



Environment, Tourism & Migrant Labour: A Focus on Darjeeling Hills

Ugen Dukpa St.Josephs College Darjeeling Registration Id: 51131570

Email0d: Dukpaugen24@Gmail.Com

How to Cite this Article:

Dukpa, U. (2026). Environment, Tourism & Migrant Labour: A Focus on Darjeeling Hills. International Journal of Creative and Open Research in Engineering and Management, <i>02</i></i>(03).
<https://doi.org/10.55041/ijcope.v2i3.071>

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<https://doi.org/10.55041/ijcope.v2i3.071>

Abstract

Being the queen of hills Darjeeling used to mesmerize its visitors and its beauty finds place even in the heart of the Nobel Laureate Rabindranath Tagore. It is one of the most famous hill stations for a quiet long period of time. Along with natives a good number of foreign travelers are also seen in Darjeeling city and surroundings throughout the year. The economy of Darjeeling, a district and a hill station in North Bengal, is dependent on tourism to a large extent and over the past few decades the city has witnessed a large scale infrastructural development centering the construction of hotels and resorts mainly by corporate groups and companies. On the one hand this kind of growth has meet up the needs of rising number of tourists and has boost up the local economy but on the other hand it has surely affected the environment adversely. Large numbers of migrant labourers are brought from adjacent districts like North Dinajpur to fulfill the requirement of workers for completing the time bound projects taking place in the region. The living condition of these in-migrants is not up to the mark and they are also adding pressure in the region that is already overwhelmed by the influx of tourists. The entire process is dominated by commercial interests and there is hardly any concern either for local residents or for natural environment.

In this context the study aims to focus on the environmental exploitation of Darjeeling due to over tourism and to explore the conditions of the in-migrants working in the construction site of the town. The paper emphasizes the necessity of careful planning and management to ensure long-term sustainability, well-being of local communities and the decent standard of living for the migrants to tackle the double-edged sword of development resulted from the expansion of tourism.

KEYWORDS: Environment, Tourism, Migrant Labourers, Exploitation, Sustainability



1. INTRODUCTION

Nestled in the Eastern Himalayas, Darjeeling is one of India's most renowned hill stations, celebrated for its scenic beauty, cool climate and cultural heritage, known as the "Queen of the hills" this picturesque town attracts millions of tourists annually significantly boosting the local economy. Tourism has become the economic backbone of Darjeeling, contributing over 50% of the district's revenue with nearly 500,000 tourists visiting each year. However, the rapid growth of tourism has also led to various socio-environmental challenges that threaten the sustainability of the region. Over the past two decades, Darjeeling has witnessed a surge in infrastructure development aimed at accommodating the increasing tourist influx. As of 2023, the town has over 1500 hotels, homestays and resorts, primarily managed by corporate groups seeking to profit from the region's popularity. This expansion has brought short-term economic gains but at a significant environmental cost. According to recent environmental impact assessments, over 20% of the region's green cover has been depleted due to unregulated construction, leading to an increase in landslides, loss of biodiversity and water scarcity. These environmental changes not only impact the landscape but also pose risks to both local communities and the overall attraction of Darjeeling as a tourist destination. The high demand for infrastructure has created a substantial need for labour, much of which is supplied by migrant workers from nearby districts like North Dinajpur, Malda and even states like Bihar. Migrant labourers, estimated to number around 20,000 during peak construction seasons, are essential to Darjeeling's tourism-driven economy. Yet, they often endure harsh living and working conditions, with limited access to housing, healthcare and fair wages. Reports indicate that most migrant labourers earn wages below the recommended minimum wage living in temporary shelters without basic sanitation. This vulnerable workforce, while integral to Darjeeling's growth, faces numerous socio-economic challenges that have sparked concerns among local authorities and advocacy groups. The unchecked expansion of tourism and the resulting influx of migrant labour have also strained Darjeeling's limited natural resources, especially water shortages, exacerbated by waste management issues. In 2023 Darjeeling produced an estimated 100 metric tons of waste per day, a volume that local waste management infrastructure struggles to handle, leading to pollution and degradation of the town's pristine environment. The cumulative effects of these issues underscore the urgent need for sustainable tourism policies that balance economic growth with environmental conservation and labour welfare. This study aims to address these interlinked challenges by exploring the socio-environmental impact of tourism and the conditions of migrant labourers in Darjeeling. Through secondary data analysis and case study comparisons, the research provides insights into sustainable practices that can mitigate environmental degradation while supporting the well-being of local communities and migrant workers. By examining models from comparable regions, this study seeks to offer practical recommendations to policymakers, ensuring a sustainable future for Darjeeling's tourism industry and a dignified existence for its labour force.

