

Integrating Indian Knowledge Systems with Homestay Tourism to Achieve Sustainable Development Goals for Hill Communities in Uttarakhand

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Abstract

Purpose: This study evaluates the role of homestays in advancing Sustainable Development Goals (SDGs) while integrating principles from Indian Knowledge Systems (IKS) to highlight sustainable homestay tourism as a driver of economic development within the hill communities of Uttarakhand.

Design/Methodology/Approach: A comprehensive primary survey employing fieldwork methodology was conducted to understand the relationship between various factors shaping the economic trajectory of rural regions viewed through the perspectives of homestay entrepreneurs who incorporate traditional knowledge and practices rooted in IKS.

Findings: The study reveals the economic impacts of homestays by highlighting their role in poverty alleviation, livelihood diversification and local economic empowerment. Drawing on the principles of Vasudhaiva Kutumbakam (The World is One Family) and Atithi Devo Bhava (Guest is God), homestays are nurturing social sustainability through rural infrastructure development, utilization of indigenous products and enhancement of social cohesion. Environmental sustainability emerges as a critical facet with findings revealing further emphasis on waste management practices and sustainable technologies to resonate with traditional Indian values of living in harmony with nature.

Research limitations/implications: The scope of the study is related to Uttarakhand and future research should explore similar dynamics in other regions to validate and generalize the findings.

Practical/Research Implications: Supporting homestay entrepreneurs and investing in rural infrastructure can significantly enhance economic opportunities, social cohesion, and environmental sustainability aligned with the holistic approaches of Indian Knowledge Systems.

Originality/Value: This study offers unique insights into the economic, social and environmental impacts of homestays in hill areas of the Himalayan region.

Keywords: Sustainable Development Goals (SDGs), Economic Growth, Homestays, Social Empowerment, Environmental Sustainability, Indian Knowledge Systems (IKS).

1. Introduction

Tourism is crucial for making progress towards accomplishing Sustainable Development Goals. The importance of tourism was officialized during the announcement of the 2017 International Year of Sustainable Tourism for Development (United Nations, 2018). Tourism is realized as a route for sustainable economic expansion for developing countries (Scheyvens and Laeis, 2019) because tourism can contribute to poverty reduction and sustainable economic growth (Saarinen and Rogerson, 2014). In the framework of the SDGs, SDG 1 aims to end poverty in all types of appearances by the year 2030. A decent working environment and job opportunities are important to ease poverty and encourage sustainable livelihood development through tourism (Bramwell et al., 2017). The most used definition of poverty relates to the level of income. In this regard, tourism can contribute by promoting economic growth via job creation and opportunities to establish businesses at local levels. The requirement of low-skilled and local occupations is more accessible to the deprived and vulnerable offered by the tourism sector (World Tourism Organization, 2023). With initiatives



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like the ST-EP which stands for Sustainable Tourism-Eliminating Poverty program developed by the World Tourism Organisation (WTO), sustainable tourism can be a fundamental tool in reducing poverty in rural regions (WTO, 2002). "Sustained, inclusive and sustainable economic growth" is the main objective of SDG 8, which also places a strong emphasis on "full and productive employment and decent work for all." (UN, 2019).

Homestay tourism is one of the many factors that contribute to global economic growth and is perceived as an effective sector for achieving economic progress in developing countries (World Tourism Organization, 2023). Homestay is a sort of accommodation enterprise that promotes the community-based tourism (CBT) idea, which emphasizes community involvement in all stages of the process from idea generation to planning, execution, management, monitoring, assessment and benefit sharing (Schott and Nhem, 2018). The homestay is a community-based enterprise (CBE) that can lead to improvements in local infrastructure including healthcare, transportation and communication systems thus economically benefitting the community (Manyara and Jones, 2007). CBT through homestay is seen as promoting local participation, empowerment and decision-making processes that align with the objectives of SDG8 (Duffy, 2002). CBT is often regarded as a potential contributor to Sustainable Development Goals particularly SDG1 (No Poverty) with SDG8 (Decent Work and Economic Growth) as it has been posited that CBT initiatives can facilitate job creation and enhance localized economic connections to mitigate economic leakages (Lopez-Guzman et al., 2011; Lapeyre, 2010; Manyara and Jones, 2007). Community-based tourism (CBT) holds promising potential for enhancing the socioeconomic landscape of rural areas offering numerous benefits to the local community. One of the foremost advantages lies in its economic contributions which play a key part in fostering rural economic development and combating poverty (Goh, 2015). Scholars such as Salazar (2012) have extensively documented how CBT initiatives generate economic opportunities for residents by stimulating tourism-related enterprises such as homestays, local handicrafts and culinary ventures nurturing entrepreneurship and job creation. Community-based tourism (CBT) including homestay initiatives, can be effectively linked with the Vedic period practices as described in the early mandalas of the Rigveda. In the Vedic tradition the term "Sabha" was used for an assembly with various functions related to community governance and justice implying that community governance involved active participation and delegation of roles (Bhatnagar, 1932). The historical practices of communal decision-making, justice and economic benefit-sharing in the Vedic period offer a valuable framework for contemporary homestay tourism practices that prioritize community involvement and local empowerment. This linkage provides a historical foundation for understanding how contemporary community-based tourism aligns with ancient Indian Knowledge Systems.

