
**Nature Based Tourism Promotion for Sustained Local Wellbeing and
Environment Friendly Best Practices: A Neoliberal Approach at Himalayan
Tourist Destination Tehri Garhwal, India**

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Abstract

'Nature' and its very truest forms are part of the changing dynamism of planet earth since its formation. The varied geophysical setups of nature around the globe have their unique characteristics and ecosystem services. Among all geological landscapes the Himalayan mountain range has global significance due to its distinctive structural attributes. The current trends of tourism development in the Himalayan tourist destination Tehri have been threatening the local ecosystem through deforestation, increased solid wastes, pollution and loss of biodiversity. Further, it is intimidating to the highland mountain dwellers by over consumption of their local resources. Therefore, sustainable tourism development mechanism with achievable actions should prioritize across the destination. This paper is based on the increasing threats of tourism development at Tehri and its surroundings. It has come up with a nature based tourism business model for the destination to cope up with current scale and level of tourism development. Further, the outcomes can be beneficial for local livelihood generation, eco friendly best practices and future planning and policy framework of tourism.

Keywords: nature based tourism, best practices, sustainable development and Tehri Garhwal, India

Introduction

Tehri Garhwal is one of the largest and western most districts of the state Uttarakhand, India. It is located on the outer ranges of the mid Himalayas which consist of low line peaks rising alongside with the planes of the northern India. The district lies between the parallels of 30.3` and 30.53` north latitude and 77.56` and 79.04` east longitude (MSME-DI, 2016-2017). It is bounded by Uttarkashi district in the north, Rudraprayag district in the east, Pauri Garhwal district in the south and Dehradun district in the west with a total geographical area of 3796 km². The district has a

sub-temperate to temperate climate, which remains pleasant throughout the year. The district has a population of 6, 18,931 (Census, 2011). It is bestowed with a unique landscape which generates major crops like; rice, wheat, mandua and oilseeds etc. It is also known for its horticultural crops, which include fruits, vegetables, off season vegetables, floricultural crops, medicinal and aromatic plants. In terms minerals; Magnesite, Dolomite, Limestone, Tin, Phosphate and Marbles are the major minerals of the district.

Despite of much potential the district is still struggling to manage the wellbeing of local people. Issues such as unemployment, outmigration and social equity are still questioning the highland mountain dwellers. On the other hand, an increasing inflow of tourists to the Himalayan destination has brought a mix tests to the destination and its community. It has the potentials to eradicate many a longstanding developmental issues and on the other hand threatens the local natural environment. Hence, it is appropriate to introduce a neoliberal approach of tourism development at this discourse which can bring a balanced scale and level of development in the destination (Gupta & Rout, 2016). Countries around the world with environmental progressive policies are prompting sustainable based tourism models into their developmental agenda. Among them nature based tourism is one of such viable agenda. Hence, it is well justified to take nature based tourism as a development model in the discourse of Tehri Garhwal.

Nature based tourism potentials

Sites

Tehri as a destination has many potential sites in the lap of nature. Among them Tehri lake, Buda Kedar, Chandrabadni, Chamba, Dhanaulti (Dhanolti), Devaprayag and Chamba are the major nature based tourism attractions.

Image 1: Potential sites of nature based tourism



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significance too, sites such as; Buda Kedar, Chandrabadni and Devaprayag are famous for it. Sites such as Tehri Lake, Chamba, Dhanaulti (Dhanolti), and Chamba offers nature based activities as popular weekend getaway. Nature based trek routes in Tehri Garhwal includes Nagtibba, Khatling Glacier, Sem-Mukhem, Pawanli Kantha, Sahastratal and Masartal. These destinations are trekker's paradise and the recent trends of tourism development in these sites are questioning nature conservation.

Activities

Preferred recreational activities by tourists at the destination are trekking, hiking, nature walk, camping, rappelling, village walk, photography, visiting temples and cultural activities.

Current state of tourism development

The research has tried to understand the current state of tourism development in the destination scale from the perspective of nature based tourism. Therefore, five parameters were taken into

account such as; tourist arrivals, ambient of air quality, built-up and population density, forest area and change and municipal solid waste generation quantity. In the case of tourist arrival, five years (2012-2016) data were considered for this purpose.

