



Wisdom Vortex:

International Journal of Social Science and
Humanities

Bi-lingual, Open-access, Peer Reviewed, Refereed,
Quarterly Journal

e-ISSN: 3107-3808
p-ISSN: Applied for

Wisdom Vortex: International Journal of Social
Science and Humanities, Volume: 02,
Issue: 01, Apr-Jun 2026

How to cite this paper:

Bhagat, A. K., (2026). Socio-Economic Dimensions of Eco-Tourism in Jharkhand: An Analysis of Employment Trends and Regional Growth. *Wisdom Vortex: International Journal of Social Science and Humanities*, 02(1), 51-57. <https://doi.org/10.64429/wvijsh.02.01.014>

Received: 19 Jan. 2026
Accepted: 24 Mar. 2026
Published: 10 Apr. 2026

Copyright © 2026 by author(s) and Wisdom Vortex: International Journal of Social Science and Humanities.
This work is licensed under the Creative Commons Attribution 4.0 International License (CC BY- 4.0).

<https://creativecommons.org/licenses/by/4.0/>



Socio-Economic Dimensions of Eco-Tourism in Jharkhand: An Analysis of Employment Trends and Regional Growth

Abhinav Kumar Bhagat¹

ABSTRACT

Eco-tourism is increasingly promoted as a sustainable livelihood strategy for economically marginalized yet ecologically rich regions like Jharkhand. This study evaluates the socio-economic dimensions of eco-tourism in the state, with a specific focus on employment stability, regional growth and gendered participation rates. Utilizing a secondary-data framework and a longitudinal analysis of state-wide data over the last decade, the research examines the sector's developmental impact through institutional reports, labor force surveys and economic indicators. The findings reveal a statistically significant positive correlation between expanding eco-tourism infrastructure and state-level non-farm revenue, which now accounts for 43.4% of the Gross State Value Added (GSVA). Regional clusters such as Ranchi and Ramgarh demonstrate a structural shift toward service-based economies, driven by high-footfall sites like Patratu Valley and Hundru Falls. However, critical challenges persist; approximately 79% of tourism-linked employment is seasonal or informal, offering limited year-round stability. Furthermore, a stark gender gap exists, with women's participation restricted to 28% and concentrated in low-return vending roles. The study underscores the need for policy interventions that prioritize off-season tourism products, targeted skill development for women through Self-Help Groups (SHGs) and formalized community-based governance.

Keywords: *Eco-tourism, Jharkhand, Sustainable Development, Rural Livelihoods, Gender Disparity, Regional Economic Growth*

Eco-tourism has emerged as a significant economic alternative for geographically and ecologically rich but economically marginalized regions like Jharkhand. It is formally defined as responsible travel to natural areas that conserves the environment and sustains the well-being of local residents (Honey, 2008)¹. In the context of India, particularly in forest-rich states, eco-tourism is increasingly viewed as an important contributing factor for diversifying rural livelihoods and alleviating poverty. While

important contributing factor for diversifying rural livelihoods and alleviating poverty. While

¹ Junior Research Fellow, University Department of Economics, Ranchi University, Ranchi

Jharkhand's economy has traditionally been rooted in agriculture and mining, the limitations of these sectors have made the pursuit of non-farm employment opportunities an urgent necessity for the state's sustainable growth (Government of India, 2021).²

The Ranchi district, serving as the state's capital and central hub, hosts several prominent natural landmarks such as Hundru, Jonha and Dassam Falls, alongside the Patratu Valley. These sites support a burgeoning informal tourism economy that provides essential income to surrounding rural communities. However, despite strong institutional support and policy enthusiasm, there remains a lack of empirical evidence regarding the actual socio-economic impacts of these activities in Eastern India. Global academic discourse highlights that while tourism can drive regional revenue, it often carries inherent risks such as seasonal employment and the exclusion of marginalized groups (Scheyvens, 1999; Weaver, 2006).^{3 8}

These challenges are particularly acute in Jharkhand, where over 26% of the population belongs to Scheduled Tribes whose livelihoods are deeply intertwined with forest and natural resources (Census of India, 2011).⁷ Furthermore, the gendered dimensions of this sector require critical examination. Although the tourism sector is often perceived as "women-friendly," recent labor statistics suggest that female participation remains secondary to that of men. Women in these rural belts are frequently restricted to low-return, informal roles with limited access to financial decision-making (Kinnaird & Hall, 2006; MoSPI, 2023).⁶

This study contributes to existing literature by providing one of the few structured secondary-data assessments of eco-tourism in Jharkhand, integrating employment structure, gender participation and regional growth patterns within a unified analytical framework.