The study addresses a critical gap in the homestay tourism economics literature by investigating the role of homestays in supporting sustainable livelihood generation and aligning with Sustainable Development Goals (SDGs) while integrating principles from Indian Knowledge Systems (IKS). While previous research has emphasized the economic contributions of homestays to rural areas, there is limited understanding of their impact on sustainable livelihoods with SDGs incorporating IKS. The study aims to explore how homestays contribute to economic development, poverty alleviation and the promotion of decent work while adopting IKS and aligning with SDG1 and SDG8. The study explores the economic, social and environmental components of homestays to gain insight into their broader implications for sustainable development and community resilience. The study incorporates traditional Indian practices and philosophies that advocate for self-sufficiency and local governance as seen in the Arthashastra and Sabhasystems (Bhatnagar, 1932) which align with the principles of community-based tourism. The integration of IKS into this investigation highlights the economic benefits with the social and environmental impacts drawing on ancient Indian principles such as Vasudhaiva Kutumbakam (world is one family) and Atithi Devo Bhava (guest is God) which emphasize hospitality, community welfare and harmonious coexistence with nature (Warrier,1953). These historical frameworks underscore the importance of community participation, equitable resource management and sustainable economic practices, which are critical for achieving the SDGs.

The study incorporates the following objectives:

1. To analyze how homestay enterprises contribute to economic development, poverty alleviation, and the promotion of decent work, aligning with SDG1 (No Poverty) and SDG8 (Decent Work & Economic Growth).
2. To examine the economic, social, and environmental dimensions of homestays to understand their broader implications for sustainable community development.
3. To integrate principles of Indian Knowledge Systems (IKS), including indigenous governance models (as reflected in the Arthashastra and Sabha systems), and explore their relevance to community-based tourism.

Sustainable Development Goal	Selected Targets related to community-based tourism	Sustainable livelihood generation through Homestays
Goal 1: No Poverty	1.1 a. Mobilize resources to implement policies to end poverty b. Create pro-poor and gender-sensitive policy frameworks 1.2 a. Reduce poverty by at least 50% b. Business development 1.5 Crisis management	Tourism value chains are created by homestays with other businesses related to tourism. Homestay guidelines and policies are formulated to reduce income and gender inequalities. Homestays support entrepreneurship development. Homestays promote the skill development of communities. Reduction in migration due to income incentives of homestays.
Goal 8: Decent Work and Economic Growth	8.4 Improve resource efficiency in consumption and production 8.5 Full employment and decent work with equal pay 8.9 Promote beneficial and sustainable tourism	Homestays adopt waste management practices with the use of renewable energy. Homestays are based on the concept of local community participation. Homestays create opportunities for employment of local community members and promote local products.

Table 1.

Alignment between selected Sustainable Development Goals (SDGs) with associated targets and the potential for sustainable livelihood generation through homestays incorporating IKS

Source: Author's computation (SDGs and Targets based on World Tourism Organization, 2023).

