

ADVENTURE TRAVEL EXPANSION: A RELATIVE STUDY OF KULLU AND BILASPUR REGIONS IN HIMACHAL PRADESH

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ABSTRACT

Adventure tourism has gained immense popularity in recent years, contributing significantly to the economic growth of various regions worldwide. This research paper aims to conduct a comparative study of adventure tourism development between the Kullu and Bilaspur districts of Himachal Pradesh, India. The purpose of this comparative study is to evaluate the development of adventure tourism in the Kullu and Bilaspur districts of Himachal Pradesh, with a focus on understanding the distinct strategies and outcomes in each region. This comparative study employs a mixed-method approach, combining both quantitative and qualitative data. Quantitative data is gathered from government tourism reports, economic surveys, and tourism statistics specific to the Kullu and Bilaspur districts. Qualitative data is derived from interviews with key stakeholders, including local tourism operators, government officials, and community representatives. Additionally, field observations and case studies of specific adventure tourism projects in both districts are used to assess infrastructure development, sustainability initiatives, and community participation. Sustainability is a critical focus of this study, assessing initiatives in both Kullu and Bilaspur that aim to balance tourism growth with environmental conservation and local community benefits. In Kullu, efforts include waste management programs, eco-friendly accommodations, and the protection of fragile mountain ecosystems through regulations on trekking and rafting. Bilaspur focuses on preserving biodiversity around Govind Sagar Lake, promoting responsible water sports, and minimizing the environmental footprint of new tourism infrastructure. Additionally, both regions emphasize community-driven tourism models to ensure local populations benefit economically, maintain cultural heritage, and have active roles in tourism planning and decision-making.

Keywords: Adventure tourism, Himachal Pradesh, Kullu, Bilaspur, sustainable development

1. INTRODUCTION

Adventure tourism has become a dynamic and integral component of global tourism, significantly contributing to the socioeconomic development of numerous regions. Himachal Pradesh, known for its scenic landscapes and adventure offerings, has seen a notable surge in adventure tourism, particularly in districts like Kullu and Bilaspur. Kullu has long established itself as a premier destination for adventure enthusiasts, while Bilaspur is an emerging site with considerable growth potential. This study aims to conduct a comparative analysis of adventure tourism development in these two districts, focusing on the current trends, infrastructure development, economic impact, sustainability efforts, and future growth prospects. In doing so, this research will not only assess how adventure tourism has shaped the local economies of Kullu and Bilaspur but also examine the strategies needed to ensure long-term sustainability and community involvement.

To avoid repetition and ensure a concise introduction, descriptions of both districts will be streamlined. Kullu, often referred to as the "Valley of Gods," is well known for its wide array of adventure activities like trekking, paragliding, river rafting, and mountaineering. Instead of reiterating these common activities multiple times, the introduction will focus on the distinctive factors that make Kullu a renowned hub for adventure tourism, particularly its historical significance as a destination for thrill-seekers. Similarly, Bilaspur, an emerging destination for water-based activities such as boating and water sports on Govind Sagar Lake, will be succinctly introduced without excessive elaboration. This approach will ensure that the introduction remains focused on the core objectives of the study rather than getting bogged down by redundant descriptions.

The primary objective of this study is to offer a comparative analysis of the adventure tourism sectors in Kullu and Bilaspur. The analysis will assess current trends in both regions and investigate how adventure tourism has evolved, especially with infrastructure development, economic growth, and community participation.

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A significant focus of the study is to explore the sustainability efforts in each district and evaluate the potential for future growth in the context of ecological preservation, local community empowerment, and government policy support. By drawing comparisons between a well-established destination like Kullu and a developing region like Bilaspur, this study aims to highlight best practices and challenges that can guide the future of adventure tourism in similar regions.

The comparative analysis will be carried out using both qualitative and quantitative research methods. Data will be collected from multiple sources, including government tourism reports, local economic surveys, interviews with stakeholders (tourism operators, government officials, and local communities), and statistical records from the *Himachal Pradesh Tourism Development Corporation (HPTDC)*. Quantitative tools such as data on tourist arrivals, revenue generation, employment figures, and infrastructure investment will be analyzed to assess the economic impact of adventure tourism in both districts. Qualitative tools, including interviews and case studies, will be used to explore community involvement, regulatory challenges, and sustainability initiatives. The integration of both qualitative and quantitative approaches will provide a holistic view of the adventure tourism landscape in Kullu and Bilaspur. Adventure tourism has played a critical role in shaping the local economies of both Kullu and Bilaspur. In Kullu, tourism is one of the main sources of income, contributing to the livelihoods of thousands of people involved in tourism-related activities such as hospitality, transportation, guiding services, and retail. The influx of tourists for adventure activities has resulted in the growth of local businesses, the creation of jobs, and increased revenue for the district. Adventure tourism in Kullu is not only restricted to seasonal activities but also extends throughout the year, attracting a steady stream of visitors. This continuous flow of tourists has helped stabilize the local economy, making it resilient to economic fluctuations.

In Bilaspur, although adventure tourism is still in its nascent stage, the district has seen promising growth in recent years. The development of water sports and adventure parks around Govind Sagar Lake has attracted a new segment of tourists, creating opportunities for local employment and entrepreneurship. While Bilaspur's adventure tourism sector is not as mature as Kullu's, the district's potential for growth is immense, given its natural resources and proximity to major cities like Chandigarh and Shimla. Adventure tourism in Bilaspur has the potential to become a major driver of economic development, provided there is adequate investment in infrastructure and marketing.

Sustainability is a central theme in this comparative study, as adventure tourism often poses challenges to the environment and local communities if not managed properly. In Kullu, the surge in tourist numbers has raised concerns about environmental degradation, waste management, and the overuse of natural resources. The local government and tourism operators have started to implement sustainability initiatives, including eco-friendly trekking routes, stricter regulations on waste disposal, and the promotion of responsible tourism practices. However, challenges remain, particularly in balancing the need for economic growth with environmental conservation.

