

**An Analysis of integrated Community based Eco-tourism
Development in Gorkhey village area of Kanchendzonga
landscape-India**

**A Dissertation Submitted
To
Sikkim University**



**In Partial Fulfillment of the Requirement for the Degree of
Master of Philosophy**

**By
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Department of Tourism
School of Professional Studies
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November 2021



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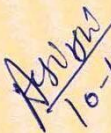
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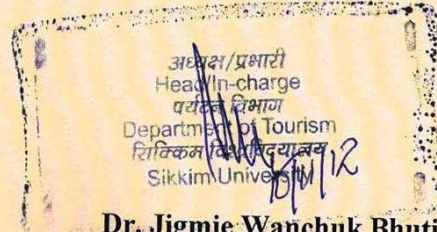

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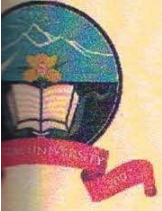
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All the assistance and help received during the course of the investigation has been duly acknowledge by her.

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List of abbreviations

ATREE	Ashoka Trust for Research in Ecology and the Environment
CBET	Community Based Eco-tourism
CBNRM	Community Based Natural Resource Management
CBT	Community Based Tourism
CDB	Community Development Blocks
GBPNIHE	G.B. Pant National Institute of Himalayan Environment and Sustainable Development
GTA	Gorkhaland Territorial Administration
ICDP	Integrated Conservation and Development Projects
ICIMOD	International Centre for Integrated Mountain Development
IHR	Indian Himalayan Region
KLCDI	Kanchenjunga Landscape Conservation and Development Initiatives
KL	Kanchenjunga landscape
MoEF&CC	Ministry of Environment, Forest & Climate Change
NMHS	National Mission on Himalayan Studies
SDGs	Sustainable Development Goals
SRC	Sikkim Regional Centre
TGEC	The Gorkhey Eco-tourism Committee
TIES	The International Eco-tourism Society
TMI	The Mountain Institute of India
UNWTO	United Nation World Tourism Organization
WWF	World Wide Fund for Nature

CHAPTER I

INTRODUCTION

1.1 Background

Community Based Eco-tourism (CBET) can be understood differently by different persons. As per the International Eco-tourism Society (TIES), the term eco-tourism is ‘travelling to the undisturbed natural destination which conserves the usual environment as well as it sustains the wellbeing of local people’ (<http://www.ecotourism.org>). The definition of CBET was further rephrased by Boo (1992) as ‘nature tourism which promotes conservation of the usual environment and helps in achieving sustainable development’ and introduced the element of proactive financial development and conservation. As expanded the definition by Honey (1999), CBET not just provides monetary benefits for local communities and conserves the natural environment, supports human rights, self-governing actions etc. Furthermore, the theory on conservation and practice, the CBET as Community Based Natural Resource Management (CBNRM) is a predominant and prime strategy action of enterprise-based for conservation of biodiversity and is the very popular element for the strategy of Integrated Conservation and Development Projects (ICDP) (Salafsky, N. et. al 2001).

Eco-tourism operators do not just involve a wide array of cost-saving and environmental measures practices, but it simply invests in protecting a natural environment and threatened species (Honey, 2002). From an environmental perspective, most of the eco-tourism operators have claimed to profit local people by providing community projects or through employment but the term CBET suggests even beyond involving communities very actively. There is a lacking agreement on

the actual fundamental objectives and a genuine expectation has underlies much debate in general on CBET and ICDPs (Hodgson & Dixon, 2000).

Eco-tourism is a sustainable and alternative form of tourism that is consistently gaining ground on a global scale during the past few decades (UNWTO, 2001). Eco-tourism is one of the newest and greatest opportunities for the local communities in terms of generating income from natural resources without destroying the natural environment (Colvin, 1996). The fundamental principle of eco-tourism is to minimize the negative impacts on ecology, representing the local values and culture and actively backing for the economic well-being of host communities along with the stakeholders involved. Eco-tourism has the impetus to become a driver of sustainable tourism development and also provide a multiplicity opportunity for the development of the disadvantaged, marginalized and rural areas leading to poverty alleviation. It fuels economic development and social wellbeing of people and at the same time preserves and maintain the natural environment and cultural heritage through awareness creation. The indigenous participation in all endeavours of eco-tourism is a debate of the last few decades.

The word participation denotes how and in addition to what extent people can share their opinions, take an active part in many activities, projects, events, decision-making, profit-sharing, and other issues concerning the procedure of tourism development. The key reason for the existence of local practising eco-tourism is fairness, taking into consideration for conservation of the area through eco-tourism development which certainly requires restrictions on the traditional usage of local resources by the residents, in fact, several studies have indicated the status of integrating the perceptions, interest of local individuals and values in the same region where the eco-tourism resource or destination is found (Vincent and Thomson, 2002).

The community's involvement should be encouraged from the actual beginning by promoting public dialogue and by enabling them to participate in the process of decision making and profit-sharing. The foremost underlying concept of CBET development is to empowering of local people. The possible cause happens to be when the views, perceptions and preferences of the local inhabitants are taken into consideration in the eco-tourism planning (WWF-International, 2001).

Community participation in CBET makes the project sustainable and local participation plays a pivotal role in attaining the objective in its establishment. Increased individual disposable income improves the standard of living in community-based eco-tourism. Other than this, there is an underlying perception of the promotion of CBET that empower the local society. In particular, there are four different categories in the concept of empowerment of host communities i.e., economic category, psychological category, social category, and political. In terms of economic category, eco-tourism creates a long-term benefit that is distributed fairly within the host groups and can be used for the endless improvement of the community's substructure. Moreover, eco-tourism has donated to the psychological empowerment of the local individuals by enhancing their sense of self-confidence and cultivating pride in their cultural and natural heritage (Kiss,2014). The psychological empowerment of the local people by enhancing their sense of self-esteem and by sowing pride for their natural and cultural heritage. This occurs because eco-tourism reveals to the public the value of the host community in terms of natural beauty or cultural uniqueness. Again, eco-tourism may strengthen social bonds within the community by promoting cooperation among its members. Finally, eco-tourism brings about political empowerment since it creates a forum for expressing peoples' voices concerning issues of local development (Meera, 2019).

It is the fact that CBT development depends upon a participatory approach with massive participation and involvement by the locals in every stage in the developmental process, it has gone a long way for building skills, knowledge and confidence of the locals to take charge for the activities, exploit the potentials, and direct the tourism development and planning within their communities (Dangi & Jamal, 2016). This has stimulated oneness and collaborative participation, improving the vices of unskillful youths, women, elderly, marginalize etc. creating grounds for common knowledge about community resources and assets, shared decision making and equitable distribution of risks and benefits. A boundless deal of these benefits are abstracts and difficult to measured (Paul, S. 2014). However, several studies that investigated the results of few CBT projects have revealed several benefits, both economic, social, environmental etc. The potential role of an integrated approach in CBET is to bring societal upliftment and environmental conservation hand-in-hand. Therefore, the present study in this region is an attempt to understand and propose the potential benefits of an integrated CBET that links nature, culture and its people through an integrated approach.

1.2 Potential of CBET in Study Area

Kanchenjunga landscape (KL) nestled in the Himalayan biodiversity hotspot provides ecosystem services that are critical for biodiversity, water, energy and agricultural sustainability. KL having mountainous provinces are the source of many biological as well as cultural diversity and it delivers vital facilities with a tangible value for an economy that includes water, power, medicinal plants, minerals, and fibres-to mountain communities having greater significance for heavily populated settlements of downstream areas. The Mountains also impact the climatic conditions of their surrounding regions and serve as vital carbon sinks (Chettri, N. et. el, 2007; ICIMOD,

2010; Gupta, S. et. al 2019). The promotion of CBET in the KL is an inclusive activity that sustains the livelihood of local communities and their natural resources. Gorkhey village in Darjeeling District is among one of the identified KL villages by ICIMOD, many mega projects are engaged in this particular region to promote CBET for sustaining the livelihood of local people.

Gorkhey is one of the least visited places in Darjeeling hills. The valley is surrounded by a thick pine forest and a small river flowing known as Gorkhey Khola, which separates the boundary between Sikkim and West Bengal (Pradhan, S. 2017). The village having major significant attributes as i) Transboundary nature: as an International transboundary location, the site is connected with Nepal and falls in Sikkim and West Bengal states of India, ii) Socio-economic pliability: Community of the pilot site is highly dependent on the agricultural practices and tourism in identified part of West Bengal farming is the major occupation. Community people in the site heavily depend on the utilization of natural resources for their livelihood, iii) Protected Area (PA) connectivity: site shares parts of Singalila National Park and Barsey Rhododendron Sanctuary, iv) Ecoclimatic variability: categorized into, a) sub-tropical (1800 - 2000m asl), b) temperate (2000-3400m asl), and c) sub-alpine (3400-3685m asl) zones, v) Biodiversity rich flora and fauna including agro-biodiversity and animal livestock, vi) Eco-tourism potential: Subalpine meadows of Barsey-Singalila site command view of series of mountain ranges culminating in four of the five world's highest peaks such as Mount Everest, Mt. Lhotse, Mt. Makalu and Mt. Kangchenjunga (Chettri, N. & Sharma, A. 2009). The unique environmental, as well as cultural settings of the Gorkhey village region amid diverse indigenous communities, make the place worth visiting. However, since the village is untouched by modernization and development, the locals are socially marginalized and

economically unprivileged. Small scale agriculture, little farming and animal husbandry are the primary occupations of the locals in the region (Atree, 2016). Communities of this Himalayan upland are stricken by recent climate change. This has led to resource depletion, decrease agricultural productivity and changing agricultural patterns. Many of the community members are struggling to fulfil the basic human necessities such as education and healthcare. Locals have also started migrating to the lowland areas due to the hardship to survive in this landscape (KLCDI, 2017). Under these circumstances, local development agendas are much needed for the region. Tourism development in the mountains is one such viable agenda which is much sought after, lately.

To take tourism as a development agenda for the Gorkhey village region, its form of tourism must be chosen carefully. Among different forms of sustainable tourism that can address local reality and are based on Agenda 2030 of Sustainable Development Goals (SDGs), 'Community based eco-tourism' is one such form of tourism that can be considered for this region. It has the potential to link conservation with enterprises for local development (Godde, 1999). It is based on the principles that focus on local wellbeing, conserve local biodiversity and promotes social equity.

Community Based Eco-tourism in this region can bring sustainable and equitable tourism benefits and livelihood opportunities to forest village communities while ensuring the conservation of local biodiversity, local culture and offering unique learning and enriching experience to the tourist. Its promotion requires a multidisciplinary approach that evaluates the local bio and socio-cultural resources, builds the capacity of local stakeholders to host tourists and offer them a range of interesting products and also ensures adequate safeguards for conservation and

equitable benefit sharing (ATREE, 2017). Therefore, the rationality to introduce integrated community based eco-tourism in the study area was found to be suitable.

1.3 Statement of Research Problem

CBET is in an initial stage in our country, and also it lacks business professionalism. As the picture displays, it is like a mix of rural tourism, homestay tourism, and a kind of tourism which is the close proximity to nature. The same is the case for the Gorkhey village area: this remote village area is bestowed with nature's beauty and abundance natural heritage but there is a lack of tourism system for CBET that can function in a proper way. Lack of adequate touristic infrastructure, skilled manpower, touristic support services to the Gorkhey village area is a major concern of holistic tourism development in this area. There is limited research available on CBET analysis and statement in particular to Indian context. A study in this regard would be highly beneficial with finding out ground level outcomes of tourism's economic contributions. Organised and well managed CBET can provide long term socio-economic benefits to this area. The present research will make an insight to understand and find out suitable conclusions for the existing issues of CBET in the Gorkhey village area.

