Alternative Tourism Practices for Kaziranga National Park – A Case Study

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ABSTRACT

Kaziranga National Park of Assam, India, is famous for the conservation success story of the world famous One Horned Rhino. It has been declared as a World Heritage Site in the year 1985. The Park is very popular among the national and foreign tourists coming to this part of India and the trend of the number of tourists coming to visit the Park is increasing. For the sustainability of the Park, it is necessary to think about the carrying capacity and alternative tourism before the Park loses its uniqueness in the form of virginity. This paper will highlight the measurement of the psychological crowding norm of the tourists coming to visit the Park. On the basis of the psychological crowding pattern, measures will be suggested to optimize the number of tourists entering the Park. Moreover, to reduce the pressure on the Park, alternative tourism practices will be put forward. Measures will also be put forward to increase the satisfaction level of the tourists coming to Kaziranga National Park.

Keyword: Tourism sustainability, Carrying capacity and Alternative tourism

Travel and Tourism is the world’s largest industry and creator of jobs across national and regional economics. It creates 1.5 times more jobs than any other sector. Every million rupee that goes into the tourism industry created 85 new jobs as against 13 new jobs in the manufacturing sector and 45 in the Agricultural sector (Sharma, 2007) It is one of the top five sectors for 83 percent of the countries and a leading source of foreign exchange for at least one in three
developing countries (Narayan, 2005). Global tourism as an industry is worth well over US$ 4 trillion when all expenditures (International and domestic) have been taken in to account (Hall & Kearsley, 2001).

Global tourism activity has registered a growth rate of 7.1 percent a year (Suh & McAvoy, 2005). The World Tourism Organization states that tourist’s arrivals world wide will increase to 1.6 billion in 2020. Similarly, tourism receipts are expected to increase to US$ 2 trillion by 2020 (WTO). The latest research for Travel and Tourism anticipates a slowdown in the industry in 2008 but prospects are bright for the coming ten years. World Travel and Tourism is expected to generate close to US$ 8 trillion in 2008, rising to approximately US$ 15 trillion over the next ten years, according to the latest Tourism Satellite Accounting (TSA) research launched by the World Travel and Tourism Council (WTTC) and its strategies partner Accenture.

Tourism plays a leading role in the Indian Economy and it is estimated that in the year 2006 tourism in India has created 25 million jobs. Out of it 21 million jobs are directly created. Its share to the Gross Domestic Product is also found to be 6.1 percent (Sharma, 2007). The Ministry of Tourism statistics states that foreign tourists’ arrivals during the year 2008 were 5.37 million as compared to foreign tourist arrivals of 5.08 million during the year 2007. Therefore in spite of global financial melt down and terrorist activities, number of foreign tourist’s arrivals has increased in 2008 as compared to 2007. Foreign exchange earnings during this period were Rs 50730 crore as compared to Rs. 44360 crore in 2007. UNWTO has predicted a growth rate of 2-3% for international tourist arrivals in the world during 2008. Therefore, Indian scenario (growth rate of 5.6%) is much better than the world scenario.
So, from the revenue generation and job creation point of view, the tourism industry seems to be a boon to the world economy. And to the Indian economy, it is been a fortunate thing to happen at a time when it is going through financial hardship and unemployment is on the rise.

But the basic question is how long the industry is going to sustain? Putting emphasis on increasing the tourists’ inflow without putting much emphasis on the sustainability factor has made many previously attractive tourist destinations to lose their attractions. This is because of the destinations’ inability to cope with the pressure from tourism. But when there is an imbalance between the pressure created by the visitors and the capacity of the destination to withhold it, the destination starts deteriorating, either ecologically or otherwise. Hence the concept of carrying capacity comes to make tourism sustainable in a particular destination. The concept of carrying capacity implies that there is a particular number (or a range) of tourists within a specified time period which the destination can support without deteriorating. According to Cooper et al, “that level of tourist’s presence which creates impacts on the host community, environment and economy that are acceptable to both tourists and the hosts and sustainable over future time periods”. Carrying capacity should be regarded as a tool for guiding policy formulation and implementation towards sustainable tourism.

In this context O’Reilly (1986) identified carrying capacities relating to environmental, economic, social and psychological factors. Similarly, Farrell (1992) argued that there were at least four types of carrying capacities. Of course, as the WTO, definition suggests, these four types of carrying capacity are inter-related.

Carrying capacity, apart from measuring a maximum number of tourists, a particular destination can accommodate physically, also takes into account the environmental, economic, social and
psychological factors. On the basis of these, Hunter (1995, p.5) gives a more precise definition by distinguishing five different types of carrying capacity.

