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Full Length Research Paper

Assessment of ecotourism resources: An applied methodology to Nameri National Park of Assam-India

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Assam, comprising Eastern Himalaya, is one of the mega bio-diversity hot spots of the world. It also forms part of two endemic bird areas, viz. Eastern Himalaya and Assam plains. Nameri National Park is a part of NBL (north bank landscape of the Brahmaputra River) and also is a part of Eastern Himalayan mega biodiversity hotspot, which has immense potentialities for ecotourism venture. The present research is an assessment of potential sites within the park, that can speed up tourism infrastructural development. This paper highlights such possibilities on the basis of assessment of ecotourism resources of the Nameri National Park during field experience gained in the different parts of the study area.

Key words: Biodiversity, ecotourism resources, applied methodology, potentiality analysis.

INTRODUCTION

Ecotourism is a field of human activity where conservation and development can effectively be balanced to achieve a mutual goal for the benefit of the people in the community. The term 'Ecotourism' was first coined by '*Hector Ceballos Lascurain*' in 1983, and was initially used to describe nature-based travel to relatively undisturbed area with an emphasis on education. This new approach of tourism is becoming an increasingly popular expression of sustainable development as it relates to biodiversity conservation (Yadav, 2002). It involves education and interpretation of natural environment as well as how to manage it in an ecologically sustainable way. Here 'natural environment' includes cultural components and the term 'ecologically sustainable' involves returnees to the local community and long term conservation of resources (Grant, 1995) which may sustain livelihood opportunities to the community. In this way a person (tourist) eventually acquires a consciousness and knowledge of the natural environment, together with cultural aspects, that will convert people keenly involved in conservation issues (Cebaballos, 1998).

REVIEW OF LITERATURE

The modern concept of leisure and tourism is essentially a product of western world. The importance of studies on recreation has been rapidly increasing in the western world. The works of Prosser (1994) deal with spas in Siberia in general which are being exploited by the state. The author makes specific study of spas at Nisevacka (East Siberia) that changed the mode of electricity generation from thermal to non thermal processes. Patullo (1996) dealt with tourism and its effect on the way of life of the people in Noirmoutier Island (off the Atlantic coast of France). The author studied tourists' potentialities and possibilities of accommodating holiday makers.

Wells (1997) analyzed the role of national parks and tourism in economic development and concluded that tourism can provide an immediate economic rationale for

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establishing national parks. Hamilton (1973) examined the largest Canadian National Park (The Wood Buffalo Park– 44807 km^2) out of 28 national parks of Canada. He also analyzed recreational land use, the only type of land use allowed in the national parks and the gradually changing nature of the wilderness.

Billet et al. (1972) prepared a series of papers on the theme of employment and tourism in national parks in Switzerland and outlined the diversity of tourism phenomenon and the related diverse employment opportunities (Clout, 1974).

Lascurain (1983) coined the term ecotourism and was initially used to describe nature-based travel to relatively undisturbed areas. Sustainable ecotourism is 'envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological process, biological diversity and life support system' (World Tourism Organization, 1988). Peine et al. (1988) studied the tourist flow patterns at Great Smoky Mountains National Park. Cebaballos (1988) dealt with ecotourism that grows with community involvement; and exposed communities will eventually acquire a consciousness and knowledge of their natural environment, together with cultural aspects, that will convert some body keenly involved in a conservation issues. Mantell et al. (1990) highlighted the regional setting for recreation and ecotourism in the southern Appalachians. Sadler (1990) has attempted to show the whole range of ecotourism ethics, mode of operation ecotourist, operators, significance of local community and above all the conservation issues and the sustainable development system model. Ecotourism is an enlightening natural travel experience that contributes to the conservation of ecosystem while representing the integrity of the host community (Seace et al., 1992). Ruschmann (1992) says ecotourism involves education and interpretation of natural environment and to manage it in an ecologically sustainable way. The World Commission of Environment and Development (1992) referred to 'The Sustainable Ecotourism Development' as development that meets the needs of the present without comprising the ability of future generation to meet their own needs. As the very idea of ecotourism is based on sustainable use of resource, there should be some guidelines, both general and specific. The ethic-based perspective of ecotourism was put forward by Weight (1993). Ecotourism Society (1993) highlighted the impact of biodiversity on tourism phenomena. Jackus et al. (1993) studied the ecotourism and sustainable conservation of biodiversity in the Appalachian Highlands of Tennessee and North Carolina. Tennessee Department of Tourism Development (1994) studied the economic impacts of ecotourism in Tennessee. Ecotourism for sustaining local culture was studied by the U.S.A. President's Council on Sustainable Development (1994). The Appalachian Regional Commission (1994) studied how ecotourism can be a means of building a sustainable economy. Mehlhop et al. (1994) studied the ecological basis for ecosystem management for sustainable ecotourism phenomenon. Kinsley (1994) highlighted nature-based ecotourism for 'Sustainability'. A useful bibliography on nature tourism was prepared by Machlis (1998).

