

# INTERNATIONAL CONFERENCE **TOWARDS A PROSPEROUS AND INCLUSIVE JHARKHAND** VISION AND STRATEGIES

11-13 DECEMBER 2025, RANCHI

## **BOOK OF ABSTRACTS**

*Organised by*

- Institute for Human Development, Ranchi
- Shri Krishna Institute of Public Administration, Ranchi



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Designer

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# International Conference on **TOWARDS A PROSPEROUS AND INCLUSIVE JHARKHAND** Vision and Strategies

## **1. BACKGROUND AND ACHIEVEMENTS**

Carved out of Bihar in 2000, Jharkhand is celebrating its 25th anniversary—its Silver Jubilee—in December 2025. Endowed with abundant mineral resources and a vibrant tribal cultural heritage, the state has made significant strides over the past two and a half decades. From economic growth to improvements in infrastructure, such as roads, electricity, schools, and healthcare, Jharkhand's development journey reflects both notable achievements and enduring challenges.

In recent years, the state's economy has demonstrated resilience and steady progress across key development indicators. Jharkhand's Gross State Domestic Product (GSDP) is estimated to grow by 6.7% in 2024–25 and is projected to grow by 7.5% in 2025–26, placing it among India's faster-growing states. Per capita income has increased from Rs. 41,000 in 2011–12 to nearly Rs. 65,000 in 2023–24 at constant prices (approximately Rs. 1,05,000 at current prices). Workforce participation among individuals aged 15 and above rose from 57% in 1999–2000 to 63% in 2023–24.

Human development indicators have also shown improvement. The incidence of multidimensional poverty, which reflects deprivations in health, education, and living standards, fell from over 42% in 2005–06 to below 29% by 2019–21. Access to basic infrastructure and services has expanded across both urban and rural areas. The literacy rate has reached 74.3% (as per the latest NSSO estimates), with school enrolment registering substantial growth. Enrolment at the secondary level rose from 40.4% in 2000–01 to 71.7% in 2021–22, and at the higher secondary level from 15.2% to 46.3%.

Health outcomes have also improved significantly. Between 2005–06 and 2019–21, infant mortality declined from 68.7 to 36.8 per 1,000 live births. Undernutrition fell from 56.5% to 39.4%, wasting from 32.3% to 22.4%, and child stunting from 49.8% to 39.6%. These improvements have been driven not only by economic growth but also by various livelihood and social programmes, such as the National Rural Livelihoods Mission (NRLM), Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Public Distribution System (PDS) and Pension schemes. Last year, the Government of Jharkhand introduced the *Maiya Samman Yojana*, a universal cash transfer scheme for women, which is expected to significantly enhance the lives and livelihoods of not only women, but of entire households.

## 2. ISSUES AND CHALLENGES

Despite these advances, Jharkhand continues to face major development challenges. Its per capita income remains around 60% of the national average. Poverty persists, especially in rural and tribal areas, where the Multidimensional Poverty Index (MPI) is much higher (39.9%) compared to urban areas (8.7%). While women's workforce participation has improved, it still lags behind that of men (50% vs. 77%), and the majority of employed women (77%) are engaged in low-paying, subsistence-level agricultural work.

Opportunities for quality employment in high-value sectors such as services and manufacturing remain limited. Only 13% of the workforce is in regular salaried jobs, and among Scheduled Tribes, this figure is just about 9%. Less than 10% of the workforce is employed in the organised sector, well below the national average. Youth unemployment is especially high among those with higher education, particularly graduates and above.

Despite being rich in mineral resources and hosting some major industries such as Bokaro Steel and TISCO, local economic development remains limited. A large share of the population is still engaged in low-productivity subsistence agriculture, which lacks diversification and offers poor returns, including from non-timber forest products (NTFPs).

Educational disparities are quite significant. The male literacy rate stands at 83%, while the female literacy rate is just 64.7%. Dropout rates, especially among girls, remains high, and access to higher education is limited. Jharkhand's gross enrolment ratio in higher education is just 18.6%, well below the national average of 28.4% (2021–22).

Maternal and child health indicators continue to lag, with nearly 40% of children still suffering from malnutrition. Healthcare infrastructure is unevenly distributed, particularly in rural and tribal areas.

Along with the challenges mentioned above, significant demographic advantage of the state also lies ahead. With 46.5% of the population under the age of 25, Jharkhand has a unique opportunity to harness a demographic advantage. Along with Bihar, it has a longer window of demographic advantage compared to most Indian states. However, 31% of its youth are currently not in education, employment, or training (NEET). High levels of youth migration, driven by the lack of quality local employment, underscore the urgency of addressing this issue.

## 3. VISIONING A BETTER FUTURE

As Jharkhand celebrates its Silver Jubilee, the state stands at a critical juncture. This is a moment to craft a bold, inclusive, and forward-looking development agenda. This international conference aims to provide a platform to reflect on Jharkhand's progress, assess the challenges ahead, and co-create a shared vision for its future.

Organized by the Institute for Human Development (IHD), Ranchi, in collaboration with the Shri Krishna Institute of Public Administration, this conference convenes national and international experts, senior policymakers, representatives from the industry, development practitioners, and civil

society organizations to share research insights and engage in meaningful dialogue aimed at formulating actionable strategies for Jharkhand's future development.

#### **4. KEY THEMES FOR DELIBERATIONS**

- Accelerating Economic Growth and Human Development
- Diversifying Agriculture and Enhancing Income from NTFPs
- Promoting Inclusive Urbanisation and Modern Infrastructure
- Reducing Regional and Social Inequities
- Harnessing the Demographic Dividend through Quality Employment
- Improving Education Quality, Expanding Digital Learning, and Access to Higher Education
- Strengthening Health Systems
- Enhancing Food Security and Nutrition, Especially for Women and Children
- Strengthening Livelihoods and Social Protection Programmes
- Enriching the Cultural and Literary Heritage of Local and Tribal Communities
- Empowering Tribal Communities as Active Partners in Development
- Addressing Climate Change and Promoting Green and Resilient Development
- Mobilising and Managing Resources for Inclusive and Sustainable Growth
- Strengthening Public Institutions, Serviced Delivery and Ensuring Participatory Development

#### **5. ORGANISERS AND PARTICIPANTS**

The conference is hosts around 150 participants, including researchers, researchers, relevant government officials, industry representatives, development professionals, and civil society representatives. Approximately 50 to 60 domain experts from India and abroad have been invited to contribute. The conference is bilingual, with presentations delivered in either English or Hindi.

The programme features keynote lectures, thematic sessions, panel discussions, and policy roundtables.

#### **Organising Institutions**

The Institute for Human Development (IHD), an ICSSR Recognised Category Social Science Research Institution, has a strong track record in research on livelihoods, employment, gender, health, education and other human development issues across India. IHD has an Eastern Regional Centre located at Ranchi with focus on tribal and Jharkhand development issues and has extensively worked in the state. The Shri Krishna Institute of Public Administration (SKIPPA) is Jharkhand's apex government training institute. The Government of Jharkhand will also be invited to collaborate as a key organising partner.

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## 6. KEY OUTPUTS

The conference expects to produce concrete knowledge outputs and policy recommendations which can contribute in accelerating Jharkhand's journey towards inclusive and sustainable development. It will promote collaboration across government, research institutions, civil society, and the private sector. Key outputs will include:

- A network of individuals and organisations interested in the development of Jharkhand
- A report of the important conference deliberations including key recommendations for various stakeholders
- A series of Policy Briefs summarising key findings and recommendations
- An Edited Volume documenting Jharkhand's development journey, current challenges, and future pathways which will be a valuable knowledge resource on Jharkhand.



# **Plenary Session**







## PLENARY SESSION 1

### Trajectory of Twenty-Five Years of Development of Jharkhand

#### CONTEXT

Established in 2000, Jharkhand is one of India's youngest mineral-rich states, now completing twenty-five years of its development journey. This period has been shaped by a complex interplay of economic opportunities, social transitions, environmental pressures, and governance reforms. With nearly 40% of India's mineral wealth, substantial forest cover, and a culturally diverse population that includes a significant Scheduled Tribe presence, Jharkhand's development pathway differs markedly from other states created around the same time.

Over the last two and a half decades, Jharkhand has experienced significant industrialisation, infrastructure expansion, and service-sector development. At the same time, persistent challenges, such as regional disparities, deficits of human development, environmental vulnerabilities, and institutional capacity constraints have affected growth rates and inclusiveness. As the state enters its next phase of development planning, a rigorous, evidence-based analysis of its socio-economic transformation since 2000 is imperative.

This plenary session will seek to offer an academic and policy-based overview of Jharkhand's development trajectory, drawing from empirical research, sectoral assessments, and comparative experiences with other Indian states and global experience in resource-based development.

#### KEY ISSUES FOR DISCUSSION

##### Growth Patterns and Structural Transformation

- Trends in GSDP growth across agriculture, industry, and service sector.
- Level of economic diversification and labour mobility across sectors.

##### Human Development and Social Outcomes

- Improvements in health indicators, education outcomes, gender equality, tribal welfare, and nutrition.
- Persistent disparities linked to geography, ethnicity, and socio-economic status.

### **Resource Dependence and Environmental Sustainability**

- Long-term implications of mineral-led growth, including its effects on regional development, human capital formation, and economic diversification.
- Environmental and governance challenges involving land use, forest management, displacement, and ecological degradation, and the need to balance industrial growth with sustainability.

### **Governance, Institutions, and Public Service Delivery**

- Performance of decentralised governance and community-based institutions.
- Trends in social sector expenditure, fiscal management, and policy implementation.

### **Infrastructure and Connectivity**

- Advances in transport, power, digital networks, and urban infrastructure.
- Infrastructural gaps that continue to constrain productivity, market access, and inclusive development.

### **Livelihoods, Employment, and Migration**

- Patterns of employment generation across rural and urban economies, and the factors that drive inter-state migration.
- Emerging opportunities in MSMEs, agro-processing, and green jobs.

It is hoped that this session will provide a comprehensive assessment of Jharkhand's development trajectory, highlighting major achievements, structural constraints, and sectoral dynamics over the past twenty-five years and evidence-based insights to inform the state's medium- and long-term development vision, including priorities for inclusive growth, human capital strengthening, and sustainable industrialisation.

## PLENARY SESSION 2

### Accelerating And Diversifying Agriculture In Jharkhand

#### CONTEXT

Agriculture remains central to Jharkhand's socio-economic landscape, supporting a large share of its rural population and shaping livelihoods, food security, and social stability. Despite its abundant natural resources, varied agro-climatic zones, and vibrant tribal knowledge systems, agricultural growth has long been constrained by low productivity, limited irrigation, fragmented landholdings, and insufficient market linkages. The predominance of rain further heightens the vulnerability to climatic variability and environmental stress.

Over the past decade, Jharkhand has adopted a range of initiatives, including watershed development, promotion of high-value crops, strengthening farmer producer organisations (FPOs), and the use of improved technologies, to enhance agricultural performance. Nonetheless, the pace of growth remains uneven, and diversification toward horticulture, livestock, fisheries, and agro-processing is yet to reach its full potential. With changing dietary preferences, rising urban demand, and emerging opportunities in value chains, the state is well positioned to adopt a more resilient and diversified agricultural strategy.

This plenary session seeks to offer a rigorous, evidence-based, and comparative assessment of pathways for accelerating agricultural growth and diversification in Jharkhand, drawing on national experiences and global best practices in inclusive rural development.

#### KEY ISSUES FOR DISCUSSION

##### Low Productivity and Limited Irrigation

- Heavy reliance on monsoon-dependent farming with slow growth in assured irrigation.
- Limited adoption of improved seeds, soil health measures, mechanisation, and effective extension services.

##### Underdeveloped Value Chains and Market Access

- Inadequate storage, processing, grading, transport, and cold-chain infrastructure.
- Smallholder farmers face weak market integration, high transaction costs, and information gaps.

### **Scope for Diversification**

- Untapped potential in horticulture, floriculture, sericulture, lac production, poultry, piggery, dairy, and inland fisheries.
- Need for region-specific diversification strategies based on agro-ecological characteristics and cultural practices.

### **Climate Vulnerability and Environmental Sustainability**

- Rising climate risks due to droughts, erratic rainfall, and soil degradation.
- Urgent need for climate-resilient farming systems, water conservation, and regenerative agriculture.

### **Institutional and Governance Constraints**

- Strengthening the capacity of FPOs, cooperatives, and community-led institutions.
- Coordination among departments responsible for agriculture, irrigation, livelihoods, and rural development.

### **Rural Livelihood Security and Migration**

- Seasonal migration driven by inadequate and unstable rural employment.
- Potential of diversified agriculture and allied sectors in generating stable, local livelihoods.

It is hoped that the deliberations in this session will outline the broad contours of Jharkhand's inclusive growth agenda by promoting diversified and resilient agriculture that strengthens rural livelihoods, reduces vulnerability, and ensures equitable socio-economic progress, particularly for tribal and smallholder communities.

## PLENARY SESSION 3

### **Promoting Inclusion and Equality: Empowering Tribal and Other Marginalised Communities as Active Partners in Jharkhand's Development**

#### **CONTEXT**

Jharkhand's demographic and cultural landscape is significantly shaped by its tribal communities, who constitute a substantial share of the state's population. Alongside Scheduled Tribes, several Scheduled Castes, Particularly Vulnerable Tribal Groups (PVTGs), women, and other socio-economically disadvantaged groups form an important part of the state's development fabric. Their historical relationship with land, forests, and natural resources, coupled with unique socio-cultural institutions, has contributed to its rich heritage while also influencing developmental outcomes.

Despite constitutional protections, progressive legislation, and multiple welfare initiatives, many marginalised groups continue to face disparities in education, health, livelihoods, political participation, and access to public services. Structural constraints like geographical isolation, land alienation, limited infrastructure, insufficient investment in developmental sectors, and ineffective implementation of protective laws, have adversely affected community participation in development processes.

As Jharkhand aspires for inclusive growth, it is essential to critically examine the socio-economic status of tribal and marginalised communities and identify actionable strategies to enhance their agency, representation, and overall well-being. This plenary session provides a platform for evidence-based dialogue on approaches for strengthening inclusion, promotion of equitable growth, and positioning historically marginalised groups as key partners in the state's development journey.

#### **KEY ISSUES FOR DISCUSSION**

##### **Socio-Economic Disparities and Human Development Gaps**

- Persistent gaps in literacy, school retention, nutrition, maternal and child health, and access to quality healthcare.
- Spatial inequalities within the state, especially in remote and forested regions which are facing higher deprivation.

### **Land, Forest Rights, and Resource Governance**

- Implementation challenges related to the Panchayats (Extension to Scheduled Areas) Act (PESA) and the Forest Rights Act (FRA), including displacement, resettlement, and loss of traditional livelihoods.
- Strengthening customary institutions and community-led management of natural resources.

### **Livelihood Insecurity and Limited Economic Opportunities**

- Heavy reliance on subsistence agriculture, forest produce, informal labour, and seasonal migration.
- Underdevelopment of value chains involving minor forest products, handicrafts, livestock, and traditional knowledge systems.

### **Cultural Integrity, Identity, and Social Inclusion**

- Balancing development interventions with the preservation of indigenous cultural practices and languages.
- Addressing social exclusion, discrimination, and barriers to accessing entitlements and services.

### **Governance, Representation, and Institutional Capacities**

- Ensuring effective participation of tribal communities in local governance and strengthening administrative coordination.
- Promoting evidence-based policymaking and community-driven policy making for tribal development.

### **Education, Skill Development, and Youth Aspirations**

- Enhancing access to quality schooling, higher education, and vocational training tailored to regional contexts.
- Aligning skill development with emerging economic opportunities in agriculture, services, and the green economy.

It is hoped that the session will develop a comprehensive understanding of the multi-dimensional barriers faced by tribal and marginalized communities in Jharkhand and support Jharkhand's inclusive growth agenda by empowering marginalized groups, strengthening social cohesion, and ensuring their active participation in governance, resource management, and development decision-making.

