#### JOURNAL OF DEVELOPMENT REVIEW



# Tourism Industry, Rural Tourism and Biodiversity in Nepal



#### Bhim Prasad Subedi

Assistant Professor of English at Saraswati Multiple Campus, Tribhuvan University, Nepal email - bhimsubedizig@gmail.com
Orcid Id: 0009-0004-2284-8739

#### ARTICLE INFO

Received date: April 22, 2025 Reviewed: May, 3 2025 Revised: June 24, 2025 Accepted: July 26 2025

#### Keywords

Tourism Industry, ecotourism, rural development, biodiversity conservation, sustainable tourism, hospitality sector community participation, Nepal tourism

#### ABSTRACT

This study examines the multifaceted structure of Nepal's tourism industry, highlighting its interdisciplinary nature and diverse service sectors. Nepal's tourism is driven by its unique geographic, cultural, and ecological features, encompassing services such as transportation, hospitality, cultural engagement, and recreation. The hospitality sector forms a crucial component, offering varied lodging experiences ranging from luxury resorts and conference centers to rural bed and breakfast inns. These services not only meet the essential needs of travelers but also support local economic development and cultural exchange. Rural and eco-tourism in Nepal are gaining traction as travelers seek immersive, nature-based experiences such as trekking, paragliding, and village homestays. Scholars emphasize tourism's role in facilitating cultural interaction, conserving biodiversity, and promoting sustainable development, particularly in ecologically sensitive regions. Strategic planning, robust regulatory frameworks, and community participation are essential for maintaining the integrity of Nepal's natural and cultural heritage. Ecotourism, therefore, emerges as a sustainable model that integrates environmental stewardship with economic growth, positioning Nepal as a leading destination for responsible travel. The paper advocates for inclusive, community-centered approaches to tourism planning for long-term sustainability and rural prosperity.

© 2025 Journal of Development ReviewSMC All rights reserved

#### Introduction

The tourism industry is a vast and intricate sector that intertwines various services and businesses aimed at fulfilling the needs of travelers. Due to its interdisciplinary nature, it is often difficult to define precisely. In the context of Nepal, the tourism sector encompasses a diverse range of services including transportation, recreational activities, cultural experiences, and commercial enterprises such as local markets and shopping centers. These components work together to deliver comprehensive travel experiences for both domestic and international visitors.

Tourism in Nepal is particularly exciting due to the country's unique geographic, cultural, and ecological features. The travel and tourism domain involves numerous stakeholders including travel consultants and agents who coordinate transport, lodging, and itinerary planning. Additionally, travel wholesalers play a crucial role in designing and promoting packages that incorporate multiple activities and destinations, catering to both individual travelers and organized groups.

This study aims to evaluate the role of ecotourism in promoting rural development and biodiversity conservation in Nepal, particularly focusing on how tourism activities influence local economies and support environmental sustainability. The central research question guiding this paper is: "How does ecotourism contribute to sustainable rural development and conservation in Nepal's ecologically sensitive regions?"

This framing positions tourism not only as an economic venture but as a mechanism for local empowerment and environmental stewardship.

The hospitality sector, a core component of tourism, primarily addresses lodging and food service requirements. It is summarized to highlight that the services: hotels, resorts, conference centers, B&Bs support rural tourism by offering infrastructure for visitors and encouraging local enterprise. These services not only meet travelers' basic needs but also contribute to cultural exchange and local economic development.

In Nepal, rural tourism has gained momentum as travelers seek authentic experiences in natural and less-developed environments. Activities such as trekking, mountaineering, cycling, paragliding, and village homestays allow tourists to engage with local cultures and biodiversity. The integration of tourism with Nepal's rich ecological landscapes, home to a vast array of flora and fauna, has positioned the country as a leading destination for nature-based and eco-tourism. Accordingly, sustainable tourism strategies are essential to ensure that tourism development does not compromise biodiversity or cultural integrity. Several scholars support these perspectives tourism's multidimensional scope. Bhatia (2002,p. 13) emphasizes that tourism integrates economic, cultural. and environmental dimensions, making it both an opportunity and a challenge for national development. Smith and Robinson (2006, p. 65) argue that tourism serves as a mediator of cultural exchange, facilitating

both global interaction and local identity preservation. Sharpley (2009,p. 112) highlights the importance of sustainable tourism in environmentally sensitive areas, such as Nepal's mountainous regions. These scholarly arguments provide a foundation for understanding the potential of ecotourism in fostering long-term community resilience and environmental protection. Similarly, Hall and Page (2014) stress the role of strategic planning in tourism to maximize benefits and minimize negative impacts on ecosystems and communities.

