

Research Article

Impact of Tourism on Local Community: A Case Study on Kuakata

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Abstract

Kuakata, known as the "daughter of the sea," has become one of the fastest-growing areas for tourists visiting Bangladesh. The purpose of this research was to examine how tourism has affected the local community in Kuakata in relation to the economic, social and environmental impacts it has had to date. Data was collected using a quantitative & descriptive research design from 342 surveys, along with personal discussions/interviews with local residents such as shop owners, hotel employees, and people in transportation positions. Data analysis was conducted using SPSS 26 to complete descriptive statistics for reliabilities (using Cronbach's Alpha) and regression analysis for determining the significance of the tourism-related variables towards the local development of communities. The results of the study demonstrate that the economy derives a large positive impact from tourism. Specifically, the respondents felt that improved "employment opportunities" (with a mean of 4.21) and "improved local economy development" (with a mean of 4.20) were the top two benefits they received through tourism. In addition, tourism improved the community's infrastructure and provided a higher standard of living. Culturally, tourism offers an opportunity to exchange culture with other countries and appreciate their heritage, along with the benefits it brings to the local community. However, not everything about tourism is positive. The research also indicates that tourism has caused significant problems, including environmental damage caused by the increased number of tourists visiting this area, such as increased pollution, damaged habitats, and damaged marine ecosystems. An example is the great number of crabs that die as a result of large numbers of motorcycles driving on the beaches. This study concludes that the enormous potential of tourism as a driver for social and economic development is threatened by the adverse environmental impacts of tourism and also the fear of cultural dilution. In order to achieve sustainable and inclusive growth, this paper has recommended that community-based tourism, investment in environmentally friendly infrastructure, and the implementation of waste management systems be adopted for sustainable tourism. In addition, the study recommends that local communities be involved in the decision-making processes concerning planning for the development of tourism so that the economic benefits of tourism can be equally distributed and that Kuakata's unique natural and cultural assets can be preserved.

Keywords

Tourism Impact, Local Economy, Socioeconomy, Environment

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1. Introduction

Bangladesh offers numerous tourist attractions, such as archaeological sites, historical mosques and monuments, the world's longest natural beach, attractive landscapes, hill forests and fauna, rolling tea fields, and tribal cultures. Tourists are drawn to the area's diverse flora and animals, as well as the active tribal life. Each region of the country has a distinct geography, flavor, and cuisine. Bangladesh is also home to Royal Bengal Tigers, freshwater pink dolphins, and antique red earth temples. Tourism plays an important role to build quality life and for the future development of local communities and impact on the destination environment [1]. According to the Bangladesh Tourism Board, 650,000 tourists had attracted by Bangladesh in 2023. This is the highest number of tourists since 2010. At that time the board formed and started to keep data on foreign tourists [2].

Kuakata is a place with a long sandy sea beach with evergreen forest, blue sky, boats, towering cliffs, surfing waves, and so on [3]. For that reason tourists from other countries also come to visit such places. An average of about 4,000 to 5,000 tourists visit Kuakata each day but their numbers multiply by three to four times during winter, the peak holiday season [4]. Tourists of Kuakata generally need a hotel or motel to stay, tourists need food and beverage, they need transportation facilities to move from one destination to another destination, tourists of Kuakata usually do some shopping such as dress, dried fish, ritual, souvenir, engaging with the culture, And arranging sports and recreational events. [5], divided the resources of Kuakata into natural resources and cultural resources. In all these cases, the local community engages tourists to provide services or to sell the products to ensure the best use of resources. By providing service or selling products, tourists and service providers or product sellers exchange the value for the products or services.

Kuakata tourism increases quality of life by creating jobs, increasing income, and improving infrastructure facilities in local communities. It creates opportunities to exchange cultural values, community empowerment, and better public services. Sustainable development creates new opportunities to increase quality of life. Social responsibility, economy and socio-cultural impact on quality of life [6] Quality of life depends on some factors that are wealth, employment, the environment, physical and mental health, education, recreation and leisure time, social belonging, safety, security, and freedom.

Due to the high demand of tourists overuse and lack of inventory of resources such as fresh water (developments have resulted in less obtainment of fresh drinking water due with own reservoirs) and seafood [7]. According to UNDP the tourists are responsible for around 90% of the plastic thrown into the sea every day, which is destroying the marine ecosystem in the area. In addition, the motorbikes carrying tourists to the beach have a severely adverse effect on the biodiversity there. At least 200 motorcycles provide services in Kuakata every

day during the tourist season. These motorcycles make trips to Crab Island at least 2-3 times a day. At least 6,000 crabs die every day due to the huge rush of bikes on the Kuakata Sea beach. The interaction between tourists and locals can be effective and beneficial and can lead to cultural exchange which results in mutual respect and understanding [8]. On the other hand, it can introduce the outer social norms which do not associate well with local traditions and cultures and can cause behavior shifts among the locals and especially among their youth. Tourism always emphasizes the local spirit and culture because this is exactly what tourists want to see or experience. However, at the same time, existing relationships and expectations require sometimes to change the clothing, behavior, or language of people living in the local community, which can lack the authenticity of the whole atmosphere [9].

Sustainable waste management system diverts waste from disposal, increases adaptability, are process-oriented, and include feedback loops [10]. It supports the use of renewable energy, waste management, and water conservation efforts. Sustainable tourism initiatives help to preserve ecosystems and biodiversity, ensuring long-term environmental health and community well-being.

