Economy Vs Ecology: Sustainable Tourism Development in a Himalayan State-Role of Avian Tourism

Asheesh Bisht (Author)  
Dept. of Management Studies, Kumaun University Nainital, India  
asheeshbisht12@gmail.com

Dr. Amit Joshi (Author)  
Dept. of Management Studies, Kumaun University Nainital, India  
amitjoshiaj@gmail.com

Abstract: Tourism plays an important role in Indian Economy. In recent times, India has emerged as one of the most sought after tourist destination in the world. Traditional tourism activities on one-hand helps in increasing the revenue of the nation on the other hand there are many negative aspects associated with it like generation of solid waste, enhancement of traffic and over interference of tourist in areas where they visit. This also leads to degradation of local ecology. Uttarakhand is a Himalayan state in India with fragile ecology susceptible for disasters. This paper tries to identify different tourism activities carried out in Uttarakhand and explores the possibility of avian tourism in the state. Avian tourism in this part of the country is in infancy. Avian tourism provides a great opportunity for enhancement of tourism along with preservation of ecology. This study will assess avian tourism and will try to determine how wild and avian tourist affect the local community, economy and ecology.

Introduction: Tourism comprises of different set of activities and businesses having a common theme of providing product and services to the tourists. According to United Nations World Tourism Organization (UNWTO), "Tourism comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes." Tourism entails the movement of people to countries or places outside their usual environment for personal or business/ professional purposes.

India is one of the rapidly growing tourism destinations of the world. World travel and tourism council calculated that tourism generated Rs. 8.31 lakh crore (6.3% of national GDP) in 2015 and provided 8.7 percent of the total employment. India stands sixteenth in terms of tourism with share of 1.59 percent.(Rochelle, 2015). The diverse flora and fauna, climatic conditions, historical heritages and cultural diversity in India have made it as among the most sought after tourist destination across the world. Nation also holds a good name in the world for being a cheap and affordable tourism destination of the world. Among all the states and Union territories, Tamil Nadu holds the highest share of both domestic and foreign tourist.

According to India Tourism Statistics at Glance, 2014 (Tourism, 2007) Uttarakhand is not among the top ten states of India. Another worrying aspect is that after 2013 disaster Uttarakhand has become famous for all notorious reasons. Every year during monsoon, there is discussion about Uttarakhand in different media channels that has created fear in the mind of people visiting the state.

Present study seeks to determine the alternative for mass tourism that has been instrumental in disturbing the fragile ecology of the Himalayan state of Uttarakhand. The foundation of this study is on the premise that avian tourism may prove to be a viable alternative in terms of managing the ecological and economic impacts of tourism. For accomplishing the designed objectives we conducted a detailed study in three districts of Uttarakhand, namely, Nainital, Chamoli and Rudraprayag. In total 225 respondents were interviewed and expert opinion from a renowned bird and wildlife expert Mr. Rajesh Pawar was taken.
1.1 - Tourism in Uttarakhand

Uttarakhand is the 27th state of the Indian Union that came into existence in Nov. 2000. Out of total area of around 53,483 square Kms. 85 percent is mountainous with most of the northern part covered with Himalayas and Glaciers. Tourism is one of the major sources of revenue generation in the state. The state has a lot of potential for religious, leisure, wildlife and adventure tourism thus making it one of the most preferred destinations for domestic and foreign tourists. The new tourism policy of the state has given a lot of emphasis for sustainable tourism development. Religious tourism is one of the most important segments in tourism sector in Uttarakhand. Many religious spots for Hindu’s and Sikh community are present in Uttarakhand leading to huge amount of inflow of tourist in the region.

Different types of Tourism activities that contribute for the economic growth of the region are as follows:

1.1.1 Adventure Tourism: Adventure tourism is one that involves touring and traveling with perceived/possible risk thus requiring specialized skills or/and physical capabilities. Uttarakhand is a major spot for people looking for adventure tourism. Activities like skiing, hiking, trekking, rafting, mountaineering and camping are carried out in lot of places in Uttarakhand. Trekking (like Roopkund, Milam Glacier, Pindari Glacier etc.), River rafting (Rishikesh), Mountaineering, Skiing(Auli), Paragliding(Bhimtal) are few adventure activities that are few major activities attracting tourist in the region.

