

A COMPREHENSIVE INVESTIGATION ON TOURISTS' SATISFACTION AND POST BEHAVIORAL INTENSION TOWARDS COX'S BAZAR BEACH OF BANGLADESH

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ABSTRACT: *The study was carried out in the world's longest beach and the tourist capital of Bangladesh named Cox's Bazar beach. The objective of the current study is to examine the tourists' satisfaction towards Cox's Bazar beach as well as re-visiting and recommending others to visit the destination. The study is based on both primary and secondary data, applied quantitative methods and 310 questionnaires were used. The factor analysis was conducted to generate composite variable from the original attributes. Multiple regression analysis was carried out using Translog stochastic frontier model and the results revealed that among all the derived factors, F1 (Emergency and Ancillary services), F2 (Accommodation and Security), F3 (Destination on the spot facilities) are significant factors influencing overall tourist satisfaction. Moreover, the concerned authority should provide and ensure quality service with these factors. This result can be helpful to the concerned policy makers and marketers of beach tourism at Cox's Bazar in formulating strategies to maintain or enhance their competitiveness.*

WORDS: Beach Tourism, Destination Spot Facility, Factor Analysis, Stochastic Frontier Analysis.

INTRODUCTION

Measuring tourist satisfaction is an essential to successful destination marketing because it influences the choice of destination, the consumption of products and services, and the decision to revisit and recommend (Kozak & Rimmington, 2000). A satisfied tourist is more expected to choose and visit the same destination on later occasions and to turn into a promoter via positive word-of-mouth than an unsatisfied tourist (Kozak 2003; Pizam, 1993; Ross, 1993). As a result, a satisfied tourist transmits his/her constructive knowledge to others and repeats their visit (Alen Rodriguez and Fraiz, 2007; Halowell 1996; Operman 2000).

Bangladesh has huge potentiality for tourism. The country is fully covered by rivers and sea all around its boundary. The world longest sea beach Cox's Bazar is located in Bangladesh. Furthermore, this is the tourist capital of Bangladesh. Cox's Bazar is blessed with 120 km beach that is slopping gently down to the blue waters of the Bay of Bengal against the picturesque background of a chain of hill covered with deep green forests. This type of smooth and straight beach is hardly found in any places of the world. Miles of golden sands, towering cliffs, surfing waves, rare conch shells, and delightful seafood are the magnetism of Cox's Bazar beach (Hasan and Dey, 2013). As the longest sea beach of the world, Cox's Bazar beach is experiencing huge growth in tourism since past. During the peak season

millions of tourists come to visit and enjoy the natural beauty of Cox's Bazar from home and abroad and all hotels, motels and guest houses are fully filled up. Even some tourists spend their night inside the vehicle due to the unavailability of the seats in the hotels (Sheikh Saleh Ahammed, 2010). At present the economy of Cox's Bazar almost depends on tourism. From a common observation it is found that tourism has brought a substantial change in this area. Local community is apparently benefited from tourism and its economy is boosting compared to other backward areas. From economic view point, the local community and other stakeholders like investors, hoteliers, tour operators and others are getting benefits both in cash and in kind (Hasan and Mondal, 2013). Eventually, the flow of economic contribution and growth of this area is highly reliant on the continuity of the tourists' arrival. Therefore, better understanding of the tourists' behavior, available facilities to serve them, and sufficiency of existing facilities to satisfy their need can enhance the tourists' arrival and sustainability of these destinations. The purpose of this study is to identify the determinants of tourist satisfaction and their behavioral intention to revisit Cox's Bazar Beach. There are some studies have been conducted covering some aspects of tourism issues in Bangladesh. So far the researchers of this study know that no in-depth study has been conducted to cover the objectives of this study. The present study is an ample step to cover this gap. The findings of the study may help to the policy makers, marketers, stakeholders, and other related bodies of tourism to understand the tourists' need, perceptions and satisfaction, and to develop the services and facilities according to the tourists' preferences.

Statement of the Problem

Cox's Bazar beach is the world longest beach. It has economic and social value. From general observation and economic front, it is now the foremost source of earning of the local community and contributes to the nation income generation, employment generation and foreign exchange earnings. Around 10000 people are employed in the Cox's Bazar tourism area and each of families consists of 6 members on an average, and then this industry is giving food roughly to the 60,000 people (Ahammed, Sheikh Saleh: 2010) . So, the socio-cultural condition, economy, standard of living of local community at Cox's Bazar depend on the sustainability and survival of this destination. The growth, development and sustainability of tourism in this area almost depend on the numbers of tourists visiting the area and the perception of the tourists towards the destinations (Hasan and Nayeema, 2008). The trend and number of tourists visiting will depend on better understanding of their behavior, available facilities to serve them and sufficiency of existing facilities to satisfy tourists' need. So, to attract more tourists at Cox's Bazar beach we need to know the tourists' need, want, demand and their perceptions towards the existing facilities and services, and how present facilities and services are being evaluated by them. If the concerned authority able to know tourists well through us, they will try to provide goods and services according to tourists' need. As a result, current position of the destination would be developed and sustained for long ever. The lack of proper understanding of tourists' consumer behavior, it has caused negative economical and social publicities on Bangladesh in general and the local community in particular, because it has hurt the reputation of Bangladesh in the world. Therefore, present study is an ample step to discover the problems and make possible solutions for them.