## PLENARY SESSION 4

### Expanding Access to Higher Education and Improving Education Quality in Jharkhand

#### CONTEXT

Higher education is critical for developing human capital, fostering innovation, and enabling socio-economic transformation. With a predominantly youthful population, significant tribal communities, and evolving development aspirations, strengthening higher education is essential for enhancing employability, promoting social mobility, and supporting inclusive growth. Over the past two decades, Jharkhand has expanded its network of universities, colleges, technical institutions, and specialised centres; yet challenges remain in access, equity, quality, and governance.

While the National Education Policy (NEP) 2020 and the digital learning platforms have created new opportunities for expanding inclusive and multidisciplinary higher education, Jharkhand continues to face region-specific constraints, such as uneven distribution of institutions, limited infrastructure, shortages of qualified faculty, challenges in accreditation and quality assurance. Additionally, first-generation learners, students from remote tribal areas, and women continue to face barriers to access and completion.

This session will critically assess the current state of higher education in Jharkhand, identify systemic gaps, and explore policy pathways for strengthening access, relevance, and quality in alignment with national and global standards.

#### KEY ISSUES FOR DISCUSSION

##### Access, Equity, and Regional Disparities

- Uneven distribution of higher education institutions and limited access for tribal students, women, and first-generation learners
- Inadequate hostels, transport, digital connectivity, and student support services affecting participation and retention.

### **Quality of Teaching and Learning**

- Shortage of trained faculty and need for continuous professional development and pedagogical innovation.
- Gaps in curriculum relevance, assessment methods, and alignment with labour market requirements.

### **Infrastructure and Institutional Capacity**

- Inadequate laboratory facilities, libraries, research infrastructure, and digital learning resources.
- Support needed for institutions to meet accreditation and quality benchmarks.

### **Research, Innovation, and Industry Linkages**

- Low research output and limited engagement in applied, interdisciplinary, and problem-solving research.
- Weak collaboration with industry, particularly in emerging sectors such as green energy, AI, and advanced manufacturing.

### **Governance and Funding Constraints**

- Need for improved administrative capacity, transparency, and accountability.
- Challenges in funding adequacy, utilisation efficiency, and long-term institutional planning.

### **Digital Transformation and Future Skills**

- Uneven access to digital tools, e-learning platforms, and internet connectivity.
- Need to integrate digital literacy, soft skills, and industry-relevant competencies into curricula

It is hoped that the session will develop a strategic roadmap to expand access to higher education and ensure equity for disadvantaged communities, including tribal and rural students.



## PLENARY SESSION 5

### Enhancing Nutritional Outcomes of Children in Jharkhand

*Organised by*  
UNICEF & IHD Ranchi

#### CONTEXT

Child nutrition constitutes a critical determinant of human capital formation and long-term socio-economic development. Despite incremental improvements, Jharkhand continues to face the prevalence of undernutrition, stunting, wasting, micronutrient deficiencies, and adolescent nutrition. These issues are shaped by a combination of socio-economic vulnerabilities, such as high levels of poverty, dietary inadequacies, maternal health constraints, and geographic barriers that disproportionately affect rural, tribal, and remote communities coupled with limited awareness, knowledge and affected by detrimental feeding practices and social norms.

National surveys and state-specific assessments indicate that child nutrition outcomes in Jharkhand remain below desired benchmarks, reflecting systemic gaps in food security, health services, water and sanitation, and social protection. Addressing these deficits is imperative for realizing the Sustainable Development Goals and advancing Jharkhand's inclusive development trajectory.

Jharkhand Government is cognisant of these challenges, making every attempt to address the gaps in service delivery systems and bringing together the partners and other departments to reach every child. In addition to the initiatives, the Institute for Human Development (IHD) Ranchi in collaboration with UNICEF, to contribute to evidence generation, bring out the behavioural insights to community barriers which will aid to improve community-based nutrition dialogue. This session aims to bring together, policymakers, programme managers, technical experts, researchers and development partners to examine evidence, share experiences, and identify pathways to improve child nutrition sustainably and equitably.

## KEY ISSUES AND CHALLENGES

### High Burden of Stunting, Wasting, and Underweight

- Persistent undernutrition among children under five, with heightened vulnerability in Scheduled Areas, socio-economically disadvantaged households, and remote regions.
- Significant disparities in nutritional outcomes across socio-economic and geographic groups.

### Maternal Nutrition and Intergenerational Effects

- High prevalence of anemia among adolescent girls and pregnant women.
- Early marriage, early pregnancy, and inadequate maternal diets contribute to low birth weights and long-term developmental impacts.

### Dietary Inadequacies and Food Insecurity

- Limited dietary diversity, low intake of animal protein, fruits, and vegetables.
- Seasonal food insecurity and dependence on subsidised food systems.

### Gaps in Public Health and Nutrition Services

- Challenges in ensuring regular growth monitoring, early detection of severe acute malnutrition, and timely referral.
- Infrastructure and workforce constraints within the ICDS and health systems, and a need for better convergence among health, nutrition, agriculture, education, and social protection programmes.

### Water, Sanitation, Hygiene (WASH) and Disease Burden

1. Poor sanitation, unsafe drinking water, and environmental enteric dysfunction impacting nutrient absorption.
2. High prevalence of diarrhoeal diseases and communicable diseases affecting nutritional outcomes.

### Social Determinants and Behavioural Factors

- Cultural norms affecting breastfeeding, complementary feeding, and dietary choices.
- Barriers to accessing health and nutritional services for tribal and marginalised communities.

### Data, Monitoring, and Implementation Challenges

- Need for stronger real-time monitoring, evidence-based planning, and evaluation of interventions.
- Variations in programme performance across districts.

## OBJECTIVES OF THE SESSION

- To analyse the current status of child nutrition in Jharkhand and identify structural and behavioural determinants affecting nutritional outcomes among children.

- To examine the effectiveness of existing nutrition programmes, including ICDS, POSHAN Abhiyaan, and maternal–child health initiatives, and explore innovative, community-driven, and scalable models to improve dietary diversity, maternal nutrition, and child feeding practices.
- To develop actionable, evidence-based policy recommendations to enhance the quality, equity, and sustainability of nutrition interventions in Jharkhand, while strengthening multi-sectoral convergence.

#### **Expected Outcomes and Policy Significance**

- Develop a consolidated understanding of child nutrition challenges and priority needs in Jharkhand.
- Generate evidence-based recommendations to improve policy design, programme implementation, interdepartmental convergence, and community-based strategies.
- Support Jharkhand’s inclusive growth agenda by strengthening child nutrition systems, enhancing human capital, reducing intergenerational poverty, and contributing to the achievement of the Sustainable Development Goals.

## PLENARY SESSION 6

### Partnering with Industry in Jharkhand's Development

#### CONTEXT

Jharkhand is one of India's industrially significant states, endowed with abundant mineral resources, a strong metallurgical legacy, and a strategic location within the eastern regional economic corridor. Over the past two decades, the state has attracted investments in mining, steel, power, cement, and related manufacturing sectors, alongside the emergence of new industries such as food processing, logistics, pharmaceuticals, and renewable energy. With national priorities emphasising green transitions, technology-driven production, and regional industrial balance, Jharkhand has an opportunity to redefine its industrial development trajectory.

Industry plays a pivotal role in employment generation, promoting innovation, strengthening regional value chains, enhancing infrastructure, and fostering inclusive economic growth. However, industrial development in Jharkhand has historically faced challenges, including infrastructural deficits, regulatory complexities, environmental concerns, uneven skill availability, and limited integration of local communities into industrial value chains.

This plenary session will critically examine how industries can become active partners in Jharkhand's development by adopting sustainable, responsible, and inclusive business practices that align with the state's socio-economic priorities.

#### KEY ISSUES FOR DISCUSSION

##### Industrial Infrastructure and Investment Climate

- Strengthen transport connectivity, power reliability, logistical facilities, and industrial parks to improve economic competitiveness
- Simplify regulatory processes, land acquisition, and clearances to enhance investor confidence.

##### Employment Generation, Skills, and Labour Markets

- Align skill development with industry needs through stronger training and industry-academia linkages.

- Expand local employment opportunities to reduce prevalence of out-migration.

### **Sustainable and Responsible Industrialisation**

- Address mining-related environmental degradation by promoting cleaner technologies and resource-efficient models.
- Strengthen corporate social responsibility (CSR) frameworks, community engagement, and compliance with environmental safeguards.

### **Local Enterprise Development and Value Chains**

- Build stronger linkages integrating MSMEs, cooperatives, and producer groups into industrial value chains
- Promote ancillary industries, agro-processing, renewable energy, and service-sector opportunities

### **Technological Upgradation and Innovation Capacity**

- Need for digitalisation, automation, AI-enabled process optimisation, and R&D capacity building.
- Strengthening partnerships with universities and technical institutes for innovation and problem-solving.

### **Community Engagement and Social Inclusion**

- Ensuring that tribal and rural communities benefit from industrial expansion through employment, skilling, and livelihood diversification.
- Addressing displacement-related challenges through participatory planning, fair compensation, and long-term development commitments.

### **Partnership Frameworks and Governance Structures**

- Enhancing coordination between government, industry, and community institutions.
- Improve the ease of doing business through transparent, predictable, and efficient regulatory systems.

It is hoped that this session will identify priority actions and policy recommendations to enhance Jharkhand's industrial competitiveness, workforce readiness, and investment climate, enabling the state to accelerate industrialisation that generates decent jobs and fosters inclusive development.

## PLENARY SESSION 7

### *Roundtable on* **Enhancing Skills and Creating Decent Livelihoods and Employment in Jharkhand**

#### **CONTEXT**

Jharkhand's labour market is characterised by a relatively young workforce, significant rural and tribal population, and a high degree of informal employment. Despite the state's rich mineral reserve and an emerging manufacturing base, the availability of decent and sustainable livelihood opportunities has not matched the aspirations of its youth. High out-migration continues, driven by limited local jobs, skill mismatches, and structural constraints across major sectors. Nonetheless, sectors such as mining, manufacturing, construction, agriculture, agro-processing, renewable energy, tourism, health care, and services, offer significant employment potential if supported through coherent policy and institutional mechanisms. While the Jharkhand Skill Development Mission Society (JSDMS), ITIs, polytechnics, and various industry partnerships have expanded training initiatives, challenges such as institutional fragmentation, variable training quality, weak labour-market linkages, and restricted mobility pathways constrain outcomes.

This roundtable aims to bring together policymakers, industry leaders, skill training institutions, researchers, and civil society to reflect on strategies for building an integrated, inclusive, and future-oriented skills and employment ecosystem in Jharkhand.

#### **KEY ISSUES FOR DISCUSSION**

##### **Skill Gaps and Mismatch**

- Training programmes are often misaligned with industry demand and emerging sectoral needs.
- Limited focus on advanced, digital, and green skills required for future economies.

##### **Quality and Access of Training Institutions**

- Variable quality of ITIs, polytechnics, and training centres, especially in rural and tribal areas.
- Shortage of qualified trainers, outdated curricula, inadequate equipment, and weak industry links.

### **Informal and Precarious Employment**

- Dominance of informal jobs with limited social protection, low wages, and limited upward mobility.
- Seasonal and distressed migration affecting household stability and social wellbeing.

### **Entrepreneurship and Local Livelihood Opportunities**

- Underdeveloped entrepreneurial ecosystem for micro and small enterprises, with limited access to credit, market linkages, technology, and mentorship
- High potential sectors like agriculture, food processing, crafts, forestry, renewable energy, and tourism are under-leveraged.

### **Inclusion and Equity**

- Marginalised groups such as women, tribal communities, and rural youth face systemic barriers in accessing training, employment, and entrepreneurship opportunities.
- Social norms, limited mobility, and the lack of tailored skilling pathways systematically intensify the exclusion of women, tribal communities, and other marginalised groups.

### **Migration, Urbanisation, and Labour Market Dynamics**

- Persistent out-migration due to limited local opportunities and inadequate social protection for workers.
- Growing urbanisation necessitates skills aligned with urban services, construction, and emerging industries.

### **Institutional Coordination and Convergence**

- Fragmented implementation across departments and partners leads to duplication and weak outcomes.
- Need for integrated planning, monitoring, and data systems to ensure accountability and results.

It is hoped that this session will provide recommendations to improve skill development programmes, strengthen labour market linkages, and promote decent work opportunities especially for the marginalised groups.





# **Thematic Round-Table Sessions**





# THEMATIC ROUND-TABLE SESSION 1

## Diversifying Agriculture and Enhancing Income from Non-Farm Sector

### CONTEXT

Jharkhand's economy and livelihoods are deeply intertwined with its agrarian and forest-based systems. While agriculture remains the primary source of livelihood for most rural and tribal households, it faces persistent challenges of low productivity, mono-cropping, and weak market linkages. Alongside this, the non-farm sector, especially Jharkhand's substantial portfolio of Non-Timber Forest Products (NTFPs), offers a far more immediate and scalable pathway for income diversification. For many forest-dependent and tribal communities, products such as lac, mahua, tamarind, sal seed, chironji, hill brooms, and medicinal plants contribute significantly to household earnings, often surpassing agricultural income during lean seasons.

Despite this potential, the non-farm sector remains underleveraged due to fragmented value chains, limited processing infrastructure, inadequate storage systems, weak regulatory and institutional support, and restricted access to finance and technology. Strengthening the non-farm economy, through organised NTFP value chains, community enterprises, and market-oriented processing, alongside diversifying agriculture through high-value crops, horticulture, livestock, and agroforestry, can substantially enhance rural incomes, improve resilience, and generate more equitable livelihood opportunities.

The session aims to examine pathways to diversify agriculture and strengthen its linkages with allied sectors and forest-based livelihoods, explore policy and institutional mechanisms to enhance income from NTFPs while ensuring ecological sustainability, share successful models and innovations in agricultural diversification, value addition, and community-based forest product enterprises, and identify strategies for scaling up sustainable practices, improving market linkages, and integrating women and tribal producers into value chains.

### SOME ISSUES FOR DISCUSSION

- How can the non-farm sector—particularly NTFPs—be positioned as a major driver of rural income while strengthening complementary linkages with diversified agriculture?

- What mechanisms are required to build robust NTFP value chains through improved collection, processing, grading, storage, and marketing via cooperatives, FPOs, and public–private partnerships?
- How can technology and innovation, such as digital market platforms, traceability tools, resource mapping, and real-time agro-advisories, enhance productivity, transparency, and pricing for non-farm producers?
- How can convergence between NRLM, MGNREGS, CAMPA, and other programmes be leveraged to support NTFP development, forest conservation, and rural enterprise growth?
- What strategies are needed to strengthen women’s and tribal collectives, enabling them to lead in production, processing, value addition, and trade of NTFPs?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 2

### **Inclusive Urbanisation with Special Reference to Small, Medium and Market Towns**

#### **CONTEXT**

Jharkhand is undergoing a steady urban transition in which small, medium, and market towns are emerging as critical nodes of economic activity, trade, mobility, and employment. However, this urbanisation remains uneven and often exclusionary. Many of these towns face rapid population growth without corresponding investments in infrastructure; informal housing and limited access to basic services continue to constrain the possibility of building inclusive and resilient urban settlements. Modern infrastructure—covering transport, energy, digital connectivity, and essential urban utilities—forms the backbone of economic growth and human development, yet its reach and quality vary widely across settlements. As a result, low-income groups, migrants, informal workers, and marginalised communities often experience restricted access to affordable housing, sanitation, mobility, and digital opportunities. For Jharkhand to fully harness the potential of urbanisation, there is a need to focus on developing livable, inclusive, climate-resilient small and medium towns that can act as engines of balanced and regionally distributed growth.

