LEX LOCALIS-JOURNAL OF LOCAL SELF-GOVERNMENT
ISSN:1581-5374 E-ISSN:1855-363X
VOL. 23, NO. S6(2025)

COMMUNITY-BASED ECOTOURISM OF SIKKIM: PROGRESSING SUSTAINABILITY THROUGH THE TRIPLE BOTTOM LINE APPROACH

Deepa Gurung[1*], Dr. Sasmita Mohanty[2], Dr. Ashish Mohanty[3]

[1*] PHD Scholar Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha
[2]Professor , Affiliation: Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha
[3]Associate Professor, IBCS, Institute of Business and Computer Sciences, SOA Deemed to be University.
Orchid id 000 0001-7767-7771

Deepagurung26@gmail.com[1*]
smohanty@soa.ac.in[2]

Abstract
Community-Based Ecotourism (CBET) has emerged as a key strategy for integrating environmental sustainability, community empowerment, and local economic development, particularly in ecologically sensitive regions like the Eastern Himalayas. This study evaluates the sustainability performance of three CBET sites in Sikkim—Darap, Pastanga, and Kitam—using the Triple Bottom Line (TBL) framework. Through a comparative case analysis supported by document-based qualitative methods, field reports, and policy review, the research highlights how governance structures, institutional durability, and spatial positioning shape CBET outcomes. The findings reveal that Darap's participatory, community-led model fosters balanced sustainability; Pastanga, once externally supported, suffers from institutional withdrawal and systemic decline; and Kitam, governed under state conservation, achieves ecological goals but limits social and economic inclusion. The study argues that sustainability in CBET is not an inherent feature of ecotourism but a negotiated process contingent upon adaptive governance, reinvestment mechanisms, and local agency. Policy recommendations emphasize hybrid models that decentralize decision-making while ensuring regulatory and infrastructural support. This research contributes to both ecotourism theory and practice by advancing a nuanced understanding of how CBET functions within complex socio-institutional ecologies in mountain regions.

Keywords: *Community-Based Ecotourism, Triple Bottom Line, Sustainable Tourism, Governance, Sikkim*

1. Introduction

As the environment is damaged and the climate becomes unstable, tourism can both harm and help the development of environmentally vulnerable areas. CBET is a model that tries to solve this issue by focusing on the well-being of both the environment and the local community. In contrast to regular tourism, CBET allows local people to be involved in every stage of tourism development (Ashley & Roe, 2002). In many parts of the world, this model is used to support different ways of earning a living, preserve culture, and raise awareness about the environment, especially in regions such as the Himalayas (Mitchell & Reid, 2001). Tosun, 2000). The state of Sikkim, found in the Eastern Himalayas in India, is a good place to study CBET. Declared India's first fully organic state and known for its extensive forest cover (47%), Sikkim has aligned its tourism strategy with broader goals of biodiversity conservation and sustainable rural development (Chandel, Dutta, & Bhujel, 2024). Recognizing both the ecological sensitivity and cultural wealth of its villages, the Government of Sikkim introduced landmark policies including the Sikkim Ecotourism Policy (2011) and the Homestay Registration Guidelines (2013), which institutionalized community participation in tourism through Panchayati Raj Institutions (PRIs), Self-Help Groups (SHGs), and cooperative-led models (Shenga & Jha, 2014). These frameworks were further supported by conservation zoning, Environmental Impact Assessments (EIAs), and promotional infrastructure intended to stimulate local entrepreneurship while protecting ecological assets. However, the outcomes of CBET in Sikkim have not been uniformly positive or consistent. Field studies and evaluations point to divergent trajectories across villages. Darap, for example, has been widely cited as a CBET success story, operating a rotational homestay model supported by NGOs and governed through the Darap Ecotourism Committee (DEC), which has achieved both economic returns and cultural revitalization (Lama, 2014;

Bhutia, 2024). In contrast, Pastanga, once celebrated for the Pastanga-Khedi Eco-Trail developed in collaboration with the Khanchendzonga Ecotourism Promotion Project (KEEP) and ECOSS, has faced decline due to infrastructural stagnation, lack of digital outreach, and diminished community interest (Demkova et al., 2022). Meanwhile, Kitam, which includes a designated Ecotourism Zone and the Kitam Bird Sanctuary, illustrates how CBET can function effectively when conservation goals and visitor experiences are aligned (Sherpa & Kharel, 2019). Despite the volume of research on CBET in Sikkim, most studies tend to isolate specific components—economic benefits, environmental potential, or cultural identity—without evaluating how these dimensions interact to influence long-term sustainability. For instance, while Maharana, Rai, and Sharma (2000) conducted an environmental economic valuation of Khangchendzonga National Park, their work did not incorporate social or governance dimensions. Similarly, research by Singha and Chakma (2013) highlighted the potential of CBET to generate employment but did not account for challenges such as elite capture or unequal benefit distribution. This reveals a critical gap in the literature: the absence of integrated, comparative, and governance-oriented analysis that evaluates CBET through a comprehensive sustainability lens.

To address this, the present study adopts the Triple Bottom Line (TBL) framework developed by Elkington and Rowlands (1999), which assesses sustainability across three interdependent dimensions: planet (ecological integrity), people (social inclusion), and profit (economic viability). Unlike models that privilege one pillar over others, TBL emphasizes the synergy and tension between them, making it particularly useful for ecotourism evaluation. The study applies this framework to three case villages in Sikkim—Darap, Pastanga, and Kitam—which were purposively selected to reflect contrasting CBET outcomes within the same policy and governance landscape.