## Nepal's Cultural and Ecological Tourism

Nepal is a federal democratic republic characterized by its multicultural. multilingual, multiethnic, and multireligious composition, underscoring its rich sociocultural diversity. Geographically, Nepal is a landlocked country situated between the People's Republic of China to the north and the Republic of India on its eastern, western, and southern borders. It spans an area of 147,181 square kilometers and is shaped as an irregular rectangle. Geopositioned between 26°22' to 30°27' north latitude and 80°04' to 88°12' east longitude, the country stretches approximately 870 kilometers from east to west and averages 193 kilometers in width from north to south.

Nepal's topography spans from the Terai lowlands at around 60 meters to the peak of Mount Everest at 8,848 meters, the highest point on Earth. This extreme altitudinal gradient within a compact geographical area supports diverse ecosystems, climatic zones, and rich biodiversity. The elevation gradient

contributes to 118 ecosystem types, 35 forest types, and 75 vegetation categories (Gurung, 1980, p. 14; Bhuju et al., 2007, p. 33), forming the foundation for eco- and adventure-based tourism. Tourists are drawn to these diverse environments not just for scenic beauty, but for wildlife watching, nature photography, and cultural immersion in ecologically distinct regions. These activities offer opportunities for sustainable tourism development while supporting conservation goals.

To date, forests represent Nepal's second most vital natural asset after water, covering approximately 5.96 million hectares (40.36%) of the national land area. An additional 4.38% comprises other wooded lands. These forests are distributed across varied landscapes; 37.80% in the Middle Mountains, 32.25% in the High Mountains and High Himalayas, 23% in the Churia hills, and 6.90% in the Terai plains. Forests supply essential timber, medicinal plants, raw materials for cottage industries, and support livestock farming. These forest areas are not only key to rural livelihoods but also central to eco-tourism, particularly for trekking, birdwatching, ethnobotany tours, and forest homestays. Furthermore, forests play a vital ecological role in conserving biodiversity and regulating the hydrological cycle; as noted by Acharya (2002) and the Food and Agriculture Organization (2009), they significantly contribute to groundwater recharge and atmospheric stability by absorbing carbon dioxide and releasing oxygen.

In the context of tourism, Nepal offers unparalleled potential due to its natural

beauty, cultural heritage, and ecological diversity. The country attracts millions of international tourists annually, drawn by its ancient temples, ethnic diversity, traditional hospitality, and varied landscapes. According to the Ministry of Culture, Tourism and Civil Aviation (2024), Nepal Received approximately 1.2 million international visitors in 2023, with tourism contributing 6.7% to the national GDP and generating over 1 million direct and indirect jobs. Adventure tourism thrives, particularly in the Himalayan region, where snow-capped peaks, including Mount Everest and other globally renowned summits, provide opportunities for trekking, mountaineering. and expedition-based tourism. This data underscores the growing economic relevance of ecotourism and calls for strategic integration of natural resource management with tourism planning to sustain both livelihoods and biodiversity. These natural attributes, coupled with a deeply rooted cultural identity, position Nepal as a premier destination for sustainable and experience-based tourism.

## **Ecotourism: Concepts, Principles, and Contemporary Trends**

Ecotourism, a specialized segment of the tourism industry, emphasizes travel to ecologically sensitive and relatively undisturbed natural areas while advocating for sustainable tourism practices. In contrast to mass tourism, it prioritizes minimal environmental impact and promotes smallscale, community-driven experiences. The International Ecotourism Society defines ecotourism as "responsible travel to natural areas that conserves the environment and improves the well-being of local people" (as cited in Honey, 2008). At its essence, ecotourism fosters environmentally responsible behavior and encourages a profound appreciation of both natural ecosystems and cultural heritages.

This approach extends beyond recreational activity, urging travelers to engage deeply with ecological and cultural landscapes. By cultivating environmental awareness, education, and cultural appreciation, ecotourism presents a sustainable alternative to mass tourism that balances environmental conservation with socio-economic benefits for host communities.