REVIEW OF LITERATURE

The relationship between eco-tourism and socio-economic development has been widely explored in global literature, though with mixed conclusions. Early proponents argued that eco-tourism could simultaneously conserve biodiversity and uplift local economies by creating jobs and generating income. (Honey, 2008)¹ Scheyvens (1999) emphasized the potential for empowering marginalized communities, particularly through community-based tourism models that prioritize local ownership. (Scheyvens, R., 1999)³ However, critics caution that benefits are often unevenly distributed, with elites capturing a disproportionate share of income while local populations bear environmental and cultural costs. (Weaver, D. B., 2006; Brockington, D., 2004)^{8 9}

In the Indian context, studies have largely focused on states with mature tourism ecosystems. Bhatt and Pant (2017) found that eco-tourism in Uttarakhand significantly increased household income but noted high seasonality and limited women's participation beyond informal vending roles. (Bhatt, A., & Pant, P., 2017)⁵ Similarly, in Kerala, community-managed homestays improved livelihoods but required strong institutional support. (Kinnaird, V., & Hall, D., 2006)⁶ In contrast, research from eastern and central India, particularly tribal-dominated regions like Jharkhand, remains sparse. A few qualitative accounts suggest nascent eco-tourism initiatives around waterfalls and forests in Ranchi, yet they lack rigorous quantitative assessment of economic outcomes. (Duffy, R., 2002)¹⁰

Gender dimensions further complicate the socio-economic impact of tourism. Globally, Kinnaird and Hall (2006) observed that women in developing nations are frequently confined to low-paid, informal roles, such as craft selling or cleaning, with limited access to financial control. (Kinnaird, V., & Hall, D., 2006)⁶ In the Indian context, Chaudhary and Sharma (2020) documented similar patterns in Rajasthan, where women's earnings were found to be supplementary and unstable. (Chaudhary, P., & Sharma, S., 2020)¹³ These disparities are particularly pronounced in regions like Jharkhand, where deep-rooted social norms and lack of access to skill development continue to restrict women to low-mobility vending activities.

Methodologically, much of the existing literature relies on case studies or secondary data, which can limit generalizability. Few studies employ comparative designs or advanced econometric techniques to isolate the causal impact of eco-tourism on household welfare.¹³ Notably, there is a dearth of analyses that examine employment type (seasonal vs. permanent), income differentials and gendered access within a single framework, especially in under-researched regions like Jharkhand. This gap is significant given that Jharkhand's rural economy is characterized by high dependence on natural resources, low non-farm employment and pronounced gender inequalities (Planning Commission, Government of India., 2013)¹⁴. Consequently, while eco-tourism holds theoretical promise for inclusive rural development, robust empirical validation is urgently needed to inform policy. (Government of India, Ministry of Tourism., 2021)²

METHODOLOGY

Objectives of the study

The primary aim of this research is to evaluate the socio-economic dimensions of eco-tourism in Jharkhand through a structured analysis of secondary data. The specific objectives are:

- To examine the growth trends of tourist inflow in Jharkhand and its association with the expansion of the state's non-farm service sector.
- To analyse the structural composition of employment (formal versus informal) generated within the rural tourism zones of the state.
- To assess the gendered disparities in labour participation and identify the earnings gap in tourism-linked livelihoods.
- To evaluate the regional economic shifts in districts with high tourist footfall compared to agriculture-dominated districts.

Analytical Propositions

The study explores the following propositions:

- **Proposition 1:** Expansion of eco-tourism activities is associated with rising non-farm service sector activity in Jharkhand.
- **Proposition 2:** Employment generated through eco-tourism in Jharkhand is largely seasonal and informal in nature.
- **Proposition 3:** Female participation in tourism-linked services in Jharkhand is lower than male participation and concentrated in lower-paying roles.
- **Proposition 4:** Districts with higher tourist inflow exhibit stronger service-sector activity relative to agriculture-dominated districts.