1.4 Significance of CBET in Gorkhey Area

Eco-tourism as a part of a sustainable form of tourism development is an essential source of economic development for local communities. The concept of eco-tourism is becoming very popular due to the increasing pressure on urban resources. Eco-tourism plays a significant role in the socio-economic benefits of the locals. The study area falls under the protected areas between Singalila national parks, and Barsey rhododendron sanctuary has a considerable significance of precious natural and

cultural resources. The promotion of nature-based tourism (eco-tourism, adventure tourism and special interest tourism activities etc.) can be the primary attraction to this area. Systematic and sustainable development of CBET in the study area would be a crucial tool for providing a reasonable number of economic benefits in terms of employment opportunities, revenue generations and increasing income resources. Apparently, active community participation and their skill enhancements and awareness will protect this region's peculiar natural environment and unique natural heritage. Therefore, this study highlights the socio-economic impact of CBET development, eco-tourism activities and the prospects of untapped eco-tourism potentials in the study area. Further, the study findings and implications will help in the future policymakers in drafting policy for the overall CBET development of the study area.

1.4 Thesis Outline

Chapter 1 presents an introductory background to the existing research problem in Community based eco-tourism, the significance of eco-tourism and the rationality to take up the research problem.

Chapter 2 reflects the building blocks of the entire research work. This chapter presents an extensive review of the literature. This section addresses the academic and nonacademic literary work to the research problem.

Chapter 3 set out to address the comprehensive of the study area that includes the geographical features, demographic, socio-economic and cultural background, local administrative, resources of CBET and present scenario of CBET practices in the study area.

Chapter 4 deals with the research methodology and techniques applied in this study.

Chapter 5 addresses the research objectives (1, 2 & 3). Based on research objective 1: ‘To study the tourism development in the study area’. This objective was answered by both qualitative and quantitative data analysis. Objective 2: ‘To assess the eco-tourism activities in Gorkhey village area’ were answered by analyzing local stakeholders’ participation towards eco-tourism practices in the study area. Objective 3: ‘To identify the untapped eco-tourism potentials in the Gorkhey village area’ was answered by analyzing untapped eco-tourism activities from 119 locals including homestay operators from the study area.

Chapter 6 concludes the entire study. This chapter documented the results of the study titled ‘*An Analysis of Integrated Community Based Eco-tourism Development in the Gorkhey Village Area of Kangchenjunga Landscape-India*’ and it also draws the results of the study based on its research objectives and hypothesis. Furthermore, this chapter highlighted the key findings and their importance towards sciences, policies and practices through recommendation.

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CHAPTER II

Review of literature and Research Methodology

This chapter introduces a review of Community Based Tourism (CBT) studies along with mountain tourism and other related work on integrated Community Based Eco-tourism (CBET). This chapter has been divided broadly into four sub-themes that provide insight into the subject to build the frame for the current study and also includes the research design of the study.

2.1 literature Review

2.1.1 Community Based Eco-tourism and conservation.

Stem et al. (2003) stated that Eco-tourism is directly linked with environmental conservation and local economic benefits. To achieve ecological goals, assisting awareness and education for conserving the natural environment is essential among community members. Eco-tourism can be an effective conservation strategy.

Bhattacharya & Kumari (2004) claim that the sociocultural situation of the state of Sikkim is unique and it is nonreliability within India and eco-tourism performance in Sikkim has achieved economic, social and ecological dimensions of sustainability.

Kiss (2004) specified that Community Based Eco-tourism (CBET) had been considered increasingly as a biodiversity conservation strategy even by creating economic benefits from its resources. Further, the study stated that the limiting factors like minimal local community involvement, poor linkages of biodiversity advantages with commercial industry, and improper promotion of a CBET destination lead to minimal economic benefits among host community members. CBET must consider as significant to nature conservation and social as well as economic viability in the long-term commitment of benefits among locale.

Gangte (2011) recommended that the possibility of Eco-tourism for sustainable community development needs effective public policy and strategy to enhance local community participation to safeguard sustainability in development.

Manu & Kuuder (2012) find out that Community Based Eco-tourism (CBET) can be a long-term livelihood option for local community members. Especially CBET helps in women empowerment and generate income from natural resources without destroying the environment.

Bhattacharya & Ganguly (2014) mentioned that empowering the communities with tourism initiatives can be a very practical and powerful way of sustaining Communities' economic and environmental wellbeing of marginal civilizations near National parks.

Stone (2015) highlighted that the nature of Community is heterogeneous, and therefore, a collaborative partnership can simultaneously allow and disallow specific segments of community empowerment. Furthermore, the approach of collaborative partnership is theoretically distinct, and it bends with unforeseen consequences, and the collaboration of community partnership is the essential mechanism for the development of Eco-tourism.

Bandyopadhyay (2016) revealed that the women who depend on daily wages from tea gardens are now generating a good economy from Eco-tourism since the inception of eco-tourism development in Lamahatta, initiated by Govt. of West Bengal in 2012. Further, women have a significant role in developing sustainable Eco-tourism.

Bhaya, S. Chakrabarty (2016) mentioned that the Jungle-mahal, as well as the tribal people of Jungle-mahal in West Bengal, has a significant natural source in developing

Eco-tourism in the region. Furthermore, Eco-tourism can be a greeted motivation for socioeconomic enhancement for tribal people living in natural areas.

Tesfaye (2017) stated that CBET is prominent for environmental conservation and can have significant benefits to the host community. Furthermore, the poorly managed eco-tourism facilities, infrastructures, and a lack of trained manpower hinder on development of CBET and resource use conflict of interest.

Das & Chatterjee (2018) claimed that Eco-tourism is one the most important practices in protected areas of India that positively empower the unskilled locals in income-generating capacity. Eco-tourism has a huge scope in generating employment opportunities for landless poor families with additional livelihood actions where farming alone cannot support them.

Puri et al. (2019) Stated that the development of the economy and the pressure of a high population had created a foremost challenge for the upkeep of natural resources, including protected areas. Hoverer, to address the gap of Eco-tourism to follow an integrated approach the scientific research is essential to assist an appropriate legislative policy, financial investment, and consumer awareness.

Ramos-Garcia et al. (2018) mentioned that nature-based tourism and Eco-tourism in rural areas are trending, especially in terms of environmental management and delivering direct economic benefits to the host. The study argued that government intervention in Eco-tourism is equally important as partaking of the local Community in practising Eco-tourism.

2.1.2 Stakeholder Engagement in the Development of Community Based Tourism.

Denman (2001) stated that CBT is a measurement of Eco-tourism where empowering the local people is the centre of CBT. Furthermore, CBT is a relationship among host-guest and with meaningful participation of both creates economic benefits of local Community and also conserves the environment.

Mitchell (2003) argued that tourism organizers should take community participation very seriously for expressive community integration in tourism. Community integration can have inclusiveness in transparent decision making, a huge number of local involvement, local ownership, and management, also provides efficient and equitable process within the local people (Mitchell, 1998).

Deb Burman et al. (2007) claimed that Northeastern India is rich in both geographically and culturally diverse as the indigenous people of this region are mainly Tibeto-Burman and Mongoloid. They still preserved living habits, languages, and culture. This study argued that CBT in the northeastern region of India has a major potential to attract domestic and international visitors at large. But many concerns relating to CBT expansion in the regions are not clarified. While involving local groups in the process of planning is important to manage unplanned impacts on the local environment and provides unbiased benefits from tourism activities.

Gupta & Bhatt (2009) mentioned that CBT in a mountainous state provides a huge scope for community wellbeing and is the right tool for achieving sustainability in tourism practices. Local community members have a positive perspective towards CBT as an important tool for community development.

Asker et al. (2010) recommended that all the stakeholders in CBT should comply with a local, national and international regulatory framework so the Community can develop according to its standards and quality controls in venturing CBT.

Anand et al. (2012) stated that rapidly growing tourism had brought many positive plus negative impacts on social wellbeing and the natural environment. Therefore, to Avoid many unplanned tourism threads, it is essential to initiate sustainable practices to protect natural resources and local wildlife that provides alternative livelihood options for local people. The study also recommended that the homestay model is the best initiative to deliver equitable benefits among the host community across the economic classes.

Chaudhary & Lama (2014a) argue that the local youth participation in the Community based tourism development scheme is minimal; they are dropping the membership from the scheme once they develop contact with tourists and try to venture on their own. There is a shift in community focus to self-venture, which is creating constrain for the development of CBT in the long term at the CBT destination of Sikkim.

Chaudhary & Lama (2014b) mentioned that CBT would go a long way option in providing better income generation for the rural people. It will also help in conserving the natural environment.

Paul, S. (2014) argued that the communities are like-minded and are not homogenous because of their mixed perceptions towards the impact of CBT. Furthermore, tourist satisfaction and the hospitability of the local host are the key elements of CBT development.

Dangi & Jamal (2016) claimed that there had been evolved two domains of knowledge in the lane of tourism studies, i.e., sustainable tourism (ST) and CBT, both

have varied definitions and criteria for success factors. For desirable outcomes, both ST and CBT should be advocated by different stakeholders (i.e., NGOs, governmental organizations, public-private sectors, academics, etc.). This study also revealed that integrated sustainability dimensions are lacking in CBT, and there is greater intervention required in equity, justice, ethical, and governance-related issues.

Meera (2019) recommended that CBT entrepreneurship is a very powerful model for rural entrepreneurs as it reflects the possible integrated intervention. The local communities can be able to orient themselves at all levels of entrepreneurship positively.

Banik & Mukhopadhyay (2020) argued that the CBT approach could help to reduce the inadequacy of ST in achieving the whole participation of local members and providing overall benefits by warranting planning, management, and execution of tourism activities by the natives and for the native community.

2.1.3 Eco-tourism for Sustainable Mountain Development

Godde (1999) mentioned that the central challenges in mountain tourism for maintaining a triangle of sustainability elements, i.e., ecological, economic, and sociocultural, has to be carefully integrated into Community based mountain tourism to balance tourism sustainability in the mountain.

Chettri, N. et al. (2007) stated that International Centre for Integrated Mountain Development (ICIMOD) had identified the Kanchenjunga complex as an important transboundary landscape in the Eastern Himalaya.

Chettri, N. & Sharma, Eklabya (2009) argued that the Kanchenjunga landscape nestled in the Himalayan biodiversity hotspot provides ecosystem services that are critical for biodiversity, water, energy, and agricultural sustainability. Therefore, this

region has a huge scope for eco-tourism development which contributes to livelihood sustainability as well as conservation of biodiversity.

Kala, C. (2013) claimed that the mountain communities promote Eco-tourism as the form of eco-parks. The income from eco-parks for mountain communities has increased continuously due to eco-tourism development in the mountains. Furthermore, eco-tourism development in mountain regions has reduced non-degradable plastic waste and improved environmental conditions.

Malik & Bhat (2014) argued that tourism in the mountain state of Pahalgam, J&K, is significantly impacting the environmental degradation primarily due to unplanned infrastructure development relating to tourism and heavy tourist influx to the hill station during summer. Waste treatment in the hill station is essential as it ultimately goes into the river. To treat solid and liquid wastes generated by tourism and to avoid environmental degradation in the hills, there needs to impose a strict waste-management policy or any waste treatment plant.

