

Eco-Tourism and its Development in Tribal Regions of Jharkhand

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Abstract

Jharkhand, a state nestled in the lap of nature and often called the land of forests, is a haven for those seeking solace and spiritual connection amidst natural beauty. Its rich and abundant natural splendour offers many opportunities for visitors to immerse themselves in the wonders of the natural world. Whether it's observing the diverse flora and fauna thriving in its verdant forests, marvelling at the numerous enchanting waterfalls, trekking through breathtaking hills, encountering the diverse wildlife in its renowned national parks, or embarking on a profound spiritual journey through its famous temples, Jharkhand promises an unforgettable and reflective experience. Therefore, exploring ecotourism in the state of Jharkhand has the potential for significant economic growth, offering hope to marginalised communities and fostering optimism in sustainable tourism and economic sustainability.

The study delves into ecotourism by exploring the rich cultural practices and traditions of tribal communities in Jharkhand. It envisions ecotourism as a unifying force, aiming to unite people from all walks of life under the shared belief of “*Vasudhaiva Kutumbakam*”—One Earth, One Family, One Future. The involvement of tribals in ecotourism has the potential to promote environmental sustainability and drive social, economic, and cultural development.

Key Words: Tribal, Sustainable, Ecotourism, Flora and Fauna, Non-Timber Forest Products, Forest Bath.

Introduction

Jharkhand, located in eastern India, is rich in historical significance, cultural diversity, and scenic beauty. Jharkhand, separated from Bihar in 2000, has developed into a distinct region combining modernity and heritage. Adjacent to Bihar to the north, West Bengal to the east, Odisha to the south, Chhattisgarh to the west, and Uttar Pradesh to the northwest, Jharkhand is well situated in the eastern region of India. The state's terrain, which is made up of hills, plateaus, and thick woods, positions it in the centre of the nation.

Jharkhand is highly significant due to its wealth of natural resources, including enormous mineral deposits, thick forests, and a wide variety of flora and fauna. This state has greatly aided India's industrial development, especially in the steel and mining industries. The capital city, Ranchi, is a government, business, and education centre.

Jharkhand's landscape is diverse, encompassing verdant forests, undulating hills, fertile plains, and abundant water bodies. This varied ecosystem supports many plant and animal species, making it an attractive destination for nature enthusiasts and researchers.

Jharkhand's forests boast a rich assortment of plant life, including towering sal trees, aromatic sandalwood, and medicinal herbs. These forests provide essential ecosystem services such as carbon sequestration and soil conservation and sustain local livelihoods through the collection of non-timber forest products.

The state's forests are home to diverse wildlife species, including elephants, tigers, deer, and various bird and reptile species. Protected areas like Betla National Park and Hazaribagh Wildlife Sanctuary play a crucial role in conserving these animals and their habitats.

With their dense foliage and diverse flora and fauna, Jharkhand's forests are biodiversity hotspots. They provide habitats for wildlife and recreational opportunities for visitors seeking to connect with nature. The state's hills and

plateaus, such as those found in the Chotanagpur Plateau, provide breath taking vistas and opportunities for trekking and exploration. These rugged terrains are a testament to the region's geological diversity. Jharkhand's rivers and waterfalls, including Hundru Falls and Dassam Falls, add to the state's natural allure. These cascading water bodies offer scenic beauty and serve as popular tourist attractions and sources of hydroelectric power.

Jharkhand embodies cultural richness, showcasing the traditions, customs, and way of life of its indigenous communities. The tribal villages celebrate various traditional festivals steeped in cultural significance. These festivities serve as occasions for communal bonding and religious observance, highlighting the close-knit nature of village life. The tribal are skilled artisans known for their craftsmanship in pottery, weaving, and other traditional crafts. These artistic endeavours reflect the local communities' creativity and serve as a source of income and cultural expression. The local cuisine reflects the region's agricultural heritage, featuring staples like rice, lentils, and vegetables. Traditional cooking methods and recipes passed down through generations contribute to the villages' unique flavours and culinary traditions.

Jharkhand's biodiversity, landscapes, and cultural diversity, offer a captivating blend of natural beauty, cultural heritage, and traditional lifestyles. These elements make Jharkhand an appealing destination for Ecotourism and contribute to the region's identity and socio-economic vitality.

RATIONALE OF THE STUDY

Several considerations serve as justification for the investigation of Ecotourism and its growth in Jharkhand's tribal regions:

- **Preserving Cultural Heritage:** Jharkhand is home to various tribal groups. The communities are rich in languages, customs, and cultural traditions. By preserving and showcasing this distinctive cultural legacy, Ecotourism can help raise communities' awareness and sense of pride.
- **Sustainable economic growth:** Tribal communities may benefit from Ecotourism by creating long-term job prospects. It can lessen reliance on customary and frequently unsustainable means of subsistence by generating jobs in a variety of industries, including hotels, tour guide services, handicrafts, and local goods.
- **Preservation of natural resources:** Promoting Ecotourism emphasises conservation, promoting ethical tourism behaviours, and supporting the preservation of regional ecosystems, species, and biodiversity.
- **Empowerment and socio-economic uplift:** Tribal groups can actively engage in the tourism business through Ecotourism, earning money and gaining knowledge. As a result, their socio-economic circumstances improve and they have better access to healthcare and education.
- **Promoting cultural understanding and exchange:** Ecotourism encourages interaction between tourists and native populations. This connection might result in greater awareness, respect, and acceptance of various lifestyles, lowering cultural reconciles and fostering unity.
- **Diversification of revenue sources:** Because tribal areas frequently depend on meagre sources of income like agriculture or forestry, they are frequently economically vulnerable. By offering a substitute source of income, Ecotourism lowers the financial risks connected to conventional means of subsistence.
- **Infrastructure and community development:** Building roads, lodging, sanitary facilities, and community centers are all necessary for the growth of Ecotourism. The locals' quality of life is improved, as well as that of tourists alike.
- **Environmental education and awareness:** Ecotourism provides a platform for raising awareness of environmental issues. Tourists can learn about the value of conservation, sustainable living, and indigenous people's difficulties, which will encourage a sense of obligation to protect the environment.

