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Unexplored eco-tourism potential in Askot Wildlife Sanctuary, Uttarakhand, India

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Citation: Joshi, R., & Puri, K. (2023). Unexplored eco-tourism potential in Askot Wildlife Sanctuary, Uttarakhand, India. *European Journal of Sustainable Development Research*, 7(4), em0239. https://doi.org/10.29333/ejosdr/13849

ARTICLE INFO	ABSTRACT
Received: 27 May 2023	The concept of eco-tourism in protected areas namely national parks, wildlife sanctuaries, biosphere reserves,
Accepted: 25 Oct. 2023	and community reserves and their implications for nature conservation are of global significance. This note indicates about the opportunities of eco-tourism in Askot Wildlife Sanctuary (WLS), Uttarakhand. It's potential has not been harnessed and it remains neglected in terms of management inputs. Eco-tourism in Askot WLS shall contribute to bio-diversity conservation, creation of environmental awareness, and controlling the migration of locals for jobs/livelihood. It can generate employment and income of the local people and in turn will boost the socio-economic development of the area. Need of the hour is to connect with the needs of people and resources available that will provide them with better opportunities of employment.
	Keywords: eco-tourism, Askot Wildlife Sanctuary, Uttarakhand, opportunities, livelihood

INTRODUCTION

To achieve socio-economic and environment sustainability, there needs to be social commitment towards nature based activities (Armitage, 2005). It has been well cited that for eco-tourism development, which is a nature based activity, requires local communities involvement in the planning and decision making procedures. Bello et al. (2016) indicated that community participation in planning tourism is a step towards sustainable tourism and alleviating poverty. Lanier (2014) mentioned that community involvement for ecotourism activity is essential for authentic eco-tourism, which can be materialized. This nature based activity, eco-tourism is flourishing in bio-diversity hotspots and thereby achieving economic growth, environment conservation as well as sociocultural sustainability (Brandt & Buckley, 2018; Weaver, 2002). The International Ecotourism Society has defined ecotourism as "the travel to natural areas that conserves the environment and sustains the wellbeing of local people". It can help in advocating bio-diversity conservation and bringing forward the locals by providing them the economic incentives. But it also depends upon whether they are ecologically sustainable and economical. Without careful planning and management, this activity can also have negative consequence on environment. The concept of eco-tourism in protected areas namely national parks, wildlife sanctuaries, biosphere reserves, and community reserves and their implications for nature conservation are of global significance.

Uttarakhand State is known for its unique bio-diversity present in its protected areas (**Table 1, Table 2, Table 3**, and **Table 4**). Eco-tourism can become one important tool for the development of Uttarakhand State. It can generate employment and income of the local people and in turn will boost the socio-economic development of the area. More prominently, it can prevent the migration of local people from the mountain areas to lowlands in search of employment. The State has presence of rare and diverse species of flora and fauna. It lies in Himalayan bio-geographic zone of India (2B Western Himalaya and 7B Shiwaliks including Garhwal and Kumaon regions) (Uttarakhand Biodiversity Board, 2023). Indian Himalayan region has trans-boundary connection of protected areas, i.e., Indo-Nepal border of Kailash and Kangchenjunga landscapes (Aayog, 2018).

PROTECTED AREAS IN UTTARAKHAND

This note indicates about the opportunities of eco-tourism in Askot Wildlife Sanctuary (WLS), Uttarakhand. Askot WLS is located in District Pithoragarh of Uttarakhand State. Rawal and Dhar (2001) stated that Askot WLS is low profile protected area and its potential have not been harnessed and it remains neglected in terms of management inputs and establishing fruitful links between reserve and inhabitants. Askot WLS has 290.91 km² reserve forest area of Askot and Dharchula range, Pithoragarh Forest Division.

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Table 1. List of national parks

No	Protected area	Area (km²)	Year
1	Corbett National Park*	520.82	1936
2	Nanda Devi National Park	624.60	1982
3	Valley of Flowers National Park	87.50	1982
4	Rajaji National Park	820.42	1983
5	Gangotri National Park	2,390.02	1989
6	Govind National Park	472.08	1990

