

**To what extent do ambiguous regulations and rules impede the economic
benefits derived from adventure sports activities in small regional
economies?**

Research paper by Angad Brar

Abstract

This study delves into the significant role of adventure sports activities in fostering the economic development of small regional economies. It focuses on the potential economic benefits of adventure sports in attracting tourists, creating jobs, and developing local businesses. The study particularly examines Bir, a town in Himachal Pradesh known for paragliding, to demonstrate how adventure sports can serve as powerful economic drivers.

The study also investigates how unclear and inconsistent regulations pose barriers to investment and growth in adventure sports destinations like Bir. It aims to identify the challenges that regulatory issues present and explore opportunities for economic growth through clearer and more consistent regulations.

To achieve a comprehensive understanding of these issues, the study thoroughly reviews empirical evidence, survey data, and various articles and papers on the topic. The findings indicate that unclear regulations stifle investment, reduce participation, and create economic uncertainty, ultimately hindering the economic growth of regions like Bir.

Based on these insights, the study provides actionable recommendations for policymakers and stakeholders to address these challenges and promote sustainable growth in adventure sports destinations. The research aims to offer valuable guidance for fostering economic development through adventure sports tourism in small regional economies.

Adventure sports significantly contribute to the economies of small regions by attracting tourists, creating jobs, and stimulating local businesses. These activities draw visitors who spend money on lodging, food, equipment rentals, and other local services, generating substantial revenue for the area. The influx of tourists also leads to the creation of various jobs, including guides, instructors, and hospitality staff, further strengthening the regional economy with a variety of new employment opportunities.

Regional economics, which studies how geographical spaces influence economic activities, explores how spatial phenomena such as agglomeration economies and infrastructure development affect both private and social welfare. In the context of adventure sports, regional economics helps in understanding how the geographical features and infrastructure of a region can enhance or limit the economic benefits derived from these activities.

Despite the potential economic benefits, unclear regulations and rules can hinder the growth of adventure sports. Ambiguous regulations can create uncertainty, stifle investment, and reduce participation, thereby limiting the economic potential of these activities. For example, inconsistent policies on when and where adventure sports can be conducted can deter tourists and investors, negatively impacting the local economy.

This paper will explore how unclear regulations impede the economic potential of adventure sports in small regional economies. By examining specific case studies and analyzing the impact of ambiguous rules on various aspects of the adventure sports industry, we aim to uncover the challenges and opportunities for economic growth in this sector. Through a comprehensive review of relevant literature and empirical evidence, we will shed light on the implications of regulatory

ambiguity and offer insights into potential solutions for maximizing the economic benefits of adventure sports in small regional economies.

Adventure sports tourism has the potential to bring significant economic benefits to a region. According to a study by Buckley in 2012, adventure tourism can generate substantial revenue for local communities through direct spending on activities, lodging, meals, and transportation. Additionally, the introduction of adventure sports activities can attract investments in infrastructure such as roads, accommodations, and recreational facilities, contributing to further economic development (Pomfret & Bramwell, 2016).

The study of regional economics examines how geographic space influences economic activities, emphasizing factors like agglomeration economies and infrastructure development. These factors impact the distribution of economic resources and activities within a region, affecting both private and social welfare. In small regional economies, adventure sports can have a significant impact by drawing tourists, creating job opportunities, and stimulating local businesses.

The impact of adventure sports on regional economies is complex. On one hand, these activities can drive the development of infrastructure like roads, accommodations, and recreational facilities, benefiting the local economy. On the other hand, they can encourage agglomeration economies, with businesses and services congregating around popular adventure sports destinations, creating a center of economic activity.

However, the economic benefits of adventure sports are not guaranteed and depend heavily on the management of spatial factors such as land use planning, transportation networks, and the preservation of natural resources. Effective regional planning can amplify the positive impacts of

adventure sports, while inadequate planning can result in issues such as congestion, environmental harm, and social tensions.

Adventure sports significantly impact small regional economies by attracting tourists and generating revenue. These activities can support local economies through direct spending on services like accommodation, food, and equipment rental, as well as through indirect effects like job creation and the stimulation of local businesses.

For instance, in regions where adventure sports are a primary draw, local businesses such as hotels, restaurants, and retail stores often experience increased demand, leading to higher employment rates and improved economic conditions for residents. Additionally, adventure sports can enhance the region's visibility and reputation, attracting further investment and development.