Table 1.1: Destination evaluation matrix

Five year tourist arrival trends						
2012	2013	2014	2015	2016	Five years' average	
980279	496369	571047	1160335	976834	836972.8	
Ambient of Air Quality (AAQ)						
Tourist destinations		NO ₂ (Nitrogen dioxide)	PM ₁₀ (Atmospheric particulate matter)	SO ₂ (Sulphur dioxide)		
Tehri District		15.21 (µg/m ³)	118.21(µg/m ³)	18.46(µg/m ³)		
Built-up and population density						
Total geographical area (km ²)	Urban	Rural	Total population	Urban %	Rural %	Density
3642	5.65 (0.15%)	9.9 (.27%)	6,18,931	11.33	88.67	170 (Persons per km ²)
Forest area and change						
Total geographical area (km ²)	Total forest area in 2011 (km ²)	Total forest area in 2013 (km ²)	Total forest area in 2015 (km ²)	Change (km ²)	% change in the total forest area in the last five years	
3642	2147	2148	2156	8	0.37	
Municipal solid waste generation quantity						
Elevation (feet)	Population	MSW status (MTPD)			Solid waste generation Per capita (kg/capita/day)	
5740 (max.)	618931	24.315			0.03	

Source: Uttarakhand Tourism Development Board; Environment Protection and Pollution Control Board, Government of Uttarakhand and <http://airpollutionapi.com/>; Ministry of Environment, Forests & Climate Change, Government of India; Bhuvan and Census of India, 2011; Forest Department, Uttarakhand (2012-13; 2014-15) and ENVIS Centre on Himalayan Ecology (2015) & Ministry of Urban Development, Government of Uttarakhand

The data reveal that there is an increasing trend in tourist arrival. However, due to local environmental conditions such as natural disasters and support infrastructures; there are ups and

downs in this trend. It is evident from the arrival trends of the year 2013 and 2016. Further, the ambient of air quality (AAQ) of Tehri is less polluted by taking NO₂ (Nitrogen dioxide), PM₁₀ (Atmospheric particulate matter) and SO₂ (Sulphur dioxide) into account. The concentration of these elements are of 15.21 (µg/m³) NO₂ (Nitrogen dioxide), 118.21(µg/m³) PM₁₀ (Atmospheric particulate matter) and 18.46(µg/m³) SO₂ (Sulphur dioxide). Thus, it provides an opportunity for nature based tourism in the destination. The destination has a total geographical area of 3642 (km²), out of which 5.65 (0.15%) are urban built up area and 9.9 (.27%) are rural built up area. Hence, it urges nature based tourism to be part of the destination development agenda. The destination has a total population of 6, 18,931 of which 11.33 % are urban and 86.67% are rural. In the case of forest area and change, the destination has a positive growth rate of 0.37% as a total forest cover of 2147 km² in the year 2011 to 2156 km² in the year 2015. It highlights that the nature based tourism will further add to the local forest conservation. Per capita municipal solid waste generation quantity in the destination is 0.03 (kg/capita/day). It too represents that the destination is still in a nascent stage of tourism development and nature based tourism can certainly contributes to it.

Tourist awareness about nature tourism and conservation

The research made an attempt to know the tourist awareness on nature based tourism and conservation. Therefore, a total of 200 tourists were surveyed for this purpose. Out of the 200 sampled tourists, 152 (76%) were males and 48 (24%) females. It represents that the male tourists had greater motivation to visit the destination than the females. The age group of the sampled tourists was between 18-25 years - n-15 (7.5%), 26-35 years - n-88 (44%), 36-45 years - n-67 (33.5%), 46-55 years - n-21 (10.5%) and above 55 years - n-9 (4.5%).

Tourists travelling to the region were residents of Delhi (39%), Haryana (20.5%), Chandigarh (11%), Uttar Pradesh (8%), Punjab (5.5%), Kolkata (12%) and Uttarakhand (3.00%). Mainstream tourist's inflow to the destination were from urban environment - 144 (72%) and 56 (28%) tourists were from rural environment. This signifies that tourists coming to the destination were mostly from urban areas to escape from the urban monotony. Educational qualification of tourists surveyed were as follows: up to high school - 08 (04.00%), intermediate - 15 (7.5%), graduate - 129 (64.5%) and post graduate and above - 48 (24%). This highlights that the tourists travelling to the destination are well aware about the destination geography. Occupation of these tourists was

as follows: 64 (32%) - businessman, 16 (08%) - government services, 98 (49%) - professionals, 06 (03%) - agriculturalist, 10 (05%) - household workers, 02 (01%) - retired personnel and 04 (02%) - were marked as other. The monthly incomes of the respondents were: 27 (13.5%) - <20,000, 88 (44%) - 20,001-35,000, 66 (33%) - 35,001-50,000, 15 (7.5%) - >50,000 and 04 (2%) were in the no income group (see Table 1.2).

