

## **Sustainable Tourism Development in Bangladesh: An Empirical Study on Sylhet**

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***Abstract :** Sustainable tourism development indicates the travel and tourism designed to minimize the impacts of visitors and tourists on the places they visit, encourage protection of both cultural and natural heritage, upkeep the environment, and provide long-term means for social improvements and economic opportunities for local residents. Sustainability principles refer to the environmental, economic, and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability. Sylhet, most picturesque and naturally affluent regions in Bangladesh, is a major tourist destination in Bangladesh and has the great potential to be developed and promoted as a major sustainable tourism destination of Bangladesh. This study elucidates the social, cultural, environmental, economical, political and other factors affecting the sustainability of the Sylhet through factor analysis and other measurements and provide recommendation about the initiatives that should be taken to mitigate and to control the negative impacts of tourism (environmentally, economically, and socially) to make Sylhet as a sustainable tourism destination.*

***Keywords:** sustainable tourism, sustainable tourist destination, tourists' experience, tourists' perception, index analysis, factor analysis*

### **Introduction**

According to WTTC (2014), the importance of travel and tourism in an economy continued to grow in 2013. Its total contribution comprised 9.5% of global GDP (US \$7 trillion) and the sector generated over 266 million jobs – 1 in 11 of all jobs in the world. The industry outperformed the entire wider economy in 2013, growing faster than other notable industries such as manufacturing, financial services, and retail (WTTC, 2014). Being a people-oriented and labor intensive industry, tourism helps to create many jobs which have helped revitalize local economies. Tourism sector allows for quick entry into the workforce for youth, women, and migrant workers. Moreover, in case of LDCs, travel and tourism sector has been accounted for 45% of their service exports thus, lead this

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sector to be considered by most of the LDCs as powerful engine for their economic growth, employment, and poverty alleviation. However, tourism is a commodity for sale, which is consumed at the point of production. Hence, it is growing fast as a global industry and is comparatively an easier way to earn foreign currencies. In 2012, the tourism day was celebrated worldwide centering the theme “Tourism and Sustainable Energy”. This shows the importance of sustainable growth for the entire industry. Moreover, tourism planners worldwide are taking important steps for sustainable tourism development and these steps are also helpful for creating jobs, lifting people out of poverty and are helping to protect the planet (UNWTO, 2013). At the same time, complaints from tourist destinations concerning massive negative impacts upon environment, culture, society, and residents’ regular life have given rise to a demand for a more sustainable development in tourism (Commission on Sustainable Development, 2012).

Sustainable tourism development is a totally different and a new phenomenon in Bangladesh. Sustainable tourism development indicates the travel and tourism designed to minimize the impact of visitors and tourists on the places they visit, encourage protection of both cultural and natural heritages, upkeep the environment along with its biodiversity, flora and fauna, and provide long-term means for social improvements and economic opportunities for local residents. However, sustainable tourism development requires the informed participation of all relevant stakeholders. Moreover, it is asked for the strong political leadership to ensure wide participation of all the related stakeholders and their consensus building. Many scholars suggested that different parties will have to be involved in the sustainable tourism development process to ensure its success (Commission on Sustainable Development, 2012). Furthermore, achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary. In this paper it is highlighted that, sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues, and promoting sustainable tourism practices amongst them. This study tries to initiate the promotional points and the initiative needed to be taken to mitigate and to control the negative impacts of tourism (environmentally, economically, and socially) to make Sylhet, Bangladesh as a sustainable tourism destination.

This study also elucidates the social, cultural, environmental, economical, political and other factors affecting the sustainability of the Sylhet through factor analysis and other measurements. Moreover, this study considered that new tourism developments should be

planned together with municipal, industrial, agro-aqua-cultural, and nature protection activities, to allow for multiple complementary uses and to segregate conflicting activities.