In Nepal, these principles have been operationalized through conservation and tourism community-based initiatives, notably within the Annapurna Conservation Area (ACA) and Chitwan National Park. For example, the Annapurna Conservation Area Project (ACAP) collaborates with local Management Committees to allocate tourism revenues toward education, healthcare, and conservation awareness (Baral, Stern, & Heinen, 2007). Similarly, community forest user groups in Chitwan employ ecotourism income to finance anti-poaching measures and biodiversity education.

Contemporary ecotourism trends in Nepal also highlight gender empowerment and sustainable development. Women-led homestay initiatives in Sirubari (Syangja) and Ghale Gaun (Lamjung) demonstrate how tourism fosters local women's social and economic empowerment, leadership

opportunities, and cultural preservation (Ghimire & Upreti, 2012). These grounded practices underscore Nepal's potential to serve not only as a tourist destination but also as a paradigm of community-based sustainability and inclusion.

## **Core Principles of Ecotourism**

The concept of "ecotourism," first introduced by Hetzer, in 1965, emphasizes a holistic approach to tourism that blends environmental conservation, cultural respect, duty and social responsibility. Its core principles include minimizing environmental harm, maximizing socio-economic benefits for local communities, respecting local cultures and traditions, and enriching tourist experiences through authentic and meaningful interactions. These foundational ideals require travelers to engage consciously and ethically, promoting sustainability and integrity in every aspect of their journey. As (Weaver 2001, p. 105) highlights, the success of ecotourism relies heavily on the active commitment of eco-travelers to uphold these values in practice.

## Significance and Benefits of Ecotourism

Ecotourism serves as a transformative mode of travel that fosters environmental and social responsibility among visitors while offering substantial personal and collective benefits. It cultivates intercultural understanding by immersing travelers in diverse cultural traditions, such as indigenous lifestyles, language, music, and attire, thereby promoting empathy and global awareness. As noted by Stronza and Gordillo (2008, p. 448), direct interaction with local communities

enhances cultural competence and linguistic diversity. Crucially, ecotourism supports the preservation of natural ecosystems and cultural heritage, advancing conservation efforts by generating local economic incentives and reinforcing the significance of traditional knowledge.

#### **Emerging Trends in Ecotourism**

The global expansion of ecotourism reflects a growing recognition of its ecological and social significance, as evidenced by initiatives such as the development of nature reserves, regulation of tourist influx, and the promotion of rural destinations. Importantly, ecotourism contributes to gender equity in developing regions by empowering women through enxtrepreneurial opportunities and active participation in community-based economies. As Fennell (2020) summaries, it encourages economic engagement by prompting visitors to purchase locally crafted goods and services, thereby fostering women's financial independence, cultural expression, and innovation while enriching tourists' experiences with authentic, community-rooted interactions.

Tourism is a vital pillar of Nepal's economy, significantly contributing to employment generation, foreign exchange earnings, and the preservation of indigenous culture and arts. Since the 1960s, Nepal has strategically prioritized tourism development, particularly rural tourism, as a catalyst for socio-economic transformation and cultural conservation (Upadhayaya, 2013, p. 45). The government emphasizes village-based tourism to combat poverty and strengthen local economies

through Nepal's distinct rural social fabric.

Regions such as Kaski, Lamjung, Palpa, Parbat, Syangja, and Gulmi have emerged as exemplars of community-based tourism. Sirubari in Syangja, Nepal's first planned village tourism destination, and Ghale Gaun in Lamjung, are notable models where local communities manage homestays, cultural events, and reinvest tourism revenue in education and healthcare (Kunwar & Pandey, 2020). These initiatives illustrate how structured community participation and equitable resource distribution can uplift livelihoods and improve social cohesion.

Nepal's cultural richness and ecological diversity attract tourists seeking immersive experiences. Village tourism now integrates ecotourism, trekking, and adventure sports, promoting authentic and community-centered travel. The rise of Free Independent Travelers (FITs), as noted in tourism ministry records, indicates growing demand for personalized rural experiences. FITs favor homestays in destinations like Ilam, Tansen, and Bandipur, reinforcing a shift toward meaningful, nature-based travel.