Note. *Corbett Tiger Reserve consist of Rajaji & Corbett National Park

Tabl	e 2.	List	of	wildlife	sanctuaries
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No	Protected area	Area (km²)	Year
1	Govind Wildlife Sanctuary	485.89	1955
2	Kedarnath Wildlife Sanctuary	975.20	1972
3	Askot Wildlife Sanctuary	599.93	1986
4	Sonanadi Wildlife Sanctuary	301.18	1987
5	Binsar Wildlife Sanctuary	47.07	1988
6	Mussoorie Wildlife Sanctuary	10.82	1993
7	Nandhaur Wildlife Sanctuary	269.95	2012

Table 3. List of conservation reserves

No	Protected area	Area (km ²)	Year
1	JhilmilJheel Conservation Reserve	37.84	2005
2	Aasan Wetland Conservation Reserve	4.44	2005
3	Pawalgarh Conservation Reserve	5.82	2012
4	Nainadevi Himalayan Bird	111.91	2015
	Conservation Reserve	111.91	2015

Table 4. Biosphere reserve in Uttarakhand

No	Protected area	Area (km ²)	Year
1	Nanda Devi Biosphere Reserve	5,860.69	1988

Askot WLS is also known as Musk Deer Park with an area of 600 km² (Ministry of Environment, Forest and Climate Change [MoEFCC], 2021).

Askot WLS has 60.00% floral diversity as endemic to the Himalayan region (Samant et al., 1998). The landscape diversity of Askot WLS was studied by Samant et al. (1998), which indicated 52.00% is covered by forest and 12.00% is pastureland. Pastures are important habitats for wildlife and also form important source of fodder, fuel, timber, etc. supporting livestock of local communities. Anwal, Chaudasi, Rangbhotiya, Rangdarma, Van Ranjees, and Vyasi are the local communities living in Askot WLS area.

Askot WLS is spread between the heights of 600 meters to 7,000 meters and is located mostly in the watershed areas of the river Kali and its tributaries. This WLS is at the junction of the Western and Central Himalayas and covers three biomes: Eurasian High Montane (Alpine and Tibetan) (Biome-5), Sino-Himalayan Subtropical Forests (Biome-8), and Sino-Himalayan Temperate Forests (Biome-7) (Data Zone, 2023).

ECO-SENSITIVE ZONE IN ASKOT

In the year 2021, the Government of India declared ecosensitive zone (ESZ) around Askot WLS. National Environment Policy (2006) defines environmentally sensitive zones as "*areas/zones with identified environmental resources having incomparable values, which require special attention for their*

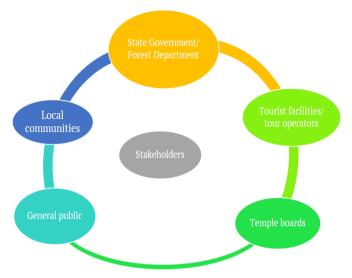


Figure 1. Multi-stakeholder partnership required for ecotourism infrastructure (Source: Authors' own elaboration)

conservation." MOEFCC (2021) declares ESZs to protect the biodiversity of the area outside protected areas, namely national parks, wildlife sanctuaries, biosphere reserves, and community reserves. Eco-tourism is a regulated activity in such ESZs. ESZ in Askot is to an extent of zero to 22 kilometres around the boundary of Askot WLS having area around 454.65 km² (MOEFCC, 2021).

In 2018, the Government of Uttarakhand came up with a scheme dedicated towards the development of homestay tourism, 'DeenDayal Upadhyay Homestay Yojana' to provide self-employment opportunities in rural areas of Uttarakhand (DeenDayal Upadhyaya Homestay, 2023). The main objective of this scheme is to provide clean homestays to tourists (national/international), capital subsidy of 33.00%, or 10 lakh in hilly area. There is also interest subsidy on home loan (https://pauri.nic.in/tourism-department/). Such schemes, which help in supporting hospitality, infrastructure for ecotourism can strengthen the initiative in Uttrakhand with multi-stakeholder partnership required for eco-tourism infrastructure (**Figure 1**).

NATURE TRAILS

Kalabaland, Milam, Naamik, Panchu, Raalam, and Saalang are some of the glaciers, where tourist treks. Besides, Aadi-Kailash, Bajrgang Dhura Pass, Chipla-Kedar, Khalia Top, OM Parvat (Vyas Valley), Panchachuli Base (DarmaValley), Ralam-Sipru Pass, and Sinla Pass are also some of the treks, where very year hundreds of tourists treks. A total of 583 have arrived in Adi-Kailash and OM Parvat, respectively, 1,043 in Panchachuli (Darma valley), 124 in Milam glacier, 48 in Namik glacier, 1,278 in Khalia Top, and 27 in Naginidhuraaea during 2020-2023 (till February 2023). Some important valleys in Askot landscape are Vyas Valley, Chaudas Valley, Darma Valley, Talla Darma Jauljibi, Baram Valley, Gauri-Madkini Valley, and Malla Johar. Vanraji, DARMA Rang Bhotia, Byasi Rang, Cahudasi Rang, Jauhari Bhotia, Jauhari Barpatia, Munsyari, Anwals, Brahmin, and Nagre-OBS are some of the communities residing in the landscape.