### **Rationale of the Study**

Though, Sylhet has good potential to be developed and promoted as one of the sustainable tourism destinations in Bangladesh, however, a large gap exists to reach there. The major reasons behind this situation are lack of local peoples, policy makers, and tourism service providers' awareness about sustainable tourism, its benefits and its positive impacts on the Sylhet's natural environment, cultural heritage, local economy, and society. Moreover, little research and lack of activities to enlighten the local peoples and related stakeholders on developing and promoting Sylhet as a sustainable tourism destination made the scenario worsen. Sylhet, in spite of having similar potentiality like Cox's Bazar and Sundarban for developing and promoting itself as a sustainable tourism destination in South and South-East Asia, receives much less attention and promotion from the policy makers and from both the public and private sectors of Bangladesh.

This study will try to find out the actual condition of the tourists' experience whilst visiting Sylhet and whether there is any possibility to develop and promote Sylhet as a sustainable tourism destination. The present study will show the level of service provided by the public and related private sectors and their contributions to develop and promote Sylhet as a sustainable tourism destination. This study will also suggest the ways to promote sustainable tourism in Sylhet and to protect its natural, cultural and environmental heritages. Moreover, the present study will also highlight the impacts of sustainable tourism to the local people and the payback they will get from it. Finally, this paper will show the ways of making Sylhet as a sustainable tourism destination which will create employment and other benefits for local people whilst protecting and up-keeping the environment for present as well as future generations.

### **Aims and Objectives**

The aim of this study is to find out the possible ways to develop and promote Sylhet as a sustainable tourism destination by identifying the tourists' actual experiences whilst visiting Sylhet, their degree of sensitivity to the environmental pollution, and the positive and negative factors that affect their visits. Moreover, the study aims to highlight the promotional aspects through which Sylhet can be differentiated as a sustainable tourism destination compare with other destinations in Bangladesh.

The objectives of this study are to:

1. find out the types of tourists' experiences that the tourists enjoy whilst visiting Sylhet.
2. identify the degree of sensitivity of tourists regarding environmental pollution.
3. highlight positive and negative factors affecting tourists for visiting Sylhet.
4. identify the level of maintenance of different destinations and tourist spots of Sylhet.
5. recommend the ways to promote sustainable tourism and suggestions to protect the natural, cultural, and historical heritages of Sylhet.

### **Literature Review**

The World Tourism Organization (2010) defines tourists as people "traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes" (WTO, 2010). As tourism has become a popular global leisure activity, it can be either domestic or international. International tourism has both incoming and outgoing implications on a country's balance of payments. To date, tourism is a major source of income for many countries, and affects the economy of both the source and host countries, in some cases it is of vital importance (Cooper et al., 2008). Similarly, many authors define domestic tourism as 'people's visiting activities to different destinations within the geographical boundary of their own country of residence' (Jafari, 1986, 2002; Sharpley and Telfer, 2002).

Tourism suffered as a result of a strong economic slowdown due to the late-2000s recession taken between the second half of 2008 and the end of 2009, and the outbreak of the H1N1 influenza virus (WTO, 2010). This slowdown on international tourism demand was also reflected in the air transport industry with a negative growth in passenger traffic as well as, the hotel industry with declining room occupancy (UNWTO 2012). It then slowly recovered, international tourism receipts (the travel item of the balance of payments) grew to US\$1.03 trillion in 2011, corresponding to an increase in real terms of 3.8% from 2010 (UNWTO, 2012). Moreover, international tourist arrivals surpassed the milestone 1 billion tourists globally for first time in history in 2012 (UNWTO, 2013). According to the World Travel and Tourism Council (2014), "the total contribution of Travel & Tourism to world's GDP was USD 6,990.3bn (9.5% of world's GDP) in 2013, and is forecast to rise by 4.3% in 2014, and to rise by 4.2% pa to USD10,965.1bn (10.3% of world's GDP) in 2024. Moreover, in 2013, the total contribution of Travel & Tourism to world's employment, including jobs indirectly supported by the industry, was 8.9% of

total employment (265,855,000 jobs). This is expected to rise by 2.5% in 2014 to 272,417,000 jobs and rise by 2.4% pa to 346,901,000 jobs in 2024 (10.2% of total)".

