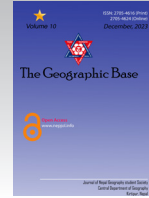




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Reviving Tourism in Nepal: Embracing Sustainable Mountain Adventures

Sabitri Sharma

Central Department of Geography, Tribhuvan University, Kirtipur, Kathmandu, Nepal

Email: Sabitri.787717@cdg.tu.edu.np

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Abstract

This paper explores mountain tourism in Nepal, emphasizing its rich natural beauty, cultural heritage, and adventure opportunities. The primary objective is to analyze tourist flow over the years, highlighting trends of growth, decline, and recovery. The article examines the potential of mountain tourism while addressing challenges related to tourism regulation and the necessity of environmental conservation. A descriptive approach is employed to assess these trends and challenges, utilizing secondary data from reputable sources, including the National Planning Commission, the Tourism Board, the Bureau of Statistics Nepal, and various published journals and dissertations. The study conscientiously addresses the revival of mountain tourism in Nepal and the sensitive challenges linked to mountain tourism. By emphasizing the urgency of these concerns, the article advocates for the adoption of sustainability principles and the implementation of judicious management strategies to mitigate these challenges.

Introduction

Mountain tourism is a significant component of Nepal's tourism sector, attracting millions of visitors each year to its renowned peaks, including Mount Everest, the Annapurna range, and numerous lesser-known yet equally breathtaking mountains (Nepal, 2016). The country's rich biodiversity, unique culture, and warm hospitality make mountain tourism particularly appealing. Additionally, Nepal is home to seven cultural heritage sites and one natural heritage site included in the UNESCO World Heritage list since 1979, all located within mountainous areas (Upadhayaya & Upreti, 2011).

In November 1998, the UN General Assembly declared 2002 as the International Year of Mountains and Ecotourism, presenting an excellent opportunity and challenge for advancing sustainable mountain development (Nepal,2022). The Nepal Himalaya encompasses approximately 800 sq. km within the vast expanse of the Hindu Kush – Himalaya range, stretching over 3,500 km from the northwest in Afghanistan to the southeast in Myanmar. This area spans from Byasrishi Himal in Darchula in the west to Kanchenjunga in the east, as documented by (Upadhayaya & Upreti, 2008).

The transformation of mountainous areas into destinations for recreation, retirement, and investment in tourism-related amenities is evident (Nepal, 2011).

(Karki,2023) notes that 16% of tourists visiting Nepal are specifically drawn to trekking and climbing, highlighting the abundant mountaineering opportunities available. As a nature-centric destination offering isolation-based activities, Nepal aligns with the preferences of modern travelers seeking post-COVID experiences.

Nepal's diverse landscapes, featuring iconic peaks like Annapurna I, Dhaulagiri, and Manaslu, provide thrilling climbing experiences and various trekking opportunities. Popular trails, such as the Annapurna Base Camp trek and the Everest trek, alongside regions like Mustang and Manang, attract numerous trekkers annually. The majestic Himalayas cover around 83% of Nepal's total land area, contributing to the country's reputation for unspoiled natural beauty and rich cultural heritage.

Beyond trekking, Nepal offers a range of adventure activities, including white-water rafting on rivers like Gandaki, Seti, and Trishuli, as well as paragliding, skydiving, kayaking, bungee jumping, and jungle safaris, all enhancing the country's tourism appeal. Notable pilgrimage sites such as Pashupatinath, Lumbini, and Muktinath further draw visitors, making tourism a significant source of income and showcasing Nepal's tremendous growth potential (Genc, 2021).

However, mountain tourism also presents challenges for the industry, particularly regarding tourists' behaviors and

preferences. The appeal of mountain tourism lies in its unique natural environment, fresh air, and scenic landscapes, which attract prospective tourists (Zeng et al., 2022).

Methods and Materials

To achieve its objectives, the article employs a descriptive methodology, relying on secondary data sources to examine trends, challenges, and recovery patterns in Nepal's mountain tourism sector. Key data sources include annual tourist arrival statistics from the Department of Immigration, Nepal (2021/2023), which highlight shifts in international tourism over the past decade, allowing for analysis of growth, decline, and post-pandemic recovery trends. The Nepal Tourism Board (NTB) provides demographic insights and details on the impact of global events, such as the COVID-19 pandemic and the Russian invasion of Ukraine, which have influenced tourism patterns in Nepal. Additionally, literature from sources like (Prasai, 2023) and (Bhatia, 1996) supports a contextual understanding of tourism's vulnerability to external crises and the need for resilience. This combination of secondary data and contextual literature review enables the article to assess the effectiveness of sustainable tourism practices and inform strategies for enhancing resilience within Nepal's mountain tourism sector.

Results and Discussion

Tourism Movement in Nepal

Approximately 83% of Nepal's total land area of 141,181 sq. km (CBS, 2006) consists of mountainous landscapes, including the iconic Himalayas. These landscapes have long been a central attraction for visitors, offering unparalleled natural beauty and a wealth of cultural heritage. Nepal's section of the greater Hindu Kush-Himalaya range stretches over 800 sq. km, beginning from Byasrishi Himal in the west (Darchula) to Kangchenjunga in the east, making it a focal point for both adventure and cultural tourism (Upadhayaya & Upreti, 2008).

Historically, Nepal's strategic location between India and Tibet fostered early cultural exchanges, exemplified by the 592 AD marriage of Princess Bhrikuti to King Srong-tsen Gampo of Lhasa, which solidified Nepal-Tibet relations. The visit of the Chinese traveler Xuanzang (Huien-Tsang) in 643 A.D, particularly to Lumbini, further highlights Nepal's importance as a historical and spiritual destination (Sharma, 2033 BS). These early connections laid the groundwork for what would eventually become a thriving tourism sector.