2. STATEMENT OF THE PROBLEM

The interconnection between Environment, Tourism and Migrant Labour in the Darjeeling hills highlights critical and evolving issues that pose significant challenges to the region's sustainability. Darjeeling's natural environment is increasingly strained by tourism, especially during peak seasons, which lead to pollution, unmanaged waste and damage to local ecosystems. The heavy reliance on tourism has also made the region susceptible to economic instability, similar to the "Dutch Disease" phenomenon, where over-dependence on a single sector undermines other economic activities such as tea production. Additionally, while tourism generates income and supports local businesses, it also creates challenges in terms of unregulated infrastructure growth. The rise of illegal hotels, unplanned homestays and unmanaged tourism facilities has put immense pressure on local resources, impacting water availability, waste management and traffic control. As a result, there is an urgent need for sustainable tourism practices that prioritize environmental conservation and community well-being. Moreover, Darjeeling's booming tourism sector depends heavily on migrant labour, particularly in construction, to support the demand for expanded infrastructure. These migrant workers, drawn from nearby regions for higher wages, are crucial to the local economy but often face precarious working conditions and insufficient wages. This labour force experiences limited access to adequate housing, sanitation and social protections, leading to increased socio-economic vulnerabilities. This study, therefore, seeks to address the dual impact of environmental degradation and the socio-economic challenges faced by the migrant labourers due to over-tourism. By exploring the environmental exploitation associated with tourism growth and assessing the conditions of in-migrant construction workers, this research aims to provide insights into the need for balanced development. Emphasizing the importance of careful planning and sustainable management, the study aims to propose strategies that protect



Darjeeling's environment while ensuring the welfare of its communities and migrant labourers in the face of ongoing tourism expansion.

3. LITERATURE REVIEW

The Literature review in this context provides a comprehensive examination of existing research related to the environmental and socio-economic impacts of tourism and migrant labour focusing on Darjeeling and similar regions. It includes studies on tourism development, environmental sustainability, socio-economic conditions of migrant workers and community responses to tourism and labour dynamics. Tourism development has been both a boon and bane for many regions, especially those with fragile ecosystems like Darjeeling. Tourism can drive economic growth, but it often comes at the cost of environmental degradation.

1. Bhandopadhyay in 2016 in his paper titled “Ecotourism, and Women of Lamahatta Darjeeling” focuses on the role of women in ecotourism in Lamahatta, Darjeeling. It highlights how local women engage in homestays and other tourism related activities, empowering themselves economically and socially. The paper discusses how ecotourism, when well managed, can help uplift local communities and preserve the environment by integrating women into its operations

2. Bhutia in 2016 in his paper titled “Rural Tourism for sustaining rural livelihoods in Darjeeling hills” explores the importance of rural tourism in sustaining livelihoods in Darjeeling. The article analyzes how tourism can provide an economic alternative to traditional agriculture, which is increasingly under pressure due to environmental challenge. The study emphasizes the importance of sustainable tourism practices that don't exploit natural resources but rather foster community –driven economic benefits

3. The Darjeeling Chronicle in 2023 in their article titled “Darjeeling’s Struggle with Unsustainable Tourism” explores the adverse impacts of mass tourism in Darjeeling, focusing on issues such as overcrowding, pollution, and strain on local resource. It highlights the need for better tourism management practices and sustainable development to protect the region's environment. The discussion underscores the importance of balancing tourist influx with the preservation of natural and cultural heritage to ensure long-term sustainability

4. Dey and Choudhury in 2024 in their article titled “Tea Estates to Tea Tourism: Darjeeling’s Changing Landscape” examines the economic and social challenges faced by the Darjeeling hills due to the decline in tea production and the rise of tourism. It discusses the concept of “Dutch Disease” where over-reliance on specific industries like tea and tourism makes the local economy vulnerable. The authors advocate for economic diversification and better labour conditions to stabilize and grow the local economy. The piece emphasizes the potential of tea tourism to boost both sectors while maintain environmental sustainability

5. Khawas in 2006 in his paper titled “Status of Tea Garden Labourers in Eastern Himalaya: A Case of Darjeeling Tea Industry” offers a socio-economic analysis of tea garden labourers in Darjeeling focusing on their working condition, wages and social status. The paper highlights the exploitation faced by these labourers, who often work for below minimum wages, live in substandard housing and have little access to healthcare and education. The author also discusses the broader economic structures that perpetuate this exploitation, including the dependence of the local economy on the tea industry and tourism

