
A Critical Analysis on the Local Community's Attitude And Intention Towards Ecotourism And Conservation in Chakrashila Wildlife Sanctuary, Kokrajhar, Assam

Dr. Akshay Kr. Haloi

Assistant prof., Dept. of Zoology

Bajali College, Pathsala, Barpeta District, Pin-781325, State Assam, India

Jyotirmoy Misra

PG student, Dept. of Zoology

Bajali College, Pathsala Barpeta District, Pin-781325, State Assam, India

Manzur Hassan

PG student, Dept. of Zoology

Bajali College, Pathsala Barpeta District, Pin-781325, State Assam, India

1. ABSTRACT: *This study focuses on the different aspects of ecotourism while examining the local people's view and attitude about Chakrashila Wildlife Sanctuary located in Kokrajhar district of Assam. The attitudes and intentions of the community towards four dimensions of ecotourism, including conservation of natural resources, preservation of cultural tradition, sustainable community development and participation in ecotourism planning and management, are taken under consideration for measurement. This paper also focuses on the parallelism between community attitude and intention toward developing ecotourism. All collected data are based on group interviews conducted among the indigenous communities of Bandarpara village which is primarily consisting of Bodo people. The results shows enthusiastic positivity from the local people which is necessary for ecotourism, and their intentions of direct involvement for the development necessities are also very promising. The local people are currently supporting all the guidelines of ecotourism development and conservation, provided to them, which are based on international guidelines of ecotourism. It is also seen that the intentions might depend upon various factors. Economic, political and social conditions of the communities are very important to be considered for the positive behavioral outcomes. The community empowerment and relationships with the government and authorities are needed to be addressed properly if it is to avoid future conflicts with the development of ecotourism.*

KEYWORDS: *Ecotourism, Community Development, Conservation.*

2. INTRODUCTION: "Ecotourism", according to the definition by The International Ecotourism Society (2005), is "responsible travel to natural areas that conserves the environment and improves the well-being of local people." Ecotourism should be used to distinguish those initiatives which are environmentally sensitive, but which also aim to ensure that members of local communities have a high degree of control over the activities taking place, and a significant proportion of the benefits accrue to them (Liu, 1994; Ceballos-Lascurain, 1996). It is suggested that successful protected area management will not be achieved without the cooperation and support from local communities (Gurung, 1995; Mehta & heinen, 2001; Wells and Brandon, 1993). Local people must be empowered and involved in making decisions for conservation (Newmark & Hough, 2000; Sofield, 2003). Ecotourism's goal is to achieve conservation and community development through the provision of economic and social incentives to local communities (Bookbinder, Dinerstein, Rijal, Cauley, & Rajouria, 1998; Chapman, 2003; Davenport, Brockelman, Wright, Ruf, & Rubio del Valle, 2002; Ross & Wall, 1999; Scheyvens, 1999; Wunder, 2000). Critiques have argued that generating local support for conservation is challenging because of the highly complex and heterogeneous characteristics of community,

and variable interests in issues related to conservation and development (Heinen, 1996). In New Zealand, Maori communities are using ecotourism as a means of sustainably utilization of physical resources at their disposal in a way which can provide employment options. Ngai Tahu, for example, are training local tribes people to deliver information to compliment tourist activities such as a highly successful Whale Watch venture. They aim to ensure that Ngai Tahu people are well trained so that ecotourism can be both socially and economically sustainable, reviving respect for traditions and enhancing local livelihoods by providing an income for many previously unemployed people (Anon, 1993). This paper examines how the local people of a peripheral village Bandarpara of Chakrashila Wildlife Sanctuary have responded towards prospects of ecotourism and their attitude and intention toward the four key dimensions of ecotourism development. They are: (i) conservation of natural resources, (ii) preservation of cultural tradition, (iii) sustainable community development, and (iv) participation in ecotourism planning and management. Four general dimensions are identified from selected literature of ecotourism guidelines and principles to encompass the areas of socially appropriate tourism (Cooke, 1982). Very few studies have explored community attitude toward ecotourism development (Nepal 2004; Walpole & Goodwin, 2001). Ecotourism is a very new concept which is being tried to introduce in properly in Chakrashila Wildlife Sanctuary with consent to the local authorities like Bodoland Tourism Department and Forest department.