Study area

The study region covers Nameri National Parks of Assam located in $26^{o}50^{/}48^{//}$N to $27^{o}03^{/}43^{//}$N latitudes and $92^{o}39^{/}$E to $92^{o}59^{/}$E longitudes, covering an area of 200 km^2 in the northern bank of Brahmaputra River in Sonitpur district. The area is criss-crossed by the River Jia-Bhoreli and its tributaries namely Diji, Dinai, Doigurung, Nameri, Dikorai, Khari etc. Nameri is covered by of Tropical evergreen, semi-evergreen, moist deciduous forest with cane and bamboo brakes and narrow stripes of open grassland along rivers. Grassland comprises less than 10% of the total area of the park while the semi-evergreen and moist deciduous species dominate the area. The area is influenced by the tropical monsoon regime. The predominance of the Southwest monsoon in this region causes precipitation to be highly seasonal (Barthakur, 1986).

During the British, period the park was designated as Game Centaury for hunting of animals. There are 4(four) forest villages and 1(one) agriculture farming corporation is situated in the west buffer of the park. Similarly 4(four) forest villages and 1(one) Taungya village are there in the east buffer. There are 18(eighteen) revenue villages situated outside but along the southern and south-western boundary of the park. Local people depend on the park for their livelihood. The forest villages located in the area acquire culture of different ethnic groups. The Mishing, Garo, Karbi, Bodo, Napali, Adivasi and other groups of indigenous community reside in the south buffer area. They are engaged in collection of NTFP (Non timber forest produce) and grazing of livestock. A good proportion of local populace has been engaged in ecotourism activities as tour guide, providing local accommodation, selling handicraft, work in the ecocamp for their livelihood.

The Assam (Bhorelli) Angling and Conservation Association (ABACA) in the park has been organizing regulated angling (catch and release basis) competitions every year since 1981 with the assistance and co-operation of the Department of Sports, Department of Tourism and Department of Environment and Forest, Government of Assam.

Objectives

The study has been carried out within the Nameri

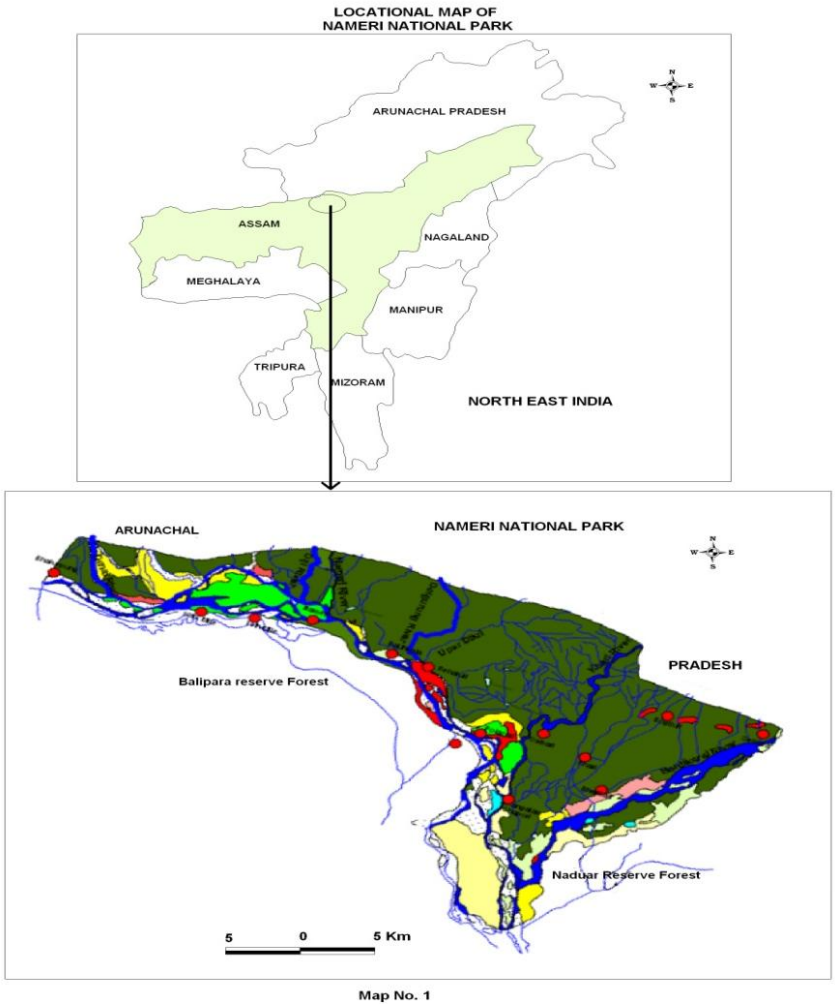

Figure 1. Map of Nameri National Park.