Nepal's introduction to the global stage began during its unification period, as Western explorers became intrigued by its mystique. Captain Kirkpatrick's 1792 visit, recorded in his book *An Account of the Kingdom of Nepal*, was

instrumental in introducing the West to Nepal's unique landscape and culture. This early exploration was followed by the pioneering work of Toni Hagen, whose geological mapping and advocacy for rural eco-tourism played a significant role in shaping modern tourism in Nepal (Nepali Times, 2017).

A major turning point came after Nepal's democratic movement in 1950, with road networks being built to connect the country to the Indian border. This infrastructure development spurred foreign interest in climbing, trade, and pilgrimage, marking the beginning of a more formalized tourism industry (Singh & Rana, 2022). The successful ascent of Mount Everest by Tenzing Norgay and Sir Edmund Hillary in 1953 was a landmark event that cemented Nepal's status as a prime destination for adventure tourism.

In the 1960s, the Sherpa and other ethnic groups in the mountainous regions began establishing trekking agencies, often with the help of foreign guides. The late 1960s and early 1970s saw an influx of Western tourists, particularly the hippie movement, drawn initially by the availability of cannabis. However, after the government banned the sale of cannabis in 1973, Nepal's tourism began shifting toward more structured and sustainable forms of adventure tourism, such as trekking and cultural exploration (Ojha, 2018).

In a bid to regulate and promote tourism sustainably, the government established

national parks and created the 1978 Master Plan of Tourism. This strategic document rejected the Himalayan Degradation Theory and underscored the importance of sustainable practices in managing tourism resources (Sacareau, 2009).

In 1998, the Nepal Tourist Board was created to strategically promote the country as a global tourism destination. This effort was bolstered by the Visit Nepal '98 campaign, but the onset of the Maoist insurgency in 1999 caused a significant decline in tourist numbers. The signing of the 2006 peace treaty allowed Nepal to refocus on tourism, leading to the celebration of a second Tourism Year in 2011.

The April 25, 2015 earthquake was a major setback for Nepal's tourism industry, causing widespread destruction, including damage to UNESCO heritage sites. Despite this, the trekking and mountaineering industries remain vital components of the economy, providing jobs to over 18,000 guides, 50,000 porters, and countless others. In 2018 alone, climbing fees contributed over Rs 680 million, employing around 1,700 high-altitude guides.

In 2020, the government launched the ambitious Visit Nepal 2020 campaign, aiming to attract 2 million tourists. Unfortunately, the COVID-19 pandemic severely impacted the campaign, causing an 81% drop in tourist arrivals compared to 2019. The economic survey of 2020/21

recorded just 230,085 visitors, excluding those from India, underscoring the profound effect of the global pandemic on Nepal's tourism sector (Economic Survey 2020/21).

Signs of recovery began to emerge in 2022/23, but the sustainability of this recovery will require a concerted effort by the government, private sector, and stakeholders. Addressing uncertainties and embracing sustainable tourism practices are essential to ensure the long-term success and resilience of Nepal's tourism industry (Bhandari, 2022).

Mountain Tourism Bouncing Back after COVID-19

In 2021, Nepal's tourism sector experienced a sharp decline, with foreign visitor numbers plummeting to 150,962

due to the second wave of the pandemic. This downturn was particularly pronounced among Chinese tourists, a demographic that had previously been on the rise (Prasai, 2023). This situation underscores the tourism industry's vulnerability to external factors, highlighting the necessity for resilience and adaptability, as noted by (Bhatia,1996).

In 2022, signs of recovery emerged, with nearly 600,000 arrivals from January to November. However, this momentum was disrupted by the Russian invasion of Ukraine, which negatively impacted economies in Europe and Asia, further straining Nepal's tourism sector and overall economy (NTB, 2022).

Table 1: Tourist Flow in Nepal Different Decade

Year	Number of tourists arriving in Nepal	Change % from the previous year
2010	602867	+ 18.2
2011	736215	+ 22
2012	803092	+ 9.1
2013	797616	- 0.7
2014	790118	- 0.9
2015	537970	- 31
2016	753002	+40
2017	940218	+ 24.8
2018	1173072	24.8
2019	1197192	2.8
2020	230085	- 81
2022	600000	+ 89.32
2023	8,09678.	+34.95

Source: Department of Immigration 2021/2023

According to statistics from the Nepal Tourism Board, 1,014,876 international tourists visited Nepal as of December 31, 2023. With this achievement, the government successfully met its target of attracting one million foreign tourists in 2023.

Positive Trends (2010-2017)

From 2010 to 2017, Nepal experienced consistent growth in tourist arrivals. During this period, positive changes in the political environment, improvements in infrastructure, historical legacy, and effective marketing campaigns could have contributed to a more favorable international perception of Nepal as a tourist destination.

Negative Trends (2015-2017)

The significant drop in 2015 can be attributed to the devastating earthquake that hit Nepal that year. The earthquake could have triggered negative perceptions of Nepal's safety and infrastructure, impacting tourist decisions. International media coverage and global responses might have influenced these perceptions.

Recovery (2016-2018)

The sharp increase in tourist arrivals in 2016 indicates a post-earthquake recovery. International support, positive narratives emphasizing Nepal's resilience, and reconstruction efforts might have contributed to a more positive image, encouraging tourists to return.