LITERATURE REVIEW

From the view point of customer, service satisfaction is the feeling of the customer about how happy or unhappy he or she is with various aspects of the services received. Chon and Olsen (1991) revealed a correlation between tourists' expectations and their satisfaction towards a destination. Tourists buy the travel products and service, if their experience about travel product is better than their expectations.

Zethmal, Berry and Parasuraman (1990) expressed that a customer relationship with a company is strengthened when a customer makes a favorable attitude about the company's service quality and weakened when a customer makes negative attitudes about the service quality. There is a considerable support for a link between improvement in service quality and increasing of volume of customers. In addition, there are also link among the customers' satisfaction, service quality and retention of customer (Zathmal and Bitner, 2000).

Moreover, some research findings supported the concept that the level of customer satisfaction determines their future intentions and behavior towards the service (Taylor and Baker, 1994). Level of customers' satisfaction with the service was positively related to their willingness to re-use the service and to recommend it to others (Zathmal and Bitner, 2006). Oliver & Beardon, 1985; Patterson, 1993), Pizam, Neumann, and Reichel (1978) confirmed that it is important to measure tourists' satisfaction with each of the destination attributes, because consumer satisfaction or dissatisfaction with the attributes leads to overall satisfaction or dissatisfaction towards the destination. In addition, Rust, Zahorik, and Keininghan (1993) studied that the importance of each attribute to the overall impression should be measured because satisfaction or dissatisfaction can be the end result of evaluating a number of positive and negative experiences.

Objectives: The specific major objectives of the study are:

- i) To find out the determinants of tourists' satisfaction during their stay at Cox's Bazar Beach as a tourists' destination.
- ii) To explore the relation between the overall level of satisfaction and the revisit behavior of tourists towards Cox's Bazar Beach as tourist destination.
- iii) To set out relationship between the level of overall satisfaction and the recommending intension to others about Cox's Bazar Beach as tourist destination.

Hypothesis of the study: The study presents three hypotheses:

H1_o: There is no relationship exists between the Cox's Bazar Beach destination attributes and the overall satisfaction of tourists.

H2_o: No relationship exists between overall satisfactions with the Cox's Bazar Beach experience and tourists' intention to revisit.

H3_o: There exists no relationship between visitors' overall satisfaction with the Cox's Bazar Beach experience and tourists' intention to recommend it to others.

Rationale and Significance of the Study

Current study highlights on the tourists' level of satisfaction and revisit behavioral intention towards Cox's Bazar beach. From general observation it is understood that compared to other backward areas its economy is in a better position. So, considering the socio economic importance researchers have selected Cox's Bazar as the area for this study. From different literature it is clear to us the economy, standard of living of local community are depended on the sustainability and survival of this destination. Therefore, for the development of the local community and nation's economy, this destination can play a significant role in greater extent. From this perspective, present study has been undertaken. Scholars have argued that some studies regarding tourism in Bangladesh as well as relating to the subject have been conducted. However, no rich study has been conducted yet covering the understanding of tourists' satisfaction and post satisfaction behavior towards Cox's Bazar. The findings of the study regarding the knowledge of tourists' satisfaction may help beach tourism marketers, concerned authorities to design their offerings to meet the expectations of tourists and so enhance loyalty and reduce marketing costs, ensuring sustainability. Further, the results should make knowledge stronger about the relationship between satisfaction factors and post purchasing aim for beach tourism products. Moreover, this study will contribute to the gulf of knowledge in tourism satisfaction research and the literature of this field will be enriched.

METHODOLOGY OF THE STUDY

The study is exploratory as well as descriptive in nature. Both primary and secondary data have been used. The sample population for this study consists of tourists who visited Cox's Bazar beach from 07 December 2012 to 21 December 2012. A simple random sampling technique was used to collect primary information through survey using questionnaires that were distributed to the respondents. The questionnaire was prepared with various attributes using a numerical scale of 1 to 5 to measure the tourists' satisfaction at Cox's Bazar beach. Out of 320 a total 308 questionnaires were useable with a response rate of nearly 98%. The factor analysis was accomplished to generate correlated variable composites from the total attributes. The multiple regression analysis was used to finds the causal relation between dependent and independent variable. Secondary data has been collected from relevant research reports, newspapers, books, publications, websites and published documents of Bangladesh Parjatan Corporation (BPC).