Datta & Banerji (2015) claimed that the eastern Himalayas became polluted due to unsustainable practices of tourism. Promoting alternative forms of Eco-tourism in such a destination has aided the sustainable development of community livelihoods and conservation of the environment. Furthermore, the study also argued that despite many pristine natural environments and scenic beauty in Sellrygoan, Kalimpong, West Bengal, it is still hindering sustainable development due to improperly managed public amenities and infrastructures.

Bhalla, P. et al. (2016) mentioned that due to the cause of the human-wildlife interaction, the scheme of homestay and the development of Eco-tourism had been a great influence for mountain people for their significant occupation. Furthermore, the

positive behaviour of mountain people towards homestay programs and eco-tourism development has resulted in the engagement of villagers in public-private partnerships, and their willingness for interpretation of nature activities has supported the objectives of Eco-tourism.

Ashok et al. (2017) claimed that Eco-tourism had contributed a vital commitment for the conservation of in-situ in the protected areas, management of biodiversity, entire wildlife, habitat and also for the promotion of eco-tourism sustainability and management in Sikkim Himalaya, India.

Krishnan, S. (2017) stated that Phalut and Sandakphu are two major tourist attractions in Singalila National park, and Gorkhey village is in the buffer zone of Singalila National Park. Further, many Indian and international tourists are plaitudes of online tourists. Tourism in this region is considered as an alternative to agriculture which is stressed due to wildlife conflicts.

Pradhan, S. (2017) mentioned that tourism in Singalila National Park (SNP) had brought a positive impact of tourism on livelihood options for local people. However, there needs to address some challenges of the ecological integrity of the landscape, such as solid waste management, littering along the tourist routes. Furthermore, this study also maintained that the need for capacity building program for local guides, development of interpretation mechanism about the Singalila range, which is an integral part of a Park and is also essential for management function as mentioned in the National Eco-tourism Guidelines of India (Government of India, 2011).

Rout & Gupta (2017) argued that the mountain communities depend on external agencies for facilitating the process of community development. Over-dependence on outside investment and services has resulted in dissatisfaction among the

communities. The promotion of CBT in the mountain region represents the potential benefits of communities.

Wagh, S. (2017) specified that the need for an alternative conservation paradigm that can explore culture and nature linkages in Kanchenjunga landscapes. The perception of locals towards sustaining the management role and their engagement during decisions about their land, water, and forest resource is mandatory. Promoting Eco-tourism can be a better way to linked nature and culture in the landscape.

Gaur & Kotru (2018) examined that Indian Himalayan Region (IHR) has been an important meaning of spiritual value for Hindus because of its sacred lands; therefore, the movement of Indian tourists is increasing in this landscape, and as a result, traffic congestion, pollution of air/noise, energy, water, security are becoming a recurrent problem especially in Dharamsala, Rothing Pass from Kullu Manali or Amarnath Yatra and even in Sikkim Himalaya.

Lama et al. (2019) stated that Singalila ridge is geopolitically divided India with Nepal, which has a great potential for transboundary tourism. Besides, wildlife watch tourism is increasing in the global tourism market. Wildlife watch tourism in this region is practised as a non-consumptive form of tourism, and it serves as an incentive for the conservation of wildlife and their habitat.

Tewari (2019) claimed that there is almost 50% of positive changes have been raised in terms of eco-tourism sustainability indicators at Kanchenjunga Biosphere Reserves (KBR), Sikkim-India, since the introduction of eco-tourism policy in Sikkim in 2010-2011. Furthermore, there are several key management issues arise in operational eco-tourism destination such as the absence of eco-tourism policy and environmentally accountable marketing of eco-tourism product, lack of enforcement of rules for

conservation, code of conducts for both tourist and host and monitoring of tourists' activities, reputation to indigenous knowledge, and advancement activities in the fragile area and their impact.

Chakrabarty & Sadhukhan (2019) mentioned that southern Singalila has a huge scope of interdependence between Geotourism and adventure tourism and is thereby responsible for soft adventure activities of the tourism sector in the region. The communities found at 2000mtrs – 3000mtrs asl are mostly animal husbandry with horticulture practitioners while above 3000mtrs asl, the communities are largely dependent on tourists especially trekkers for their livelihood at present.

Gupta et al. (2019) argued that CBT as a mainstream agenda in the mountain had brought significant highlights on the socio-economic development of mountain communities. A successful CBT outcome will subsidize the welfare of deprived peoples of the Himalayas.

2.1.4. Key Insights

The review of literature provides a key insight about the underlying points about integrated CBET development, Eco-tourism, and Community Based Mountain development in the context of Kanchenjunga Landscape-India. An extensive literature has been made on Community-based eco-tourism development with special reference to Sikkim and Darjeeling Himalayas states of India. On the source of the review of literature, the study got an insight about the following;

- Sustainable community-based tourism development and promotion in Khangchendzonga Landscape is the best form of tourism to introduce in the landscape.

- The KL India has a wide range of Himalayan Biodiversity hotspots and Transboundary regions as the major attractions for the development of CBET.

2.2 Research Objectives

In order to perform the desired study in an effective and efficient way, the following research objectives are proposed on the critical evaluation of previous literature available on CBET. Further, these objectives focus on the CBET profit, potential and prospects in the study area.

- **Objective 1:** To study tourism development of the study area.
- **Objective 2:** To assess Eco-tourism activities in the Gorkhey village area.
- **Objective 3:** To identify untapped eco-tourism potentials in the Gorkhey village area.

Research Methodology

2.2.1 Research Design and approaches

The present study applied a quantitative research design, the study is supported with the analysis of primary and secondary data. A purposive sampling (non-probability sampling) technique is applied to gather the required data from the study area.

2.2.2 Sample Design

- **Universe**

Gorkhey village area was taken as a universe study. Whereas, two finite population such as (i) homestay operators and (ii) locals of the village has taken into account for this study. The popular tourist sites of the Barsey-Singalila region called Gorkhey and Samanden village were selected as a part of the sample village.

- **Sample size**

Based on the 2011 census survey (Govt. of India), a total of 200 sample size was drawn (i.e., 50% of the total population 395) out of which 119 provided their responses through the pre-defined structured questionnaire survey method. The sample of the study includes local people and other stakeholders.

2.2.4 Data Collection

Primary data for the research was collected through questionnaires and observations from the tourism service providers that includes (homestay operators, tourism entrepreneurs, and other stakeholders). Secondary data for this research was collected through various relevant sources, including West Bengal government reports and publications, Darjeeling tourism department and other academic publications.

- **Questionnaire**

The primary data was collected from the stakeholders by framing a structured questionnaire having predefined items (variables) on a 5-point Likert scale. The set of questionnaires for the community members consist of three sections such as (i) demographic profile and socioeconomic characteristics; (ii) information on community based eco-tourism practices; (iii) information on selected attributes in relevance to CBET operations in the study area.

2.2.4 Data Analysis

The collected data were analyzed through descriptive statistics such as percentage analysis, and cross-tabulation was taken into consideration.

The data and information collected from primary sources during field surveys were analyzed using Microsoft Excel and IBM SPSS 20.0 software to achieve the framed

objectives of the study. Further analysis was carried out by using cross-tabulation and frequency percentage methods to check the selected variables characteristics.

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CHAPTER - III

THE STUDY AREA

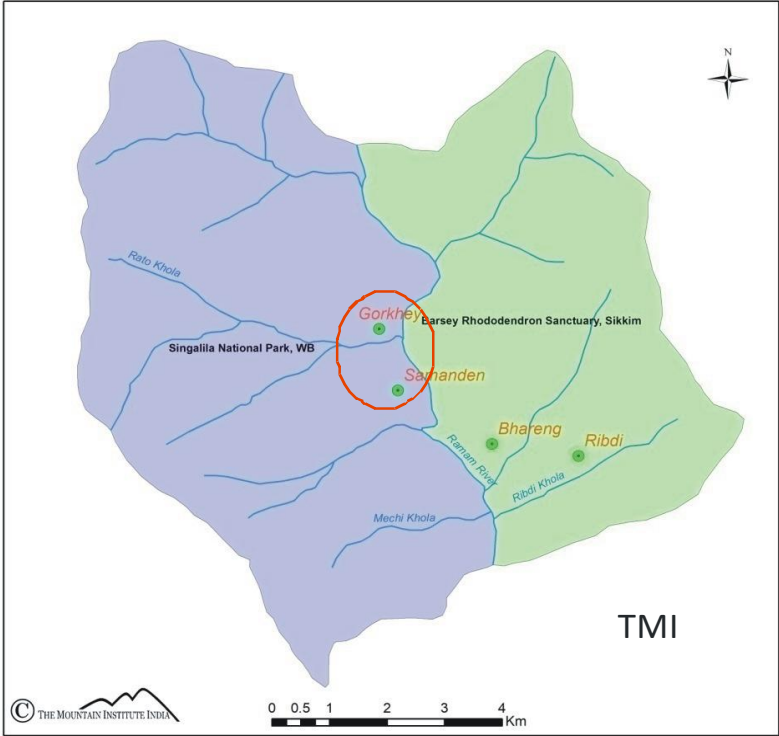
3.1 Geographical background of Kanchenjunga Landscape

The global Mountains cover the total land surface of the planet Earth of around 27% and pay to the sustenance and wellbeing of 720 million individuals living in the mountains, and billions more living downstream that is in fact, half of the human inhabitants depend on mountains for its clean water, energy and food (Rout & Gupta, 2017). Similarly, the Indian Himalayan Region (IHR) extends about 2,400km across the Indian northern border, covering a total area of about 500,000sq km. IHR comprises river Indus in the West, the Brahmaputra in its eastern part, and makes transboundary connections with six counties of Hindukush Himalayas. It is further categorized into three perpendicular divisions, i.e., the Great, the Middle, and the Lesser Himalayas or called the Shivalik Ranges. Which is further divided into five divisions, i.e., the Nepal, and Assam or eastern Himalaya, the Jammu and Kashmir, the Himachal, and the Uttarakhand. The Eastern Himalayas consists of six distinct political and national territories, i.e., the Himalayas of Nepal, Bhutan, Sikkim, Arunachal Pradesh, Darjeeling Sub-Himalaya, and Assam Sub-Himalaya. The Kanchenjunga landscape (KL) is based in the core zone of the eastern Himalayas (Chettri & Sharma, 2009). The entire landscape of eastern Himalayas remains the fragment of the Indo-Burman hotspot and that is the 25 biodiversity hotspots of the World, having global importance of many critical transboundary ecosystems shared by India, Nepal, Bhutan, China, and Myanmar. The Kangchenjunga raises the altitude of 8,586m (28,169ft) delimited with river Tamur in West, Jongsang La and Lhonak Chu in its north, and the river Teesta in its east. The Kanchenjunga lies between the countries of Sikkim-India and Nepal. Kanchenjunga National Park, mainly located in

Sikkim and has got inscription in UNESCO World Heritage site as a mixed category, is among 17 Protected Areas (Pas) of KL-India (O'Neil, 2017). The Indian part of Kanchenjunga Landscape includes the mountain state of Sikkim in the northern part of the landscape and the district of Darjeeling and the parts Jalpaiguri in the western part of West Bengal at the southern part of the landscape. Darjeeling is set at an elevation of 2,000 meters (6700 ft) in the Lesser Himalayas (Oli et al., 2013). The hill city of Darjeeling within the northern part of West Bengal is located at an altitude of 2,000 meters (6700 ft.) has been partially acquired a sovereign status as Gorkhaland Territorial Administration (GTA).