#### **SOME ISSUES FOR DISCUSSION**

- How can inclusive urban growth be advanced by making urbanisation more people-centred, ensuring equitable access to housing, water, sanitation, and social services?
- How can urban planning and governance be improved through stronger municipal capacities, robust planning systems, and data-driven decision-making?
- How can modern and green infrastructure be developed by promoting sustainable transport, renewable energy, digital networks, and climate-resilient urban design?
- How can economic diversification and employment within small, medium, and market towns be strengthened by supporting local enterprises, informal sector livelihoods, and skill development?
- How can participatory and smart governance be ensured by actively involving citizens—especially women and youth—in planning, monitoring, and decision-making to enhance accountability?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 3

### Generating Quality Employment and Reaping Demographic Advantage

#### CONTEXT

Jharkhand, endowed with abundant natural resources and a young and diverse population, holds significant promise for inclusive and sustainable development. However, despite its mineral wealth and expanding industrial base, the state continues to grapple with stubborn challenges of unemployment, underemployment, and a predominantly informal workforce. The pursuit of quality employment, characterised by stability, dignity, fair wages, and social protection, is therefore central to Jharkhand's development aspirations. Creating such employment is not only an economic priority but also a moral imperative, essential for advancing social justice, equity, and long-term resilience.

This session of the international conference provides an interdisciplinary platform for scholars, policymakers, industry leaders, development practitioners, and youth representatives to collectively deliberate on employment-generation strategies tailored to Jharkhand's distinctive socio-economic landscape.

#### SOME ISSUES FOR DISCUSSION

- What are the defining characteristics of employment generation in Jharkhand?
- Which sectors hold the greatest potential for creating quality, sustainable jobs—particularly in manufacturing, services, and emerging green industries?
- How can labour-intensive and environmentally responsible industries be encouraged and scaled?
- In what ways can local entrepreneurship, MSMEs, and cooperative models be strengthened to provide stable livelihoods, especially in rural and tribal areas?
- What institutional reforms are needed to enhance coherence between employment, education, and industrial policy?
- How can Jharkhand's employment strategy promote gender equity, social inclusion, and expanded opportunities for marginalised communities?

- How can vocational and technical education be strengthened to align with evolving labour market demands?
- What policy measures are required to balance economic growth with environmental sustainability and the rights and well-being of workers?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 4

### Strengthening Health Systems

#### CONTEXT

Jharkhand's development depends significantly on improving the health and well-being of its population—an area where there is broad agreement on the need for sustained attention. While the SDG India Index Baseline Report 2018 placed the state among the lower-ranked in India, these findings underline where focused efforts can yield meaningful progress.

Key health indicators such as Total Fertility Rate (TFR), Infant Mortality Rate (IMR), Under-5 Mortality Rate (U5MR), Life Expectancy at Birth (LEB), and nutrition, remain below the national average, reflecting both demand-side constraints, including educational gaps, poverty, and gender inequality, as well as supply-side challenges in public health delivery, water and sanitation, and preventive services. Strengthening these areas offers a clear pathway for improvement.

Health infrastructure remains uneven, particularly in remote and rural regions, resulting in disparities in access. Addressing service shortages and enhancing the capacity of the public health system can help reduce dependence on informal and unregulated providers over time. For tribal communities, improving access to timely and appropriate healthcare, alongside better information and preventive services, remains particularly important.

As Jharkhand marks its Silver Jubilee, the moment offers an opportunity to take stock of existing gaps and chart a forward-looking strategy to strengthen the state's health system, improve access, and ensure more equitable outcomes in the years ahead

#### SOME ISSUES FOR DISCUSSION

- What are the possible ways of improving the primary health care system in the state?
- What are the possible avenues for improving accessibility and quality of publicly delivered healthcare systems at the secondary and tertiary level?
- What are the possible ways of enhancing footfalls in the publicly delivered health facilities?
- How can the private sector contribute to improving health outcomes for people, especially from marginalised groups?



- How can the out-of-pocket-expenses on treatment be minimised?
- How can the health system be made inclusive so as to ensure the participation of the community in the delivery of healthcare?
- What are the possible ways of coordination between the different agencies dealing with various social determinants of health (ICDS, primary school, public health, etc.)?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 5

### Enhancing Food Security and Nutrition

#### CONTEXT

In Jharkhand, people in general and the marginalised groups like the Adivasis and Dalits in particular face significant challenges in meeting the food and nutritional requirements. According to NFHS-5, around 38 lakh children under five in Jharkhand are malnourished, including 23 lakh anaemic, 15 lakh stunted, and over 8 lakh underweight. Additionally, 65% of women aged 15–49 are anaemic, and 26% have a BMI below 18.5. The crisis is even more severe among tribal communities, reflecting socio-economic marginalization and structural inequalities.

This international conference provides a platform for scholars, policymakers, practitioners, social and political activists, and community leaders to explore strategies to strengthen food security and nutrition in Jharkhand and beyond.

#### SOME ISSUES FOR DISCUSSION

- How to improve the public distribution system?
- How to improve the status of nutrition of the children and women by making the ICDS and other services more inclusive and effective?
- How to improve the nutritional behavior of the community?
- How to improve the quality of food production at the household level?
- How to make use of the indigenous knowledge on food and nutrition to improve the overall quality of food and nutritional intake?
- How to strengthen coordination between different actors, namely public departments, civil society, academia, and the communities?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 6

### Expanding and Strengthening Social Programmes and their Delivery

#### CONTEXT

Jharkhand, despite its rich natural and human resources, continues to face persistent challenges of poverty, informal and insecure work, and uneven access to public services, particularly in rural and tribal regions. While the state has made notable progress in expanding its social protection and welfare architecture, large sections of the population remain vulnerable to economic shocks, livelihood insecurity, and social exclusion. Programmes such as MGNREGS, ICDS, the Public Distribution System, social pensions, and school-related benefits have provided essential safety nets for poor households. Recent initiatives like the *Maiyaa Samman Yojana* further signal Jharkhand's growing commitment to gender-responsive welfare and the recognition of women's unpaid care roles.

However, the effectiveness of these programmes is often constrained by fragmented delivery systems, gaps in infrastructure, weak coordination across departments, and limited community participation. Remote tribal areas, in particular, experience inconsistent coverage and barriers to accessing entitlements. Strengthening social protection in Jharkhand therefore requires a comprehensive approach that combines robust safety nets with livelihood enhancement, institutional reforms, and citizen-centred service delivery.

A more integrated framework, linking social protection with skill development, employment generation, local enterprise promotion, and digital delivery mechanisms, can improve resilience and reduce long-term dependence on welfare transfers. At the same time, stronger public institutions, empowered local governments, and active community engagement are critical for improving the reach, quality, and accountability of social programmes. This session will explore how Jharkhand can build stronger, more coherent, and more inclusive systems that protect vulnerable groups while enabling sustainable and dignified livelihoods.

#### Some Issues For Discussion

- How can Jharkhand strengthen and better align its existing social protection and livelihood programmes to build long-term economic resilience?

- What community-based livelihood models—such as SHGs, cooperatives, and producer groups—hold the greatest potential for enhancing rural incomes and reducing vulnerability, especially in tribal regions?
- What institutional reforms are needed to improve efficiency, transparency, and accountability in social programme delivery, particularly in remote areas?
- How can digital platforms and MIS systems be leveraged to strengthen beneficiary identification, fund flow, monitoring, and last-mile service delivery?
- What role can Gram Sabhas, SHGs, and local committees play in participatory governance and improving programme reach and effectiveness?
- How can social protection programmes be better linked with skill development, entrepreneurship, and sustainable employment opportunities to reduce long-term dependence on welfare transfers?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 7

### **Mobilising and Managing Financial Resources for Inclusive and Sustainable Growth**

#### **CONTEXT**

Jharkhand has strong potential for growth, but many districts, especially those with large tribal and rural populations, still face long-standing development gaps. A key challenge is the state's limited ability to raise, allocate and manage financial resources in ways that support long-term, broad-based development.

A forward-looking strategy calls for expanding and diversifying the state's financial base. This includes strengthening revenue administration, improving efficiency in public spending, and designing regulatory and institutional frameworks that make Jharkhand a more predictable and attractive destination for private capital. Better utilisation of centrally sponsored schemes, greater absorption of externally aided projects, and stronger fiduciary systems are central to improving fiscal capacity.

Private investment will play an important role in sectors such as renewable energy, logistics, agro-processing, digital infrastructure and green technologies. Instruments such as Public–Private Partnerships, blended finance, credit guarantees, and outcome-based funding can help crowd in private capital for development priorities. Aligning Corporate Social Responsibility spending with state strategies on skill development, climate resilience and rural infrastructure can add targeted support where public funds are limited.

Local institutions also need the capacity to plan, raise and manage funds. Strengthening Panchayati Raj institutions, improving financial devolution, and building local-level systems for budgeting and monitoring can lead to more responsive and equitable development outcomes.

Digital tools, data systems and transparent reporting mechanisms can improve resource planning and accountability. This includes dashboards for scheme monitoring, digital payments, GIS-based tracking of projects, and integrated finance management systems.

The session will focus on practical ways to widen the state's fiscal and investment space, strengthen financial governance and support inclusive growth.

### **SOME ISSUES FOR DISCUSSION**

- How can Jharkhand enhance financial resources from various internal and external sources to support inclusive and sustainable development?
- What steps can strengthen Panchayati Raj Institutions and local governance systems for effective financial mobilisation, planning, and monitoring?
- How can gender-responsive budgeting be institutionalised across departments to ensure that public spending addresses the needs and priorities of women and marginalised groups?
- How can digital tools and data systems improve financial planning, real-time tracking, transparency, and accountability in resource use?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 8

### Enriching the Cultural and Literary Heritage of Local and Tribal Communities

#### CONTEXT

Tribal communities of Jharkhand share with the global currents of indigenous peoples heritage and embody unique systems of ecological knowledge, oral traditions, indigenous medicine, folklore, and artistic expression that have evolved through centuries of coexistence with nature. Their worldviews offer alternative models of sustainability, harmony, and collective well-being. The conference seeks to rediscover, revitalize, and integrate indigenous cultural and literary traditions within contemporary knowledge systems, development strategies, and creative practices. By fostering cross-cultural exchange and collaborative inquiry, the conference aims to open new pathways toward a more inclusive, sustainable, and culturally enriched Jharkhand through mutual learning between local experiences and global perspectives.

#### SOME ISSUES FOR DISCUSSION

- What are the extant oral traditions among the tribals of Jharkhand?
- How do these oral traditions carry the memory and moral imagination of the people?
- What initiatives can be taken to maintain and flourish the rich and diverse linguistics treasure of the tribals?
- How can tribal linguistic and cultural practice be linked with environmental protection?
- How can the tribal art forms and cultural expressions be linked with the educational enhancement of education in the state in general, and of the tribals in particular?
- How can the tribal cultural human development initiatives of the state?
- How can tribal languages and cultural practices be achieved and made available for the wider public?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 9

### **Addressing Challenge of Climate Change and Pollution and Promoting Green and Resilient Development**

#### **CONTEXT**

Climate change, along with environmental pollution, has emerged as two of the most concerning challenges of our time, threatening our sustainable growth as well as human well-being. Jharkhand, a state gifted with rich natural resources, is now facing the dual challenge of achieving fast economic development while ensuring environmental sustainability. Industrialisation, mining, and urbanisation have contributed to the economic growth, development and progress, but this has also led to deforestation, air and water pollution, soil degradation, along with the loss of biodiversity. The depletion of forest cover, in particular, is weakening natural ecosystems, reducing carbon sequestration capacity, and affecting the forest-dependent tribal communities whose livelihoods and cultural identities are closely linked to these landscapes. These issues, if left unaddressed, could destabilise the long-term prosperity of the state.

The concept of green and resilient development emphasises the low-carbon producing industries, renewable sources of energy, sustainable agricultural production, waste management, and climate-resilient infrastructure. Jharkhand, with its young and developing population with an expanding industrial base, can become a groundbreaker in adopting innovative green technologies and climate-supportive practices. Strengthening forest conservation, promoting community-led forest management, and restoring degraded forest areas can also become important pillars in this transition. Effective policy reforms and frameworks, institutional coordination, and public participation are key factors in achieving this vision.

The session will explore strategies that integrate environmental protection with the inclusive development of the state, ensuring that growing economic opportunities reach marginalised communities while preserving the state's ecological balance, including the sustainable management of its forests.



## **SOME ISSUES FOR DISCUSSION**

- What can be the possible measures to reduce pollution and restore ecological balance through cleaner technologies and responsible resource management?
- What measures can be taken to expand solar, wind, and bioenergy sectors to reduce dependency on fossil fuels and create green jobs?
- How to develop smart, clean, and circular urban systems for air quality improvement and waste recycling?
- How to strengthen environmental governance through inclusive policies, awareness, and capacity building?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 10

### Expanding and Improving Quality of School and Higher Education

#### CONTEXT

Jharkhand's education system, spanning school to higher education, has expanded over the past few years, yet the challenge of ensuring quality, equity, and meaningful learning outcomes remains acute. In both government schools and higher educational institutions, particularly in rural and remote tribal regions, persistent gaps in infrastructure, faculty availability, digital connectivity, and learning materials continue to impede effective delivery of education. These challenges are compounded by high dropout rates, low retention, limited exposure to diverse learning experiences, and language barriers that make classroom instruction difficult for first-generation learners.

At the school level, inadequate infrastructure, shortages of trained teachers, and limited teaching-learning resources undermine foundational learning. Without strong foundations, students struggle to transition successfully into higher education. Similarly, the higher education sector faces deficits in classrooms, laboratories, libraries, hostels, digital tools, and qualified faculty—constraints that affect both access and quality. Improving learning capacity, strengthening institutional infrastructure, and ensuring adequate academic support are essential to enable students to progress across the entire education continuum.

Quality education—whether at the primary, secondary, or tertiary level—is central to Jharkhand's broader social, economic, and political transformation. Strengthening school education will reduce dropout rates, improve retention, and create a prepared pool of learners capable of entering higher education. Strengthening higher education will enhance employability, expand pathways to decent work, and empower young people to participate meaningfully in the state's development. Quality education reforms therefore constitute both a rights-based obligation and a strategic investment in Jharkhand's human capital.

Achieving these goals requires a concerted and collaborative effort from government agencies, educational institutions, teachers, parents, local communities, civil society, and the private sector. This session aims to examine how Jharkhand can build a more coherent, well-resourced, and equitable education ecosystem that strengthens both school and higher education, ensuring that every learner—

regardless of geography, language, or socio-economic background—can access and benefit from quality learning opportunities.

### **SOME ISSUES FOR DISCUSSION**

What immediate and long-term measures are needed to improve enrolment, attendance, and learning outcomes across school and higher education, particularly in rural and tribal regions?

- How can Jharkhand strengthen educational infrastructure—classrooms, laboratories, libraries, hostels, and digital connectivity—to enhance teaching and learning quality at all levels?
- What strategies can address the persistent shortage of trained teachers and faculty and ensure continuous, meaningful professional development, especially in remote areas?
- How can language barriers be addressed to build inclusive learning environments for tribal, multilingual, and first-generation learners?
- How can parents, local communities, and governing bodies be more effectively engaged in school and college governance to improve accountability and academic support?
- How can curricula and academic pathways be better aligned with emerging skill needs, local livelihoods, and industry demands to improve employability and strengthen transitions from school to higher education?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 11

### Enhancing Skills, Promoting Entrepreneurship and Startups for Local Enterprise and Economic Development

#### CONTEXT

As Jharkhand enters its 25th year, the state is poised to rethink its economic model and move beyond its dependence on mining and heavy industries by fostering entrepreneurship and local enterprise. Building a vibrant ecosystem for entrepreneurship and startups can play a transformative role in achieving inclusive and sustainable economic development. There is a need to diversify the economic landscape by promoting entrepreneurship, startups, and local enterprises—especially in rural and semi-urban areas.

Jharkhand's abundant natural resources, skilled youth, and emerging innovation networks present strong foundations for nurturing local enterprises. The emergence of the startup ecosystem provides a unique opportunity for Jharkhand to leverage its human capital, local skills, and natural endowments. The state has immense potential in sectors like *agro-based industries, handicrafts, tourism, renewable energy, IT, and rural innovation*. A thriving entrepreneurial ecosystem can generate employment, encourage innovation, empower youth and women, and reduce migration.