6. Sharma and Chettri in 2023 in their paper titled “Socio-economic impact of Homestay Businesses in Darjeeling” investigate the growth of homestay businesses as an alternative income source for local families, especially amidst rising tourist number. It examines their economic impact on both the local economy and existing hotel businesses

7. Subba in 2008 in his study titled “Living the Nepali Diaspora in India: An Autobiographical Essay” reflects on the experiences of the Nepali diaspora in Indi, with a focus in Darjeeling. He discusses the dual identity of being both Indian and Nepali and how this affects the socio-economic position of Nepali migrant labourers. Subba highlights the contributions of Nepali labour to the development of regions like Darjeeling while also pointing out the marginalization and discrimination they often face.

8. Singh and Narban in 2020 in their article titled “Ecotourism as a Sustainable Alternative to Mass Tourism” delves into the principles of ecotourism and contrasts it with the detrimental effects of mass tourism. It defines ecotourism as a responsible travel to natural areas that conserves the environment and improves the well-being of local people. The authors highlight the benefits of ecotourism, including job creation, income generation and environmental conservation and they argue that ecotourism is a viable, sustainable alternative to mass tourism, which often leads to environmental degradation and social disruption.



9. Rawat in 2019 in his article titled “Rural Tourism and Sustainable Development in Takdah and Mineral Spring Darjeeling” explores how rural tourism affects economic stability and social welfare of the local population in Takdah and Mineral Spring. It discusses the challenges including financial constraints, lack of education in tourism management and the impact of regional political unrest on tourism. The study suggests that supporting local stakeholders through education and financial assistance can enhance rural tourism’s benefits and sustainability

10. Rai in 2020 in her paper titled “Ecotourism Potential in the Darjeeling Hills: Prospects, Challenges and Possibilities” offers an in-depth analysis of ecotourism in Darjeeling. It explores the area’s unique natural and cultural resources, emphasizing Darjeeling’s appeal for ecotourism due to its landscape, rich biodiversity and cultural heritage. The author discusses how ecotourism can serve as a sustainable alternative to mass tourism, which leads to environmental degradation due to resource overuse. The paper highlights key locations within the Darjeeling hills, such as Mirik Lake and Lamahatta, where ecotourism initiatives are already underway or could be expanded further. The challenges noted in the paper include balancing tourism growth with the need to protect natural resources, ensuring the equitable distribution of economic benefits and developing infrastructure that supports both tourism and environmental conservation. The author suggests that with proper planning, ecotourism in Darjeeling could help mitigate the pressures of mass tourism, attract environmentally conscious tourism and enhance local community development.

11. Valentine in 1993 in his paper titled “Ecotourism and Nature Conservation: A Definition with some recent Developments” offers an early definition of ecotourism, emphasizing its role on nature conservation. The paper outlines the principles of ecotourism and its potential for combining environmental protection with socioeconomic benefits, a concept that remains central to modern ecotourism discussions

The Literature reveals that while tourism can drive economic growth and development, it often leads to significant environmental and socio-economic challenges. Sustainable tourism practices that integrate environmental conservation, social equity and economic benefits are essential to address these issues. The experiences of migrant labourers highlight the need for improved labour rights and support systems to ensure fair treatment and decent living conditions. Local communities must be actively involved in tourism planning and decision-making to balance the benefits of tourism with the need to protect the environment and support local livelihoods. Policymakers and tourism managers must adopt holistic approaches that consider the interconnectedness of economic, environmental and social factors. Lastly the literature review underscores the complex interplay between tourism, environmental sustainability and migrant labourers in regions like Darjeeling. Addressing these challenges requires a comprehensive approach that prioritizes sustainable tourism practices, supports the socio-economic conditions of migrant workers and involves local communities in decision-making processes. The future research should continue to explore these dynamics focusing on the effectiveness of proposed policies and practices in achieving sustainable development