Stagnation and Decline (2018-2020)

The growth in tourist arrivals slowed down in 2018, and there was a drastic decline in 2020, likely due to the global COVID-19 pandemic. The pandemic, while primarily a health crisis, also had profound impacts on international perceptions of travel safety. Government responses, global media coverage, and public health measures could have influenced tourist decisions during this period.

Recovery post-pandemic (2022-2023)

The significant increase in tourist arrivals in 2022 and 2023 suggests a post-pandemic recovery. Effective handling of the pandemic, vaccination campaigns, and international cooperation in reopening borders may have positively influenced perceptions of Nepal as a safe destination.

Table 2: Top Five Country of Nationality Arrival in Nepal (2020-2021)

Position and year	2020	2021
Rank 1	India	India
Rank 2	Myanmar	USA
Rank 3	Thailand	UK
Rank 4	China	China
Rank 5	USA	Bangladesh

Source: Nepal Tourism Board (2021)

In 2020, India led the list of tourist arrivals to Nepal, followed by Myanmar, Thailand, China, and the USA. By 2021, India retained its top position, while the USA moved up to second place, displacing Myanmar, which dropped out of the top five. The UK also made its way to third place, replacing Thailand, which

exited the top rankings. China maintained its fourth position in both years, reflecting its steady contribution to Nepal’s tourism. Bangladesh entered the top five in 2021, taking the fifth spot previously held by the USA, indicating significant shifts in travel patterns during the pandemic years.

Table 3: Purpose of Visit

Year	2020	2021	Status
Holiday/Pleasure	139202	100843	-27.6
Pilgrimage	25530	11172	- 60.8
Trekking & Mountaineering	35893	15549	- 56.7
Others	26460	23398	- 11.6

Source: Nepal Tourism Statistics 2021|

While analyzing all categories—Holiday/Pleasure, Pilgrimage, and Trekking and mountaineering—experienced substantial declines, indicating challenges or factors impacting each specific segment. The "Others" category, while also experiencing a decrease, had a comparatively smaller decline because of Covid 19.

Nepal engaged in mountain tourism activities, encompassing trekking, expeditions, holiday pleasure, and pilgrimage, accounting for approximately 70.57% of the total arrivals. What holds greater appeal among tourists for mountain tourism are destinations such as National Parks and Wildlife Reserve, Pashupati Area, Lumbini, Manaslu Trekking, Mustang Trekking, Humla Trekking, Lower Dolpa Trekking, Kanchanjunga Trekking, and Upper Dolpa Trekking (Tourism Statistics 2021).

The Potential of Mountain Tourism in Nepal

Nepal is a country that is home to some of the most beautiful mountain ranges in the world. It is a popular destination for adventure sports, including trekking, mountaineering, rafting, kayaking, and mountain biking. Nepal is home to many of the world’s highest peaks, including Mount Everest, and is a popular destination for mountaineers. Nepal has gained global recognition as an ideal location for adventure sports tourism and a rich cultural heritage (Ruhet, 2021). The country is also home to many rivers that offer excellent opportunities for rafting and kayaking, including the Trishuli River, the Seti River, and the Bhote Koshi River. Mountain biking is also a great way to explore Nepal’s stunning mountain ranges, with many trails that

offer breathtaking views of the mountains and the countryside. Thousands of snow lakes, waterfalls, water, snow-carved-shaped and u-shaped valleys, and wind-carved stone castles are the fascinating boon of nature in Nepal. Similarly, Himalayan goats, yaks, and sheep are unique animals to see. Nepal is a paradise for bird lovers, with over 646 species (almost 8% of the world's total) of birds, and among them, almost 500 species are found in the Kathmandu valley alone. The most popular bird-watching spots in Kathmandu are, for example, Phulchoki, Godavari, Nagarjun, Bagmatiriver, and Taudaha (Huddart, et.al. 2020). Hard and soft adventurous activities are entertaining global tourists in Nepal.

Nepal's mountain tourism industry holds immense growth potential, offering travelers the opportunity to experience the country's natural beauty, biodiversity, and rich cultural heritage. Popular treks such as the Annapurna Base Camp Trek, Langtang Trek, Korala Pass (Mustang), Tilicho Lake (the world's highest-altitude lake), Thorong Pass, Mardi Himal, Poon Hill, Manaslu, Gokyo Ri, and Everest Base Camp provide breathtaking mountain views, catering to both novice and experienced trekkers (Gurung, 2007). These treks are a must-do for visitors looking to explore Nepal's stunning landscapes and immerse themselves in its culture.

However, mountainous regions are often difficult to access, environmentally fragile, and excluded from key political

and economic decisions, leading to widespread poverty among residents. The challenging terrain, vulnerability to erosion, landslides, snow and ice avalanches, and the marginalization of these areas often result in environmental degradation (Acharya, 2023). Despite these challenges, mountain regions possess unique qualities that make them attractive to tourists. As such, tourism presents a valuable opportunity for sustainable mountain development, particularly in areas where alternative economic resources are limited.

The Mountain Clean-Up Campaign 2023, led by the Nepali Army in collaboration with government bodies and donors, made significant strides in cleaning Nepal's iconic mountains, including Everest, Lhotse, Annapurna, and Baruntse. A team of 97 members, consisting of Nepali Army personnel and Sherpa supporters, exceeded expectations by removing 35 tons of waste, surpassing the previous year's total of 33 tons. The collected waste, totaling 35,708 kg, was sent to recycling partner Creation for verification, segregation, and proper management in Kathmandu. The success of this campaign highlights the importance of collective environmental stewardship, demonstrating that concerted efforts can significantly contribute to preserving natural surroundings. It also underscores the urgent need to address waste management challenges in remote high-altitude areas (The Himalayan Times, 2023).