Case studies from different regions highlight the positive economic impact of adventure sports. Malaysia, for example, has experienced substantial economic growth and increased tourist activity through hosting various sporting events, including adventure sports. These events attract international visitors, generate revenue, and stimulate economic activity in the host regions.

However, the economic impact of adventure sports comes with challenges. The seasonal nature of many adventure sports can lead to fluctuations in economic activity, and the reliance on specific natural environments makes these regions vulnerable to environmental changes and degradation. Therefore, sustainable practices and strategic planning are crucial to maximize the economic benefits of adventure sports while mitigating potential negative impacts.

Regulations play a crucial role in shaping the economic potential of adventure sports. Clear and effective regulations can enhance the safety, sustainability, and attractiveness of adventure sports, thereby boosting their economic impact. Conversely, ambiguous or poorly enforced regulations can hinder economic benefits by creating uncertainty, increasing costs, and discouraging investment.

In the context of adventure sports, regulations encompass various aspects, including safety standards, environmental protection, land use, and business operations. Clear and consistent regulations can provide a stable environment for businesses and investors, ensuring that adventure sports activities are carried out safely and sustainably.

However, unclear regulations can present significant challenges. Ambiguities in rules can lead to inconsistent enforcement, legal disputes, and increased costs for businesses. These issues can deter investment and limit the economic potential of adventure sports in small regional economies. For instance, in regions where regulatory frameworks are unclear, businesses may encounter difficulties in obtaining permits, navigating legal requirements, and ensuring compliance with safety standards.

By combining insights from Buckley (2012) and Pomfret & Bramwell (2016), we can see how the management of spatial factors and effective regulations are critical for maximizing the economic benefits of adventure sports tourism. Proper planning and sustainable practices are key to overcoming the challenges and ensuring long-term positive impacts on regional economies.

Case Study:

Area of study:

Bir, a small town in Himachal Pradesh, serves as the focal point for this research due to its prominence as a top paragliding destination. Bir-Billing Special Area, situated in the Kangra District, lies approximately 65 kilometers southeast of Dharamshala, the second capital of the state, at latitude 32°N and longitude 76°E. The area is at an elevation of 1,525 meters. This region gained international recognition when the Paragliding World Cup Association (PWCA) hosted the inaugural "First Paragliding World Cup of India" in October 2015, attracting 150 top-ranked paragliding pilots worldwide and 500 free-flying pilots. Additionally, Bir-Billing is the gateway to Bada Bhangal, the tribal part of Himachal Pradesh.

A significant Tibetan refugee community resides in Bir's Tibetan Colony, established in the early 1960s after H.H. Dalai Lama's exile from Tibet. This colony reflects a unique cultural amalgamation contributing to the area's distinct identity. The Bir-Billing Special Area was officially designated on November 4, 2004, under the Himachal Pradesh Town and Country Planning Act, 1977. The designated Special Area, for which a Development Plan has been prepared, encompasses seven revenue villages covering an area of 2,172 hectares (Development Plan-2035 Bir-Billing Special Area, Kangra District, Himachal Pradesh).

Research Objectives:

In this case study, the paper aims to explore how adventure sports, especially paragliding, impact the local economy by drawing tourists, generating revenue, and creating job opportunities. The study will analyze the multiplier effect of these activities on the local economy. Additionally, it will investigate the impact of ambiguous regulations, such as restrictions during events like cricket

matches in nearby Dharamshala, which previously resulted in the cancellation of trips by many foreign pilots. A quantitative survey will be conducted among these pilots to collect relevant data. The study will end with recommendations for policymakers and stakeholders to tackle these challenges and foster sustainable growth in adventure sports destinations.

Tourism accounts for 6.6% of Himachal Pradesh's GDP, with a primary focus on Shimla, Kullu-Manali, and Dharamshala. However, these destinations are negatively impacted by mass tourism, leading to the need for promoting alternate forms of tourism for sustainability and financial benefits. One such sub-branch is sports tourism, which presents opportunities for sustainable development in Himachal Pradesh due to the state's suitability for various sports. By taking a sustainable approach, sports tourism can help diversify tourism, alleviate pressure on popular destinations, mitigate the adverse effects of mass tourism, attract high-spending tourists, prolong tourist stays, and boost the local economy.