2. Review of literature

2.1. Community-based tourism through homestays

Murphy (1985) first introduced the concept of community-based tourism (CBT), examining how tourism is managed by local communities in developing nations. Community-based tourism (CBT) holds promising potential for enhancing the socioeconomic landscape of rural areas offering numerous benefits to the local community. One of the foremost advantages lies in its economic contributions, which play a pivotal role in fostering rural economic development and combating poverty (Goh, 2015). Scholars such as Salazar (2012) have extensively documented how CBT initiatives generate economic opportunities that trickle down to residents by stimulating tourism-related enterprises such as homestays, local handicrafts and culinary ventures to motivate entrepreneurship and job creation (Kayat, 2010). Goodwin and Santilli (2009) recognised that homestays fulfill a practical need for travelers seeking lodging within CBT destinations, emphasizing their integral role in the tourism experience. They epitomize an immersive and authentic experience for tourists providing more than just accommodation by offering a glimpse into local life through activities but also as a vital component in fostering cultural exchange and supporting local economies. Homestays are increasingly recognized for their potential to confer advantages upon specific owners with the broader community to amplify access to economic opportunities (Basak et al.,2021). The operation of homestays not only generates additional family income but also holds the potential to enhance broader livelihood prospects including access to crucial services such as healthcare and education (Shukor et al., 2014). Cash inflows derived from sources like tourism expenditures, play a crucial role in strengthening household food security and overall economic resilience (Ashley, 2000). There remains a substantial knowledge gap concerning the comprehensive effects of homestays on the sustainable

source of revenue of homestay entrepreneurs and the host communities despite the recognized significance of homestays within the CBT framework and their implicit role in fostering rural sustainable development (Sen and Walter, 2020).

2.2 Homestays supporting sustainable livelihood generation

Sustainable livelihood involves the skills, resources and activities necessary to support a source of sustenance (Chambers and Conway, 1992). Sustainability in livelihoods entails the ability to endure adversities and disruptions while augmenting its capacities and resources without compromising the integrity of natural resources. The principle of sustainable tourism underlines the imperative of judicious use of environmental resources to support tourist development while concurrently upholding ecological integrity and safeguarding natural heritage and biodiversity (Guide, 2005). By fostering long-term economic viability and equitable distribution of benefits among stakeholders, sustainable tourism endeavors to create a balance between economic progress and environmental conservation. Consequently, Homestay tourism has emerged as a critical strategy within the sustainable tourism framework as it offers a multifaceted approach to achieving lasting environmental, socio-cultural and economic progress (Okazaki, 2008). This entails not only utilizing resources responsibly but also ensuring the preservation of indigenous cultural practices and traditions within host communities (Guide, 2005). By integrating tourists into local communities and empowering residents to participate in tourism activities, homestay tourism endeavors to minimize negative environmental impacts while maximizing socio-economic benefits (Kunjuraman and Hussin, 2017). This holistic approach boosts the tourism practice and strengthens community resilience and fosters sustainable development. Considering a sustainable economic perspective, homestay is observed to improve economic opportunities for communities (Lama, 2013). Pasanchay and Schott (2021) highlighted the importance of adopting sustainable practices in homestay operations to maximize economic benefits while fostering community development and well-being. The concept of sustainable livelihood generation through homestays yields benefits not only for individual homestay entrepreneurs but also for the economic growth of the locals living around it (Acharya and Halpenny, 2013). Despite the essential role that homestays play in sustainable livelihood generation as highlighted in previous studies (Janjua et al., 2021), there persists a significant dearth of comprehensive understanding regarding the economic advantages of homestays by integrating Indian Knowledge Systems (IKS) in enhancing the livelihood opportunities of communities.

3. Methodology

3.1 Overview of the Geographic Region

The geographical region under consideration pertains to Tehri Garhwal district, situated amidst the Himalayan expanse of Uttarakhand, India. Encompassing a latitude ranging from approximately 30° 03' N to 30° 52' N and a longitude spanning from around 77° 56' E to 79° 02' E, the district claims an expansive geographical expanse of 2021.22 square kilometers. Tehri Garhwal district is distinguished by its location extending from the foothills near Rishikesh in the south to the majestic snow-capped peaks of Jonli and the Gangotri in the north. The Bhagirathi River navigates the landscape seemingly bifurcating the district into two distinct regions while other prominent water bodies such as the Bhilangna, Alaknanda, Ganga and Yamuna Rivers demarcate its eastern and western boundaries. Bounded by Uttarkashi district to the north, the district of Pauri Garhwal to the south, Rudraprayag to the east and Dehradun to the west, Tehri Garhwal district occupies a crucial position within the Uttarakhand state's geographical fabric. Echoes of ancient reverence resonate through settings such as Muni-ki-Reti and Tapovan where ancient sages undertook rigorous Tapsaya. The rough topography of Tehri Garhwal has facilitated the preservation of its rich cultural heritage which remains virtually untouched by the passage of time (District Profile Tehri Garhwal, 2024). Table 2 presents a breakdown of various tourism regions within the Tehri Garhwal district along with the attractions they offer. Each region is described in detail highlighting its tourist attractions and the opportunities for sustainable tourism development and community engagement through homestays.