Findings of the Study: Findings of the study has been developed from the following points of view;

Respondents' Socio-Demographic Profile;

According to the theory of consumer behavior, for a service sector customers' choice, buying and levels of satisfaction are affected by the customer's background and external stimuli (Fornell C, 1992). Due to distinctive motivations and personalities, past experiences, reference groups, and physical conditions, individual may assess the same belief differently. It is shown that out of total 310 respondents more than two-third (80.3%) were male and nearly one-fourth (19.7%) were female. Highest 41.9% have completed their graduation followed by one-fourth (27.1%) who completed secondary level. Data revealed, more than half of the respondents (58.7%) were from 15-29 age group, followed by one-third (33.9%)

from 30-44 age group. In addition, one-third (32.6%) were students, where approximately one-fourth (27.7%) were businessmen followed by another one-fourth (24%) in private service and a less significant (9%) are in government service. A less amount (7.7%) have income more than Taka 71,000, and the highest percentage was 30 % who have income range 10,000-30,000 followed by 15.2% have 31,000-50,000 Taka (\$1=Tk. 78 approximately) per month. The data provides a clear idea that people from a number of backgrounds including male, young age, and businessmen are the main visitors at Cox's Bazar.

Assessing the Tourists' Satisfaction during their Stay at Cox's Bazar Beach

The table 1 revealed that out of 29 attributes only 3 attributes had highest performance mean score $<(M=4.00)$ and 15 attributes scored in between 3.00 to 4.00 and 11 attributes had lowest scored <3 respectively. The highest mean score with respect to satisfaction occurred in the case of item natural attraction ($M=4.57$), followed by and the available local transportations like taxis, liteace and others ($M=4.15$) and road quality in the spot area ($M=4.12$) and lowest satisfaction was for emergency service such as lifeboat, ambulance, fast aid ($M=2.17$).

Table 1, Results of attributes relating to tourists satisfaction

Attributes	N	Statistics		
		Mean	SD	V
Natural attractions of the beach	303	4.57	.647	.419
Pollution free nature and environment	302	3.12	1.072	1.150
Financial, physical and other safety and security	306	3.31	1.105	1.220
Service quality of residential hotels	306	3.42	.778	.605
Online hotel booking facility	305	2.98	.942	.887
Price of the residential hotels	305	3.25	1.026	1.053
Service quality of restaurants	304	3.19	.864	.747
Food quality at restaurants	303	3.25	.832	.692
Price of foods at the restaurant	306	2.98	1.052	1.107
Cleanliness of public areas nearest the beach	306	2.63	.900	.811
Public and Private toilet facilities nearest the beach	307	2.37	.990	.981
Service quality of transportations	307	3.39	.828	.686
Available local transportations like taxis, liteace ,	306	4.15	.694	.482
Road quality in the spot area	304	4.12	.613	.376
Transportation cost	305	3.97	.798	.636
Watch tower facility for enjoying sea view and	306	2.44	1.093	1.194
Dress change facility nearest the beach	306	2.23	.948	.899
Swimming, surfing, and boating facilities	305	3.15	1.103	1.217
Playing, driving and horse riding facilities on the beach	306	3.10	.841	.707

Local product, sea products shopping facilities	306	3.17	.789	.623
Cost of surfing, boating, driving and horse riding	298	3.11	1.072	1.150
Online information about Cox's Bazar	305	3.08	1.073	1.151
Local information centre	302	2.64	.871	.759
Health and Medical facilities to serve tourists	307	2.59	.882	.777
Financial institution for withdrawing instant cash	305	3.15	.650	.423
Waste disposal facility	302	2.23	.903	.816
Local people behavior and hospitality towards tourists	306	3.36	.956	.914
Tourist caring facility such as personal care, child care	303	2.38	.896	.802
Emergency service such as lifeboat, ambulance, fast aid	301	2.17	.807	.651

[Satisfaction mean scores below 2.75 are interpreted as dissatisfaction; scores between 2.75 and 3.25 indicated neither satisfaction nor dissatisfaction; scores above 3.25 were interpreted as satisfaction] Hill, Brierley and MacDougall (1999).

Hypothesis H1_o, There is no relationship exists between the Cox's Bazar beach destination attributes and the tourists overall satisfaction.

Hypothesis 1 tested using multiple regression analyses. To prepare a scale for this analysis, a factor analysis of the attributes was conducted.

Factor Analysis

To create correlated variable from the original 29 attributes and to identify a smaller set of dimensions, factor analysis was conducted, that explain most of the variances between the attributes. The factor scores are then putted in a regression analysis. Present study, factors are retained only values greater than or equal to 1.0 of eigenvalue. The principal components analysis shows the overall significance of the correlation matrix was 0.000, with a Bartlett test of sphericity value of 1622.069 with degree of freedom 406. The statistical probability test revealed that there was a significant correlation between the variables, and the factor analysis was appropriate. The KMO overall measure of sampling adequacy was 0.755, and was meritorious (Hair, Anderson, and Black 1999).