National Park (Figures 1 and 2) and the objectives are stated as follows:

(i) To highlight how the biodiversity and cultural base can be an attraction for tourists;
(ii) To study the tourist-flow pattern and their preferred destinations and needs; and
(iii) To evaluate the status of existing facilities with the help of applied methodology for potentiality analysis of the ecotourism resources in the park

METHODOLOGY

This work is a field study; data and information were obtained on the spot observation of ecotourism resources by the author. He was supported by locally produced secondary sources like books, papers, reports, maps and information of local people. For this study, data related to tourist flow are collected from primary survey, Govt. tourist department and department of environment and forest.

A survey procedure was adopted for tourists. The entry, exit points and destinations are ideal points to interact with the tourists. Hence, the survey was conducted at Tezpur and in the park considering it as the 'Gateway' of tourism activity in the Nameri National Park. The study of tourist in the destinations was made through field visits. Self-explanatory questionnaires were distributed at random from selected points of tourist arrivals, viz. Tourist Lodges, Eco-camp at Potasali, Range Forest Office of the park as well as in the places of Tezpur, Rangapara, Balipara, Bhalukpung, Bishwanath Chariali etc, in order to get the views of the tourists. While collecting the data from the tourists, the questionnaires were distributed to them according to their size. The questionnaires were distributed to individuals as well as groups, since some of the tourists come in group, or with