		Integrating Indian Knowledge Systems with Homestay Tourism to Achieve Sustainable 194
Tourism regions	Attraction of the regions	
1. Dhanolti Range	The Dhanolti Range settled in the western part of Tehri Garhwal Himalayas presents a captivating blend of dense forests with hills. Homestays in this region provide guests with an authentic experience of eco -tourism and adventure activities. The presence of Surkanda Devi Temple adds to the cultural appeal of Dhanolti attracting pilgrims and history enthusiasts. Also, the availability of trekking trails and camping sites promotes sustainable tourism practices and the economic growth of communities in the region.	
2. Kanatal Belt	Adjacent to the Dhanolti Range lies the scenic Kanatal Belt, renowned for its serene ambiance. Kanatal provides ample opportunities for eco-tourism and nature-based activities. Moreover, the presence of heritage homestays allows visitors to plunge themselves into the authentic culture and lifestyle through interactions with villagers in agricultural activities contributing to sustainable development efforts.	
3. Tehri lake	At the heart of the Tehri district lies the expansive Tehri Lake formed by the Tehri Dam constructed on the river Bhagirathi. This man-made reservoir attracts visitors with its water -based recreational activities including boating, jet-skiing and angling. Homestay hosts in this region also provide facilities for workcation with the organization of cultural events contributing to employment generation in the district.	
4. Tapovan region	The Tapovan region is situated along the banks of the Ganges River in the southern part of the district which holds immense spiritual significance. Tapovan attracts spiritual seekers and wellness enthusiasts from across the globe. Homestay s in Tapovan offers yoga , meditation sessions, organic meals and holistic healing therapies to guests for a transformative experience rooted in spirituality and mindfulness.	Table 2. Tourism regions with attractions in Tehri

Source: Author's computation of various tourism regions.

3.2 Research design

This research is grounded in fieldwork conducted in the Tehri district from March to September 2023. The research adopted a mixed-method approach by incorporating qualitative and quantitative techniques to capture a comprehensive understanding of homestay enterprises and their role in sustainable economic growth by adopting Indian knowledge systems. A total of 639 homestay establishments were identified across four primary tourism regions which are the Dhanolti Range, the Kanatal Belt, Tehri Lake, and the Tapovan region for Spatial comparison of homestay performance across the four tourism regions to assess economic disparities. The selection of participants followed an opportunistic and snowball sampling strategy (Black, 1999) due to the informal nature of homestay operations. These methods allowed for an organic expansion of the sample, ensuring representation across diverse homestay types and locations.

To capture detailed insights, 287 in-depth semi-structured interviews were conducted in Hindi, the language in which homestay entrepreneurs were proficient. Each interview lasted 30 to 60 minutes, allowing respondents to elaborate on their experiences, challenges and the integration of traditional Indian knowledge systems into their business practices. The interview schedule was designed to explore how homestays contribute to poverty reduction, economic growth, and sustainable tourism. The flexible nature of the interviews facilitated the additional themes beyond the predefined research questions (Gray, 2004). The interview schedule was crafted to gain a thorough understanding of how homestays serve as a means for poverty reduction and economic growth while incorporating traditional Indian knowledge systems within the region.

A comparative assessment framework was employed to analyze the intensity of sustainable economic growth across key rural development factors. The analytical process included various steps. Firstly, to conduct this analysis, various sustainable growth indicators were classified into high, medium, and low intensity using frequencies and corresponding percentages based on homestays adopting Indian knowledge systems through income levels, livelihoods standard, local business linkages, social empowerment benefits, capital formation and environmental aspects to outline apparent patterns. Secondly, the data is stratified into respective ranks based on the mean scores obtained for each variable. Such a methodological approach allows for a detailed exploration of the multifaceted dynamics influencing economic growth offering valuable insights into the broader economic growth trajectory within the context under study.



Source: District Profile Tehri Garhwal, 2024.