Table 2 shows eight-factor solution which explained 64.13% of the overall variance before the rotation. From the varimax-rotated factor matrix, eight factors consist of 29 variables were defined that loaded most heavily (loading >0.4). The communality of each variable ranged between 0.415 and 0.857.

The Cronbach's alpha of each factor was determined to test the reliability and internal consistency of each factor. The coefficients alpha ranged between 0.5697 and 0.8185 for the eight factors. The results were considered reliable and accepted, since 0.50 is the minimum value for accepting the reliability test (Nunnally, 1967).

Table 3, Factor Analysis Result

Attributes	Communalities	Factor Loading	Results
Factor 1: Emergency & Ancillary Services			Eigenvalue 6.58
Waste disposal facility	.777	.797	Variance explained 22.72%
Emergency service such as lifeboat, ambulance, fast aid services	.771	.836	Cumulative variance 22.72
Tourist caring facility such as personal care, child care	.750	.909	Coefficient alpha .763
Financial institution for withdrawing instant cash	.575	.889	Number of items 04
Factor 2: Accommodation & Security			Eigenvalue 3.16
Price of the residential hotels	.749	.860	Variance explained 10.91%
Price of foods at the restaurant	.692	.803	Cumulative variance 33.63
Service quality of transportations	.625	.728	Coefficient alpha .763
Food quality at restaurants	.543	.624	Number of items 05
Financial, physical and other safety and security	.540	.867	
Factor 3: Destination Facilities			Eigenvalue 1.87
Service quality of restaurants	.745	.810	Variance explained 6.45%
Watch tower facility for enjoying sea view and waves	.696	.860	Cumulative variance 40.8
Dress change facility nearest the beach	.640	.824	Coefficient alpha .818
Public and Private toilet facilities nearest the beach	.600	.836	Number of items 05
Cleanliness of public areas nearest the beach	.590	.811	
Factor 4: Cost of Activities			Eigenvalue 1.69
Cost of surfing, boating, driving and horse riding	.668	.800	Variance explained 5.85%
Swimming, surfing, and boating facilities	.625	.852	Cumulative variance 45.93
Local people behavior and hospitality towards tourists	.581	.763	Coefficient alpha .638
			Number of items 03
Factor 5: Activities & Shopping			Eigenvalue 1.54

Playing, driving and horse riding facilities on the beach	.826	.885	Variance explained 5.33%
Local product, sea products shopping facilities	.737	.899	Cumulative variance 51.26 Coefficient alpha .770 Number of items 04
Factor 6: Transportation facility			Eigenvalue 1.37
Road quality in the spot area	.896	.905	Variance explained 4.73%
Available local transportations like taxis, liteace ,	.862	.910	Cumulative variance 55.99
Transportation cost	.428	.849	Coefficient alpha .644 Number of items 03
Factor 7: Information & Medical Services			Eigenvalue 1.29
Local information centre	.784	.852	Variance explained 4.46%
Health and Medical facilities to serve tourists	.753	.878	Cumulative variance 60.45
Online information about Cox's Bazar	.521	.808	Coefficient alpha .648 Number of items 03
Factor 8: Attraction & Service Quality			Eigenvalue 1.06
Natural attractions of the beach	.714	.776	Variance explained 3.65%
Service quality of residential hotels	.710	.666	Cumulative variance 64.13
Pollution free nature and environment	.569	.898	Coefficient alpha .790
Online hotel booking facility	.515	.802	Number of items 04

Note: Extraction Method : Principal Component Analysis, KMO = 0.882,

Bartlett's Test of Sphericity: $p = 0.000$ ($\chi^2 = 1541.422$, $df = 276$)

Factor 1 was named as "*Emergency & Ancillary*" Services which comprised of four variables that is to say waste disposal facility, emergency service such as lifeboat, ambulance, fast aid, tourist personal care, child care facility and financial institution for withdrawing instant cash. This factor represents 22.72% of the variance with an eigenvalue of 6.58 the

variables comprised with the factor emergency and ancillary services which tourists like ($\alpha = 0.763$).

Factor 2 was defined as “*Accommodation and Security*” accounted for 10.91% of the variance with an eigenvalue of 3.16 loaded with five items relation to Accommodation and security. The items are namely price of foods at the restaurant, price of the residential hotels, service quality of transportations, price of foods at the restaurant, food quality at restaurants, financial, physical and other safety and security. ($\alpha = 0.763$)

Factor 3 This factor accounts for 6.45% of the variance with an eigenvalue of 1.87, named as “*Destination on the Spot Facilities*” consisting of five items namely service quality of restaurants along with other facilities such as public and private toilet, and dress change facility nearest the beach, watch tower facility for enjoying sea view and waves, and cleanliness of public areas nearest the beach.