3. MATERIALS AND METHODS:

3.1. STUDY AREA: Chakrashila Wildlife Sanctuary covers an area of 45.568 km² in Kokrajhar and Dhubri district of western Assam, within 26.33 N and 90.33 E. The area was designated reserve forest in 1966. As the hunting and deforestation was increasing, it started attracting some attentions. The NGO Nature's Beckon initiated awareness among the local people which eventually helped establishing it as a wildlife sanctuary in 1994 (Kothari *et al.*, 2000). The Sanctuary has a hilly terrain covered with semi-evergreen and moist deciduous forest interspersed with patches of grassland and scattered bushes, and represents the southernmost distribution of the Endangered golden langur *Trachypitecus geei*, which is endemic to western Assam and parts of Bhutan and is the Sanctuary's flagship species. Chakrashila also harbours 33 other species of mammals, 273 species of birds, 24 species of reptiles and amphibians, 60 species of fishes and 107 species of plants (Datta *et al.*, 1998).

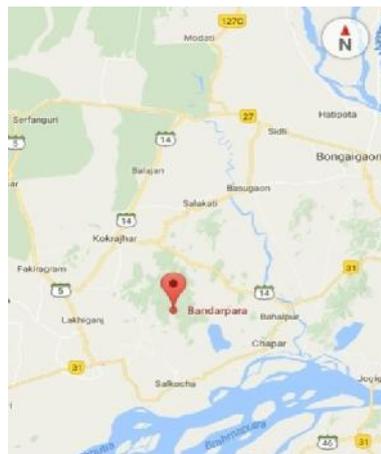


Fig.1: Location of the area

Source:www.googlemaps.com)

The village undertaken for the study is Bandarpara, which is within the vicinity of Chakrashila Wildlife sanctuary, 1 km from the forested area (Fig.1). The village is inhabited by Bodo people. Agriculture is currently their main economic activity, with great prosperity and significantly less use of chemicals. They primarily cultivate crops like Sali, Ahu, Bodo, Joha, Malsira and rear pigs, poultry, goats, cattle etc. There is more tourist attraction in that place like the *Daukaraja* stream, *Abhayakuti* temple etc.

There are three streams flowing through the village, providing the villagers with rich water source. The village is surrounded by hilly terrain, mostly with semi-deciduous forest.

3.2. METHODS: Field work for the study was conducted during the period from January to March, 2017. According to the records of tourism department and survey data, Bandarpara consisted of about 200 residents with not more than 100 families, most of the local age groups are from 15 to 85; 52.9% can read and write, 11.8% can only sign and 35.3% cannot read or write.

Snowball method of sampling was used for the interview, which consisted of survey questionnaire (Lai & Nepal, 2005). There were total of 60 interviews conducted among the people with various age. There were two scales in the interview for every person, one was to explore their attitude and another was to explore their intention toward ecotourism. For attitude analysis, 20 questions were made from the ecotourism guidelines which include all socio-psychological necessities for development of ecotourism. There was a 5 point likert-type scale for every question where 1,2 considered as unfavorable, 3 as neither favorable nor unfavorable, 4,5 as favorable. The same questions were asked for their intention with a bit of wording changes like favorable was changed to likelihood, for their behavioral approach toward involving in the act and asked to score points in the given point scale, from 1 to 5.

Spearman's ρ was calculated to explore the correlation between the attitude and intention. The scores for each of the four dimensions of ecotourism were summed and mean score was calculated. The aggregate score was used to calculate the correlation between attitude and intention.

