

Developing Eco-tourism in the Himalayan State of Jammu and Kashmir, India

Chander Mohan Seth

Abstract

State of Jammu and Kashmir with a geographical area of 222,236 km² is located on the northern most part of Indian subcontinent in western Himalaya. Population of state is 14.28 million. Out of this, 11.9% is tribal population comprising of Gaddi, Bakarwal, Gujjar, Brokpa, Changpa, Shina, and Balti tribes. State is blessed with three unique landscapes with abundant natural assets. Jammu Province is a subtropical region with ten administrative districts, Kashmir Valley is temperate region with ten administrative districts, and trans-Himalayan Ladakh is high altitude cold desert with two administrative districts. Elevation of state varies from 300 to 7000 m. This diversity of landscape and climate is reflected in the rich diversity of state's cultural, social, and biological diversity. State of Jammu and Kashmir is one of the best gifts of nature on earth with abundance of verdant valleys, high rising mountain peaks, some of the biggest and longest glaciers, thick forests, highly productive alpine pastures, number of fresh and brackish water lakes, millions of migratory birds, rich wildlife and rare snow leopard, scenic areas, waterfalls, ethnic tribes and typical art and architecture of historical buildings. State has number of national parks, wildlife sanctuaries, and wetlands providing an opportunity to the state to promote eco-tourism. These natural assets make Jammu and Kashmir State as one of the best destinations for the eco-tourism in the world. Tourism is the key sector of Jammu and Kashmir's economy and accounts for 6.98% of the state's GDP. In the paper, an attempt has been made to describe the eco-tourism destinations of the state using a methodology of primary and secondary data, government sources, and direct visit to the sites. The survey and study of some of the important eco-destinations were carried out in the year 2014 using

SWOT methodology. In the paper also some of the success stories of eco-tourism practices introduced in the year 2003–2004 have been discussed. Based on best practices, in the paper, eco-tourism policy and the vision to develop these destinations have been discussed.

Keywords

Eco-tourism • Himalaya • Dogra • Kashmiri • Ladakhi • Homestays • Nature camps • Hemis National Park • Snow leopard • Changpa • Gaddi • Mantalai • Sudh mahadev temple • Dudu Valley • Sustainability

1 Introduction

The beauty of J&K state and Kashmir Valley in particular has been described by the Persian poet Amir Khusro as, “*Agar firdous baroye zameen ast, hami asto, hami ast*” (Lawrence 1996), meaning if there is paradise on earth, it's here, it's here, it's here. Jammu and Kashmir State is located in the northwest part of India comprising western part of Himalaya (Fig. 1a, b). State is highly mountainous covering trans- and cis-mountainscapes of Himalaya. Altitude of state varies from 300 m in Jammu plains to the highest peaks of Nun and Kun 7135 and 7077 m in Ladakh. State enjoys three climatic zones of hot subtropical in Jammu, temperate in Kashmir, and cold desert Ladakh. State is rich in biodiversity with a variety of floristic and faunal species. Total forest area of the state is 20,230 km² (Chugh 2012). State animal is hangul (*Cervus canadensis hanglu*), state bird is black-necked crane (*Grus nigricollis*), state plant is chinar (*Platanus orientalis*), and state flower is lotus (*Nelumbo nucifera*). State has maximum number of nineteen species of ungulates (Schaller 1977). Snow leopard (*Uncia uncia*) is the iconic species of Ladakh Himalaya (Hillard 1989). The cultural diversity of the state is represented by Dogras in Jammu, Kashmiris in Kashmir, and Ladakhis in Ladakh (Drew 1875). Some of the famous rivers like Indus, Jhelum,

