

**ECOTOURISM AND RURAL LIVELIHOOD IN EAST KHASI
HILLS DISTRICT, MEGHALAYA.**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

MARTIUS RANGIASAID RYNJAH

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BY

MARTIUS RANGIASAID RYNJAH

DEPARTMENT OF SOCIAL WORK

SUPERVISOR

Dr. GRACE LALHLUPUII SAILO

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE DEGREE
OF DOCTOR OF PHILOSOPHY IN SOCIAL WORK MIZORAM
UNIVERSITY, AIZAWL**

MIZORAM UNIVERSITY

AUGUST 2025

CERTIFICATE

This is to certify that the thesis, Ecotourism and Rural Livelihood in East Khasi Hills District, Meghalaya submitted by Mr. Martius Rangiasaid Rynjah for the award of Doctor of Philosophy in Social Work is carried out under my guidance and incorporates the scholar's bonafide research and this has not been submitted for award of any degree in this or any other University or Institute of learning.

(DR. GRACE LALHLUPUII SAILO)

Research Supervisor

Department Of Social Work

Mizoram University

Aizawl-796004

DECLARATION
MIZORAM UNIVERSITY

August 2025

I **Martius Rangiasaid Rynjah**, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to the Mizoram University for the **Degree of Doctor of Philosophy in Social Work**.

(MARTIUS RANGIASAID RYNJAH)

Research Scholar
Department of Social Work
Mizoram University
Aizawl - 796004

(KANAGARAJ EASWARAN)

Professor & Head
Department of Social Work
Mizoram University
Aizawl -796004

(Dr. GRACE LALHLUPUII SAILO)

Research Supervisor
Department of Social Work
Mizoram University
Aizawl -796004

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LIST OF ABBREVIATIONS

CAA	:	Citizenship Amendment Act
ILP	:	Inner Line Permit
SLF	:	Sustainable Livelihood Framework
KIIs	:	Key Informant Interview
BPL	:	Below Poverty Line
APL	:	Above Poverty Line
CBOs	:	Community-Based Organisations
SHGs	:	Self Help Groups
C&RD	:	Community & Rural Development
NDB	:	New Development Bank
ADB	:	Asian Development Bank
PRA	:	Participatory Rural Appraisal
SPSS	:	Statistical Package for Social Sciences
IQV	:	Index of Qualitative Variance
ATMs	:	Automated Teller Machine
BDO	:	Block Development Officer
RKM	:	Ram Krishna Mission
CHC	:	Community Health Center
PHC	:	Primary Health Center
CrPC	:	Criminal Procedure Code
KHADC	:	Khasi Hills Autonomous District Council
MLA	:	Member of Legislative Assembly
PPP	:	Public Private Partnership
NGOs	:	Non-Governmental Organisations

CHAPTER I

INTRODUCTION

The present study on Ecotourism and Rural Livelihood in East Khasi Hills District, Meghalaya aims at examining the role of ecotourism in promotion of rural livelihood in areas of eco-tourist hotspots in selected villages in two C&RD blocks in East Khasi Hills District, Meghalaya. The study will contribute towards understanding the nature and patterns of ecotourism practices in in Meghalaya. The study will throw light on the contributing benefits of ecotourism on various forms of economic, social, and environmental or ecological engagements at the household and community level. It would also provide knowledge on the management and utilization cycle of the resources by the local community.

1.1 Ecotourism

Before the inception of the term ‘ecotourism,’ the most common term used was alternative-tourism. During the environment movements in 1960’s and 1970’s mass tourism There was very much a discourse in conceptualizing ecotourism, as a result other terms like sustainable tourism and nature-based tourism are being simultaneously used in place

The term ecotourism was first officially used by Ceballos-Lascurain (1987), who defined it as: ‘travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas’ (Weaver, 2001).

The historical evolution of ecotourism can be traced back to the mid twentieth century because of the growth of mass tourism and environmental concerns. Therefore, the quest to understand ecotourism must consider in understanding the relationship between tourism practices and the environment. There have been many authors and writer who have attempted to describe the history of ecotourism. Most prominent amongst them were Lindberg and McKercher (1997) and Fennel (1999) who were the pioneers in tracing the history of ecotourism in the twentieth century

with their primary focus on the growth of the tourism industry and interest on the natural environment (Dowling, 2013).

According to Beaumont (1998) as found in Dowling (2013), argued that the concept and the terminology of ecotourism may have been explored recently during the mid twentieth century but the practices of ecotourism has been in existence as old as in the 18th centuries referring to the exploration of early geographers, establishment of the Yellowstone in 1872 in the United States and the Banff in Canada in 1885 as evidences of much earlier practices and interest in nature tourism.

TIES (2006) as found in Manalel and Vinodan (2011), pointed out that within the tourism industry, nature tourism is one of the fastest growing branches of the tourism industry and that its segment ecotourism has been ever increasing with 20% - 30% growth per year since 1990.

According to the TIES (2006), ecotourism is another segment of the tourism industry that focuses on exploring the untouched and remains of natural areas (I Nee & I Beckmann, 2011). The concept of ecotourism is easily confused with other concepts containing some similar attributes like ecotourism (O'Neil,2002). Pleumarom in O'Neil (2002) have also suggested that ecotourism can be understood as a concept not as a model.

After the onset of the industrial revolution that ushered in the development of the means of transport and roadways that tourism activities also took place. The colonial period has also brought about awareness of other people's countries and cultures through increased mobility with the development of automobile and airplane and when soldiers returned home from colonized places like India, Africa and Australia. The invention and development in the use of photography produced visual evidence and developed curiosity to travellers who wished to visit those exotic places O'Neil (2002).

Ceballos-Lascurain (1996) mentioned that in 1988, it is estimated that there were between 157 and 236 million international ecotourists worldwide. Honey in O'Neil

(2002), pointed out that in 1995 the global spending in travelling alone amounted to \$3.4 trillion which is expected to grow to \$4.2 trillion in 2000.

1.2 Evolution of Ecotourism

The problem with mass tourism is another phenomenon that led to the development and practice of ecotourism. Mass tourism was the common form of tourism that was practiced in the initial development stage of tourism. It was also expected that mass tourism would also bring about growth in the economy in forms of foreign exchange and GNP growth, tax revenue and employment but this was not the case (Lascurain, 1996). It had led to various problems and effects like environmental, economic, and socio-cultural impact. Also due to the development of mass tourism, much of the funds and subsidies are being allocated to tourism industry that favours tourist and leaving the other programs and industries that are benefitting the locals. During the late 1960s when they started to introduce the fencing or the park system in the nature-based tourist spots, the international conservation and scientific organization observed two phenomena on different continents. In Africa the local were removed and relocated from the protected areas to areas around the park started to resent against the park system and visitors since they receive no benefit from the relocation. They started poaching and disturbing the natural environment and its resources. The conflict between man and the protected areas has brought attention to the scientist, conservationist, park officials and environmental organisations that if the protected areas were to co exists with the local people; the locals need to benefit from the protected areas and tourism. As a result Kenya was the first African country to engage and involved the local and indigenous community's council to control both environmental protection and economic development in the protected areas (Honey, 1995).

The history and development of ecotourism can also be found in the role of international aiding agencies during the late 1970s. The World Bank and U.S Agency for International Development have played an important role in the development of ecotourism. During the late 1970s the less developed countries were at a financial and economic crisis and are having mounted debt, and the environmental movement

incited international aiding agencies such as the World Bank and U.S Agency for International Development to consider tourism as a tool or strategy for development and conservation. During the 1980s the developing countries also had a role to play in the development of ecotourism. These countries realized that ecotourism had a great potential in foreign exchange and minimizing environment destruction other destructive development activities and yield more economic benefits. The travel and tourist industry have also contributed to the growth and development of ecotourism. These industries saw the opportunity with the development and evolving trends that ecotourism provided and with the dissatisfaction towards mass tourism they seize the opportunity to exploit the benefits from the travelling public who are environment conscious and who are willing to invest in those travelling agencies that have environmental concerns (Honey, 1995).

According to Brown in O'Neil (2002), during the 1980's many argued that there is a need for another alternative to tourism as it has negative impact on the environmental, economic and socio-cultural aspects of the host communities. A call for 'alternative tourism' was highly demanded on the basis that its policies should not only consider economic growth but also environmental quality and welfare of the local people.

According to Ceballos-Lascurain in O'Neil (2002), during the 1960s when mass tourism was blooming in the tourism industry it also gave rise to socially concerned citizens and tourists who are concerned not only to impacts on health created by mass tourism but are also concerned for the welfare of animals and ecosystem. This gave rise to the environmental movement which demanded from the government to specially allocate separate land for animals and the ecosystem and as an opportunity for people to visit and admire the wildlife in its natural beauty and hence help in protecting more areas and species. With this it led to the establishment and linkage between tourism, environment exploration and protection and paved way for the development of ecotourism.

According to Diamantis (2010), there are a variety of ecotourism definitions all reflecting a range of paradigms and perspectives. A variety of terms have been

introduced to describe the same phenomenon which may be referred to as nature travel, nature-orientated tourism, nature tourism, nature-based tourism, sustainable tourism, alternative tourism and special interest tourism (Laarman & Durst, 1987; Durst & Ingram, 1988; Wilson & Laarman, 1988; Valentine, 1992; Hall & Weiler, 1992; Diamantis, 1998a).

Ceballos-Lascurain (1996) in O'Neil (2002) defined the term tourist in his writing about the evolution of tourism as "an individual who travels for the pleasure of traveling, out of curiosity," and "tourism," describing travel as a leisure activity, first appeared in the early 1800s.

Ceballos and Lascurain (1987) were amongst the first who attempted to define ecotourism as "travelling to relatively undisturbed or uncontaminated natural areas with the specific objectives of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas".

There have also been others who attempted to define ecotourism see; (Ziffer, 1989: 6), (Boo, 1991b: 4), (Forestry Tasmania, 1994: ii), (Richardson, 1993: 8), (Australia Department of Tourism, 1994: 17), (Tickell, 1994: ix), (Boyd & Butler, 1993: 13, 1996a: 386), (Boyd & Butler, 1996b: 558), (Goodwin, 1996: 288), (Lindberg & McKercher, 1997: 67), (Ecotourism Society in Orams, 1995a: 5).

All definitions of ecotourism have stated with experienced and observed by scholar or visitor. It shows that the concept and definition of ecotourism derived from seven components; contributes to conservation of biodiversity, sustains the well-being of local people, includes an interpretation/learning experience, involves responsible action on the part of tourists and the tourism industry, is delivered primarily to small groups by small-scale businesses, requires lowest possible consumption of non-renewable resources, stresses local participation, ownership and business opportunities, particularly for rural people (I Nee & I Beckmann, 2011).

1.3 Issues and trends of Ecotourism

The past decade has seen enormous social, political and economic change in places such as Africa, Eastern Europe, Asia and the USSR leading to a growing concern with theory in interpretive practice; the rise of ecotourism and consequent changes in the interpretation of environmental issues; reactions to globalization and the tension between homogeneity and uniqueness; the need to interpret emotive issues and contested heritage; and adopting a grassroots approach to interpretive planning (Ballantyne, 1999).

CREST's study (2013) found out that for the first time ever, international tourist arrivals surpassed one billion in 2012 and international tourism receipts exceeded \$1 trillion in 2011. Harvard Business School study found that companies that adopted environmental, social, and governance policies in the 1990s outperformed those that did not, while a Nielsen survey found that 66% of consumers globally prefer to buy products and services from companies that have implemented programs to give back to society.

WTO (1996), the Asia-Pacific region has experienced rapid tourism growth during the past decade. Tourism in the East Asia and Pacific region has grown much faster than in the South Asia region, and somewhat faster than global tourism. WTO (1997) estimates that the East Asia and Pacific region had 87 million international arrivals in 1996, with South Asia having 4.5 million international arrivals in that period. These arrivals generated US\$80.8 billion and US\$4.0 billion in receipts, respectively. Most observers feel that ecotourism has grown faster than tourism generally during the past several years. Based on a survey of ecotourism operators in the region, Lew (1997) found that average annual growth rates have been steady at 10% to 25% over the past few years, and many are projecting higher growth in coming years. There are various explanations for ecotourism's growth, including:

- increasing environmental awareness and interest, including the desire to be perceived by others as environmentally sensitive;
- increased media exposure to natural areas around the world;
- related to the above two, a desire to see natural areas before they disappear;

- increasing dissatisfaction with traditional tourism destinations and products, and a desire for more educative and challenging vacations;
- desire to go to novel destinations, sometimes as a way to "outdo" others (e.g., to be the first person one knows who has been to Antarctica); and
- easier access to remote ecotourism destinations through development of air routes, roads, and other infrastructure.

Jaswal (2014), the tourism industry of India is economically important and grows rapidly. The World Travel & Tourism Council calculated that tourism generated INR6.4 trillion or 6.6% of the nation's GDP in 2012. It supported 39.5 million jobs, 7.7% of its total employment. The sector is predicted to grow at an average annual rate of 7.9% from 2013 to 2023. This gives India the third rank among countries with the fastest growing tourism industries over the next decade.

1.4 Eco Tourism in India

Kumari (2021), mentioned in her article that as per the data received from the report of 'The World Travel and Tourism Council' India has generated approximately 16.91 lakh crore which contributed to 9.2% of India's GDP in 2018. With the evolving trend in the tourism industry according to the assessment of the report there would be a growth of 6.9% of the tourism industry that would contribute to 32.05 Lakhs crore from the year 2028. It is assumed that the growth of sustainable tourism on the same line as responsible tourism provides opportunities for both social and economic development keeping in mind the need for protection and conservation of the natural environment. The tourism industry is regarded by the authority as one of the sectors providing livelihood opportunities fostering economic growth. With the present trend of the tourism industry, environment-friendly tourism is seen as to be more sustainable in the long run. Ecotourism provides both the needs of economic and livelihood benefits of the indigenous communities with principle focus of conservation and protection of the natural resources.

National tourism policy (2002) starts from the idea that tourism can be used as a development tool tourism not only generates government revenue, foreign currency, but also provides an optimal use of India's scarce resources, sustainable

development, high quality employment (especially to youngsters, women and disabled people), and finally, peace, understanding, national unity and stability. The principles of the policy are to take part in the ongoing tourism revolution, government and private sector investment oriented towards community welfare, strengthen the tourism-culture relationship and upgrade environmental protection for monuments representing the culture, establish close connections between tourism and other government departments and ministries for tourist development, any tourism activity should have sustainability as the sole aim, special emphasis on ecotourism focused to reduced socio-economic issues of the community, development of accommodation for adventure tourism in remote and rural areas in which the panchayat shall take initiatives for simple and clean places, tourist industries and travel agents shall have code of ethics for which infringement shall be dealt with, special section of state police shall be trained to be tourist police, make of opportunities to project rich cultural heritage at the international level and ensuring good governance for proper and genuine implementation of Policies (GOI, 2002: 8-9).

The concept of ecological sustainability subsumes the environmental carrying capacity of a given area. The general principles of ecotourism guiding the initiatives of the Ministry are as under:

- (a) The local community should be involved leading to the overall economic development of the area.
- (b) The likely conflicts between resource use for eco-tourism and the livelihood of local inhabitants should be identified and attempts made to minimize the same
- (c) The type and scale of eco-tourism development should be compatible with the environment and socio-cultural characteristics of the local community, and
- (d) It should be planned as a part of the overall area development strategy, guided by an integrated land-use plan avoiding inter-sectoral conflicts and ensuring sectoral integration, associated with commensurate expansion of public services.

1.5 Tourism and Ecotourism Development in Meghalaya

Meghalaya is blessed with rich flora-fauna and biodiversity that has a potential of being one of the hotspots of ecotourism in the northeast India. There are numerous natural beauties in Meghalaya that are known worldwide. Tourism has been part and parcel of Meghalaya for decades. The scenic beauty of Meghalaya has attracted tourist from different parts of the region and the world to admire its beauty in its wilderness. The less human activity and modification of the natural beauties that would disturb the beauty of the tourist destinations has a wide scope for ecotourism in Meghalaya. Some of the famous ecotourism destinations in Meghalaya are the Nohkalikai Falls, Sngithiang falls, Dainthlen Falls, Seven Sisters Falls, Mawsmai Cave, Crystal clear water in Shnongpdeng and Dawki, Mawlynnong one of Asia's cleanest village, Living root bridge in Nohwet, Double Decker living root bridge in Nongriat, Thangkharang Park and other natural scenic beauty of the region.

Meghalaya is one of those north eastern states in India that has been naturally gifted with rich biodiversity and natural beauty. The lush green scenic beauty and pleasant climatic conditions makes it even more appealing and attractive for nature lovers to visit the tourism destinations in Meghalaya. Tourism in Meghalaya has a very long history and can be dated back to the colonial period when the colonial rulers made Shillong a hill station capital as a retreat from the scorching heat and humid summers.

The Wards's Lake located in Shillong is one of the important landmarks established during the colonial period and overtime became a centre of tourist attraction for every tourist visiting Meghalaya. It was built in 1984 planned by the then Chief Commissioner of Assam Sir. Willam Ward and was constructed by a Colonel Hopkins. The lake was surrounded with beautiful flowers that bloomed all year round and a showcase of the rich biodiversity of the place, and a work of marvel engineering of a wooden bridge across the lake. The artificial lake served as a recreation place for the British officials and their families during the summers.

Over the years Sohra was known for its beautiful natural scenic beauty and holding a record for being the wettest place on earth which popularised the place and attracted

visitors to experience the cool pleasant climate and weather conditions. Gradually it became a place for leisure and recreation for many of the common people of Shillong. People started visiting Sohra with friends and families for picnic, even schools and colleges often take the children and students for an exposure or a tour to these places admiring its beautiful scenic beauty and lush green scenery. The most popular places visited in those days were Laitkroh, Nohkalikai falls, Dainthlen Falls, Khohramhah, Nohsngithiang Falls, Mawsmmai Caves and Thangkharang. These tourism destinations attracted domestic tourists due to their beautiful surrounding and lush green scenic beauty during the summers.

The Elephant falls is another popular tourist attraction in Meghalaya that got its name during the British colonialism after one British officer saw a huge rock that looks like an elephant near the waterfall. Unfortunately, the rock was destroyed by the devastating earthquake in 1897 which caused heavy devastation and destruction in the region. The waterfall is known to the local community as the '*Kshaid Lai Pateng Khohsiew*' meaning three step waterfalls. The Elephant falls at present is still very famous among the tourists visiting the state with many other enterprises developing in the spot.

The David Scott trail in Meghalaya has its history with the British Administrator David Scott who was stationed in northeast India during the colonial period. During his tenure in northeast India he laid the route for cart trail through the dense forests of Meghalaya from Mawphlang to Lad-Mawohlang stretching 16km to ferry goods for the British soldiers from Assam via Meghalaya to Sylhet in Bangladesh. Now popularly known as the David Scott Trek is very popular among hikers and trekkers who undertake the route as an adventure or leisure activity taking 4 – 5 hours to complete the trek. At the beginning of the trek from Mawphlang one can see the Umiam-Mawphlang river and along the trek the route is covered with awesome scenery with green surrounding and valleys and crystal-clear water and natural pool and a resting place called 'Ka Kor Shonmai'.

The onset of ecotourism in Meghalaya can be traced back to the year 2003 when Mawlynnong a remote and rural village under the Pynursla C & RD block nearby the

India-Bangladesh border was being awarded as one of the cleanest villages in Asia by the Discover India Magazine. The village became very popular among the media and spread to different parts of the country and across the globe attracting tourists from across the country to visit the village. Soon after the popularity of Mawlynnong, in the following years Riwai village adjacent to Mawlynnong village became famous for being the home to the 'Jingkieng-jri' or commonly known as the 'Living Root bridge' attracting tourist for its indigenous practice and engineering of a unique form of bridge built from the roots of a particular tree of the Indian rubber fig tree (*Scientific name: Ficus Elastica*).

Upon seeing the rich biodiversity fostering the rise in development of ecotourism practices and its potential for contributing to the economy of the state, the Government of Meghalaya and the New Development Bank have agreed to undertake a project for the development of ecotourism infrastructure in the state of Meghalaya. The financial aspect of the project will be supported by the New Development Bank through loan for \$79.05 million and counterpart funding from the government of Meghalaya, the project shall be executed by the Government of Meghalaya and implemented by the Meghalayan Age Limited with the vision to complete the project in the year 2028. The core thrust of the Project is to promote ecotourism development through infrastructural development at 5 ecotourism circuits in Meghalaya. The project aims at attracting more domestic and international tourists to boost the economy of the state through the tourism sector. Furthermore, it is estimated that the project will generate employment opportunities for approximately 1400 people in the state of Meghalaya and its implementation would be in tune with the National Tourism Policy of India in fostering sustainable and inclusive economic growth for Meghalaya. The Project will also contribute to reduced greenhouse gas emissions through replacement of road travels by the ropeway (New Development Bank, 2023).

New Development Bank (NDB)	
Project Summary for Public Disclosure (after approval of NDB financing)	
Project Name	Meghalaya Ecotourism Infrastructure Development Project
Country	The Republic of India
Type	Sovereign
Area of Operation	Multiple Areas
Concept Approval Date	18-Sep-21
Financing Approval Date	18-Jul-22
Total Project Cost	INR 7.3 billion
Initial Limit of NDB Financing	USD 79.05 million
Current Limit of NDB Financing	USD 79.05 million
Borrower	The Republic of India
Project Entity	Government of Meghalaya & Meghalayan Age Limited

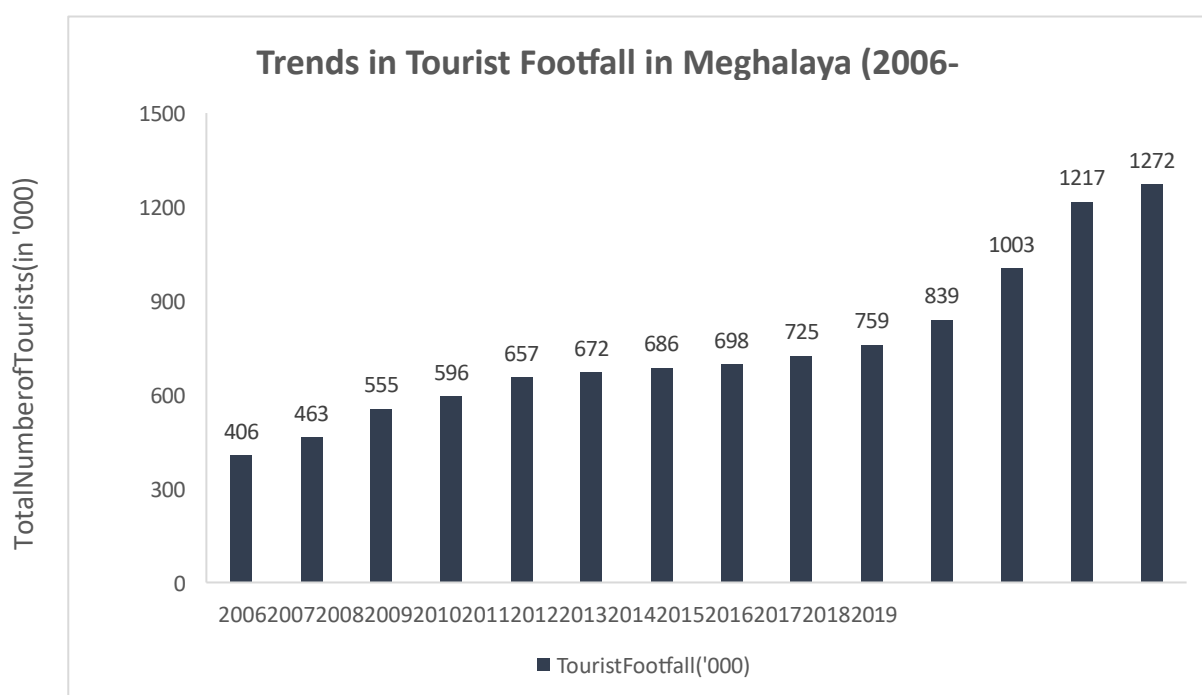
Source: New Development Bank, 2023

The Government of India launched the Swadesh Darshan 2.0 in 2023 for the development of responsible sustainable and responsible tourist destination in the country. Under this programme 19 states across the country have been identified for development and the state of Meghalaya is among one of the 19 states chosen to benefit for tourism development under the programme. The aims of the scheme are to; enhance inclusive benefits from tourism and develop local livelihood through ecotourism, to generate income generating economic activities and promote entrepreneurship among local communities, to capacitate and foster skill development among youths in terms of tourism and hospitality, to facilitate more venture and investments of private sectors in tourism and hospitality, and to promote tourism activities that would preserve local culture and natural resources (Inception Report, Ministry of Tourism, Govt. of India, 2023).

According to the report by the Inception Report conducted by the Ministry of Tourism, Govt. of India, it included a brief overview of tourism in the state of

Meghalaya. It discussed that the state of Meghalaya is unique with its rich biodiversity, natural beauty, and rich cultural heritage has great potential and scope for ecotourism and cultural tourism. The report documented certain statistical data with regards to tourism arrival in the state of Meghalaya; Meghalaya recorded 12,71,446 tourism arrival in the year 2019 of which 12,45,633 were domestic tourists and 25,813 foreign tourists. The data shows an increase in tourists' inflow to the state of Meghalaya as compared to 4.06 lakhs in 2006 to 12.72 lakh in 2019. It could be noted here that the steady increase in tourists' inflow could be attributed to the enhancement of transportation and connectivity as one of the contributing factors influencing tourists' inflow to the state of Meghalaya. According to Directorate of Economics and Statistics, Govt. of Meghalaya, the tourism sector contributes about 4.1%* to the State's GSDP. Tourism industry holds a 2.87% share in the total employment in the state, accounting to 16,55,472 persons employed in the state. According to the regional tourism satellite account for the state of Meghalaya by National Council of Applied Economic Research (NCAER), 8,99,808 people are self-employed whereas 7,55,664 work as employees in the state (Inception Report, Ministry of Tourism, Govt. of India, 2023).

Trends in Tourist Footfall in Meghalaya (2006 – 2019)



Source: India Brand Equity Foundation, 2019

Tourism Development at Umiam and Mawkhanu, Meghalaya

Meghalaya tourism sector is set to receive an enhancement in funding for Tourism Development Projects from the Finance Ministry for the development of Iconic Tourist Centres at Umiam and Mawkhanu project worth Rs. 199 Crore with approximately Rs. 99.27 crore each for the purpose of tourism development at Umiam and Mawkhanu. The renovation of tourism at Umiam would include a crafts village, arts and culture pavilion, botanical garden, amphi theater, and essential infrastructure like roads and utilities. Additionally, the project at Umiam would be enhanced with the introduction of the Western Bypass road, that will connect Lad Umsaw in Ri-Bhoi to Lad Mawreng in East Khasi Hills. The project would facilitate public-private partnerships (PPP) in creation of jobs and enhancing tourism-based economy that would improve local livelihoods. While the tourism development project at Mawkhanu would include a Meghalayan Experience Theme Park, festival ground and amphi theater, and supporting amenities. The site will also host large events such as the Cherry Blossom Festival, celebrating local arts, music, and cultural heritage. (The Highland Post, 1st December, 2024).

Meghalaya Tourism Policy 2023

The Meghalaya Tourism Policy 2023 emphasized on the emerging growth and trend of the tourism industry in the state over the past decade. The growth of the tourism industry has generated employment opportunities for the local communities and at the same time influenced its contribution to the State's GSDP. It has been mentioned in the policy that the tourism sector has contributed 4.1% of the state's GSDP. The policy also acknowledged the potential of the tourism industry particularly the ecotourism sector capable of influencing benefits for various sectors such as construction, transport, agriculture, food processing, handicrafts, and financial services and various skill levels in terms of employment opportunities and income generation. The present tourism policy is a revamp of the Meghalaya's previous tourism policy 2011. It was felt that with the evolution of the tourism industry in the state over the decade there is a need to have a new policy to relook into the different factors and areas that can be reformed with the lessons learned from the COVID pandemic. In the post-COVID era, large volume of tourists' are much more inclined to visit local tourism destinations in place of international tourism destinations. There was a need to act promptly to turn the attention

towards the tourism sector to support the growing tourism economy in the state. The present policy is inspiring and lie on the foundation of its Vision Statement, *“To position Meghalaya as a preferred tourism destination and harness the tourism potential of the State, thus driving growth, generating employment and entrepreneurship opportunities for individuals and communities while keeping sustainability at the core.”*

The tourism industry is multidimensional and multi-sectoral in its nature of operation and practice, it requires the support and coordination of various sectors and various levels for infrastructure creation, capacity building, engagement with the communities, promotion & marketing and attracting investments among others. To achieve this goal, a mechanism to involve different organizations from various sectors has been incorporated in the policy with the prime responsibilities as auxiliaries to the Department of Tourism in implementing various activities for the promotion and support of tourism in the state.

The various organizations and agencies that have been set up within the policy;

- a) **Tourism Department/Directorate of Tourism:** The tourism department is the apex body within the framework of the policy to formulate policies and the overall implementation of all programme pertaining to tourism as directed by the central and state government. The underlying tasks of the department is to; implement schemes for the growth and development of the tourism sector in the State and to benefit visiting tourists, development of infrastructure and accommodation at tourism spots, to carry out capacity building and training activities, to undertake promotional activities, awareness programme, and publicity related for the promotion of tourism via print, electronic, and social media.
- b) **Meghalaya Tourism Development Corporation (MTDC):** The MTDC is a company owned by the state government under the control of the Tourism Department, Government of Meghalaya. It is tasked with executing tourism projects across the state and development of infrastructure for tourism. At present the MTDC is the owner of Vivanta Meghalaya, Shillong, the Pinewood hotel, and the Orchid Lake resorts at Umiam and Mawkasiang which are the flagship programme for tourism development undertaken by the government of Meghalaya.

- c) **Meghalayan Age Limited (MAL):** MAL is a not-for-profit company undertaking of the Government of Meghalaya which was established under Section 2 (45) of the Companies Act, 2013. It was merged under the Planning, Investment Promotion and Sustainable Development Department (erstwhile Planning Department), Government of Meghalaya. MAL has been specifically assigned to implement externally project aimed at promoting tourism and preservation of heritage in the state of Meghalaya. MAL promotes entrepreneurship and private sector participation in the state by organizing events and festivals and mobilizing investments to promote tourism in the state.
- d) **The Meghalaya Rural Tourism Cooperative Federation Limited (MRTCF Ltd.):** Established in 2013, its core tasks are to provide financial support, guidance, technical skills, and management skills to all the affiliated Primary Cooperative Societies undertaking rural tourism projects. Its prime focus is to promote as support the growth of rural tourism across the villages of high tourism potential in the state. One of the initiatives of the Government of Meghalaya through MRTCF Ltd. is the setting up of accommodation units like the “Travelers Nest”. The agency also promotes local tourism cooperatives at the grassroots level that are tasked with operation and maintenance of the properties. The agency has promoted 36 such initiatives across the states that are being looked after by primary cooperative societies of the agency.

Core Principles of the Policy

The Meghalaya Tourism policy is vested on the foundation of its core principle components; sustainable & responsible tourism, employment generation & entrepreneurship, community participation, technology, and synergy with other departments and schemes/programs.

- i. **Sustainable & Responsible Tourism:** This principle focuses on fostering a systematic and planned economic growth through the tourism sector by considering the carrying capacity of tourism destinations, instilling value-based tourism, low environmental impact of tourism, conscious and careful waste management practices, sustainable transportation, and conservation of local heritage.

- ii. Employment Generation & Entrepreneurship:** With majority of the population in the state are in the range of 35 years, the policy seeks to create employment opportunities for the youth and through sustainable tourism entrepreneurship. The government of Meghalaya has launched a flagship programme in 2021 for promoting livelihood through entrepreneurship PRIME (Promotion and Incubation of Market Driven Enterprises), and it shall give special attention to tourism-related enterprises and products.
- iii. Community Participation:** The Sixth Schedule of the Indian Constitution provides and protects the practice and presence of the traditional institutions, local governance, and customary laws among the major tribes within the state of Meghalaya. With the discretionary powers and functions vested upon the local and grass-root governance through the Sixth schedule the various programs and schemes are being implemented in consultation at all levels of the traditional governance. This provides a favorable condition for the government to work in synergy with the local community fostering community participation in the process. Major activities initiated by the government of Meghalaya for tourism development have been implemented by engaging local communities. The government also supports community initiatives for organizing festivals, beautification, cleaning and plantation drives across the state.
- iv. Technology:** The progress of contemporary societies is evident through the increasing and intensive use of technology in various sectors. The policy stresses on the utilization of technology for seamless destination discovery, bookings, ticketing, customer-connect, training, helpline, and feedback. Investments on the use of technology to gather data and vital information on real-time updates on footfalls, traffic, and occupancy and help the stakeholders manage pricing and carrying capacity. Thus, it would help the government to plan and anticipate peak tourist seasons for organizing festivals and events and marketing campaigns.
- v. Synergy with other departments and schemes/programs:** The policy seeks to incorporate inter-departmental collaboration to promote and facilitate tourism development in the state.

Thrust Areas of the Tourism Policy

The policy have identified key and important areas that requires short, mid-term and long-term planning and implementation to help achieve the mission and overall vision of the policy. These thrust areas of the policy are;

- i. To encourage tourists arrival and longer stay by developing and enhancing auxiliary infrastructure to cater to the needs of the visiting tourists' in terms of quality accommodation, transportation, newer tourist destinations, encouraging development of wayside amenities, tourist information centre and signage, and to promote tourist destinations that are accessible for the differently abled persons.
- ii. To enhance physical infrastructure, transportation and connectivity to ease tourists not only to reach the state of Meghalaya but also connectivity within the state to various tourist destinations. The policy has put forward some suggestion in this connection like; introduction of electric vehicles, training programs for taxi drivers to capacitate them on knowledge and skills that are essential to acquire while engaging in the tourism industry, to upgrade the online "Meghalaya Tourism" app that will increase transparency, ensure better price discovery, remove the hassles associated with bookings and will also augment the earning opportunities available to the operators from the State, introducing luxury tourist vehicles and caravans for better tourism experience and satisfaction of the tourists', to set standards in terms of timing, services and fares that are charged by the existing taxi operators operating from Guwahati airport, Umroi airport and ISBTs (Shillong & Tura) to city centers and tourist destinations.
- iii. The present tourist hotspots and places of attraction are highly concentrated from Umiam-Shillong-Sohra and Dawki. To ensure regional balance of tourism development and to reduce the pressure over the carrying capacity of the ecology new tourism circuits will be introduce across other region and districts in the state. Thus, this will also pave way for infrastructural development and provide for livelihood opportunities for other local communities across the state of Meghalaya.
- iv. To undertake regular capacity building programs for all stakeholders engaged in

the tourism industry to promote better and productive human resources with the basic knowledge and skills in terms hospitality in the tourism industry and contribute to increasing rate of employability in the tourism industry among the youths.

- v. To promote and encourage experiential tourism to create unique experiences for the visiting tourists of the authentic culture, food habits, festivals, local music and dances, age old traditional practices, adventure, and indigenous health practices.
- vi. In order for the tourism industry to reach beyond the boundaries of the State of Meghalaya and India as a recognized, preferred, sustainable and safe tourism destination contributing to the State's economy, enhancing the well-being of its communities, and enabling growth while conserving its rich cultural heritage and natural beauty promotion, marketing and branding is a very important component. This would be an enormous task which shall be undertaken by the Department of Tourism of the state.
- vii. The policy further emphasizes and encourages the involvement and participation of the private sector to complement on the works and efforts of the state government.
- viii. One of the top priorities of the mandate in the policy is to ensure tourist safety. While the local communities particularly of those tourist hotspots have shown great hospitality to the visiting tourists yet further improvement is always helpful to assure safety of visitors such as; prohibition for tourists to venture to difficult tourists destinations without being accompanied by tourist guides and experts, to set up 'Tourist Police Force', important of assessing trekking routes and first aid kits and emergency evacuation support may also be made available at all the treks, to enroll or register all tourist taxis for safe transit of tourists', and to set up helpline for tourists who are in distress.
- ix. To regulate standard certification and framework as an outline for the management and provision of services at all tourist destinations to follow minimum recommended standards to maintain amenities and services to cater to the needs of the visiting tourists' such as tourism information centers, parking areas, public conveniences, shops, restaurants, seating areas, disabled-friendly

access, viewpoints, signages, safety features, waste management, illumination, first aid, security and sustainability.

Finance and Resource Mobilization

The tourism sector has been one central cohesive source of support for the economy of the state. Hence, to further sustain the contribution of this sector many interventions, innovations and initiatives will be required for the future imperatives further enhance tourism development in the state. In this aspect enormous resources would be required to meet the needs of the goal and vision of the policy. To cater to these requirements, the state government shall; earmark and increase the budget for tourism over the coming years, converge central scheme to meet the infrastructural requirement for tourism, converge funds from other ministries and departments, facilitating and lobbying external aided projects, and encourage Private-Public-Partnership (PPP).

1.6 Schemes For Tourism Development in Meghalaya

1. Scheme for Community Led Tourism Infrastructure:

The state of Meghalaya has witnessed the rise in the number of visitors and over the years and this trend is expected to continue as tourism destinations in Meghalaya is one of the most sought-after tourist destinations in the country. Tourism industry has been a major contributor to the economy of the state it is therefore important to support the development and growth of the tourism industry in the state. With this in mind the government of Meghalaya has launched a Scheme for Community led Tourism Infrastructure. This scheme aims at supporting infrastructural development in villages that are tourism destinations to enrich better tourist experience by ensuring better and quality infrastructure. Under this scheme, communities are empowered to identify development needs aimed at enhancing existing tourism infrastructure and spearheading the development of necessary facilities in their areas. The Government will extend financial assistance of up to INR 25 lakhs to support infrastructure development works. The approach towards the implementation of the scheme aims at fostering active community participation from the local communities in the process of identification infrastructural gaps, planning and development process. The objectives of the scheme are to :

- i. Facilitate participatory development driven by insights from grassroots enterprises.
- ii. Address current infrastructure deficiencies to enhance the overall tourist experience.
- iii. Foster a convenient and safe environment in Meghalaya for all tourists.

Scheme components

The scheme is aimed at improving or developing enabling infrastructures in regions that have considerable tourism potential measured by way of current tourist footfalls.

The admissible components for development under the scheme include:

- Construction of toilets and public conveniences
- Installation of water ATMs
- Establishment of holding areas and ticketing facilities
- Development of hiking trails, viewpoints, and resting decks
- Waste Management Solutions
- Establishment of experiential centers, museums, and information centers
- Provision of equipment for experiential products such as bicycles and kayaks
- Children play area
- Parking infra, sheds
- Solar panels/ electric charging stations
- Any additional components as specified by the Directorate of Tourism through official notification.

2. Agro Tourism Villa Scheme:

The Agro Tourism Villa Scheme is a component under the Chief Minister's Elevate Program launched by the Government of Meghalaya which aims at creating employment and creating job opportunities for the youths by encouraging and promoting entrepreneurship through bank linkage and accessibility to financial credit by providing subsidies in the form of down-payment and backend subsidy in the form of EMI co-payment. The program will operate through a single online portal that would make beneficiaries accessible to various other schemes through the portal. The program encompasses several sectors such as agriculture, horticulture, veterinary and animal husbandry, tourism, entertainment, sports, wellness, and any business venture of economic interest for the people of the State. Under this scheme, eligible

individuals can receive a significant subsidy of 35% of the project cost (25% upfront and 10% as a co-payment of the EMI). This subsidy applies to projects ranging from ₹50 lakhs to ₹1.5 Crore, with a maximum subsidy of ₹52.5 lakhs, incentivizing investments in villa-type accommodations.

The objectives of the scheme are as follows:

- **Enhance Tourist Experience:** Elevate the experience of high-value tourists by providing them with superior amenities and comfortable accommodations.
- **Stimulate Private Investment:** Encourage private investment in villa-type accommodations through substantial subsidies.
- **Attract Discerning Travelers:** Target high-value tourists, both domestic and international, by offering upscale accommodations.
- **Promote Sustainable Tourism:** Foster sustainable tourism practices to responsibly preserve Meghalaya's natural beauty and cultural heritage.
- **Boost Local Economy:** Contribute to the local economy by offering quality accommodations that attract more high-value tourists and increase spending.
- **Drive Rural Development:** Promote rural development by constructing villas in tourist sites, scenic agricultural fields/orchards, benefiting local communities and lesser-explored areas.
- **Showcase Meghalaya's Beauty:** Highlight Meghalaya's unparalleled beauty and rich heritage to travelers, establishing it as an alluring destination.
- **Priority clusters:** Promote the development of Tourism in the priority cluster identified by the Tourism department

3. Prime Tourism Vehicle Scheme:

PRIME Tourism Vehicle Scheme is a component under the Chief Minister's Elevate Program launched by the Government of Meghalaya which aims at creating employment and creating job opportunities for the youths by encouraging and promoting entrepreneurship. The scheme seeks to support young entrepreneur through bank linkage and accessibility to financial credit by providing subsidies in the form of down-payment and backend subsidy in the form of EMI co-payment. The program will operate through a single online portal that would make beneficiaries accessible to various other schemes through the portal. The scheme seeks to promote adventure tourism in the state of Meghalaya by encouraging entrepreneurs to buy

various range of luxury passenger vehicles and other variants of vehicles that are capable for offroad adventures with various seating capacities.

Objectives of the scheme

- Economic growth of the state: PRIME tourism vehicle is envisaged to bring economic growth to the state through encouraging youths to engage in economic generation activities in tourism and other sectors which are indirectly connected to tourism such as agriculture, handicrafts, food, and hospitality industry etc. Tourism brings revenue to the state through spendings by tourists on food, accommodation, transportation and buying locally produced products as souvenirs etc.
- Increase entrepreneurship: Along with the entrepreneurship being promoted in tourism transportation sector through the scheme, overall development of the sector will encourage small businesses such as restaurants, souvenir shops and entertainment.
- Increase availability of tourist vehicles in the state: The increase in the number of options for the vehicle will be ensured through introduction of the scheme.
- Promote adventure tourism in the state: By providing solutions to infrastructural gap related to transportation of adventure tourists and gears to the remote locations, the scheme is envisaged to promote adventure tourism in the state.
- Training to the drivers: To provide tourists with well-trained and well-equipped drivers who can also act as their tourist guide
- Create livelihood opportunities: Boosting tourism in the state will create jobs in variety of sectors such as hospitality, transportation, restaurants, and entertainment. This can reduce unemployment and stimulate local economics.

4. Meghalaya Tourism Homestay Scheme:

With the aim for promoting employment generation for the state of Meghalaya, the Meghalaya Tourism Departments in convergence with the Prime Minister Employment Generation Scheme (PMEGP) has launched the Meghalaya Tourism Homestay Scheme 2022. The scheme components offer employment opportunities through the creation of tourism infrastructure such as homestay, restaurants (dhabas / wayside amenities) and crafts emporium. The Meghalaya Tourism Homestay

Scheme will be implemented by the Tourism Department in collaboration with the District Commerce and Industry Centre (DCIC), under the Commerce and Industries Department, Government of Meghalaya as the partner agency for support related to PMEGP.

The Salient features of the scheme are as follow:

- PMEGP offers a subsidy of up to 35% for project cost of up to Rs 20 Lakh.
- In addition to PMEGP subsidy, the Tourism Department provides an additional 35% subsidy for project cost costing up to Rs 10 Lakh.
- Therefore, beneficiary can access a total subsidy of 70% for project cost up to Rs 10 Lakhs, i.e., 35% from PMEGP and 35% from Tourism.
- The scheme employs a credit-link subsidy model. Partner bank offers 95% of the project cost as loan, with the beneficiary contributing the remaining 5%.
- Beneficiaries receive a one-year moratorium and a maximum loan term of 7 years from the loan disbursement date.
- The beneficiary repays an average Equated Monthly Instalment (EMI) of approximately Rs 6,000/- over a period of 7 years, enabling them to own an asset worth Rs 10 Lakh (a two rooms homestay, restaurants, dhabas / wayside amenities, and crafts emporium). With this EMI, a beneficiary can earn an estimated monthly income of up to Rs 60,000, while paying just Rs 6,000/- as EMI for 7 years.
- The Scheme is designed to create employment and livelihood opportunities, with estimated monthly revenue nearly 10 times the EMI, even conservatively estimated.
- The Tourism Department pays the 35% subsidy directly to the bank as EMI support during the first three years.
- The PMEGP's 35% subsidy is transferred to the beneficiary's account at the beginning of the fourth year.

5. Meghalaya Motorcaravan Scheme:

The Meghalaya Motorcaravan scheme is one of the component schemes under the CM-Elevate programme launched by the government of Meghalaya that aims at creating employment opportunities for the youth through entrepreneurship

engagement. The scheme seeks to support young entrepreneur through bank linkage and accessibility to financial credit by providing subsidies in the form of down-payment and backend subsidy in the form of EMI co-payment. The program will operate through a single online portal that would make beneficiaries accessible to various other schemes through the portal.

Objectives of the scheme

- **Economic growth of the state:** The scheme is envisaged to bring economic growth to the state through encouraging youths to engage in economic generation activities in tourism and other sectors which are indirectly connected to tourism such as agriculture, handicrafts, food and hospitality industry etc. Tourism brings revenue to the state through spendings by tourists on food, accommodation, transportation and buying locally produced products as souvenirs etc.
- **Increase entrepreneurship:** Along with the entrepreneurship being promoted in tourism transportation sector through the scheme, overall development of the sector will encourage small businesses such as restaurants, souvenir shops and entertainment.
- **Increase potential of the state as top tourist destination:** The scheme is aimed to enhance the attractiveness and potential of the state as a preferred tourist destination and put Meghalaya on the tourist Map of the World
- **Promote alternative tourism:** Motorcaravans will provide visitors with a customizable, luxurious, private, and safe travel experience, as well as to showcase the unique ecology and culture of Meghalaya to the visitors.
- **Promote sustainable tourism:** To reduce the excessive concentration of tourists at a place in the state and thereby reduce unsustainable tourism
- **Training to the operators:** Through this scheme, the operators will be provided with customer service skills which will include communication skills, industry knowledge, conflict resolution and basic first aid.
- **Create livelihood opportunities:** Boosting tourism in the state will create jobs in variety of sectors such as hospitality, transportation, restaurants, and entertainment. This can reduce unemployment and stimulate local economics.

6. Integrated Eco-Tourism and Sustainable Agri-Based Livelihood Development Project:

The Asian Development Bank (ADB) in March 2025, has proposed for a new project for livelihood development in the state of Meghalaya. This project is titled 'Integrated Eco-Tourism and Sustainable Agri-Based Livelihood Development Project' with the aim of enhancing economic development by creating employment opportunities through integrating nature-based tourism with climate-smart agricultural practices. The project will be implemented on selected tourism destinations that manifest important natural and cultural values. The project aims at promoting sustainable ecotourism through effective and conscious management of forests and agricultural lands. Alongside ecotourism development, other projects would also be incorporated to improve ecotourism sector in Meghalaya; such as development of a Music Village and Cultural Experience Hub at Wakhken, which aims to promote local traditions and heritage. The Living Root Bridges Museum and hiking trails to Kongthong and Nongblai at Wahlyngkhat will highlight the state's unique natural wonders. Additionally, the Rain and Bamboo Interpretation Center at Mawsynram-Dongrum will be established to educate visitors about the region's distinctive ecological features (The Shillong Times, 2025).

1.7 Rural Vulnerability

According to the International Labour Organisations (ILO) (2017), referred the concept of vulnerability to the various elements that are social, economic, environmental, political in nature and its impact on the individuals and groups affecting the coping capacity of the individuals and groups and resulting in the degradation of their well-being. The concept of vulnerability is very much related with resilience of individuals or groups; resilience is the capability of individuals and groups to withstand and improve from external threats that affect the well-being of individuals and groups. The higher the resilience level of an individual or groups the lesser is the vulnerability and vice versa (Bhowmick, 2014).

According to the World Bank, the rural population in India has been estimated to be approximately 908 million. The rural population of India constitute about 64% of the

rural population in India. The UN population projection has stated that even with the ongoing rapid growth of urbanization process evident in the Indian context, the rural population in India will still stand at 800 million by 2050. It was also stated that by 2050 even though there would be a decrease in the rural population, there would still be a large section of the Indian population residing in rural setting and rural issues would continue to endure. The report identified various attributes of vulnerability in the context of rural India such as; minority communities, high dependency on wage labour and small farmers, wage-labour disparity, dropout rate among adolescence, illiteracy among adults, high migration rates among adults, lack of proper shelter, inadequate drinking water, food insecurity, labour intensive agricultural practices, irrigation facilities, climate change, financial literacy, child nutrition, land tenure, social exclusions, gender inequality, domestic violence and, limited benefits from social welfare programmes (The State of Rural Vulnerability Report, India, 2023).

Majumdar (2020), in his article on rural transformation in India augmented that, rural transformation in India in general has been characteristically perceived as positive transformations in practice and structural features of the rural communities. In his article he critically examined the fact that rural transformation does not always mean development or progression. He further pointed out in his article that rural transformation in the context of India has led to the changes in the structure of the Indian economy particularly the rural economy. The process of rural transformation in India has influenced the trending and increasing shift from agriculture to non-agricultural economic activities contributing to decreasing practices of agriculture which has been the main contributor to the Indian economy over the years and resulting in de-agrarianizing of the Indian economy.

Narayanan (2020), while discussing on the transformation of rural India he focused on the rural vulnerabilities in India and was reminiscent on the impact of the global COVID-19 pandemic crisis that increased the vulnerability on the already vulnerable sections particularly the rural communities. He identified the vulnerable groups that were adversely affected by the pandemic were those who were engaged in menial works such as smallholder, farmers, agricultural labourers, artisans, unorganized

construction sector workers, migrant, labourer, small vendors, women-headed households etc.

1.8 Theoretical Perspectives

The study uses the Sustainable Livelihoods Framework in order to understand how eco-tourism affects rural livelihood in Meghalaya.

Sustainable Livelihoods Framework (SLF)

Natarajan. et al., (2022), the sustainable livelihoods approach is a unique tool that approves a multidimensional outlook towards understanding poverty and the various factors that are contributing towards poverty and other such factors that are capable of improving the conditions of poverty. It primarily focuses on assessing and understanding the strengths and capabilities of the people living under poverty and the coping strategies adopted by the people in relation to the various assets accessible or exposed to the individuals, groups, and families. The SLF set forth in its action as an approach not as a method and as a frame work not as a theory. Its core values are upheld on a strong philosophical foundation that appraises local knowledge and engaging with local people. It privileges the incorporation of other participatory methods to gather knowledge in its operation. Since its inception and extensive usage, the SLF is centered around the individual as a parameter for development activities. Scoones (2015), the prime objective of the approach that focused on village life and individual's capabilities captivated the changes that manifested in rural livelihoods over the years. With the impact and influence of globalization across the globe, many countries started to drift towards industrialization and villages across the globe have also seen gradual changes in the elements that composes rural life leading to the growth of labour migration, remittances and small-scale commercial agriculture (Borras, 2009). The increasing climatic, environmental changes, and exploitation of natural resources that has taken place over the years have been influencing impacts on rural livelihoods increasing vulnerability exposure for farmers and decreased state support (Taylor, 2015).

Natarajan. et al., (2022), in their paper seeks to re-assess and review the SLF and its application in the 21st century. They propose to redevelop the livelihood approach

focusing to appraise its strengths, accept its weakness, and furnish the approach to be able to fit in the context of the 21st century. To fine-tune the approach that was developed to identify those needs that were relevant in the 1990s and bring about structural changes in the approach that can apply to both rural and urban and across different context of the globe.

Chambers and Conway (1991) defined livelihood as “*A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.*”

This definition further expanded the comprehension towards the conventional concept of poverty that was particularly specific to the economic measures. Since then, other factors such as resources, social, institutional, environmental, vulnerability and shocks as parameters have been incorporated in understanding the concept of poverty.

Scoones (1998), as found in Natarajan et al., (2022) quoted a definition of livelihood given by Chambers and Conway in their working paper (1992: 5, and see Chambers, 1995), “*A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a living is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.*”

Historical evolution of the SLF

Natarajan. et al., (2022), the Sustainable Livelihoods Framework (SLF) since its inception by the Department for International Development (DFID) in the 1999's as a tool for understanding the dynamics associated with community livelihoods and poverty have been a prominent supporter for academicians and community workers to understand livelihoods in the context of a rural community. The DFID used the SLF to come up with strategies and interventions as part of its poverty reduction program. Over time, other organizations, including the United Nations Development

Programme UNDP (2000), CARE (2002), and Oxfam (2005), adapted and modified the framework to fit different contexts to design policies and programs aimed at improving people's well-being.

Natarajan. et al., (2022), the concept of Sustainable Livelihoods (SL) is owed to the work of Chambers and Conway in 1992 on their publication of a working paper “Sustainable Rural Livelihoods: Practical Concepts for the 21st Century”, published by the Institute of Development Studies. The paper brought forward and depicted the earlier work World Commission on Environment and Development (WCED), and the outcome of the Brundtland report ‘Our common future’ (WCED, 1987). The Brundtland report lacked in clarifying and defining the concept and the perspective of livelihood and sustainable livelihood regardless that the terms were used in the report. UNDP Human Development Report (1990), was subservient in the foundation of the concept of sustainable livelihoods. However, both the reports did not provide clear definition of the concept of livelihood and sustainable livelihoods but they did incorporate two important elements i.e. a concern for sustainability and the notion of capabilities. From the late 1980s many concepts and elements that are core to development practices were contemplated in the SLA through organizations that are engaged in the field of development like the UNDP and commissions such as the WCED. Upon its linkage with the Brundtland report Chambers and Conway focused only on the social aspect of sustainable livelihood neglecting the environmental dimension. It was during the era of the 1990s that the Sustainable Livelihood Approach (SLA) transformed into Sustainable Livelihood Framework (SLF) when various development organizations both governmental and NGOs used the approach to develop strategies for their intervention.

Fig.1.1 Sustainable rural livelihoods: a framework for analysis (Scoones 1998)
(Source: redrawn from Scoones 1998: 4).

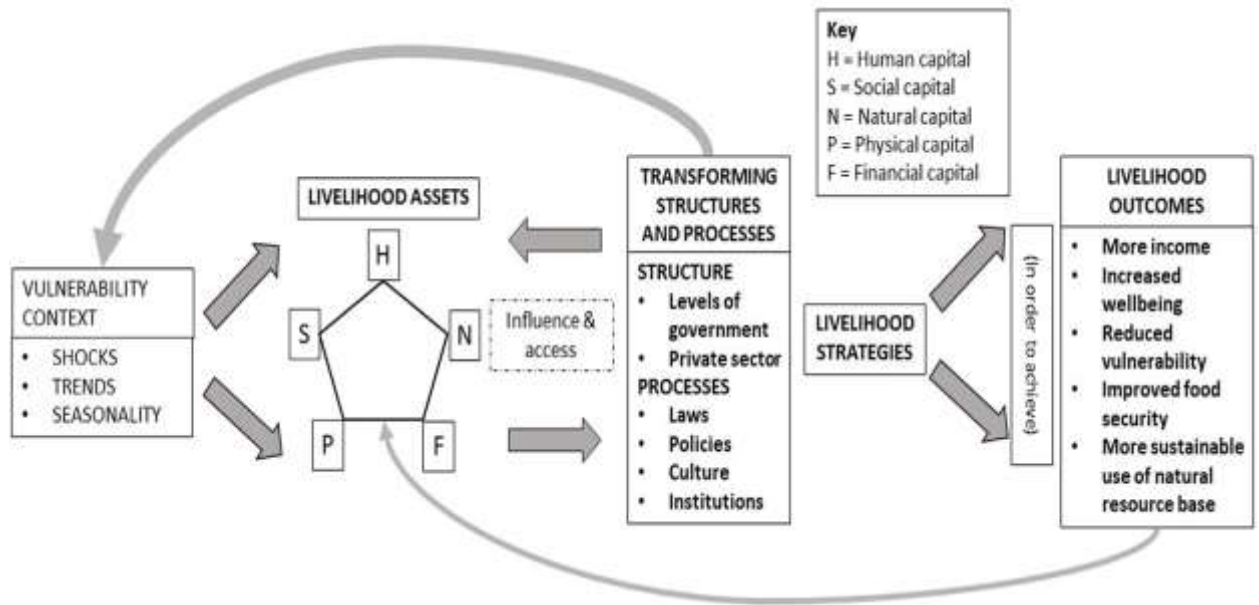
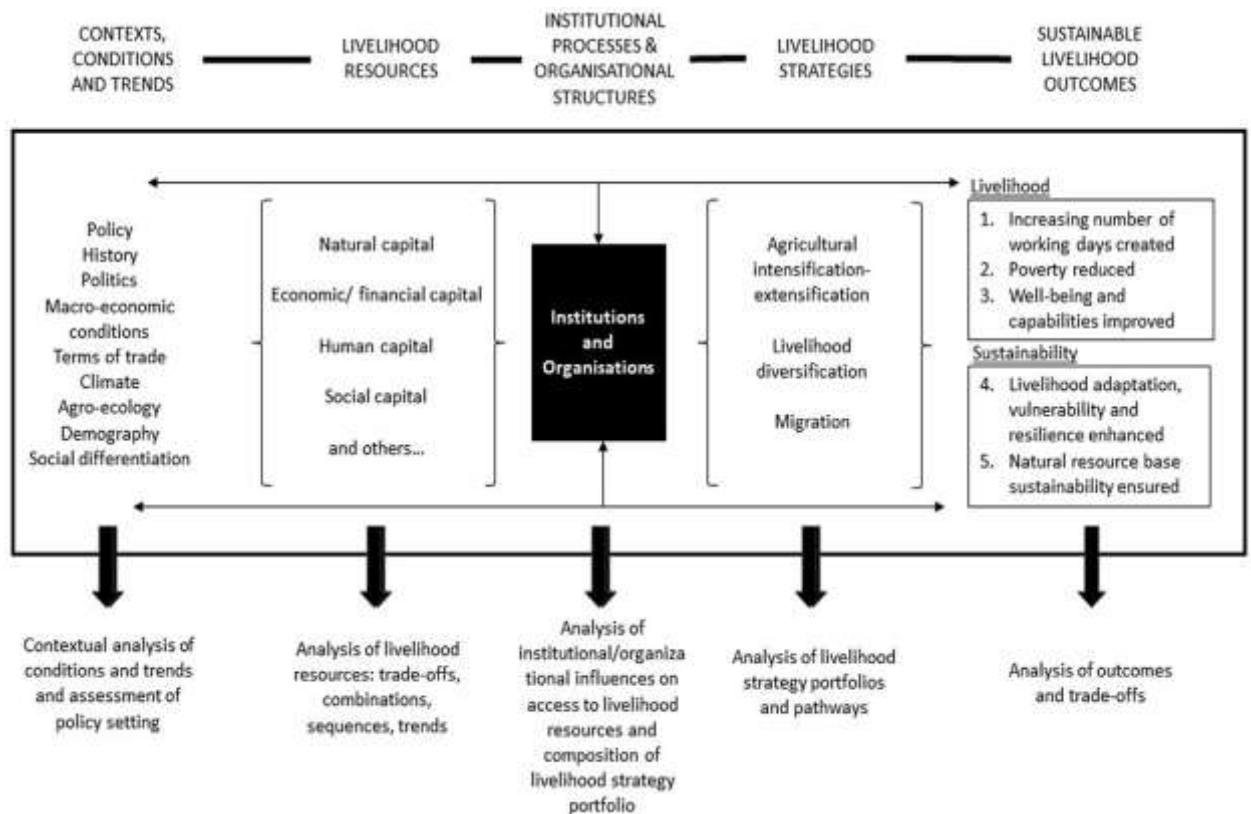


Fig. 1.2 The DFID Sustainable Livelihoods Framework (SLF) (Source: redrawn from DFID, 1999).



Objectives of the SLF

The overall goal of the SLF is to enhance sustainable livelihood practices of the people by understanding and examining the various internal and external factors that are positively and negatively influencing livelihoods practices of the people through promoting:

- a) improved access to high-quality education, information, technologies and training and better nutrition and health;
- b) a more supportive and cohesive social environment;
- c) more secure access to, and better management of, natural resources;
- d) better access to basic and facilitating infrastructure;
- e) more secure access to financial resources; and
- f) a policy and institutional environment that supports multiple livelihood strategies and promotes equitable access to competitive markets for all.

Core Elements of the Sustainable Livelihoods Framework (SLF)

The SLF helps in understanding community dynamics in the context of livelihood and factors influencing livelihoods and poverty. It facilitates to identify needs and priorities that are required for intervention and taking into account the interest of the stakeholders. The SLF is just a tool that helps in facilitating the ground work and gathering local knowledge that will be resourceful in the planning and formulation of development activities and not a remedy for the problems or issues. Its flexibility in nature allows the incorporation and integration of various tools and techniques that are instrumental in gathering knowledge in understanding the different dimensions or elements of the framework. The SLF creates a link of the different aspects of the ecology that are capable of generating influence on the outcome of the livelihood strategies. It seeks to understand people's access to various assets in relation to the adoption of the different forms of livelihood strategies and its influence on their livelihood outcomes and other institutions.

The livelihood framework identifies five core asset, categories or types of capital upon which livelihoods are built. Increasing access –which can take the form of ownership or the right to use –to these assets is a primary concern for DFID in its support of livelihoods and poverty elimination.

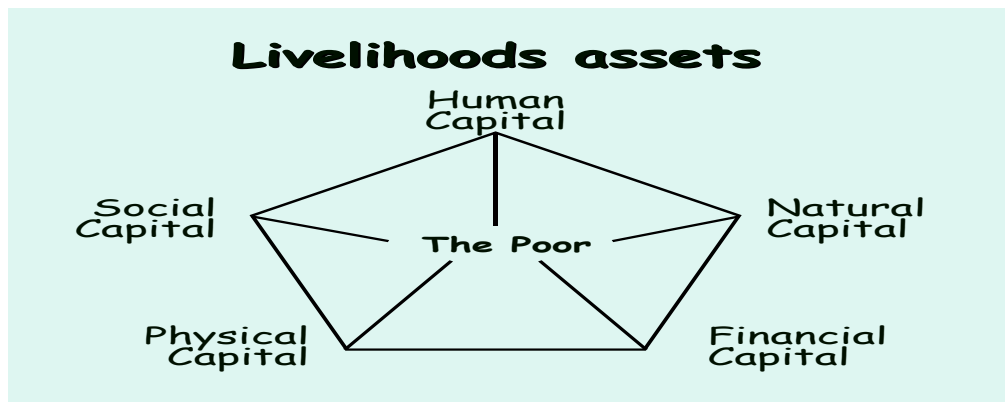
The SLF primarily focuses on people and people is the centre at which the framework revolves in understanding livelihood strategies and livelihood outcomes with reference to the influences of the various elements incorporated within the framework. The framework believes that the livelihood outcomes of the people are being influenced by their accessibility to various assets. Every asset has its own importance and capacity to influence over the people's livelihood outcomes.

a) Capital Assets:

The sustainable livelihoods framework helps to organize the factors that constrain or enhance livelihood opportunities and shows how they relate to one another. A central notion is that different households have different access livelihood assets, which the sustainable livelihood approach aims to expand. The livelihood assets, which the poor must often make trade-offs and choices about, comprise:

- i. **Human capital**, e.g., health, nutrition, education, knowledge and skills, capacity to work, capacity to adapt
- ii. **Social capital**, e.g., networks and connections (patronage, neighborhoods, kinship), relations of trust and mutual understanding and support, formal and informal groups, shared values and behaviors, common rules and sanctions, collective representation, mechanisms for participation in decision-making, leadership
- iii. **Natural capital**, e.g., land and produce, water and aquatic resources, trees and forest products, wildlife, wild foods and fibers, biodiversity, environmental services
- iv. **Physical capital**, e.g., infrastructure (transport, roads, vehicles, secure shelter and buildings, water supply and sanitation, energy, communications), tools and technology (tools and equipment for production, seed, fertilizer, pesticides, traditional technology)
- v. **Financial capital**,¹ e.g., savings, credit and debt (formal, informal), remittances, pensions, wages.

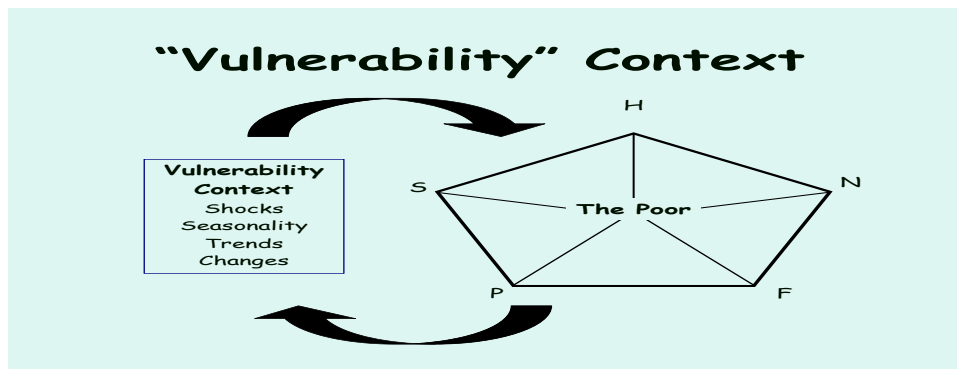
Figure 1.3 Livelihood Assets



b) Vulnerability Context:

Vulnerability context characterizes the exposure of the people to various forms of natural, social, economic, and political phenomenon that negatively affects the livelihood strategies and livelihood outcome of the people. These vulnerabilities can be of various nature and tempo that can have a short- or long-lasting impact on the people and individual and as a result it affects the overall well-being of the individual and the family. Vulnerability context helps us understand the dynamics of poverty experienced by the people. It is their ability to adapt and adjust or overcome vulnerability or adopt coping mechanisms that will determine the impact of vulnerability on the livelihood strategies and livelihood outcomes of the people. In the SLF, there are two dimensions in the vulnerability context of the people that are external factors; shocks, seasonality and critical trends, and the internal factor is the lack of coping mechanisms of the people to face the external shocks.

Figure 1.4 Vulnerability context

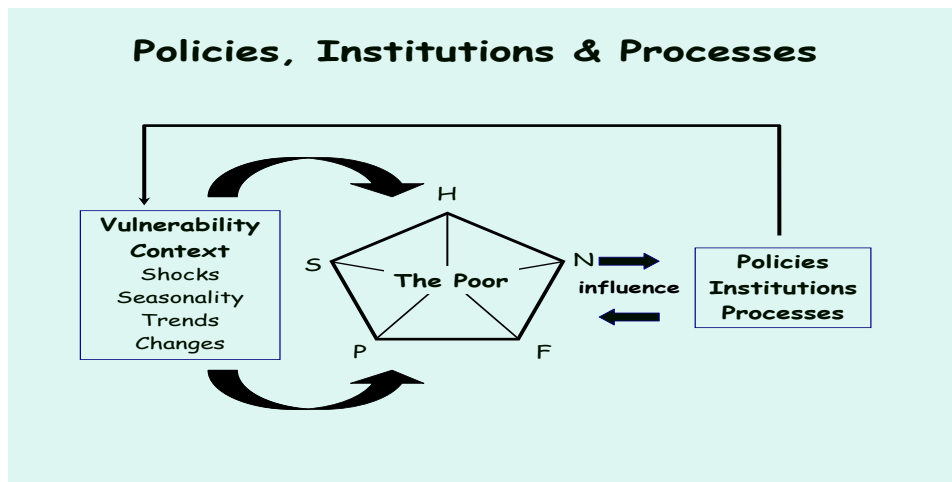


c) Policies and Institutions:

Apart from the livelihood assets and vulnerability context policies and institutions are also important elements capable of influencing the livelihood outcomes of the people. These are policies and institutions the processes of which can transform the vulnerability context of the people. The policies and institutions are implemented by structures and processes these comprises of public and private sector organizations that set and implement policy and legislation; deliver services; and purchase, trade, and perform all manner of other functions that affect livelihoods.

The Processes and structures are interrelated with each other, the processes such as laws, regulations, policies, operational arrangements, agreements, societal norms, and practices regulate the manner in which the structures such as government or non-government organizations and institutions will function. We can say that the processes cannot run or perform without a structure. The presence of the processes and structures can transform the life of the people and reduce vulnerability, the outcome of which can influence better life for the people.

Figure 1.5 Policies, Institutions and Processes



d) Livelihood Strategies and Outcomes:

Livelihood strategies and livelihood outcome are very much integral in the application of SLF. The former can be considered as a means and the latter as an income. Both are very much central and instrumental to the vision of the SLF facilitating the process to reduce poverty and usher sustainable livelihood practices that will result in; more income, increased well-being, reduced vulnerability, improved food security, more sustainable use of the natural resource base, and recovered human dignity.

Inherent Principles of the SLF

1. People Centered

It starts with an analysis of people's livelihoods and how these have been changing over time, fully involves people and respects their views, focuses on the impact of different policy and institutional arrangements upon people/households and upon the dimensions of poverty they define (rather than on resources or overall output per se). It stresses the importance of influencing these policies and institutional arrangements so they promote the agenda of the poor (a key step is political participation by poor people themselves), it works to support people to achieve their own livelihood goals.