Objectives of the study

- a. To assess Jharkhand's tribal regions' biodiversity, sceneries, and natural attractions in order to pinpoint possible locations for the growth of Ecotourism.
- b. To research the distinctive customs, cultural history, and way of life of Jharkhand's tribal groups, emphasising how they may enhance ecotourism offerings.
- c. To evaluate the possible socio-economic advantages of Ecotourism in tribal areas, such as the creation of jobs, income, and infrastructure.
- d. To look into ways to manage Ecotourism so that it has the least possible adverse environmental effects and actively supports local conservation initiatives.
- e. To investigate methods for incorporating nearby tribal communities into the organisation, execution, and oversight of ecotourism projects.
- f. To develop recommendations for enhancing the effectiveness and inclusivity of ecotourism initiatives for tribal communities in Jharkhand.

Review of Literature

As a low-impact and frequently small-scale substitute for traditional commercial mass tourism, ecotourism involves visiting delicate, pristine, and comparatively undisturbed natural places (Baruah, 2018). It entails taking reasonable trips to protected regions, preserving the environment, and enhancing the quality of life for locals. Its goals could include educating tourists, funding environmental preservation, directly assisting local communities' political and economic advancement, and promoting respect for human rights and other cultures (Kiper, 2013).

Travelling for ecotourism usually entails visiting places where the main draws are the flora, fauna, and cultural legacy (Fennell, 2020). Ecotourism aims to increase visitor respect for our natural environments and provide insight into how humans affect the environment. As an alternative to mass tourism, community-based tourism is currently becoming more and more well-known throughout the world. This new tourist strategy places a strong emphasis on getting to know the locals and having unique experiences. The locals hope to establish a popular tourism destination that highlights the area's exceptional natural resources, the warmth of the locals, and their significant involvement in the community. The local community's conviction that tourist development can produce money and jobs is the most important outcome. But in order to accomplish these goals, previous technical training from both public and commercial institutions is needed (López-Guzmán, et al., 2011).

Indians have a long history of reverencing and protecting the natural world. Thus, it makes sense that ecotourism is growing in India (Hameed et al., 2018). Along with other forms of tourism, such as domestic, inbound, and outbound travel, the Indian government has established the Ministry of Tourism and Culture to promote ecotourism in India. Internal, national, and international tourism are the subcategories. Compared to roughly 693 million arrivals worldwide, the WTO predicts an increase of one billion arrivals in 2010 (Zhou-Grundy, 2011).

As a result, 565.4 million people travelled internationally in 1995; this number rose to 1006.4 million in 2010; by 2020, it had reached 1561.1 million (Patel, 2020). With 30 world heritage sites, a thriving creative sector, and excellent natural and cultural resources (rated 8th and 24th, respectively), India is ranked 68th out of the 139 most desirable travel destinations in the world (World Economic Forum, 2011). It has produced a number of social and economic advantages, fosters global awareness and national integration, and generates foreign exchange earnings and job opportunities for a large number of individuals (Ahsan, 2008).

Over the past three years, India has welcomed visitors from throughout the globe. It is evident that India has been signing more free trade agreements across the board. India began including the number of arrivals of non-resident Indians in its statistics in 2014, in accordance with the definition of international tourist arrivals. India's position has improved by roughly 17 places as a result of this. In 2018, the proportion of foreign tourists arriving in India was

1.24%. South Asia had the largest percentage share in free trade agreements (FTAs) in 2018, with 29.40%, followed by Western Europe (21.25%). Africa (3.33%), West Asia (4.26%), Australasia (3.91%), North America (17.12%), South East Asia (8.40%), East Asia (6.86%), Eastern Europe (4.41%), and West Asia (4.26%) Latin America (0.96%) and Central and South America (India Tourism Statistics at a Glance, 2018). India's ecotourism industry has a number of obstacles, chief among them being a dearth of infrastructure—roads, lodging, well-thought-out business plans, skilled naturalists, community consensus-building techniques, awareness campaigns, etc. Many phrases, which are not synonymous with eco-tourism, are used in the name of the industry to draw 41 eco-tourists, including nature tourism, green tourism, bio-tourism, and many others (Goodwin, R. D., & Chaudhary, S. K. 2017). Research on the creation of sustainable tourism has been prompted by the impact of tourism on the environment. It is impossible to consider sustainable tourism in a vacuum. It is connected to and interconnected with other aspects of daily life, business, and society (Bedi, P., Tripathi, N. G., & Singh, H. B. 2019). Therefore, in order to achieve sustainable growth in tourism and position India as a global participant in the travel industry, the Central and State Governments, the corporate sector, and non-profit organisations must all play an active role (Chandrashekara & Nagaraju, 2014). Tourism is a multifaceted industry. The findings also suggest that there exists a noteworthy variation among the stakeholders in the tourist industry concerning their perceptions of the characteristics of sustainable tourism development in India (Chand & Dubey, 2013). Research on sustainable tourism is being actively conducted by academics from well-known travel destinations and their governments, and their contributions to the area have gained international recognition (Qian, Shen, & Law, 2018). In addition to providing visitors with a meaningful experience and maintaining a high degree of satisfaction, sustainable tourism should also increase visitors' understanding of sustainability issues and encourage the adoption of sustainable travel practices (WTO, 2005).

The present study, titled "Eco-Tourism and its Development in Tribal Regions of Jharkhand," delves into the exploration of ecotourism potential and its implications from the perspective of tribal communities in Jharkhand, focusing on Chamranga and Lapra villages. This Research aims to evaluate the biodiversity, landscapes, and natural attractions in these tribal regions to identify potential areas for ecotourism development. Additionally, the study seeks to understand the unique cultural heritage, traditions, and lifestyles of the tribal communities, emphasising their possible contribution to ecotourism experiences. Through a comprehensive analysis, the study assesses the potential socio-economic benefits of Ecotourism, including income generation, employment opportunities, and infrastructural development in tribal regions. Furthermore, the Research investigates how Ecotourism can be designed and managed to ensure minimal environmental impact while actively contributing to regional conservation efforts. It explores strategies for involving local tribal communities in the planning, executing, and managing ecotourism initiatives to ensure their active participation and stake in the benefits. Additionally, the study aims to raise awareness about the importance of sustainable Ecotourism among local communities, tourists, and stakeholders, proposing strategies for promoting environmental conservation and cultural preservation.