Table 1. 2: Socio demographic profile of tourists

Characteristics	Frequency	%
Gender		
Male	152	74.00
Female	48	26.00
Age (years)		
18-25	15	7.5
26-35	88	44.00
36-45	67	33.5
46-55	21	10.5
Above 55	9	4.5
State of origin		
Delhi	78	39.00
Haryana	41	20.5
Chandigarh	22	11.00
Uttar Pradesh	18	8.00
Punjab	11	5.5
Kolkata	24	12.00
Uttarakhand	06	03.00
Tourist environment		
Urban	144	72.00
Rural	56	28.00
Education		
Up to High school	08	04.00
Intermediate	15	7.5
Graduate	129	64.5
Post Graduate and above	48	24.00
Occupation		
Business	64	32
Service-Govt.	16	08
Professional	98	49
Agriculture	06	03

Household work	10	05
Retired	02	01
Other	04	02
Monthly income		
<20,000	27	13.5
20,001-35,000	88	44
35,001-50,000	66	33
>50,000	15	7.5
No Income	04	02

Source: Field data

A chi square (cross tabulation) analysis was performed. The cross-tabulation analysis was performed between the five statements (dependent variables) based on nature based tourism and conservation and the age (independent variables) of the tourists surveyed.

Table 1.3: Tourist knowledge and awareness of ecotourism and conservation

Statements/independent variable (age)	Agree	Neither agree nor disagree	Disagree	χ^2	Sig.
Environmentally responsible					
18-25 years (n-15)	3	7	5	105.314	.000
26-35 years (n-88)	21	44	23		
36-45 years (n-67)	17	27	23		
46-55 years (n-21)	5	10	6		
Above 55 years (n-9)	2	5	2		
Educative to tourists and locals					
18-25 years (n-15)	1	8	6	82.089	.000
26-35 years (n-88)	9	45	34		
36-45 years (n-67)	11	26	30		
46-55 years (n-21)	5	12	4		
Above 55 years (n-9)	1	5	3		
Minimal environmental impacts					
18-25 years (n-15)	2	9	4	89.411	.000
26-35 years (n-88)	5	44	39		
36-45 years (n-67)	7	29	31		
46-55 years (n-21)	5	11	5		
Above 55 years (n-9)	2	5	2		
Contribute to resource conservation and preservation					

18-25 years (n-15)	3	7	5	101.417	.000
26-35 years (n-88)	22	24	42		
36-45 years (n-67)	17	20	30		
46-55 years (n-21)	5	9	7		
Above 55 years (n-9)	2	4	3		
Non-consumptive					
18-25 years (n-15)	3	10	2	99.16	.000
26-35 years (n-88)	21	22	45		
36-45 years (n-67)	15	25	27		
46-55 years (n-21)	5	8	8		
Above 55 years (n-9)	2	4	3		

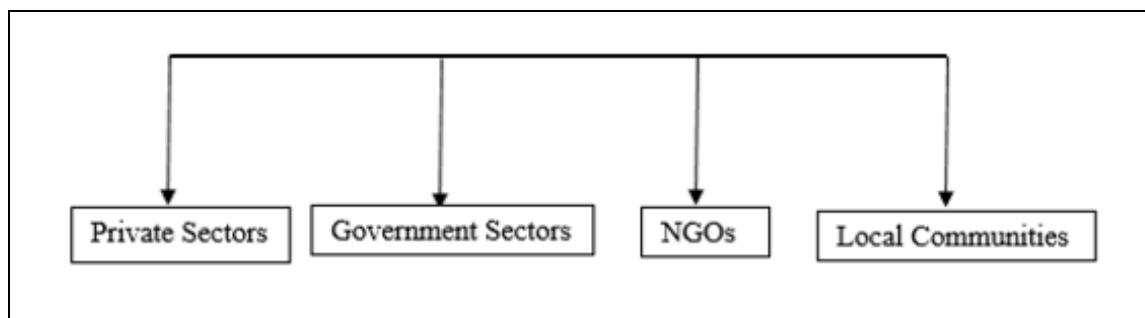
Source: Field data

The output of the analysis highlights (see Table: 1.3) that there is a significant relationship between tourists travelling to region and their prior knowledge and awareness nature based tourism and conservation. According to the analysis, only 25.5% of the total (N=200) tourists had some or little knowledge and awareness of nature based tourism and conservation, and the rest were either neutral or disagreed with the statements. It highlights that there is a potential future threat to the destination. Hence, to create awareness among the tourists visiting to the destination are of utmost importance for the future sustainability of the destination.