Tourism also presents a pathway to address Nepal's broader social challenges including inequality, poor healthcare, and malnutrition by fostering economic inclusion, education, and local entrepreneurship. Thus, sustainable tourism emerges as a transformative tool for inclusive and resilient rural development in Nepal.

## Village Ecotourism Development Challenges in Nepal

While Nepal holds immense potential

for village and ecotourism, a range of environmental and infrastructural barriers hinder its sustainable development. Major issues include rapid population growth, deforestation, agricultural expansion, pollution, and unplanned development, all exacerbated by climate change impacts such as rising temperatures and ecological degradation (Nepal & Chipeniuk, 2005, p. 315). These pressures threaten not only biodiversity and glacial ecosystems but also the natural aesthetics that attract tourists to rural destinations.

Waste mismanagement along trekking routes presents a persistent environmental and experiential issue. In the Everest and Annapurna regions, inadequate disposal of plastic waste disrupts local habitats and degrades scenic value (UNDP, 2021). Additionally, unchecked cultural influence from tourism risks westernizing rural youth, diminishing the authenticity of traditional lifestyles and undermining community identity.

While tourism contributes to modernization, its socio-cultural impacts differ across regions. In some traditional hill towns such as Bandipur and Tansen, local communities have consciously resisted the pressures of excessive commercialization to preserve their cultural identity. In contrast, areas with higher accessibility, such as Pokhara, have experienced more rapid cultural transformations driven by tourism development. Notably, Bhattarai et al. (2005, p. 672) highlight emerging concerns in tourist towns like Sauraha, where increasing

incidences of prostitution and rural-to-urban migration are perceived to undermine the authenticity and long-term appeal of rural tourism destinations.

Infrastructural limitations such as transportation. sanitation. and poor communication networks, further constrain tourism development in remote areas. These deficiencies, along with language barriers, reduce tourist satisfaction and limit economic opportunities for host communities. For example, homestay operators in Ilam and Rukum have observed booking declines during off-seasons due to poor accessibility and lack of clean water.

To overcome these barriers, Nepal must adopt an inclusive, coordinated strategy that integrates infrastructure development, environmental conservation. cultural preservation, and skill enhancement. Community-led waste management programs like those by the Sagarmatha Pollution Control Committee (SPCC), sustainable trail investments, and tourism-based education initiatives for youth and women are critical interventions.

Only through comprehensive, grassroots-led policies can Nepal transform its village and ecotourism sectors into resilient, inclusive engines of rural development and national prosperity.

## **Biodiversity in Nepal's National Parks**

Nepal is renowned for its rich biodiversity, comprising a wide range of flora and fauna that significantly contributes to its tourism appeal. The country's diverse topography from lowland plains to high-altitude Himalayan

regions, has supported the establishment of numerous national parks, each harboring unique wildlife species (Bhuju et al., 2007 p. 4). Below is a concise overview of key national parks in Nepal and their contributions to biodiversity conservation:

#### Chitwan National Park

Chitwan National Park, one the oldest national park, established in 1973 and recognized as a UNESCO World Heritage Site in 1984. The National Park spans 952 sq. km in Nepal's subtropical lowlands. It safeguards diverse wildlife, including endangered mammals, reptiles, and over 650 bird species, highlighting its ecological significance and role in biodiversity conservation.

## **Bardiya National Park**

This national park established in 1976 encompasses an area of 968 square kilometers, with an elevation ranging from 80 to 150 meters. The park is home to diverse wildlife, including the Royal Bengal tiger, wild elephant, one-horned rhinoceros, pangolin, blackbuck, swamp deer, and freshwater dolphin. Additionally, it supports approximately 360 bird species, highlighting its ecological richness and conservation significance.

## Sagarmatha National Park

This National Park established in 1976 and designated a UNESCO World Heritage Site in 1979, covers an area of 1,148 square kilometers at altitudes ranging from 2,780 to 5,300 meters. It harbors snow leopards, red pandas, and approximately 250 bird species.

## **Langtang National Park**

Founded in 1976, Langtang National Park stretches across 1,710 square kilometers, rising dramatically from lush lowlands at 1,500 meters to towering Himalayan peaks at 7,234 meters. This expansive ecological sanctuary shelters rare and elusive wildlife such as the red panda and snow leopard, and boasts a vibrant avifauna with around 350 different bird species thriving within its diverse habitats.

