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# COVID-19 Impact on Regional Tourism Development in Bangladesh-A Study of Cumilla District

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## Authors' contributions

This work was carried out in collaboration among all authors. Author SRA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author SMNI managed grammatical correction and revised the manuscript after the first draft. Author MAA managed the analyses of the study and literature searches. All authors read and approved the final manuscript.

## Article Information

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# ABSTRACT

The travel industry is one of the most developing businesses all around the globe. Bangladesh can possibly create the travel industry on account of its alluring natural beauty and rich cultural heritage. But the COVID-19 adversely impacts the travel and tourism industry all over the world and Bangladesh is no exception. The main objective of the study was to find out the COVID-19 impact on regional tourism development in Bangladesh-A study of Cumilla district. The study area was Cumilla District. Tourists of Cumilla District were the population of the study. The study has done mainly based on primary and secondary data. For collecting primary data, the survey method is used by distributing online questionnaires through social media. From the analysis, it was found that at present all the tourist places have been opened for tourists. But the presence of tourists is not so

high. The majority of the respondents said high damage has been done to Cumilla tourism due to lockdown & it has also caused a lot of damage to the development of the sights & the surrounding area in tourist places. The majority of the respondents are satisfied with transportation quality. But they are dissatisfied with non-compliance with hygiene rules, high cost of touring, poor security & the management style of tourist place authority. Most of them suggest for arranging adequate thermal scanners & hand sanitizer at the entrance of the tourist place, reducing the cost of touring & taking more promotional activity. Some guidelines have been mentioned in the recommendation part.

Keywords: COVID-19; tourism industry; tourist; Cumilla district.

# **1. INTRODUCTION**

Bangladesh is a very nice place to visit. The tourism industry of Bangladesh has several positive impacts on the overall economy of this country. Since the start of March, the travel industry area of Bangladesh has been contrarily affected by the COVID-19 flare-up. From mid-March, the government initiated strict embargos on visiting tourist spots. The Bangladeshi government has decided to suspend all on-arrival visas for tourists from all countries in order to prevent the spread of the COVID-19 outbreak. Cumilla district has played a significant role in Bangladesh's tourism. Many historical and archaeological sites are located in the Cumilla district. The arrival of tourists has a positive impact on regional developmental activities such as roads, bridges, electricity, water supply, education, health & community development, etc. But COVID-19 adversely impacts Cumilla tourism. Travel and tourismrelated activities are stagnated. Due to COVID-19, excavation work, road development tasks, the repair & cleaning work was stopped for a long time.

In Bangladesh, November to June is the ideal time or peak season for the tourism business. Bangladesh's tourism has fallen in really bad times. But hopefully, it will be possible to get out of this bad situation soon. Because of the lockdown, people have been under house arrest for a long time and so with the lifting of the lockdown, the number of tourists has increased in several tourist places. This research is an attempt to explore the COVID-19 impact on regional tourism development in Bangladesh-A study of Cumilla district and also present some recommendations to minimize present losses. For preparing the study, many previously published articles, newspapers, reports, and journals are being observed. So hopefully, this study will be a helpful document for the tourism industry.

# 2. RESEARCH OBJECTIVE

The study has been conducted with the following objectives:-

- To measure the impact of COVID-19 on regional tourism development in Bangladesh.
- To analyse the present scenario of the tourism industry in Cumilla District.
- To provide some suggestions to overcome present losses in the tourism industry.

# 3. LITERATURE REVIEW

Before the Covid19, Bangladesh's tourism sector income was always increasing every year. However, the tourism sector revenue during the COVID-19 pandemic was a loss since March 2020. The impact of the pandemic has proved so massive that it might take years for the sector to return to its normal shape. This pandemic is an unpredictable occasion of recent years. Essentially it creates a large-scale crisis for a long time, possibly never before. Since the end of 2019 and the tremendously beginning of 2020, every nation, economy and human activity has not escaped from the pandemic. Therefore, for reducing the spread of the COVID-19 virus all countries citizens were restricted to long-distance travel, Bangladesh also follows this rule. These restrictions have primarily suspended tourism both globally and nationally [1]. Hafsa [2] mentioned that the entire tourism and hospitality industry around the globe is going to face a bog disaster and this will continue till the COVID-19 situation become normal. Hoque, et al. [3] pointed out that the occurrence of Coronavirus in China has significant impacts all across the globe. The global tourists have dropped their programs to visit China and the Chinese tourists are restricted to visit abroad countries. Kumar [4] stated that lockdown has been done in many cities not only in India but also all over the world.