2. Rationale of the Study

Now tourism is one of the most rapidly growing industries in the world. Tourism increases the purchasing power of the destination countries, empowers the local community, and generates jobs. The tourism industry significantly impacts local communities by some factors: poverty alleviation, creating new job opportunities, boosting local economies, increasing the standard of living, developing infrastructure, revenue generation, encouraging cultural exchange between tourists and the local community, growing the value of local culture and heritage, creating environmental pollution, and damaging the natural landscapes and ecosystems. The UN Tourism stated that communities can be benefited or damaged in two ways: positively through employment opportunities, increased economic activity, and enhanced social services; negatively through overtourism, which can strain or destroy local resources and cultural values.

This study not only helps to understand the impact of tourism but also helps researchers, government policymakers, travel and tourism developers, investors, as well as other interested stakeholders in investing in business. This study provides a thorough understanding of the local context and the sophisticated effects of tourism.

3. Literature Review

Tourism is one of the biggest industries in the world which has a significant impact on local communities economically,

socially and environmentally. This paper examines the economic, social and environmental impacts of tourism focusing on the Kuakata local community. [11], stated that the Tourism industry is normally referred to as the world's biggest industry and often regarded as a way of obtaining development of the community. As per the World Tourism Organization (2009), the tourism industry is one of the world's most rapidly growing industries and acts as an engine of global development. One of the most popular topics of tourism is tourism impact studies toward the community. The understanding of community's perceptions on tourism impacts is important (Ap, 1992). [12], Their study finds positive effects of local community is increasing income, employment opportunities, and infrastructure development, while negative aspects encompass issues like cultural erosion, environmental degradation, and economic volatility.

[13], studied "Local Community Participation and Responsible Tourism Practices in Ecotourism Destination: A Case of Lower Kinabatangan, Sabah." and revealed that the local lower Kinabatangan has a great opportunity to grow sustainable ecotourism destinations to increase economic enhancement. [14], Major results indicate that tourism is advocated as a tool for poverty alleviation, most residents perceived tourism to have had little or no significant impact in alleviating poverty. [15], The result of the study indicated that tourism has both positive and negative impacts on tourist destinations. The positive social impact of tourism was expressed in moderate terms and stated in terms of the expansion of hotels, road transportation, air transportation, electricity, internet, banking, and other infrastructures. The negative social impact was expressed in small terms and conveyed in terms of the unequal access to the aforementioned social services, the expansion of prostitution, the persistence of theft and illicit trade in heritage, and the random adoption of the lifestyles and manners of tourists by residents.

[16], Studied the Developing a tourism impact attitude scale and found the main reason for growing preference has been increasing evidence that tourism has both positive and negative impacts on local communities involved. Many views from different residents can provide insight in the nature and degree of impacts from tourism on the irrespective tourist destination. The community views on the impact of tourism are likely to be very important for planning a successful development. [17], studied the impact of the tourism industry on host communities: Antalya and Canakkale cases The study employed a quantitative research method using convenience sampling due to difficulties in accessing the entire population. They addressing that tourism improves social life of host communities, and contributes women in participating to labor force and positive to the solution of unemployment problem. [18], This paper reveals that Gracia can enhance its economic account by investing in the tourism industry that provides social returns like SME establishments, employment generation and upgrading of infrastructure. It concentrates on the effects generated by the tourism sector on the economy, environment, political

and socio-cultural structures of the host community, and the overall idea is to stress the role and positive effects resulting from well-organized and properly managed control of economic effects on the host community.

3.1. Economic Impact of Tourism

Tourism is one the most powerful economic drivers for local communities. According to (UNWTO), tourism has a significant contribution to the local economy by creating jobs, infrastructure development and foreign exchange earnings [19]. Tourism in Kuakata has a significant positive impact on the local economy. [20] studied the impact of tourism on the economy of the local community of Kuakata highlights the contribution of tourism on the balance of payments, job creation, exchange of funds and socio-economic growth. [21], studied sustainable tourism at Kuakata from the point of view of the tourist, stating that the development of tourism facilities and infrastructure helps stimulate investment in other sectors, and helps to create a multiplier effect which benefits the wider economy. But this tourism sector generally offers low-range, labor-intensive jobs to local stakeholders or residents, with little opportunities for advancement into managerial positions. [22], stated that tourism has led to deterioration of natural landscapes and ecosystems, and become a threat to regional biodiversity. Efforts are taken to mitigate these impacts which include promotion of eco-friendly tourism practices and promoting environmental awareness among visiting tourists and local stakeholders. Proper waste management and use of sustainable resource are very important to minimize the ecological footprint of tourism in Kuakata [23]. [24], studied how local economic development is impacted by tourism to find what role tourism plays in economic development of a local region. The study was guided by using tourism statistical data and secondary data. Tourism is a low skilled and labor intensive industry, providing many benefits including poverty reduction.

[25], analyzed the impact of tourism for the development of the economy in the local area and focused on the correlation between tourist's arrival, investment, government expenditure and economic growth of South Sumatra. This analysis reveals that tourism investment does not contribute positively to the economic growth of the host country, but the economic growth of the host country, tourism added value, and government spending has a positive relation with the tourists. While examining the role of government policy as a factor that influences the tourist industry development, it is necessary to note that this factor is critical and decisive. [26], This study revealed the majority of the local residents hold that tourism has a positive effect on the local community. The most important benefits that residents felt had flowed from tourism were increased employment opportunities, property values, image of the city, appearance and infrastructure of the city and improved pride as the residents.

