
Community Based Tourism towards Sustainable Tourism Development: A Case Study of the Stakeholders in the River Island Majuli

JECOB KONWAR
DHSK Commerce College
Dibrugarh, Assam
India

DEB KR. CHAKRABORTY
Department of Economics
Dibrugarh University, Dibrugarh, Assam
India

Abstract:

Tourism industry with an impressive growth rate across the world is no doubt one of the fastest growing industries. This paper intends to analyse the perception of local people and visitors towards tourism in Majuli. The Island holds the credit of being the biggest habituated fresh water river island in the world. The paper attempts to determine factors responsible for tourism in the island. The paper also attempts to develop a framework for tourism development with the help of the factors determined by the respondents. From the paper it has been found that it is a necessity of the hour to explore new tourism products and services and give adequate opportunities to all sectors and sections of the society to contribute together to the growth of the economy with the help of tourism industry. In this aspect, from the findings of the study it has been found that the Community Based Tourism (CBT) approach is best suited to the island.

Key words: Tourism, Majuli, Community based tourism (CBT), Sustainable tourism.

Introduction:

Tourism industry with an impressive growth rate across the world is one of the fastest growing industries (Chaturvedi 2010; Chaudhary 2010; Sheehan, Ritchie, & Hudson 2007; Sharpley 2006). Tourism is now the largest industry in the world by virtue of any economic measure, including gross output, value added, employment, capital investment and tax contribution (Wheatcroft 1994). Tourism is the largest sector in the worldwide export of goods and services, and accounts for 12 percent of the total global income (Anbalagan, Selvam, & Amudha 2008). It is a labour intensive industry (Chaudhary 2010) and according to WTTC, 2010 it is estimated that tourism industry is expected to contribute 8.1 percent of total employment, 235 million jobs or 1 job in every 12.3 jobs, further it is projected that there will be rise to 9.2 percent of total employment, creating 303 million jobs or 1 in every 10.9 jobs by 2020 (WTTC 2010; Chaudhary 2010).

CBT is based upon the curiosity or desire of visitors to learn more about the routine life of people from different cultures, traditions and lifestyles. Community based tourism (CBT) or Community Tourism (CT) is “a type of tourism run by and for local community”. Rozemeijer (2001) defines CBT as tourism initiatives that are owned by one or more defined communities, or run as joint venture partnerships with the private sector with equitable community participation, as a means of using the natural resources in a sustainable manner to improve their standard of living in an economically viable way.

Suansri (2003) defines CBT as tourism that takes environmental, social and cultural sustainability into account, which is managed and owned by the community, for the community, with the purpose of enabling visitors to increase their awareness and learn about the community and local ways of life. Active community participation in the development of

their tourism industry is central to CBT and significantly dependent upon community resources, needs and decisions (Tosun 2000). Community Based tourism considers community at the centre of all activities and resources.

Objective of the Present Paper:

The present study is undertaken with an objective to identify the underlying factors responsible for tourism and tourism based activities in the river island Majuli.

Majuli: The Biggest Fresh Water River Island:

Majuli, a river-made island is the largest of its kind over the world (Shrivastav 2010; Nath 2009; Mahanta 2001; Hamilton 1808) and the heart of Neo-Vaishnavite institutions/monasteries of Assam, popularly known as *Satras*. The concept of Neo-Vaishnavism and *Satras* are profounded by the great Vaishnava saint and social reformer “Sankardeva” of 15th -16th century Assam. In this light, unique feature of Majuli is its religious cum spiritual institutions popularly known as *Satras*.

Although the status of Majuli being the biggest river island is challenged by various scholars from time to time, it is found that this land is the only inhabited and fresh water island of its kind (Nath 2009). Mohammad Cazim, the biographer of Emperor Aurangzeb (1658-1707), stated that it was about 50 Kosh in length which is equivalent to 100 miles (Asiatic Research 2009).

As per 2011 Census of India records, the total population of Majuli is approx 1, 70,000 (Census Report 2011). Majuli holds a unique land habitat and flora & fauna. Demographically, the society of the island presents a diversified population comprising people of various castes normally prevailing in Assam. The society of Majuli could also be viewed

in terms of linguistic and religious groups (Nath 2009).

Research Methodology:

This study is embodied with primary and secondary data. The primary data has been collected from the respondents categorized in two categories of stakeholders' i.e. local household respondents and visitor respondents. The study includes a local household sample of 414 respondents and 148 visitor respondents comprising of 126 domestic visitors and 22 foreign visitors. The responses of local households and visitors have been collected during the year 2011 to 2013. The questionnaire statements consist of varied statements related to Majuli and tourism based elements & activities of the island. The respondents were expected to rate the factors on the basis of their experience. In this respect, the factor statements were rated on the basis of five – point Likert scale. The scale ranges from Strongly Agree (5) to Strongly Disagree (1). In case of local household respondent's questionnaire, total 50 statements were directed, whereas at the same time only 25 statements have been incorporated in the questionnaire directed to visitor respondents.