Stakeholders of nature based tourism

Stakeholders play an important role towards the holistic development of tourism in any given destination. The existing status of tourism stakeholders in the district are as follows:

Figure 2: Stakeholders of nature based tourism



- *Private sector:* Private sector such as travel agencies and tour operators, hotel operators and other service providers are operating within the district and outside of it. The outside operators are operating from places like Dehradun, Rishikesh, Haridwar and New Delhi.
- *Government sectors:* The Department of Tourism, Uttarakhand works as the executing agency for tourism promotion and development in the district. The Uttarakhand Tourism Development Board (UTDB) is the key implementing agency for tourism plans and projects along with the line departments such as Department of Forest (DoF) and Public Works Department (PWD). Garhwal Mandal Vikas Nigam (GMVN) and Department of Forests have established hotels and Forest Rest Houses (FRHs) at various locations such as; near Tehri Dam, Dhanaulti and Chamba.

Non-Government Organizations (NGOs): There are a few NGOs and welfare organizations which are working in the region in areas such as conservation, empowerment, sanitation and human rights. Some of the prominent organizations in the region are; (1) Parvateeya Jan Kalyan Samiti, (2) Ped Lagao Ped Bachao Sanstha, (3) Trees for Life, (4) Uttarakhand Jan Jagriti Sansthan, (5) Agrim Krishi Evam Gramodyog Vikas Sansthan, (6) Ahilya Devi Sewa Sansthan, (7) Garhwal Vikas Kendra and (8) Uttaranchal Jankalyan Samiti. These organizations are yet to be the part of tourism promotion and development in the region. The involvement of these organizations will be crucial for nature based tourism promotion.

- *Local communities:* The involvement of local communities in the tourism sector is quite low. However, there is an increasing interest among youth to be part of tourism startups.

Policy Framework

Both tourism policy (2017) and forest policy (2001) have emphasized on to promote ecotourism and nature based tourism in the state. The tourism policy (2017) has much emphasized on integrated eco-tourism projects, to promote eco-friendly practices such as; tree plantation, jungle safaris, nature walks, mountain treks, camping etc. in a way that also promotes awareness and sensitivity towards environment conservation. On the other hand, the forest policy has much emphasized on value chain based eco-tourism products to ensure conservation and economic wellbeing of the locals.

Operational mechanism

Future operational mechanism of nature based tourism at Tehri Garhwal must look into the following areas with due importance:

1. To create nature based tourism models to link the local products or services from conception, through full range of activities including different phases of production, delivery to final consumer and final disposal after use.
2. Awareness campaign on nature based tourism should be provided to stakeholders for destination sustainability.
3. Tourist traveling to the destination must be made aware about the dos and don'ts
4. Information centre at major entry point must open to provide adequate and essential information to tourists on conservation of local natural heritage.
5. Policy lead achievable action plans on nature based tourism development and promotion must put forward.
6. Environment friendly best practices must also be prioritized to avoid increase waste and contribute to the local environment
7. Horizontal and vertical integration among key stakeholders are to be done for the smooth functioning of nature based tourism.
8. Designing destination development plans across the tourists site should prioritize the environmental conservation and local wellbeing
9. Capacity building programs on nature based tourism must design to educate locals on nature based tourism entrepreneurship

Conclusion

To conclude nature based tourism potentials in Tehri Garhwal, it is evident that the destination has great potential for nature tourism promotion. It is also in the nascent stage of tourism development. Therefore, tourism development in the destination scale must prioritize sustainable form of tourism development. Therefore, nature based tourism certainly can be promoted in the line with sustainable tourism indicator areas. However, local and tourist awareness on nature based tourism should prioritize. Existing hotels and their operations are also need to look into. Hence, the discussion above provides a ground to introduce the novel approach of nature based tourism at Tehri Garhwal.

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