C. M. Seth (✉)
Jammu, India
e-mail: drcmseth@rediffmail.com

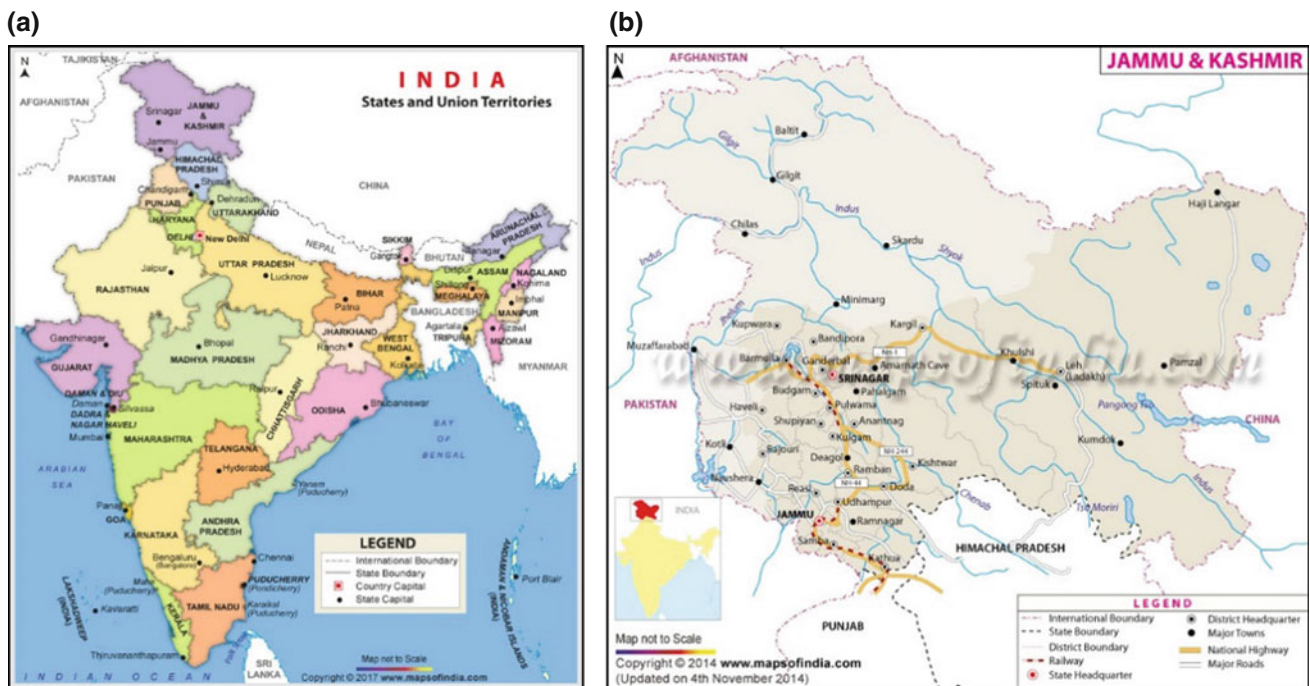


Fig. 1 a Map of India. b Map of J&K state

and Chenab flow through its territory on the banks of which ancient Indus Valley Civilization flourished (Lawrence 1996).

Travelers, knowledge seekers, explorers, and traders have been coming to J&K state from time immemorial as it formed the part of the famous silk land trade route (Drew 1875). But it was during the Dogra rule 1847–1947 AD that tourism became commercial in the state with the British and other European explorers and pleasure seekers started coming to state (Doughty 1971). Mughals were also impressed by the beauty of the state, and they invested in the beautification of the state by laying down world famous Mughal gardens (Beg 2010).

2 Objectives

Objectives of the present study are:

1. To study eco-tourism potential of all the three regions of J&K state.
2. To survey and identify the eco-tourism destinations of the state.
3. To recommend the eco-tourism vision model for the promotion of eco-tourism in state.
4. To propose eco-tourism model of homestays and nature camps to state which is culturally, ecologically, and economically sustainable.

3 Methodology

The methodology of the present study included both primary and secondary sources. Secondary sources comprised of all published reports of the state government and the Government of India, old published literature and studies carried out by the Department of Tourism, Department of Wildlife, and Department of Economics. Studies carried out by the WWF-India were also consulted. Primary source comprised of detailed study of some of the potential eco-tourism destinations based on SWOT analysis and field survey of eco-tourism destinations in Jammu Hills.