The responses of the both categories of respondents have been collected in different pattern. According to the Majuli Cultural Landscape Region Act, 2006 there are 31 *Satras* (religious monasteries) in the river island Majuli (The Assam Gazette Extraordinary 2006). Majuli had total of 40 *Satras* in the past (Nath 2009, 205) but by 2005 the number of *Satras* significantly reduced to 22 (approximately) in number (Das 2010). For data generation from local household respondents initially 50 percent of *Satras* (i.e. 15 *Satras*) were randomly selected out of officially listed 31 *Satras* in the island. In second phase of sampling design, convenience and geographical sampling method under the concept of non-probabilistic sampling techniques has been adopted; incorporating those

respondents whose place of residence is within one km periphery (30 household responses per *Satras*) of the randomly selected 15 *Satras* in the river island Majuli. The reason for selecting these areas significantly lies in the religious tourism activities conducted in the *Satras*, which basically attracts more tourists than any other tourism activity. Thus, the communities residing in the surrounding zone of a *Satra* are more directly attached with tourism based activities. The response rate of local household respondents is 92 percent.

With respect to the visitors, two pattern of data generation has been adopted. At first majority of the domestic cum foreign respondents were asked to respond at the time of leaving the Island i.e. place of exit. During this process of data generation, if it is found that respondents cannot undertake the study at the time of place of exit, they were requested to provide an e-mail contact or social networking site address, thereby forwarding the online questionnaire for their later response.

In order to determine the small set of variables out of large set of variables, factor analysis approach has been adopted. The primary objectives in the factor analysis methodology are to determine the numbers and nature of factors, and the pattern of their influences on the surface attributes. For the purpose of factor analysis Exploratory Factor Analysis (EFA) has been used.

Results and Discussion:

The results and discussion section consists of three parts. The first part attempts to identify the factors determined from the response of the local household respondent response. The second part looks into the information prescribed by the visitors and the final part is concerned with the framework for tourism development in the river island Majuli.

a. Local household respondents:

The statement pre-testing was carried out amongst 414 local household respondents with respect to the 50 statements. The scale was tested for internal consistency reliability and for this test Cronbach’s Alpha value had been used (Sane and Singh 2012; Mukherjee and Shivani 2013). In assessing internal consistency of a data, reliability assessment / test is the first step undertaken so as to avoid additional dimensions produced by factor analysis due to garbage items (Churchill 1979). The alpha value equal to 0.70 or above indicates that the items make a reliable set for further analysis (Park, Heo, and Rim 2008).

All 50 statements		After Reliability test refinement	
Cronbach's Alpha	N of Items (No.)	Cronbach's Alpha	N of Items (No.)
0.896	50	0.936	27

Table No 1. Reliability Statistics

Source: Enumerated from Field Survey

Of the total 50 statements, 27 statements are considered for the further steps of analysis. The remaining 23 statements are deleted for having a low corrective item to total correlation value, derived after performing reliability test. Thus, after deleting the statements the Cronbach’s Alpha value has been improved to 93.6 percent from the previous value of 0.896. (Table no.1) The item – correlation analysis represents a refinement of test reliability by identifying “problem” items in the test, i.e., those items that yield low correlations with the sum of the scores on the remaining items. Rejection of those items that are inconsistent with the rest increases the internal consistency of the remaining parameters (Ho 2006). Pope, (2009), stated that values for an item – total correlation between 0 and 0.19 may indicate that the parameters are not discriminating well, Values between 0.2 and 0.39 indicate good

discrimination and values above 0.4 and above indicate very good discrimination. The object of the reliability test is to remove the inconsistent items and improve the internal consistency of the test.

Label	Statement	Corrected Item-Total Correlation	Communalities (h ²)	
			Initial	Extraction
LP3ST 20	Tourism activities generating benefits for all sections of the society.	.550	1.000	.659
LP3ST 21	The money that tourism brings in is of benefit to the whole community	.471	1.000	.681
LP3ST 22	There should be specific tax on tourists.	.420	1.000	.681
LP3ST 23	Tourism provides incentives for the conservation of natural resources.	.671	1.000	.575
LP2ST 24	Increased tourism activity is not effecting the natural environment in the region.	.727	1.000	.678
LP3ST 25	The overall benefit of tourism is more than the costs to the people of the area.	.283	1.000	.630
LP3ST 26	Tourism development has not affected the rates and taxes of products.	.589	1.000	.674
LP1ST 27	Internal transport system in the Island is convenient.	.293	1.000	.661
LP4ST 29	I do participate in activities related to promotion of local culture through local authority councils and bodies.	.624	1.000	.495*
LP1ST 30	Accommodation in Majuli is not a problem.	.364	1.000	.690
LP4ST 32	Climate and environment of Majuli is all time good for tourism activities.	.479	1.000	.428*
LP2ST 33	Tourism has led to an increase in infrastructure in local area.	.620	1.000	.580
LP3ST 34	Family life of local society has not been disrupted by the presence of tourists.	.715	1.000	.691
LP3ST 35	Local people are treated equally, rather than as inferiors by tourists.	.653	1.000	.709
LP2ST 36	Role of tour operators is vital for tourism development in Majuli.	.635	1.000	.569
LP4ST 37	Majuli holds the potential of being a major tourist attraction spot.	.710	1.000	.677
LP1ST	The conveyance facility between the	.244	1.000	.592

