

Chapter 10

Impact of Climate Change on Himalayan Tourism Destinations

Sanjeev Kumar Saxena

 <https://orcid.org/0000-0002-2139-9255>

Assam University, India

Vandana Gupta

LM College of Science and Technology, Jodhpur, India

Wahengbam Priyalakshmi

Assam University, India

Mehzabin Ferdous

Assam University, India

ABSTRACT

Climate change poses significant challenges to Himalayan tourism destinations, affecting their landscapes, ecosystems, and local communities. This article investigates the various impacts of climate change on these destinations and explores the implications for tourism activities. It also explores the consequences of altered weather patterns on adventure tourism activities and addresses the impact on local flora and fauna. Additionally, the socio-economic repercussions for local communities and the challenges faced by indigenous populations and cultural heritage preservation are discussed. The article emphasizes the importance of sustainable tourism practices to mitigate these impacts and foster resilience. Collaboration between local communities, governments, and tourism stakeholders is crucial, as is the development of effective policies at national and international levels. The study concludes by highlighting the need for further research to address the complexities of climate change impacts on Himalayan tourism destinations.

DOI: 10.4018/979-8-3693-0823-3.ch010

1. INTRODUCTION

Stretching across various countries in South Asia, the majestic mountain range of The Himalayas is known as the “Roof of the World”. The Himalayas is a beauty to behold with its towering peaks, breathtaking landscapes and diverse ecosystems. Some of the highest peak of the world like the Mount Everest and Mount Kanchenjunga are in this range where mountaineers, trekkers and adventure enthusiasts are attracted from around the globe. Apart from the beauty, the Himalayas also has great significance of culture and spiritual. For centuries ancient traditions, religions and indigenous culture has been flourishing in this mountain range. The Himalayan range is a popular destination among many tourists for cultural tours, spiritual retreats and even eco-tourism experiences because of its blend in cultural heritage which is beautifies by its stunning natural beauty. But regardless of how mighty the Himalayan range is, it is not immune to the various challenges like the retreating of glaciers, altered weather patterns and ecological disruption which occurs due to climate change. For the future generations to cherish and appreciate the Himalayan ranges it is important for the present generation to ensure longevity and vitality of the mountain range by putting in efforts to preserve the eco system and promote sustainable tourism practices.

Though the Himalayas offer a wide range of attraction, the climate change has a huge impact on the destination. The mountain range with its majestic landscape and fragile ecosystem is very much vulnerable to the effects of global warming. The region’s iconic attractions ad various tourism activities like the adventure tourism activities has been directly affected by the melting of glaciers, reduced snowfall, and also the altered weather pattern which is due to global warming. The Glaciers Lake Outburst Floods (GLOFs) and landslides which occurs due to the retreat of the glaciers is a threat to the human settlement and infrastructure. Also the change of the pattern of precipitation and extreme weather conditions is also a very big issue for the adventure tourism which impact the safety of the visitor and various activities like trekking and mountaineering which have been feasible to the tourists. Climate change is also adversely affecting the balance in the ecosystem of the Himalayan region which results in the loss of biodiversity and even allowing the eco-tourism experience to lose their authenticity. These results in the need and requirement for implementing sustainable tourism practices and various adaptation strategies. For the Himalayan tourism destination to have resilience and long term sustainability, it is high time that the local communities, government and tourism stakeholders to collaborate and work towards the same goal. Taking into consideration of global warming and climate change while tourism planning, promoting various sustainable practices and supporting the conservation of natural and cultural heritage in mitigating the harsh effects of global warming and climate change and preserve the unique destination for the future generations to enjoy.

1.1 Objectives of this Study

The research objectives of this study on the impact of climate change on Himalayan tourism destinations are as follows:

- To investigate the specific impacts of climate change on iconic attractions in the Himalayas,
- To identify sustainable tourism practices and adaptation strategies to mitigate the adverse effects of climate change on Himalayan tourism destinations.
- To provide policy recommendations for national and international stakeholders to integrate climate change mitigation and adaptation strategies into tourism planning and management.

7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/impact-of-climate-change-on-himalayan-tourism-destinations/343137

Related Content

Convergence of Energy Efficiency in OECD Countries: Consideration of Sharp and Smooth Breaks

Muhammed Sehid Gorusand Erdal Tanas Karagol (2023). *Perspectives on Ecological Degradation and Technological Progress* (pp. 15-41).

www.irma-international.org/chapter/convergence-of-energy-efficiency-in-oecd-countries/327101

Technological Advancement and Phenomenon of Environmental Sustainability (TAPES) in 6G Wireless Communication System

Snehasis Dey (2025). *6G Impacts on Natural Habitats and Human Life* (pp. 169-190).

www.irma-international.org/chapter/technological-advancement-and-phenomenon-of-environmental-sustainability-tapes-in-6g-wireless-communication-system/378229

Discovering Advances in Using Artificial Techniques (AI) Techniques to Understand and Manage Wildfires

Gunjan Srivastavaand Bhupinder Singh (2025). *Machine Learning and Internet of Things in Fire Ecology* (pp. 93-112).

www.irma-international.org/chapter/discovering-advances-in-using-artificial-techniques-ai-techniques-to-understand-and-manage-wildfires/363676

Integrating Machine Learning Into Wildlife and Forest Conservation: Ethical Considerations and Sustainable Practices

Souvik Dharand Arya Dhar (2025). *Machine Learning and Internet of Things in Fire Ecology* (pp. 129-156).

www.irma-international.org/chapter/integrating-machine-learning-into-wildlife-and-forest-conservation/363678

Challenges and Recommendations for Fostering Pilgrimage Tourism in the Himalayan Region of India

Gaurav Bathla, Ashish Raina, Varinder Singh Ranaand Amit Kumar (2024). *Mountain Tourism and Ecological Impacts: Himalayan Region and Beyond* (pp. 35-46).

www.irma-international.org/chapter/challenges-and-recommendations-for-fostering-pilgrimage-tourism-in-the-himalayan-region-of-india/343131