In Bilaspur, sustainability initiatives are still in the early stages, but there is growing awareness of the importance of preserving the district's natural beauty. Efforts are being made to promote eco-friendly water sports, regulate the use of plastic, and engage local communities in conservation projects. The success of these initiatives will largely depend on how well they are integrated into the broader tourism development strategy of the region. By comparing the sustainability efforts in both districts, this study will provide insights into how emerging destinations like Bilaspur can learn from the successes and challenges faced by established tourism hubs like Kullu.

One of the key objectives of this study is to assess the future growth prospects of adventure tourism in Kullu and Bilaspur. In Kullu, the potential for further growth lies in diversifying the range of adventure activities, upgrading tourism infrastructure, and developing new areas for tourism. However, growth in Kullu must be managed carefully to avoid the pitfalls of over-tourism, which can strain local resources and diminish the quality of the tourist experience.

Bilaspur, on the other hand, is at the beginning of its adventure tourism journey and has significant room for growth. The district's unique geographical features, such as the vast expanse of Govind Sagar Lake, provide ample opportunities for developing water-based adventure activities. To realize

this potential, Bilaspur will need to invest in tourism infrastructure, such as better accommodation options, transportation, and safety measures for adventure sports. Additionally, marketing campaigns targeting adventure tourists from nearby cities and states can help boost tourist arrivals.

This comparative study fills a critical gap in adventure tourism literature by offering an in-depth analysis of both a mature adventure tourism destination (Kullu) and an emerging one (Bilaspur). While there is extensive research on adventure tourism in Himachal Pradesh, most studies have focused on individual districts without offering comparative insights. By examining the similarities and differences between Kullu and Bilaspur, this study contributes to the academic discourse on sustainable tourism development in mountainous regions. The findings from this research will provide valuable lessons for policymakers, tourism operators, and local communities on how to balance tourism growth with sustainability and community development.

In addition to adventure activities, both Kullu and Bilaspur offer rich cultural experiences that enhance their appeal as tourist destinations. Kullu's famous Dussehra festival and Bilaspur's traditional fairs and festivals add a cultural dimension to the tourism experience, attracting visitors who are interested in local traditions and heritage. By integrating adventure tourism with cultural tourism, both districts can create a more holistic tourism experience that appeals to a broader range of tourists. The preservation and promotion of local culture will also play a crucial role in ensuring that tourism development benefits local communities and strengthens their cultural identity.

This comparative study of adventure tourism in Kullu and Bilaspur provides a comprehensive analysis of the current state of tourism in both districts, the economic and social impacts, and the sustainability challenges they face. By focusing on both established and emerging tourism models, this study highlights the importance of sustainable practices, community involvement, and future growth prospects in adventure tourism development. As adventure tourism continues to evolve in Himachal Pradesh, the lessons learned from Kullu and Bilaspur can serve as a blueprint for other regions looking to harness the potential of tourism while preserving their natural and cultural heritage.

2. LITERATURE REVIEW

Adventure tourism has been extensively studied over the past few decades, covering a wide range of topics including its economic, environmental, and socio-cultural impacts. This literature review seeks to organize these themes into sub-sections for clearer flow while tracing the evolution of research from older foundational studies to recent findings. The review also emphasizes comparative studies between Kullu and Bilaspur in Himachal Pradesh, highlighting key contrasts and aligning these with broader theoretical frameworks.

The economic significance of adventure tourism has been a recurrent theme in the literature. Swarbrooke et al. (2003) provide an early analysis of how adventure tourism contributes to local economies by creating jobs, boosting hospitality sectors, and attracting investment. More recent studies, such as Kumari (2024), offer a focused look at Himachal Pradesh, where adventure tourism is a major driver of local economies, particularly in regions like Kullu. Comparative studies by Chandel (2020) and Kumari (2024) reveal that while Kullu has a well-established tourism economy, Bilaspur is still in the developmental phase, offering new opportunities for revenue generation through infrastructure development and marketing. Smooth transitions between older and more recent studies show the evolution of thought from the general economic benefits of tourism to a more nuanced understanding of its impact on local economies. Kumari (2024) emphasizes that Kullu's long-established adventure tourism sector provides a consistent stream of revenue, but Bilaspur's untapped potential poses both challenges and opportunities for future economic growth. The economic data presented by Thakur (2023) and the Himachal Pradesh tourism report further substantiate these claims by providing quantitative evidence of increased revenue generation and job creation in both districts. Environmental sustainability is a core focus of recent adventure tourism studies. Buckley (2010) was one of the first to discuss the ecological challenges associated with tourism growth, highlighting issues such as waste management and resource depletion. Chandel