2. Holistic

It is non-sectoral and applicable across geographical areas and social groups. It recognizes multiple influences on people, and seeks to understand the relationships between these influences and their joint impact upon livelihoods. It recognizes

multiple actors (from the private sector to national level ministries, from community-based organizations to newly emerging decentralized government bodies). It acknowledges the multiple livelihood strategies that people adopt to secure their livelihoods. It seeks to achieve multiple livelihood outcomes, to be determined and negotiated by people themselves.

3. Dynamic

The approach seeks to fit according to the nature of people's activity which is also changing over time. It tries to understand the changes that affects and influences changes in people's livelihood and proposes supportive intervention and in order to balance between the changing patterns of livelihoods. It examines and assesses the impact of both internal and external factors contributing to the livelihood vulnerability of the people. It stresses on analyzing the cause-and-effect relationship and series of critical events to understand the dynamics of livelihoods.

Building on strengths

The SLF in its nature of operation gives core importance to the strength rather than needs of the community. It stresses upon the capabilities of everyone how they make accessible of the various assets and adopt coping mechanisms to reduce poverty and vulnerability. By focusing on the potential of the people or the individual it supports to remove obstacles that are hindering the people to achieve their potential. Thus, making people more resilient to the different form of vulnerabilities.

Macro-micro links

The SLF creates a linkage between macro-micro processes influencing the dynamics of livelihoods of the people. It proposes and supports the 'Bottoms-up Approach' in the process of policy formulation, development and planning by appraising local knowledge so that the process fit in the micro context. This will ensure the essence of development as the key stakeholders are part of the development process rather than mere receivers.

Sustainability

The notion of 'Sustainability' is central to the operation of the SLF. The framework advocates for the different dimensions of sustainability.

Implications of the SLF

The SLF is a flexible approach and tool that is very effective in the process of its application in development studies and in understanding the livelihood dynamics of the community in development practice. Its inclusive nature helps the development practitioners to have a multi-dimensional outlook towards livelihood issues and incorporate various other elements of different schemes and nature that could contribute to livelihood sustainability. It cuts across different sectors in the process of discovery of new methods and strategies in the process of attaining its goal. It examines the various elements of the ecology and the environment in the process to derive a context specific approach to appraise local perspective for its reflection on the framework.

1.9 Statement of the Problem

The study aims at examining the role of ecotourism in promotion of rural livelihood in areas of eco-tourist hotspots in selected villages in two blocks (Pynursla and Shella Bholaganj) East Khasi Hills District, Meghalaya. The rich cultural heritage, natural beauty and biodiversity of the Meghalaya are worth conducting a study. There are numerous natural beauties of Meghalaya known worldwide and there are studies conducted in identifying the potentials of ecotourism for improving rural livelihood in Meghalaya (Tarafder, 2017; Bera, 2015; Samantsinghar, 2012; Laloo et al., 2007). Prior to the inception of the tourism industry of tourism activities in the state of Meghalaya the concept of tourism was best understood in terms of recreational activities and visit to places that are of scenic beauty which are now ecotourism hotspots. In those days people did not realise the potential and benefit of the tourism and its impact on the local economy people by nature were very hospitable and are welcoming for both domestic and outside visitors. It could be said that Meghalaya was first known to the rest of the country for being the wettest place on earth and has its name on the Book of Guinness of World Record receiving an average rainfall of 11,871 mm (467.4 inches) annually.

The onset and development of ecotourism in Meghalaya is at its infancy stage, it was very recent that the concept of ecotourism has paved way in the context of tourism practices in Meghalaya. The impact and economic opportunities of ecotourism in

other areas has led to exploration of the unexplored ecotourism potentials in rural Meghalaya. Even with the growth of ecotourism, agriculture is still the dominant livelihood practice and income generation among the locals in rural Meghalaya. In spite of the copious literature on ecotourism in India, there are very scarce studies that have been conducted in the context of Meghalaya. Most of the studies conducted in the northeast region were from an etic perspective, there is a scope for study from an emic perspective. There are very few or no studies from macro social work perspective in the area of ecotourism emphasizing on livelihood and community development. There are very few studies conducted on Impact of Ecotourism on traditional livelihood at the international and national level and very scarce in the context of Meghalaya. There are limited studies on ecotourism as a strategy for poverty alleviation and community development programme even with the potentials of ecotourism to generate income and supporting national and state policies. Ecotourism also has the potential to not only generate income but also to conserve traditional cultural heritage and practices. With women folks also constituting a large proportion of the workforce in the state in both urban and rural settings it would be useful to examine the role of ecotourism in the process of social and economic empowerment of rural women. Very rare studies conducted on ecotourism and rural livelihood in NE India and Meghalaya, ecotourism studies conducted in NE India were mostly focused on environment and biodiversity. The present study will be the first of its kind that focused on ecotourism and its influence on rural livelihood from a macro social work perspective in Meghalaya.

1.10 Objectives of the Study

- i. To understand the socio-economic and structural basis of rural households engaging in ecotourism.
- ii. To examine the vulnerability context of the villages where ecotourism activities are undertaken.
- iii. To assess the influence of the ecotourism on the livelihood assets of the households.
- iv. To identify the pattern of utilization of ecotourism by the households.

- v. To probe into the livelihood outcomes of rural households from ecotourism activities.
- vi. To understand the social dynamics of ecotourism on rural livelihood from the peoples lived experiences.

1.11 Chapter Scheme

The present study is organised into various chapter each having its own essence and significance to portray.

Chapter I sets the stage for the research by outlining the context, background, and significance of the study. It introduces the research problem, states the main objectives, and presents the research questions or hypotheses. This chapter also provides an overview of the theoretical framework, the scope and limitations of the study, and a brief outline of the structure of the thesis.

The second chapter synthesizes previous findings, providing a comprehensive background that situates the current research within the broader academic discourse. By evaluating and contrasting different perspectives, the literature review establishes the theoretical and empirical foundation for the study, demonstrating how the new research will contribute to and expand the existing body of knowledge.

The third chapter is a blueprint of the entire thesis and it provides details of the design, methods adopted, procedures used to conduct the study. It is a very important component of any research as it describes the data collection techniques and tools that is used to meet the objectives of the research.

Chapter IV provides a detailed description of the profile and background setting where the research study is conducted. It also identifies the vulnerability context which are unpredictable events and its implications on the livelihood practices of local member of a community.

The fifth chapter provides a detailed overview of the demographic, economic, and social characteristics of the respondents in the present study. It allows the researcher

to have a comprehensive understanding of the respondents and the influence of the variables on the different aspects of the respondents.

Chapter VI focuses on the relationship of rural livelihood and ecotourism and the outcomes that are derived through ecotourism practices in the community. It examines the contribution of ecotourism on employment, economic growth, and welfare of local communities.

Chapter VII focuses on the interplay of ecotourism with other elements in the community that can influence directly or indirectly on the ecotourism activities in the community. This chapter also portrays the lived experiences of the members of the rural households through in-depth case studies.

The last Chapter VIII provides an integration of the various findings of the objectives of the study and offers conclusion to the study along with suggestions.

The present chapter as a preliminary of the study has provided a glimpse of the background of ecotourism in the context of the state of Meghalaya. The following chapter is a review of the various studies that have been conducted and undertaken in the domain of ecotourism. The chapter would provide a critical review on the literature related to ecotourism and rural livelihood practice.

CHAPTER II

REVIEW OF LITERATURE

The previous Chapter introduced the conceptual framework of the study, along with statement of the problem and objectives of the study. The goal of any research study is to have a very comprehensive and detail knowledge of the subject matter being chosen to be studied or investigated. Review of literature helps to understand the theoretical background and empirical dimensions of the research problem. It also helps in identifying the substantive, theoretical, methodological, conceptual, and operational gaps in literature. Review of literature helps in identifying substantive, theoretical, methodological, conceptual issues and addressing them appropriately in the context of the present study. Hence, in this chapter a critical review of available studies on ecotourism and rural livelihood is presented thematically.

2.1 Studies on Ecotourism

The historical evolution of ecotourism can be traced back to the mid twentieth century because of the growth of mass tourism and environmental concerns. Therefore, the quest to understand ecotourism must consider in understanding the relationship between tourism practices and the environment. There have been many authors and writer who have attempted to describe the history of ecotourism. Most prominent amongst them were Lindberg and McKercher (1997) and Fennel (1999) who were the pioneers in tracing the history of ecotourism in the twentieth century with their primary focus on the growth of the tourism industry and interest on the natural environment (Dowling, 2013).

The term ecotourism was first officially used by Ceballos-Lascurain (1987), who defined it as: ‘travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas’ (Weaver, 2001).

Chandel., A. & S., Mishra. (2016), conducted a content analysis of the various definitions of ecotourism and have come up with various themes derived from the various range of definitions of ecotourism. The themes developed from the content analysis incorporates that ecotourism involves; tourism practices and visitors that are oriented with nature, ecotourism destinations are characterized with very minimum human activities that might affect the fragility of the ecology, fostering and encouraging conservation of the biodiversity and mitigating human impact on the environment, contributes to learning and education of the various elements involved in ecotourism practices, ecotourism influences social and economic benefits to host communities and employment opportunities for rural households, ecotourism fosters honouring and being sensitive to local cultures and traditions of the host communities, it facilitates active and collective participation of local community members that are important stakeholders in the process of ecotourism practices, approaches to ecotourism practices should be carried out in such a manner that the outcomes do not negatively affect ecotourism destinations, optimum utilization of the natural resources in an eco-friendly manner and contributing to sustainability of the ecology, incorporate policies and guidelines for tourists and visitors to develop and imbibe environment friendly and responsible tourism, appreciating and appraising the rich biodiversity of both flora and fauna, absence of destruction or disrupting the rich biodiversity, involves ecotourism practices that offers services to low number of visitors, ecotourism practices that are centric to local communities, and fostering spirit of volunteerism among local communities and visitors for conservation efforts and socio-economic well-being of local communities.

Samal and Dash (2023), carried out a review of literature in the study of ecotourism to understand the prospects and research gaps for future research in the field of ecotourism. The study reviewed various research paper on ecotourism that was published between the years 2002 – 2021. The findings from the study revealed that while there are variations in the number of research publication in the field of ecotourism yet there is an increasing trend in research conducted in the field of ecotourism between 2002 – 2021. It was also found that majority of the research studies were conducted in the second world countries and findings from these

showed that most of the context with which the studies on ecotourism was conducted faced challenges in resource management. The most common themes that were focused in these studies in relation to ecotourism are natural resource management and livelihood. Very few studies incorporated good governance, role of tour guides, and the impact of psychological, technical, and political factors in the context of ecotourism. It was also highlighted that studies on critical issues such as climate change, carbon footprints, and biodiversity in relation to ecotourism were very scarce. Future studies and research in the field of ecotourism can also focus on community-based ecotourism and capacity building for ecotourism stakeholders to provide more knowledge and literature in other related aspects of ecotourism.

Vaja (2021) documented a paper to understand the concept of ecotourism and the various strategies adopted by the tourism department in the implementation of ecotourism practices in the context of Thenmala ecotourism destination in Kerela. The paper was based on the findings collected through secondary literature and ecotourism in Kerela was found to encompass a variety of elements such as cultural, adventure, leisure, recreational, and children's eco-park. Ecotourism has been the key factor for the growth of the tourism industry in Kerela. Ecotourism in the context of Kerela integrates diffusion and preservation of culture and heritage and fosters the growth of village economy. The practice of ecotourism adopted strategies that are in tune with the cultural and environmental context of Kerela. In the process of promoting ecotourism in Kerela the Tourism Department adopts various forms of marketing strategies that are deemed to be suitable and effective in capturing the attraction of service users across India and in different context of various countries in the world by using the various forms of print, electronic, and digital media to reach the audience.

Kumari (2021), mentioned in her article that as per the data received from the report of 'The World Travel and Tourism Council' India has generated approximately 16.91 lakh crore which contributed to 9.2% of India's GDP in 2018. With the evolving trend in the tourism industry according to the assessment of the report there would be a growth of 6.9% of the tourism industry that would contribute to 32.05 Lakhs crore from the year 2028. It is assumed that the growth of sustainable tourism on the same

line as responsible tourism provides opportunities for both social and economic development keeping in mind the need for protection and conservation of the natural environment. The tourism industry is regarded by the authority as one of the sectors providing livelihood opportunities fostering economic growth. With the present trend of the tourism industry, environment-friendly tourism is seen as to be more sustainable in the long run. Ecotourism provides both the needs of economic and livelihood benefits of the indigenous communities with principle focus of conservation and protection of the natural resources.

Butler (2018) as found in Samal and Dash (2023), provide certain critical viewpoint on ecotourism on the aspect that of the onset and trend of growth and increasing preference of ecotourism as an alternate form of tourism over mass tourism. He argued that while many consider ecotourists as perfect synchronization with the practice of ecotourism that is ecofriendly and visit to remote tourism destination areas that are least visited by people. This might be overlooked and mere categorization without in depth understanding of the phenomenon can lead to misinterpretation. Hence, the author opined that there is a need for empirical examination and assessment to understand the efforts and inputs and the benefits that derives from nature-based travelling to sensitive areas rather than making conclusions based on mere categorizations influenced by the trends of a phenomenon.

According to Beaumont (1998) as found in Dowling (2013), argued that the concept and the terminology of ecotourism may have been explored recently during the mid twentieth century but the practices of ecotourism has been in existence as old as in the 18th centuries referring to the exploration of early geographers, establishment of the Yellowstone in 1872 in the United States and the Banff in Canada in 1885 as evidences of much earlier practices and interest in nature tourism.

Diamantis (2010), in his analysis on the evolution and trends of ecotourism projected that ecotourism is conceptualized based on three important components; natural-based, educational and sustainability inclusive of both social and economic. It was argued that ecotourism could earn more reliability in the tourism industry if the

different stakeholders are able to avoid overmarketing of its products and ensure sustainable use of the natural resources. The author concluded that ecotourism is still evolving in its practices and that there is a wider scope for research in ecotourism in the future.

Subramaniam (2008), highlighted the platform provided by ecotourism to be inclusive for the marginalized and the rural communities to be part in getting access for economic growth and benefits. Furthermore, he stressed on the importance to integrate and appreciate indigenous knowledge and practices and contextualizing ecotourism practices.

2.2 Studies on Tourism and Ecotourism in North East India

Verma (2024), while discussing on the practice of ecotourism in Northeast India highlighted that the northeastern states of India have abundant resources that cater to the development of tourism activities in the region. The northeastern region possesses rich biodiversity comprising of flora and fauna, natural vegetation like forests, endemic plant and animal species, beautiful waterbodies and its natural beauty make it attractive for nature lovers to adventure and capture the mesmerizing beauty of the different states in the region. The region is also home to places that are of religious importance for followers and faithful of diverse religion allowing tourists for religious pilgrimage to visit and explore the rich religious heritage of the region; home to diverse cultures among the many tribal and non-tribal communities that reside in the region. The diversity in culture also offers various forms of local festivals that attract tourists across the country and cross the globe to visit the region to experience the different cultural fabric. The most prominent among the local festivals that is intertwined with the local culture is the Hornbill Festival of the Naga tribal community. The uneven distribution of the natural topography of the region also offers the scope for the emerging trend of adventure sports and tourism in the region. At the same time, the author also discussed on the problems and challenges of ecotourism in the region pointing out various factors that are hindering ecotourism development. The paper reflects that the deficiency of physical infrastructure minimum basic services in the region particularly in ecotourism destinations could

not fully cater to the needs of the visiting tourists. The local population in the region are not inclined towards undertaking entrepreneurship activities to maximise their benefit from tourism activities in the region and are more contented with the simple business undertaking with no interest in entrepreneurship. Limited research studies in the field of ecotourism in the region have not been able to generate enough knowledge to sensitize the local communities about the potentials of ecotourism to bring about social and economic benefits at the micro and macro level for the local communities and the region overall. Another challenge for ecotourism development in the region is the limited participation of local communities in the ecotourism development process undertaken by state government and other government agencies. Creating awareness and sensitizing the local community about ecotourism, utilization of natural resources and avoid the implementation of man-made innovations and materials as much as possible, imbibing cultural elements is very crucial in paving a way for sustainable ecotourism development in the region. Research undertaking in the field of ecotourism particularly in the context of northeast India to have a deeper understanding broader knowledge on the concept and practice of ecotourism and the tourism industry so that it contributes to knowledge building among the local communities on tourism, hospitality, consumer satisfaction, services, income generation, and biodiversity conservation.

Priya and Dhiren (2016) as found in Kalyan et al., (2023), while attempting to explore the scope for ecotourism in northeast India has given a brief account of the contextual potentials of the different states of northeast region and their scope for their engagement in sustainable ecotourism. The paper projected an overview of Assam, Arunachal Pradesh, Manipur, Mizoram, Meghalaya, Tripura, Sikkim, and Nagaland are the eight states of the region that are blessed with eye-catching and picturesque landscape, rich natural resources and biodiversity, favourable climatic conditions, unique cultural heritage, and local cuisine that are sources of attraction for tourist to visit the region and at the same time uplift the growth of ecotourism in the region. The region's geographical location provides for uneven topography in the region that offers various forms of tourism activities like; religious tourism in the form of pilgrimage for different religion, adventure tourism such as trekking,

mountaineering, water sports, cultural tourism for local indigenous festivals, nature lovers, bag packers, educational tourism, etc. However, apart from this positive aspect that the region possesses, from an etic perspective there are certain deficiencies that needs to be investigated which are essential to supplement ecotourism in the region; connectivity, insecurity, and geographical isolation that could affect ecotourism in the region.

Kalyan et al., (2023) cited (Phukon et. al., 2020), identified and highlighted some of the prominent tourist destinations that among the states in northeast India. The state of Assam is mostly favoured for visit by tourists due to the availability of basic tourist services such as easier accessibility to conveyances and better connectivity. While the state of Nagaland stands out to be the state that the tourists does not favour much for visitation. The state of Meghalaya is home to some of the famous tourism destinations in the region with Mawlynnong village known for its cleanliness and was recognised as one of the cleanest in Asia and at the same time another village in Meghalaya located in Ri-Bhoi district namely Umden is famous for the practice of sericulture and silk production and its lush green scenery. The Majuli island in Assam is well known for its geographical importance as the largest riverine island in India which attracts tourists from across the country and another village in Assam Namphake is a unique place of interest for the tourists as it is home to the Tai-phake tribe whose culture and dialect very much resembles with the culture of the community in Thailand, its beautiful scenery is a perfect blend for ecotourism. The Toupheima village in Nagaland offers tourists a unique glimpse and pure village experience and cultural uniqueness of the tribal rural Naga community.

Karmakar (2023) as reflected by Kalyan et al., (2023), discussed the various forms of tourism and ecotourism practices that are evident in the north eastern states of India. It was pointed out that the Loktak lake which is the only floating national park in the world is one of the ecotourism destinations in Manipur that is a habitat to some flora and aquatic species is not just a source for ecotourism destinations but also a source of livelihood for fishermen community dependent on the lake for their economic engagements. Dzongu village in Sikkim is a home to the Lepcha tribal community

where tourist across the country flock to this location to enjoy its natural beauty, glacial rivulets, hot springs and waterfall and learn about the rich cultural heritage and historical importance of the Lepcha community. In terms of biodiversity, the Manas National Park lures tourists across the country and from different parts of the globe to witness the rich biodiversity and whereas Kaziranga National Park which is among the world heritage is also home to the world's unique animal species like the one-horned rhinoceros, and the Nameri National Park of Assam is an amalgamation for nature lovers particularly bird species and biodiversity for educators and bird enthusiasts. Other than the tourism sector, the northeastern region is also famous for its unique products and handicrafts of its village industries that are closely tied with essence of the local culture among the different communities in the region; different forms of bamboo products that are part of the traditional heritage among different communities in the region, Lashingphee of Manipur, Carpets of Arunachal Pradesh, Muga products of Assam, and Shawls of Mizoram are examples of some unique products.

Joshi & Dhyani (2009) as mentioned Kalyan (2023), discussed the status of ecotourism among the northeastern states of Sikkim, Arunachal Pradesh, Nagaland and Tripura and the presence of rich flora-fauna and rich biodiversity that allows ecotourism practices in these locations. To be more specific as discussed by the author in the paper, in the context of Nagaland the Khonoma village is a good example of conservation practices that has eventually contributed for the village to be tagged as a 'green village' and the conservation efforts is being supplemented by the establishment of Khonoma Nature Conservation and Tragopan Sanctuary in 1998 to further strengthen and sustain conservation efforts. The green and uneven topography of the Yuksom village in Sikkim is very favourable and attracts adventure tourists for hiking and trekking activities. In Arunachal Pradesh, the Thembang village in West Kameng district there is a beautiful ancient village that is being conserved through community-based ecotourism practices and the Ziro Valley in Arunachal due to its beautiful natural surrounding is known for attracting tourists for trekking activities. The Talley Wildlife Sanctuary in Arunachal is home to many inimitable and rare plant and animal species.

Kalyan (2023) conducted a SWOT analysis to assess tourism and ecotourism activities in the context of the northeastern states. The outcome of the analysis was categorised on the basis of Strength, Weaknesses, Opportunities and Threats that are relevant in the context of tourism and ecotourism among the different states of northeast India. The strengths were reflected through elements such as historical importance of tourism destinations, rich cultural heritage, local communities, policy, biodiversity, natural beauty, favourable climatic conditions, hospitability, youth, local products and handicrafts and village industries. The weaknesses found were poor connectivity and transportation, lack of marketing awareness and promotion, lack of entrepreneurship, deficiency in professional services, and lack of public-private networking. The opportunities showed rich biodiversity and natural resources that can be utilized for ecological sustainability, large rural areas that can be used to promote ecotourism, to assess opportunities in rural areas for rural inventions to improve livelihoods, services, and productivity, to boost ecotourism with special reference to northeast India, scope for more ecotourism development and expansion as there are many unmapped potentials of ecotourism destinations in rural areas, to promote and encourage entrepreneurship among rural youth and capacity building programme for professional services in hospitality, and to pave way for tourism development through international networking. The threats found were the presence of insurgency, frequent incidents of ethnic clashes, large population living under poverty or economically low, and extortions may hamper the process and opportunities for ecotourism development.

Deb and Rout (2023) conducted a study to examine the attitude of local residents towards ecotourism in Reiek, Mizoram. In this study 187 respondents from Reiek were randomly selected for the purpose of the survey by administering structured questionnaire and adopted a descriptive and inferential analysis to bring out results from the study. The results showed that the respondents in the study showed positive outlook towards ecotourism in Reiek, Mizoram. However, to be more specific the inferences from the study showed that there was a gender difference in the attitudes of respondents towards ecotourism in Reiek. Here, the female respondents above 30 years showed more positive and supportive attitude towards ecotourism in Reiek as

compared to the male respondents that are below 30 years. Furthermore, the results from the study reflected that the respondent's attitude towards ecotourism varied according to their occupational background. The study concluded that the findings from the study would be very useful for concerned authorities to understand people's perspective by involving and engaging local communities in the process of formulating programmes and policies for ecotourism development.

Yan et al., (2017), as found in Deb and Rout (2023), stated that the state of Mizoram in northeast India despite of having rich natural resources, biodiversity, cultural and traditional practices yet its potential is being undermined and untapped. Even in the context of ecotourism in Mizoram, its potential is being undervalued and ecotourism potential destinations remains unexplored and research studies for ecotourism have been rarely conducted.

Upriy (2015), Ecotourism in North East India: With special reference to Sikkim Himalaya. The article emphasizes that tourism potential of the Northeast has not been fully exploited. The rich flora-fauna and biodiversity of the region needs to be tapped as tourism can usher socio-economic and infrastructural development in north east India. With reference to Sikkim, it needs to exploit its tourism policy to the fullest for rejuvenating its economy. The Look-East policy has not created any impact in the North east region. The Look east policy can bring about development in the region like road, rail and air connectivity, communication, and trade.

Meena and Das (2012) attempted to examine the potential of Tripura, north-east India as an ecotourism destination. Few ecotourism spots in Tripura have been chosen to find out the main attractions. The study found out that with the withdrawal of the policy imposing restrictions on foreigner to visit Tripura in 1995, there has been an increase in the number of tourists visiting Tripura. Other findings in the study revealed that the absence of militancy in the region is also one of the factors contributing to the inflow of tourists in Tripura. The study has identified that Tripura has the potential of being one of the big ecotourism destinations in northeast India and that the tourism industry could be used as a strategy to create employment and

improve the socio-economic status of the people in general and particularly the indigenous.

Gogoi & Bora (2009) studied on sustainable ecotourism, Kaziranga national park, Assam, emphasizing on in-depth study of the existing rich biodiversity in Kaziranga National Park (KNP), Assam, entrepreneurial activities at the tourist spot and tourists satisfaction. The findings in the study revealed that there are very limited government facilities in the park. Most of the enterprises in the park are owned by private sector and are seasonal in nature mostly from November to April. It was found that the prices of commodities are higher than the market value. The level of tourist satisfaction with the activities and facilities in the park is medium.

2.3 Studies on Ecotourism in Meghalaya

Lyngdoh (2022), provided an overview of tourism development in Meghalaya and discussing tourism development in Meghalaya into various stages. In this study the author mentioned that the roots and history of tourism in Meghalaya can be traced back to the era of the British colonial rule. Shillong once being the capital of Assam was also influenced with tourism development since the late 1970s. The root or origin of tourism development in Meghalaya started from Sohra (Cherrapunjee) from which was famous and world known for being the wettest place on earth receiving heavy rainfall during the monsoons. Visitors from different places across the country and foreign nationals visited Sohra and the host communities was very hospitable to the visitors which paved way for tourism practices. At the same time, the scenic beauty and biodiversity attracted local population from Shillong to visit Sohra which led to the initiation of picnic spots for the local tourists. The second stage in tourism development in Meghalaya can be traced back to the onset of the millennium from the year's 2000 - 2012 where hotels started to flourish and the state tourism department was central in promoting tourism that attracted tourists from Assam and West Bengal were the primary guests who were attracted to experience the scenic beauty, climate and weather, and the landscape of Sohra influencing hotel development at Sohra and Shillong which is the centre for the visiting tourists. The lift in tourism development in other parts of Meghalaya was further catalyzed with the

tourism development in Mawlynnong known as the cleanest village in Asia by the 'Discover India Magazine' in 2003 resulting in the increase of tourist's influx from across the country and worldwide. In due time, many local commercial enterprises were initiated by the host communities in providing services like food, lodging, petty shops, souvenir stalls etc., to cater to the need and requirements of the visiting tourists. The development of tourism has influenced various infrastructural development in tourist destinations. The last stage of tourism development as categorized by the author is the 'take-off' stage from the year 2015 onwards. In this stage tourism development have not only concentrated in Sohra and Mawlynnong but also outspread to other villages and region that offers ecotourism pleasure to visitors. This tourism development has not only affected the communities that offers tourism activities but also influenced the development of local businesses on adjoining villages and communities nearby the tourist destinations.

Peinlang (2019), augmented that the of rich biodiversity that the nature has endowed Meghalaya serves as a potential for fostering the growth of ecotourism or alternative tourism in the state of Meghalaya. He also identified that the rich natural resources and biodiversity that Meghalaya possesses could also foster other typologies of the tourism industry apart from ecotourism such as adventure tourism, cultural tourism, agricultural tourism, and educational tourism. However, the author also stressed that while Meghalaya has a great potential for ecotourism, at the same time, there are also certain hindrances that needs to be looked into and addressed so that ecotourism and other nature of tourism activities are sustainable; resources at the tourist destinations should be undisturbed and monitor non-exhaustive utilization of the ecotourism places, local communities are to actively participate in the process to promote cultural tourism, tourism development in the state should encourage control and management of resources by the local communities, and the seasonality nature of tourism requires different forms of tourism products that are well suited for all types of visitors throughout the year.

Khyriem (2018), in his review on the impact of tourism on the economic development of Meghalaya revealed that tourism activities in Meghalaya has created opportunities for employment generation in different sectors for the local communities in terms of both professional service delivery, skilled and unskilled labour, tourism has also contributed as a source of income and revenue for the state government through direct contribution from taxes levied on enterprises and business earned from tourism activities in the state and through indirect contribution from taxes levied on goods and services, tourism has also influenced and put pressure on the state government to upgrade and keep up with infrastructural development to cater to the needs of visiting tourists in the state in order to contribute towards sustainable tourism practices, and lastly the presence of tourism activities in rural and remote communities have also contributed to socio-economic development of the local communities catering to improving the village economy of the and local industries through production of local products. In conclusion the study few suggestions that are crucial for sustainable tourism development for the state of Meghalaya; the need for a robust tourism policy for regulating tourism activities in the state to ensure equality among various stake holders involved in tourism, the role of the government to facilitate tourism activities in the state, the need to support local communities with development and maintenance of infrastructure, to catalyze unexplored tourism destinations to boost tourism development in the state, ensuring safety and security to visiting tourists, paving way for other forms and scope of tourism typologies, to be more environment conscious and encouraging responsible tourism, and the state government should regulate tourist transportation vehicles from other states so as to provide more employment opportunities for the locals.

Bera (2015), carried out a study on Tourism Potentiality in Shillong and Its Surroundings. The study focused on potentiality of tourism, places of tourist attraction, constraints of Tourism, current status of tourism and future development of tourism in Shillong. The study has identified that Shillong and its surroundings has numerous places of tourist attraction like, historical places and remains from the colonial period, waterfalls, lakes, caves, museum and the Cathedral church. Some constrains identified in the study was the agitation of NGOs in Shillong against

influx, improper waste management in the parks, lack of public drinking water facility, conflict between tourist spots and promotion agencies, and no steps from the government and municipality to promote tourism or tackle these hindrances.

Nayak & Mishra (2013), in their article on 'Problems and Prospects of Promoting Tourism in Meghalaya' conducted a SWOT analysis on the tourism activities practised in Meghalaya. Under the various themes of the SWOT analysis, the authors derived several findings based on the themes of the analysis. The results shows that the rich natural resources, biodiversity, and the natural beauty of different forms that Meghalaya possesses holds as the strength for ecotourism development in the state of Meghalaya. There are also several challenges and hindrances identified in the tourism practices such as; transport and communication, public amenities to cater to the basic needs of the visitors or tourists, state policies preventing outsiders particularly non-tribals to setup enterprises in Meghalaya, social unrest and insurgency are some of the challenges for tourism development in Meghalaya. The intervention of Asian Development Bank in infrastructure development to boost tourism development with neighbouring Asian countries with northeast India, and special packages of the central and state government for tourism development for Meghalaya serves as opportunities for facilitating tourism development in Meghalaya. Regular social unrest in the northeast region, issue of influx of outsiders into Meghalaya, over utilization of natural resources, and political instability are seen as threats to tourism development in Meghalaya.

Samantsinghar (2012) conducted a case study of Mawlynnong, Meghalaya focusing on strength of rural institutions and their role in delivering sustainable livelihoods while protecting the natural environment using Sustainable Livelihoods Approach (SLA). It was found in the study that cleanliness, proper waste management, beautiful natural scenic views and the living-root bridge are the factors attracting tourists to visit the village. The village is also branded as one of the cleanest village in Asia. The huge inflow of tourist to the village created job opportunities through ecotourism related activities and its proper waste management strategy help conserve and protect the natural environment. The study found out that effective integration of

traditional authority structure in the Govt. delivery system has provided a stable platform for sustainable waste management and cleanliness.

Laloo et al., (2007), focused in involving local communities in the planning process to receive just benefits from tourism activities. The study examined and identified the potentiality of cultural and eco-tourism in the states of N.E India like tribal culture,eco-villages, palaces and temples, Buddhist culture, traditional crafts, museums and village cultural centres. However, some constrains were also identified like lack of infrastructural development, rigid laws and policies that discourages outsiders to come, accommodation, advertising, marketing and networking. Steps should be taken in order to make the above activity/industry into a sustainable one.

Pyngrope (2010), conducted a study aimed at identifying the potentials of ecotourism around Shella, Meghalaya. The findings in the study shows that the area has fascinating landforms Geomorphic features like waterfalls, isolated hillocks, plunge pools, springs, and karst features like caves, stalactites, stalagmites, potholes etc. that would attract nature lovers in capturing and admiring its beauty in its wilderness. These features of attraction can help in developing Shella as a potential site for ecotourism. The study also revealed that the adjoining areas to Shella also possess numerous natural beauties like, Natural Park, caves, waterfalls, natural picnic spot, and undisturbed natural remnants of historical phenomena and events.

2.4 Studies on Ecotourism and Rural Livelihoods

Tiwari et al., (2021), conducted a study to assess the potential of ecotourism development as an approach to acclimatize in relation to climate change and improve rural livelihood in Bageshwer and Pithoragarh district of Uttarakhand. The outcomes from the study found that ecotourism development as an approach to climate change and rural livelihood requires active and cooperative participation of important stakeholders in the entire process. It is also important that involvement of the key stakeholders at various levels in the development process is of grave importance to ensure the positive outcome at the grass root level. The authors also opined that capacity building activities and programmes are essential to be conducted from time

to time to enhance skill development and facilitate the process of ecotourism development. Strategies adopted should target to create a positive impact and outcome on key stakeholders that are socially and economically backward or poor and vulnerable sections living in rural areas. As a result of ecotourism development and the benefits that it brings in enhancing the welfare and well-being of the host community it would create a sense of awareness and realization among the host community the importance to inculcate and practice habits and actions that contributes to protection and conservation of the environment and biodiversity. Thus, in conclusion, it was also suggested that mass media, writers and authors can also play a very important role as a catalyst in facilitating ecotourism development among the host community and key stakeholders

Singh (2021), while examining the benefits of ecotourism as an alternative form of tourism on the host community and the ecology found out that ecotourism has created some positive outcomes for the rural households, community, and the environment. Ecotourism being nature-based its resources are being utilized as a means for seizing employment opportunities for the members of the host communities. Apart from the social and economic benefits garnered, ecotourism has also made the host communities realized the importance of conservation efforts of the various ecotourism resources to enhance ecotourism development in the region and as a result, contributing to social and economic benefits of the host communities and creating opportunities for employment generation fostering better living standard of rural households. At the same time, it was also observed that there is still a need for the indigenous communities to get more support to maximize their opportunities from the resources belonging to the community. While ecotourism has provided socio-economic benefits to host communities, on the other hand it has also affected the resources accessible by the visitors so it was suggested that ecotourism should be practiced and at the same time giving encouraging and promoting more conservation efforts and commitment.

Pujar and Mishra (2020) conducted a study to assess the positive and negative outcomes and impact of conservation and the integration of ecotourism on the livelihoods of indigenous communities in Western Odisha. The findings revealed that the promotion of ecotourism did not have any impact on the livelihoods of indigenous communities. The findings in the study identified that lack of knowledge on ecotourism among the indigenous is one of the key issues contributing towards low impact of ecotourism on the livelihoods of the indigenous communities in Odisha.

Nsukwini & Bob (2016) examined the Socio-economic Impacts of Ecotourism in Rural Areas, South Africa. It was found out that ecotourism activities in the area did not benefit the communities to their level of satisfaction. The employment opportunities from ecotourism were mostly seasonal in nature. Accesses to the natural resources from the protected areas were allowed to the locals. Job opportunities, good working relations and joint problem solving were dependent upon the nature of relationship with the park's management or staffs. The key benefit from ecotourism in the area includes interaction with the tourists, sale of crafts and opportunities to profile cultural activities. However, tourism did not have much impact on creating employment opportunities and alleviating poverty in the area.

Stone (2013) conducted a study to assess the linkage between protected areas, tourism, and rural livelihood in Botswana. The study adopted qualitative approach through focus group discussions, households, and key informant interviews to collect the data. The study found out that the involvement of the community in tourism has brought both positive and negative impacts on the livelihoods and the protected areas. Some of the impacts are the influence of changes in community capitals dynamics, mechanization and commercialization of agriculture, government funded infrastructural development, income generation, commodification of some of the community capitals, and the heightened human-wildlife conflicts.

Wuleka et al., (2013) conducted a study on Livelihood Enhancement through Ecotourism in Damongo, Ghana to explore the impact amelioration measures on the environment through the evolution of the eco-village model instituted by the Ghana

Wildlife Division. Both purposive and simple random sampling methods were employed to collect data from key stakeholders within the community and also employed sustainable livelihood framework. The result shows that there is improvement in income of the local residents after the implementation of the project from the ecotourism activities like tour guides, home stay operators, performance of cultural eco-village dance troupe, boating, rural fishing including crocodile and bird watching. The project has also contributed in conservation where it has led to reduced incidence of hunting, no harvesting of fuel wood and or grasses within the park, no bush burning and farming activities within the confines of the park.

Wuleka., et al., (2012) conducted a study on Community-based Ecotourism and Livelihood Enhancement in Sirigu, Ghana aimed at identifying the income related generating activities in the community, assessing the level of female participation and in identifying the key stakeholders in Sirigu ecotourism site. The data for the study was gathered using questionnaire and conducting interviews from 440 samples. The findings in the study revealed that the income generating activities in the community were arts, handicrafts, village tour and local guest house. Ecotourism paved way for active community participation and decision-making process in the community especially in matters relating to ecotourism. The opportunities and benefits provided by ecotourism activities in the area did not only bring about economic benefit to the locals but has also led to the development of positive outlook towards any tourism activity in the area. There is high percentage of women's participation that led to the establishment of SWOPA. Ecotourism did not only benefit the individuals but also the community where there were many public facilities and amenities were established in the area such as schools, bore wells, public library and even micro credit scheme was launched for supporting the initiation of small businesses. The key stake holders of the ecotourism project were the local indigenous people.

Ijeomah (2012) studied to analyze the Impact of tourism on livelihood of communities adjoining eco-destinations in plateau state, Nigeria. A total of 410 questionnaires were administered at random to household heads from ten selected communities bordering five surveyed ecotourism centres. Results showed that

tourism has different impacts; negative impacts like increased land hunger leading to reduce land for farming, blocked access to roads, destruction of crops by animals, consumption of livestock by wild animals and fuel wood scarcity. Some positive impacts are employment, fishing, preservation of culture, increase in population, supply of fish to the community market, proliferation of private enterprises and biodiversity conservation.

Susan (2011) conducted a study on Ecotourism and Rural Livelihoods in five villages in Cameroon to assess on the practice of ecotourism in conserving the biodiversity while improving livelihood of the local people and fostering local development. The present study employed the Livelihood Framework to explain the socio-economic characteristics of the local people. Data were collected from the main stakeholders using household questionnaires and different semi-structured interviews were administered to 119 households, the 5 local chiefs of the different villages, the 5 Village Ecotourism Committee (VEC) members in the different villages and to the management and staff of Mt. CEO. The findings revealed that most of the natural resources were the main assets of the villagers while the creation of protected areas was the main constraints to livelihood of the villagers. The coping strategies adopted by the villagers were agricultural diversification, alternative means of livelihood activities like fishing, hired labour and petty trading. The stakeholder's analysis framework was also used to understand the relationship between the stakeholders and ecotourism. It was found that the locals had positive attitude towards ecotourism and conservation of the area but estranged relationship with the Mt. CEO as the locals lacked involvement and did not benefit from the ecotourism activities. The causes that led to the conflict were lack of trust, local involvement in ecotourism conservation and management, access to park resources, poaching, limited opportunities and poverty. In order to avoid such conflicts, the locals proposed to be involved in ecotourism conservation and management activities, aid in cash and kind and access to resources.

Njole (2011) conducted a study in Tanzania to examine how tourism can contribute to local livelihood and at the same time conserve nature. The study employed a sustainable livelihood framework to address livelihood assets, vulnerability context,

transforming structures and processes, and livelihood strategies in order to achieve livelihood outcomes. The study also used both qualitative and quantitative approaches for data collection. The findings in the study showed that tourism has created job opportunities for the community member to be employed in lodges, local tour guides and curio shops. Tourism is the major contributor of economic benefits to the community than any other sector, provided employment opportunities, infrastructural development and even educational sponsorship. This resulted in pulling migration of people from other places to search for employment in the area and leading to unequal distribution of economic benefits in the community. It was also found that apart from the promotion of tourism the management has also imposed strict policies regarding pollution and waste management in the area. The presence of tourism activities in the area has raised awareness on the need to conserve the environment and tackle its issues in the community.

Mbaiwa & Sakuze (2009), in their analysis on the scope of cultural tourism in livelihood diversification in Botswana. The study used sustainable livelihood framework in its analysis between cultural tourism and livelihood diversification. The study found out that the cultural heritage of the people was the main factor of attraction for the tourists. Cultural tourism in Xaixai village included tourists experiencing the Sans way of life like to hunt small game, gather, dance, laugh, live together, telling stories, sharing cultural values and practices. The study shows that cultural tourism has had a significant impact on the locals and potential to diversify their livelihood. It was found that the traditional and subsistence practice of livelihood like hunting, gathering and agricultural activities which were once the backbone of their livelihood is no more the primary livelihood activity of the community as there is scarcity of water for agriculture and hunting is restricted by the government. Cultural tourism in Botswana has provided the significant number of the locals to get employed in tourism activities and projects.

Mbaiwa (2008), conducted a study to analyze the changes in rural livelihood before and after tourism development through CBNRM in the Okavango delta, Botswana. The study used both qualitative and quantitative approaches to collect data using tools of participant observation, semi-structured interviews, and key informant

interviews. The results in the study show that there are both positive and negative effects of tourism development on rural livelihood in the area. It revealed that on the positive side the rural livelihoods and conservation of resources have improved and the resident's have also inculcate positive attitude towards tourism development and conservation as compared to some decades ago when they were not involved in tourism development. On the negative side the residents became too dependent on tourism development causing a decline or to forgone their traditional livelihood practice. The study shows that there is a need for people to have diversification of livelihood options other than tourism activity only.

Tao (2006) conducted a study in Taiwan and focused on the role of Tourism as a Livelihood Strategy in Indigenous Communities. The study adopted a qualitative approach and used the sustainable livelihood framework to assess the context and forms in which tourism might contribute to sustainable livelihood outcomes. The results show that tourism has brought about change in the livelihood of the indigenous communities. There is a change from traditional self-sustaining livelihood strategies to more marketable strategies among the communities. The promotion of tourism has also provided new opportunities for the indigenous community to use their culture as an attraction for the tourist and thus gaining economic benefit. The study revealed that there is a wide range of livelihood strategies adopted by both the communities as regular or occasional activity, collective or self-owned enterprises like restaurants, home stays, café, food stalls, handicraft stores and campsites.

Agyeman (2005) conducted a study in Kakum national park in Ghana to assess ecotourism's impacts on rural livelihoods and potential for poverty alleviation. Semi-structured and open interviews were the data collection techniques used. Six were selected and interviewed; thirty-nine (39) local people from two communities were selected based on livelihood activities using snow-ball sampling. The findings showed that despite the implementation of ecotourism there is no significant impact on the livelihood of the locals. There are some locals who depend on ecotourism as their main livelihood activity and some engaged in ecotourism in supplementing their farming. The locals need to diverse their livelihood activities to improve their living

standards. The revenue generated from ecotourism did not benefit the community as there is no supporting policy. The people also lacked training to involve in ecotourism affecting their service delivery and livelihood from ecotourism. The study also found that there is a conflict between human and wildlife because of the destruction of farms and receiving no compensation leading to resentment between the locals and the protection agency.

2.5 Studies on Ecotourism and Sustainable Development

Varghese (2024) undertook a study to explore into the relationship of ecotourism and sustainability practices in Tamil Nadu revealed the challenges that are being encountered in the implementation of ecotourism in Mamallapuram, Tamil Nadu. The findings from the study showed waste management as one of the grave challenges obstructing the implementation of ecotourism in the ecotourism destination in Tamil Nadu. Based from the findings of the study several components of waste management process pose as a concern for ecotourism and sustainability practices in the study. Due to ecotourism the ecotourism destination is faced with large-scale waste production from using various forms of services by the tourists. Additional to the large-scale waste generated, the composition of waste products generated and the deficiency waste segregation pose a serious threat of pollution to the environment thereby depreciating the ecotourism values and components of the ecotourism destination.

Seervi (2023) documented a paper on ecotourism and sustainable development with the goal to explore the ambit of ecotourism as a mechanism for economic development and as an approach for equating environmental concerns and sustainable development. The paper shed light on the importance of ecotourism for economic development of local communities and village economy enhancing standard of living and in alleviating poverty of rural and host communities, raising cultural diffusion and awareness, biodiversity protection and management, creation of relationship between visitors and the environment and encouraging habits and behaviours for sustainable development, development of environment friendly attitudes and behaviour, ecotourism has the potential to contribute to the state's

economy, among the other forms of tourism ecotourism can be seen as more honourable practice of leisure activity, enhances good relationship between tourists and host communities, ecotourism practices are more eco and environmental friendly, and lastly ecotourism creates employment opportunities and monetary benefits to local communities. Furthermore, with the aim of sustainable development to ensure resources available for future generations, ecotourism could foster man-environment interaction with minimum impact on the environment. The author concluded that, ecotourism has in its inherent nature most elements that are pre-requisites for promoting sustainable development.

Kumar et al., (2023), in their assessment of the socio-economic and environmental effects of ecotourism on sustainable development found that the outcomes from ecotourism is multidimensional in nature having both favourable and unfavourable impact on the social, economic, and environmental spheres of the host communities. The positive effects of ecotourism on the economic front have provided host communities and its members with opportunities for engaging in income generation activities, employment, utilization and sale of local goods and services, and enhanced the village economy. The negative effects of ecotourism shows that elements of the host communities such as culture and tradition have been neglected in the practice of ecotourism, and ecotourism has also led to degradation of the environment and biodiversity due to unmonitored usage of resources. In view of the multi-dimensional effect of ecotourism on the socio-economic and environmental spheres of the host communities the study suggested that the negative effects of ecotourism can be mitigated by adopting proper guidelines, strategies, and mechanisms in the practice of ecotourism that are socially and environmentally conscious and friendly. Ecotourism practices by the host communities should incorporate the principles of sustainable development as an integral and core elements of ecotourism practices by the host communities and to promote and encourage responsible tourism practices by visitors as well.

Sarkar (2023) has undertaken a study in Sikkim to examine tourism development through community participation and sustainable development by adopting mixed method and using both empirical and secondary data. The results from the study

shows that the social and economic benefits that ecotourism brings about facilitates local participation in the process of tourism development. The study reveals that the youth population are very much actively involved in engaging with tourism and ecotourism activities in the study area. The local population in the village perceives tourism and ecotourism as an alternative source of livelihood as they have been experiencing unfavourable returns from agriculture due to various factors. Another important empirical evidence from the study shows the indigenous practice of rainwater harvesting practised among the local population which contributes to the goals of sustainable development. The host communities project their hospitable behaviour towards the visiting tourists understanding that the inflow of tourist has direct relation with their derivation of economic benefits.

Karmakar (2022) conducted a study in Sikkim to analyse the best practices in ecotourism activities based on certain parameters such as conservation, community, culture, and commerce supported by the state and their contribution towards goals of sustainable development. The results have shown that the various forms of ecotourism practices are implemented in the state following strict guidelines that are instrumental for attaining the sustainable development goals and human development. These guidelines followed consists of certain key elements that contributes to ecotourism best practices in Sikkim; conservation of the biodiversity and cultural resources, facilitating active participation of local people, infrastructural support and communication development, raise environmental consciousness, optimum usage of environmental resources, capacity building for ecotourism stakeholders, ecotourism activities should enhance local economy, and regular programs to address sustainable tourism in Sikkim.

Sinha (2023) reviewed ecotourism practices as an approach for sustainable development practices in India. The author revealed that ecotourism practices in India is multidimensional in nature that could address a range of social, economic, and environmental concerns. It also discussed on the importance of ecotourism practices as a catalyst in sensitizing and raising consciousness on environmental concerns, fostering constructive interaction between visitors and the host communities that would contribute to understanding the values of conservation of

local resources. Ecotourism has in its capacity not only the conservation potential but also to bring about economic benefits to the local communities. Furthermore, the review augmented the need for intersectoral collaboration of the various sectors; government, civil society, private enterprises, and local communities to unfold the potential of ecotourism in addressing social, economic, and environmental issues. Another important aspect emphasized in this review is the incorporation of responsible tourism through industrious effort to mitigate environmental harm, embracing and honouring local culture and traditions, and committing to ecological preservation of ecotourism destinations visited.

Sinha (2023) believed ecotourism has the potential as an approach for sustainable development practice in India. But at the same time, there are also several other factors and parameters that require multi-level and inter sectoral collaboration from the government authorities, private sectors, local communities and civil societies to help unfold the potential of ecotourism in the Indian context. Furthermore, while it is evident that the spurge and continued growth of the tourism industry in India particularly ecotourism there is a need to ensure equilibrium between tourism activities, preservation practices of the ecosystem, and visitors is of core importance to be incorporated in ecotourism practices. Ecotourism practices should encourage and foster attitudes, behaviour and activities that are contributing to the reduction of negative consequences on the environment, appraising and being sensitive to local cultures, commitment to promote conservation efforts at ecotourism destinations across the country. It was concluded that ecotourism should be adopted and be given due recognition as a powerful strategy in the promotion of sustainable development as it has the potential to bring about and usher peaceful coexistence between the environment, indigenous culture, and economic growth.

Ramchurjee and Suresha (2013) conducted a study in Karnataka, India to explore whether the local residents of the Bagalkot district have positive attitudes and awareness towards the impact of ecotourism on sustainable development. The study focused on social and cultural impacts and level of awareness on ecotourism and empowerment of the local community. The study revealed that the residents showed a high degree of awareness and sensitivity regarding the negative and

positive socio-cultural impacts that can be contributed by ecotourism. Positive social impacts like social cohesion, new learning, respecting maintaining and culture. Negative social impacts; reduced grazing land for hotels and resort development, damaging the ability of local communities to maintain their traditional lifestyles. Positive cultural impacts like ecotourists experiencing the local culture and maintaining temple and cave structures. Negative cultural impacts like transformation of traditional cultural symbols into commodities to sell to visitors and youngsters attempt to copy the styles of the tourists. The finding shows that the residents have positive attitude towards ecotourism and conservation and understand how ecotourism can contribute to their socio-economic well-being of the households and the community. They need training and education related to ecotourism in order to improve their lifestyles, economy and resource management. Their involvement in ecotourism programs would be a potential strategy to promote and support sustainable development in the area.

The concept of Sustainable development and tourism are very much supplementary to each other. The former seeks to promote and advocate for optimum utilization of resources while seeking to achieve socio and economic goals. Similarly, on the other hand, tourism specifically ecotourism taps the potentials of the environment to secure socio-economic benefits through tourism practices. The nature of both the approaches are very much cantered on the ecosystems in their process for socio-economic development. As a result, both advocates and promotes practices that upholds the principles and values that balances the social, economic and ecosystem in their quest for development (Fennel, 2007).

Milgrath (1989), as found in Fennel (2007) specifically stressed on the importance and essence of values as being fundamental in our actions. He strongly argued that values are inevitable in within the individual that it evolved as a concern for others. Ironically this value system has become specifically human centric in the quest for economic development. The value system has become so human centric that we give high weightage to human values as an end and neglecting or not associating values to the means in order to achieve the ends. He infers that non-human too should be valued for what they provide as a means to an end and exist in their own right.

2.6 Ecotourism and Community Development

Rani (2024) conducted a study in Himachal Pradesh to evaluate the factors influencing ecotourism in Himachal, assessing visitors value towards ecotourism, and challenges faced by visitors in ecotourism destinations. The findings from the study revealed that the growth of ecotourism in Himachal are accounted from several factors such as visitors interests as a recreation activity, influence on income and revenue generation for the host communities, and biodiversity conservation efforts of the host community have played a very important role in influencing the growth and development of ecotourism in Himachal. Additionally, ecotourism has also provided the host communities to initiate income generation activities thereby providing employment opportunities for members of the host communities. With respect to the challenges faced by tourists or visitors, spaces for parking vehicles were a challenge for visitors, there are some ecotourism destinations that are overcrowded, mobile and internet coverage were limited, and banking and financial facilities were also an obstacle for visitors. The study suggested that banking and communication services should be setup and accessible to the public as these services are the most frequent demands of the tourists and that shall provide tourism satisfaction and cater to the needs of the visitors.

Vaja (2021) documented a paper to understand the concept of ecotourism and the various strategies adopted by the tourism department in the implementation of ecotourism practices in the context of Thenmala ecotourism destination in Kerela. The paper was based on the findings collected through secondary literature and ecotourism in Kerela was found to encompass a variety of elements such as cultural, adventure, leisure, recreational, and children's eco-park. Ecotourism has been the key factor for the growth of the tourism industry in Kerela. Ecotourism in the context of Kerela integrates diffusion and preservation of culture and heritage and fosters the growth of village economy. The practice of ecotourism adopted strategies that are in tune with the cultural and environmental context of Kerela. In the process of promoting ecotourism in Kerela the Tourism Department adopts various forms of marketing strategies that are deemed to be suitable and effective in capturing the attraction of service users across India and in different context of various countries in

the world by using the various forms of print, electronic, and digital media to reach the audience.

Rana & Choudary (2021) undertook a case study to assess the status of Shoghi camping site of Shimla District in Himachal Pradesh which is the only ecotourism destination in the hill area. It was found that the ecotourism destination in the study could generate amount of revenue from ecotourism activities. The study suggested that more benefits could accrue through ecotourism development of similar activities in the area which would contribute in generation of revenue for the state government, facilitate community development, direct benefits to members of the host communities, and promote environment conservation and protection. Thus, it was concluded that the region has enormous potential for ecotourism practices and effective utilization of the resources would contribute to employment generation and environment conservation that are intrinsic to the objective of sustainable development.

Kumar & Sharma (2019) conducted a study in Sikkim to analyse the usage and preferences of tourist's in using social media platforms in relation to their participation in ecotourism. The findings from the study revealed that the tourists among the age group between 19 to 40 are very active and enthusiastic in their participation in ecotourism but they lack awareness on conservation and protection and local events or festivals of the host community. Those respondents who are graduates and higher education are more inclined and strongly motivated to participate in ecotourism making it ideal for planners to synergise strategies in making them promoters of ecotourism. Additionally, budget-friendly options should be created for frequent travellers based on their spending habits. Lastly, referring to the relation between media and ecotourism, it was found that among all social media platforms, Facebook is mostly preferred by the respondents for ecotourism promotions. Thus, emphasizing the need for tourism planners for better marketing and ecotourism promotion via social media.

Chandra and Arora (2019) conducted a case study in Uttarakhand adopted a descriptive approach by using both primary and secondary data to assess the impact

of ecotourism in community development. The results in the study shows that ecotourism has a multidimensional impact on the community; village economy, environmental impact, socio-cultural impact, and overall impact on community development. Firstly, ecotourism has positively created an impact on the village economy by improving the standard of living of the households in the community by providing employment generation and income generation to members and households of the host communities. In the host community, agriculture is still the predominant source of income and livelihood for majority of the community members and ecotourism has supplemented the members of the host communities as an additional or secondary source of income by engaging in providing accommodation and other basic needs to the visiting tourists. Secondly, there is inevitable impact of ecotourism on the environment that are both positive and negatively affects the environment. While the host communities are still dependent on forest products at the same time conservation efforts are being encouraged and promoted to protect flora and fauna and biodiversity of the villages. Thirdly, the frequent contact between the host community and the visiting tourists have influenced both tourists and host communities in terms of socio-cultural diffusion and social learning in both positively and negatively in terms of lifestyle. Lastly, ecotourism has greatly influenced the overall development of the community. It has influenced the core elements of the community; economy, socio-cultural, and ecological dimensions that forms the underlying values of a community.

Kumar (2014) conducted a study titled Sikkim; a Role Model of Ecotourism in India: A Critical analysis. The study was based on both primary and secondary data and its objective was to critically analyze the tourism policy of Sikkim, factors contributing to Sikkim as the most visited place in 2014 for ecotourism and the impact of tourism policy on biodiversity and local population. It was found out that the tourism policy of Sikkim is in meets all the needs with conservation measures. Its policy imposes environmental fees for entry and stay time in some environmental sensitive areas. The tourism policy also operates in diversification of different modes of tourism. The policy incorporates the collaboration between government and civil societies to learn and involve in ecotourism and conservation efforts. The policy seeks to empower the

local communities emphasizing on the weaker sections and use ecotourism to conserve biodiversity, culture and tradition. It was also found out that Sikkim was the most visited place in 2014 as it was branded as the greenest state in India, innovative tourism activities, eco-friendly policies and organic food is promoting Sikkim in a big way. The policy has also helped the local community in poverty alleviation through employment opportunities in tourism and ecotourism projects.

S.M. Bhagwat (2013) conducted a study emphasizing on the role of the government in the development of ecotourism in Andhra Pradesh. She argued that if ecotourism is promoted and involves appropriate levels of participation of the local community would benefit the local community and contribute towards conservation of invaluable environmental heritage. Ecotourism activities have played an important role rural community development by generating employment for local youth and women to engage in tourism activities. It has also contributed to preservation of culture by exhibiting cultural items as tourism activity.

Vinodan & Manalel (2011) conducted a study to explore the economic and non-economic benefits enjoyed by the local community through their active participation in ecotourism programmes in Parambikulam Tiger Reserve in Kerala, India. The study reveals that the ecotourism programme in Parambikulam has provided direct economic benefit from employment opportunities and source of livelihood for the locals in the form of interpreter, guides for sightseeing, cleaners, forest watcher and undertaking enterprises such as honey processing, paper carry bag production, bamboo handicraft production, organic farming, balm production, cleanliness project, sales outlet and tailoring unit. This has helped in reducing the dependency of the local on the forest for their livelihood. Other indirect benefits enjoyed by the locals are educational incentive, loan and financial assistance, insurance, health programme and training courses.

Chen et al. (2008)'s study aimed at demonstrating the uneven distribution of economic benefits among the stakeholders from ecotourism in the Wolong Nature Reserve, China. The study revealed that infrastructural growth was taking place but most of the infrastructures were either owned by the government or by stakeholders outside the reserve. The locals were employed in low-skilled temporary jobs that

yielded very less returns from ecotourism in the area. Most of the stakeholders benefiting from the ecotourism activity like infrastructural construction, hotels/restaurants, and souvenir sales in the area were the outsiders where as the locals were the bearers of conservation. There is very little or no participation from the locals in ecotourism in the area. The locals who benefited from ecotourism were only those households situated nearby the roads than those who live deeper near the Panda habitat and dependent on the natural resource from the forests.

2.7 Studies on Ecotourism Entrepreneurship and Social Entrepreneurship

Rana and Bisht (2023) conducted a study in 100 villages of Uttarakhand focusing on the role of rural youth in promoting community-based-agri-ecotourism as a strategy for transformation of local food system to foster food production and consumption of healthy food products and at the same time bring about socio-economic welfare of local communities and convincing environmental effects. At the same time, the study explored the potentials and opportunities for agri-ecotourism to revitalize traditional mountain agricultural practices and its mutualism with tourism to empower youth through home stays or farm stay for culinary enthusiast and improving rural economy. The findings in the study revealed that enhanced local food production will attract more rural youth engagement in food production and providing an opportunity for youth employment. Apart from this it was also seen that agri-ecotourism is not limited to rural areas but to the urban population who seek inexpensive and nutritious food as well. Comparison was also made that during the COVID-19 Pandemic when prices of food commodities went up many families who are poor particularly in rural areas were adversely affected and during that time the local products produced by the community which were inexpensive and subsidized liberated the burden of food insecurity for such communities in times of disaster. Based on the findings from the study it was also suggested that the initiation of agri-ecotourism would contribute to prevention of large-scale migration of youth from villages, sustaining subsistence farming practices, promotion of culinary tourism, and raising awareness on environment conservation.

Wahyuni and Aryaningsih (2022) conducted an empirical in Bali to explore opportunities for entrepreneurship among rural-owned enterprises in the promotion of sustainable ecotourism. The data in the study was collected from respondents who were managers of rural-owned enterprises at ecotourism destinations in Bali. The results from the study shows that there are certain factors that influences the practice of sustainable entrepreneurial activities among the local communities. Firstly, the practice of sustainable entrepreneurship is strongly determined by the respondents pre-occupied knowledge of the entrepreneurship activities that the respondents are interested to undertake. Secondly, in relation to the former, another influencing factor contributing to entrepreneurship activities is the motivation to initiate or undertake such activities. Such motivations come from understanding of the benefits that entrepreneurship activities would benefit self and others. Thirdly, entrepreneurship among the respondents also determined by the respondent's knowledge of entrepreneurship that derives from experiences from previous work, jobs, and projects. Lastly, entrepreneurship undertaking is also determined by certain socio-cultural values of the community that contributes to social harmony and environment conservation.

Kummitha et al., (2021) conducted a study to understand the perception of local communities on the role of Tourism Social Entrepreneurship (TSE) towards the development of ecotourism and local community. The study included two ecotourism organisations in India in Kabani and Mangaljodi and 362 community employees of the organisations participated in the survey of the study. The results in the study revealed two important factors that influenced peoples positive and supportive perceptions towards TSE; the presence of the TSE creates employment opportunities for the local communities and brings about economic benefits for the local communities, and the role of the TSE in the process of ecotourism development that incorporated conservation practices for environmental sustainability. However, there were some differences in the perception of the local communities towards the role of TSE in enhancing quality of life satisfaction and promotion of socio-cultural attributes through the TSE. The local communities despite having positive opinion and perception with regards to economic benefits and environmental sustainability

they differed their opinions that the TSE failed to address the socio-cultural sentiments and elements of the communities that affected the level of participation of both the local communities. In respect to the quality-of-life satisfaction, the local communities in Kabani were very much satisfied with the role of the TSE in enhancing their quality-of-life satisfaction while on the other hand the local communities at Mangaljodi claimed that the TSE had negative impact on their quality-of-life satisfaction as the TSE failed to bring about infrastructural development in the community. The study concluded with recommendations that the practice of social entrepreneurship in host communities for ecotourism should adopt approaches that promotes and facilitates participation of local communities at different levels to foster ecotourism development and the development of the community.

Kummitha et al., (2023) conducted a study in Himachal Pradesh in four ecotourism destinations of Kaza, Langza, Komic and Dhankhar. The aim of the study was to investigate the perception of the respondents towards economic, infrastructure development, quality of life, environmental conservation and cultural development, through their participation in Tourism Social Entrepreneurship (TSE) at different phases. The results of the study have shown that the perceived benefits from the presence of the TSE plays an important role in influencing the participation of the local communities. The residents showed more active participation and supportive perceptions of the TSE in the development phase rather than the formation stage. The study inferred that economic benefits, environmental conservation, promotion of cultural elements, infrastructural development, and increase in the quality of life of the respondents that are evident in the development phase of the TSE are the influential and determining factors that influences the participation and support of the local communities towards the TSE.

Rahmawati et al., (2021) conducted a study in Indonesia applying the concept of Green Entrepreneurship with the aim of understanding its application for ecotourism development. The author opined that with climate change being a global issue affecting the ecology across the globe the adoption of Green Entrepreneurship concept and practice that promotes the use of ecofriendly materials and products in

the process of ecotourism development would be best suited in the practice of promoting ecotourism development and ecological conservation. The results from the study shows that the limited knowledge of the community on the concept of ecotourism is due to the lack of infrastructure that makes them inaccessible to area that have potentials for ecotourism affecting ecotourism development. Another obstacle towards ecotourism development is that the people or local communities lack awareness on environmental conservation and are solely focused on economic benefits for improving their quality of life and neglecting ecological conservation. The absence of the implementation of an effective policy by the concerned authority to promote ecotourism has led to the failure to discover ecotourism potentials. The study concluded by providing some solutions for ecotourism development by; enhancing physical infrastructure to enhance accessibility to areas of ecotourism potential, to promote ecotourism development as well as ecological conservation, incorporating the concept of Green Entrepreneurship in ecotourism development, and the government to come up with an effective ecotourism policy.

2.8 Research Gaps

The review of literature has provided space to identify the research gaps in the study of ecotourism and livelihood at different levels. Some of the research gaps identified in the area of ecotourism and livelihood are:

1. There are few studies conducted focusing on ecotourism as poverty alleviation and community development programme given its potential in creating job opportunities.
2. Most of the studies conducted were focused on identifying the income strategies involved by the community and neglected the on Impact of Ecotourism on traditional livelihood of the communities.
3. The studies conducted in the northeast region were from an etic perspective, there is a scope for study from an emic perspective and focused only on assessing the potentials of ecotourism for livelihood promotion and did not examine the impact of ecotourism on livelihood of the communities in the region.
4. The existing studies also reveal significant gaps, particularly in understanding the long-term impacts of ecotourism on community resilience and the uneven distribution of its benefits.

5. There are very rare and limited studies conducted on ecotourism and rural livelihood in northeast India and Meghalaya and were mostly focused on environment and biodiversity.
6. Studies in Meghalaya have only identified the potentials of ecotourism in the state providing a scope for impact studies.

The present chapter has provided a much broader knowledge and insight on ecotourism and rural livelihood that are the main thrust in the present study. It has given a broader perspective on the relation between ecotourism, rural livelihood and other related concepts that are pivotal in understanding the various dimensions related to the study. The next chapter discusses the methodology that is adopted in the present study which includes description of the study area, research design, sampling, description of the tools for data collection and data analysis.

CHAPTER III

METHODOLOGY

In the previous Chapter, previous research studies have been reviewed and research gaps have been identified. In this Chapter, the research methodology employed for the study is described in detail. A sound methodology is set of underlined procedures and approaches that guides the study. It is the process that bridges the problem being studied and the new discoveries that would share light on the existing problem. The methodology helps in understanding and examining the scope for rural livelihood in the context of ecotourism development and the nature of livelihood activities that the respondents are engaged through the onset of ecotourism.

3.1 The Setting: Profile of the Study area

The study has been undertaken in the state of Meghalaya which is described in detail as follows:

3.1.1 Meghalaya

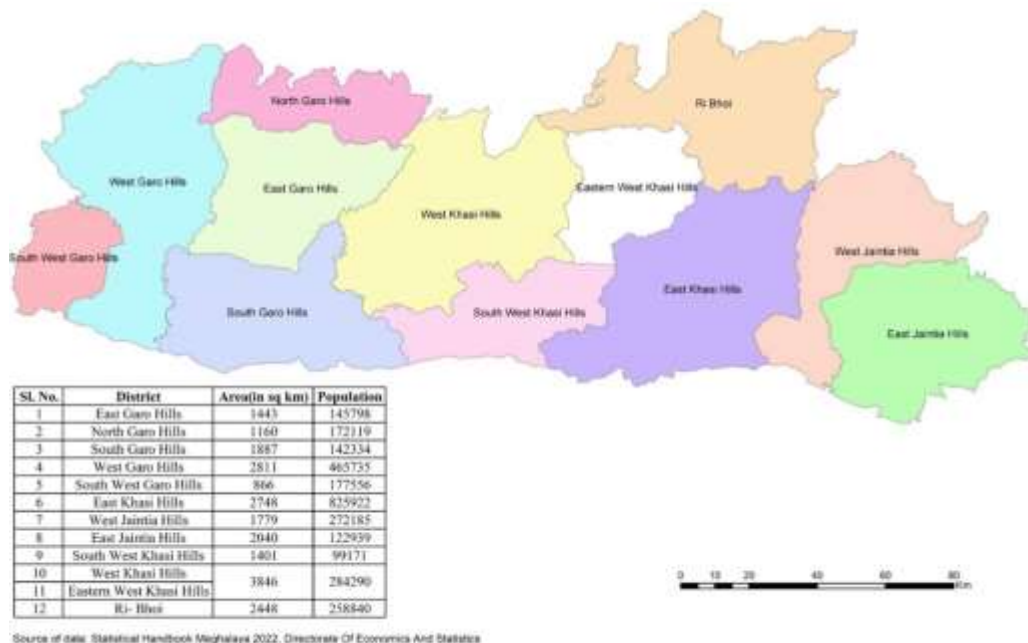


Fig 3.1: Map of Meghalaya

Source: Statistical Handbook of Meghalaya, 2022 Directorate of Economics and Statistics

Meghalaya is filled with abundant rainfall, sun-shine, virgin forests, high plateaus, tumbling waterfalls, crystal clear rivers, meandering streamlets and hospitable people. The emergence of Meghalaya as an Autonomous State on 2nd April 1970 and as a full-fledged State on 21st January 1972 with Shillong as the capital city marked the beginning of a new era of the geo-political history of North Eastern India. Meghalaya is one of the seven states located in north east India that is known by many as the abode of clouds and Scotland of the east. It extends for about 300 kilometres in length and about 100 kilometres in breadth. Shillong, the capital of Meghalaya is located at an altitude of 1496 metres above sea level. Shillong, which was made Assam's capital in 1874, remained so till January 1972, following the formation of Meghalaya.

Meghalaya is subject to vagaries of the monsoon and the climate varies with altitude. The climate of Khasi and Jaintia Hills is uniquely pleasant and bracing. It is neither too warm in summer nor too cold in winter, but over the plains of Garo Hills, the climate is warm and humid, except in winter.

The state of Meghalaya is divided into different regions such as the Khasi Hills, Jaintia Hills, West Khasi Hills, Ri-Bhoi, and Garo Hills. The state of Meghalaya has 12 districts. Total population of Meghalaya as per latest census data is 2,966,889 of which male and female are 1,491,832 and 1,475,057 respectively.