#### SOME ISSUES FOR DISCUSSION

- What could be the strategies for fostering entrepreneurship and strengthening the startup ecosystem in Jharkhand?
- What could policy support be extended for skill development, finance, technology, and institutional collaboration in empowering local enterprises and job creation?
- What could be the possible avenues for promoting rural and tribal entrepreneurship, women-led startups, and social enterprises that drive community-based economic growth?
- How a market support system could be developed to help the local enterprises, especially those which are led by women and marginalised groups?
- What possible capacity enhancing programmes can be taken to enable the entrepreneurs, especially women and other marginalised groups?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 12

### Empowering Tribal and Marginalised Communities

#### CONTEXT

On the occasion of its 25th year, Jharkhand enters a pivotal moment in its development journey. Despite its rich natural and cultural endowments, the state continues to face entrenched inequities and widespread underdevelopment, especially within tribal and marginalised groups. Despite progressive state-led initiatives and a resilient community spirit, there are several challenges including poverty, land alienation, limited access to quality education and health, declining traditional livelihoods, malnutrition, and disempowerment persist, which underlines the need for stimulating strategies.

Jharkhand's Adivasi population represents their integral relationships with *Jal, Jangal, Jameen* and empowerment of tribal and marginalised communities is crucial for the state's vision of inclusive growth, equity, and sustainable development. The context adds relevance and urgency to addressing multidimensional exclusion by enhancing social, economic, and political participation, protecting land and cultural rights, and ensuring meaningful access to state resources and decision-making. This panel will provide a platform to critically assess innovations, policies, and ground-level experiences, aiming to co-create an inclusive strategy for transformative action.

#### SOME ISSUES FOR DISCUSSION

- How can the structural barriers like land loss, educational deprivation, health gaps, and underrepresentation be removed?
- What measures can be taken to protect traditional and forest-based livelihoods, create non-timber forest product value chains, and come to terms with the climate and resource pressures?
- How to link the recognition of tribal identity, heritage, and role of women with social transformation?
- How to strengthen local self-governance, capacity building, and participatory planning as drivers of social inclusion and empowerment?
- How to overcome the implementation challenges of PESA, FRA, and social protection schemes for tribal welfare?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

## THEMATIC ROUND-TABLE SESSION 13

### Empowering Women and Enhancing Gender Equality

#### CONTEXT

The state's 25-year journey offers a compelling moment to examine the realities facing women in Jharkhand and to imagine pathways toward deeper gender equality. Despite progress in literacy, livelihood schemes, and representation in local governance, gender inequalities remain deeply rooted across social, economic, and political spheres. Women continue to face limited access to productive resources, wage disparities, unsafe work conditions, and inadequate participation in decision-making bodies.

In Jharkhand, gender gaps intersect with poverty, illiteracy, and social norms that constrain the agency of women, especially among tribal and rural populations. Addressing these requires coordinated action among government institutions, civil society, academia, and private actors to advance legal reforms, equitable access to resources, and gender-responsive governance. This panel situates these issues within the broader framework of development and equity as Jharkhand envisions its future trajectory.

#### SOME ISSUES FOR DISCUSSION

- What mechanisms can strengthen the enforcement and monitoring of gender-related laws and schemes across the state?
- What are the most prevalent forms of gender-based violence in Jharkhand, and how can prevention and response strategies become more community-driven?
- What barriers limit women's access to land, credit, and productive resources, and what reforms are needed to remove them?
- What social protection or infrastructure measures can ease women's care burden and enhance their economic participation?
- How can gender-responsive budgeting be institutionalised within state and local planning to ensure that public expenditure reflects women's priorities?
- What opportunities do digital platforms and emerging technologies offer for expanding women's economic and social empowerment?

The issues listed above are illustrative and will guide the discussion, though the scope of the conversation may extend beyond them.

# **Technical Session**







# **DIVERSIFYING AGRICULTURE, ENHANCING INCOME FROM NON-TIMBER FOREST PRODUCTS (NTFP) AND ADDRESSING CHALLENGE OF CLIMATE CHANGE**

## **Integrating Agricultural Marketing and Diversification for Enhancing Farmers Income in Jharkhand**

**Dewashish Kumar**, Assistant Professor, Binod Bihari Mahto Koyalanchal University, Dhanbad

Jharkhand is a state with large agrarian dependence and complex agroecological zones, yet farmers face low and unstable incomes. This paper studies how better integration of agricultural marketing systems with crop and enterprise diversification can improve farm incomes in Jharkhand. Drawing on conceptual frameworks and a mixed-methods research design, the study proposes pathways through which diversification (crop, livestock, horticulture, and non-timber forest products) combined with market interventions (aggregator models, value-chain linkages, contract farming, digital marketplaces, and cold-chain investments) can raise and stabilize farmers' earnings. The methodology outlines a household survey across representative districts, value-chain mapping for importance commodities and econometric testing (OLS) of income effects using difference-in-differences and propensity score matching to control for selection bias. Illustrative results indicate that where smallholders adopt diversification and access organized market channels, average household agricultural income rises by a meaningful margin and seasonality risk falls. The paper discusses institutional bottlenecks; market information gaps, poor infrastructure and weak producer organizations and recommends policy and program measures for e.g., targeted investments in post-harvest infrastructure, strengthening cooperatives and farmer producer organizations, market linkages with processors and retailers, digital price and procurement platforms and credit/insurance products adapted for diversified portfolios.

## Advancing Sustainable Mining at Hindalco

**Anoma Basu**, AVP Head Sustainability, Hindalco Industries Limited

**Deep Narayan Singh**, Lead Sustainable Mining, Hindalco Industries Limited

The metals and mining sector in India is bound to witness significant growth in the coming decade with per capita demand for key metals such as steel, projected to increase from 74 kg in 2018 to 158 kg in 2030 (Invest India, 2020) and that for aluminium, projected to increase to more than triple from 2.5 kg in 2018 to 8.7 kg by 2030 (Fitch, 2020). It is critical to balance this growth with requires balancing economic growth with community, environmental, and social responsibility.

At Hindalco, we envision a more Resilient, Responsible and Reliable future and the Sustainable Mining Charter is aimed at accelerating our shift towards sustainability-focused operations. In Jharkhand, Hindalco operates bauxite mines at Lohardaga and Netarhat regions covering 838 hectares and 1143 Hectare respectively and has secured two coal blocks at Palamu and Latehar district.

Hindalco implements sustainable mining through adoption of the 'Sustainable mining charter', a holistic industry first document. The charter identifies seven thematic areas (i.e Sustainable Land Use, Biodiversity Conservation, Emission Reduction, Water Stewardship, Waste Management, Local Economic Development, Health & Safety), actions on which would enable mining organisations to advance sustainable mining in Jharkhand.

Some of interventions identified and implemented and the associated impact are as below:

1. Sustainable land use: Plantation of more than 488,000 native tree species to restore approx. 200 ha of mine out land also achieving the carbon sequestration potential of about 1900 to 2300 tCO<sub>2</sub>/ha.
2. Water stewardship: HIL achieved all its bauxite mine to 1.25-time water positive and developed 59526 kL rainwater harvesting capacity.
3. Renewables: Installation of 395 KW of solar power capacity
4. Local economic development: Implemented holistic healthcare program for the community focussed on women and children at Chakla. Hindalco also setup an affordable sanitary pad manufacturing unit, operated by the community. Hindalco also implemented a program Hareli, a program focussed on providing farm and non-farm livelihood opportunities to the community. Some other interventions implemented are Kasi and bamboo craft and basketry, Tasar silk reeling, cotton handloom, Mushroom Cultivation/ Paper plate making/ Lac Cultivation/ Vermi compost etc.

## **Economic Contribution of Non-Timber Forest Products to Tribal Households in Odisha: Opportunities, Challenges and Strategic Interventions**

Minaketan Behera, Chairperson and Professor of Economics, Jawaharlal Nehru University (JNU), New Delhi

Non-Timber Forest Products (NTFPs) are an important part of tribal communities' ways of making a living in Odisha. They provide food, income, and a sense of cultural identity. The paper seeks to evaluate the reliance of tribal households on non-timber forest products (NTFPs) for income and sustenance, estimate their contributions across various tribal regions, analyse the challenges encountered by tribal collectors in production, processing, and marketing, and propose policy and institutional measures to enhance NTFP-based livelihoods and ensure equitable benefit distribution. The results show that NTFPs make a big difference in a household's yearly income, adding between 20 and 45 percent, depending on the area and the time of year. Nonetheless, obstacles remain, including limited access to equitable markets, insufficient value addition and processing infrastructure, predatory intermediaries, volatile pricing, and constrained institutional assistance. The paper proposes a multifaceted approach, encompassing the enhancement of primary collectors' cooperatives, the promotion of training in value addition, packaging, and quality enhancement, the establishment of NTFP clusters, the connection of producers with Forest Development Agencies, and the assurance of Minimum Support Price enforcement.

## **Giridih Dynamics of Agricultural Growth in Jharkhand: Causes and Emerging Concerns**

Nayan Kumar Soren, Assistant Professor and Research Scholar, Giridih College and Indian Institute of Technology, Delhi

The present study examines the dynamics of agricultural growth in Jharkhand from 2004-05 to 2022-23, divided into three sub-periods: 2004-05 to 2011-12 (The period of high growth), 2011-12 to 2018-19 (The period of slowdown), and 2018-19 to 2022-23 (The revival phase). Specifically, the study enquires about a higher agricultural growth rate from 2004-05 to 2011-12 and subsequent growth slowdown and stagnation in gross value added (GVA) in agriculture in Jharkhand. Moreover, the study also analyses the reasons behind low per capita GVA in agriculture in Jharkhand.

To achieve this objective, the study employs an exploratory data analysis method to answer the main questions posed. The study is primarily based on secondary data sources, including National Accounts Statistics, the Handbook of Statistics on Indian States, Reserve Bank of India and the Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, as well as some supplementary data sources.

The article first highlights that the agricultural growth rate of Jharkhand in real terms remained the highest among Indian states from 2004-05 to 2011-12, following the growth boom across states. The subsequent

slowdown in Jharkhand from 2011-12 to 2018-19 was like the national trend and that of the eastern states; however, a growth revival has not occurred in Jharkhand in the same manner as in other eastern states and across India after 2018-19. Additionally, the evidence indicates that the GVA agriculture per capita in Jharkhand has been declining relative to the national average since 2011-12.

There are several reasons for the decline in GVA agriculture in Jharkhand since 2011-12. There was a consistent decline in food grain yields since 2011-12, which occupied more than 85 per cent of the gross cropped area. The gross cropped area increased during the slowdown period, but it did not offset the already declining yield. Furthermore, during the period from 2018-19 to 2022-23, both the yield and area decline drastically. Fruit production grew at an unprecedented rate during the high-growth period and subsequently slowed, while vegetable production growth also remained sluggish. The terms of trade for the agricultural sector in Jharkhand remained adverse, like the national trend, since 2011-12. Additionally, the costs of cultivation have increased, further squeezing productivity. Behind low per capita GVA agriculture in Jharkhand is structural issues like low irrigation extent along with high the rainfall dependence, lower use of modern inputs like fertilizer, low diversification towards higher value crops and adverse agrarian structure.

There are some policy implications. First, the irrigation extent needs to be improved in the state to reduce variability of output and cropped area caused by rainfall variability. Second, crop diversification is required to minimize the variability of GVA agriculture growth rate and output risk. Third, fertilizer use should be improved which is already much lower than other states. Fourth, some appropriate measures should be taken to improve the land use and reduce fallow area.

## **Non-Timber Forest Products (NTFPs) and Their Role in Sustaining Rural and Tribal Livelihoods in Jharkhand**

**Smita Paul**, Research Scholar, Ranchi University, Ranchi

Non-timber forest products (NTFPs) are biological resources of plant and animal origin harvested from forests, plantations, wooded land, and trees outside forests. Across regions, they play a dual role: in developed countries, NTFPs support cultural, recreational, and biodiversity-related activities, while in developing countries like India, they remain essential for subsistence, household consumption, and income generation. Although several studies indicate that the economic value of NTFPs per hectare may exceed that of timber, their potential continues to be under-recognized in policy and management. Against this background, the present study attempts to draw attention to the crucial role of NTFPs in sustaining the livelihoods of rural and tribal people in Jharkhand.

The study reviews international, national, and state-level literature that highlights the contribution of NTFPs to household income, employment, food security, and poverty reduction. It adopts a descriptive and analytical research design using secondary data to understand the socio-economic significance of NTFPs, their contribution to Jharkhand's economy, and the challenges and opportunities associated with the sector. Jharkhand is selected as the study area due to its abundant forest resources and persistently high poverty levels. Forests shape the economic, social, and cultural lives of rural and tribal populations, resulting in strong dependence on forest-based livelihoods.

Findings identify major NTFPs in Jharkhand, including Lac, Sal seeds and leaves, Mahua flowers, Bamboo shoots, Karanj, Kusum, Amla, Imli, Palas, Chironji, Harra, Kendu leaves, Honey, Dori, and multiple medicinal

plants. Their seasonal cycles ensure year-round availability, providing continuous livelihood support. The contribution of NTFPs is examined across two dimensions: first, their socio-economic significance for forest-dependent households—livelihood security, employment, income enhancement, food and nutritional support, healthcare, cultural importance, and women's empowerment; and second, their economic impact on the state through revenue generation, employment creation, rural entrepreneurship, and trade. Despite these benefits, the sector faces persistent challenges such as market inefficiencies, inadequate value addition and processing, limited marketing skills, unsustainable harvesting practices, and climate-related risks.

The study concludes that strengthening the NTFP sector in Jharkhand requires an integrated approach involving sustainable forest management, improved value-chain efficiencies, stronger market systems, and institutional and skill-building support. Limitations arise from reliance on secondary data and the lack of district-level primary evidence.

## **Role of Minor Forest Produce on Augmenting the Income and Employment of Tribals in Ranchi District**

**Harish Singh Munda**, Research Scholar, Ranchi University, Ranchi

**Marcus Barla**, Associate Professor, St. Xavier's College Ranchi

Minor Forest Produce is defined as all the non-timber forest produce of plant origin including Bamboo, Brush Wood, Mahua, Tussar, Tamarind, Amla, Honey, Lac, Tendu leaves, Medicinal Plant and Herbs Roots, Kusum and like products. It plays an important role in the life support of the tribal and forest dwellers in terms of subsistence, income generation and employment. This Paper aims to investigate (i) The Role of Minor Forest Produce in Augmenting the Income of the Tribals, (ii) The Role of Minor Forest Produce in generating Employment for the Tribals. The present paper highlights the role of Minor Forest Produce on the life of Tribal communities of Ranchi district of Jharkhand state. The present study has been conducted on a purposively selected Bundu block of Ranchi district. 3 villages and 25 samples have been taken through purposive random sampling technique. The study was done with Interview Schedule using Personal Interview and Focus Group Discussion method. The result of the study revealed that total average annual income of the households was Rupees 77524.92. Minor Forest Produce was the largest income contributor in the study area. The average annual income from Minor Forest produce was Rupees 37526.12 /household whereas agriculture was the second largest income contributor with Rupees 32453.18/household. Minor Forest Produce, Agriculture, Livestock and Poultry farming, Wage labourer and Business related to Minor Forest Produce were the main occupation in the study area. The income breakup was Minor Forest Produce (48.40%), Agriculture (36.83%), Livestock and Poultry farming (10.70%), Wages Labour (2.50%) and Business related to Minor Forest Produce (1.54%). Minor Forest Produce generated a total annual employment of 57.96 mandays/household. A total of 39 Minor Forest Produce was found in the study area. 64% of the respondent were female and 36% were male. The average age of the respondent was between 31-60 years and most of them had not completed their matriculation. The present study suggests the government to ensure proper Value Addition for certain Minor Forest Produce, which would increase both income and employment of tribals.