The travel industry is suffering the most because of this. Dread has fumed in individuals' psyches and they will try not to travel to another country. Richards and Morrill [5] concluded that businesses in almost all travel tourism sectors and worldwide have already experienced a downturn in demand and that they are also expecting this to continue over the following year. Gössling, et al. [6] has pointed out that some of the key research needs to understand these changes and contribute to a more sustainable post-pandemic tourism sector. Because, as soon as the virus is under control, there will be an urge by many to go back to business as usual. But the crisis holds important messages regarding the resilience of the tourism system, also in regard to other ongoing crises that are not as immediate, but potentially even more devastating than COVID-19, such as climate change. Chaudhary et al., [7] mentioned that this COVID-19 pandemic has negatively affected the services and the manufacturing sectors such as hospitality, tours and travels, healthcare, retail, banks, hotels, real estate, education, health, IT, recreation, media, and others.

Ulak [8] stated that there have been many disastrous events and tourism crises in the past. Negative events like- 9/11 attack on the twin tower in the USA; the Mumbai Taj attack in; Earthquake in Nepal; Tsunami in Japan; SARS, Ebola, Zika Virus, and many other pandemics have impacted global tourism brutally. However, with the strategies, ideas and joint effort of tourism stakeholders, the assurance of safety and security of the travelers have eradicated the tourism crisis and had rejuvenated. Yeh [9] found that open correspondence is a key to effectively battle pandemics and government-supported credits are urgent to the endurance of the travel industry. Wachyuni & Kusumaningrum [10] concluded that tourism will recover faster because the majority of respondents in their study have planned when and where they will immediately after the COVID-19 pandemic end with new travel preferences. Richards [11] has mentioned that tourism has survived previous crises, and it will survive this crisis as well. Numerous individuals are presently moving their vacation plans from this late spring to 2021, and there is little uncertainty that the interest is there.

# 4. METHODOLOGY

The study has done based on primary and secondary data. Primary Data for the study has been collected by visiting tourist spots, by asking

a question to local people, authorities, and tourists of the spots in Cumilla in full compliance with the health rules & maintaining social distance. Secondary Data have been collected from different newspapers, articles, journals, websites & Wikipedia, etc. Random sampling has been chosen to meet the research objectives. To conduct this survey, a predesigned online questionnaire had been provided to 200 respondents. Respondents with different designations had participated in this online survey. The survey conducted using onlinebased. Questions are generally structured as multiple-choice questions. A survey link was posted on social media & friends were asked to participate in this survey.

# 5. COVID-19 AND BANGLADESH TOURISM

According to the Ministry of Civil Aviation and Tourism, Bangladesh's tourism sector has lost about TK. 14,000 crore due to the epidemic. As per the Bangladesh Tourism Board, 4 million individuals associated with the area have lost their positions up until now. About 70% of the manpower involved in tourism is in extreme uncertainty about livelihood. The Director of the Tour Operators Association of Bangladesh (TOAB). Mr. Shahidullah said "Everything related to tourism has been closed for four months, but the working expenses have not halted, bank revenue, land lease, staff compensations, power and gas bills are as yet going on. Many have shut their organizations and moved to villages. Some have changed professions. In the fiscal year 2020-21, a budget of BD TK.6 lakh crore has been allocated for the civil aviation and tourism sector. This time, the allocation of BD TK. 262 crore has been increased in this sector as compared to the last financial year, but it is not enough to meet the demand [12].