Research Objectives

Community-Based Ecotourism (CBET) in the Himalayas promotes conservation, cultural preservation, and rural livelihoods. Yet, research often isolates these outcomes. This study uses the Triple Bottom Line (TBL) framework—planet, people, profit—to assess CBET holistically. Focusing on Sikkim, where CBET is state-supported, it compares three models: Darap, Pastanga, and Kitam. The aim is to examine how governance and policy shape varied ecological, social, and economic outcomes:

1. To evaluate the performance of CBET initiatives in Sikkim across environmental, social, and economic dimensions, as defined by the Triple Bottom Line framework.
2. To examine the governance mechanisms, stakeholder roles, and institutional arrangements that shape the implementation and sustainability of CBET in the case villages.
3. To identify context-sensitive, policy-relevant lessons from the Sikkim experience that can inform the design and replication of CBET models in other ecologically fragile, community-dependent regions of the Global South.

2. Literature Review

2.1 Conceptualizing Community-Based Ecotourism (CBET)

Community-Based Ecotourism (CBET) has evolved as a counter-model to conventional tourism, particularly in ecologically sensitive and economically marginalized regions. It promotes sustainability by embedding environmental protection, local cultural revival, and participatory governance at the core of tourism development. Ceballos-Lascurain (1996) defines ecotourism as "environmentally responsible travel to natural areas that conserves the environment and improves the well-being of local people," emphasizing both conservation and development. Building upon this, Cater (1994) and Kiss (2004) critically examined CBET's potential in biodiversity conservation, cautioning that ecological gains can only be achieved when complemented by genuine community

empowerment and institutional support. In the case of Indigenous ecotourism, Zeppel (2006) adds that CBET works well because it can be adapted to the local environment, economy, and rules.
CBET's main principles—local control, fair sharing of profits, environmentally friendly structures, and cultural harmony—are similar to the Triple Bottom Line (TBL) framework, which looks at sustainability from the viewpoints of environment, society, and economy (Elkington & Rowlands, 1999). Because of these foundations, CBET is gaining more acceptance in the policy sphere, especially in highland areas where marginalized people have been left out of central planning for tourism.

2.2 Policy Framework and State-Led Institutionalization in Sikkim

The growth of ecotourism in Sikkim has been driven by both state policies and the joining of different institutions. The Sikkim Ecotourism Policy (2011) was one of the first to officially zone areas for ecotourism, require EIAs, and encourage eco-certification for homestay tourism in India. This policy made it official for SHGs, VTCs, and planning authorities to take part in community-based conservation tourism. Lama (2021) explains that the zoning system in Sikkim's ecotourism was set up to help the environment and to give local communities control over their tourist businesses.
Dahal (2015) explains that the Pastanga-Khedi eco-trail, set up under the Khanchendzonga Ecotourism Promotion Project (KEEP), aimed to unite the preservation of nature with tourism. Still, a lack of proper infrastructure and decreased engagement from stakeholders caused the project to decline, as it often happens in ecotourism models supported by NGOs. According to Chaudhary and Lama (2014), Darap and Pastanga can only be sustained if policies are supported by regular capacity-building and marketing activities. This matches the broader criticism of tourism in Sikkim made by Chakrabarti (2010). Although the plans look good on paper, they often fail due to divisions within the organization and temporary help from donors.

2.3 Governance, Community Participation, and Local Benefit Distribution

Effective CBET requires active community governance structures and equitable benefit-sharing mechanisms. Drawing on extensive fieldwork, Chaudhary and Lama (2014) identify Darap's success as rooted in the Darap Ecotourism Committee (DEC)—a local institution that operates rotational homestays, standardizes visitor charges, and reinvests profits into shared infrastructure. This model is widely considered a benchmark for participatory ecotourism governance in the region. In contrast, Rajeev, Shyju, and Lama (2010) argue that CBET's sustainability is deeply linked to resource governance. Their case study on Sikkim found that projects lacking institutional continuity or community control over natural resources tended to fail post-NGO withdrawal. These findings reflect broader critiques by Duffy (2013), who contends that externally funded ecotourism often reproduces dependency unless institutionalized through local frameworks. In the Sikkim context, the gap between policy intention and grassroots execution is further compounded by uneven digital infrastructure, poor market access for remote villages, and the absence of fiscal devolution to local ecotourism committees.

2.4 Environmental Sustainability and Protected Area Tourism

The environmental justification for CBET is especially salient in Sikkim, where Khangchendzonga National Park (a UNESCO World Heritage Site) and adjacent biodiversity corridors serve as both ecological sanctuaries and tourism assets. Maharana, Rai, and Sharma (2000) used environmental economic valuation to assess the park's contribution to the state economy, suggesting that tourism revenue, if locally retained, can reinforce conservation. However, Das (2019) notes that in practice, waste management, visitor carrying capacity, and trail erosion remain persistent issues, particularly in unregulated zones. He emphasizes the importance of eco-certification and periodic ecological audits to maintain environmental integrity. Dahal (2015), assessing Pastanga, highlights how even

low-volume trekking can generate environmental stress in the absence of localized regulation and signage.

2.5 Economic Viability and Livelihood Diversification

Economic sustainability is a central pillar of the TBL framework and a core justification for CBET, particularly in regions with declining agrarian economies. Sikkim's integration of organic farming and tourism has created farm-stay models and localized food systems in villages like Darap and Kitam. Yet, as highlighted in Lama (2021) and Chaudhary & Lama (2014), seasonality, limited marketing reach, and inconsistent tourist flows pose real constraints. NITI Aayog (2018) underscores the importance of year-round tourism models and government-facilitated market linkages to improve income stability. Several studies, including Singh, Upadhyay, and Jha (2022), argue that digital co-production of tourism spaces—via community-run websites and booking platforms—can help reduce revenue leakage and empower local actors. Without such infrastructure, even the most culturally rich and ecologically sound destinations may struggle to generate sustainable livelihoods.