4. METHODOLOGY

To comprehensively explore the socio-economic and the environmental impacts of tourism and migrant labour in Darjeeling, this study utilizes Secondary data analysis as the primary research method. This research method provides both breadth and depth, allowing for a detailed understanding of the issues from established sources and application of lessons from similar tourist regions. The Secondary data analysis is central to this study, drawing on a range of existing reports, government publications, academic research and media sources. This method provides a broad overview of tourism trends, environmental degradation and migrant labour conditions in Darjeeling without primary data collection, making it ideal for capturing long-term trends and identifying policy gaps. A comprehensive review of relevant academic papers, government reports and studies has been conducted to gather foundational insights on tourism growth, environmental impacts and labour migration in Darjeeling. The sources include academic journals and research articles with studies in Sociology, Economics, Tourism, Geography, Anthropology and Environmental Sciences helping frame the socio-economic and Environmental dynamics of Darjeeling within theoretical perspectives as well as reports from non-governmental organizations and research organizations which have documented on the ground conditions for migrant workers, environmental changes and the challenges faced by the local communities. The quantitative data has been gathered from sources like the National Sample Survey office (NSSO), Census of India and West Bengal’s tourism department. The key statistics include Tourism figure, Economic Contribution and labour Statistics and Environmental Impact data. The Environmental impact assessments and ecological studies specific to Darjeeling are reviewed to analyze the direct effects of tourism on the region’s ecosystems. These include data on biodiversity loss, pollution, and waste management challenges, often exacerbated by increasing tourist volumes and construction projects as well as a review of



news articles, articles, editorials and local reports providing current insights into public sentiment and emerging issues. This captures the real-time challenges faced by both the local residents and the migrant labourers due to tourism driven development

5. FINDINGS OF THE STUDY

The following findings summarize the key insights from the study on the interplay of environment, tourism and migrant labour in Darjeeling. The study finds that the rapid and large-scale development of tourism infrastructure in Darjeeling has led to considerable environmental degradation. The key issues include deforestation, soil erosion and pollution of water bodies. The increased tourist activities have resulted in high levels of waste generation, which local waste management systems struggle to handle. This has led to unmanaged waste, littering and contamination of natural resources, adversely affecting the local environment. The high demand for water during peak tourist seasons has exacerbated water scarcity in Darjeeling. The over-extraction of water resources for tourism-related activities has reduced water availability and quality for local residents. The study also makes this finding that Darjeeling's economy has become heavily dependent on tourism, making it vulnerable to fluctuations in tourist arrivals and other external shocks. This "Dutch Disease" effect has led to the neglect of other important economic sectors like agriculture and tea production. The economic benefits of tourism are unevenly distributed and large corporate groups and companies primarily benefit from the tourism boon, while local businesses and communities often receive a smaller share of the economic gains. The influx of tourists has also put immense pressure on local resources, including water, food and public services. This competition between tourists and residents has strained local resources and infrastructure often disadvantaging the public population. The rapid development of tourism infrastructure has not been matched by improvements in local housing and infrastructure and many local residents live in inadequate conditions with limited access to essential services. The migrant labourers in the construction sector face challenging working conditions. They often work long hours for low wages with little to no job security or labour rights. These conditions are compounded by inadequate safety measures and lack of proper work contracts. The migrant workers typically reside in temporary shelters or inadequate housing with limited access to clean water, sanitation and healthcare and these poor living conditions increase their vulnerability and marginalization. The migrant labourers are drawn to Darjeeling by the promise of higher wages but face significant socio-economic vulnerabilities and they often lack access to social protections, healthcare and education leading to heightened marginalization. The unregulated growth of tourism has also led to the proliferation of illegal hotels and homestays. This has contributed to chaos during the peak tourist seasons and exacerbated environmental and social issues. There is also a critical need for sustainable tourism practices to mitigate the negative impacts of tourism on the environment and local communities. The efforts to promote sustainable tourism, such as better waste management, traffic control and community engagement are essential but currently inadequate. The local communities are often excluded from decision-making processes related to tourism development. This has resulted in development projects that do not align with the needs and priorities of the local population. Despite recognizing the issues, there is often a gap in effective policy implementation and enforcement. Sustainable practices and regulations are not adequately promoted or adhered to, leading to continued environmental and social degradation. The study, therefore emphasizes the necessity of an integrated approach to development that balances tourism growth with environmental conservation and social equity. This includes ensuring fair wages and working conditions for migrant labourers, improving local infrastructure and services and promoting sustainable tourism practices. These findings highlight the complex challenges faced by Darjeeling due to the intertwined impacts of tourism, environmental degradation and migrant labour conditions. They underscore the need for comprehensive strategies to achieve sustainable development protect the environment and improve the socio-economic conditions of both local residents and the migrant labourers.