## 5.1 Stagnant Tourism Because of Covid-19 in Cumilla District

Comilla District, officially and currently known as Cumilla District. The present Cumilla is a district under the Chittagong Division. Many archaeological and attraction places are situated in this district, Like Shalban Bihar, Maynamati Museum, Maynamati war cemetery, Jagannath temple, Bangladesh Academy for Rural Development, Charpatra Mura, Palace of king Bhoj, Dharmasagarsagor par, Gomti's banks and Lalmai hils, etc. Because of Covid 19, the tourist places of Cumilla are empty as tourists do not come from different parts of the country & the local businesses are facing severe losses due to this. At other times, people of different ages from different parts of Cumilla and other parts of the country used to walk in tourist places, but now there is only wailing. Mr. Rubel, GM of Fun Town, said that the entertainment centres built at a cost of crore of taka are facing losses due to coronavirus. If the government does not cooperate, these institutions will be shut down [13]. In Cumilla, the huge number of people lost their job and close their small business during this pandemic. Significant number of tour and travel agent closed their business which increased unemployment in this region. Bangladesh's enormous monetary development has been not able to make occupations proportionately over the pandemic.Some early migrants from Cumilla, who have been working in Middle Eastern countries many of them are returned as they lost their job in overseas due to COVID-19. It also negatively impacted to regional development.

#### 6. REGIONAL TOURISM DEVELOPMENT

# 6.1 Perspective Cumilla

Tourism is a sector with positive effects on regional development. It is an important development tool that provides economic, social and political development in the region [14]. The achievement of the travel Industry in the Centro area relies upon the nature of its regular assets, accessible foundation, and provincial and nearby administration [15]. In the Cumilla district, local people prefer tourist arrival because roads & electricity are developed in the archaeological area due to the arrival of tourists. Houses, structures, convenience, lodging lofts, are developed for boosting traveler appearance. Due to COVID-19 tourist's arrival significantly fall in this region although this region has a great potentiality.

Table 1 shows that tourist arrivals decreasing except 2016 and 2017. In 2019 and 2020 had a massive negative impact of COVID-19 which is why tourist arrivals were significantly decreased as national/domestic and international are uninterred to travel because of health and safety reasons.

# 6.2 Covid-19 Impact on Regional Tourism Development

The development of the tourism sector is encouraging the development of other economic sectors, enhances infrastructure development & tourism contributed to increasing also employment and income opportunities. But, due to the coronavirus, tourism-related all activities have come to a standstill. The antiquated and recently shaped vacationer spots of Cumilla have been shut for around a guarter of a year because of the pandemic. Because of government restrictions and panic, people have not been able to visit the tourist spots & the development work of the tourist place is also stopped. Various development works like enhancing the beautification of the tourist place, introducing different facilities for the tourist & excavation to find archaeological patterns in different places were stopped by order of the authorities. Because of the lockdown, the canal excavation work, road development task around the tourist place was closed. The repair & cleaning work was also stopped for a long time in the tourist spots. In such a circumstance, many have been compelled to shut down their organizations.

#### Table 1. Tourist arrivals rise in five years

Year	Arrival of foreign tourists in BD (in millions)
2014	0.16
2015	0.14
2016	0.20
2017	0.26
2018	0.27
2019	0.20
2020 (January	0.10
to August)	
(0	

(Source: BPC, [12] and [16])

#### 7. DATA ANALYSIS

The collected data has been analysed with the help of SPSS.

Table 2 shows that 48% of respondents visited different tourist spots in the Cumilla district but 52% of respondents didn't visit any tourist place because maximum tourists believe first to save lives and then think of a wish like tourism.

Table 2. Respondents answer on "Have you visited any tourist places in Cumilla
Recently"

Options	Frequency	Percent
Yes	95	48
No	105	52
Total	200	100
	Source: Field survey,	2020

Table 3 indicates that 50% of respondents said the sights are open & 35% of respondents said it could be open. Maximum sights were closed from April to July to reduce the incidence of Corona virus, but now all sights are open for tourists.