[27], This study aims to find out on the impacts of tourism

development towards the economic base of the community in Malaysia particularly in Langkawi Island which has been a famous tourism destination since 1990's. The development of the island is considered as the generation of the cash flow, means of creating jobs and as a positive impact towards the society. Thus, the need to sustain investment in tourist development as crucial in unlocking future flow of benefits to the locals is underlined by the study. Tourism plays a vital role in the economic development by way of providing a cash inflow to shore employment opportunities. Spending on accommodation, transportation, food and services by visitors boosts local businesses and spurs economic growth. Local development and job creation are generated in the economic sectors such as hotels, restaurants, tour operators or local artisans from the visitor arrivals. [28, 29], This study reveals inadequate government planning, policies and regulations, insufficient knowledge and skills of tour operators, and the broader social issues of poverty and its concomitant implications have become the impediments. Despite numerous economic advantages for the government, private businesses and other external organizations, the local villagers do not sufficiently benefit financially from tourism development.

3.2. Environmental Impact of Tourism

The environmental impact of tourism in Kuakata is a major concern. The rapid influx of tourists has led to increased pollution, resource depletion, and habitat destruction. [21], highlights the negative effects of tourism on the environment, such as sound, noise, air, and water pollution, and excessive use of natural resources. [30], Involvement of the local community in conservation activities, such as beach cleaning and environmental awareness campaigns, is very important in mitigating these disadvantageous effects. [31], Studied Tourism industry of Bangladesh and its potential advocate for prioritizing environmental conservation to ensure sustainability of tourism, stressing the need for sustainable tourism practices that balance economic growth with environmental protection.

Tourism can help environmental conservation in the sense that environmental natural attributes and attractions will need to be preserved to attract tourists. It provides communities a reason to save their forests, wildlife and marine environment by adding tangible and transactional value. Respecting the destination is key to that: this can take many shapes, but sustainable tourism practices (such as minimizing waste and having eco initiatives) help protect the environment while also permanently supporting local communities. [28], Tourism can lead to environmental degradation if not managed sustainably. [32], studied the environmentally sustainable tourism problems and prospects in Bangladesh and identified many negative impacts on the coastal environment of Bangladesh because of tourism, including coral reef destruction, pollution, and climate change. Gazta, [33], Tourism and natural environment can both co-exist and be mutually beneficial to each other if the tourism industry has the willingness to pull in full

support to the conservation efforts of the natural environment. In doing so, it can help maintain the environment and also recover from the negative image that it has built up for itself during the last few decades.

[34], highlighted in his study of the Blue economy, complex challenges posed by marine tourism in Bangladesh, such as environmental risks and infrastructure deficiencies. [35], Tourism creates catastrophe situations all over the world and this collapse condition can extinguish regional collaboration and communication. They also said people need to be conscious about the negative impact of tourism and take the proper steps to lessen the problem specially each government of each country and international authority in regarding the tourism industry.

3.3. Social Impact

According to the UNWTO, responsible tourism practices can help the promotion of cultural heritage preservation and promote mutual understanding between tourists and local communities [36]. [37], studied the Local views of tourism impact on island destinations using the Social Exchange Theory and noted that tourism could lead to the transformation of local cultures. [26], studied the social impact study on a specific destination named the Dambulla Tourism Destination in Sri Lanka involving exploratory interviews with local residents and a field survey to assess the impacts of tourism. Over a sample of 400 residents. The study concluded that strong support for continued tourism development and increased visitation. Tourism in Sri Lanka helped in job creation, increase property values, and residents' pride, though some tourism projects faced community opposition. [38], they investigate community perceptions toward the economic and environmental impact of tourism in Shiraz, Iran. The study demonstrates that there are broadly similar views among the community that the local communities have positive views toward economic and environmental impacts of tourism with only minor differences with each other.

In Kuakata, [39], Studied Local Residents' Attitude Towards Socio-economic Impact of Tourism over a sample of 96 local residents of local communities. Findings suggest that local residents' attitudes towards tourism are positively impacted by factors such as living standards, employment opportunities, earning potential, cultural development, and social values. [40], Their results suggest that residents of communities dependent on tourism can clearly differentiate between its economic benefits and the social costs, and that awareness of certain negative consequences does not lead to opposition towards further tourism development. [17], studied the socio-economic impacts of coastal tourism on local communities in Kuakata gathering data from 350 local tourism stakeholders and noted that tourism activities are very important for sustainable livelihood and reducing vulnerability. It is also observed that there is very poor empowerment of local stakeholders and limited local participation. New policies should

be made and implemented. BATO endorses pro-community tourism development approaches where all economic gains resulting from the tourism sector are enjoyed by the community members [41]. The Bangladesh Association of Tour Operators help in requesting the government to adopt community-based tourism models to ensure that tourists' income is well distributed among Bangladeshi citizens [42]. It also seeks to increase community participation in tourism planning and action, thus increasing social justice and the rate of incorporation.

4. Research Gap

Previous studies on Kuakata lack comprehensive analysis of the social impact of tourism on traditional practices, social values, and community cohesion. There is a need for holistic frameworks to balance economic, environmental, and social impacts, and to focus on upgrading local residents' opportunities.