Factor 4 is called “*Cost of Activities*” with an eigenvalue of 1.69 and 5.85 percent of the variance, and classified into three activities namely cost of surfing, boating, driving and horse riding, swimming, surfing, and boating facilities, local people behavior and hospitality towards tourists. ($\alpha = 0.538$).

Factor 5 accounted for 5.33 % of the variance and 1.54 eigenvalue labeled as “*Activities and Shopping*”. This factor consisted of two factors viz. ‘playing, driving and horse riding facilities on the beach, local product, sea products shopping facilities. ($\alpha = 0.777$).

Factor 6 named as “*Transportation facility*” which consisted of Road quality in the spot area, available local transportations like taxis, liteace and transportation cost. This factor accounted for 4.73 % of the variance with 1.37 eigenvalue ($\alpha = 0.644$).

Factor 7 with an eigenvalue of 1.294, this factor explains 4.46 % of the variance. This factor mainly “*Information & Medical Services*” which included local information centre, health and medical facilities to serve tourists and Information about Cox's bazaar. ($\alpha = 0.648$).

Factor 8 was labeled as “*Attraction & Service Quality*” which included ‘natural attractions of the beach, service quality of residential hotels, pollution free nature and environment and online hotel booking facility. This factor accounted for 4.46 % of the variance with an eigenvalue of 1.29.

Stochastic Frontier Analysis: With a view to support for hypotheses 2, regression analyses were used in the current study to test and explain the casual relationship between variables.

In order to examine the overall satisfaction of tourist in Cox Bazar, here we will investigate whether factors suggested by factors analysis are significant to influence their overall satisfaction or not.

Overall satisfaction model can be defined as

$$Y_i = f(X_i, \beta) + e_i \quad (1)$$

Y_i is a vector of overall satisfaction level, $f(X_i, \beta)$ is deterministic part of the observed variables ;

X_i is a vector of N inputs of attributes related to an individual tourist's satisfaction, ϵ_i is a residual component.

Applying factor analysis to model (1), overall satisfaction model can be reduced as follows:

$$Y_i = f(X_i, \beta) + \epsilon_i = f(X_i, \beta) + V_i - U_i \quad i = 1, 2, \dots, N \quad (2)$$

where, V_i s are distributed as $NID(0, \sigma^2)$ and independent of U_i s. The U_i s are non-negative random variables assumed to be distributed as $NID(0, \sigma^2)$ with truncation at zero. The relationship between U_i and the observed satisfaction frontier (OSF) of an individual tourist is

$$OSF = \exp(-U_i) \dots \dots \dots (3)$$

Thereafter observed satisfaction model can be expressed according to the functional form of Translog stochastic frontier

$$\ln(Y_i) = \beta_0 + \sum_{j=1}^N \beta_j \ln X_{j_i} + \frac{1}{2} \left(\sum_{j=1}^N \beta_{jj} \ln X_{j_i}^2 \right) + \sum_{j=1}^N \sum_{j < k} \beta_{jk} \ln X_{j_i} * \ln X_{k_i} + V_i - U_i \dots \dots \dots (4),$$

“ln” refers to the natural logarithm.

Table: (3) 1

Model	Result	β_1	β_2	β_3	β_4	β_5	β_6	β_7	β_8	Akaike criterion	Hannan-Quinn
Model I	coefficient	0.11	0.45	0.33	0.10	0.12	0.06	-0.07	0.07	416.05	430
	t	0.70	2.48	2.12	0.84	0.95	0.36	-0.59	0.46		
	p	0.48	0.004	0.03							
Model II	coefficient	0.07	0.33	0.18						300.49	293.74
	t	4.98	24.1	0.18							
	p	0.001	0.001	0.008							
Model III	coefficient	0.02	0.08	0.04						589	583
	t	3.14	13.06	6.02							
	p	.002	00.000	0.00							
			1	7							

Table (3) 2

Source	Sum of Square	df	Mean Square	R ² = 0.97713 F(4, 203) = 2168.46 P= 0.00014
Regression	116.95	4	29.23	
Residual	2.73	203	0.013	
Total	119.68	307	0.57	