# Table 3. Respondents answer on "Are thesights open now"

Options	Frequency	Percent
Yes	100	50
No	30	15
May be	70	35
Total	200	100

Source: Field survey, 2020

Table 4 represents that 48% of respondents have agreed that the lockdown hampered the development of the sights & the surrounding area & 36% of respondents ticked on maybe. Because of the lockdown road development, canal excavation, cleaning & sights adornment work was stopped for a long time in the area of the sight.

#### Table 4. Respondents answer on "The lockdown has hampered the development of the sights & the surrounding area"

Options	Frequency	Percent
Yes	95	48
No	33	16
May be	72	36
Total	200	100
	Source: Field survey,	2020

Table 5 shows that 37% of respondents said the presence of people at a tourist place is lower & 21% of respondents are ticked on lowest. Most people are not coming to the tourist place due to concerning health protection. Because of Covid-19, the tourist places of Cumilla are almost empty as tourists do not come from different parts of the country.

Table 5. Respondents answer on "The
presence of people in a tourist place"

Types of responses	Frequency	Percentage
Highest	12	13
Higher	15	15
About the same	13	14
Lower	35	37
lowest	20	21
Total	95	100

Source: Field survey, 2020 \*\*\*Only 95 respondents answered this question

Table 6 describes that 40% of respondents are satisfied & 32% of respondents are dissatisfied about the place they have visited. Among those 8% are highly satisfied, on the other hand, 13% are highly dissatisfied about the place they have visited. It is expected that Cumilla tourism will be able to overcome the loss gradually since the majority of the visitors are satisfied by visiting tourist places.

# Table 6. Respondents answer on "Level of satisfaction about the place they have visited"

Types of responses	Respondents	Percentage
Highly satisfied	8	8
Satisfied	38	40
Neutral	7	7
Dissatisfied	30	32
Highly	12	13
dissatisfied		
Total	95	100
	vey, 2020 ***Only 9	
ans	wered this question	า

Table 7 depicts that 33% respondents select transportation quality & 22% respondents select security behind their satisfaction. Due to located along the Dhaka-Chittagong highway, the finest transportation facility still exists in Cumilla region.

Table 8 illustrates that 36% of respondents select non-compliance with hygiene rules & 21% of respondents select high cost of touring behind their dissatisfaction. In most of the tourist spots, people do not follow the hygiene rules and the extra entry cost is the reasons for the dissatisfaction of the tourists.

Table 9 shows that 43% of respondents said higher damage has been done in Cumilla tourism

due to lockdown and 26% of respondents said somewhat worse. Cumilla tourism was facing huge losses due to the lockdown and policymakers think that it will take a long time to recover from this loss. Mr. Bhuiyan, Director of Dino Park mentioned that the leisure centres would be able to turn around again if the bank waived interest on loans and other benefits. Table 10 indicates that 36% of respondents are dissatisfied and 28% of respondents are highly dissatisfied about the management style of tourist place authority during the pandemic. Authorities in maximum tourist spots are indifferent to comply with health regulations and maximum staffs are walking around without a mask which is the reason for tourist dissatisfaction.

Causes of satisfaction	Frequency	Percent	
Cost-efficient	8	17	
Transportation quality	15	33	
Security	10	22	
High quality of food	7	15	
Adherence to hygiene rules	6	13	
Total	46	100	

Source: Field survey, 2020 \*\*\* Only 46 respondents answered this question

#### Table 8. Respondents answer on "Causes of dissatisfaction"

Causes of dissatisfaction	Frequency	Percent	
High cost of touring	9	21	
Bad transportation	5	12	
Poor security	7	17	
Poor quality of food	6	14	
Non-compliance with hygiene rules	15	36	
Total	42	100	

Source: Field survey, 2020 \*\*\*Only 42 respondents answered this question

# Table 9. Respondents answer on "The extent of damage has been done in Cumilla tourism dueto lockdown"

Types of responses	Respondents	Percentage	
Higher	86	43	
Somewhat worse	51	26	
Stayed the same	24	12	
Lower	23	11	
None	16	8	
Total	200	100	