Methodology

The research study was conducted in Chamranga and Lapra villages, situated in the Ranchi district of Jharkhand, to explore ecotourism development in tribal regions. Both primary and secondary data sources were utilised for the study. Primary data collection involved personal interviews and well-structured questionnaires administered to three key stakeholder groups: village heads, officials from the Forest Department, and local villagers.

The interview schedule was tailored to gather insights on various aspects, including the current ecotourism activities in the villages, the potential for ecotourism development, challenges faced by the community, and their perspectives on integrating Ecotourism into broader community development goals. The Questionnaire aimed to assess the community's awareness of government policies related to Ecotourism and their readiness to embrace sustainable tourism practices.

Secondary data was obtained from diverse sources such as academic literature, official websites, government regulations, notifications, and materials from organisations like TRIFED. These secondary sources provided valuable

background information, policy insights, and data to complement the primary research findings, enriching the overall analysis of ecotourism development in Chamranga and Lapra villages.

Chamranga Village:

Located amidst the lush greenery of Jharkhand, Chamranga village is symbolic of the region's rich tribal heritage and biodiversity.

Home to indigenous communities with deep-rooted connections to the land, Chamranga offers a glimpse into traditional lifestyles, cultural practices, and sustainable livelihoods.

With its scenic beauty, diverse flora and fauna, and proximity to natural attractions such as forests, rivers, and waterfalls, Chamranga holds immense potential as an ecotourism destination.



Figure 1.: Map showing Chamranga Village

Source: Google Map

Lapra Village:

Situated in the heart of Jharkhand's tribal belt, Lapra village is renowned for its scenic beauty, serene surroundings, and vibrant cultural traditions.

The village is characterised by its close-knit community, traditional craftsmanship, and reverence for nature, making it an ideal setting for ecotourism experiences that showcase the intrinsic connection between people and their environment.

Lapra's tranquil ambience and proximity to ecologically significant areas like forests and hills make it a prime candidate for sustainable tourism initiatives that promote environmental conservation and community empowerment.

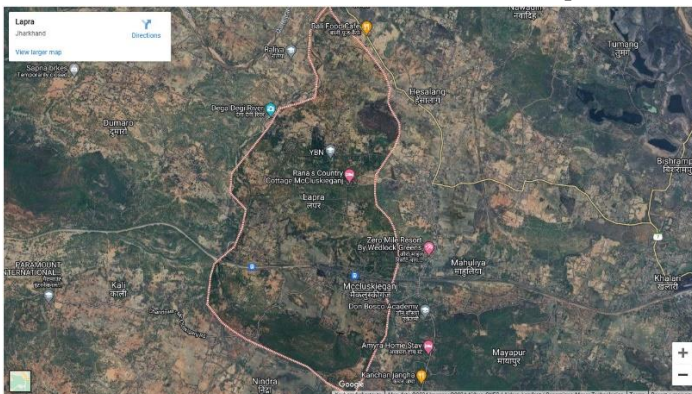


Figure 2: Map showing Lapra Village

Source: Google Map

The process of data collection for this study commenced with establishing communication channels with officials from the Forest Department through interviews. Given the comprehensive nature of the required information and the busy schedules of the officials, multiple meetings were arranged. These interactions proved instrumental in acquiring detailed insights into sustainable management practices, regulatory frameworks, and technological applications for monitoring ecotourism activities, particularly in Chamranga and Lapra villages.

Extensive interviews were conducted with forest department officials to deepen the understanding of ecotourism management and its impact on tribal communities. These conversations aimed to elucidate the department's role in overseeing ecotourism initiatives, including aspects related to community engagement, infrastructure development, and environmental conservation efforts.

Interviews were also conducted with village heads to gain firsthand insights into the local context and the influence of governmental interventions. Forest officials were approached to provide comprehensive lists of current government policies tailored to ecotourism development in tribal regions, shedding light on policy implementation and effectiveness in supporting local communities.

Comprehensive field study helped us to better understand the village settings and ecotourism practices. Additionally, villagers were encouraged to share photos depicting ecotourism activities, providing visual context to complement the research findings.

Structured questionnaires and interviews were conducted to gather insights from key stakeholders, including tribal villagers, tourism companies, and tourists. The Questionnaire covered various aspects such as perceptions of Ecotourism, economic opportunities, environmental conservation, and community involvement. The respondents displayed openness and cooperativeness during the interviews, offering valuable perspectives for the study's analysis and recommendations.

Analysis of the Research

The present study, titled "Eco-Tourism and its Development in Tribal Regions of Jharkhand," investigated the potential of eco-tourism as a sustainable development strategy in tribal communities. This research explores the natural and cultural resources available in tribal regions and examines how eco-tourism can be leveraged to generate income and promote community empowerment. The study identifies the drivers and barriers associated with eco-tourism development, focusing on the challenges faced by tribal entrepreneurs in initiating and sustaining eco-tourism initiatives. Feedback from selected stakeholders has been gathered to understand these challenges and to gather suggestions for improving eco-tourism infrastructure, promotion, and management. Additionally, the study assesses the impact of government policies on the socio-economic conditions of tribal communities engaged in eco-tourism activities, aiming to offer insights into how these policies can better support the sustainable development of eco-tourism in tribal regions. The present chapter has been discussed under the following sections:

➤ Profiling of Selected Tribal Villages in Jharkhand

The study includes detailed profiling of two selected villages in Ranchi District, namely Chamranga and Lapra. Key details of each village have been gathered and analyzed. Their details are as follows:

1. Chamranga Village: Chamranga, nestled in the tribal regions of Jharkhand, is a picturesque village located in the Chanho Block of Ranchi district.

Table 1: Demographic and Employment Profile of Chamranga Village.

Particulars	Total	Male	Female
Total No. of Houses	420	-	-
Population	2,300	1,150	1,150

Child (0-6)	380	200	180
Schedule Caste	10	5	5
Schedule Tribe	1,800	900	900
Literacy	63.50%	70.20%	56.80%
Total Workers	950	600	350
Main Worker	800	-	-
Marginal Worker	150	80	70

Source: (<https://www.censusindia2011.com>)

2 Lapra Village

Lapra Village is situated in the Burmu Block of Ranchi district, Jharkhand.