4 Tourism Industry

Tourism industry has contributed in building the economy of the Jammu and Kashmir State. It is one of the major economic vehicles to generate employment and livelihoods. This sector has given jobs to a large number of people and generated economic activities, especially in the tertiary sectors. The development of the service sectors of the state such as transport, hospitality, horticulture, and small-scale industry is dependent on the tourism industry (Anon 2000).

At present, in J&K state, there are three types of tourist destinations. In Ladakh, it is mainly adventure and eco-tourism. In Kashmir Valley, it is mainly leisure tourism,

Table 1 Domestic and foreign tourist arrival in J&K state for last ten years

Year	Kashmir Valley	Amarnath Yatra	Jammu	Ladakh	Total (000)
2006	432,890	265,000	6,950,000	NA	7,647,890
2007	441,840	214,000	7,222,000	NA	7,877,840
2008	572,100	498,075	6,576,000	72,000	7,718,175
2009	601,200	373,419	8,235,064	78,573	9,288,256
2010	736,448	458,046	8,749,000	76,055	10,019,549
2011	1,314,432	634,000	10,115,232	178,042	12,241,706
2012	1,308,765	621,000	10,394,000	179,070	12,502,575
2013	1,171,130	353,969	9,287,871	137,702	10,950,620
2014	1,167,618	372,909	7,803,193	181,801	9,525,021
2015	927,815	352,771	7,776,604	146,501	9,203,691
2016	403,442	220,490	2,135,482	8659	9,203,691 Figures up to April 2016 only

and in Jammu, it is pilgrim tourism (Jina 1994). Department of Tourism, J&K government, is administratively regulating the tourism development in the state, and eco-tourism is regulated by the Department of Wildlife.

Footfall of tourism in the state suffered heavily from 1989 to 2002, because of militancy. With the improvement in the security scenario, the government has made all possible efforts and took all possible steps for the revival of the tourism sector by raising the requisite infrastructure for restoration of the pristine glory of the places of the tourist attraction (Seth 2017a, b) (Table 1).

5 Tourism Policy of the State

At present, there is no tourism policy of the J&K government, but Ministry of Tourism GOI engaged SANTEK Pvt. Ltd consultants to prepare 20 years perspective plan for sustainable tourism development in J&K state from 2000 to 2020 under the Incredible India scheme (Kant 2009). The final report submitted has analyzed the potential of tourism in J&K state and also suggested the framework for drafting tourism policy of the state. No tourism policy has been approved so far. Now, J&K Tourism Department has engaged Tata Consultants to draft the vision document for tourism development in J&K state and also the tourism policy which also has not been finalized so far. Therefore, in absence of sound tourism policy, there are ad hoc decisions by the government to promote tourism in J&K state through proliferation of Tourism Development Authorities which is not going to develop the tourism industry in state on sustainable basis and shall also endanger the environment and ecology of the state (Seth 2017a, b).

The draft of the policy is available on the website of the tourism department for the comment of the public states its

Vision as, to develop tourism as one of the principle engine for the Economic development in the State so that state is show cased as leading global destination by the year 2025. The mission of tourism policy states, to develop Jammu & Kashmir as a dynamic, sustainable, and most-favored tourist destination by devising strategies for increasing footfall of domestic and international tourists.

The new draft tourism policy proposes to develop the tourism industry in state by including new sectors like adventure, caravan tourism, heliport tourism, handicrafts, pilgrimage, MICE, heritage, eco-tourism, and golf. Policy also proposes to encourage the active participation of private sector for strengthening and promoting Jammu and Kashmir as a safe and friendly destination. It also proposes to strengthen the sectoral coordination of the government departments and take up research projects with universities to find out new areas for tourism promotion and also other marketing and publicity issues which can help the government in framing robust tourism policy document.

When we analyze the above SWOT analysis, it appears that strengths and opportunities overcome the weaknesses and threats, and there is every possibility in future that there will be boost in the footfall of tourists to the state and visitors will again get attracted to the natural beauty and rich cultural heritage of the state (Table 2).