Source: Field survey, 2020

# Table 10. Respondents answer on "Level of satisfaction about the management style of tourist place authority during the pandemic"

Types of responses	Respondents	Percentage
Highly satisfied	8	8
Satisfied	11	12
Neutral	15	16
Dissatisfied	34	36
Highly dissatisfied	27	28
Total	95	100

Source: Field survey, 2020

Suggestion	Frequency	Percent
Arranging adequate thermal scanners and hand sanitizer at the entrance	57	29
of the tourist place.		
Hanging health safety instructions with pictures	30	15
Ensuring tourists' security	33	16
Taking more promotional activities	36	18
Reducing the cost of touring	44	22
Total	200	100
Source: Field survey, 2020		

 Table 11. Suggestions for improving the quality of tourism during Covid-19

Table 11 represents that 29% of respondents suggest arranging adequate thermal scanners & hand sanitizer at the entrance of the tourist place, 22% suggest reducing the cost of touring & others suggest taking more promotional activity, ensuring tourists' security, hanging health safety instructions with pictures in different places. Most tourist destinations do not have adequate hand sanitizers, thermal scanners & health safety instructions which should be arranged soon.

#### 8. FINDINGS AND DISCUSSION

After analysing primary data, the study has come to some important findings:

- The majority of the respondents mentioned that they didn't visit any tourist places in Cumilla Recently.
- Most of the respondents told that the sights are open now.
- The majority of the respondents agreed that the lockdown has hampered the development of the sights & the surrounding area.
- The majority of the respondents mentioned that there is a lower presence of people in the tourist place.
- Most of the respondents are satisfied with visiting the tourist place.
- The majority of the respondents are satisfied with transportation quality, security & cost efficiency.
- Most of the respondents said noncompliance with hygiene rules, high cost of touring poor security are the reasons behind their dissatisfaction.
- The majority of the respondents said a higher extent of damage has been done to Cumilla tourism due to lockdown.
- The majority of the respondents are dissatisfied with the management style of tourist place authority during the pandemic.

 The majority of the respondents have suggested arranging adequate thermal scanners & hand sanitizer at the entrance of the tourist place, reducing the cost of touring & taking more promotional activity.

## 9. CONCLUSION

Due to Covid-19, various sectors including tourism of Bangladesh have been affected which are still being affected. Therefore, incomes in various sectors have been decreased noticeably specifically in the tourism sector. The empirical data have shown that although people did not leave their homes in the last seven months, but now people are going to visit different places and all the tourist places have been opened for tourists. But the presence of tourists is not enough because of the current pandemic which is still ongoing all over the world. The lockdown has caused a lot of damage to the development of the sights and the surrounding area in tourist places. Most of the tourists are satisfied with the tourist places and transportation quality. But maximum tourists are dissatisfied with noncompliance with hygiene rules, high cost of touring, the poor security, and the management system of tourist places. The maximum tourists suggested that arranging adequate thermal scanners and hand sanitizer at the entrance of the tourist place, reducing the cost of touring and taking more promotional activities. There is no doubt that this COVID-19 and the current pandemic situation has brought a lot of negative impacts on tourism development, especially regional development in Cumilla, Bangladesh. COVID-19 presents a serious obstacle to develop regional and national tourism development in Bandladesh towards the importance of embracing regional long-term development in creative economies. So, the government and policymakers need to pay special attention to this sector. This study did not cover respondents throughout the country &

amp; the sample doesn't actually represent the overall population. Another vital constraint of the study was the insufficiency of information. It is hard to get insight because authorities are not willing to provide sufficient information. And also because of this pandemic situation, some institutions and tourist spots are closed during March 2020. This research is based on the Cumilla area, but in the future, two or more other divisions can be included as a comparative study in Bangladesh to comprehend the development trends.