## **Enhancing Rural Livelihoods and Income through Agricultural Diversification and Non-Timber Forest Products (NTFPs)**

**Anant Kumar Sharma**, Assistant Professor, SNSRKS College, Saharsa, Bihar

Traditional and mono-cropping agricultural systems are facing significant risks due to persistently changing climate patterns, market volatility, and declining soil fertility. For rural and forest-dependent communities, adopting Agricultural Diversification and the sustainable utilization of Non-Timber Forest Products (NTFPs) has emerged as a vital strategy to secure livelihoods and enhance income resilience. This seminar provides a detailed analysis of the potential for successfully integrating these two components, the economic benefits they bring, and the key challenges they confront.

Agricultural diversification entails a shift from traditional cereal crops to a broader range of high-value commodities (such as fruits, vegetables, flowers, medicinal and aromatic plants) and allied activities (including livestock rearing, fisheries, apiculture, and agroforestry). This strategy not only stabilizes and increases farmer income but also mitigates risk, improves soil health, and promotes environmental sustainability. Notably, Agroforestry systems, which deliberately combine trees with crops on the same land unit, offer synergistic benefits by producing food, fodder, fuel, and NTFPs simultaneously.

Concurrently, Non-Timber Forest Products (NTFPs)—which include Mahua, Tendu leaves, bamboo, lac, gums, wild fruits, and medicinal herbs—are a crucial source of income and a safety net during lean seasons for tribal and forest-dwelling communities. However, merely collecting these products is insufficient for maximizing returns. Value Addition activities, such as primary processing (grading, drying), and secondary manufacturing (jams, essential oils, handicrafts) at the local level, are essential to capture more value and ensure sustainable income.

In this paper, we will examine case studies that have successfully implemented agricultural diversification and the commercialization of NTFPs. We will focus on best practices for sustainable harvesting, improved market linkages, the critical role of Farmer Producer Organizations (FPOs), and the necessary policy support required to empower rural entrepreneurs.

The key finding is that an integrated approach—combining technical training, improved infrastructure, and collective marketing—is the definitive key to strengthening both agricultural and forest-based livelihoods and alleviating rural poverty.

## **Empowerment of Tribal Communities through Ragi Production in Jharkhand**

**Neetu Kumari**, Assistant Professor, Ram Lakhan Singh Yadav College, Ranchi

**Nancy Tirkey**, Assistant Professor, Ram Lakhan Singh Yadav College, Ranchi

Tribals can actively participate in development by sharing traditional ecological knowledge, contributing artisanal skills, engaging in micro-entrepreneurship and influencing policy through

political representation. Development efforts, such as technology transfer in agriculture and health are increasingly focusing on tribal involvement, recognizing their unique insights as crucial for inclusive and sustainable national growth. Empowering tribal communication through education and addressing their specific socio-economic needs essential for unlocking their full potential as partners in development. The tribal communities of Jharkhand face challenges like land alienation and low literacy, low income. These challenges should be addressed through community led education, digital inclusion and support for tribal business. Moreover, their role may change from a sole participant to one of co – creators in the development of Jharkhand.

The objective of this article is to study the contribution of Ragi production in empowering Tribal communities in Jharkhand.

## **NTFPs, Agroforestry and Rural Livelihood Security: Strategies for Sustainable Agricultural Diversification in Jharkhand**

**Vineeta Rani Ekka**, Assistant Professor, Ranchi University

The paper explores how incorporating Non-Timber Forest Products (NTFPs) into agroforestry-based farming systems can act as a transformative approach for sustainable agricultural diversification and livelihood security in Jharkhand. It emphasizes tribal and forest-dependent communities for whom NTFPs such as saal seeds, mahua flowers, lac, bamboo, medicinal plants, mushrooms, and wild fruits are vital sources of income, nutrition, and risk mitigation during lean agricultural periods. The study conceptualizes agroforestry as a link between forest and farm, where combinations of trees, crops, and livestock boost productivity, stabilize incomes, and restore degraded ecosystems, while also creating opportunities for NTFP-based enterprises. Through a review of secondary literature, policy documents, and case evidence from Jharkhand, the paper assesses the economic role of NTFPs in rural households, the ecological benefits of diversified tree-based systems, and the social aspects, including the key role of women in NTFP collection and value addition. It analyses how issues like insecure land tenure, weak market connections, price fluctuations, and limited processing infrastructure restrict the potential of NTFP–NTFP-agroforestry integration. The paper also reviews relevant government efforts on agricultural diversification, MSP for minor forest produce, and community forest management, along with their implications for livelihood security. Building on this, the paper proposes strategies such as promoting NTFP-focused agroforestry models on private and community lands, strengthening producer groups and value chains, improving access to credit, technology, and climate-resilient practices, and aligning forest, agriculture, and tribal policies towards a landscape-based livelihood approach. It argues that integrating NTFPs into diversified agroforestry systems can reduce poverty, income volatility, support nutrition-sensitive farming, and boost climate resilience in Jharkhand. The paper concludes that such an integrated approach offers a practical pathway toward a greener, more inclusive rural economy and a sustainable future for the state's forest-dependent communities.



## **Addressing Climate Change through Green and Resilient Development: The Jharkhand Experience**

**Asmi Raza**, Assistant Professor, University of Delhi, New Delhi

Jharkhand, the mineral-rich state located in the eastern part of India, stands at a critical point in its development path. Due to increasing climate vulnerabilities, such as unpredictable rainfall, heat stress, land degradation, and loss of biodiversity, the state has to face the challenge of balancing its economic goals with the requirements of nature. This research examines Jharkhand's changing climate change response through the concept of green and resilient development, thus providing a real case study of subnational climate governance in India. The study has three core objectives: (i) to assess the climate risk profile and adaptive capacities of Jharkhand across the ecological and socio-economic dimensions; (ii) to investigate the incorporation of sustainability principles into the planning system at the state level and into sectoral policies; and (iii) to locate the climate resilience models that are the sources of the replicable ideas to the national and regional strategies. The study utilises a mixed-methods approach to the research, including policy review, stakeholder interviews, and geospatial mapping. The data is culled from sources such as climate vulnerability assessments, state action plans, and district-level development indicators. GIS tools are used to depict the climate-susceptible areas, changes in land use, and infrastructure gaps. Major findings disclose that Jharkhand has implemented a variety of interventions that are expected to bear fruit in the long run, such as afforestation drives, decentralised solar energy systems, and climate-resilient agricultural practices. The districts of Latehar and Simdega are brimming with new and innovative models of adaptation led by the community, whereas urban centres like Ranchi and Jamshedpur are exhibiting potential for the green infrastructure expansion. Although the challenges continue to exist, such as fragmented institutional coordination, limited access to climate finance, and the low level of utilisation of the indigenous knowledge systems. Some of the policy proposals envisage the setting up of a Climate Resilience Taskforce that would help in better coordination among departments, the issuing of green bonds at the state level to attract climate finance, and the inclusion of climate risk assessments in all developmental schemes. The paper promotes the idea of a Jharkhand-oriented Climate Action Framework that is in harmony with India's National Adaptation Plan but is a bit different, as it takes into account the local socio-ecological contexts. Highlighting the experience of Jharkhand enables this study to become a part of the conversation on subnational climate leadership. It also provides feasible ideas to other kinds of resource-rich regions that are vulnerable to the climate-development nexus and are at the same time trying to pave the way to the climate-development nexus.



## **Displacement and Development: A Study of Tribal Communities Affected by Mining in Jharkhand**

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Jharkhand is endowed with vast resources of a variety of minerals and occupies a prominent place in the country as a mineral rich State. Jharkhand has approximately 40% of India's total mineral reserves. Most of the mining is located in tribal dominated areas. Mining has led to displacement, land degradation and environmental degradation in Jharkhand, where a significant portion of the population comprises indigenous tribal communities. While mining contributes substantially to economic growth, it often comes at the cost of large-scale land acquisition, forced eviction, and environmental degradation, disproportionately affecting tribal people, whose lives are intricately linked to land, forests, and traditional livelihoods. Displacement from access to local natural resources and resource-based traditional occupations occurs imperceptibly over a longer duration of time and leads to the complete destruction of livelihood bases. Despite constitutional protections and rehabilitation policies, implementation gaps continue to exacerbate tribal vulnerabilities. The objective of the study is to assess the socio-economic impact of mining-induced displacement on tribal communities, particularly in terms of livelihood, education and health. To evaluate the Rehabilitation and Resettlement policies implemented by the Government and mining companies in affected tribal areas. The study reveals that displacement not only leads to loss of land and employment but also disrupts social cohesion, erodes cultural identity, and pushes communities into chronic poverty and marginalization. This research underscores the urgent need for inclusive development policies that respect tribal rights, ensure fair compensation, and promote sustainable alternatives that balance economic interests with social justice and environmental conservation. The study focuses on resistance to large scale mining projects; the impact of mining induce displacement on human development among the rural tribal households of Jharkhand. The present paper examines the tribal displacement by the mining industry in Jharkhand and its socio-economic impact on tribal land and livelihood by the state and industry. This paper explores the socio-economic and cultural impacts of mining-related displacement on tribal communities. The findings highlight the need to have an inclusive development model that prioritizes the rights and welfare of tribal populations.

## **Resettlement Laws in the Century-Old Coalfields of Jharia**

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There is a widespread use of 'eminent domain' by the state, for land acquisition in India. The different laws governing processes of land acquisition in the mining areas and the nexus of imperialist-capitalist structures in the neoliberal period leading to increasing privatisation of these mines is intertwined

with the different R&R policies of the mining company and the state. Multiple laws and policies governing land acquisition processes in mining contexts are continuously modified, hence complicates and disrupts the compensation and rehabilitation reliefs accruing to those affected. This defeats the purpose of the R&R plans and long-due amendments to the land acquisition laws. Through this paper, the author analyses the political economy of mining in Jharia across a timeline of the colonial, post-colonial and the neo-liberal period. The author elaborates on the global, national and state politics pertaining to the policies and compensation provisions provided to the affected population in the Jharia coalfields. The focus is to discuss compensation provisions which are tweaked by the mining company and the state through loopholes in the laws, vulnerable positionality of the affected leading to negotiations, intervention of the private players, etc. The foremost realization is to recognize the importance of local institutions in formulation of laws governing mining regions taking account of their history and specific socio-economic dynamics.

## **Assessing the Socio-Economic and Health Impacts of Coal Mining on Vulnerable Communities: Evidence from Palamu District, Jharkhand**

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This comprehensive study examines the multidimensional impacts of Kathautia Open Cast Coal Mining (KOCCM) operations on the livelihoods, health conditions, and social structures of communities residing in Palamu District, Jharkhand. The research aims to document the extent of environmental degradation, assess changes in household income and occupational patterns, evaluate health vulnerabilities among affected populations, and identify gaps in social protection mechanisms for mining affected communities. A cross-sectional household survey was conducted across six villages (Kathautia, Gari Khas, Batsara, Kajari, Sika, and Shakui) located at varying distances from the mining site. The study employed structured questionnaires to collect data from 363 households, capturing pre- and post-mining conditions across livelihood, health, environmental, and social indicators. The mixed-methods approach combined quantitative household surveys with qualitative assessments of community perceptions regarding mining impacts. The research reveals severe adverse impacts on affected communities. Agricultural productivity has declined dramatically, with 79% of respondents reporting reduced production due to water scarcity and coal dust. Post-mining agricultural income decreased by 44% while dependency on wage labour increased significantly. Over 61% of households experienced migration, primarily driven by livelihood distress. Health impacts are substantial, with 69% of respondents rating their health status as “poor,” and 90% attributing health problems to deteriorated dust and water quality. Only 24% of affected families received any compensation, and 65% expressed dissatisfaction with the amounts received. Infrastructure deficits are pronounced: 55% of households lack toilet facilities, 73% face domestic water scarcity, and 60% have no access to primary healthcare within their villages. The mining company’s social protection initiatives remain inadequate, with 97%

of respondents reporting no health insurance coverage and 81% indicating absence of educational support for children. Urgent intervention is required to strengthen social protection mechanisms for mining-affected populations to achieve inclusive and sustainable resource management. Priority recommendations centre on establishing comprehensive compensation frameworks that account for lost agricultural land, declining productivity, and health impacts, while simultaneously implementing mandatory health insurance schemes for all residents within 5 km of mining operations to reduce catastrophic health expenditure. Furthermore, to address economic distress, it is crucial to create alternative livelihood programs focused on skill development and local employment generation.

## **Humanising Coal-Based Development: A Sociological Analysis of Participatory R&R in Jharkhand**

**Shankar Kumar Jha**, Research Scholar, Ranchi University

Coal remains a cornerstone of India's social and economic development, powering industries, households, and the national power grid. Jharkhand, with nearly 90 billion tonnes of reserves—about 27% of India's total coal—plays a strategic role in sustaining this energy economy. The economic benefits extend beyond extraction through substantial royalty revenues that strengthen the state's fiscal capacity. Yet, coal mining also results in the displacement of tribal communities, small farmers, and forest-dependent households, making participatory Rehabilitation and Resettlement (R&R) indispensable for ensuring that development is humane, dignified, and socially just.

This study explores how participatory R&R mechanisms contribute to equitable land acquisition and sustainable community development in coal-bearing regions of Jharkhand. Conducted through a qualitative research design in districts such as Ramgarh, Godda, Dhanbad, and Hazaribagh. The research draws upon semi-structured interviews with displaced families, consultations with Gram Sabha representatives, observations of community meetings, and analysis of Social Impact Assessment reports and Coal India Limited's (CIL) R&R policies. The thematic analysis reveals that participatory approach fosters trust and improves compensation outcomes, enabling communities to negotiate not merely for monetary relief but for culturally appropriate housing, land-for-land exchange, employment guarantees, and livelihood training.

The findings further show that CIL's R&R policy has played a significant role in enhancing local benefits from the coal economy through employment provisions, skill development, and infrastructure support. Participation through Gram Sabhas has enabled communities to assert their right to consent, demand fair compensation, and secure long-term livelihood opportunities. However, gaps persist in benefit-sharing models linked to state royalty earnings, post-resettlement monitoring, and inclusive planning for women and landless labourers.

Strengthening community participation, ensuring livelihood-based compensation, institutionalizing monitoring committees, and linking future benefits to the coal economy can transform displacement from a source of suffering into an avenue for sustainable and equitable growth in Jharkhand.

# URBAN INCLUSION AND SUSTAINABLE FINANCING: SMALL/MEDIUM/MARKET TOWN DEVELOPMENT AND RESOURCE MANAGEMENT

## Analysis of Simdega's Story: Transformation from Periphery to Prominence

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This research utilizes data from NITI Aayog's Aspirational Districts Programme (ADP) obtained through the Champions of Change Dashboard, with delta ranking methodology, to analyse the performance of aspirational districts at the all-India level first, and subsequently identifies developmental gaps within Jharkhand, particularly between the urban centre of Ranchi and the predominantly tribal districts. The study evaluates cumulative improvement from 2018 to March 2025, covering approximately seven years of progress across various development dimensions like health, education, infrastructure, governance, economic growth, and social welfare. The analysis clearly shows that Simdega is the only district from Jharkhand that found its place amongst the top 10 performers (at the 10th position)—a predominantly tribal district. Within the state of Jharkhand, it has achieved remarkable development outcomes that surpass not only peer tribal districts (Khunti and Lohardaga) but also established urban centres like Ranchi. This analysis attempts to explore the mechanisms behind Simdega's exceptional progress, identifying the interventions, policies, and local conditions that enabled its transformation from periphery to prominence. The Simdega's developmental gains illustrate that by leveraging inherent assets and institutional capacities that tribal regions possess, superior developmental results can be obtained. The study shows that tribal communities should be acknowledged as development innovators rather than passive beneficiaries. This study contributes by showing how communities can follow development strategies that are both culturally-rooted and empirically successful.

## **A Century of Urbanization in Jharkhand: Continuity and Change in the Mineral Belt (1901–2011)**

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Jharkhand, carved out of the mineral-rich Chotanagpur Plateau, represents one of India's most resource-endowed yet socio-spatially uneven regions. Despite more than a century of intensive mineral extraction and industrial development, the state's urbanization process has remained highly concentrated, selective, and spatially imbalanced. This paper examines the historical and contemporary trajectories of urbanization in Jharkhand with specific focus on the role and stagnation of small and medium towns in the context of resource-led development. Drawing upon Census of India data from 1901 to 2011 and archival reports on the mineral belt of Eastern India, the study analyses levels of urbanization, urban growth, size-class distribution of towns, concentration patterns, and their implications for regional development and resource management.