The literacy rate in Meghalaya has seen upward trend and is 74.43 percent as per latest population census. Of that, male literacy stands at 75.95 percent while female literacy is at 72.89 percent.

Meghalaya follows a matrilineal system in which the lineage is given to the mother's side. The common language spoken in the state is Khasi, English, and Hindi. Christianity is the dominant religion in Meghalaya.

3.1.2 Study Area: East Khasi Hills District



Fig3.2: Map of East Khasi Hills, District, Meghalaya

Source: Statistical Handbook of Meghalaya, 2022 Directorate of Economics and Statistics

The present study focuses on the scope and practice of ecotourism in facilitating and fostering rural livelihood in the context of East Hills District of Meghalaya. The onset of tourism and particularly ecotourism development in Meghalaya is very recent. While tourism as a leisure or recreational activity was long practised by the domestic populace in Meghalaya its transformation from leisure activity to source of livelihood for the rural communities is very recent. The take-off stage for ecotourism development and livelihood practices can be traced to the start of the millennium in the 2000s when tourism activities were associated with commercial transaction. However, the spread of ecotourism development was seen in the years 2005 – 2007 with Mawlynnong being recognised as one of the cleanest villages in Asia. This recognition made the village a centre for tourist attraction for tourists within the country and for international tourists. This stage of ecotourism development saw the need in the requirements of the visiting tourists, and paved way for the local communities to grab the opportunity and engage in livelihood activities to cater to

the needs of the tourists through setting up of petty shops, food stall, homestay, and souvenir stalls.

Over the years Sohra was known for its beautiful natural scenic beauty and holds a record for being the wettest place on earth which popularised the place and attracted visitors to experience the cool pleasant climate and weather conditions. Gradually it became a place for leisure and recreation for many of the common people of Shillong. People started visiting Sohra with friends and families for picnic, even schools and colleges often take the children and students for an exposure or a tour to these places admiring its beautiful scenic beauty and lush green scenery. The most popular places visited in those days were Laitkroh, Nohkalikai falls, Dainthlen Falls, Khohramhah, Nohsngithiang Falls, Mawsmi Caves and Thangkharang. These tourism destinations attracted domestic tourists due to their beautiful surrounding and lush green scenic beauty during the summers.

The onset of ecotourism saw the growth, spread and development of ecotourism destinations in East Khasi Hills, Jaintia Hills, and South Garo Hills Districts in Meghalaya. Ecotourism development and growth has been accompanied by parallel growth with the development of rural livelihood in ecotourism destinations in Meghalaya.

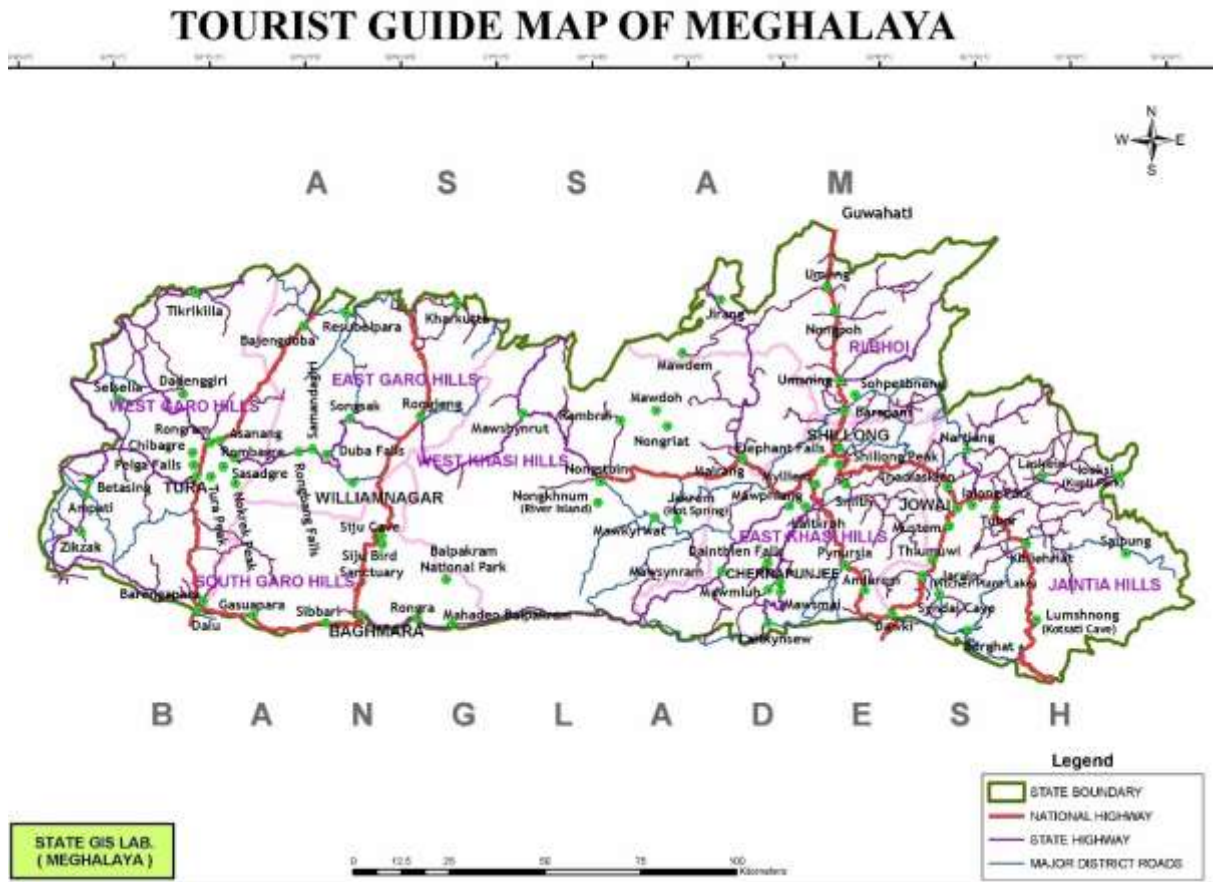


Figure 3.5 Tourist Guide Map of Meghalaya

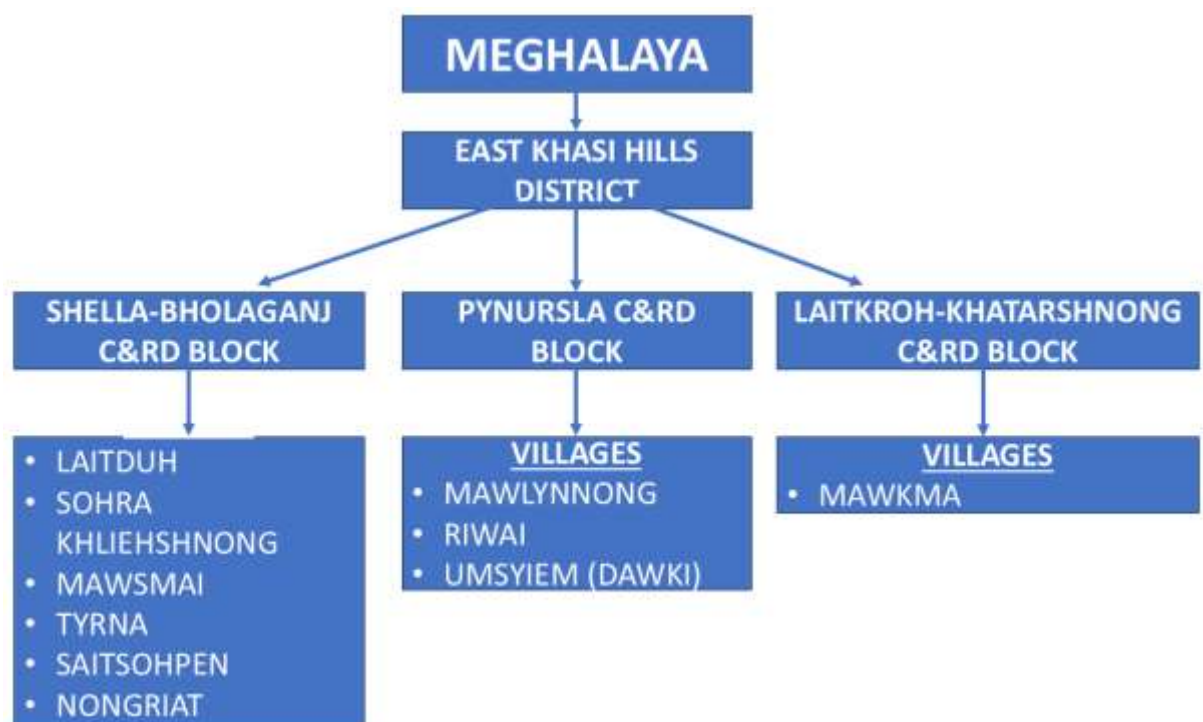
Source: Govt. of Meghalaya, 2023

The present study is conducted in East Khasi Hills District, Meghalaya. For the purpose of the study, ten villages have been selected based on the presence of ecotourism destinations in the respective villages. The ten villages are in three C&RD Blocks in East Khasi Hills District, Meghalaya namely, Shella -Bholaganj, Pynursla, and Khatarshnong-Laitkroh C&RD Block. Most of the inhabitants of the village belong to the Khasi Tribe and the medium of communication is the Khasi language. Majority of the local inhabitants in the selected villages are Christian of different denominations and some of the local practice traditional religion of the Khasi (Seng Khasi).

3.2 Research Design

The present study adopts a descriptive research design in its attempt to study to examine ecotourism development and the scope and potential for Rural Livelihood engagements in areas of eco-tourist hotspots located at the selected villages in two C & RD Blocks (Pynursla and Shella Bholaganj) East Khasi Hills District, Meghalaya. The study employs mixed method research strategy by utilizing both quantitative and qualitative approaches in pursuance of the objectives of the study. The data in the study were collected from both primary and secondary sources; the primary data was collected from respondents identified in the study who are directly engaged in ecotourism related livelihood activities in the ecotourism destinations chosen for the study, and the secondary source of data was collected from previous research studies, articles, newspaper publications, and official government reports.

3.2.1 Sampling



The present study adopts two types of sampling techniques for identifying the geographical context and primary respondents in the study. Multi stage sampling was adopted to identify and narrow down the geographical area and the study setting.

Purposive sampling was adopted to identify households engaging in ecotourism that are the unit of the study.

In the first stage, East Khasi Hills District as the larger geographical area was identified as the study area.

In the second stage, 3 Community & Rural Development (C & RD) Blocks were identified in the selected district (East Khasi Hills) where the maximum eco-tourism activities are undertaken in the state

In the third stage, the study identified 10 villages from the selected from the C & RD blocks that are host communities and ecotourism destinations. Among these, three (3) villages were selected from Pynursla C& RD Block, six (6) villages from Shella-Bholaganj C& RD Block, and one (1) village from Khatarshnong-Laitkroh C& RD Block.

In the last stage, using purposive sampling, households from the ten villages were identified based on their direct engagement in ecotourism related livelihood activities, as well as on their consent and willingness to participate in the study.

3.2.2 Tools of Data Collection

Data was collected from both primary and secondary sources. Primary data was obtained from the respondents while secondary sources of data were previous research studies, books, articles, newspaper publications; and both published and unpublished studies, to enhance a broader understanding of subject.

Quantitative data was collected through survey method employing a semi-structured self-administered survey form to gather baseline information from the respondents. Qualitative data was collected using Key Informant Interviews (KIIs), Case studies and Participatory Rural Appraisal (PRA) techniques such Social Mapping and Services and Opportunities Map. The Key Informants were the Headman or village chief, and the Committees in charge of Tourism in the community.

3.2.3 Data Processing and Analysis

The quantitative data was processed and analysed using SPSS (Statistical Package for Social Sciences) and outcomes are being presented in the form of simple averages and cross-tabulations. The qualitative data collected through in-depth interviews with respondents were organised into case studies and information obtained from KIIs were integrated in the major findings of the study. The data collected from KIIs were transcribed into written format and used Index of Qualitative Variation (IQV) to assess the degree of diversity or dispersion within a distribution of categorical or nominal data for qualitative data analysis.

3.3 Theoretical and Operational Definitions

The key concepts and operational definitions used in the study are as follows:

Ecotourism: The term ecotourism was first officially used by Ceballos-Lascurain (1987), who defined it as: ‘travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas’ (Weaver, 2001). The International Ecotourism Society (TIES) defines ecotourism as "responsible travel to natural areas that conserves the environment and improves the well-being of local people" (TIES, 1990).

The operational definition of ecotourism in the present study refers to the places or areas of tourist destinations that are sources of tourist attractions due to the presence of naturally gifted rich biodiversity. Meghalaya has many places with naturally gifted waterfalls, rivers, scenic beauty that has been source of attraction for nature lovers and tourists from both intra-state and inter-state. These naturally gifted beautiful elements have become places for tourist attraction and at the same time the current trend serves as a source of livelihood for the host communities. Ecotourism here also reflects the presence of strong conservation efforts by the community in the process of sustainable resources management.

Livelihood: According to Conway and Chambers (1992), Livelihoods comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.

Rural livelihood in the context of the present studies refers to those activities engaged by the host communities for their livelihood. It reflects in the study that while the host communities are engaged in agriculture as the traditional source for income and livelihood, the onset and development of ecotourism has also paved way for the host communities to identify ecotourism as another source of income and livelihood engagement that brings about economic benefits as well as promotes ecological conservation practices for sustainable livelihoods.

3.4 Limitations of the Study

Ethical considerations have been followed where respondent households in the study are based solely on their willingness to participate. The present study on Ecotourism and Rural Livelihood conducted in East Khasi Hills District of Meghalaya is entirely based on empirical data collected from the respondents who are directly engaged in livelihood activities that are derived with the onset and presence of ecotourism. The study was conducted only in ecotourism hotspots in East Khasi Hills District and there was no comparison with other ecotourism destinations in other geographical context in Meghalaya, hence generalizations from the study in the context of Meghalaya might not be accurate for the diverse rural population.

The present chapter on methodology have discussed on the various elements and processes that have been adopted in the present study. The following chapter focuses on the vulnerability context and profile of the communities in the study.

CHAPTER IV

RURAL VULNERABILITY CONTEXT: COMMUNITY PROFILES

The previous Chapter delved into the methodology used in the study. This chapter presents the profile of the communities studied and analyses factors which contribute to the vulnerability of people's livelihood. The vulnerability context examines the various factors that expose individuals or communities to risks and uncertainties. The vulnerability context identifies and analyses elements such as economic instability, environmental hazards, social inequalities, and political challenges that can affect livelihoods, well-being, and resilience.

4.1 Community Profiles

The study was conducted in the villages of Sohra-Mawsmmai, Sohra-Khliehshnong, Saitsohpen, Laitduh, Nongriat, Tyrna, Riwai, Mawlynnong, Umsyiem (Dawki), and Mawkma. The profiles are presented below:

Table 4.1 Distribution of Households and Population among the Villages

Villages	Households	Population
Mawlynnong	122	529
Riwai	78	438
Dawki	236	1058
Sohra Khliehshnong	485	2178
Sohra Mawsmmai	98	475
Saitsohpen	120	650
Tyrna	155	750
Nongriat	36	136
Laitduh	31	135
Mawkma	300	1300

Source: KIIs

Table 4.1 represents the village with respect to the profile of households and population of the respective villages. As per the data in the table above, there is an

uneven distribution of households and population in the study. This shows the spatial and demographic variations of the village in terms of household's and population of the villages. From among the villages selected in the study, the data in the above table shows that few villages like Mawkma, Dawki (Umsyiem), and Sohra-Khliehshnong have higher population density and like Nongriat and Laitduh have smaller population density.

Table 4.2 Distribution of Ethnicity and Language among the Villages

Villages	Ethnicity	Language
Mawlynnong	Khasi (ST)	Khasi & War
Riwai	Khasi (ST)	Khasi & War
Umsyiem (Dawki)	Khasi (ST)	Khasi & War
Sohra Khliehshnong	Khasi (ST)	Khasi
SohraMawsmmai	Khasi (ST)	Khasi
Saitsohpen	Khasi (ST)	Khasi
Tyrna	Khasi (ST)	Khasi
Nongriat	Khasi (ST)	Khasi
Laitduh	Khasi (ST)	Khasi
Mawkma	Khasi (ST)	Khasi

Source: KIIs

The above table (Table 4.2) projects two elements that are important in understanding the profile of the community; ethnicity and language. In terms of ethnicity, the data in the above table shows that a vast majority of the villages selected in the study belong to the Khasi (ST) community and the language mostly used by the villages as means for communication is Khasi except in Dawki, Riwai, and Mawlynnong the villages the village also used 'War' dialect as a medium of communication within their own community. This shows that ecotourism has influenced the livelihood engagements of the indigenous communities among the Khasi tribe. The Khasis who have been following and the primitive form of agricultural practices like shifting cultivation and subsistence farming as their predominant occupation and the main source of income have now engaged

themselves in livelihoods through ecotourism, this indicates that the onset of ecotourism has provided the indigenous communities with opportunities to engage in multiple livelihood activities and enhance their socio-economic status and well-being. With ecotourism being nature-based and directly related with ecological conservation, the outcome of which brings about opportunities for socio-economic and environmental benefits to the host communities, it can be inferred that the sustainable rural livelihoods can be attained through community efforts towards conservation of resources.

Table 4. 3 Distribution of Land Ownership among the villages

Villages	Land Ownership Patterns
Mawlynnong	Community Land and Private land
Riwai	Community Land and Private land
Umsyiem (Dawki)	Community Land and Private land
Sohra Khliehshnong	Community Land and Private land
Sohra Mawsmmai	Community Land and Private land
Saitsohpen	Community Land and Private land
Tyrna	Community Land and Private land
Nongriat	Community Land and Private land
Laitduh	Community Land and Private land
Mawkma	Community Land and Private land

Source: KIIs

The above table portrays the nature of land ownership patterns that are being practised in the villages. The data in the above table shows that the land ownership patterns in all the villages are being owned by the community as well as private lands. Here in the context of Meghalaya, community ownership of land has a very strong age-old traditional practice. In community land ownership system, the land is being controlled by the community through the village council. The village council has absolute control of such lands and its resources. In the context of land community land ownership, the types of land that are owned or under the control of the community are sacred groves, restricted forests, and community land. The sacred

groves meaning ‘Law Kyntang, Law Lyngdoh, and Law Niam’ are forests that are very much strongly associated with the traditional belief systems and is very closely knitted with those who follow the traditional religion. Even at present there are some traditional rites, religious ceremonies, and rituals that are being conducted at the sacred groves. The village council and the traditional heads have imposed very strong and strict prohibitions of any form of human activities to maintain the sanctity of the place. The restricted forests meaning ‘Law Adong’ are however different from the sacred groves. The restricted forests are not associated with any form of religious or traditional belief system, but human activity in the forests is strongly prohibited without the consent of the village council. Another form of restricted forests is the village supply forests that are used for community needs under strict surveillance and controlled monitoring by the village authority or council. And lastly, community land is a land which is owned by the community and a plot of land is being distributed among community members after marriage only to those who are original inhabitants of the village. Outsiders who become members of the village either by marriage or migration do not have access or are entitled to have possession of a community land.

Table 4. 4 Social System followed among the Villages

Villages	Social System	Inheritance
Mawlynnong	Matrilineal	Inherited by Youngest Daughter
Riwai		
Umsyiem (Dawki)		
Sohra Khliehshnong		
Sohra Mawsmmai		
Saitsohpen		
Tyrna		
Nongriat		
Laitduh		
Mawkma		

Source: KIIs

The above table shows the type of social system and law of inheritance followed by the villages. The data in the above table portrays the villages in the study follow the matrilineal society and lineage is traced from the mother side. The practice of inheritance is unique among the Khasis, the youngest daughter inherits the ancestral property of the family. Traditionally the male members among the Khasis do not have access or inheritance of the ancestral property. After marriage, the male members move out from their maternal house and shift to their in-law's places with his wife. However, in modern times the male members are also given a share of the ancestral property depending upon the capacity and possession of the parents. The youngest daughter after marriage stays at her parental residence and takes care of the parents.

Table 4. 5 Nature of Governance of the Villages

Villages	Nature of Governance
Mawlynnong	Village Council
Riwai	
Dawki	
SohraKhliehshnong	
SohraMawsmmai	
Saitsohpen	
Tyrna	
Nongriat	
Laitduh	
Mawkma	

Source: KIIs

The above table reflects the nature of governance that is being followed by the villages at the grassroot level. The data in the above table shows that the villages are governed by the village council which is an age-old traditional form of political institutions at the grassroot level that have been followed by the Khasi community. The village council is an elected informal organisation whose members are elected

by the people and not hereditary in nature. The village council is being represented by a village headman and executive members and are responsible for the management of the daily affairs of the community. The village council represents the entire community and the decision made by the village council is binding to all the members of the community. The role of the village council is to ensure smooth and harmonious functioning of the community. It seeks to address the issues and problems of the community and gives high priority for the welfare and well-being of the community. It is responsible for the maintenance of security and peaceful environment within the community.

Table 4. 6 Distribution of Distance of The Village from City Capital and Nearest Town

Villages	Distance from Shillong	Nearest Town	Distance to Nearest Town
Mawlynnong	77 km	Pynursla	24 km
Riwai	70 km		19 km
Dawki	82km		31km
Sohra Khliehshnong	55 km	Sohra	0km
Mawsmmai	57km		3km
Tyrna	65 km		12 Km
Nongriat	65 km		17 km
Laitduh	51 km		21 km
Mawkma	46 km		16 km
Saitsohpen	54 km		2.5 km

Source: KIIs

The above table shows the distribution of distance from the villages to the state headquarters Shillong and the nearest town from the villages. From the data given in the above table the nearest village to the city capital is Mawkma at 46 km from Shillong. The data in the table also projects that Sohra and Pynursla are the two main towns that are important for the villages in the study. Both Sohra and Pynursla serve are the civil sub-divisions for the villages in the study. It can be inferred here that the

two towns of Pynursla and Sohra are vital location for the villages for their daily transactions. The villages highly depend on these two towns for essential supplies that they require in for their daily needs such as food and healthcare services.

Table 4.7 Distribution of Nature of Tourist Attraction Present at the Villages

Sources of Tourist Attraction	Mawlynnong	Riwai	Dawki	Mawkma	Sohra	Khliehshnong	Laitduh	Mawmai	Tyrna	Saitsohpen	Nongriat
Scenic Beauty	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Waterfalls	X	X	X	✓	✓	X	X	X	X	X	✓
Historical Tourism	X	X	X	X	✓	✓	X	X	X	✓	X
Cultural Tourism	X	X	X	X	✓	X	X	X	X	✓	X
Village Tourism	✓	✓	✓	X	✓	✓	✓	✓	✓	X	✓
Adventure Tourism	✓	✓	✓	✓	✓	✓	X	✓	✓	X	✓
Camping	✓	✓	✓	✓	✓	✓	X	✓	✓	X	✓
Boating	X	X	✓	X	X	X	X	X	X	X	X
Viewpoint	✓	X	✓	X	✓	X	X	✓	✓	✓	X
Rivers	X	✓	✓	✓	X	✓	✓	X	X	X	✓
Caves	X	X	X	✓	✓	X	X	X	X	X	X
Picnic Spots	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X
Living Root Bridge	X	X	X	X	X	X	X	X	X	X	✓

Source: KIIs

Table 4.7 displays the various sources of tourists' attraction that are present in each of the villages selected in the present study. The data in the above table presents the villages as V1 - V9 across the columns, and the sources of tourist attractions are being presented across the rows. The data shows us the pluralistic form of tourism and ecotourism activities present in the selected villages in the study. While ecotourism is generally understood as a branch or type of the tourism industry that is

very closely associated with nature, the data above also provides us with important information that the villages in the study do also have the presence of tourism components that are of historical and cultural importance among the indigenous Khasi community and the local communities in the present study. The data in the above table reveals the diversity of ecotourism activities that are present in each of the selected in the study. In the context of ecotourism, the diversity of ecotourism activities present in the villages reflects the rich natural resources possessed by the villages that are key components to ecotourism. As we look at the various forms of ecotourism in the above table it is very clear that all of it is a pure gift of nature for humans to embrace its elements that has from time immemorial served and evolved as a means for survival and sustainability of the local communities. Even at present nature is catering to the needs of the local communities which may not be as practised and utilized as it was during the primitive period but the interdependency and the conscious interrelationship of man and the environment is evident from the practices of ecotourism by the local communities hereby establishing as a consensus between nature and humans as to allow humans to consciously utilize its resources and in turn humans particularly the local communities are responsible for the protection and conservation of the nature and its elements. The various forms of ecotourism

Table 4. 8 Distribution of Ecotourism and Resource Management

Villages	Ecotourism Management			Resource Management	
	Ecotourism Committees	Village Council		Ecotourism Committees	Village Council
Mawlynnong	1	0		0	1
Riwai	0	1		0	1
Laitduh	0	1		0	1
Nongriat	0	1		0	1
Sohra Khliehshnong	0	1		0	1
Mawsmat	1	0		0	1
Mawma	0	1		0	1
Tyrna	1	0		0	1
Dawki	1	0		0	1
Saitsohpen	0	1		0	1
Total	4	6		0	10

Source: KII

The above table portrays the management aspect of ecotourism in the villages; one aspect of management specifically focuses on the management of ecotourism activities, and the other aspect focuses on the management and utilization of ecotourism resources in the respective villages of the present study. Firstly, with regards to the management of ecotourism activities of the respective villages in the study, the data in the above table reveals that of the ten (10) villages selected in the study four (4) villages have setup sub-committees for ecotourism that are solely responsible for matters or affairs related to ecotourism activities in the respective communities. On the other hand, ecotourism activities of the other six (6) villages are being looked after by the village council itself. Secondly, with respect to the management and utilization of resources the village council of all the ten (10) villages are the sole authority to decide on matters that are related to the management and utilization of the resources of the community. It can be inferred from the above analysis that there are different levels of local administration and management when it comes to management of ecotourism activities, and management and utilization of

resources among the local communities. Here, it is very important to understand that by the provisions of the Sixth Schedule of the Indian Constitution the Autonomous District Council empowers and lays down special provision for the exercise of powers and functions by the traditional political institutions such as the village council. The traditional institution is led by the village 'Headman' or the 'Sardar' of the village. The Headman and his executive members are the highest authorities at the village level who can make decisions or exercise powers and functions laid down by the district council. The village council can make decisions over the management and utilization of resources of the community. Other committees or councils are established with the permission and under the supervision of the village council. At the same time here, the ecotourism committees are formed as a sub-committee of the village council upon the sanction of the village council to undertake responsibilities in matters related to ecotourism activities. The village council empowers the ecotourism committees with certain discreet powers and functions and flexibility of operation over matters related with ecotourism but the final decision will be taken in consultation and upon approval of the village council.

Table 4. 9: Distribution of Availability of Public Amenities in the Villages

Public Amenities	Mawlynnong	Riwai	Dawki	Mawkma	Sohra Khliehshnong	Laitduh	Mawsmai	Tyrna	Saitsohpen	Nongriat
Public Washroom	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Parking Space	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
Accommodation	✓	✓	X	X	✓	✓	✓	✓	✓	✓
Food	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ATMs	X	X	X	X	✓	X	X	X	✓	X
Health Care	X	X	PHC	Sub-Centre	CHC	X	X	X	CHC	X
Roads	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
Footpaths	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Electricity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Streetlights	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internet	Poor	Poor	Poor	Poor	Yes	Poor	Poor	Poor	✓	Poor
Drinking Water	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Signage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Safety & Security	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: KIIs

Public amenities are very important assets and services that are very of high demand by the visiting tourists. These services and facilities are fundamental in ecotourism practices to cater to the needs and requirement of the tourists. They contribute towards in influencing the impact of visiting tourists on the economy and the ecotourism practices of the local communities. The table above displays the

availability of the different forms of public services and public amenities at the ecotourism villages. As per the data from the above table it is seen that while most of the public amenities are available in the villages yet there are few public amenities that are still lacking to cater to the needs of the visiting tourists such as; ATMs, health care centre, and internet connection. However, these mentioned public amenities that are not available in the villages may be present outside the village or in neighbouring villages which may not be comfortable and a challenge for the tourists as well as the locals to get access to these services in times of needs. Services such as ATMs are very crucial as it facilitates and caters to the financial needs of the tourists while visiting the places. In the digital world at present most individuals are dependent on various gadgets and technologies that requires internet for social connection and financial transactions. But poor internet connection in many of the villages makes it difficult for the tourists to use internet for their social and financial requirements.

As seen in the above table (Table 4.9), there are only three villages that has health care centre within the village. Health care is one of the public amenities and a basic need which is lacking that is of crucial importance that should be accessible for the tourists and local communities. Accessibility to public amenities contributes to the overall well-being of the individuals and the community. Accessibility and availability of public amenities are important components of ecotourism that fosters and supports growth of ecotourism activities in the villages. Apart from the availability and accessibility of the public amenities, it should also be well maintained and managed to cater the needs of visiting tourists. In the process approach towards utilization of amenities should lead and contribute to conservation of the environment and well-being of the local people. Sustainable ecotourism practices require the contribution of both local communities and visiting tourists as service seekers and service providers to contribute towards responsible tourism practices by promoting conservative approaches through conscious utilization of resources. We can conclude that authorities, civil societies, and the host communities should collaborate and strengthen their effort to manage the impacts of ecotourism on the environment and biodiversity to sustain ecotourism practices at present and for the future.

4.2 Rural Vulnerability

Vulnerability context refers to the phenomenon that is associated with individuals, groups and, communities and their exposition to the influences of the social environment. It measures or assesses the social, economic, political, and environmental risks and their impact on the individual, groups and communities and their response in coping in the occurrences for such events. The concept of vulnerability context also examines the ability of the individuals, groups, and communities to develop coping strategies as a mechanism in the process of reducing the impact of the various forms of vulnerabilities. As a result, vulnerability context is directly associated with the coping strategies adopted; better coping strategies adopted will result in reduced exposure to the different forms of vulnerabilities.

Participatory Rural Appraisal

Participatory Rural Appraisal (PRA) is an approach that has been adopted by development organizations and found to be very effective in the process of working with rural communities. The basic essence and foundation of PRA is its ability to gather relevant and first-hand information of a particular community through the active participation of the community members using PRA tools and techniques. The underlying principle of PRA is it approaches in understanding the community from the local perspectives and appraising local knowledge through participatory approaches. PRA tools allow equal participation of all members of the communities emphasizing more on the local knowledge of members of the host communities rather than relying on the conventional methods of using questionnaires and survey forms that are mostly applicable to those who are literate. PRA uses symbolic representation of the local knowledge that are being shared by the local communities in which any member of the local community regardless of his or her educational qualification. PRA is very flexible in its operation that allows the innovative and improvisations in the use of tools and techniques that could contribute towards appraising local knowledge.

For assessing the vulnerability context of the communities and households, Participatory Rural Appraisal (PRA) techniques such as Social Mapping and Services

and Opportunities Mapping were facilitated among the Headman and important stakeholders of the community.

Ecotourism as a branch of the tourism industry being considered as a form of leisure activity that involves travelling to places and destinations that offers nature-based experiences for visiting tourists. The presence of ecotourism brings various forms of benefits for the local communities and the environment. It has the potential to foster positive changes and transitions at different levels of the community. Ecotourism supports and fosters economic growth of rural households and improves rural village economy of the ecotourism destinations and neighbouring communities. It does not only support social and economic changes and transitions of the local communities but also promotes approaches and practices and education for conservation and protection of the environment. But at the same time, there are also certain factors that contributes towards vulnerabilities of ecotourism activities of the local communities. The various context of vulnerabilities shared by the respondents can be categorized as; economic, environmental, social, market economy, and support system.

The Social map and Services and Opportunities map provide a pictorial representation and an overview of the ten villages in the study. While social map has enabled to identify various important institutions and infrastructures that are available in the village, the services and opportunities map has allowed to understand the community's accessibility to various important services that are necessary to cater to the needs of the community. The information gathered from both social map and services and opportunities map have indicated certain factors that are contributing to the formation of the physical assets and vulnerability context of the community.

Social Map

Social Mapping is one of the PRA techniques that depicts a pictorial representation of the community. It depicts what the local people believe to be relevant and important for them. It represents the habitation patterns, important infrastructure, connectivity, and institutions that are available locally within the community. It

contributes to understanding the availability of and opportunities of utilization of services various important institutions for the local communities. The social map contributed to understanding the availability of the various institutions and infrastructures as physical and social assets in relation to the vulnerability of the local community.

Services and Opportunities Map

Services and opportunities mapping is another PRA technique that shows the services that is available within the community to the community. It assesses the important services and opportunities in relation to the accessibility of the local communities to such services. It examines the vulnerability of the local communities in terms of their accessibility of the services. It examines the various services and opportunities that are available both internal and external to the local communities. The services and opportunities map shows that the vulnerability of the local communities is less if their accessibility to the important services is available internally within the community, and vulnerability is more when accessibility to the important services and opportunities are external to the local communities.

4.3 The villages studied: PRA

The present study was conducted in East Khasi Hills District of Meghalaya among three Community and Rural Development Blocks (C & RD Blocks) Laitkroh-Khatarshnong, Shella-Bholaganj and Pynursla C & RD Blocks. Within the Block level administration ten villages were identified as hotspots for ecotourism destinations; Mawkma, Laitduh, Sohra-Khliehshnong, Mawsmal, Saitsohpen, Tyrna, Nongriat, Mawlynnong, Riwai and Umsyiem (Dawki). The present study adopted PRA techniques such as Social Map and, Services and opportunities map to have an overview of the villages.

4.3.1 Mawlynnong village

Mawlynnong is one of the villages known for its cleanliness and natural beauty and has been identified as one of the ecotourism hotspots in Meghalaya. It falls within the administrative jurisdiction of the Pynursla C & RD Block and has a total of 122 households and 529 population. It is located 20km from the nearest town Pynursla

which is the civil sub-division. As represented in the social map the village has two lower primary schools and one upper primary school, three churches of different denominations (Presbyterian, Catholic, Church of North India), the village has numerous public facilities such as three washrooms, three parking spaces, 20 places of accommodation for tourists, two food stalls and six restaurants. The village is well connected with roads to the village and within the village. There is a ticket counter for entry inside the village, two viewpoint, two grocery stores. Some of the resources available within the village are betelnut, beetle leaves, wild pepper, and pineapple (See Fig 4.1).

The services and opportunity maps show that the village is exposed to geographical vulnerability due to its location. The nearest town from the village Pynursla is 20 km away and it is located approximately 69 km away from Shillong the capital city. Host communities must travel 20 km from the village to avail the important services such as government offices, financial institutions, higher education institutions, healthcare, police and, market is not accessible within the village. The distance from the village to the airport and railway located at Guwahati is 191 km and 180 km respectively which are the main hub for transportation used by tourists. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 90 km away from the village.

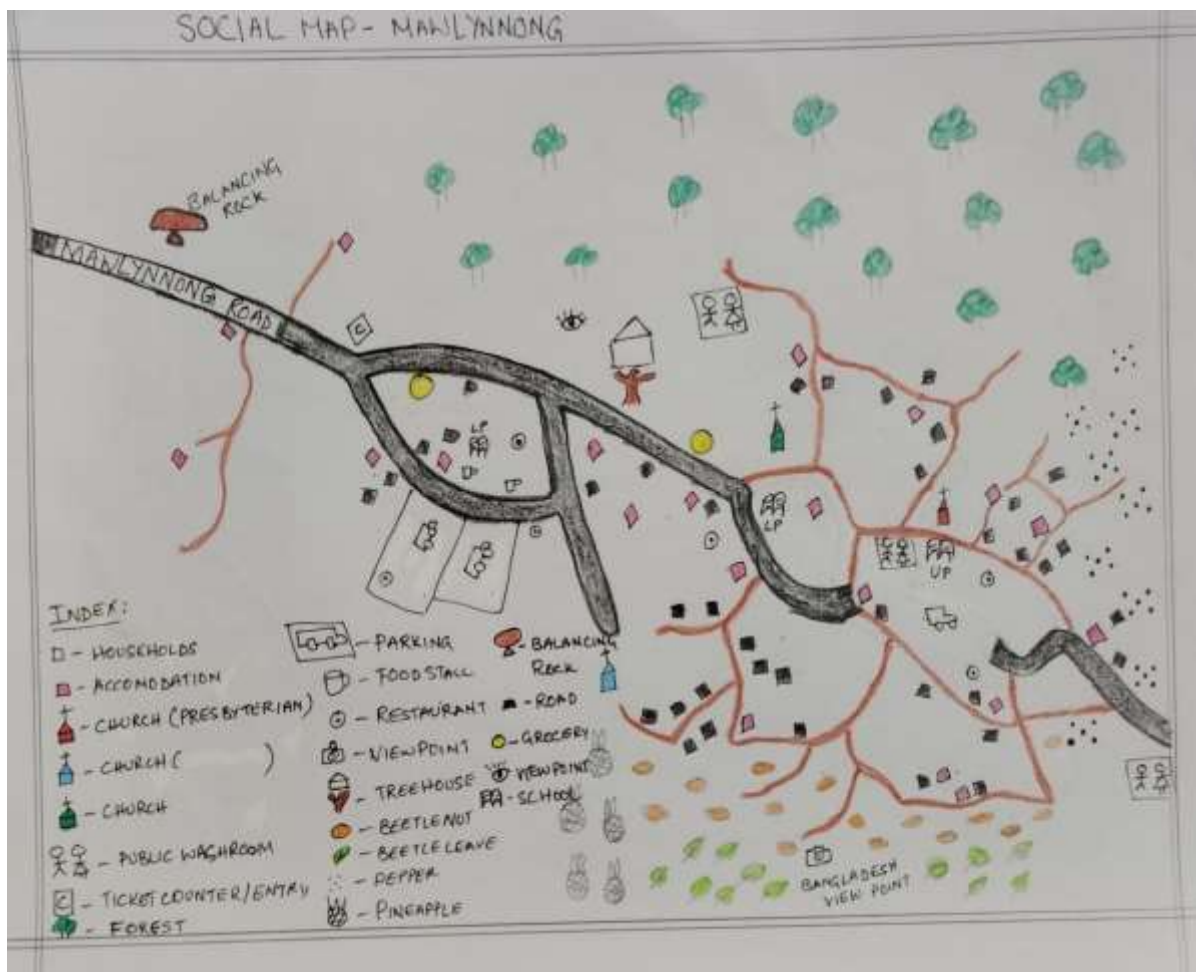


Fig 4.1 Social Map of Mawlynnong

Source: PRA

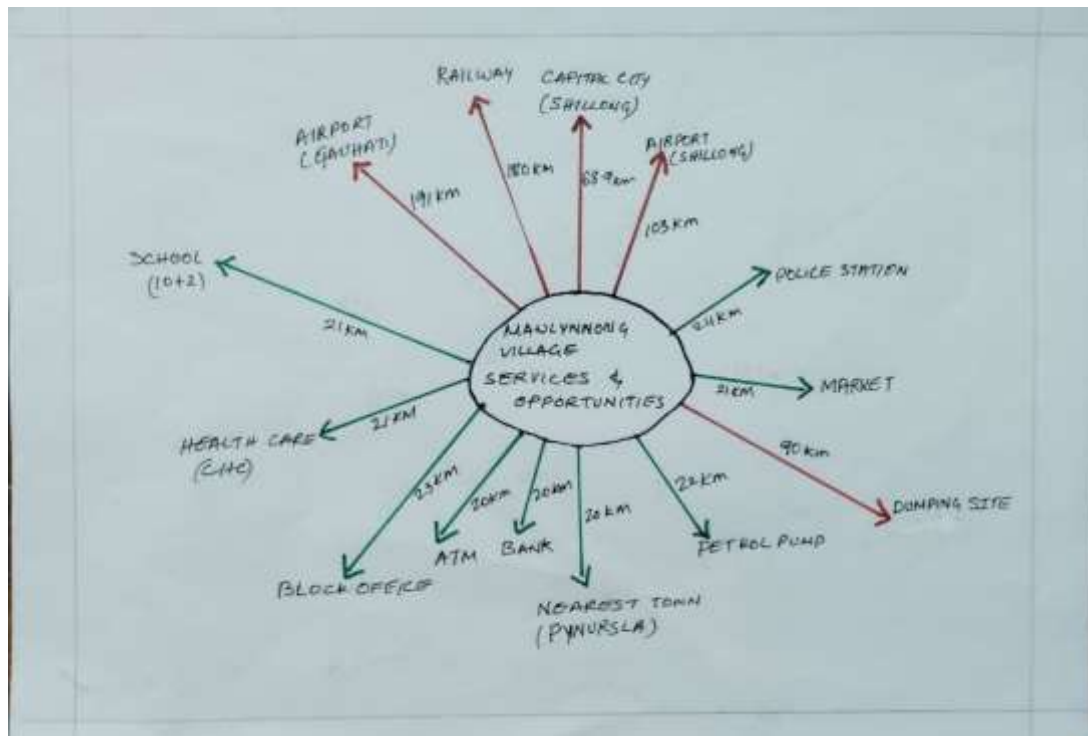


Figure: 4.2 Services and Opportunities Map of Mawlynnong Source: PRA

4.3.2 Riwai Village

Riwai village located next to Mawlynnong was also identified as a hotspot for ecotourism destination holds a strategic access to the living-root bridge located at the bordering Nohwet village. It falls within the administrative jurisdiction of the Pynursla C & RD Block and has a total of 78 households and 438 population. It is located 18 km from the nearest town Pynursla which is the civil sub-division. As represented in the social map the village has 1 government lower primary school and one SSA upper Primary school, one Presbyterian church, two washroom, five places for accommodation, two parking spaces, four food stalls, four petty shops, one football ground. The village possess resources like broomstick cultivation, beetlenut, and wild pepper.

The services and opportunity maps show that the village is exposed to geographical vulnerability due to its location. The nearest town from the village Pynursla is 18 km away and it is located approximately 66 km away from Shillong the capital city. Host communities must travel 18 km from the village to avail the important services such as government offices, financial institutions, higher education institutions,

healthcare, police and, market is not accessible within the village. The distance from the village to the airport and railway located at Guwahati is 189 km and 178 km respectively which are the main hub for transportation used by tourists. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 86 km away from the village.

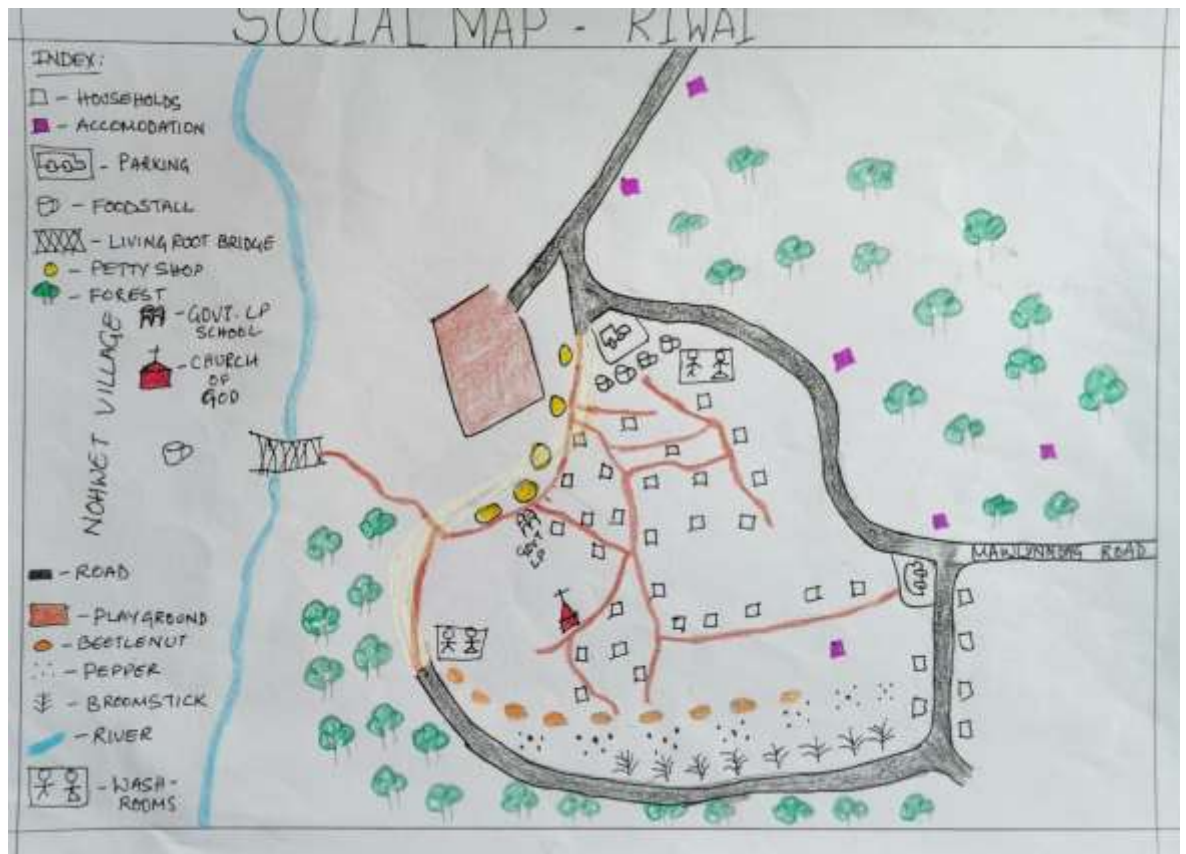


Figure: 4.3 Social Map of Riwai Village

Sources: PRA

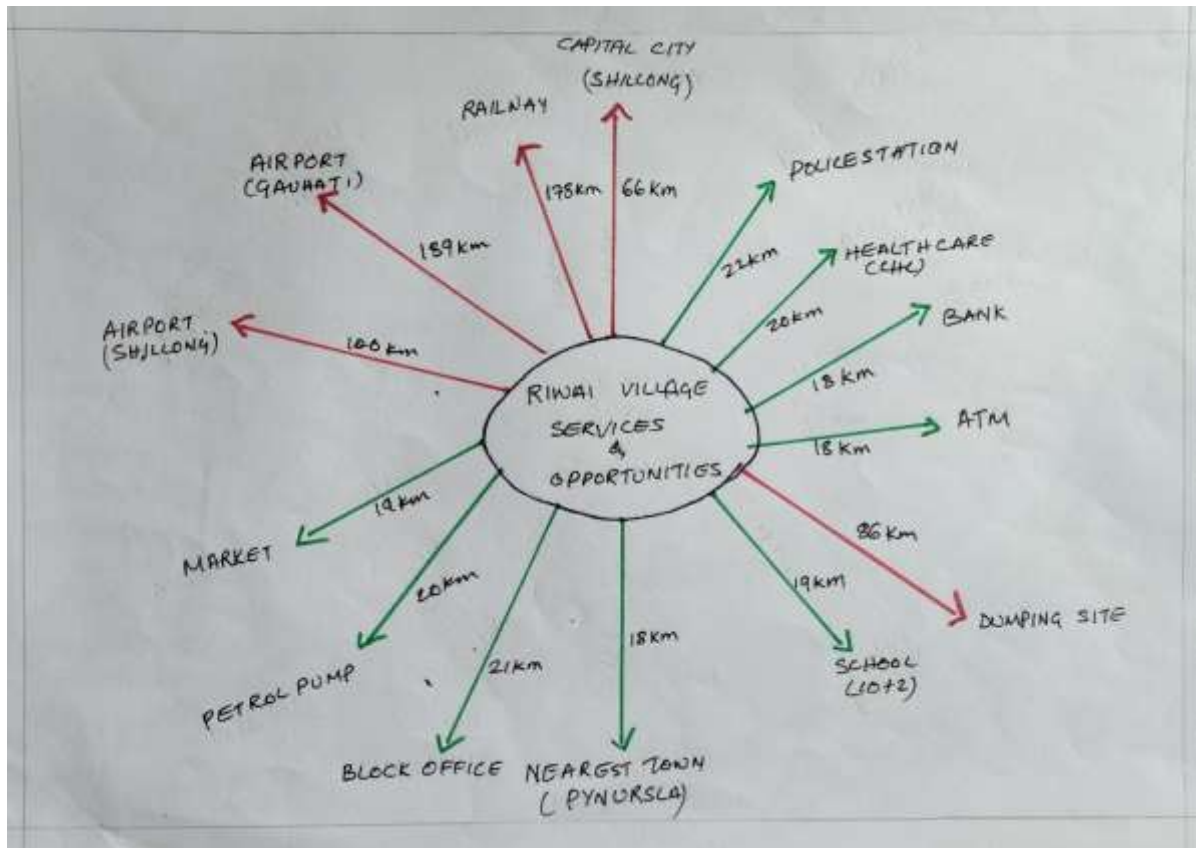


Figure: 4.4 Services and Opportunities Map of Riwai Village Source: PRA

4.3.3 Umsyiem (Dawki) Village

Dawki village is one of the oldest ecotourism destinations among the villages identified in the present study. It is located near Dawki at the Indo-Bangladesh border. It falls within the administrative jurisdiction of the Pynursla C & RD Block and has a total of 236 households and 1058 population. It is located 3 km from the nearest town Dawki and 30 km from Pynursla which is the civil sub-division. The Village has one church, one upper primary school, one lower primary school, two food stalls, a parking space, two viewpoints, a playground, two boating centres, and five camping sites. The village possesses natural resources like the Umngot river, and plantation of litchi, betelnut and beetle leaves.

The services and opportunity maps show that the village is exposed to geographical vulnerability due to its location. The nearest town from the village is Dawki 3 km and 30 km from Pynursla which is the civil-sub division and is located approximately

80 km away from Shillong the capital city. Important services like healthcare, police, market, higher education financial institutions, are accessible to the host communities within 3 – 5 km from the nearest town Dawki. The location of the village from the Block office and civil sub-division makes the host communities vulnerable as they must travel 30 km to Pynursla to get access to government offices. Moreover, the distance from the village to the airport and railway located at Guwahati is 200 km and 190 km respectively which are the main hub for transportation used by tourists. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 100 km away from the village.

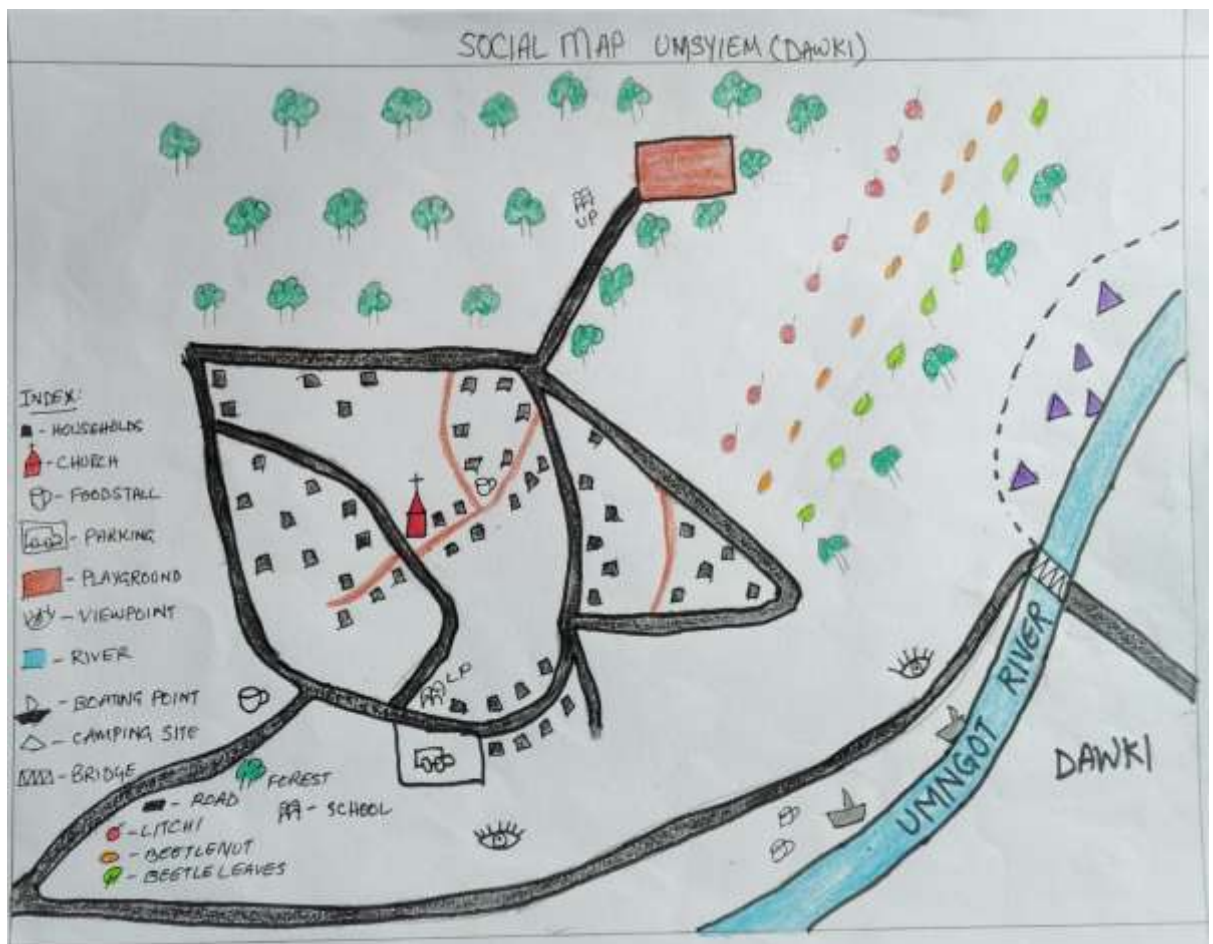


Figure: 4.5 Social Map of Umsyiem (Dawki) Village

Sources: PRA

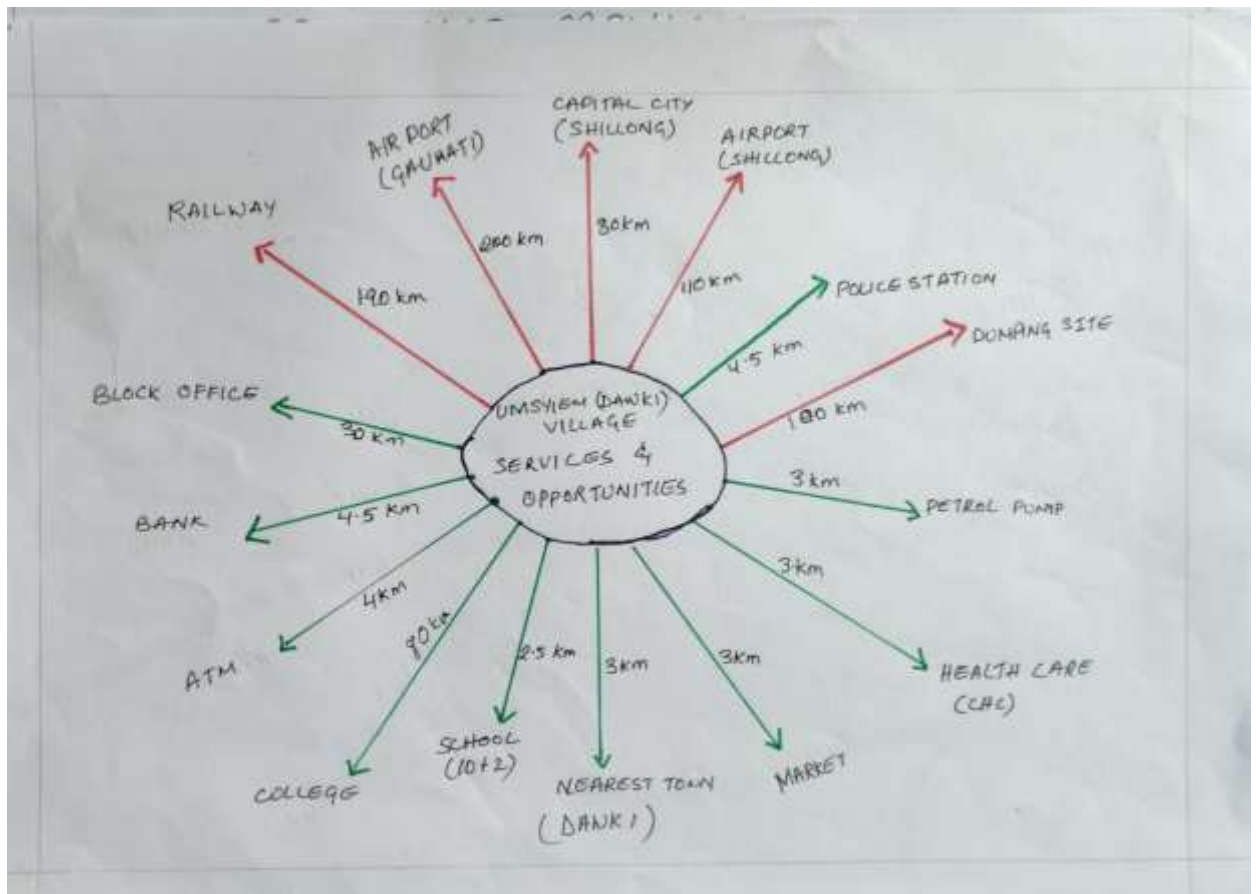


Figure: 4.6 Services and Opportunities Map of Umsyiem (Dawki) Village

Source: PRA

4.3.4 Mawkma Village

Mawkma village is one of the recent ecotourism destinations that have been identified in the present study. It falls under the administrative jurisdiction of the Laitkroh-Khatarnong C & RD Block and has a total of 300 households and 1300 population. The village has three schools, one lower primary school, one upper primary school and one secondary school, one sub-centre for healthcare, one presbyterian church and one catholic church, three petty shops or small grocery stores within the village. The village has four entry points to the ecotourism destinations, one food stall within the village and 12 food stalls within the tourism spots. The villages possess four waterfalls and a natural swimming pool that forms the important natural resources of the village. The village is well connected with roads to reach the village and within the villages and ecotourism destinations.

The services and opportunities map shows that the village is located 17 km from the block office and 46 km from the capital city Shillong. The nearest town to the village is Sohra 17 km from the village which is a civil sub-division. While health care services are available within the village, it also shows the vulnerability of the villages in terms of access to higher education, government offices, police, services of financial institutions, market, block office located more than 15 km from the village to gain access to these services. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 66.5 km away from the village.

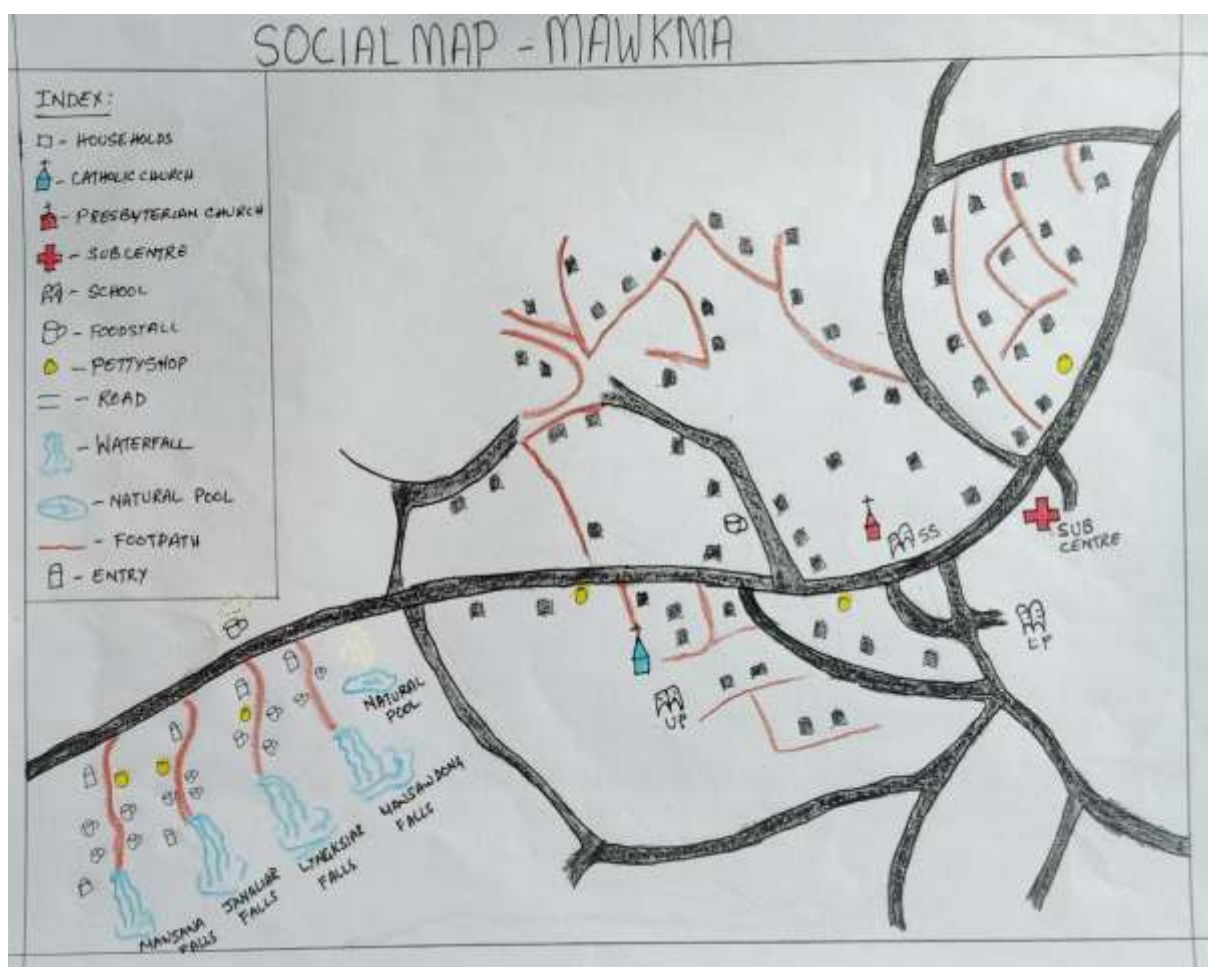


Figure: 4.7 Social Map of Mawkma Village

Source: PRA

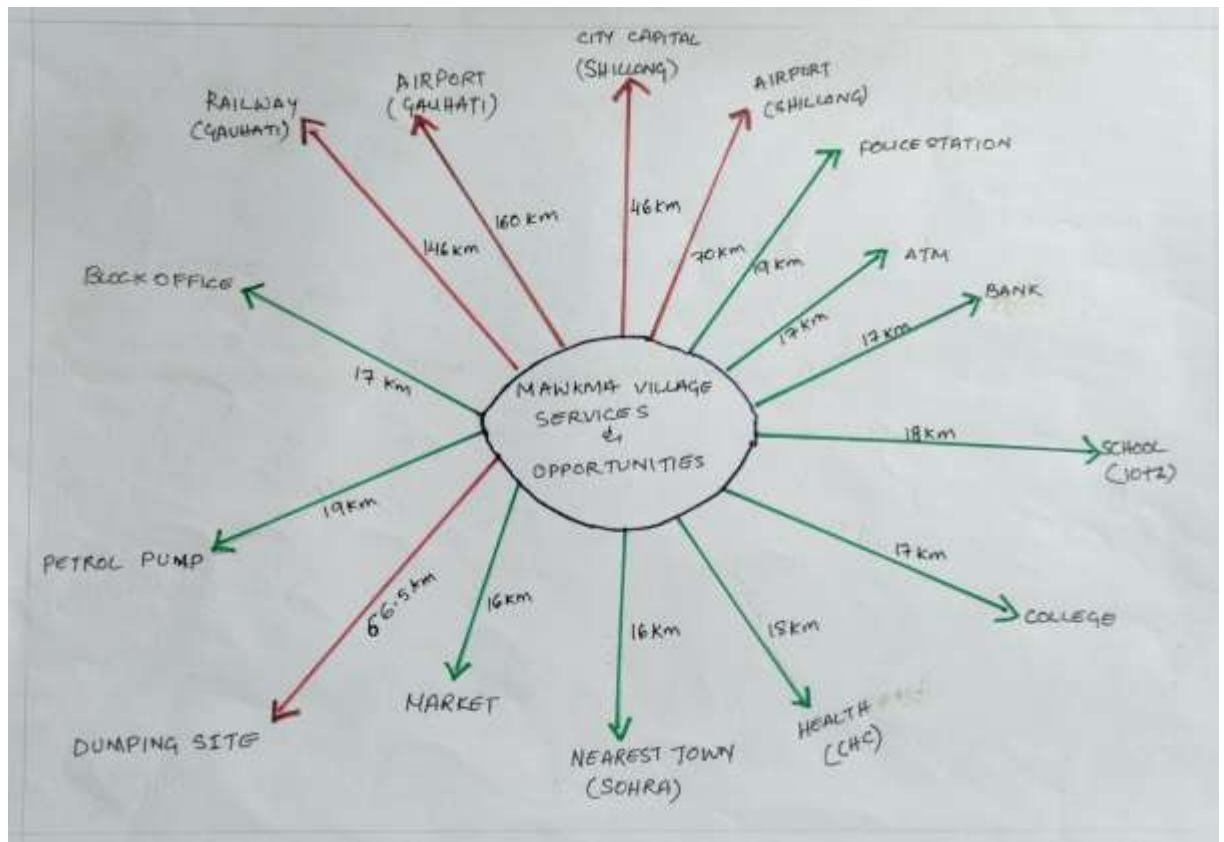


Figure: 4.8 Services and Opportunities Map of Mawkma Village Source: PRA

4.3.5 Laitduh Village

Laitduh is one of those villages that has been identified in the study as an ecotourism hotspot and at the same time a home of rich historical, cultural, and folk tales among the Khasis. Laitduh village comes under the administrative jurisdiction of the Shella-Bholaganj C&RD Block East Khasi Hills District with 31 households and having 135 total population. The Village has two churches one belonging to the presbyterian denomination and the other is of the catholic denomination, one lower primary school, two places of accommodation for tourists, a parking space, two food stalls and, three petty shops. The village also possesses natural resources like two waterfalls, one natural pool, forest and, trekking route. The village is well connected with roads to reach the village and for commuting within the village.

The services and opportunities map shows geographical vulnerability of the village in terms of the distance between the village and its accessibility towards the important services. The village is located at 14km from Sohra which is the nearest

town and 53 km from Shillong which is the capital city. Important services such as healthcare, higher educational institutions, police, market, financial services and institutions, government offices are in the Sohra which is the nearest town and a civil sub-division for which the host communities must travel not less than 14 km to gain access to these important services. The distance from the village to the airport and railway located at Guwahati is 164 km and 157 km respectively which are the main hub for transportation used by tourists. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 69 km away from the village.



Figure: 4.9 Social Map of Laitduh Village

Source: PRA

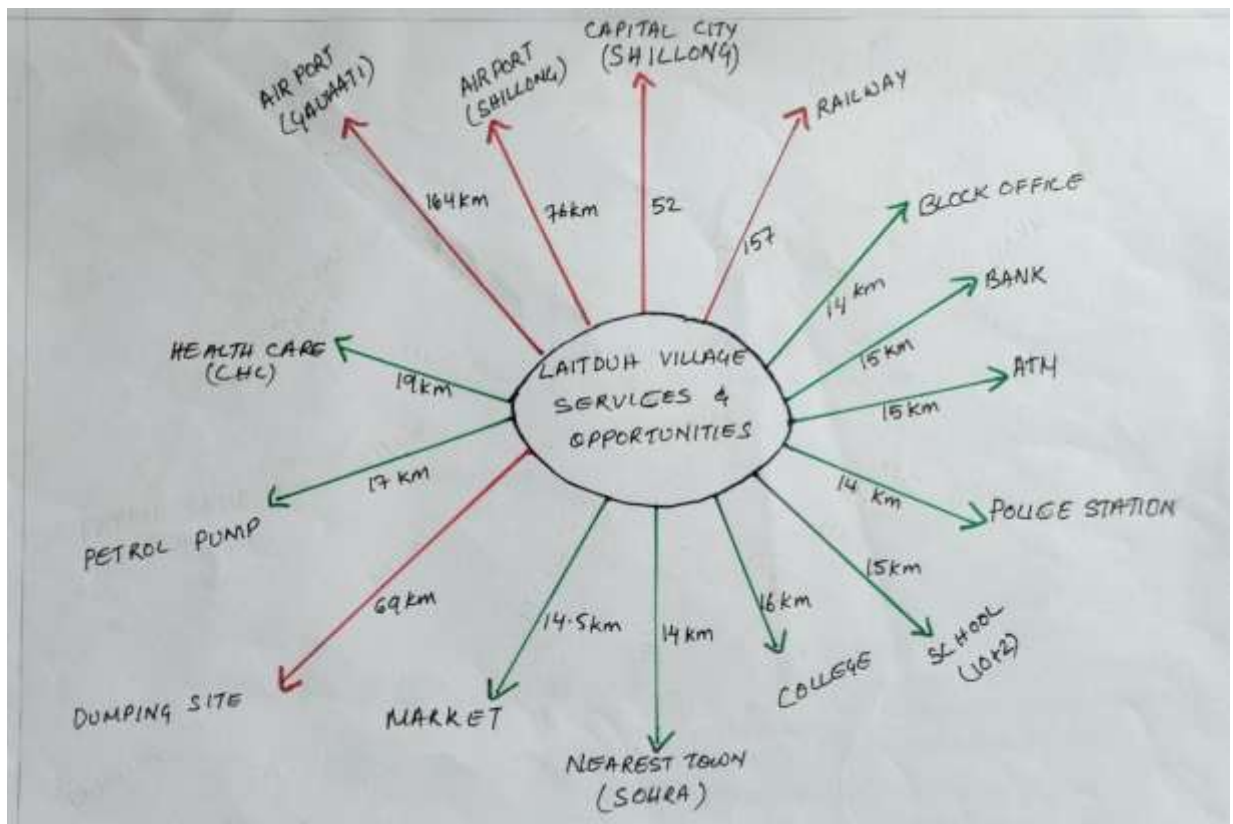


Figure: 4.10 Services and Opportunities Map of Laitduh Village Source: PRA

4.3.6 Sohra (Khliehshnong)

Sohra Khliehshnong is one of the villages in Sohra region identified in the present study on ecotourism which shares an important attribute to the historical milestones of ecotourism and tourism practices, and cultural history among the Khasis. The village is located within the civil sub-division and it comes under the administrative jurisdiction of the Shella-Bholaganj C&RD Block East Khasi Hills District with 485 households and 2178 total population. The village has one lower primary school, one secondary school and one school run by the Ram Krishna Mission (RKM) from lower primary till higher secondary. It also has a bike rental centre, two public toilet, thirteen accommodation places for accommodation, two camping sites, a viewpoint to the waterfall, a parking space, an indigenous heritage museum, a trekking point, a entry ticket counter. There are food stalls and petty shops at the tourism spot and a wine shop at the periphery of the village.