The Darjeeling district is situated between 27°2'9.6252" N to 88°15'45.6192° E, right near the border between Nepal and India, and it assembled three hills' subdivisions, i.e., Darjeeling, Kalimpong district, and Kurseong (Lama et al. 2019). The Darjeeling Himalayas is also known to be as Terai, which is coming under the Siliguri subdivision. The Darjeeling foothills share its northern border with Kishanganj, an outermost northeastern district of Bihar, the district of Jalpaiguri in the east and Nepal in the West. Darjeeling extent 16miles (26 km) from east-west and north-south 18miles (29 km) (Chakrabarty et al. 2019). Darjeeling is 2nd least populous after Dakshin Dinajpur in West Bengal as per the census report of 2011. Darjeeling district includes four subdivisions, i.e., Sadar Darjeeling, Mirik, Siliguri, and Kurseong, and the city of Darjeeling is the headquarter. Darjeeling district comprises seventeen police stations, six community development blocks (CDB), four municipalities, one municipal corporation, and one hundred thirty-four gram panchayats. Gorkhey is a forest village under the Daragoan Srikhola gram panchayat unit of the block of Pul Bijanbari Darjeeling under Rimbick Lodhoma constituency of the GTA (Pradhan, 2017).

Figure 3.1: Location map of the study area



Source: darjeeling.gov.on; TMI

Gorkhey, a forest village, is located at coordinates of 27.1875° latitude N and 88.0724° E longitude in the district of Darjeeling. The village shares the buffer zone of Singalila National Park, the two main rivers of the regions Gorkhey river and Raman River meet at the outskirts of the village. The river Ramam of Gorkhey village demarcates the boundary between West Bengal and Sikkim.

3.1.1 Biodiversity (Flora and Fauna)

Kanchenjunga Landscape (KL), shared by Bhutan, India, China, and Nepal, is highly significant for enriched biodiversity, particularly in the eastern part of the Indian Himalayan Region (IHR). The northern part of the Kanchendzonga landscape comprises the hilly state of Sikkim, which has around 82% of the terrestrial area is under forest Jurisdiction. The district Darjeeling and parts of the northern Jalpaiguri, West Bengal constitute the southern part of this KL and some part of Bhutan in the West of KL. The total area of the KL is around 10000 km², and the elevation ranges extend from 40m asl in the Jalthal forest of Nepal to 8586mtrs asl which is the height of Mt. Kanchedzonga (Oli et al., 2013). The vegetation of KL is largely divided into six zones, i.e., Warm temperate and Cool temperate Tropical, Subalpine, alpine and Subtropical (Chaudhary *et al.*, 2015). It forms a biodiversity hotspot due to rich of the diversity of different flora and fauna, and it also serves as a place for the many endangered and threatened species of plants and animals. It affords the habitat to many charismatics, including Bengal tiger, Snow leopard, Benga, Elephant, Red panda, and Takin (Chettri *et al.*, 2008). The landscape is home to many vulnerable species of Himalayan birds, such as tragopans and hornbills. Similarly, the rare flowering plants, including orchids and rhododendrons (Kandel *et al.*, 2016). Several vulnerable and endangered medicinal plant species are recorded from the landscape,

that includes Chiraito, Himalayan Yew, Kutki, Marsh Orchid, and Himalayan Mayapple, etc. (Uprety *et al.*, 2016).

There are fourteen protected areas to date, including six transboundary in nature shares by Bhutan Nepal, China, and India: Khangchendzonga Biosphere Reserve, Barsey Rhododendron Sanctuary, Singalila National Park, the Kangchenjunga Conservation, Pangolakha Wildlife Sanctuary common by India-China and Bhutan, and Toorsa Strict Nature Reserve dividends by Bhutan and India (Chettri *et al.*, 2008).

The KL India has significant resources of floral (about 4500-5000 species) and fauna (> 4000 species) diversity. Many endemic and threatened species are reported for KL India. The most important species of the KL include the Asiatic black bear, snow leopard, red panda, Himalayan musk deer, tiger, (Chettri *et al.*, 2008). The variety of habitat found in the kl ranges as of seasonally dry, deciduous woodlands in the lower foothills, rich sub-tropical, temperate broad-leaved jungles in the mid-hills, to sub-alpine cone-bearing forests and highland meadows, all within a hundred kilometers distance. The third highest mountain in the World and its extreme topographic relief compels the spreading of plant and animal species and affects microclimatic settings (Uprety *et al.* 2016).

3.2 Sociocultural setup of Gorkhey village Area

The majority of the inhabitants in the Gorkhey village area are from the Sherpa community. The Sherpas community are belonging the Tibetan origin, which means "Eastern People" in the Tibetan language (Subba, 2008). Apart from Sherpas, other communities like Rai, Tamang, and Chettri are also found in the village (Badola *et al.*, 2016).

3.2.1 Demographic Profile

In order to measure the demographic profile of the Gorkhey village, specific data have been gathered based on the existing secondary data. The Gorkhey Village area has a total population of (Male-190 and Female-205) with a total literacy rate of 76.73%.

Table 3.1: Demographic profile of study area

Particulars	Gorkhey Village Area
Total Population	395
Male Population	190
Female Population	205
Total Literacy Rate	76.73%

Source: Census, 2011 (Govt. of India)

3.2.2 Religion

The Sherpas practice the Buddhist religion; they worship the Lord Buddha and Guru Rinpoche as the family deity and visit the monastery (Gumba) as the sacred Centre for worship (Singh, 1993). While the other communities practice Hinduism. The common language of the area is Nepali/Gorkhali, but the communities speak their language (especially the Sherpas who speak Sherpa) while others mostly speak Nepali (Badola et al., 2016).

3.2.3 Festival

The main festivals of this region are Dusherra, Diwali, Loosung, Saga Dawa, DukpaTsheshi, Lhabab-Duechen, Sonam Lossar, etc.

3.2.4 Gastronomy

The majority of the inhabitant of Gorkhey are from the Sherpa community, followed by Rai, Chettri, and Tamang. A majority of them serve Sherpa cuisine. The local cuisine such as soya bean fermented (Kinema), Leafy Vegetables Dried (Gundruk), Selroti, Curd, Butter (Ghee), dried Fish (Sidra), dried and salted fish (Sukuti), Cherry Chillie (Dalley Khorsani), etc. and alcoholic beverages like chhyang and locally made rhododendron, kiwi wine is being served to the tourist (Badola et al. 2016).

3.3 Tourism infrastructure

There are limited homestays in the Gorkhey village region, and homestay tourism is being popular over this entire region. There are high constraints of tourism infrastructure and facilities in the village area, and the local Community lacks advancements in tourism business activities. There is also a lack of synchronization between the Government and other stakeholders to support and promote inclusive Community based eco-tourism development, other stakeholders.

3.3.1 Homestays

Table 3.2 illustrates that there is a total of nine registered homestays in the Gorkhey village area as found in the field survey during the study period. Gorkhey area has nine homestays with 174 beds to cater to all segments of tourists. Further, there is a kind of alternative accommodation in practice like local people are welcoming tourists in their own homes with providing lodging and dining facilities. This kind of alternative accommodation is not registered with any official institution but is in practice especially during the peak tourist season.

Table 3.2: Number of registered Homestays and available facilities

Name of homestay	No. of Rooms	Number of bed capacities per night
Paradise Homestay	4	20
Eden Homestay	9	35
Santi homestay	6	24
Denvor homestay	6	14
Gorkhey Trekker huts	5	20
Uden Homestay	3	14
Silent Valley	6	31
Milan homestay	2	8
Lakpa Sangay Homestay	2	8

Source: Primary field data

This region is receiving importance from the viewpoint of Community based eco-tourism promotion. The continuous growth of CBET in the Gorkhey village region plays a significant role in sustaining livelihood opportunities for local communities. The entire Gorkhey region is covered by both Singalila and Barsey national parks that highlight the region as an ideal destination for the development of CBET (as shown in table: 3.3 below).

Table 3.3: No. of tourists visited during 2012-2018 in Gorkhey Village Area

Years	Domestic	International	Total
2012	200	90	290
2013	212	112	324
2014	500	212	712
2015	800	490	1200
2016	1200	541	1741
2017	1520	601	2121
2018	2050	750	2800

Source: Directorate of Forest, Govt. of West Bengal, 2019

3.3.2 Transportation

Bagdogra (approximately 170 km) is the nearest fully functional airport to the Gorkhey, whereas New Jalpaiguri Siliguri West Bengal is the closest railway station to Gorkhey with an approximate distance of 150 km.

The commercial transportations are Jeep, Bus, Pickups, Sawari, etc., which owned by locals. The transport destination of these points is Siliguri, Darjeeling, Gangtok-Sikkim, and Jorethang. The vehicles are accessible to Rammam Village, Darjeeling, and Bhareng, Sikkim; from these two points, the tourist has to hike 6 km from Rammam village and 4km from Bhareng to reach this picturesque valley village of Gorkhey.

3.4 CBET resources and activities in Gorkhey Village Area

Gorkhey village area has a huge plethora of tourism resources in both the forms of nature and cultural richness. The prospective of integrated CBET in this region has great potential to attract diverse segments of tourists, and through the tourist expenditure, it contributes to the local economy. These resources are further divided into Eco-tourism, cultural heritage.

3.4.1 Eco-tourism resources

The picturesque Gorkhey village area has an abundance of potential for nature- Based tourism. The village is in the periphery of Singalila National Park comprises some peculiar biodiversity of this region (Krishnan, 2017). The major attractions of the region are Sandakphu and Phalut trek on the Singalila ridge.

- **Singalila National Park**

Situated at an altitude of more than 7000ft asl at the ridge of Singalila, the Singalila National Park was recognized as the National Park of India in 1992. The Singalila national park is part of the eastern Himalayas, falls under the district of Darjeeling. Sandakphu and Phalut with having an elevation of 3630 meters. And 3600 meters.

Respectively are located in Singalila national park. River Rammam and Sirikhola flow through the Singalila National Park (Lama et al. 2019).

- **Sandakphu**

The famous trekking destination, Sandakphu, is situated at an altitude of 3636 meters. In West Bengal. The place offers some majestic sights of four of the World's highest 8000mtrs peaks- Mt. Everest (8850mtrs, 1st), Makalu (8481mtrs, 5th), the Kanchenjunga (8586mtrs, 3rd), and Mt. Lhotse (8516mtrs, 4th) (Lama et al. 2019).

- **Phalut**

Phalut at the elevation of 3595m asl is the second highest peak of West Bengal-India. Phalut is part of the Himalayan ridge of Singalila and is located at the transboundary of India and Nepal. It is the major trek in West Bengal. At the top of Phalut, grassy land that is devoid of any vegetation is rewarded with mesmerizing view of a long stretch of snow peaks, including the Everest group, Kanchenjunga, etc. The mesmerizing view of Mt. Kanchendzonga can be seen from here at a stones' throw distance.

- **Samanden Village**

Samanden is a small valley village near Gorkhey village in Darjeeling. It is 1 km from the Gorkhey. The forest village of Samaden is unique due to its rich biodiversity, unique landscape, and pleasant weather throughout the year. Hiking to this village is incredible as forest, and hilly journey transforms the minds closer to nature. Furthermore, Rammam and Gorkhey rivers are the significant motivation for travellers to this region.

Rammam river is a major river in Gorkhey. It is originated from the Singalila range and has a huge source of clean water in the region. River Rammam merges with the river Rangeet near Jorethang, South Sikkim. Rammam river is the significance of the boundary between West Bengal and Sikkim.

A small river following through the village is known as Gorkhey Khola. It merges with the river Rammam at the boundary of a village. The river adds more uniqueness in attracting visitors to the region.

