

Sustainable Homestay Tourism for Enhancing Rural Livelihood in the Uttarakhand Himalaya: A Study of the Tons River Basin

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Abstract. The Himalayan region provides a suitable basis for practicing various types of tourism due to its unique and spectacular landscape, varied climate, forest diversity, and rich cultural heritage. However, the people of the Himalayan region face poverty, and the area lacks adequate infrastructure, particularly in terms of accommodation and transportation. Sustainable homestay tourism can enhance rural livelihoods and promote various forms of tourism in the Himalaya. This study examines the role of sustainable homestay tourism in enhancing rural livelihood in the Uttarakhand Himalaya. Data were collected from the secondary sources and through case studies of five villages located along the Tons River valley. A report of homestay tourism of the State Government was considered for gathering data. For the case study, the heads of two households from each village were interviewed, totalling 10 interviewees. Each interviewee operates a homestay for tourists, with the number of available beds ranging from a minimum of four to a maximum of ten. However, the quality of the homestays is not optimal. This study suggests that more farmers should engage in homestay tourism, offering suitable accommodation, local food and beverages, and cultural performances that reflect the heritage of the region. Sustainable homestay tourism can enhance rural livelihoods while strengthening the region's cultural identity.

Keywords: Homestay tourism; Rural livelihood; Traditional agriculture; Tons River basin; Himalaya.

1 Introduction

Homestay tourism is a type of tourism that offers affordable and comfortable accommodation to tourists or pilgrims in major travel destinations. It is managed by individuals or communities, and it boosts the income and economy of rural populations [1]. It also enables local communities to preserve their environment and cultural heritage [2], and is a key driver in reducing poverty and enhancing rural livelihoods, as it integrates various tourism activities such as trekking, cultural tourism, agro-tourism, health tourism, and eco-tourism [3]. Moreover, it provides a platform for selling local agricultural and dairy products [4]. Tourists gain insight into indigenous knowledge, engage with traditional cultures, and enjoy a

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comfortable, homely stay. On the flip side, homestay tourism generates income and employment for the hosts, strengthens the rural economy, improving livelihoods, and raises awareness [5]. It has a greater role in preserving and promoting local culture and customs. Typically, meals and drinks are included in the stay, which may range from daily to weekly or monthly durations [6]. This form of tourism is highly beneficial for maintaining local cultural heritage, increasing employment opportunities, and generating income [7].

Homestay tourism has far-reaching multiplier effects on the economy, development, employment, lifestyle, and population dynamics [4,8–11]. It offers economic, social, and cultural benefits, significantly enhancing the quality of life for host communities. It also has the potential to empower communities through development. With its low capital requirements, it is accessible to economically disadvantaged groups. The cultural aspect is central to this form of tourism, where the interaction between host and guest forms the core of the experience. Additionally, education, entertainment, and enrichment activities further enhance its value [12].

Homestay tourism was first introduced in Malaysia in 1998, with the goal of offering local hospitality to tourists while improving the income and livelihoods of hosts [13]. Other Southeast Asian countries, including Vietnam, Thailand, and Indonesia, have also successfully promoted homestay tourism [14]. In the Mekong region, homestay tourism has played a significant role in reducing rural poverty [15]. In India, homestay tourism is taking shape and will be popular in due course of time.

Tourism accounts for approximately 50% of the total Gross State Domestic Product (GSDP) in the Uttarakhand Himalaya [16,17]. However, hotel infrastructure in smaller and remote areas remains underdeveloped, leaving rural communities without the benefits of tourism and keeping them impoverished [18,19]. This also limits tourists, both domestic and international, from exploring the beauty of these remote locations. These challenges prompted the state government to introduce the 'Deen Dayal Upadhyaya Griha Awaas Home Stay (DDUGAHS) Regulation 2018.' The regulation's primary aim is to provide affordable homestay accommodations for domestic and foreign tourists through the involvement of local communities or individuals. Additionally, it seeks to improve accommodation facilities, create employment opportunities, and offer supplementary income sources to communities or individuals at the village level.