Scholars assert that tourism is in a form which can maintain its variability in an area for an infinite period of time (Butler, 1993:29). It has emerged from being a relatively small-scale activity into a global economic phenomenon from the 1960s onward. Today, it is described as one of the world's largest and fastest growing economic sectors (UN, 1999; WTO, 2002). Evidence suggests that tourism as a global phenomenon shows no signs of substantially abating in the long term. It has been suggested that travel is necessary in order to maintain relationships, as social life is increasingly networked and conducted at a distance (John, 2003). For many people, vacations and travel are increasingly being viewed as a necessity rather than a luxury, and this is reflected in tourist numbers with growth up to 8% in emerging economies (UNWTO, 2012). With the advent of e-commerce, tourism products have become one of the most traded items on the internet. Tourism products and services have been made available through intermediaries, although tourism providers (hotels, airlines, etc.), including small-scale operators, can sell their services directly (Lu. J and Lu. Z, 2004).

However, like other forms of development, tourism can also cause its share of problems, such as social dislocation, loss of cultural heritage, economic dependence and ecological degradation (Islam, 2008; Rahman, 2010). Learning about the impacts of tourism has led many people to seek more responsible holidays. These include various forms of alternative or sustainable tourism such as: 'nature-based tourism', 'ecotourism' and 'cultural tourism'. Sustainable tourism is becoming so popular that some say that what we presently call 'alternative' will be the 'mainstream' in a decade. Therefore, considering the aim and objectives of the current study, an extensive literature review was undertaken that included academic journals covering natural resource management and conservation, journals of the travel and tourism industry, and those journals produced by environmental organizations such as United Nations Environment Programme (UNEP), conference proceedings, discussion papers and published books and manuals. In addition, literature produced by bodies such as the World Tourism Organization (WTO), and the World Travel and Tourism Council (WTTC) are also highlighted over the paper. The present study found that all the above literature stretches the concept that all tourism activities, whatever the tourists' motivation is (holidays, business travel, conferences, adventure travel and ecotourism etc.) need to be sustainable. Therefore, the next section of the literature review summarizes the aforementioned literature to clearly clarify sustainable tourism, its components, principle and polices, and the ways to ensure its development and promotion.

### **Sustainable Tourism**

The growth in alternative forms of tourism has occurred simultaneously with increased recognition of the need to implement the concept of sustainable development. As with "ecotourism", "sustainable development" is another environmental catch phrase with no single definition. Cooper et al. (2008) defined sustainable tourism as tourism that respects both local people and the traveler, cultural heritage and the environment. It seeks to provide people with an exciting and educational holiday that is also of benefit to the people of the host country. Moreover, development of sustainable tourism in a destination is a continuous process of coordination and development of amenities, facilities, products and services that support host communities to deliver quality experiences for visitors and enhance residents' well-being (Sustainable Tourism, 2013).

The most widely used definition throughout which runs the theme of sustainable development defines it as: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). Moreover, governance systems for the tourism commons as a whole and their individual components are needed to establish rules of collective behavior and principles of resource allocation in host areas and offer the requisite authority that legitimizes and protects the rights and duties of local and nonlocal resource appropriators and users (Healey, 1997).

Furthermore, sustainable tourism is about managing tourism's impacts on the environment, communities and the future economy to ensure that the effects are positive rather than negative for the benefit of future generations. It is a management approach that is relevant to all types of tourism, regardless of whether it takes place in cities, towns, countryside or the coast (English Tourism Council, 2002). However, sustainable tourism development meets the needs of the present tourists and host regions while protecting and enhancing the opportunity for the future. Although it is envisaged as leading to management of all resources thus, it is a way of economic, social and aesthetic needs fulfillment, as well as, maintaining cultural integrity, essential ecological processes, biological diversity and life support systems (WTO, 1996). Moreover, the impact of tourism on developing countries is a critical sustainability issue. Interestingly, tourism's economic contribution in many developing countries has exceeded that of traditional economic activities such as agriculture and mineral extraction (UN, 1999).

The link between tourism and the environmental and social components of sustainable development has received increasing attention. Industry stakeholders assert that, besides its economic contribution, tourism can lead to ecologically and socially sustainable

development (WTTC and IHRA, 1999). It is suggested that tourism can act as a catalyst for conservation and environmental protection because of the following factors (WTTC and IHRA, 1999):

- Firstly, it is generally non-consumptive and has less impact on natural resources than most other industries.
- Secondly, it is based on the appreciation of natural and cultural assets and has greater motivation to protect its resource base.
- Finally, it can provide valuable revenue and economic incentive to conserve resources which would otherwise be used in more damaging activities.