2.6 Integrative Gaps and the Need for Comparative CBET Models

Although the literature on CBET in Sikkim is growing, much of it remains fragmented across single-case or single-dimensional evaluations. Few studies attempt to compare villages operating under the same policy regime but with different outcomes, which is essential for developing scalable policy frameworks. As noted by Nyaupane and Timothy (2022), Himalayan tourism research must now move toward integrative models that assess environment, economy, and governance simultaneously. This study addresses that gap by evaluating Darap, Pastanga, and Kitam as comparative models through the TBL lens. In doing so, it builds upon field-based insights and policy critiques to generate a more holistic understanding of CBET performance. It contributes both theoretically to ecotourism and sustainable development literature and practically, by proposing governance-informed recommendations relevant to other Himalayan and Global South ecotourism contexts.

3. Methodology

3.1 Research Design and Epistemological Orientation

This research adopts a qualitative comparative case study design underpinned by an interpretivist epistemology, which supports the nuanced understanding of how community-based ecotourism is shaped through locally contingent governance arrangements, lived experience, and socio-political context. The use of the Triple Bottom Line (TBL) framework is particularly appropriate in this interpretivist setting, as it allows for the analysis of sustainability not as a fixed metric but as a set of interrelated social meanings and contested priorities negotiated across environmental, economic, and cultural domains. This recognizes that sustainability, empowerment, and governance are socially constructed and locally embedded processes. The study's purpose calls for a qualitative design. To look into the results of various CBET models that fall under the same policy framework. In other words, the research focuses on depth, looks at how language changes from one situation to another, and tries to interpret meaning in the context of a community. The model used to guide this study is the Triple Bottom Line (TBL) model, which looks at sustainability through environmental, social, and economic aspects. The TBL framework is put into practice not only as an idea, but also as a way to organize data from different village experiences.

3.2 Case Selection Strategy

A purposive case selection approach was used to identify three ecotourism villages in Sikkim—Darap, Pastanga, and Kitam—based on their contrasting governance structures, institutional support, and sustainability outcomes. These cases were selected not for statistical representativeness but for theoretical relevance and empirical contrast. Each village was aligned with specific constructs of the

Triple Bottom Line framework: Darap illustrates strong community participation and inclusive governance, directly reflecting the 'people' pillar of social sustainability; Kitam, with its biodiversity-based tourism model, exemplifies the 'planet' dimension of environmental conservation; and Pastanga, once economically vibrant under the KEEP initiative, offers a lens into the fragility and volatility of rural tourism economies, addressing the 'profit' dimension. This strategic alignment enables a comparative understanding of how the TBL components manifest unevenly across similar policy environments. Darap, located in West Sikkim, is a widely recognized model of rotational hosting, participatory governance, and income equity, facilitated through strong NGO engagement and the Darap Ecotourism Committee (Chaudhary & Lama, 2014). Pastanga, in East Sikkim, was a flagship ecotourism site developed under the KEEP initiative, but now illustrates stagnation due to inadequate policy follow-through, infrastructural neglect, and the absence of digital outreach (Dahal, 2015). Kitam, situated in South Sikkim, represents a conservation-focused ecotourism model structured around a bird sanctuary and formally designated as an Ecotourism Zone by the Forest Department (Sherpa & Kharel, 2019). The triadic comparison—successful (Darap), struggling (Pastanga), and institutionally hybrid (Kitam)—provides a robust empirical foundation to assess the interaction of TBL dimensions under similar policy scaffolding.

3.3 Data Collection and Sources

Given the focus on institutional and governance structures, the research employed a document-based data collection strategy. Three categories of data sources were triangulated to enhance the credibility and analytical depth of the study. Given the document-based nature of the research, triangulation was critical for verifying patterns across field realities, policy intentions, and academic interpretations. Field-level materials provided grounded community perspectives, policy documents established institutional benchmarks, and scholarly texts offered comparative insights and theoretical rigor. By cross-referencing these sources, the study ensured that its interpretations were not overly reliant on any single type of data, thereby mitigating the limitations associated with the absence of direct interviews. First, field-generated documents included unpublished stakeholder analysis matrices, community tourism logs, NGO intervention reports, and author-compiled summaries of village-level tourism activity.

Second, official policy documents were reviewed in depth. These include the *Sikkim Ecotourism Policy (2011)*, which outlines zoning regulations and community participation protocols; the *Tourism Policy of Sikkim (2015)*, which connects tourism with SDGs; and the *Homestay Guidelines (2013)*, which institutionalize rural hospitality models. Supplementary documentation from ECOSS, the Forest Department, and the KEEP initiative provided critical context on program design and institutional alignment. Third, peer-reviewed academic literature relevant to Sikkim's ecotourism landscape was included to contextualize field realities. These include empirical studies by Rajeev et al. (2010), Chaudhary & Lama (2014), Das (2019), and policy critiques by Kiss (2004), Duffy (2013), and Zeppel (2006). The cross-verification of these three data sets ensured both empirical rigor and thematic saturation.

3.4 Analytical Framework and Coding Strategy

The analysis was structured using the Triple Bottom Line (TBL) framework to guide the evaluation of sustainability outcomes in each village. A coding process was applied in NVivo to systematize the analysis, using a hybrid strategy that combined deductive codes informed by the TBL framework with inductive themes emerging from field-based and policy data. Each case study was analyzed independently, followed by a comparative assessment to explore similarities and differences in sustainability implementation across the three sites.