In a related context, (Sharma, 2000) emphasized that geological, topographical, and meteorological characteristics of past avalanche disaster sites can be used to educate tourists about the ever-present risks of such events. For instance, in April 2015, a devastating earthquake in Nepal triggered an avalanche at approximately 7,000 meters in the Mt. Everest region, resulting in over 17 deaths and 61 injuries. This followed a previous avalanche in 2014 that killed 16 Sherpas. The same 2015 earthquake also triggered a catastrophic avalanche in the Langtang region, which buried 116 houses and killed 308 people, including 176 locals, 80 foreigners, and 10 army personnel. Additionally, in January 2020, an avalanche struck the Annapurna region, where 200 people were rescued, but seven, including four Korean tourists, remain missing. In 2014, a snowstorm caused by Cyclone Hudhud claimed the lives of over 40 people of various nationalities at Thorong-La Pass on the Annapurna Circuit.

Nepal's mountainous geography, with 85% of its land above 1,500 meters, makes it highly susceptible to natural disasters. Adventure tourism, in particular, faces significant risks from hazards such as avalanches, glacial lake outburst floods (GLOFs), flash floods, landslides, debris flows, rockfalls, and rock detachments. Climate change is exacerbating these dangers, as rising temperatures increase the frequency and severity of such events.

Nepal's unique natural features and rich traditional culture, deeply intertwined with the diverse ethnic communities of the Himalayan region, are key attractions for tourists. The development of mountain tourism has expanded significantly, with increasing involvement and enthusiastic participation of local people, contributing to their livelihoods. Nepal's art and culture, majestic mountains, hills, lakes, exotic wildlife, and unique biodiversity offer an unmatched experience for visitors. However, preserving these natural and religious sites is crucial for the long-term sustainability of tourism. Simple but effective measures can be taken to ensure this preservation. For instance, developing integrated, risk-sensitive land-use planning and implementing sustainable trekking networks across Nepal's diverse landscapes will protect the environment while enhancing the tourist experience. Establishing robust early warning systems, preparing hazard maps, and updating glacial lake monitoring will mitigate disaster risks in vulnerable areas.

Fostering collaboration among stakeholders and actively engaging local communities in disaster preparedness and environmental conservation efforts will not only reduce risks but also build a more resilient tourism industry. Volunteer clean-up campaigns and stopping littering in public places are essential to keeping these areas pristine. By integrating these areas research to develop educational tourism content, Nepal can attract more visitors

and enhance its reputation as a premier destination for adventure and eco-tourism. These efforts will create a balanced approach to preserving the environment while promoting sustainable tourism growth, securing Nepal's position as a leading global destination.

A Notable Resurgence in Tourist Arrivals in 2023 in Nepal

Nepal's tourism sector has encountered various challenges, including sociopolitical issues leading to a prolonged political transition, natural disasters like the 2015 earthquake, and the adverse impacts of COVID-19, all contributing to a decline in foreign visitors. Key concerns include low tourist arrivals and minimal daily expenditure per visitor, posing significant issues for Nepal's tourism. Despite these hurdles,

Nepal has consistently aimed to enhance its role in the global tourism industry through initiatives like Visit Nepal - 1998, Nepal Tourism Year - 2011, and Visit Nepal - 2020 (NTB 2020). Recognizing the substantial policy implications, economists have focused on understanding the causal link between tourism-generated income and economic growth in developing nations. This paper examines the potential of mountain tourism and some issues to be addressed in the context of Nepal.

According to the information furnished by the Nepal Tourism Board (NTB, 2023), Nepal welcomed 917,058 international tourists until November 2023. This figure specifically represents the number of tourists arriving by air. The top ten countries contributing the highest number of tourists are also highlighted.

Table 4: Top ten countries contributing the highest number of tourists in 2023

Rank 1	India	319936
Rank 2	USA	100357
Rank 3	China	60878
Rank 4	United Kingdom	8217
Rank 5	Australia	6075
Rank 6	Germany	5911
Rank 7	France	5271
Rank 8	Thailand	4533
Rank 9	Bangladesh	4292
Rank 10	Srilanka	2507