- **Barsey Rhododendron Sanctuary**

Barsey Rhododendron Sanctuary, located in the range of a Singalila in West Sikkim, a well-known nature-based destination among adventure lovers, provides mesmerizing views of rhododendron forests. It is located in the range of Singalila in western Sikkim.

3.4.2 Eco-tourism activities in Gorkhey village area

Gorkhey is a gorgeous and picturesque forest valley village situated strategically between Darjeeling and Sikkim. It is a natural wonder at its best, surrounded by thick pine forests and two major rivers called Gorkhey khola and Rammam. Despite trekking to major destinations like Samdakphu, Phalut, and Barsey, there are many activities that tourists engaged in during their visit. The tourists are participating in the following eco-tourism activities in the village region (Pradhan, 2017).

- **Camping**

Camping in the valley village Gorkhey is one of the major activities. With the richness of wide flora and fauna, crystal clear rivers, and the view of snow-clad Himalayas at its backdrop, a breathtaking valley of the Gorkhey village area is

assembled of many natures at a single destination. All these provide a unique opportunity for tourists to tent camp under a cool breeze and clear skies, which gives the tremendous experience of billion stars (Krishnan, 2017).

- **Trekking**

The terrain Himalayas of the Barsey-Singalila range offers various stunning trekking routes. The best trekking destinations are Sandakphu and Phalut. Sandakphu and Phalut Trek is the best trek on planet earth as one can see all 5 highest peaks of the World i.e., Mt. Kanchenjunga, Mt. Lhotse, Mt. Everest, Mt. Makalu, Mt. Chomo Lonzo, all standing with its family peaks (Chakrabarty et al. 2019).

- **Hiking**

Gorkhey forest village in the Kanchenjunga landscape is renowned for its homestays, crystal clear rivers, clean surroundings, and rich in varied flora and fauna. Hiking around the high valley village provides a wonderful insight into life. The richness of biodiversity in the forest village Gorkhey is the best potential for attracting more visitors to the destination (Pradhan, 2017).

- **Birdwatching**

The KL India has significant floral (4500-5000 species) and fauna (> 4000 species) diversity. Gorkhey village under the KL region has a huge scope for wildlife watching. Birdwatching is the best activity perceived by tourists during their visit to the Gorkhey village area (Krishnan, 2017).

- **Swimming in river**

Clean water of the river Rammam and Gorkhey Khola contribute to the recreational activities in the Gorkhey village. Swimming in the clean water in this region is a

magical experience and is one of the significant outdoor activities in this village (Krishnan, 2017).

- **Photography**

Special interest activity like photography is the most significant outdoor activity in the Gorkhey village area. This area falls under the transition zone of Barsey-Singalila National Park, has a great potential for wildlife photography (Krishnan,2017).

Figure 3.2: Pictures of tourism resources in Gorkhey Village Area



Panaromic View of Gorkhey Village



View of Samanden Village



Paradise Homestay



Eden Lodge



Gorkhey Trekkers Huts



Denver Homestay



Gorkey check post



Gorkhey Khola

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CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 Demographic and socioeconomic characteristics of local community

To understand the background of the sampled population such as age, gender, sex, educational qualification, occupation, income etc. the cross-tabulation was performed to validate the data. The demographic and socioeconomic characteristics of respondents from the study area were divided into gender, age, education, occupations, and monthly income. Out of the respondents 119, 66 (55.5%) were males and 53 (44.5%) females (Table 4.1).

Table 4.1: Sampled Demographic and Sociographic Profile

Characteristics	Frequency	Percentage
Gender		
Male	66	55.5%
Female	53	44.5%
Age Groups		
18 - 25	28	23.5
26 – 35	58	49
36- 45	22	18.5
46 – 55	11	9
Educational Qualification		
Secondary	88	74
Higher Secondary	16	13.4
Graduate	15	12.6
Employment Status		
Employed	14	11.8
Unemployed	56	47.1
Self-Employed	49	41.1
Type of occupation		
Farmer	24	20.2
Tourism-related business/ services	89	74.8
Livestock keepers	6	5.0
Income		
up to 10000 INR per month	79	66.4
11000 – 25000INR per month	40	33.6

Source: Field data

The age distribution of the sampled respondents was between the age groups of 18 -25 years (23.5%), 26-35 years (49%), 36-45 years (18.5%), 46-55 (9%) respectively. The research shows a clear disparity in the education system which shows a higher illiteracy rate among the respondents. 74%. (88 Of the 119) respondents have attended secondary level education only, 16 respondents (13.4%) were just able to study up to higher secondary level. On the other hand, only 15 (12.6 %) of the respondents were able to receive a graduation degree (Figure 4.1). In the mountainous forest village of Gorkhey, the major communities of the village are self-employed and are engaged in a tourism-related business, in this regard majority of the respondents 89 (74.8%) are associated with tourism-related business and services. 24 respondents (20.2%) are engaged in farming related activities, remaining 6 (5.0%) are associated as livestock keepers, on the account of employment status the rate of in employment is quite high 56 respondents (47.1%) are paced in unemployed category. Although a sufficient number of sampled populations 49 (41.1%) are actively in self-employment activities (Figure 4.2). Based on occupation, 79 (66.4%) of the respondents were earning less than Rs. 10000INR/- per month, 33.6% (40) of the respondents are earning an average income of Rs. 11000 – 25000INR per month.

4.1.1 Cross Tabulation

To validate the collected data Cross tabulation methods was performed for the selected demographic variables to see the effects and relationship between demography and tourism development. The cross-tabulation was performed with variables age groups and gender across their educational qualification, occupations and income to check the relationships between the variables.

- Cross Tabulations of age groups with occupation

Table (4.2), represents the relationships between age groups and occupation of the respondents. The results concluded that 45 respondents out of 119 belong to the age group of 26-35 are engaged in tourism-related services. In the same age group eleventh respondents are engaged in farming activities only two are recorded as livestock keepers. Under the age group of (18-25), 21 out of 119 respondents are engaged in tourism-related services, in the age group five respondents are engaged in farming, remaining two members work as livestock keepers. In the age group of (36-45), 13 respondents out of 119 are engaged in tourism-related business and services, six respondents from the same age group are engaged in farming activities and three are engaged as livestock keepers.

Table 4.2: Distribution of respondents based on age with occupation

Age * Occupation Crosstabulation					
Age Groups		Occupation			Total
		Farmer	Tourism Related Business/Services	Livestock keeper	
18-25	Count	5	21	2	28
	% within Age	17.9%	75.0%	7.1%	100.0%
	% within Occupation	19.2%	24.4%	33.3%	23.6%
26 – 35	Count	11	45	2	58
	% within Age	19.0%	77.6%	3.4%	100.0%
	% within Occupation	42.3%	52.3%	16.7%	48.7%
36 – 45	Count	6	13	3	22
	% within Age	27.3%	59.1%	13.6%	100.0%
	% within Occupation	23.1%	15.1%	50.0%	18.5%
46-55+	Count	4	7	0	11
	% within Age	36.4%	63.6%	0.0%	100.0%
	% within Occupation	15.4%	8.1%	0.0%	9.2%
Total	Count	26	86	7	119
	% within Age	21.8%	72.3%	5.8%	100.0%
	% within Occupation	100.0%	100.0%	100.0%	100.0%

Source: Field data

Only 7 out of 119 under the age group between (46-55) are engaged in tourism-related business and services, from the same age group 4 respondents are engaged in farming and none of this age group is engaged in livestock keeping (Table 4.2). From this cross tabulation, it is concluded that there is a majority of youths between the age groups of (18-35) are involved in tourism-related business and services.

- Cross tabulation of age group with income

On account of age groups and income cross tabulations the following information is represented (Table 4.3).

Table 4.3: Distribution of respondent's age groups across their income

Age * Income Crosstabulation

Age Groups		Income		Total
		up to 10000 INR	11000 - 25000INR	
18-25	Count	18	10	28
	% within Age	64.3%	35.7%	100.0%
	% within Income	22.8%	23.7%	23.6%
26 – 35	Count	40	18	58
	% within Age	69.0%	31%	100.0%
	% within Income	50.6%	49.4%	48.7%
36 – 45	Count	15	7	22
	% within Age	68.2%	31.8%	100.0%
	% within Income	19.0%	18.4%	18.5%
46-55	Count	6	5	11
	% within Age	54.5%	45.5%	100.0%
	% within Income	7.6%	13.2%	9.2%
Total	Count	79	40	119
	% within Age	66.4%	33.6%	100.0%
	% within Income	100.0%	100.0%	100.0%

source: Field data

Majority of respondents i.e., 18 from the age group of (18-25), 40 from (26-35), 15 from (36-45) and 6 from (46-55) are earning up to only 10000INR per month. In the income group of 11000-25000INR most of the respondents i.e., 18 are from the age group of (26-35) followed by 10 respondents from the age group (18-25). In this income group 7 respondents belong to age group (36-45) and only 5 are from the age group (46-55). Hence, with this analysis, it is concluded that youths are earning greater income from tourism profession in this region.

- Cross tabulation of gender with occupations

As depicted in table (4.4), most of the respondents from both male and female are engaged in tourism-related business/services. It also showed that male's engagement (49.4%) is quite higher than of females (39.6%) in tourism related occupations. and female respectively. In the farming and livestock keeper again, male's engagement is greater than females' involvement as shows; in farming (13.3%) males, (10.7%) females, Livestock keeper 3.3% male and 2.7% female. Furthermore, 20.2% of the total respondents (119) are engaged in farming and 74.8% engaged in tourism-related business and services and only 6.0% are engaged in livestock keeping. It has revealed that the majority of the community in the study area are engaged in tourism related activities followed by farming and very few are engaged in livestock keeping.

Table 4.4: Distribution of gender and occupation

Gender * Occupation Crosstabulation					
Gender		Occupation			Total
		Farmer	Tourism related business/Services	Livestock keeper	
Male	Count	16	45	5	66
	Expected Count	13.3	49.4	3.3	66.0
	% within Gender	24.2%	68.2%	7.6%	100.0%
	% within Occupation	66.7%	50.6%	83.3%	55.5%
	Count	8	44	1	53
Female	Expected Count	10.7	39.6	2.7	53.0
	% within Gender	15.1%	83.0%	1.9%	100.0%
	% within Occupation	33.3%	49.4%	16.7%	44.5%
	Count	24	89	6	119
	% within Occupation	100.0%	100.0%	100.0%	100.0%
% of Total		20.2%	74.8%	5.0%	100.0%

Source. Field data

- **Cross tabulation of gender with income**

It is observed that 57.6% of the gender (males) are earning 10000INR per month while 77.4% from the females are earning 10000INR per month. In the income group, 11000-25000INR per month 42.4% were males and 22.6% were females respectively (table 4.5).

Table 4.5. Distribution of gender across income.