4. Result
4.1 Demographic characteristics of the Homestay entrepreneurs

Table 3.
The demographic
attributes of the
participants (Number of
respondents = 287)

Characteristics	Category	Frequency	Percentage
Sex	Male	194	67.6
	Female	93	32.4
Age	20 - 35 years	113	39.4
	36 - 50 years	123	42.8
	51 and above	51	17.7
Level of education	Primary	21	7.3
	High school	32	11.2
	Intermediate	53	18.5
	Graduation	125	43.5
	Post-graduation	56	19.5
Years of experience	1 - 3	78	27.2
	4 - 6	124	43.2
	Above 7	85	29.6
Monthly income level (₹)	59,999 and below	91	31.7
	60,000 - 69,999	108	37.6
	70,000 - and above	88	30.6

Source: Author's computation

Most participants were male accounting for 67.6% of the total sample while females comprised 32.4%. Regarding age, the respondents were divided into three categories and the largest share of respondents came inside the 36 - 50 years of age group representing 42.8%.Participants were divided into five groups considering the education level and most of the participants had finished their Graduation accounting for 43.5% of the total sample followed by Post-graduation with 19.5% and Intermediate with 18.5%.Most of the participants had 4 - 6 years of experience comprising 43.2% of the total sample followed by Above 7 years with 29.6% and 1 - 3 years with 27.2%.The distribution across income levels was relatively balanced with 31.7% falling in the ₹59,999 and below category, 37.6% in the ₹60,000 - ₹69,999 category and 30.6% in the ₹70,000 and above category.

4.2 Improved Livelihoods Standard provided by homestays

Economic aspects	Improvement of livelihood						Mean	Rank
	High		Medium		Low			
	F	%	F	%	F	%		
a. Diverse livelihood possibilities	174	60.6	84	29.3	29	10.1	2.50	II
b. Local employment generation	144	50.1	107	37.4	36	12.5	2.37	III
c. Poverty alleviation	181	63.1	91	31.7	15	5.2	2.57	I
d. Improved standard of living	95	33.1	131	45.6	61	21.3	2.11	IV

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Table 4.
Degree of improvement in livelihood associated with various economic aspects.

Source: Author's computation (F = Frequency. % = Percentage)

Poverty alleviation emerged as the paramount contributor to livelihood improvement producing a substantial mean score of 2.57. A considerable 63.1% of respondents rated it as High, indicating its perceived potency in enriching livelihood conditions. Subsequently, Diverse livelihood possibilities attained a commendable mean score of 2.50 suggesting its noteworthy impact on livelihood enhancement and diversification. Local Employment generation yielded a respectable mean score of 2.37 signifying its substantive contribution to livelihood improvement endeavors. Noteworthy percentages of respondents affirmed its role in the promotion of local commercial vitality and employment prospects. Improved standard of living garnered the lowest mean score of 2.11 implying a comparatively modest impact on livelihood enhancement. Nevertheless, a significant proportion of respondents constituting 45.6%, rated it as Medium suggesting relevance to a lesser extent compared to other factors.

4.3 Economic growth of the local community

Economic growth factors	Intensity of growth						Mean	Rank
	High		Medium		Low			
	F	%	F	%	F	%		
a. Rural infrastructure development	59	20.5	113	39.4	115	40.1	1.80	III
b. Use of local products	82	28.6	139	48.4	66	23	2.05	II
c. Local economic linkages	134	46.7	117	40.8	36	12.5	2.34	I
d. Reduction of leakages	33	11.5	118	41.2	136	47.3	1.64	IV

Table 5.
Intensity of economic growth assessed across various economic growth factors.

Source: Author's computation (F = Frequency. % = Percentage)

In terms of Rural Infrastructure Development, a significant portion of 39.4% respondents reported medium intensity followed closely by low intensity 40.1% while a smaller proportion reported high intensity of 20.5% responses. The mean score was 1.80 indicating a relatively moderate level of rural infrastructure development. The Use of Local Products exhibited a similar trend with the majority of 48.4% respondents indicating medium intensity followed by high intensity 28.6%. The mean score for this category was 2.05 suggesting a moderate level of utilization of local products. The Local Economic Linkages category demonstrated a higher intensity of economic growth with the majority of respondents reporting high intensity of 46.7% responses indicating a comparatively high level of local economic linkages. This category ranked first in terms of mean score reflecting its significant contribution to economic growth within the local community. The Reduction of Leakages category showed a predominant low intensity of economic growth with the majority of 47.3% respondents indicating low intensity followed by medium intensity 41.2% and high intensity 11.5%. The mean score for this category was 1.64 suggesting a relatively low level of reduction in economic leakages. The leakages reduction was ranked fourth in terms of mean score indicating the least impact on economic growth within the local community.