1.1.2 Wildlife tourism: Wildlife tourism is the one showing animals in their natural habitat. National parks and wildlife sanctuaries are an important attraction in Uttarakhand. Wildlife lovers, naturalists, eco-tourists and holidaymakers visiting the region. The state is known for its diversified flora and fauna. Uttarakhand has 12 National Parks and Wildlife Sanctuaries covering 13.8 percent of the total area of the state where you can capture the indisputable expressions of various animals and birds. The various Parks and Sanctuaries are located at different altitudes varying from 800 meters to more than 500 meters above sea level. Jim Corbett National Park, Rajaji National Park, Nanda Devi Biosphere Reserve and Askot Biosphere reserve are among few wildlife tourism destinations attracting a lot of tourist every year.

1.1.3 Pilgrimage Tourism: Uttarakhand, also known as “DevBhoomi” i.e land of god attracts a lot of pilgrims from different parts of the India and world looking for salvation. Choti Char Dham Yatra comprising Gangotri, Yamnotri, Kedarnath and Badrinath is a famous pilgrimage destination of Hindus and Hemkund Sahib, Ritha Sahib, and Nanakmatta are famous shrines of Sikhs.

1.1.4 Wellness Tourism: Wellness tourism is travel for the purpose of enhancing health and well-being through physical, psychological, or spiritual activities. Wellness tourism is many times confused with medical tourism. Medical tourism is a reactive approach for treatment of disease while wellness industry is a proactive approach that is more of associated with improvement of health and quality of life. Yog and Ayurved are two holistic approaches that are closely associated with mental and physical wellness. Haridwar and Rishikesh are two famous spots for wellness tourism.

1.1.5 Ecotourism: Ecotourism is defined as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education" (The International Ecotourism Society, 1990). Ecotourism is a mix of travel and community with sustainable development of society and environment. Diversity of Uttarakhand provides huge potential for the developing it as a major ecotourism hub the nation. Avian tourism is of the most sought for activities that is closely associated with ecotourism.

Avian Tourism is a form of eco and wildlife tourism that is gaining huge popularity now days. A lot of wildlife lovers, birders, conservationist and photographers are actively involved in this activity. The term avian tourism is relatively new (Steven, Morrison and Castley, 2014). The more prevalent term was birding or bird watching. When it comes to identifying the potential of ecotourism or wildlife tourism in terms of economic and ecological benefits avian tourism traditionally has not been given
due consideration. Few researches on economic and ecological impacts of avian tourism have been
done in other parts of the world but Indian literature in this regard is pretty less.
Generation of employment and income enhancement are two basic things that a government and
society aims for. Avian tourism can play an important role in attaining the both objective. A study was conducted
in South Africa to check the role of community tourism in enhancing the community
development and biodiversity conservation (Biggs et al., 2011). They extensively studied eleven
community based avian tourism projects running in the area. During the course of research, they were
able to find out that the income of local guides who were involved in avian tourism showed an
increment. The average monthly income of the local guides increased from USD 114 to USD 362.
With this, they were able to conclude that if policy makers and government provide long-term support,
than avian tourism has the potential of becoming a cost effective way of providing jobs to the local
residents.

Bird watchers are among the wealthiest set of travelers. US fish and wildlife service published Birding
in the United States: A Demographic and Economic Analysis Addendum to the 2006 National Survey
of Fishing, Hunting, and Wildlife Associated Recreation. This article tried to find the education and
income level of the avian tourist. They showed that twenty-nine percent of people who live in
households that earn $75,000 or more were dedicated avian tourists, which is eight percent above the
national average of 21 percent. Another aspect that is related to income is education
and it shows the same trend. The participation of people with less than high school education was 12 percent
much below than that of national average whereas people with at least a college degree had the highest
participation at a rate of 28 percent.

Another major impact of Avian tourism is on social life of the people living around bird watching
trails. (Sekercioglu, 2002) conducted a research to identify the economic benefits, problems associated
and conservation value arising out of the avian tourism for a community based program. He was able
to identify that among various kinds of ecotourism that can be carried out in any areas bird watching
has the highest potential to contribute to local communities. In addition, bird watching has immense
potential to educate locals about the value of biodiversity. He advocated that the governments of less-
developed nations, local and international NGOs, and bird watching companies should give priority to
bird watching promotion and education. They advocated that these organizations should work for
increasing the contribution of bird watching to rural communities as bird watching has a significant
potential to generate income and work for the protection and promotion of natural areas.