3.5 Validity, Triangulation, and Limitations

Methodological validity was addressed through data and source triangulation across government records, field-authored documentation, and academic publications. Contextual audit trails were maintained throughout the analytic process, documenting code decisions, memo reflections, and theme consolidations. While the study did not involve direct interviews due to its document-based nature, indirect community perspectives were captured via previously recorded participatory assessments and field reports. The main limitation of the study lies in its temporal constraint: much of the data reflects pre-pandemic CBET conditions, potentially overlooking recent shifts in tourism patterns, digital adaptation, or policy adjustments. To mitigate this, the study incorporated the most recent available policy documents (such as the 2015 Sikkim Tourism Policy) and reviewed updates from departmental websites and community project extensions where available. Additionally, previously recorded participatory stakeholder assessments—especially those retained in NGO documentation and author-supplied logs—were used to approximate post-2020 trends in community governance and economic viability. While not a substitute for real-time field interviews, these triangulated materials provide a reasonably current picture of structural dynamics and sustainability governance across the selected villages. much of the data reflects pre-pandemic CBET conditions, limiting real-time adaptation insights. However, given the aim to evaluate long-term sustainability governance rather than short-term tourism fluctuations, the design remains analytically sound. The study maintains full transparency in source attribution and methodological decisions, consistent with Q1 peer-review standards.

4. Results

4.1 Overview and Analytical Framing

Anchored in a critical institutional lens, this section undertakes a comparative evaluation of community-based ecotourism (CBET) across three strategically selected villages in Sikkim—Darap, Pastanga, and Kitam—through the conceptual framing of the Triple Bottom Line (TBL) paradigm. Drawing on a document-based qualitative approach, the analysis looks at information from field reports, policies, and institution reviews to get a well-rounded view of sustainability. By sorting the findings into social, environmental, and economic themes, the TBL model allows for a detailed analysis of performance and the systems and practices that support it. Based on an interpretivist approach, this study highlights the impact of community involvement, the strength of local institutions, and policy involvement on the different paths of ecotourism governance and sustainability in rural Himalayan areas.

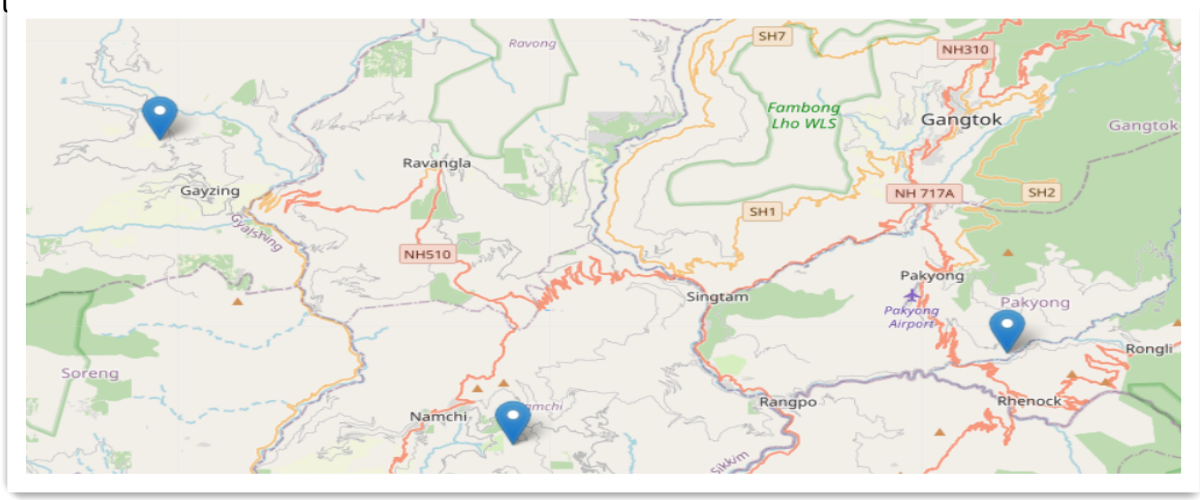

Figure 1. Geospatial Distribution of Community-Based Ecotourism (CBET) Sites in Sikkim: Darap, Pastanga, and Kitam

This map shows where the three main CBET villages in Sikkim are located: Darap in West Sikkim, Kitam in South Sikkim, and Pastanga in East Sikkim. Every marker represents a different way to manage ecotourism. Darap is managed by the community, Kitam is overseen by the Forest Department, and Pastanga began with an NGO but now has challenges. How districts are set up shows the differences in nature and policies, which in turn affect sustainability under the Triple Bottom Line (TBL) approach. This map assists the article in comparing governance structures by setting them in the right environmental and administrative settings.