Sustainable tourism is the concept of visiting a place as a tourist and trying to make only a positive impact on the environment, society and economy (Lisse, 2009). However, tourism can involve primary transportation to the general location, local transportation, accommodations, entertainment, recreation, nourishment and shopping as well. There is now broad consensus that tourism development should be sustainable; however, the question of how to achieve this remains an object of debate (Gossling and Ceron, 2004).

Without travel there is no tourism, so the concept of sustainable tourism is tightly linked to a concept of sustainable mobility (Hoyer, 2000). Two relevant considerations are tourism's reliance on fossil fuels and tourism's effect on climate change. 72 per cent of tourism's CO<sub>2</sub> come from transportation, 24 per cent from accommodations, and 4 per cent from local activities (Peeters and Dubois, 2010). Aviation accounts for 55% of that transportation CO<sub>2</sub> emissions (or 40% of tourism's total). However, when considering the impact of all greenhouse gas emissions from tourism and that aviation emissions are made at high altitude where their effect on climate is amplified, aviation alone accounts for 75% of tourism's climate impact.

Socially, tourism is credited for its potential impact on employment; income redistribution and poverty alleviation; contribution to native craft revival, festivals and traditions; and improvements to the physical and social infrastructure, enhancing overall health and social welfare (UN, 1999). There are many critics who question tourism as a sustainable development strategy. Some contend that, although tourism has proved effective as a vehicle for economic growth, the fundamental principles of sustainable development including equity, holistic planning and sustainability, cannot be easily transposed onto the sector (Sharpley, 2000).

Five themes used for evaluation tourism research framework, they are population, peace, prosperity, pollution and protect. The fundamental concern of sustainability is that aggregate human impacts threaten the survival humans and ecosystem services on which they depend (Pereira et al., 2010; Persha and Agarwal, 2011). However, impact has grown because biological evolutionary pressures promote continuing human reproduction and competitive consumption. Moreover, sustainability requires modifications to human society so as to reduce its aggregate impacts. Firstly, the impacts depend on the size and distribution of the global human population. Secondly, impact on the social organization, economy, governance and civil society. Finally, the consumption, pollution, and/or protection of nature are result of such social organization to modify further.

As world population is a key predictor of current and future human impact on the planet, peace is considered as a global measure of successful social organization and governance. Moreover, prosperity quantifies economic activity, and a substitute for per capita resource consumption. Furthermore, pollution increases the possibility that the environment and other protected areas are in threat. Therefore, tourism contributions which pollute the atmosphere, oceans and freshwater needs special supervision with regulations as sustainability is a solution to these problem (Gossling, 2002; Gossling and Schumacher, 2010; Gossling et al., 2011).

Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic, and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability (UNEP and UNWTO, 2005). Thus, sustainable tourism should:

1. Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.
2. Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.
3. Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable

employment and income earning opportunities and social services to host communities, and contributing to poverty alleviation.

Therefore, sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary (UNEP and UNWTO, 2005).

### **Sylhet as a Destination**

Nestled in the picturesque Surma valley amidst scenic tea plantations and lush green tropical forests, greater Sylhet is a prime attraction for both international tourists visiting Bangladesh as well for domestic tourists. Laying between the Khasia and the Jaintia hills on the north, and the Tripura hills on the south, Sylhet breaks the monotony of the flatness of this land by a multitude of terraced tea gardens, rolling countryside and the exotic flora and fauna. Here the thick tropical forests abound with many species of wildlife, spread their aroma around the typical hearth and homes of the Mainpuri tribal maidens famous for their dance. Moreover, about 80 km. from Sylhet town connected by road and rail - Srimangal is known as the tea capital of Bangladesh and the actual tea center of the area. For miles and miles around, the visitor can see the teagardens spread like a green carpet over the plain land or on the sloping hills. The main attraction of Sylhet city is the Shrine of Hajrat Shahjalal (R) and Hajrat Shah Poran (R). The following table (Table 1) represents the potential sustainable tourist spots in Sylhet.