39	main land and the island is safe and convenient.			
LP4ST 40	Private sector involvement/ participation in tourism business in Majuli are supportable.	.330	1.000	.586
LP4ST 41	Visitors' attitude and behaviour is good and supportive to local people.	.661	1.000	.592
LP3ST 42	Occurrence of flood is a major problem of the island Majuli.	.665	1.000	.621
LP4ST 43	I strongly support the declaration of Majuli as World Heritage Site.	.735	1.000	.736
LP3ST 44	Government incentives are essential for tourism development in Majuli.	.646	1.000	.636
LP2ST 45	Residents should be allowed to develop tourist attractions in the region.	.583	1.000	.584
LP2ST 47	Majuli hold a significant potential to be launched as a river island tourism destination.	.685	1.000	.608
LP3ST 48	Tourism is having an economically viable prospect in Majuli.	.585	1.000	.558
LP4ST 49	For promotion of unique features of Majuli, tour operators need to take adequate initiatives to attract and encourage tourists to visit the same.	.741	1.000	.707
LP4ST 50	I am interested to take part in tourism management policies in future.	.759	1.000	.681
Extraction Method: Principal Component Analysis.				

Table No. 2 Cronbach Alpha and Initial Extraction of 27 Statements

Note: * = Removed for having low communality i.e. < 0.50.

Source: Enumerated from Field Survey.

The communalities defined for each selected variables are based on the extracted factors. Ideally, the communalities should be 1.00 and the minimum acceptable value is 0.5 (Matai and Bhat 2013). In the present study, except two communality values i.e. for LP4ST29 and LP4ST32, all the remaining 25 variables are showing a good extraction values for factor solution. The variables that are having a value below the standard value of 0.50 are henceforth removed from further analysis. (Table no 2)

In the present study table no 3 shows the KMO sampling adequacy measuring the value of 0.912, confirming

the appropriateness of factor analysis. It shows the suitability of the data for factor analysis and indicates the proportion of variance in the variables, which is common variance. High values close to 1.0, generally indicates that a factor analysis may be useful with the data. If the value is less than 0.50, the results of the factor analysis probably not are very useful (Matai and Bhat 2013). As in the present study the values are quite high (91.2 percent), it supports that the sample was good enough for factor analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.912
Bartlett's Test of Sphericity	Approx. Chi-Square	6721.619
	Df	300
	Sig.	.000

Table No. 3 KMO and Bartlett's Test

Source: Enumerated from Field Survey.

Bartlett's test of Sphericity indicates whether a given correlation matrix is an identity matrix, which indicates that the variables are unrelated. The significance level gives the result of the test. Very small p- values (less than 0.05) indicate that there are probably significant relationships among given variables. A value higher than about 0.10 or so may indicate that the data is not suitable for factor analysis (Burlakanti and Srinivas 2013). In this case, the significance level has a very small value i.e. 0.000, which is less than 0.05, thus suggesting that the variables possess significant relationship. The variables with Chi square value = 6721.619, degree of freedom = 300 provide a support for the validity of the factor analysis of the data set (Table no 3). These tests confirm that the data is adequate for factor analysis.

After the first run of the variables for factor extraction on the basis of Eigen values above 1 with Principal Component Analysis technique, it has been found that total four (4) factors have been extracted out of 25 variables. An Eigen value is a ratio between the common (shared) variance and the specific

(unique) variance explained by a specific factor extracted (Ho 2006). A method widely used for determining a first set of loadings is the principal component method. This method seeks values of the loadings that bring the estimate of the total communality as close as possible to the total of the observed variances (Tryfos 1997).

In-depth analysis of the extracted four (4) factors shows that the factors are holding certain common variables to explain. Moreover, Scree plot also reflects the presence of some unnecessary factors (Field 2005). The cumulative Rotation Sum of squared loading has reported 64.606 percent of cumulative variance.

The Scree plot generated from the data run also shows that there are four prime variables which are having more dominance in comparison to other variables. The point at which the curve first begins to straighten out (Eigen value = 1) is considered to indicate the maximum number of factors to extract. Thus, those factors which are above this point of diversion are deemed meaningful and those afterwards are not (Ho 2006).