Table 2: Demographic and Employment Profile of Lapra Village

Particulars	Total	Male	Female
Total No. of Houses	450	-	-
Population	2,500	1,200	1,300
Child (0-6)	380	190	190
Schedule Caste	20	10	10
Schedule Tribe	2,050	1,000	1,050
Literacy	62.80%	72.50%	53.20%
Total Workers	950	600	350
Main Worker	750	-	-
Marginal Worker	200	120	80

Source: (<https://www.censusindia2011.com>)

Analyzing the demographic profile of Chamranga and Lapra villages, it's evident that residents are primarily engaged in farming and agriculture labor, with a wide age range spanning from 20 to 60 years and a mix of both male and female genders. For these communities, eco-tourism represents a promising avenue for economic empowerment and sustainable development. By harnessing their rich natural resources and cultural heritage, they can diversify their income streams and improve livelihoods.

Eco-tourism can create additional sources of income during off-peak agricultural seasons, reducing dependency on traditional livelihoods that may be vulnerable to climate change and market fluctuations. By investing in eco-friendly infrastructure and promoting responsible tourism practices, Chamranga and Lapra can ensure the long-term sustainability of their natural and cultural assets while maximizing economic benefits for residents.

Eco-tourism fosters community pride and empowerment by showcasing the intrinsic value of local traditions, knowledge, and customs. Through storytelling, traditional performances, and hands-on experiences, residents can actively participate in preserving and promoting their cultural heritage while forging meaningful connections with visitors from around the world.

➤ **Analysing how local tribal communities and Tourists can benefit from Eco-tourism.**

Eco-tourism offers a promising opportunity for income generation in tribal regions like Chamranga and Lapra villages in Jharkhand, where natural resources and cultural heritage abound. By shifting focus from traditional activities like Agriculture and Farming to immersive tourism experiences, such as:

1. Guided Nature Walks: Explore the lush forests and scenic trails surrounding Chamranga and Lapra villages. Places to visit include the dense woodlands near Chatti River, Bala river and the serene paths leading to Dega-degi Riverbed.

2. Birdwatching Tours: Head to Namodag Valley and Tengra and Nakta Pahad (hills) for excellent birdwatching opportunities, where you can spot a diverse array of bird species amidst their natural habitats.

3. Cultural Immersion: Experience the rich cultural heritage of Chamranga and Lapra villages by visiting Srava-Dharma Sthal, where you can witness a harmonious blend of religious diversity with a Church, Mosque, and Temple located in close proximity.

4. Village Homestays: Stay with local families in traditional homes in Chamranga and Lapra villages, immersing yourself in the authentic rural tribal lifestyle and participating in daily activities like farming and cooking.

5. Community Workshops: Participate in pottery and handicraft-making workshops organized by local artisans in Chamranga and Lapra villages, where you can learn traditional crafts like pottery and basket-weaving.

6. Outdoor Adventures: Embark on trekking expeditions to Tengra and Nakta Pahad (hills) and Tiru Fall, where you can enjoy stunning views of the surrounding landscapes and indulge in thrilling outdoor activities like camping and river rafting.

7. Culinary Experiences: Sample delicious local cuisine at homestays and community eateries in Chamranga and Lapra villages, featuring farm-fresh organic ingredients and traditional recipes passed down through generations.

8. Spiritual Retreats: Find serenity and spiritual rejuvenation at Srava-Dharma Sthal and the picturesque Sunrise-Sunset Viewpoint, ideal spots for meditation, yoga, and introspection.

9. Environmental Conservation Activities: Participate in tree planting drives and clean-up campaigns along the banks of Bala and Chatti River and Dega-degi Riverbed, contributing to the conservation of the region's natural beauty.

10. Photography Expeditions: Capture the breathtaking landscapes and cultural heritage of Chamranga and Lapra villages at scenic viewpoints like Sunrise-Sunset Viewpoint and Tengra and Nakta Pahad (hills), offering stunning photo opportunities at every turn.

11. Forest bathing: known as "Shinrin-yoku" in Japanese, is a practice that involves immersing oneself in nature, particularly forests, to enhance physical, mental, and emotional well-being. In Chamranga and Lapra villages, surrounded by lush greenery and dense forests, forest bathing offers a unique opportunity for visitors to reconnect with nature and experience its therapeutic benefits.

12. Mud House stay: In Chamranga and Lapra villages of Jharkhand, mud houses are a prevalent architectural feature, reflecting the traditional building practices of the local tribal communities. These houses are constructed using locally available materials such as mud, clay, straw, and sometimes bamboo. The process of building mud houses involves mixing these materials to form a sturdy yet environmentally friendly structure.

These eco-tourism activities serve as a catalyst for income generation and diversification among tribal communities in Chamranga and Lapra villages, offering sustainable livelihood opportunities while preserving the region's natural and cultural assets. Through active participation in tourism-related ventures, local residents can unlock their entrepreneurial potential, enhance their economic well-being, and build a more resilient future for themselves and future generation.

➤ **People awareness level with the eco-tourism practices and policies in the tribal regions of Jharkhand:**

Table 3. People awareness level with the eco-tourism practices and policies in the tribal regions of Jharkhand

Awareness level with the eco-tourism practices and policies	Village Head	Tribal Villagers	Tourists	Forest Official	Total (N=144)
	n1 =2	n2 =100	n3 =40	n4 = 2	N*
Not Familiar	0(0)	46(8)	7(17)	0(0)	53(36)
Very Familiar	0(0)	13(13)	6(15)	1(50)	20(13)
Somewhat Familiar	2(100)	41(79)	27(67)	1(50)	71(49)
n= Number of respondents n1+n2+n3 = N = Number of respondents Figure in parenthesis denotes percentages					

Table 4.4 presents the awareness levels of various stakeholders regarding eco-tourism practices and policies in the tribal regions of Jharkhand. Among village heads, there is a notable level of familiarity, with 100% reporting being somewhat familiar with eco-tourism practices and policies. In contrast, the majority of tribal villagers (79%) also express some level of familiarity, albeit lower than village heads. However, tourists and forest officials show varying degrees of awareness. While 15% of tourists and 50% of forest officials report being very familiar with eco-tourism practices and policies, a significant portion of tourists (17%) and forest officials (50%) indicate not being familiar at all.