The services and opportunities map shows lesser geographical vulnerability of the village in terms of the distance between the village and its accessibility towards the important services. The village is located within 0.5 km from the nearest town Sohra. It shows that the important services like higher educational institutions, healthcare, police, market, banking and financial services, government offices are located within the periphery of the village under 5 km and are easily accessible by the host community. However, the distance from the airport and railway to the village is one of the vulnerabilities exposed to the village as they are in Guwahati at 166 km and 158 km respectively from the village. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 72 km away from the village.

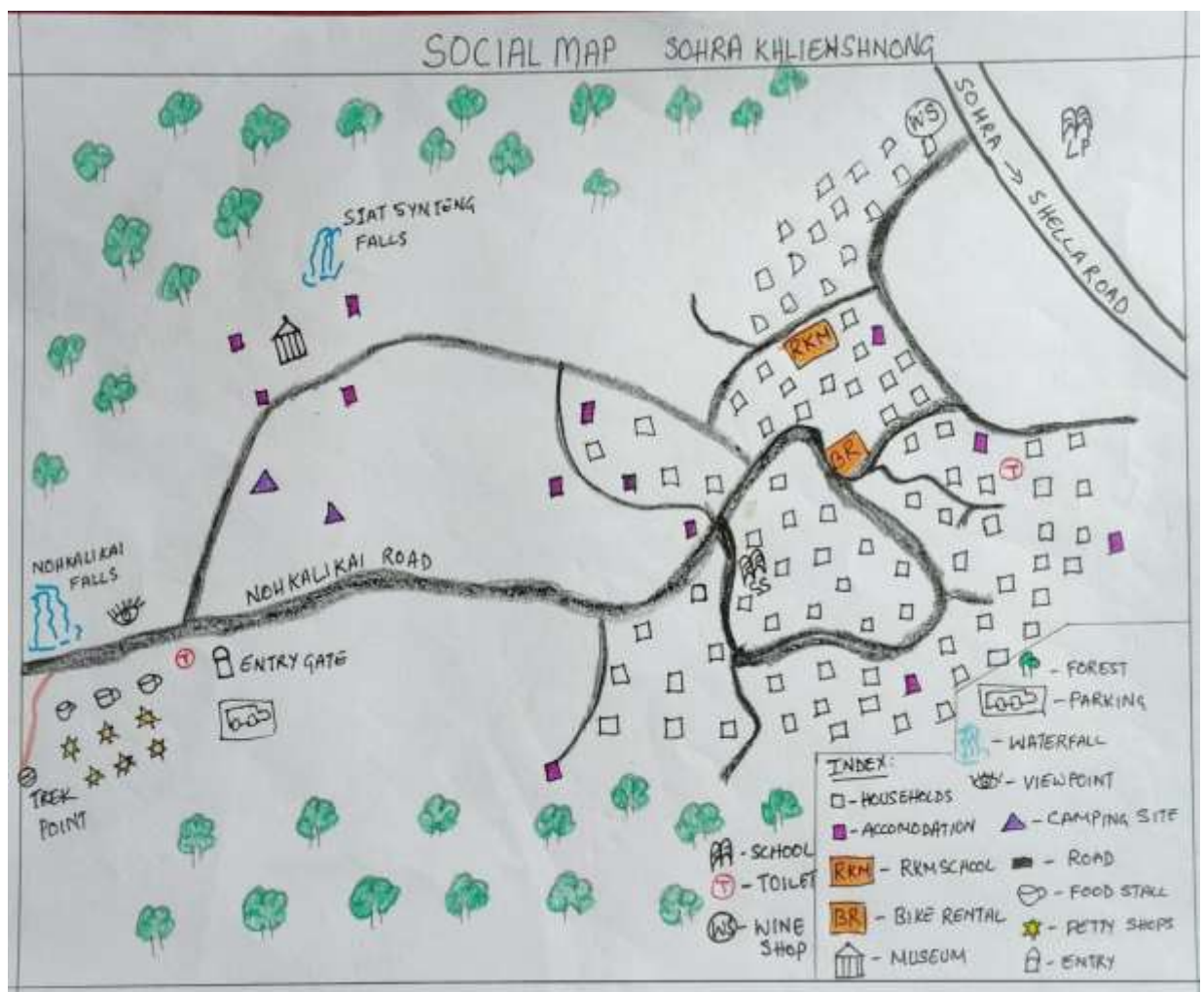


Figure: 4.11 Social Map of Sohra (Khliehshnong)

Source: PRA

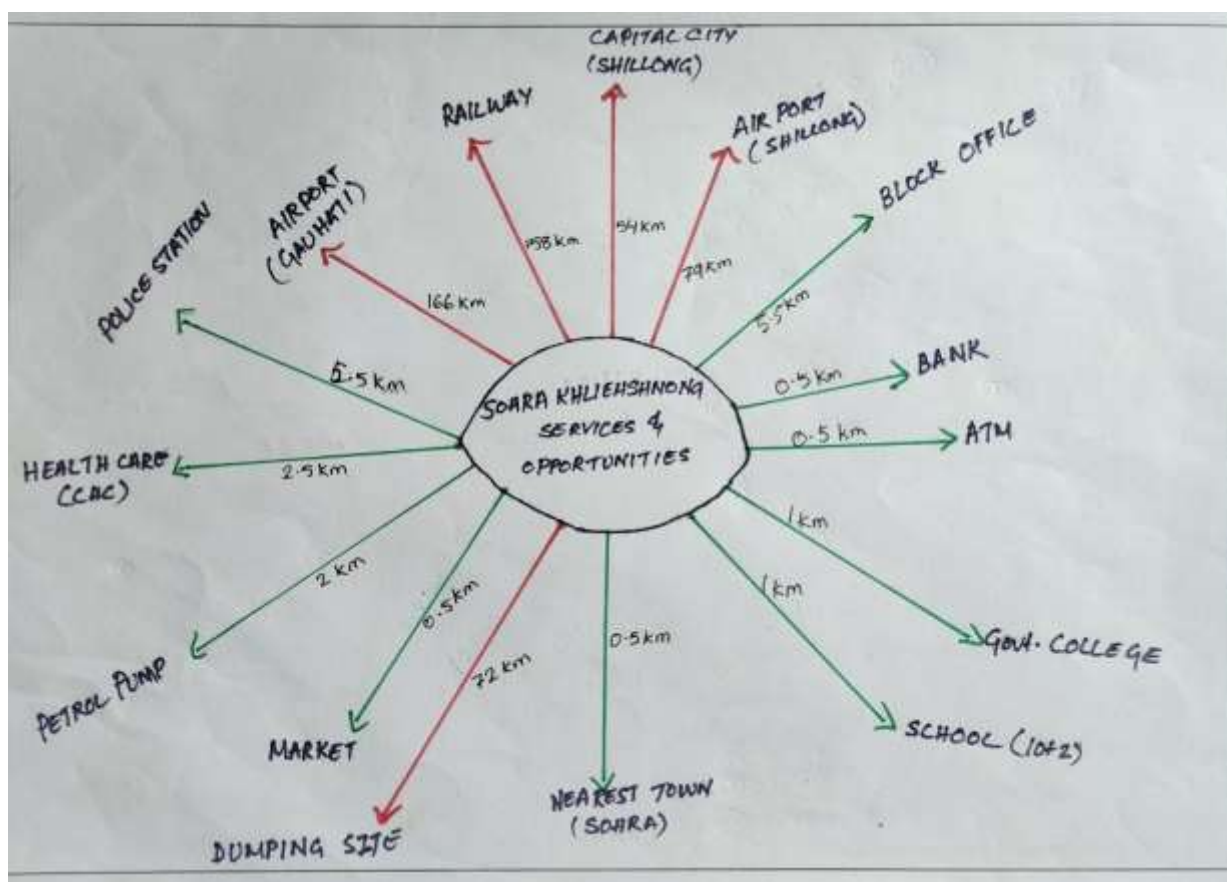


Figure: 4.12 Services an Opportunities Map of Sohra (Khliehshnong) Source: PRA

4.3.7 Mawsmmai Village

Mawsmmai village is one of the oldest tourism destinations in East Khasi Hills District of Meghalaya that has been the center of tourist attractions for many decades. It falls under the administrative jurisdiction of the Shella-Bholaganj C&RD Block East Khasi Hills District with 98 households having 475 total population. The village has one lower primary and one upper primary school, one church, a community hall, two eco-parks, three parking spaces, three resorts, thirty-one places of accommodation for tourists, four public toilets at the tourist spot, a viewpoint of the Nohsngithiang waterfall, six grocery shops, five major food stalls and, three ticket counter. The village is well connected with roads to the village and within the village. It also possesses natural resources like sacred groves, community reserved forests, caves, streams, and monoliths.

The services and opportunity maps of the villages shows that the village is located within 3.5 km from the nearest town to the village which is Sohra and 60 km from

Shillong which is the capital city. While important institutions such as government offices, health care, higher educational institutions, banking and financial services, market, and police station are located at the periphery of the village within 4 km from the village. This shows that village experiences less geographical vulnerability in its accessibility to the institutions that are providing important services to the community. However, the distance from the airport and railway to the village is one of the vulnerabilities exposed to the village as they are in Guwahati at 170 km and 162 km respectively from the village. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 78 km away from the village.

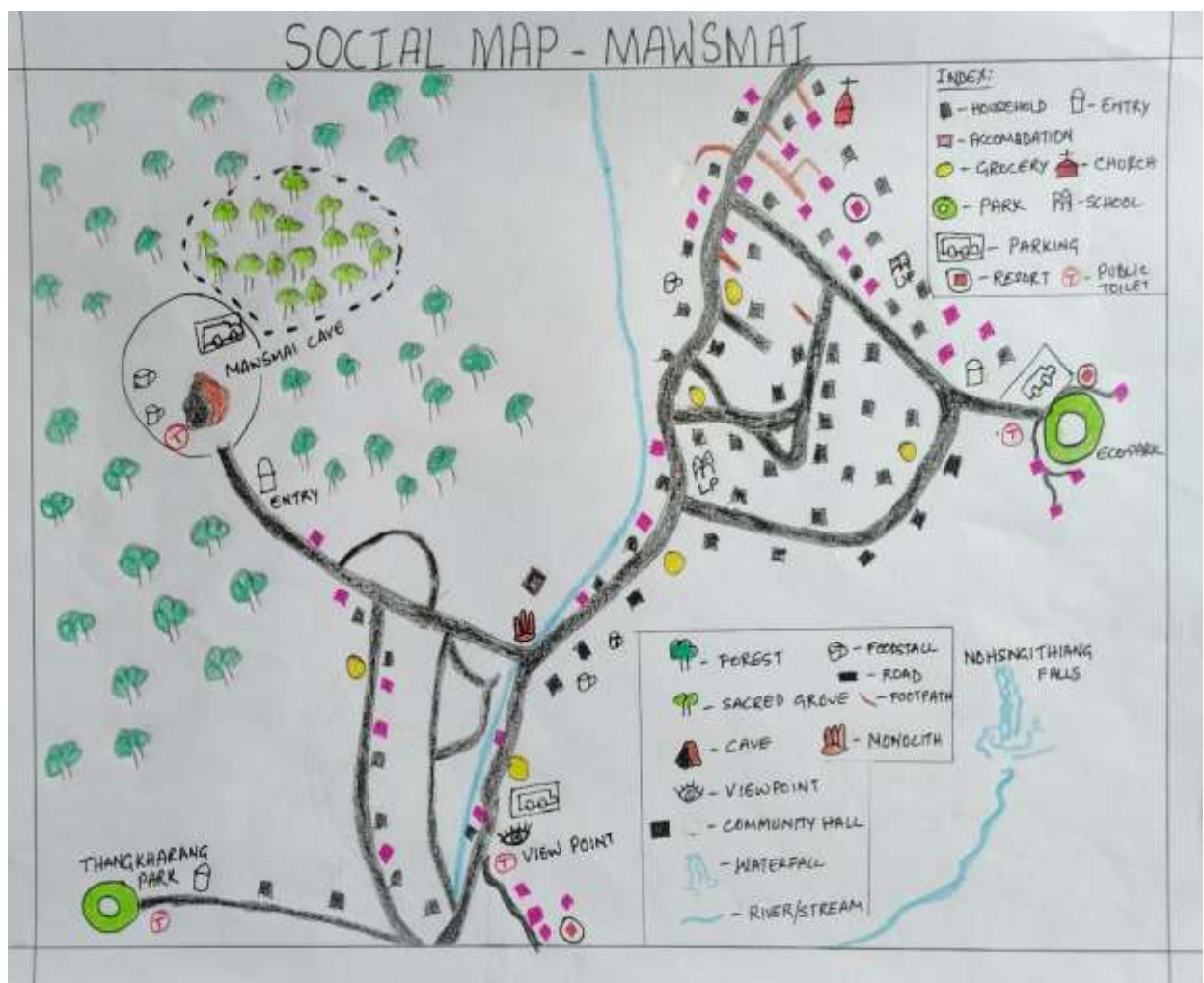


Figure: 4.13 Social Map of Mawsmat Village

Source: PRA

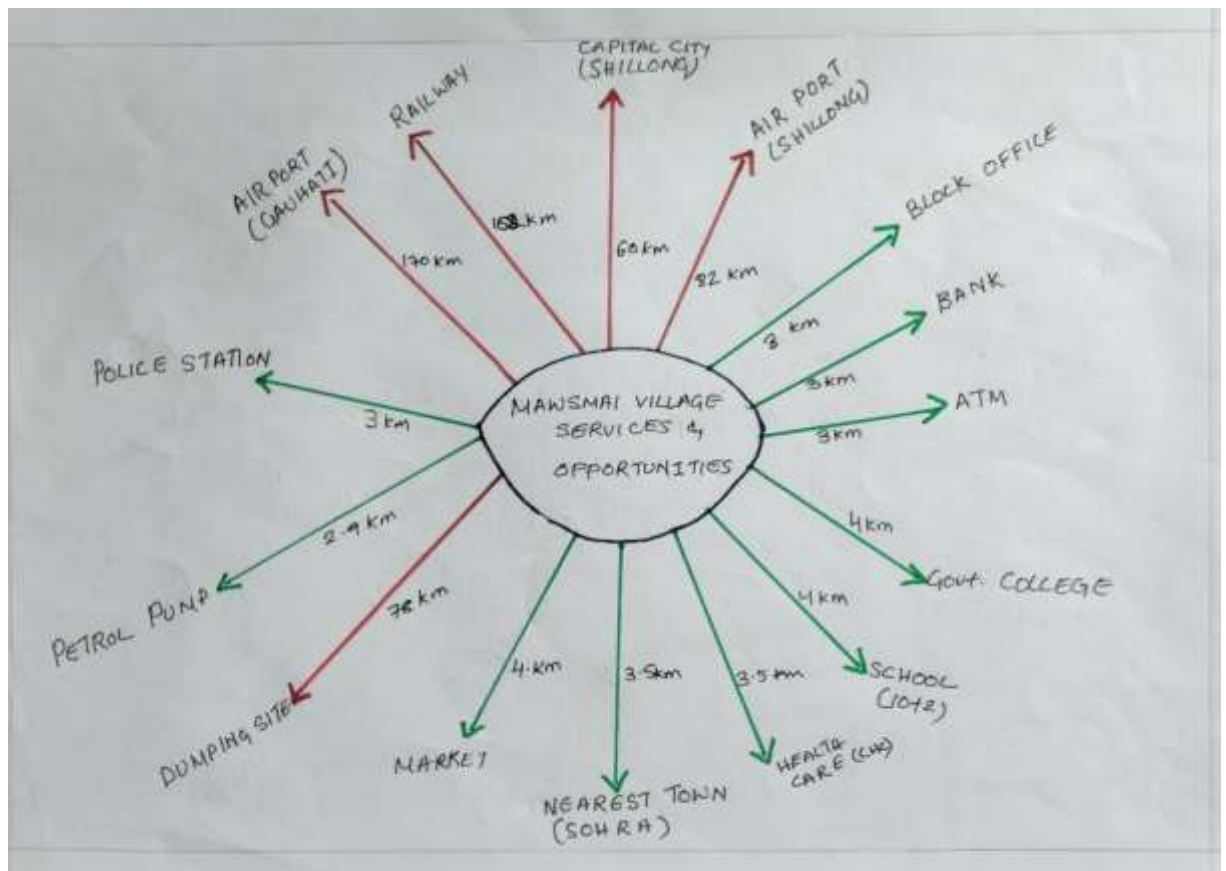


Figure: 4.14 Services and Opportunities Map of Mawsmmai Village Source: PRA

4.3.8 Tyrna Village

Tyrna village is a village that is strategically located on the way to Nongriat village which is famous for its double decker living root bridge (Jingkieng Jri). The village has 155 households with and a total of 750 population. It falls under the administrative jurisdiction of the Shell-Bholaganj C&RD Block. The village has one lower primary school and one upper primary school, two churches, a parking space, one hotel, five homestay accommodation for tourists, one resort, tourist guide point, a playground, four food stalls, one public toilet and, four grocery shops. The village also has natural resources like community reserved forest, bay leaf cultivation, beetlenut plantation and, wild pepper.

The services and opportunities map shows that Tyrna village is located 16 km away from Sohra which is the nearest town and 68 km from Shillong the capital city. It also shows that various important institutions and services such as higher educational

institutions, health care, police, market, banking and financial institutions and, government offices are located between 8 km to 16 km from the village. This shows some degree of geographical vulnerability in terms of easy accessibility to important institutions and services. Higher degree of geographical vulnerability is seen with regards to transportation hub and waste management. The distance between the village and the airport and railway at Guwahati is 177 km and 169 km, and Shillong airport is 89 km from the village. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 82 km away from the village.



Figure: 4.15 Social Map of Tyrna Village

Source: PRA

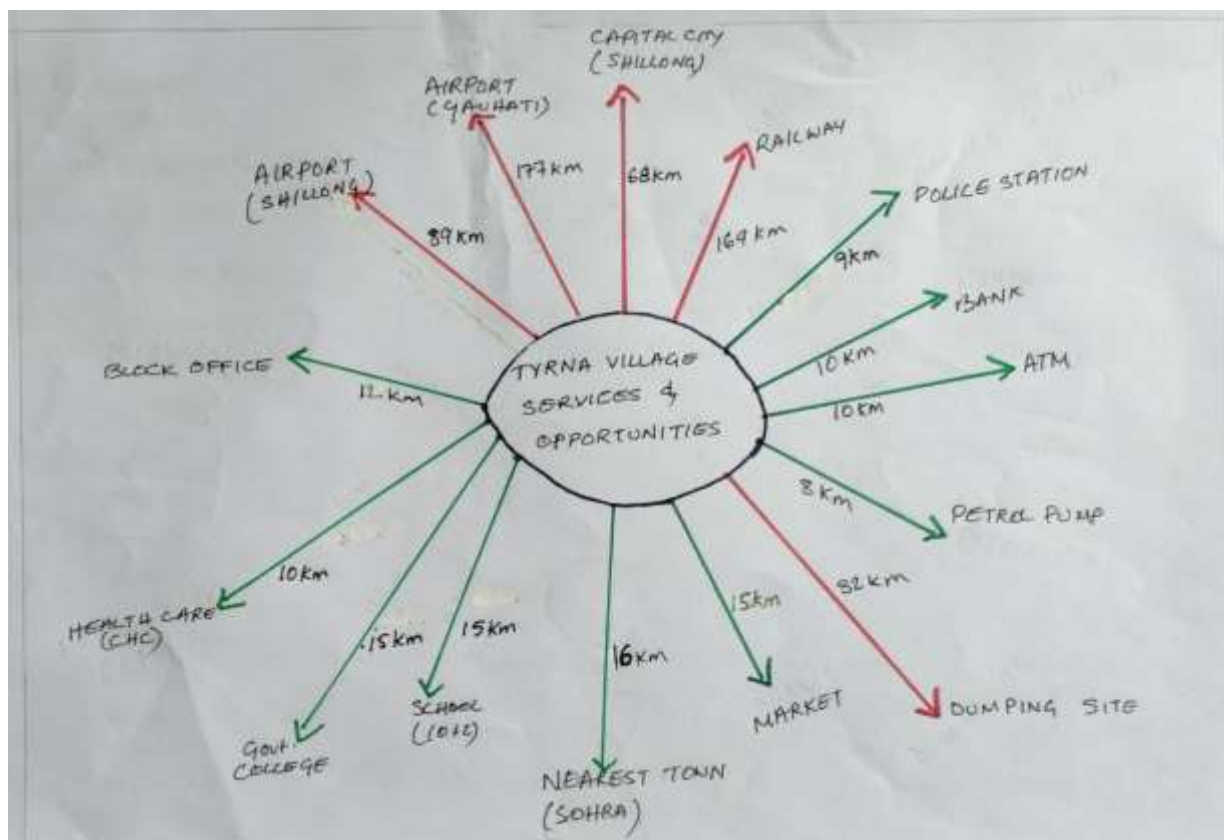


Figure: 4.16 Services and Opportunities Map of Tyrna Village Source: PRA

4.3.9 Nongriat Village

Nongriat village is the only village identified in the study as one of the ecotourism hotspots and at the same time it is remotely located and the only route to reach the village is a two-hour trek on foot. It is well known for being home to the indigenous engineering of the double decker living root bridge (Jingkieng-jri) and famous rainbow waterfall that attracts tourists from all over the country despite its remote location. It comes under the jurisdiction of the Shell-Bholaganj C&RD Block with 36 households and a total population of 136. The village has one lower primary school, six homestays for tourist accommodation, one entry point to the living root bridge, one public toilet/washroom, one food stall, two petty shops. The village also possesses natural resources such as community reserve forests, living root bridges, waterfall, lagoons, trekking route, and a fish pond. The host communities' plant betelnuts, bay leaf, and wild pepper as their agricultural products. The only route to the village is by travelling on footpaths and connected with bridges across rivers.

The services and opportunities map shows high degree of geographical vulnerability of the community due to the remote location of the village. The nearest town from the village is Sohra which is 23 km from the village. The distance between the village and Shillong the capital city is 75 km. The important services such as government offices, higher educational institutions, market, police, health care, and banking and financial services are not easily accessible by the host community as they are located 23 km away from the village. This shows that the geographical vulnerability of the village due to its remote location has make it challenging for the community to get access to the important institutions and services. In terms of waste management, it is nearly impossible to collect waste from the village and disposed of at a dumping site as it is 90 km away from the village, the extreme challenge to dispose waste from the village to leaves them with no other choice but to burn the non-biodegradable waste materials.

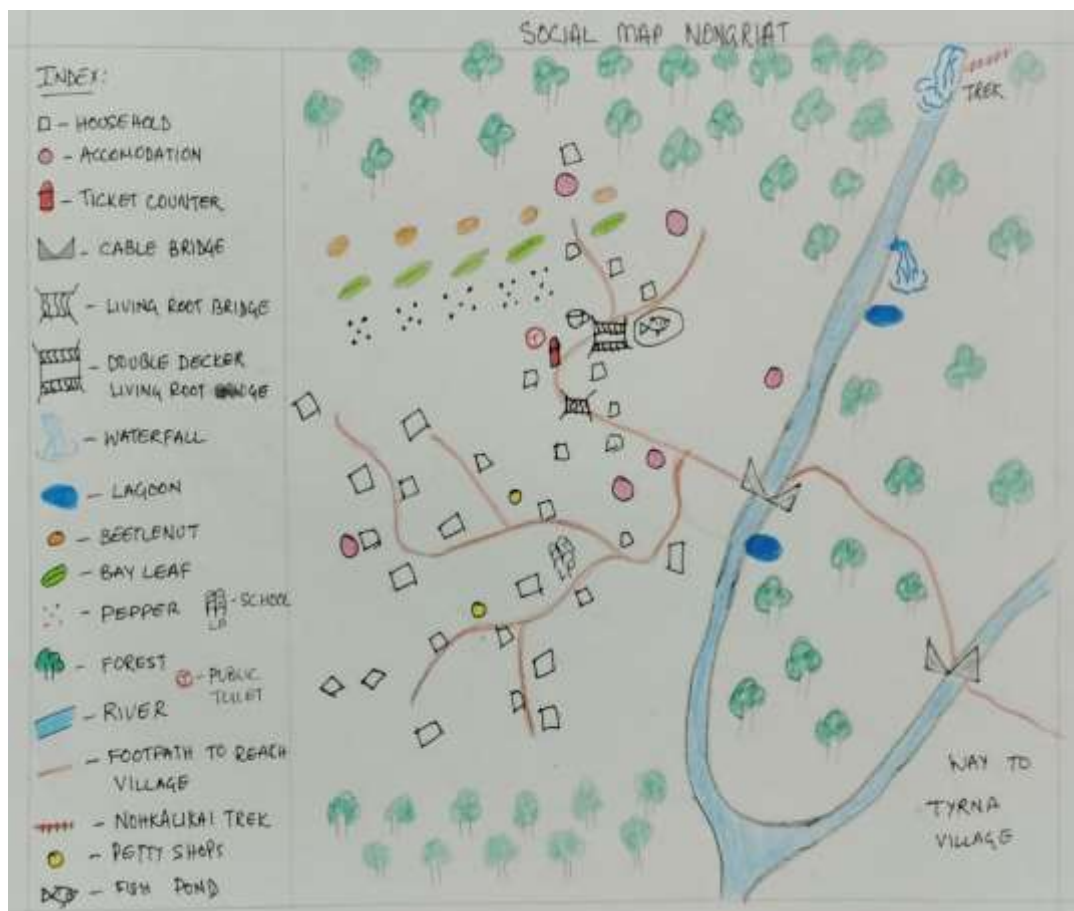


Figure: 4.17 Social Map of Nongriat Village

Source: PRA

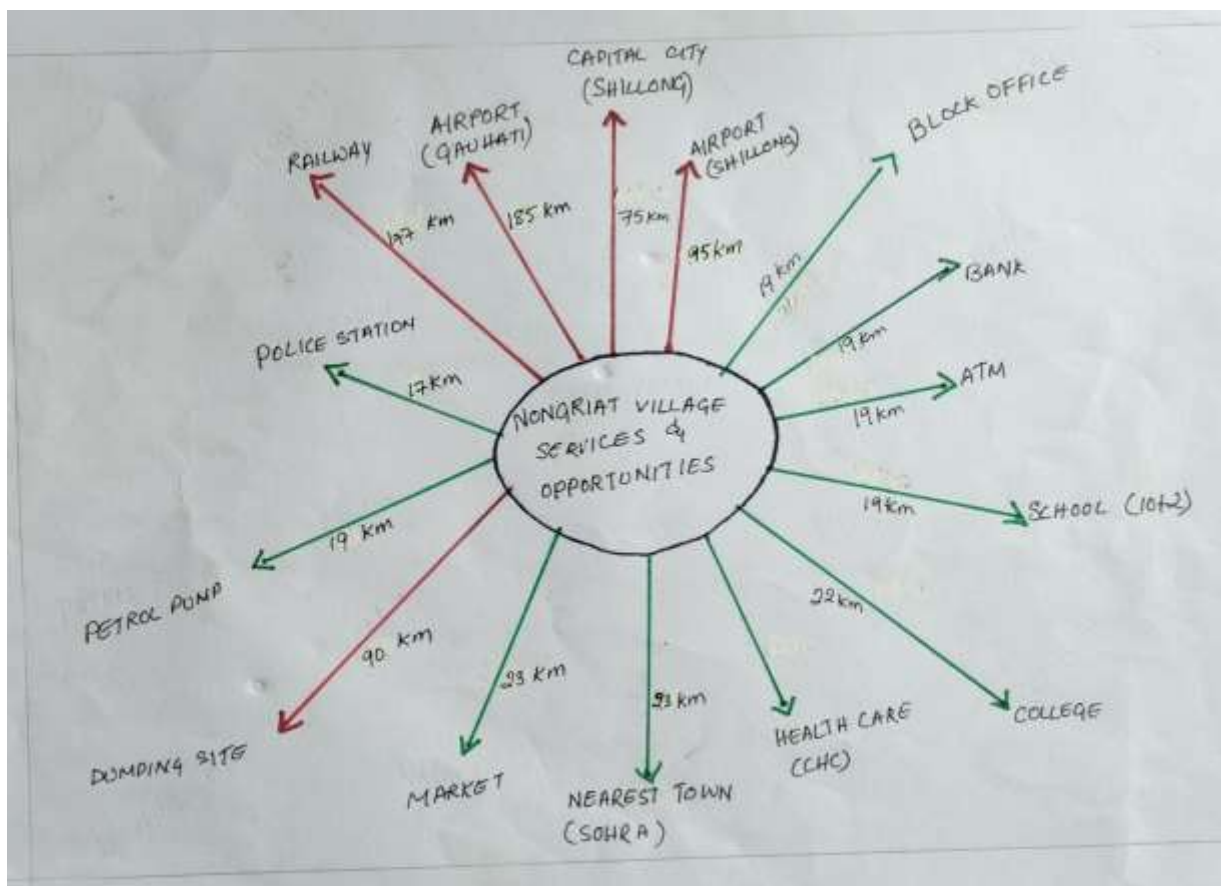


Figure: 4.18 Services and Opportunities Map of Nongriat Village Source: PRA

4.3.10 Saitsohpen Village

The village is in the outskirts of the Sohra main town and is a very busy hub for tourists and the local communities as many important institutions were being setup in the village. The village has 120 households with a total population of 650 people. It falls under the jurisdiction of the Shella-Bholaganj C&RD Block. The village is home to various important institutions such as the Block Development office, Teachers training center, Indian training Institute, National Institute of Technology, a Bank and, office of the Sub-Divisional Officer. The village has two private secondary schools and one government higher secondary schools, one church belonging to the catholic denomination, eight food stalls, seventeen homestays for tourists' accommodation, one ATM machine, one petrol pump, four grocery shops and, a viewpoint.

The village is located 6 km from Sohra which is the main town in the region and 59 km away from Shillong which is the capital city. The services and opportunities map shows that the village has less exposure to geographical vulnerabilities as many important institutions and services are accessible within the village. This shows that the community has easy accessibility of the various services provided by the different institutions present in the village. However, the distance from the airport and railway to the village is one of the vulnerabilities exposed to the village as they are in Guwahati at 171 km and 163 km respectively from the village. In terms of waste management, the only available landfill for dumping waste particularly non-biodegradable waste generated from the households is 77 km away from the village.



Figure: 4.19 Social Map of Saitsohpen Village

Source: PRA

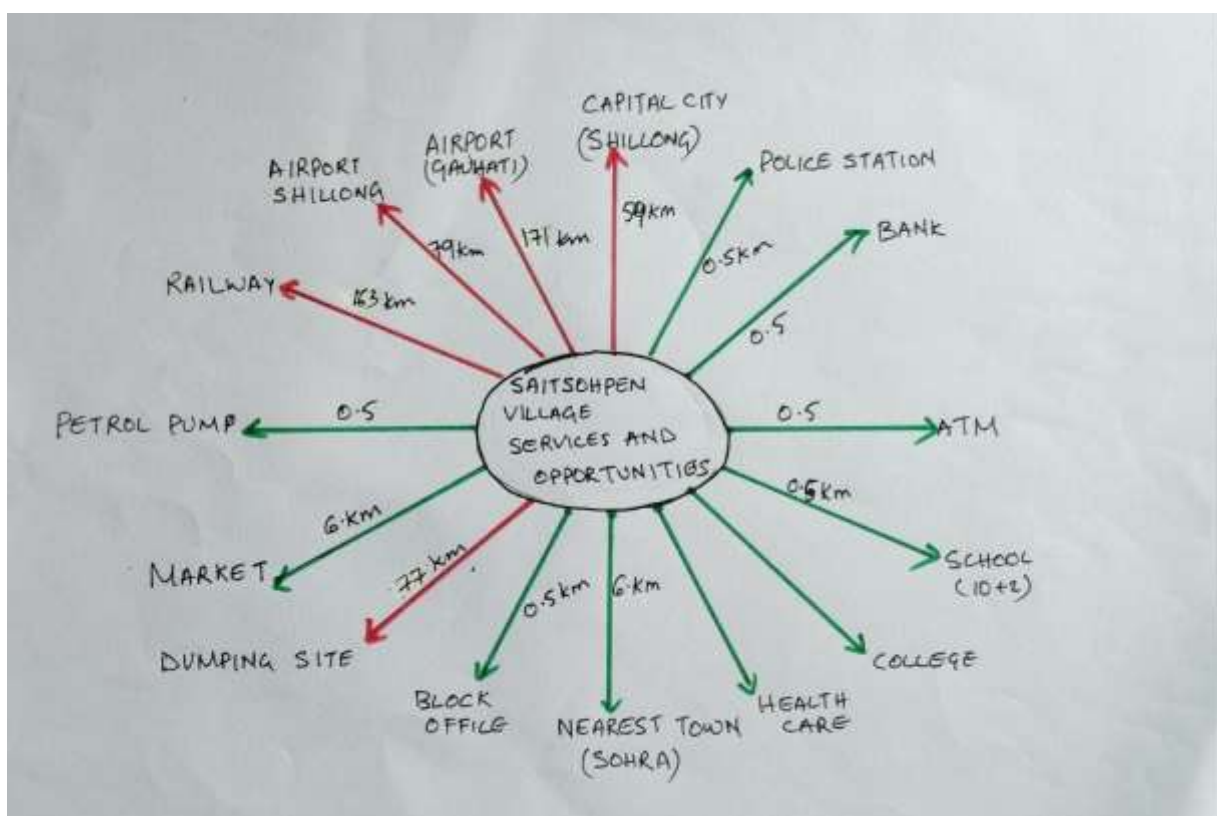


Figure: 4.20 Services and Opportunities Map of Saitsohpen Village Source: PRA

Analysis of the PRA:

Nature of Villages: One of the very distinctive features observed of the village in the present study includes the identification of the type and nature of villages. On one hand there are few villages that are located within the main town or vicinity of the main town and on the other hand, there are villages that are located far and remote from the main town. Villages like Sohra-Khliehnsong and Saitsohpen are located within the main town and it can be observed that their geographical location are very much related and influences the establishment of physical assets and infrastructures as a result it also influences their accessibility to the major services and opportunities that are offered by the various institutions present in the villages.

Physical assets and accessibility: Another observation derived from the PRA techniques adopted in the study is the availability of physical assets. In terms of physical assets, it can be observed that major or important infrastructure like important government offices, health care centers, higher educational institutes, police station, banking, and financial institutions, are located within the main town. In relation to the villages in the present study, the availability of physical assets and

their accessibility are advantageous to communities and villages located nearby the main town. This reduces the vulnerability of the communities and villages in terms of their accessibility to important institutions and services. While on the other hand the deficiency of physical assets in other villages that are located far away from the main town exposes their vulnerability in accessing the services from important institutions.

Natural Assets influencing ecotourism practices: Ecotourism practices in the present study are being influenced by the presence of natural assets in the respective villages identified in the study. The observation from the PRA techniques used in the present study have shown that the villages possess natural assets such as waterfalls, natural scenic beauty, indigenous engineering of the living root bridges, caves, eco-parks, natural swimming pools are the inherent factors that have influenced the development of ecotourism in the villages. As a result, the presence of the natural assets has also influenced host communities to undertake and engaged in livelihood activities that are derived from ecotourism at the household and community level. The natural assets have been inherent in attracting tourists and in the process of ecotourism development leading to the setting up of infrastructures like homestay, guest house, hotels, food stalls, entry and parking fee, petty shops to cater to the needs of visiting tourists in the villages. Thus, natural assets have played an important role as a source of livelihood for the host communities.

Geographical vulnerability: Among all the villages, Nongriat village is seen to be the most vulnerable in terms of its accessibility to major important institutions and services due to its remote location it lacks the availability of physical assets that are crucial and important for the community. All the villages in the are exposed to vulnerability in terms of waste management and disposal as the landfill for dumping waste materials is located far from the village with an average distance of 45 km from the villages. Hence, regular, or daily collection of waste materials from households for dumping and disposal is a challenge for the communities in the study. As a result, this may contribute to households practicing burning the accumulated waste products which may result in environment pollution and littering.

Natural assets and livelihood diversification: It is observed from the PRA technique adopted that the practice of ecotourism in the villages of Dawki,

Mawlynnong, Riwai, Nongriat, and Tyrna is also accompanied by the practice of agriculture which has been the predominant occupation of the local communities before the onset of ecotourism. The local communities in the above villages are engaged in the plantation of litchi, bay leaf, wild pepper, pineapple, and broom sticks. These plantations can be further processed and can help local communities diversify livelihood engagements alongside while engaging with ecotourism and enhance their economic benefits.

Vulnerability of Human Resources: The observation from the above PRA techniques shows that apart from Sohra-Khliehshnong and Saitsohpen village, most of the other villages in the study are vulnerable in their accessibility for higher education. It shows that the villages are deficient in terms of the availability of higher education institutions in their respective villages. Most of the educational institutions in the village's extent from lower primary till upper primary schools. This deficiency in higher educational institutions may influence higher rate of school dropouts among and result in lack of skilled human resources among the rural villages in the study.

Connectivity: Apart from Nongriat village which is only accessible on foot to reach the village, all the other villages in the study are well connected with roads from Shillong which is the capital city and from the nearest town to the villages. In the context of the present study, the availability of road connectivity makes it easier and more accessible for tourists to reach the ecotourism destinations attracting more tourists and contribute to the economic development of local communities.

4.4 Assessment of Vulnerability Context

The vulnerability context of the villages and rural households in the present study was assessed using PRA tools and Key Informant Interviews consisting a minimum of 4 and maximum 6 participants who were among important stakeholders of the villages who are both engaged in the management of ecotourism practices in the villages and at the same time are also engaged in undertaking livelihood activities through ecotourism practices.

1. Economic vulnerability

- a) **Dependency on ecotourism:** The respondents shared that while there is growth in ecotourism activities in the villages the households and the community mainly benefit from visiting tourists from outside the state of Meghalaya. The trend of tourist inflow is very high among those from outside the state of Meghalaya particularly from Assam as compared to domestic tourists from Meghalaya whose trend of visiting are seasonal in nature. The social and economic benefits particularly livelihood activities of the respondents and the village are largely dependent upon the inflow of tourists from outside the state of Meghalaya. There are many respondents from the selected villages in the present study that are dependent on ecotourism as their primary source of income. Past incidences such as the Covid-19 Pandemic, CAA conflict have adversely affected the inflow of tourists and at the same time directly influenced livelihood outcome of the respondents. There are some time or months during the year that the villages record low inflow of tourists. During these times the village and the respondents yield very less income from ecotourism as compared during peak seasons.

The Key Informants shared that community members engaging in ecotourism livelihood activities particularly homestay, guest houses, restaurants, resorts, tourist guides, and some petty shops are entirely and directly dependent upon tourists for their livelihood. (KIIs)

- b) **Livelihood transition:** For so many years since the early 2000s when the growth of ecotourism was evident in Meghalaya particularly in East Khasi Hills many respondents started to shift their livelihood activities from labour and agriculture to ecotourism. There was a gradual change in economic activities among the respondents and local communities. Ecotourism started to play as the primary sources of income for many of the respondents. The respondents were very satisfied with their economic engagement as they could earn regularly. During the Covid-19 Pandemic the lock down has completely shut down ecotourism activities which meant a halt to income generation from ecotourism. The respondents had to find employment opportunities during the Pandemic, those who had agricultural

land engaged in their own land for agriculture, and others had to work as agricultural labourers and wage labour. Yet there was limited opportunity for the respondents as everyone was undergoing economic and financial crisis.

During the Covid-19 Pandemic we had to engage in any form of livelihood activities that provided us income, some who are engaged in agricultural activities besides ecotourism could somehow derive some form of income through agriculture. (KIIs)

The respondents shared that it was a very difficult period for them as the only economic activity that were allowed was labour and agriculture(KIIs)

Some respondents shared that the rural communities will always be vulnerable in the future as there is nothing much the village economy can offer for the local communities apart from ecotourism, agriculture, and labour. (KIIs)

c) Reliant on Village Revenue: Ecotourism has also contributed to income generation for the village council through entry fees, parking fees and small taxes etc. The purpose of levying some fees from tourists is to support management and maintenance of ecotourism activities and public amenities to cater to the needs of the visiting tourists and local communities. But the revenue generated by the village council is not sufficient to keep up with the requirements of the increasing inflow tourists over the years.

Members of the village council shared that the village is levying a very small amount of fees from tourist for the village revenue it is the only source of income for the villages and very challenging and difficult to meet the maintenance of village infrastructure and facilities. (KIIs)

Environmental Vulnerability

a) Irresponsible Tourism: Many visiting tourists particularly do not give much importance and value to the environment. Even though notice boards and signage kept in various parts of the village they still litter the places around. Some tourists do not use dustbins that are being provided to discard their packets or other wastes.

The nature and environment have given various forms benefits for the households and community and the duty of the community is to conserve and protect nature.

(KIIs)

The tourists do not understand the principles of conservation as they do not understand the social and economic benefits that nature provides. Their sole purpose to visit the village is enjoyment and pleasure. (KIIs)

- b) **Large scale use of plastic items:** The large-scale use of plastic materials for various purposes has been a menace to the environment in all the ecotourism villages in the study. It has been challenging for the local communities to keep the environment free from plastics. Many of the items used and required by the tourists are being provided in plastic materials. There has been no alternative to the use of plastic to cater to the requirements of the visitors.

Managing plastic wastes is very challenging although the village collects plastic wastes separately but disposing it is very challenging as the distance for disposing is very far. (KIIs)

Plastic materials such as food packets are the most non-ecofriendly substances for the environment. There are times when these plastic materials accumulates so much that the only option is to burn the plastics wrappers although burning of plastics is not usually encouraged for the households and community. (KIIs)

Social Vulnerability

- a) **Social issues:** One of the vulnerabilities that have been affecting ecotourism regularly are social issues and social disorganization within the state of Meghalaya and particularly Assam. The state of Assam is very important for other northeastern states, it connects other states and the rest of northeast India. Whenever there is any form of social disorganization occurring within Meghalaya or Assam the inflow of tourists is affected by a very high level of decrease in visiting tourists. Social issues that have been happening in recent times were CAA, border issues, ILP issues in Meghalaya. Ecotourism activities in the context of the villages in the study are very much reliant on national

tourists and from other states apart from other northeastern states. Major contributors towards growth of ecotourism in Meghalaya are national tourists who mostly consists of non-tribals. As a result, it reflects idle ecotourism activities and negative impact on the livelihood outcomes from ecotourism on the respondents.

Respondents shared that recent experiences of social issues such as the Citizenship Amendment Act (CAA) have recorded very less tourists visiting Meghalaya due to the fear that conflict may arise and feeling of insecurity. (KIIS)

Some respondents shared that during times of social disorganization they hardly derive any benefit from ecotourism activities. (KIIS)

- b) **Land Dispute:** While ecotourism has brought about social and economic benefits to the rural households and the community. There have been incidents in the context of the study where possession of land ownership has created an issue among one of the villages in the present study. Among the villages that were selected in the study Laitduh village has been vulnerable to disputes over land with other neighbouring villages over the past 3 years. Laitduh village and its rural households has not been able to derive benefits from ecotourism since the onset of dispute over land between Laitduh village and other villages. Members who once used to benefit from ecotourism by keeping shops are now unemployed and are engaged in other economic activities. The village council has not been able to generate revenue from ecotourism due to the dispute. The matter has been taken by the Khasi Hills Autonomous District Council (KHADC) which is yet to be resolved.

According to the participants in the KIIs, 'The Weisawdong Falls was initiated by Laitduh village as an ecotourism destination since 2015 but lately since 2022 other neighbouring villages have made claims over the ownership and jurisdiction rights of the area which has thus created an unresolved land dispute'. (KIIS)

All forms of tourism activities and economic activities in the disputed area near the waterfall has been stopped and barricaded and section 144CrPC has been

imposed by the Civil Sub-divisional Authority due to the dispute over the ecotourism destinations. (KIIS)

- c) **Covid19 Pandemic:** The Covid19 pandemic has been the worst that the respondents have faced since engaging in ecotourism. The pandemic has caused economic and employment issues for the respondents. Ecotourism was totally non-functional during the pandemic and respondents who entirely depended on ecotourism as their primary source of income faced problems of unemployment.

Respondents shared that during the initial period of the pandemic they had nothing to do they could not engage in their regular livelihood activities as there was lockdown. (KIIS)

COVID-19 was a very difficult period for most of the respondents as job opportunities were very limited or to no avail in the rural communities. (KIIS)

Geographical Vulnerability

Most of the villages in the present study engaged in ecotourism activities are located far from the towns and cities except Sohra village which itself is a civil sub-division. One of the villages in the study (Nongriat) is in a very remote geographical area where access to village is only possible by undertaking 60 – 90 minutes' walk from the last location where public transport can reach in Tyrna village. Most of the village in the study are highly dependent on the nearest towns for their supplies and products that are necessary for their households needs and to cater to the needs of the visiting tourists. Other forms of vulnerabilities exposed by the local communities are access to basic needs such as health and education. Most of the villages have to travel to the nearest town to get access for healthcare services and pursuing higher education.

Lack of Support System

- a) **Public facilities:** One of the support systems that the villages that is still lacking in the villages are public amenities like ATMs, health care center and internet connection. These are some of the public amenities that are regularly required by the visiting tourists but maintenance of these amenities is far beyond the

capacity of the community. It requires intervention from higher authorities to provide access to such amenities to cater to the needs of the tourists and communities and foster growth of ecotourism in the villages.

Respondents shared that since the onset of ecotourism the village council has levied small amount of fees from tourist and local communities engaged in ecotourism related livelihood activities and made all the arrangements and maintained the various public amenities to cater to the needs of the tourists and the public. (KIIS)

It is difficult for tourists who visits for the first time when they need money for various purposes. Fluctuations of internet coverage in many locations makes it difficult to carryout online financial transactions as well. (KIIS)

- b) Lack of Entrepreneurship Knowledge and Skills:** Since the beginning of ecotourism local community members have slowly and gradually started to engage in livelihood activities through ecotourism. They follow a very simple give and take nature of livelihood engagement and transactions. Business in the simplest form limited as per the needs and requirements of visiting tourists.

Respondents shared that they started engaging in livelihood activities with the limited and personal knowledge on business that they have from themselves. They have not received or undergone any form entrepreneurship skills training programme. (KIIS)

Respondents also shared that may be training on entrepreneurship would give them more ideas and knowledge and benefit them while engaging in livelihood activities through ecotourism. (KIIS)

- c) Promotion:** Initially the respondents in the study do not follow or practice any form of advertising practices to promote their livelihood activities. The exposure of their livelihood activities simply depends upon their direct interaction with the tourists upon their visit to the ecotourism destinations. At present with the growth and popular usage of social media particularly Facebook application local community members have started posting about the ecotourism activities happening in the villages.

d) Prefer schemes over bank loans: When asked about financial support or financial resources that the respondents seek during the initial stage while starting their livelihood activities majority of the respondents shared that they prefer schemes rather than taking loans from banks. One of the reasons shared by the respondents is that banks available nearby villages do not have schemes for tourism, if they must avail loans from the banks, they can avail only through personal loans for which most of the respondents do not want to avail due to high rate of interest.

If there are schemes available schemes from the government is preferably better as there is government support through subsidies. (KIIS)

Availing loans from banks is very risky, if we have taken loans from banks, it would have been a crisis for us as there was hardly any income during the pandemic period. (KIIS)

Market Economy

The unavailability of local market in the village has also been one of the disadvantages for the local communities. The local communities depend on the local market that is in the nearest town. Most of the times the prices of commodities at the local market are controlled by the middleman who brings the products at wholesale prices from the city market in Shillong. The wholesale prices are applicable to those who require large quantities and of products. This has resulted in inflation of prices in the villages as to make profit from the commodities the respondents and the villagers must sell the products at prices slightly higher than the market prices.

Respondents shared they are compelled sell products and commodities at a slightly higher rate as the prices of the commodities and products from the market is not available at wholesale prices because they require only lesser quantity. (KIIS)

Respondents also shared that at times when they go to Shillong, they get better prices of the commodities but again travelling to Shillong regularly is not feasible as it is far ultimately, they need to rely on the products available at the local markets with small margin of profits. (KIIS)

Political Vulnerability

Another aspect of vulnerability in the context of ecotourism in Meghalaya is the lack of political intervention in terms of implementation of effective policies, programmes and legislations that would contribute towards sustainable ecotourism practices and bring about more benefits for the local communities. The previous tourism policy of Meghalaya prior to 2023 has failed to address and implement effective programmes to support ecotourism development and foster economic growth of indigenous communities in the state. The present practice of ecotourism in the various villages selected in the study are being initiated with the simple community-led indigenous knowledge on ecotourism and community-based management of resources. Even with the present development and growth of ecotourism in Meghalaya there has been no contribution from the government and concern authorities for the villages to support ecotourism activities and foster economic growth for local communities.

Respondents shared that they are not aware of the tourism policy and guidelines laid down within the policy and there has not been any kind of initiative from the government or higher authorities that could be of help and support to the community in respect to tourism or ecotourism development. (KIIS)

Seasonal Vulnerabilities of livelihood activities

While the trend in ecotourism activities in most of the villages occurs throughout the year, there is one village, Dawki that faces seasonal vulnerability in livelihood activities. The contributing factor to seasonal vulnerability in Dawki village is the nature of ecotourism livelihood activity engaged by the respondents. Vast majority of the respondents provide boating services for the tourists as boatman. Most of the tourists visit Dawki village because of the presence of the crystal clear Umngot river in Umsyiem, Dawki. The peak season for tourism activity in Dawki village is during the month of August, September, October, December, January, February, and March. There is high inflow of tourists during these months as the river becomes crystal clear and the tourist could enjoy boating services of the respondents in the study. While during dry and rainy season the water becomes murky as many upstream

rivers from different places are connected to the Umngot river as the main tributary into the Bay of Bengal.

The present chapter has presented the analysis of the various forms of the vulnerability context and the profile of the communities that have been included in the present study. The following chapter V presents the analysis of the socio-economic and structural bases of the households collected through field survey and have been purposely selected and identified that are engaged in livelihood activities through ecotourism.

CHAPTER V

SOCIO-DEMOGRAPHIC AND STRUCTURAL BASES OF RESPONDENTS

The previous chapter discussed the vulnerability context and community profiles of study area. It has contributed in identifying the different factors of different nature that exposes the vulnerabilities of the villages and rural households in the present study. It has also contributed in understanding the social and economic and demographic dimensions of the communities that constitutes in building the profile of the communities in the present study. The present chapter analyses the socio-economic profile and the structural bases of the respondent households in the study.

5.1 Profile of the Respondents

In this section, the profile of the respondents has been presented. The profile includes the age group, gender, marital status, educational level and family structure of the respondents. The socio-demographic profile provides a structural background to the study.

Table 5.1: Age Group and Gender of the Respondents

Age Group	Gender		Total N = 360
	Male n = 220	Female n = 140	
Below 18 Years	2 (100)	0 (0.0)	2 (100)
19 – 30 Years	109 (71.2)	44 (28.8)	153 (100)
31 – 40 Years	74 (62.2)	45 (37.8)	119 (100)
41 – 50	19 (36.5)	33 (63.5)	52 (100)
51 – 60 Years	15 (55.6)	12 (44.4)	27 (100)
60 Years and above	1 (14.3)	6 (85.7)	7 (100)
Total	220 (61.1)	140 (38.9)	360 (100)

Figures in Parenthesis are percentages:

Source: Computed

Age is one of the fundamental variables that plays a very crucial role in the analysis of demographic profile of a study. Age helps in identifying the patterns of distribution of the respondents that may influence on different factors and dimensions of the in the study. It provides us with vital information of the different age groups and their relation to other variables that would contribute to the objectives and goal of the study. Age in the literal sense is clearly understood as a numerical value but at the same time it also allows the researcher to grab important information that could enhance a deeper understanding of a phenomenon at different levels of age groups. Age is a factor contributing to learning and experience, as the individual grow, he generates new learnings and wisdom of experiences that fosters maturation. As a result of the process of learning, depending upon his relationship with the environment it influences the individual attitudes, perceptions that are essential for enhancing life-skills and in the decision-making process. Age is also associated with various tasks fulfilment at different levels as a form of social expectations from every individual member to accomplish at different stages of his lifespan. As a result of their fulfilment, members enjoy a form of social status approved and sanctioned by the society.

The above table represents the cross tabulation of the age group and gender of the respondents. The table is being represented with age-groups across the rows and gender across the columns. The data in the above table shows the age groups across gender engaging in livelihood through ecotourism. The data shows that 61.1% of the respondents in the study which is a little more than half of the total respondents are male and 38.9% of the respondents in the study which is a little more than a third of the total respondents are female. This shows that in the present study, then male folks are the dominant gender engaging in livelihood through ecotourism. The data in the above table shows that both genders are actively engaged in undertaking livelihood through ecotourism between the age groups of 19 - 60 years. The comparative analysis of both genders in the above table shows that between the age group of 19 - 30 years, less than majority of the respondents in this age group are male with 71.2% and a little more than a fourth of the respondents are female with 28.8%. In the age group between 31 - 40 years, the data in the table shows that more than half of the

respondents in the age groups are male respondents with 62.2% and a little more than a third of the respondents in this age group with 37.8% are females. Between the age group of 41 - 50 years, more than half of the respondents in this age group are female with 63.5% and a little more than a third of the respondents are male with 36.5%. While in the age group between 51 - 60 years, a little less than half of the respondents in this age group are male with 55.6% and a little less than half of the respondents in this age group are female with 44.4%. From the analysis of the above table, it can be inferred that the presence of ecotourism practices has provided more employment opportunities for respondents of both genders between the age group between the youthful age of 19 - 30 years, and during the early adulthood stage between the age group of 31 - 40 years. It is also evident from the data in the above table that the participation or engagement in ecotourism declines with the increase in age. The number of respondents participating in ecotourism are seen declining between the age of 41 - 60 years and above. It can be further inferred that ecotourism can be used to foster the process for youth empowerment and to address the issue of unemployment among the youth in rural setting. Entrepreneurial activities can also be initiated to equip the youth and the early adults with knowledge and skills on entrepreneurship in the context of tourism and hospitality.

Table 5.2: Marital Status of the Respondents

Gender	Marital Status			Total
	Married	Widow	Unmarried	
Male n=220	94 (42.7)	1 (0.5)	125 (56.8)	220 (100)
Female n=140	111 (79.3)	4 (2.9)	25 (17.9)	140 (100)
Total N=360	205 (56.9)	5 (1.4)	150 (41.7)	360 (100)

Figure in Parenthesis are Percentages

Source: Computed

Gender and marital status provide us with an important dimension of understanding part of the socio-demographic profile of the respondents. Marriage is a social process

and a social expectation that is expected from the individuals in the society. Marriage is attached with enjoying social status and at the same time the fulfilment of social responsibilities at an individual, familial, and societal level.

The data in table 5.2 represents the gender distribution in relation to the marital status of the respondents in the study who are engaged in ecotourism related livelihood income generating activities. The table is being divided into two broad categories i.e., gender which is being represented in the rows and marital status that is being represented in the columns. While the gender of the respondents is being categorised as male and female, the marital status of the respondents is being categorised as married, widow, and unmarried. The data in table 4.1.3 shows that the marital status among the female respondents is higher (79.3%) in comparison to the male respondents (42.7%). This shows that engaging in ecotourism related income generating activities is an asset for the rural households in the study. The married male and female respondents carry with them certain responsibilities as parents in fulfilling the needs of the family. The data shows that respondents engaging in ecotourism related livelihood activities have contributed as a source of income for the bread earner or supplements the bread earner in the family to fulfil the needs and requirements of the family. On the other hand, the unmarried male respondents are higher (56.8%) against unmarried female respondents (17.9%) in the study. The presence and the existence of the practices of ecotourism has provided employment opportunities for unmarried male and female respondents to further enhance entrepreneurship capacities of the respondents and to become economically independent and self-reliant.

Thus, it can be concluded that engaging in income generating activities through ecotourism has contributed to the economic structure of the rural households in the study either as a source of income for the rural households or supporting and supplementing the household economy. Ecotourism also has the potential to enhance entrepreneurship practices among the rural youths to become economically self-reliant. Therefore, there is a need to support, promote and foster rural entrepreneurship through various capacity building programmes on entrepreneurship

knowledge, skills, and practices among the youths so that it can sustain ecotourism practices and contribute for the improvement of the village households and economy in the long run.

Table 5.3: Educational Level of Respondents

Education	Gender		Total N = 360
	Male n = 220	Female n = 140	
No Formal School	0 (0)	3 (2.1)	3 (0.8)
Primary	12 (5.5)	17 (12.1)	29 (8.1)
Upper Primary	37 (16.8)	60 (42.9)	97 (26.9)
Matriculation	57 (25.9)	30 (21.4)	87 (24.2)
Higher Secondary	18 (8.2)	17 (12.1)	35 (9.7)
Graduate	95 (43.2)	13 (9.3)	108 (30)
Post Graduate	1 (0.5)	0 (0)	1 (0.3)

Figures in Parenthesis are Percentages:

Source: Computed

The Education sector has been one of the contributing institutions in the field of human and social dimensions of development. As one of the institutions of social change it has been accepted and acknowledge by many of its potential to bring about positive changes at various levels in the society. The contribution of both public and private sector has provided invaluable contributions on the field of education in India. Examining educational qualification of the respondents would help in understanding the dynamics of human development in the context of the study. Education is a means to gather knowledge, information and awareness which would

equip the individuals with skills and enhance the capacity of the individual to identify resources and opportunities that would be beneficial for him. Examining educational qualification of the respondents would contribute in understanding and assessing the role of education in influencing livelihood engagement and undertaking of the respondents of the host communities with respect to the exposure and opportunities offered with the existence of ecotourism practices in the respective geographical context of the study.

The above table provides a representation of the educational qualification across both the genders in the study. The distribution shows that the level of educational qualification among the respondents ranges from no formal schooling to post graduate level for both genders. First key observation from the above table shows that while there are no male respondents who do not have no formal school, on the other hand, very few female respondents 2.1% have had no formal school. Secondly, at the post graduate level which is the highest educational qualification level of the respondents in the, it is observed from the data in the above table that only an insignificant number of male respondents 0.5% have completed post graduate level while there are no female respondents who have completed post graduate education. Furthermore, the data in the above table shows that out of the total number of male respondents in the study 43.2% which is less than half of the male respondents have completed graduation, on the other hand out of the total female respondents in the study 42.9% of female respondents which less than half of the total female respondents have only completed upper primary education. The analysis of the data in the above table shows a huge disparity in terms of educational qualification among the male and female respondents. The male respondents have much higher educational qualification as compared to the female respondents. This could also indicate that the drop-out rate is higher among the female as compared to the male respondents in the study. The low educational qualification and high drop-out rate among the female respondents could possibly lead to early marriage among the female respondents in the study. Thus, it can be concluded that the male respondents are much more advantageous than the female respondents in terms of acquiring skills and are the main contributor of human resources among the respondents in the study.

Table 5.4: Family Size & Family Type of Respondents

Family Size	Nature of Family		Total N = 360
	Nuclear	Joint Family	
1 - 3 (Small)	57 (15.8)	0 (0.0)	57 (15.8)
4 - 6 (Medium)	181 (50.3)	1 (0.3)	182 (50.6)
7 above (Large)	118 (32.8)	3 (0.8)	121 (33.6)
Total	356 (98.9)	4 (1.1)	360 (100)

Figures in Parenthesis are Percentages

Source: Computed

The above table projects a cross-tabulation of the family size and family type of the respondent households. The family size has been categorised as small sized family (1 – 3 members), medium sized family (4 – 6), and large sized family having more than 7 members in the family. In terms of type of family, the table shows that both nuclear and joint family system are being followed by the households in the study. Firstly, it is clearly evident from the data in the above table that a huge majority of the total household (98.9%) are practising nuclear family system and a very insignificant portion of the households (1.1%) which is less than a tenth of the total household in the study follow joint family system. Secondly, in terms of size of the family, a little more than half of the total households in the study (50.6%) have medium size family with 4 - 6 members in their family, a third of the total households in the study (33.6%) have large size family with more than 7 members in their family, and more than a tenth of the households in the study (15.8%) have small size family with 1 - 3 members in the family. Thirdly, it is observed from the data in the above table that an absolute majority of the households having small size family follow nuclear family system and there is no record of small size family in the study following joint family system. Apparently, it is also observed that both nuclear and joint family system are

prevalent among the medium size households but only an insignificant portion of the household (0.3%) follow the joint family system within the medium the medium size family. Again, among the large size family both nuclear and joint family system is being practised but the practice of nuclear family is dominant over joint family system with nuclear family constituting a vast majority (97.5%) as compared to joint family system (2.5%) among the large size family in the study.

The analysis of the above data reveals that there is variation in the family structure among the rural households between small, medium and large sized families. It also shows that while medium sized family are most common among the rural households in the study it indicates that there is adequate labour force within the village to engage in various economic activities through ecotourism. While nuclear family system is very much commonly practised among the Khasi society it is still a very dominant practice among the households even at present. At the same time, the prevalence of large sized family structure among the rural households in the study indicates the lack of family planning adopted by the rural households. It can be concluded here that while the family structure has contributed to the availability of labour force among the rural households, at the same time, bigger family size may affect the distribution and utilization of resources among the rural community.

Table 5.5: Economic Status of Respondents

Economic Status	Gender		Total N = 360
	Male n = 220	Female n = 140	
BPL	171 (77.7)	109 (77.9)	280 (77.8)
APL	49 (22.3)	31 (22.1)	80 (22.2)

Figures in Parenthesis are Percentages

Source: Computed

Poverty has been one of the features of the Indian rural economy. The existence of poverty has posed as a challenging task for authorities in the field of rural development. Poverty is multi-dimensional in nature and its effects and impacts can

be seen at the individual, household, and societal levels. Poverty has caused and contributed to the deprivation of basic needs among those living below and below-below poverty line. Particularly during the Covid-19 Pandemic, Indian population living below poverty line have seen to have increase their vulnerabilities in the context of employment, health, education, food security, and other basic needs. However, over the past few decades there has been a series of development interventions at the central and state level of government to alleviate poverty in India. Despite the implementation of various poverty alleviation programmes, policies, and legislations yet 12.92% of the population in India are still living below poverty (World Bank, 2017).

The above table displays a comparative analysis between gender and economic status of the respondents. It can be observed from the data in the table above that on the overall, 77.8% which is little less than the majority of the total respondents inclusive of both male and female falls under Below Poverty Line (BPL) category and 22.2% a little more than a fifth of the respondents inclusive of both male and female falls under the Above Poverty Line (APL) category. On the other hand, the data in the above table shows almost uniform distribution with very minimal variation in the economic status between both male and female respondents in the study. The data in the above table shows that 77.9% of the female respondents and 77.7% of the male respondents both of which is a little less than the majority of both the male and female respondents in the study belong to the BPL category. At the same time, 22.3% of the male respondents and 22.2% of the female respondents both of which constitute a little more than a fifth of the total male and female respondents in the study belong to the APL category. The analysis of the data in the above can be inferred that ecotourism can be adopted as an approach to for poverty alleviation among the rural poor. It can be used as a tool to address the issues of poverty in the rural community. Ecotourism has the potential to bring about changes in the socio-economic and overall well-being of the rural households and the community.

Table 5.6: Nature of Origin of Respondents

Nature of Origin	Gender		Total N = 360
	Male n = 220	Female n = 140	
Marriage	4 (1.8)	3 (2.1)	7 (1.9)
Business	3 (1.4)	1 (0.7)	4 (1.1)
Native	213 (96.8)	136 (97.1)	349 (96.9)

Figures in Parenthesis are Percentages:

Source: Computed

Macro research studies have always centralised its focus on the local communities in examining or assessing the impacts or influence of various factors on the system and sub-systems within the context of the communities. To understand the larger community, it is very crucial to understand the various systems and sub-systems that contribute to the larger community ‘the sum of all the part is greater than the whole.’ It helps us to understand the different structures and textures that contribute toward the dynamics of the community social system. Understanding the individuals who are the smallest unit in the society would give us a broader comprehension and overview of the influence and impacts of the environment on the smaller units of the society. Understanding the nature of inhabitants who are part of the subject matter of a study would be beneficial in having more understanding of ecotourism in relation to the local or host communities in the context of the study. Ecotourism taken as a medium in the study can be both the influencing factor and at the same time can be influenced by various social processes.

The above table discusses the nature of origin of both the male and female respondents in their engagement in ecotourism livelihood activities in the present study. On the overall, the data in the above table shows that a large majority of the respondents 96.9% inclusive of both male and female are natives of the villages in the present study. The data also shows that there are respondents in the study who are

not natives of the villages but are engaged in ecotourism activities in the present study. While a large majority of the respondents engaged in ecotourism are native origin of the villages in the study, some of the respondent become natives of the villages through marriage and while some respondents are only engaged for business purpose only. The data in the above table shows that very few of the respondents have become natives of the village through marriage; here 1.8% male and 2.1% female respondents became natives or inhabitants of the village through marriage. At the same time there are very less male with only 1.4% and female with 0.7% among the respondents who are not native or inhabitants of the village but are engaging in ecotourism in the villages in the study. In conclusion it can be inferred that maximum of the benefits and opportunities derived through ecotourism are being utilized by members of the host communities who are natives of the villages in the study. On the other hand, the analysis clearly shows that there are certain social restrictions to engage in ecotourism for outsiders who are not native of the villages in the study.

Table 5.7: Possession of Land

Land Possession	Gender		Total N = 360
	Male n = 220	Female n = 140	
Yes	209 (95)	125 (89.3)	334 (92.8)
No	11 (5.0)	15 (10.7)	26 (7.2)

Figures in Parenthesis are Percentages:

Source: Computed

Land is an ecological asset that can be utilized in different forms for both individual, public, and commercial purposes. Land and the environment serve as an ecological system for human and social interaction of the various systems, sub-systems and between man and the environment. Land is an important resource for both rural or urban communities. In the context of Meghalaya, the practice of community land holding system is being practised particularly among the rural communities. Through the community land holding system individuals both male and female who are

natives of the local rural communities are being allotted a plot of land after their marriage as the family social structure in Meghalaya practices nuclear family system. Individual members are only required to pay a small amount of fee as a form of 'Patta' fee to the village council. Under the community land holding system, there is a special provision for the allotted land holdings to the native members. Members can utilize the land allotted to them by constructing a house as a place of residence or practising agriculture. The land should be maintained and utilized by the natives under minimum specific period otherwise the village council has the right to take away the rights over the land if not used and maintained by the members who have been allotted the land. And in no circumstance the community land allotted to the members can be sold to others. The ownership of the land shall be transferred from one generation to the other provided that the land is utilized by the native member.

The table above shows the distribution of land possession with respect to both genders among the respondents. An overview of the above table highlights that possession of land is evident for both genders among the respondents and it also shows that there are respondents who do not possess land of their own. Overall, the data shows that a huge majority of the respondents inclusive of both male and female 92.8% possess land. Among the male respondents, the data in the above table shows that a huge majority of the male respondents 95% in the study possess land, and 89.3% of the female respondents in the study making more than the majority of female respondents in the study also possess their own land. The analysis shows that the land possession is quite high among the male respondents as compared to the female respondents in the study. As per the Khasi customary law of inheritance, the youngest daughter in the family inherits the ancestral property of the clan. In contrary to the outcome of the analysis, there are more male respondents who possess land more than the female respondents in the study. This indicates that the male members among the Khasi matrilineal society have also been inheriting land from their clans. This might indicate a shift or a new practice that is prevalent among the Khasi society with respect to inheritance.