Table 6.
Collective social empowerment benefits resulting from homestay initiatives.

4.4 Collective Social Empowerment Benefits

Social empowerment	Intensity of the benefits						Mean	Rank
	High		Medium		Low			
	F	%	F	%	F	%		
a. Ability to fund other ventures	43	14.9	131	45.7	113	39.4	1.75	III
b. Sense of cultural pride	101	35.2	119	41.5	67	23.3	2.11	I
c. Raised cultural heritage awareness	82	28.6	139	48.4	66	23	2.05	II

Source: Author's computation (F = Frequency. % = Percentage)

The data illustrates that the ability to fund other ventures emerged as a noteworthy collective social empowerment benefit with 45.7% of respondents experiencing a medium intensity with a mean score of 1.75 positioning it as the third ranked benefit in terms of intensity. The sense of cultural pride is identified as the most salient social empowerment with a mean score of 2.11 positioning it as the top ranked homestay benefit in terms of intensity. Furthermore, raised cultural heritage awareness emerges as another significant collective social empowerment benefit with 48.4% of respondents experiencing a medium intensity and 28.6% indicating a high intensity highlighted by the mean score of 2.05, placing it into second rank.

4.5 Capital formation of local communities

Table 7.
Intensity of capital formation resulting from various development aspects.

Development aspects	Intensity of the		Capital formation				Mean	Rank
	High		Medium		Low			
	F	%	F	%	F	%		
a. Women participation	25	8.7	95	33.2	167	58.1	1.50	IV
b. Enhanced decision -making	122	42.5	124	43.2	41	14.3	2.28	I
c. Increased communal coordination	111	38.7	137	47.7	39	13.6	2.25	II
d. Skill development of locals	33	11.5	107	37.3	147	51.2	1.94	III

Source: Author's computation (F = Frequency. % = Percentage)

Active and passive participation of women in homestay ventures emerges as a notable aspect of capital formation with 33.2% of respondents experiencing a Medium intensity and 58.1% reporting a Low intensity supported by the lowest mean score of 1.50, positioning its rank as the fourth aspect in terms of intensity. Enhanced decision-making is identified as a significant contributor to capital formation with a mean score of 2.28 placing it as the top ranked facet in terms of capital formation. Additionally, increased communal coordination emerges as another pivotal aspect of capital formation with 47.7% of respondents experiencing a Medium intensity and 38.7% indicating a High intensity positioning it at the second rank. Skill development of locals is identified as a significant contributor to capital formation with a mean score of 1.94 positioning it as the third ranked feature in terms of intensity.

4.6 Environmental aspects of homestays

Table 8.
Intensity of awareness regarding environmental aspects within homestay operations.

Environmental aspect	Intensity of the awareness						Mean	Rank
	High		Medium		Low			
	F	%	F	%	F	%		
a. Environmental Awareness	69	24.1%	121	42.1%	97	33.8%	1.90	IV
b. Waste Management Awareness	174	60.6%	84	29.3%	29	10.1%	2.50	I
c. Use of Sustainable Technologies	95	33.1%	141	49.2%	51	17.7%	2.15	III
d. Sustainable Use of Resources	153	53.3%	92	32.1%	42	14.6%	2.38	II

Source: Author's computation (F = Frequency. % = Percentage)

Awareness towards the environment is observed to have a Medium intensity among 42.1% of respondents while 33.8% report a Low intensity and 24.1% indicate a High intensity. This observation is supported by the mean score of 1.90. Waste management awareness emerges as a significant aspect of environmental awareness with 60.6% of respondents reporting a High intensity highlighted by the mean score of 2.50 placing it at the top rank in terms of

awareness intensity. The use of sustainable technologies is identified as another pivotal aspect of environmental awareness with 49.2% of respondents experiencing a Medium intensity together with 33.1% reporting a High intensity and a mean score of 2.15. Sustainable use of resources is recognized as a significant contributor to environmental awareness with 53.3% of respondents experiencing a High intensity positioning it as the second-ranked aspect in terms of awareness intensity.