This analysis suggests that there is generally a moderate level of awareness among stakeholders regarding eco-tourism practices and policies in the tribal regions of Jharkhand. However, there are disparities in awareness levels among different groups, with village heads and tribal villagers showing higher levels of familiarity compared to tourists and forest officials. This indicates a need for targeted awareness campaigns and capacity-building initiatives to ensure that all stakeholders are adequately informed about eco-tourism practices and policies, thereby fostering more effective collaboration and sustainable development in the region.

➤ **The key factors that make the village an attractive destination for eco-tourism:**

Table 4. key factors that make the village an attractive destination for eco-tourism

Factors	Village Head	Tribal Villagers	Tourists	Total (N=142)
	n1 =2	n2 =100	n3 =40	N*
Rich biodiversity	2(100)	34(34)	18(45)	54(38)
Cultural diversity	1(50)	56(56)	22(55)	79(55)
Scenic landscape	2(100)	76(76)	16(40)	94(66)
n= Number of respondents n1+n2+n3 = N = Number of respondents *Multiple responses thus total frequency exceeds N Figure in parenthesis denotes percentages				

Table 4.5 provides insights into the perspectives of village heads, tribal villagers, and tourists regarding factors influencing eco-tourism development in Chamranga and Lapra villages of Jharkhand. Rich biodiversity emerges as a key factor unanimously recognized by all groups, with 100% agreement among village heads and tourists and 34% agreement among tribal villagers. This indicates a shared understanding of the region's ecological significance and potential for eco-tourism. Cultural diversity also garners significant recognition, with 56% agreement among tribal villagers and 55% among tourists, showcasing the importance of indigenous heritage in attracting visitors. Additionally, scenic landscapes are highly valued by both village heads and tribal villagers, with 100% and 76% agreement respectively, highlighting the allure of the natural environment for eco-tourism activities.

Rich biodiversity

The deciduous Forests surrounding Chamranga and Lapra villages are teeming with indigenous trees such as sal and mahua, creating vital habitats for a variety of wildlife. From deer and wild boar to antelope and porcupine, the area supports a rich diversity of mammals and birds, providing ample opportunities for nature enthusiasts to observe and appreciate wildlife in its natural habitat.

The villages are also blessed with an abundance of plant species, including wildflowers and Medicinal herbs such as neem, tulsi, and ashwagandha, revered for their healing properties and integral role in traditional medicine practices. The rivers (Chatti River, Duga-dugi River) streams, and ponds that traverse the villages further enhance the biodiversity of the area, providing habitats for aquatic life and supporting lush vegetation along their banks. Residents and visitors alike benefit from the presence of these water bodies, which serve as sources of sustenance, recreation, and biodiversity.

Cultural diversity

Languages: The indigenous languages spoken in Chamranga and Lapra villages include languages such as Mundari, Ho, Santhali, and Kurukh, which are integral to the cultural identity of the local tribal communities.

Traditional Festivals: Residents celebrate a variety of traditional festivals, including Sarhul, Sohrai, Karma, and Tusu Parab. These festivals are deeply rooted in agricultural cycles and spiritual beliefs, marking occasions for communal celebrations, rituals, music, dance, and feasting.

Architectural Landscapes: The villages boast a diverse architectural landscape, ranging from traditional tribal dwellings made of locally-sourced materials to colonial-era structures like the Anglican Church and Graveyards, Anglo-Indian Bungalows. Each building reflects the region's rich history and cultural influences.

Culinary Traditions: Local cuisine in Chamranga and Lapra villages showcases a variety of indigenous ingredients and cooking techniques. Traditional dishes often feature staples such as rice, lentils, vegetables, and locally-sourced meats, reflecting a deep connection to the land and agricultural practices.

Handicrafts: Artisanal crafts such as weaving, pottery, basketry, and woodcarving are integral to the cultural identity of the villages. Skilled artisans create intricately-designed handicrafts using locally-sourced materials, showcasing the creativity and craftsmanship of the local community.

Scenic landscape

The scenic landscapes surrounding Chamranga and Lapra villages in Jharkhand boast a rich tapestry of natural beauty and cultural heritage, offering visitors a captivating journey through picturesque vistas and historical landmarks.

Bala, Chatti River and Dega-degi Riverbed: Flowing gracefully through the heart of Chamranga and Lapra villages, the Chatti River enchants visitors with its crystal-clear waters and verdant banks. The rhythmic melody of flowing water echoes through the surrounding forests, beckoning travelers to immerse themselves in the soothing embrace of nature.

Srava-Dharma Sthal: A unique convergence of religious diversity, Srava-Dharma Sthal houses a Church, Mosque, and Temple within close proximity. This harmonious coexistence of different faiths symbolizes the village's ethos of tolerance and unity, serving as a spiritual sanctuary for pilgrims and seekers alike.

Nakta and Tengra Pahad (hills): Majestic and awe-inspiring, Nakta and Tengra Pahad rise proudly above the surrounding landscape, offering panoramic views of verdant valleys and rolling hills. A trek to its summit promises adventure and discovery, with each step unveiling the secrets of this ancient land.

➤ **Challenges faced in promoting eco-tourism in tribal regions of Jharkhand:**

Table 5. Challenges faced in promoting eco-tourism in tribal regions of Jharkhand

Factors	Village Head	Tribal Villagers	Tourists	Total (N=142)
	n1 =2	n2 =100	n3 =40	N*
Lack of infrastructure	2(100)	82(82)	31(77.5)	115(88)
Limited awareness among tourists	2(100)	67(67)	24(60)	93(66)
Regulatory constraints	1(50)	32(76)	12(30)	45(32)
n= Number of respondents n1+n2+n3 = N = Number of respondents *Multiple responses thus total frequency exceeds N Figure in parenthesis denotes percentages				

In Chamranga and Lapra villages of Jharkhand, lack of infrastructure is a major concern for village heads, tribal villagers, and tourists, with 100% agreement among village heads, 82% among tribal villagers, and 77.5% among tourists. Limited awareness among tourists is also a significant challenge, recognized by 100% of village heads, 67% of tribal villagers, and 60% of tourists. Regulatory constraints are another concern, with 50% of village heads, 76% of tribal villagers, and 30% of tourists expressing agreement. Addressing these challenges, including infrastructure development, awareness building, and regulatory facilitation, is crucial for sustainable eco-tourism development in the region, unlocking the full potential of its natural and cultural assets.