(2016) expanded on this by addressing the specific environmental challenges in mountainous regions like Himachal Pradesh, advocating for stricter regulations to preserve natural ecosystems. The integration of more recent sustainability frameworks, such as the NIRVANA model proposed by Kumari (2024), adds coherence to the discussion by aligning it with current sustainable tourism practices. *NIRVANA* focuses on *Nature, Infrastructure, Recreation, Values, Awareness, and Nurturing* as key elements to promote sustainability in adventure tourism. This model provides a forward-thinking approach for both Kullu and Bilaspur, with Kumari (2024) arguing that Bilaspur, in particular, could benefit from adopting these principles to prevent environmental degradation during its development phase. Sustainability challenges have also been discussed in the context of community engagement. Studies such as Aref et al. (2020) emphasize that community participation is crucial for successful tourism development. In regions like Kullu, where tourism is already well-established, Chandel (2020) suggests that more needs to be done to involve local communities in decision-making processes to ensure long-term sustainability. Bilaspur, on the other hand, could learn from these lessons as it builds its adventure tourism infrastructure. The socio-cultural impacts of adventure tourism, including its role in preserving or altering local traditions, have been addressed in multiple studies. Singh (2022) highlights the challenges posed by tourism growth in Himachal Pradesh, particularly in regions like Kullu, where the influx of tourists has led to cultural commodification. However, the same study notes that tourism can also play a role in preserving local traditions through cultural tourism initiatives that align with adventure tourism offerings. Kumari (2024) identifies the cultural significance of both Kullu and Bilaspur, noting that festivals and traditions are a crucial part of the tourism experience. However, while Kullu has capitalized on its cultural heritage to attract tourists, Bilaspur has not yet fully integrated its cultural elements into its tourism strategy. This presents an opportunity for Bilaspur to develop community-based tourism initiatives that not only promote adventure tourism but also preserve and showcase local culture. Community engagement is a recurrent theme in the literature, with studies such as Aref et al. (2020) discussing the importance of involving local communities in tourism planning. Chandel (2020) identifies successful case studies where community-based tourism initiatives have led to sustainable tourism development in Kullu. Bilaspur, on the other hand, faces challenges in engaging local communities due to a lack of established tourism infrastructure. Future research could explore how Bilaspur can implement successful community engagement models to support its tourism growth. The role of digital tools in promoting adventure tourism has gained attention in recent years. Ali, Ryu, and Hussain (2016) discuss how social media and digital marketing platforms have revolutionized the way destinations attract tourists. Mawarni et al. (2022) further elaborate on the use of digital tools to enhance tourist experiences, particularly in adventure tourism, where real-time updates and online bookings have become essential. Bilaspur, as an emerging destination, has the opportunity to leverage these tools more effectively to attract tourists from urban areas and neighbouring states. Kullu, with its established tourism sector, already uses digital platforms for promotion and booking. However, Bilaspur has not yet fully embraced these tools. Kumari (2024) argues that Bilaspur's tourism authorities could benefit from implementing more advanced digital strategies, such as targeted social media campaigns and user-friendly online booking systems, to boost its visibility in the competitive tourism market.

Infrastructural challenges have been a consistent theme in adventure tourism research. Singh (2022) and Kumari (2024) identify road and air connectivity, safety standards, and the lack of adequate accommodation as major barriers to tourism growth in Himachal Pradesh. Kullu has largely overcome these challenges through significant government investment in roads, airports, and safety regulations for adventure activities.

Bilaspur, on the other hand, faces more pronounced infrastructural challenges. The district lacks direct air connectivity and has limited road access, making it difficult for tourists to reach. Kumari (2024) suggests that improving these infrastructure deficits should be a priority for Bilaspur if it wants to compete with more established destinations like Kullu. Additionally, safety standards for adventure sports need to be enhanced to ensure tourist safety and prevent accidents, which could otherwise deter potential visitors.

The *NIRVANA* framework proposed by Kumari (2024) provides a comprehensive model for sustainable tourism development in emerging adventure destinations like Bilaspur. However, this model can be more closely aligned with earlier theoretical contributions, such as Buckley's (2006) work on tourism growth and sustainability. Bridging these models would enhance the theoretical depth of the literature and provide a more cohesive understanding of how adventure tourism can be sustainably managed in different stages of development.

While there is extensive literature on adventure tourism in Himachal Pradesh, a gap remains in the comparative analysis between established and emerging destinations. This study fills that gap by comparing Kullu, a mature adventure tourism hub, with Bilaspur, an emerging destination with untapped potential. The comparative analysis between Chandel (2020) and Kumari (2024) highlights key differences in infrastructure, economic impact, and community engagement between these two districts, providing valuable insights for policymakers and tourism stakeholders.

The literature on adventure tourism offers a broad spectrum of themes, ranging from economic and environmental impacts to socio-cultural changes and community engagement. By organizing these themes into sub-sections, this review has demonstrated the evolution of thought in adventure tourism research, from early studies on economic benefits to more recent discussions on sustainability and digital tools. The comparison between Kullu and Bilaspur reveals distinct challenges and opportunities for each district, with Kullu serving as a model of success and Bilaspur representing a region with significant growth potential. As adventure tourism continues to evolve, future research should focus on addressing the infrastructural challenges and sustainability concerns in emerging destinations like Bilaspur while drawing lessons from the successes and limitations of established hubs like Kullu.

3. OBJECTIVE OF STUDY

The objectives outline the scope of the study, focusing on comparative analysis, economic impact assessment, sustainability considerations, and strategic recommendations for enhancing adventure tourism development in Kullu and Bilaspur districts of Himachal Pradesh.

3.1 To Compare Tourism Infrastructure in Kullu and Bilaspur

This objective will focus on comparing key aspects of tourism infrastructure, including **transportation, accommodation, and safety standards**. These are critical to adventure tourism as they directly impact tourist accessibility, comfort, and security. The study will explore differences in road and air connectivity, the availability of quality accommodations, and the adherence to safety protocols for adventure sports. Understanding these differences will provide insights into the readiness of both districts to cater to adventure tourists and will inform policy recommendations for infrastructure improvements.

3.2 To Analyze Tourist Arrivals and Preferences

This objective will involve analyzing data on **tourist arrivals** in both Kullu and Bilaspur, focusing specifically on adventure tourists. Preferences will be assessed through **surveys and interviews** to understand what types of adventure activities tourists prefer, the duration of their stay, and their spending patterns. The study will also evaluate the role of **seasonal trends** and the appeal of different activities in shaping tourist preferences. This analysis will help determine the competitive strengths of each district and inform marketing strategies to attract more adventure tourists.

3.3 To Examine Economic Impact

The study will assess the **direct, indirect, and induced economic impacts** of adventure tourism in Kullu and Bilaspur. This includes analyzing the **creation of employment**, the **generation of income** for local businesses, and the overall **regional development** facilitated by tourism activities. Specific focus will be placed on the sectors most influenced by adventure tourism, such as hospitality, retail, and transport. Additionally, the study will compare how much each

district benefits economically from adventure tourism and how tourism revenue contributes to local economic sustainability.