**Table 1: Potential Sustainable Tourist Spots in Sylhet**

Madhabkunda Waterfall	Lalakhali	Jaflong	Jointapur's Rajbari
Bichanakandi	Hammam Waterfall	Srimongol	Ratargul Swamp Forest

### **Methodology**

This research is done on the basis of descriptive method. The term descriptive research refers to the type of research question, design, and data analysis along with descriptive statistics, while inferential statistics try to determine cause, solution and effect (Malhotra, 2010). Based on the literature review and findings from the initial in-depth interviews, and considering the earlier similar studies, 26 variables (items) were finally identified and have been incorporated to develop the survey questionnaire. The survey questionnaire was divided into two parts. Apart from the socio-demographic and travel information part

in the questionnaire, for identified 26 items, respondents (tourists) were asked to fill the questionnaire and rate the importance of the items based on five-point Likert scale. Data sources were both primary and secondary in nature. Primary data sources were: questionnaire and industry experts interviews and secondary data source were: articles on recognized journals and e-journals, books, and other published materials by government and other international bodies (UNWTO, WTTC, UNEP, UNDP, USAID etc.) on sustainable tourism development under the context of Bangladesh and other countries as well. However, due to not having actual population size and proper sampling frame, the present study used non-probabilistic judgmental sampling as sampling process, thus, the selection of the sampling units (tourists) is left primarily to the interviewer. Furthermore, to ensure the population representativeness of the sample and to ensure the generalization based on the findings of the current study, a total of 329 valid responses were used for data analysis. Additionally, reliability and validity of the collected data has been examined by using Alpha (Cronbach's Alpha) and split half (Spearman-Brown coefficient and Guttman split-half coefficient) techniques. Finally, the present study used index analysis, descriptive statistics - frequency distribution and multivariate dependence technique - factor analysis to analyze the collected data.

### **Data analysis and findings**

#### **Reliability of Data**

The reliability of data was verified using both alpha and split half techniques. The following tables (Table 2 and 3) represent the findings of the data reliability.

**Table 2: Reliability Statistics (using cronbach alpha technique)**

<b>Reliability Statistics</b>	
<b>Cronbach's Alpha</b>	<b>No. of Items</b>
.777	26

The test was undertaken to calculate and to verify the reliability and internal consistency of the questionnaire items by measuring Cronbrach Alpha score (Zikmund and Babin, 2010). Malhotra, (2010) states that Cronbach Alpha score of at least 0.70 of any study represents the reliability of the data of that study. The present study found that, for the 26 identified predictors the Cronbrach Alpha score was 0.777, thus, indicating the reliability of the collected data.

**Table 3: Reliability Statistics (using split half technique)**

<b>Reliability Statistics</b>			
Cronbach's Alpha	Part 1	Value	.686
		N of Items	13*
	Part 2	Value	.631
		N of Items	13*
	Total N of Items		
Correlation Between Forms			.544
Spearman-Brown Coefficient	Equal Length		.705
	Unequal Length		.705
Guttman Split-Half Coefficient			.701

\* The identified 26 items (predictors) were divided into two parts. Each of the parts consists of 13 items and shows reliable score for the respective parts.

#### **Future potentiality of Sylhet to be a Sustainable Tourism Destination (STD)**

Based on the findings of the index value, the following table (Table 4) represents the future potentiality of Sylhet to be a Sustainable Tourism destination (STD).

**Table 4: Level of Future Potentiality of Sylhet to be a STD**

<b>Descriptive Statistics</b>		
	<b>N</b>	<b>Mean</b>
Accommodation facility is good enough	329	.7455
I prefer to stay in high standard hotel	329	-.1909
I prefer quality food & beverage of the restaurants	329	.9273
I usually take local food/drinks	329	.8636
Transportation system is good	329	.7091
I prefer the comfort of journey the most while choosing transportation	329	1.0545