5. Research Objectives

The purpose of this research is to explore the economic, social and environmental impacts of tourism on the local community at Kuakata. The paper has taken into consideration the various economic impacts in terms of poverty reduction, employment generation, economic growth, improvement in the living standards, and physical infrastructure that tourism can bring about to the host destinations. On the other hand, this paper also assesses the social impacts of tourism on the traditional customs and social values of the local community and the environmental impacts of tourism in relation to increased pollution and destruction of natural landscapes and ecosystems along with the participation of the community in tourism planning.

6. Methodology

The research is descriptive and quantitative, and it examines the impact of tourism on the local community of Kuakata Sea Beach. The quantitative approach was selected to systematically measure local residents' perceptions and experiences regarding tourism development and its socio-economic, cul-

tural, and environmental impacts. By focusing on real-life experiences and the opinions and perceptions of local residents, this study attempted to gain insight into how they view the impacts of tourism in their community. The research is based on both primary and secondary data. Primary data were collected through survey forms and personal interviews with local residents of Kuakata. Secondary data were collected from journals, academic papers, government publications, tourism reports, online sources, and research articles. To select the study participants, the researchers used convenience sampling to identify local residents who were directly or indirectly engaged in tourism. These included shopkeepers, hotel employees, transport workers, and general residents.

Two main tools were used:

1) Survey Questionnaire:

The survey form contained open-ended and open-minded questions where respondents were encouraged to freely express their opinions, experiences, and suggestions about tourism development in Kuakata.

2) Short Interviews:

Short face-to-face interviews were conducted with selected community members to gather more detailed explanations and personal views on how tourism has affected their daily life, income, culture, and environment.

The data for the study was collected using a methodology that emphasized a community-centred approach with significant contributions made by local residents in Kuakata. Researchers who worked on the project designed and distributed the survey instrument based on this philosophy in the hopes of gathering the opinions of as many members of the local community as possible. The primary means of distributing the surveys to local residents were direct face-to-face distributions and through the Internet. Local residents also provided assistance to researchers in the distribution of the survey instruments, and researchers were able to incorporate additional information from social media users who frequently visited Kuakata and used social media to communicate with others about their trips. Because of the use of a combined quantitative and qualitative data approach, a large enough sample size ($n = 342$) was obtained from a variety of sources. Based on the overall goals of the study, researchers created 19 main variables that measured economic, social, and environmental effects of tourism from the local community's perspective and included them in the survey instrument.

7. Findings

7.1. Demographic Variable Frequency

Table 1. Demographic Variable Frequency.

Statistics		Age	Gender	Education	Profession	Income
N	Valid	342	340	339	342	342
	Missing	0	2	3	0	0
Mean		2.60	1.35	3.83	1.74	2.19
Median		2.00	1.00	4.00	1.00	1.00
Mode		2	1	4	1	1
Std. Deviation		1.089	.478	.823	1.075	1.458
Variance		1.186	.228	.677	1.156	2.127
Skewness		.991	.632	-.950	1.123	.785
Std. Error of Skewness		.132	.132	.132	.132	.132
Kurtosis		-.147	-1.610	2.190	-.252	-.874
Std. Error of Kurtosis		.263	.264	.264	.263	.263

7.2. Reliability Test (Using Cronbach Alpha Technique)

The dependent variable “*Development of Local community*”

served as the principle of data collection. “SPSS 26” was used to evaluate the collected data from the participants. Split methods and Cronbach alpha were employed to assess the reliability of the data. Reliability Analysis using Cronbach Alpha Techniques result is depicted below:

Table 2. Reliability Statistics.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.849	.859	10

7.3. Descriptive Statistics

Descriptive statistics is a set of methods commonly used to summarize and describe the main characteristics of a database,

such as its central tendency, variability, and distribution. Between four major types of Descriptive Statistics measures of central tendency, the Mean or average method is generally used to specify the center of distribution, On the other hand, standard deviation is employed to see how the data deviates from the mean value [43].

Table 3. Descriptive Statistics.

Item Statistics			
Variable	Mean	Std. Deviation	N
Poverty Alleviation	3.94	.837	342
Employment opportunity	4.21	.851	342
Boost local economy	4.20	.822	342
Increase the standard of living	4.08	.837	342
Develop infrastructure	4.07	.905	342
Cultural exchange between tourists and host community	4.11	.877	342
Increases the value of local culture and heritage	3.96	.929	342
Generate revenue for the local government	4.01	.914	342
Increases environmental pollution	3.80	1.054	342
Damage of natural landscapes and eco-systems	3.55	1.155	342

Through a descriptive statistics table it represented the mean value and standard deviation of 10 independent variables. The study has seen that the mean value of the dependent variable is 4.01. The value indicates that tourism can significantly help in developing local communities. The mean value of other variables such as Poverty Alleviation. (3.94), Employment opportunities (4.21), Boost Local economy (4.20), Increase the standard of living (4.08), Develop infrastructure (4.07), Cultural exchange between tourists and host community (4.11), Increases the value of local culture and heritage

(3.96), Generate revenue for the local government (4.01), Increases environmental pollution (3.80), and Damages of natural landscapes and ecosystems (3.55) are some of the means of developing local communities.

7.4. Model Summary

The calculated model has a higher medium-adjusted R value, indicating a strong fit for the regression model of the data. Table 6 displays the R square value of. 360, the adjusted R square value of. 341, and the Standard Error value of. 675.