#### Rara National Park

Rara National Park established in 1976, spans 106 square kilometers, primarily located in Mugu and partially in Jumla, with altitudes ranging from 1,500 to 5,000 meters. It shelters species such as pangolin, red panda, snow leopard, and approximately 350 bird species.

## Shey Phoksundo National Park

This protected area covers 3,555 sq. km at elevations between 1,500 and 6,000 meters, established in 1984. It hosts diverse fauna including wild yak, snow leopard, grey wolf, and Tibetan antelope, alongside a rich avifauna of approximately 150 to 200 bird species.

#### **Khaptad National Park**

This protected region encompasses 225 square kilometers at altitudes ranging from 1,500 to 5,000 meters was established in 1984,. It supports diverse wildlife, including the elusive snow leopard, blue sheep, musk deer, goral, grey wolf, and leopard cat, highlighting its ecological significance.

#### Makalu Barun National Park

Founded in 1991, this sanctuary encompasses 1,500 square kilometers and is slated for expansion to 2,350 sq. km. It serves as a vital habitat for a rich assemblage of fauna, including iconic species such as the snow leopard, clouded leopard, red panda, and musk deer, while also supporting nearly 300 avian species, particularly within the ecologically significant Arun Valley.

## Shivapuri Nagarjun National Park

Designated as a protected area in 2002, this 159-square-kilometer reserve spans altitudes from 1,350 to 1,880 meters. It sustains a rich variety of wildlife, including red pandas, clouded and common leopards, wild boars, leopard cats, and langurs, highlighting its critical ecological significance and contribution to biodiversity conservation within this elevational range.

#### **Banke National Park**

Established in 2010, this park covers 550 square kilometers, with a proposed expansion to 2,350 sq. km, at elevations of 80–150 meters. It hosts diverse fauna, including the Royal Bengal tiger, wild elephant, four-horned antelope, pangolin, and Nepal's exclusive striped hyena, alongside approximately 300 bird species in the Arun Valley.

Therefore, Nepal's protected areas serve not only as critical habitats for a wide array of endangered, endemic, and globally significant species, but also as foundational pillars for ecological tourism, environmental stewardship, and sustainable rural development. Spanning from the subtropical lowlands of Chitwan and Bardia to the high-

altitude ecosystems of Sagarmatha and Shey Phoksundo, these national parks collectively encapsulate the ecological heterogeneity of the Himalayan region. These conservation areas support diverse taxa, including emblematic megafauna such as the Royal Bengal tiger, one-horned rhinoceros, and snow leopard, alongside a broad spectrum of avifauna, herpetofauna, and small mammals. Beyond their conservation value, the national parks are integral to Nepal's ecotourism infrastructure, contributing significantly to local livelihoods, community-based resource management, and biodiversity education.

However. maintaining the ecological integrity and tourism potential of these parks necessitatessustainedcommitmenttoscientific monitoring. infrastructural enhancement, wildlife protection strategies, and inclusive governance mechanisms. A holistic and multi-stakeholder approachencompassing governmental agencies, local communities, and international conservation bodies is imperative to safeguard Nepal's wildlife heritage and to elevate the global ecological and cultural relevance of its protected landscapes.

#### Conclusion

Ecotourism is a responsible and sustainabilityoriented form of tourism that prioritizes the conservation of biodiversity, ecological integrity, and cultural heritage. Emerging as a rapidly expanding segment of the global tourism sector, it attracts environmentally conscious travelers while fostering greater respect for natural landscapes and indigenous traditions. The effective development of ecotourism begins with structured planning and the integration of policies that emphasize environmental preservation, cultural authenticity, and inclusive community engagement. In this process, government institutions play a critical role by formulating and implementing regulatory frameworks that ensure the sustainable utilization of natural resources, protection of fragile ecosystems, and promotion of local heritage. To further support this effort, incentives such as grants, tax reductions, and subsidies can encourage tourism businesses to adopt renewable energy technologies and responsible waste management practices. Equally important is the empowerment of local communities, whose active participation is essential for longterm sustainability. Community-based tourism initiatives, as seen in Sirubari and Ghale Gaun, serve as successful examples where local ownership allows economic benefits to remain within the community. Additionally, capacity-building in hospitality, language skills, and environmental awareness enhances engagement and stewardship. Ultimately, ecotourism offers Nepal a holistic strategy for rural development, environmental protection, and cultural preservation, serving as a replicable model for other developing nations.