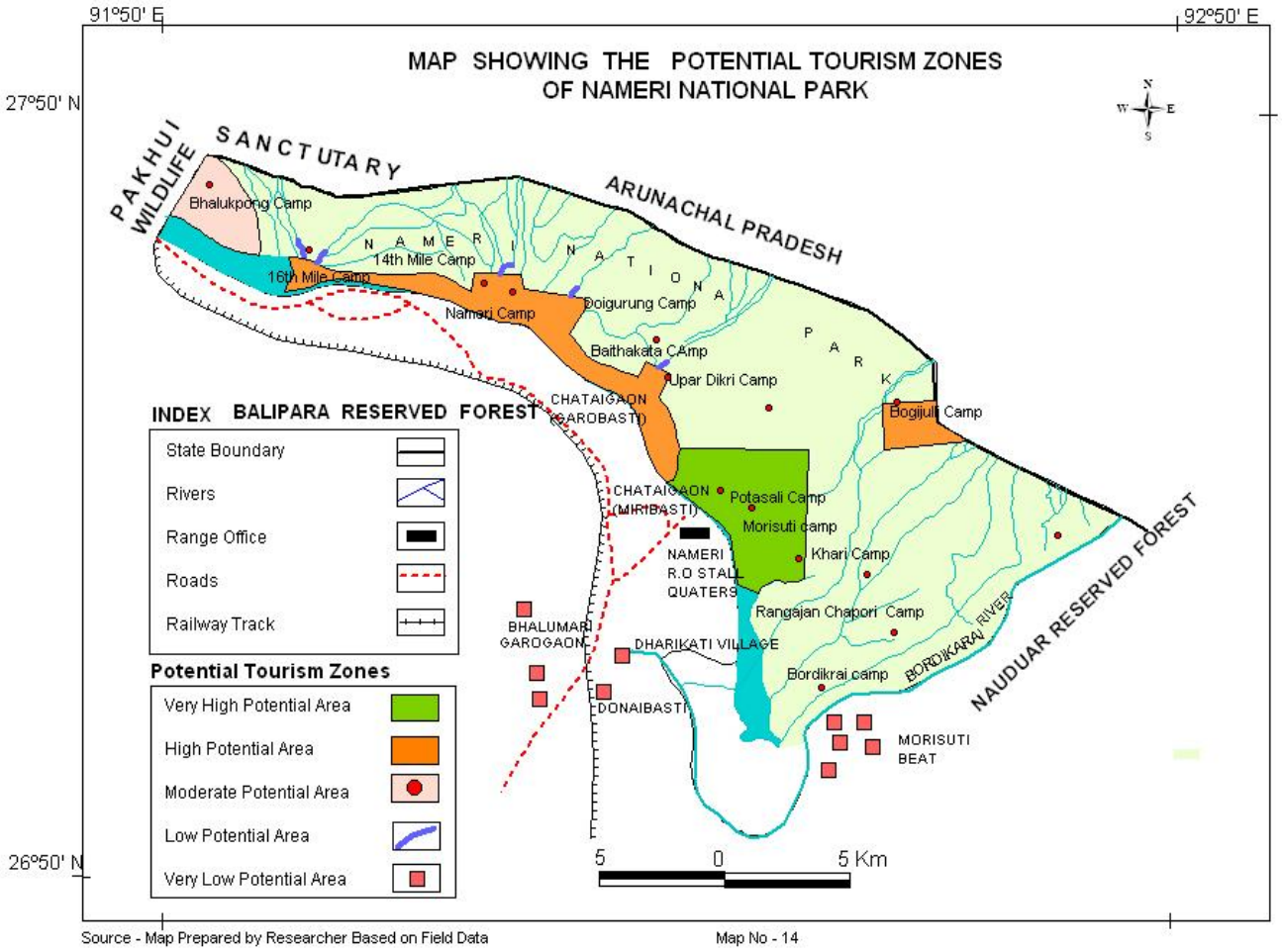

Figure 2. Map showing the potential tourism zones of Nameri National Park.

families. Single tourist was asked to fill them individually, whereas those who came in groups were handed one inventory (represented by all members in the group) for their views. Therefore, altogether 100 duly completed questionnaires from foreign tourists and 315 from domestic tourists were received reflecting the views of 380 foreign and 1250 domestic tourists respectively. The above response represents about 40% of the incoming tourists to the park, during the year 2010 to 2011. The survey through questionnaire is supplemented by discussion with tourists both at group and individuals levels, from where they stay as well as tourists' spots within the park.

In the second stage, the questionnaire was used to evaluate the preferences or attraction of tourist' interests consisting of places of stay, demand of alternative accommodation, recreational demand, perception of tourism infrastructure and services, perception of the climate of the park and future travel prospect. The third consideration of the questionnaire is to evaluate the nature of cultural landscape near the park. These include the cultural environment of the community and their participation in different ecotourism activities in the park. The third stage of the questionnaire deals with identification of tourist destination in the park, according to the preferences of the tourist. For this purpose visits and surveys at specific points of tourists interest were carried out to recognize the characteristics of resources in the park.

In the last stage, after the identification of tourist points in the park, different maps were prepared in relation to the tourist interest, with the help of Survey of India Topographical Maps (Scale-1:50,000), and satellite images (LISS-III, Scale-1:50,000), after making geo-reference through field observation during survey. Data generated from the field were entered in Microsoft Excel for frequency generation for each category. Different tables and diagrams were prepared from the data collected. Apart from the primary data, secondary data were also consulted for information, which forms the

base information for the study area.

Method of potentiality determination

The potentiality of ecotourism in an area is indeed the result of interaction of tourist demand and supply or local availability of tourist resources. Tourist demand of an area can be assessed through the preference or choice of tourist towards various components of its unique attractions (background tourism resources). To gauge the preference pattern or the choice of tourist, it is necessary to compile a resource inventory incorporating both existing and potential resources of the area. Here, an attempt has been made to judge the choice of the tourist through campaigns of purposively designed resource inventory of fifteen appeal elements or attractions possessed by the park. The inventory was prepared on the basis of the items of tourist attraction as campaigned in various publications and tourist brochures brought out by the state government and private tourism promotional agencies along with author's field experiences. The inventory was then handed over to the tourists for their comment. The percentage of tourist preferring each category of attraction is considered as an index to judge the significance of that category. The value is then rounded to a simple conversion scale of 1 to 10 to minimize the complexity of manipulating them arithmetically. This meant that each of the attraction categories thus received a numerical coefficient of tourist demand. To have an overall picture of tourist demand of a particular location, the numerical coefficients of each of the attraction category were added, subject to their availability in that area. The second step was to evaluate the supply or local availability component of attraction possessed by an area so as to analyze how well the resources are able to satisfy the interest or choice of tourists. Availability or supply component of resources or attractions was assessed on the basis of some essential characteristics, which are common to all tourist attractions, irrespective of their varying nature. A set of six criteria was selected on the basis of logical, observation and field experience. In fact, these qualifying criteria are some of the most important aspects necessary for any tourist resource, which also enables a place to emerge as a better tourist destination. The criteria considered are as follows.