Table 3.1 and 3.2 showed the estimated result for three different models. In model I, we employed ordered probit estimation including eight relevant variables. If we invoke the assumption that $U_i \sim (0, \sigma^2)$, then t test can be used to test a hypothesis for individual partial regression coefficient. In this regard, we can consider the estimated result of model where we regress observed satisfaction on eight variables. If we postulate that $H_0 : \beta_i = 0$ and $H_a : \beta_i \neq 0$. The null hypothesis states that, with some X_i held constant, any X (X_2) has no influence on Y . To test the hypothesis, we use t test where computed t value exceeds the critical t value at the chosen level of significance for X_2 and X_3 , but we can not reject null hypothesis for all other variables. Notice that we have 308 observations and we have used an ordered probit estimation in model I, where result shows that X_2 and X_3 has significant effect on tourist satisfaction. In model II, we exclude few less significant variables and we decompose the stochastic error term. As we have estimated U^{\wedge} , so unobserved random influences related with tourist satisfaction were cancel out in model II, here we have found all three variables X_1 (Emergency & Ancillary Services), X_2 (Accommodation and Security), X_3 (Destination on the Spot Facilities) are enough significant to explain observed satisfaction frontier (OSF) of an individual tourist satisfaction.

In model III, observed satisfaction model is expressed according to the functional form of Translog stochastic frontier, where estimated t value for X_1 , X_2 and X_3 shows strong effect on tourist satisfaction. For model III we also have estimated ANOVA table. For the overall significance of model III, analysis of variance technique is very convenient here. Under the assumption that $U_i \sim (0, \sigma^2)$,

$$E \frac{\sum \hat{u}_i^2}{n-3} = E(\hat{\sigma}^2) = \sigma^2$$

with additional assumption that $H_0 : \beta_1 = \beta_2 = \beta_3 = 0$ and $H_a : H_0 : \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$, where

$$\frac{E(\beta^{\wedge}_2 \sum y_i x_{2i} + \beta^{\wedge}_3 \sum y_i x_{3i})}{2} = \sigma^2$$

Therefore, if the null hypothesis is worth to reject, both above equation may not give identical estimate of true σ^2 . In this context as we have significant relationship between tourist satisfaction and X_1 , X_2 and X_3 , the sole source of variation in Y is due to explained variation (regression in table II) by both variables, as it is 116.95, where as variation in Y is due to the observed random forces represented by residual is 2.73, very trivial. So explained sum of squares is relatively larger than the residual sum of squares, taking due account of their respective degrees of freedom (df). As a result, the F value provides a test of the null

hypothesis that the true slope coefficients are simultaneously zero. Here it is found that computed F value exceeds the critical F value from F table at 5 % level of significance, so, we can reject null hypothesis. Alternatively p value of the observed F is adequately low (0.00014) and F value is satisfactorily large $F(4, 203) = 2168.46$, leading to rejection of the null hypothesis that together X1, X2 and X3 have significant effect on tourist satisfaction.

In conclusion, we can say all essential dimensions are not equally significant. Thus, hypothesis 1 is rejected by the results of regression analysis. So, there is a relationship, which is what we expected.

Tourists' Overall Satisfaction and Intension to Revisit Cox's Bazar Beach

H_{2o}, No relationship exists between overall satisfactions with the Cox's Bazar experience and tourists' intention to revisit.

The visitors' overall satisfaction with Cox's Bazar beach and their revisit behavioral intention has also been questioned. In order to further reveal support for hypothesis 2, regression analyses were used in this part to test and explain the casual relationship between variables. Table 5 shows that R equals 0.212, implying a weak positive correlation between overall satisfaction and visitors' revisit. However, R² equals 0.045, showing that overall satisfaction explained only 4.5% of the variation in tourists' intentions to revisit. The F ratio is 9.66 (p=0.002), which is considered significant.

Table 4, Regression Results of Tourists' Overall Satisfaction and intension to revisit (N=307)

Model Summary

R	R ²	Adjusted R ²	Std. Error of the Estimate
.212	.045	.045	.638

Analysis of variance

	Sum of Squares	df	Mean Square	F	Sig.(p)
Regression	3.930	1	3.930	9.665	.002(a)
Residual	83.758	306	.407		
Total	87.688	307			

Regression Analysis

Independent Variables	B	Std. Error	Beta	T	Sig.
(Constant)	3.429	.248		13.823	.000
Satisfaction	.181	.058	.212	3.109	.002*

* represents p < 0.05

Based on the results reported in Table 4, Hypothesis H2_o, which states that no relationship exists between visitors' overall satisfaction and intention to revisit, is rejected.

Tourists' Overall Satisfaction and Intention to Recommend Cox's Bazar Beach to Others

H3_o, There exists no relationship between visitors' overall satisfaction with the Cox's Bazar Sea beach experience and tourists' intention to recommend it to others.

Table 5 shows the results of the linear regression analysis which examined the relationship between visitors' overall satisfaction and their intention to recommend the museum. R equals 0.161 showing that there is a weak and positive correlation between overall satisfaction and intended recommendation. More than 2.6% of the variation ($R^2=0.026$) in intention to recommend the Cox's Bazar sea beach as tourist destination to others was explained by respondents' overall satisfaction.