Lack of infrastructure

Stakeholders highlighted the geographical challenges posed by the rugged terrain and remote location of the villages, making it difficult and expensive to construct essential infrastructure such as roads and bridges. Additionally, limited investment and attention from government authorities have historically resulted in inadequate funding for infrastructure development, leading to a lack of basic amenities like access to clean water and reliable electricity and services for the residents. Connectivity issues, including poor road networks and transportation links, further exacerbate the problem by isolating the villages and restricting access to urban centers and markets. Resource constraints, dependence on external funding, regulatory hurdles, and environmental considerations were also cited as challenges hindering infrastructure development.

Limited awareness among tourists

After engaging in discussions with stakeholders in Chamranga and Lapra villages of Jharkhand, it became apparent that limited awareness among tourists regarding eco-tourism stems from several underlying reasons. One prominent factor highlighted by stakeholders is the lack of promotional efforts to showcase the unique eco-tourism opportunities available in these villages. It was noted that insufficient advertising campaigns and outreach initiatives have resulted in low visibility among potential tourists. Stakeholders also emphasized the challenges related to information

accessibility. They mentioned the absence of comprehensive guides, brochures, and online resources detailing the eco-tourism initiatives, cultural events, and available amenities in Chamranga and Lapra villages. This limited access to information makes it difficult for tourists to plan visits to these destinations effectively.

Perception challenges were also acknowledged during the discussions. Stakeholders highlighted how misconceptions or stereotypes about tribal regions might influence tourists' decisions. Concerns regarding safety, infrastructure, or cultural differences may deter tourists from considering Chamranga and Lapra villages as viable eco-tourism destinations.

Regulatory constraints

Regulatory constraints are among the concerns voiced by tourists visiting the area. These constraints encompass a range of rules and regulations aimed at preserving the natural environment and cultural heritage while promoting responsible tourism practices. Some of the regulatory constraints mentioned include limitations on activities such as trekking, camping, or wildlife interaction in protected areas to prevent disturbance to the ecosystem. These constraints underscore the importance of adhering to guidelines that uphold environmental sustainability and respect the cultural sensitivities of the region.

There are also areas that have been affected by Naxalite insurgency, presenting unique challenges and considerations for tourism development. These Naxalite-affected regions may include certain areas within the villages or nearby forested areas where the presence of armed groups has historically disrupted governance, security, and development efforts.

Through effective communication and collaboration between stakeholders, it is essential to address these constraints in a manner that fosters responsible tourism and preserves the integrity of Chamranga and Lapra villages for future generations.

➤ sustainable practices considered important in eco-tourism:

Table 6. sustainable practices considered important in eco-tourism

Factors	Tourism companies	Forest Experts	Forest Officials	Total (N=8)
	n1 =2	n2 = 4	n3 = 2	N*
Waste reduction and recycling	2(100)	3(75)	2(100)	7(87)
Conservation of natural resources	2(100)	2(50)	2(100)	6(75)
Support for local communities	1(50)	4(100)	2(100)	6(75)
Preservation of local culture	2(100)	3(75)	1(50)	6(75)
Use of eco-friendly transportation	1(50)	1(25)	1(50)	3(37)
n= Number of respondents n1+n2+n3 = N = Number of respondents *Multiple responses thus total frequency exceeds N Figure in parenthesis denotes percentages				

Table 4.7 highlights key sustainable practices crucial for eco-tourism development in Chamranga and Lapra villages, as perceived by tourism companies, forest experts, and officials. Waste reduction and recycling are unanimously recognized as essential, with 87% agreement among respondents. Additionally, conservation of natural resources, support for local communities, and preservation of local culture are highly valued, each receiving 75% agreement. Eco-friendly transportation is acknowledged, albeit to a lesser extent at 37%. Effective implementation of these practices requires stakeholder collaboration, community engagement, and investment in eco-friendly infrastructure and responsible tourism behaviors. These efforts aim to minimize environmental impact, preserve biodiversity, and ensure the long-term sustainability of eco-tourism initiatives in the tribal regions.

Waste reduction and recycling

During conversations with stakeholders in Chamranga and Lapra villages of Jharkhand, I learned about the various waste reduction and recycling techniques employed to promote sustainable eco-tourism practices in the region. Here the tourists are served food in Eco friendly Dona- Pattal (Plates made of leaves) and earthen glass and pots. This practice minimizes the volume of waste, while facilitating recycling efforts.

Stakeholders also highlighted the importance of composting organic waste to produce nutrient-rich compost used to enhance soil fertility in agricultural activities.

Conservation of natural resources

In Chamranga and Lapra villages of Jharkhand, stakeholders employ various techniques to conserve natural resources and promote sustainable eco-tourism practices. Stakeholders prioritize the preservation of indigenous plant and animal species, promoting sustainable harvesting practices, and minimizing habitat destruction. The tourist are encouraged to plant the saplings of the sal/Mahua trees to contribute towards afforestation and this will give them a sense of pride towards conservation and a sense of belongingness to continue their visits to these area of eco-tourism again and again. Overall these efforts aim to safeguard the region's rich biodiversity and ensure the long-term viability of eco-tourism activities.

Support for local communities

The conversations with stakeholders from Chamranga and Lapra villages in Jharkhand, we gained insights into the various techniques used to support local communities through eco-tourism initiatives. One notable approach emphasized by stakeholders is community engagement, where residents actively participate in decision-making processes related to eco-tourism development. This involvement ensures that the community's needs and aspirations are considered, fostering a sense of ownership and empowerment.

Additionally, capacity-building programs are implemented to equip local residents with the skills and knowledge needed to engage effectively in eco-tourism activities. These programs cover areas such as hospitality, cultural preservation, and sustainable resource management, enabling community members to take on roles as guides, hosts, and entrepreneurs within the tourism sector.