6 Eco-tourism

The International Ecotourism Society (TIES), 2015, defines eco-tourism as a “Responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education.” The World Conservation Union IUCN defines eco-tourism as “Environmentally responsible travel to natural areas, in

Table 2 SWOT analysis for tourism in J&K state

<p><i>Strengths</i> Rich cultural and biodiversity of all the three regions of the state are its strength for development of tourism. Its natural beauty is well known throughout the world with kind and hospitable people</p>	<p><i>Weaknesses</i> Some of the main weaknesses for development of tourism industry in state are lack of approved tourism policy and poor development of road infrastructure for good connectivity. Other weaknesses include poor research inputs and lack of capacity building of stakeholders for better services. Lack of long-term perspective planning at local and state level by field functionaries is also contributing in poor development of tourism industry in the state</p>
<p><i>Opportunities</i> State can provide opportunities to cater to the needs of all type of tourists and provide high returns from the investment in developing infrastructure by private players. Opportunities to develop new circuits and explore new destinations</p>	<p><i>Threats</i> Since, Jammu and Kashmir State is at present seriously affected by cross-border militancy and disturbances at border with neighboring country, peace in the state is prerequisite to develop and promote tourism in the state. In such an insecure environment, tourists prefer to shift to other peaceful tourist destinations. This is one of the biggest challenges to the state to create peaceful atmosphere so that tourists feel safe and secure to visit the state</p>

order to enjoy and appreciate nature (and accompanying cultural features, both past and present) that promote conservation, have a low visitor impact and provide for beneficially active socio-economic involvement of local peoples.”(Chauhan 2014). Under the Incredible India policy to promote tourism, Government of India came up with the concept of branding India with subsets of branding states with their unique culture and heritage values. Every state with its diverse culture had to give something different to the tourist. In the past ten years, tourism has shifted from urban to rural areas and from old monuments to wildlife and national parks. Under Incredible India branding, eco-tourism in some of the states like Kerala, Rajasthan, Meghalaya, Nagaland, Mizoram, Ladakh in Jammu & Kashmir and Sikkim has been great success (Kant 2009). In China, Israel, and other African countries, eco-tourism is highly developed helping the countries to promote environmentally and culturally sustainable tourism. China is promoting the concept of ecological cities, villages, and areas of scenic beauty (Zhang 2008). Sustainability and eco-tourism are therefore complimentary to each other because the basic components of eco-tourism demand the implementation of sustainability principles of nature visit, conservation, education, and awareness (Kant 2009).

In India, eco-tourism is based on the Indian concept of handprint with positive impact on environment and not the foot print which is based on the negative impact on environment (Sarabhai 2015). To reduce the impact of commercial tourism on fragile eco-systems of the country and promote eco-tourism in India, Ministry of Tourism Government of India approved eco-tourism policy in the year 1998 which has been adopted by all the states except

J&K state, although Department of Wildlife under its eco-tourism division has submitted eco-tourism policy to the government which is yet to be approved (Chauhan 2014).

Over the past few decades, due to the policy of state government to increase the foot fall of tourists by increasing the inflow of tourists in its traditional tourist destinations of Kashmir Valley, it has sacrificed its natural assets, environment, and ecology which are not going to sustain the tourism industry on a long term on sustainable basis. With the opening up of new areas under Tourism Development Authorities and lack of proper eco-tourism policy, these green verdant eco-fragile areas have become concrete jungles and spoiled the environment of the area. In order to preserve these areas and also use them for tourism, the state government should follow the National eco-tourism policy and its guidelines (Kant 2009).

The eco-tourism in J&K state has several natural assets to offer to the tourists like mountains, hiking/trekking, glaciers, scenic beauty, waterfalls, cultures, heritage, rivers, flora, nature camps, fauna, lakes, caves, Bactrian camel rides, horse rides, traditional knowledge and practices, wetlands and migratory birds, protected areas, zoos and environmental parks, religious tourism in mountains, meadows, valleys, and alpiners (Seth 2017a, b).