4. RESULTS AND DISCUSSION:

4.1. ATTITUDE TOWARD ECOTOURISM:

Frequency distribution of percentage of responses of different statements from the dimensions for the attitude exploration can be seen in the **Table 1**. High degree of agreements can be observed for the statements "specifying carrying capacity for tourist activities (80%)" and "learning about the natural heritage of the area (85%)". They also showed mixed reaction toward the open access to the sanctuary. They showed strong support toward not relaxing any laws to promote ecotourism and opposed for the trading of rare plants and animals.

The residents showed a very high degree of agreement (>90%) for the statements indicating "preservation of traditional sites", "preserving traditional ceremonies" and "learning about the cultural heritage" in the dimension 2. There was a mixed reaction for the statement which indicates "altering original economic activities by ecotourism".

TABLE 1: LOCAL PEOPLE'S ATTITUDE TOWARD ECOTOURISM DEVELOPMENT

Statements	Favorable (%)	unfavorable (%)	Neither (%)
Dimension 1: Conservation of natural resources			
1. Carrying capacity for tourist activity	80	10	10
2. Completely open access to the reserve for tourist Activities	30	35	35
3. Relaxing the reserve regulations to facilitate tourism Development	40	50	10
4. Trading in rare animal	15	60	25
5. Trading in rare plants	35	45	20
6. Learning about the natural heritage of the area	85	10	5
Dimension 2: preservation of cultural tradition			
1. Preserving the traditional tribal sites in the sanctuary	95	0	5
2. Preserving the spirit and content of the traditional ceremonies from any change induced by tourism development	90	0	10
3. Replacing the original economic activities by tourism	60	30	10
4. Learning about the cultural heritage of the area	90	5	5

Dimension 3: Sustainable community development

1. Tourist littering	5	85	10
2. Reducing waste	95	5	0
3. Crowds of tourist in the community	70	20	10
4. Taking negative tourism impacts as necessary for local development	55	35	10
5. Maximizing non-local tourism investment	30	60	10
6. security issues	80	10	10
7. Preventing negative tourism impacts	90	0	10

Dimension 4: Participation in ecotourism planning and Management

1. Communicating with the local government for ecotourism Planning	95	0	5
2. Participating in ecotourism planning	85	5	10
3. Increasing ecotourism-related employment opportunities	90	0	10

In the dimension 3, “tourist littering” was highly unfavorable, while “reducing waste (95%)”, “crowds from tourist”, “security issues”, “negative tourism impact prevention” are actively agreed. “Maximizing non local investments” had heterogeneous reactions.

Dimension 4 was agreed in a high frequency (>85%) while there was a positive sign of the relation development between local people and authority. Their active involvement in ecotourism planning pointed towards the successful conservation of the environment and community development.

4.2. INTENTION TOWARD ECOTOURISM DEVELOPMENT: There were mixed responses seen in the intention toward the statements asked to the residents which is noticeable comparing to the attitude responses (Table 2). There was high level of likeliness for working among the statements, “educating people about not to buy or sell rare animals and plants” in the sanctuary, “learning about the natural and cultural heritage of the area”, “assisting local authorities to prevent illegal activities” from the dimension 1. They showed low amount of positivity on the statements where regulations on tourist numbers were implemented and encouraging relaxation in regulation for tourism were focused. In Dimension 2, all the statements had high likelihood of involvement except the rescheduling of the traditional events. In the Dimension 3, except the statement which says “encouraging the local government for non local investments in tourism”, all the statements were supported with high likelihood intentions. In the Dimension 4, the statements except the one which encourages local government to reduce communications with local people, all others had a high degree of likelihood (>80%).

