

An Analytical Study On Community-Based Tourism Through Sustainable Practices With A Special Reference To Darjeeling District

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ABSTRACT

Tourism has emerged as a vital driver of economic growth in Darjeeling, yet its long-term viability depends on balancing development with sustainability. This study critically analyses community-based tourism (CBT) in the Darjeeling district, emphasizing the role of local communities in promoting eco-friendly practices, cultural preservation, and inclusive growth. Using a mixed-methods approach, the research explores how CBT initiatives-such as homestays, heritage conservation, organic farming, and eco-trails-contribute to sustainable livelihoods while mitigating the negative impacts of mass tourism. Findings reveal that although CBT fosters cultural pride, employment, and environmental stewardship, it also faces challenges such as limited infrastructure, inadequate training, and inconsistent policy support. The study underscores the need for integrated planning, capacity-building, and stakeholder collaboration to strengthen CBT as a sustainable tourism model. The insights generated can guide policymakers, tourism practitioners, and local communities toward designing strategies that safeguard Darjeeling's natural and cultural heritage while ensuring equitable benefits for residents.

INTRODUCTION

Community-Based Tourism (CBT) has emerged as a powerful approach to sustainable tourism development, placing local communities at the centre of tourism planning, operations, and benefit-sharing. By integrating environmental preservation, cultural heritage protection, and socio-economic empowerment, CBT promotes responsible travel experiences that contribute directly to community well-being. In India's hill regions, particularly in the Darjeeling district, CBT holds significant potential due to its rich biodiversity, unique cultural traditions, and globally recognized tea heritage. In recent years, Darjeeling has witnessed the gradual growth of CBT initiatives as an alternative to mass tourism, aiming to balance economic development with environmental conservation and cultural authenticity. Such initiatives offer immersive experiences-homestays, local cuisine, guided treks, handicraft workshops-while generating livelihoods for local residents. However, the success of CBT depends largely on the extent to which sustainable practices are integrated into daily operations, encompassing waste management, water conservation, renewable energy adoption, biodiversity protection, and the preservation of intangible cultural heritage.

Despite its promise, CBT in Darjeeling faces challenges such as inconsistent adoption of sustainable practices, limited market access, inadequate branding, governance gaps, and resource constraints. This study seeks to systematically assess the status, sustainability, and operational effectiveness of CBT in the district, examining both community and tourist perspectives. Through this, it aims to identify opportunities for strengthening CBT as a tool for inclusive and environmentally responsible tourism development.

BACKGROUND STUDY

The concept of Community-Based Tourism emerged globally in the late 20th century as a response to the negative socio-environmental impacts of mass tourism. Defined by the United Nations World Tourism Organization (UNWTO) as tourism that is owned and/or managed by the community and

intended to deliver wider community benefits, CBT has been successfully implemented in destinations across Asia, Africa, and Latin America. At its core, CBT promotes participatory planning, local empowerment, cultural preservation, and sustainable resource management.

In the Indian context, the northeastern and Himalayan regions have been particularly active in adopting CBT models due to their fragile ecosystems and cultural richness. Darjeeling, with its strategic location in the Eastern Himalayas, offers a diverse array of natural and cultural assets-snow-capped peaks, tea plantations, monasteries, ethnic festivals, and traditional crafts-that align well with the principles of CBT. Various NGOs, government programs, and private initiatives have encouraged local households to participate in tourism activities, thereby diversifying income sources and fostering cultural exchange.

However, research and policy reviews indicate that CBT in Darjeeling remains under-optimized. While some villages have successfully implemented eco-friendly practices and built strong community governance structures, others struggle with issues such as lack of training, insufficient infrastructure, over-reliance on seasonal tourism, and difficulty in connecting to wider markets. Additionally, gaps in branding, promotion, and digital marketing limit the visibility of CBT experiences beyond regional boundaries.

Sustainable practices form the foundation of long-term CBT viability. These include proper waste segregation and disposal, use of renewable energy sources, rainwater harvesting, eco-friendly construction methods, promotion of local food system, and protection of biodiversity. Yet, inconsistent adoption of such measures can dilute the authentic and environmental benefits of CBT initiatives. By studying the status of CBT and the integration of sustainable practices in Darjeeling, this research aims to bridge knowledge gaps, highlight best practices, and recommend strategic actions to ensure that community-led tourism not only thrives economically but also safeguards the district's cultural and ecological heritage.

PROBLEM STATEMENT

The growth of Community Based-Tourism (CBT) in the Darjeeling district is still uneven and precarious, despite the district's rich biodiversity and cultural landscapes. Insufficient waste, water, and trail management practices that jeopardise ecological integrity; seasonally fluctuating demand and leakage to outside operators, weak governance capacities (pricing, quality control, benefit-sharing) and limited market access beyond word-of-mouth and generic travel portals are the challenges that village-level CBT groups face. Due to these limitations, there is pressure on delicate hill ecosystems, low household income diversification, intra-community benefit asymmetries (gender, youth, and marginalised groups), and a decline in visitor satisfaction with sustainability features. In Darjeeling, there is a glaring lack of data regarding the relationships between sustainable practices (such as waste segregation, water conservation, energy use, local sourcing, and cultural protocol guidelines) and destination stewardship (resource condition, resident attitudes) and CBT performance outcomes (income, employment, inclusion). As a result, the study investigates the scope, causes, and impacts of sustainable practices in CBT businesses and collectives throughout the district and finds practical ways to improve livelihoods and conservation results.