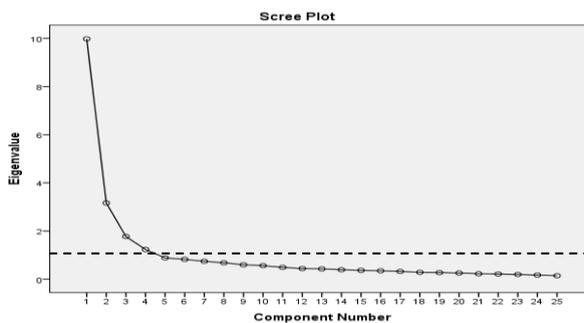


Figure No. 1

Factor loadings are used to measure the correlation between the variables and the factors. A loading close to one (1) indicates a strong correlation between a variable and the factor, while a loading closer to zero (0) indicates a weak correlation

(Nargundkar 2008). The factors are rotated using Varimax with Kaiser Normalization rotation method. Principal Component Analysis (PCA) is the technique of factor extraction. Varimax rotation was used to extract the factors with factor loadings greater than +/- 0.33 (Ho, 2006).

After analyzing the rotated factor matrix table, it has been found that 14 variables categorized in four factors are cross loaded. Sometimes deletion of the cross loaded items serves to clarify the factors and makes the interpretation much easier. Though, considering the wording of the cross loaded variables and based on their features, the cross loaded factors has been assigned to the most logically/ conceptually representative of (Ho 2006, 221).

Label	Statements	FACTORS			
		LF1	LF2	LF3	LF4
LP3ST35	Local people are treated equally, rather than as inferiors by tourists.	.817			
LP2ST45	Residents should be allowed to develop tourist attractions in the region.	.742			
LP2ST33	Tourism has led to an increase in infrastructure in local area.	.714			
LP3ST21	The money that tourism brings in is of benefit to the whole community	.711			.361
LP3ST44	Government incentives are essential for tourism development in Majuli.	.691			
LP4ST41	Visitors' attitude and behaviour is good and supportive to local people.	.646		.389	
LP3ST22	There should be specific tax on tourists.	.645			.410
LP3ST48	Tourism is economically viable in Majuli.	.631			
LP4ST50	I am interested to take part in tourism management policies in future.	.619	.447		
LP4ST43	I strongly support the declaration of Majuli as World Heritage Site.	.595	.561		
LP2ST36	Role of tour operators is important for tourism development in Majuli.	.553	.513		
LP3ST26	Tourism development has not affected the rates and taxes of		.785		

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	products.				
LP2ST24	Increased tourism activity is not effecting the natural environment in the region.		.704		
LP3ST42	Occurrence of flood is a major problem of the island Majuli.	.362	.694		
LP3ST34	Family life of local society has not been disrupted by the presence of tourists.	.375	.631	.374	
LP3ST20	Tourism activities generating benefits for all sections of the society.		.608		.510
LP4ST37	Majuli holds the potential of being a major tourist attraction spot.	.480	.543	.367	
LP3ST23	Tourism provides incentives for the conservation of natural resources.		.537	.433	
LP2ST47	Majuli hold a significant potential to be launched as a river island tourism destination.		.535	.492	
LP1ST30	Accommodation in Majuli is not a major problem of tourism.			.791	
LP4ST40	Private sector involvement/ participation in tourism business in Majuli are supportable.			.769	
LP3ST25	The overall benefit of tourism is more than the costs to the people of the area.			.734	
LP4ST49	For promotion of unique features of Majuli, tour operators need to take adequate initiatives to attract and encourage tourists to visit the same.	.397	.397	.593	
LP1ST39	The conveyance facility between the main land and the island is safe and convenient.				.743
LP1ST27	Internal transport system in the Island is good.			.353	.701
Cronbach Alpha		0.929	0.926	0.872	0.711
Eigen Values		9.980	3.166	1.771	1.234
% of Variance		39.921	12.663	7.085	4.937
Cumulative Variance (%)		39.921	52.584	59.669	64.606

Table No. 4 Rotated Factor Matrix^a

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Source: Enumerated from Field Survey.

The Varimax- rotated factor matrix, reported four (4) factors representing 64.606 percent of the explained variance were extracted from 25 variables. The results showed that the alpha coefficient of the four factors ranged from 0.711 to 0.929. The rotated factor matrix helps in making a broad interpretation of the four parameters that have been identified.

The first factor (LF1) is the most important factor which explains the 39.921 percent variance with an Eigen value of 9.980. The Cronbach Alpha estimated for the factor 1 shows a high degree of internal consistency with 92.9 percent of reliability. This factor includes 11 variables i.e. local people are treated equally, rather than as inferiors by tourists (.817), residents role in developing tourist attractions in the region (.742), infrastructural growth in local area (.714), The money that tourism brings in is of benefit to the whole community (.711), Government incentives for tourism development in Majuli (.691), Visitors' attitude and behaviour is good and supportive to local people (.646), There should be specific tax on tourists (.645), Economic viability of tourism in Majuli (.631), Interest to take part in tourism management policies in future (.619), Strong support to the declaration of Majuli as World Heritage Site (.595) and Role of tour operators for tourism development in Majuli (.553). On the basis of the detail analysis and observations of this factor, it is basically representing the support and willingness of the respondents towards promoting tourism in the island. Thus, it is named as "**Tourism Community Attitude (TCA)** i.e. community attitude towards tourism and tourism based activities in the river island Majuli." The factor 2 (LF2) is a composition of eight variables i.e. Tourism development has not affected the rates and taxes of products (.785), Increased tourism activity is not effecting the natural environment in the region (.704), Occurrence of flood is a major problem of the island Majuli (.694), Family life of local society has not been disrupted by the presence of tourists (.631), Tourism activities generating benefits for all sections of the