Table 4. Model Summary.

Model Summary ^b									
Model R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1.600a	.360	.341	.675	.360	18.657	10	331	.000	2.024

a. Predictors: (Constant), IV10, IV5, IV1, IV8, IV9, IV2, IV4, IV6, IV3, IV7

b. Dependent Variable: DV

7.5. ANOVA

The following ANOVA model shows that the F test is significant. It is justifying to say that all the independent variables significantly affect the dependent variable. The estimated multiple regression model is more acceptable for the study. The overall acceptability of the 'βi' has been tested by the 'ANOVA' model. The results of the ANOVA model indicate the significance of the model.

The ANOVA table tests whether overall regression model (with 10 independent variables/predictors) is a good fit for the data. The model is statistically significant, as indicated by the "Sig." value of. 000. Since this is less than 0.05, we can conclude that the predictors (IV1 through IV10) significantly influence the Dependent Variable (DV). F-Statistic, The high F-value of 18.657 further confirms that the variance explained by the regression (85.054) is significantly greater than the unexplained residual variance (.456).

Table 5. Anova Test.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	85.054	10	8.505	18.657	.000 ^b
	Residual	150.899	331	.456		
	Total	235.953	341			

a. Dependent Variable: DV

b. Predictors: (Constant), IV10, IV5, IV1, IV8, IV9, IV2, IV4, IV6, IV3, IV7

a. *Dependent Variable:* Development of local community

b. *Predictors:* (Constant), Poverty Alleviation, Employment opportunities, Boost local economy, Increase the standard of living, Develop infrastructure, Cultural exchange between tourists and host community, Increases the value of local culture and heritage, Generate revenue for the local government, Increases environmental pollution and Damages of

natural landscapes and ecosystems.

7.6. Regression Analysis

The coefficients of all the independent variables on the dependent variable "Development of Local community" are shown in the Table.

Table 6. Regression Analysis.

Descriptive Statistics			
	Mean	Std. Deviation	N
Development of Local community	4.01	.832	342
Poverty Alleviation	3.94	.837	342
Employment opportunity	4.21	.851	342
Boost local economy	4.20	.822	342
Increase the standard of living	4.08	.837	342
Develop infrastructure	4.07	.905	342
Cultural exchange between tourists and host community	4.11	.877	342
Increases the value of local culture and heritage	3.96	.929	342
Generate revenue for the local government	4.01	.914	342

Descriptive Statistics			
	Mean	Std. Deviation	N
Increases environmental pollution	3.80	1.054	342
Damages of natural landscapes and ecosystems	3.55	1.155	342

Economic and Developmental Benefits: The data shows strong positive perceptions across all developmental categories, with all mean scores exceeding 3.90.

Top Perceived Benefits: Respondents identified "Employment opportunity" (4.21) and "Boost local economy" (4.20) as the most significant positive impacts.

Infrastructure and Living Standards: There is high agreement that tourism "Develops infrastructure" (4.07) and "Increases the standard of living" (4.08).

Socio-Cultural and Environmental Perceptions: The second table reveals a mix of positive cultural exchanges and concerning environmental costs:

Cultural Value: Tourism is seen as a strong driver for "Cultural exchange" (4.11) and as a way to "Generate revenue for the local government" (4.01).

Negative Externalities: While still above the midpoint, the lowest mean scores were related to "Damages of natural landscapes" (3.55) and "Increases environmental pollution" (3.80). This suggests that while residents see the economic gain, they are aware of the environmental toll.

8. Discussions

The findings of this study provide valuable insights into the multifaceted impact of tourism on the local community of Kuakata. Tourism has emerged as a significant economic driver for the region, contributing to poverty alleviation through job creation, boosting the local economy, and improving living standards. The data reveals that many local residents acknowledge tourism's role in enhancing infrastructure and fostering cultural exchange between visitors and the host community. However, these positive developments come with challenges that merit attention.

One of the most notable findings is the environmental degradation caused by tourism. The excessive influx of visitors has strained natural resources and led to pollution, habitat destruction, and harm to the marine ecosystem. The daily rush of motorbikes to popular attractions such as Crab Island not only disrupts biodiversity but also threatens the long-term sustainability of Kuakata's natural beauty, a critical asset for tourism. On a social level, tourism has brought cultural benefits by encouraging exchanges that enrich both visitors and locals. However, it has also introduced concerns about cultural dilu-

tion, as the adoption of foreign social norms risks altering traditional practices and values among the local population, particularly the youth. Economically, while tourism has created numerous job opportunities, many of these are labor-intensive and offer limited upward mobility. Residents expressed concerns about unequal access to tourism-related benefits and the lack of community involvement in decision-making processes. Additionally, while infrastructure development has improved, its environmental and cultural costs raise questions about long-term planning and sustainability.

The analysis also highlights the need for sustainable tourism practices. Community participation in planning and management emerged as a recurring theme in responses, underscoring the importance of incorporating local voices into tourism development initiatives. Proactive measures, such as the promotion of eco-tourism and responsible visitor behavior, are essential to mitigate adverse environmental impacts and ensure the preservation of Kuakata's unique attractions. In summary, tourism in Kuakata presents a complex interplay of benefits and challenges. The positive economic and social impacts must be balanced with strategies to address environmental concerns and enhance community involvement. A collaborative approach that includes local stakeholders, policymakers, and environmental experts can pave the way for sustainable tourism development that benefits both residents and visitors while preserving Kuakata's natural and cultural heritage.