Adventure sports, including river rafting, zip-lining, paragliding, and skiing, have gained popularity in India in recent years. Millennials are driving the growth of this sector, seeking thrill, stress relief, and memorable experiences. Paragliding is particularly popular, with more than 25 sites across India, notably Bir-Billing in Himachal Pradesh. Bir-Billing hosted the first World Cup of paragliding in 2015 and serves as a role model for other sites. Uttarakhand has approximately five operational paragliding sites but has not achieved the same level of popularity as Bir-Billing.

Factors Contributing to Bir-Billing's Success:

Observational research was conducted to identify factors contributing to Bir-Billing's success and propose improvements for Uttarakhand. Key factors include:

- Excellent connectivity and strategic location.
- Well-trained local pilots.
- Presence of a paragliding association.
- Hosting international events like the World Cup.
- Focused development by the Himachal Pradesh Tourism.

Recommendations for Uttarakhand include focusing on a single site for development, providing training to local pilots, organizing events and competitions, forming and empowering a paragliding association, improving connectivity and infrastructure, and enhancing promotion efforts. Adopting the Bir-Billing model can help Uttarakhand leverage its potential for adventure tourism, particularly in destinations like Mussoorie, to become world-class paragliding sites.

Visitors flock to Bir-Billing for paragliding amidst stunning mountains and greenery, but tandem pilots are facing significant financial challenges. Despite their daily hard work, they struggle to earn enough money and often face job uncertainties. Kuldeep Thakur, president of the Paragliding Pilot Union in Bir, explains, "We have to halt paragliding operations for around five months each year due to the rainy season and snowfall. Even during the remaining months, closures occur frequently due to various reasons such as VIP visits, cricket matches in nearby Dharamshala, and unexpected events like untimely rains, low tourist traffic, and landslides."

Thakur mentions that the union has approximately 280 registered tandem pilots, most of whom are local with at least five years of experience in solo and tandem paragliding. Veteran pilot Partap Singh discusses the economic challenges faced by paragliding pilots, saying, "On average, a tandem pilot completes three flights per day, earning Rs 1000 per flight. However, the flying season

only lasts for three to four months in a year. Taking the maximum flying term into consideration, the monthly earnings amount to about Rs 10,000." He adds that pilots who have purchased their own paragliders struggle to recover their investment of around Rs 5.5-6 lakh.

The union president also expresses dissatisfaction with the lack of maintenance at both the takeoff site at Billing and the landing site at Bir, the involvement of unregistered travel agents in booking paragliding, and the training of solo paragliding by non-locals. "The lack of matting or grassing at the takeoff site sometimes leads to accidents and discomfort for both the passenger and the pilot," he said. He also raises concerns about unregistered travel agents booking paragliding flights, stating, "These individuals offer flights for as low as Rs 1500, and during the peak tourist season, they charge anywhere between Rs 3500 to Rs 5000, which affects the reputation of registered booking agents." He further claims that unregistered solo paragliding trainers from outside Kangra are present.

The flight from Billing to Bir takes around 15 minutes, but this time may extend to more than half an hour based on passengers' requests for extended flights at extra charges, without compromising on safety. One pilot mentions, "Despite the excitement and thrill of this profession, our lives are burdened with hard work, and we struggle to earn a living. We often find it difficult to manage financially." Kuldeep adds, "When paragliding started in Bir, many local youths were eager to become pilots and find employment locally. However, the enthusiasm has faded, and now local youth prefer to move to big cities in search of jobs."