3.4 To Assess Environmental and Cultural Sustainability

This objective will assess both the **environmental** and **cultural sustainability** of adventure tourism in Kullu and Bilaspur. The study will use **sustainability metrics** such as **carbon footprint**, **waste management practices**, and the impact on **natural resources** to measure environmental sustainability. For cultural sustainability, the focus will be on the **preservation of local traditions**, the integration of **cultural heritage** into tourism offerings, and the impact of tourism on **community identity**. The aim is to understand how well each district balances tourism development with the preservation of its natural and cultural resources.

3.5 To Identify Policy and Management Strategies

This objective will involve analyzing existing **policy frameworks** and **management strategies** in Kullu and Bilaspur, particularly about the challenges of **overcrowding**, **environmental degradation**, and **community involvement**. The study will explore both the successes and limitations of current policies, and where gaps exist, it will propose **new policies** to address emerging challenges. Special attention will be given to the role of **local governance**, **stakeholder collaboration**, and the **regulation of tourism activities** to ensure sustainable growth.

3.6 To Provide Recommendations for Sustainable Growth

The recommendations will be based on the findings from the comparative analysis of infrastructure, tourist preferences, economic impacts, and sustainability assessments. The study will offer **actionable, context-specific strategies** for both Kullu and Bilaspur to achieve sustainable growth in adventure tourism. These recommendations will focus on **improving infrastructure**, **enhancing tourist experiences**, **promoting sustainability**, and **engaging local communities**. The aim is to provide a roadmap for long-term sustainable development that benefits both the economy and the environment.

3.7 To Establish Measurable Success Criteria for Sustainable Adventure Tourism

The study will develop a set of **measurable success criteria** based on the outcomes of the research. These criteria will focus on key performance indicators such as **economic returns**, **tourist satisfaction**, **environmental protection**, and **community engagement**. The goal is to create a framework that can be used to evaluate the success of future adventure tourism initiatives in both districts, ensuring that development aligns with sustainable tourism principles.

4. RESEARCH METHODOLOGY

This study adopts a mixed-method approach to assess the development of adventure tourism in the districts of Kullu and Bilaspur, focusing on the comparison of tourism infrastructure, environmental sustainability, and economic impact. The methodology is divided into four distinct subsections: **quantitative approach**, **qualitative approach**, **comparative analysis**, and **data sources**. This structure ensures that both numerical data and stakeholder perspectives are used to inform the analysis, creating a well-rounded assessment of adventure tourism in both regions.

5. QUANTITATIVE APPROACH

The quantitative approach for this study primarily relies on surveys and visitor arrival data, complemented by environmental metrics to gather comprehensive insights into tourism in Kullu and Bilaspur. Surveys form the core of the data collection, targeting 1,000 tourists – 500 from Kullu and 500 from Bilaspur. Using a stratified random sampling method, participants will be selected based on demographics such as age, gender, income, and nationality to ensure diverse representation. These surveys, distributed through online platforms and in-person at key tourist locations, will focus on collecting data about tourists' demographics, preferences for adventure activities (e.g., trekking,

paragliding, and water sports), satisfaction with current infrastructure, and awareness of sustainable tourism practices. In addition, visitor arrival data, sourced from the *Himachal Pradesh Tourism Development Corporation (HPTDC)* and local government records, were analyzed to uncover trends over the past five years, examining seasonal tourist patterns and the economic impact of tourism, including spending and job creation. Environmental sustainability is also evaluated through key indicators such as waste management, energy consumption, and ecosystem health. This data was collected through field observations, collaborations with environmental agencies, and secondary reports.

6. QUALITATIVE APPROACH

The qualitative approach provides a deeper understanding of tourism in Kullu and Bilaspur by focusing on the perspectives of key stakeholders through interviews and focus groups. A purposive sampling method is used to select government officials, community leaders, and tour operators, as these individuals possess valuable insights into the tourism industry. A total of 40 semi-structured interviews, with 20 conducted in each district, will focus on exploring topics such as tourism development strategies, infrastructure challenges, and policy implementation. Additionally, six focus groups (three in each district) were organized, each consisting of 6-10 local community members. These discussions will centre around the socio-cultural and economic impacts of tourism, providing a grassroots perspective on how tourism affects livelihoods. The key themes that emerged from these interviews and focus groups include tourism infrastructure, where stakeholders will discuss current challenges and potential improvements, sustainability practices adopted by operators and communities, and the economic and cultural impacts of tourism, particularly in terms of employment, income generation, and the preservation of cultural heritage. Through these qualitative methods, the study aims to gain a holistic view of the tourism dynamics in these regions

7. COMPARATIVE ANALYSIS

The study includes a comparative analysis of Kullu and Bilaspur, focusing on key aspects of adventure tourism in both districts. This analysis assessed differences and similarities in tourism infrastructure, tourist preferences, economic impact, and environmental challenges. In terms of infrastructure, Kullu's established support for trekking, paragliding, and eco-tourism will be compared to Bilaspur's focus on water-based activities like kayaking and fishing around Gobind Sagar Lake. Tourist preferences are evaluated, with Kullu being a hub for trekking and paragliding, while Bilaspur is emerging as a destination for water sports. Environmental impacts have also become a critical point of comparison, with Kullu facing challenges like deforestation and waste generation, while Bilaspur's issues are more focused on water conservation and the ecological health of Gobind Sagar Lake. The comparative analysis integrated both primary data—gathered from surveys and interviews—and secondary data, such as visitor statistics and environmental reports, to conclude the different paths each region is taking in developing adventure tourism. This approach highlights not only the unique strengths and challenges of each district but also areas for improvement and opportunities for sustainable growth.