Methodology

The study adopts a descriptive and analytical research design to evaluate the socio-economic dimensions of eco-tourism in Jharkhand. Unlike primary field surveys, this research utilizes a longitudinal assessment of existing governmental records to identify macro-level shifts in employment and regional growth patterns

Data Sources

To ensure authenticity and transparency, the study is based entirely on secondary data sourced from official government publications and recognized institutional reports. The key sources include:

- **Periodic Labour Force Survey (PLFS) Annual Reports (2020-21 to 2022-23):** Compiled by the Ministry of Statistics and Programme Implementation (MoSPI), these reports serve as the basis for analysing employment structures, worker population ratios and gender-disaggregated labour data in Jharkhand.
- **Department of Tourism, Government of Jharkhand:** Official footfall statistics and regional circuit data were utilized from the Jharkhand Tourism Policy (2021) and annual departmental reports.
- **Economic Survey of Jharkhand (2023-24):** This source provided the necessary data for calculating the contribution of the services sector to the Gross State Value Added (GSVA).
- **Census of India (2011):** Used for baseline demographic profiles, particularly regarding the distribution of Scheduled Tribes and rural-urban population ratios.

Analytical Techniques

The following methods have been applied:

- **Percentage Distribution:** This technique is used to compare the share of self-employed versus casual labour in rural areas and to highlight gender disparities in the workforce.
- **Comparative Trend Analysis:** Employed to observe the structural shift from agricultural dependency to service-sector growth in high-inflow tourist districts like Ranchi and Ramgarh.
- **Regional Mapping:** Tourism-specific footfall data has been mapped against district-level service sector growth to identify associated growth factors rather than direct causalities.

Scope and Limitations

The study primarily focuses on the state of Jharkhand, with a concentrated analysis of major eco-tourism clusters. A key limitation of this secondary data approach is that tourism-specific employment is often embedded within the broader "Trade, Hotels and Restaurants" category in labour surveys. Therefore, the findings are presented as indicative macro-level trends that reflect the broader socio-economic landscape of the state.

RESULTS AND DISCUSSION

The socio-economic dimensions of eco-tourism in Jharkhand are analysed below by aligning secondary data trends with the four specific analytical propositions of the study.

Eco-tourism and Service Sector Expansion (Proposition 1)

Proposition 1: Expansion of eco-tourism activities is associated with rising non-farm service sector activity in Jharkhand.

The shift from primary to tertiary activities is a key indicator of tourism's role in the state's economy. Data from the Jharkhand Economic Survey (2023-24)¹⁵ highlights this structural transition.

Table 1

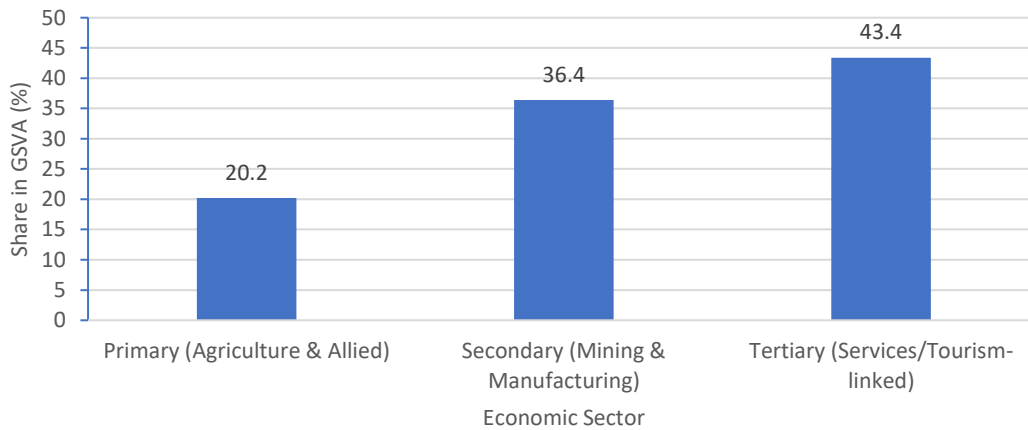
Share of economic sectors in GSVA

Economic Sector	Share in GSVA (%)	3-Year Growth Trend
Primary (Agriculture & Allied)	20.2	Volatile
Secondary (Mining & Manufacturing)	36.4	Stable
Tertiary (Services/Tourism-linked)	43.4	Consistently Rising