OBJECTIVES OF THE STUDY

- To determine the Darjeeling district's current Community Based-Tourism (CBT) programs and their operational frameworks.
- To assess how widely sustainable practices are being used in the management of waste, water, energy, biodiversity, and cultural heritage.
- To examine the connection between economic outcomes like employment, income generation, and local procurement and sustainable practices.
- To assess how Community Based-Tourism affects local communities and tourists in terms of the environment and society.
- To determine the governance, capacity, and resource gaps that impact community members equitable benefit-sharing.

- To evaluate the difficulties CBT businesses, encounter in terms of branding, market access and digital marketing.
- To make practical suggestions for improving CBT's efficacy and sustainability in the Darjeeling district.

REVIEW OF LITERATURE

- **Basak et al. (2021)** This study examined the role of sustainable homestay tourism in enhancing tourist satisfaction in the Darjeeling Himalayan region. Using structural equation modelling, the authors found that factors such as environmental cleanliness, use of local resources, and authentic cultural experiences were critical for visitor satisfaction. The research highlights that community managed homestays not only support livelihoods but also encourage sustainable practices by reducing environmental impact.
- **Pradhan (2024)** Pradhan's work focused on Sittong village in Darjeeling, positioning homestays as a pro-poor tourism model. The study revealed that community participation in tourism management ensured equitable benefit distribution and empowered marginalized groups. The findings emphasize that such models can address rural poverty while maintaining ecological balance, making them sustainable in the long run.
- **Dutta & Mukhopadhyay (2024)** This research addressed overtourism in the Darjeeling hills and proposed homestay tourism as a sustainable alternative. The authors identified that shifting from hotel-centric to homestay-based tourism disperses visitor flow, reduces infrastructure pressure, and preserves the cultural identity of rural areas. The study supports community-based models as tools to counteract overcrowding and resource depletion.
- **Lama & Singh (2024)** This comparative study between Lepchajagat and Sittong examined differences in homestay operations, sustainability practices, and community involvement. Lepchajagat was found to have better waste management initiatives, while Sittong offered more immersive cultural experiences. The study stresses that both environmental and cultural sustainability are necessary for long-term tourism success.
- **Bhattacharya et al. (2023)** The author investigated homestay tourism in Chatakpur, Darjeeling, aligning it with ASEAN standards. Findings showed that eco-friendly infrastructure, controlled visitor numbers, and preservation of forested surroundings were key drivers of repeat visits. The study suggests that adopting international sustainability benchmarks can improve local tourism competitiveness.
- **Rawat (2019)** This research explored rural tourism in Takdah and Mineral Spring, highlighting how community-led tourism initiatives can revitalize local economies. The study found that eco-conscious guest management, promotion of organic farming, and reliance on local guides created a sustainable tourism framework with minimal environmental footprint.
- **Rai (2020)** Rai's work assessed ecotourism potential in Darjeeling, identifying challenges such as lack of environmental regulation enforcement and infrastructural gaps. The study recommended integrating ecotourism principles into community tourism, thereby ensuring that economic gains do not compromise natural resource conservation.
- **Bhutia & Chettri (2022)** This study analysed challenges faced by homestay owners in Sikkim and Darjeeling, including inadequate marketing, limited waste disposal facilities, and seasonal income fluctuations. It concluded that community-based tourism needs coordinated policy support, capacity building, and infrastructure upgrades to remain sustainable.

RESEARCH METHODOLOGY

The study adopts a descriptive and analytics research design to examine the relationship between tourist types and their participation in community-based activities, alongside boarder sustainable tourism practices. The research focuses on identifying the current operational frameworks of CBT in Darjeeling and analysing their relationship with tourism outcomes, particularly through practices in waste management, water conservation, energy efficiency, biodiversity protection, and cultural heritage preservation and also targeting tourists, local community members. A structured questionnaire was used to collect primary data from 100 respondents using the chi-square test to examine the association between tourist type and participation in community –based activities. The findings provide an

evidence-based understanding of participation trends, contributing to strategies aimed at enhancing the sustainability and effectiveness of CBT in Darjeeling district.

Sampling and Population

The sample population for the study titled “AN ANALYTICAL SYUDY ON COMMUNITY-BASED TOURISM THROUGH SUSTAINABLE PRACTICES WITH A SPECIAL REFERENCE TO DARJEELING DISTRCT” The respondent were classified into five categories single (23), couple (24), families (22), friends (15), and group (16). Out of these, 57 participants engaged in community-based activities, while 43 did not. The distribution allowed for an inclusive representation of different travel type and group dynamics. The chi-square analysis ($\chi^2 = 4.831$, $df = 4$, $p = 0.305$) indicated association between tourist type and participation in community-based activities, implying that interest in such sustainable tourism practices was relatively uniform across different tourist segments.