society (.608), Majuli holds the potential of being a major tourist attraction spot (.543), Tourism provides incentives for the conservation of natural resources (.537) and Majuli holds a significant potential to be launched as a river island tourism destination (.535). This factor has been extracted with a variance of 12.663 percent and 3.166 Eigen value with an internal consistency of 0.926. On the analysis of the extracted variables it has been noticed that these eight parameters are speaking about the probable results of the tourism and tourism based activities in the river island Majuli. It shows impact of the tourism activity to the economy of the river island and its future potentialities. Thus, the determined factor representing the impact of tourism activities in the island is named as “**Tourism Impact (TI)**.”

The third factor (LF3), which is extracted from the variables, has been representing the basis infrastructural essentialities that are required for tourism and tourism based activities. Considering this feature it is named as “**Tourism Necessities (TN)**”. This factor incorporates four prime variables of tourism i.e. Accommodation in Majuli is not a major problem of tourism (.791), Private sector involvement/participation in tourism business in Majuli are supportable (.769), The overall benefit of tourism is more than the costs to the people of the area (.734), and For promotion of unique features of Majuli, tour operators need to take adequate initiatives to attract and encourage tourists to visit the same (.593). The factor is representing 7.085 percent of total variance explained with an Eigen value of 1.771.

The fourth and the final factor (LF4) have extracted two prime variables (Variance 4.937 percent and Eigen value 1.234). The statements that are considered in this factor are (i). The conveyance facility between the main land and the island is safe and convenient (.743) and (ii). Internal transport system in the Island is good (.701). As these statements suggest that communication system to and from Majuli is one of the major

elements to be taken care of by the concerned departments prior to promoting tourism and tourism based activities in the island. Majuli which is totally natural and unique, this encourages more tourists to flux to the Island but in some cases inadequate basic amenities create considerable hindrances. Thus on the basis of the opinion of the local household respondents and considering the parameters the factor is renamed as “**Tourism Conveyance (TCon).**”

Factor No.	FACTOR TERMS	ABBREVIATIONS
LF1	Tourism Community Attitude	TCA
LF2	Tourism Impact	TI
LF3	Tourism Necessities	TN
LF4	Tourism Conveyance	TCon

Table No. 5 No. of Factors Determined and Terms Defined

Source: Enumerated from Research Findings.

Thus on the basis of the factor analysis performed on the responses of local household respondents, the above specified common factors came into limelight.

b. Visitor Respondents:

As Cronbach’s Alpha estimates the internal consistency associated with the scores that can be derived from a scale or composite score, after the first run of the 25 statements, it has reported a value of 65.4 percent. The initial value has represents less internal consistency of the all the variable statements under study. The corrected item to total correlation shows the correlation (consistency) between each item and the sum of the remaining items.

All 25 statements		After Reliability test refinement	
Cronbach's Alpha	N of Items (No.)	Cronbach's Alpha	N of Items (No.)
0.654	25	0.713	15

Table No. 6 Reliability Statistics

Source: Enumerated from Field Survey.

In deciding which item(s) to retain or delete, the total corrective item to total correlation with high communality has been retained. Based on this criterion, ten variable statements have been removed from further analysis. After ignoring the ten statements from further analysis, the Cronbach's Alpha has been re-tested and the after removal value has been improved to 0.713, increasing the internal consistency of the remaining variables. (Table no. 6)

Label	Statement	Corrected Item-Total Correlation	Communalities (h ²)	
			Initial	Extraction
TP1ST4	Availability of food for tourists is not a vital problem of Majuli.	.332	1.000	.371*
TP2ST6	Majuli holds the potentiality of being launched as a health and recreation tourist spot for its calm environment.	.278	1.000	.400*
TP1ST7	Sufficient numbers of ATMs are available in the island.	.410	1.000	.663
TP1ST9	Adequate number of tourist bungalows, guest house, circuit house, government accommodation, hotels etc. are available in Majuli.	.289	1.000	.367*
TP2ST11	There is an immense potentiality of developing agri-tourism in Majuli.	.241	1.000	.211*
TP3ST12	Low level of urbanization growth is good for Majuli.	.223	1.000	.408*
TP1ST13	Majuli has a unique set of religious and dance form.	.266	1.000	.602
TP2ST16	As Majuli attracts a quite good number of migratory birds in seasons, it holds a potentiality of having a good bird sanctuary.	.383	1.000	.617
TP3ST18	Occurrence of flood is a major problem of the island Majuli.	.384	1.000	.746
TP1ST20	The local art & handicraft and local communities have given a unique dimension to the features of Majuli.	.202	1.000	.584
TP4ST21	Climate and environment of	.414	1.000	.334*