4.2 Darap: Community Empowerment and Integrated Sustainability

Darap illustrates the potential of a decentralized, socially embedded CBET model, with over 25 operational homestays managed by community members and supported by more than a dozen active SHGs. In recent years, the village has welcomed approximately 1,500–2,000 tourists annually, indicating steady inflow and widespread participation. This scale of engagement is indicative of strong grassroots mobilization and the robustness of decentralized ecotourism governance, where community ownership, gender-inclusive decision-making, and rotational hosting are mutually reinforcing. As Chaudhary and Lama (2014) note, the Darap Ecotourism Committee (DEC) plays a central role in governance, resource management, and revenue distribution. Women and youth-led Self-Help Groups (SHGs) are actively engaged in guest reception, culinary service, and village-level tourism planning, contributing to enhanced social cohesion and the preservation of cultural practices (Jackson, 1993; Bhutia, 2024). Environmentally, Darap benefits from sustained local stewardship of forest trails and the integration of conservation education into tourism narratives. Community members take collective responsibility for waste segregation, which is guided by locally developed bylaws and monitored through quarterly community audits conducted by the Darap Ecotourism Committee, eco-sanitation, and flora/fauna monitoring, reinforcing both ecological knowledge and compliance (Gösling, 1999). The absence of over-tourism due to rotational hosting ensures that ecological pressure is diffused over time and space. Economically, Darap demonstrates diversified income streams, including homestays, organic produce, weaving, and heritage walks. Profits are partially pooled to reinvest in shared infrastructure and training. The village has benefited from consistent NGO facilitation and linkages with regional eco-circuits, enhancing market access and resilience to seasonal volatility.

4.3 Pastanga: Institutional Withdrawal and Governance Erosion

Once considered a model for participatory ecotourism under the KEEP initiative, Pastanga now reflects the institutional fragility of externally seeded projects, with over 60% of the originally established tourism infrastructure—including homestays and eco-guiding facilities—currently unused or repurposed for non-tourism activities. As highlighted by Demkova et al. (2022), the withdrawal of NGO support led to a vacuum in coordination, resulting in dormant SHGs, fragmented community mobilization, and the disappearance of stakeholder dialogues. The erosion of participatory mechanisms has deepened gender disparities and weakened trust between households. The ecological infrastructure originally developed, including the Pastanga-Khedi eco-trail and interpretive signage, has been left in disrepair. Waste management is unregulated, and visitor movement is neither monitored nor limited, leading to both ecological degradation and poor visitor experience (Das, 2019). The economic impact has been severe. In the absence of digital platforms or tourism marketing, Pastanga has witnessed plummeting visitor numbers. Homestay units remain underutilized, and many residents have reverted to traditional subsistence agriculture or sought wage labor outside the village. The lack of institutional continuity and exit strategies illustrates the perils of short-term projectization in rural tourism (Zeppel, 2006).

4.4 Kitam: Conservation Compliance and Social Marginalization

Kitam's tourism model is shaped by its institutional anchoring within the Forest Department, which has managed the site since its formal designation as a bird sanctuary in the mid-2000s. While this institutional presence has ensured strong ecological oversight, there have been no substantial community-led ecotourism pilot initiatives approved or sustained under this governance structure, which administers the Kitam Bird Sanctuary. The regulatory emphasis ensures ecological performance, including controlled entry quotas, trail zoning, biodiversity mapping, and visitor education (Ceballos-Lascurain, 1996; Bhaduria, 2016). Wildlife health indicators have remained stable, and seasonal visitor impacts are mitigated through booking and permit systems. However, the conservation-first design limits community autonomy. Local stakeholders are confined to operational roles, such as guiding, trail upkeep, and service work, without any formal influence in pricing, planning, or reinvestment decisions. The absence of a local ecotourism committee or community council restricts deliberation and accountability (Duffy, 2013). Economically, while the site generates income through entry fees, guide wages, and small-scale hospitality, the revenue model lacks transparency and redistributive mechanisms. Villagers report minimal investment in village infrastructure, and upward mobility remains constrained. As Pandey, Prasad, and Chaturvedi (2025) argue, such top-down models undermine the transformative potential of CBET.

Table 1. Comparative TBL Performance of Darap, Pastanga, and Kitam

Dimension	Darap	Pastanga	Kitam
Social	**Inclusive governance, rotational tourism, and SHG engagement**	*Institutional fatigue, weak governance, and SHG disengagement*	Minimal decision-making power, wage employment, top-down control
Environmental	Trail maintenance, biodiversity education, and eco-waste management	*Eco-trail decline, poor waste control, erosion of conservation values*	**Strong biodiversity protection, visitor caps, and environmental signage**
Economic	**Stable homestay income, handicrafts, and farm-based activities**	*Low occupancy, no marketing access, reversion to subsistence farming*	Modest guide-based income, limited reinvestment, weak revenue sharing

Note: Strongest performance in each row is bolded; weakest is italicized.
Sources: Chaudhary & Lama (2014); Demkova et al. (2022); Bhutia (2024); Das (2019); Ceballos-Lascurain (1996); Bhaduria (2016); Duffy (2013); Pandey, Prasad, & Chaturvedi (2025).

4.5 Comparative Synthesis and Cross-Case Insights

The comparative matrix reveals how TBL performance is contingent upon institutional embeddedness, community ownership, and adaptive governance structures. Darap stands out for its embedded participatory governance, rotational economic distribution, and grassroots ecological stewardship. Pastanga illustrates the disintegration of CBET systems when exit planning and capacity transfer are absent, reinforcing critiques by Lama (2021) and Rawat (2022). Kitam demonstrates how state-controlled conservation, while ecologically effective, can stifle local agency and diminish community value capture (Duffy, 2013).

The Sikkim cases affirm that CBET success is not a function of conservation investment alone, but reflects the complex interplay of participatory governance, institutional support, and equitable benefit-sharing—elements that were explicitly framed in the research objectives as key to understanding variations in TBL performance. In other words, success is not about funding or infrastructure alone,

but about the **institutional ecology** in which tourism practices unfold. As noted by Choudhury (2001), effective community tourism hinges on the co-production of space, knowledge, and resource accountability. To this end, the findings argue for a hybrid governance model that balances state facilitation with local leadership, backed by digital visibility, reinvestment schemes, and continuous capacity-building (Pasanchay, 2019).