Jammu and Kashmir Government in order to promote eco-tourism in state created an eco-tourism wing under the Wildlife Protection Department. Department in the year 2008 prepared Eco-Tourism Development Plan for J&K state by engaging Jungle Lodges and Resorts Limited, Bangalore. This report and its recommendations have not been implemented so far (Jha 2008).

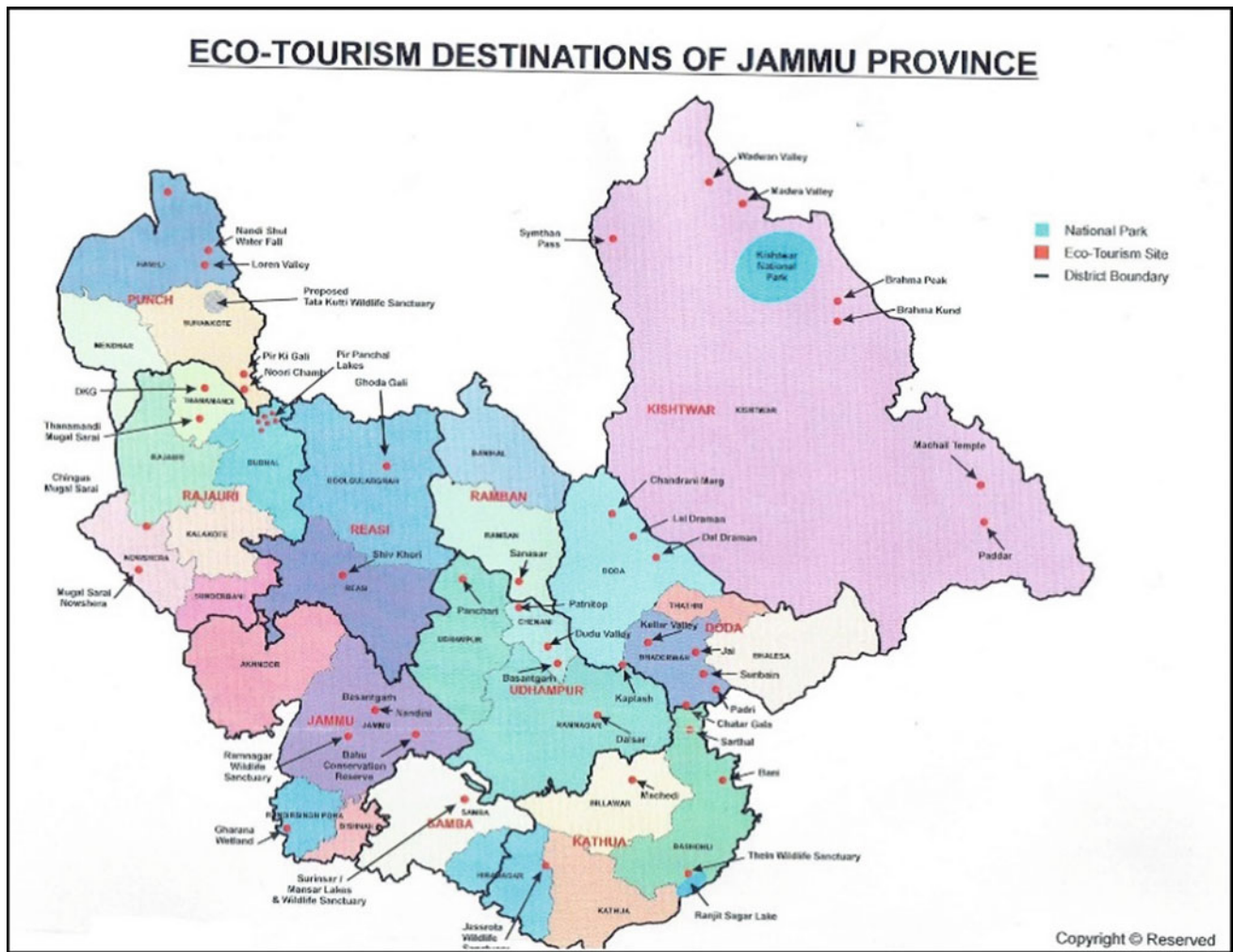


Fig. 2 Map of eco-tourism destinations in Jammu Hills, J&K (Chauhan 2014)