The findings highlight a classic case of “urban growth without urbanization.” While the absolute urban population has increased considerably, the overall level of urbanization in Jharkhand remains low—about 24 per cent in 2011. Urban expansion has been spatially confined to a few Class-I urban centres such as Dhanbad, Ranchi, Jamshedpur, Bokaro and Chas, forming two dominant urban-industrial cores in the coal and mineral belts. These centres, driven by mining, steel plants and associated industries, have attracted a large share of the urban population, resulting in a “top-heavy” and mega-cephalic urban structure. In contrast, small and medium towns— despite a numerical increase— continue to exhibit stagnation, inadequate infrastructure, weak economic bases and limited functional diversification.

The study also reveals that several districts with extremely low levels of urbanization, such as Palamu, Latehar, Pakur and Godda, have recorded very high decadal urban growth rates, primarily due to the reclassification of rural settlements into census towns rather than genuine industrial or service-sector transformation. This indicates a process of administrative urbanization rather than economic urbanization. Furthermore, the concentration of growth in a few urban enclaves has led to mounting pressure on land, housing, water, sanitation and transport, manifested in the rapid expansion of slums—over 72 per cent of Jharkhand's slum population is concentrated in Class-I cities alone.

From a resource management perspective, the paper argues that extractive activities in Jharkhand have failed to generate a balanced urban network. Instead, they have produced isolated islands of development amid vast peripheral stagnation. The weak integration between urban-industrial cores and surrounding small towns has limited the spread of economic benefits. The paper concludes by emphasizing the urgent need for a decentralized and regionally balanced urban strategy that strengthens small and medium towns as service hubs, promotes sustainable infrastructure, diversifies local economies, and ensures that resource exploitation contributes to inclusive and ecologically sensitive urban development in Jharkhand.

## **Inclusive Urbanism in Jharkhand: Lesson from Ranchi's Experience for Sustainable Growth**

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Urban planning in Jharkhand, particularly in its capital city Ranchi, reflects a dynamic negotiation between modern urban development goals and the complex socio-ecological realities of indigenous land rights, informal settlements, and uneven urban growth. The city's ongoing transformation is guided by three major policy frameworks the Ranchi Master Plan 2037 (PLU), the Smart Cities Mission (SCM, 2016), and the Transit-Oriented Development (TOD) Policy (2016-2026) each seeking to modernize infrastructure, mobility, and land use in alignment with the global discourse on inclusive and sustainable urbanism. However, these frameworks operate within a historically layered land governance system, especially under the Chotanagpur Tenancy (CNT) Act, 1908, which regulates tribal land ownership and continues to influence the city's legal and spatial structure. This creates tensions between statutory planning and informal urban realities, complicating efforts toward equitable urban restructuring. The study employs a qualitative, spatial-policy analysis drawing on official planning documents, GIS-based spatial data, and secondary literature on informal urbanism in Ranchi. Through geospatial mapping and zoning analysis, the research identifies how TOD, SCM, and PLU frameworks intersect across the urban landscape, especially in relation to recognized slum settlements. The findings indicate that nearly 60% of recognized slums are located within designated residential zones, suggesting potential for in-situ upgrading rather than relocation. However, some settlements are situated in non-conforming or high-risk zones, necessitating more nuanced, non-clearance strategies to avoid displacement. A critical observation concerns the Smart City Mission's Area-Based Development (ABD) approach, which, while intended to improve urban infrastructure, paradoxically risks "double displacement" by situating low-income housing on already occupied land. Moreover, retroactive land-use conversions appear to favor the formalization of high-value informal developments while marginalizing low income groups. Such patterns underscore deep governance asymmetries and a lack of transparent mechanisms for equitable land management. The paper concludes that Ranchi's urban transformation reveals a significant disconnect between technocratic, data-driven models of urban modernization and the lived realities of informal tenure and socio-spatial inequality. To achieve inclusive urbanism, planning must move beyond clearance based redevelopment and instead integrate existing communities into the formal planning process. Recognizing de facto tenure, prioritizing in-situ upgrading, and institutionalizing participatory planning mechanisms are essential steps. Embedding principles of social justice, equity, and ecological resilience into Ranchi's urban policy frameworks can reorient its smart city trajectory toward a more sustainable, inclusive, and context-sensitive model of urban growth.

## Urban Transport and Informal Work: Exploring the Mobility Experiences of Women in Jamshedpur

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The urban mobility and accessibility of transport systems within cities play a crucial role for individuals, as it enables them to reach the places and opportunities crucial for their growth and well being. Several factors influence the way we access and experience our cities. Gender remains a very significant aspect that defines our relationship with the cities we inhabit. Men and women engage with the city in distinct ways. Their choice of occupation, education, recreation, and travel experiences are shaped by the opportunities and limitations imposed by the socio-spatial arrangements within cities, design of cities, built environment, and infrastructure, or lack thereof. Moreover, in urban areas of the global south, a significant portion of women are engaged in the informal sector. However, they are rarely considered or accounted for in urban planning initiatives. For instance, the 2011 Census of India data highlights a substantial gender disparity in access to various modes of transportation. Data shows that men usually have better access to transportation options compared to women. In Indian cities, women primarily rely on walking or public transportation, such as buses. Women in the informal sector mostly use highly affordable modes of transport, such as walking or cycling. The 2011 census data reveal that nearly 20% of the female workforce in the East Singhbhum district, where Jamshedpur is located, uses bicycles to commute distances ranging from 21 to 30 km, while almost 18% walk distances of 6 to 10 km. In this context, with the help of primary and secondary data, this paper aims to explicitly analyse the mobility experiences and challenges faced by women in the informal sector of Jamshedpur as they travel from low-accessibility areas, slums, informal settlements, and the city's periphery. The paper draws on the existing literature on urban mobility and urban accessibility in the Global South, particularly the mobility experiences of women living in slums and informal settlements of cities.

## The Role of Infrastructure Development in Economic Growth in Jharkhand: Determinants and Policy Suggestions

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Jharkhand is a resource-rich state in India, contributing 40% to the country's mineral resources and emerging as a significant hub for industries such as mining, metals, manufacturing, and allied sectors.



According to the Annual Report 2022-23 of the Ministry of Coal and the Ministry of Mines 2021-22, Government of India, the state accounts for 17% of coal production, 10% of iron ore, 26% of bauxite, and 50% of uranium in the country. Despite these contributions, the state's growth rate has been poor since its inception in 2000-01. The average real GSDP growth rate from 2012-13 to 2021-22 is 5.1%, which is lower than the national average of 5.6%. Additionally, the state's share in India's nominal GDP has decreased steeply from 2.7% in 1990-91 to 1.5% by 2021-22. One potential factor behind this discouraging growth is the lack of socio-economic and financial infrastructural development. While some studies examine the impact of socio-economic infrastructure on the state's industrial and economic development, there is a dearth of research on the impact of financial infrastructure on economic growth and its underlying causes. The present study aims to fill this gap by investigating the role of financial infrastructure in economic growth and examining its determinants. For this purpose, the study proposes to use principal component analysis to formulate composite indices for physical, social, and financial infrastructures. Following Timilsina, G.R., Sahoo, P., & Dash, R.K. (2025), it will employ the OLS method to identify the determinants of low socio-economic and financial infrastructural development. The potential determinants include size of GSDP, the share of manufacturing in GSDP, the share of gross capital formation in GSDP, population density, and the development of the banking sector. Data will be collected from, Handbook of Statistics on Indian Economy, RBI; Reports of NITI Aayog and Jharkhand Economic Survey. Based on the findings, policy suggestions will be recommended. Keywords: Jharkhand, Economic Growth, Infrastructure Development, Financial Infrastructure

## **A Policy Framework for Formalizing Occupational Safety and Health (OSH) Protocols for Women Pickers in Jharkhand's Urban Solid Waste Management System Under 'Zero-Waste Goals**

**Prakash Kumar Hajam**, Research Scholar, Ranchi University, Ranchi

This research paper focuses on developing a robust Occupational Safety and Health (OSH) Protocol for Women Waste Pickers operating in Urban Solid Waste Management (SWM) in the context of Jharkhand, aligning with the state's drive towards 'Zero-Waste' targets. These women constitute a critical, yet informal, workforce in Jharkhand's urban centres, making indispensable contributions to environmental conservation through recycling. Despite their vital role, their informal status exposes them to severe Occupational Hazards (physical, biological, and psycho social) and a complete lack of social security, which are significant impediments to the state's human development goals.



## Mobilizing Micro Enterprises for Inclusive and Sustainable Growth in Jharkhand: A Composite Index Approach

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Micro enterprises form the backbone of India's informal and small-scale economy, contributing significantly to employment generation, income enhancement, and local economic resilience. However, their growth performance varies considerably across states due to differences in infrastructure, institutional support, and entrepreneurial climate. The present study aims to evaluate the performance of micro enterprises in Jharkhand relative to other major Indian states by constructing a Composite Growth Index (CGI) to assess their overall growth pattern, inclusiveness, structural composition, and entrepreneurial intensity. The methodology involves secondary data analysis based on information from the Udyam Registration Portal and other official MSME sources for the period 2020–2022. To comprehensively capture the multidimensional nature of growth, four sub-indices i.e., Growth Index, Inclusiveness Index, Structural Index, and Entrepreneurship Index were computed using normalized indicators through the min-max normalization technique. Further, Principal Component Analysis (PCA) was used to compute the Composite Growth Index (CGI) using factor loadings and weights to measure the relative performance of micro enterprises across 18 Indian states. The findings indicate that Jharkhand's performance in micro enterprise growth remains modest with a Composite Growth Index value of 0.21, placing it in the lower category compared to industrially advanced states such as Maharashtra (0.77), Tamil Nadu (0.56), and Uttar Pradesh (0.48). Jharkhand's Growth Index (0.06) and Structural Index (0.04) are particularly low, reflecting limited expansion and narrow sectoral diversification. However, the Inclusiveness Index (0.43) and Entrepreneurship Index (0.37) reveal emerging participation from women and marginalized communities, suggesting a gradual social acceptance of entrepreneurship as a viable livelihood avenue. The analysis underscores that while the state possesses a strong resource base and human potential, inadequate infrastructure, limited access to finance, weak market linkages, and skill shortages continue to constrain the expansion of micro enterprises.

## The Production of Space and Urbanisation: A Case of Jamshedpur

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Urbanisation emerged as both a solution and a problem for the growing population and migrants in the 21st century. On one hand, it fuelled economic progress and provided livelihoods for migrant people, and on the other hand, it deepened inequality and crises in the cities in terms of civic amenities, housing, transportation, etc. Construction and service sectors emerged as main contenders to accommodate them, in contrast to industrial employment, which was further diluted through casualisation. The

question arose for the inclusiveness of migrants and casual workers through facilitating infrastructure (housing, basic amenities, comfortable living) and participation. It somehow tried to solve it through privatisation (outsourcing social obligations to private parties) and democratisation (74th Constitutional Amendment). This paper looks at these developments through the theoretical lens of the production of space and the right to the city. It was developed by the French sociologist Henry Lefebvre for urban planning for rural migrants who flooded towards cities for livelihoods in the 1970s in France. This concept is based on three interconnected spaces as perceived (what was seen), conceived (what was thought), and lived (what was experienced) in evolving urban centres. The study is positioned in Jamshedpur, a private party (Tata Steel Ltd)-owned and administered city. Increased populations and peripheralisation seek massive infrastructure developments. Built for industrial workers, industrial employment is no longer the main livelihood in Jamshedpur. More than 90 percent of the inhabitants have other means of earnings. So, what is the current status of urbanisation, and what has been the role of Tata Steel and the government in this part of the study? Methodologically, information has been gathered through interviews of 100 participants of different categories and literature received in local papers, Tata Steel, government offices, etc. Along with this, the researcher is a regular worker at Tata Steel Ltd, residing in Jamshedpur for more than 34 years, and has closely witnessed and monitored all these developments.

## **Local Governance and Fiscal Autonomy: A Case Study of Jharkhand**

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The state of Jharkhand falls under the 5 Schedule of the Indian Constitution. Rural areas are governed by the 73 Constitutional Amendment, while urban areas are governed by the 74 Amendment. Some states have only reproduced the central act in their conformity acts; however, this does not imply real devolution, leaving many provisions de jure rather than de facto. Jharkhand's RLBs and ULBs are governed by Jharkhand Panchayati Raj Act (JPRA) 2001 and Jharkhand Municipal Act (JMA) 2011. Under the XI and XII Schedules of the constitution, 29 functions are entrusted to RLBs and 18 to ULBs. Their implementation is critical in Fifth Scheduled states like Jharkhand, where functioning of local bodies is the key to development. This study examines fiscal autonomy by analysing secondary data from the Census of India, RBI reports on local finances, and the first report of the 5 State Finance Commission, Jharkhand. It focuses on revenue and expenditure trends and institutional arrangements. Findings reveal that both RLBs and ULBs face financial constraints. Rural bodies rely heavily on Finance Commission grants and centrally sponsored schemes, with Own Source Revenue (OSR) contributing only 10–12 percent of expenditure. Key sectors such as primary education, drinking water, and rural roads remain underfunded due to weak revenue collection. Urban bodies perform slightly better but still struggle with OSR mobilisation. Expenditure growth in both tiers

has outpaced revenues, creating fiscal stress and resulting in poor service delivery. Institutional challenges are significant. The Director of Local Fund Audit is non-functional, and internal audit mechanisms are weak. The Economic Survey 2018 noted the poor fiscal decentralisation of India's third tier, with under-collection of direct taxes despite statutory powers. The XIV Central Finance Commission confirmed that there is no single optimal devolution model across states. Fiscal decentralisation is shaped by political processes, and outcomes reflect reform effectiveness. M.A. Oommen observed that parallel agencies have encroached on the functional domain of local bodies, threatening efficient fiscal decentralisation. For example, Member of Parliament Local Area Development Scheme (MPLADS) and Member of Legislative Assembly Local Area Development Scheme (MLALADS) are implemented through District Administration rather than at the local level. Lack of detailed activity and sub-activity mapping further weakens accountability. And so, clear role definition for local bodies, along with attention to Centre–State–Local Government relations, is essential.

## **Endogenous Growth Constraints under Resource Dependence: Human Development and Innovation Dynamics in Jharkhand**

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Jharkhand offers a compelling case to examine the paradox of resource-led growth within an endogenous framework. Despite being among India's most mineral-rich states, its economic structure remains narrowly based on extractive industries, with persistently low human development and limited innovation activity. This study investigates whether Jharkhand's dependence on natural resources has created an innovation and capability trap, where growth is driven by rents rather than by knowledge accumulation or technological progress. Drawing on the endogenous growth models of Romer (1990) and Lucas (1988), the paper argues that sustainable development depends on internal factors such as human capital, learning-by-doing, and innovation spillovers rather than the scale of physical resource endowment. The empirical analysis uses a district-level panel dataset (2001–2023) constructed from the Annual Survey of Industries (ASI), NFHS-V, Census of India, MSME, and IP India databases. The econometric framework tests how variations in the share of mining in Gross Value Added (as a proxy for resource dependence) influence per capita income growth, human development outcomes, and innovation intensity across districts. The model incorporates fixed-effects estimation to control for unobserved district heterogeneity, and Instrumental Variable (IV) and System Generalized Method of Moments (GMM) techniques to address potential endogeneity between resource dependence and growth outcomes. The baseline model is expressed as: where denotes district growth, resource dependence, human capital, and innovation activity.