Physical carrying capacity is the maximum number of tourists that can be accommodated physically. Physical carrying capacity is the limit of a site beyond which wear and tear will start taking place or environmental problems will arise. This is a measure of the spatial limitations of an area and is often expressed as the number of units that an area can physically accommodate.

Environmental carrying capacity is the maximum number of tourists that can be allowed to a destination without harming its environment.

Economical carrying capacity is the degree of dependency the economy has on tourism. It is the ability to absorb tourism activities without displacing or disrupting desirable local activities.

Social carrying capacity is the maximum number of tourists that can be allowed to a destination without affecting the social aspects of the local community.

Psychological carrying capacity is the degree of visitor’s satisfaction associated with a particular destination. As the number of visitors / tourists to a destination increase, the satisfaction
concept, rather than becoming important is damaged. As new users enter the system, norms regarding use levels rise, causing a “floating baseline” and the displacement of dis-satisfied users are lost in the aggregate increase of user satisfaction (Nielsen, Shellby et al. 1977). This concept is in contrast to Nielson et al.’s (1977) “last settler syndrome” where user dissatisfaction decreases as location/destination more crowded and satisfaction varies by time and nature of first novice experience.

All types of carrying capacities are interrelated. Measuring these may not only be a subjective exercise, it can also prove extremely difficult due to the degree of interdependency among them. This research work will be limited to determining psychological carrying capacity of the visitors on Kaziranga National Park.

Kaziranga National Park is a famous tourist destination. Situated in Nagaon district of Assam, India, the Kaziranga National Park was declared a World Heritage site by UNESCO in 1985. It extends over an area of 860sq.km. It is bounded by the Mikir Hills on the South and Brahmaputra River on the North. The park was declared a Wildlife sanctuary in 1950 and accorded the status of a National Park in 1974. The Indian one-horned rhino is the main attraction of this park. The park is divided into four ranges Kohara, Bagori, Agaratoli and Panbari.
A portion of the Kaziranga National Park is also a tiger project. The buffer zone of the tiger project is open to tourists for visit. Visitors are allowed to enter the park in the form of jeep safari and elephant riding. Jungle trekking is allowed only in the Panbari range. The visitors are accompanied by forest guards. Night entry is not allowed.

KNP has been accepting more and more visitors every year over the last several years.

**Table 1: Inflow of Tourism to KNP**

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic</th>
<th>Foreign</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2001</td>
<td>50498</td>
<td>1838</td>
<td>52336</td>
</tr>
<tr>
<td>2001-2002</td>
<td>44162</td>
<td>2144</td>
<td>46306</td>
</tr>
<tr>
<td>2002-2003</td>
<td>59811</td>
<td>2055</td>
<td>61866</td>
</tr>
<tr>
<td>2003-2004</td>
<td>57864</td>
<td>3773</td>
<td>61637</td>
</tr>
<tr>
<td>2004-2005</td>
<td>76619</td>
<td>5154</td>
<td>72873</td>
</tr>
<tr>
<td>2005-2006</td>
<td>72362</td>
<td>4711</td>
<td>77073</td>
</tr>
<tr>
<td>2006-2007</td>
<td>67962</td>
<td>5748</td>
<td>73674</td>
</tr>
<tr>
<td>Year</td>
<td>Visits 1</td>
<td>Visits 2</td>
<td>Visits 3</td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>2007-2008</td>
<td>60270</td>
<td>6300</td>
<td>66570</td>
</tr>
<tr>
<td>2008-2009</td>
<td>100284</td>
<td>5767</td>
<td>106051</td>
</tr>
<tr>
<td>2009-2010</td>
<td>105264</td>
<td>7580</td>
<td>112844</td>
</tr>
<tr>
<td>2010-2011</td>
<td>112392</td>
<td>7447</td>
<td>119839</td>
</tr>
</tbody>
</table>

Source: Directorate of Tourism, Assam, 2011

Increase in the number of tourists is encouraging from the economic point of view. Even it is a heartening factor for local population who are benefited by the spending of the tourists. However, keeping the sustainability factor in mind, two point are to be given importance. First, to what extent the ecology of the Park can withstand the pressure from visitors? And second, how long can the Park maintain the ‘virginity’ attribute on which it is positioned. If the level of degradation of the ecology of the Park due to visits by tourists is more than the level of degradation the ecology can sustain by itself, there will be gradual degradation in the general ecology level of the Park. Moreover, the Park is positioned as a virgin forest land to attract tourists. If more and more tourists start coming to visit Kaziranga and all are allowed to enter the Park, The virginity of the Park will be lost and there will be dissatisfaction among the tourists.