Gender * Income Crosstabulation				
Gender		Income		Total
		up to 10000 INR	11000 - 25000INR	
Male	Count	38	28	66
	% within Gender	57.6%	42.4%	100.0%
	% within Income	48.1%	68.4%	55.5%
Female	Count	41	12	53
	% within Gender	77.4%	22.6%	100.0%
	% within Income	51.9%	31.6%	44.5%
Total	Count	79	40	119
	% within Gender	66.4%	33.6%	100.0%
	% within Income	100.0%	100.0%	100.0%

Source. Fiend data

4.2 An Assessment of Community Based Eco-tourism Development in Gorkhey Village Area

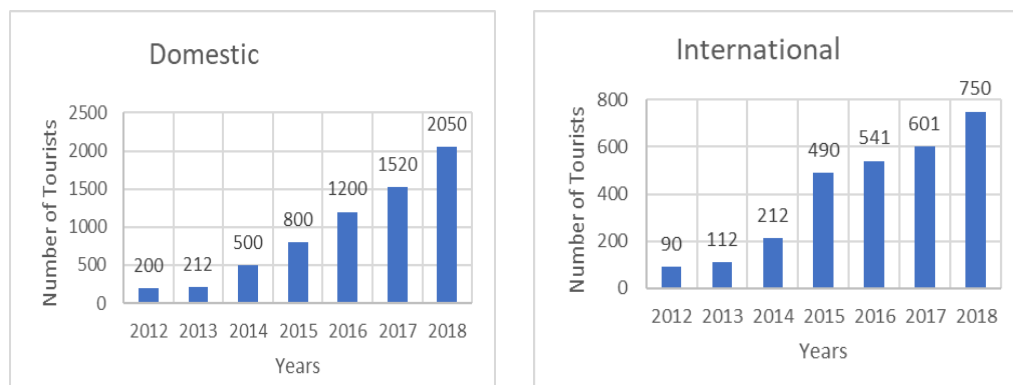
To analyze the existing tourism development and patterns in the Gorkhey village area and identify CBET practices as well as identification of untapped potentials for integrated CBET development in the study area. To understand this in detailed information on tourism profile, touristic infrastructure, facilities & services, tourist market, tourist patterns and behaviours are collected through the pre-defined structured questionnaire with having important variables. After the analysis and interpretation, the following outcomes are concluded as follows.

4.2.1 Tourist Trends and patterns

The tourist inflow in the study area is seasonal. Major tourist inflow takes place between November to May. Tourist who explores the Singalila National Park often touch and stay overnight at Gorkhey as a stopover point. The maximum length of stay

goes up to 2 days, as the route further goes down to Rammam and connects to the starting point of the trek Manebhanjang (table 4.6).

Figure4.2: Domestic and International Tourists Arrival Data in Gorkhey Area



Source: GBPNiHE

As per the available data, tourist inflow has surged in the study area from 2012 to 2018. Increasing number of tourist arrivals pushed the demand of new homestay settlements to this area. The data represents a constant growth trend in both domestic and international tourist arrivals since 2012. In the case of domestic tourist arrival, 200 tourists were recorded in the year 2012 and has reached 2050 in the year 2018. In the case of international tourist arrival, 90 tourists were recorded in 2012, and the trend has increased through the years, reached 750 in 2018.

Tourist generating region

The major sources of tourist generating region to Gorkhey Singalila are from major cities of West Bengal itself viz., Kolkata, Siliguri, Darjeeling which is 47.1%, followed by other states 36.1%, i.e., from Karnataka, Uttarakhand, Maharashtra, Gujarat, and from Sikkim only 4.2%. The sources of origin for foreign tourists in this region are from Russia, Japan, South Africa, Turkey, Thailand, South Korea, which is 12.6% (Table 5.6).

Table 4.6: Major Tourist Market Sources for the Study Area

Source of origin	Frequency	Percentage
West Bengal	56	47.1%
Sikkim	5	4.2%
Other States	43	36.1%
Foreign	15	12.6%

Source: Field data

- **Duration of stay in the region**

The maximum duration of tourists stay in the Gorkhey village area is two nights. 60.5% of respondents said the majority of tourists visiting this area stayed for 2 nights, followed by a day visitor (26.1%), only 13.4% stays for 3 nights (Table 4.7).

Table 4.7: Minimum length of stay

Duration	Frequency	Percentage
A day Visitors	31	26.1%
2 nights	72	60.5%
3 nights	16	13.4%

Source: Field data

- **Marketing strategies**

The medium of marketing homestays can be through print media (11.1%), social media (11.1%), website (11.1%), tour operator/travel agent (44.4%) and other (22.2%) (table 4.8).

Table. 4.8: Medium of marketing

Attributes		Frequency	Percentage
The medium of marketing/ business development	Print Media	1	11.1%
	Social media	1	11.1%
	Website	1	11.1%
	Tour operators/Travel agents	4	44.4%
	Other	2	22.3%

Source: Field data

The study shows that the medium of marketing (44.4%) done their reservation of homestay through travel agents and tour operators followed by 22.2% (others) which means the reservation through phone calls directly and rest of all 11.1% are through print media, social media and website.

The local products and services used by homestays, i.e., fruits/ vegetables, meat items like fish/chicken, local beverages etc. (Table 4.9).

Table 4.9: Local products

Local Products and services used by homestay	Fruits/ Vegetables	5	55.6
	Meat items like Fish / Chicken	3	33.3
	Local Beverages	1	11.1

Source: Field survey

The maximum homestays are using locally grown products like fruits and vegetables (55.6%) and 33.3% chicken meat (items included chicken, fish etc.) followed by local beverages like rhododendron wine etc., 11.1%.

- **Uses of local products (food & beverage) and services**

The responses of local homestay operators for their dependency on local products and services revealed that the majority of homestays had a greater dependency on local vegetables, i.e., 45.8% using locally grown vegetables such as cabbage, cauliflower, spinach, potato, maize, Chayote (iskus), pea, beans, carrot, reddish, carrot etc. followed by others, i.e., 24.2 % which are the wild edibles used by homestay like ferns, nettles, bamboo shoot, etc. grocery and kitchen items 17.5%, and local chicken 9.2% respectively (Table 4.10).

Table 4.10: local produce as food & beverage items

Local Produce	Frequency	Percentage
Fruits/ Vegetables	55	45.8
Grocery/Kitchen items	21	17.5
Meat items like Fish / Chicken	11	9.2
Local Beverages	4	3.3
Other	28	24.2

Source: Field data

4.2.2 Tourism Infrastructure and facilities in Gorkhey village area

Homestay operation is the prime CBET practice in the Gorkhey village area. There are nine registered homestays in the Gorkhey village area. The facilities provided by homestay operators are bed with attached bathroom, clean and affordable room, tourist safety and security, a showcase of local culture, involving guests in farm and handicraft activities, guided jungle hiking, river trekking, birdwatching, and dining of local cuisine. The questionnaire was distributed among all nine homestay operators to know about the infrastructure and facilities provided by homestays in this region. The homestay infrastructure and facilities can be divided into (1) room with modern amenities, (2) room infrastructure, (3) first aid kits facilities, (4) safety and security, (5) cultural facilities, and (6) guest involvement in local activities (Table.4.11). Rooms with modern amenities: the research shows that there is a disparity in modern amenities provided by homestay which shows 55.6%, i.e., five off nine homestays does not provide modern amenities like geyser, attached toilet, access to internet facilities etc. and only 4 (44.4%) provides modern amenities like attached toilet, hot & cold running water and self-locker facilities. Further for room infrastructure: the study reveals that the room infrastructure including furniture and electric appliance facilities which shows 66.7% respondent said that there are no such facilities available at homestay in Gorkhey village area and only 33% agreed with it. First aid kit facilities:

most of the available homestays have first aid kits facilities, which show 77.8% are prepared with first aid facilities, whereas only 22.2% don't have this facility in their homestay. 66.7 % homestay offering safe and secure touristic activities whereas, 33.3% respondents said there no as such facilities available. For the showcase of local culture, 66.7% respondents said they are not showcasing any cultural activities to the tourist and only 33.3% agreed with it. In addition, jungle hiking, river trekking, and birdwatching 88.9% respondents said they are providing such facilities to the tourists whereas, only 11.1% not agreed to it. In terms of dining of local cuisines (55.65%), they are not serving local cuisines to the tourist and only 44.4% homestay operators are serving local cuisines to the tourist.

Table.4.11: Homestay infrastructure and facilities

Attributes		Frequency		Percentage	
		Yes	No	Yes%	No%
Homestay infrastructure and facilities	Bedrooms with modern amenities and attached bathrooms.	4	5	44.4	55.6
	Room Infrastructure including furniture, electric appliances etc.	3	6	33.3	66.7
	Availability of first aid facilities	7	2	77.8	22.2
	Offering safe and secure touristic activities	6	3	66.7	33.3
	Showcase of local culture	3	6	33.3	66.7
	Guest involvement in farms and handicraft activities	2	7	22.2	77.8
	Jungle hiking, river trekking, birdwatching, etc.	8	1	88.9	11.1
	Dining of local cuisine	4	5	44.4	55.6

Source: Field data

4.2.3 Touristic facilities in Gorkhey Village Area

The Gorkhey village area is one of the forest villages under Singalila National Parks, and the village has no road connectivity so far. During the survey, it is recorded that the village is situated at a 4km distance from the Sikkim State Pradhan Mantri Gram Sadak Yojana (PMGSY) road, Bhareng, West Sikkim and 5km from Rimbick, Darjeeling, respectively. 36.1% respondents said there are accessible transport facilities and footpaths. The closest railhead is the New Jalpaiguri railway station, and the closest airport is the Bagdogra airport in Siliguri. However, there is not accessible by vehicle because there are no motorable roads and to get there trekking is the only option. For goods and household commodities, horses are the only means of transportation. To reach Gorkhey, the nearest place for the vehicle is Ramman, Srihola-West Bengal, which is at a 5km distance and Bhareng-West District of Sikkim, which is at a 4km distance. The tourist information centre/ interpretation centre in the region is at Mane Bhanang-Darjeeling, where the visitors can get information about the entire Singalila trek. In particular to Gorkhey there is absence of tourist information and interpretation center as only 4.2% respondents said yes to it. As a recreational activity, there are tented accommodation facilities (47.1%) available for tourists, and also, the Eco lodges (12.6%) are available to have minimal impact on the environment (Table 4.12). It is observed that the government monetary supports for the development of tourism in the region is required to aid the better transportation and to develop tourist interpretation or tourist information centres in the region.

Table 4.12: Available touristic facilities in Gorkhey village area

Statement	Frequency	Percentage
Transport facilities	43	36.1%
Information center/interpretation center	5	4.2%
Tented Accommodation	56	47.1%
Eco lodges	15	12.6%

Source: Field data

4.2.4 Eco-tourism practices in Gorkhey Village area

The abounds greenery of the Gorkhey area does not only provide relaxation but it also provides refreshing. Since the village falls under the transition zone of Barsey-Singalila National parks offers shelter to many of the endangered plants and animal species (Lama, A.K. 2019). The principal eco-tourism practices of Gorkhey area are divided into four categories: (1) Awareness of local natural heritage and biodiversity conservation (2) Community capacity building, (3) Responsible and ethnic tourism and (4) Opportunities for ecofriendly infrastructure and development. Gorkhey area is ecologically fragile, and it is very important to practice responsible use of its natural resource. As shown in the table (Table 5.13), Awareness of local natural heritage and biodiversity conservation (31.3%) local respondents are aware of the importance of natural heritage and biodiversity conservation. The incorporation of natural heritage and biodiversity conservation is the key of successful eco-tourism in the study area. Community capacity building, 24.1% respondents said they have attended capacity building programme organized by NGOs in the study area. Capacity building is essential parts in term of promoting sustainable eco-tourism and also it creates a comprehensive and good quality product. Gorkhey area is very famous for diverse species of flora and fauna therefore, they practice (responsible and ethnic tourism) as 22.1% respondents said they practice low impact tourism in the village, also creates awareness among the tourists for exotic cultural experience. Further, 22.1%

respondents said they have (Opportunities for ecofriendly infrastructure and development) as the study area is ecologically fragile zone and the need of ecofriendly infrastructure and development is very essential. It is observed that ecotourism in the study area is highly preferred and locals are involving in best practices towards sustainable eco-tourism in the Gorkhey area.