Preservation of local culture

The discussions with stakeholders in Chamranga and Lapra villages of Jharkhand, we discovered various strategies employed to preserve the rich local culture within the context of eco-tourism. One prominent method involves showcasing traditional arts and crafts, where local artisans exhibit their talents and offer handmade products to visitors. These artisans play a crucial role in preserving indigenous craftsmanship while generating income for themselves and their communities.

Stakeholders emphasized the importance of cultural performances, including traditional dances and music, as essential components of the eco-tourism experience. Dances and music that contribute to the preservation of local culture include, Chhau and Domkach dance forms. Nagpuri music is popular in the sample tribal villages of

Jharkhand, featuring traditional instruments like mandar, Nagara and bansuri. These performances not only entertain tourists but also serve as a means of cultural expression and identity for the local communities.

Another notable approach is facilitating cultural immersion experiences, allowing visitors to engage in everyday activities like cooking traditional meals, participating in agricultural practices, and observing local rituals. These interactions enable tourists to gain firsthand insights into the cultural practices and customs of the tribal communities, fostering cross-cultural exchange and appreciation. Stakeholders highlighted the significance of preserving oral traditions and folklore by encouraging interactions with tribal elders and community leaders. These elders serve as repositories of cultural knowledge, sharing stories, myths, and rituals that have been passed down through generations.

➤ Contribution of eco-tourism in economic development of Community:

Table 7. Contribution of eco-tourism in economic development of Community

Factors	Tribal Villagers	Village Head	Tourism Companies	Total (N=104)
	n1 =100	n2 = 2	n3 = 2	N*
Employment generation	76(76)	2(100)	2(100)	80(76)
Income diversification	82(46)	1(50)	2(100)	85(81)
Small business opportunities	27(27)	1(50)	1(50)	29(27)
Infrastructure development	66(66)	2(100)	2(100)	70(67)
n= Number of respondents n1+n2+n3 = N = Number of respondents *Multiple responses thus total frequency exceeds N Figure in parenthesis denotes percentages				

The analysis of eco-tourism's economic impact in tribal regions of Jharkhand reveals key benefits as perceived by stakeholders. Firstly, employment generation is significant, with 76% of tribal villagers recognizing its importance, indicating poverty alleviation and empowerment. Income diversification is highlighted by 46% of villagers, enhancing resilience to economic fluctuations. Small business opportunities are noted, along with infrastructure development, acknowledged by 66% of villagers. Overall, eco-tourism contributes to economic development by creating jobs, diversifying income, fostering small businesses, and improving infrastructure, thus aiding poverty reduction and community well-being.

Employment Generation

Tribal villagers expressed a keen interest in the employment opportunities that eco-tourism can offer. Through interactions with tourism companies and village heads, it was highlighted that initiatives such as guided tours, hospitality services, and artisanal craftsmanship could create a significant number of jobs within the community. This not only fosters economic independence but also empowers individuals by providing avenues for skill development and professional growth.

Income Diversification

Discussions revealed that income diversification is seen as a pathway to resilience against economic uncertainties among tribal villagers. By engaging in eco-tourism activities, such as homestays, cultural performances, and selling locally sourced products [broom, Chattai (mat made from leaves), Dona and Pattal, Cane chairs etc.], villagers can supplement their traditional sources of income from agriculture and forestry. This diversification ensures a more stable financial foundation for households, reducing dependency on seasonal livelihoods and enhancing overall economic well-being.

Small Business Opportunities

Village heads and tourism companies emphasized the potential for small business growth within the eco-tourism sector. From setting up guesthouses and eateries to offering transportation services and organizing cultural events, there are ample opportunities for entrepreneurial ventures to thrive. By encouraging local entrepreneurship, eco-tourism fosters community development and self-sufficiency, enabling villagers to take ownership of their economic destinies.

Infrastructure Development

Stakeholders unanimously agreed on the transformative impact of eco-tourism on infrastructure development. As tourist arrivals increase, there is a growing demand for improved roads, accommodations, sanitation facilities, and recreational amenities. Through collaborative efforts between local authorities, businesses, and tourism stakeholders, infrastructure projects can be initiated to enhance the overall tourism experience while benefiting the entire community.

➤ **The Skill development programs recommend to enhance the participation of the local community in eco-tourism activities:**

Table 8. Skill development programs recommend to enhance the participation of the local community in eco-tourism activities

Factors	Tribal Villagers	Village Head	Total (N=102)
	n1 =100	n2 = 2	N*
Hospitality and customer service training	86(86)	2(100)	88(86)
Ecological conservation workshops	45(45)	1(50)	46(45)
Cultural awareness programs	56(56)	1(50)	57(55)
n= Number of respondents n1+n2 = N = Number of respondents *Multiple responses thus total frequency exceeds N Figure in parenthesis denotes percentages			

The analysis of Table 4.8 Skill development programs for eco-tourism in tribal regions of Jharkhand highlights key priorities identified by stakeholders. Hospitality and customer service training, recognized by 86% of tribal villagers and 100% of village heads, emerges as crucial for enhancing visitor experience. Additionally, ecological conservation workshops (45% tribal villagers, 50% village heads) and cultural awareness programs (56% tribal villagers, 50% village heads) are deemed valuable for promoting environmental sustainability and preserving indigenous culture. Investment in these programs can empower local communities to actively contribute to eco-tourism success while safeguarding the region's natural and cultural heritage for future generations.

Hospitality and customer service training

For hospitality and customer service training, stakeholders emphasized the importance of hands-on workshops led by experienced professionals. These workshops could be organized in collaboration with local tourism companies or hospitality institutes, providing practical training in communication, cultural sensitivity, and service excellence to enhance the tourism experience for visitors.

Ecological conservation workshops

In terms of ecological conservation workshops, stakeholders highlighted the need for interactive sessions focused on practical conservation techniques. These workshops could involve local experts leading activities such as tree planting, waste management, and wildlife conservation efforts. By actively involving the community in conservation activities, residents gain a deeper appreciation for their natural surroundings and become stewards of their environment.