9. Recommendations

While protecting the environment, Kuakata has to invest in environmentally friendly infrastructure and facilities, such as sustainable waste management systems.

- 1) Tourists need to be taught how to behave responsibly when visiting Kuakata, restricting numbers of visitors and area of promotion for the branding as an environmentally conscious destination.
- 2) Engage the local community in the tourism planning and decision-making process to make certain that tourism benefits everyone fairly.
- 3) Launch marketing initiatives that present the distinct landscape and natural attractions of Kuakata to draw a wider base of domestic and international tourists to Kuakata.
- 4) Assist local businesses to develop and expand tourism

and related services, providing them with training (e.g. business start-up) and resources were necessary which results in preferential local recruitment and skill development in the tourism industry.

- 5) Develop and implement sustainable tourism plans in collaboration with government agencies, NGO's and the private sector for preserving local ecosystems as well as cultural heritage.
- 6) Develop advanced medical facilities and emergency services that can serve tourists and the community to improve safety, security, and public health.

10. Contribution of the Paper

This paper makes many key contributions to the existing literature on Impact of tourism on local communities: A case study in Kuakata. This paper gives an in-depth analysis on Impact of tourism in a local community and their positive and negative impact of tourism in Kuakata. The data analysis of the paper shows the tourism sector is impacting a local community on Economical, Social and Environmental factors. How Development of Local communities is happening because of tourism as this industry is reducing poverty, creating new employment opportunities, boosting the local economy as new investment and jobs are being created and local infrastructure are also being developed because of the growth of the tourism industry. The effect of cultural exchange between tourists and the host community and how it is increasing the value of local culture. This study gives another in-sights on how tourism can generate revenue that can be used by local governments. The study also provides information on how the tourism industry is Increasing pollution in a destination and is a leading cause for the damages of natural landscapes and ecosystems. The paper's empirical insights include specifics on the actual experiences and results of Kuakata's local community development. By describing the effects of tourism on local communities, the study will offer recommendations for tourism stakeholders wishing to use tourism as a tool for community development. The report highlights several important policy ramifications for Kuakata's inclusive tourist development. The report offers practical suggestions for the stakeholders to use the tourism business in Kuakata to grow the community by emphasizing the importance of community engagement. By highlighting the research gaps in the current literature review for additional examination, the study preserves a foundation for researchers in the future. The study gives an in-depth understanding of the relation between Development of local community and Tourism industry in Kuakata and gives valuable insights for policymakers and researchers.

11. Conclusion

Tourism in Bangladesh is a growing industry with diverse

attractions. We have rich cultural heritage, historical landmarks, natural beauty, drawing both natural and cultural tourists. Kuakata tourism has been growing rapidly for its scenic beauty and natural attraction. Kuakata offers the best view of sunrise and sunset over the sea from Bangladesh. Even Kuakata offers eco tourism experiences at nearby mangrove forest and island. Their Rakhine community carries rich cultural heritage by their unique traditions, local cuisine and different festivals. This study illustrates Kuakata tourism reduces poverty by job creation for the local community people. As tourism expands there, it helps build infrastructure development and raises the standard of living of many community peoples. It also promotes cross-cultural interactions between visitors and local peoples. The sustainability of Kuakata tourism is threatened by environmental challenges including pollution, natural degradation and ecosystems. To combat these negative effects, community participation planning is of utmost importance to ensure that the benefits of tourism are equitably distributed and that the local voices are heard. In general, Kuakata's tourism sector presents opportunities for socioeconomic development. The goal of sustainability is being accomplished by its eco-friendly design, promotion of responsible tourism, and the involvement of the local community in the process of making choices.

12. Limitations

This study relies on data collected from specific local residents and visitors, it may not fully represent the entire local residents or visitors. The study may be limited by the time frame in which data was collected, potentially missing short-term fluctuations or longer-term trends. Besides this study has limitations for cultural practices, cultural promotion and preservation of cultural heritage in Kuakata. This research only focuses on the Kuakata Sea Beach limits its relevance to other tourist spots in Bangladesh or elsewhere that face distinct dynamics and difficulties.

13. Future Directions

The respondents for the survey for this paper include only Kuakata Sea beach area locals. Researchers can gather vast volumes of information from the whole of Kuakata for future studies.

In this study we have mainly focused on economical, social and environmental factors of tourism in the local community. For future studies researchers can focus on other impacting factors of tourism on local communities.

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Conflicts of Interest

The authors indicate that during the writing of this research article, they had no conflicts of interest with any other party.

Appendix

Survey on “Impact of tourism on the local community: A case study on Kua-kata Sea Beach”

Dear participants,

We are conducting a survey to understand the impact of tourism on the development of the local community in Kua-kata. Responses obtained from you will give us invaluable views on how tourism impacts different spheres of community existence. The survey is anonymous, and your participation is voluntary— please answer the forthcoming questions based on what you have experienced and perceived. Your contribution will be appreciated, thank you.