8. RESULTS AND FINDINGS OF RESEARCH

As shown in **Fig 1** the comparative analysis of adventure tourism between Bilaspur and Kullu Districts of Himachal Pradesh indicates differing levels of agreement among respondents about Bilaspur's ability to attract more adventure tourists. The data shows that the largest group of respondents (32) holds a neutral stance, with a standard deviation of 0.47, pointing to some diversity of opinion within this group.

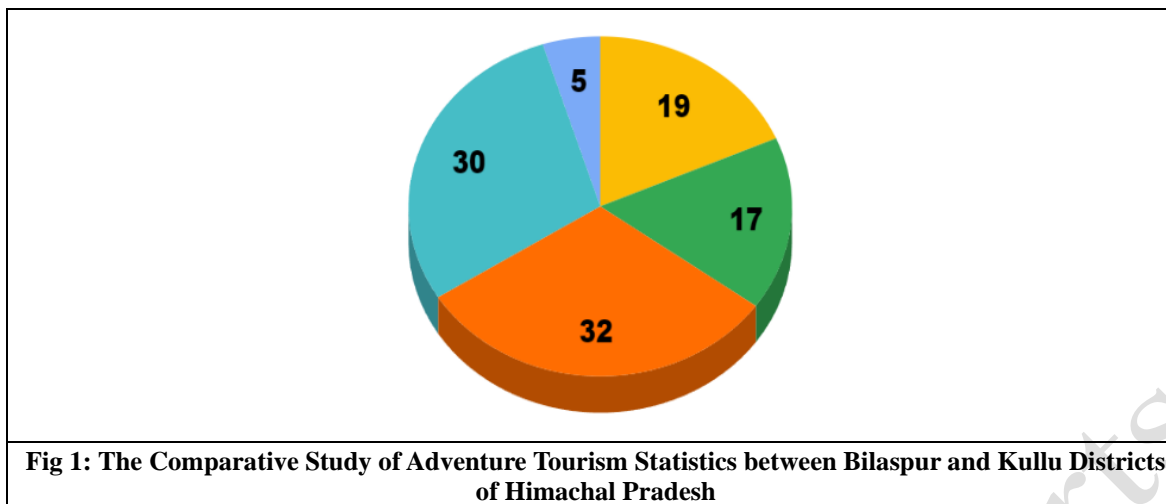


Fig 1: The Comparative Study of Adventure Tourism Statistics between Bilaspur and Kullu Districts of Himachal Pradesh

Closely following are the 30 respondents who agree with the statement, accompanied by a standard deviation of 0.46, indicating slightly less variability in their responses. On the other hand, 19 respondents strongly disagree, reflected by a standard deviation of 0.39, while 17 respondents disagree with a standard deviation of 0.37, both suggesting moderate agreement within these groups. Notably, only 5 respondents strongly agree, with the lowest standard deviation of 0.22, signifying the greatest level of consensus within this category. Overall, while opinions are varied, the neutral and agree categories are the most common, each displaying different levels of internal consistency among respondents.

As per Figure 2, the analysis of responses regarding the infrastructure for adventure tourism in Bilaspur versus Kullu districts shows a significant preference for a neutral stance. An overwhelming majority of 103 respondents selected the neutral option, with complete agreement within this group, as reflected by a standard deviation (SD) of 0.00, indicating no variability in their responses. This suggests that the neutral group is uniform in its stance, potentially indicating ambivalence or a lack of strong opinions regarding the infrastructure. Meanwhile, 50 respondents believe that Bilaspur's adventure tourism infrastructure is more developed, with a standard deviation of 0.50, indicating some diversity of opinion among those who agree. This level of variability shows that while there is general agreement, the strength of their convictions differs, with some respondents more strongly in favour than others.

The strongly disagree and strongly agree categories had fewer respondents, with 11 and 10, respectively, and standard deviations of 0.31 and 0.30. These figures suggest moderate agreement within these groups, meaning there is some, but not extreme, variability in how strongly respondents in these categories feel about the infrastructure differences. Additionally, 6 respondents disagreed, with the lowest standard deviation of 0.24, indicating a relatively consistent view among this small group.