Table 5.8: Gender of the Head of the Household

Male n = 220	Female n = 140	Total N = 360
303	57	360
(84.16)	(15.84)	(100)

Figures in Parenthesis are Percentages:

Source: Computed

Gender is an important component in understanding the distribution of respondents across the context of a given study. Examining gender as a separate or independent variable helps in understanding opportunities, accessibility, and inclusion among genders in the context of a study. It contributes towards examining and identifying whether there exist any forms disparities among gender with reference to the main goals of the study. The issues of gender inequality in the form of opportunities and accessibility to resources have been seen as one of the major contemporary discussions and debate in modern development practices. This section would provide insight on the influence of ecotourism on gender with reference to their livelihood engagements and practices.

The table above represents the gender of the head of the households of the respondents in the study. It can be observed from the data in the above table that 84.16% which is more than a majority of the households in the study have the male as the head of the household, and at the same time 15.84% which is less than a tenth of the total households in the study have the female as the head of the households. The analysis of the above table shows that although the Khasis follow a matrilineal society yet patriarchy is still evident at the household level where generally the male is the head of most of the households among both rural and urban households. This shows the dominant role of the male among the Khasi matrilineal society yet strong patriarchy practice at the household level. Apart from this, it is also evident from the above table that there are few families where they have the female as the head of the households in the present study. While, the male or the father is very strongly and most commonly considered as the head of the households, family situations such as death of the husband, divorce, parental separation, single-motherhood, and orphaned

may contribute to having the female as the household head in the present study. So, while the common and customary practice of patriarchy among the Khasis positions the male as the head of the households particularly the father, social and family situations may contribute to have female folks such as the mother, aunty or the daughter as the head of the households.

This chapter has provided an analysis of the socio-economic profile of the rural households in the present study. It has contributed in understanding the background of the rural households and their livelihood engagement that are derived with the practice of ecotourism in the respective villages. The next chapter focuses on the analysis of the livelihood strategies adopted by the rural households and the influence of ecotourism practices on the overall development of the community with the onset of ecotourism in the selected villages that are being identified as host communities of ecotourism destinations in the study.

CHAPTER VI

RURAL LIVELIHOOD AND ECOTOURISM

The previous Chapter presented the socio-economic and demographic profile of the respondents. The parameters such as age, gender, occupation, ethnicity, family structure and economic activities of the respondents were being analysed. The respondent's profile is crucial in understanding the impact or influence of the respondents in the context of the present study. The present chapter presents the influence of ecotourism practice on the rural livelihoods of the households among the villages in the present study. It depicts the influence of ecotourism practices on the livelihood strategies that are being undertaken or engaged by the members of the host communities at the household level. This chapter also analyses the patterns of utilization of resources by the community at the macro level. The present chapter also portrays the forms of livelihood diversification that is being brought about with the onset and practice of ecotourism in the villages of ecotourism destinations in the present study.

6.1 Livelihood Assets

Livelihood assets are resources that are available within the community that are accessible and utilized by the rural households as a source of livelihood for them. The livelihood assets are the basis in which the rural households can pursue different forms of livelihood activities for attaining social and economic well-being. The accessibility of the rural households to the livelihood assets is a key factor that determines the nature of livelihood activities undertaken or engaged by the rural households. The core elements of the livelihood assets adopted in the Sustainable livelihood Framework in the study are natural capital, physical capital, social capital, human capital, and financial capital.

The livelihood assets of the communities were assessed by facilitating Focused Group Discussions with key stakeholders particularly those who were engaged in undertaking livelihood activities through ecotourism practices in the community. To understand the role of the livelihood assets in influencing the livelihood strategies among the rural households engaged in ecotourism related livelihood activities, the

following enquiries were conducted to assess the influence of livelihood assets on the livelihood strategies of the rural households:

Livelihood Assets of the Respondents

Livelihood assets are resources that are available within the community that are accessible and utilized by the rural households as a source of livelihood for them. The livelihood assets are the basis in which the rural households can pursue different forms of livelihood activities for attaining social and economic well-being. The accessibility of the rural households to the livelihood assets is a key factor that determines the nature of livelihood activities undertaken or engaged by the rural households. The core elements of the livelihood assets adopted in the Sustainable livelihood Framework in the study are natural capital, physical capital, social capital, human capital, and financial capital.

Table 6.1 Village wise Distribution of Primary Source of Income

VILLAGE	PRIMARY SOURCE OF INCOME						TOTAL
	Tourism	Business	Labour	Farmer	Teacher	Govt. Service	
Mawlynnong	55 (20.7)	0 (0)	0 (0)	5 (17.2)	1 (12.5)	3 (100)	64 (17.8)
Mawsmmai	16 (6.0)	10 (52.6)	5 (14.3)	0 (0)	5 (62.5)	0 (0)	36 (10)
Riwai	12 (4.5)	3 (15.8)	3 (8.6)	0 (0)	1 (12.5)	0 (0)	19 (5.3)
Sohra	13 (4.9)	2 (10.5)	1 (2.9)	0 (0)	0 (0)	0 (0)	16 (4.4)
Saitsohpen	5 (1.9)	1 (5.3)	0 (0)	0 (0)	1 (12.5)	0 (0)	7 (1.9)
Laitduh	7 (2.6)	1 (5.3)	2 (5.7)	0 (0)	0 (0)	0 (0)	10 (2.8)
Nongriat	4 (1.5)	2 (10.5)	0 (0)	3 (10.3)	0 (0)	0 (0)	9 (2.5)
Tyrna	51 (19.2)	0 (0)	10 (28.6)	7 (24.1)	0 (0)	0 (0)	68 (18.9)
Dawki	73 (27.4)	0 (0)	12 (34.3)	10 (34.5)	0 (0)	0 (0)	95 (26.4)
Mawkma	30 (11.3)	0 (0)	2 (5.7)	4 (13.8)	0 (0)	0 (0)	36 (10)
TOTAL	266 (73.9)	19 (5.3)	35 (9.7)	29 (8.1)	8 (2.2)	3 (0.8)	360 (100)

*Figure in Parenthesis are Percentages**Source: Computed*

The concept of an economy refers to the system of production, distribution, and consumption of goods and services within a society or a geographical area. It encompasses all the activities and interactions that occur between individuals, businesses, and governments as they allocate resources to satisfy human wants and

needs. Key elements of the concept of economy include; resource allocation, production and consumption, exchange and markets, distribution of income and wealth, economic growth and development, and government intervention. Overall, the concept of economy is multidimensional and complex, encompassing a wide range of economic activities, institutions, and dynamics that shape the functioning of societies and the well-being of individuals. Income distribution has been the main component that has a great influence on the economy of various societies across the globe. Income is a medium that influences the individual's capacity to get access to resources that could fulfil the needs of the individual. Across different societies, there are different forms of stratification of income sources that are associated with the nature of works of the individuals. The economy of different countries of the world are being driven by various sectors that provides income for the citizens of its country. Economy differs from one context to the other, in both urban and rural communities. The economies of urban communities are being comprised of various sectors and are more complex in nature as compared to the simple economy of the rural communities that is being driven largely by agriculture. Majority of the rural communities in India are being characterised as an agricultural economy with the agricultural sector as a major contributor to the village economy. Studies on ecotourism across different region and context have shown the various impacts of ecotourism on the socio-economic transformation of the rural households and village economy. With the growth of ecotourism practices in Meghalaya, the present study attempts to assess the influence of ecotourism on the rural households and the village economy.

The above table 5.9 displays the village wise distribution of the primary sources of income of the respondents. The data presented in the table shows the dominant role of ecotourism contributing 73.9% as the primary source of income of the respondents, and 26.1% of the respondents are engaged in business, labour, agriculture, and service sectors such as teachers and government as their primary sources of income. Thus, it can be inferred here that ecotourism has played a very important role in influencing the economic structure of the households and village economy in the present study. As evident from the data in the above table, the

presence of ecotourism has strongly influenced the livelihood engagements of the respondents and the economy of the villages in the study. Ecotourism has brought about a shift in livelihood engagements of the respondents from traditional to ecotourism related livelihood engagements in some of the village economy in the study. At the same time this also indicates the potential of ecotourism as a means in bringing about transformative changes for the households and village economy.

Table 6.2 Practices of Agriculture and Patterns of Utilization

Practising Agriculture	Patterns of Utilization of Agricultural Products					Total
	Own Consumption	Consumption And selling	Selling If Surplus	Selling Only	NA	
Yes	12 (3.3)	150 (41.7)	3 (0.8)	66 (18.3)	0 (0.0)	231 (64.2)
No	0 (0)	0 (0)	0 (0)	0 (0)	129 (35.8)	129 (35.8)
Total	12 (3.3)	150 (41.7)	3 (0.8)	66 (18.3)	129 (35.8)	360 (100.0)

Figure in Parenthesis are Percentages

Source: Computed

Agriculture has been one of the traditional forms of economic activities in many societies. The practice of agriculture has been one of the contributing factors in the growth and evolution of human civilization. Agriculture as a non-formal sector of the economy has played a very important role for the rural households and village economy for many decades. In the Indian context, the agricultural sector has largely contributed to the Indian economy since independence. As society evolved the practice of agriculture also evolved but not uniformly across various context. While there are economies where agricultural practices are driven by the onset of technology, at the same time there are also some economies that are still following traditional methods for agriculture. In the context of India particularly in Northeast India excluding Assam, majority of the rural village communities practice subsistence form of agricultural practices mainly for their own consumption. The pattern for commercializing agricultural products is relatively less particularly among the tribal communities.

Table 5.10 presents the data pertaining to the agricultural practices and utilization of agricultural products of the respondents. The data presented in the table above shows that only 64.2% of the respondents are engaged in agriculture. Among those respondents who are engaged in agriculture the data shows that, the patterns of utilization of the agricultural products varies among the respondents; 41.7) of the respondents utilized the agricultural products are for both consumption and selling, 18.3) of the respondents utilize the agricultural products for selling purpose only, 3.3) of the respondents utilize the agriculture products for their own consumption only, and 0.8) of the respondents sell the agricultural products only if there is surplus. Thus, it can be inferred that, while ecotourism has been the primary source of income of the respondents in the study, at the same time it has also provided an opportunity for livelihood diversification for some of the respondents by engaging in income generation through ecotourism and practising agriculture.

Table 6.3 Livestock Keeping and Utilization

Livestock Keeping	Utilization Patterns			Total
	Sell	Own Consumption	Not Applicable	
Yes	43 (11.9)	0 (0)	0 (0)	43 11.9)
No	0 (0)	0 (0)	317 (88.1)	317 88.1)
Total	43 (11.9)	0 (0)	317 (88.1)	360 100.0)

Figure in Parenthesis are Percentages

Source:

Computed

The table 6.3 portrays the data related to the practice of livestock keeping and patterns of utilization of the respondents. According to the data presented in the table above, it shows that only a very small margin of the respondents 11.9) practice livestock keeping as one of the forms of agricultural practices. The data also indicates the uniformity of the utilization pattern of the respondents with regards to

the livestock. Thus, it can be seen here that livestock keeping which was once considered as an economic asset and wealth among the rural folks have now seen a diminishing influence among the rural households in the study. At the same time, livestock keeping has provided the respondents with opportunities for livelihood diversification alongside ecotourism related income generation activities which would contribute to economic improvement of the rural households. The prevalence of livestock epidemics particularly for piggery and poultry may have a role in contributing to the diminishing influence of livestock keeping among the respondents. The stability and regular income generation from ecotourism can also be one of the contributing factors that the respondents are focusing and investing more time in ecotourism. It can also indicate the slow and gradual shift in village economy with the onset of ecotourism in the respective communities bringing about some changes and transformation to village life and economy.

6.1.1 Natural Capital:

- How has the natural resources influenced ecotourism development in the community and livelihoods activities for the rural households?
- How is ecotourism affecting the use or conservation of these natural resources?

Natural attractions: The foundations in the process of ecotourism development in the villages is the presence of the sources of natural attractions that serves as the important natural capital of the village. The forms of natural attractions present in the villages that has led to the development of ecotourism destinations are natural scenic beauty, rich biodiversity, waterfalls, rivers, pleasant weather, lush green environment, indigenous knowledge practice have been the essence of ecotourism development in the villages. The presence of the natural attractions has paved way for members of the host communities to derive economic benefits from visiting tourists.

The members of the community opined that the natural attractions are a gift from the nature to the village community as a reward for the efforts of the community in conserving the natural resources. (KIIS)

The members of the community believed that the development of ecotourism has its roots in the indigenous knowledge of conservation practised by the forefathers since the early days. (KIIS)

Conservation Practices: One of the important factors that influenced ecotourism development in the villages is the age-old practice of conservation of natural resources. This practice has been an integral part among the rural community since time of the forefathers. The forefathers have been in very close bond with the environment. The practice of conservation of the natural resources of the forefathers have transcended from generation to the other and is still being strongly upheld by the present generation. This practice has been very crucial in preserving the natural resources and rich biodiversity of the community. Even before the onset of ecotourism practices the community values the importance of conservation of nature.

The members of the community shared that conservation efforts have been existence since time immemorial and a result of indigenous knowledge on conservation of natural resources of their forefathers. (KIIS)

Maintaining Cleanliness: Maintaining cleanliness of the surrounding has been part of the rural culture among the Khasis. The rural households have inculcated the habit from their forefathers the importance of cleanliness at the household and the community level. It is seen as a collective responsibility among the community members to keep the surrounding clean.

One of the peculiar practices that is very much prevalent among the Khasis is the maintenance of cleanliness at the household and community level. (KIIS)

In the context of ecotourism practices in the present study, the natural capital or natural resources have been identified to have played a very important role in the practice and onset of ecotourism in the communities or villages in the present study. The presence of the natural capital and rich biodiversity have paved way for ecotourism initiatives in the villages selected in the present study. The various forms or typologies of natural capital possessed by the villages or communities that are associated with ecotourism in the study are; natural scenic beauty, rivers, waterfalls,

weather and climatic conditions, lush green environment, cleanliness, age old indigenous engineering practices. These natural capitals have ever been present in the community since time immemorial and are seen as a reward from nature to the community and are the main sources of tourist attraction of the villages that has paved way for ecotourism practices and initiatives among the local communities. The presence and availability of this natural capital has led to ecotourism practices among the local communities and at the same time, it has brought about opportunities for livelihood engagement and employment generation for the local communities and enhancing social and economic benefits of the host communities. The presence of many unexplored places that have potentials for ecotourism initiatives and practices provides for future scope and sustainability for ecotourism and enhancing rural livelihoods in the communities.

6.1.2 Physical Capital:

- How has infrastructure development contributed to ecotourism development in the community?
- What are the challenges in terms of infrastructure that can be improved to foster more benefit from ecotourism?

The various villages in the study are in remote and rural areas from the main city in Shillong, Meghalaya. The distribution of physical capital among the villages are not uniform due to the geographical location of the village, while some villages are located very near to the nearest town within the district some are in far and remote areas. In common, all the villages apart from Nongriat village are well connected with basic infrastructures such as roads, electricity, drinking water sources, public amenities, footpaths, local markets, communication, community hall, schools, and grocery stores.

Influence of ecotourism on infrastructural development: In the context of ecotourism, the rural households engaged in livelihood through ecotourism have led to the establishment of various infrastructures to cater to the needs of the visiting tourists such as homestays, guest house, lodges, resorts, hotels, restaurants, food

stalls, gift shops or souvenir stores, tourists parking spaces, public toilets and washroom, viewpoints. However, among all the villages in the study, Nongriat is the only village that is not accessible by road. Access to the village is only possible on foot. Hence, the village lacks access to better infrastructure due to its remote location.

With the onset of ecotourism and the gradual inflow of tourist to the villages the village local administration felt the need to setup basic infrastructures to cater to the needs of the visitors. (KIIS)

Infrastructural development and Livelihood opportunities: while the onset of ecotourism has paved way for infrastructural development at the same time the establishment of certain infrastructures such as homestay, guesthouse, hotels, resorts, restaurants, food stalls, petty shops, gift shops, grocery stores have also provided livelihood opportunities for the rural households as service providers. On the other hand, infrastructures such as parking spaces, public toilets, entry fee, viewpoints have also served as a source of revenue for the village administration by levying some amount as service fee from the tourists and utilized for the maintenance of the ecotourism spots and welfare of the community.

The onset of ecotourism has paved way for rural households to engage in economic and livelihood activities through ecotourism by providing various forms of services to the tourists in the form of accommodation, food, petty shops, and gift shops. (KIIS)

Ecotourism and infrastructural challenges: there are some challenges in terms of infrastructure that are lacking or deficient and that can be improved to provide better services for the visiting tourists. The distribution of physical capital among the villages are not uniform due to the geographical location of the villages. Villages nearer to the nearest town has better accessibility to important services such as ATMs, police, market, tourist information centres, mobile and internet connection, online services, healthcare facilities whose services are not only required by the host communities but as well as the tourists.

The village within its limited resource may have been able to provide the minimum basic needs for the tourists but other needs such as ATMs, police, market, tourist information centres, mobile and internet connection, online services, healthcare facilities, road maintenance, are some of the infrastructural deficiencies that are very much required by the tourists and are beyond the capacity of the community to provide such needs. (KIIS)

6.1.3 Social Capital:

- What is the role of local organisations and institutions in influencing ecotourism development in the community?
- How does ecotourism affect relationships and cooperation within the community?

Village Council: The village council has been very instrumental in the development of ecotourism in the villages. The village council being the traditional local authority at the village level has been leading the way in facilitating community efforts, fostering community participation, enhancing social cohesion among the members of the host communities in the process of ecotourism development, managing, utilising, and conservation of the natural and community's resources. The village council realised the potential of ecotourism in bringing about socio-economic benefits to the rural households and the community at large. Leading the process with the support of the members of the community, it has taken the initial steps and mobilise resources to setup infrastructures and facilities to support ecotourism initiation and development in the villages.

The role of the village council is to ensure the welfare and well-being of the members and households of the community and the welfare of the community at large. Upon realising the presence of the natural resources within the community as a potential for ecotourism practice and seeing the socio-economic benefits the community and the households the village council facilitated collective efforts of the community in the process of initiating ecotourism in the villages. (KIIS)

Community-based ecotourism: Since the onset of ecotourism, the community has been at the forefront to collectively undertake the task of pursuing ecotourism practices in the village. The practice of ecotourism involved democratic principles of collective involvement of the local community members from the initial stage of ecotourism development. Ecotourism practice in the villages is based on the foundations of community-led initiatives in different matters related with ecotourism in the community. Collective decision-making facilitated by the village council in matters related to management, utilization, and conservation of community's resources. Members of the community share equal responsibility in the process of protecting and conserving the resources of the community to ensure sustainable ecotourism practices.

The practice of ecotourism would not have been possible without the active participation of the members of the host communities. The practice of ecotourism has since its inception was led by the collective efforts of the community. (KIIS)

Social cohesion: Social cohesion has been a core value that has been upheld and practised among the rural communities in the present study. The common challenges and problems that characterises the rural communities has made it inherent and inevitable element among the rural households. Social cohesion and cohesiveness among the rural households have transcend from generations and still a core value among the rural households at present. The interdependency in times of need have strengthen the spirit of cohesiveness among the rural households. The onset of ecotourism practices in the village has brought about benefits to the rural households and the village at large which is a result of the collective efforts of the community members. This has further enhanced the spirit of community cooperation, sense of belongingness, community participation, community involvement, sense of ownership and responsibility, hospitality, and community led initiative and conservation.

The rural communities have been tightly knitted with the spirit of cohesion since the very beginning. The village council has played an important role in facilitating community-based ecotourism that further strengthens social cohesion among the community members. (KIIS)

Social capital is seen as a very important and instrumental livelihood asset of the SLF in the context of ecotourism in the study. The manifestations of social capital in the study can be seen in the form of community cooperation, sense of belongingness, community participation, community involvement, sense of ownership and responsibility, hospitality, and community led initiative and conservation. These attributes of the community have made it possible for the community to undertake ecotourism through the traditional village institutions i.e., the village council as a mechanism that brings the members of the community under one umbrella for the common goal of the community. These attributes among the local communities have been innately present among the community members as one of the core values that has been practised and transcended from the forefathers. This fosters the spirit of unity, cooperation, and sense of belongingness among the community members that promotes and enhances community led initiatives and sustains the community efforts for conservation practices.

6.1.4 Human Capital

- What knowledge or skills do community members have that support ecotourism?
- Have there any training programs or capacity-building efforts related to ecotourism in your village?

Availability of labour force: In all the villages selected in the study, both genders are actively in labour that are directly related with ecotourism and other labours. Ecotourism related livelihood activities serve as both primary and secondary occupation for the different in the study. While some are dependent on ecotourism as primary source of income others depend on ecotourism as secondary form of occupation and are engaged in agriculture, labour, business, and service sector. A

vast majority of the respondents in the study engaged in ecotourism related livelihood activities are members of the host communities.

The initiation of ecotourism practices has provided livelihood opportunities for residents of the community. Ecotourism development has brought equal opportunities for men, women, and youths to engage in different forms of livelihood through ecotourism. (KIIS)

Unskilled labour: While the villages have the labour force to engage in labour particularly in ecotourism related livelihood activities, the nature of labour engagement is purely unskilled. They engaged in income generating activities based on the limited business acumen that they possess by themselves. The respondents do not have knowledge on entrepreneurship nor have they undergone capacity building programmes on entrepreneurship. This deficiency in entrepreneurship knowledge and skills may obstruct the local communities to take full advantage of the social and economic benefits of ecotourism and livelihood diversification that could enhance their livelihood engagement.

The local communities engaged in livelihood activities through ecotourism have not undergone any training or capacity building in entrepreneurship and tourism hospitality. (KIIS)

Some of the community members who have worked under others use their own experiences in their livelihood engagements. (KIIS)

6.1.5 Financial Capital:

- What are the main sources of income for households in the village?
- What are the main sources of financial capital that supported members of the local communities to start ecotourism-related businesses?
- Do people have access to credit, savings groups, or banks?

Ecotourism emerging as primary income: The onset of ecotourism has brought about a slow and gradual transition in the sources of income for the communities.

Prior to the onset of ecotourism agriculture and labour have been the main characteristic of the economic structure of the community. Gradually with the onset of ecotourism many community members have started small business that are related with ecotourism. The regularity and stability in income derived from ecotourism have influenced the slow but gradual transition of the village economic activities.

Members of the host communities have given more focus on ecotourism related livelihood activities. Over the years there has been increase in the number of members engaged in ecotourism related livelihood activities. Members have been investing in setting up homestay, food stalls, and petty shops in the villages. (KIIS))

Own Capital and interpersonal Borrowing: The financial capital is a very important livelihood asset that provides support for livelihood engagement of the local community. Respondents who are engaged in ecotourism related livelihood activities have started or initiated their economic activities by utilising financial support that they could save by themselves individually or by borrowing from relatives and friends.

Lack of Financial literacy: Despite having individual banking accounts very few respondents have availed loans from the bank. From the local community members point of view the fear factor that they might not be able to repay the loan amount or delay in the repayment of loans may lead them to face consequences and penalties imposed by the bank. As a result, they practice informal form of financial borrowing from family, friends, and relatives as a source of financial support for initiating economic and livelihood activities that are related through ecotourism.

The fear of being unable to repay bank loans and facing consequences refrained the members of the host communities to avail bank loans. (KIIS)

6.2 Livelihood Patterns

Livelihood patterns in the typical ways in which individuals, rural households and communities are engaged as an economic activity. Patterns in livelihood describes the nature of economic activities that the rural households and communities undertake as a source of economic activity that generates income for the rural

households and community. Patterns of livelihood are being influenced by many factors such as economy, geographical location, climatic conditions and rural urban context. While there are communities that have similar patterns of livelihood undertaking at the same time there are also communities that differs in the patterns of livelihood particularly among the urban households. It is the combination of livelihood undertaking that the households are engaged in the context of a particular community.

Table 6.4 Distribution of Seasonality Trends in Ecotourism Practices

Villages	Trend of Ecotourism Practices		Total
	Seasonal	Throughout the Year	
Mawlynnong	0 (0)	64 (17.8)	64 (17.8)
Mawsmmai	3 (0.8)	33 (9.2)	36 (10)
Riwai	1 (0.3)	18 (5)	19 (5.3)
Sohra	1 (0.3)	15 (4.2)	16 (4.4)
Saitsohpen	0 (0.0)	7 (1.9)	7 (1.9)
Laitduh	2 (0.6)	8 (2.2)	10 (2.8)
Nongriat	0 (0)	9 (2.5)	9 (2.5)
Tyrna	1 (0.3)	67 (18.6)	68 (18.9)
Dawki-Umsyiem	95 (26.4)	0 (0)	95 (26.4)
Mawkma	0 (0)	36 (10)	36 (10)
Total	102 (28.3)	258 (71.7)	360 (100)

Figures in percentages are percentages

Source: Computed

Seasonality trends in ecotourism practices refers to the fluctuations of inflow of tourists at ecotourism destinations during a period. The trend depends upon several

factors intrinsic to the host community's ability to offer and attract tourist inflow to the ecotourism destinations. Factors such as climatic conditions, weather, food, culture, and other natural elements are key factors in influencing the trends in ecotourism and individual preferences of tourists. The trend in ecotourism may also vary according to the nature of tourists; national, domestic, and foreign tourists. It is inevitable that the presence of ecotourism has brought various forms of benefits to local communities, but at the same time it is also important for the local communities to understand and assess the trends of tourist inflow to optimize benefits from ecotourism.

Table 6.4 displays the data pertaining to the seasonality trends of ecotourism in the present study. The data presented in the above table indicates two different trends distributed within the context of ecotourism in the selected communities in East Khasi Hills District, Meghalaya. The data shows that ecotourism practices have been trending daily throughout the year in most of the communities except for Dawki-Umsyiem. This indicates that the respondents in the study are actively engaged in ecotourism activities throughout the year. This also means that ecotourism has been supporting and brought about livelihood stability among those respondents who are dependent on ecotourism as their primary source of income. While tourist inflow in most of the villages is trending almost on daily basis the rate of inflow would be lesser as compared to peak seasons. Furthermore, it shows that in the context of Dawki-Umsyiem village seasonality trend in ecotourism does contribute to the vulnerability context for the respondents. Dawki-Umsyiem village is located south of Meghalaya with the Umngot river bordering India and Bangladesh. Dawki-Umsyiem is well known throughout India for its crystal-clear water at Umngot river and attracts tourists from all over the country to experience boating and camping activities at Umngot river from during winter and dry season. Peak season for tourist inflow to Dawki-Umsyiem is during winter from October to April. Tourists love to enjoy boating, camping, viewpoint towards Bangladesh as ecotourism activities in Dawki-Umsyiem. The period from October to April is considered as peak season and there would be around as many as 200 boatmen depending on tourism during this

peak period. Wage Labour and agriculture are the secondary sources of income for majority of the respondents during off seasons.

Table 6.5 Trends of Tourist Inflow

Months	Seasonal Inflow of Tourist											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Mawlynnong	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Riwai	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Umsyiem (Dawki)	High	High	High	Low	Low	Low	Low	Low	Low	Low	High	High
Mawkma	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Laitduh	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Sohra- Khliehshnong	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Mawsmmai	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Tyrna	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Nongriat	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low
Saitsohpen	Low	Low	Low	Low	High	High	High	High	High	High	Low	Low

Source: KIIs

The above table displays the trends of tourist inflow towards ecotourism places in East Khasi Hills District Meghalaya. The data in the above table portrays the annual inflow of tourist to the ecotourism villages in the study. The data in the above table clearly indicates that the trends in ecotourism activities occur throughout the year from January to December with some variations in the rate of inflows during certain periods of the year. The trends of tourist inflow to the villages are indicated in the above table are high tourist inflow and low tourist inflow.

As seen in the above table, the months of June to October records the highest inflow of tourists in the ecotourism villages except in Umsyiem (Dawki) village where high inflow of tourist are being recorded to be in the months of November till March. During the month of November till April there is low inflow of tourist to the other villages of ecotourism destinations apart from Umsyiem (Dawki). The monsoons in Meghalaya starting from June to October is characterised by pleasant weather conditions, lush green landscape, rainfall, gushing waterfalls, attracts the tourist from outside the state to visit these places and enjoy the pleasant environment although it may be a bit chilling at higher altitudes. As the data shows in the above table the monsoon is the peak season for ecotourism activities and tourist inflow in Meghalaya. While this continues from November till February the inflow of tourist is lesser as compared to the monsoons due to the very chilling and cold winter conditions in the region. But ecotourism activities such as boating activities particularly at the crystal clear Umngot river in Dawki-Umsyiem a village bordering Bangladesh is at its peak during the winters from November till March. The water in the river is crystal clear as the rain has stopped after the retreating monsoon and onset of autumn in October-November. Ecotourism activities and the inflow of tourist are quite low during the dry season from March to April or Mid of May. Thus, the regularity of inflow of tourists throughout the year indicates the active nature of ecotourism activities in the selected villages of East Khasi Hills District of Meghalaya and at the influencing benefits to the local communities through ecotourism. This also indicates the stability of livelihoods and employment opportunities for the local community members who are engaged in ecotourism livelihood activities. As evident from the above table, the high inflow of tourists to the ecotourism destinations would bring social and economic benefits to the rural households and the community. It allows the community and households to identify livelihood assets and take up the opportunity to engage in livelihood activities by catering to the various requirements of the visiting tourists and to evolve in their livelihood practices. At the same time, it is very crucial to assess and examine the availability of services and facilities to cater to the needs of the visitors. Availability of services and facilities are crucial factors that influences the visiting tourists to spend in the community that will directly or indirectly have an impact on the

households and village economy. Therefore, we can conclude that while ecotourism activities are blossoming in the villages there is a need to assess and examine the balance between the inflow of tourists, approach towards ecotourism practices, and the services and facilities to cater to the basic needs of visiting tourists.

Table 6.6 Distribution of Livelihood Activities and Service Users

Nature of Livelihood Activities	Service Users		Total
	Just Tourist	Both Tourist and Community	
Homestay	48 (17.9)	0 (0.0)	48 (13.3)
Petty shop	39 (14.6)	23 (24.7)	62 (17.2)
Guide	61 (23.1)	0 (0)	62 (17.2)
Hotels	0 (0.0)	5 (5.4)	5 (1.4)
Restaurant / food stall	13 (4.9)	37 (39.8)	50 (13.9)
Gift shop	22 (8.2)	6 (6.5)	28 (7.8)
Guest house	3 (1.1)	1 (1.1)	4 (1.1)
Grocery shop	0 (0.0)	20 (21.5)	20 (5.6)
Resort	1 (0.4)	0 (0.0)	1 (0.3)
Boating	80 (30.0)	0 (0.0)	80 (22.2)
Total	267 (74.2)	93 (25.8)	360 (100)

Figures in percentages are percentages

Source: Computed

Service users refer to individuals or groups who directly utilize or benefit from the services provided by organizations, institutions, or service providers. These users can vary depending on the type of service being offered and the sector in which it operates. Ecotourism can have a significant impact on various service beneficiaries

and service users, contributing to economic growth, job creation, infrastructure development, cultural preservation, and environmental conservation in destinations. In the context of ecotourism, service users are individuals or groups who directly or indirectly benefit from the tourism industry's activities and services. In the context of tourism, the local communities provide or offers various forms of services to cater to the needs of the visitors, hence in terms of service utilization pattern the local communities acts as service providers and the visitors become service users who would reciprocally benefit the local communities by utilizing their services.

Table 6.1.4 presents the data pertaining to the Livelihood Activities adopted by the respondents and the nature of service users utilizing the services. The overall data shows that the nature of service users utilizing the services provided by the respondents comprises of 74.2) just tourists, and 25.8) both tourists and communities. It is very important to identify here that, among the various forms of services offered by the respondents; petty shops, restaurant or food stalls, grocery shops, and hotels are the only forms of services whose services users are both tourists and community. The analysis clearly indicates the influence of ecotourism on the rural Livelihood Activities of the respondents and the economy of the community. In the context of the present study, the data analysis shows that Livelihood Activities adopted by the respondents are highly dependent on the utilization of their services by tourists who are the main service users. At the same time, it exposes the vulnerability of Livelihood Activities of the respondents in the study. This means that visiting tourists have a greater and direct impact on the livelihood and benefits from ecotourism for the respondents and the community. Thus, we can conclude that ecotourism practices in the study is found to be influenced by external factors particularly service users.

6.3 Livelihood Strategies

Livelihood strategies are economic activities that an individual undertakes to generate income. Livelihood strategies are dependent upon the individual's accessibility to various social, economic, physical, natural and human capital or resources that can influence on the livelihood undertaking of an individual.

Table 6.7 Village Wise Distribution of Livelihood Strategies adopted by the Respondents

VILLAGES	NATURE OF LIVELIHOOD ACTIVITIES										Total
	Homestay	Petty shop	Tourist Guide	Hotels	Food stall	Gift shop	Guest house	Grocery shop	Resort	Boatman	
Mawlynnong	24 (50.0)	1 (1.6)	0 (0.0)	1 (20.0)	11 (22.0)	23 (82.1)	2 (50.0)	2 (10.0)	0 (0.0)	0 (0.0)	64 (17.8)
Mawsmmai	4 (8.3)	0 (0.0)	0 (0.0)	2 (40.0)	14 (28.0)	0 (0.0)	0 (0.0)	15 (75.0)	1 (100)	0 (0.0)	36 (10.0)
Riwai	6 (12.5)	6 (9.7)	2 (3.2)	0 (0.0)	1 (2.0)	3 (10.7)	1 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)	19 (5.3)
Sohra	7 (14.6)	0 (0.0)	0 (0.0)	1 (20.0)	3 (6.0)	2 (7.1)	0 (0.0)	3 (15.0)	0 (0.0)	0 (0.0)	16 (4.4)
Saitsohpen	1 (2.1)	0 (0.0)	0 (0.0)	1 (20.0)	4 (8.0)	0 (0.0)	1 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)	7 (1.9)
Laitduh	1 (2.1)	8 (12.9)	0 (0.0)	0 (0.0)	1 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	10 (2.8)
Nongriat	4 (8.3)	4 (6.5)	0 (0.0)	0 (0.0)	1 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	9 (2.5)
Tyrna	1 (2.1)	4 (6.5)	60 (96.8)	0 (0.0)	3 (6.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	68 (18.9)
Dawki-Umsyiem	0 (0.0)	11 (17.7)	0 (0.0)	0 (0.0)	4 (8.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	80 (100.0)	95 (26.4)
Mawkma	0 (0.0)	28 (45.2)	0 (0.0)	0 (0.0)	8 (16.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	36 (10.0)
TOTAL	48 (12.3)	62 (17.2)	62 (17.2)	5 (1.4)	50 (13.9)	28 (7.8)	4 (1.1)	20 (5.6)	1 (0.3)	80 (22.2)	360 (100)

Figures in percentages are percentages

Source: Computed

Livelihood has been the fundamental unit for survival and the fulfilment of human needs. As an economic activity, livelihood practices have evolved from the very simplistic group activity for survival to more complex and systematic form of

engagement for economic benefits. The progress and evolution of human society has also led to the changes in Livelihood Activities and engagement across societies, communities, and economies. Livelihood is an important parameter in determining and assessing socio-economic status and accessibility to opportunities and resources for individuals, groups, and the society at large. In the context of the present study, the growth of ecotourism in Meghalaya has provided rural communities with opportunities to engage in economic activities that provides for income generation by providing services to the visiting tourists. In this regard the table above examines the various forms of Livelihood Activities engaged by the respondents with the presence and practice of ecotourism in their respective communities.

The table 4.1.11 displays the village wise distribution of Livelihood Activities among the respondents. The data displayed in the table above shows the villages in the study distributed across the column and the Livelihood Activities adopted by the respondents are being distributed across the rows. The data portrayed in the table above shows the various forms of Livelihood Activities adopted by the respondents in the study are; homestay, hotels, guest house, food stalls, petty shops, grocery shops, gift shop, resort, and tourist guides, and boating activities. As evident from the data in the table above, a very small margin of the respondents is engaged in hotels (1.4%), guest house (1.1%), and resorts (0.3%) as their Livelihood Activities. At the same time, engaging in Livelihood Activities through boating and as tourist guide is not common across the context of the study. Boatman as a livelihood strategy is being engaged by respondents particularly in Dawki-Umsyiem village comprising 22.2% among the distribution of Livelihood Activities, and tourist guides comprising 17.2% among the distribution of Livelihood Activities in the study. Thus, from the analysis of the data above, it can be inferred that the Livelihood Activities adopted by the respondents in the study is very simplistic in nature that requires less use of technology and financial resources in the creation and promotion of their Livelihood Activities.

Table 6.8 Distribution of Livelihood Strategies and Sources of Funds

Nature of Livelihood Strategies	Sources of Funds					Total
	Own Capital	Family Support	Borrowed from Others	Loan from Bank	Not Applicable	
Homestay	28 (58.3)	15 (31.2)	3 (6.2)	2 (4.2)	0 (0.0)	48 (100)
Petty Shop	43 (69.4)	13 (21.0)	6 (9.7)	0 (0.0)	0 (0.0)	62 (100)
Guide	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	62 (100)	62 (100)
Hotels	5 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (100)
Restaurant/Food Stall	36 (72.0)	12 (24.0)	2 (4.0)	0 (0.0)	0 (0.0)	50 (100)
Gift Shop	23 (82.1)	3 (10.7)	2 (7.1)	0 (0.0)	0 (0.0)	28 (100)
Guest House	2 (50.0)	2 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (100)
Grocery Shop	16 (80.0)	3 (15.0)	0 (0.0)	1 (5.0)	0 (0.0)	20 (100)
Resort	0 (0.0)	0 (0.0)	0 (0.0)	1 (100.0)	0 (0.0)	1 (100)
Boating	58 (72.5)	19 (23.8)	3 (3.8)	0 (0.0)	0 (0.0)	80 (100)
Total	217 (60.3)	67 (18.6)	16 (4.4)	4 (1.1)	56 (15.6)	360 (100)

Figures in percentages are percentages

Source: Computed

Livelihood Activities are a wide range of activities that are being engaged by individuals for the attainment of economic benefits, security, and stability through the creation of wide range of services as a transaction between service providers and

service users. Funds and financial support are essential components and requirements to engage in income generation activities and Livelihood Activities. Accessibility to financial support is an important factor that could influence on the stability and security of livelihoods engaged by the respondents and local communities. Finance and funds are important ingredients to support the existing or identified livelihood assets to enhance socio-economic benefits and improvement of households and community economy. Thus, in the context of the present study, the presence of ecotourism practices has enabled the rural communities and households to identify assets that would contribute in the creation of livelihood opportunities for the respondents. While the mere presence of resources and ecotourism practices alone would not help in the creation of income generation activities, it requires the supplementing role of financial resources to create various opportunities for economic benefits for the households and the community. Therefore, it is important to understand and examine the respondent's identification, accessibility, and utilization of the sources of financial supported involved in the process of promotion of Livelihood Activities through ecotourism practices.'

The data presented in table above represents the distribution of Livelihood Activities and the sources of funds utilized by the respondents to start their income generation activities from the identified livelihood assets through ecotourism practices. The data presented in the table has shown that own capital, family support, borrowing from others, and bank loans are the sources of funds utilized by the respondents for generation of income and engaging in ecotourism related Livelihood Activities. As it can be seen from the data in the table above, a very large portion of the respondents (60.3%) utilized their own capital for income generation and only (1.1%) of the respondents utilize the banking services for loans as seed capital to start their income generation, (18.6%) of the respondents utilized their family as a source of financial support, and (4.4%) of the respondents borrowed from others. Among the Livelihood Activities adopted by the respondents, banking services as a source of fund or loans have been utilized particularly by those respondents who are adopting Livelihood Activities such as; hotels, resorts, homestays, and grocery shop that requires large capital investments during the startup. Thus, several inferences can be drawn from

the above data analysis in terms of capital investments, financial literacy, entrepreneurship, and government schemes for financial support. Firstly, as per the analysis of the data presented in the table, respondents are more inclined to invest in income generation activities that requires minimal capital investments that has clearly been shown in the table above respondents prefer utilization of own capital to invest for income generation and earn immediate benefits. Lack of financial literacy among the respondents about the banking sector and the role of rural banks and micro-finance in supporting rural entrepreneurship and economic empowerment may have contributed to respondents not identifying these sectors as sources for funds for their livelihood engagement. Lack of entrepreneurship ideas, mindset, and attitude could be one of the factors that the respondents failed to look at the opportunities and benefits that the banking and finance sector could support the respondents in promoting and improving their income generation. Respondents may have been fear driven by the concept of banking interest and commodity mortgaging to identify banking sector as a source for financial support for them in their livelihood endeavours. Lastly, one of the most crucial components for rural livelihood promotion is support from the government. None of the respondents in the study have accessed or avail support from the government or its agencies to support the respondents in their livelihood engagement. Ecotourism has unarguably brought opportunities for social and economic benefits of rural communities. But to further sustain these benefits government interventions are required for ecotourism to be more inclusive component as an approach for rural development.

Table 6.9 Distribution of Sources of Income for the Village Council/Ecotourism Committees

Village	Sources of Revenue					Total
	Parking Fee	Paid Public Washroom	Entry Fee	Taxes	Community Homestay	
Mawlynnong	1	1	1	1	0	4
Riwai	1	1	1	0	0	2
Umsyiem (Dawki)	1	1	0	0	0	2
Mawkma	1	1	1	0	0	3
Laitduh	1	1	1	0	0	3
Sohra-Khliehshnong	1	1	1	1	0	4
Mawsmai	1	1	1	0	0	3
Tyrna	1	1	0	0	0	2
Nongriat	0	1	1	0	1	3
Saitsohpen	1	1	0	0	0	2

Source: KIIs

The table above displays the various sources of income generated by the village council through ecotourism activities in the respective villages of the present study. The presence of ecotourism activities in the villages has attracted tourist both from within and outside the state of Meghalaya. The visiting tourist have directly or indirectly ushered social and economic benefits to both the households and community. Ecotourism constituted as an asset to the local community and has helped to identify sources of livelihood activities for the households and income generation for the community through ecotourism. The data in the above table shows that the ecotourism committees or the village council generate income by levying some amount from the parking fees in the ecotourism spots, paid public washroom, entry fees to the ecotourism spots, and by collecting small amount from shops operating in the villages. It is important to note here that the amount that the village collects from the above-mentioned sources is to sustain ecotourism activities in the

village though proper maintenance and management of resources for where financial investments are required. Income generated from these sources has to some level contributed to financial self-reliance of the village council in managing and maintaining the ecotourism spots and catering to the needs and requirements of the visiting tourists. The village council has also helped local community members in employment generation by employing members on permanent or rotational basis to engage in collecting parking fees, counter person for washrooms, counter person at the entry, sweepers, or cleaners at the tourist spots. Thus, we can conclude that the presence of ecotourism activities has significantly contributed towards the village economy and as an element of rural development in the villages.

Table 6.10 Distribution of Helpers Hired by the Respondents

Hiring Helpers	Domicile of Hired Helpers			Total
	Within the Village	Neighbouring Village	Do Not Hire Helpers	
Yes	42 (11.7)	20 (5.6)	0 (0.0)	62 (17.2)
No	0 (0.0)	0 (0.0)	298 (82.8)	298 (82.8)
Total	42 (11.7)	20 (5.6)	298 (82.8)	360 (100)

Figures in parenthesis are percentages

Source: Computed

Ecotourism practices have the potential in bringing about various contributions to the village economy. As part of the village economy, the major contributors in the context of ecotourism are the transactions between service providers and the service users. These constitutes the core stakeholders who are directly benefiting from ecotourism practices. At the same time, ecotourism also has an indirect impact by enhancing the on the village economy through; job creation, boost to local business, infrastructure development, environment conservation, and community involvement and ownership. The benefits of ecotourism are not concentric within the host community but also dispersed to individuals and households in adjacent communities.

Table 6.10 represents the data pertaining to helpers hired by the respondents. In the above table, the data are being classified into two categories; helpers hired by the respondents and the domicile of the helper hired. With reference to the data displayed in the above table, it can be clearly seen that only a very small portion of the respondents (17.2%) hire helpers to assist or help them while engaging in their ecotourism related Livelihood Activities. Secondly, among the helpers hired by the respondents, (11.7%) of the helpers reside within the same community or village as that of the respondents and (5.6%) of the helpers belong to the neighbouring villages. Thus, in the analysis of the data presented in the above table it indicates the impact of ecotourism on rural livelihood and employment of the community and village economy. As seen from the data in the above table, even though there are only a small portion of the respondents who hire helpers to assist them while engaging in their Livelihood Activities it indicates that the present practice of ecotourism not only benefitted the respondents in identifying livelihood assets and adopt Livelihood Activities but have also indirectly created employment opportunities for others as hired helpers. The nature of the livelihood engagement of the respondents can also be a factor that the only a small portion of the respondents require helpers. At the same time, the data shows that employment opportunities have not only limited to those within the community but has also provided employment to residents of neighbouring villages and communities as well. The benefits that individual members derive from ecotourism would create wider awareness on the potential of nature and environment as a source for economic benefit for individuals and the community but also in promoting conservation efforts for sustainability of ecotourism practices.

This chapter has provided insights on the implication of ecotourism on rural livelihoods of the local communities. We have seen how the various livelihood assets accessible by the local communities influence in the livelihood strategies among the local communities. The next chapter discusses the Dynamics of Ecotourism focusing on the influence of ecotourism on the various aspects of the rural households and the community at large.

CHAPTER VII

DYNAMICS OF ECOTOURISM: LIVED EXPERIENCES

The previous chapter VI discussed the influence of ecotourism on the livelihood among the rural households in the study. It discussed on the various livelihood assets of the communities and their influences in livelihood strategies undertaken by the local community. The present chapter is organised into two sections to present a dynamic understanding of the nature and patterns of ecotourism activities and the lived experiences of individuals who are engaged in livelihood activities through ecotourism in East Khasi Hills District, Meghalaya. The experiences and perceptions of persons engaged in ecotourism activities for their livelihood have been analysed using qualitative methods such as Key Informant Interviews (KIIs) and in-depth case studies.

7.1 Key Informant Interviews (KIIs)

Key Informant Interviews (KIIS) were used to gather qualitative data from among important stakeholders in the context of ecotourism from the ten (10) villages across three (3) Community and Rural Development Blocks in East Khasi Hills District, Meghalaya. The KIIs as a tool for qualitative research involves in-depth conversation with individuals from the communities in the present study that possess important knowledge on the evolution and development of ecotourism in the respective villages in the study. KIIs were conducted with the Headman and Executive Committee members of the village council, members of the villages tourism society who are actively involved in ecotourism related livelihood activities and the management of ecotourism affairs in the villages who provided crucial insights and information with regards to ecotourism in the respective villages.

The key enquiries that were facilitated while conducting the KIIs were focused on the evolution and development of ecotourism, impact of ecotourism on community development, benefits of ecotourism on rural households' livelihood, challenges and management strategies in ecotourism development and Skill development.

7.1.1 Classification of Villages Based on IQV

The villages are classified using Index of Qualitative Variation (IQV) which measures variation in nominal variables. It quantifies the extent to which different categories or groups are represented in a dataset, indicating the diversity or heterogeneity of the examined variables. IQV is calculated by dividing the sum of squared frequencies of each category or group by the square of the total number of observations. This results in a value ranging from 0 to 1, where 0 represents complete homogeneity (all observations belong to the same category) and 1 represents maximum heterogeneity (observations are evenly distributed across all categories).

The villages are classified into three categories based on their IQV values: high diversity, medium diversity, and low diversity. This classification is further enriched by incorporating qualitative aspects based on dominant livelihood activities.

Table 7.1: Diversification of Ecotourism related Livelihood

Village	IQV	Diversity Classification	Activity Classification
Sohra-Khliehshnong	0.84	High	Homestays, Guest house, Restaurants, Food Stalls, Petty Shops, Souvenir Stalls
Mawlynnong	0.80	High	Hotel, Homestay, Guest house, Restaurant, Food Stalls, and Gift Shops, petty shops
Riwai	0.78	High	Homestay, Guest houses, Petty Shops, and Gift Shops, Restaurant, tourist guide
Mawsmmai	0.73	Medium	Hotels, Resorts, homestay, Food Stall, and grocery shops
Saitsohpen	0.68	Medium	Homestays, Restaurants, Food Stalls, and Grocery Shops
Nongriat	0.66	Medium	Homestays, Food stall, and Petty Shops
Mawkma	0.38	Low	Petty Shops and food stalls
Laitduh	0.38	Low	Petty Shops
Dawki-Umsyiem	0.31	Low	Boatman Services
Tyrna	0.24	Low	Tourist Guide Services
Total	0.94	High	Overall Diversity

Source: Computed from KIIs

The above table presents the classification of the villages based on the diversity of livelihood engagements of the local communities in the ecotourism hotspots identified in the study. The above table highlights the various forms of livelihood engagements undertaken by the members of the local communities in the study. As seen from the above table, the nature, and typologies of livelihoods engagements of the local communities are hotels, homestay, guest houses, resorts, restaurants, food stall, gift shops, souvenir, petty shops, tourist guide, and boatmen. The IQV score 0.94 in the above table shows overall there is high degree of livelihood diversification that are being engaged by the local communities of the villages included in the present study. However, the high degree of diversification as found in the IQV does not represent the individual villages hence to have a more understanding in terms of livelihood diversification of the individual villages the diversification of livelihood has classified the various villages into categories of high livelihood diversification, medium livelihood diversification and, low livelihood diversification. This classification is based on the diverse nature of livelihood activities engaged by the local communities in the selected villages in the. From the above classification of livelihood diversification, it was found that the villages of; Sohra-Khliehshnong, Mawlynnong, and Riwai have high livelihood diversification, with the nature of livelihood engagements varying from; guest house, homestay, resorts, restaurant, food stall, souvenir stores, petty shops, and grocery stores. The villages that have medium Livelihood Diversification, are Mawsmmai, Saitsohpen, and Nongriat. The livelihood engagement of local communities in the villages are comparatively less diverse such as; Hotels, Resorts, homestay, Food Stall, and grocery shops. The villages like Mawkma, Laitduh, Dawki-Umsyiem, and Tyrna have very low livelihood diversification. The livelihood engagements of the local communities in Mawkma and Laitduh are petty shops and food stall, Dawki-Umsyiem Village is only engaged in boating and Tyrna village is concentrated on tourist guide.

Thus, it can be concluded that the practice of ecotourism has provided the local communities with opportunities to engage in variety of livelihood undertakings as either primary or secondary sources of income. The ability of the local communities

to diversify their livelihood engagements would contribute to the social and economic benefits of the rural households in attaining economic empowerment. It also contributes to the overall benefit of the community and village economy.

7.1.2 Drivers of Ecotourism

Drivers of ecotourism can be understood as combination of key factors that have contributed to the development of ecotourism in the three high livelihood diversifications in the study. They are the key elements that facilitated the evolution and development of ecotourism at various stages in the selected villages. They are key components and crucial interventions that are directly responsible for the growth of ecotourism in the high livelihood diversification villages in the present study.

Table 7.2 Drivers of Ecotourism across Three Villages

Development Sequence	Mawlynnong	Riwai	Sohra
Natural Attractions as the core Driver of ecotourism	Village's natural beauty and cleanliness attract tourists.	Located on the route to the living-root bridge.	Unique climatic condition of highest rainfall and scenic views attract tourists.
Natural resources influenced Recognition and Awards	Recognition as the cleanest village in Asia prompted village council to develop ecotourism.	Strategic location as a key passage to Mawlynnong and the living root bridge in Nohwet village.	Known for natural scenic beauty, receiving the highest rainfall in the world, attracting unique tourist interest.
Community and Social Support	Ingrained value of cleanliness facilitated social support for ecotourism.	Community improved infrastructure and prioritized conservation.	Historical and cultural cohesion of the Khasi people promoted tourism.
Community Initiative	Village council and community members promoted ecotourism and conservation.	Village council Recognized potential benefits from tourists and developed ecotourism.	Village Council promoted as a tourist destination due to unique climatic conditions and cultural heritage.
Government and Institutional Support	Initial support from tourism department; ongoing support from village council and local MLA.	Limited specific information on government support.	Long history of tourism industry support with diverse livelihood opportunities.
Infrastructure Development	Enhanced infrastructure: roads, accommodation, and tourist facilities.	Improved infrastructure to facilitate tourist visits to nearby attractions.	Well-developed infrastructure: roads, accommodation, healthcare, and banking facilities.
Cultural and Historical Significance	Emphasis on cleanliness and hospitality.	Scenic village location with access to natural attractions like the living root bridge.	Evolution from folklore sites to popular ecotourism destinations for domestic and national tourists.

Source: Compiled from KIIs

The above table specifically focuses in examining the development of ecotourism activities in three villages that are ecotourism destinations in east Khasi Hills District, Meghalaya. The table above reflects the drivers of ecotourism development in the three villages of high livelihood diversification in East Khasi Hills District, Meghalaya. It portrays the various drivers that have been responsible for the growth and development of ecotourism in the three villages of Mawlynnong, Riwei and Sohra.

The above table shows seven contributing factors that are directly responsible for the development of ecotourism in the three villages. The first factor which is very crucial in the process of ecotourism development shows that natural factors like natural scenic beauty, indigenous knowledge system, climatic conditions, rich biodiversity, clean environment are core factors that led to fame and recognition, strategic location and historical and cultural importance are the core foundation of ecotourism development. The process of ecotourism development encompasses the importance of non-structural elements in the process of bringing collective efforts among community members to carry on forward the development of ecotourism in the villages. Community led initiative in the process of ecotourism development is very important as it further enhances cooperation and instil a sense of ownership among community members towards resources of the community. Support system as highlighted is one of the important components to sustain the ecotourism practices led by the community. Ecotourism development also ushers infrastructural development in the community to cater to the needs and requirements of visiting tourists and at the same time transforming the community. Thus, it can be concluded that ecotourism development is a result of a combination of the relationship and contribution of natural assets, unique and distinctive recognition of a place, community efforts, community led initiative, support systems, and infrastructural development that fosters growth and sustainability of ecotourism.

Mawlynnong which may be the first villages where ecotourism first started emerging in Meghalaya, began its journey with its recognition as the cleanest village in Asia. This significant accolade prompted the village council to actively develop

ecotourism. The ingrained value of cleanliness among the local community, nurtured since childhood, facilitated social support for these initiatives. Proactive efforts by the village council and community members played a crucial role in promoting ecotourism and conservation. Initially, the village received support from the tourism department, which helped lay the groundwork for ecotourism. Ongoing support from the village council and local MLA further supported these efforts, ensuring sustainable development. The village council undertook significant efforts to enhance infrastructure, including roads, accommodation, and tourist facilities, to cater to the growing number of visitors. Mawlynnong's natural beauty and the community's commitment to cleanliness and hospitality have consistently attracted tourists, reinforcing the village's position as a premier ecotourism spot.

Sohra, also known as Cherrapunjee, is a town with natural scenic beauty, rich natural resources, deep historical and cultural significance to the Khasi people of Meghalaya. Its longstanding presence as a tourist destination predates the formal tourism industry in the region. The town's rich history and cultural heritage have always been a major draw for tourists. The Khasi people's folklore, traditions, and historical sites have been integral in promoting Sohra as an ecotourism destination. The established reputation of Sohra as a tourist destination due to its unique climatic conditions—once receiving the highest rainfall in the world—adds to its allure. This natural phenomenon attracts visitors from around the globe, seeking to experience its lush landscapes and scenic beauty. Sohra benefits from a long history of tourism industry support, which has facilitated diverse livelihood opportunities for its residents. The town's growing infrastructure and tourism services reflect this support. Sohra boasts well-developed infrastructure, including roads, accommodation, healthcare, and banking facilities. These amenities are essential in supporting a steady flow of tourists and ensuring their comfort and safety. The town's scenic views, historical sites, and unique weather conditions continue to attract tourists, making it a key ecotourism hub in Meghalaya.

Riwai village, strategically located on the path to Mawlynnong, serves as a key passage for tourists traveling between these two prominent ecotourism spots

Mawlynnong village which is known as the cleanest village in Asia and Nohwet village which is famous for the indigenous knowledge and engineering of the Living root bridge locally known as the 'Jingkienjri'. Despite lacking major attractions of its own, Riwai has leveraged its location to develop its own ecotourism offerings. The community in Riwai recognized the potential benefits from tourists passing through their village. They took proactive steps to improve village infrastructure, prioritize conservation, and provide services that cater to visitors. Community efforts have focused on enhancing the scenic village's appeal by maintaining cleanliness and facilitating easy access to nearby attractions like the living root bridge in Nohwet. While specific information on government support is limited, community initiatives have been the primary drivers of ecotourism development in Riwai. The village's efforts reflect a grassroots approach to leveraging its strategic location. Infrastructure improvements in Riwai have been aimed at making the village a convenient stop for tourists traveling between Mawlynnong and other places, including better roads, parking facilities, and basic amenities. The village's natural setting and its role as a gateway to other attractions make it an appealing stop for tourists, contributing to its growing recognition in the ecotourism sector.

The development of ecotourism in Mawlynnong, Sohra, and Riwai showcases a blend of unique drivers and common themes. Mawlynnong's rise as the cleanest village in Asia highlights the power of community pride and cleanliness. Sohra's historical and cultural significance underscores the importance of heritage in attracting tourists. Riwai's strategic location demonstrates how geographical positioning can be leveraged to develop ecotourism. Together, these villages reflect the dynamic interplay of natural beauty, community efforts, and infrastructural development in fostering successful ecotourism destinations in Meghalaya.

7.1.3 Impact of Ecotourism on Community Development

Ecotourism practices can foster positive changes and development and at the same time add pressure to local communities. Ecotourism can influence the community in many ways depending upon the ability of the community to develop coping strategies in the process of growth and development of ecotourism. Ecotourism has

played a pivotal role in the community development of Mawlynnong, Riwai, and Sohra, shaping their social, economic, and environmental landscapes. This examination provides insights into how ecotourism has fostered growth, unity, and sustainability within these communities, while also addressing the challenges they face.

Table 7.3 Impact of Ecotourism on Community Development

Impact	Mawlynnong	Riwai	Sohra
Social Cohesion and Unity	Enhanced unity, social cohesion, and cooperation among community members and hospitality	Enhanced unity, cohesion, and cooperation within the community hospitality towards visitors and tourists.	Increases hospitality, social cohesion, solidarity.
Economic Benefits	Equal distribution of benefits, preventing migration for employment.	Additional income sources for locals, especially those engaged in agriculture.	High influence of tourism on the local economy, livelihood opportunities, providing a regular income source for locals.
Employment Opportunities	Employment opportunities for youths and women from the village and neighbouring villages.	Local community members manage ecotourism activities with limited employment for locals from other villages.	Diverse livelihood opportunities due to its status as a town, influences migration for employment.
Community Welfare	Revenue from tourist services used for ecotourism development and community welfare, including education support.	Revenue used for infrastructure improvements and community welfare.	Revenue facilitates the welfare of local communities and tourists but faces challenges with mass tourism.
Environmental Impact	Managing plastic waste and dealing with intoxicated visitors remain challenges.	Potential future challenges if road usage changes affect tourism.	Increased use of land and natural resources, with pressures of mass tourism and modernization diluting ecotourism essence.
Challenges	Issues with waste management, visitor behaviour, and reliance on self-generated funds.	Challenges with maintaining tourism if road usage patterns change, and limited financial literacy.	Managing the transformation from ecotourism to mass tourism, littering, price inflation, and monopoly of the private sector.

Source: Compiled from KIIs

The impact of ecotourism on the communities are classified into six categories; social cohesion and unity, economic benefits, employment opportunities, community welfare, environmental impact, challenges (Table 7.3). With the growth of

ecotourism in the three villages, it gives rise to different forms of influence and impact of ecotourism on the community. The presence and practice of ecotourism activities brings about social cohesion among community members. Community based ecotourism fosters unity and cooperation among local community as it is initiated by the community members and the community are equally responsible to contribute for the sustainability of ecotourism activities in the village. The onset of ecotourism has also brought economic benefits to the households and the community. Community members are able to engage in ecotourism related livelihood activities and practice diversification of livelihood by engaging in more than one livelihood with the opportunities provided by ecotourism. Ecotourism has the potential to generate employment opportunities for the local community in providing various forms of service to cater to the needs and requirements of the visiting tourists by directly engaging in ecotourism related livelihood.

From a community development perspective, ecotourism in Mawlynnong has enhanced social cohesion and unity. The village's collective commitment to cleanliness and hospitality has not only attracted tourists but also strengthened the bonds among community members. This unity has been essential in mobilizing efforts for sustainable tourism and communal welfare. Similarly, Riwai has experienced improved social cohesion and cooperation through community-led initiatives aimed at enhancing infrastructure and providing services to tourists. The shared goal of promoting ecotourism has brought residents together, fostering a strong sense of community. In contrast, Sohra due to its geographical location and its possession of the status of a town has attracted migration for locals from other villages seeking employment in the tourism sector.

Economically, ecotourism has significantly contributed to the development of these communities. In Mawlynnong, the equitable distribution of tourism-related income has prevented out-migration and ensured that economic benefits are felt across the community. This has been crucial in promoting local development and enhancing the quality of life for residents. Riwai has similarly benefited, with tourism providing supplementary income for agricultural households and supporting infrastructure

improvements. These economic gains have reinforced the community's resilience and self-sufficiency. Sohra's established tourism activity has had a profound impact on the local economy, providing regular income and diverse employment opportunities. However, the community faces the challenge of balancing economic benefits with the environmental pressures, which can strain local resources and disrupt traditional livelihoods.

The creation of employment opportunities through ecotourism has been a cornerstone of community development in these villages. Mawlynnong has leveraged tourism to create jobs, particularly for youths and women, thus empowering these groups and reducing the need for migration. The village council's efforts have ensured that even the poorest families find employment within the community, fostering economic inclusivity. In Riwai, while most ecotourism activities take place in the neighbouring Mawlynnong, the additional income and job opportunities have supported the community's economic stability. Sohra, being a larger town, offers a wider array of tourism-related jobs, attracting workers from outside the community.

Ecotourism has also facilitated significant advancements in community welfare. Mawlynnong has effectively utilized tourism revenue to support ecotourism development, educational initiatives, and community welfare programs. This has not only improved infrastructure but also enhanced social services and support systems within the village. Riwai's investment of tourism revenue into infrastructure and welfare initiatives has similarly uplifted the community, demonstrating how tourism can be harnessed for holistic development. In Sohra, while tourism revenue has contributed to the welfare of local communities, the challenges of mass tourism necessitate a more strategic approach to ensure sustainable development and equitable distribution of benefits.

Sustainable community development in the context of ecotourism requires careful environmental management. Mawlynnong's struggle with plastic waste management and visitor behaviour underscores the importance of robust environmental policies and community education. Riwai's potential future challenges with road usage patterns highlight the need for adaptive and forward-thinking infrastructure planning.

Sohra's experience with mass tourism illustrates the critical balance required to protect natural resources and maintain the essence of ecotourism. The pressures of increased land use, resource extraction, and modernization call for integrated approaches that involve all stakeholders in sustainable tourism practices.

Ecotourism has significantly contributed to the community development of Mawlynnong, Riwei, and Sohra by enhancing social cohesion, providing economic benefits, and creating employment opportunities. However, these communities also face challenges related to environmental sustainability, social integration, and managing environment pressure due to high inflow of tourist. Effective community development strategies must therefore focus on sustainable practices that support local livelihoods, preserve cultural and natural heritage, and promote inclusive growth. By addressing these challenges, these communities can continue to benefit from ecotourism while ensuring long-term sustainability and resilience.

7.1.4 Benefits of Ecotourism to Rural Household Livelihoods

Ecotourism has significantly impacted the livelihoods of rural household in the communities of Mawlynnong, Riwei, and Sohra, bringing a range of economic, social, and developmental benefits. Comparing these three ecotourism destinations provides insights into how ecotourism can drive community development and improve the quality of life for rural people.

Table 7.4: Benefits of Ecotourism to Rural Household Livelihood

Classification of Benefits	Benefits to Rural Household Livelihood	Mawlynnong	Riwai	Sohra
Economic Benefits	Income Generation	Significant income from ecotourism activities.	Additional income, especially in agriculture.	Regular income from tourism industry.
	Employment Opportunities	Jobs for youths and women, reducing migration.	Locals manage activities; limited for non-locals.	Diverse jobs attracting outside workers.
	Economic Inclusivity	Equal distribution, supporting poor families.	Benefits felt widely through initiatives.	Supports locals and tourists economically.
Community Welfare and Development	Community Welfare	Revenue for development, welfare, education.	Revenue for infrastructure and welfare.	Revenue supports welfare; manage mass tourism impact.
	Entrepreneurship	Encourages local businesses.	Opportunities for local livelihood activities.	Promotes entrepreneurship and modernization.
	Skill Development	Improves service delivery via internet and social media.	Relies on basic skills and knowledge.	Professional training for chefs and staff.
Social Cohesion and Solidarity	Community Solidarity	Enhanced unity and cooperation.	Strengthened bonds through projects.	Less cohesive due to non-local influx.

Source: Compiled from KIIs

Ecotourism has become a major source of income for rural households in Mawlynnong. The significant income generated from ecotourism-related activities has helped support the local economy, providing a stable financial base for many families. Employment opportunities have been created particularly for youths and women, reducing the need for migration in search of work. The equitable distribution

of tourism benefits ensures that even the poorest families receive support, fostering economic inclusivity within the community.

Riwai has also benefited economically from ecotourism, with additional income sources particularly for those engaged in agriculture. The local community manages most of the ecotourism activities themselves, which limits employment for non-locals but strengthens local economic stability. Community-led initiatives have ensured that the benefits of tourism are widely felt across the village, supporting local livelihoods and fostering economic resilience.

In Sohra, the established tourism industry provides a regular income source for local households. The diverse employment opportunities in the tourism sector attract workers from outside the town, contributing to the local economy. However, this influx of non-locals presents challenges in terms of economic inclusivity and social cohesion. Nonetheless, the economic benefits support both local communities and tourists, ensuring a continuous flow of revenue.

In terms of Community Welfare and Development, Mawlynnong has effectively utilized revenue from ecotourism for community development and welfare. The funds generated are used for maintaining and improving tourist facilities, supporting educational initiatives for children, and assisting poor families. This focus on community welfare ensures that the benefits of ecotourism are reinvested into the village, promoting sustainable development.

In Riwai, tourism revenue has been directed towards infrastructure improvements and various welfare initiatives. These efforts have enhanced the overall quality of life for residents, demonstrating how ecotourism can be harnessed for holistic community development. The support for local entrepreneurship has provided opportunities for villagers to start their own livelihood activities, further strengthening the community's economic base.

Sohra also benefits from tourism revenue, which facilitates welfare activities and supports the local economy. However, managing the impact of mass tourism remains

a challenge. The need for a balanced approach to tourism development is crucial to ensure that the revenue continues to benefit the community without compromising the sustainability of local resources.

In Mawlynnong, ecotourism has enhanced social cohesion and unity among community members. The collective efforts to promote cleanliness and hospitality have fostered a strong sense of cooperation and shared purpose. This unity is crucial for the community's resilience and ability to manage tourism sustainably.

Riwai has similarly experienced strengthened social bonds through collaborative infrastructure and tourism projects. The community's involvement in tourism has brought residents together, promoting solidarity and mutual support. This cohesion is essential for sustaining the village's tourism initiatives and ensuring that the benefits are widely distributed.

In contrast, Sohra faces challenges in maintaining social cohesion due to the high influx of non-locals seeking employment in the tourism sector. This migration can dilute the tight-knit community fabric, making it harder to foster a sense of unity and shared purpose. Effective community development strategies are needed to integrate both locals and newcomers, ensuring that the social benefits of tourism are maximized.

Ecotourism has brought substantial benefits to the rural household livelihoods in Mawlynnong, Riwai, and Sohra, enhancing economic stability, community welfare, and social cohesion. Mawlynnong and Riwai have leveraged ecotourism to foster unity, economic inclusivity, and sustainable development. In Sohra, while the economic benefits are significant, the challenges of mass tourism and social integration require careful management. These communities illustrate the diverse ways in which ecotourism can drive rural development, highlighting the importance of sustainable practices and inclusive strategies to ensure long-term benefits for all residents.

7.1.5 Challenges in Ecotourism Development

Ecotourism has brought numerous benefits to the communities of Mawlynnong, Riwai, and Sohra, but it has also presented several challenges. These challenges can be classified into social, environmental, infrastructure, and economic categories, with each community facing unique issues.

Table 7.5 Challenges in Ecotourism Development

Classification	Challenges	Mawlynnong	Riwai	Sohra
Social Challenges	Initial community resistance to tourism	✓	X	X
	Dealing with intoxicated visitors	✓	X	X
	Dependence on community-led initiatives with limited support	✓	✓	✓
	Managing modernization that dilutes the essence of ecotourism	✓	✓	✓
Environmental Challenges	Managing plastic waste	✓	✓	✓
	Transition from ecotourism to mass tourism, leading to resource strain	X	X	✓
	Increased land and resource usage pressures	✓	✓	✓
	Environmental management and waste disposal	✓	✓	✓
Infrastructure Challenges	Mobile network issues	✓	✓	✓
	Electricity problems, especially during the rainy season	✓	✓	X
	Inaccessibility to essential infrastructure like ATMs and healthcare	✓	✓	X
	Potential future road usage changes affecting tourism	X	✓	X
	Financial literacy and banking accessibility issues	✓	✓	X
	Infrastructure to handle increased tourist flow while maintaining cultural heritage	X	X	✓
Economic Challenges	Skills gap in entrepreneurship and hospitality	✓	✓	✓
	Limited professional training for service providers	✓	✓	✓

Source: Compiled from KIIs

In Mawlynnong, initial resistance to tourism was a significant hurdle. The community had concerns about the potential negative impacts of increased visitor numbers. Additionally, managing intoxicated visitors has posed a social challenge, affecting the village's atmosphere and the residents' comfort.