Keeping all these factors in mind, it has been felt that it is high time to determine the carrying capacity of Kaziranga National Park, so that the major tourists’ attraction of the region does not degrade and lose its attraction. Hence, this study is undertaken to determine Psychological Carrying Capacity of Kaziranga National Park. As the satisfactions of the tourists are important for sustainable development of tourism, the Psychological Carrying Capacity with respect to the perceived crowding norms and the perceived norms of the visitors are included in the study. The ecological factor has been keeping out side the scope of the study.
The required secondary information’s for the determination of Carrying Capacity were provided by the Forest Department as well as the Assam Tourism Development Corporation.

To collect the necessary primary information required, a sample survey was conducted amongst the tourists in Kaziranga National Park. A questionnaire consisting of 19 questions was administered personally to different strata of tourists. A total of 800 questionnaires were distributed. Out of these 637 were received from the respondents and finally 507 questionnaires were considered usable.

The study used exit survey for collection of primary information. Tourism psychological carrying capacity is determined by many factors (Zhou, 2003).

The survey was conducted during Dec, 07 to May 2008.

The Questionnaire is designed by consulting the previous studies of similar nature. It was finalized after a pilot survey with 25 respondents during March 2007. Subsequently, the data was analyzed using the SPSS (for Window) package.

**Social norm curve and Psychological Carrying Capacity for Kaziranga National Park**

Psychological carrying capacity of Kaziranga National Park (KNP) and its various ranges can be determined with the help of social norm curve through collected data. Tourism psychological capacity is a comprehensive evaluation system, which is constituted of tourist psychological carrying capacity. Tourism psychological carrying capacity is determined by many factors (Zhou, 2003).

Figure 3: Social norm curve for Kohara range of the Park
Figure three shows the social norm curve for Kohora range. This curve implies that tourists are satisfied if they meet less than 18 jeeps during the whole trip of the Kohora range. 18 is the point where they do not form any perception regarding whether they are satisfied or not. Similarly, figure four shows the social norm curve for the Bagori range and figure five for the Agaratoli range. The number of jeeps tourists perceive to be the point for deciding crowded or not for Bagori range is 12 and Agaratoli is eight.

Fig-4 Social norm curve for Bagori range of the Park

Fig-5 Social norm curve for Agaratoli range of the Park
 Though there is still a large gap between the carrying capacity of KNP and the actual visits per year, KNP being the site for natural / wild life tourism with the best infrastructure in this region, the pressure on it is increasing at a faster rate. It is high time to think about some alternative forms of tourism so that the increasing pressure of KNP is checked.

Alternative tourism is basically the opposite of mass tourism. Here, a specific interest area is identified and tourism is directed to that area.

**Alternative Tourism and Kaziranga National Park**

Alternative tourism involves travel that is personal and authentic and encourages interaction with the local environment, people and host communities. Alternative tourism is an educationally oriented and non - commercial programme. It also promotes a socially and ecologically responsible tourism that people centered. The interesting thing is that it creates a venue for initiating friendships and solidarity between peoples (*Peoples Global Exchange: 1992*)

The forms that can be included under the banner of alternative tourism can be Natural, Cultural, Events and Others. This is shown in the following diagram:
The study conducted by the authors revealed the following data related to interests of the tourists apart from visiting a National Park.

Percentage (%) of tourists’ interest in the following activities:

**Table: 2**

<table>
<thead>
<tr>
<th>Tourists</th>
<th>Culture</th>
<th>Tradition</th>
<th>Local Food and Beverages</th>
<th>Participation in Farm Activities</th>
<th>Experiencing Local Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>35.5%</td>
<td>23.5%</td>
<td>38.1%</td>
<td>8.1%</td>
<td>55.4%</td>
</tr>
<tr>
<td>Domestic</td>
<td>34.5%</td>
<td>22.3%</td>
<td>33.6%</td>
<td>7.2%</td>
<td>57.9%</td>
</tr>
<tr>
<td>Foreign</td>
<td>36.5%</td>
<td>31.7%</td>
<td>69.8%</td>
<td>14.3%</td>
<td>38.1%</td>
</tr>
</tbody>
</table>

From this analysis it is clear that 57.9% domestic tourists favour local environment and it is 38.1% by foreign tourists. Again, 69.8% foreign tourists favour local food and beverages and 33.6% by
the domestic tourists Therefore, we can opine **rural tourism as an alternative form of tourism** in the neighbouring area of Kaziranga National Park. This is shown in the following fig.7.