6. RECOMMENDATIONS TO PROMOTE SUSTAINABLE DEVELOPMENT IN

DARJEELING: Based on the challenges identified in the abstract and the study's findings, here are some robust recommendations to promote sustainable development in Darjeeling while protecting the environment and improving socio-economic conditions for local residents and migrant labourers

i) Environmental Sustainability

- a. To enforce stringent regulations to control deforestation, soil erosion and pollution and establish protected zones where construction and tourist activities are prohibited to preserve biodiversity and
- b. To develop and implement effective waste management systems, including recycling programs and waste to energy projects and encourage hotels, resorts and other tourist facilities to adopt sustainable waste disposal practices.
- c. To introduce water conservation initiatives such as water harvesting, efficient water usage practices and the construction of water storage facilities to mitigate water scarcity during peak tourist seasons
- d. To promote and encourage eco-tourism on conservation and education and to develop eco-friendly tourism infrastructure and promote activities that have minimal environmental impact, such as trekking, bird watching and cultural tours

ii) Economic Diversification

- a. To reduce reliance on tourism by promoting other sectors like agriculture, tea production and handicrafts and to provide incentives and support for local businesses to diversify and innovate
- B.To implement strict zoning laws and building codes to regulate the construction of hotels and resorts and to ensure that new developments adhere to sustainable practices and do not encroach on ecologically sensitive areas
- C.To encourage the growth of local businesses and homestays by providing financial support, training and marketing assistance and to ensure that economic benefits from tourism are distributed equitably among local communities

iii) Social Equity

- a. To invest in improving housing and basic infrastructure for local resident, particularly in rural areas and to ensure development projects prioritize the needs of the local population and do not displace communities
- B.To enhance and strengthen public services, including healthcare, education and sanitation and to meet the increased demand from both residents and tourists and to ensure that migrant labourers have access to these essential services.

iv) Migrant Labour Welfare

- a. To implement and enforce labour laws that guarantee fair wages, safe working conditions and job security for migrant workers and to conduct regular inspections and penalize employees who violate these standards
- b. To develop affordable and adequate housing facilities for migrant labourers, complete with basic amenities such as clean water, sanitation and healthcare and also to establish migrant worker centres that offer support services and resources
- c. To introduce social protection programs for migrant workers, including health insurance, access to education for their children and financial literacy training and to create mechanisms for migrant workers to voice their concerns and participate in decision-making processes

v) Sustainable Tourism Practices

- a. To educate tourists about sustainable practices and the importance of respecting local culture and the environment and to develop codes of conduct for tourists and tourism operators to minimize negative impacts
- b. To involve local communities in tourism planning and management and to encourage community-based tourism initiatives that allow locals to benefit directly from tourism activities while preserving their cultural heritage
- c. To implement systems to monitor and manage tourist numbers to prevent overcrowding and overuse of resources and also to develop off-peak tourism strategies to spread tourist visits more evenly throughout the year

vi) Policy and Planning

- a. To develop an integrated policy framework that addresses environmental conservation, economic development and social equity and to ensure that policies are aligned across different sectors and levels of government
- b. To provide training and capacity building programs for local authorities, tourism operators and community leaders to



implement and manage sustainable tourism practices effectively

c. To foster collaboration between government, private sector, NGOs and local communities to ensure a coordinated and inclusive approach to tourism development and to establish multi-stakeholder platforms for dialogue and decision-making

vii) **Research and Continuous Improvement**

a. To conduct ongoing research to monitor the environmental and socio-economic impacts of tourism and to use the data and evidence to inform policy decisions and adjust strategies as needed

b. To create mechanisms for regular feedback from tourists, local residents and migrant workers to identify emerging issues and improve tourism practices continuously

7. CONCLUSION

The study highlights the complex interplay between environment, tourism and migrant labour in Darjeeling, revealing significant challenges and opportunities. Rapid tourism growth has led to severe environmental degradation, including deforestation, water pollution and waste management issues, exacerbating water scarcity during peak seasons. Economically, while tourism boosts local incomes, it also creates vulnerabilities due to over-reliance on the sector and uneven benefit distribution, with large corporations often reaping the most significant rewards. Socially, the strain on local resources and inadequate infrastructure has resulted in poor living conditions for residents and increased socio-economic disparities. Migrant labourers, essential for the construction sector, face precarious working conditions and inadequate living arrangements, further marginalizing them despite their critical role in the economy. Addressing these challenges requires sustainable tourism practices, economic diversification and social equity measures. Enforcing environmental regulations, promoting eco-tourism and improving waste and water management are crucial. Supporting local businesses, ensuring fair wages and improving living conditions for migrant labourers are essential for socio-economic balance. A comprehensive, integrated approach that includes community involvement and effective policy implementation is necessary for achieving long-term sustainability in Darjeeling. By balancing environmental conservation, economic development and social equity, Darjeeling can mitigate the negative impacts of tourism and promote a sustainable and inclusive future for all.

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