Riwai, on the other hand, has primarily struggled with the dependence on community-led initiatives. Limited external support means the community must rely heavily on its own resources and efforts, which can strain local capacity.

Sohra faces more complex social challenges due to its larger size and established tourism industry. The high influx of non-locals seeking employment in the tourism sector has disrupted social cohesion. Moreover, the process of modernization, necessary to cater to a growing number of tourists, has diluted the traditional essence of ecotourism, posing a significant social challenge.

Mawlynnong has made significant strides in cleanliness, but managing plastic waste remains a persistent environmental challenge. The village's commitment to sustainability is tested by the increasing volume of waste generated by tourists.

In Sohra, the transition from ecotourism to mass tourism has led to significant environmental pressures. Increased land and resource usage, coupled with inadequate environmental management and waste disposal systems, threaten the sustainability of its natural attractions. This strain on resources underscores the need for more effective environmental policies.

Riwai has not reported major environmental challenges specific to ecotourism, likely due to its smaller scale and strategic efforts to manage tourism sustainably.

Mawlynnong faces several infrastructure-related challenges. Mobile network issues and electricity problems, especially during the rainy season, hinder the village's ability to provide consistent services to tourists. Additionally, the inaccessibility of essential infrastructure like ATMs and healthcare facilities presents significant challenges for both residents and visitors.

Riwai's infrastructure challenges are more anticipatory. Potential changes in road usage could significantly impact tourism traffic, necessitating adaptive infrastructure planning. Furthermore, the community faces issues related to financial literacy and banking accessibility, which affect the economic inclusivity of tourism benefits.

Sohra, with its larger tourist influx, faces the challenge of developing infrastructure that can handle increased visitor numbers while preserving its cultural heritage. The balance between modern amenities and maintaining the town's traditional appeal is delicate and requires careful planning.

Mawlynnong's economic development through ecotourism has been substantial, but there are gaps in entrepreneurship and hospitality skills among residents. Addressing this skills gap is crucial for enhancing the quality of services offered to tourists and for sustaining economic growth.

In Riwai, the lack of professional training for service providers limits the potential for delivering high-quality tourist experiences. While the community manages its activities well, there is a need for more structured training programs to elevate service standards.

Sohra does not report specific economic challenges, but the broader impacts of mass tourism imply underlying economic pressures, such as the equitable distribution of tourism revenue and the integration of non-local workers into the local economy.

The communities of Mawlynnong, Riwai, and Sohra face diverse challenges in their ecotourism development efforts, categorized into social, environmental, infrastructure, and economic challenges. Mawlynnong struggles with social resistance, waste management, and infrastructure limitations. Riwai's primary challenges are its reliance on local initiatives and the need for adaptive planning and professional training. Sohra contends with the complexities of mass tourism, environmental strain, and balancing modernization with cultural preservation. Addressing these challenges requires tailored strategies that consider each community's unique context and leverage their strengths to promote sustainable ecotourism.

7.1.6 Management Strategies for Addressing Ecotourism Challenges

The communities of Mawlynnong, Riwai, and Sohra face various challenges in their efforts to develop and sustain ecotourism. The management strategies to address these challenges can be classified into social, environmental, infrastructure, and economic categories. Each community has adopted or requires different strategies based on their specific needs and contexts.

Table 7.6 Management Strategies

Classification of Challenge	Management Strategy	Mawlynnong	Riwai	Sohra
Social Challenges	Community Sensitization and Education	✓	X	X
	External Partnerships for Community-Led Initiatives	X	✓	X
	Inclusive Community Strategies	X	X	✓
Environmental Challenges	Robust Waste Management Policies	✓	✓	✓
	Eco-Friendly Practices	X	X	✓
	Adaptive Road Usage Strategies	X	✓	X
Infrastructure Challenges	Improving Mobile Network and Electricity Supply	✓	✓	X
	Financial Literacy and Banking Access	✓	✓	X
	Sustainable Infrastructure Development	✓	✓	✓
Economic Challenges	Hospitality and Entrepreneurship Training	✓	✓	X
	Professional Training for Service Providers	X	✓	X

Source: Compiled from KIIs

Community Sensitization and Education-

Mawlynnong has implemented workshops led by tourism experts and local leaders to educate residents about the benefits and management of tourism. This strategy also includes developing a community-driven code of conduct for visitors, distributed via pamphlets and signage throughout the village. Riwai and Sohra have not adopted this

strategy, which may be beneficial for fostering a better understanding of tourism within these communities.

Managing Intoxicated Visitors-

In Mawlynnong, the establishment of a visitor center staffed by local volunteers helps manage visitor behavior. Additionally, partnerships with local law enforcement increase patrols during peak tourist seasons to effectively address disruptive behavior. Riwai and Sohra have not adopted this strategy, which could help manage similar challenges if implemented.

External Partnerships for Community-Led Initiatives-

Riwai has formed partnerships with NGOs and government agencies to provide financial and technical support for community-led tourism projects. The creation of a village tourism board that includes representatives from external organizations facilitates collaboration and resource sharing. Mawlynnong and Sohra have not pursued this strategy, although such partnerships could enhance their tourism initiatives.

Robust Waste Management Policies-

Mawlynnong has implemented robust waste management policies, including the installation of separate waste bins for recyclables, compostables, and non-recyclables at key tourist spots, with clear signage in multiple languages. Monthly community clean-up drives are organized and incentivized by rewards. Riwai and Sohra have not adopted this strategy, which could improve their waste management practices.

Eco-Friendly Practices-

Sohra mandates the use of biodegradable packaging for all vendors operating within tourist areas, with regular inspections to ensure compliance. An eco-tourism certification program promotes businesses that adhere to sustainable practices, increasing their visibility in tourist brochures and websites. This strategy is not currently used in Mawlynnong or Riwai, but could enhance environmental sustainability in these villages.

Adaptive Road Usage Strategies-

Riwai has developed adaptive strategies to cope with potential changes in road usage, ensuring sustainable tourism traffic management. A feasibility study for rerouting traffic during peak tourist seasons and the development of designated pedestrian

pathways are part of this strategy. Mawlynnong and Sohra have not implemented this strategy, which could help manage tourist flow and reduce congestion.

Improving Mobile Network and Electricity Supply Mawlynnong collaborates with telecom providers to install additional mobile towers and has set up a village fund to subsidize the installation of solar panels for backup electricity. These measures ensure consistent power supply and improved connectivity. Riwai and Sohra have not adopted this strategy, which could enhance their infrastructure reliability.

Financial Literacy and Banking Access Riwai partners with local banks to conduct financial literacy workshops, focusing on saving, budgeting, and accessing microloans. The village advocates for the installation of an ATM and promotes mobile banking services to increase financial accessibility. This strategy is not employed in Mawlynnong or Sohra, but could support economic inclusivity in these communities.

Sustainable Infrastructure Development Sohra applies for government grants aimed at developing eco-friendly infrastructure, such as solar-powered street lighting and water conservation systems. A master plan with zoning regulations preserves cultural heritage sites while accommodating modern tourism facilities. Mawlynnong and Riwai have not adopted this strategy, which could help balance development and cultural preservation.

Hospitality and Entrepreneurship Training Mawlynnong has established a training center in partnership with a local college, offering courses in hospitality management, customer service, and small business development. Micro-grants and low-interest loans are provided to aspiring entrepreneurs to start tourism-related businesses. Riwai and Sohra have not implemented this strategy, which could boost local entrepreneurship and service quality.

Professional Training for Service Providers Riwai in the past has organized a training programs with certified trainers for local tour guides, hotel staff, and restaurant workers. A mentorship programme pairs experienced professionals from nearby towns with local service providers to enhance their skills. Mawlynnong and Sohra have not adopted this strategy, which could improve the professionalism and quality of their tourism services.

Mawlynnong, Riwai, and Sohra each face unique challenges in developing and sustaining ecotourism. Mawlynnong focuses on community education, visitor management, waste management, and infrastructure improvements. Riwai emphasizes external partnerships, adaptive infrastructure strategies, financial literacy, and professional training. Sohra addresses inclusive community strategies, eco-friendly practices, and sustainable infrastructure development. By learning from each other's strategies, these communities can enhance their ecotourism initiatives and ensure sustainable development.

7.1.7 Skills Development for Ecotourism

Acquisition of skills play an important role in any livelihood practice. The major points of discussion on skills development and skills acquisition for ecotourism in the three villages of Mawlynnong, Riwai and Sohra have been categorized into Skills Acquired, Source of Skills Development and benefits of skill acquisition.

Table 7.7 Skills, Sources of Skills Development, and Benefits

Classification	Skills/Source/Benefit	Mawlynnong	Riwai	Sohra
Skills Acquired	Basic skills and knowledge for providing services	✓	✓	✓
	Professional skills in entrepreneurship	X	X	✓
	Hospitality and customer service skills	X	X	✓
Source of Skills Development	Personal experience and inherent knowledge	✓	✓	✓
	Internet and social media for gaining new ideas	✓	✓	✓
	Professional training programs for chefs and hospitality roles	X	X	✓
	Community workshops and informal learning	✓	✓	X
	Structured training programs and mentorship	X	X	✓
Benefits of Skills Acquisition	Improved service delivery and customer satisfaction	✓	✓	✓
	Enhanced employment opportunities	✓	✓	✓
	Better professional service quality	X	X	✓
	Increased economic benefits and local entrepreneurship	X	X	✓

Source: Compiled from KIIs

The above table shows that in Mawlynnong, skills acquired for ecotourism activities include basic skills and knowledge for providing services, hospitality, and customer service skills in both Mawlynnong and Riwai communities. While this is also true for Sohra, the community gives importance to Professional skills in entrepreneurship.

The source of skills development is again similar for Mawlynnong and Riwai communities where the source of skills includes personal experience and inherent knowledge, internet, and social media for gaining new ideas, community workshops and informal learning. Sohra, apart from the mentioned sources acquires ecotourism skills from Structured training programs and mentorship which Mawlynnong and Riwai do not have access to.

The benefits of skill acquisition are found to be Improved service delivery and customer satisfaction as well as Enhanced employment opportunities in all three communities. However, skill acquisition does not seem to increase professional service quality nor does it increase economic benefits and local entrepreneurship in Mawlynnong and Riwai as it does in Sohra.

7.1.8 Skill Development: Challenges and Community Responses

The challenges to skill development in Ecotourism for livelihood in Esat Khasi Hills, Meghalaya can be understood in terms of challenges faced as well as community responses to enhance the same. Developing skills in provision of services and carrying out Ecotourism activities will enhance not only households but will contribute to community development.

Table 7.8 Skill Development: Challenges and Community Responses

Classification	Challenge	Mawlynnong	Riwai	Sohra
Challenges	Limited access to formal training programs	✓	✓	X
	General lack of professional training affecting service quality	✓	✓	X
	Dependence on local community efforts for service improvement	✓	✓	X
	Need for structured programs to enhance skills	✓	✓	X
Community Responses	Ongoing efforts to improve hospitality and customer service	✓	✓	✓
	Use of internet and social media for skill enhancement	✓	✓	✓
	Establishment of training centers and programs	X	X	X
	Partnerships with external organizations for skill development	X	X	✓
	Implementation of community-driven initiatives for service improvement	✓	✓	✓

Source: Compiled from KIIs

From Table 7.7, it can be clearly seen that challenges towards skill development exist similarly across the three villages of Mawlynnong, Riwai and Sohra. While the villages of Mawlynnong and Riwai face challenges such as Limited access to formal training programs, General lack of professional training affecting service quality, dependence on local community efforts for service improvement and the awareness of the need for structured programs to enhance skills, Sohra does not face any such challenges.

There are differences in how the community responds to skill development needs in Ecotourism practices. Mawlynnong and Riwai have ongoing efforts to improve hospitality and customer service, use internet and social media for skill enhancement, and implement community-driven initiatives for service improvement. In Sohra, the community has established training centers and programmes and creates partnerships with external organizations for skill development but does not make use of social media for enhancement of skills at the community level.

7.2 Case Studies

This section presents an in-depth analysis derived from interviews documenting the lived experiences among seven local stakeholders engaged in ecotourism-based livelihoods across villages in East Khasi Hills, Meghalaya. Each case reflects a unique trajectory influenced by the social, economic, and environmental landscape of rural ecotourism. The analysis highlights key livelihood dynamics, challenges, and adaptive strategies grounded in the lived experiences of individuals offering insight into how ecotourism can act as a driver of transformation as well as a be source of vulnerability. The names of the participants in the interviews have been changed and informed consent have been obtained before the interviews.

The case studies presented explores the individual experiences of the respondents, and to understand the context of ecotourism and its influence on the rural livelihood engagements of the rural households. The cases focus on the diverse livelihood activities that were found in the villages. The findings from the case studies are further categorised into themes that are derived from the shared personal experiences of the respondents who have consented and participated in the present study.

Case 1: Food Stall Owner

Ms. Jessica is 37 years of age and hails from Mawkma village which is one of the selected villages in the present study. She is married and she has four children; her husband is engaged in daily wage labour as a mason within the village. Ms. Jessica derives her livelihood from the food stall that is being setup at Lyngksiar which is one of the ecotourism destinations of Mawkma village. Prior to her engagement at the food stall in her earlier days after she got married she was working as a labourer

at a coal field within her village but after the National Green Tribunal banned coal mining in 2014 coal mining activities came to a halt and she herself along with many others lost their job and was a housewife until the onset of ecotourism in the village. The practice of agriculture is not possible in the village due to the quality of the soil that makes it non arable. *"I was very depressed during that time as there were no other opportunities for livelihood engagement in the village. We were struggling and were dependent only upon my husband's wage labour"*. During this time her husband was the only bread earner in the family and was solely supporting his family through his wages. Her husband's wages merely suffice the basic needs of the family. When ecotourism started in the village her father setup the food stall as means for passive income for the family. The food stall is being managed by Ms. Jessica and her siblings daily and her father pays her labour from the income earned from the food stall. Ms. Jessica shared that during the COVID-19 pandemic she could not derive any income from her livelihood engagement as the lockdown was imposed and there was zero income from tourism. Her dependency on ecotourism, has made her and her family economically vulnerable during the pandemic. She entirely relied on her husband who hardly got any opportunities for wage labour in the villages as mobility to other villages was heavily restricted. At present Ms. Jessica is also earning for the family and is supporting her husband financially to run and cater to the needs of her family. Through her livelihood engagement at the food stall of her father she has contributed to improve the standard of living of her family. She is now also supporting her husband and can contribute to send their children to school, renovate their house, practice savings, meet miscellaneous needs like dress and clothing for her children, bought mobile phone for herself, sometimes takes her family for recreation. By engaging at the food stall Ms. Jessica said that she was able to keep some savings with the intention of setting up her own enterprise in the future and a plot of land has also been allotted to her by the village council at the ecotourism destinations.

Case 2: Food Stall Owner

Ms. Teresa is 45 years of age and she is an inhabitant of the host community Mawsmai village which is one of the oldest ecotourism destinations in East Khasi

Hills District Meghalaya. She is a single mother and has 3 children and is currently engaged in managing a food stall at the ecotourism spot in Mawsmmai. She inherited the food stall from her mother which is one of the oldest stalls in the tourist destination in Mawsmmai village. Her mother started with a makeshift stall in the late 1990's when there were visitors to the place but very few mostly army officers and their family. Her mother started by simply selling tea and some snacks nearby the entry to the Mawsmmai cave at the tourist spot. Gradually when Sohra (Cherrapunjee) was known for having the highest rainfall in the world complemented by its natural scenic beauty tourist's inflow started to increase. When the village council started to manage tourism activities in the village in the year 2000's her mother was allotted a plot to setup her food stall in the tourist spot. Ms. Teresa did not complete her education and after dropping out of school she helped her mother in managing the food stall and later she got married with 4 children. Due to her mother's health condition, her mother could no longer manage the food stall since then it was managed by Ms. Teresa. At present Ms. Teresa who is a single mother is managing the food stall and at times when her children have holidays, they come and help her in the stall during the peak tourism season she hires helpers from the village. Ms. Teresa's engagement in the food stall as her livelihood activity has very much contributed in economically empowering her being a single mother and raise her children. Her experience during the COVID-19 pandemic will never be forgotten she said. She narrated that it was all of a sudden that she had no time to be prepared. Her livelihood came to a halt and she could barely manage her basic needs. She used whatever she could save to cater to the most basic of needs. With the limited opportunity available in her village for livelihood, she engaged in cleaning betelnut for those who sold betelnut to consumers for consumption. What started as a makeshift stall is now the main source of income for her family and has been providing her family the basic needs they required over the years. Now Ms. Teresa was able to upgrade the stall with proper roofing and well painted walls, her livelihood has allowed her to support her children's education, bought a car, renovate her house, and allowed her to save money to start a home stay. At present Ms. Teresa has started to construct a home stay which is a lodging facility for the tourists.

Case 3: Homestay Owner

Mr. Jerry is 36 years of age and married with two children. He hails from Mawlynnong village and has completed his graduation in Bachelor of Commerce from Shillong in 2017. He belongs to the Khasi tribal community and follows Christianity as his religion and he belongs from a middle-class family. At present Mr. Jerry is working as a school teacher in Church of North India Upper Primary school in Mawlynnong. Prior to his work at present, he was engaged with a private company in Guwahati. With the onset and development of ecotourism in Mawlynnong village from the year 2007 he started his livelihood engagement in ecotourism as a tourist guide in the year 2015 and in the following year 2016 he established a petty shop within the ecotourism spot within the village assisted by his mother. Gradually with the growth and development of ecotourism Mawlynnong as one the cleanest village in Asia it became one of the most sought ecotourism destinations in Meghalaya resulting in large volume inflow of tourists. his undertaking and engagement in ecotourism was flourishing as an outcome he could save some amount from the earnings that he generated from his livelihood activity and started a homestay for the tourists in the year 2019. However, alike other members in the community, his livelihood was adversely affected with the breakout of the COVID-19 pandemic in the year 2020. The pandemic caught him and many others unprepared and has negatively impacted his livelihood engagement and outcome. He stressed that the growth of ecotourism and the tourism industry in his village has influenced him and many others to invest and concentrate more on ecotourism as rather than on agriculture which has been their traditional economic activity as ecotourism garnered more stable and regular income compared to their traditional livelihood. The restrictions imposed by the authorities during the pandemic has halted the tourist inflow to the village directly affecting the livelihood derived from ecotourism. This resulted in zero benefit from ecotourism and resulted in economic crisis and unemployment for many. In the case of Mr. Jerry, during the pandemic, he reverted to agriculture although it affected stability and regularity in his income generation. The occurrence of the pandemic has made him realise the need to balance his livelihood engagement and not to be over dependent on a single source of livelihood. Gradually,

post-pandemic after normalcy has been re-established and tourist inflow resumed his undertaking in ecotourism regained and at the same time regular income stability and economic stability returned. But this time, lesson learned from the pandemic changed his perspective by focusing and putting efforts both on his agricultural activities well as his ecotourism undertaking. His engagement in ecotourism related livelihood activity has contributed to his well-being for him and his family. In the year 2024 he was able to diversify his livelihood and managed to open another homestay which has contributed to increase in income level for him, he was able to employ others to assist him in managing his homestay and as well as hired shopkeepers, he was able to support his younger sister's education, apart from catering to his basic needs he is able to spent some amount on, house renovation, providing better food for his family, clothing, taking out his family for recreational activities.

Case 4: Guest House Owner

Mr. John is 25 years of age and is a native inhabitant of Riwai village. He is still a bachelor at present and lives with his elder sister. He lost both his parents from a very young age and was taken care by his sister. He completed his education till class 12 (higher secondary school) and did not continue his higher education after class 12th due to financial constraints. His brother-in-law owns a guest house in the village and since 2018 he has been assisting his brother-in-law in running the guest house as a care taker. Without any experience in hospitality, he followed the guidance of his brother-in-law who had undergone formal course in tourism and hospitality from Shillong. In the year 2022, due to his experience working in the guest house he was made as the manager of the guest house till present. His engagement as a manager in the guest house has provided him economic stability and self-dependent for his basic needs. Earlier while he was caretaker at the guest house he mostly depended on his sister for the attainment of his needs. At present after being promoted as a manager at the guest house his wage was also increased which has contributed in attaining better standard of living for him. He could not only look take care of himself economically but also contribute to his sister for running the family. He was able to acquire a smart phone where he used it to advertise the guest house using social media platforms. He shared that, at present he could practice savings and opened savings bank account for

himself and he also has the intention of opening his own guest house and food stall in the future. However, in his experience as caretaker and manager of the guest house he faced some challenges in his undertaking. One of the challenges that he has faced regularly in his engagement is was in terms of providing food services for those who are purely vegetarian. His helpers are not experienced in making pure vegetarian and sometimes they face are being given bad feedbacks from the tourists due to food service. He suffered a lot during the COVID-19. Himself and many other members in the community have been depending on the ecotourism as the main source of income and livelihood. During the pandemic there were no tourists due to the imposition of the lockdown and it directly affected their livelihood. As a result, there was no economic benefit from ecotourism, with no other option he engaged in plantation of beetlenut and other agriculture but it did not solve his financial crisis as the returns were seasonal and not regular. With lack of

Case 5: Chef and Caterer

Mr. Paul is 45 years of age and is a native of Mawsmmai village and a head chef in a resort and is also assisting in managing his aunt's food stall which is one of the oldest food stalls in Mawsmmai ecotourism spot. He works as a head chef in the resort in the evening till morning shift and evening shift and during the day he helps his in managing his aunt's food stall with his cousins as his aunt is not able to run the food stall due to her prolonged illness. He has completed his professional diploma course in culinary course from IHM Shillong after which he was working as a caterer before working as a head chef at a resort in Mawsmmai. His main source of income is his engagement as head chef in the resort and he earns additional income by engaging in his aunt's food stall and his services as a caterer whenever opportunities arise. His livelihood engagement in more than one source has enhanced his economic wellbeing and enhanced his standard of living. His experience during the COVID-19 pandemic was very unpleasant as his knowledge and skills that he has gained were directly related with tourism and hospitality. Without tourists during the pandemic, he was not able to engage in his regular livelihood and it has affected his income level and standard of living during the period. He tried selling makeshift fast food during the pandemic but it was not successful as the restrictions imposed affected

mobility of the individuals in the community and creating less demand for his services. Being the sole bread earner in the family, he had to engage in any work that was available during the pandemic. He shared that engaging in the food stall is quite challenging as they entirely depended on the tourist for their services particularly during off tourist seasons. During off seasons he prepares food for the tourists but there are times when there are less tourist visiting and there is very less sale in his services. Engaging in the food sector is very difficult as the food prepared cannot be kept for another day as it would get spoiled. Whenever there is less inflow of tourists, he needs to prepare less food to avoid wastage and lesser inflow of tourists lesser is his economic benefits. But there are times when the tourist inflow is unexpected, they come in huge number and there is less food prepared and the opportunity to maximise benefit is being wasted. During peak seasons he shared that there is increase in income level and reduced vulnerability as the food prepared is always sold out. However, the additional earnings he earns during the peak tourism season he must save for later to pay the helpers during the off season when the sale is considerably lesser and benefits are low.

Case 6: Tourist Guide

Mr. Henry is a tourist guide aged 38 years old, married with three children and is a native of Tyrna village. He completed his education till class 12th from Sohra. He started his career as a tourist guide in the year 2007, in the year 2010 he had undergone a course on tourism and hospitality and training for tourist guide from IGNOU. In the beginning of his career, he started working as a tourist guide for a company A from Darjeeling. During this period, ecotourism development in Meghalaya was very little known and while there were tourists who have visited Meghalaya the inflow was quite low as compared to the present scenario. In the year 2015 he left the job as a tourist guide with company A and started to guide tourists independently to various tourism destinations in Meghalaya. When the tourism industry started to take off in Meghalaya particularly in east Khasi hills, he started giving training and guidance to other youths from his village on undertaking the activity of tourist guide. At present majority of the youths in Tyrna village have undertaken tourist guides as an economic activity and livelihood activity. Mr. Henry

apart from engaging as a tourist guide, he is also an active member in the community and is a member of the tourism society in Tyrna village. He said that engaging as tourist guide in the tourism industry does not requires much capital but it cannot sustain in the long run as it depends on the age, physical health of an individual. Engaging as tourist guide is very energy consuming and an individual can be a tourist guide only till a certain age. He shared that those engaged as tourist guide must also engage in other forms of livelihood as there is no insurance of its sustainability and economic stability and security in the long run. During the pandemic, since there was no tourism activity and the role of tourist guide was absent. Even amidst the COVID-19 pandemic with him being the sole bread earner in the family, and dependent on tourism activity he had to engage in any economic activity within the village that provided him monetary benefits in return. He was engaged as wage labourer and agricultural labourer for others as livelihood alternatives during the pandemic as tourism activities was absent. The covid experience triggered him the need to engage in alternative livelihood activities to reduce the exposure of vulnerability in terms of unemployment during similar events like the pandemic in the future. With the amount that he was able to save from being a tourist guide he was able to setup a small grocery store in 2023 which is being looked after by his wife. The setup of the grocery store has enabled his family to have secondary source of income that has contributed to better income level for his family and at the same time enhanced better standard of living.

Case 7: Boatman

Mr. Luke is 37 years old and is a native of Umsyiem (Dawki) village which is famous for boating activities and crystal-clear water of the Umngot river. Mr. Luke is a married with two children and his wife is a house wife and they belong to the BPL category. He discontinued his education after completing class 12th as his family could not support his higher education due to the financial problems. He has 4 siblings younger to him who are still going to school and after discontinuing his education he worked with his mother in his plantation activities of betelnut, and betel leaves to contribute to his family income to support his younger sibling's education. He got married in 2018 and needed to find a better job to support his own family.

Due to lack of employment opportunity, he took up working as a boatman for others as a wage earner. He has been engaged as a boatman since 2018 and prior to engaging as a boatman he was following his uncle who was also a boat man. In 2023 while engaging as a boatman for others he could save some amount from his earnings with that amount he could save he bought a new boat for himself. He shared that he engages as a boatman seasonally starting from the month of September to March or mid of April. During these months or tourist season he earns good income from his boating services it is during this season that from his earnings he could save as well. These are the months of high tourists' inflow to his village as there are no heavy rain and the water in the Umngot river is still clear and stable current. During the monsoon there are very few tourists as boating is usually not suitable because of rain. He also shared that there are others who entirely depend on boatman throughout the year as well. During June to August, he engages in his plantation activities with his family in the plantation of betelnut and betel leaves. He shared that his boating services is his primary source of income while his engagement in plantation is his secondary income that he earns seasonally. He also shared that his livelihood is much better at present that he has his own boat as compared to earlier when he was working for others. During the COVID-19 pandemic he suffered from unemployment from his primary livelihood activity and he was entirely dependent on plantation, wage labour, and any other work available in the village that provided him income. It was very challenging in the village as prices of essential commodities inflated and he used whatever amount he had in his savings to acquire the basic needs for his family. After the pandemic it took almost 2 years to regain the normalcy in his income generation from his boating service. On a positive note, his engagement as a boatman as his livelihood activity has brought about many transformations for him and his family. He was able to construct a semi-concrete house with three rooms that for him and his own family. Apart from running his own family he was able to contribute to his mother to support his younger sibling's education. He opened a savings account and started practised savings from the additional earnings he earns from his livelihood and secondary income. He is now saving money to invest in buying another boat and hire a boatman so that he can increase his income and improve his standard of living. He shared that after his

engagement as a boatman he was able to contribute to his family's income and reduced the burden of his mother who was the sole bread earner in his family. His family's standard of living improved he spends his income in acquiring better food for his family, pocket money for his wife, better clothing for his children, spent on family or festival celebrations.

Analysis of the Case Studies

These case narratives, featuring food stall operators, tourist guides, boatmen, guesthouse managers, and aspiring entrepreneurs, provide a textured understanding of how ecotourism is reshaping livelihoods in regions where traditional employment options are limited or no longer viable. The selected participants come from diverse socio-economic and demographic backgrounds, including single mothers, youth, and middle-income earners, offering a broad spectrum of insights into how tourism intersects with local realities. This analysis adopts a thematic approach to distil the key patterns and recurring challenges embedded in their stories. Themes such as economic upliftment, gender empowerment, livelihood diversification, seasonal vulnerability, and the impact of the COVID-19 pandemic are examined in detail to assess both the opportunities and limitations presented by ecotourism. By critically engaging with these themes, the analysis aims to unpack not only the direct economic effects of tourism but also its broader social, cultural, and structural implications for rural communities.

Rural Employment Opportunities: The case studies have revealed that the ecotourism has played an important role in providing employment opportunities for the rural communities in the context of the present study. Its role in generating employment opportunities has been very crucial particularly in rural areas where the land is not arable for the practice of agriculture. The practice of ecotourism in the rural communities in the context of the present study has enabled the members of the host communities to engage in various forms of livelihood activities such as food stalls, guest house managers, boat operator, tourist guides, homestay owners. It has the potential to transform the socio-economic conditions of the rural households and the village economy.

Contribution to Family Income: As evident from the case studies ecotourism has contributed in terms of economic improvement and supplement households' income through the engagement of other family members in ecotourism related livelihood activities creating additional sources for the family's income, easing the burden traditionally borne by a single earner. The case studies have shown that the increase in the number of bread earner in the family has enabled individuals to increase and improve expenditures on children's education, health care, and support home improvements. These contributions that are a result of the individual's engagement in ecotourism have shown some form of resilience that is being brought about by ecotourism in the process of improving household well-being. However, the narratives in the case studies have also shown that this resilience can be affected in terms of dependency on ecotourism, seasonality, and the unpreparedness level to external shocks such as social disruptions like the pandemic.

Shared Expenditure in the Family: Ecotourism has provided opportunities to increase the sources of income of a family providing supplementary financial benefits and supporting collective living of the family. The cases have shown that members of the family who are earning through ecotourism are able to support the main bread earner by sharing the expenses to acquire the needs of the family. This has further strengthened family cohesion and a source of support for the family at times of financial needs or distress of the family. On the other hand, the income flow from ecotourism is highly dependent on the stability and steadiness of ecotourism activities which may have a reciprocal impact on the individuals and family's income. Hence, to sustain the shared prosperity and resilience of the family it can be reiterated that there is a need to diversify income sources.

Practice of Savings: The cases presented in the present study has shown evidences that the practice of ecotourism has brought about social and economic improvements for the individuals and families. The potential of ecotourism to provide employment opportunities and increase income sources in the family has influenced individuals in the present study to practice savings for future aspirations and utilization in times of emergencies. An example from the case studies can be seen in the aspirations of Ms. Jessica who planned to have her own food stall and Mr. John who aspires to own a

guesthouse have inculcated the practice of savings to achieve their aspirations. The example from Mr. Luke have shown the vulnerability of being over dependent on ecotourism at times of unprecedented emergencies like the COVID-19 pandemic where he depleted his savings as there was no income from ecotourism during the emergency. This signals the need for financial literacy that could help individuals access financial support and become resilient to external shocks.

Increase in Income Level: With the onset of ecotourism in the villages in the present study, the case studies have shown that individual households have been able to engage in different forms of livelihood activities. The cases studies have shown that their engagement in livelihood activities driven by ecotourism have brought about significant influences in the economic status of the households. Their engagement has brought about increase in income levels shared through the lived experiences of the cases in the present study. Ecotourism has played a crucial role in influencing the transition and occupational shift among the individual households and improved personal income levels of the cases in the present study.

The case of Mr. Jerry is a perfect example in this context, the onset of ecotourism practices in his village has provided him an opportunity to venture in ecotourism related livelihood activity. He started engaging in ecotourism by setting up a petty shop which was assisted by his mother as the caretaker. His engagement as a petty shop owner has gradually allowed him to expand his livelihood undertaking to owning a homestay, at present he owns two homestay and hires individuals from his village as caretakers of his homestay. The transition from a petty shop owner to owning two homestays shows that his livelihood engagement has enhanced and improved his income level which has paved for his upward mobility, improved his standard of living, educational support for his sibling, and develop his economic ventures through ecotourism.

Primary Source of Income: The cases presented in the study have shown evidences that ecotourism has influenced an occupational shift among the individual cases that are being presented in the case studies. While agriculture and farming activities has been the traditional occupation and the main source of income for the majority of the

rural households the onset of ecotourism has brought about shift in the primary sources of income as evident from the cases present in the study. The economic benefits derived from ecotourism as compared to their traditional economic activities has provided them regularity in income and stability in income flow has influenced occupational shifts among the rural households in the study leading to households to become dependent on the tourism sector for their livelihood. However, this dependency as in the case of Mr. Jerry he narrated that his over-reliance on ecotourism has exposed his vulnerability during the COVID-19 pandemic. He shared that the growth of ecotourism has shifted his focus entirely on the tourism sector neglecting the traditional economic activities that has been the backbone of majority of the rural households before the onset of ecotourism. It can be reiterated here that Mr. Jerry had been economically affected during the pandemic as there was no income from tourism during the pandemic. He had to engage in his farming activities and any labour work that was available in the village for his income. He stated that the lesson he learned from the pandemic made him realise that becoming over-reliant on ecotourism had made him vulnerable and stressed that there should be a balance between his engagement in ecotourism and his agriculture or farming activities. This implies that there is a need for livelihood diversification to lessen the over-reliance on a particular activity as a means for livelihood.

Improved Standard of Living: The onset of ecotourism has influenced the engagement of individuals in undertaking the different forms of livelihood which derived them better employment opportunities and enhanced improvements in the standard of living of the individuals. The cases in the present study, have provided their individual experiences about the socio-economic transformations that have been brought about by ecotourism for the households by engaging in the different forms of livelihoods activities. The evidences from the lived experiences of the participants clearly shows the potential of ecotourism as a means or a tool for the transformation of the rural households. The presented cases described that their engagement in ecotourism related livelihood activity has enhanced improvement in their income which paved way for better standard of living that led to the transformation in terms of; business expansion, hiring helpers, improving their houses from thatched roofs to

concrete homes, educational support and access, increased family income, affording mobile phones, expenditure on food and clothing, possession of a vehicle, and enjoying recreational family time. However, as seen in the cases of Mr. Luke and Ms. Teresa these positive outcomes through livelihood engagements from ecotourism become fragile due to the seasonality of tourism activities and during times of social unrest or disruptions. This requires consistent income and year-round income and planning to maintain the living standards.

Employment for Others: The onset of ecotourism has not only provided opportunities for livelihood engagement by individuals. Ecotourism has enabled the creation of job opportunities by the participants for other members of the community. Members who have initiated or undertaken livelihood activities may require assistants to help them in their enterprises, there are also those who wish to expand their livelihood ventures but they cannot fully engage all their activities by themselves they need others to assist them in this case the requirements from their engagement creates job opportunities for others as well. A suitable example can be cited from the cases in the present study, Ms. Teresa hires helpers during peak seasons, while Mr. Jerry employs others for his shop and homestay. Even Mr. Luke plans to hire a boatman. These developments reflect the community-level multiplier effect of tourism, where individual success can generate shared benefits. However, the seasonal nature of this employment may not contribute stability in income and economic benefits for those engage under others.

Diversification of Livelihood: It is seen from the cases presented that ecotourism offers a wide range of opportunities for livelihood engagement for the participants and members of the host communities. The livelihood undertaken by the participants in the case studies varies from, shopkeeping, caretaker, guest house, boatman, tourist guide, grocery shop. As evident from the cases presented above there are individuals among those who are engaged in livelihood through ecotourism that have also alongside adopted other economic activities other than engaging in ecotourism related livelihood activities. The cases of Mr. Henry who is a tourist guide but have also opened a grocery shop and Mr. Luke who engages seasonally with farming activities during the off-season for tourism reflects their efforts to maintain income

flow. While diversification of livelihood among some of the cases presented in the study contributes to improving resilience, it often requires individual labour, additional investments and low returns that may discourage individuals from seeking alternative sources of income. To supplement livelihood diversification, individuals and rural households can be supported by providing and capacitating them through institutional support for entrepreneurship training and micro-investment schemes that would integrate the utilization of primary source and identification of secondary sources of livelihood which could significantly improve their resilience.

Poverty Alleviation: Several individuals reported significant improvement in their poverty status due to ecotourism. Mr. Luke's story—rising from BPL status to a house-owning entrepreneur—embodies this potential. However, access to tourism opportunities is not evenly distributed. Ensuring equitable access, especially for marginalized or asset-poor individuals, is essential to scale ecotourism's poverty-reduction potential.

Empowerment as Single Mothers: The cases presented in the study have also reflected the potential that ecotourism has brought about in the achievement of financial autonomy and transformation among the rural households in the study. The case study of Ms. Teresa is a testimonial of the positive impact of ecotourism among the rural households. Despite being a single mother, her engagement at the food stall she inherited from her mother has paved way for her to become self-reliant which has contributed to her social and economic empowerment and gained financial autonomy. She single-handedly provided for her children's basic needs and supported her children's education, upgraded her home, bought a vehicle and initiated a homestay as an additional source of income in the near future. Her journey exemplifies the strength and potential of ecotourism as a tool to rural development and gender empowerment and its capacities to bring about transformation among the rural households. However, the successful journey of Ms. Teresa is a retrospect that allows us to understand the importance of accessibility to assets that is key influencing factor that could bring about access to benefits as a means to improve living standard and well-being. This also reflects the need to ensure accessibility to

important assets and extending financial support to women that can contribute towards empowering rural women.

Need for Training and entrepreneurship: The case studies that have been presented in this chapter have also shed light to the deficiencies that are looming in the practice of ecotourism by the rural households in the present study. Apart from Mr. Henry and Mr. Paul who have undergone courses on tourist guide and culinary activities respectively, other case studies have reflected that their engagement in the tourism industry has been initiated with their own limited knowledge on tourism and hospitality. The cases presented in the case of Mr. John shows the skill gaps in serving vegetarian food to tourists was a challenge for the manager due to staff inexperience that are existing in their engagement in the tourism industry. The various activities that are being engaged by the rural households and the cases presented reflect an entrepreneurial intent but they very much are deficient in formal business training. Some of the entrepreneurial intent among the cases presented are; Ms. Jessica aspires to launch her own stall, and Mr. John used basic marketing to advertise his guesthouse. These cases reveal the potential of the individuals that are untapped or are not being supported to unfold as an entrepreneur. The findings from the cases presented clearly shows that there is a need for training in hospitality, customer service, and niche culinary skills to elevate service standards and maintain competitiveness. At the same time, the success and sustainability of the ventures initiated and engaged by the cases presented must be capacitated through inputs on entrepreneurship knowledge and skills.

Non-Arable Land and the Need for Alternatives: While agriculture has been the traditional source of livelihood among the rural communities the findings from the case studies revealed that there are several villages that are facing agronomic constraints. Ms. Jessica shared that apart from engaging in ecotourism most of the members in her village are engaged in wage labour due to the inability to practice agriculture due to rocky soil structure of the topography of her village. Agriculture as a traditional economic activity is being practised by few households for self-subsistence. This resulted to members to adapt and engage in non-agricultural livelihood as the primary source of income. The emergence of ecotourism has very

much contributed to the village economy and has given employment and opportunities for the rural households and have to a certain extent prevented migration to other villages in search for wage labour. Policy focus should include developing tourism in similar non-arable regions while ensuring resilience to overdependence.

Impact of the COVID-19 Pandemic and over-dependence: The pandemic has adversely affected tourism-dependent households. The sudden and unprecedented imposition of lockdown during the pandemic has deeply affected the communities, households and individuals who were directly engaged in ecotourism as a means of livelihood. The imposition of lockdown has restricted and created a halt of the inflow of tourists to ecotourism destinations who were the main source of income for the household's dependent on ecotourism. The halt in tourist inflow has contributed to no tourism activities at all in the villages in the present study. Many rural households and the have resulted in loss of income and livelihood, forced many, into temporary manual labour, depletion of savings and, a return to low-yield activities like seasonal farming revealed ecotourism's fragility. These experiences have emphasized the urgent need for income diversification and alternatives to protect vulnerable communities in future disruptions.

Seasonal Vulnerability: Tourism in Meghalaya is driven by a number of factors such as scenic beauty, natural landscapes, waterfalls, indigenous knowledge and engineering, clean environment and, weather patterns. While tourist inflow happens through the year yet peak tourism seasons and climatic conditions attracts tourists' during a particular time of the year making income generation seasonal. From the cases presented in the present study, the seasonal character of ecotourism activities can be understood in the cases of Mr. Paul prepares less food in off-seasons to avoid waste, while Mr. Luke shifts to farming during the monsoons. These fluctuations cause instability, especially for those without a secondary income. Promoting off-season tourism through cultural events or nature-based activities could extend earning periods and reduce income gaps.

These thematic narratives highlight the multifaceted nature of tourism-driven livelihoods in Meghalaya. While tourism brings opportunities for income and personal development, it also exposes individuals to seasonal instability, lack of job security, and physical strain. Across all cases, themes of resilience, aspiration, and adaptability emerge prominently. The lived experiences of these individuals underline the importance of supportive policies, skill development, and diversification strategies to make tourism-based livelihoods more secure and sustainable for the future.

This chapter has presented the dynamics of ecotourism; its impact on rural households and the community. It has provided us insights of ecotourism from the community's perspective and the lived experiences among the rural households engaged in ecotourism on areas such as; drivers of ecotourism, ecotourism and community development, challenges in ecotourism and skills associated with ecotourism engagement. It had also provided accounts of individual experiences of the respondents through case studies. The next chapter is the concluding chapter of the present study it will integrate the major results of the study and provide suggestions and implications of the present study on policy makers, social work intervention and further research.

CHAPTER VIII

CONCLUSION

The present study on ‘Ecotourism and Rural Livelihood in East Khasi Hills District, Meghalaya,’ was carried out in ten villages to examine the practice of ecotourism in Meghalaya. The preceding chapters have discussed on the concepts and background of the study, a comprehensive review of literature that helps in understanding the broader and interrelated concept of ecotourism and widens the knowledge in understanding the different dimensions ecotourism, a sound methodology that has guided the conduct of the present study. The findings have also been discussed separately organised into different chapters.

The present chapter integrates both quantitative and qualitative findings to provide a holistic understanding on *Ecotourism and Rural Livelihood* in the context East Khasi Hills District of Meghalaya. The integrated findings in this chapter are organised according to the dimensions and core elements of the Sustainable Livelihood Framework (vulnerability context, livelihood assets, transforming processes and, livelihood outcomes) that was adopted in the present study to examine sustainable livelihood practices through ecotourism. The synthesis of this chapter not only reinforces the research objectives but will also set stage for the conclusions and recommendations to follow.

8.1 Integration of Findings

The section on integrated findings presents a comprehensive synthesis of the results that was derived from the primary data collected and analysed during the course of this study. It brings together various dimensions of the core foundation of the study that revolves around Ecotourism and Rural Livelihood that was explored through both qualitative and quantitative methods, it offers a holistic understanding of the key subjects investigated under the theme of Ecotourism and Rural Livelihood. By knitting together multiple aspect features of evidences from individual case narratives, survey responses, and interviews or interactions with key informants, this section seeks to reveal encompassing patterns, interrelationships, and emerging themes that define the lived realities of the study population. The first section

portrays the demographic profile of the respondents who voluntarily participated in the present study. The second section reveals the vulnerability context of the villages that were identified as ecotourism hotspots as geographical context of the present study. The third section examined the various livelihood assets of the rural households. The fourth section provides us a comprehensive understanding of the processes of utilization of ecotourism by the rural households. The fifth section exhumes the livelihood outcomes derived and brought about by ecotourism practices. The sixth section provides us perspectives of the dynamics of ecotourism practices through the lens and the lived experiences of the individual rural households. This approach ensures a distinct interpretation of the data and findings that is grounded in contextual realities, thereby enhancing the relevance and applicability of the research outcomes.

8.1.1 Socio-demographic profile of rural households engaged in ecotourism

The socio-demographic profile and structural bases of the rural households are being organised into age, gender, marital status, education, family structure, economic status, land possession and, head of the household.

Age group: The data shows that a little more than half of the total respondents are male and a little more than a third of the total respondents are female. This shows that males are the dominant gender in livelihood through ecotourism. Whereas both genders are actively engaged in undertaking livelihood through ecotourism.

Age and gender: The comparative analysis of both genders shows that between the age group of 19 - 30 years, majority of the respondents are male and almost a third of the respondents are female. In the age group between 31 - 40 years, more than half of the respondents are male while 37.8% are females. Conversely, in the age group of 41 - 50 years, more than half of the respondents are female while 36.5% are male. In the age group between 51 - 60 years, a little less than half of the respondents are male and less than half of the respondents are female.

It can be inferred that the presence of ecotourism practices has provided more employment opportunities for respondents of both genders especially for youth

between the age group of 19 - 30 years, and during the early adulthood stage (31 - 40 years). Participation or engagement in ecotourism declines with the increase in age. The number of respondents participating in ecotourism are seen declining between the age of 41 - 60 years and above. It can be further inferred that ecotourism can be used to foster the process for youth empowerment and to address the issue of unemployment among the youth in rural settings. Entrepreneurial activities can also be initiated to equip the youth and the early adults with knowledge and skills on entrepreneurship in the context of tourism and hospitality.

Marital status: The marital status among the female respondents is higher (79.3%) in comparison to the male respondents (42.7%). Respondents engaging in ecotourism related livelihood activities have contributed as a source of income for the bread earner or supplements the bread earner in the family to fulfil the needs and requirements of the family. On the other hand, the unmarried male respondents are more (56.8%) as compared to unmarried female respondents (17.9%) in the study. The presence and the existence of the practices of ecotourism has provided employment opportunities for unmarried male and female respondents.

Economic Activity: Engaging in income generating activities through ecotourism has contributed to the economic structure of the rural households in the study either as a source of income for the rural households or supporting and supplementing the household economy. Ecotourism also has the potential to enhance entrepreneurship practices among the rural youths to become economically self-reliant. Therefore, there is a need to support, promote and foster rural entrepreneurship through various capacity building programmes on entrepreneurship knowledge, skills, and practices among the youths so that it can sustain ecotourism practices and contribute for the improvement of the village households and economy in the long run.

Education: Firstly, the data shows that very less female respondents (2.1%) did not have any formal schooling at all while the male respondents in the study have attended at least primary level of education.

Secondly, at the post graduate level which is the highest educational qualification level of the respondents in the study, it is observed that only a very small number of male respondents (0.5%) have completed post graduate level while there are no female respondents who have completed the same. Furthermore, less than half of the male respondents have completed graduation, and less than half of the total female respondents have only completed upper primary education.

The analysis shows a huge disparity in terms of educational qualification among the male and female respondents. The male respondents have much higher educational qualification as compared to the female respondents. This indicates that the drop-out rate is higher among the female as compared to the male. The low educational qualification and high drop-out rate among the female respondents could possibly lead to early marriage.

Family structure: Almost all of the households are nuclear families while only 1.1% follow joint family system. In terms of size of the family, half of the respondents come from medium size family, a third of the total households in the study have large size family and 15.8% have small size family.

The analysis of the data reveals that there is variation in the family structure among the rural households between small, medium and large sized families. While nuclear family system is very much commonly practised among the Khasi society it is still a very dominant practice among the households even at present. It can be concluded here that while the family structure has contributed to the availability of labour force among the rural households, at the same time, bigger family size may affect the distribution and utilization of resources among the rural community.

Economic Status: A large number (77.8%) of respondents, inclusive of both male and female falls under Below Poverty Line (BPL) category; and a little more than a fifth of the respondents fall under the Above Poverty Line (APL) category. On the other hand, the data shows almost uniform distribution with very minimal variation in the economic status between both male and female respondents in the study.

Nature of Origin: On the overall, the data shows that a large majority of the are natives of the villages in the present study. Only a tenth (10.7%) are not natives of the villages but are engaged in ecotourism activities. While a large majority of the respondents engaged in ecotourism are native origin of the villages in the study, some of the respondent become natives of the villages through marriage and while some respondents are only engaged for business purpose only. Very few of the respondents - 1.8% male and 2.1% female respondents became natives or inhabitants of the village through marriage. Very few males and an even lesser number of female respondents who are not native or inhabitants of the village but engage in ecotourism in the villages. Maximum of the benefits and opportunities derived through ecotourism are being utilized by members of the host communities who are natives of the villages in the study. On the other hand, there are certain social restrictions to engage in ecotourism for outsiders who are not native of the villages in the study.

Possession of Land: A huge majority of the respondents inclusive of both male and female 92.8% possess land. Most of the male respondents (95%) and 89.3% of the female respondents in the study possess their own land. As per the Khasi customary law of inheritance, the youngest daughter in the family inherits the ancestral property of the clan. In contrary to the outcome of the analysis, there are more male respondents who possess land more than the female respondents in the study. This indicates that the male members among the Khasi matrilineal society have also been inheriting land from their clans. This might indicate a shift or a new practice that is prevalent among the Khasi society with respect to inheritance.

Head of the households: A majority of the households in the study have the male as the head of the household, and less than a fifth of the total households in the study have the female as the head of the households. Khasis follow a matrilineal society yet patriarchy is still evident at the household level where generally the male is the head of most of the households among both rural and urban households. This shows the dominant role of the male among the Khasi matrilineal society yet strong patriarchy practice at the household level. While, the male or the father is very strongly and most commonly considered as the head of the households, family situations such as death of the husband, divorce, parental separation, single-

motherhood, and orphaned may contribute to having the female as the household head in the present study.

8.1.2 Rural Vulnerability Context

The vulnerability context is categorised as critical trends and shocks which were identified and organised into different themes. Trends include; increasing inflow of tourist, lack of effective waste management practices, increasing use of online services, role of non-local private sector, and increasing popularity through social media. Shocks include; economic vulnerability, environmental vulnerability, social vulnerability, geographical vulnerability, vulnerability to physical assets and accessibility, lack of support system, political vulnerability, seasonal vulnerabilities, and market vulnerability.

Critical Trends

Increasing inflow of tourist over recent years affect the carrying capacity of the ecotourism destinations that could create harm to the environment.

The results are consistent with studies from Kanga, Kumar, & Singh (2025), who highlighted that unregulated ecotourism growth adds pressure to ecotourism destinations beyond their carrying capacity which disturbs the ecological habitat affecting the biodiversity. Das & Chatterjee (2015) witnessed that the increasing popularity of ecotourism destinations led to overtourism and the lack of mechanism to control visitors may lead to harm both local cultures and ecosystems.

Lack of effective waste management practices has created a menace and a challenge for the local communities to manage waste products.

Similar results were also found in Das & Chatterjee (2015), who highlighted that growth of ecotourism has also led to plastic waste accumulation, poor waste segregation and burning practices. Mega, N., et al. (2023) found similar challenges in Indonesia ecotourism site revealing the large quantity accumulation of plastic waste is due to lack of community participation and sustainable infrastructure that hindered attaining sustainable ecotourism goals. Foschi, E., Barbir, J., Mersico, L. et

al. (2025) found that Research in European tourist cities confirmed that increased in tourist footfalls have significantly contributed to high volumes of plastic and single-use packaging waste, especially in "on-the-go" consumption settings. The studies emphasized that tourists often lack understanding of local segregation systems, aggravating mismanagement issues

Post COVID-19 pandemic witnessed a growing trend in the use of online payment method through different platforms. However, the lack of proper network coverage in some of the villages has created inconvenience for the visiting tourists to conduct online financial transaction. Moreover, the deficiency and unavailability of ATM facilities in the vicinity of the ecotourism destinations adds more to the issues of the visiting tourists causing inconvenience to the visiting tourists and affecting their satisfaction level as visitors which can lead to negative feedbacks on their service satisfaction.

The results align with the studies from Yadav et al., (2024) revealing that the COVID-19 pandemic has accelerated the utilization of digital payment platforms with large disparity of utilization in the context of rural and urban population in India. It was also found that Wireless tele-density remains lower in rural areas as compared with national averages. Digital payment convenience translates into higher satisfaction among travellers—especially urban tourists accustomed to seamless transactions (Ujjawal & Sharma, 2025).

Upon understanding and realisation of the potential commercial and economic benefit that can be derived from ecotourism, non-local entrepreneurs running private tourism companies outside the state of Meghalaya have seek the opportunity to capture the commercial benefits that the tourism industries offer by introducing tourism packages for domestic and international tourists. The lack of entrepreneurship knowledge, skills, and attitude of the tourism industry among the local youths have deprived them with opportunities to generate employment and engage as entrepreneurs within the tourism industry.

The above results resonate with other findings from (Rynjah & Sailo, 2021), local youths often lack entrepreneurship knowledge, skills, and industry readiness—hindering their engagement in tourism enterprises. While ecotourism in Meghalaya provides livelihoods (e.g. Mawlynnong, Riwai, Mawsmai), most community participation remains small-scale and constrained by technical capacity and limited training. Kumar (2024) emphasized that sustainable nature-based tourism in Meghalaya flourishes when local communities are closely involved in planning and service provision. Meghalaya’s draft tourism policy (2022) explicitly invites private sector participation from established hospitality brands and non-local operators in the state’s tourism industry to develop high-value tourist accommodation and expand tourism infrastructure beyond Shillong (Meghalaya draft tourism policy, Government of Meghalaya, 2022)

The use of technology and social media of different forms have contributed in promoting ecotourism destinations of the villages. It has helped in diffusing information to people across different parts of the country and across the globe through the use of social media platforms on the other hand, there may be fake or un-authenticated social media handlers that could pass negative and wrong information to the public.

Similar results were reflected in the findings from other studies (Chatterjee & Dsilva, 2021; Hussain et al., 2024) pointing out that social media platforms like instagram, facebook have boosted popularity of ecotourism destinations across the globe allowing dormant tourism sites gain visibility. Kaur (2024), revealed that social media content exhibited through digital platforms like Facebook, Instagram, YouTube enhances the attractiveness and reach of eco-tourism in India prompting potential tourists to choose such destinations. However, in contrast, the mass usage of social media have also been responsible in spreading false information with significant consequences for tourism businesses even triggering unwarranted panic or reduced bookings (Bahel, 2024)

Shocks

In Economic vulnerability, the social and economic benefits particularly livelihood activities of the respondents and the village are largely dependent upon the inflow of tourists from outside the state of Meghalaya. There are many rural households in the study that are dependent on ecotourism as their primary source of income. The respondents were very satisfied with their economic engagement as they could earn regularly. Past incidences such as the Covid-19 Pandemic, CAA conflict have adversely affected the inflow of tourists and at the same time directly influenced livelihood outcome of the respondents. During the Covid-19 Pandemic the lock down has completely shut down ecotourism activities which meant a halt to income generation from ecotourism resulting in loss of employment, respondents had to find employment opportunities, those who had agricultural land engaged in their own land for agriculture, and others had to work as agricultural labourers and wage labour.

Similar results were found in Devi & Biju (2021), stating that the ecotourism economy in Kerala collapsed during the lockdown locals who engaged in ecotourism shifted to agriculture and wage labour and in addition to the above findings the locals faced low returns and faced psychological stress. Ghosh (2022), also found that rural-based tourism collapsed during the COVID-19 pandemic which had adversely affected those who depended on seasonal and external tourist inflow. Bhutia (2021), Identified a similar shift from agriculture and wage labour to ecotourism in Dzongu, Sikkim. Although this created income opportunities, overdependence made communities vulnerable when tourist numbers dropped. Chakraborty & Banerjee (2021), explained social conflicts like the Citizen Amendment Act (CAA) created insecurity among tourists leading to sharp declines in visitation and affecting the tourism economy. UNEP (2021), notes that many ecotourism destinations in developing regions faced a total shutdown of tourism-based income during the COVID-19 Pandemic, forcing people to fall back on subsistence farming. Bhutia & Lachenpa (2022), found that while community-based tourism generated revenue for the community, revenue was inadequate for infrastructure upkeep and service delivery. Mehta & Shah (2019), also found that the

local councils charged parking and entry fees but lacked the administrative capacity and revenue to reinvest in waste management and tourism facilities.

In contrast to the results above, India Water Foundation. (2022), shows the implementation of IBDLP for ecosystem restoration projects alternative livelihoods (aquaculture, apiculture), reducing environmental vulnerabilities. Shepherd (2022), highlighted the REDD++ project in Meghalaya are facilitating communities to engage in agroforestry, beekeeping, and reduced dependency on traditional farming.

Environmental Vulnerability: The large-scale use of plastic materials for various purposes has been a menace to the environment in all the ecotourism villages in the study. It has been challenging for the local communities to keep the environment free from plastics. Many of the items used and required by the tourists are being provided in plastic materials. There has been no alternative to the use of plastic to cater to the requirements of the visitors.

Similar to the above results are being reflected in; Dey & Mishra (2020), highlighting plastic pollution as a key threat to natural beauty and sustainable ecotourism. Sati (2019), tourists ignored local norms and caused unsustainable plastic accumulation contributing to challenges in waste segregation and disposal. UNEP (2020), pointed that the common practice of convenience packaging and food services, is driving the use of plastics in nature-based destinations.

Social Vulnerability: Major contributors towards growth of ecotourism in Meghalaya are national tourists who mostly consists of non-tribals. One of the vulnerabilities that have been affecting ecotourism regularly are social issues and social disorganization in recent times were CAA, border issues, ILP issues within the state of Meghalaya and particularly Assam. As a result, it reflects idle ecotourism activities and negative impact on the livelihood outcomes from ecotourism on the respondents. The Covid19 pandemic has caused economic and employment issues for the respondents who entirely depended on ecotourism as their primary source of income faced problems of unemployment.

Similar results were found in; Devi & Biju (2021), stating that the ecotourism economy in Kerala collapsed during the lockdown locals who engaged in ecotourism

shifted to agriculture and wage labour and in addition to the above findings the locals faced low returns and faced psychological stress. Ghosh (2022), also found that rural-based tourism collapsed during the COVID-19 pandemic which had adversely affected those who depended on seasonal and external tourist inflow. Bhutia (2021), Identified a similar shift from agriculture and wage labour to ecotourism in Dzongu, Sikkim. Although this created income opportunities, overdependence made communities vulnerable when tourist numbers dropped. Chakraborty & Banerjee (2021), explained social conflicts like the Citizen Amendment Act (CAA) created insecurity among tourists leading to sharp declines in visitation and affecting the tourism economy. UNEP (2021), notes that many ecotourism destinations in developing regions faced a total shutdown of tourism-based income during the COVID-19 Pandemic, forcing people to fall back on subsistence farming.

While ecotourism has brought about social and economic benefits to the rural households and the community. There have been incidents in the context of the study where possession of land ownership has created an issue among one of the villages in the present study. Members who once used to benefit from ecotourism by keeping shops are now unemployed and are engaged in other economic activities. The village council has not been able to generate revenue from ecotourism due to the dispute. The matter has been taken by the Khasi Hills Autonomous District Council (KHADC) which is yet to be resolved.

The results of the study are in consistent with other studies; Chakraborty & Singh (2020), found that the community land ownership and customary laws in Meghalaya and Nagaland are common factors contributing to jurisdictional conflicts when tourism or infrastructure projects are initiated which is very similar to the case of Laitduh village in the study. Colchester, M. (2011), local communities have been deprived of benefits from ecotourism due to disputed territorial claims. Rawat (2019), reported that boundary disputes in villages around Jim Corbett National Park have stalled the livelihood of locals engaged in homestay services.

Geographical Vulnerability: Most of the villages in the present study engaged in ecotourism activities are located far from the towns and cities but are highly dependent on the nearest towns for their supplies and products that are necessary for their households needs and to cater to the needs of the visiting tourists. Other forms of vulnerabilities exposed by the local communities are access to basic needs such as health and education.

While most of ecotourism destinations are located in villages far from town and cities, they face several challenges that are being revealed in other studies like; Gurung & Scholz (2008), revealed that the remote location of ecotourism destinations limits the access to health, education, and markets in remote villages restricts the full potential of community-based ecotourism. UNWTO (2017), reported that, rural ecotourism sites worldwide suffer from lack of access to roads, telecom, and basic services, which hampers both tourist satisfaction and community benefit from ecotourism. Furthermore, Bansal & Kumar (2011), revealed that deficiency of infrastructure in remote areas limit access to services, making local communities dependent on distant towns. This affects not just tourism management but also the local population's overall well-being.

Lack of Support System and Infrastructure: Villages nearer to the nearest town has better accessibility to important services such as ATMs, police, market, mobile and internet connection, online services, healthcare facilities whose services are not only required by the host communities but as well as the tourists. One of the reasons shared by the respondents is that banks available nearby villages do not have schemes for tourism, if they must avail loans from the banks, they can avail only through personal loans for which most of the respondents do not want to avail due to high rate of interest.

In view of the results above similar studies have been found in support of the results. See; (Singh & Rawat, 2020; Nongkynrih & Syiemlieh, 2023; Boro & Narzary, 2021; Dixit & Narula, 2010) who documented that tourism in remote villages face similar issues related to poor infrastructure and digital isolation and that infrastructural benefits of the villages are very much associated with their location to the towns.

Chakrabarty & Mandal (2021), pointed out that social media (particularly Facebook and Instagram) became key drivers for visibility and tourist engagement. Mishra & Sahoo (2019), found that local community members avoid formal banking and prefer government grants or subsidies as financial support to engage in tourism. Furthermore, Scheyvens (2002), argues that lack market access limits the ability and growth of the local communities and tourism development. UNDP India (2020), identified lack of entrepreneurial training, credit access, and digital infrastructure in rural India as major hurdles in ecotourism development.

Market Economy

The unavailability of local market in the village has also been one of the disadvantages for the local communities. Most of the times the prices of commodities at the local market are controlled by the middleman who brings the products at wholesale prices from the city market in Shillong. The wholesale prices are applicable to those who require large quantities and of products. This has resulted in inflation of prices in the villages as to make profit from the commodities the respondents and the villagers must sell the products at prices slightly higher than the market prices.

The results are consistent with other studies like; Singh (2018), found that limited access to wholesale markets resulted in price distortion and inflated rural commodity prices. Similarly, Chakraborty (2019), found that in Meghalaya and Nagaland, the absence of regular rural markets and high transport dependency results in price hikes for both inputs and outputs, affecting both tourists, local entrepreneurs and local communities.

Political Vulnerability: Since the onset of ecotourism, tourism policy of Meghalaya prior to 2023 largely failed to implement effective strategies for promoting ecotourism and supporting the economic development of indigenous communities. In the villages studied, ecotourism initiatives have emerged primarily through community-led efforts grounded in indigenous knowledge and local resource management. Despite visible growth in ecotourism, government and institutional support remain minimal, offering little assistance to strengthen these grassroots

activities or enhance local livelihoods. Moreover, the introduction of the Public-Private Partnership (PPP) model in the 2023 Tourism Policy is projected to favour non-local private investors, potentially marginalizing local communities the very communities that ecotourism seeks to empower.

Supportive findings from other sources of the above results are reflect through; Government of Meghalaya (2023), although more robust than the previous policy 2012 the new Tourism 2023 policy proposes a shift towards sustainable and inclusive tourism, but implementation is still in early stages making it unready to assess its impact and effectiveness oof its intervention. (Rishi & Khuntia, 2020; Das & Chatterjee, 2015; Nyaupane & Poudel, 2011) have similarly pointed out that government tourism departments often fail to integrate ecotourism with tribal welfare schemes, leading to poor policy coordination and low grassroots impact.

Seasonal Vulnerabilities of livelihood activities: The peak season for tourism activity in Dawki village is during the month of August, September, October, December, January, February, and March. There is high inflow of tourists during these months as the river becomes crystal clear and the tourist could enjoy boating services.

In support of the above results from the present study, similar results were also reflected in other studies see; (Roy & Roy, 2015 in Sikkim; Das, 2011 in Assam; and Stone & Rogerson, 2011 in Africa) found that that nature-based tourism face seasonal trend in tourism activities which resulted in temporary closure of tourism activities affecting local economy, livelihoods of local communities due to seasonal unemployment leading in migration of local communities for economic activities and livelihood transition during off-seasons.

8.1.3 Livelihoods Assets of the Rural Households

A majority of the respondents use ecotourism as their primary source of income, while little more than a fourth are engaged in business, labour, agriculture, and service sectors such as teachers and government as their primary sources of income. The presence of ecotourism has strongly influenced the livelihood engagements of

the respondents and the economy of the villages in the study. At the same time this is also indicates the potential of ecotourism as a means in bringing about transformative changes for the households and village economy.

The results of the study are consistent with findings from other studies across the Indian context see; (Rai, 2020 in Sikkim; Sharma & Joshi, 2021 in Uttarakhand; Baruah & Das, 2022 in Meghalaya) documented the transformation of the local economy after the onset of ecotourism which led to the constitution of tourism as their main source of income providing the rural households to engage in hospitality activities preventing local communities to migrate outside the village in search for livelihoods. On the other hand, Nandy& Hazarika (2023), stressed that the riverine ecotourism activities in Majuli, Assam has contributed to the diminishing practices in agricultural activities, 60% - 75% of the rural households are dependent on ecotourism.

A little more than half of the respondents are engaged in agriculture where only almost a third utilized for both consumption and selling. While ecotourism has been the primary source of income of the respondents in the study, at the same time it has also provided an opportunity for livelihood diversification for some of the respondents by engaging in income generation through ecotourism and practising agriculture.

Similar patterns are seen in other studies see; (Singh & Rawat, 2020; Yumnam & Singh, 2021; Joshi & Mehta, 2022; Baruah & Das, 2022) highlighted that rural households engaged in ecotourism in Uttarakhand, Manipur, Gujarat, and Meghalaya integrated ecotourism engagements alongside agricultural practices allowing them for livelihood diversification and at the same time provide income security.

Natural Capital

Drivers of Ecotourism: The forms of natural attractions present in the villages that has led to the development of ecotourism destinations are natural scenic beauty, rich biodiversity, waterfalls, rivers, pleasant weather, lush green environment, indigenous

knowledge practice have been the essence of ecotourism development in the villages. The presence of the natural attractions has paved way for members of the host communities to derive economic benefits from visiting tourists.

Supportive of the above results are evident from other studies see; (Nath and Sinha, 2020 in Meghalaya; Sharma & Bhatt, 2021, in Himachal Pradesh; Das & Dey, 2023 in Meghalaya; Kuri & Bordoloi, 2019, Kaziranga Assam) found that natural features, rich biodiversity with minimal human efforts have emerged as the core drivers of ecotourism and fostered community participation in conservation and paved way for supporting various forms of livelihood engagements.

One of the important factors that influenced ecotourism development in the villages is the age-old practice of conservation of natural resources. This practice has been an integral part among the rural community since time of the forefathers.

The results above are similar to the findings from prior studies see; (Tynsong & Tiwari, 2019 in Meghalaya; Upadhyay & Mishra, 2020 in Odisha; Chakraborty & Bhattacharya, 2021 in Sikkim) indigenous knowledge system of conservation such as the sacred groves, preservation of age-old cultural practices and rituals that have transcended from generations through community led conservation are key to the success of ecotourism.

Maintaining cleanliness of the surrounding has been part of the rural culture among the Khasis. It is seen as a collective responsibility among the community members to keep the surrounding clean. This has played a very important role as one of the pre-requisites of ecotourism. This practice has become value-added and an important component in the development and growth of ecotourism which is an inclusive responsibility of the members of the local communities.

The results presented above are supported from similar findings from the studies of; (Nongkhlaw & Tiwari, 2020; Das and Dutta, 2021; Paul and Chakraborty, 2023) asserted that cleanliness among the Khasis have been culturally embedded and seen as a collective responsibility of the community which have contributed to the foundations and an important pre-requisite of ecotourism.

Physical Capital

The rural household engagement in ecotourism have led to the establishment of various infrastructures to cater to the needs of the visiting tourists such as homestays, guest house, lodges, resorts, hotels, restaurants, food stalls, gift shops or souvenir stores, tourists parking spaces, public toilets and washroom, viewpoints.

The results above align with findings from previous studies see; (Bhalla et al., 2016; Velmurugan et al. 2025; and Acharya & Halpenny, 2013) attributed that tourism development have fostered the establishment of various amenities and infrastructures to cater to the needs of the tourists and have provided opportunities for of various income generating initiated by local cooperatives and rural households.

On the other hand, infrastructural development such as parking spaces, public toilets, entry fee, viewpoints have also served as a source of revenue for the village administration by levying some amount as service fee from the tourists and utilized for the maintenance of the ecotourism spots and welfare of the community.

The results align with findings from the previous studies see; (Pandya,2022; Bhutia, 2024; and Basnet, D., et al. 2017) infrastructural development through ecotourism growth have offered job opportunities for rural households while also allowing village committees to charge stall fees and license charge and are being utilized to upkeep public infrastructures in the tourist spot.