Table 5, Regression results of tourists' overall satisfaction and recommend behavior (N=307)

Model Summary

R	R²	Adjusted R²	Std. Error of the Estimate
.161(a)	.026	.021	.773

Analysis of variance

	Sum of Squares	df	Mean Square	F	Sig.(p)
Regression	3.259	1	3.259	5.459	.020*
Residual	122.972	206	.597		
Total	126.231	207			

Regression Analysis

Independent Variables	B	Std. Error	Beta	T	Sig.
(Constant)	3.444	.301		11.458	.000
Satisfaction	.165	.071	.161	2.337	.020*

* represents $p < 0.05$

The F ratio is 5.45 ($p=0.020$), which is considered significant. The beta coefficients ($\beta=0.161$, $p=0.020$), show that one unit increase in visitors' overall satisfaction with the Cox's Bazar sea beach performance would lead to a 0.161 unit increase in tourists intention to recommend the Cox's Bazar sea beach as tourist destination to others.

In conclusion, Hypothesis H3o, which states that no significant relationship exists between tourists' overall satisfaction and intentions to recommend the Cox's Bazar sea beach as tourist destination, is therefore rejected.

CONCLUSION AND SUGGESTIONS OF THE STUDY

The outcomes of this study have some important implications which can be useful to the policy makers and marketers of the beach tourism at Cox's Bazar in formulating strategies to keep up or enhance their competitiveness. The results of regression analysis found that F1 (emergency and ancillary services), F2 (accommodation and security), F3 (destination on the spot facilities) are the most important factors that affects overall tourist satisfaction more than others factors. Furthermore, though tourists are satisfied with some aspects but this level of satisfaction are not playing significant role to revisit and recommend it to others. So,

- Tourism products and service marketers of this destination should provide quality service with the **Accommodation and Security factor**. As most of the domestic tourists visit Cox's Bazar in peak season but the infrastructure facilities of Cox's Bazar are not standard enough to support them. Therefore, concerned authority should take the necessary steps to improve the services and facilities provided at the Cox's Bazar beach with a view to change and improve the perception of the tourists, and thus further intensify their interest in visiting this place in the future. Special attention needs to be paid more on food price to be reasonable and quality services to touch the tourist perception and attitude. To ensure safety and security of the visitors, security facilities are not sufficient for saving lives from unexpected hazards. During the survey period it was found that for 1km. beach area only three police men were employed. So, security position must be enhanced for avoiding any risky situation.
- The concerned authorities also need to pay attention on the factor named **on the spot facilities** especially on different beach activities. The concern public authority from both local and central government needs to allot a sufficient budget to improve the sea beach activities such as surfing, boating, biking and various types of riding, especially during the peak seasons. Because large number of tourists visiting this place at that time. Special amusement and entertainment facilities including watch tower, river view studio should be setup to ensure more satisfaction of tourists.
- Furthermore, **emergency & ancillary services** need to be must improve. To save visitors lives from any unexpected hazards and protect them from any emergency situation, rescuers, doctors and lifeboats are too insufficient. For monitoring and maintaining emergency service only two watch tower, 4 speed boats are employed. However facilities should be satisfactory to save tourists from any unexpected accidents. In Cox's Bazar, beach area has no drainage facilities, waste disposal and treatment system. All wastes are thrown to the sea directly without any treatment that causes severe environmental pollution. A Tourism Training Institute at Cox's Bazar can be set up with the help of local community where local youths can be employed, and the investors can produce efficient hospitality people for Cox's Bazar tourism. People who are working as tourists' guide should be trained properly to show well and cordial behavior.

- In addition to implement the above suggestions, concerned authority must keep consideration biodiversity of the area in planning any facilities since tourists pay great attention to feel the nature of sea areas. So, future infrastructural development should be properly planned and implemented to avoid negative impacts to the beach area. Buildings are being made nearby to the beach which are causing loss to the natural environment and spoiling the beauty of the sea. Thus public authority should impose restriction on building hotels in the name tourism along the beach. It is seriously necessary to control illegal logging activities and obligatory actions should be taken against these to ensure a well preservation of the natural surroundings.

CONCLUSION

Hence, the suggestions above can assist to gain a better understanding of the different perceptions hold by the local and foreign tourists, and thus implement more strategic marketing decisions for both managers and marketers of the Cox's Bazar beach as a destination in Bangladesh. Moreover, people who have direct or indirect involvement in the development of this destination have to contribute more to produce a variety of unique products which could attract the tourists. Finally, an important limitation needs to be taken into consideration is that the survey in this study was carried out over a period of fifteen days. The views were taken from the respondents who may not represent a year round's numbers. Hence, it is recommended that future research incorporate a survey covering the full peak season because tourists' responses may varies in seasonality.