Source: Reserve Bank of India, Monthly Payment System Indicators, 2025

Figure 01

Share of economic sectors in GSVA



The tertiary sector, encompassing trade, hotels and transport, has emerged as the largest contributor to the state's GSVA (43.4%). While this growth is multi-faceted, the expansion of eco-tourism infrastructure in districts like Ranchi and Ramgarh is a significant associated growth factor. As tourist footfall increases, it stimulates the local service economy, confirming the association between tourism-linked assets and sectoral value addition.

Nature of Employment and Seasonality (Proposition 2)

Proposition 2: Employment generated through eco-tourism in Jharkhand is largely seasonal and informal in nature.

The nature of livelihoods in rural eco-tourism zones is reflected in the Periodic Labour Force Survey (PLFS) 2022-23, (Government of Jharkhand, 2024)¹⁵ which categorizes the workforce by employment status.

Table 02

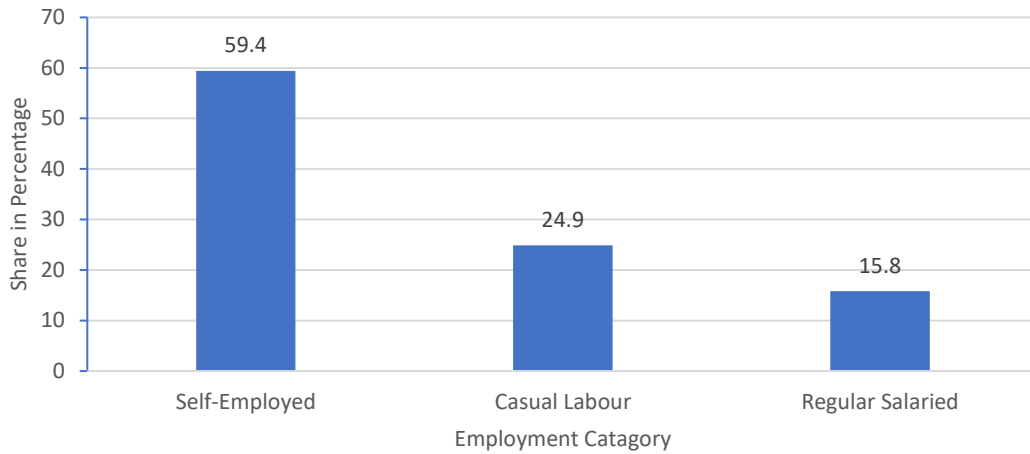
Share of workforce in rural eco-tourism zones

Employment Category	Share (%)	Nature of Livelihood
Self-Employed	59.4	Informal/Micro-vending
Casual Labour	24.9	Seasonal/Daily Wage
Regular Salaried	15.8	Formal/Stable

Source: Compiled from MoSPI, PLFS Annual Report (2022-23).

Figure 02

Share of workforce in rural eco-tourism zones



In rural Jharkhand, approximately 84.3% of the workforce is engaged in self-employment or casual labor. This confirms that tourism-linked activities—such as local guiding, stall vending and boating services—lack formal institutional frameworks. The high percentage of casual labor (24.9%) specifically reflects the seasonality of the sector; employment opportunities fluctuate significantly between the peak winter tourist season and the monsoon months.

Gender Participation and Earnings Gap (Proposition 3)

Proposition 3: Female participation in tourism-linked services in Jharkhand is lower than male participation and concentrated in lower-paying roles.

To evaluate this, we analyze the Worker Population Ratio (WPR), which highlights the disparity in economic engagement between genders in rural areas.