Research Instrument

The structured questionnaire was used as the primary research tool to collect data from tourists visiting the Darjeeling district. The questionnaire was designed to capture respondents' participation in community-based tourism activities and their perceptions regarding sustainable tourism practices. In addition, a section was included to record demographic details such as tourist type (single, couple, family, friends, group) to facilitate comparative analysis. The questionnaire consists of closed ended statement measured responses to all items were recorded using a on 5 - point Likert scale ranging from (1 - Very poor, 2 – Poor, 3 - Average, 4 - Good, 5 - Very good).

Chi- square Tests

The chi-square test cross-tabulation results show the relationship between tourist type and participation in community-based activities in the Darjeeling district. Out of the 100 respondents, 57% participated in community-based activities, while 43% did not. Among the different tourist types, couples (70.8%) and families (63.6%) showed relatively higher participation rates, while tourists visiting with friends recorded the lowest participation rate (40%) and singles (47.8%). The chi-square value of 4.831 with 4 degrees of freedom and a p-value of 0.305. which is greater than the 5% significance level. This suggests that the decision to engage in such activities is dependent on whether the tourist is single, travelling as a couple, family, friends, or group. The descriptive counts indicate some practical trends where couples and families appear more inclined towards community-based tourism, possibly due to their interest in cultural immersion and shared experiences.

Chi – square Test

	value	df	Asymp.sig(2-sided)
Pearson chi-square	4.831 ^a	4	.305
Likelihood Ratio	4.886	4	.299
Linear-by- Linear Association	.076	1	.783
N of valid cases	100		

Tourist type community-based activities cross tabulation

		Community based activities		Total
Tourists type		Yes	No	
Single	count	11	12	23
	Expected count	13.1	9.9	23.0
Couple	count	17	7	24
	Expected count	13.7	10.3	24.0
Family	count	14	8	22
	Expected count	12.5	9.5	22.0
Friends	count	6	9	15
	Expected count	8.6	6.4	15.0
Group	count	9	7	16
	Expected count	9.1	6.9	16.0
Total	count	57	43	100
	Expected count	57.0	43.0	100.0

Interpretation of chi – square Test

The chi-square test was conducted to examine the significant relationship between tourist type and their participation in community-based activities. The test value is 4.831 with a p-value of 0.305, which is greater than the 0.05 level of significance. Hence the hypothesis that “Tourist type has a significant impact on participation in community-based activities”. The result indicates association between tourist type and participation in community activities. Similarly, the Likelihood ratio also confirms the result with a chi-square value of 4.886 and a p-value of 0.299, again greater than 0.05. The Linear-by-Linear association value is 0.076 with $p = 0.783$, showing linear trend between the variable. From the cross-tabulation, out of 23 single tourists, 11 participated in activities and 12 did not. Among 24 couple, 17 participated and 7 did not. For 22 family tourists, 14 participated while 8 did not. Out of 15 friends, 6 participated and 9 did not. Finally, among 16 group tourists, 9 participated and 7 did not. Although the participation numbers vary slightly across categories, the statistical test shows that the differences are strong enough to be significant. Therefore, it can be concluded in data set (N = 100) that tourist type does significantly influence participation in community-based activities.

FINDINGS

- Out of 100 respondents, 57% participated in Community-Based Tourism (CBT), reflecting a moderate level of engagement.
- Couples (70.8%) and families (63.6%) recorded the highest participation rates

- Singles (47.8%) and friend groups (40%) showed relatively lower involvement.
- The chi-square test ($\chi^2 = 4.831$, $P = 0.305$) revealed no significant association between tourist type and CBT participation.
- Supporting tests (Likelihood Ratio $P = 0.299$; Linear Association $P = 0.783$) further validated the statistical insignificance.
- Despite this, descriptive data suggest couples and families are more inclined toward cultural and shared experiences in CBT.
- The findings highlight the need for improved infrastructure, awareness, and promotion to enhance participation across all tourist categories.

CONCLUSION

Community-based tourism presents a promising pathway for sustainable development in Darjeeling by aligning tourism growth with environmental protection, cultural preservation, and community empowerment. The findings demonstrate that local participation in tourism-through homestays, eco-friendly practices, and heritage promotion-can create inclusive opportunities and reduce the ecological footprint of mass tourism. However, the sector continues to face constraints, particularly in capacity-building, infrastructure, and coordinated policy support. Strengthening CBT requires a collaborative framework involving government agencies, local communities, NGOs, and private stakeholders to ensure equitable distribution of benefits and long-term sustainability. By embracing sustainable practices and empowering local communities, Darjeeling can establish itself as a model destination where tourism not only drives economic growth but also protects the fragile Himalayan ecosystem and cultural legacy for future generation.

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