Cultural awareness programs

Regarding cultural awareness programs, stakeholders emphasized the significance of celebrating the unique heritage of Chamranga and Lapra villages. These programs could include cultural festivals, art exhibitions, and storytelling sessions led by local elders. By showcasing their traditions and customs, the community can foster a sense of pride in their cultural identity while educating visitors about their heritage.

Conclusion and Suggestions

The study examines the involvement of tribal communities in Eco-tourism activities in Chamranga and Lapra Village and how they can benefit from it. Through a comprehensive analysis this study unravels the potential of eco-tourism as a vehicle for sustainable development in tribal communities, with a particular focus on Chamranga and Lapra villages. The tribal regions of Chamranga and Lapra in Jharkhand offer a unique blend of rich biodiversity, cultural diversity, and scenic landscapes, making them ideal destinations for eco-tourism. The forests teem with indigenous trees and wildlife, while the villages boast a vibrant cultural tapestry of languages, festivals, architecture, cuisine, and handicrafts. Scenic landmarks like rivers, mountains, waterfalls, and valleys add to the allure of the region, providing opportunities for serene exploration and adventure. These natural and cultural treasures create an immersive and unforgettable experience for visitors/tourists, highlighting the importance of preserving and promoting eco-tourism in tribal Jharkhand for future generations to enjoy.

The study Reveals that eco-tourism can be a game-changer for tribal communities in places like Chamranga and Lapra villages in Jharkhand. Instead of relying solely on farming, people can earn money by offering unique experiences to visitors. These experiences include things like guided nature walks, birdwatching tours, cultural immersion, and even staying in traditional mud houses. By doing these activities, locals can showcase their culture, protect the environment, and make a living. Plus, it's a win-win because tourists get to experience something special while helping the community thrive. Overall, eco-tourism opens up new opportunities for tribal villages, making life better for everyone involved.

Suggestions:

- **Investment in Infrastructure:** Prioritize infrastructure development to improve accessibility and basic amenities in the villages. This includes constructing roads, bridges, and utilities such as clean water and electricity, as well as enhancing transportation networks to connect the villages with urban centers and markets.
- **Promotional Efforts:** Increase awareness among tourists by implementing robust promotional campaigns showcasing the unique eco-tourism opportunities available in the region. Develop comprehensive guides, brochures, and online resources to provide tourists with detailed information about eco-tourism initiatives, cultural events, and available amenities in Chamranga and Lapra villages.
- **Community Engagement:** Involve local communities in eco-tourism planning and decision-making processes to ensure that their needs and aspirations are considered. Empower community members through capacity-building programs that equip them with the skills and knowledge needed to actively participate in eco-tourism activities, such as hospitality training and cultural preservation workshops.
- **Regulatory Support:** Work with government authorities to streamline regulations related to eco-tourism development, ensuring that they balance environmental conservation with tourism promotion. Provide guidance and support to stakeholders in adhering to regulatory requirements while fostering responsible tourism practices that minimize negative impacts on the environment and local communities.
- **Security Measures:** Address security concerns in Naxalite-affected areas by implementing measures to ensure the safety and well-being of tourists and local residents. Collaborate with law enforcement agencies to enhance security measures and create a conducive environment for tourism development in these regions.

References

- Ahsan, M. N. (2008). Ecotourism in Bangladesh: A new tool for economic development. *Journal of Socioeconomic Research and Development*, 5(3), 299-304.
- Baruah, P. (2018). Understanding Ecotourism and Sustainable Tourism: A Comprehensive. *International Journal of Management (IJM)*, 9(1).
- Bedi, P., Tripathi, N. G., & Singh, H. B. (2019). Smart tourism innovations for smart region, case of Jaipur metropolitan region, India. *Smart Metropolitan Regional Development: Economic and Spatial Design Strategies*, 491-535.
- Dhiman, M. C., & Dubey, A. K. (2011). *Sustainable Tourism Development in India*. Fennell, D. A. (2020). *Ecotourism*. Routledge.
- González Santa Cruz, F., Sánchez Cañizares, S. M., & López-Guzmán, T. (2011). Satisfacción laboral como factor crítico para la calidad: El caso del sector hostelero de la provincia de Córdoba-España. *Estudios y perspectivas en turismo*, 20(5), 1047-1068.
- Goodwin, R. D., & Chaudhary, S. K. (2017). Eco-tourism dimensions and directions in India: An empirical study of Andhra Pradesh. *Journal of Commerce and Management Thought*, 8(3), 436-451.
- Hameed, W. U., Basheer, M. F., Iqbal, J., Anwar, A., & Ahmad, H. K. (2018). Determinants of Firm's open innovation performance and the role of R & D department: an empirical evidence from Malaysian SME's. *Journal of Global Entrepreneurship Research*, 8(1), 1-20.
- Kiper, T. (2013). Role of ecotourism in sustainable development. *InTech*.
- Nagaraju, L. G., & Chandrashekara, B. (2014). Emergence of Tourism in Sustainable Growth of India. *International Journal*, 1(3), 30-36.
- Patel, R., Babady, E., Theel, E. S., Storch, G. A., Pinsky, B. A., St. George, K., ... & Bertuzzi, S. (2020). Report from the American Society for Microbiology COVID-19 International Summit, 23 March 2020: value of diagnostic testing for SARS-CoV-2/COVID-19. *MBio*, 11(2), 10-1128.

Qian, J., Shen, H., & Law, R.(2018). Research in sustainable tourism: A longitudinal study of articles between 2008 and 2017. *Sustainability*, 10(3), 590.

Shukla, P. S., & Shamurailatpam, S.D. (2024). Sustainable Tourism in India: An Integrative Approach for Economic Development and Poverty Alleviation. In *Strategic Tourism Planning for Communities: Restructuring and Rebranding* (pp. 121-141). Emerald Publishing Limited.

WTO. (2005). *Making Tourism More Sustainable-A Guide for Policy Makers* (English version).

Zhou-Grundy, Y. (2011). *Forecasting international regional tourist arrivals to China* (Doctoral dissertation, Victoria University).

https://tourism.jharkhand.gov.in/cms/Application/uploadDocuments/download/Document2_0170214_124311.pdf

<http://www.ranascountrycottage.com/>