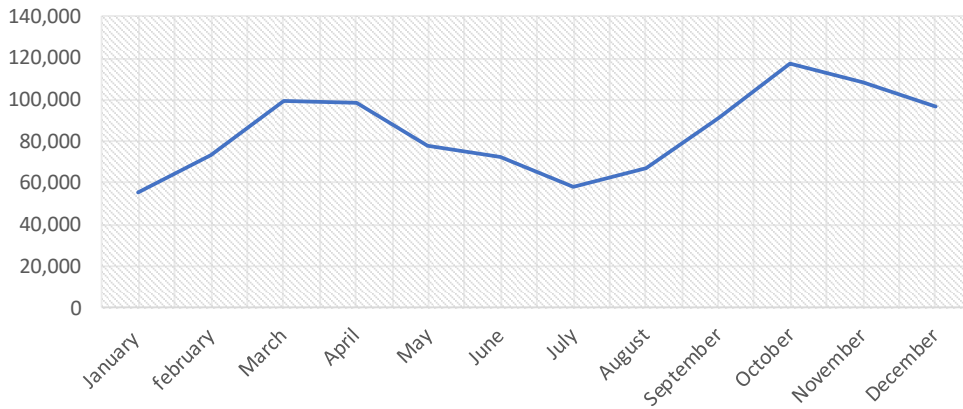


Figure 1: Trend line of Tourist arrival in Nepal from January to December 2023

Source: <https://www.ceicdata.com/en/indicator/nepal/visitor-arrivals>

The government of Nepal has established a goal to draw in one million international tourists in the year 2023. Nevertheless, the count of foreign arrivals by air in Nepal has already reached around 917,058 within the eleven months. Achieving the government's target is contingent on the arrival of 90,000 tourists in December. According to the Nepal Tourism (Board, 2023), the country has seen a remarkable 98% recovery in tourist arrivals in September 2023 compared to September 2019, which marked the year with the highest influx of tourists. In September 2019, Nepal hosted a total of 92,604 foreign tourists. Most of the visitors to Nepal seem from India, with 28,694 Indian arrivals recorded in September. Following closely, the number of Chinese visitors reached 8,174, marking the highest entry of Chinese nationals since the onset of the COVID-19 pandemic. American arrivals stood at 7,364, while

Bangladesh ranked fourth with 3,716 visitors

In October 2023, Nepal received a total of 117,306 international tourists, according to data from the Immigration Department, as confirmed by the Nepal Tourism Board (NTB). During October 2023, the highest number of tourists, 18,480 in total, originated from India. The second-highest number of visitors came from the United States, with 14,879 tourists.

Despite the government of Nepal setting a target of attracting one million foreign tourists in 2023, the number of visitors arriving by air in the first nine months has reached approximately 700,000. Achieving the government's goal will necessitate the arrival of an additional 300,000 tourists in the next three months.

In terms of geographical distribution, 35.88% of the visitors were from

SAARC countries, according to the NTB. Additionally, European countries contributed 24.70% of the total visitors in April, while 10.21% were from the Americas. The remaining arrivals were distributed across Asia (14.84%), Oceania (4.27%), and other regions (10.10%).

It is worth noting that the easing of COVID restrictions has led to a substantial increase in Chinese tourists visiting Nepal. In October 2023, China secured the fourth position with 4,770 visitors, marking a notable surge from the 352 Chinese tourists who chose Nepal as their destination in the same month of 2022.

Regulating Mountain Tourism as a Challenge

In examining the dynamics of mountain communities in Nepal, it becomes clear that sustaining these regions while promoting sustainable mountain tourism and preserving the natural landscape poses significant challenges (Zenc et al., 2022). The national tourism policy's strategic categorization of trekking areas into General, Directed, and Controlled Trekking Areas (CTA) highlights the complexities of managing tourism in diverse and often fragile regions. Specifically, Controlled Trekking Areas, such as Upper Mustang, Upper Dolpa, Nar and Phu Villages, Manaslu, Humla, and certain areas in the Gorkha district, require special attention due to their unique characteristics, emphasizing the challenge of balancing economic

benefits with environmental and cultural conservation (MoCTCA, 2019).

Regulations and Royalties

The imposition of specific regulations and royalties in Controlled Trekking Areas reflects an attempt to balance tourism revenue with conservation efforts. However, ensuring that the structured fee system truly supports the sustainable development of these regions remains a challenge. There is often a lack of transparency and equitable distribution of royalties, which can hinder local communities from benefiting fully from tourism, thereby raising concerns about the long-term economic sustainability of these areas (Nepal, 2007, Gurung, & DeCoursey, 2000).

Group Entry Prerequisites

Requiring group entry prerequisites for foreign trekkers helps control visitor numbers and mitigate environmental degradation. However, enforcing these prerequisites presents challenges, particularly in ensuring compliance without deterring potential tourists (Upadhyaya, 2020). The tension between promoting tourism for economic gain and controlling its environmental impact is a persistent issue, with overcrowding still posing a risk to both the local environment and the cultural fabric of these communities.

Mandatory Engagement with Registered Agencies

Requiring trekkers to engage with registered agencies in Controlled Trekking Areas aims to uphold service quality and foster responsible tourism. However, this policy can have unintended consequences, such as restricting travelers' flexibility and discouraging small, independent operators from joining the tourism sector. Ensuring that registered agencies remain accountable and preventing exploitation while fostering equitable tourism practices present ongoing challenges for the sustainability of mountain tourism (Buckley, 2011).

A fairer approach could involve waiving permit fees for entry into controlled areas, enhancing accessibility, encouraging local participation, and ensuring that communities involved in tourism activities reap broader benefits (Upadhyaya & Upreti, 2011).

It is crucial to acknowledge the vital role of travel and tourism in generating foreign currency, creating job opportunities, and promoting economic self-sufficiency (Du et al., 2016; Nepal et al., 2019). However, for mountain tourism to achieve genuine sustainability, it is necessary to address its negative impacts and implement reforms that facilitate equitable benefit distribution and increased local engagement.

To enhance sustainability, it is essential to develop comprehensive strategies that address these challenges and promote responsible tourism practices, thereby

protecting the long-term ecological and cultural integrity of mountainous regions.

Critical Concerns Demanding Careful Management for Sustainable Mountain Tourism

With the rising trend in nature-based tourism and the increasing appeal of mountain destinations, many mountain regions will likely see a substantial surge in both international and domestic tourism. Yet, this heightened exposure can make mountain communities susceptible to severe environmental impact and disruptions to local culture and traditions, as witnessed in various mountain destinations globally. The mountainous regions of Nepal typically exhibit uneven and steep terrain, deep ravines, cold temperatures, delicate ecosystems, underdeveloped soil, restricted crop options, isolated villages, reduced oxygen pressure, and low air humidity, as described by Upadhyaya in 2006. Therefore, mountain tourism must adhere to sustainability principles, prioritizing environmentally sound practices, equity, and long-term benefits for all involved parties.