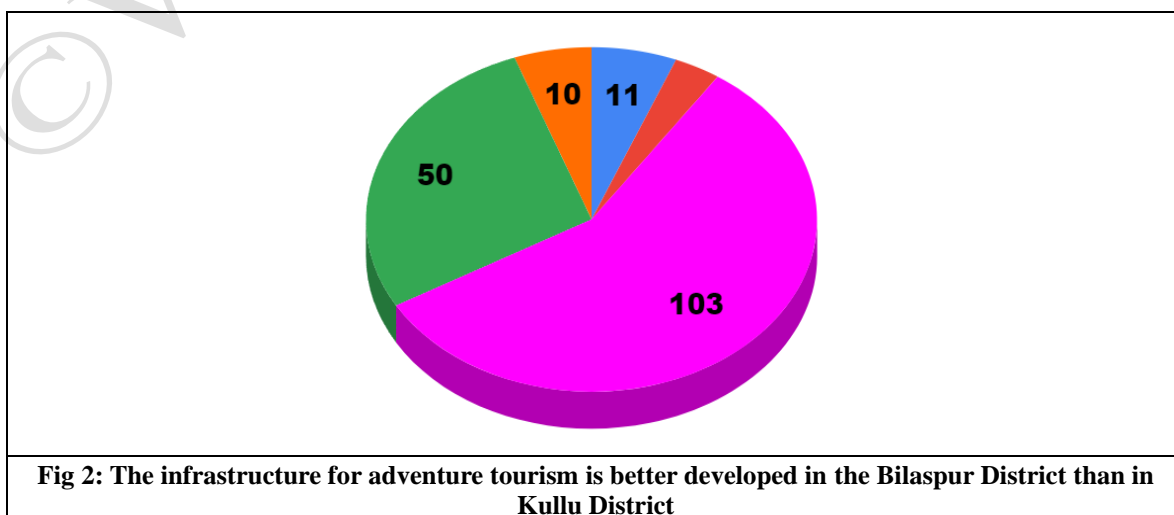
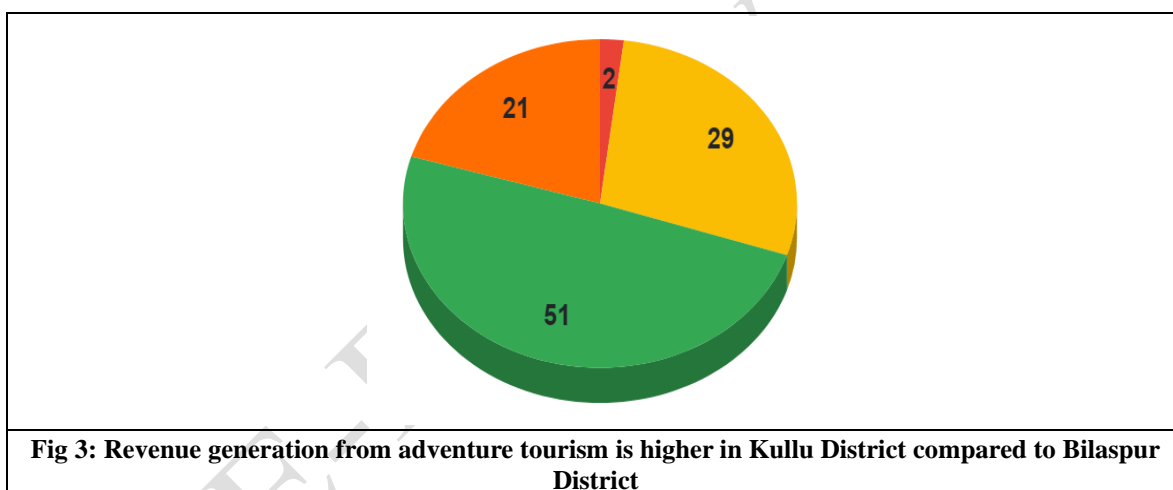


Fig 2: The infrastructure for adventure tourism is better developed in the Bilaspur District than in Kullu District

The discussion of standard deviations highlights the degree of agreement or variability within each group, providing depth to the analysis. However, for non-statistical readers, it's important to understand that lower standard deviations (like in the neutral and disagree groups) indicate that respondents share more similar views, while higher standard deviations (like in the agree group) reflect a wider range of opinions. The prominence of neutral responses, such as the 103 respondents in Figure 2, suggests a potential area for further exploration. This large neutral stance might indicate a lack of strong opinions due to limited information, uncertainty about the infrastructure, or ambivalence. Exploring these possibilities could provide valuable insights into why so many respondents chose a neutral position.

The analysis presented in Figure 3 indicates varying opinions on whether the Kullu District generates more revenue from adventure tourism compared to the Bilaspur District. Notably, a significant number of respondents (51) agree with this statement, accompanied by a standard deviation (SD) of 0.50, which indicates considerable variability in their views. This variability suggests that while many perceive Kullu as a more lucrative destination, their confidence levels may differ based on personal experiences or information sources.

The neutral responses, comprising 29 respondents with a standard deviation of 0.45, deserve further interpretation. The moderate variability within this group could imply several factors, such as uncertainty about the specifics of revenue generation, a lack of detailed knowledge regarding adventure tourism in either district or ambivalence due to equal perceptions of both locations. Understanding why respondents chose the neutral option could provide insights into potential areas for improvement in communication or marketing strategies for both districts.

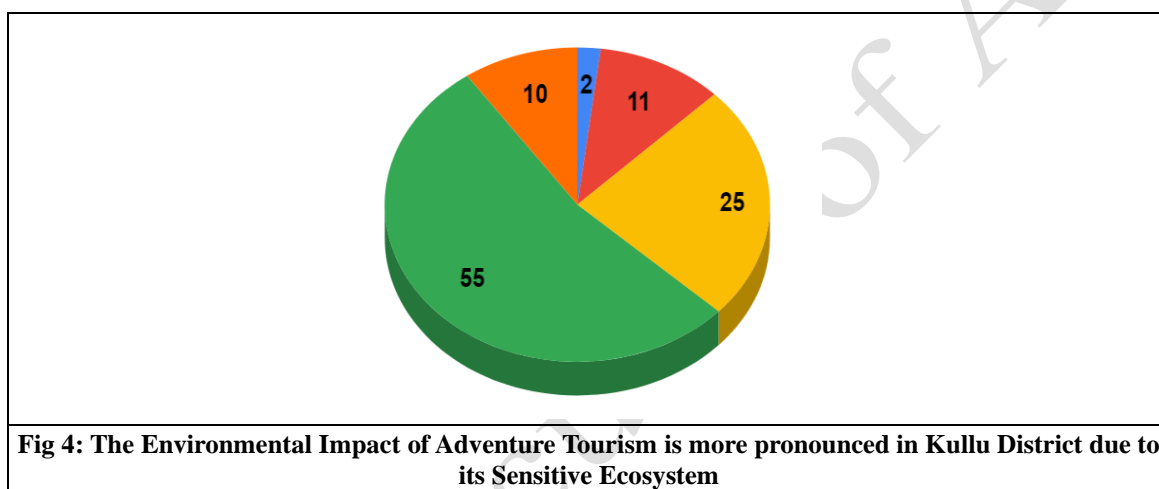


Furthermore, the comparative analysis between Bilaspur and Kullu should be expanded to detail their similarities and differences in terms of infrastructure, environmental impact, and revenue generation. For instance, while Figure 3 highlights the differences in revenue generation, it would be beneficial to explore the underlying reasons why Kullu may generate more revenue. Factors such as effective marketing campaigns, the diversity of adventure tourism activities offered (e.g., trekking, paragliding), and established tourist infrastructure could all contribute to Kullu's advantages over Bilaspur. Additionally, analyzing the infrastructure in both districts reveals that Kullu has a more developed framework supporting a variety of adventure activities, while Bilaspur may be focusing on water-based sports. This distinction may attract different tourist demographics, further influencing revenue generation.