Importance

Some destinations may have similar type of attraction, but one may be comparatively well equipped and capable of offering better facilities and services to tourists. Hence importance of a destination may be estimated to be higher compared to those with similar resource base but lacking required organization for the promotion of tourism.

Accessibility

Accessibility to a destination and its attraction represents its degree of availability over space. Importance of physical access is always underlined in connection with all tourist resources irrespective of their nature. A more accessible destination has greater advantage than a less accessible one.

Seasonality

Seasonality has an important role to play in the pattern of use of the available tourist base of an area. It is more important in the case of Nameri National Park, as almost all the tourist resources of the park are meant for outdoor recreation or nature based. A short tourist season with a considerably long off-season has limitation in this regard.

Popularity

Reputation is an asset of a destination and tourists generally prefer to go to such places, which are preferred by most others. Over time a positive image of the destination is built which gets diffused from tourist to tourist through the chain of tourist agencies and promoters.

Fragility

A tourist destination may have all the important qualities mentioned above, but can be inherently fragile and unable to sustain more pressure from visitors. Such destinations may lose their original natural and cultural characteristics over time. So, an understanding of the fragile nature of resources is a prerequisite for sound ecotourism practice.

Admission

Physical accessibility does not necessarily imply that an attraction is available to tourist. Many sites cannot be visited or activities enjoyed without obtaining prior permission, buying a ticket, or- in general-gaining admission.

For assessing the 'Local availability' or 'Supply component' of tourist resources of an area, each of the above mentioned criteria was rated by adopting a nominal scale

Table 1. Ranking scheme for assessing 'local availability' of tourist resource in Nameri National Park.

Criteria selected	Rating scale	Weight
Importance	Among best attractions	2
	Good standard	1.5
	Moderate standard	1
	Less appeal	0.5
Accessibility	Excellent	2
	Adequate	1.5
	Limited	1
	Difficult	0.5
Seasonality	>6 months	2
	3-6 months	1.5
	2-3 months	1
	<2 months	0.5
Fragility	Large development potential	2
	Moderate development potential	1.5
	Controlled development potential	1
	No development potential	0.5
Popularity	>50% foreign visitor	2
	20 – 50% foreign visitor	1.5
	2 – 20% foreign visitor	1
	Rarely any foreign visitor	0.5
Admission	No permission	2
	Partial permission	1.5
	Adequate permission	1
	Restricted	0.5

(that is good, moderate, bad, etc.). To counterbalance the 'Demand component' a nominal scale 1 to 10 has been introduced to assess the total weight of the six selected criteria (Table 1).

In the processes of ranking, a location having the best position in terms of all the six selected criteria is given an aggregate weight of 10 (a weight of 2 is given to criteria having the highest position in the category concerned). On the other hand, a location having lowest weight in the rating scale for all the six selected criteria is given an aggregate weight of 1 (a weight of 0.5 is given to a criterion showing the lowest position in the category concerned). Assessment of the position of the criteria selected has been made on the basis of author's personal observation in the field and interaction with the tourists who visited the concerned locations.

Now each of the tourist locations has two comparable numerical values representing a demand or appeal component (A) and a local availability or supply component (B) of resources (Table 2).

A meaningful '*Tourist Potential Index'* (TPI) can thus be calculated with the help of the numerical values of demand and supply of resources in an area (Ferrario, 1982). Thus the tourist potential index of an area may be calculated as: TPI =(A+B)/2

Ecotourism destinations of the Nameri National Park

Bogijuli area

Bogijuli area is located in the most remote corner of the park in the bank of Bogijuli River near Assam Arunachal Pradesh interstate border. Wildlife from Himalayan region and from the plains has been seen while crossing the area during elephant safaris. These expeditions can prove to be ideal for appreciating the nature's beauty with the rich variety of flora and fauna. Tourist resources of the area are good standard but inadequate accessibility. The area can enjoy tourist's season of more than three months from October to March. From the view point of fragility the area can sustain controlled development of tourism. As the appeal elements of the area are fragile, it requires controlled development of tourist venture. The tourist potentiality index for Bogijuli area is 18.50.

Table 2. Demands and supply components and tourist potentiality index of destination.