I prefer the quality of services no matter how much money they cost	329	.2727
I am well informed about the cultural, social norms and economic conditions of people	329	.4273
I do favor the businesses that conserve cultural heritage and traditional values	329	1.0545
I prefer to consume local goods to support local families	329	1.0273
I do not litter the tourist spots with waste materials	329	1.2364
I prefer to take services from environmentally responsible businesses	329	.9545
I prefer to buy things which are not harmful to nature	329	1.3091
I use non-renewable resources carefully	329	.9909
I think destinations and tourist spots are maintained properly	329	-.3455
Concerned authority is enough cautious natural degradation of destinations	329	1.3273
ST will improve economic condition of local people	329	1.4091
ST will make positive impact on natural and cultural heritage	329	1.3545
Local people are conscious about protecting tourist destination and environment	329	-.1909
Local people are involved in tourism activities	329	-.0455
Tourists are conscious about natural, cultural heritages and sites	329	-.2545
Service providers are sensitive to environmental pollution and natural degradation	329	-.1818
ST will create more employment for local people	329	1.2091
Local people are friendly	329	-.4545
Tourists tend to take responsibilities for their actions	329	-.1909
Valid N (list wise)	329	
Index Value= (total mean/25) =		0.6007

25 variables were selected to explain the future potentiality of Sylhet to be a major sustainable tourist destination. The Index Value (mean of the 25 simple variables of 329 samples) was 0.6007. However, the mean of the 26<sup>th</sup> variable named ‘Sylhet has the potential to be a major sustainable tourism destination’ was the direct measurement of the future potentiality of Sylhet as a sustainable tourism destination and the mean value was found 0.6000.

A 5 point Likert Scale where + 2 signifies Highly Satisfied and - 2 denotes highly dissatisfied was used to record the feedback. According to the scale, 0.6007 represents more close to satisfied point (+1)

**Table 5: Similarity between the indexed and the future potentiality level of the sample**

Index Value	Future Potentiality	Similarity*
.6007	.6000	99.88%

\* Here, similarity refers how the indexed and the future potentiality level of the sample are mathematically close

### Findings from index analysis

From ‘Index analysis’, the current study found that the tourists visiting Sylhet are interested about the sustainable tourism development. However, there are many scopes for improvements, if Sylhet wants to be established as a major STD of Bangladesh. Therefore, to understand the perceptions of tourists about the level of future potential of Sylhet to be a STD, based on the findings of the mean value of the ‘index analysis’ (see Table 4), predictors were identified that have positive and negative impacts on tourists’ perception level whilst they visiting Sylhet and presented in the following table (see Table 6).

**Table 6: Variables having positive and negative impacts on tourists’ perception**

Positive impacts	Negative impacts
1. Accommodation facility	1. Preference to stay in high standard hotel
2. Preference of quality food & beverage	2. Taking destinations and tourist spots as maintained properly

3. Consuming local food/drinks	3. Local people's consciousness about protecting tourist destination and environment
4. Affirmative transportation system	4. Local people involved in tourism activities
5. Preferring the comfort of journey the most while choosing transportation	5. Tourists are conscious about natural, cultural heritages and sites
6. Preference of the quality of services no matter how much money they cost	6. Service providers are sensitive to environmental pollution and natural degradation
7. Well informed about the cultural, social norms and economic conditions of people	7. Local people's friendliness
8. Favoring the businesses that conserve cultural heritage and traditional values	8. Tourists tend to take responsibilities for their actions.
9. Consumption of local goods to support local families	
10. Not littering the tourist spots with waste materials	
11. Preferring to take services from environmentally responsible businesses	
12. Preferring to buy things which are not harmful to nature	
13. Using non-renewable resources carefully	
14. Concerned authority for natural degradation of destinations	
15. ST will improve economic condition of local people	
16. ST will make positive impact on natural and cultural heritage	
17. ST will create more employment for local people	

While identifying the positive and negative impacts, any variable for which the index value is below 0.6007, which is the value of the future potentiality index, this study has

considered those variables as identifiers for determining the future potential of Sylhet to be a major STD.

### Factor analysis

Factor Analysis helps to identify the key variables which are contributing most to describe the model. But prior to Factor Analysis, KMO testing is required to ensure that the number of data is enough to run the analysis. Ideally, the KMO value should be greater than 0.5 (Malhotra & Birks 1997). The following table (Table 7) represents the results of the KMO & Bartlett's test.