#### Reference

- Acharya, K. P. (2002). Twenty-four years of community forestry in Nepal. International Forestry Review, 4(2), 149–156. https://doi.org/10.1505/IFOR.4.2.149.17450
- Baral, N., Stern, M. J., & Heinen, J. T. (2007). Integrated conservation and development project life cycles in the Annapurna Conservation Area, Nepal: Is development overpowering conservation? Biodiversity and Conservation, 16(10), 2903–2917. https://doi.org/10.1007/s10531-007-9161-5
- Bhatia, A. K. (2002). Tourism development: Principles and practices. Sterling Publishers.
- Bhattarai, K., Conway, D., & Shrestha, N. (2005). Tourism, terrorism and turmoil in Nepal. Annals of Tourism Research, 32(3), 669–688. https://doi.org/10.1016/j.annals.2004.10.008
- Bhuju, U. R., Shakya, P. R., Basnet, T. B., & Shrestha, S. (2007). Nepal biodiversity resource book: Protected areas, Ramsar sites, and World Heritage Sites. International Centre for Integrated Mountain Development (ICIMOD), Ministry of Environment, Science and Technology, and United Nations Environment Programme.
- FAO. (2009). Nepal forestry outlook study. Food and Agriculture Organization of the United Nations.
- Fennell, D. A. (2020). Ecotourism (5th ed.). Routledge.
- Food and Agriculture Organization of the United Nations (FAO). (2009). Nepal forestry outlook study. Asia-Pacific Forestry Sector Outlook Study II. Working Paper No. APFSOS II/WP/2009/05.
- Ghimire, S., & Upreti, B. R. (2012). Gender and tourism in Nepal: Case studies from Ghalegaun and Sirubari. South Asia Economic Journal, 13(1), 135–151. https://doi.org/10.1177/139156141101300106
- Gurung, H. (1980). Vignettes of Nepal. Sajha Prakashan.
- Hall, C. M., & Page, S. J. (2014). The geography of tourism and recreation: Environment, place and space (4th ed.). Routledge.
- Honey, M. (2008). Ecotourism and sustainable development: Who owns paradise? (2nd ed.). Island Press.
- Kunwar, R. R., & Pandey, H. R. (2020). Tourism and Development: A Case Study of Sirubari Village Tourism in Nepal. The Gaze: Journal of Tourism and Hospitality, 11(1), 1–22. https://doi.org/10.3126/gaze.v11i1.30413
- Ministry of Culture, Tourism and Civil Aviation. (2024). Tourism statistics 2024. Government of Nepal. https://www.tourismdepartment.gov.np/publication/tourism-statistics-2024
- Nepal, S. K. (2005). Tourism and remote mountain settlements: Spatial and temporal development of tourist infrastructure in the Mt. Everest region, Nepal. Tourism

- Geographies, 7(2), 205–227. https://doi.org/10.1080/14616680500072436
- Nepal, S. K., & Chipeniuk, R. (2005). Mountain tourism: Toward a conceptual framework. Tourism Geographies, 7(3), 313–333. https://doi.org/10.1080/14616680500164851
- Sharpley, R. (2009). Tourism development and the environment: Beyond sustainability? Earthscan.
- Smith, M. K., & Robinson, M. (2006). Cultural tourism in a changing world: Politics, participation and (re)presentation. Channel View Publications.
- Stronza, A., & Gordillo, J. (2008). Community views of ecotourism. Annals of Tourism Research, 35(2), 448–468. https://doi.org/10.1016/j.annals.2008.01.002
- United Nations Development Programme (UNDP). (2021). Sustainable Waste Management in Trekking Areas: Lessons from the Himalayas.
- Upadhayaya, P. K. (2013). Role of tourism in local development: A case study of Sirubari village in Nepal. The Gaze: Journal of Tourism and Hospitality, 5(1), 24–45. https://doi.org/10.3126/gaze.v5i1.13296
- Weaver, D. (2001). Ecotourism as mass tourism: Contradiction or reality? Cornell Hotel and Restaurant Administration Quarterly, 42(2), 104–112. https://doi.org/10.1177/0010880401422007