Lastly, addressing the environmental impacts in both districts would enrich the discussion. For instance, the environmental challenges faced by Kullu, such as deforestation and waste management, can have long-term implications for its tourism revenue if not managed properly. In contrast, Bilaspur's focus on water conservation around Gobind Sagar Lake may create opportunities for eco-tourism, potentially attracting environmentally conscious tourists. By providing this additional context and interpretation, the findings from the study will be strengthened, offering a more comprehensive understanding of the dynamics of adventure tourism in Kullu and Bilaspur. As shown

in Fig. 4, the data reflects respondents' opinions regarding the environmental impact of adventure tourism in Kullu District, a region known for its sensitive ecosystem. The majority of respondents agree (mean of 55) or strongly agree (mean of 10) that the environmental impact is significant. The standard deviations (SDs) of 0.50 and 0.30, respectively, suggest a moderate level of consistency among those who believe that adventure tourism has a pronounced effect on the environment in this area.

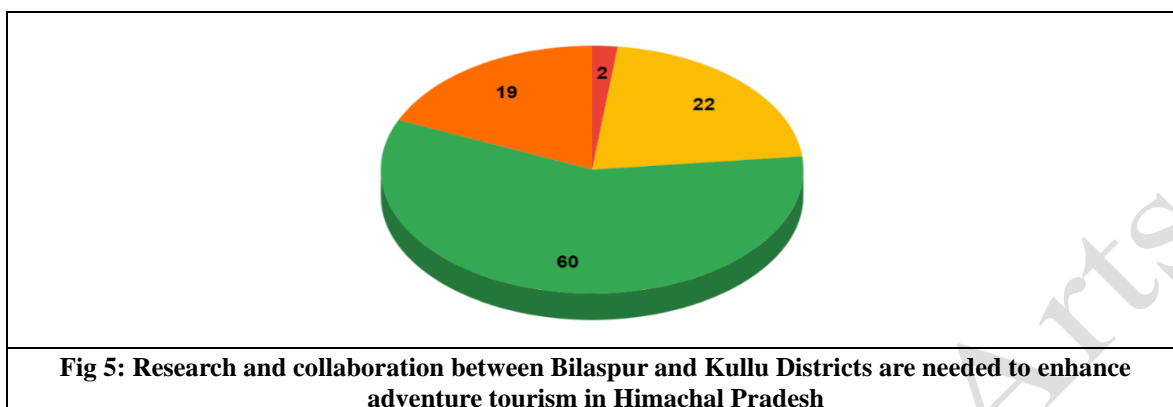
Fig. 4 illustrates the perception that "the environmental impact of adventure tourism is more pronounced in Kullu District due to its sensitive ecosystem." A considerable number of respondents are neutral (mean of 25), indicating uncertainty or ambivalence about the extent of the impact. The standard deviation of 0.43 for the neutral group suggests slightly more variation in their responses, possibly reflecting diverse perspectives on the issue. Conversely, a smaller portion of respondents disagree (mean of 11) or strongly disagree (mean of 2) with the statement, suggesting that they do not believe the environmental impact is as severe as others perceive it to be. The lower SDs of 0.31 and 0.14 in these categories indicate a higher level of agreement among those who downplay the impact.



Overall, the data shows a clear tendency toward recognizing that adventure tourism has a significant environmental impact in Kullu District. However, the presence of neutral and disagreeing responses highlights a spectrum of opinions regarding the severity of this impact. The consistency of the majority opinion, combined with the relatively low disagreement, underscores the perceived vulnerability of Kullu's ecosystem to the effects of adventure tourism. To enhance this discussion, it is important to delve into specific environmental challenges that Kullu faces due to adventure tourism, such as deforestation, waste management issues, and their effects on local biodiversity. For instance, the increased foot traffic from tourists can lead to soil erosion and habitat disruption, while improper waste disposal can contaminate local water sources and harm wildlife. By contextualizing the statement that "adventure tourism has a pronounced effect on the environment," a clearer picture of the specific environmental pressures can be presented.

As shown in Figure 5, the data represents responses to the statement, "I strongly agree that further research and collaboration between Bilaspur and Kullu Districts are needed to enhance adventure tourism in Himachal Pradesh." The results indicate strong support for this idea, with the majority of respondents leaning toward agreement. A substantial portion of respondents agree with the statement (mean of 60), indicating that most believe in the importance of research and collaboration between these districts to boost adventure tourism. The standard deviation (SD) of 0.50 suggests moderate variability in the strength of this agreement, indicating a generally strong consensus with some differing opinions on the extent of agreement. Fig. 5 illustrates that a significant number of respondents strongly agree (mean of 19) with the statement, demonstrating a firm belief in the need for further efforts in this area. The SD of 0.39 indicates that while there is strong agreement, there is slightly less variability compared to those who simply agree. A smaller group of respondents is neutral (mean of 22), reflecting uncertainty or a more balanced view on the necessity of increased

research and collaboration. The SD of 0.41 for the neutral group suggests some diversity in opinions, which may indicate differing levels of knowledge or interest in the subject. Only a minimal number of respondents disagree (mean of 2), and none strongly disagree (mean of 0), demonstrating very limited opposition to the statement. The low SD of 0.14 in the disagree category reflects consistency among this small group, reinforcing the overall trend of support for collaboration.



Overall, the data reflects strong support for enhancing adventure tourism through research and collaboration between Bilaspur and Kullu, with minimal disagreement and a significant number of respondents advocating for this approach. To enhance the discussion, it would be beneficial to outline the specific benefits of such collaboration, such as sharing best practices, developing joint tourism strategies, and pooling resources for marketing efforts. Additionally, recommendations on how this collaboration should be approached would add depth to the analysis. Key stakeholders, including local government officials, tourism boards, community leaders, and adventure tourism operators, should be involved to ensure that diverse perspectives are considered.