1. Age of the participants:

Below 20 years

20-30 years

30-40 years

40-50 years

50 & Above

2. Gender of the participants

Male

Female

3. Education Qualification

Below Primary

Secondary

Higher Secondary

Graduate

Post Graduate or more

4. Occupation of the participants

Student

Businessmen

Private Sector Holder

Govt. Service Holder

Others

5. Monthly income of the participants

Less than 10000

10000-20000

20000-40000

40000-50000

50000 & above

7. Tourism industry helps in poverty alleviation in Kua-Kata

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

8. Tourism helps to create new jobs for local residents

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

9. Tourism boosts the local economy

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

10. Tourism raises the standard of living for local communities

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

11. Tourism helps to develop the infrastructure in Kua-kata

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

12. Tourism helps in revenue generation of the local community and government.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

13. Tourism helps to encourage cultural exchange between tourist and the local community

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

14. Tourism helps is the growth of the value of local culture and heritage

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

15. Tourism is a creates of environmental pollution in Kua-kata

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

16. Tourism damages the natural landscapes and ecosystems

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

18. Community participation in tourism planning helps in sustainable tourism development.

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree

19. What suggestions do you have for improving the management and impact of tourism in Kua-kata

Conclusion:

Thank you for participating in this survey. Your responses are very important to us will help us to understand the impact of tourism on local community in Kuakata.

References

- [1] Bangladesh Tourism Board (BTB). (2023). Official website. Link: <https://tourismboard.gov.bd/>
- [2] Siddiqui, K. (2024, May 5). 6.5 lakh visitors arrive in 2023, exceeding pre-Covid level.
- [3] Sareen, T. R., & Pandey, V. C. (2004). Environment, security and tourism development in South Asia. Gyan Publishing House.
- [4] Sorhab Hossain, "Kuakata Tourism to Boom Once Padma Bridge Opens," The Daily Star, June 21, 2022.
- [5] Rahman, M., Haque, M., & Hossain, M. (2015). Tourism Development and Policy in Bangladesh: A Study on Kuakata Beach. *Journal of Policy and Development Studies*, 9(1), 45-57.
- [6] Al-Sakkaf, M. A., Mohaidin, Z., Murshid, M. A., Amarnah, S., Basendwah, M., & Bawazir, K. A. (2024). Destination social responsibility and residents' quality of life: The mediating role of multidimensional impacts of tourism. *Journal of Quality Assurance in Hospitality & Tourism*, 25(4), 959-993.
- [7] Belgrano, A., & Villasante, S. (2021). Linking ocean's benefits to people (OBP) with integrated ecosystem assessments (IEAs). *Population Ecology*, 63(1), 102-107.
- [8] Ap, J., & Crompton, J. L. (1998). Developing and Testing a Tourism Impact Scale. *Journal of Travel Research*, 37(2), 120-130. <https://doi.org/10.1177/004728759803700203>
- [9] Mckercher, B. (2002). Cultural tourism: The partnership between tourism and cultural heritage management. The Haworth Hospitality Press.
- [10] Imam, A., Mohammed, B., Wilson, D. C., & Cheeseman, C. R. (2008). Solid waste management in Abuja, Nigeria. *Waste management*, 28(2), 468-472.
- [11] Sharpley, R. (2002). *Tourism and Development: Concepts and Issues*. Multilingual Matters Limited.
- [12] Agarwal, S., Isha, T., Lrappa, T., Akaremsetty, S., & Shekhar, C. (2023). The Impact of Tourism on Local Communities: A Literature Review of Socio-Economic Factors. *Journal of Harbin Engineering University*, 44(8), 1851-1859.
- [13] Chan, J. K. L., Marzuki, K. M., & Mohtar, T. M. (2021). Local community participation and responsible tourism practices in ecotourism destinations: A case of lower Kinabatangan, Sabah. *Sustainability*, 13(23), 13302.
- [14] Musinguzi, D. (2012). The impacts of tourism on local communities: Developing and operationalising a comprehensive monitoring framework.
- [15] Alamineh, G. A., Hussein, J. W., Endaweke, Y., & Taddesse, B. (2023). The local communities' perceptions on the social impact of tourism and its implication for sustainable development in Amhara regional state. *Heliyon*, 9(6).
- [16] Lankford, S. V., & Howard, D. R. (1994). Developing a tourism impact attitude scale. *Annals of Tourism Research*, 21(1), 121-139.
- [17] Bhuiyan, M. A. H., & Darda, A. (2024). Socioeconomic impacts of coastal tourism on local communities in Kuakata, Bangladesh (No. 1430). ADBI Working Paper.
- [18] Zaei, M. E. and Zaei, M. E., 2013. The impacts of the tourism industry on the host community. *European journal of tourism hospitality and research*, 1(2), pp. 12-21.
- [19] UNWTO. (2021). *Tourism for Sustainable Development*. United Nations World Tourism Organization.
- [20] Horaira, M. A., 2020. The economic impact of tourism on to the community of kuakata. *Asian Journal of Humanity, Art and Literature*, 7(1), pp. 43-58.
- [21] Sarker, J. U., Nahar, K., & Asraf, M. A. (2023). Tourists' Perceptions toward Sustainable Tourism at Kuakata, Bangladesh. *Journal of Tourism & Adventure*, 6(1), 1-17.
- [22] Rahman, M. M., Rahman, M. A., & Nahar, A., (2015). STATUS OF "KUAKATA" A NEGLECTED NATURAL SCENIC RESOURCE OF BANGLADESH. *European Scientific Journal*, 11(5).
- [23] UN World Tourism Organization (UNWTO). (2023). Official website. Link: <https://www.untourism.int/>
- [24] Meyer, D. F., & Meyer, N. (2015). The role and impact of tourism on local economic development: a comparative study and leisure. *African Journal for Physical Health Education, Recreation and Dance*, 21(1.1), 197-214.
- [25] Bashir, A., & Suhel, S. (2018). The role of tourism toward economic growth in the local economy. *Economic Journal of Emerging Markets*, 10(2), 32-39.
- [26] (a) Chandralal, K. P. L., & Palliyaguruge, K. (2010). Impacts of tourism and community attitude towards tourism: A case study in Sri Lanka. *South Asian Journal of Tourism and Heritage*, 3(2), 41-49.