1.2 Inflow of Tourist in Uttarakhand: The number of tourist visiting Uttarakhand is increasing on
yearly basis. Table below will provide a detail of tourist visiting the state from 2000 to 2011.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Year</th>
<th>Indian Tourist</th>
<th>Foreign Tourists</th>
<th>Total ( In Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2000</td>
<td>110.79</td>
<td>0.57</td>
<td>111.36</td>
</tr>
<tr>
<td>2</td>
<td>2001</td>
<td>105.49</td>
<td>0.55</td>
<td>106.04</td>
</tr>
<tr>
<td>3</td>
<td>2002</td>
<td>116.52</td>
<td>0.56</td>
<td>117.08</td>
</tr>
<tr>
<td>4</td>
<td>2003</td>
<td>129.3</td>
<td>0.64</td>
<td>129.94</td>
</tr>
<tr>
<td>5</td>
<td>2004</td>
<td>138.3</td>
<td>0.75</td>
<td>139.05</td>
</tr>
<tr>
<td>6</td>
<td>2005</td>
<td>162.81</td>
<td>0.93</td>
<td>163.74</td>
</tr>
<tr>
<td>7</td>
<td>2006</td>
<td>193.58</td>
<td>0.96</td>
<td>194.54</td>
</tr>
<tr>
<td>8</td>
<td>2007</td>
<td>221.54</td>
<td>1.06</td>
<td>222.6</td>
</tr>
<tr>
<td>9</td>
<td>2008</td>
<td>230.64</td>
<td>1.12</td>
<td>231.76</td>
</tr>
<tr>
<td>10</td>
<td>2009</td>
<td>231.54</td>
<td>1.18</td>
<td>232.72</td>
</tr>
<tr>
<td>11</td>
<td>2010</td>
<td>309.72</td>
<td>1.36</td>
<td>311.08</td>
</tr>
<tr>
<td>12</td>
<td>2011</td>
<td>266.66</td>
<td>1.43</td>
<td>268.09</td>
</tr>
</tbody>
</table>

Source: Tourist Arrival in Uttarakhand (Since Formation of the State); Statistical-Survey; available at
The above table clearly states that right from its inception the number of tourist visiting the state has enhanced drastically. The majority of tourist visiting the state are pilgrims.

Figure 1: Inflow of Tourist in Kedarnath and Badrinath (Source: http://badarikedar.org/management/Number-Of-Pilgrims accessed on 20 June 2017)

The graph above gives a detail account of number of people visiting two famous religious spots of Uttarakhand. This clearly indicates that the number of tourist visiting these religious destinations is increasing every year. The number of tourist visiting the state declined after 2013 due to natural disaster of 2013, which badly affected the both Kedarnath and Badrinath.

Apart from religious tourism, another is visit of casual tourist or weekenders in different hill stations. People living in different parts of the country visit renowned hill stations on long weekends and other holidays. The summer season receives maximum number of tourist followed by Durga pooja and a few in winter vacations.

Religious tourists are mostly budget travelers. They travel in a constrained budget and spending is quite low. Consequently, the benefits to the local economy are minimal. The amount of money transferred to the local stakeholders is quite less. Most of the temples in char dham (most famous religious tourism destination) circuit are located in very higher altitude. These areas are prone to avalanches, flashfloods and landslides. The inflow of pilgrims usually exceeds the physical carrying capacities of these destinations. This mass inflow of pilgrims causes irreparable damage to the extremely fragile ecology of the region.

Causal tourist and weekenders tend to visit few well-known hills stations and spots leading to massive unplanned construction, chaos, heavy traffic and generation of solid waste in an alarming rate in those areas. This uncontrolled flow of tourist destroys the very purpose for which tourist flock to these places. No doubt, these weekenders and casual tourist enhance the economic growth of the region but that economic gain is confined to few places and that too for a very small segment of the society. Majority of the locals are affected negatively because of this massive inflow of tourists. The losses to local ecology and culture are irreparable.
The answer to the above mention problem lies in Avian Tourism.

1.3 Uttarakhand as Avian Tourism Destination: Uttarakhand has the potential of becoming one of the most sought after avian tourism destination in India. There are 6 National Parks, 7 Wildlife Sanctuaries and 3 Conservation Reserves in the state. Apart from it, many other destinations too provide immense opportunities for avian tourism.

Important avian tourism zones of Uttarakhand are Corbett National Park, Rajaji National Park, Gangotri National Park, Nanda Devi National Park, Valley of Flowers, Askot Wildlife Sanctuary, Benog Wild Quail Sanctuary, Binsar Wildlife sanctuary, Kedarnath Wildlife Sanctuary, Nandhur Wildlife Sanctuary, Pawalgarh Conservation Reserve and Jhilmil conservation reserve. All the above-mentioned are reserved areas with high potential for bird watching.