Social Capital

The village council being the traditional local authority at the village level has been leading the way in facilitating community efforts, fostering community participation, enhancing social cohesion among the members of the host communities in the process of ecotourism development, managing, utilising, and conservation of the natural and community's resources. The village council realised the potential of ecotourism in bringing about socio-economic benefits to the rural households and the community at large. Leading the process with the support of the members of the community, it has taken the initial steps and mobilise resources to setup

infrastructures and facilities to support ecotourism initiation and development in the villages.

These findings resonate with the previous studies see; (Langthasa and Das, 2021 in Nagaland; Bhutia, 2024 in Sikkim; and Pasanchay, 2019 in Laos) reported that the village council has played a very important role in ecotourism development by setting up tourism committees that were responsible for managing tourism activities, management of community's resources, mobilise volunteers and identifying revenue generation activities with strong community support and mediated conflicts and issues arising between tourism and community.

Social cohesion has been a core value that has been upheld and practised among the rural communities in the present study. The practice of ecotourism involved democratic principles of collective involvement of the local community members from the initial stage of ecotourism development through community-led initiatives in the process of protecting and conserving the resources of the community to ensure sustainable ecotourism practices. Interdependency in times of need have strengthen the spirit of cohesiveness among the rural households. The onset of ecotourism practices in the village has brought about benefits to the rural households and the village at large which is a result of the collective efforts of the community members. This has further enhanced the spirit of community cooperation, sense of belongingness, community participation, community involvement, sense of ownership and responsibility, hospitality, and community led initiative and conservation.

The results above resonate with the previous studies conducted by; (Bhalla et al., 2016; Bhutia, 2024 in Sikkim; and Pasanchay, 2019 in Laos) emphasized that the success in ecotourism was ingrained in the cohesive spirit present among the community member that have contributed to the development of co-ownership feeling among the community, shared responsibility, trust in leadership, and social benefits strengthened social bonds among community members.

Community Shared benefits: The case of Mawkma village is very unique among the villages in the study as the village council equally shares the economic benefits it has derived from ecotourism activities among the households in the village.

The village has played a very important role in ensuring equal opportunities for the local communities to benefit from ecotourism. The village council in a democratic spirit have decided to employ members of the local communities in rotational basis so that each and every household particularly those households under poverty have equal chance and opportunity to enjoy economic benefits from ecotourism.

These findings are consistent with Nongbri and Das (2020), documented similar participation of the community in ecotourism practices in Mawphlang, Meghalaya, where the local traditional governance fostered collective action which ensured both community benefit and environmental protection. Similarly, Nair and Sreekumar (2019) found in Kerala's Thenmala ecotourism project that the sense of community ownership active involvement of community members in planning and management of resources resulted in maintaining ecological balance while creating employment. In Nagaland, Langthasa and Das (2021) observed that democratic involvement and rotating responsibilities within the village fostered community led ecotourism practices and shared benefits.

Human Capital

Both genders are actively in labour that are directly related with ecotourism and other labours. Ecotourism related livelihood activities serve as both primary and secondary occupation for the different in the study. While some are dependent on ecotourism as primary source of income others depend on ecotourism as secondary form of occupation and are engaged in agriculture, labour, business, and service sector.

Similar trends have been documented by; (Sarma & Barman, 2021; Deka and Bhattacharjee, 2021; Thomas, 2020) ecotourism offered supplementary income to agricultural households where both genders to engaged in various forms of livelihood while gender-based employment for the female engaging in food

processing, souvenir production, and tourist services have provided economic empowerment to rural women and such economic engagements have been carried out without disruption to the local traditions.

Financial Capital

Respondents who are engaged in ecotourism related livelihood activities have started or initiated their economic activities by utilising financial support that they could save by themselves individually or by borrowing from relatives and friends.

Mishra & Sahoo (2019), found that local community members avoid formal banking due to high interest rates they prefer government grants or subsidies. Dixit & Narula (2010), found that lack of public facilities like ATMs, telecom connectivity, and health centers in rural tourism areas deters the spending capacity and duration of stay of tourists in the tourism villages affecting tourists' satisfaction.

8.1.4 Livelihood Patterns and Utilisation

Monsoon is the peak season for ecotourism activities and tourist inflow in Meghalaya, November till February the inflow of tourist is lesser as compared to the monsoons due to the very chilling and cold winter conditions in the region. The regularity of inflow of tourists throughout the year influences benefits to the local communities through ecotourism. This also indicates the stability of livelihoods and employment opportunities for the local community members who are engaged in ecotourism livelihood activities.

Similar results were found in; Thampi and Thomas (2021) who studied Thenmala Ecotourism Project in Kerala found that seasonality in tourist inflow was balanced by promoting other forms of tourism activities such as trekking in monsoons and cultural events during dry seasons. This has resulted in managing fluctuations in income for local communities. Lepcha and Rai (2020) observed in Dzongu, North Sikkim, that the seasonality of tourism during monsoons were balanced with seasonal farming and agricultural activities to ensure stability in income. In contrast, Deka and Bhattacharjee (2021) revealed that the ecotourism in Chandubi Lake Assam

have been reliant on tourism festivals which made them vulnerable during off seasons but they engaged in non-tourism activity for income generation.

The various forms of Livelihood Activities adopted by the respondents in the study are; homestay, hotels, guest house, food stalls, petty shops, grocery shops, gift shop, resort, and tourist guides, and boating activities. A very small margin of the respondents is engaged in hotels, guest house, and resorts as their Livelihood Activities.

Similar results were reflected in other studies by Tacho and Basar (2021) who noted that the locals in Ziro Valley are engaged in small scale traditional ecotourism related livelihood activities that are low cost with minimum investments. Similarly, Pandey and Bisht (2020) documented that households in Nainital undertaking ecotourism livelihoods basically used easily available resources as their seasonal engagement in tourism. They make temporary homestays from extra rooms available in their houses during tourism seasons and operate makeshift seasonal stalls. Furthermore, Jamir and Chishi (2019), revealed that ecotourism in Nagaland is active during particular festive seasons only leading to seasonal engagements in ecotourism livelihood through family business.

Own capital, family support, borrowing from others, and bank loans are the sources of funds utilized by the respondents for generation of income and engaging in ecotourism related Livelihood Activities. A very large portion of the respondents utilized their own capital for initiating income generation and only 1.1% of the respondents utilize the banking services for loans as seed capital to start their income generation, almost a fifth of the respondents utilized their family as a source of financial support, and 4.4% of the respondents borrowed from others.

The results above are consistent with studies conducted in Sikkim, Kerela and Assam. Bhutia and Rai (2020) found that rural households in Sikkim engaging in tourism initiated their ecotourism livelihood through funds available from their own savings. They avoid formal bank credit due to the long processes involved and lack of tailored tourism loan products. Krishnan and Thomas (2021) highlighted that women-led ecotourism microenterprises in Wayanad prefer personal funds, family support over

formal loan due to lack of financial literacy, fear of default, and bank interest rate. In a study on rural ecotourism in Kaziranga National Park, Saikia and Gogoi (2022) reported that only 2% of the respondents avail formal bank credit, others The majority relied on savings and short-term family loans, largely due to lack of products supporting tourism related credit support.

Only a very small portion of the respondents hire helpers to assist or help them while engaging in their ecotourism related Livelihood Activities but have indirectly created employment opportunities for others as hired helpers. At the same time, the employment opportunities have not only limited to those within the community but has also provided employment to residents of neighbouring villages and communities as well.

Similar results to the above findings are reflected in; Pasa & Shrestha (2024) showed that the practice of community-based ecotourism in Annapurna Conservation Area, Nepal has not only empowered local residents but also provided part-time or fulltime employment to others as guides, porters, and food suppliers. Field (2025), found that in Mexico – Baja California Sur, the practice of ecotourism promotes or encourages conservation at the same time it also provides inter-community employment by hiring helpers for logistical support (maintenance, food delivery, trail upkeep).Cherian &Natarajamurthy (2025), found that in Kerala, ecotourism has provided indirect employment to others through hired helpers for laundry, catering, local transport and homestays.

8.1.5 Dynamics of Ecotourism

The first factor which is very crucial in the process of ecotourism development shows that natural factors like natural scenic beauty, indigenous knowledge system, climatic conditions, rich biodiversity, clean environment are core factors that led to fame and recognition, strategic location and historical and cultural importance are the core foundation of ecotourism development.

The results are consistent with the findings from other studies; Das & Nedungadi (2025), who identified that natural capital and biodiversity have been the most frequent theme that arise in their analysis of global themes for tourism. Similarly,

Ramaano (2025), pointed that even in the context of South Africa, natural landscapes and wildlife are the core element that drives tourism entrepreneurship and that the local communities depend to generate employment. Yadav. (2025), while focusing on agri-tourism in Odisha, India found that the combination of rural landscapes, biodiversity, and farming culture have formed the foundation of sustainable tourism. Similarly, El Zein et al. (2025), shows that natural and heritage sites in Lebanon, were the principal elements that have contributed rural tourism and that tourists were more inclined to the natural environment and thus led to influencing opportunities for rural employment which fostered and encouraged preservation practices.

Support system as highlighted is one of the important components to sustain the ecotourism practices led by the community. Ecotourism development also ushers infrastructural development in the community to cater to the needs and requirements of visiting tourists and at the same time transforming the community. Thus, it can be concluded that ecotourism development is a result of a combination of the relationship and contribution of natural assets, unique and distinctive recognition of a place, community efforts, community led initiative, support systems, and infrastructural development that fosters growth and sustainability of ecotourism.

The results are consistent with results from, Cooney & Gaffrey (2015), emphasized that non-structural elements such as community values and participation are of parallel importance as infrastructural elements that would contribute to sustainable tourism practices. Additionally, it also stressed that policy and capacity building programmes are essential support system. The Plan Bleu report (2019) of the mediterranean, pointed out that non-structural approaches such as community training, social cooperation, and environmental governance are essential to rural ecotourism development. Gupta & Nair (2014), stressed on the importance of all forms of non-structural community support such as governance, awareness, and capacity building to empower community-based ecotourism. Frith et al. (2014), promotes the use of eco-sensitive infrastructure for structural development and encourage and instil community ownership to inculcate environment consciousness practices. Elmakki (2025) have shown that social cohesion and local leadership in

terms of governance, shared benefits and resource management have contributed to ecotourism success.

Proactive efforts by the village council and community members played a crucial role in promoting ecotourism and conservation. The village council undertook significant efforts to enhance infrastructure, including roads, accommodation, and tourist facilities, to cater to the growing number of visitors.

Similar results were also portrayed in studies; Dutta (2023), Sarmah & Sharma (2019) and Bhuyan & Deka (2019), found that the ingrained value of cleanliness among the community in Mawlynnong that has become part of their culture and the critical role of the initiatives of the village council, community shared responsibility, and community participation in the promotion of responsible tourism. Pandiya(2024), evaluates Mawlynnong as a model village for sustainable tourism as it enshrines in its ecotourism practices the cleanliness, waste segregation, and community ownership as a holistic approach towards community-based ecotourism practice.

8.1.6 Ecotourism and Community Development

The significant income generated from ecotourism-related activities has helped support the local economy, provides a financial base for many families. Employment opportunities have been created particularly for youths and women, reducing the need for migration in search of work. The support for local entrepreneurship has provided opportunities for villagers to start their own livelihood activities, further strengthening the community's economic base.

The equitable distribution of tourism benefits ensures that even the poorest families receive support, fostering economic inclusivity within the community. Community-led initiatives have ensured that the benefits of tourism are widely felt across the village, supporting local livelihoods and fostering economic resilience.

Community based ecotourism fosters unity and cooperation among local community as it is initiated by the community members and the community are equally responsible to contribute for the sustainability of ecotourism activities in the village.

Community members are able to engage in ecotourism related livelihood activities and practice diversification of livelihood by engaging in more than one livelihood with the opportunities provided by ecotourism. Ecotourism has the potential to generate employment opportunities for the local community in providing various forms of service to cater to the needs and requirements of the visiting tourists by directly engaging in ecotourism related livelihood.

The creation of employment opportunities through ecotourism has been a cornerstone of community development in these villages has leveraged tourism to create jobs, particularly for youths and women, thus empowering these groups and reducing the need for migration.

Ecotourism has also facilitated significant advancements in community welfare by utilizing tourism revenue to support ecotourism development, educational initiatives, and community welfare programs. This has not only improved infrastructure but also enhanced social services and support systems within the village. Reinvestment of tourism revenue into infrastructure and welfare initiatives has similarly uplifted the community, demonstrating how tourism can be harnessed for holistic development. The funds generated are used for maintaining and improving tourist facilities, supporting educational initiatives for children, and assisting poor families.

The above results of the present study align with other research studies conducted by; Kumitha et al. (2023), shows that the practice of social entrepreneurship in ecotourism among the residents have enhanced household income, reduced migration in search of job, and fostered entrepreneurship engagement among the youths, and also emphasized dominant livelihood activities engaged by women folks through ecotourism.

The results from Kumar (2023), a case study in India exhibited that the key principle for the success in the practice of community-based ecotourism is the inclusiveness of

all members of the community both direct beneficiaries and those vulnerable households who lack access to various resources to receive equitable share of the benefits from ecotourism. Inclusiveness should be a cornerstone in ecotourism governance. Talukder et al. (2024), discusses the strategies for inclusive growth through community-based ecotourism should focus as a pro-poor approach through collective ownership of ecotourism assets.

Prasad (2024), revealed that community-based ecotourism in Nepal has empowered local communities in terms of collaboration, conflict resolution, and enabled community members to cohesively contribute towards sustainability of ecotourism resources.

Kumar et al. (2023), found that ecotourism has supported the rural economy with different forms of economic benefits through livelihood opportunities, livelihood diversification, and shared benefits that has influenced reduced migration. Swain & Batabyal (2016), from their study in Tamil Nadu, showed that community-based ecotourism practices have enabled households to diversify income for economic benefits and reduced dependency on seasonal work and migration.

Rana et al. (2024), found that nature-based tourism improves quality by enhancing benefit as an alternative source of income to farmers and encouraging youth participation resulting in reduced migration. Juma & Khademi (2019), through their case study on community-based tourism in Kenya found that ecotourism activities have led to increased income among the rural households, improved living conditions, fostered female participation, and influenced infrastructural development like roads, water supply, and other visitor infrastructure benefiting both the community and the visitors.

Kumar et al. (2023), results provided a critical examination of the contribution of ecotourism towards sustainable development through reinvesting revenues generated from ecotourism activities for community welfare through education, health, and local infrastructure. The results also emphasized that neglecting macro benefits from

ecotourism would risk community dissatisfaction and erosion of tourism's long-term value.

8.1.7 Challenges in Ecotourism Development

Social Challenges: initial resistance to tourism was a significant hurdle. The community had concerns about the potential negative impacts of increased visitor numbers. Additionally, managing intoxicated visitors has posed a social challenge, affecting the village's atmosphere and the residents' comfort.

Environmental Challenges: managing plastic waste remains a persistent environmental challenge. The village's commitment to sustainability is tested by the increasing volume of waste generated by tourists.

Environmental Pressure: ecotourism to mass tourism has led to significant environmental pressures. Increased land and resource usage, coupled with inadequate environmental management and waste disposal systems, threaten the sustainability of its natural attractions. This strain on resources underscores the need for more effective environmental policies.

Infrastructure Challenges: Mobile network issues and electricity problems, especially during the rainy season, hinder the village's ability to provide consistent services to tourists. Additionally, the inaccessibility of essential infrastructure like ATMs and healthcare facilities presents significant challenges for both residents and visitors.

Lack of entrepreneurship skills: Economic development through ecotourism has been substantial, but there are gaps in entrepreneurship and hospitality skills among residents. Addressing this skills gap is crucial for enhancing the quality of services offered to tourists and for sustaining economic growth. the lack of professional training for service providers limits the potential for delivering high-quality tourist experiences. While the community manages its activities well, there is a need for more structured training programs to elevate service standards.

Similar to the themes discussed in the results above were found from studies conducted by; Mulya (2023) explored community-based ecotourism in Indonesia and found that apart from the benefits that ecotourism brings there are also certain negative impacts like alcoholism, influence of urban behaviours, and loss of traditional norms have affected the comfort of the local communities. Community norms have been adopted to reduce impact of these challenges on local communities. Ayazlar & Ayazlar (2016), found that tourist behaviour exhibited through intoxication and lack of respect have created resentment among local community showing that resident's support and mutual respect should be paralleled with regulation which would contribute towards better improvement of tourism activities on both ends.

Similar to the above results are being reflected in; Dey & Mishra (2020), highlighting plastic pollution as a key threat to natural beauty and sustainable ecotourism. Sati (2019), tourists ignored local norms and caused unsustainable plastic accumulation contributing to challenges in waste segregation and disposal. UNEP (2020), pointed that the common practice of convenience packaging and food services, is driving the use of plastics in nature-based destinations. Belsoy et al. (2012), found that the growth and increase in the number of visiting tourists has created pressure over the environment through waste accumulation, increasing in land use and encroachment, and forest degradation. This calls for the need of effective environmental policies and governance to sustain the core values of ecotourism practices.

The results are consistent with the studied conducted by Mehrabanzadeh & Zonoozi (2025), who found that entrepreneurship skills is one of the critical gaps that is evident in ecotourism practices among the rural communities. The authors stress on the importance of training, soft skills, and service quality in realizing the full potential of ecotourism for rural entrepreneurship. While local residents are actively engaged in ecotourism, they fall short in possessing skills that are rudimentary such as hospitality practices, customer service, and business development skills. It recommended that establishment of training centers for providing capacity building

programmes on financial literacy and tourism etiquette to enhance local capacity. It concluded that community-driven tourism initiatives cannot thrive without targeted human capital investments

8.1.8 Impacts of Ecotourism on Rural Households

Rural Livelihood Opportunities: The case studies have revealed that the ecotourism has played an important role in providing livelihood opportunities for the rural communities in the context of the present study. Its role in generating employment opportunities has been very crucial particularly in rural areas where the land is not arable for the practice of agriculture. The practice of ecotourism in the rural communities in the context of the present study has enabled the members of the host communities to engage in various forms of livelihood activities such as food stalls, guest house managers, boat operator, tourist guides, homestay owners. It has the potential to transform the socio-economic conditions of the rural households and the village economy.

Similar study conducted by Marak, L.R., & Ram, R. 2018 In west Garo Hills Meghalaya on ecotourism within the Nokrek Biosphere Reserve, a protected area in Meghalaya. It was found out that ecotourism has significantly contribute towards rural livelihoods through variety or difference income sources beyond agriculture especially in areas with barren land or degraded land where the Local communities engaged themselves in homestay owners, guides, food vendors. Similar study conducted by Nepal, S. K. (2002) on Sustainable tourism, protected areas, and livelihood needs of local communities in developing countries with in Annapurna Conservation Area, Nepal it was found out that ecotourism has brought employment to the local communities through engaged in guesthouse, food services and guiding apart from agriculture practices.

Contribution to Family Income: As evident from the case studies ecotourism has contributed in terms of economic improvement and supplement households' income through the engagement of other family members in ecotourism related livelihood activities creating additional sources for the family's income, easing the burden traditionally borne by a single earner. The case studies have shown that the increase

in the number of bread earner in the family has enabled individuals to increase and improve expenditures on children's education, health care, and support home improvements. These contributions that are a result of the individual's engagement in ecotourism have shown some form of resilience that is being brought about by ecotourism in the process of improving household well-being. However, the narratives in the case studies have also shown that this resilience can be affected in terms of dependency on ecotourism, seasonality, and the unpreparedness level to external shocks such as social disruptions like the pandemic.

Similar study conducted by Bhutia, T., & Zaman, A. (2019) on Community-based ecotourism and its impact on local livelihoods: A study in the Khangchendzonga Biosphere Reserve, Sikkim it was found out Ecotourism helped improve the economic well-being of households. The involvement of multiple family members (especially women and youth), ecotourism providing substantial financial benefits and diverse income-generating opportunities for local communities, leading to improved livelihoods and economic empowerment which has enhanced income stability, and proceeds were commonly used for children's education and health. Similar study conducted by Mensah, J. V. (2017) on Community-based ecotourism and livelihood enhancement in the Kakum National Park area of Ghana it was found out that through Ecotourism it has help in diversified income for family through various activities like guided tours, homestays, selling local crafts, or providing transportation. The increased household income enhanced social mobility has help the families in improving access to education and healthcare. Similar it was found out that Seasonality vulnerabilities and global crises like COVID-19 can lead to economic instability and affected on tourist flows

Shared Expenditure in the Family: Ecotourism has provided opportunities to increase the sources of income of a family providing supplementary financial benefits and supporting collective living of the family. The cases have shown that members of the family who are earning through ecotourism are able to support the main bread earner by sharing the expenses to acquire the needs of the family. This has further strengthened family cohesion and a source of support for the family at times of financial needs or distress of the family. On the other hand, the income flow

from ecotourism is highly dependent on the stability and steadiness of ecotourism activities which may have a reciprocal impact on the individuals and family's income. Hence, to sustain the shared prosperity and resilience of the family it can be reiterated that there is a need to diversify income sources.

Similar study conducted by Manyara, G., & Jones, E. (2007) on Community-based tourism enterprises development in Kenya in the study it was found out that family involved in community base tourism share a fair allocation of financial burdens and responsibility among the family member. Sharing of income help to build a stronger family relationships and creates informal support systems. Where family members pool their resources and provide mutual assistance, it strengthens bonds through shared responsibility and interdependence. Similar study conducted by Lama, P., & Job, H. (2014) on Community-based tourism and livelihood enhancement it was found out that family involved in ecotourism, has significant in collaborative financial behaviour where family members pool their income to cover shared expenses of the household. Study so found out that women earning an income through homestays can increase women's economic independence and social status, leading to greater involvement in household decisions and improved family dynamics. The study has indicated that shared household earnings can alleviate stress on sole breadwinners.

Practice of Savings: The cases presented in the present study has shown evidences that the practice of ecotourism has brought about social and economic improvements for the individuals and families. The potential of ecotourism to provide employment opportunities and increase income sources in the family has influenced individuals in the present study to practice savings for future aspirations and utilization in times of emergencies.

Similar study conducted by Nepal, S. K., & Saarinen, J. (2016) on Political ecology and tourism it was found out that households involved in ecotourism has Increased income that help them to start saving regularly in order to help them to improve homes, invest in small businesses, and prepare for unexpected circumstances. Study also shows that the COVID-19 pandemic has increased hardship as many families

run out of money or are financially depleted. Similar study conducted by Manyara, G., & Jones, E. (2007) on Community-based tourism enterprises development in Kenya shows that Community members involved in tourism has significant improved in economic activities which help in develop a stronger savings culture compared to those relying on agriculture. Increased income from ecotourism helps the families to improved their livelihoods and in purchasing more land, increased in livestock and ensuring children receive better education.

Increase in Income Level: With the onset of ecotourism in the villages in the present study, the case studies have shown that individual households have been able to engage in different forms of livelihood activities. The cases studies have shown that their engagement in livelihood activities driven by ecotourism have brought about significant influences in the economic status of the households. Their engagement has brought about increase in income levels shared through the lived experiences of the cases in the present study. Ecotourism has played a crucial role in influencing the transition and occupational shift among the individual households and improved personal income levels of the cases in the present study.

Similar study conducted by Mowforth, M., & Munt, I. (2015) on Tourism and sustainability it was found out that most of the Local residents experienced a boost in financial well-being thanks to tourism, help them to increase their earnings to grow their businesses or improve their families' lives. The study also shows that shift from traditional practices livelihood like agriculture to a service base occupation has bring a positive change in the livelihood stability and increased in financial. Similar study conducted by Kontogeorgopoulos, N. (2005) on Community-based ecotourism in Phuket and Ao Phangnga, Thailand found out that the shift from farming to tourism-related businesses like souvenir shops and lodging, help in pursuit of higher income and improved the economic well-being of residents. This shift has resulted in more diversified household assets and an overall enhancement of their living standards.

Primary Source of Income: The cases presented in the study have shown evidences that ecotourism has influenced an occupational shift among the individual cases that are being presented in the case studies. While agriculture and farming activities has been the traditional occupation and the main source of income for the majority of the rural households the onset of ecotourism has brought about shift in the primary sources of income as evident from the cases present in the study. The economic benefits derived from ecotourism as compared to their traditional economic activities has provided them regularity in income and stability in income flow has influenced occupational shifts among the rural households in the study leading to households to become dependent on the tourism sector for their livelihood.

Similar study conducted by Baral, N., & Heinen, J. T. (2007) on Decentralization and people's participation in conservation found out that agriculture has been replaced by Tourism due to its better income. Tourism has become the main source of income for many households. While this shift improved household well-being, the 2015 earthquake and later the pandemic exposed how dependent many had become on tourism alone. study also show that promoting livelihood diversification and reintegrating agriculture traditional farming by involves strategies to enhance income in rural communities through various agricultural activities. This will help to reduce vulnerability to economic, improve food security, and boost overall well-being of the community. Similar study conducted by Mbaiwa, J. E. (2004) on the socio-economic benefits and challenges of a community-based safari hunting tourism in the Okavango Delta, Botswanait was found out that ecotourism has become the primary source of income. prior pastoralists and agriculture activities where the main sources but it has shifting entirely into tourism roles. But economic shocks such as floods, market changes, or pandemics can have significant negative impacts on communities who heavily reliant on a single sector.

Improved Standard of Living: The onset of ecotourism has influenced the engagement of individuals in undertaking the different forms of livelihood which derived them better employment opportunities and enhanced improvements in the standard of living of the individuals. Positive outcomes through livelihood engagements from ecotourism become fragile due to the seasonality of tourism

activities and during times of social unrest or disruptions. This requires consistent income and year-round income and planning to maintain the living standards.

*Similar study conducted by Das, M., & Chatterjee, B. (2015) on Ecotourism found out that that ecotourism has open and employment opportunities for the community who depend on agriculture. Ecotourism has increased the income of the household that lead to financial stability where they can access better housing, education, and a higher standard of living. Similar study conducted by Spenceley, A. (2008) on responsible tourism shows that household involved in community-based ecotourism enterprises experienced positive change in the quality of life, encompassing aspects like increased wealth, better living conditions, and improved access to resources and opportunities including **home upgrades, better nutrition.***

Employment for Others: The onset of ecotourism has not only provided opportunities for livelihood engagement by individuals. Ecotourism has enabled the creation of job opportunities by the participants for other members of the community. Members who have initiated or undertaken livelihood activities may require assistants to help them in their enterprises, there are also those who wish to expand their livelihood ventures but they cannot fully engage all their activities by themselves they need others to assist them in this case the requirements from their engagement creates job opportunities for others as well.

Similar study conducted by Nyaupane, G. P., Morais, D. B., & Dowler, L. (2006) on the role of community involvement and number/type of visitors on tourism impacts shows that household engaged in ecotourism running teahouses, trekking lodges, and souvenir stalls and they need to hired local youth or women to help them especially during peak trekking seasons. The increase of tourism in the community has benefits not only the business owners but the youth and women in the community although jobs were mostly seasonal. Similar study conducted by Das, M., & Chatterjee, B. (2015) on Ecotourism found out that through ecotourism has positive impact on the community resulted in former poachers and forest dwellers they are being employed as eco-guides, cooks, and support staff in tourism operations, this create and

opportunity to the community people by providing indirect employment and promoting community integration.

Diversification of Livelihood: It is seen from the cases presented that ecotourism offers a wide range of opportunities for livelihood engagement for the participants and members of the host communities. The livelihood undertaken by the participants in the case studies varies from, shopkeeping, caretaker, guest house, boatman, tourist guide, grocery shop. As evident from the cases presented above there are individuals among those who are engaged in livelihood through ecotourism that have also alongside adopted other economic activities other than engaging in ecotourism related livelihood activities. The cases of Mr. Henry who is a tourist guide but have also opened a grocery shop and Mr. Luke who engages seasonally with farming activities during the off-season for tourism reflects their efforts to maintain income flow. While diversification of livelihood among some of the cases presented in the study contributes to improving resilience, it often requires individual labour, additional investments and low returns that may discourage individuals from seeking alternative sources of income. To supplement livelihood diversification, individuals and rural households can be supported by providing and capacitating them through institutional support for entrepreneurship training and micro-investment schemes that would integrate the utilization of primary source and identification of secondary sources of livelihood which could significantly improve their resilience.

Similar study conducted by Snyman, S. (2012) on the role of tourism employment in poverty reduction and community perceptions of conservation and tourism in southern Africa. It was found out that Livelihood diversification helps households and women reduce their reliance on tourism income, making them more resilient to these fluctuations. Study also shows that most of the family member engaging in tourism-related activities (e.g., crafts, guiding) also engage in farming. Similar study conducted by Norbu, T., & Phuntsok, T. (2021) on Ecotourism and sustainable livelihoods shows that most of the rural families they combined ecotourism with farming, livestock, animal rearing and weaving. This multi-income strategy was essential during low tourist inflow periods.

Poverty Alleviation: Several individuals reported significant improvement in their poverty status due to ecotourism. Ensuring equitable access, especially for marginalized or asset-poor individuals, is essential to scale ecotourism's poverty-reduction potential.

Similar study conducted by Nepal, S. K. (2008) on ecotourism and rural poverty alleviation: Prospects and challenges in the case of Sikkim state, India study shows that ecotourism plays an important role in significantly contributing to economic stability, poverty reduction and economic upliftment of rural communities by creating employment opportunities (e.g., homestays, guiding).

In contrast with the above studies, studies conducted by Barkin, D. (2006) on Sustainable tourism: A community-based approach study shows that with the ecotourism initiatives take place, still poverty remained rooted because income was seasonal and profits were concentrated in a few households. The poorest residents often lacked the skills, literacy, or social connections to fully participate.

Empowerment as Single Mothers: The cases presented in the study have also reflected the potential that ecotourism has brought about in the achievement of financial autonomy and transformation among the rural households. It also reflects the need to ensure accessibility to important assets and extending financial support to women that can contribute towards empowering rural women.

*Similar study conducted by Schellhorn, M. (2010) on Development for whom? Social justice and the business of ecotourism it was found out that community Ecotourism initiative has led to enhanced or improved the economic status among the women that has empowered them particularly single mothers, by helping them to run home stays, sell crafts, and participate in decision-making processes. Access to tourism has increased the income **and helps in their self-confidence and autonomy**. Similar study conducted by Zapata, M. J., Hall, C. M., Lindo, P., & Vanderschaeghe, M. (2011) on Can community-based tourism contribute to development and poverty alleviation? Lessons from Nicaragua it was found out that in the Amazon region of Peru, ecotourism training program conducted to women, including widows and*

single mothers, shows a positive outcome that has empowered them. Engagement in ecotourism help them financially independence and contribute to household income through manage small enterprises, and improve their social status.

Need for Training and entrepreneurship: There is a need for training in hospitality, customer service, and niche culinary skills to elevate service standards and maintain competitiveness. At the same time, the success and sustainability of the ventures initiated and engaged by the cases presented must be capacitated through inputs on entrepreneurship knowledge and skills.

*Similar study conducted by Regmi, M. C., & Walter, P. (2016) on Conceptualizing host learning in community-based ecotourism home stays it was found out that in rural community, although many villagers entered ecotourism with great eagerness and passion, their lack of formal training in **hospitality, customer service, and business management** has limited the quality of services offered. Without proper capacity building within local communities, there's a higher risk that tourism development will not meet the expectation or will not benefits the community. Similar study conducted by Giampiccoli, A., & Saayman, M. (2018 on Community-based tourism development model and sustainability it was found out that in Vietnam, community-based tourism development has focused skills training programs for the community in homestays and enhanced the **professionalism of services like competence and reliable help in increased tourist satisfaction**, and empowered community to manage and focus on well defined strategy more effectively.*

Non-Arable Land and the Need for Alternatives: While agriculture has been the traditional source of livelihood among the rural communities the findings from the case studies revealed that there are several villages that are facing agronomic constraints. The emergence of ecotourism has very much contributed to the village economy and has given employment and opportunities for the rural households and have to a certain extend prevented migration to other villages in search for wage labour. Policy focus should include developing tourism in similar non-arable regions while ensuring resilience to overdependence.

*Similar study conducted by Singh, S. (2012) on ecotourism and sustainable development it was found out that in Ladakh, India, where agriculture is limited due to extreme cold and barren land, ecotourism has emerged as an important source of income. The Locals resident has adapted by incorporating **homestays, guiding services, and cultural performances**. Through ecotourism has helped to retain youth in villages to support village economies and it will also reduce outmigration. Similar study conducted by Kontogeorgopoulos, N. (2005) on Community-based ecotourism in Phuket and Ao Phangnga, Thailand it was found out that in Northern Thailand, limited agricultural productivity due to land degradation and soil erosion. To sustain the economy the local community, **diversify into ecotourism** (e.g., forest treks, homestays). This transition has providing financial stability to the villager.*

Impact of the COVID-19 Pandemic and over-dependence: The pandemic has adversely affected tourism-dependent households. The sudden and unprecedented imposition of lockdown during the pandemic has deeply affected the communities, households and individuals who were directly engaged in ecotourism as a means of livelihood. The imposition of lockdown has restricted and created a halt of the inflow of tourists to ecotourism destinations who were the main source of income for the household's dependent on ecotourism. The halt in tourist inflow has contributed to no tourism activities at all in the villages in the present study. Many rural households and the have resulted in loss of income and livelihood, forced many, into temporary manual labour, depletion of savings and, a return to low-yield activities like seasonal farming revealed ecotourism's fragility. These experiences have emphasized the urgent need for income diversification and alternatives to protect vulnerable communities in future disruptions.

*Similar study conducted by Manyara, G., & Jones, E. (2021) on Ecotourism, community resilience and COVID-19 in Kenya it was found out that community ecotourism has become the primary source of income. Due to COVID-19 there is a restriction that leads to fall of tourism. Many households had to close their business and distributing its assets to claimants and women-led community tourism groups became inactive, highlighting the **need for diversified resilience strategies**. Similar*

*study conducted by Kumar, S., & Nayak, B. (2021) on COVID-19 and its impact on tourism sector in India it was found out that rural tourism entrepreneurs in Uttarakhand, India, especially those running homestays, experienced **complete loss of income**, forcing many to return to agriculture or wage labour. Due to which it has impact in the financial and led **to reduces savings** and significant food insecurity.*

Seasonal Vulnerability: Tourism in Meghalaya is driven by a number of factors such as scenic beauty, natural landscapes, waterfalls, indigenous knowledge and engineering, clean environment and, weather patterns. While tourist inflow happens through the year yet peak tourism seasons and climatic conditions attracts tourists' during a particular time of the year making income generation seasonal. Promoting off-season tourism through cultural events or nature-based activities could extend earning periods and reduce income gaps. While tourism brings opportunities for income and personal development, it also exposes individuals to seasonal instability, lack of job security, and physical strain. The lived experiences of these individuals underline the importance of supportive policies, skill development, and diversification strategies to make tourism-based livelihoods more secure and sustainable for the future.

Similar study conducted by Lama, N., & Rai, S. C. (2017) on ecotourism and sustainable livelihood it was found out that in Sikkim ecotourism activities are highly seasonal, with peak inflows in summer and autumn. Income drops significantly during off-seasons, compelling locals to rely on agriculture or temporary jobs. This instability weaker the sustainable livelihood goals of the community. Similar study conducted by Lama, Tolkach, D., & King, B. (2015) on strengthening community-based tourism in a new resource-based island nation it was found out that in Nepal, seasonal tourism has impact on the unemployment and financial stress among the community particularly in mountainous areas. Most of the locals' resident either migrate for seasonal wage labour or shift temporarily to agriculture, which is often support-based for the community.

8.2 Suggestions

The results of the present study on Ecotourism and Rural Livelihood in East Khasi Hills District Meghalaya have provided insights of the current status of ecotourism practices in the selected villages in the study. With ecotourism growth and development in Meghalaya is seen to be at an infancy stage the future prospects of ecotourism with its potential seems to be promising as one of the major contributors for the GDP of the state, rural development, socio-economic transformation and empowerment of the rural households and grass root management and utilization of resources. Yet these promising multi-level benefits can only be achieved through the support of a cross-sectoral approach that would operationalize a holistic approach towards tourism from various dimensions. Hence, the study has identified suggestive measures on themes that would be relevant for policy makers, social work intervention, promoting sustainable ecotourism, rural entrepreneurship, promoting village industries, and scope for further research that would help contribute towards sustainable ecotourism practices in Meghalaya.

8.2.1 Suggestions for Policy makers

1. Holistic Ecotourism Policy

Parallel with the growth of ecotourism the state needs a robust ecotourism policy that will provide a framework to support ecotourism in Meghalaya. The policy should integrate cross-sectoral approach and affiliations to foster sustainable ecotourism that shall focus on empowering grassroots organisations engaged in ecotourism and the conservation of the rich biodiversity that are the heart of ecotourism in the state of Meghalaya. The 2023 Meghalaya Tourism Policy is still at an early implementation stage, and past schemes (e.g. credit or infrastructure grants) have not reached interior hotspots nor have they created an impact on the local communities to enhance sustainable ecotourism. The cross-sectoral policy should align with Tourism, Rural Development, Environment, and Women & Child welfare, with clear roles for the autonomous district councils, village councils, and NGOs in their contribution towards promoting sustainable ecotourism.

2. Institutional Support: The growth of ecotourism can be sustained through the support of various institutions operating within the state. Institutional support for sustainable ecotourism includes a multi-faceted approach with key stakeholders like government agencies, local communities, and NGOs playing vital roles. These institutions are necessary to provide outlines for ecotourism practices, availing funds, ensuring ecotourism practices are environmentally conscious, contributing to benefit the society, and are economically feasible. These approaches require crucial role of the central and state government to develop policies, impose regulations and formulate strategies for promoting sustainable tourism and ecotourism. NGOs and civil societies that are engaged with the communities focusing on rural development, community empowerment, can play a pivotal role in nurturing linkages between the communities and various institutions to promote responsible ecotourism practices. Financial institutions can provide targeted funding and financial instruments to support ecotourism entrepreneurs, particularly those in remote and geographically challenging areas. Promoting ecotourism destinations and experiences through various channels, highlighting their unique natural and cultural attractions. These institutions are vital for engaging local communities, ensuring their participation, and promoting sustainable practices at the grassroots level.

3. Infrastructural Support: Infrastructural support and development are instrumental in the development of ecotourism and for sustaining ecotourism practices. Ecotourism practices in the village have been hindered and challenged due to the lack of infrastructure to support the growth of ecotourism in Meghalaya. The geographical context of ecotourism in the state of Meghalaya are located in rural villages that are far from towns and cities which created an imbalance and unequal distribution and access to basic and important infrastructures like ATMs, banks, health care, public transportation, mobile and internet connections, water supply, waste management etc. While some villages due to their location to the nearest towns are accessible to the basic infrastructures other villages are devoid of their access to such infrastructures. There is a need to support infrastructural development and ensure accessibility to both local communities and tourist visitors to cater to the

needs while engaging in ecotourism and at the same time satisfied tourism experiences.

3. Strengthening Livelihood Assets: Livelihood assets are key to the presence of ecotourism in the present study. It influences livelihood engagement of local communities and provides opportunities for livelihood diversification that could enhance social and economic outcomes among the local communities. While the natural and social capital has played a very important role in the development of ecotourism in East Khasi Hills district of Meghalaya, other livelihood assets such as physical capital, human capital and financial capital are having lesser influence on the livelihood of the local communities that could enable the local communities to gain maximum benefit if the livelihood assets are properly and effectively accessible by them. The livelihood assets can be reinforced through enhancing; physical capital with better infrastructural support that are accessible to both local communities and visiting tourists, human capital can be enriched by providing capacity building programmes that would equip the local communities with knowledge and skills that are relevant in their engagement with ecotourism for effective service delivery, and financial capital can be promoted through various forms of financial literacy programmes and bank linkage for distant and remote villages. Hence there is a need to implement effective mechanisms that could harness the potential of the livelihood assets in contributing to better livelihood outcomes for the local communities.

4. Create effective transforming structures: Ecotourism practice needs to be supported with effective processes and structures that are capable of bringing about socio-economic transformation of local communities engaged in ecotourism. These processes can be in the form of policies, programmes that are tailored to suit fit within the ecotourism practices present in the context of Meghalaya. At the same time the implementation of these processes needs structural arrangement that can operationalise the components within the processes. The processes and structures should seek to address and finetune the livelihood assets that are capable producing better livelihood outcomes of the local communities and at the same time focus on empowering community-based organisations that are spearheading community-led

ecotourism activities. It should bridge and create linkage between the local communities and various institutions through the CBOs to empower local communities gain access to resources that are key determinants in the success of ecotourism. The process and structures should also seek to support conservation strategies of the CBOs and promote more responsible and sustainable ecotourism.

5. Reducing Vulnerabilities: Seasonal vulnerabilities in ecotourism practices have emerged as one of the challenges for local communities engaged in ecotourism. The seasonality in their engagement in ecotourism has proven to be a vulnerability for the local communities affecting them in terms of employment, stability in income and affect the outcomes from livelihood engagements of the rural households particularly those households that are dependent on ecotourism for their livelihood. Organising festivals and other forms of ecotourism activities during off-seasons can reduce the vulnerability context of local communities allowing the rural households to engage in non-ecotourism livelihood activities during off-seasons thereby providing continuity in their livelihood engagement. Special emphasis should be given to encourage local communities to engage in other forms of livelihood like agriculture as a secondary livelihood options to avoid impact of seasonal tourism trend on the livelihood of the local communities.

6. Integrated Ecotourism Practice: Ecotourism practice should be encouraged to integrate cultural and indigenous components that are unique of the host communities to inculcate a more pluralistic tourism practices and foster respect to indigenous cultural heritage and practices. It also serves as a medium of cultural diffusion to visitors to learn and acknowledge the rich cultural practices of the local communities. Ecotourism should create an authentic indigenous experience to the visitors that would be more meaningful in experiencing tourism in its completeness. Integrated tourism approach would also provide diverse livelihood strategies that can be adopted by the local communities which would bring about multi-dimensional impacts of ecotourism on the local communities. This would also allow local communities preserve the rich historical and cultural heritage that they possess to sustain and transcend to the younger generations. New forms of tourism activities

such as adventure tourism, seasonal sport activities or indigenous sport activities could play a pivotal role in reducing the vulnerabilities encountered by the local communities.

8.2.2 Suggestions for Social Work Intervention

1. Macro Social Work Intervention: Social work practice at a macro level intervention can play a very important role in supporting development and success of ecotourism that would benefit the environment and local communities. Social workers through the method of community organisation can work with the local communities in identifying the potential of ecotourism in bringing about changes for the local communities and mobilise local communities to collectively participate in the planning and implementing process of ecotourism development in the community ensuring local voices are heard and valued. Social work experts can facilitate the process of participation of the local communities using Participatory Rural Appraisal (PRA) techniques to help local communities understand the dynamics and resources available within the community that are capable in bringing about transformation for the local community.

2. NGOs and civil societies: Social workers can help communities develop and manage ecotourism initiatives, address potential negative impacts, and promote sustainable practices. Social work practitioners engaged in NGOs and civil societies can facilitate the process for capacity building through organising training programmes and workshops for local communities in collaboration with other organisations or institutions to enhance knowledge and skills that are important while engaging in ecotourism.

3. Social Work Advocacy: Social work practitioners can advocate for the issues of social justice and equity, ensuring that the benefits of ecotourism are distributed fairly and that vulnerable groups are not marginalized. Social workers can educate the communities about the importance of environmental sustainability and responsible tourism practices that involves strong conservation efforts to minimize negative impacts and identifying community benefits from conservation. Social

workers can help communities develop and implement sustainable tourism strategies that protect the environment while also providing economic opportunities.

4. Empowering Grass root organisations: Social work intervention can help and train village or community-based organisations and youths engaged in ecotourism and entrepreneurship through monitoring and providing regular capacity building programmes that would enhance their effectiveness while catering to the needs of visitors and in the management for sustainable ecotourism practices.

5. Cultural Preservation: Ecotourism can be a powerful tool for promoting cultural exchange and understanding between tourists and local communities. Social workers can help ensure that tourism activities respect local cultures and traditions. They can educate tourists about the cultural norms and values of the communities they are visiting, promoting respectful and responsible interactions. Social workers can also help communities to preserve and promote their cultural heritage, ensuring ecotourism practices can contribute to awareness and education of indigenous cultures.

8.2.3 Promoting Village Industries

Rural Women Empowerment: While ecotourism has proven to be of great potential to usher socio-economic transformation of rural households and changes in the village economy. It can also be adopted as an approach to empower rural women through Self Help Groups (SHGs) by engaging rural women in identifying income generating activities that could enhance them economically. Village industries such as handicrafts, weaving and souvenir making can be encouraged to be undertaken by women folks which allow them to engage in rural employment. Steps should be taken to ensure financial support for women engaged in ecotourism activities in the form of subsidies, grants and soft loans so that women could be able to start up income generation. Grassroot institutions should encourage rural women folks to come up with innovative ideas and projects that could be provided institutional support and encourage rural women entrepreneurship. Regular training and workshop on entrepreneurship by experts for rural women should be conducted to

equip them with knowledge and skills on entrepreneurship that are best suited for rural tourism activities. Constant monitoring of SHGs that are engaged in ecotourism activities are of prime importance in providing technical assistance and support particularly for those groups that are new to get in line with the functioning of SHGs.

8.2.4 Rural Entrepreneurship

Empowering rural youth through entrepreneurship: Youth empowerment through entrepreneurship plays a significant role in promoting sustainable ecotourism. Social entrepreneurship, in particular, has the potential to create positive impacts in the sustainable tourism sector. When young people are empowered as entrepreneurs, they can initiate their own endeavours that not only generate income but also contribute to environmental preservation and community development. Eco-entrepreneurship represents a recent development that aligns entrepreneurial activities with environmental sustainability. Capacity building programmes on entrepreneurship and hospitality for the local youths can contribute to human capital in the villages that are equipped with skills and knowledge in the tourism sector which would help in improved services and reducing the skill gap that presently exist among the youths engaged through their simple business acumen affecting tourists' satisfaction.

8.2.5 Promoting Sustainable Ecotourism Practices

1. Responsible Tourism: Ecotourism has far been seen as a unilinear dimension between the host communities and the tourists. The former being solely responsible in the process of managing, conserving and catering to the needs of the visitors while the latter have been seen as the recipient of the various services without any form of responsibility. The concept of responsible tourism is inclusive of the responsibility of both the host communities and visitors in contributing towards the goal of sustainable tourism. While the host communities have much heavier responsibilities in conserving the natural and physical resources the visitors are visitors are equally responsible by respecting and acknowledging the conservation efforts of the local communities and to inculcate habits that would contribute towards conserving and

protection of the resources for sustainable growth of ecotourism by adhering to community norms, avoiding indiscriminate littering of the environment, respecting local culture, and inculcating habits of using materials that are not harmful to the environment.

2. Bridging Environment and Community benefits: Ecotourism has the potential to bring about positive impact at the household and community level. It has the capacity to generate economic benefits at the household and revenue for the community. The economic benefits that ecotourism generates encourages local communities to engage in conservation of natural resources. Ecotourism offers significant socio-economic benefits by promoting sustainable economic development at the same time encouraging conservation of natural environment. It bridges the relation between environmental conservation and poverty alleviation by generating income and empowering local communities. The opportunities that ecotourism offers for employment, job creation, preservation of natural resources and cultural heritage can contribute to alleviation. It can generate stable employment opportunities, support cultural preservation, and contribute to infrastructure development in indigenous and local communities. Additionally, ecotourism initiatives can promote community development, which is crucial for poverty alleviation efforts. Overall, tourism, including ecotourism, is considered an appropriate mechanism for poverty reduction as it contributes to economic growth and can provide social, environmental, and cultural benefits

3. Conservation of Biodiversity: The foundations of ecotourism lie heavily on the availability and presence of the rich biodiversity of a community. Biodiversity holds a high value in ecotourism practices. The economic benefits that ecotourism generates encourages local communities to engage in conservation of natural resources. It plays a very important role in raising awareness of sustainable development motivating people to conserve natural environment. The sustainability and continuity of ecotourism practices is very much dependent upon the conservation efforts that are being invested to preserve and protect the biodiversity. The practice of ecotourism and conservation practices is inevitable to each other, while the

presence of biodiversity has provided a platform for ecotourism practices, on the other hand the benefits that derive from ecotourism encourages local communities to engage in conservation of natural resources.

8.2.6 Scope for Further Research:

The scarce empirical studies on ecotourism in Meghalaya particularly from a local perspective provides the scope for further research or studies on ecotourism in Meghalaya. Further research studies would be very beneficial in contributing to the knowledge and literature of ecotourism focusing on different dimensions and adopting various forms of research approaches that would bring about pluralistic research outcomes that would contribute in understanding ecotourism practices from different perspectives. Further research on ecotourism in Meghalaya can be focused on:

- Ecotourism and social capital
- Rural women empowerment and ecotourism
- Impact of programme and policies on grass root ecotourism practices
- Indigenous knowledge systems and ecotourism
- Ecotourism and cultural diffusion
- Ecotourism from a tourist's perspective
- Gender based livelihood engagements and ecotourism
- Ecotourism and poverty alleviation, rural development
- Impact of ecotourism on non-ecotourism hotspots
- Ecotourism and innovative ecofriendly practices
- Ecotourism and rural hospitality services

8.3 Conclusion

The present study on ecotourism and rural livelihoods in the East Khasi Hills have documented a complex interplay between of social, economic, and environmental dimensions. While ecotourism practices as an industry in the context of the present study has been found to be at an infancy stage its presence and practice have a very

long history as a recreational activity for many decades even during the British period. Ecotourism in the present study has emerged as a vital source of income for the rural households engaged in ecotourism as their livelihood activity.

The present practice of ecotourism in the study was a result of the community led initiative spearheaded by the traditional village council which is the grassroot authority among the Khasis in Meghalaya. As a community-based ecotourism led initiative the practice of ecotourism can be credited and acknowledged to the tireless efforts of the village council which identified the potential benefit that ecotourism can offer to the rural households and the community at large. Started with the limited resources available with the village council, it set up facilities that could generate revenue from its services and being reinvested for upkeep and upgrading ecotourism services. Strong indigenous knowledge on conservation practice, social cohesion, and active community participation facilitated by the village council has been the backbone of ecotourism in the context of the present study.

Ecotourism has provided both male and female members of the rural households to engage in various forms of livelihood strategies such as homestays, food stall, petty shops, tourist guides, gift shop, etc which has brought about social and economic benefits to members of the rural households yet it also exposes families to seasonal shocks and infrastructural gaps. The vulnerability revealed that dependency on tourism, inadequate waste management, digital connectivity, and basic services are some other vulnerabilities encountered by the villages.

The practice of ecotourism in the study have also documented the strong presence of the village council in the management and utilization of natural, physical, and social capital to enhance better services for ecotourism activities. At the same time the village council with its discretionary powers ensured equal benefits for the rural household particularly poor households to get equal opportunities in reaping the benefits from ecotourism by creating employment opportunities and providing social support.

The strong presence of the village council ensuring the continuity and transcending the indigenous knowledge on conservation of natural resources and rich social capital among the local communities shows latent capacity for sustainable ecotourism development. However, it requires a cohesive community and state policy framework that channels tourism revenues into rural infrastructure; district-level extension and microfinance schemes to professionalize homestays and guide services; and social work interventions that foster social cohesion, land-conflict resolution, and ecological stewardship.

Social entrepreneurship and local innovative local initiatives need to be encouraged to enhance skilled human resource among the local community for better service delivery and tourist satisfaction. Entrepreneurship activities should be accompanied by regular capacity building programmes that targets ecotourism entrepreneurs to capture maximum benefits from tourism while at the same time respecting the carrying capacity of ecotourism destinations that may put pressure on the resources. Building resilience mechanisms such as off-season cultural festivals, and micro-savings products will guard against income volatility and strengthen poverty-alleviation.

While the trend of ecotourism development is still emerging across different geographical locations and regions in the state of Meghalaya the future of ecotourism looks promising only if it is guided and supported by effective governance, policies, tailored programmes, institutional support and unwavering support from local communities and visiting tourist to encourage more responsible and sustainable ecotourism. By intertwining together policy reform, infrastructural investment, livelihood diversification, entrepreneurship, macro social-work intervention, and biodiversity conservation, the present study maps a path toward an ecotourism model that enhances rural well-being, gender equity, and ecosystem health simultaneously. Continuous monitoring, community engagement, and iterative learning will be essential to ensure that the benefits of ecotourism endure for generations to come.

APPENDIX

Ecotourism and Rural Livelihood in East Khasi Hills District

(Confidential & Ph.D. Research purpose only)

Dear Respondent,

I am a Ph.D. research scholar in the Department of Social Work at Mizoram University. I am conducting a study on the topic mentioned above and kindly request you to share your honest opinions by marking the appropriate responses. Your information will remain strictly confidential and will be used solely for academic purposes. Thank you for your valuable time and cooperation.

Thank you.

(Martius Rangiasaid Rynjah)

Research Scholar,
Mr. Martius Rangiasaid Rynjah,
Research Scholar
Dept. of Social Work,
Mizoram University.

Research Supervisor,
Dr. Grace Lalhlupuii Silo,
Assistant Professor
Dept. of Social Work,
Mizoram University.

Section I

Survey Questions No. _____

- ***C&RD Block:***

- ***Name of the Village:***

- ***Mobile No of the Respondent:***

***** Please tick (✓) wherever applicable in the boxes or space provided:**

PART I: PROFILE OF THE RESPONDENTS:

- 1. Gender:**

Male		Female	

- 2. Age:** _____

- 3. Marital Status:**

Married		Widow		Un-married		Divorced	

- 4. Level of Education attained:**

No formal schooling		Till Matriculation		Post-Graduation	
Till primary		Higher Secondary		Other:	
Till Upper Primary		Graduation			

- 5. Do you Belong to the BPL category?**

Yes		No	

- 6. Are you and born and brought-up in this Village?**

Yes		No	

a. *If No*, what is the nature of your stay in this Village?

Marriage		As employee		I have a business here	

b. How many years have you been staying in this Village?

7. Nature of dwelling:

Own House		Rented House	

8. Do you have your own plot of land in this village?

Yes		No	

9. Who is the head of the household?

Father		Elder Brother		Uncle	
Mother		Sister		Aunty	

10. Number of members in your family? _____

11. How many members are there who earns for the family?

12. What is/are their occupation?

Tourism		Business		Laborer (Masonry)		Farmer (others land)
Teacher		Government		Farmer (own land)		Others (Specify)
<i>Other Occupation:</i>						

13. Type of Family:

Nuclear family		Joint Family	

14. What is your position in the Family?

Father		Uncle		Son	
Mother		Aunty		Daughter	

15. What is your main source of income or livelihood?

Tourism		Business		Laborer (Masonry)		Farmer (others land)
Teacher		Government servant		Farmer (own land)		Others (Specify)
Other Occupation:						

16. What is/are your other sources of income or livelihood?

Tourism		Government Servant		Laborer (Masonry)		Farmer (others land)
Teacher		Business		Farmer (own land)		
Others (Specify)						

17. Do you practice agriculture?

Yes		No	

18. What do you cultivate or plant?

19. What do you do with your agricultural products?

Own consumption only		For consumption and selling	
Sell only if there is surplus		For selling only	

15. Do you keep livestock?

Yes		No	

16. What are the livestock/livestocks that you keep?

Cows		Pigs		Ducks		Buffaloes		Poultry	
Others:									

17. What do you do with your livestock?

Sell		For Self	

18. Do you have fish ponds?

Yes		No	

19. How do you use the ponds?

For my own consumption		Allow fishing for commercial purpose	

PART II: TOURISM RELATED LIVELIHOOD ACTIVITY

1. Which year did tourism started in your village?

2. What is the nature of your tourism related livelihood activity?

Homestay	Petty Shops	As a Guide
Hotels	Restaurant/Food	Gift Shop
Guest House	Grocery Shops	Resort
Boating	Tent House	Trekking Guide
<i>Others:</i>		

3. Who are benefiting from your livelihood activity?

Just Tourists		Both tourists and	

4. In which year did you start this activity? _____

5. How many years have you been engaged in this tourism related activity?

Number of Years			
Less Than 1 Year		Between 9 Years – 12 Years	
Between 1 Year – 3 Years		Between 12 Years – 15	
Between 3 Years – 6 Years		More Than 15 Years	
Between 6 – 9 Years			

6. Is it an individual Enterprise or a family business?

Individually owned		Family		Partnership with	

7. Did you take loan for starting this activity?

Yes		No	

a. If Yes from where did you take the loan or financial assistance?

Bank		Private Money	

b. If No how did you manage with the financial needs for this activity?

Own		Borrowed from Family		Borrowed from

8. Is there anyone from your family who have also started tourism related livelihood activities individually?

Yes		No	

- a. If Yes, what is the nature of their enterprise?

Homestay	Petty Shops	Guide
Hotels	Restaurant	Gift Shop
Guest House	Grocery Shops	Others
Boating	Tent House	Trekking Guide

Others:

9. Do you hire helpers to help you?

Yes		No	

- a. If yes, how many helpers are you hiring at present

- b. From where do you hire your helpers?

Within the		Neighbouring Villages		Other Places	

10. What is the trend of tourist inflow to your village?

Seasonal		Throughout the	

- a. Which are the months that there is more tourist inflow to your village?

January		Marc		May		July		Septembe		November	
Februar		April		June		August		October		December	

- b. If you are engaged in your tourism related livelihood seasonally can you give the average income during such seasons.

Month	Incom	Month	Incom	Month	Income
January		May		Septembe	
Februar		June		October	
March		July		Novembe	
April		August		December	

11. What do you do during the off seasons when there is no inflow of tourist?

Nothing		Other		Migrate to other place for job	
Agriculture		Wage Labour		Making arts and Crafts	
If Other activity please specify:					

12. If you are engaged in your livelihood throughout the year, can you provide your average monthly income you earn from the tourism related livelihood activity?

Monthly Income			
Below Rs. 5000		Rs. 11000 – Rs. 14000	
Rs. 5000 – Rs. 8000		Rs. 15000 – Rs. 18000	
Rs. 8000 – Rs. 11000		Above Rs. 18000	

Section II:

Survey Questions No. __

Survey Questions for the Village Council or Groups Managing the tourist spots. Name of the village: _ C&RD Block: _____

Areas for tourist attraction in your village	Waterfalls	Scenic Beauty			
	Caves	Cleanliness			
	Rivers	Wildlife			
	Adventure tourism	Others			
How many tourist spots are there in your village					
Total Population of your village					
Total Households					
No. of households engaged in tourism related livelihood activity					
BPL families engaged in tourism related livelihood activity					
Primary occupation of the people in your village	Agriculture	Tourism - livelihood activity			
	Others				
		High	Moderate	Low	
Nature of tourist inflow to your village	Domestic				
	National				
	International				
Months of high tourist inflow to your village	January	May		September	
	February	June		October	

	March	July	November	
	April	August	December	
Tourism related Livelihood practices in your village	Homestay	Restaurant		
	Hotels	Grocery Shops		
	Guest House	Tourist Guide		
	Petty Shops	Gift Shop		
	Others			
Who has benefited the most from tourism development in your village?		High	Average	Low
	Youth			
	Women			
	Village			
	BPL Families			
Particular Group or association to manage the tourism affairs in your village	Yes			
	No			
	If Yes, are they formally registered?			
If yes, is it under the village council or is it independent of the village council	Created by the village council			
	Working along with the village council			
	Independent of the village council			
Who control the tourist areas	Government			
	Village council			
	Tourism association of the village			
	Both Government and Village council			

	Both Village council and Tourism association of the village	
	Private Ownership	
	Others	
Responsibility for the management and maintenance of the tourism spots	Village Council	
	Particular Group	
	Volunteers specifically assigned with the task	
	Community Responsibility	
	Others	
Are there ecotourism spots/areas in your village that have been discovered but not permitted for tourist visits yet	Yes	
	No	
	Not Explored	
If yes, what could be the reason for not allowing tourists to visit these places yet		
How does the village committee generate revenue from tourism	Entry fee to the village	Donations from tourists
	Entry fee to the tourism spots	Rents from shops n hotels
	Parking fee	Others
Annual income of the village generated through tourism activities		
Areas in which these revenues are being	For maintenance of tourist spots only	

invested	Hiring employers to maintain the tourist spots
	For the overall development of the village
	Welfare and charity activities in the village
	Others
How has tourism brought about overall development for the village community?	Development of roads
	Development of footpaths
	Public toilet
	Electricity
	Drinking water supply
	Setting up of Village School
Do the government officials come for visits and survey of the tourist spots	Yes
	No
If yes, which department of the government does come and visit	Tourism
	Forest
	Soil
	BDO
	Others
Government department that provided you support to develop tourism in your village.	Tourism
	Forest
	Soil
	BDO
	Others

		Finance	Materials	Training	Infra struc ture
Type of support provided.	Tourism				
	Forest				
	Soil				
	BDO				
	Others				
Any training programme conducted with government to promote tourism in your village.	Yes				
	No				
If yes, which department organised the training.					
What was the focus of the training programme?					
SHGs formed for promotion of livelihood through tourism in your village.	Yes				
	No				
If Yes, how many SHGs are formed.					
Are there any NGOs supporting the villages in the promotion for ecotourism	Yes				
	No				

Can you please provide the name of the NGOs?		
What are the government schemes adopted to promote tourism in your village		
Challenges that the village encounters to sustain tourism	Dependence on forest products	Pollution
	Lack of Support from authorities	Waste management
	Use of Non-biodegradable products	Climate Change
	Lack of Community Involvement	Training Programme
	Ineffectiveness of Tourism Policy	
	Environmental degradation	
	Others:	
Challenges that the village encounters to cater to the needs of the tourists	Hospitality	Water
	Electricity	Safety of the tourists
	Poor transportation	Internet
	ATMs	Dispensary
	Others:	

Key Informant Interview Guide:

- How has the natural resources influenced ecotourism development in the community and livelihoods activities for the rural households?
- How is ecotourism affecting the use or conservation of these natural resources?
- How has infrastructure development contributed to ecotourism development in the community?
- What are the challenges in terms of infrastructure that can be improved to foster more benefit from ecotourism?
- What is the role of local organisations and institutions in influencing ecotourism development in the community?
- How does ecotourism affect relationships and cooperation within the community?
- What knowledge or skills do community members have that support ecotourism?
- Have there any training programs or capacity-building efforts related to ecotourism in your village?
- What are the main sources of income for households in the village?
- What are the main sources of financial capital that supported members of the local communities to start ecotourism-related businesses?
- Do people have access to credit, savings groups, or banks?

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Bio- Data of the Candidate

Name: Martius Rangiasaid Rynjah
Sex: Male
Date of Birth: 16-07-1988
Educational Qualification: M.Phil. in Social work
Marital Status: Married
Contact No: 8794024356
Email ID: martiusryn@gmail.com
Permanent address: Malki, Shillong, East Khasi Hills District
Meghalaya, Pin – 793001
Current Address: Malki, Shillong, East Khasi Hills District
Meghalaya, Pin - 793001

Details of Educational Qualification

Sl. No	Class	Subject/Specialization	Board/University	Division
1.	SSLC	-	ICSE	2 nd Division
2.	HSSLC	Arts	MBOSE	2 nd Division
3.	Bachelor of Arts	Sociology	NEHU	2 nd Division
4.	Master of Social Work (MSW)	Community Development	Dibrugarh University	1 st Division
5.	M. Phil	Social Work	Mizoram University	1 st Division

Paper Presentations in Seminars/Conferences

Sl. No	Title of the paper presented	Seminar/Conference	Organizer	Date
1.	Sacred Groves in Meghalaya: Belief System and Indigenous Knowledge of Environment Preservation and Protection	International Seminar	Department of History & Ethnography, Mizoram University	5 th & 6 th March, 2019
2.	FBOs and Rural Development: Some Case Studies in Shillong Meghalaya	National Seminar	Department of Social Work, Mizoram University	22 nd & 23 rd March, 2018

Paper Publication in Journals

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1.	Ecotourism and Rural Livelihood Opportunities in East Khasi Hills District, Meghalaya	EPRA International Journal of Multidisciplinary Research (IJMR) (Volume 7, Issue no 4)	April 2021
2.	Community-Based Ecotourism and Community Development, East Khasi Hills District, Meghalaya	International Journal of Scientific Development and Research (IJS DR) (Volume 10, Issue 7)	July 2025

PARTICULARS OF THE CANDIDATE

NAME OF THE CANDIDATE : Martius Rangiasaid Rynjah
DEGREE : Ph.D
DEPARTMENT : Social Work
TITLE OF THE THESIS : Ecotourism and Rural Livelihood in
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(Prof.KANAGARAJ EASWARAN)
Head
Department of Social Work
Mizoram University
Aizawl-796004

ABSTRACT

ECOTOURISM AND RURAL LIVELIHOOD IN EAST KHASI HILLS DISTRICT, MEGHALAYA.

**AN ABSTRACT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY**

MARTIUS RANGIASAID RYNJAH

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DEPARTMENT OF SOCIAL WORK

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**ECOTOURISM AND RURAL LIVELIHOOD IN EAST KHASI HILLS
DISTRICT, MEGHALAYA.**

BY

**MARTIUS RANGIASAID RYNJAH
DEPARTMENT OF SOCIAL WORK**

SUPERVISOR

Dr. GRACE LALHLUPUII SAILO

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE DEGREE
OF DOCTOR OF PHILOSOPHY IN SOCIAL WORK MIZORAM
UNIVERSITY, AIZAWL**

INTRODUCTION

The present study on Ecotourism and Rural Livelihood in East Khasi Hills District, Meghalaya aims at examining the role of ecotourism in promotion of rural livelihood in areas of eco-tourist hotspots in selected villages in two C&RD blocks (Pynursla and Shella-Bholaganj) East Khasi Hills District, Meghalaya. The study will contribute towards understanding the nature and patterns of ecotourism practices in in Meghalaya. The study will throw light on the contributing benefits of ecotourism on various forms of economic, social, and environmental or ecological engagements at the household and community level. It would also provide knowledge on the management and utilization cycle of the resources by the local community.

The Concept of Ecotourism

Before the inception of the term ‘ecotourism,’ the most common term used was alternative-tourism. During the environment movements in 1960’s and 1970’s mass tourism There was very much a discourse in conceptualizing ecotourism, as a result other terms like sustainable tourism and nature-based tourism are being simultaneously used in place

The term ecotourism was first officially used by Ceballos-Lascurain (1987), who defined it as: ‘travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas’ (Weaver, 2001).

The historical evolution of ecotourism can be traced back to the mid twentieth century because of the growth of mass tourism and environmental concerns. Therefore, the quest to understand ecotourism must consider in understanding the relationship between tourism practices and the environment. There have been many authors and writer who have attempted to describe the history of ecotourism. Most prominent amongst them were Lindberg and McKercher (1997) and Fennel (1999) who were the pioneers in tracing the history of ecotourism in the twentieth century with their primary focus on the growth of the tourism industry and interest on the natural environment (Dowling, 2013).

According to Beaumont (1998) as found in Dowling (2013), argued that the concept and the terminology of ecotourism may have been explored recently during the mid twentieth century but the practices of ecotourism has been in existence as old as in the 18th centuries referring to the exploration of early geographers, establishment of the Yellowstone in 1872 in the United States and the Banff in Canada in 1885 as evidences of much earlier practices and interest in nature tourism.

TIES (2006) as found in Manalel and Vinodan (2011), pointed out that within the tourism industry, nature tourism is one of the fastest growing branches of the tourism industry and that its segment ecotourism has been ever increasing with 20% - 30% growth per year since 1990.

According to the TIES (2006), ecotourism is another segment of the tourism industry that focuses on exploring the untouched and remains of natural areas (I Nee & I Beckmann, 2011). The concept of ecotourism is easily confused with other concepts containing some similar attributes like ecotourism (O'Neil,2002). Pleumarom in O'Neil (2002) have also suggested that ecotourism can be understood as a concept not as a model.

After the onset of the industrial revolution that ushered in the development of the means of transport and roadways that tourism activities also took place. The colonial period has also brought about awareness of other people's countries and cultures through increased mobility with the development of automobile and airplane and when soldiers returned home from colonized places like India, Africa and Australia. The invention and development in the use of photography produced visual evidence and developed curiosity to travellers who wished to visit those exotic places O'Neil (2002).

Ceballos-Lascurain (1996) mentioned that in 1988, it is estimated that there were between 157 and 236 million international ecotourists worldwide. Honey in O'Neil (2002), pointed out that in 1995 the global spending in travelling alone amounted to \$3.4 trillion which is expected to grow to \$4.2 trillion in 2000.

Evolution of Ecotourism

The problem with mass tourism is another phenomenon that led to the development and practice of ecotourism. Mass tourism was the common form of tourism that was practiced in the initial development stage of tourism. It was also expected that mass

tourism would also bring about growth in the economy in forms of foreign exchange and GNP growth, tax revenue and employment but this was not the case (Lascrain, 1996). It had led to various problems and effects like environmental, economic, and socio-cultural impact. Also due to the development of mass tourism, much of the funds and subsidies are being allocated to tourism industry that favours tourist and leaving the other programs and industries that are benefitting the locals. During the late 1960s when they started to introduce the fencing or the park system in the nature-based tourist spots, the international conservation and scientific organization observed two phenomena on different continents. In Africa the local were removed and relocated from the protected areas to areas around the park started to resent against the park system and visitors since they receive no benefit from the relocation. They started poaching and disturbing the natural environment and its resources. The conflict between man and the protected areas has brought attention to the scientist, conservationist, park officials and environmental organisations that if the protected areas were to co exists with the local people; the locals need to benefit from the protected areas and tourism. As a result Kenya was the first African country to engage and involved the local and indigenous community's council to control both environmental protection and economic development in the protected areas (Honey, 1995).