	Majuli is all time good for tourism activities.			
TP1ST22	Accessibility to Majuli and in Majuli is good.	.307	1.000	.489*
ST23	The behavior of the front desk employees at hotel / motel was satisfactory.	.446	1.000	.899
ST24	It was difficult for me to make a reservation for accommodation in the island.	.292	1.000	.928
ST25	The overall experience of my visit to the island is very good.	.429	1.000	.504
Extraction Method: Principal Component Analysis.				

Table No. 7 Cronbach Alpha and Initial Extraction of 15 Statements

Note: * = Removed for having low communality i.e. < 0.50.

Source: Enumerated from Field Survey.

As ideally, the communalities should be 1.00 and the minimum acceptable value is 0.5 (Matai and Bhat 2013), the reported communalities of the 7 variable statements are below the threshold limit and thus ignored from further factor analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square	540.979
	Df	28
	Sig.	.000

Table No. 8 KMO and Bartlett's Test

Source: Enumerated from Field Survey.

Analysis of KMO sampling adequacy confirming the appropriateness of factor analysis it has been noticed a value of 0.500. The Bartlett's test of Sphericity reported by the table no. 8, the Chi square value of 540.979 with a degree of freedom of 28 supporting for the validity of the factor analysis of the data set. Analysis of the significance level shows a result of 0.000, which is less than 0.05, suggesting that the variables are significantly related. After the values reported by the KMO measure of sampling adequacy and Bartlett's test of Sphericity it has been noticed that the considered variables are adequate for performing factor analysis.

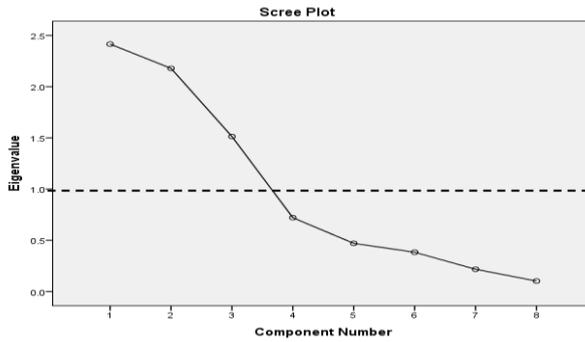


Figure 2.

After restricting total 25 statements to 8 statements for factor extraction test on the basis of Eigen values above 1 with Principal Component Analysis technique, it has been found that 03 factors have been extracted out of 8 variables under study. Analysis of the extracted factors representing 76.317 percent of the total variance explained.

For the clarity of the extracted factor loadings of the identified factors, cross variables could be removed from the analysis. But considering the statements position it has been considered in the factor to which it is most represented to (Ho, 2006). After analyzing the rotated factor matrix table, it has been found that 01 variable categorized in two indentified factors are cross loaded i.e. statement no. 25 (Table No. 9). The internal consistency of the identified factors ranges from 0.755 to 0.921.

Label	Statements	FACTORS		
		TF1	TF2	TF3
TP1ST13	Majuli has a unique set of religious and dance form.	.845		
TP2ST16	As Majuli attracts a quite good number of migratory birds in seasons, it holds a potentiality of having a good bird sanctuary.	.790		
TP1ST20	The local art & handicraft and local communities have given a unique dimension to the features of Majuli.	.754		
ST25	The overall experience of my visit to the	.640		.435

	island is very good.			
ST24	It was difficult for me to make a reservation for accommodation in the island.		.964	
ST23	The behavior of the front desk employees at hotel / motel was satisfactory.		.943	
TP1ST7	Sufficient numbers of ATMs are available in the island.			.928
TP3ST18	Occurrence of flood is not a major problem of the island Majuli.			.856
Cronbach Alpha		0.755	0.921	0.822
Eigen Values		2.414	2.178	1.513
% of Variance		30.181	27.227	18.910
Cumulative Variance (%)		30.181	57.408	76.317

Table No. 9 Rotated Factor Matrix^a

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Source: Enumerated from Field Survey.

With respect to the data collected from the tourist respondents, the first factor that has been identified explains the 30.181 percent of variance with an Eigen Value of 2.414 (Table no 12). The first factor variables estimated an internal consistency value of 0.755. The first identified factor i.e. TF1 includes three specific variables and one cross loaded variable under study (table no. 12). The variables that are incorporated under this factor are TP1ST13 (Majuli has a unique set of religious and dance form, 0.845); TP2ST16 (As Majuli attracts a quite good number of migratory birds in seasons, it holds a potentiality of having a good bird sanctuary, 0.790); TP1ST20 (The local art & handicraft and local communities have given a unique dimension to the features of Majuli, 0.754) and ST25 (The overall experience of my visit to the island is very good, 0.640). Careful analysis and observation of the statements indentified represents the opinion of the respondents towards the tourism resources available in the river island Majuli. Thus, considering the features of the statements the identified factor has been named as “**Tourism Resources (TR)**”.