Uttarakhand is home to 14 Important Bird and Biodiversity Areas (Islam & Rahmani, 2004) that are important and priority sites for conservation. A detailed list down different Important Bird and Biodiversity Areas (IBA’s) of Uttarakhand is given below.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>IBA Site Name</th>
<th>IBA Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Asan Barrage</td>
<td>A1, A4i</td>
</tr>
<tr>
<td>2</td>
<td>Askot Wildlife Sanctuary</td>
<td>A1, A2</td>
</tr>
<tr>
<td>3</td>
<td>Binog Sanctuary-Bhadraj-Jharipani</td>
<td>A1, A2</td>
</tr>
<tr>
<td>4</td>
<td>Binsar Wildlife Sanctuary</td>
<td>A3</td>
</tr>
<tr>
<td>5</td>
<td>Corbett Tiger Reserve</td>
<td>A1</td>
</tr>
<tr>
<td>6</td>
<td>Govind Nagar National Park and Wildlife Sanctuary</td>
<td>A1, A2</td>
</tr>
<tr>
<td>7</td>
<td>Kedarnath Musk Deer Sanctuary</td>
<td>A1, A2, A3</td>
</tr>
<tr>
<td>8</td>
<td>Nanda Devi Biosphere Reserve</td>
<td>A1, A2</td>
</tr>
<tr>
<td>9</td>
<td>New Forest Campus</td>
<td>A3</td>
</tr>
<tr>
<td>10</td>
<td>Rajaji National Park</td>
<td>A1</td>
</tr>
<tr>
<td>11</td>
<td>Sonanadni Wildlife Sanctuary</td>
<td>A1</td>
</tr>
<tr>
<td>12</td>
<td>Upper Pindar Catchment, East Almora Forest Division</td>
<td>A1, A2, A3</td>
</tr>
<tr>
<td>13</td>
<td>Valley of Flowers</td>
<td>A1</td>
</tr>
<tr>
<td>14</td>
<td>Gangotri Forest Reserve</td>
<td>Data Insufficient</td>
</tr>
</tbody>
</table>

*Source:* (Mohan and Sondhi, 2014)

The above-mentioned Table gives a detail account of different areas that are important for conservation of Birdlife in state of Uttarakhand. Important Bird and Biodiversity (IBA) area is define as an area that is identified using internationally acceptable criteria’s for conserving the bird population. Of the total 14 identified areas 11 meets criteria requirement of A1. A1 encompasses those areas that have presence of globally threatened species listed in International Union for Conservation of Nature (IUCN) red list. Six areas lies in A2 criteria that shows the presence of restricted range species, four of the above mentioned regions meet A3 criteria that signifies biome-restricted species. One area Asan Barrage is in A4i a criterion that shows the presence of water birds.

The total number of bird species in India is 1303, of which around fifty percent are present in Uttarakhand. The varied topography ranging from rivers beds to high snow laden mountain peaks provides an opportunity for varied avian biodiversity. An updated checklist of birds shows presence of 686 bird species in Uttarakhand. Of the total 686 species 5 species are listed in IUCN as critically endangered, 2 species are listed as endangered, 18 are vulnerable and 20 are nearly threatened. 5 species are endemic to the region. The above mentioned facts clearly states that Uttarakhand has potential of becoming one of the best avian tourism zones in India (Mohan and Sondhi, 2014).

Of the total 225 respondent who were surveyed, 123 (54.6%) were casual or weekenders, 65 (28.9%) were religious tourist and rest 37 (16.44%) were wildlife/ avian tourist. Of the total wildlife and avian tourists, the inclination of majority was towards wildlife. Only 14 (37.8 percent) of wildlife/ avian tourists were solely interested in avian tourism. Remaining 21 were inclined to other wildlife but had an interest on bird watching. This shows that the avian tourism is in a nascent stage in Uttarakhand.
However, number of tourist does not present the whole picture. Another aspect is income of the visitors. Of the total 225 respondent, people engaged in wildlife tourism lie in higher income group. The average income of the 37 respondent engaged in wildlife tourism was 8.5 lakh per annum, which is much higher than those involved in other tourism activities. Income of a person can help in analyzing the spending capacity of the person. On an average, the stay of avian tourist was of 5 days. This shows that the avian tourist stayed in Uttarakhand for much longer time duration than casual tourists or weekenders that had an average of 2 days. Longer the stay more is the utilization of local resources thus enhancing the income of the local residents.