Uttarakhand is home to a diverse range of rural communities, each with its own distinct culture. The traditional dwellings and huts of these communities in the highlands and alpine pastures offer a unique experience for tourists and pilgrims seeking homestay accommodations. The region's rich cultural and natural diversity further enhances its appeal for homestay tourism. The concept, promoted by the state government, is based on walking and slow tourism, allowing visitors to immerse themselves in the various cultures, lifestyles, and local cuisines of remote villages. Homestay tourism provides a more comfortable, exciting, engaging, and educational experience compared to traditional hotel stays. It offers an escape from crowded hotels, promoting peace and tranquility. Additionally, it is more affordable and cost-effective than staying in commercial hotels. This study explores sustainable homestay tourism in the region, analysing its potential for generating income, creating employment, and enhancing livelihoods in rural areas with special reference to the Tons River basin. Additionally, the study proposes a model for sustainable homestay tourism and examines its impact on local culture, the economy, and rural livelihoods.

1.1 Study Area

The Tons River is a significant tributary of the Yamuna River, part of the Ganges system. Originating from the Bandar Punch Mountain at 6,385 meters in Uttarkashi District, Garhwal Himalaya, India, it flows into the Yamuna River near Kalsi service centre. The river stretches

148 kilometers and has a catchment area of 5,146 square kilometers. The Tons River is formed at Netwad, Uttarkashi District, where its two main tributaries, the Rupin and Supin, converge. The region also hosts the Netwad-Mori hydropower project. Another notable tributary is the Pabbar River. The Tons River primarily drains the Uttarkashi District, forming a natural border with Himachal Pradesh (Fig. 1). The Tons River basin is characterized by its fragile ecosystems and rugged landscapes, frequently experiencing landslides, mass movements, flash floods, and debris flows. As a glacial-fed river, the Tons River maintains high water volume and velocity year-round. The basin is culturally rich, with three distinct sub-cultural realms: Jaunsar-Babar, Rawain, and Garhwal. It features a diverse landscape and a range of climatic conditions, from subtropical humid to sub-temperate, temperate, cold, and frigid cold. These villages, ranging in altitude from 1,300 to 2,750 meters, exhibit rich agrobiodiversity. However, infrastructural facilities are severely lacking. While some villages are situated along roadsides, road conditions deteriorate significantly during the monsoon and post-monsoon periods. Educational institutions are sparse, and market facilities are inadequate, compounding the challenges faced by these rural communities.

Table 1. Geographical information of the selected case study villages.

Village	Location	Altitude (m)	Accessibility from road
Sweel	Kamal valley	1300	1.5 km
Gaichwan	Tons valley	1500	On the road
Sankari	Supin valley	1940	On the road*
Dharkot	Supin valley	2530	On the road*
Osla	Supin valley	2750	8 km

*Road condition is worst. During rainy and post rainy seasons, road remains blocked.

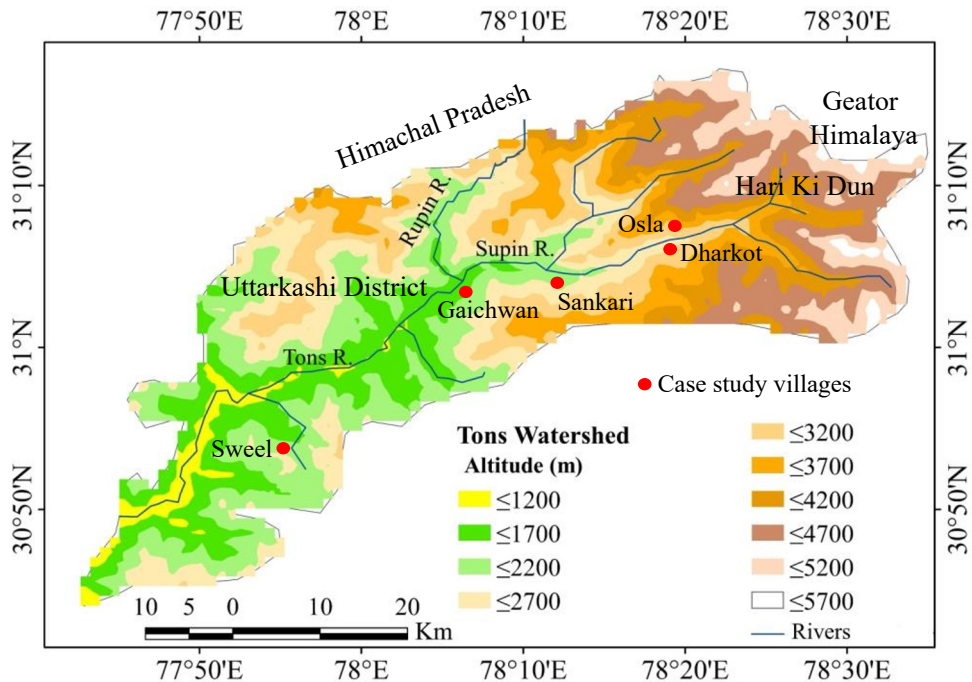


Fig. 1. The Tons River basin showing case study villages.