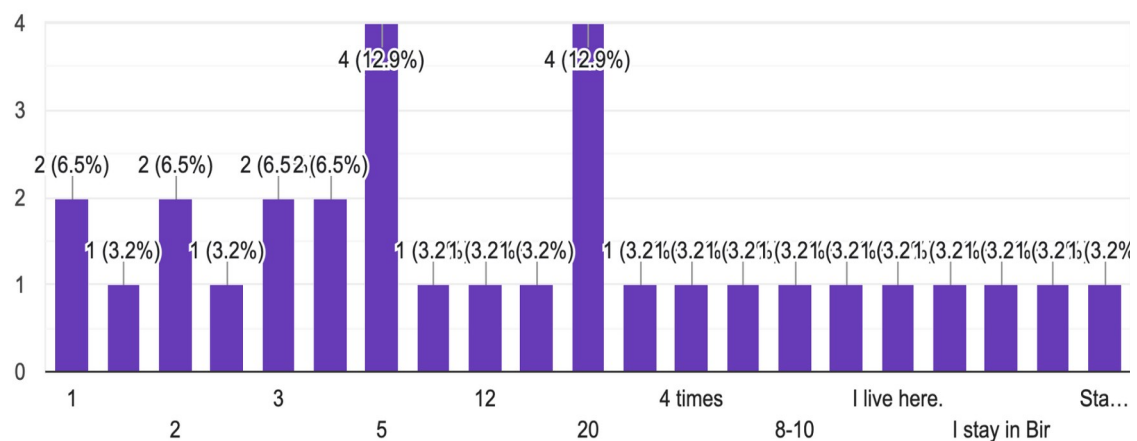
The union emphasizes the need for a government paragliding training school for new pilots and to monitor the training provided by individuals. "After an accident or other mishap, the reputation of the registered pilots in Bir is negatively impacted," Kuldeep said. Vinay Dhiman, the deputy director of tourism, Kangra, mentioned that travel agents sometimes offer complete packages to

tourists, including hotel bookings, travel, and paragliding, and eventually collaborate with registered pilots and transfer the bookings to them. He also mentioned that pilots undergo the SIV ('Simulation d'Incident en Vol') course before being registered with the department. Vinay said that the department has deployed marshals to monitor paragliding activities, and pilots' equipment is regularly inspected (Rana, 2024).

Complimentary to the given research above research conducted by the author of the paper indicates the following about the region Bir-Billing:

How many times have you visited Bir for paragliding in the last 10 years?

31 responses

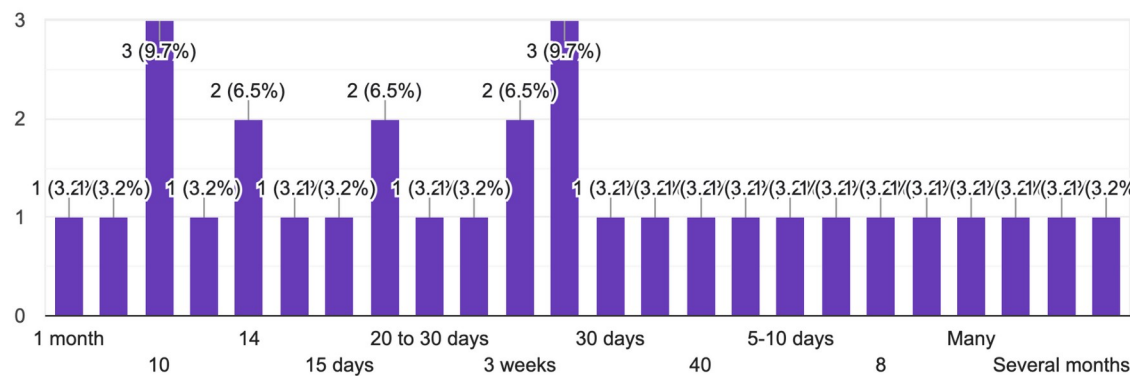


The bar chart depicting the frequency of visits to Bir for paragliding over the past 10 years among 31 respondents shows diverse visit patterns. The most common frequencies are 5 visits and 20 visits, each reported by 12.9% of respondents, indicating a mix of moderate and frequent visitors. Lower frequencies such as 1, 2, 3, 4, and 12 visits were less common, each reported by a small percentage of respondents (3.2% each). Additionally, there are respondents who either live in Bir or visit very frequently, showing a high level of engagement with the location. The data

suggests a broad range of visit frequencies, highlighting Bir's appeal to both occasional and regular paragliders.

What is the typical duration (in days) of your visits to Bir?