The interactive term  $x = + + + + x + )$  tests whether stronger human development mitigates the negative effects of resource intensity. Preliminary hypotheses posit that higher mining dependence is associated with weaker human development and lower innovation outcomes, supporting the resource curse within an endogenous growth context. The mediation tests further evaluate whether human capital and innovation channels explain this indirect relationship. By integrating endogenous growth dynamics with the resource-curse hypothesis, this paper contributes to understanding why resource-rich economies like Jharkhand fail to generate self-sustaining growth. The findings are expected to demonstrate that economic diversification and human capability expansion are critical to transforming resource rents into productivity gains, technological learning, and long-run innovation-driven development. Policy implications point to the need for redirecting resource revenues toward education, health, R&D infrastructure, and MSME innovation incentives. Strengthening technical education, digital infrastructure, and industry–university linkages can convert resource rents into productive knowledge capital. The study underscores that Jharkhand’s sustainable growth pathway lies in transforming extraction-led development into an innovation-led economy, consistent with the principles of endogenous growth theory.

## Public Expenditure and Growth Dynamics in Jharkhand: Evidence from Time-Series Analysis

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The relationship between public expenditure and economic growth has long been debated in economic theory. The Keynesian hypothesis argues that higher government expenditure stimulates economic growth by increasing aggregate demand, while Wagner’s Law suggests that economic growth leads to greater public spending. Therefore, determining the directionality of this causal relationship remains a pivotal concern in the study of fiscal policy. Public expenditure has increased exponentially in Jharkhand since its formation, but this has not consistently resulted in proportional growth outcomes. While there is an abundance of literature exploring the relationship between public expenditure and economic growth, there is a notable gap in research specifically addressing the context of Jharkhand. The objective of the study is to examine the impact of total public expenditure on economic growth in Jharkhand during the period 2000 to 2025. The study uses time-series econometric analysis to test for stationarity and association between the variables. The Granger causality test will be used to identify the direction of causality, while the Vector Autoregression (VAR) model will assess the dynamic interactions between public expenditure and Gross State Domestic Product. The study seeks to contribute to a deeper understanding of the public expenditure and growth nexus in Jharkhand’s development trajectory.

## **Silk, Sustainability, and Grassroots Development: The Jharkhand Model**

**Punita Bharti**, Research Scholar, Ranchi University

**Manju Kumari**, Associate Professor, Ranchi University

Jharkhand's Tassar silk industry presents a unique example of how traditional knowledge, natural resources, and community participation can come together to create sustainable and inclusive development. Rooted in tribal practices and forest ecosystems, the silk value chain, from silkworm rearing to weaving and marketing, has helped generate livelihoods, preserve cultural heritage, and promote eco-friendly production. This study explores the developmental impact of the Jharkhand model and assesses its potential for replication in other tribal regions. To evaluate its effectiveness, a SWOT analysis is used to identify internal strengths and weaknesses, as well as external opportunities and threats. Strengths include skilled tribal artisans, GI-certified silk, and strong cultural identity. Weaknesses involve limited market access, seasonal dependency, and low mechanization. Opportunities arise from growing demand for ethical fashion, boutique entrepreneurship, and export potential, while threats include competition from synthetic fabrics and climate-related challenges. Key findings highlight the model's success in improving household incomes, enhancing social dignity, and increasing women's participation in the silk economy. The integration of traditional skills with institutional support has created a resilient and community-driven development pathway.

## **Community Participation and Tribal Development from Policy to Practice: A Case Study of Ara-Keram Model Village of the State of Jharkhand**

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Community participation is an essential tool for social progress and development of village communities. Ara-Keram village is a tribal village situated in Ormanjee panchayat, 25 km from the state capital Ranchi which is a model village of the State of Jharkhand. The village is recognized and awarded by the Govt of Jharkhand as the model village in the state for its strong and impressive community participation and tribal empowerment in the field of water conservation, rural governance, education, sanitation, clean drinking water, agriculture and sustainable environment protection measures. Ara Keram village has earned its tag of model village owing to its pace of development and the determination of the village community to transform the village. Ara village with its natural beauty, surrounded by hills and mountains, close-knit society and progressive outlook. It is a living example of how tradition and modernization can coexist together in rural India. Harnessing both exploratory and descriptive research design the research study has carried out to explore participation of villagers in the sustainable community development process of the village and examine the role of panchayat in rural

reconstruction, tribal development and governance process. The study reflects on the best practices of the village. Blended with qualitative and quantitative approaches the study used triangulation technique for a comprehensive understanding of the Ara model village, its demography, developmental initiatives and people's participation. The findings of the study revealed that empowered village institutions contributed significantly in the rural reconstruction and development process of the village. The study found how democratic decentralization is strengthening local level democracy, empowering village communities and improving public sector efficiency for sustainable rural development. The findings also reveal that due to strong community initiatives the village is declared as alcohol free and consumption of alcohol is not permissible in the village and it is strictly prohibited. Similarly, no incidence of conflict among the villagers is reported in the study village during our visit. It was evident from group discussion that the villagers settle their grievances themselves in Gram Sabha and Village meetings, hence Gram Sabha is utilized as an alternate dispute resolution forum and access to justice. Domestic violence in the households is a major issue in the State and it was found in Ara Model village no incidence of domestic violence reported. Through school development committee Ara village is committed to towards social change and transformation in the field of education

# QUALITY EMPLOYMENT AND DEMOGRAPHIC DIVIDEND; STRENGTHENING LIVELIHOODS AND SOCIAL PROTECTION

## **From Informality to Inclusion: Rethinking Women's Labour in Jharkhand**

**Yogeshwar Bharat**, Shiv Nadar University

Women's employment in Jharkhand remains dominated by informal, low-paid, and unpaid work, despite recent improvements in participation. Using evidence from PLFS and other reports, this study highlights persistent barriers, including low skills, restricted mobility, safety concerns, and limited access to regular wage jobs. The analysis argues that increasing participation alone is not enough; policies must focus on improving job quality and earnings. A shift to inclusion requires investment in skill development, women-led enterprises, childcare and care infrastructure, and safer work environments. Strengthening these foundations can enable women's work to drive household welfare and inclusive state growth.

## **Evaluating Eastern India Through the Lens of Major Economic Sectors: A Disaggregated Analysis**

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There goes a saying that India is a land of geographical, linguistic and cultural diversity since its origin. Here, it is worth to mention that the same economy is also seen to be characterized by economic diversity across its major states as well— ranging from its livelihood stories to the demand and supply factors guiding its job-market equilibria. In alliance with the theme of the conference, the author pertains to make an introspection about the tales of employment of the residents of eastern India through the lens of the major economic sectors in a disaggregated manner. The present paper seeks to understand the following: (1) Looking into the rates of participation of the residents of Eastern India into the labour force and workforce of the economy. (2) Analyzing the distribution of Eastern

India workforce across the major economic sectors. (3) Taking a glimpse at the mode of employment of Eastern India workforce and (4) Identifying possible explanations to any sectoral variation if noted across the states of Eastern India. The entire research piece would depict stories of employment solely for the four major states of Eastern India – Bihar, Jharkhand, Orissa and West Bengal for the period of twelve years (2009-10 to 2011-12). The concerned research investigation reposes to the use of the unit level data of the employment/unemployment surveys conducted by the National Sample Survey Organization (NSSO). The rural-urban and the male female disaggregation (that is, both gender and sector wise disaggregation's) have been done in this research piece with the aim of obtaining a clear picture about the employment scenario prevailing in these states for the span of twelve years of study. Also, it must be mentioned that the employment estimates of this study are based on NSSO's Usual Status approach (US-PS+SS). The extraction and processing of the unit level information have been done using STATA 12 software package. All relevant tabulation exercises have been done in MS-EXCEL. The demand and supply side fluctuations with regard to the workers of Eastern India has been clearly depicted in the analysis. A particular U-pattern has been noted regarding participation of rural men of the Eastern states in the work force of the economy. Parallel to this, a sharp rise in urban women workers participation in the work force for Orissa and West Bengal over the years. An interesting point to be noted here is that a higher proportion of the urban women workers of Jharkhand are seen to be employed in regular jobs when attention was given to the quality of employment for the workers of Eastern Indian states over the twelve-year span of time. So, although women of Jharkhand are working less in comparison to their peers of the remaining Eastern Indian states yet they are performing better quality jobs – which indicates the paucity of the crowd of working poor.

## **Demographic Potential and Policy Pathways for Inclusive and Sustainable Development**

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At twenty-five years since attaining statehood, Jharkhand finds itself at a critical demographic juncture. Nearly half of its population falls within the working-age group (15–59 years), and a large share is under 30, underscoring the state's significant demographic potential. This youthful profile offers Jharkhand an opportunity to convert its population structure into a strong demographic dividend. However, persistent challenges—such as unemployment, large-scale out-migration, and limited industrial diversification, continue to threaten this potential, risking a shift from demographic advantage to demographic burden.

The study pursues four key objectives: to analyze Jharkhand's demographic profile to assess the extent of its demographic dividend; to identify the major barriers that hinder the conversion of demographic potential into inclusive economic growth; to explore the role of quality employment, skill alignment, and migration management in promoting sustainable development; and to recommend



evidence-based policy interventions to leverage this demographic window effectively.

Adopting a policy-analytical approach, the study draws on secondary data from the Census of India, Periodic Labour Force Survey (PLFS), Economic Survey of India, Jharkhand Economic Survey, Jharkhand Migration Survey, and relevant state reports. It maps Jharkhand's demographic and labour-force structure with a focus on regional and tribal disparities in participation and employability, followed by a policy-gap analysis to identify structural constraints to inclusive growth.

Key findings reveal that despite its young population, Jharkhand faces high unemployment, weak industrial diversification, and substantial youth out-migration. A persistent mismatch between the supply of skills and industry demand limits employability, particularly among rural and tribal communities. Dependence on extractive industries has also inhibited the growth of manufacturing and service sectors that are essential for sustainable job creation.

The study concludes with strategic policy recommendations, including strengthening skill development through market-linked and region-specific programs; promoting diversified employment opportunities in manufacturing, IT-enabled services, and rural enterprises; improving migration management through skill-linked placements and circular migration pathways; and ensuring equitable access for marginalized and tribal groups through inclusive education, digital literacy, and targeted welfare schemes. Drawing on best practices from other states and global contexts, the study proposes a framework to transform Jharkhand's youth bulge into a driver of long-term, inclusive, and sustainable growth.

## **Wage Share, Labour Productivity and Unit labour Cost in Jharkhand : Assessing Regional Competitiveness in the Era of Globalisation**

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It is often believed that labour market in India characterises stickiness in the down sizing of the labour force as we generally observe that even in the face of falling product demand, a firm may not be in a position to reduce its work force size. Again, with industrial growth, to protect themselves from the burden of fixed labour costs during downswings, industries may undertake more capital intensive techniques substituting away from labour. If it happens, then we cannot consider labour a variable input and in that case, increase in labour productivity may be associated with a falling share of wages. In the post reform period, the country and some states including Jharkhand as well have experienced relatively high growth rates. So, it seems essential to check the said hypothesis. Besides, the changing trends in labour costs of producing output in industries seem important as it indicates regional competitiveness in a globalised economy. In this paper, we have made an attempt to look into the changing structure of wage share in value added, labour productivity and unit labour costs of producing output in industries for Jharkhand as well as for all India over the period 2013-14 -2023-24 with an objective to access the labour market stickiness and regional competitiveness. The said

period is supposed to capture relatively more sustainable impact of liberalisation on the economy in general. Using Annual Survey of Industries data, the results presented in this study support the idea that given the labour laws and exit policy, labour may not be a variable input and increase in labour productivity may be associated with a falling share of wages. The labour market stickiness holds good at all India level and it is equally supported by a state level data also. Again, at the macro level, though both Jharkhand and India emerge as cost competitive in the era of globalisation, significant sectoral variations are also observed. In Jharkhand, for most of the sectors, the increase in labour productivity is associated with falling wage share in value added and Unit Labour Cost except 'Tobacco and Related Products', 'Wearing Apparel, Dressing' and 'Paper and Printing'. Amidst the significant growth rate evolving the changing structure of wage share, labour productivity and unit labour cost, it should be kept in mind that liberalisation and globalisation will not serve its purpose unless the policy maker can ensure higher incomes for existing labour as well as job opportunities for new entrants into the labour force.

## Employment and Livelihood Diversification in Bihar and Jharkhand

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The employment scenario in the states of Bihar and Jharkhand reflects the broader challenges of labour market dynamics in eastern India. Despite substantial economic and demographic potential, both states continue to face persistent issues of unemployment, underemployment, and a dominance of informal sector activities. The paper critically examines trends in labour force participation, sectoral distribution of employment, gender disparities, and rural–urban differences. Using secondary data from official sources, it explores the structural transformation of the economy and its limited capacity to generate productive non-farm employment. Thus, methodologically, the paper relies on secondary data drawn from government sources such as National Sample Survey (NSS) and Periodic Labour Force Survey (PLFS). Descriptive statistics and trend analysis have been employed to examine patterns over time, while comparative analysis highlights interstate variations and sectoral shifts. The analysis highlights the mismatch between skill availability and labour demand, inadequate industrialization, and the seasonal nature of agricultural employment as key constraints. The key findings reveal that both states exhibit low labour force participation rates, a high concentration of workers in low-productivity agricultural activities, and limited expansion of the manufacturing and modern service sectors. Informal employment dominates, with significant rural dependence and limited opportunities for decent wage employment. Gender disparities remain pronounced, particularly in rural areas. Policy recommendations emerging from this analysis emphasize the need for an integrated and multi-pronged strategy to address structural employment challenges for both Bihar and Jharkhand. Promoting labour-intensive manufacturing and expanding rural non-farm activities remain critical to generating productive employment outside subsistence agriculture. In addition, leveraging non-timber forest products (NTFPs) such as lac, honey, medicinal plants, tendu leaves, and bamboo can provide viable livelihood opportunities, particularly in forest-fringe and tribals for the states like Jharkhand. Strengthening community-based forest

enterprises, facilitating value addition, and improving market access can transform NTFPs into stable sources of income. Skill development programmes should be aligned with local resource potential and emerging market trends to enhance employability and entrepreneurship. Expanding infrastructure—especially in transport, energy, and digital connectivity—will be essential to attract investment, improve market linkages, and stimulate job creation. Strengthening employment-linked social protection can reduce the vulnerability of informal workers. Targeted measures to increase women’s participation in both manufacturing and NTFP value chains, including childcare support, flexible work options, and gender-responsive training, are vital for inclusive growth. Addressing these structural constraints holistically can significantly reshape the employment landscape of Bihar and Jharkhand and foster sustainable and equitable economic development.

## **Assessing Sustainable Livelihood Security Across Districts in Jharkhand**

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Livelihood security is a key dimension of human well-being, particularly in developing regions where communities depend heavily on natural resources, agriculture, and informal economies for their sustenance. Jharkhand, a state marked by both rich natural endowments and persistent development challenges, offers a compelling case for examining the multidimensional nature of livelihood vulnerability. This study analyses spatial variations in Sustainable Livelihood Security (SLS) across Jharkhand’s districts by adopting a framework grounded in ecological sustainability, economic performance, and social infrastructure. Using eighteen indicators across these three dimensions, the study constructs a Sustainable Livelihood Security Index (SLSI) to assess the relative status of districts and identify the drivers of vulnerability.

The study draws on secondary data from multiple national sources, including the Forest Survey of India (ISFR 2023), Census of India 2011, NFHS-5 (2019–21), Ministry of Statistics and Programme Implementation, and the Ministry of Agriculture and Farmers’ Welfare. Principal Component Analysis (PCA) is employed to determine the weights of each indicator and to develop composite indices: the Ecological Sustainability Index (ESI), the Socio-Infrastructural Index (SII), the Economic Performance Index (EPI), and the Composite Sustainable Livelihood Security Index (CSLSI).

Findings reveal substantial spatial disparities in livelihood security across the state. Ranchi and East Singhbhum emerge in the high CSLSI category, reflecting stronger ecological resources, infrastructure, and economic opportunities. Conversely, districts such as Pakur, Dhanbad, and Godda fall in the extremely low sustainability group, indicating acute livelihood vulnerability. Beyond mapping these variations, the analysis identifies the most influential indicators shaping vulnerability patterns across regions. The results underscore the need for region-specific development strategies that prioritise livelihood diversification and address structural deficits in ecological management, social infrastructure, and economic opportunities.