5. Conclusion and Implications

5.1 Conclusions

The study has explored into the significance of Sustainable Development Goals (SDGs) through homestays for sustainable livelihood generation while adopting Indian knowledge systems (IKS) in hill communities in Uttarakhand. The study sheds light on the multifaceted impacts of homestays on the communities and their livelihood generation. The findings underscore the principal importance of poverty alleviation, diverse livelihood possibilities and local employment generation as the multifaceted benefits of homestays for sustainable livelihood generation. These benefits align with ancient Indian economic principles found in texts such as the Arthashastra, which emphasize the importance of local economic self-sufficiency and community-based resource management (Prasoon,2012). Besides, the study highlights the role of homestays in fostering rural infrastructure development and the utilization of local products which is reminiscent of the traditional Indian concepts (Chattopadhyaya et al., 2005). While these aspects demonstrate potential for improvement, the significant intensity of local economic linkages underscores the substantial contribution of homestays to economic growth within the local community. In terms of collective social empowerment benefits, the study identifies the ability to fund other ventures, sense of cultural pride and raised cultural heritage awareness as notable factors contributing to social cohesion and empowerment within hill communities which aligns with the concepts described by (Chandalia, 2017) highlighting the importance of tribal knowledge systems in maintaining cultural heritage and biodiversity. Capital formation through the participation of women enhanced decision-making, increased communal coordination and skill development of locals emerge as crucial aspects facilitated by homestays further enhancing community resilience and empowerment mirroring the ancient Indian ethos of inclusive participation and decentralized decision-making as practiced in the village assemblies or "Sabhas" mentioned in the Rigveda (Bhatnagar, 1932). Environmental aspects of homestays also receive attention with waste management awareness, the use of sustainable technologies and the sustainable use of resources highlighted as significant contributors to environmental awareness and conservation efforts. While there is room for improvement, particularly in raising awareness of the environment, the study underscores the positive strides made in waste management and the adoption of sustainable practices. These practices resonate with the Indian philosophical tradition of living in harmony with nature, as articulated in ancient texts (Balasubramanian, 2010; Mital, 2004;Rahman, 1999;Vatsyayan, 2006; Warrier, 1953).

5.2 Implications of Study

The exploration of Sustainable Development Goals (SDGs) through homestays for sustainable livelihood generation in hill communities in Uttarakhand holds significant implications for both academic research and practical interventions aimed at hill community development. Firstly, the findings underscore the pivotal role of poverty alleviation, diverse livelihood possibilities and local employment generation in fostering sustainable livelihoods within hill communities. By addressing economic vulnerabilities and enhancing income-generating opportunities, homestays using IKS can contribute substantially to poverty reduction and livelihood improvement aligning with SDG 1 and SDG 8.

The study highlights the importance of rural infrastructure development, utilization of local products and developing local economic linkages to enhance economic resilience and promote community development. The emphasis on these aspects not only supports economic growth within the local community but also contributes to SDG 9 (Industry, Innovation and Infrastructure) and SDG 11 (Sustainable Cities and Communities) by fostering

inclusive and sustainable development in rural areas (United Nations, 2018). The findings further underscore the status of joint social empowerment benefits including enhanced decision-making, increased communal coordination and skill development of locals in fostering social cohesion and empowerment within hill communities. These aspects are crucial for promoting community resilience and fostering inclusive development, aligning with SDG 5 (Gender Equality) and SDG 10 (Reduced Inequalities). From an environmental standpoint, the study highlights the significance of promoting environmental awareness, waste management, sustainable technologies and the sustainable use of resources within homestay operations. The study aligns with SDG 12 (Responsible Consumption and Production) and SDG 13 related to Climate Action by fostering environmental stewardship and promoting sustainable practices Homestay can contribute to environmental conservation and mitigate negative impacts on local ecosystems (United Nations, 2021). The study provides significant policy implications for enhancing rural tourism development through homestays applying Indian knowledge systems by emphasizing the need for comprehensive regulatory support, capacity building and sustainability-focused measures. Strengthening policy frameworks that provide financial incentives, microfinance access, and infrastructural support can facilitate the growth of homestay enterprises while ensuring long-term economic viability. Structured training programs focusing on managerial, financial, and hospitality skills can enhance the operational efficiency of homestay entrepreneurs while preserving cultural authenticity. Moreover, facilitating homestay participation in digital platforms and technology-driven initiatives can enhance market accessibility, improve visibility among domestic and international tourists, and contribute to the broader economic transformation of rural areas.

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