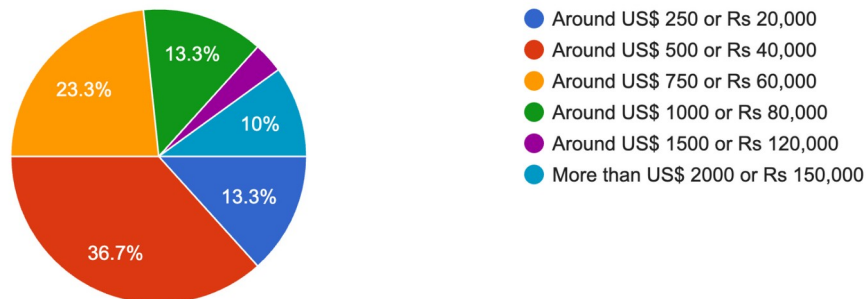
31 responses



The bar chart illustrating the typical duration of visits to Bir among 31 respondents shows a wide range of stay lengths. The most common durations are 30 days (9.7%) and 3 weeks (6.5%), indicating that some visitors prefer extended stays. Other durations, such as 1 day, 10 days, 14 days, 15 days, 20 to 30 days, and various other lengths, each represent a smaller fraction of respondents (3.2% each). This diversity in visit lengths suggests that Bir attracts a variety of visitors, from those on short trips to those staying for several months. The varied durations highlight Bir's appeal as a flexible destination suitable for both brief visits and extended stays.

How much do you typically spend on each trip to Bir? (Please skip question if you are not comfortable sharing)

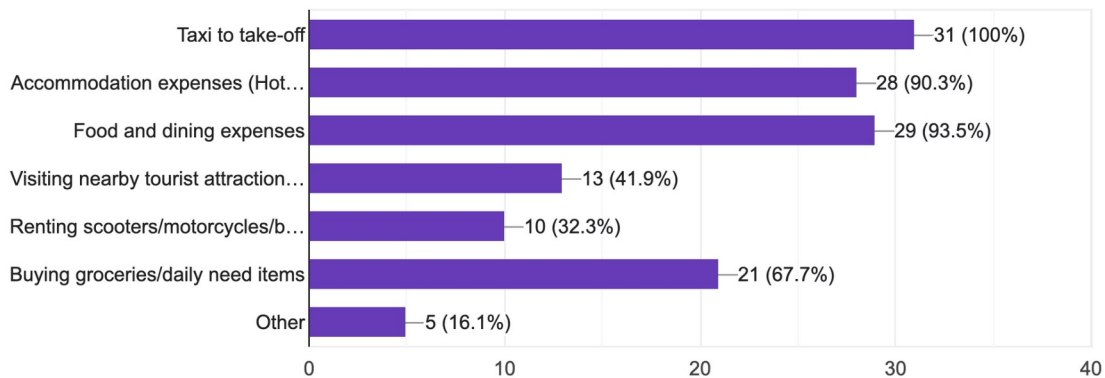
30 responses



The pie chart detailing the typical expenditure per trip to Bir among 30 respondents indicates significant variation in spending habits. The most common expenditure range is around US\$500 or Rs 40,000, chosen by 36.7% of respondents. Other notable spending categories include around US\$1000 or Rs 80,000 (23.3%) and US\$750 or Rs 60,000 (13.3%). Fewer respondents spend at the extremes, with the lowest expenditure category (around US\$250 or Rs 20,000) and the highest expenditure category (more than US\$2000 or Rs 150,000) being the least common, reported by 10% and 3.3% of respondents, respectively. This indicates that most visitors to Bir have a moderate budget for their trips, with a smaller number spending either significantly less or significantly more.

Where do you spend during your Bir visits? Select all that apply:

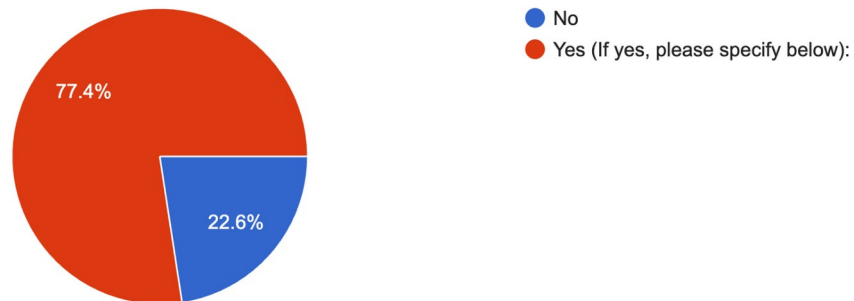
31 responses



The bar chart depicting the spending habits of respondents during their visits to Bir illustrates distinct patterns in expenditure. All respondents (100%) spend on taxi services for transportation, indicating a universal need. A significant majority also allocate funds for accommodation (90.3%) and food and dining expenses (93.5%), reflecting the essential nature of these expenditures for travelers. Additionally, 67.7% of respondents purchase groceries or daily necessities, showing a preference for self-sufficiency during their stays. Less common expenditures include visiting nearby tourist attractions (41.9%) and renting scooters or motorcycles (32.3%), suggesting these activities are of lower priority. The "Other" category, with 16.1%, indicates some unique or less common expenditures. This data suggests that visitors primarily allocate their budgets towards essential services like transport, accommodation, and food.