The second factor (TF2) consists of two variable

statements i.e. ST24 (It was difficult for me to make a reservation for accommodation in the island, 0.964) and ST23 (The behavior of the front desk employees at hotel / motel was satisfactory, 0.943). This factor has been extracted with a variance of 27.227 percent and 2.178 Eigen value. Considering the parameters extracted under the study, it could be easily noticeable that visitors are more concerned about the hospitality they receive in the river island during their period of visit or stay. Thus, this factor has been regarded as “**Tourism Hospitality (TH)**”.

Considering the third factor (TF3) identified from the responses generated from the visitors, it has been found that it incorporates total three statements, two of which are specifically identified and one cross loaded. The two specific statements are TP1ST7 (Sufficient numbers of ATMs are available in the island, 0.928) and TP3ST18 (Occurrence of flood is not a major problem of the island Majuli, 0.856). The cross loaded variable is statement no. 25. The factor explains 18.910 percent of variance with 1.513 Eigen Value. Analysis of the third factor explains that apart from the tourism resources and expected hospitality in the river island Majuli, tourists are also more careful to consider the existing infrastructural and geographical setup of the island in order to promote tourism and tourism based activities. Thus, the third factor has been named as “**Tourism Features (TF)**” of Majuli.

Factor No.	FACTOR TERMS	ABBREVIATIONS
TF1	Tourism Resources	TR
TF2	Tourism Hospitality	TH
TF3	Tourism Features	TF

Table No. 10 No. of Factors Determined and Terms Defined

Source: Enumerated from Research Findings.

c. Results of factor analysis and Tourism development framework for Majuli:



Figure No. 3
Community Based Tourism Model from Factor Analysis
 Source: Enumerated from Research Findings.

From the analysis of the Likert scale statements directed to the two prime categories of stakeholders i.e. visitors and local household respondents, both the groups of respondents have certain common features to share. For any sustainable tourism development plan, the role of local community cannot be undermined. Sustainability is a concept that is frequently used in relation with tourism development. While there does not exist a universal definition of sustainability, many scholars agree that sustainable development includes long term positive economic, social and environmental outcomes (Hunter 1997; UNWTO 2004; Goodwin 2011). The UNWTO (2004) indicates that sustainable tourism guidelines and management practices are relevant to all forms of tourism and in all locations, also including mass tourism destinations and niche segments. For a controlled sustainable tourism practices in a tourism spot, the local participation is utmost expected. In this aspect Majuli as a potential tourist spot possess the features of being launched as Community based tourism activity zone. The reason for such an explanation is obvious and lies in the kinds of tourism products delivered by the island community to the visitors across the world at large. The primary product of tourism is not something produced by the

industry. The product is often the heritage, wealth, and expected legacy of the community that serves as the tourist destination (ICLEI 1999). Brohman (1996, 60) states that 'community-based tourism development would seek to strengthen institutions designed to enhance local participation and to promote the economic, social, and cultural well-being of the popular majority'. There is no doubt in the minds of the community at large that Majuli holds a greater prospect as a potential tourist destination, but role of necessary modifications and plans and policies cannot be underestimated.

With respect to the local household communities it has been noticed that they are quite concerned about the present status of the island both in geographical and economical aspects. In this context, they do believe in the role the local community had to play in promoting tourism and tourism based activities in the river island Majuli. The attitude of the local community towards a sustainable tourism industry is quite strong. This mindset has a positive impact in promoting tourism activities in the island. Local communities are willing to take part in different forms of tourism management practices which could have direct or indirect impact on their day to day lifestyle. Adequate participation of local communities in such activities could lead to a more involved and constructive tourism practices. The ironical aspect of the tourism management practices is that the local community which belongs to a weaker or lower stratum of social stratification feels dejected in this matter. The reason for such opinion of the respondents primarily lies in the perception. They perceive that lack of funds, inadequate representation in higher authority and less experience & knowledge keeps them away from such participative activities. Though some local NGOs are taking initiatives to keep them aware and involved in certain levels of decision making processes. Moreover, local household communities also perceive that tourism based activities could generate sustainable revenue for the local community. For that

matter they presume that a visitor needs to be charged for the services and products which they consume or visit to explore. There is no specific mechanism of charging fees from the visitors in the river island Majuli. Religious institutions (*Satras*) (not all) charge certain amount from visitors for allowing them to explore the museum, under their administrative control.

The cost and benefit aspect of tourism and tourism based activities is another critical elements to be taken care of. The opinion of the local household respondents shows that apart from their support and willingness to develop tourism and tourism based activities in the river island Majuli they are quite concerned about the possible impact of such activities. Moreover the results derived from the opinion of the local household respondents shows that tourism and tourism based activities could play a more positive role in near future. If right initiatives and promotional aspects were taken and implemented, then there is a fair chance that this industry could help the island to get a tag of river island based tourism destination.