Destination	Appeal or demand component																Supply component						Tourist index
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	A	B	C	D	E	F	TI
i. Bogijuli area	9	6				4								7	3	29	1.5	1.0	1.5	1.5	1.0	1.5	18.50
ii.Balipung and Kurua Beel	9	-	-	-	-	7	-	-	-	6	-	-	-	8	6	36	1.5	1.5	1.0	1.5	1.5	2.0	22.50
iii. Jiabhoreli River	-	-	-	9	-	-	7	5	-	-	-	4	2	1	2	30	2.0	1.5	2.0	2.0	1.5	2.0	20.50
iv. Confluences of tributaries	-	-	-	9	-		6	3		-	-	-	2	-	-	20	1.0	1.0	1.5	1.5	1.0	2.0	14.00
v. Bhalukpung and neighborhood	-	7	5	-	4	-	-	-	7	-	-	-	-	-	-	23	1.5	1.5	2.0	1.5	1.0	2.0	16.25
vi .Ecocamp and surrounding	7	5	4	6	5	-	-	-	4	-	3	-	-	4	3	41	1.5	1.5	1.5	1.5	2.0	2.0	25.50
vii. Fringe villages	-	-	7	-	4	-	-	-	7	-	-	-	-	-	4	18	1.0	1.0	2.0	1.0	1.5	2.0	13.25
viii . Ethnobotany nearby environs	-	-	-	-	-	7	-	-	-	-	-	-	-	-	4	11	0.5	1.0	1.5	1.0	1.0	2.0	9.00
ix. Tribal life	-	-	8	-	-	4	-	-	7	-	-	-	-	3	2	24	1.0	1.5	1.5	1.0	1.0	2.0	16.00
v. Camp in the park	7	5	-	-	7	-	-	-	-	-	-	-	-	2	3	26	1.5	1.0	1.5	1.5	1.5	1.5	17.25

Source: Based on survey conducted by the author in between 2010-2011. Note: Demand Component- i. Wild life ii. Scenery and natural landscape iii. Art and handicraft iv. Rafting v. Native life and culture vi. Flora and Fauna vii. Angling viii. Adventure sports(land & air) ix. Local Dance and festivals x. Spa Activities xi. Nightlife entertainment xii. Water sport xiii. Sun bath xiv. Trekking xv. Research. Supply Component- a. Importance b. Accessibility c. Seasonality d. Fragility e. Popularity f. Admission.

Balipung and Kurua Beel

Balipung, one of the most important potential sites for Spa activities situated only in two kilometres away from Potasali camp has its unique character because there is a salt-lick. This salt-licks offered opportunities for mineral bath in the park.

Apart from the salt licks, the surrounding area is covered by moist deciduous forest with tall elephant grasses which is the rich habitats of mammalian species like Gaur, Elephant, Deer, Hollock Gibbon, resident and migratory water birds etc. Both foreign and domestic tourists usually prefer to travel the area as a part of their tourist's ventures. It is a beautiful nature spots ideal for nature exploration, trekking and bird watching.

The area can enjoy tourist's season over three months from November to March. From the fragility point of view, it has scope for controlled tourism venture. From popularity point of view, it is observed that the area is able to attract foreign tourists. The tourist potentiality index for Balipung area is 22.50.

Jiabhoreli River

The Jiabhoreli River forms the western boundary of the national park. The rafting down the river Jiabhoreli gives a unique experience to the tourist. The stretch of rafting is about 20 kms in length from 16th mile to Potasali camp. The regulated angling is also permitted along with rafting for research and education on catch, record and release basis in the river within the stretch from 16th mile point to Potasali bank during the period from 1st November to 31st March. Rafting in the park is well organized and popular among both Indian and foreign tourists and their preference pattern is 10.47 and 13%, respectively. During the course of rafting in the river a rafter has to cross rafting grade I to III. Regarding seasonality the destination can enjoy a tourist season of over three months, from October to March. As the appeal elements of the area are fragile in nature, it requires controlled development of tourist venture. The tourist potentiality index for Jiabhoreli River stands at 20.50.

Confluences of the tributaries

There are five major tributaries namely Diji, Dinai, Doigruing, Nameri and Khari, which intersect the park from its different locations. Dinai that flows from northern corner of the park is short in length.

It adjoins the Jiabhorelli River near the 16th mile camp along with three small tributaries. The small catchment of the Dinai in the park consists of grassland and supports mammalian species. Diji, one of the tributary flows down from Arunachal Pradesh and carries enormous water during rainy seasons. Doigrung is another tributary flowing along with Diji and Dinai is small in bed width but comparatively deep. The bank of the Doigrung River is dominant with savannah grass locally known as *Bat and Tora.* These grasslands are the breeding ground of mammalian species of the park. Khari River flows nearby the Bogijuli camp and the bank of the river is used as shortest elephant path through Khari-Charali to the Potasali camp as the camp is located in the remote corner of the park. All the tributaries in the park are perennial in nature. These two tributaries (Doigrung and Khari) traverse the park in a short distance and lead to meet in the middle of the Jiabhorelli River south of the park. The confluences of these tributaries in the park are important point for regulated angling. Angling seasons generally start from November to March on catch and release basis. The confluences are the breeding ground of Golden Mahseer (*Labeo pengusia*) and Sil Gharia (*Tor putitora*). The confluence of the Nameri River near 13th mile is one of the important points for the angling.