Avian tourists prefer watching birds in their natural behavior and surrounding. This takes them far away from well-known traditional tourism destinations of Uttarakhand. (Traditional tourism centers are those associated with pilgrimage or casual/weekender tourism and quite famous among masses like Nainital, Haridwar etc). During to survey it was identified that areas Like Sattal and Pangoot in Nainital District, Maku in Rudraprayag district, Mandal Village in Chamoli district and Munisyrin in Pithoragarh districts are most preferred avian tourism destination that are commercially receiving the avian tourist from India and abroad.

The best time to visit Uttarakhand for Avian tourism is in between Oct to March. Tradition tourism activities like religious tourism specifically Char Dham Yatra, weekenders causal tourism visit mostly in summers from March to October. Thus developing proper avian tourism facilities can help in receiving the tourist round the year without enhancing the existing facilities. Avian tourists generally carry heavy cameras, binoculars and other equipment for recording the species that they see in any given area. Also spotting the birds in an unknown territory is a tedious and skillful task. Because of above mentioned facts tourist tend to hire locals living in near-by areas of bird watching trails. These people work as guides, bird spotters or porter. This on one hand helps in enhancing the level of income of household while on other hand this helps in generating the awareness about the avian life present in the region thus indirectly contributing to the conservation and protection of birds. It also creates a pull for development of infrastructural facilities (like roads, rest houses, restaurants etc.) to provide comfortable stay to the tourists.

To substantiate the findings of survey author carried out a detailed interview of bird/wildlife expert and tour operator Mr. Rajesh Pawar. He emphasized that bird watching or avian tourism that once was confine to United States of America and other developed nations is now a serious activity in India too. With the availability of cheap DSLR’s and other equipment, the craze of avian tourism has enhanced drastically. Tourist from different regions of India and aboard visit Uttarakhand frequently and spend time and money for watching species that are native of the region. According to him the young and budding avian tourist are more concerned in knowing about different species of birds that are found in the region on the other hand more experienced bird watchers come with some target species in mind. He mentioned that avian tourism takes tourist in far of places that helps in enhancing the local economy of those centers that traditionally are not part of mass tourism.

Conclusion
Tourism in Uttarakhand may best be described as ‘mass tourism’. Hundreds of thousands of people flock to the hills of Uttarakhand every year for pilgrimage, visiting wild life sanctuaries and hill stations (during summer months to escape the heat of the plains). Mass tourism has adversely affected the ecology of the hills of Uttarakhand. The benefits of mass tourism in the state accrue to only a handful of people in the organized and unorganized sector. Mass tourism has only a small trickledown effect on the local economy of almost all major tourist destinations in the state. The disadvantages of mass tourism far outweigh its benefits. Uncontrolled human activity in the fragile hills often results in degradation of grasslands, accumulation of solid waste and scarcity of resources like water. Moreover, the majority of travelers are either backpackers or mainstreamers with limited spending. The duration of stay and the amount spent does not justify the blatant use of resources of the state. The benefits to the local economy are minimal. The stakeholders may boast of facts and figures to make big claims regarding the increase in the number of tourists but the truth is that this increased number has done more harm than benefits raising genuine concerns.
This study suggests that avian tourism can effectively ensure a trade-off between economy and ecology. Avian tourists are usually educated individuals from relatively higher income groups. Concern for environment is inherent in almost all of them. Promoting avian tourism is almost synonymous with ‘socially responsible tourism’ or ‘ecologically sustainable tourism’. At present, it is in a nascent stage in Uttarakhand. Geographical condition of the state makes it home of around half of the total bird species found in India. Bird watchers are mostly from higher income group and have high spending power. The use of local people and local resources, visiting to lesser known (with respect to popular mass tourism) destinations helps in overall development of economy of the region. Bird watchers tend to be more ecologically sensitive thus posing less threat to local ecology. State can facilitate sustainable development of avian tourism. Regular census of birds in different part of state will provide information regarding different species found in different regions. This will act as a baseline data for tourist visiting the region. Creation of home stays in remote village with abundance of avian population will provide a sustainable source of income to the local community. Continuous training program for rural youth will help in converting them to specialized bird watchers and guides. Fragile ecology and massive exploitation of resources have raised question on developmental path that state economy has chosen. The author does not undermine the significance of religious and mass/weekender tourism but is of the opinion that checks and balances in the form of regulations by the government or voluntary codes of conduct by tour operators must be in place to ensure sustainability.

References
12- http://www2.unwto.org/annual-reports accessed on 10 July 2017
14- http://uttarakhandtourism.gov.in/ accessed on 10 July 2017
16- http://uttarakhandtourism.gov.in/utdb/?q=adventure/wildlife accessed on 10 July 2017