In the process of developing a tourist destination it is very much essential for the tourism planners and developers to consider the features prevalent in a spot or with a product. The features help the planners to gain access to the tourism product and services. The basic necessities of the island are necessary to be fulfilled both in tangible and intangible forms, for a more concrete and sustained growth of the industry. In that context the role of tourism infrastructural necessities cannot be ignored. The existing tourism setup helps in launching its products well and in – depth. Infrastructure is one of the pre-requisite of any tourist spot across the world, be it a communication system, accommodation, connectivity, or any other basic amenities that is desired by a tourist. At the same time efforts are necessary to be taken for learning and teaching more participative and cooperative behavioural approach of

local respondents cum visitors during any interaction. With respect to the opinion of the local respondents they came up with a serious issue in the river island Majuli, i.e. the mode of transportation system. Majority of the respondents consider it as one of serious issues which need to be addressed well. They opine that the situation becomes worse in the rainy seasons when the Mother Nature becomes very harsh with the island. In that matter the safety and security of local community and visitors (if any) becomes prime concern. Thus, efforts are needed to be taken to counter this issue for an adequate growth and development of tourism industry in the island for throughout the year activity.

With respect to the opinion of the visitors towards tourism and tourism based activities and associated aspects in the island Majuli, their prime focus is on three aspects: (i) Tourism resources (ii) Tourism Hospitality and (iii) Tourism Features of Majuli.

These three factor terms were emerged out of the opinion of the visitors response and highlights the areas of thrust in the river island Majuli. As a tourist, individuals always prefer to explore and experience more within a given period of time and money. Extensive opportunities with respect to varied tourism products keeps a destination always full with visitors and activities. With respect to the island Majuli, numerous religious and cultural activities performed by the religious institutions (*Satras*) in assistance with the local communities. But, other than these specific activities none of the other forms of tourism has been yet developed in the island or are in a very nascent stage of growth. Unfortunately, this phenomenon makes it less attractive for tourists even after having immense potentiality of promoting other forms of tourism like water-sports based tourism, gastronomical tourism, adventure tourism, eco tourism, rural tourism, bird tourism and even disaster based tourism activities, etc. Apart from the availability of resources the local hospitality and

friendliness attract substantial number of tourists. A good hospitality and favourable environment increases the willingness of the visitors to stay for longer period in the tourist spot. This phenomenon generates more resource in the form of income or employment creation through multiplier effect (Bhatia 1983, 68). In case of visitors response it has been noticed that they are quite satisfied with the service and hospitality they received from the local community.

With respect to the tourism development in the river island Majuli immense potentiality is there to increase and improve the existing numbers of tourism products. For a very new planner in any tourist spot or a product, it is also essential for them to look into the attractions lying in the area of entry. The same can be said in the case of the river island Majuli too. Moreover, any existing tourism structure and product helps the planners and developers to launch it directly to the users with a slight modification as desired by the clients (tourists). During the growth period of the tourism product or spot it is quite essential for the planners and developers to come up with some solid future products so that tourists always get new areas or dimensions to explore every time they visit the spot or to consume the product. As the “Butler’s Destination Life-Cycle Model” (1980), observes that a destination or a product passes through a number of stages of tourism development, whereby the number of tourists increases with time until a point is reached when either the destination renews itself or starts to deteriorate. The ultimate fate of the destination is decided by local management practices. In this context the approach of applying community based tourism model is quite appropriate. To that matter necessity is for exploring new tourism products and services and give adequate opportunities to all sectors and sections of the society to contribute together to the growth of the economy with the help of tourism industry.

Thus to keep the status of a tourist destination and products intact, it is very much essential on part of the

planners and even the community to come up together with new products and services from time to time. There is a need to generate an equal opportunity for all sections of the local society so that the local economy could sustain on itself for a longer period in the near future.

Conclusion:

Despite of challenges and problems in the island, Majuli still holds immense potentiality to be explored. This island holds a unique ranges of demographic, cultural, religious and natural resources which are of its kind. The isolation of the island and presence of a large number of wetlands located in the island have given shelter to varied migratory and non-migratory birds, apart from exotic fish and other aquatic species. The moderate rainfall, pollution free environment, pleasant climate, peaceful and non-violent nature of its inhabitants have made Majuli a unique reserve of biodiversity.

With respect to promote intensify the tourism and tourism based activities in the river island Majuli, a specific model or framework has been required. Tourism activities without any proper plans and policies could jeopardize the whole industry in near future. Majuli could be a heaven for visitors if timely action and steps were taken to promote the industry in collaboration of local communities. From the findings of the study it could be concluded that community based tourism approach towards sustainable development could be a more viable avenue for the local communities and for the island as a whole in prospective future.

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