The area enjoy tourist's season over three months from November to March. From the fragility point of view, it has scope for controlled tourism venture. From popularity point of view, it is observed that the area is able to attract foreign tourists. The tourist potentiality index for the area is 14.00.

Bhalukpung and neighbourhood

This region covers North-western part of Nameri National Park, Assam and its adjoining areas of Arunachal Pradesh. The pocket is ideal for ecotourism venture like trekking and rafting. Bhalukpung is an ideal point for picnic and hot spring bath. It also an ideal place to carry out interstate trekking venture along Nameri River touching Nilboha and Pakhui wildlife sanctuary (Arunachal Pradesh) up to the confluence of Papu River, a left bank tributary of the Kameng/Jiabhoreli. This trek measures a distance of about 47 Km and can provide scope of rafting for about 50 km along the course of Jiabhoreli River up to Bhalukpung. The area also can provide opportunities for cyclist to appreciate natural beauty of the area, especially along Charduar-Bhalukpung-Tipi trek. In terms of supply of local availability, the area possesses some of the best tourist attractions of the state with adequate accessibility. The area can enjoy a tourist season of over three months, from October to February. From the viewpoint of fragility, the area can sustain controlled development of tourism. As far as the popularity is concerned, the area has attracted 49% of the foreign tourist visiting in the park. The tourist potentiality index for the Bhalukpung area stands at 16.25.

Eco camp and surrounding

The Southern buffer of Nameri National Park in Potasali area near the picturesque Jiabhoreli River, a camping facility was set up in 1994 for nature lovers and wild life enthusiast. The eco-camp is outcome of a joint effort of the Department of Forest, Government of Assam and Assam (Bhorelli) Angling and Conservation Association (an NGO) with the financial support of the North Eastern Council. Ecocamp arranges safaris conducted by the wildlife department to explore the fascinated habitat on foot or on elephant back.

Ecocamp offers ideal site for stay of tourists who seek to visit the Nameri National Park. Tourist also experiences the comfortable stay in this camp which having thatched roof and wooden floor an eco-friendly accommodation. The area can enjoy a comparatively long tourist season of over six month from October to April.

Considering the fragility angle the area can be said to have good development potentiality for ecotourism. In spite of varied tourist attractions in the surrounding areas, the area is gaining popularity among foreign and domestic tourists. So far cent percent tourist visited the resources of the area. The tourist potentiality index for the area is highest of all the resources in the park, that is 25.50.

Fringe villages of the park

There are several villages, which are laying in the east or west buffer of the Nameri National Park. These fringe villages are dominated by Mishings, Karbi, Tea Garden laborers, Garo, Assamese and Bodo Communities. This indigenous ethnic identity flourishes with own tradition. The people of the fringe villages are bearing rich tradition of arts and crafts. Assamese craftsman still retain some of the crafts of the past through such activities as weaving, bamboo, cane, bell metal, pit clay and wood workers and ivory carvings. The craft of weaving cane certainly surpass the works of the many parts of the world. Weaving is considered as a part of the domestic chore of the folk in every rural indigenous home in the villages.

The area has the tradition of producing three verities of silk Viz. Pat, Eri ao Endi and Muga. The practice of providing this type of silk is common to all the indigenous people both tribal and non tribal residing in the fringe villages.

Bamboo and cane crafts make a major contribution to the material cultural of the fringe villages. As the climate is suitable for growth of bamboo and cane, the artisans

near the park prepare verities of cane and bamboo artifacts for day-to-day use, decoration and sale. Fringe villages near the park are ideal sites for tourist to know about the local customs, tradition and way of living. The area can enjoy comparatively a long tourist season of over six months, from September to March. The tourist potentiality index for the area is 13.25.

Ethno-botany nearby environs

There are several communities inhabiting the periphery of the park and often depend on local plant species both for day-to-day life and for medicinal purposes. The ethno-botany of a particular area reflects the adoption of the communities in the existing environment. The people of the locality used different type of plants either for medicine or for daily use. Some of the plant species that are found in the area are used as sacred grooves for their long back traditional system of rituals. Through the practices of such traditional systems, the community acts as a conservationist of the surrounding area. The area can enjoy a comparatively long tourist season of over six month from October to April. The tourist potentiality index is 9.00.