**Table 7: KMO & Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.601
Bartlett's Test of Sphericity	Approx. Chi-Square	1307.854
	Df	300
	Sig.	.000

KMO value for the research was .601, which is greater than 0.5. This indicates that the number of data collected under the research is enough to run the analysis.

**Table 8: Total Variance Explained by Factor Analysis**

<b>Total Variance Explained</b>									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.396	17.582	17.582	4.396	17.582	17.582	3.007	12.029	12.029
2	3.103	12.414	29.996	3.103	12.414	29.996	2.544	10.175	22.204
3	2.624	10.494	40.490	2.624	10.494	40.490	2.520	10.081	32.286
4	2.089	8.355	48.845	2.089	8.355	48.845	2.162	8.647	40.932

5	1.757	7.027	55.873	1.757	7.027	55.873	2.083	8.332	49.264
6	1.365	5.460	61.332	1.365	5.460	61.332	1.880	7.518	56.782
7	1.296	5.182	66.515	1.296	5.182	66.515	1.827	7.310	64.092
8	1.111	4.444	70.959	1.111	4.444	70.959	1.717	6.867	70.959

From the factor analysis, it can be interpreted that initial Eigen values can explain 70.959% of the data variance and this variance can be described by 8 factors.

After 300 Varimax Rotations, 8 factors were found. The 8 factors are presented below in the following table (Table 9) which describes the groups of important variables which are critical to establish Sylhet as a sustainable tourist destination.

**Table 9: Top 8 Factors Found by Factor Analysis**

Factor	Variable	Factor Loading	Variance Explained
<b>Factor 1: Purchasing Preference</b>	I prefer to consume local goods to support local families	.779	17.582%
	I prefer to take services from environmentally responsible businesses	.768	
	I do favor the businesses that conserve cultural heritage and traditional values	.748	
	I prefer to buy things which are not harmful to nature	.748	
<b>Factor 2: Condition of Major Supporting Services</b>	Accommodation facility is good enough	.809	12.414%
	Service providers are sensitive to environmental pollution and natural degradation	.736	
	Transportation system is good	.636	
<b>Factor 3: Quality of Service Demanded</b>	I prefer to stay in high standard hotel	.795	10.494%
	I prefer the quality of services no matter how much money they cost	.730	
	I prefer quality food & beverage of the restaurants	.682	

	I prefer the comfort of journey the most while choosing transportation	.630	
<b>Factor 4: Impact of Sustainable Tourism</b>	ST will make positive impact on natural and cultural heritage	.801	8.355%
	ST will improve economic condition of local people	.752	
	ST will create more employment for local people	.638	
	I am well informed about the cultural, social norms and economic conditions of people	.439	
<b>Factor 5: Involvement of Locals and Concerned Authority</b>	Concerned authority is enough cautious natural degradation of destinations	.718	7.027%
	Local people are friendly	.670	
	Local people are involved in tourism activities	.665	
<b>Factor 6: Level of Responsibility</b>	I usually take local food/drinks	.717	5.460%
	Local people are conscious about protecting tourist destination and environment	.711	
	Tourists tend to take responsibilities for their actions	-.511	
<b>Factor 7: Natural Resources and Environment</b>	I use non-renewable resources carefully	.841	5.182%
	I think destinations and tourist spots are maintained properly	.743	
<b>Factor 8: Tourists' Knowledge and Cautiousness</b>	Tourists are conscious about natural, cultural heritages and sites	.776	4.444%
	I do not litter the tourist spots with waste materials	.437	
<b>Total:</b>			<b>70.959%</b>

### Findings from factor analysis

From factor analysis, identified 8 factors can be outlined. Among those 8 factors, top 3 factors are announced as the most important factors that influence the future potential of Sylhet to be a STD. These 3 factors explained 40.517% of the total variance. The

following table (Table 10) represents the top 3 important factors that influence the future potential of Sylhet to be a STD.