REFERENCES

- Ahammed, Sheikh Saleh 2010, 'Impact of Tourism in Cox's Bazar', Bangladesh, Master in Public Policy and Governance Program, Department of General and Continuing Education, North South University, Bangladesh
- Alen Gonzalez M E, Rodriguez Comesana L, Fraiz Brea J A, 2007, 'Assessing tourist behavioral intentions through perceived service quality and customer satisfaction', *Journal of Business Research*, Feb 2007, Volume: 60 Issue: 2 pp.153-160
- Chon, K., & Olsen, M. D. 1991, 'Functional and symbolic congruity approaches to consumer satisfaction/dissatisfaction in tourism', *Journal of the International Academy of Hospitality Research*, 3 (9), 45-64.
- Hallowell, B. 1996, The relationships of customer satisfaction, customer loyalty, and profitability: An empirical study, *International Journal of Service Industry Management*, 7(4), 27 - 42.
- Hasan, Md Kamrul and Nayeema Maswood 2008, 'An appraisal of foreign tourist arrivals' trend in Bangladesh', *Prime University Journal*, Vol. 2, No. 2, July-December, 2008.
- Hasan, Md. Kamrul and Golam Rabbani Mondal 2013, 'factors affecting to choice cox's bazaar sea beach of Bangladesh as a tourist destination', *The international Journal of Management*, vol: 2/issue :1 (january, 2013)
- Hill, Brierley and MacDougall (1999) 'How to Measure Customer Satisfaction'. Gower, London

- Islam, Md. Nazrul and Kamrul, (2009, “Status of Bangladesh in SAARC Tourism: A study on Foreign Tourist Arrival”, South East University Journal of Business Studies, Vol.V2, No. 1, January-June, 2009.
- Jin Huh (2002), “Tourist Satisfaction With Cultural / Heritage Sites: The Virginia Historic Triangle” Masters Thesis in Hospitality and Tourism Management, Virginia Polytechnic Institute and State University.
- Kamrul, Hasan and Prodip dey 2012, ‘Tourism Industry: An Emerging Mover of the Economic Development of Bangladesh’, Banglavisision Research Journal, Vol 10, No 1, Nov. 2012
- Kozak, M. 2003, ‘Measuring tourist satisfaction with multiple destination attributes’, Tourism Analysis, 7, 229-269.
- Kozak, M. and Rimmington, M. 2000, ‘Tourist Satisfaction with Mallorca, Spain, as an Off-Season Holiday Destination’, Journal of Travel Research, 38, 260-269.
- Mir Sofique Abdul and Jannat Ara Parvin (2009), “Economic Prospects and Constraints of Cox’s Bazar Bangladesh – A Study”, South Asian Journal of Tourism and Heritage (2009), Vol. 2, No. 1.
- Odunga, Pius (2005), PhD-thesis on “Choice of Attractions, Expenditure and Satisfaction of International Tourists to Kenya” Wageningen University.
- Oliver, R. L. & W. O. Bearden 1985, ‘Disconfirmation Processes and Consumer Evaluations in Product Usage’, Journal of Business Research, 13:235-246.
- Oppermann, M. 2000, ‘Tourism destinations loyalty’, Journal of Travel Research, 39 (11), 78-84.
- Parasuraman, Berry and Zeithaml 1990, An Empirical Examination of Relationships in an Extended Service Quality Model, Marketing Science Institute Research Program Series, December 1990, Report No. 90-122.
- Patterson, P.G. 1993, Expectations and product performance as determinants of satisfaction for a high-involvement purchase, Psychology & Marketing, 10(5), 449-465.
- Pizam, A. & Millman, A. 1993, ‘Predicting satisfaction among first-time visitors to a destination by using the expectancy-disconfirmation theory’, International Journals of Hospitality Management, 12(2), 197-209.
- Pizam, A., Neumann, Y. Reichel, A. 1978, ‘Dimensions of tourist satisfaction with a destination’, Annals of Tourism Research, 5, 314-322.
- Ross, G. F. 1993, ‘Destination Evaluation and Vacation Preferences’, Annals of Tourism Research, 20(3), 477-489.
- Rust, R.T., Zahorik, A.J. & Keininghan, T.L.(1993). Return on Quality, Chicago,IL: Probus Publishing.
- Yue Hou (2009), ‘An Investigation into Visitors’ Satisfaction With Port Elizabeth’s Heritage Museums’ Masters Thesis, Faculty of Business and Economic Sciences, Nelson Mandela Metropolitan University.
- Zahidul Naim Zakaria ‘Where the Waves Crash’ Star Insight, A monthly Publication of daily star, Volume 2 Issue 84, June 5, 2010.
- Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2006. Services marketing: Integrating customer focus across the firm. New York: McGraw-Hill/Irwin.
- www.bangladeshtourism.gov.bd/resource_centre cited April 28, 2011