In the year 2014, a study was undertaken to find out the eco-tourism potential in Jammu Hills of the state by WWF-India (J&K) and Indian Institute of Forest Management, Bhopal, India. During this study, we were able to identify more than 100 eco-tourism destinations which can be developed for the potential responsible and ecologically sustainable tourism in the state (Chauhan 2014). The eco-tourism destination map is produced in Fig. 2. During the study, we found that homestays and nature camps are the best tools to promote eco-tourism in the state.

7 Homestays

In J&K state, for the first time in Ladakh, an initiative was taken to promote the concept of eco-tourism through the concept of homestays so as to conserve the local culture and ecology and also promote the economy of the area and local population dependant on these landscape for their

livelihoods through grazing and collection of medicinal plants in the year 2001. This initiative was taken by one of non-governmental organizations like the Snow Leopard Conservancy (SLC), the Himalayan Homestays Program and Women’s Alliance of Ladakh (WAL), travel agencies like Zanskar Trek, the first village-based travel company Hidden North Adventures, and individuals like Helena Norberg-Hodge and Thinlas Chorol (Raina 2017).

In May 2001, The Mountain Institute, LEDeG, and Snow Leopard Conservancy organized a workshop on “Ecosystem opportunities in Rural Ladakh” in the city of Leh in order to increase the awareness and explore opportunities for eco-tourism. In this workshop, Ladakhi villagers, tour operators, and other stakeholders decided to promote tourism as “a traditional village-based homestay, maintain and share a traditional way of life, provide Ladakhi food, be based on eco-friendly concepts and which require a small amount of investment for renovation of building” (Jha 2008).

A visitor survey was conducted in 2001 in Leh town, to assess the interest of tourists and tour operators for the adoption of this new approach of sustainable tourism, and based on the results, it was decided to go ahead with the development of homestays. In 2002, initially with the assistance of UNSECO and other government sources, the Snow Leopard Conservancy and The Mountain Institute started its implementation of the Himalayan Homestays in Ladakh and first ecological area selected for this purpose was Hemis National Park (Fig. 3b) famous for a very elusive and beautiful Himalayan cat the snow leopard (*Uncia uncia*), (Fig. 5b). About 100 families of nomadic Changpa graziers in 15 villages who live in harmony with grazing lands and the snow leopard and other wildlife in the area were adopted (Fig. 4a, b). Main objectives for this alternative eco-friendly

model was to ensure that host communities develop a unique mountain experience, obtain fair return for their service and investment, ensure that homestays contribute to conserving local culture and natural heritage, and create a distinctive, authentic, reliable, tourist accommodation and experience homestay packages for visitors in the world’s highest range. This protected wildlife area is spread over an area of 4400 km² covering three valleys of Rumbak, Markha, and Shang (Fig. 3b). Later on from the year 2003 onwards, the homestays was adopted as a regular scheme of wildlife and tourism departments. The success of the homestays in the Hemis NP attracted 6000 foreign tourists in the year 2006; the number, however, has come down due to disturbed conditions of state. Table 3 indicates number of tourists who visited Hemis NP from 2012 to 2016 (Raina 2017).