#### **10. RECOMMENDATIONS**

In summary, there are some important recommendations highlighted for the tourism authority which need to pay attention for the regional development:

- Cumilla region has a unique tourist place for attracting tourists but due to coronavirus no effective measure has been taken by tourism authority for the visitors e.g., promoting health screening measures for both employees and visitors are urgently needed.
- Allocating enough budgets to hold archaeological sites authenticity through excavation, development, continuous renovation. Besides, the authority should start again various development works like infrastructure development (accommodation, restaurants), road development tasks, cleanliness of the tourist place & the beautification of the tourist place, etc. Emphasis on domestic tourism and without the improvement of tourism industry never possible to develop and attract domestic visitors.
- For the promotion of the tourism industry, the tourism authority should make a plan for creating events, announcements, writing blogs, and opening YouTube channel, so that information can be obtained through social media.
- Enhancing sanitation procedures, reducing the price of the entry ticket, and different ride discounts. Establishing health facilities such as health centres, first aid centres for enhancing tourists' arrival. For ensuring social distance in tourist places local authorities should hire more guards in tourist spots. Arranging adequate thermal scanners, hand sanitizer, hanging health safety instructions with pictures in tourist places. Besides taking more promotional

activities including social media for the promotion of tourism in Bangladesh like Cumilla.

# CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the authors.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

#### REFERENCES

- Rahmanov F, Aliyeva R, Rosokhata AS, Letunovska NY. Tourism management in azerbaijanunder sustainable development: Impact of COVID-19; 2020.
- Hafsa S. Impacts of covid-19 pandemic on tourism & hospitality industry in Bangladesh; 2020. SSRN 3659196.
- 3. Hoque A, Shikha FA, Hasanat MW, Arif I, Hamid AB. The effect of coronavirus (COVID-19) in the tourism industry in China. Asian Journal of Multidisciplinary Studies. 2020;3(1):52-8.
- Kumar A. Disastrous impact of coronavirus (COVID 19) on tourism and hospitality industry in India. J. Xi'an Univ. Archit. Technol. 2020;1-5.
- 5. Richards G, Morrill W. The impact and future implications of COVID-19 in the youth travel sector. ATLAS Tourism and Leisure Review. 2020;2:57-64.
- Gössling S, Scott D, Hall CM. Pandemics, tourism and global change: a rapid assessment of COVID-19. Journal of Sustainable Tourism. 2020;1-20.
- Chaudhary M, Sodani PR, Das S. Effect of COVID-19 on economy in India: Some reflections for policy and programme. Journal of Health Management. 2020; 22(2):169-80.
- Ulak N. A preliminary study of novel coronavirus disease (COVID-19) outbreak: A pandemic leading crisis in tourism industry of Nepal. Journal of Tourism and Hospitality Education. 2020;10:108-31.
- 9. Yeh SS. Tourism recovery strategy against COVID-19 pandemic. Tourism Recreation Research. 2020;1-7.
- 10. Wachyuni SS, Kusumaningrum DA. The effect of COVID-19 pandemic: How are the future tourist behavior? Journal of

Education, Society and Behavioural Science. 2020;6:67-76.

- 11. Richards G. The impact of crisis on travel: Covid-19 and other shocks. Tourism Facing A Pandemic: From Crisis to Recovery. 2020;25-32.
- Bangladesh Parjatan Corporation, Annual report, Bangladesh Parjatan Corporation, Dhaka, Bangladesh; 2020. BBC B. BBC.com. Available:BBC.com:https://www.bbc.com/b engali/news-53458759).2020 Accessed on October, 2020.
- 13. Somoynews Retrieved from somoynews.tv:https://www.m.somoynews.t v/pages/details/225088A. 2020 october
- BOZ A, SERÇEK S. The role of tourism in regional development and its effects on economic development. Proceedings E-Book II. 2016;14:41.
- Neves P, Brokking P. Tourism towards sustainable regional development. Skolan för Arkitektur Och Samhällsbyggnad, Kungliga Tekniska Högskolan; 2006.
- 16. The Financial Express, Tourism potentiality in Cumilla; 2020.

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