Have you encountered any challenges or disruptions due to unclear rules and regulations?

31 responses



According to the pie chart, 77.4% (24 out of 31) of the respondents encountered challenges or disruptions due to unclear rules and regulations. This indicates that a significant majority of individuals have faced difficulties that potentially impact their activities negatively. The prevalence of these issues highlights the urgent need for well-defined rules and clearer communication to address such challenges. On the other hand, 22.6% (7 respondents) reported not facing such issues, indicating that while the problem is widespread, it is not universal. Overall, the data underscores the importance of regulatory clarity for ensuring smooth operations and reducing disruptions.

Analysis:

Job Creation: The expansion of adventure sports tourism can generate new employment opportunities across multiple sectors. According to Saayman and Saayman (2006), this type of tourism can create jobs within the service industry, including roles such as guides, instructors, and hospitality staff. Additionally, the increased demand for adventure sports equipment and gear can stimulate the growth of local businesses, leading to further job creation in the retail and manufacturing sectors (Musa & Dimmock, 2012).

Diversification of the Economy: Developing adventure sports tourism can diversify regional economies that might be overly dependent on traditional industries like agriculture or manufacturing. Introducing a unique tourism product can attract different types of visitors, reducing the region's reliance on a single economic sector (Williams & Soutar, 2009). This economic diversification can enhance the resilience of regional economies against economic shocks and fluctuations.

Increased investments lead to increased incomes: I would like to connect the amount of income generated in this village to the concept of the Keynesian multiplier. Since individuals find the economy growing due to the emergence of the market, there is a tendency to invest by setting up ancillary industries. As investment increases, it is found that incomes generated increase by a multiplier amount. The economic theory and logic that one is considering is that as incomes increase, consumption or the propensity to consume increases but not at the same rate. This leads to an increase in the income generated by a multiplied amount.

$\Delta Y = K \Delta I$ - This reflects that change in come is K times(multiplier) the change in Investment. This also connects to the concept of circular economy. As income is generated through the expenditure incurred.

As per my research, typically, 5000 people visit Bir every year for paragliding, and they spend an average of \$ 750. Given the findings from the survey, if regulations and infrastructure improve, then another 2000 to 3000 pilots will come, and those that come may stay longer and spend more. So this could lead to \$ 2 to 3 million in spending, which with the multiplier could have a benefit of \$ 3-5 million.

Sustainable Development: Adventure sports tourism can also promote sustainable development within regional economies. Stoddart and Rogerson (2004) note that adventure sports often encourage the preservation of natural environments and cultural heritage, as these elements are key attractions for adventure tourists. By advocating for sustainable practices and responsible tourism, regions can secure long-term economic benefits while minimizing adverse environmental and social impacts.

The proper regulations are crucial for maximizing the economic benefits of adventure sports tourism, ensuring safety, sustainability, and long-term viability. They play a vital role in enhancing safety by ensuring that adventure sports activities are conducted safely through clear and enforced regulations that set standards for equipment, training, and operations. This, in turn, protects participants and reduces the risk of accidents, which can have negative repercussions and deter tourists.

Furthermore, well-defined regulations create a stable and predictable business environment, thereby encouraging investment in adventure sports facilities and infrastructure. Investors are more likely to commit resources when they can anticipate consistent enforcement and understand the legal framework.

Regulations also promote sustainability by mandating sustainable practices such as environmental protection measures and responsible tourism guidelines. This helps preserve the natural and cultural resources that are vital to adventure sports tourism, ensuring that these attractions remain viable for future visitors.

Moreover, proper regulations can streamline the process for obtaining permits and licenses, reducing bureaucratic hurdles and enabling quicker business setups. This efficiency boosts local economies by allowing new businesses to start operations and contribute to job creation and revenue generation more rapidly.

In addition, clear regulations help prevent conflicts among stakeholders, such as landowners, businesses, and government agencies, by outlining rights, responsibilities, and processes. This reduces the likelihood of disputes and ensures smoother management of adventure sports activities.