Table 4.13: CBET practices in Gorkhey village area

Eco-tourism practices	Frequency	Percentage
Awareness of local natural heritage and biodiversity conservation	37	31.3%
Community capacity building	28	24.2%
Responsible and ethnic tourism	27	22.1%
Opportunities for ecofriendly infrastructure and development	27	22.1%

Source: Field data

In order to map out the ongoing eco-tourism practices in the Gorkhey village area, each sample of respondents has been asked the aforementioned statement.

4.2.5 Awareness and Knowledge of Local Community towards Eco-tourism

In order to understand the fundamental knowledge and awareness of the local people on community based eco-tourism, the three statements were being asked to the local people (Table 4.14). With the descriptive analysis of the local community's knowledge and awareness towards eco-tourism, statement (Well aware of the concept of eco-tourism), shows that 53.8% of the locals strongly agreed that they are well aware of the eco-tourism concepts while 32.8% agreed to it.

Table 4.14: Community knowledge and awareness of Eco-tourism

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Well aware of the concept of eco-tourism.	0	5.1%	8.4%	32.8%	53.8%
Have knowledge about the benefits from eco-tourism.	0	5.8%	13.4%	44.5%	36.1%
Have attained the training programs on conservation and natural resource management	4.2%	10.9%	23.5%	42.9%	17.6%

Source: Field Data

For the statement, ‘Have knowledge about the benefits from eco-tourism’, explains that 36.1% of the locals strongly agreed that eco-tourism is providing substantial benefits to the local community, whereas 44.5% agreed to it. Further the statement (Have attained the training programs on conservation and natural resource management) summarized that only 17.6% of the local participants strongly agreed that they had attended conservation training and program whereas 42.9% agreed to it. The descriptive analysis of local community awareness and knowledge for eco-tourism revealed that the local communities are quite acquainted with the practices of eco-tourism and conservation. Also, they have attended several training and development programmes organized by national and international organizations.

4.2.6 Community attitudes for participation in Community Based Eco-tourism

Further, the descriptive analysis was performed for the attitudes of local communities toward participation in eco-tourism initiatives and the impact of CBET. The statements for community attitudes towards participation in eco-tourism and impact of CBET were based on household’s income, job opportunities, education for conservation, local participation in decision-making, education for conservation, local business opportunity, promotion and preservation of local culture and traditional knowledge. The communities were being asked whether they are agreed or not to take

part in community based eco-tourism development initiatives and activities in the table below (Table 4.15).

Table 4.15: Community attitudes for participation in Community Based Eco-tourism

Statement	Percentage				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There are enough Central/State Government financial schemes for the aid/support of CBET	0	10.9%	21.9%	67.2%	0
Pleasant ambience with cleanliness surroundings plays a major role for tourist attraction	0	3.3%	30.3%	66.4%	0
CBET provides substantial job opportunities for local people of Gorkhey village area	0	4.2%	18.5%	74%	0
CBET provides business/enterprising opportunities at the regional/ local level.	0	5.0%	18.5%	72.3%	4.2%
CBET contributes significantly revenue generation of Forest Department, Govt. of West Bengal/local GTA Council	0	6.7%	6.7%	73.1%	13.4%
Household income increases because of CBET	0	4.2%	14.3%	78.2%	3.4%
Visiting tourists demands for adequate facilities and advance visitor services	0	0	7.5%	48.7%	43.7%
CBET practices in this region educates locals for conservation	0	6.0%	5.9%	34.5%	53.8%
CBET Encourages local for participation in planning and decision-making program.	0	0	10.1%	79.0%	10.9%
Promotion of integrated CBET helps in preserving local culture and traditional knowledge	0	0	3.3%	43.7%	52.9%

Source: Field data

The descriptive analysis for the perceptions of the local participation on the socioeconomic impact of eco-tourism in the Gorkhey village area highlights a high percentage (53.8%) strongly agree with the statement “CBET practices in this region

educates locals for conservation” while 34.5% agreed to it. 52.9% of locals’ participants strongly agreed with the statement “Promotion of integrated CBET helps in preserving local culture and traditional knowledge”, whereas 43.7% agreed to it. For the statement “Visiting tourists demands for adequate facilities and advance visitor services”, (43.7%) of the participants strongly agreed while 48.7% agreed to it. For the statement “CBET contributes significantly revenue generation of Forest Department, Govt. of West Bengal/ local GTA Council”, (13.4%) of the local participants strongly agreed, whereas 73.1% agreed to it. Only 10.9% of the participants strongly agreed with the statement “CBET Encourages local for participation in planning and decision-making program”, whereas 79.0% agreed to it. For the statement “There are enough Central/State Government financial schemes for the aid/support of CBET” (67.2%) respondents agreed and 21.9% neither agree nor disagree to it. 66.4% respondents agreed with the statement “Pleasant ambience with cleanliness surroundings plays a major role for tourist attraction” whereas 30.3% neutral to it. For the statement “CBET provides substantial job opportunities for local people of Gorkhey village area” 74% of the respondents agreed that CBET provides job opportunities for local people and 18.5% neutral to it. This result signifies that the intervention of CBET in the region can contribute to significant development of the local community in terms of job opportunity, business opportunity, revenue generation and preservation of local and traditional knowledge and the participation of local in planning and decision-making program.

- **Future of CBET development in Gorkhey village area**

The prospects of CBET development in the Gorkhey village area has a huge scope, (58.0%) of the respondents have said CBET development in the village has bright and progressive livelihood opportunity for future, whereas 36.1% of respondents have an average perspective for the future, only 5.9% said declining of CBET to this area (Table 4.16)

Table 4.16: Community prospective towards CBET in the Gorkhey Area.

Statement	Frequency	Percentage
Bright and progressive	69	58.0%
Average	43	36.1%
Downfall and declining	7	5.9

Source: Field data

4.3 Major Eco-tourism Activities in Gorkhey area

The major eco-tourism activities for tourists in the study area are trekking (25.2%), Day hiking (19.3%) Birdwatching and wildlife viewing (17.6%), Camping (12.6%), meditation Practices (12.6%), River fall experience (12.6%) (Table 4.17). The locals from the village area were asked about the eco-tourism activities of the tourist, and it is observed that the maximum number of tourists visiting to this area were Sandakphu-Phalut trek circuit, they visit this village for rest and relax from their long trek. Gorkhey is one of the famous points for day hikers. It is observed during the survey that the numbers of day hikers to this destination are especially from the state of Sikkim. Since Gorkhey, Darjeeling District West Bengal and Bhareng, West District of Sikkim, shares their boundary, the place is quite famous among Sikkimese and is within approachable distance. Furthermore, it is also observed that activity that most of the tourists involved during their visit are birdwatching and wildlife viewing,

river adventure activities, meditation practices in the riverside, and camping is also becoming much common activities to this area.

Table 4.17: Eco-tourism activities Gorkhey village area

Statements	Frequency	Percentage
Birdwatching and wildlife viewing	21	17.6%
Day Hiking	23	19.3%
Trekking	30	25.3%
Camping	15	12.7%
Meditation Practices	15	12.6%
River adventure activities	15	12.6%

Source: Field data

4.4 Untapped potential activity in Gorkhey village area

Gorkhey village area can be major eco-tourism activities hub because of its location within the Singalila national parks. In order to understand the untapped potential of CBET activities, the local stakeholders were asked about the potential activity which has not been practiced despite its feasibilities in the region (Table 4.18). The majority of respondents, i.e., 75.6%, provided their answer that the study area is suitable for the promotion of the trek route to Barsey Rhododendron sanctuary of West District of Sikkim. Furthermore, it is also observed that transboundary eco-tourism development in the study area is in great demand of the locals from both the states (Darjeeling and Sikkim) as (61.3%) respondents said there is feasibility for transboundary eco-tourism promotion in the region. As identified by ICIMOD, the Kanchenjunga landscape (kl), which has six transboundary-landscape in the Hindu Kush Himalayas, and the Gorkhey Singalila is one of its transboundary landscapes. The Gorkhey Singalila geographically divides the boundary of India with Nepal (Lama, A. et al, 2019). Other than transboundary eco-tourism development in the study area, (50.4%) community respondents said the promotion of community fairs and festivals viz, Sonam Losar in

February could be outreach as tourist season. The entire region is best for promoting all types of nature-based tourism activity. Other than tourism promotion, many national and international organizations such as ICIMOD, in collaboration with GBPNIHE, SRC and ATREE, Darjeeling Regional Centre are working in the area of promoting organic farming in the study area (GBPNIHE, 2020). Therefore, Apiculture as an eco-tourism activity can be promoted in the region due to its rich natural phenomenon. About (48.7%) responded have stated that apiculture as an eco-tourism activity has huge potentials. For the Gorkhey-Kali-pokhari Village Trek (24.4%), respondents said that this trek could be promoted as new trekking points from Gorkhey for one who enters from the Sikkim side. Those tourists coming to Gorkhey from Maney-bhanjang have to come across Kali-pokhari Lake; therefore, there is less potential for promoting this trek. Other than these activities, responses also made for wildlife watch activity, and since the entire region falls under the national parks of both Barsey and Singalila, the rare species of red panda can be seen here, which is the focal point for attracting more tourists to this region (Mallic, J., 2010).

Table 4.18: Untapped potential of CBET activities in Gorkhey village area

Activities	Frequency & percent (%)	
	Yes	No
Gorkhey-Kali-Pokhari Village Trek	29 (24.4%)	90 (75.6%)
Apiculture (Honey-Bee Culture)	58 (48.7%)	61 (51.3%)
Gorkhey-Barsey Rhododendron trek	90 (75.6%)	29 (24.4%)
Fair & community event (Sonam Losar)	60 (50.4%)	59 (49.6%)
Others	73(61.3%)	46 (38.7%)

Source: Field data

Furthermore, it is also observed during the survey that the study area is suitable for photography of its beautiful scenery and wildlife and also a suitable destination for introducing many outdoor recreational activities like soft adventure activities such as camping, rope sliding, zip lining, river crossing etc.

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CHAPTER 5

DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

5.1 Discussions

Based on data analysis and interpretation results, research objectives are defended as follows.

To get the study findings in an appropriate way and to meet out research objective 1 (Objective 1. To study the tourism development of the study area.), the outcome shows a positive environment for the tourism development in the Gorkhey village area with selected tourism development parameters (such as touristic infrastructure, tourism economic benefits; job opportunities, income, tourist trends (table 4.2; 4.3 & figure 4.2).

Tourism development in the Gorkhey village area has aided great source of income for forest community members. The increasing numbers of tourist arrival in the region (figure 4.2) and the youth engagement in tourism-related business (74.8%) and their monthly income from tourism (Table 4.3) highlights the tourism development of the study area. The study outcomes emphasized that tourism development in the forest village Gorkhey area has contributed economic benefits among the local people immensely and a majority of youths of this village are engaged in tourism-related jobs such as tour guide, tourist potter etc. (table 4.2). To understand the level of local community's awareness and knowledge towards CBET development and its impact on the region the selected attributes were analyzed. The key outcomes from the study underline several important findings, and a few among them are, (i) all the participants are well aware of the term eco-tourism and conservation. (ii) All the participants have attended many training and development programmes being

organized by national (GBNIHESD), international (ICIMOD) and NGOs (ATREE) for the development of local livelihood in the region by promoting sustainable tourism development. (iii) it is also revealed that the intervention of CBET in the Gorkhey village area has significant contribution in terms of job opportunities, business opportunities, revenue generation and preservation of local culture and traditional knowledge as well as local participation in planning and development programme (table 4.16 & 4.17).