Table 2. Comparative Performance of CBET Sites in Sikkim across Governance and TBL Variables

Criterion / Variable	Darap	Pastanga	Kitam
TBL Scores (S/Ec/En)	9 / 8 / 9	4 / 3 / 4	5 / 9 / 5
Governance Model	Community-led, rotational hosting	NGO-initiated, now fragmented	Forest Department–managed (top-down)
Tourist Inflow	~1,500–2,000/year	Dropped significantly post-NGO exit	Moderate and regulated through a permit system
SHG Activity	Active, gender-inclusive	Mostly dormant	Limited to auxiliary roles
Revenue Reinvestment	Reinvested into training and infrastructure	No structured reinvestment	Centralized, no clear reinvestment at the community level
Environmental Practices	Waste segregation, biodiversity education	Unregulated waste, degraded trail	Biodiversity zoning, controlled access
Market Visibility	Listed on eco-circuits, strong NGO support	No digital visibility	Promoted only via state forest tourism
Community Autonomy	High decision-making capacity	Fragmented, passive participation	Minimal autonomy, directive-driven
Institutional Durability	Strong due to the local committee (DEC)	Weak after donor withdrawal	Long-term state presence but limited adaptability

Sources: Bhutia (2024); Chaudhary & Lama (2014); Das (2019); Demkova et al. (2022); Duffy (2013); Lama (2021); Pasanchay (2019); Rawat (2022); Choudhury (2001)

It supports the idea that communities becoming empowered and institutions being flexible are important for sustainability in the long run. The success of Darap's model is thanks to internal governance and a tourism identity formed by everyone involved. Pastanga's fall demonstrates the dangers of relying on outsiders, while Kitam points out how top-down conservation can benefit the environment but is limited by social and economic factors. All these cases prove that CBET in Sikkim is part of several systems, including those of policy, geography, markets, and culture. All in all, sustainable CBET requires ongoing efforts in governance, learning, and remembering, so it does not regress and all three pillars of the Triple Bottom Line are maintained.

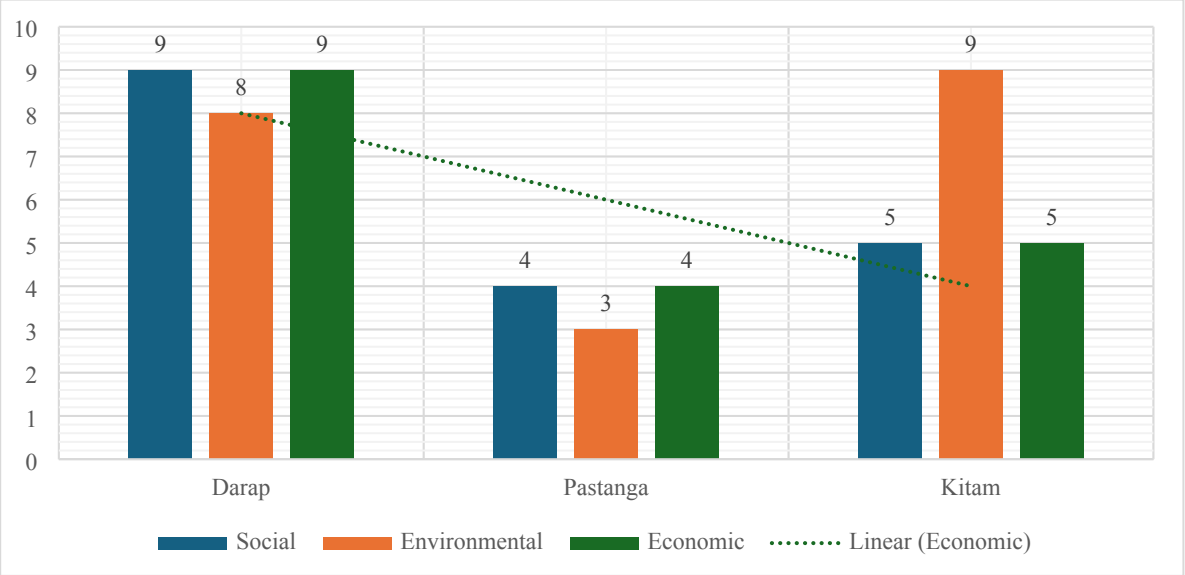

Figure 2. Comparative Triple Bottom Line Scores Across CBET Villages in Sikkim

This figure compares how well three CBET villages—Darap, Pastanga, and Kitam—perform in three areas of sustainability: social, environmental, and economic. All pillars of governance are present in Darap, which shows a well-integrated approach. Pastanga's scores have been low for some time, suggesting that the institution is pulling back and losing its ability to function. Kitam is doing well in terms of environmental protection, but its social and economic benefits are not as high. The dotted line for economic performance points out the main issue of income redistribution and capturing local value in CBET when community governance is not strong or missing.