Table 6: Critical Concerns Demanding Careful Management for Sustainable Mountain Tourism

Environmental Degradation	Erosion and Habitat Destruction, Deforestation	foot traffic and construction associated with tourism can lead to soil erosion and the destruction of fragile mountain habitats.
Over-Tourism	Crowding, Carrying Capacity	over-crowding, leading to environmental degradation, increased waste, and a diminished visitor experience. Crucial for preventing over-tourism and its negative impacts, determining and managing the carrying capacity of a mountain area is essential.
Cultural Insensitivity	Cultural Appropriation Disruption of Traditional Lifestyles	The commercialization of local cultures for tourism purposes can lead to cultural appropriation and the erosion of traditional practices.
Infrastructure Development	Unsustainable Construction Water Resource Management	Poorly planned infrastructure development, such as roads, hotels, and ski resorts, can have negative environmental and visual impacts on mountain landscapes. Improper water usage for tourism infrastructure can strain local water resources and ecosystems.
Waste Management	Litter and Pollution	Improper waste disposal by tourists and inadequate waste management systems can lead to litter and pollution, harming the natural environment and wildlife.
Climate Change Vulnerability	Glacial Retreat, Sensitivity to Temperature Changes	vulnerable to climate change, with glaciers melting and impacting water resources. Flora and fauna in mountain ecosystems may be sensitive to temperature changes, affecting biodiversity.
Wildlife Disturbance	Disturbance During Breeding Seasons Human-Wildlife Conflict	Tourism activities can disrupt wildlife during critical periods such as breeding seasons, impacting population dynamics.
Safety Concerns	Risks of Outdoor Activities	Tourists engaging in activities such as hiking, climbing, or skiing may be at risk of accidents or injuries, requiring effective emergency response and search-and-rescue operations.
Social and Economic Disparities	Unequal Distribution of Benefits, Gentrification	The economic benefits of tourism may not be distributed equitably among local communities, pricing out residents and changing the character of communities.

Source: Bhatia, 1996; Nepal & Chipeniuk, 2005; Buckley, 2004

While analyzing the challenges of sustaining mountain tourism in Nepal, it is evident that a range of interconnected issues spanning environmental, cultural, and societal domains require a comprehensive and multi-faceted approach to policy-making (Bhatia, 1996; Nepal & Chipeniuk, 2005; Buckley, 2004). Environmental degradation, caused by tourism-related activities such as soil erosion and habitat destruction, poses a direct threat to the very landscapes that attract visitors. The impacts of over-tourism further exacerbate these issues, leading to overcrowding, increased waste, and a diminished visitor experience. This makes it crucial to manage the carrying capacities of popular mountain areas effectively.

Cultural challenges also emerge as the commercialization of local traditions for tourism purposes leads to cultural appropriation and the erosion of traditional lifestyles. To counter this, policies promoting respectful and responsible tourism are essential to protect cultural heritage. Additionally, the poorly planned infrastructure development, including roads and hotels, alongside improper water usage, places undue strain on local ecosystems and resources. Sustainable construction practices and improved resource management are thus necessary to minimize environmental damage.

Waste management remains a critical concern in Nepal's mountain regions, as inadequate systems lead to pollution that harms both wildlife and the natural

environment. The impacts of climate change, including glacial retreat and temperature sensitivity, pose further risks to these fragile ecosystems. Adaptive policies are required to protect these areas and mitigate long-term environmental damage.

Wildlife disturbance, particularly during critical periods like breeding seasons, is another consequence of increased tourist activity. Human-wildlife conflicts, as well as the safety of tourists engaging in outdoor activities like trekking and climbing, highlight the need for tourism regulations that protect wildlife and ensure robust emergency response systems. Finally, the unequal distribution of economic benefits from tourism can contribute to social disparities and gentrification, emphasizing the need for policies that promote equitable economic growth and protect local communities from displacement.

Addressing these challenges is vital for the sustainable development of Nepal's mountain tourism industry. In this context, Sustainable Development Goal 12 (Responsible Consumption and Production) and Goal 8 (Decent Work and Economic Growth) are directly relevant to the promotion of sustainable tourism (Leal Filho, Azul, Brandli, Lange Salvia, & Wall, 2021). These goals encourage the implementation of policies that ensure responsible tourism practices, equitable economic benefits, and the long-term protection of Nepal's mountain environments.

The study shows that a projected increase in tourist arrivals in 2023 may indicate sustained efforts to promote Nepal as a desirable destination. Continued positive narratives, destination branding, diplomatic efforts, and policies that enhance the overall tourist experience could contribute to this positive trend.

Economic and geopolitical factors play a crucial role in tourism fluctuations. It emphasizes the importance of perceptions, narratives, and international relations in shaping the tourism landscape. Nepal's ability to manage crises, project a positive image, and adapt to changing global dynamics likely contributed to the observed fluctuations in tourist arrivals. In the foreseeable future, tourism is expected to continue playing a pivotal role in the economic landscape of the Nepal Himalayas serving as a primary contributor to the livelihoods of mountain communities (Nepal et al., 2002). Despite the evident economic advantages, the extent of social and cultural benefits remains uncertain. Additionally, questions persist regarding the environmental impact of tourism in the region (Khadka & Nepal, 2010). Looking ahead, there is a need for a comprehensive evaluation of the forthcoming implications on social, cultural, and environmental fronts to better understand the holistic impact of tourism in the Nepal Himalayas.