- [27] Bakri, N. M., Jaafar, M. and Mohamad, D., 2014. Perceptions of local communities on the economic impacts of tourism development in Langkawi, Malaysia. In SHS web of conferences (Vol. 12, p. 01100). EDP Sciences.
- [28] Ekstrom, S. (2023, August 1). How Does Tourism Benefit Local Communities? Tourism Academy. Retrieved September 23, 2024, from <https://blog.tourismacademy.org/how-does-tourism-benefit-local-communities>
- [29] Gnanapala, W. A., & Sandaruwani, J. A. R. C. (2016). Socio-economic impacts of tourism development and their implications on local communities. *International journal of economics and business administration*, 2(5), 59-67.
- [30] Louis, F., & Mohammed, S. (2024). Community Participation and Stakeholder Engagement for Sustainable Tourism Development: A Case Study of Kuakata Sea Beach.
- [31] Afroz, T., & Mahmud, K. (2017). Bangladesh's Tourism Industry and Its Potential. *Journal of Tourism and Hospitality Management*, 5(2), 22-34.
- [32] Kalam, A., & Hossen, M. A. (2018). Environmentally sustainable tourism problem and prospects in Bangladesh: A study on the coastal region at Cox's Bazar. *Journal of Environment and Earth Science*, 8(1), 18-25.
- [33] Gazta, K. (2018). Environmental impact of tourism. *AGU International Journal of Professional Studies & Research*, 6(6), 7-17.
- [34] Islam, M. S. (2020). Blue economy, complex challenges: The future of marine tourism in Bangladesh. *Safran Kültür ve Turizm Araştırmaları Dergisi*, 7(1), 42-68.
- [35] Jehan, Y., Batool, M., Hayat, N., & Hussain, D. (2023). Socio-economic and environmental impacts of tourism on local community in Gilgit Baltistan, Pakistan: A local community perspective. *Journal of the Knowledge Economy*, 14(1), 180-199.
- [36] World Tourism Organization, W. (2009). Indicators of Sustainable Development for Tourism Destination: A Guidebook. [Online] Available: http://www.unwto.org/pub/doc/UNWTO_pub_cat_08_en.pdf (April 3, 2009).
- [37] Garau-Vadell, J. B., Gutiérrez-Taño, D., & Díaz-Armas, R. (2018). Residents' perceptions of tourism impacts on island destinations: A comparative analysis. *International Journal of Tourism Research*, 20(1), 94-104.
- [38] Aref, F., Redzuan, M., & Gill, S. S. (2009). Community perceptions toward economic and environmental impacts of tourism on local communities. *Asian Social Science*, 5(7), 130-137.
- [39] Lipy, N. S., Liza, S. A., & Das, S. C. (2023). Local residents' attitude towards socio-economic impact of tourism: A study on Kuakata in Bangladesh. *Journal of Business Studies of Barishal University*.
- [40] King, B., Pizam, A., & Milman, A. (1993). Social impacts of tourism: Host perceptions. *Annals of tourism Research*, 20(4), 650-665.
- [41] Boz, M., Karakaş, E. (2017). Impact of tourism industry on host communities: Antalya and Canakkale cases. *Researcher: Social Science Studies*, 5, 153-170.
- [42] Bangladesh Association of Tour Operators (BATO). (2023). Official website. Link: <https://www.botoa.org/Welcome/welcome-to-botoa>
- [43] Malhotra, N. K. (2010). *Marketing Research: An Applied Orientation* (6th Ed.). Upper Saddle River, NJ: Pearson Prentice Hall, Pearson Education. <https://www.scirp.org/reference/referencespapers?referenceid=2989267>

Biography



Sazzadul Kabir Sabbir is a graduate of Tourism and Hospitality Management and a young researcher from Bangladesh with strong academic and professional interest in tourism development, fintech services, and hospitality entrepreneurship. He completed his Bachelor of Business Administration (BBA) degree in Tourism and Hospitality Management and is currently preparing for higher studies in Economics, Business Administration, and Finance-related disciplines. He has received formal training and certification in SPSS and Fundamentals of Research Methodology and has actively worked on multiple academic research projects related to tourism safety, fintech customer satisfaction, and sustainable tourism development. His major research interests include tourism impact assessment, community-based tourism, fintech adoption, tourist safety and security, and digital tourism.



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Research Field

Sazzadul Kabir Sabbir: Tourism-1, Fintech-2, Economics-3, Entrepreneurship-4, Sustainability-5

Md. Nahin Hossain: Tourism-1, Tourism Safety Security-2, Local Community-3, Economics-4, Cultural Tourism-5

Sheikh Nahian Mahmud Riky: Tourism-1, Tourism Safety Security-2, Politics-3, Environment-4, Socioculture-5