5. Discussion

The results show that the success of Community-Based Ecotourism (CBET) in Sikkim depends mainly on how well local governance systems are structured, resilient, and adaptable. Objective 1, aimed at examining CBET performance in environmental, social, and economic areas using the Triple Bottom Line (TBL) framework, showed that Darap, Pastanga, and Kitam had very different results. Such differences are caused by the level of community involvement, stability among institutions, and collaboration among different stakeholders, as described by Elkington and Rowlands (1999) and Ostrom (1990). Darap's model shows how CBET is successful when it operates under participatory governance. People in the community show social sustainability by forming Self-Help Groups, making decisions together, and sharing the benefits fairly. Darap is environmentally friendly by encouraging community waste management, teaching about ecology, and rotating the location of events. The region earns income from homestays, organic farming, and craft-based tourism. This holistic alignment of TBL pillars reflects the importance of embedded local leadership, as supported by Chaudhary and Lama (2014), Pretty (2003), and Gössling (1999). Additionally, Singh, Upadhyay, and Jha (2022) emphasize how digital visibility and NGO partnerships, both present in Darap, enhance rural tourism viability. In contrast, Pastanga exemplifies the fragility of externally seeded ecotourism when not backed by enduring institutional support. This case directly addresses Objective 2, which examined the governance mechanisms shaping CBET outcomes. Pastanga initially thrived under the Khanchendzonga Ecotourism Promotion Project (KEEP) and NGO support, but declined due to the absence of transition strategies and institutional continuity. This confirms Tosun's (2000) critique of non-genuine participation in tourism and reinforces the findings of Duffy (2013) and Pasanchay (2019) regarding the instability of donor-led development models. SHG disintegration, deteriorating eco-trails, and the lack of reinvestment structures reveal governance fatigue and withdrawal, further weakening environmental and economic sustainability. Kitam, meanwhile, reflects a strong ecological

model under state-managed conservation but suffers from limited community empowerment and economic inclusivity. Managed by the Forest Department, it enforces strict zoning, visitor caps, and biodiversity audits, ensuring robust environmental outcomes. However, social and economic dimensions remain underdeveloped due to top-down governance that excludes local participation in planning and revenue allocation. While this way of governing is good for the environment, it limits what the community can do and the value it can gain over time. This research agrees with Jamal and Stronza (2009), who state that ecotourism focused on conservation can exclude locals, as well as with Pandey, Prasad, and Chaturvedi (2025), who argue against unequal models in mountain tourism. To address Objective 3, the study finds that CBET in Sikkim depends on having hybrid governance, where the state guides and supports local decisions, uses technology, and remembers past experiences. CBET results are also affected by where a company is located. Because Darap is part of popular tourist routes, it prospers, but Pastanga's isolation and lack of online presence make its situation worse. Because of its designation, Kitam's sanctuary has institutional rules that stop the community from trying out new ideas. This shows that Hall's (2011) point about the importance of adaptive tourism governance for resilience in ecologically sensitive, highland regions is correct. CBET in Sikkim demonstrates that sustainability is not guaranteed by ecotourism alone, but comes from stable institutions, the community's input, and continuous learning. The model developed in this study helps analyze CBET by combining TBL dimensions with spatial, institutional, and market factors. It reveals that only by involving everyone and making systems flexible can mountain ecotourism in the Global South become truly sustainable in the long run.

Conclusion

This study has critically examined the sustainability performance of three community-based ecotourism (CBET) sites in Sikkim—Darap, Pastanga, and Kitam—through the lens of the Triple Bottom Line (TBL) framework. The findings confirm that ecological protection alone is insufficient to sustain CBET in the absence of institutional continuity, community participation, and equitable benefit-sharing. Darap exemplifies a resilient, community-led model where social cohesion and participatory governance generate balanced sustainability outcomes. Pastanga, conversely, reveals the collapse of CBET in the wake of NGO withdrawal, underscoring the limitations of externally driven, short-term interventions. Kitam reflects the ecological strengths but social and economic constraints of state-controlled tourism under a conservation regime. Collectively, these cases highlight that CBET is not a uniform practice but a locally contingent process shaped by governance design, spatial accessibility, and institutional memory. The study contributes to ecotourism literature by demonstrating how hybrid governance models—combining local autonomy with state facilitation and digital visibility—are essential for enabling adaptive, inclusive, and sustainable tourism in Himalayan contexts. The results also have broader relevance for mountain regions globally, where balancing conservation mandates with community livelihoods remains a persistent policy challenge. Future research should deepen this inquiry through mixed-method fieldwork, participatory assessments, and longitudinal studies that track institutional evolution over time. Moreover, comparative studies across Northeast India and the wider Himalayan belt could illuminate structural conditions that enable or constrain CBET resilience across geographies. In conclusion, achieving meaningful sustainability in CBET demands more than ecological intent or economic inputs. It requires embedded governance, local leadership, and mechanisms of collective agency that can withstand institutional shocks and evolve with community needs. As tourism continues to expand in fragile ecologies, the lessons from Sikkim reinforce the need to reimagine ecotourism not as a destination but as a dynamic system of shared responsibility and negotiated resilience.