Tribal social life

A glimpse of local life and culture of the rural tribal people can be observed along the fringe area of the park. The area is the home of several tribal and non-tribal communities viz, Mising, Garo, Karbi, Bodo, Nishi and typical Assamese and thus ideal for exploring the colorful elements of their life and culture.

Native life and culture, art and craft dance and festivals of the tribal community can certainly prove to be important source of attraction for tourists. Regarding supply or local availability of component, tourist resources of the area can be stated as among the best attraction in the park with adequate accessibility. The area can enjoy a tourist season more than six month from November to April. Due to lack of positive publicity and inadequate tourists' infrastructure, the area is able to attract 8% foreign tourists coming to the park. The tourist's potentiality index of the area stands at 16.00.

Camp in the park

Adventure activities like trekking, and jungle exploration can be done in an around camp, both short and long duration. There are 15th camps in the Nameri National Park.

The anti-poaching camp in the park is, 1. Bhalukpung, 2. 16th Mile camp, 3. 14th Mile camp, 4. Nameri, 5. Doigurung, 6. Baithakata, 7. Upar Dikarai, 8. Potasali, 9. Ow-bari, 10. Morisuti, 11. Rangajan Chapori, 12. Khari, 13. Bordikorai, 14. Seijosa, 15. Bogijuli

The patrolling path within the park from one camp to another is considered as elephant riding as well as trekking. Some of the important trekking routes are

i. Potasali camp to morisuti (3.5 Km.) ii. Potasali to Owbari (2.5 Km.)
iii. Potasali to watch tower (1.2 Km.) iv. Ow-bari to Morisuti (1 Km.)
v. Morisuti to Tomaljuli (3 Km.)

The tourists enjoy in the camp over three months from November to March. From the fragility point of view, it has scope for controlled tourism venture. From popularity point of view, it is observed that the area js able to attract foreign tourists. The tourist potentiality index for the area is 17.25.

ANALYSIS OF POTENTIALITY INDEX

On the basis of the techniques adopted above, the tourist potentiality index for as many as 12 destinations of the park has been calculated (Table 3). Tourist potential values for different destinations of the park range from 9.00 to 25.50. As demand component of a destination is represented by the total of weight of different categories of attractions, its overall influence is well reflected in determining tourist potentiality of the destinations.

For the purpose of prioritization of the destinations for future tourism promotional venture, all the associated tourist potential index values are grouped together under a five-fold scheme, viz. very high potential area (index value- > 21), high potential area (index value-18 to 21), high moderate potential area (index value 15 to 18), low moderate potential area (index value- 12 to 15) and low potential area (index value-<12). From the analysis it is found that only 2 destinations of the park belong to very high potential category, 3 destinations belong to high potential category, 3 destinations belong to high moderate potential category, 3 destinations belong to low moderate potential category and one destination belongs to low moderate potential category. Among the very high and high potential destinations, eco camp and surrounding area and Balipung and Kurua beel have adequate tourist facilities and services. These two destinations have been getting good response from both domestic and foreign tourists.

Conclusion

A high tourist potential index of an area reflects its high weights of 'Appeal' and 'Supply' element of resources.

Table 3. Tourism potentiality of destinations in Nameri National Park based on tourist potential index.

S/No.	Destination	Weights of demand element (A)	Weights of supply element (B)	Potentiality Index TP = (A+B)/2
1	Bogijuli area	29	8	18.50
2	Balipung and Kurua Beel	36	9	22.50
3	Jiabhoreli river	30	11	20.50
4	Confluences of tributaries	20	8.0	14.00
5	Bhalukpung and neighborhood	23	9.5	16.25
6	Ecocamp and surrounding	41	10	25.50
7	Fringe villages	18	8.5	13.25
8	Ethno-botany nearby environs	11	7.0	9.0
9	Tribal life	24	8	16.00
10	Camp in the park	26	8.5	17.25

Source: Based on the survey conducted by the author (1st October 2010 to 31st March 2011).

Such areas can offer highly rated tourists attractions and larger choices of things to see and to do by the tourists themselves. A destination may have high tourism potential but may possess fragile resources-cultural or natural. The very concept of tourist's potentiality is a dynamic one. In due course, potentiality may change with changing nature of tourist demand and supply of locally available tourist resources. It is believed that such scheme of prioritization of potential pockets of tourism may certainly provide a suitable framework for formulating tourism development strategies in Nameri National Park.

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