On the other hand, the Tons River basin boasts spectacular natural landscapes, forested areas, and rich cultural heritage. Three types of tourism are practiced here: cultural tourism, trekking, and river rafting. However, due to its remote location, infrastructure facilities such as transportation, accommodation, and institutions are lacking. Meanwhile, there is vast potential for developing homestay tourism.

2 Data Acquisition and Survey Methods

This study is based on data collected from both secondary and primary sources. District-level data on homestay facilities and their annual earnings in urban and rural areas were obtained from the Uttarakhand Tourism Development Board in Dehradun. For the collection of primary data, a case study was conducted in five villages located along the Tons River and adjacent to the roadside, all of which practice homestay tourism. Interviews were conducted with the heads of 10 households from the five villages, with two households interviewed from each village. In total, 50 interviews were conducted.

The interview questions focused on various aspects such as the total number of rooms and beds available in the homestays, the availability of internet facilities, the types of food and beverages served to tourists, whether local folklore performances were offered, and the availability of proper toilet and bathroom facilities. Additional questions included the number of tourists visiting annually, the peak tourist season, and the annual earnings from homestay tourism. The collected data were then analyzed and interpreted.

3 Results

3.1 District-wise Homestay in Urban Areas

There are 13 districts in the Uttarakhand Himalaya, seven of which are in the Garhwal region and six in the Kumaon region. Table 2 shows the district-wise registered units and income from homestay tourism in urban areas for three different years: 2017, 2018, and 2019. The Pauri and Pithoragarh districts had no homestay units in any of these years.

Table 2. District-wise registered units and income from homestay tourism in urban areas.

District	2017		2018		2019	
	Registered units	Income (USD)*	Registered units	Income (USD)	Registered units	Income (USD)
Almora	3	216	3	216	3	216
Bageshwar	Nil	0	Nil	0	1	72
Chamoli	Nil	0	Nil	0	15	1084
Champawat	1	72	2	144	2	144
Dehradun	49	3542	64	4626	182	13156
Haridwar	4	289	4	289	12	867
Nainital	21	1518	25	1807	39	2819
Pauri	Nil	0	Nil	0	Nil	0
Pithoragarh	Nil	0	Nil	0	Nil	0
Rudraprayag	Nil	0	Nil	0	3	216
Tehri	Nil	0	2	144	2	144
USN	2	144	2	144	2	144
Uttarkashi	Nil	0	Nil	0	6	433
Total	80	5783	102	7373	267	19301

Source: UTDB 2019; *1 USD is equal to INR 83 (Sept 2024).

Four districts - Bageshwar, Chamoli, Rudraprayag, and Uttarkashi - started homestay tourism in 2019. In six districts - Almora, Champawat, Dehradun, Haridwar, Nainital, and US Nagar - homestay tourism began in 2017. By 2019, the total number of registered homestay units had increased to 267, a rise from the previous years. Likewise, income from homestay tourism reached above 19 thousand USD, though it varied from district to district. The highest number of units was in the Dehradun district, while Bageshwar had the lowest. Income from homestay tourism also varied across all districts.

3.2 District-wise Homestay in Rural Areas

In the rural areas of the Uttarakhand Himalaya, homestay tourism is practiced in all districts except the US Nagar district, and it has been in operation in all other districts since 2017 (as shown in Table 3). By 2019, the total number of homestay units in the Uttarakhand Himalaya had reached 755, with the highest concentration in the Nainital district (141 units) and the lowest in the Haridwar district. The total income earned from rural homestay tourism across all districts was approximately 45 thousand USD, which was significantly higher than that from urban homestay tourism. The trend of homestay tourism showed a consistent increase over the three consecutive years.

Table 3. District-wise registered units and income from homestay tourism in rural areas.

District	2017		2018		2019	
	Registered units	Income (USD)	Registered units	Income (USD)	Registered units	Income (USD)
Almora	62	3734	66	3975	100	6024
Bageshwar	14	843	14	843	28	1686
Chamoli	2	120	2	120	111	6686
Champawat	1	60	1	60	3	180
Dehradun	13	783	15	903	29	1746
Haridwar	1	60	1	60	1	60
Nainital	19	1144	27	1626	110	6626
Pauri	2	120	4	240	21	1265
Pithoragarh	6	361	6	361	141	8493
Rudraprayag	1	60	1	60	54	3253
Tehri	65	3915	77	4638	103	6204
USN	Nil	0	Nil	0	Nil	0
Uttarkashi	19	1144	19	1144	54	3253
Total	205	12349	233	14036	755	45481

Source: UTDB 2019; *1 USD is equal to INR 83 (Sept 2024).