**Table 10: The most Important Factors and the Respective Variables**

Factor	Variable	Factor Loading	Variance Explained
<b>Factor 1: Purchasing Preference</b>	I prefer to consume local goods to support local families	.779	17.582%
	I prefer to take services from environmentally responsible businesses	.768	
	I do favor the businesses that conserve cultural heritage and traditional values	.748	
	I prefer to buy things which are not harmful to nature	.748	
<b>Factor 2: Condition of Major Supporting Services</b>	accommodation facility is good enough	.809	12.414%
	service providers are sensitive to environmental pollution and natural degradation	.736	
	transportation system is good	.636	
<b>Factor 3: Quality of Service Demanded</b>	I prefer to stay in high standard hotel	.795	10.494%
	I prefer the quality of services no matter how much money they cost	.730	
	I prefer quality food & beverage of the restaurants	.682	
	I prefer the comfort of journey the most while choosing transportation	.630	
Total =			40.517%

### Conclusion

From conducted research, we came to know many important aspects which influence the future potential of Sylhet to be a major STD. Though Sylhet has many natural sites and cultural heritages, due to the absence of proper maintenance and appropriate policies, those heritages and sites are losing their beauty and attraction day by day. The authority should be more strict and careful in adapting and implementing policies to ensure the

long-term sustainability of the social, cultural and natural attractions of Sylhet. Another important consideration that should be strictly maintained is the watchful utilization of natural resource; like- water, gas etc. Both the tourists and local people need to improve their awareness in using the natural resources carefully in order to maintain the ecological balance of Sylhet.

The taste, preference and demand of tourists are changing by time. At present, there are plenty of tourists who want to spend their leisure time in nature without leading any negative impact on the destination. This changing group of tourist is actually delivering the main essence of Sustainable Tourism and all the major tourist destinations should start positioning themselves as a Sustainable Tourism Spot in order to attract this rapidly increasing market segment- the responsible tourists.

Tourism is one of the growing industries of Bangladesh. We all need to come forward and work together to protect all our major destinations in order to retain the future sustainability of those tourist spots. The positioning and branding of our tourist destinations will let us meet the needs of present tourist and host community as well as enhance and retain opportunity for the future.

#### **Further advancements with recommendations**

According to the conducted research, about more than half of the respondents think that Sylhet has great potential to be a major Sustainable Tourist Destination. But it is also clear that there is ample scope for improvement to achieve greater success in establishing Sylhet as a Sustainable Tourism Destination and to promote sustainable tourism in Sylhet to attract more and more nature loving tourists. The authors found many vital variables that influence the potentiality of Sylhet. Moreover, these variables have to be developed and enriched if there is any need to position Sylhet as a grand Sustainable Tourist Destination. A few recommendations are listed below for making Sylhet as a sustainable tourist destination:

1. **Developing the quality of Support Services:** Tourism related different support services; like- accommodation, restaurants, transportation etc.; need to be developed in order to provide more world-class service and to meet the needs of different types of visitor. These supporting services usually contribute a lot in the overall experience of a tourist visiting Sylhet. So, these supporting elements have to run their businesses in ways that provide long-term benefit to the host community and environment.

2. **Establishing nature and environment friendly businesses:** The local people and other businesses selling various goods to the tourists have to produce and sell their products by ensuring the conservation of environment. They should not do anything that may harm the environment and other natural resources. They should practice innovative management technique in order to protect the environment against any pollution or degradation.
3. **Encouraging host community participation:** If the local community becomes cautious about the protection of environment and heritages of the destination, this forms a big step toward Sustainable Tourism development of any destination. The local community should be encouraged to contribute more in every step of planning and implementation of policies to brand Sylhet as a sustainable tourism spot.
4. **Cautiousness of Concerned Authority:** The concerned authority; who are responsible for overall management and control of tourism related activities and other natural resources of any destination; have to be more cautious regarding the protection of cultural, natural heritage and resources. They should properly plan activities that can promote Sylhet as a Sustainable Tourist Destination and implement the policies to ensure the long-term retention of natural and cultural heritages.
5. **Involvement of Private Sector:** Different NGOs, SHOs, other stakeholders; like-tour operators, travel agents, suppliers; should be more mindful in promoting Sylhet as a Sustainable Tourism Destination in front of both the domestic and local tourists'. They should start cooperating with other government organizations to build up a strong image of Sylhet in the minds of target tourists and to run campaigns to improve awareness of local people and tourists regarding the protection of environment and long-term retention of resources and heritages.

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