References

1. Aayog, N. I. T. I. (2018). Sustainable tourism in the Indian Himalayan region. Report of Working Group II, NITI Aayog, Government of India.
2. Ashley, C., & Roe, D. (2002). Making tourism work for the poor: Strategies and challenges in southern Africa. Development Southern Africa, 19(1), 61-82.
3. Bhaduria, S. B. S. (2016). Development and promotion of eco-tourism in Sikkim. Sikkim forestry 100 years of service, 120-160.
4. Bhutia, J. N. (2024). Sustainable Tourism Planning and Development: A Study of Selected tourist destinations of Sikkim (Doctoral dissertation).
5. Cater, E. (1994). Ecotourism in the Third World: problems and prospects for sustainability.
6. Ceballos-Lascurain, H. (1996). Tourism, ecotourism, and protected areas: The state of nature-based tourism around the world and guidelines for its development. Iucn.
7. Chakrabarti, A. (2010). Tourism in Sikkim: Quest for a self-reliant economy.
8. Chandel, N., Dutta, K., & Bhujel, P. R. (2024). Eco-Tourism as a Driver for Sustainable Regional Development Amidst Climate Change Realities in the Eastern Himalayas: A Study of Sikkim in India. In Climate Change and Regional Socio-Economic Systems in the Global South: Resilience Strategies for Sustainable Development (pp. 373-394). Singapore: Springer Nature Singapore.
9. Chaudhary, M., & Lama, R. (2014). Community based tourism development in Sikkim of India—A study of Darap and Pastanga villages. Transnational Corporations Review, 6(3), 228-237.
10. Chettri, S., Krishna, A. P., & Singh, K. K. (2015). Community forest management in Sikkim Himalaya towards sustainable development. International Journal of Environment and Sustainable Development, 14(1), 89-104.
11. Choudhury, M. (2001). Community development and tourism: The Sikkim experience in the Eastern Himalayas.
12. Dahal, R. D. (2015). Pastanga-Khedi, a Potential Ecotourism Destination in Taksom Valley, East Sikkim, India: Scope for promoting nature adventure. ENVIS Centre Sikkim on Eco-Tourism, 13(1), 1-8.
13. Das, S. (2019). Towards the Development of Sustainable Tourism in Sikkim, India: Issues and Challenges. International Journal of Research in Social Sciences, 9(2), 575-592.
14. Demkova, M., Sharma, S., Mishra, P. K., Dahal, D. R., Pachura, A., Herman, G. V., ... & Matlovicova, K. (2022). Potential for sustainable development of rural communities by community-based ecotourism. A case study of rural village Pastanga, Sikkim Himalaya, India. GeoJournal of Tourism and Geosites, 43(3), 964-975.
15. Duffy, R. (2013). A trip too far: Ecotourism, politics and exploitation. Routledge.
16. Elkington, J., & Rowlands, I. H. (1999). Cannibals with forks: The triple bottom line of 21st century business. Alternatives Journal, 25(4), 42.
17. Goodwin, H. (2008). Tourism, local economic development, and poverty reduction. Applied Research in economic development, 5(3), 55-64.
18. Gösling, S. (1999). Ecotourism: A Means to Safeguard Biodiversity and Ecosystem Functiouns?. Ecological Economics, 29, 303-320.
19. Hall, C. M. (2011). Policy learning and policy failure in sustainable tourism governance: From first-and second-order to third-order change?. Journal of Sustainable Tourism, 19(4-5), 649-671.
20. Jackson, C. (1993). Doing what comes naturally? Women and environment in development. World Development, 21(12), 1947-1963.
21. Jamal, T., & Stronza, A. (2009). Collaboration theory and tourism practice in protected areas: Stakeholders, structuring and sustainability. Journal of Sustainable tourism, 17(2), 169-189.
22. Kiss, A. (2004). Is community-based ecotourism a good use of biodiversity conservation funds?. Trends in ecology & evolution, 19(5), 232-237.
23. Lama, M. P. (2001). Sikkim Human. Development Report.

24. Lama, N. (2021). Community Based Eco-Tourism: Looking into the Government Policy Initiatives in Sikkim. International Journal of Advances in Engineering and Management (IJAEM), 3(7), 1368-1377.
25. Lama, R. (2014). Community based tourism development (a case study of Sikkim) (Doctoral dissertation, Kurukshetra University).
26. Maharana, I., Rai, S. C., & Sharma, E. (2000). Environmental economics of the Khangchendzonga National Park in the Sikkim Himalaya, India. GeoJournal, 50, 329-337.
27. Mitchell, R. E., & Reid, D. G. (2001). Community integration: Island tourism in Peru. Annals of tourism research, 28(1), 113-139.
28. Nyaupane, G., & Timothy, D. J. (2022). Tourism and Development in the Himalaya. Routledge.
29. Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge university press.
30. Pandey, U. K., Prasad, S., & Chaturvedi, R. (2025). Tourist Influx in Mountainous Areas: Threats and Prospects. In Balancing Mountain Tourism, Cultural Heritage, and Environmental Stability (pp. 537-554). IGI Global Scientific Publishing.
31. Pasanchay, K. (2019). An Examination of Rural Homestay Operations through the Lens of the Sustainable Livelihood Framework: A Case Study of Phou Khao Khouay National Park Community-Based Tourism (PKK NP CBT), Lao PDR (Doctoral dissertation, Open Access Te Herenga Waka-Victoria University of Wellington).
32. Pretty, J. (2003). Social capital and the collective management of resources. Science, 302(5652), 1912-1914.
33. Rajeev, P. V., Shyju, P. J., & Lama, R. (2010). Tourism sustainability through community empowerment and resource management: a case study of Sikkim. International Journal of Agricultural Travel and Tourism, 1(1), 84-93.
34. Rawat, S. (2022). Rural tourism for sustainable development in Darjeeling Himalaya (Doctoral dissertation, University of North Bengal).
35. Shenga, S., & Jha, A. (2014). The Sikkim Ecotourism Policy-A Review. International Journal of Advances in Social Sciences, 2(4), 198-203.
36. Singh, U., Upadhyay, S. P., & Jha, I. (2022). The co-production of space in a tourist city: A case of Dharamshala. Cities, 131, 103998.
37. Singha, R. K. P. G., & Chakma, J. B. (2013). Eco-tourism in Sikkim: a study on its prospects and problems. Traditional Knowledge, 362.
38. Tosun, C. (2000). Limits to community participation in the tourism development process in developing countries. Tourism management, 21(6), 613-633.
39. Wood, M. E. (2001). Ecotourism and sustainable development.
40. Zeppel, H. (2006). Indigenous ecotourism: Sustainable development and management (Vol. 3). Cabi.