3.3 Case Study

A case study of five villages in the Tons River basin was conducted, and interviews were held with 10 heads of households. Figure 2 illustrates four of the case study villages situated along the Tons River basin. These villages are located along the major trekking routes of Kedar Kantha and Hari Ki Doon, where locals provide homestay services, as well as food and beverages to tourists. The climate is conducive, and the houses, primarily built from deodar wood, are beautiful. However, the homestays lack sufficient facilities due to their remote locations, particularly those at higher altitudes where transportation infrastructure is minimal.

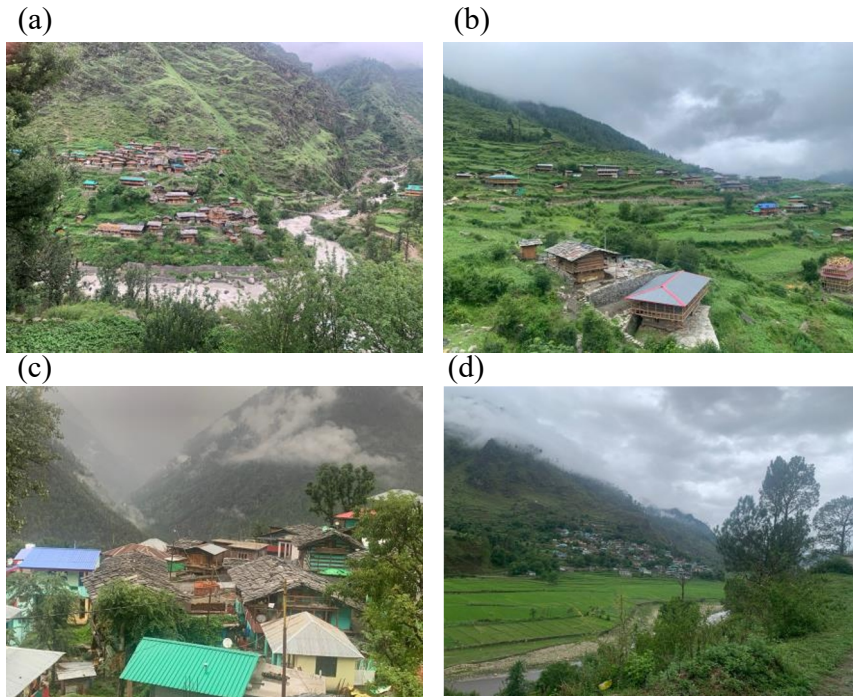


Fig. 2. Rural settlements from upper Supin basin to lower basin surrounded by agricultural fields (a) Gangad village (b) Dharkot village (c) Gaichwan village (d) Sweel village. Photo by: Vishwambhar Prasad Sati.

3.4 Homestay Tourism as a Livelihood Option

In the Tons River Basin, homestay tourism offers significant livelihood opportunities alongside agriculture and horticulture. The region is rich in cultural, natural, and adventure tourism. Cultural tourism thrives around key sites like Lakhamandal and Hanol, known for their ancient Shiva temples and connections to the epic tales of the Pandavas and Kauravas. Highland communities revere the Kauravas, while river valley residents honour the Pandavas, with notable sites such as the temple of Karna in Dewera attracting pilgrims. The area also hosts numerous fairs and festivals, drawing visitors year-round. Natural tourism flourishes due to the region's scenic beauty and pleasant summer climate, making it a popular destination. Adventure tourism is highlighted by renowned trekking routes like Hari Ki Dun and Kedar Kantha, which attract trekkers, particularly in the summer.

The accommodation and transportation facilities in the Tons River Basin are inadequate, but homestay tourism holds significant potential for enhancing livelihoods, especially in remote areas. A survey of 10 households revealed that while homestay facilities in lower altitudes are relatively well-developed, with sufficient rooms and amenities, the situation in higher altitudes is less favourable. There are fewer homestays in these regions, and the available facilities and rates are not as competitive. Across the 10 surveyed households, there were 73 homestays, with a total of 114 tourist visits in 2023. The average charge was \$10.24 per person per day, generating a total income of \$1,293.90 for the year (Table 4). Due to the poor quality of homestay facilities, many tourists resort to camping with tents in available spaces during their treks.