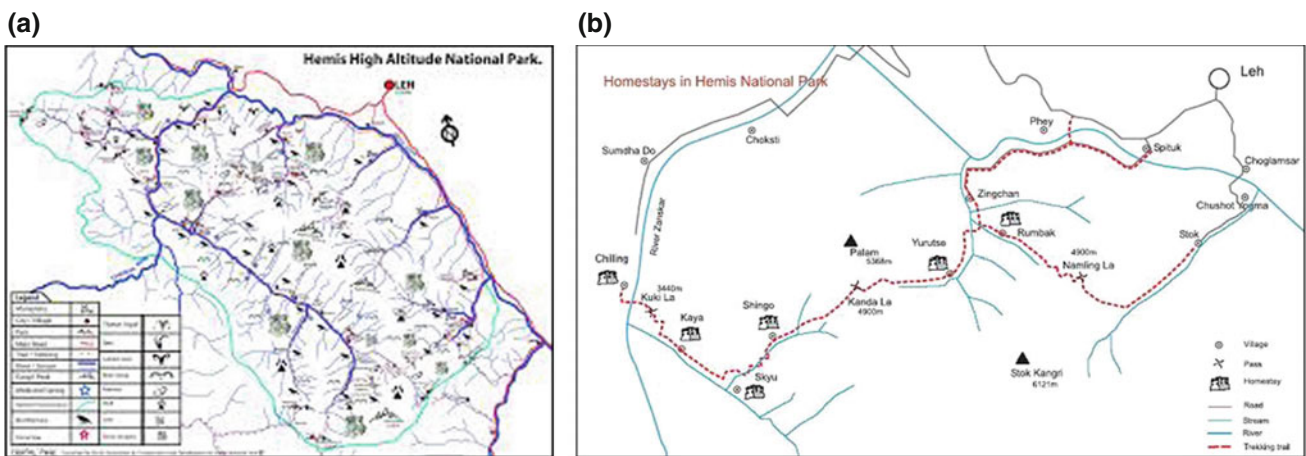


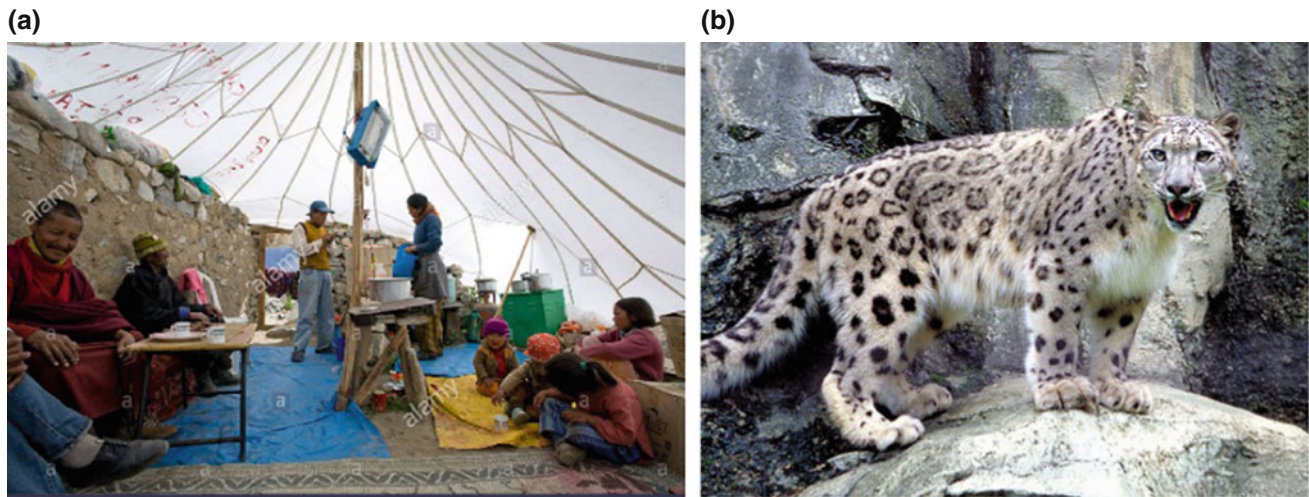
Fig. 3 a Homestays in Hemis PA. b Hemis National Park, Ladakh