The data analysis and interpretation for the explanation of research objective 2 of the study (objective 2. To assess the eco-tourism activities in the Gorkhey village area.), the result shows that the principal eco-tourism activity in the study area is homestays and trekking (table 4.12; 4.18). It is also highlighted the major existing eco-tourism activities in the study area are birdwatching and wildlife viewing, day hiking, camping, river adventure activities, (Table 4.18). Furthermore, there are eco-tourism practices such as practicing meditation practices and swimming in the river are also much common in the Gorkhey area (table 4.12).

The analysis and interpretation of objective 3 of the study (objective 3, To identify the untapped eco-tourism potentials in the Gorkhey village area.) were made by examining the local communities who are directly and indirectly involved in the tourism-related activity. The focus group discussion was made through the predefined closed-ended questions to identify the untapped eco-tourism in the Gorkhey area. Furthermore, local community members were also asked about the untapped potential CBET development that is still not in practice despite its feasibilities in the region. The outcomes of the analysis show that the area is an ideal destination for the promotion of potential trek routes from Gorkhey to Barsey Rhododendron sanctuary, Sikkim and Gorkhey to Kalipokhari village Darjeeling (table 4.19). Further, the

promotion of apiculture and cultural fest as CBET activities can be an important factor to influence more influx of tourists in the study area.

5.2 Conclusion

Gorkhey region has abundant tourism resources of both cultural and natural, which have the potential to attract more tourist segments in the region and can ultimately contribute to the local communities' economic wellbeing. The study findings conclude that the development of CBET practices in the Gorkhey village area can be the key agenda for long-term sustainable livelihood opportunities for locals. CBET development in the study area has given greater employment opportunities and a source of income to the local youths. This underlies that CBET development in the region can be a long-term sustainable livelihood opportunity in the region. Apart from CBET activities the community members are also depend on agriculture farming to support the livelihoods. The booming tourism in the region also gave rise to local livelihood opportunities, tourism with the active involvement of the local community can provide long term economic benefits to this area. There is a huge scope of farm tourism and rural tourism for sustainable socio-economic benefits to the local community. Further, various untapped eco-tourism potential activities can be introduced to diversify the CBET development in the study area. This region is a transboundary area, neighboring country Nepal has also huge eco-tourism potential, a collaborative promotional policy for the systematic CBET development can highlight this area in the map of world tourism. Apart from this rosy picture, there are certain setbacks for the growth and development of CBET in this region. The existing infrastructure of tourism in the Gorkhey village region is insufficient to meet the current demands of tourist trends. Proper connectivity, frequency and quality of transport system is a major drawback for all-around tourism development. Other

touristic infrastructure and facilities like quality accommodation along with dining services, hygienic conditions, communications aids and modes, support services like (internet, mobile and monetary activities) hamper the overall visitor satisfaction. The service providers feel perils of seasonality, unpredicted tourist inflow acts as an inhibitor for the holistic CBET development and further systematic management of visitors in this area. Locals, basically tourism service providers also feel disappointed from the Government as there is not enough support from Government to strengthen CBET development in the area.

5.3 Recommendations

The mountain region has become the largest importance for global tourists as it offers a diverse opportunity for tourists such as adventure, recreation, mesmerizing view, exultation and rest. The accountable factor for the development of unprecedented growth in tourism in the mountain is due to the advancement of scientific technology, improved infrastructure especially for transportation, accommodation and other miscellaneous facilities, monotonous lifestyle in urban areas and high disposable income. The unplanned tourism development in the mountain region in many destinations have proven pressure on the mountain environment, its local people and issues about climate change. Furthermore, unplanned tourism development in the mountain region may cause pollution, degradation of flora and fauna species, congestion and pressure in land-use patterns by locals. Hence, the forms of sustainable tourism development in the mountain region should be the primary objective in the policy framework. The Indian government has prioritized tourism as a major source of livelihood opportunities for mountain community members. Tourism development in the mountain region can significantly contribute to income

generation, employment generation, market diversification etc. The unprecedented growth of unplanned tourism growth in the Indian Himalayan Region (IHR), is really alarming for the wellbeing of natural resources and overall survival of residing communities (Niti Aayog, 2018). Therefore, the approaches to refrain or expand up the existing tourism policy with sustainable forms of the action plan are much needed for the present context of development in the region.

The key findings of the study arise from the number of policy recommendations. The development of community-based eco-tourism in the Gorkhey village area has substantial growth of tourists in the study area in a couple of years. If it is not planned systematically with sustainable efforts may turn into mass tourism in the region. Therefore, to keep sustainability in local biodiversity, socio-economic wellbeing of indigenous communities and sustainable practices of tourism in the region, this study put forward the following policy recommendations;

Recommendation for the construction of eco-friendly infrastructure

Recommendation for the conservation of natural resources by promoting community-based eco-tourism

Recommendation for economic sustainability

Recommendation for socio-economic wellbeing

Recommendations for the construction of eco-friendly infrastructure

- Support infrastructure development including better road networks, transport facilities, electricity and communication facilities, renovation of existing trekking routes, outdoor recreation centres, Eco-friendly lodges and other accommodation units, Tourist Information Centre, in-route sanitation facilities

etc. should be provided to assist the local community for eco-tourism development.

- development in the destination scale should confirm in consultation with local members for its type and scale.
- As the Gorkhey village area is a fragile eco-tourism zone, the entire range is full of potential environmental and cultural impact therefore well planned and sustainable infrastructure should take into account before construction.
- Should avoid the development of many trekking trails or new trails in the region keeping the fragile ecosystem in view.
- Should impose carrying capacity in the region to address the uncertainty from mass tourism in near future.

Recommendations for conservation by promoting and community based eco-tourism

- Marketing approaches should encourage to promote the knowledge and necessity for destination sustainability.
- Local communities should encourage to promote local handicrafts, souvenirs with minimal impacts on the ecosystem and in a sustainable way.
- Establishment of interpretation centre at each junction (towns and villages) to functions as an eco-tourism promotion centre.
- The development of transboundary eco-tourism should give major emphasis in tourism policy and planning for Sikkim and Darjeeling, W.B and also at a national level for the long-term sustainable development and livelihood prospects for the mountain community.

- Collaborative measures with concerned government departments, civil societies, and different tourist agencies/workers are required to forge a sustainable tourism strategy in the area.
- Many national and international organizations such as ICIMOD, Nepal and GBNIHESD, SRC, Gangtok, ATREE etc. have raised the voice relating to the transboundary eco-tourism development in the region. The issue about Inner Line Permits (ILP) for foreign tourists, who are required to cross the state borders shall also be part of the policy interventions.

Recommendations for economic sustainability

- Support small scale micro, small and medium enterprises (MSME) and position them for success. The local youths should be provided with training programs that include start-up for business and entrepreneurship activities, homestay operations, analysis of market and sustainability. Furthermore, the supplementary training program includes interpretation and tour guides to the local needs.

Recommendations for socio-economic wellbeing

- Local community members should encourage visiting tourists for more participation in cultural events and local traditions to increase the overall socio-economic benefits.
- To regulate the worth of CBET activities for the local community it is important to have traditional and cultural activities from the local community to cater for tourists. These activities sustained and preserve the critical elements of local culture through the development of policy and planning.

Annexure I

Performa of prescribed questionnaires for Sample survey

An Analysis of Integrated Community Based Eco-tourism Development in the Gorkhey Village Region of Kangchenjunga Landscape-India

QUESTIONNAIRE FOR LOCAL COMMUNITY/STAKEHOLDERS

Dear Respondent,

The study is undertaken as a part of the Master of Philosophy (M. Phil) in Tourism from Department of Tourism Sikkim University, Sikkim-India. It intends to know about the local community and benefits to them through Integrated Community Based Eco-tourism Development in village. The information provided by you will be purely for academic purposes and will not be shared with others or used for any commercial purposes. Your kind cooperation is highly solicited.

Thanks & Regards
Deepa Gurung (M. Phil Scholar)
Department of Tourism, Sikkim University
Email: dgurung01@sikkimuniversity.ac.in

SECTION-I

PERSONAL INFORMATION:

1. Name: _____

2. Gender: Male/ Female: _____

3. Age: 18-25 26 – 35 36 – 45 46-55

4. Educational Qualification:

- a) Secondary level
- b) High Secondary level
- c) Graduate
- d) Post Graduate

5. Employment Status

(a) Employed

(b) Unemployed

(c) Self-employed

(d) Retired

(d) Others: _____

6. Type of Occupation:

(a) Farmer

(b) Tourism related business/Services

(c) Livestock keeper

Others, please specify: _____

7. Monthly Income up to:

(a) up to 10000 INR

(b) 11000 – 25000 INR

(c) 25000- 50000INR

(d) 50000-75000 INR

(e) INR 75000 and above

SECTION-II

Information on Community Based Eco-tourism Practices

1. Name of the Homestay: _____

2. Address: _____

3. Year of establishment: _____

4. Total number of staying guest capacity/per night in your homestay:

a) Less than 10

b) 10-20

c) 20-30

d) More than 30

Sl.no	Touristic Infrastructures and Facilities	Yes	No
1	Bedrooms with modern amenities and attached bathrooms.		
2	Room Infrastructure including furniture, electric appliances etc.		
3	Availability of first aid kits		
4	Offering safe and secure touristic activities		
5	Showcase of local culture		
6	Guest involvement in farms and handicraft activities		
7	Jungle hiking, river trekking, birdwatching, wildlife watching etc.		
8	Dining of local cuisine		

6. What is the medium of marketing/ business development?

a) Print Media

b) Social media

c) Website

d) Tour operators/Travel agents

e) Other (Please specify): _____

7. Does your homestay use products/services that originate from local communities/local resources? If so, what kind of products/services?

a) Fruits/ Vegetables

b) Grocery/Kitchen items

c) Meat items like Fish / Chicken

d) Local Beverages

e) Any other (Please specify): _____

8. Duration of tourists stay in the location.

• A day visitor

• 2 days

• 3 days

• 4 days

• More than 5 days

9. Most tourist generating region.

• From West Bengal

• From Sikkim

• Outside West Bengal but domestic

• Foreign

10. What are the available basic touristic facilities in Gorkhey?

a) Transport facilities.

b) Information center/interpretation center

c) Tented Accommodation

d) Ecolodge

11. What are your future prospects about the homestay/CBET operation in Gorkhey?

a) Bright and progressive

b) Average

c) Downfall and declining

d) No idea

12. Which of the following CBET practices were undertaken in your locality?

(a) Awareness of local natural heritage and biodiversity conservation

(b) Community capacity building

(c) Responsible and ethnic tourism

(d) Opportunities for eco-friendly infrastructure and development

(e) Any other (please specify): _____

13. What are the other activities offered to the tourists in your locality?

(a) Birdwatching and wildlife viewing

(b) Day Hiking

(c) Trekking

(d) Camping

(e) Meditation Practices

(f) River adventure activities

(g) Any others (please specify): _____

8	Promotion of integrated CBET helps in preserving local culture and traditional knowledge					
9	CBET practices in this region educates locals for conservation					
10	CBET Encourages local for participation in planning and decision-making program					
Community Knowledge towards CBET						
11	Well aware of the concept of eco-tourism.					
12	Have knowledge about the benefits from eco-tourism.					
13	Have attained the training programs on conservation and natural resource management.					

THANK YOU!

SIGNATURE: _____