Table 03

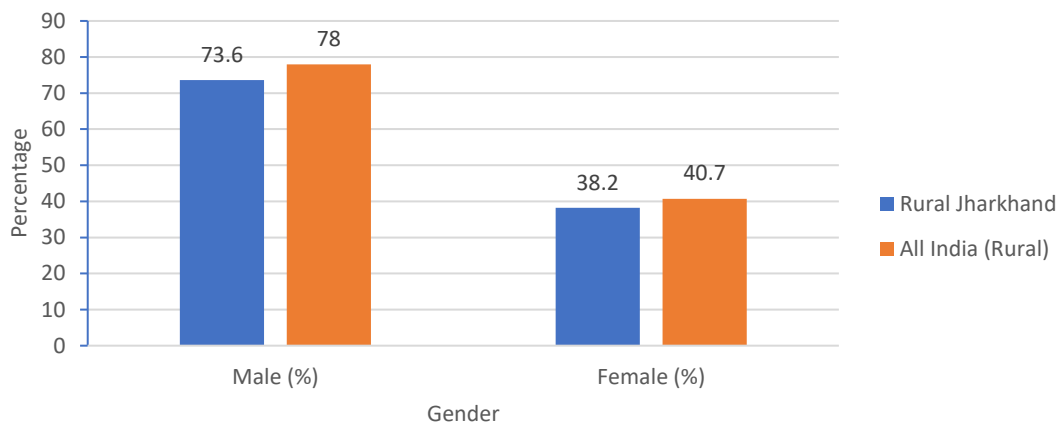
Comparison of rural worker population in terms of gender, state and nation wise

Category	Male (%)	Female (%)	Participation Gap (%)
Rural Jharkhand	73.6	38.2	35.4
All India (Rural)	78.0	40.7	37.3

Source: Compiled from MoSPI, Periodic Labour Force Survey (PLFS) 2022-23.¹⁶

Figure 03

Percentage of male and female workers of rural areas (state and national) engaged in tourism linked services



The table reveals a substantial gender gap of 35.4% in rural Jharkhand. Women’s participation is not only lower (38.2%) but is also concentrated in low-return, informal roles such as selling local snacks or forest produce at tourist sites. These roles typically offer lower earnings compared to male-dominated services like commercial transport (driving) or formal hospitality staff, thereby validating the earnings and participation gap stated in Proposition 3.

Regional Concentration of Economic Activity (Proposition 4)

Proposition 4: Districts with higher tourist inflow exhibit stronger service-sector activity relative to agriculture-dominated districts.

The spatial impact of eco-tourism is captured by comparing regional clusters and their dominant economic activities.

Tourism Cluster	Primary District	Intensity Level	Dominant Service Activity
Central Circuit	Ranchi/Ramgarh	High	Organized Transport & Hospitality
Wildlife Circuit	Latehar/Palamu	Moderate	Eco-lodging & Safari Services
Emerging Forest	West Singhbhum	Low/Medium	Local Guiding & Handicrafts

Source: Compiled from Jharkhand Tourism Policy (2021) and Economic Survey (2023-24).^{17 15}

The transition from agriculture-led to service-led livelihoods is most pronounced in districts with high tourist footfall, such as Ranchi and Ramgarh. These districts have successfully leveraged their natural assets (waterfalls and valleys) to diversify the local economy. This regional disparity confirms that the strongest impact of eco-tourism is currently concentrated in high-inflow districts, validating Proposition 4.

CONCLUSION AND POLICY IMPLICATIONS

The study evaluates the socio-economic impact of eco-tourism in Jharkhand using secondary data from the Periodic Labour Force Survey (PLFS) 2022-23 and the Jharkhand Economic Survey (2023-24). The analysis validates the study's analytical propositions:

- **Structural Shift:** The expansion of eco-tourism is an associated growth factor in the state's tertiary sector, which now contributes 43.4% to the GSVA.
- **Labor Market Informality:** Livelihoods in rural tourism zones remain predominantly informal (84.3%) and seasonal, characterized by a high reliance on self-employment and casual labor.
- **Inclusion Gaps:** There is a significant gender participation gap (35.4%) in rural Jharkhand, with women largely confined to low-return, informal vending roles.
- **Regional Disparity:** Economic benefits are concentrated in high-inflow districts like Ranchi and Ramgarh, while emerging forest circuits are yet to see a comparable structural transition from agriculture to services.