TABLE 2: LOCAL PEOPLE’S INTENSION TOWARD DEVELOPING ECOTOURISM

Statements	likely (%)	unlikely (%)	Neither (%)
Dimension 1: conservation of natural resources			
1. Encouraging the management authority to have no regulation on tourist number	35	50	15
2. Assisting reserve managers to prevent illegal activities	60	10	30
3. Encouraging the relaxation of the sanctuary regulations for tourism development	5	90	5
4. Educating people not to buy/sell products made of rare plants	0	30	10
5. Educating people not to buy/sell products made			

of rare animals	80	15	5
6. Learning about the natural heritage of the area	75	10	15
Dimension 2: Preservation of cultural tradition			
1. Preserving the traditional tribal sites in the sanctuary	85	5	10
2. Suggesting the local government to reschedule the traditional events to attract more tourists	45	35	20
3. Encouraging the local government to replace the original economic activities by tourism	50	40	10
4. Learning about the cultural heritage of the area	60	35	5
Dimension 3: Sustainable community development			
1. Providing environmental education for tourists	95	5	0
2. Using disposable tableware to save labor and costs	65	25	10
3. Welcoming crowds of tourists to the community regardless how many of them	75	20	5
4. Accepting negative tourism impacts to facilitate local development	45	30	25
5. Encouraging the local government to maximize non-local tourism investment	35	50	15
6. solving security issues	40	40	20
7. Involving in the prevention of negative tourism impacts	90	5	5
Dimension 4: participation in ecotourism planning and Management			
1. Encouraging the local government to reduce communication with the residents so that the ecotourism development will not be impeded	10	85	5
2. Participating in ecotourism planning	90	5	5
3. Participating in ecotourism-related employment	80	15	5

4.3. RELATION BETWEEN ATTITUDE AND INTENSION: The final goal of this study is to find the parallelism between community attitude and intention. If they have positive attitude toward ecotourism, they might not have the same when it comes to their intention. In the **Table 3**, the total value of the scores from attitude and intention of every dimension are taken and then the mean value is calculated. Spearman's ρ was calculated and found a significant positive correlation in case of conservation of natural resources ($\rho = 0.371$, $p < 0.01$), preservation of cultural traditions ($\rho = 0.4$, $p < 0.01$), participation in ecotourism management and planning ($\rho = 0.733$, $p < 0.01$). Only the dimension of sustainable community development was found not to have significant positive correlation.

TABLE 3: CORRELATION TEST RESULTS BETWEEN COMMUNITY ATTITUDE AND INTENTION

Dimension	attitude (mean)	Intention (mean)	Spearman's	p
1. Conservation of natural resources	3.3	3.11	0.371	0.0036
2. Preservation of cultural traditions	4.16	3.35	0.4	0.0015
3. Sustainable community development	3.35	3.45	0.071	0.59
4. Participating in ecotourism planning and management	4.26	3.28	0.733	0.00001

The present study shows that the residents' attitude and intention toward the four dimensions considered from ecotourism guidelines is positive. Preservation of cultural traditions and participating in ecotourism planning and management has higher value of mean score. Except the sustainable community development, all other dimensions have significant positive correlation. But that does not necessarily mean that every person of the community will engage in ecotourism in a behavioral approach. There is always a group of people who doubt the facts of ecotourism and ignore the vast benefits over different negative points like pollution, destruction of environment, criminal activity etc. Although different NGOs like CoRBIE are acting relentlessly for the conservation of Chakrashila wildlife sanctuary, there is always different socio-political barriers that cannot be overcome without the full support of local people. Landlords may feel losing their lands because of such steps. They need to be made much aware about ecotourism initiatives which have far greater value. The community of the village Bandarpara is very poor in economic condition, which draws importance to their improvement by encouraging them to extend the traditional economic ways with ecotourism. This study supports observations made by previous researchers that a community at an early stage of tourism development tends to hold favorable attitudes (Butler, 1980; Doxey, 1975). But with time, it may change. Communities are needed to be educated properly so that they do not get misled. Homogeneity has advantage over conservation in any indigenous community. Authorities need to look after the facts that the communities showing positive attitude and intention toward ecotourism might lead to over expectation in economic ways, which may interfere with the prime objectives of ecotourism. The BTAD Tourism and Forest Department recently has been taking many initiatives with the support of different NGO's to promote ecotourism in innovative ways like trekking, hiking, paragliding etc. They also conducted many other programs like Nature Camping, workshop near Deeplai Beel which motivated the local people and authorities and made them realize how much value is carried by the Chakrashila Wildlife Sanctuary.

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