Table 4. Homestay facilities (n=10 households), 2024.

Village	Homestay (rooms)	Number of tourists (yearly)	Income (USD*/tourist/day)	Total income (USD) yearly
Sweel	2	13	14.6	189.8
Gaichwan	22	26	12.2	317.2
Sankari	34	54	12.2	658.8
Dharkot	7	10	6.1	61
Osla	8	11	6.1	67.1
Total	73	114	10.24	1293.9

*1 USD = 83 INR (Sept 2024). Source: Household-level survey

Figure 3 highlights two homestays located in Gangad and Gaichwan villages. These wooden, intricately carved homes are designed to withstand the region's snowy winters, offering warmth and comfort. Despite similarities in room sizes and architectural styles, the quality of amenities and charges for the homestays differ between mainstream and remote areas. Both homestays are set amidst agricultural fields, where seasonal vegetables, food grains, and fruits are organically grown. The homestay owners provide tourists with fresh produce from their farms. Figure (a) shows Fafara, a seasonal vegetable cultivated near the homestay, while Figure (b) depicts apple trees surrounding the homestay.

(a)



(b)



Fig. 3. Rural homestays (a) Gangad village (b) Gaichwan village. Photo: By Vishwambhar Prasad Sati.

4 Discussion and Conclusions

In this study, we discussed homestay tourism in the Uttarakhand Himalaya in general, with a particular focus on the Tons River basin. The findings revealed that homestay tourism, which started relatively recently in the Uttarakhand Himalaya, has been steadily growing. In urban areas, homestay units are primarily available in districts located in the plains or nearby, such as Dehradun, Nainital, and Haridwar. In Chamoli, a district known for its highland pilgrimages and significant pilgrim flow, people have begun offering homestays. In remote, rural-based districts like Pithoragarh, homestay facilities in urban areas are negligible. In contrast, rural homestay tourism is approximately three times higher than in urban areas, indicating that the rural regions of the Himalaya are particularly well-suited for this type of tourism. Districts like Pithoragarh, Chamoli, Nainital, Tehri, and Almora have the highest number of homestay units. The data available is limited to 2019, and the number of units may have increased by 2024. The Uttarkashi district had fewer homestay units, and the income generated from homestay tourism varied significantly between districts.

The second part of this study focuses on a case study of five villages in the Tons River basin, located in the Uttarkashi district. All the villages in the case study practice homestay tourism, and we selected two homestay units from each village for analysis. We observed that the number of homestay units varies between the lower and upper Tons valleys, with more units in the lower valley. Homestay tourism is making impressive progress throughout the Tons River valley.

The environmental quality, climatic conditions, and rural landscape are highly suitable and appealing to tourists and trekkers, who prefer staying in rural homestays. Additionally, the traditional, delicious food and beverages, including millet-based items, as well as the availability of fruits and fresh vegetables, attract more tourists to these rural homestays. The income from homestay tourism also varies within the Tons River valley. Homestays located in the lower valley, where facilities are commendable, charge higher prices compared to those in the upper valley, where facilities are more limited.

On the other hand, rural homestay units in the Tons River valley have limited modern facilities. Frequent electricity cuts are common, and as an alternative, only one electric bulb is typically available for each room, leaving other rooms in darkness most of the time. Internet facilities are virtually non-existent in the valley, especially in the upper basin, which is completely cut off from communication, contributing to the region's underdevelopment. Other essential amenities, such as toilets and bathrooms, are also inadequate. In many homestay units, the conditions are poor, with water often unavailable. These basic facilities are crucial for the development of homestay tourism in the region.

Based on the study of homestay tourism, it can be concluded that while the Tons River basin offers abundant opportunities for sustainable homestay tourism—with its spectacular landscapes, pleasant climate, numerous trekking routes, natural and cultural attractions, and the availability of traditional food, beverages, fresh fruits, and vegetables—the quality of the homestay units is not yet up to standard. Therefore, it is recommended that homestay units be equipped with adequate facilities, including reliable internet, proper bathrooms and toilets, and consistent water supply. Additionally, incorporating local folklore performances, such as traditional dances and songs, as cultural programs will enhance the homestay experience and help popularize local folk culture. Proper training should be provided to homestay owners to ensure effective management of their tourism services. The role of the State Tourism Department is crucial in promoting homestay tourism in the Uttarakhand Himalaya and the Tons River valley.

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