 Table 5. Opportunity of products & services of eco-tourism in

 Askot

Opportunity	Examples	
	Flora & fauna	
Environmental view & cultural	Lake	
attraction	Bhotiya Tribe	
	Mountains	
	Temple	
Ponofit of Asket landscope	Hiking	
Benefit of Askot landscape	Trekking	
Accommodation & services facility	Homestays facility	
Equipment & supply	Guides, jeep, & forest guards	
	Research on birds	
Education & training	Capacity building of rural for	
	livelihood opportunities	

Notably, quite a few communities also practice transhumance, staying in alpine areas for about six months of the year along with their cattle.

With respect to important tourism treks in Askot WLS, Sobla to Sumdum, Baram to Kanar-Chipla, Payyapauri to Majhtham-Kanar, Baram to Kaflani-Adichaura, Khela to Khampabagar-Chipla-Bhanar-Khadtoli, Jumma to Chipla, Chirkila to Khampabagar, Himkhola to Gangathin-Sua, Sosa to Rungling-Himkhola, Narayan Aashram to Sirkha-Rungling-Jipti, etc. are few of them, which are natural ecological routes for tourists. According to the report of India Tourism Statistics (2022), 7,005,264 domestic tourists and 41,339 foreigner tourists arrived in Uttarakhand State during the year 2020. However, during the year 2021, 19,434,475 domestic tourists and 8,532 foreigner tourists arrived in the State. It is clear from the datasets that domestic tourist's growth rate has increased to 177.43% during 2020-2021, however foreigner tourist's growth rate has decreased to 79.36% during 2020-2021 (India Tourism Statistics, 2022). For eco-tourism promotion in the Askot, Uttarakhand Tourism Development Master Plan (2007-2022) (2023) has highlighted the services of green shuttle bus, park and ride facility at Jauljibi, eco-tax for conservation aspect at selected village points (Table 5).

Eco-Tourism Festivals

Activities like bird watching as around 300 spp. have been documented from Askot landscape can be promoted as main activity in support of eco-tourism in Askot (Bhattacharya et al., 2015). Further eco-tourism festivals may include activities like flower festivals (region specific), bird watching, trekking, which are related to nature conservation. Ministry of Commerce and Industry has also approved geographical indication tag for ringal crafts, Suupa, Mohta, Dokke, etc. of the State of Uttarakhand, which is a traditional way of livelihood (Anonymous, 2022). Another activity during the Eco-tourism visit in Askot can be on awareness/purchase of the ringal products, which have the potential of replacements for plastic-based products.

CONCLUSIONS

A study conducted in Askot conservation landscape (includes Askot WLS and minor landscape of Nanda Devi Biosphere Reserve), wherein Gori basin villages indicated that agriculture, livestock rearing, bamboo handicrafts and employment in service are primary source of income (Negi, 2012). Maikhuri et al. (2003) highlighted that eco-tourism development in Nanda Devi Biosphere reserve requires a set of institutional, environmental and technology related inputs, which are coherently knit to benefit from the natural conditions. So, eco-tourism in Askot can be harnessed with strong management inputs for improvement of the basic factors of sustainable development. Promotional activities like webinars, online pledges, environment quiz may be carried out to promote eco-tourism in Askot WLS. Social media platform can be used to showcase the tourism potential and raise awareness on the local community based tourism. To maintain the spirit of "vocal for local", rural eco-tourism can also contribute significantly to the mission of Aatma Nirbhar Bharat. It will also help in controlling the migration of locals for jobs/livelihood.

Author contributions: Both authors have been involved in all stages of this study while preparing the final version. They all agree with the results and conclusions.

Funding: No funding source is reported for this study.

Declaration of interest: No conflict of interest is declared by the authors.

Ethical statement: The authors stated that the study did not require ethics committee approval since it is based on existing literature.

Data sharing statement: Data supporting the findings and conclusions are available upon request from corresponding author.

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