Fig. 4 a Homestay trek. b Homestay village

Table 3 Number of tourists visited Hemis National Park from 2012 to 2016

Year	Domestic tourists	Foreign tourists	Total
2012–13	849	2888	3737
2013–14	291	2342	2633
2014–15	1018	2154	3172
2015–16	759	2291	3050
2016–17	1086	2219	3305
Total	4003	11,894	15,897

**Fig. 5** a Parachute Café. b Snow leopard

Now, the homestays concept of Ladakh has become so popular that many tourist love to stay in homestays and guest houses than the big five star hotels to get firsthand experience of Ladakhi culture, cuisine, wildlife, ethnic food and dresses. The success of homestays experiment in Ladakh has earned the Wildlife Department Leh the all India best eco-tourism award by the Ministry of Environment GOI in the year 2016. Now, there are more than fifty-six homestays in twenty-one villages of national park. All the local Changpas are trained in basic hygiene, cooking, and hospitality; they are trained as nature guides and set up parachute eco-cafes, Fig. 5a. Three parachute eco-cafes at Shang Sumdo, Sku Lungdo, and Pentse Sku along the trekking route inside national park have become popular among eco-tourists (Raina 2017).

Based on this experience, the government has started eco-tourism along the Mughal Road at Hirpur and Dera Ki Gali. But all these isolated interventions are without any formal government policy on promotion of eco-tourism which has resulted into concentration of eco-tourism activities only in Ladakh and is not being implemented in other two regions of Kashmir and Jammu which have great potential for taking up eco-tourism (Chugh 2012).

8 Nature Camps

Nature and eco-camps are the best tools to promote eco-tourism and culturally sustainable tourism. In the year 2013, Center for Environment Education and Training jointly with Education Department of the state and Patnitop Development Authority of Tourism Department started nature camps in one of the well-preserved and pristine valleys of Jammu region, the Dudu Valley, famous for its rainbow waterfalls (Fig. 6b), natural springs, high altitude meadows, alpine lakes, and River Suryaputri Tawi. The valley is inhabited by the local Gaddi grazing community and other communities. Locals are dependent on natural resources and grazing lands besides agriculture and animal husbandry. Valley is also famous for ancient Sudh mahadev temple, Mantalai, and Vasuki Nag temple. Sudh mahadev wildlife sanctuary is located in the area with its iconic bird monal pheasant (*Lophophorus impejanus*) and other avian and animal diversity. Area is rich in biodiversity with about 70% area under forests and many species of medicinal plants. In the year 2013, more than 100 schools and 2000 students attended the camp (Fig. 6a). In 2014, 120 schools



Fig. 6 a Nature camp at Dudu Valley. b Rainbow waterfall nature camp

with 2500 students attended the camp and in 2015, and 50 schools with 3500 students attended the camp. In 2016, only one camp was organized due to security reasons in the area. These nature camps have become very popular among schools and colleges (Salathia 2016).

9 Conclusion

During the present study, it was observed that the state government in absence of proper and formal tourism policy is promoting tourism to increase the foot fall and boost the economy. In order to disperse the tourists and provide access to other untapped tourist destinations, state has set up more than thirty Tourism Development Authorities. Most of these areas are located in the eco-fragile verdant hills. Development and infrastructural activities in these areas have spoiled the natural landscape and turned them into concrete jungles and destruction of forests and meadows. It is recommended to have a proper Eco-tourism Policy of the state with proper rules and guidelines and only that to start eco-tourism actions in this area for the carrying capacity of that landscape or wilderness area. Homestays and nature camps are the best options to promote eco-tourism in state. Government needs to develop eco-tourism destinations on the pattern of other states of India and countries where eco-tourism model has been very successful for sustainable development of eco-tourism. China, Israel, and New Zealand are some of the best examples to follow.

Acknowledgements Author is grateful to the departments of tourism, wildlife, INTACH, economics, and statistics for their assistance and providing government reports and information. Guidance and literature provided by the Department of Tourism and Hospitality, Jammu

University, is acknowledged. Grateful thanks to WWF-India J&K state office for taking up eco-tourism study in Jammu Hills. Thanks are also due to google.com and mapsofindia.com for using their maps.

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