Moreover, identifying the types of research that are most needed—such as market analysis, environmental impact studies, and visitor satisfaction surveys—could provide a clearer framework for collaboration efforts. While frequent references to standard deviations effectively highlight the variability of responses, pairing these numerical values with explanations of their impact on the study's reliability and consensus would strengthen the analysis. Summarizing the overall trends in agreement and disagreement based on these standard deviations could also enhance the reader's understanding of the data, making it clearer how these variations influence the findings and recommendations.

As per The Tribune On 27 Sep 2024, the first small cruise ship of the state was launched in Gobind Sagar Lake in Bilaspur district. Abid Hussain Sadiq, Deputy Commissioner, Bilaspur, had announced earlier this month that the cruise facility would be arranged in the lake to attract more tourists to the state and open up job opportunities for people of the area. He had stated that a cruise would also be introduced in the Kol Dam lake up to Tatapani on the border of Shimla and Mandi districts. Meanwhile, local entrepreneurs also chipped in the endeavour by arranging this small cruise ship with a carrying capacity of 45 persons.



Fig 5: First Small Cruise Ship
(Source: The Tribune 27 Sep 2024)

According to information, along with the cruise ship, some jet skies and steamers would be introduced in future, with the administration in Bilaspur district planning to make it a centre of adventure activities, including para-gliding, para-sailing, canoeing, blue water rafting, water skiing, jet skies and entertainment and ferry cruises along with other water sports events.

9. RECOMMENDATION

The recommendations in this study are directly tied to the challenges identified in both Kullu and Bilaspur, aiming to address specific areas where each district faces growth constraints in adventure tourism.

9.1 Infrastructure Development: Kullu's established infrastructure supports tourism, but continued investment is needed to manage increased visitor numbers. Bilaspur, however, faces significant challenges in improving transportation access and accommodations. It is recommended that Kullu focus on upgrading existing facilities, while Bilaspur prioritize expanding its infrastructure, particularly in remote adventure tourism areas, to enhance visitor experience and accessibility.

9.2 Sustainability Practices: In Kullu, while efforts have been made toward waste management and eco-friendly accommodations, the region faces pressure from overcrowding in popular trekking areas. A recommendation for Kullu is to enforce stricter environmental regulations, limit visitor numbers in sensitive areas, and promote off-the-beaten-path destinations. Bilaspur, still in the early stages of tourism growth, should proactively implement sustainability practices, such as eco-certification for new businesses and strict guidelines for water sports, to prevent future environmental degradation.

9.3 Community Involvement: Both districts need to improve community engagement in tourism planning. In Kullu, local communities benefit economically but are often excluded from decision-making processes. It is recommended that local authorities create more participatory tourism models where residents have greater control over how tourism is developed and managed. In Bilaspur, a stronger emphasis on community-based tourism initiatives is essential to ensure residents benefit from job creation and preserve their cultural identity as tourism grows.

9.4 Marketing Strategies: While Kullu's reputation as a tourism hub is well-established, Bilaspur remains relatively unknown. Kullu should diversify its tourism offerings to reduce overcrowding in popular spots, and Bilaspur should invest in strategic marketing to promote its lesser-known attractions and adventure activities to niche tourist markets.

These recommendations are rooted in addressing the current challenges faced by both districts, ensuring that tourism development remains sustainable, inclusive, and economically beneficial for local communities.

10. CONCLUSION

The analysis of adventure tourism in Kullu and Bilaspur Districts reveals several key insights into public perceptions, infrastructure, revenue generation, environmental impacts, and the need for collaboration. Notably, the data indicate a significant prevalence of neutral responses among participants, suggesting a potential lack of information or uncertainty about the tourism potential in Bilaspur. This highlights an area for further exploration, as understanding the reasons behind this neutrality could provide valuable context for improving stakeholder engagement and outreach. In terms of infrastructure, the comparison between Bilaspur and Kullu is clear; however, it is essential to specify particular areas of infrastructure development, such as transport systems, accommodations, and adventure sports facilities, rather than making broad statements about "developed infrastructure." This specificity will make the discussion more actionable and guide future improvements.

The findings also confirm that Kullu generates more revenue from adventure tourism than Bilaspur. This outcome may stem from Kullu's historical popularity as a tourist destination, enhanced marketing efforts, and a wider variety of adventure activities offered. Reflecting on these factors can

deepen our understanding of the dynamics behind revenue generation in these regions. Regarding environmental impacts, the data indicates that Kullu faces significant challenges, including deforestation, waste management issues, and pressure on local ecosystems due to increasing tourist activities. Acknowledging these specific challenges grounds the discussion on the tangible consequences of adventure tourism and underscores the need for sustainable practices.

The conclusion also emphasizes the necessity for research and collaboration between the districts to enhance adventure tourism. Potential collaboration avenues include joint policy development, shared infrastructure initiatives, and eco-friendly tourism strategies, all of which could lead to a more coordinated approach to tourism management. Additionally, while Kullu's dominance in revenue generation and environmental impact is clear, it is essential to highlight Bilaspur's unique opportunities for growth in lesser-known adventure activities and untapped tourism markets. Fostering these opportunities can contribute to a more balanced and sustainable tourism landscape.

Finally, to make the findings more impactful, actionable recommendations for policymakers and tourism boards should be outlined. These may include prioritizing eco-friendly infrastructure development, implementing responsible tourism practices, and investing in marketing strategies to promote lesser-known destinations like Bilaspur. By focusing on these specific sustainability measures, both districts can enhance their adventure tourism sectors while protecting their natural resources. Overall, the conclusion effectively summarizes the key findings while offering a more precise and actionable perspective for future development in the adventure tourism sector of Himachal Pradesh.

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