Lastly, regions with robust regulatory frameworks can build a reputation for being well-managed and safe, attracting more tourists. This trust is essential for long-term success, as tourists are more likely to visit and return to destinations where they feel secure and well-cared-for.

Conclusion:

In conclusion, adventure sports play a pivotal role in boosting the economies of small regions by attracting tourists, creating job opportunities, and stimulating local businesses. The influx of visitors spending on accommodations, food, equipment rentals, and other local services generates substantial revenue and fosters economic growth. The positive impact of adventure sports extends to infrastructure development and the enhancement of regional visibility and reputation, further attracting investment and development.

However, the economic potential of adventure sports is heavily influenced by the management of spatial factors and the clarity of regulations. Effective regional planning and well-

defined regulations are essential to maximize the economic benefits and ensure the sustainability of adventure sports. Ambiguous or poorly enforced regulations can hinder growth by creating uncertainty and discouraging investment.

The case study of Bir-Billing in Himachal Pradesh highlights both the opportunities and challenges associated with adventure sports tourism. While Bir-Billing has successfully leveraged its natural advantages and strategic initiatives to become a premier paragliding destination, issues such as unclear regulations, seasonality, and inadequate infrastructure maintenance pose significant challenges. Addressing these challenges through strategic planning, clear regulations, and sustainable practices can enhance the economic benefits of adventure sports and support the long-term growth of regional economies.

Through the establishment of consistent regulatory frameworks and investments in infrastructure and safety measures, regions can harness the economic potential of adventure sports. This approach not only stimulates local economies but also promotes sustainable development, preserving the natural and cultural attractions that allure visitors for the benefit of future generations. As a result, it is crucial for policymakers and stakeholders to collaborate in addressing regulatory uncertainties and fostering an environment conducive to the growth of adventure sports tourism, thus maximizing its economic impact on small regional economies.

Recommendations based on my analysis and research

Visibility into Flying Calendar

1. Annual Flying Calendar:

- Publish a comprehensive calendar in July each year covering the next 6-9 months

- Include known restrictions for cricket matches, events, and seasonal closures
- Enable advance planning for peak seasons (October-November and February-April)
- Mandatory 15-day advance notice for any additional restrictions

2. Transparent Restriction Criteria:

- Establish clear, written criteria for implementing flying bans
- Define specific conditions related to cricket matches, accidents, and VIP visits
- Create standardized protocols for restriction implementation

3. Communication System:

- Create an official online platform and mobile app for real-time updates
- Provide real-time flying conditions, restrictions, and bans
- Publish annual reports on permit fee utilization and site improvements

4. Dispute Resolution:

- Establish fair and transparent process for challenging flying bans
- Protect pilots from retribution when raising legitimate concerns
- Create clear escalation pathways for grievance resolution

Safety Protocols

1. Equipment and Communication:

- Allow essential safety equipment including satellite trackers
- Define specific radio frequencies for pilots
- Permit appropriate long-range communication devices
- Designate and staff a safety frequency

2. Search and Rescue:

- Develop comprehensive search and rescue protocols
- Establish a dedicated rescue team
- Maintain tie-up with rescue helicopter during busy flying season
- Create clear emergency response procedures

3. Regulatory Framework:

- Establish dedicated regulatory body for paragliding oversight
- Standardize permit process recognizing international certifications
- Ensure consistent rule enforcement for solo and tandem operators
- Define clear airspace zoning and no-fly zones

4. Crowd Management:

- Implement take-off site management system
- Assign take-off marshals during peak seasons
- Monitor and control pilot numbers for safety
- Establish clear protocols for launching sequence

Infrastructure

1. Site Maintenance:

- Define minimum maintenance requirements for take-off and landing sites
- Designate specific authority responsible for maintenance
- Establish regular inspection and repair schedules
- Implement grass management and cleaning protocols

2. Essential Facilities:

- Install and maintain toilets at take-off and landing sites
- Improve road access to take-off areas
- Install and maintain proper wind socks

- Develop waste management systems

3. Medical Support:

- Establish specialized medical facility for paragliding accidents
- Upgrade existing medical facilities for emergency response
- Create clear evacuation protocols
- Train local medical staff in paragliding-specific injuries

4. Information Infrastructure:

- Create central help desk for visiting pilots
- Staff information center with knowledgeable personnel
- Provide local regulations and safety information
- Operate safety frequency monitoring
- Maintain up-to-date site guides and protocols

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