Scott, Jones, & Konopek 2007 emphasize the importance of climate in mountain tourism, noting that many outdoor activities depend highly on suitable

weather. For example, increasing temperatures create difficulties for activities like glacier walking, mountain climbing, and skiing, as they accelerate glacial melt and reduce snow coverage. Weather-related comfort also plays a significant role in tourists' choice of vacation spots, making climate a crucial element in their travel decisions. In Nepal, climate change is identified as a catalyst for high-altitude avalanches and lake outbursts, there has been frequent observation of loss of life and property damage. Between 1935 and 1985, nine significant glacial lake outburst floodings (GLOFs) were documented (Nyaupane & Chhetri, 2009). Vuichard and Zimmermann (1987) extensively documented the 1985 outburst of the moraine-dammed lake Dig Tsho in the Everest region, resulting in substantial damage to tourist infrastructure and the loss of five lives. In Fall 1995, heavy snowfall led to fatalities in various tourist locations, such as 28 deaths in the Gokyo Valley in the Everest region due to avalanches on November 9 and 10. Similarly, avalanches caused seven fatalities in Kanchanjunga and five in the Annapurna region. Additionally, a landslide and debris flow on November 9 swept away houses in Bagarchhap in the Manang district, resulting in the loss of 15 lives. On March 25, 2001, five individuals returning from the Annapurna Base Camp were carried away by debris flow triggered by a snow avalanche at Deurali. These few instances underscore the potential magnitude of damages

anticipated in the future. So, climate-induced impacts need to be addressed effectively highlighting the Himalayas of Nepal.

The environmental impacts of tourism in mountainous regions are significant, with foot traffic and construction leading to erosion, deforestation, and the degradation of fragile ecosystems (Newsome, Moore, & Dowling, 2012). Over-tourism exacerbates these issues, causing overcrowding, habitat destruction, and increased waste, which diminishes both the natural environment and the visitor experience. Managing the carrying capacity of mountain areas is critical to preventing these negative impacts (Newsome, Moore, & Dowling, 2012).

Cultural insensitivity also poses challenges, as the commercialization of local traditions for tourism can lead to cultural appropriation and disrupt the livelihoods of indigenous communities. Responsible tourism practices are necessary to preserve the authenticity of local cultures (Swarbrooke, 1999).

Poorly planned infrastructure, such as roads, hotels, and ski resorts, can further damage mountain landscapes, both visually and environmentally. Unsustainable water use for tourism activities increases stress on local resources, particularly in already sensitive environments (Buckley, 2011). Additionally, inadequate waste management systems and improper tourist disposal of litter harm both ecosystems

and wildlife (Fowler & McDonald, 1997). Climate change intensifies these challenges, as glacial retreat and temperature fluctuations further threaten water resources and biodiversity (Scott et al., 2008).

Wildlife disturbance during breeding seasons and human-wildlife conflicts highlight the need for responsible tourism that minimizes ecological impact. Safety concerns related to outdoor activities also necessitate strong emergency response systems (Buckley, 2011).

Social and economic inequalities can arise when tourism benefits are unevenly distributed, potentially displacing residents and altering community dynamics. Addressing these issues requires a holistic approach to mountain tourism, focusing on conservation, cultural respect, and equitable economic distribution (Upadhaya & Upreti, 2011). Evaluating existing policies and governance systems, and making necessary reforms, will be key to ensuring the long-term sustainability of mountain tourism in Nepal (Upadhaya & Upreti, 2011).

Conclusion

The development of sustainable plans for trekking trails and land use should involve thorough discussions with all relevant stakeholders, including local communities, government authorities, tourism operators, environmental experts, and researchers. Collaborative efforts are essential to ensure that these plans address ecological, social, and economic

concerns effectively. The momentum in tourism will not pick up unless its full potential is thoroughly explored. The government can take several measures to promote mountain tourism in Nepal. Reviving mountain tourism after setbacks like COVID-19 and earthquakes involves a multifaceted approach that incorporates various strategies to boost tourism in Nepal, emphasizing quality travel, improving infrastructure, offering diverse experiences, and enhancing global connections is crucial.

Despite challenges, Nepal has effectively showcased its beauty worldwide. Swift responses to changes, effective communication, flexible policies, and the use of technology are essential. Customer and employee feedback, ongoing training, and adherence to safety measures are vital. Public-private partnerships, targeted marketing, infrastructure development, community engagement, and diversified offerings can revitalize mountain tourism, ensuring sustainability and benefiting local communities.

Furthermore, promoting public investment in protected area management, managing the environmental impact of tourism, and highlighting the unique natural features and cultural richness can contribute to the sector's growth. Involving local communities, preserving religious and natural sites, and promoting Nepali mountaineers globally are additional strategies for attracting tourists and fostering sustainable mountain tourism.