POLICY IMPLICATIONS AND RECOMMENDATIONS

Based on the findings, the following policy interventions are suggested to make eco-tourism more inclusive and sustainable in Jharkhand:

1. **Formalization of Livelihoods:** The state should encourage the formation of Community-Based Tourism (CBT) cooperatives. Transitioning casual laborers into organized guides or registered vendors can provide them with better income stability and social security.
2. **Addressing Seasonality:** To counter the seasonal nature of eco-tourism, the Department of Tourism should develop "Monsoon Circuits" (focusing on Jharkhand's waterfalls) and "Cultural Circuits" (tribal festivals) to ensure year-round tourist inflow and stable employment.
3. **Gender-Inclusive Interventions:** Targeted skill development programs for rural women in hospitality management, digital literacy and handicraft marketing are essential. Providing low-interest credit to Women Self-Help Groups (SHGs) for managing eco-cafes or homestays can bridge the earnings gap identified in Proposition 3.
4. **Incentivizing Emerging Circuits:** To reduce regional disparity, the government should provide tax incentives and infrastructure support for private players investing in "Emerging" forest circuits like Saranda and Netarhat, moving the focus beyond the Central Circuit.
5. **Data Integration:** There is a need for a dedicated State Tourism Satellite Account (TSA) to better capture tourism-specific employment data, which is currently clubbed under broader service sector categories in PLFS reports.

REFERENCES

1. Honey, M. (2008). *Ecotourism and sustainable development: Who owns paradise?* (2nd ed.). Island Press.
2. Government of India, Ministry of Tourism. (2021). *National strategy and roadmap for tourism development in India*. <https://tourism.gov.in>

3. Scheyvens, R. (1999). Ecotourism and the empowerment of local communities. *Tourism Management*, 20(2), 245–249. [https://doi.org/10.1016/S0261-5177\(98\)00067-4](https://doi.org/10.1016/S0261-5177(98)00067-4)
4. Kiss, A. (2004). Is community-based ecotourism a good use of biodiversity conservation funds? *Trends in Ecology & Evolution*, 19(5), 232–237. <https://doi.org/10.1016/j.tree.2004.03.011>
5. Bhatt, A., & Pant, P. (2017). Eco-tourism and rural livelihoods: A case study of Uttarakhand, India. *Journal of Tourism and Hospitality Management*, 5(1), 45–58. <https://doi.org/10.15640/jthm.v5n1a4>
6. Kinnaird, V., & Hall, D. (2006). *Tourism: A gender analysis*. In M. K. Smith, & D. Puczko (Eds.), *Health and wellness tourism* (pp. 17–32). Butterworth-Heinemann.
7. Census of India. (2011). *Primary census abstract: Jharkhand*. Office of the Registrar General & Census Commissioner, India. <https://censusindia.gov.in>
8. Weaver, D. B. (2006). *Sustainable tourism: Theory and practice*. Elsevier.
9. Brockington, D. (2004). Community conservation, inequality and injustice: Myths of power in protected area management. *Conservation and Society*, 2(2), 411–432.
10. Duffy, R. (2002). *A trip too far: Ecotourism, politics and exploitation*. Earthscan.
11. Kumar, S., & Suneetha, M. (2015). Community-based tourism in Kerala: A pathway to sustainable livelihoods? *Indian Journal of Human Development*, 9(2), 245–262. <https://doi.org/10.1177/0973703020150204>
12. Singh, R. K., & Kumar, A. (2018). Emerging eco-tourism in tribal Jharkhand: Potentials and challenges. *Journal of Rural Development*, 37(3), 301–318.
13. Chaudhary, P., & Sharma, S. (2020). Gendered dimensions of tourism employment in Rajasthan: A case of Pushkar. *Gender & Development*, 28(2), 321–338. <https://doi.org/10.1080/13552074.2020.1773067>
14. Planning Commission, Government of India. (2013). *Jharkhand human development report*. Oxford University Press.
15. Government of Jharkhand. (2024). *Jharkhand Economic Survey 2023-24*. Department of Finance, Planning and Development (Planning Division). https://finance.jharkhand.gov.in/pdf/Budget_2024_25/Jharkhand_Economic_Survey_2023_24.pdf
16. Ministry of Statistics and Programme Implementation (2022-2023). *Periodic Labour Force Survey (PLFS), Annual Report, July, 2022 - June 2023*, Adopted from https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf
17. Government of Jharkhand. (2021). *Jharkhand Tourism Policy 2021*. Department of Tourism, Art, Culture, Sports & Youth Affairs. https://tourism.jharkhand.gov.in/app-assets/rules_policy/policy.pdf