![Tourists interest in other activities](image)

**Rural tourism:**

Rural tourism originated in France. Through the private initiative in the field of tourism, the people in the rural areas were encouraged to stay and develop the local economy. Originally, it was related to maintaining a common agricultural policy. Those participated in rural tourism may stay at a house or camp nearby and keep contact with their hosts and free access to host’s farm and staying for a week. They engaged in the activities like picking fruits, vegetables and herbs, cooking traditional foods, Participating in traditional festivals and getting training in traditional crafts and rural traditions. They also engaged in other activities like cultural and adventure tourism (walking, biking, horse riding and site seeing.)
Rural tourism is essentially an activity, which takes place in the countryside. It is multifaceted and may include farm or agricultural tourism, cultural tourism, adventure tourism and eco-tourism. It is related with the local events. So, it is complimentary to wildlife tourism. In KNP, number of villages inhabited by the indigenous people having knowledge about the park. There about 50 villages near by the KNP. It comprises different types of communities and different tribes. It includes Ahom, Kalita, Keot, Mishing, Bodo, Adibasi, Karbi, Dimasha etc. They are engaged in various activities like local food, cultural events, ethnic dresses (dakhna for bodos women), farm activities etc., which can be an attraction to the domestic as well as foreign tourists.

Local cuisine, it includes in indigenous food, dishes and wine. It is expected that cuisine tourism can be applied in KNP, since it is surrounded by different types of tribes having different types of food habits, traditional dresses, which will help in the promotion of alternative tourism in the neighbouring area of the Park. In recent times, tourists’ food habits are changing and they search for natural foods which are belonging to the tribal people. Since the KNP is surrounded by different tribes, hence their food, dishes, dresses and local wine can attract the tourists, particularly the foreign tourists. So as complimentary to the wildlife tourism, alternative tourism can be promoted in KNP in the coming days. Thus, local cuisine (cooking pattern), local made liquor (laopani) may be some crucial factors for designing alternative tourism in the neighbouring areas of Kaziranga National Park. The local people should come forward to provide training facilities of the above activities (tribes and others) to the tourists who are interested in the same. By doing so it will attract more and more tourists’ in the near future to their areas.
Culture may be a factor for alternative tourism. Assam is a very rich state in its cultural varieties. Tourists are coming to the state from different parts of the globe and also from different parts of India to enjoy its traditional cultural entity. For instance, tourists (domestic/foreign) are coming to KNP to experience various activities like to see wildlife, birds, flora and fauna etc. But it is seen that the tourists’ mind set is changing in the passage of time. In addition to the enjoyment of wild life tourism, they are now attracted other things related to the host communities (tribes and others), their sincerity and serenity. Their culture, custom and traditions are their self recognition. Bodos, Mishing, Karbi, Kachari, Dimasa and other communities living with their different cultural identity and dignity. They are related to various traditional music, folk dance, Bodo Nritya (Bagarumba), Bathoupuja, Bambo dance, Kherai dance, Karbi dance etc. Some important festivals are Aliai Ligang of Karbi people, and Bihu of Assamese people. These traditional music, dance and festivals can attract the foreign as well as domestic tourists. Moreover, Assamese Bihu dance, folk songs, Satriya Nritya, Ujapali, Ongkia Nat, Bhawna can be more attractive for the tourists’. In Assam every villages have Namghar which may be a source of tourists’ attraction (particularly to the foreign tourists). Again, farming pattern of the people nearby the Park may attract the tourists’. So, there are immense possibilities and potentialities of alternative tourism other than wildlife tourism in KNP. Thus, alternative tourism may be substituted of wildlife tourism or Nature tourism in KNP in the near future.

CONCLUSION

As to tourism destination, the harmonious environment is determined by both tourists’ psychological feelings and this paper gives some clues to the study of psychological carrying capacity in tourism destination like Kaziranga National Park. Besides, further study on psychological carrying capacity should be taken in order to contribute more to the harmonious
environment of tourism destination. Kaziranga National Park (KNP) is a World Heritage Site. It is positioned by the Tourism Authority as a virgin forest inhabited by a number of endangered species of flora and fauna including the One Horned Rhino. Sustaining this virginity should be a major concern for the Tourism Authority of the Country as well as the respective State. If the Park has to maintain the virginity, pressure from tourism has to decline and tourists are to be diverted to different areas or localities.

References:


European Commission (2005b) Sustainable Development Indicators to monitors the implementation of the EU Sustainable Development Strategy.