The history and development of ecotourism can also be found in the role of international aiding agencies during the late 1970s. The World Bank and U.S Agency for International Development have played an important role in the development of ecotourism. During the late 1970s the less developed countries were at a financial and economic crisis and are having mounted debt, and the environmental movement incited international aiding agencies such as the World Bank and U.S Agency for International Development to consider tourism as a tool or strategy for development and conservation. During the 1980s the developing countries also had a role to play in the development of ecotourism. These countries realized that ecotourism had a great potential in foreign exchange and minimizing environment destruction other destructive development activities and yield more economic benefits. The travel and tourist industry have also contributed to the growth and development of ecotourism. These industries saw the opportunity with the development and evolving trends that ecotourism provided and with the dissatisfaction towards mass tourism they seize the

opportunity to exploit the benefits from the travelling public who are environment conscious and who are willing to invest in those travelling agencies that have environmental concerns (Honey, 1995).

According to Brown in O'Neil (2002), during the 1980's many argued that there is a need for another alternative to tourism as it has negative impact on the environmental, economic and socio-cultural aspects of the host communities. A call for 'alternative tourism' was highly demanded on the basis that its policies should not only consider economic growth but also environmental quality and welfare of the local people.

According to Ceballos-Lascurain in O'Neil (2002), during the 1960s when mass tourism was blooming in the tourism industry it also gave rise to socially concerned citizens and tourists who are concerned not only to impacts on health created by mass tourism but are also concerned for the welfare of animals and ecosystem. This gave rise to the environmental movement which demanded from the government to specially allocate separate land for animals and the ecosystem and as an opportunity for people to visit and admire the wildlife in its natural beauty and hence help in protecting more areas and species. With this it led to the establishment and linkage between tourism, environment exploration and protection and paved way for the development of ecotourism.

According to Diamantis (2010), there are a variety of ecotourism definitions all reflecting a range of paradigms and perspectives. A variety of terms have been introduced to describe the same phenomenon which may be referred to as nature travel, nature-orientated tourism, nature tourism, nature-based tourism, sustainable tourism, alternative tourism and special interest tourism (Laarman & Durst, 1987; Durst & Ingram, 1988; Wilson & Laarman, 1988; Valentine, 1992; Hall & Weiler, 1992; Diamantis, 1998a).

Ceballos-Lascurain (1996) in O'Neil (2002) defined the term tourist in his writing about the evolution of tourism as "an individual who travels for the pleasure of traveling, out of curiosity," and "tourism," describing travel as a leisure activity, first appeared in the early 1800s.

Ceballos and Lascurain (1987) were amongst the first who attempted to define ecotourism as "travelling to relatively undisturbed or uncontaminated natural areas with the specific objectives of studying, admiring and enjoying the scenery and its wild

plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas”.

There have also been others who attempted to define ecotourism see; (Ziffer, 1989: 6), (Boo, 1991b: 4), (Forestry Tasmania, 1994: ii), (Richardson, 1993: 8), (Australia Department of Tourism, 1994: 17), (Tickell, 1994: ix), (Boyd & Butler, 1993: 13, 1996a: 386), (Boyd & Butler, 1996b: 558), (Goodwin, 1996: 288), (Lindberg & McKercher, 1997: 67), (Ecotourism Society in Orams, 1995a: 5).

All definitions of ecotourism have stated with experienced and observed by scholar or visitor. It shows that the concept and definition of ecotourism derived from seven components; contributes to conservation of biodiversity, sustains the well-being of local people, includes an interpretation/learning experience, involves responsible action on the part of tourists and the tourism industry, is delivered primarily to small groups by small-scale businesses, requires lowest possible consumption of non-renewable resources, stresses local participation, ownership and business opportunities, particularly for rural people (I Nee & I Beckmann, 2011).

Overview of Literature

The body of literature on ecotourism and rural livelihoods reflects a multidimensional exploration of how tourism interacts with environment, economy, and culture. Scholars have examined ecotourism not just as a niche form of travel, but as a tool for sustainable development, cultural preservation, and income generation—particularly in rural and ecologically sensitive regions. However, several knowledge gaps remain, including insufficient attention to long-term sustainability, uneven economic benefits, and underrepresentation of local perspectives in northeastern India and Meghalaya.

Evolution of Ecotourism: Ecotourism evolved in response to the adverse impacts of mass tourism and growing environmental consciousness. Early foundational works by Lindberg and McKercher (1997), and Fennell (1999), highlighted the interplay between tourism and ecological conservation. Ceballos-Lascurain's (1987) widely cited definition positioned ecotourism as travel to undisturbed natural spaces with an emphasis on appreciation and education. This conceptual grounding has since expanded to incorporate themes like biodiversity, community participation, and sustainable resource use.

Conceptual Frameworks and Practices: Recent literature has identified recurring features of ecotourism: nature-based activities, conservation ethics, cultural sensitivity, and local empowerment. For instance, Chandel and Mishra (2016) emphasized themes such as ecological minimalism, environmental education, and host community engagement. Meanwhile, researchers like Samal and Dash (2023) observed growing academic interest in ecotourism, especially around natural resource governance and livelihoods. Nonetheless, certain dimensions—such as climate impact, psychological well-being of communities, and governance—remain underexplored.

Ecotourism and Livelihood Enhancement: Scholars are increasingly interested in how ecotourism can foster income generation and rural development. Studies by Singh (2021) and Tiwari et al. (2021) affirm that ecotourism can support household incomes, skill development, and conservation awareness. Conversely, Pujar and Mishra (2020) found limited livelihood impact among indigenous communities due to poor ecotourism literacy. Several African studies echo this pattern—while communities enjoy benefits like artisan sales and seasonal jobs (Susan, 2011; Nsukwini & Bob, 2016), the deeper issue lies in limited long-term planning and stakeholder inclusion.

Focus on Northeast India and Meghalaya: The northeastern region of India is rich in natural and cultural assets, offering fertile ground for ecotourism. Verma (2024) and Kalyan et al. (2023) illustrated both the opportunities and the constraints—ranging from picturesque landscapes and unique tribal festivals to issues like poor infrastructure, lack of awareness, and inadequate community involvement. In Meghalaya, specific sites like Mawlynnong have emerged as successful case studies for eco-conscious tourism (Lyngdoh, 2022), while broader challenges like environmental stress, policy restrictions, and market limitations persist.

Ecotourism and Sustainability: Ecotourism's alignment with sustainable development goals is widely acknowledged. Researchers like Kumar et al. (2023) and Seervi (2023) highlighted its role in promoting economic self-reliance, conserving biodiversity, and fostering eco-friendly behaviour among tourists and hosts. However, studies caution against over-commercialization, cultural commodification, and environmental overuse. In regions like Sikkim and Tamil Nadu, best practices involve policy reforms, environmental guidelines, and inclusive governance (Karmakar, 2022; Varghese, 2024).

Community Participation and Entrepreneurship: Community engagement is central to successful ecotourism models. Numerous studies describe how local ownership, participation in planning, and entrepreneurial ventures like homestays and craft sales have contributed to community welfare (Chandra & Arora, 2019; Vinodan & Manalel, 2011). Yet, not all models are equitable. For instance, in China's Wolong Reserve, benefits often went to outsiders or government actors, marginalizing the very communities meant to benefit (Chen et al., 2008). Social enterprises (e.g., Kummitha et al., 2021) offer alternative frameworks that combine conservation with local development.

Gaps in Current Research

Despite this rich body of work, several gaps are evident:

- There is lack of empirical work on how ecotourism impacts traditional livelihoods or displaces them. Most studies in northeast India are externally framed, often ignoring indigenous voices and internal perspectives. There is limited longitudinal research exploring ecotourism's enduring effects on economic resilience and community cohesion. Studies on Meghalaya and surrounding regions often stop at mapping potential rather than evaluating tangible impact.

Theoretical Perspectives

The study uses the Sustainable Livelihoods Framework in order to understand how eco-tourism affects rural livelihood in Meghalaya.

Sustainable Livelihoods Framework (SLF)

Natarajan. et al., (2022), the sustainable livelihoods approach is a unique tool that approves a multidimensional outlook towards understanding poverty and the various factors that are contributing towards poverty and other such factors that are capable of improving the conditions of poverty. It primarily focuses on assessing and understanding the strengths and capabilities of the people living under poverty and the coping strategies adopted by the people in relation to the various assets accessible or exposed to the individuals, groups, and families. The SLF set forth in its action as an approach not as a method and as a frame work not as a theory. Its core values are upheld on a strong philosophical foundation that appraises local knowledge and

engaging with local people. It privileges the incorporation of other participatory methods to gather knowledge in its operation. Since its inception and extensive usage, the SLF is centered around the individual as a parameter for development activities. Scoones (2015), the prime objective of the approach that focused on village life and individual's capabilities captivated the changes that manifested in rural livelihoods over the years. With the impact and influence of globalization across the globe, many countries started to drift towards industrialization and villages across the globe have also seen gradual changes in the elements that composes rural life leading to the growth of labour migration, remittances and small-scale commercial agriculture (Borras, 2009). The increasing climatic, environmental changes, and exploitation of natural resources that has taken place over the years have been influencing impacts on rural livelihoods increasing vulnerability exposure for farmers and decreased state support (Taylor, 2015).

Natarajan. et al., (2022), in their paper seeks to re-assess and review the SLF and its application in the 21st century. They propose to redevelop the livelihood approach focusing to appraise its strengths, accept its weakness, and furnish the approach to be able to fit in the context of the 21st century. To fine-tune the approach that was developed to identify those needs that were relevant in the 1990s and bring about structural changes in the approach that can apply to both rural and urban and across different context of the globe.

Chambers and Conway (1991) defined livelihood as *"A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base."*

This definition further expanded the comprehension towards the conventional concept of poverty that was particularly specific to the economic measures. Since then, other factors such as resources, social, institutional, environmental, vulnerability and shocks as parameters have been incorporated in understanding the concept of poverty.

Scoones (1998), as found in Natarajan et al., (2022) quoted a definition of livelihood given by Chambers and Conway in their working paper (1992: 5, and see Chambers, 1995), *"A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a living is sustainable which can*

cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.”

Historical evolution of the SLF

Natarajan. et al., (2022), the Sustainable Livelihoods Framework (SLF) since its inception by the Department for International Development (DFID) in the 1999's as a tool for understanding the dynamics associated with community livelihoods and poverty have been a prominent supporter for academicians and community workers to understand livelihoods in the context of a rural community. The DFID used the SLF to come up with strategies and interventions as part of its poverty reduction program. Over time, other organizations, including the United Nations Development Programme UNDP (2000), CARE (2002), and Oxfam (2005), adapted and modified the framework to fit different contexts to design policies and programs aimed at improving people's well-being.

Natarajan. et al., (2022), the concept of Sustainable Livelihoods (SL) is owed to the work of Chambers and Conway in 1992 on their publication of a working paper “Sustainable Rural Livelihoods: Practical Concepts for the 21st Century”, published by the Institute of Development Studies. The paper brought forward and depicted the earlier work World Commission on Environment and Development (WCED), and the outcome of the Brundtland report ‘Our common future’ (WCED, 1987). The Brundtland report lacked in clarifying and defining the concept and the perspective of livelihood and sustainable livelihood regardless that the terms were used in the report. UNDP Human Development Report (1990), was subservient in the foundation of the concept of sustainable livelihoods. However, both the reports did not provide clear definition of the concept of livelihood and sustainable livelihoods but they did incorporate two important elements i.e. a concern for sustainability and the notion of capabilities. From the late 1980s many concepts and elements that are core to development practices were contemplated in the SLA through organizations that are engaged in the field of development like the UNDP and commissions such as the WCED. Upon its linkage with the Brundtland report Chambers and Conway focused only on the social aspect of sustainable livelihood neglecting the environmental dimension. It was during the era of the 1990s that the Sustainable Livelihood Approach (SLA) transformed into Sustainable Livelihood Framework (SLF) when various

development organizations both governmental and NGOs used the approach to develop strategies for their intervention.

Fig.1.Sustainable rural livelihoods: a framework for analysis (Scoones 1998) (Source: redrawn from Scoones 1998: 4).

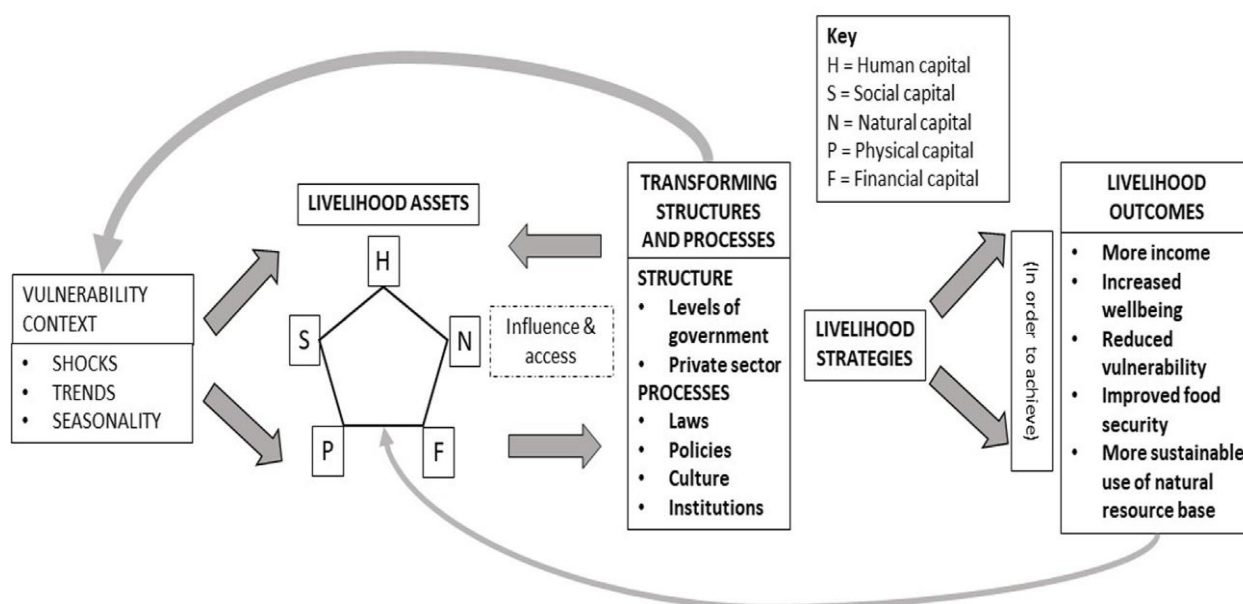
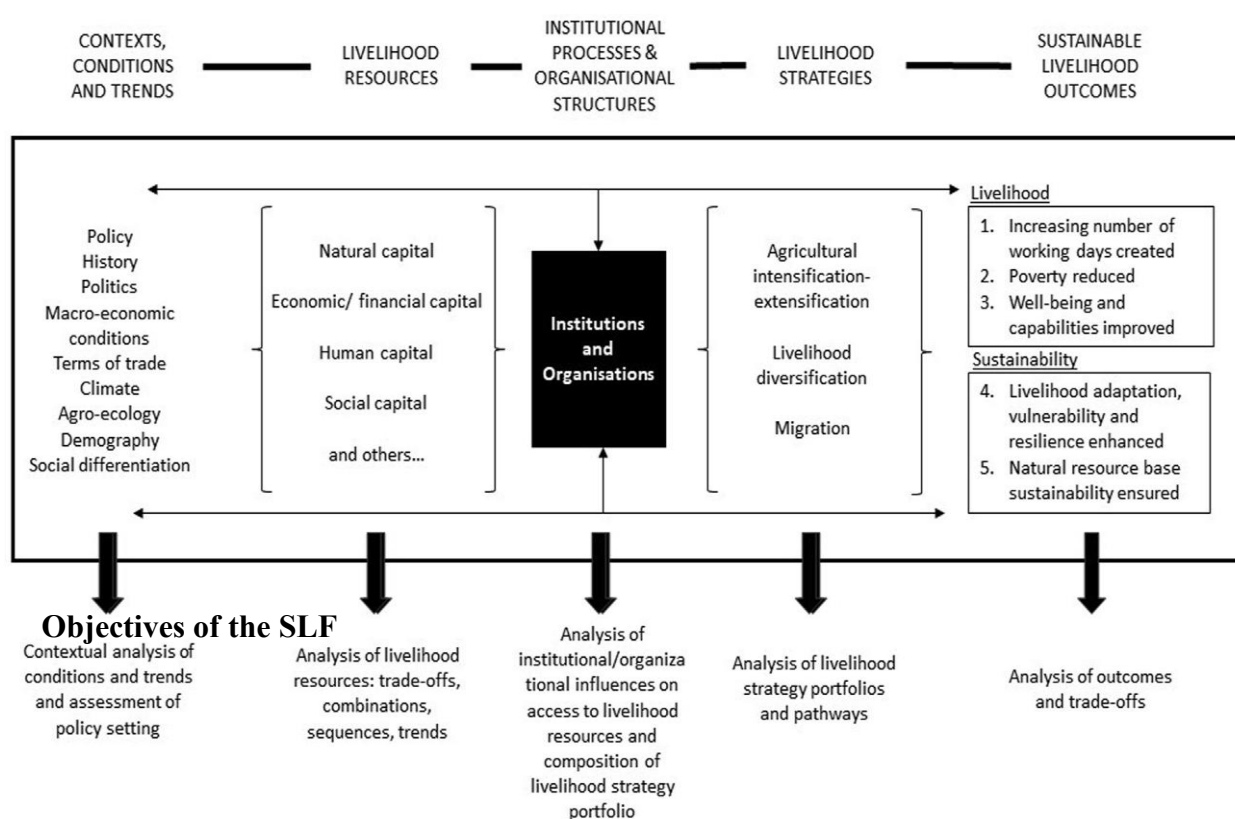


Fig. 1. The DFID Sustainable Livelihoods Framework (SLF) (Source: redrawn from DFID, 1999).



The overall goal of the SLF is to enhance sustainable livelihood practices of the people by understanding and examining the various internal and external factors that are positively and negatively influencing livelihoods practices of the people through promoting:

- a) improved access to high-quality education, information, technologies and training and better nutrition and health;
- b) a more supportive and cohesive social environment;
- c) more secure access to, and better management of, natural resources;
- d) better access to basic and facilitating infrastructure;
- e) more secure access to financial resources; and
- f) a policy and institutional environment that supports multiple livelihood strategies and promotes equitable access to competitive markets for all.

Core Elements of the Sustainable Livelihoods Framework (SLF)

The SLF helps in understanding community dynamics in the context of livelihood and factors influencing livelihoods and poverty. It facilitates to identify needs and priorities that are required for intervention and taking into account the interest of the stakeholders. The SLF is just a tool that helps in facilitating the ground work and gathering local knowledge that will be resourceful in the planning and formulation of development activities and not a remedy for the problems or issues. Its flexibility in nature allows the incorporation and integration of various tools and techniques that are instrumental in gathering knowledge in understanding the different dimensions or elements of the framework. The SLF creates a link of the different aspects of the ecology that are capable of generating influence on the outcome of the livelihood strategies. It seeks to understand people's access to various assets in relation to the adoption of the different forms of livelihood strategies and its influence on their livelihood outcomes and other institutions.

The livelihood framework identifies five core asset, categories or types of capital upon which livelihoods are built. Increasing access –which can take the form of ownership or the right to use –to these assets is a primary concern for DFID in its support of livelihoods and poverty elimination.

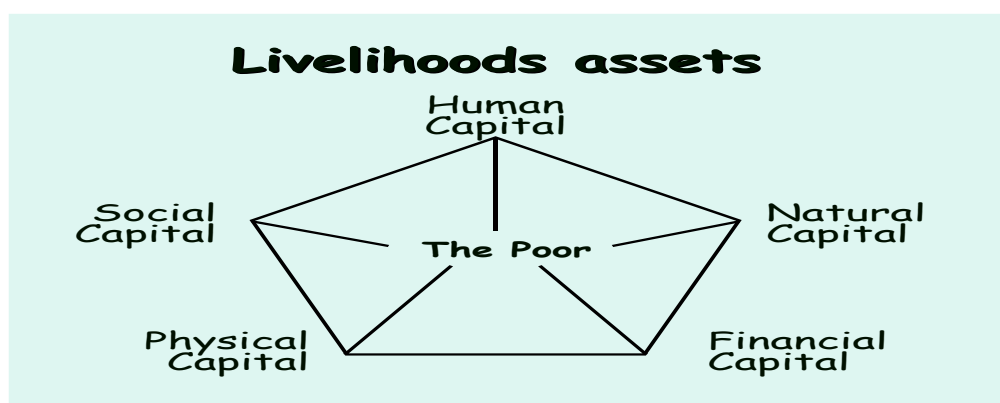
The SLF primarily focuses on people and people is the centre at which the framework revolves in understanding livelihood strategies and livelihood outcomes with reference to the influences of the various elements incorporated within the framework. The framework believes that the livelihood outcomes of the people are being influenced by

their accessibility to various assets. Every asset has its own importance and capacity to influence over the people's livelihood outcomes.

a) Capital Assets:

The sustainable livelihoods framework helps to organize the factors that constrain or enhance livelihood opportunities and shows how they relate to one another. A central notion is that different households have different access livelihood assets, which the sustainable livelihood approach aims to expand. The livelihood assets, which the poor must often make trade-offs and choices about, comprise:

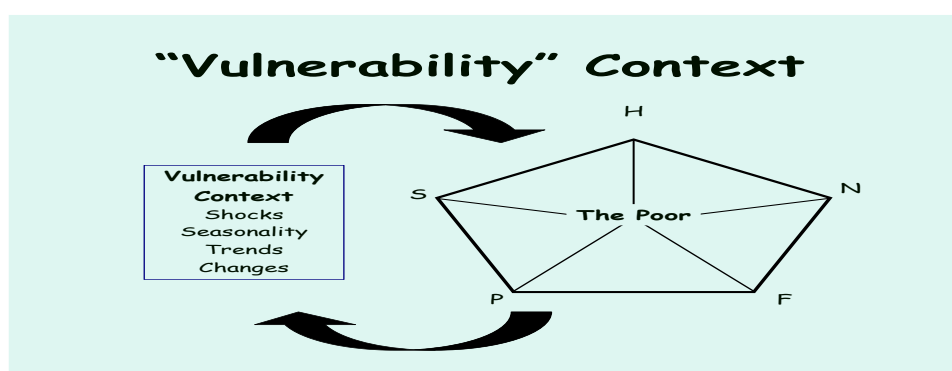
- i. **Human capital**, e.g., health, nutrition, education, knowledge and skills, capacity to work, capacity to adapt
- ii. **Social capital**, e.g., networks and connections (patronage, neighborhoods, kinship), relations of trust and mutual understanding and support, formal and informal groups, shared values and behaviors, common rules and sanctions, collective representation, mechanisms for participation in decision-making, leadership
- iii. **Natural capital**, e.g., land and produce, water and aquatic resources, trees and forest products, wildlife, wild foods and fibers, biodiversity, environmental services
- iv. **Physical capital**, e.g., infrastructure (transport, roads, vehicles, secure shelter and buildings, water supply and sanitation, energy, communications), tools and technology (tools and equipment for production, seed, fertilizer, pesticides, traditional technology)
- v. **Financial capital**,¹ e.g., savings, credit and debt (formal, informal), remittances, pensions, wages.



b) Vulnerability Context:

Vulnerability context characterizes the exposure of the people to various forms of natural, social, economic, and political phenomenon that negatively affects the livelihood strategies and livelihood outcome of the people. These vulnerabilities can be of various nature and tempo that can have a short- or long-lasting impact on the

people and individual and as a result it affects the overall well-being of the individual and the family. Vulnerability context helps us understand the dynamics of poverty experienced by the people. It is their ability to adapt and adjust or overcome vulnerability or adopt coping mechanisms that will determine the impact of vulnerability on the livelihood strategies and livelihood outcomes of the people. In the SLF, there are two dimensions in the vulnerability context of the people that are external factors; shocks, seasonality and critical trends, and the internal factor is the lack of coping mechanisms of the people to face the external shocks.

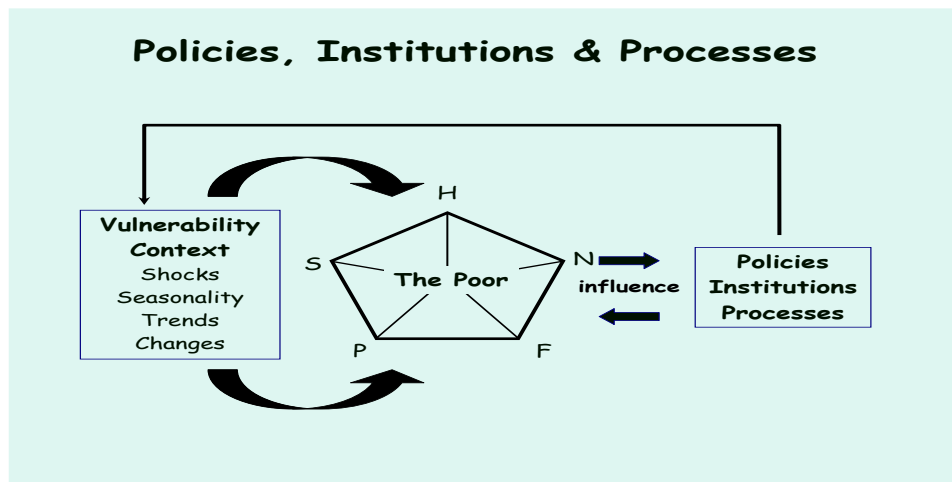


c) **Policies and Institutions:**

Apart from the livelihood assets and vulnerability context policies and institutions are also important elements capable of influencing the livelihood outcomes of the people. These are policies and institutions the processes of which can transform the vulnerability context of the people. The policies and institutions are implemented by structures and processes these comprises of public and private sector organizations that set and implement policy and legislation; deliver services; and purchase, trade, and perform all manner of other functions that affect livelihoods.

The Processes and structures are interrelated with each other, the processes such as laws, regulations, policies, operational arrangements, agreements, societal norms, and practices regulate the manner in which the structures such as government or non-government organizations and institutions will function. We can say that the processes cannot run or perform without a structure. The presence of the processes and structures can transform the life of the people and reduce vulnerability, the outcome of which can influence better life for the people.

Policies, Institutions and Processes



d) Livelihood Strategies and Outcomes:

Livelihood strategies and livelihood outcome are very much integral in the application of SLF. The former can be considered as a means and the latter as an income. Both are very much central and instrumental to the vision of the SLF facilitating the process to reduce poverty and usher sustainable livelihood practices that will result in; more income, increased well-being, reduced vulnerability, improved food security, more sustainable use of the natural resource base, and recovered human dignity.

Inherent Principles of the SLF

1. People Centered

It starts with an analysis of people's livelihoods and how these have been changing over time, fully involves people and respects their views, focuses on the impact of different policy and institutional arrangements upon people/households and upon the dimensions of poverty they define (rather than on resources or overall output per se). It stresses the importance of influencing these policies and institutional arrangements so they promote the agenda of the poor (a key step is political participation by poor people themselves), it works to support people to achieve their own livelihood goals.

2. Holistic

It is non-sectoral and applicable across geographical areas and social groups. It recognizes multiple influences on people, and seeks to understand the relationships between these influences and their joint impact upon livelihoods. It recognizes multiple actors (from the private sector to national level ministries, from community-based organizations to newly emerging decentralized government bodies). It acknowledges the multiple livelihood strategies that people adopt to secure their

livelihoods. It seeks to achieve multiple livelihood outcomes, to be determined and negotiated by people themselves.

3. Dynamic

The approach seeks to fit according to the nature of people's activity which is also changing over time. It tries to understand the changes that affects and influences changes in people's livelihood and proposes supportive intervention and in order to balance between the changing patterns of livelihoods. It examines and assesses the impact of both internal and external factors contributing to the livelihood vulnerability of the people. It stresses on analyzing the cause-and-effect relationship and series of critical events to understand the dynamics of livelihoods.

Building on strengths

The SLF in its nature of operation gives core importance to the strength rather than needs of the community. It stresses upon the capabilities of everyone how they make accessible of the various assets and adopt coping mechanisms to reduce poverty and vulnerability. By focusing on the potential of the people or the individual it supports to remove obstacles that are hindering the people to achieve their potential. Thus, making people more resilient to the different form of vulnerabilities.

Macro-micro links

The SLF creates a linkage between macro-micro processes influencing the dynamics of livelihoods of the people. It proposes and supports the 'Bottoms-up Approach' in the process of policy formulation, development and planning by appraising local knowledge so that the process fit in the micro context. This will ensure the essence of development as the key stakeholders are part of the development process rather than mere receivers.

Sustainability

The notion of 'Sustainability' is central to the operation of the SLF. The framework advocates for the different dimensions of sustainability.

Implications of the SLF

The SLF is a flexible approach and tool that is very effective in the process of its application in development studies and in understanding the livelihood dynamics of the community in development practice. Its inclusive nature helps the development practitioners to have a multi-dimensional outlook towards livelihood issues and incorporate various other elements of different schemes and nature that could contribute to livelihood sustainability. It cuts across different sectors in the process of

discovery of new methods and strategies in the process of attaining its goal. It examines the various elements of the ecology and the environment in the process to derive a context specific approach to appraise local perspective for its reflection on the framework.

Statement of the Problem

The study aims at examining the role of ecotourism in promotion of rural livelihood in areas of eco-tourist hotspots in selected villages in two blocks (Pynursla and Shella Bholaganj) East Khasi Hills District, Meghalaya. The rich cultural heritage, natural beauty and biodiversity of the Meghalaya are worth conducting a study. There are numerous natural beauties of Meghalaya known worldwide and there are studies conducted in identifying the potentials of ecotourism for improving rural livelihood in Meghalaya (Tarafder, 2017; Bera, 2015; Samantsinghar, 2012; Laloo et al., 2007). Prior to the inception of the tourism industry of tourism activities in the state of Meghalaya the concept of tourism was best understood in terms of recreational activities and visit to places that are of scenic beauty which are now ecotourism hotspots. In those days people did not realise the potential and benefit of the tourism and its impact on the local economy people by nature were very hospitable and are welcoming for both domestic and outside visitors. It could be said that Meghalaya was first known to the rest of the country for being the wettest place on earth and has its name on the Book of Guinness of World Record receiving an average rainfall of 11,871 mm (467.4 inches) annually.

The onset and development of ecotourism in Meghalaya is at its infancy stage, it was very recent that the concept of ecotourism has paved way in the context of tourism practices in Meghalaya. The impact and economic opportunities of ecotourism in other areas has led to exploration of the unexplored ecotourism potentials in rural Meghalaya. Even with the growth of ecotourism, agriculture is still the dominant livelihood practice and income generation among the locals in rural Meghalaya. In spite of the copious literature on ecotourism in India, there are very scarce studies that have been conducted in the context of Meghalaya. Most of the studies conducted in the northeast region were from an etic perspective, there is a scope for study from an emic perspective. There are very few or no studies from macro social work perspective in the area of ecotourism emphasizing on livelihood and community development. There are very few studies conducted on Impact of Ecotourism on traditional

livelihood at the international and national level and very scarce in the context of Meghalaya. There are limited studies on ecotourism as a strategy for poverty alleviation and community development programme even with the potentials of ecotourism to generate income and supporting national and state policies. Ecotourism also has the potential to not only generate income but also to conserve traditional cultural heritage and practices. With women folks also constituting a large proportion of the workforce in the state in both urban and rural settings it would be useful to examine the role of ecotourism in the process of social and economic empowerment of rural women. Very rare studies conducted on ecotourism and rural livelihood in NE India and Meghalaya, ecotourism studies conducted in NE India were mostly focused on environment and biodiversity. The present study will be the first of its kind that focused on ecotourism and its influence on rural livelihood from a macro social work perspective in Meghalaya.

Objectives of the Study

- i. To understand the socio-economic and structural basis of rural households engaging in ecotourism.
- ii. To examine the vulnerability context of the villages where ecotourism activities are undertaken.
- iii. To assess the influence of the ecotourism on the livelihood assets of the households.
- iv. To identify the pattern of utilization of ecotourism by the households.
- v. To probe into the livelihood outcomes of rural households from ecotourism activities.
- vi. To understand the social dynamics of ecotourism on rural livelihood from the peoples lived experiences.

METHODOLOGY

In the previous Chapter, previous research studies have been reviewed and research gaps have been identified. In this Chapter, the research methodology employed for the study is described in detail. A sound methodology is set of underlined procedures and approaches that guides the study. It is the process that bridges the problem being studied and the new discoveries that would share light on the existing problem. The

methodology helps in understanding and examining the scope for rural livelihood in the context of ecotourism development and the nature of livelihood activities that the respondents are engaged through the onset of ecotourism.

3.2 Research Design

The present study adopts a descriptive research design in its attempt to study to examine ecotourism development and the scope and potential for Rural Livelihood engagements in areas of eco-tourist hotspots located at the selected villages in two C & RD Blocks (Pynursla and Shella Bholaganj) East Khasi Hills District, Meghalaya. The study employs mixed method research strategy by utilizing both quantitative and qualitative approaches in pursuance of the objectives of the study. The data in the study were collected from both primary and secondary sources; the primary data was collected from respondents identified in the study who are directly engaged in ecotourism related livelihood activities in the ecotourism destinations chosen for the study, and the secondary source of data was collected from previous research studies, articles, newspaper publications, and official government reports.

Sampling: The present study adopts two types of sampling techniques for identifying the geographical context and primary respondents in the study. Multi stage sampling was adopted to identify and narrow down the geographical area and the study setting. Purposive sampling was adopted to identify households engaging in ecotourism that are the unit of the study.

In the first stage, East Khasi Hills District as the larger geographical area was identified as the study area.

In the second stage, 3 Community & Rural Development (C & RD) Blocks were identified in the selected district (East Khasi Hills) where the maximum eco-tourism activities are undertaken in the state

In the third stage, the study identified 10 villages from the selected from the C & RD blocks that are host communities and ecotourism destinations. Among these, three (3) villages were selected from Pynursla C& RD Block, six (6) villages from Shella-Bholaganj C& RD Block, and one (1) village from Khatarshnong-Laitkroh C& RD Block.

In the last stage, using purposive sampling, households from the ten villages were identified based on their direct engagement in ecotourism related livelihood activities, as well as on their consent and willingness to participate in the study.

Tools of Data Collection: Data was collected from both primary and secondary sources. Primary data was obtained from the respondents while secondary sources of data were previous research studies, books, articles, newspaper publications; and both published and unpublished studies, to enhance a broader understanding of subject.

Quantitative data was collected through survey method employing a semi-structured self-administered survey form to gather baseline information from the respondents. Qualitative data was collected using Key Informant Interviews (KIIs), Case studies and Participatory Rural Appraisal (PRA) techniques such Social Mapping and Services and Opportunities Map. The Key Informants were the Headman or village chief, and the Committees in charge of Tourism in the community.

Data Processing and Analysis: The quantitative data was processed and analysed using SPSS (Statistical Package for Social Sciences) and outcomes are being presented in the form of simple averages and cross-tabulations. The qualitative data collected through in-depth interviews with respondents were organised into case studies and information obtained from KIIs were integrated in the major findings of the study. The data collected from FGDs were transcribed into written format and used Index of Qualitative Variation (IQV) to assess the degree of diversity or dispersion within a distribution of categorical or nominal data for qualitative data analysis.

Limitations of the Study: Ethical considerations have been followed where respondent households in the study are based solely on their willingness to participate. The present study on Ecotourism and Rural Livelihood conducted in East Khasi Hills District of Meghalaya is entirely based on empirical data collected from the respondents who are directly engaged in livelihood activities that are derived with the onset and presence of ecotourism. The study was conducted only in ecotourism hotspots in East Khasi Hills District and there was no comparison with other ecotourism destinations in other geographical context in Meghalaya, hence generalizations from the study in the context of Meghalaya might not be accurate for the diverse rural population.

The present chapter on methodology have discussed on the various elements and processes that have been adopted in the present study. The following chapter focuses on the vulnerability context and profile of the communities in the study.

MAJOR FINDINGS

Socio-demographic profile of rural households engaged in ecotourism

The socio-demographic profile and structural bases of the rural households are being organised into age, gender, marital status, education, family structure, economic status, land possession and, head of the household.

The data shows that a little more than half of the total respondents are male and a little more than a third of the total respondents are female. This shows that males are the dominant gender in livelihood through ecotourism. Whereas both genders are actively engaged in undertaking livelihood through ecotourism.

The comparative analysis of both genders shows that between the age group of 19 - 30 years, majority of the respondents are male and almost a third of the respondents are female. In the age group between 31 - 40 years, more than half of the respondents are male while 37.8% are females. Conversely, in the age group of 41 - 50 years, more than half of the respondents are female while 36.5% are male. In the age group between 51 - 60 years, a little less than half of the respondents are male and less than half of the respondents are female.

The marital status among the female respondents is higher (79.3%) in comparison to the male respondents (42.7%). Respondents engaging in ecotourism related livelihood activities have contributed as a source of income for the bread earner or supplements the bread earner in the family to fulfil the needs and requirements of the family. On the other hand, the unmarried male respondents are more (56.8%) as compared to unmarried female respondents (17.9%) in the study. The presence and the existence of the practices of ecotourism has provided employment opportunities for unmarried male and female respondents.

Engaging in income generating activities through ecotourism has contributed to the economic structure of the rural households in the study either as a source of income for the rural households or supporting and supplementing the household

economy. Ecotourism also has the potential to enhance entrepreneurship practices among the rural youths to become economically self-reliant.

Firstly, the data shows that very less female respondents (2.1%) did not have any formal schooling at all while the male respondents in the study have attended at least primary level of education. Secondly, at the post graduate level which is the highest educational qualification level of the respondents in the study, it is observed that only a very small number of male respondents (0.5%) have completed post graduate level while there are no female respondents who have completed the same. Furthermore, less than half of the male respondents have completed graduation, and less than half of the total female respondents have only completed upper primary education. The analysis shows a huge disparity in terms of educational qualification among the male and female respondents. The male respondents have much higher educational qualification as compared to the female respondents.

Almost all of the households are nuclear families while only 1.1% follow joint family system. In terms of size of the family, half of the respondents come from medium size family, a third of the total households in the study have large size family and 15.8% have small size family.

A large number (77.8%) of respondents, inclusive of both male and female falls under Below Poverty Line (BPL) category; and a little more than a fifth of the respondents fall under the Above Poverty Line (APL) category. On the other hand, the data shows almost uniform distribution with very minimal variation in the economic status between both male and female respondents in the study.

A huge majority of the respondents inclusive of both male and female 92.8% possess land. Most of the male respondents (95%) and 89.3% of the female respondents in the study possess their own land. As per the Khasi customary law of inheritance, the youngest daughter in the family inherits the ancestral property of the clan. In contrary to the outcome of the analysis, there are more male respondents who possess land more than the female respondents in the study. This indicates that the male members among the Khasi matrilineal society have also been inheriting land from their clans. This might indicate a shift or a new practice that is prevalent among the Khasi society with respect to inheritance.

Rural Vulnerability Context

Increasing inflow of tourist over recent years affect the carrying capacity of the ecotourism destinations that could create harm to the environment. Lack of effective waste management practices has created a menace and a challenge for the local communities to manage waste products. Post COVID-19 pandemic witnessed a growing trend in the use of online payment method through different platforms. However the lack of proper network coverage in some of the villages has created inconvenience for the visiting tourists to conduct online financial transaction. Moreover, the deficiency and unavailability of ATM facilities in the vicinity of the ecotourism destinations adds more to the issues of the visiting tourists causing inconvenience to the visiting tourists and affecting their satisfaction level as visitors which can lead to negative feedbacks on their service satisfaction. Upon understanding and realisation of the potential commercial and economic benefit that can be derived from ecotourism, non-local entrepreneurs running private tourism companies outside the state of Meghalaya have seek the opportunity to capture the commercial benefits that the tourism industries offer by introducing tourism packages for domestic and international tourists. The lack of entrepreneurship knowledge, skills, and attitude of the tourism industry among the local youths have deprived them with opportunities to generate employment and engage as entrepreneurs within the tourism industry.

In Economic vulnerability, the social and economic benefits particularly livelihood activities of the respondents and the village are largely dependent upon the inflow of tourists from outside the state of Meghalaya. There are many rural households in the study that are dependent on ecotourism as their primary source of income.

Past incidences such as the Covid-19 Pandemic, CAA conflict have adversely affected the inflow of tourists and at the same time directly influenced livelihood outcome of the respondents.

During the Covid-19 Pandemic the lock down has completely shut down ecotourism activities which meant a halt to income generation from ecotourism resulting in loss of employment, respondents had to find employment opportunities, those who had agricultural land engaged in their own land for agriculture, and others had to work as agricultural labourers and wage labour.

The large-scale use of plastic materials for various purposes has been a menace to the environment in all the ecotourism villages in the study. It has been challenging for the local communities to keep the environment free from plastics. Many of the items used and required by the tourists are being provided in plastic materials. There has been no alternative to the use of plastic to cater to the requirements of the visitors.

Major contributors towards growth of ecotourism in Meghalaya are national tourists who mostly consists of non-tribals. One of the vulnerabilities that have been affecting ecotourism regularly are social issues and social disorganization in recent times were CAA, border issues, ILP issues within the state of Meghalaya and particularly Assam. As a result, it reflects idle ecotourism activities and negative impact on the livelihood outcomes from ecotourism on the respondents. The Covid19 pandemic has caused economic and employment issues for the respondents who entirely depended on ecotourism as their primary source of income faced problems of unemployment.

While ecotourism has brought about social and economic benefits to the rural households and the community. There have been incidents in the context of the study where possession of land ownership has created an issue among one of the villages in the present study. Members who once used to benefit from ecotourism by keeping shops are now unemployed and are engaged in other economic activities. The village council has not been able to generate revenue from ecotourism due to the dispute.

The unavailability of local market in the village has also been one of the disadvantages for the local communities. Most of the times the prices of commodities at the local market are controlled by the middleman who brings the products at wholesale prices from the city market in Shillong. The wholesale prices are applicable to those who require large quantities and of products. This has resulted in inflation of prices in the villages as to make profit from the commodities the respondents and the villagers must sell the products at prices slightly higher than the market prices.

Since the onset of ecotourism, tourism policy of Meghalaya prior to 2023 largely failed to implement effective strategies for promoting ecotourism and supporting the economic development of indigenous communities. In the villages studied, ecotourism initiatives have emerged primarily through community-led efforts grounded in indigenous knowledge and local resource management. Despite visible growth in ecotourism, government and institutional support remain minimal, offering little

assistance to strengthen these grassroots activities or enhance local livelihoods. Moreover, the introduction of the Public-Private Partnership (PPP) model in the 2023 Tourism Policy is projected to favour non-local private investors, potentially marginalizing local communities the very communities that ecotourism seeks to empower.

The peak season for tourism activity in Dawki village is during the month of August, September, October, December, January, February, and March. There is high inflow of tourists during these months as the river becomes crystal clear and the tourist could enjoy boating services.

Livelihoods Assets of the Rural Households

A majority of the respondents use ecotourism as their primary source of income, while little more than a fourth are engaged in business, labour, agriculture, and service sectors such as teachers and government as their primary sources of income. The presence of ecotourism has strongly influenced the livelihood engagements of the respondents and the economy of the villages in the study. At the same time this is also indicates the potential of ecotourism as a means in bringing about transformative changes for the households and village economy.

Natural Capital: The forms of natural attractions present in the villages that has led to the development of ecotourism destinations are natural scenic beauty, rich biodiversity, waterfalls, rivers, pleasant weather, lush green environment, indigenous knowledge practice have been the essence of ecotourism development in the villages. The presence of the natural attractions has paved way for members of the host communities to derive economic benefits from visiting tourists.

Physical Capital: The rural household engagement in ecotourism have led to the establishment of various infrastructures to cater to the needs of the visiting tourists such as homestays, guest house, lodges, resorts, hotels, restaurants, food stalls, gift shops or souvenir stores, tourists parking spaces, public toilets and washroom, viewpoints. On the other hand, infrastructural development such as parking spaces, public toilets, entry fee, viewpoints have also served as a source of revenue for the village administration by levying some amount as service fee from the tourists and utilized for the maintenance of the ecotourism spots and welfare of the community.

Social Capital: The village council being the traditional local authority at the village level has been leading the way in facilitating community efforts, fostering community participation, enhancing social cohesion among the members of the host communities in the process of ecotourism development, managing, utilising, and conservation of the natural and community's resources. The village council realised the potential of ecotourism in bringing about socio-economic benefits to the rural households and the community at large. Leading the process with the support of the members of the community, it has taken the initial steps and mobilise resources to setup infrastructures and facilities to support ecotourism initiation and development in the villages.

Human Capital: Both genders are actively in labour that are directly related with ecotourism and other labours. Ecotourism related livelihood activities serve as both primary and secondary occupation for the different in the study. While some are dependent on ecotourism as primary source of income others depend on ecotourism as secondary form of occupation and are engaged in agriculture, labour, business, and service sector. There is a need for training in hospitality, customer service, and niche culinary skills to elevate service standards and maintain competitiveness. At the same time, the success and sustainability of the ventures initiated and engaged by the cases presented must be capacitated through inputs on entrepreneurship knowledge and skills.

Financial Capital: Respondents who are engaged in ecotourism related livelihood activities have started or initiated their economic activities by utilising financial support that they could save by themselves individually or by borrowing from relatives and friends.

Livelihood Patterns and Utilisation

Monsoon is the peak season for ecotourism activities and tourist inflow in Meghalaya, November till February the inflow of tourist is lesser as compared to the monsoons due to the very chilling and cold winter conditions in the region. The regularity of inflow of tourists throughout the year influences benefits to the local communities through ecotourism. This also indicates the stability of livelihoods and employment opportunities for the local community members who are engaged in ecotourism livelihood activities.

The various forms of Livelihood Activities adopted by the respondents in the study are; homestay, hotels, guest house, food stalls, petty shops, grocery shops, gift shop, resort, and tourist guides, and boating activities. A very small margin of the respondents is engaged in hotels, guest house, and resorts as their Livelihood Activities.

Only a very small portion of the respondents hire helpers to assist or help them while engaging in their ecotourism related Livelihood Activities but have indirectly created employment opportunities for others as hired helpers. At the same time, the employment opportunities have not only limited to those within the community but has also provided employment to residents of neighbouring villages and communities as well.

Dynamics of Ecotourism

The first factor which is very crucial in the process of ecotourism development shows that natural factors like natural scenic beauty, indigenous knowledge system, climatic conditions, rich biodiversity, clean environment are core factors that led to fame and recognition, strategic location and historical and cultural importance are the core foundation of ecotourism development.

Support system as highlighted is one of the important components to sustain the ecotourism practices led by the community. Ecotourism development also ushers infrastructural development in the community to cater to the needs and requirements of visiting tourists and at the same time transforming the community. Thus, it can be concluded that ecotourism development is a result of a combination of the relationship and contribution of natural assets, unique and distinctive recognition of a place, community efforts, community led initiative, support systems, and infrastructural development that fosters growth and sustainability of ecotourism.

Proactive efforts by the village council and community members played a crucial role in promoting ecotourism and conservation. The village council undertook significant efforts to enhance infrastructure, including roads, accommodation, and tourist facilities, to cater to the growing number of visitors.

Ecotourism and Community Development

The significant income generated from ecotourism-related activities has helped support the local economy, provides a financial base for many families. Employment opportunities have been created particularly for youths and women, reducing the need for migration in search of work. The support for local entrepreneurship has provided opportunities for villagers to start their own livelihood activities, further strengthening the community's economic base.

Community-led initiatives have ensured that the benefits of tourism are widely felt across the village, supporting local livelihoods and fostering economic resilience. Community based ecotourism fosters unity and cooperation among local community as it is initiated by the community members and the community are equally responsible to contribute for the sustainability of ecotourism activities in the village.

Ecotourism has also facilitated significant advancements in community welfare by utilizing tourism revenue to support ecotourism development, educational initiatives, and community welfare programs.

Reinvestment of tourism revenue into infrastructure and welfare initiatives has similarly uplifted the community, demonstrating how tourism can be harnessed for holistic development. The funds generated are used for maintaining and improving tourist facilities, supporting educational initiatives for children, and assisting poor families.

Challenges in Ecotourism Development

Social Challenges: initial resistance to tourism was a significant hurdle. The community had concerns about the potential negative impacts of increased visitor numbers. Additionally, managing intoxicated visitors has posed a social challenge, affecting the village's atmosphere and the residents' comfort.

Environmental Challenges: managing plastic waste remains a persistent environmental challenge. The village's commitment to sustainability is tested by the increasing volume of waste generated by tourists.

Environmental Pressure: ecotourism to mass tourism has led to significant environmental pressures. Increased land and resource usage, coupled with inadequate environmental management and waste disposal systems, threaten the sustainability of its natural attractions. This strain on resources underscores the need for more effective environmental policies.

Infrastructure Challenges: Mobile network issues and electricity problems, especially during the rainy season, hinder the village's ability to provide consistent services to tourists. Additionally, the inaccessibility of essential infrastructure like ATMs and healthcare facilities presents significant challenges for both residents and visitors.

Lack of entrepreneurship skills: Economic development through ecotourism has been substantial, but there are gaps in entrepreneurship and hospitality skills among residents. Addressing this skills gap is crucial for enhancing the quality of services offered to tourists and for sustaining economic growth. the lack of professional training for service providers limits the potential for delivering high-quality tourist experiences. While the community manages its activities well, there is a need for more structured training programs to elevate service standards.

Impacts of Ecotourism on Rural Households

Rural Livelihood Opportunities: ecotourism has played an important role in providing livelihood opportunities for the rural communities in the context of the present study. Its role in generating employment opportunities in various forms of livelihood activities such as food stalls, guest house managers, boat operator, tourist guides, homestay owners. It has the potential to transform the socio-economic conditions of the rural households and the village economy.

Contribution to Family Income: ecotourism has contributed in terms of economic improvement and supplement households' income through the engagement of other family members in ecotourism related livelihood activities creating additional sources for the family's income, easing the burden traditionally borne by a single earner. The increase in the number of bread earner in the family has enabled individuals to increase and improve expenditures on children's education, health care, and support home improvements. These contributions that are a result of the individual's engagement in

ecotourism have shown some form of resilience that is being brought about by ecotourism in the process of improving household well-being.

Practice of Savings: The cases presented in the present study has shown evidences that the practice of ecotourism has brought about social and economic improvements for the individuals and families. The potential of ecotourism to provide employment opportunities and increase income sources in the family has influenced individuals in the present study to practice savings for future aspirations and utilization in times of emergencies.

Increase in Income Level: With the onset of ecotourism in the villages in the present study, the case studies have shown that individual households have been able to engage in different forms of livelihood activities. Ecotourism has played a crucial role in influencing the transition and occupational shift among the individual households and improved personal income levels of the cases in the present study.

Primary Source of Income: ecotourism has influenced an occupational shift among the individual cases that are being presented in the case studies. While agriculture and farming activities has been the traditional occupation and the main source of income for the majority of the rural households the onset of ecotourism has brought about shift in the primary sources of income. The economic benefits derived from ecotourism has influenced occupational shifts among the rural households in the study leading to households to become dependent on the tourism sector for their livelihood.

Improved Standard of Living: The onset of ecotourism has influenced the engagement of individuals in undertaking the different forms of livelihood which derived them better employment opportunities and enhanced improvements in the standard of living of the individuals. Positive outcomes through livelihood engagements from ecotourism become fragile due to the seasonality of tourism activities and during times of social unrest or disruptions. This requires consistent income and year-round income and planning to maintain the living standards.

Employment for Others: The onset of ecotourism has not only provided opportunities for livelihood engagement by individuals. Ecotourism has enabled the creation of job opportunities by the participants for other members of the community. Members who have initiated or undertaken livelihood activities may require assistants to help them in their enterprises, there are also those who wish to expand their livelihood ventures

but they cannot fully engage all their activities by themselves they need others to assist them in this case the requirements from their engagement creates job opportunities for others as well.

Diversification of Livelihood: ecotourism offers a wide range of opportunities for livelihood engagement for the participants and members of the host communities. The livelihood undertaken by the participants varies from, shopkeeping, caretaker, guest house, boatman, tourist guide, grocery shop. As evident from the cases presented above there are individuals among those who are engaged in livelihood through ecotourism that have also alongside adopted other economic activities other than engaging in ecotourism related livelihood activities. To supplement livelihood diversification, individuals and rural households can be supported by providing and capacitating them through institutional support for entrepreneurship training and micro-investment schemes that would integrate the utilization of primary source and identification of secondary sources of livelihood which could significantly improve their resilience.

Poverty Alleviation: Several individuals reported significant improvement in their poverty status due to ecotourism. Ensuring equitable access, especially for marginalized or asset-poor individuals, is essential to scale ecotourism's poverty-reduction potential.

Suggestions for Policy makers

Holistic Ecotourism Policy: Parallel with the growth of ecotourism the state needs a robust ecotourism policy that will provide a framework to support ecotourism in Meghalaya. The policy should integrate cross-sectoral approach and affiliations to foster sustainable ecotourism that shall focus on empowering grassroot organisations engaged in ecotourism and the conservation of the rich biodiversity that are the heart of ecotourism in the state of Meghalaya. The 2023 Meghalaya Tourism Policy is still at an early implementation stage, and past schemes (e.g. credit or infrastructure grants) have not reached interior hotspots nor have they created an impact on the local communities to enhance sustainable ecotourism. The cross-sectoral policy should align with Tourism, Rural Development, Environment, and Women & Child welfare,

with clear roles for the autonomous district councils, village councils, and NGOs in their contribution towards promoting sustainable ecotourism.

Institutional Support: The growth of ecotourism can be sustained through the support of various institutions operating within the state. Institutional support for sustainable ecotourism includes a multi-faceted approach with key stakeholders like government agencies, local communities, and NGOs playing vital roles. These institutions are necessary to provide outlines for ecotourism practices, availing funds, ensuring ecotourism practices are environmentally conscious, contributing to benefit the society, and are economically feasible. These approaches require crucial role of the central and state government to develop policies, impose regulations and formulate strategies for promoting sustainable tourism and ecotourism. NGOs and civil societies that are engaged with the communities focusing on rural development, community empowerment, can play a pivotal role in nurturing linkages between the communities and various institutions to promote responsible ecotourism practices. Financial institutions can provide targeted funding and financial instruments to support ecotourism entrepreneurs, particularly those in remote and geographically challenging areas. Promoting ecotourism destinations and experiences through various channels, highlighting their unique natural and cultural attractions. These institutions are vital for engaging local communities, ensuring their participation, and promoting sustainable practices at the grassroots level.

Infrastructural Support: Infrastructural support and development are instrumental in the development of ecotourism and for sustaining ecotourism practices. Ecotourism practices in the village have been hindered and challenged due to the lack of infrastructure to support the growth of ecotourism in Meghalaya. The geographical context of ecotourism in the state of Meghalaya are located in rural villages that are far from towns and cities which created an imbalance and unequal distribution and access to basic and important infrastructures like ATMs, banks, health care, public transportation, mobile and internet connections, water supply, waste management etc. While some villages due to their location to the nearest towns are accessible to the basic infrastructures other villages are devoid of their access to such infrastructures. There is a need to support infrastructural development and ensure accessibility to both

local communities and tourist visitors to cater to the needs while engaging in ecotourism and at the same time satisfied tourism experiences.

Strengthening Livelihood Assets: Livelihood assets are key to the presence of ecotourism in the present study. It influences livelihood engagement of local communities and provides opportunities for livelihood diversification that could enhance social and economic outcomes among the local communities. While the natural and social capital has played a very important role in the development of ecotourism in East Khasi Hills district of Meghalaya, other livelihood assets such as physical capital, human capital and financial capital are having lesser influence on the livelihood of the local communities that could enable the local communities to gain maximum benefit if the livelihood assets are properly and effectively accessible by them. The livelihood assets can be reinforced through enhancing; physical capital with better infrastructural support that are accessible to both local communities and visiting tourists, human capital can be enriched by providing capacity building programmes that would equip the local communities with knowledge and skills that are relevant in their engagement with ecotourism for effective service delivery, and financial capital can be promoted through various forms of financial literacy programmes and bank linkage for distant and remote villages. Hence there is a need to implement effective mechanisms that could harness the potential of the livelihood assets in contributing to better livelihood outcomes for the local communities.

Create effective transforming structures: Ecotourism practice needs to be supported with effective processes and structures that can bring about socio-economic transformation of local communities engaged in ecotourism. These processes can be in the form of policies, programmes that are tailored to suit fit within the ecotourism practices present in the context of Meghalaya. At the same time the implementation of these processes needs structural arrangement that can operationalise the components within the processes. The processes and structures should seek to address and finetune the livelihood assets that are capable producing better livelihood outcomes of the local communities and at the same time focus on empowering community-based organisations that are spearheading community-led ecotourism activities. It should bridge and create linkage between the local communities and various institutions through the CBOs to empower local communities gain access to resources that are key

determinants in the success of ecotourism. The process and structures should also seek to support conservation strategies of the CBOs and promote more responsible and sustainable ecotourism.

Reducing Vulnerabilities: Seasonal vulnerabilities in ecotourism practices have emerged as one of the challenges for local communities engaged in ecotourism. The seasonality in their engagement in ecotourism has proven to be a vulnerability for the local communities affecting them in terms of employment, stability in income and affect the outcomes from livelihood engagements of the rural households particularly those households that are dependent on ecotourism for their livelihood. Organising festivals and other forms of ecotourism activities during off-seasons can reduce the vulnerability context of local communities allowing the rural households to engage in non-ecotourism livelihood activities during off-seasons thereby providing continuity in their livelihood engagement. Special emphasis should be given to encourage local communities to engage in other forms of livelihood like agriculture as a secondary livelihood options to avoid impact of seasonal tourism trend on the livelihood of the local communities.

Integrated Ecotourism Practice: Ecotourism practice should be encouraged to integrate cultural and indigenous components that are unique of the host communities to inculcate a more pluralistic tourism practices and foster respect to indigenous cultural heritage and practices. It also serves as a medium of cultural diffusion to visitors to learn and acknowledge the rich cultural practices of the local communities. Ecotourism should create an authentic indigenous experience to the visitors that would be more meaningful in experiencing tourism in its completeness. Integrated tourism approach would also provide diverse livelihood strategies that can be adopted by the local communities which would bring about multi-dimensional impacts of ecotourism on the local communities. This would also allow local communities preserve the rich historical and cultural heritage that they possess to sustain and transcend to the younger generations. New forms of tourism activities such as adventure tourism, seasonal sport activities or indigenous sport activities could play a pivotal role in reducing the vulnerabilities encountered by the local communities.

Suggestions for Social Work Intervention

Macro Social Work Intervention: Social work practice at a macro level intervention can play a very important role in supporting development and success of ecotourism that would benefit the environment and local communities. Social workers through the method of community organisation can work with the local communities in identifying the potential of ecotourism in bringing about changes for the local communities and mobilise local communities to collectively participate in the planning and implementing process of ecotourism development in the community ensuring local voices are heard and valued. Social work experts can facilitate the process of participation of the local communities using Participatory Rural Appraisal (PRA) techniques to help local communities understand the dynamics and resources available within the community that are capable in bringing about transformation for the local community.

NGOs and civil societies: Social workers can help communities develop and manage ecotourism initiatives, address potential negative impacts, and promote sustainable practices. Social work practitioners engaged in NGOs and civil societies can facilitate the process for capacity building through organising training programmes and workshops for local communities in collaboration with other organisations or institutions to enhance knowledge and skills that are important while engaging in ecotourism.

Social Work Advocacy: Social work practitioners can advocate for the issues of social justice and equity, ensuring that the benefits of ecotourism are distributed fairly and that vulnerable groups are not marginalized. Social workers can educate the communities about the importance of environmental sustainability and responsible tourism practices that involves strong conservation efforts to minimize negative impacts and identifying community benefits from conservation. Social workers can help communities develop and implement sustainable tourism strategies that protect the environment while also providing economic opportunities.

Empowering Grass root organisations: Social work intervention can help and train village or community-based organisations and youths engaged in ecotourism and entrepreneurship through monitoring and providing regular capacity building

programmes that would enhance their effectiveness while catering to the needs of visitors and in the management for sustainable ecotourism practices.

Cultural Preservation: Ecotourism can be a powerful tool for promoting cultural exchange and understanding between tourists and local communities. Social workers can help ensure that tourism activities respect local cultures and traditions. They can educate tourists about the cultural norms and values of the communities they are visiting, promoting respectful and responsible interactions. Social workers can also help communities to preserve and promote their cultural heritage, ensuring ecotourism practices can contribute to awareness and education of indigenous cultures.

Promoting Village Industries

Rural Women Empowerment: While ecotourism has proven to be of great potential to usher socio-economic transformation of rural households and changes in the village economy. It can also be adopted as an approach to empower rural women through Self Help Groups (SHGs) by engaging rural women in identifying income generating activities that could enhance them economically. Village industries such as handicrafts, weaving and souvenir making can be encouraged to be undertaken by women folks which allow them to engage in rural employment. Steps should be taken to ensure financial support for women engaged in ecotourism activities in the form of subsidies, grants and soft loans so that women could be able to start up income generation. Grassroot institutions should encourage rural women folks to come up with innovative ideas and projects that could be provided institutional support and encourage rural women entrepreneurship. Regular training and workshop on entrepreneurship by experts for rural women should be conducted to equip them with knowledge and skills on entrepreneurship that are best suited for rural tourism activities. Constant monitoring of SHGs that are engaged in ecotourism activities are of prime importance in providing technical assistance and support particularly for those groups that are new to get in line with the functioning of SHGs.

Rural Entrepreneurship

Empowering rural youth through entrepreneurship: Youth empowerment through entrepreneurship plays a significant role in promoting sustainable ecotourism. Social

entrepreneurship has the potential to create positive impacts in the sustainable tourism sector. When young people are empowered as entrepreneurs, they can initiate their own endeavours that not only generate income but also contribute to environmental preservation and community development. Eco-entrepreneurship represents a recent development that aligns entrepreneurial activities with environmental sustainability. Capacity building programmes on entrepreneurship and hospitality for the local youths can contribute to human capital in the villages that are equipped with skills and knowledge in the tourism sector which would help in improved services and reducing the skill gap that presently exist among the youths engaged through their simple business acumen affecting tourists' satisfaction.

Promoting Sustainable Ecotourism Practices

Responsible Tourism: Ecotourism has far been seen as a unilinear dimension between the host communities and the tourists. The former being solely responsible in the process of managing, conserving and catering to the needs of the visitors while the latter have been seen as the recipient of the various services without any form of responsibility. The concept of responsible tourism is inclusive of the responsibility of both the host communities and visitors in contributing towards the goal of sustainable tourism. While the host communities have much heavier responsibilities in conserving the natural and physical resources the visitors are visitors are equally responsible by respecting and acknowledging the conservation efforts of the local communities and to inculcate habits that would contribute towards conserving and protection of the resources for sustainable growth of ecotourism by adhering to community norms, avoiding indiscriminate littering of the environment, respecting local culture, and inculcating habits of using materials that are not harmful to the environment.

Bridging Environment and Community benefits: Ecotourism has the potential to bring about positive impact at the household and community level. It has the capacity to generate economic benefits at the household and revenue for the community. The economic benefits that ecotourism generates encourages local communities to engage in conservation of natural resources. Ecotourism offers significant socio-economic benefits by promoting sustainable economic development at the same time encouraging conservation of natural environment. It bridges the relation between environmental conservation and poverty alleviation by generating income and

empowering local communities. The opportunities that ecotourism offers for employment, job creation, preservation of natural resources and cultural heritage can contribute to alleviation. It can generate stable employment opportunities, support cultural preservation, and contribute to infrastructure development in indigenous and local communities. Additionally, ecotourism initiatives can promote community development, which is crucial for poverty alleviation efforts. Overall, tourism, including ecotourism, is considered an appropriate mechanism for poverty reduction as it contributes to economic growth and can provide social, environmental, and cultural benefits

Conservation of Biodiversity: The foundations of ecotourism lie heavily on the availability and presence of the rich biodiversity of a community. Biodiversity holds a high value in ecotourism practices. The economic benefits that ecotourism generates encourages local communities to engage in conservation of natural resources. It plays a very important role in raising awareness of sustainable development motivating people to conserve natural environment. The sustainability and continuity of ecotourism practices is very much dependent upon the conservation efforts that are being invested to preserve and protect the biodiversity. The practice of ecotourism and conservation practices is inevitable to each other, while the presence of biodiversity has provided a platform for ecotourism practices, on the other hand the benefits that derive from ecotourism encourages local communities to engage in conservation of natural resources.

Scope for Further Research:

The scarce empirical studies on ecotourism in Meghalaya particularly from a local perspective provides the scope for further research or studies on ecotourism in Meghalaya. Further research studies would be very beneficial in contributing to the knowledge and literature of ecotourism focusing on different dimensions and adopting various forms of research approaches that would bring about pluralistic research outcomes that would contribute in understanding ecotourism practices from different perspectives. Further research on ecotourism in Meghalaya can be focused on;

- Ecotourism and social capital
- Rural women empowerment and ecotourism

- Impact of programme and policies on grass root ecotourism practices
- Indigenous knowledge systems and ecotourism
- Ecotourism and cultural diffusion
- Ecotourism from a tourist's perspective
- Gender based livelihood engagements and ecotourism
- Ecotourism and poverty alleviation, rural development
- Impact of ecotourism on non-ecotourism hotspots
- Ecotourism and innovative ecofriendly practices
- Ecotourism and rural hospitality services
- Longitudinal studies on impact of ecotourism
- Studies to examine the influence of social capital on community-based ecotourism

Conclusion:

The present study on ecotourism and rural livelihoods in the East Khasi Hills have documented a complex interplay between of social, economic, and environmental dimensions. While ecotourism practices as an industry in the context of the present study has been found to be at an infancy stage its presence and practice have a very long history as a recreational activity for many decades even during the British period. Ecotourism in the present study has emerged as a vital source of income for the rural households engaged in ecotourism as their livelihood activity.

The present practice of ecotourism in the study was a result of the community led initiative spearheaded by the traditional village council which is the grassroots authority among the Khasis in Meghalaya. As a community-based ecotourism led initiative the practice of ecotourism can be credited and acknowledged to the tireless efforts of the village council which identified the potential benefit that ecotourism can offer to the rural households and the community at large. Started with the limited resources available with the village council, it set up facilities that could generate revenue from its services and being reinvested for upkeep and upgrading ecotourism services. Strong indigenous knowledge on conservation practice, social cohesion, and active community participation facilitated by the village council has been the backbone of ecotourism in the context of the present study.

Ecotourism has provided both male and female members of the rural households to engage in various forms of livelihood strategies such as homestays, food stall, petty shops, tourist guides, gift shop, etc which has brought about social and economic benefits to members of the rural households yet it also exposes families to seasonal shocks and infrastructural gaps. The vulnerability revealed that dependency on tourism, inadequate waste management, digital connectivity, and basic services are some other vulnerabilities encountered by the villages.

The practice of ecotourism in the study have also documented the strong presence of the village council in the management and utilization of natural, physical, and social capital to enhance better services for ecotourism activities. At the same time the village council with its discretionary powers ensured equal benefits for the rural household particularly poor households to get equal opportunities in reaping the benefits from ecotourism by creating employment opportunities and providing social support.

The strong presence of the village council ensuring the continuity and transcending the indigenous knowledge on conservation of natural resources and rich social capital among the local communities shows latent capacity for sustainable ecotourism development. However, it requires a cohesive community and state policy framework that channels tourism revenues into rural infrastructure; district-level extension and microfinance schemes to professionalize homestays and guide services; and social work interventions that foster social cohesion, land-conflict resolution, and ecological stewardship.

Social entrepreneurship and local innovative local initiatives need to be encouraged to enhance skilled human resource among the local community for better service delivery and tourist satisfaction. Entrepreneurship activities should be accompanied by regular capacity building programmes that targets ecotourism entrepreneurs to capture maximum benefits from tourism while at the same time respecting the carrying capacity of ecotourism destinations that may put pressure on the resources. Building resilience mechanisms such as off-season cultural festivals, and micro-savings products will guard against income volatility and strengthen poverty-alleviation.

While the trend of ecotourism development is still emerging across different geographical locations and regions in the state of Meghalaya the future of ecotourism looks promising only if it is guided and supported by effective governance, policies,

tailored programmes, institutional support and unwavering support from local communities and visiting tourist to encourage more responsible and sustainable ecotourism. By intertwining together policy reform, infrastructural investment, livelihood diversification, entrepreneurship, macro social-work intervention, and biodiversity conservation, the present study maps a path toward an ecotourism model that enhances rural well-being, gender equity, and ecosystem health simultaneously. Continuous monitoring, community engagement, and iterative learning will be essential to ensure that the benefits of ecotourism endure for generations to come.

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