References

- Acharya, C. N. (2023). Sustainable Tourism Perspective of Wildlife Conservation Areas: A Case Study in Nepal. *The Journal of Economic Concerns*, 14(1-2), 62-82.
- Banskota, K., & Sharma, B. (1995). Mountain tourism in Nepal: an overview.
- Bhatia A.Scott, D., Jones, B., & Konopek, J. (2007). Implications of climate and environmental change for nature-based tourism in the Canadian Rocky Mountains: A Waterton Lakes National Park case study. *Tourism Management*, 28(2), 570-579.
- K. (1996). *International Tourism, Fundamentals and Practices*. New Delhi:
- Bhandari, D.R. (2030 BS), *Nepalko Yetihasik Bibechna, Varanasi: Krishna Kumari Devi*.
- Bhandari, A. B. (2022). History of Nepalese Tourism Industry. *Kalika Journal of Multidisciplinary Studies*, 33-40.
- Buckley, R. (2012). Sustainable tourism: Research and reality. *Annals of tourism research*, 39(2), 528-546. Sterling Publishers Private Limited.
- CBS. 2023. Statistical Pocket Book Nepal 2021. Kathmandu: Central Bureau of Statistics.
- Campaign P.S. (2017). General pattern and emerging trend of tourism development in Nepal. Tribhuvan

- University 58th Anniversary Special Publication(TU Bulletin Special 2017),49-64 Tribhuwan University
- Dhakal, R. (2015). Overview of tourism development prospects in Nepal.
- Du, D., Lew, A. A., & Ng, P. T. (2016). Tourism and economic growth. *Journal of Travel Research*,55(4), 454–464.
- Genc, R. (2021). Adventure tourism in Nepal Himalayas: Environmental effects. *Journal of Tourism & Adventure*,4(1), 47-57.
- Gurung, T. R. (2007). *Mountain tourism in Nepal*. Pratima Gurung.
- Huddart, D., Stott, T., Huddart, D., & Stott, T. (2020). Adventure tourism in the Himalayas. *Adventure Tourism: Environmental Impacts and Management*, 241-289.
- Kafle, S.(2020). History of Tourism in Nepal | A Comprehensive synopsis
- Karki, S.(2023). Peak tourism in 2023 Times<https://nepalitimes.com/here-now/peak-tourism-in-2023-9ukoi8iz>
- Khadka, D., & Nepal, S. K. (2010). Local responses to participatory conservation in Annapurna Conservation Area, Nepal. *Environmental Management*, 45, 351-362.
- Lama LT. (2006). Role of Tourism in Improving Livelihoods of the Porters. [Master Dissertation]. Kathmandu. Nepal: Purbanchal University.
- Leal Filho, W., Azul, A. M., Brandli, L., Lange Salvia, A., & Wall, T. (Eds.). (2021). *Decent work and Economic Growth*. Cham: Springer International Publishing.
- Ruhet, G. (2021). Adventure Tourism in Nepal Himalayas: Environmental Effect. *Journal of Tourism & Adventure*, 4(1), 1-4. doi:<https://doi.org/10.3126/jota.v4i1.40638s>
- Nepal, S. K. (2007). Tourism and rural settlements Nepal's Annapurna region. *Annals of Tourism Research*, 34(4), 855-875.
- Nepal, S. K. (2011). Mountain tourism and climate change: Implications for the Nepal Himalaya. *Nepal Tourism and Development Review*, 1(1), 1-14.
- Nepal, S. K. (2022). Studies in tourism impacts: past trends and emerging trajectories. Handbook of Tourism Impacts: *Social and Environmental Perspectives*, 20.
- Nepal, R., Indra al Irsyad, M., & Nepal, S. K. (2019). Tourist arrivals, energy consumption and pollutant emissions in a developing economy–implications for sustainable tourism. *Tourism Management*,
- Nyaupane, G. P., & Chhetri, N. (2009). Vulnerability to climate change of nature-based tourism in the Nepalese Himalayas. *Tourism Geographies*, 11(1), 95-119.
- NTB. (2022). Nepal Tourism Statistics 2022. Nepal Tourism Board.

- Newsome, D., Moore, S. A., & Dowling, R. K. (2012). Natural area tourism: Ecology, impacts and management. In *Natural Area Tourism*. Channel view publications. Tourism in the Nepalese Himalayas. *Tourism Geographies* 11: 96-119.
- Prasain, S. (2023). The tourism industry is in trouble, but the government's response is tepid. Kathmandu Post <https://tkpo.st/2XgfsQg>
- Sacareau, I. (2009). Changes in environmental policy and mountain tourism in Nepal. *Journal of Alp*
- Upadhayaya, P. K., & Upreti, B. R. (2011). Mountain tourism in Nepal: An overview on the sustainable inclusion of local communities. Kathmandu: Mountain forum.
- Scott, D., Jones, B., & Konopek, J. (2007). Implications of climate and environmental change for nature-based tourism in the Canadian Rocky Mountains: A Waterton Lakes National Park case study. *Tourism Management*, 28(2), 570-579.
- Sharma, B.C. (2033 BS), *Nepalko Yetihasik Roop Rekha, Varanasi: Krishna Kumari Devi*.
- Sharma, P. I. T. A. M. B. E. R. (2000). Tourism and livelihood in the Mountains regional overview and the experience of Nepal. *Growth, poverty alleviation and sustainable resource management in the mountain areas of South Asia*, 349.
- Singh, R. P., & Rana, P. S. (2022). Geography of Tourism and Pilgrimages.
- Upadhayaya, P. K., & Upreti, B. R. (2011). Mountain tourism in Nepal: An overview on the sustainable inclusion of local communities. Kathmandu: Mountain forum.
- Vuichard, D. & Zimmermann, M. (1987). The 1985 catastrophic drainage of a moraine-dammed lake, Khumbu Himal, Nepal: Causes and consequences. *Mountain Research & Development* 7: 91-110. <https://thehimalayantimes.com/environment/mountain-cleanup-campaign-2023-collects-over-341NTB/CEST>
- Nepal (2008). Tourism Development and Management Plan of Manakamana,