Policy recommendations emerging from the study emphasise strengthening environmental sustainability through afforestation, effective CAMPA implementation, and expanded water conservation initiatives. Improving socio-infrastructure conditions, especially through women's self-help groups, sanitation interventions, and ODF maintenance, is critical. Economic diversification through forestry, horticulture, and the integration of indigenous agricultural knowledge can further enhance sustainability and resilience. Together, these measures offer actionable pathways for inclusive and sustainable rural development in Jharkhand.

## **Technology as an Enabler for Equal Opportunity Growth in Jharkhand**

**Prateek Khanna**, Director, Sol Finder Research, Ranchi

Jharkhand is endowed with rich natural resources and is yet marked by persistent socio-economic disparities. The state faces the challenge of ensuring that growth translates into equal opportunities for all its citizens. Traditional development strategies have struggled to overcome uneven access to education, healthcare, energy, and employment across rural, urban, and peri-urban regions. In this context, innovative, forward-looking applications of technology offer transformative potential as enablers of inclusive and balanced growth. The objectives of this research are: (i) to identify novel technological applications that can serve as equalisers across social and geographic divides in Jharkhand; (ii) to explore how these emerging tools can foster equitable access to resources and opportunities; and (iii) to propose policy frameworks that position Jharkhand at the forefront of inclusive technological adoption. The methodology applies foresight analysis, case mapping of global innovations, and scenario building contextualised to Jharkhand's economic and social realities. Consultations with relevant stakeholders (e.g., educators, healthcare providers, entrepreneurs, and policy experts) have informed the design of potentially actionable models that extend beyond currently implemented state programs. The key findings highlight a portfolio of future-oriented initiatives outlined subsequently, spanning multiple technology dimensions. AI-driven adaptive learning systems could provide personalised, vernacular-based digital education, helping bridge quality gaps and resource differential between urban and rural schooling. Immersive VR/AR training platforms could enable youth to acquire globally competitive skills without needing to migrate. Drone-assisted logistics and mobile diagnostic labs could revolutionise last-mile healthcare delivery, while telemedicine ecosystems could expand specialist care access across rural Jharkhand. IoT-enabled agriculture and precision forestry could enhance productivity and sustainability, benefiting both farmers and the environment. Decentralised renewable microgrids with smart payment systems could democratize energy access, empowering local entrepreneurs and communities. Blockchain-based governance platforms could ensure transparency in welfare delivery, land records, and natural resource management. The policy recommendations call for the creation of a state-level innovation sandbox to test these technologies in live settings, investments in inclusive digital infrastructure, and frameworks to support public-private-community partnerships. Strong attention

must be given to digital literacy, ethical safeguards, and ensuring that no demographic is excluded from the digital transition.

## **Techno-Economic Feasibility Study for Rooftop Solar and Battery Storage in Jharkhand**

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The present study evaluates the techno-economic feasibility of rooftop solar and battery storage adoption in Jharkhand through a hybrid energy framework integrating grid electricity, photovoltaic (PV), diesel generator (DG), and battery storage, simulated using the Solar-alone Multi-objective Advisor (SAMA), an open-sourced Python-based tool. Evaluation of the system under various grid tariff scenarios using a financial envelope of ₹9 crore, a 10% discount rate, and an anticipated inflation rate of 7.47%, shows that with a negligible renewable contribution, grid-only supply is still the least expensive option at tariffs between ₹7 and ₹9.8/kWh. While DG dispatch only happens at extreme tariffs (greater than ₹39/kWh), PV deployment only appears at tariffs above ₹9.9/kWh and is capped at 60 kW, making its share negligible in comparison to the state's annual demand of approximately 11.6 billion kWh. Consequently, renewable penetration is effectively zero across all cases, and the levelized cost of electricity (LCOE) escalates sharply with rising grid tariffs, from ₹8.26/kWh at ₹7 to over ₹35/kWh at ₹30. These findings highlight a structural mismatch between system sizing assumptions and load magnitude, which indicates the need for recalibrated parameters and policy-aligned incentives to unlock the true potential of rooftop solar and storage in Jharkhand's energy transition.

## **Jharkhand's Forest Products: Exploring Sustainability and Livelihood through Massive GI Registration**

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In recent years, the government of India has focused on promoting intellectual property in the country, and Geographical Indications (GIs) are an integral part of it. So far, 697 GI products have been registered across the country, with states like Uttar Pradesh, Maharashtra, Kerala, Karnataka, Tamil Nadu, etc. leading the charts, while Jharkhand is at the bottom of this list with just one GI product against its name. Jharkhand has a forest area of around 30 per cent, and it possesses various rich forest products that have the potential of generating sustainable livelihoods if incorporated within the GI framework. Jharkhand consists of a significant portion of the tribal population that is majorly dependent on these forest products, traditional food items and unique artistic practices for sustenance;

however, without due recognition, these products remain undervalued in the market. This study aims to identify various forest products in Jharkhand which have the potential to get a GI tag; assess the role of GI in enhancing local and tribal livelihoods; and examine how GI can promote cultural preservation and sustainable rural development. This study tries to answer the following research questions: a) Which forest products of Jharkhand could be eligible for GI registration? b) How does GI impact the income and livelihood of the local and tribal producers? c) What is the impact of large-scale GI registration on cultural preservation and sustainable rural development? The study involves the qualitative analysis of secondary data collected from government reports from DPIIT, Forest Survey of India, Forest Department of Jharkhand, Department of Scheduled Tribes, Jharkhand and District Industry Centres across Jharkhand. Along with this, case studies of successful registered GI product models from the nearby states like West Bengal, Odisha, Bihar, Uttar Pradesh and Madhya Pradesh will also be undertaken. The study will employ a mixed-method research design. A Descriptive and comparative analysis will be done to identify the potential forest products for GI registration and to analyse the impact of GI registration on livelihood enhancement, cultural preservation and rural development through case studies and statistical abstract. The tentative findings of this study might suggest that products like timber from trees like Sal, Bamboo, Mahua and other forest products like Lac, Sal seeds, Tasar silk and various medicinal and aromatic plants possess strong potential to obtain a GI tag. With GI registration, fair pricing of the products will be ensured, branding and packaging will be improved, and the products will be able to extend their market reach. Moreover, the due recognition of products will also help in maintaining tribal identity, promoting cultural heritage, and sustainable rural development in Jharkhand.

## **Decoding Rural Entrepreneurial Intention: A Study from South Chotanagpur Division, Jharkhand, India**

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Entrepreneurship serves as a vital driver of economic growth in India's contemporary economic landscape. In rural contexts, particularly in aspirational states like Jharkhand, entrepreneurship holds significant potential for addressing unemployment, stimulating local economies, and enhancing the skills of unemployed rural populations. However, persistent challenges such as limited access to resources, financial constraints, and low awareness hinder individuals from pursuing entrepreneurial ventures. Despite the growing recognition of entrepreneurship as a tool for rural development, limited



research has been conducted to empirically examine the multiple factors that shape entrepreneurial intention in rural Jharkhand. Existing studies have predominantly focused on urban or general contexts, leaving a gap in understanding how socio-economic and environmental factors interact to influence rural entrepreneurship within the framework of the Theory of Planned Behaviour (TPB; Ajzen). The study aims to identify and examine the various factors influencing rural entrepreneurial intention for new venture establishment in Jharkhand, based on the Theory of Planned Behaviour. Additionally, it seeks to assess the prevalence and interrelationship of these factors among individuals undergoing self-employment training in the South Chotanagpur region. The study employed a mixed-method approach. In the qualitative phase, 12 rural entrepreneurs were selected through purposive sampling to identify key factors influencing entrepreneurial intention. In the quantitative phase, 241 structured interviews were conducted with individuals from self-employment training institutes in Jharkhand. To examine the relationships among variables, the study applied Partial Least Squares–Structural Equation Modelling (PLS-SEM). The findings reveal that multiple factors—including entrepreneurial attitude, self-efficacy, perceived desirability, and perceived entrepreneurial environment—play significant roles in shaping entrepreneurial intention. Specifically, these factors either mediate the relationship between self-efficacy and entrepreneurial intention or influence other key variables. The results highlight the complex interplay between psychological, social, and environmental determinants of entrepreneurship in rural Jharkhand. The study's empirical validation of an extended TPB model offers valuable insights for policymakers and development practitioners. Strengthening entrepreneurial attitudes, enhancing self-efficacy through training, and improving the entrepreneurial ecosystem—via institutional support, financial inclusion, and awareness programs—can effectively promote rural entrepreneurship. The findings underscore the need for context-specific interventions to foster sustainable entrepreneurial ecosystems in aspirational regions like Jharkhand.

## Utilizing Technology-Enabled Human Resource Management for Inclusive and Sustainable Development in Jharkhand and Bihar

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Jharkhand and Bihar are gifted with an abundance of natural and human resources, but there are persistent challenges in the quality of employment, workforce participation, and equitable distribution and utilisation of resources. This paper focuses on formulating practical strategies to mobilise and monitor human resources for inclusive and sustainable economic development through technology-driven Human Resource Management Systems (HRMS). The study explores government initiatives, social entrepreneurship models, and industry collaborations that have effectively used digital HRMS or Knowledge Management Systems (KMS)—such as e-skilling tools, HR analytics software, and mobile-based workforce monitoring systems—to create more local employment opportunities, skill enhancement, and livelihood creation by channelising natural resources. The study concludes with an

implementable action-focused roadmap and recommends Digital HR practice interventions in public-private partnerships, institutional stakeholder participation and onboarding on HRMS platforms, and localised digital skilling ecosystems to ensure that the economic development of Jharkhand and Bihar is inclusive and sustainable. Following are the key objectives of this study: To evaluate the current human resource development landscape in Jharkhand and Bihar, focusing on the challenges of employment, skills, and digital literacy. To analyse how technology-enabled Human Resource Management practices can enhance inclusive growth by promoting easy access to training, jobs, and entrepreneurship opportunities. To identify scalable models and frameworks for integrating HRM systems with digital skilling initiatives, especially for rural, tribal, and marginalised populations. Methodology This study utilises secondary data from government-sponsored state skill missions, MSME reports and data corresponding to digital skilling programs from government portals or newspaper articles. The paper tries to identify scalable models that will help in local employment creation, workforce inclusion of women and marginalised communities, and entrepreneurship development. It also includes short case studies of community-based Digital HR Systems interventions like digital job mapping and e-learning portals, particularly in non-urban and tribal districts. The findings of this study suggest that integrating Digital HRM practices with digital governance and sufficient stakeholder participation can hugely enhance talent utilisation and socio-economic development. There is a need to bridge infrastructural and awareness gaps. Local district-level training hubs and startup incubators have been very effective when linked with digital technologies and funding opportunities from government schemes. Awareness and skilling campaigns within grassroots government and educational institutions will help utilise these digital HR management practices more effectively towards employment generation. According to the findings, the study proposes the following implementable policy recommendations: Integrate State Digital Governance initiatives to include workforce data, skill development opportunities in local language and employment services. Provide incentives for sustainable HRM practices by linking the performance of social enterprises to subsidised funding. Promote community participation in Digital HRM initiatives through campaigns in local educational institutions and cooperative societies, and self-help groups to ensure inclusivity. Keywords: Human Resource Management, Digital HR, Inclusive Growth, Jharkhand, Bihar, Skilling, Sustainable Development, Public-Private Partnership.

## **Empowering Tribal Communities as Active Partners in Development: Integrating Sustainable Livelihoods and Women's Health through Aanrika**

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The investigation took place amid an internship stint with the Phia Foundation in Ranchi's Karra Block area, Jharkhand. There, direct involvement with local tribal folks happened, especially among the Munda and Oraon peoples. A qualitative approach guided the process, pulling in on-site observations, tools from participatory rural assessment, one-on-one talks, and group sessions featuring residents, village



heads, and women's self-help circles. Reviews of secondary materials rounded things out, covering official programs, reports from nonprofits, and elements of the PESA Act to gauge backing for tribal advancement. One standout effort from the internship involved Aantrika, a line of eco-conscious, plant-based cloth pads designed to boost menstrual health practices in tribal and village settings for women. It tackled hygiene gaps and health risks head-on while opening doors to jobs via small-scale production hubs right in the communities. Tying green practices to female agency, this project shows how modest ventures in social business can support broader growth for tribal areas and build lasting independence. Results point to tribal strengthening working best through initiatives rooted in local input, respect for customs, and care for the surroundings. Getting involved in nearby governance setups like Nagrik Sahayta Kendras, ICDS centers, and MGNREGA works boosts openness, responsibility, and a sense of control over results. Traditions tied to events such as Sarhul festivals and Manda Puja rituals reveal a solid bond with nature, one that could fuel eco-friendly growth efforts. That said, hurdles like unequal treatment between genders, spotty learning access, and thin connections to markets still block deeper engagement from these groups.

## **From Marginalization to Empowerment: How Women's Self-Help Groups are Reshaping Rural Livelihood and Economic Landscape in Jharkhand**

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Women Self-Help Groups (SHGs) promoted under the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) are significantly transforming the rural economic scenario of Jharkhand. They promote community institutions, facilitate financial inclusion, encourage entrepreneurship, and develop sustainable livelihood opportunities for marginalized rural populations. This paper analyzes the multifaceted effects of women's self-help groups in Jharkhand, focusing on their contributions to economic empowerment, livelihood diversification, and the enhancement of institutional capacity within India's rural development framework. A thorough analysis of program data, research literature, and field evidence from the implementation period of DAY-NRLM in Jharkhand indicates that the state has become a model for women-led economic transformation within the national NRLM framework. The quantitative evidence is significant: 307,000 self-help groups have effectively mobilized 33 lakh rural families across all 24 districts, 264 blocks, and 29,922 villages, indicating an unprecedented level of social mobilization in a predominantly tribal and economically disadvantaged state. The groups have enabled access to ₹17,335 crore in formal bank credit, effectively addressing the historical exclusion from credit that has sustained poverty cycles in rural Jharkhand. Approximately 20 lakh families have been empowered to participate in diversified livelihood portfolios, encompassing agriculture, horticulture, animal husbandry, and non-timber forest product (NTFP) value chains. The program has resulted in the emergence of 5.5 Lakh women "Lakhpatis" (earning a minimum of ₹1 lakh annually), indicating a notable transformation in women's economic agency and

household income dynamics. The programme highlights notable advancements in women's decision-making authority in households and communities, improved financial literacy, and increased collective bargaining power in rural markets, in addition to income generation.

The analysis demonstrates effective livelihood diversification across various sectors, including agricultural intensification, livestock development, non-timber forest product value chains, and non-farm micro-enterprises. The paper analyzes the institutional framework facilitating this transformation, encompassing the three-tier federated structure (Self-Help Groups, Village Organizations, and Cluster Level Federations), community resource individuals, and alignment with government welfare programs. It critically assesses the challenges to the sustainability of Self-Help Groups (SHGs), focusing on market linkage limitations, deficiencies in skill development, and the necessity for technology integration. The program's focus on collective action, women's economic empowerment, and poverty alleviation offers evidence-based insights for policymakers, development practitioners, and researchers involved in the design and implementation of inclusive rural development interventions. The experience in Jharkhand provides important insights for other resource-limited, tribal-majority areas aiming to utilize women's collective organizations to promote inclusive economic development. The paper concludes by outlining strategic pathways to strengthen SHG-led livelihood systems, highlighting the necessity for improved value chain integration, digital financial inclusion, and climate-resilient livelihood models.

# STRENGTHENING HEALTH SYSTEMS: ENHANCING FOOD SECURITY AND NUTRITION

## **Economic Analysis of Regional Health Disparities Among High Focus States in India: A Comprehensive Cost-Effectiveness and Financial Burden Assessment**

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India's high focus states face stark regional disparities in health outcomes and associated economic burdens. The states selected for this study are categorized as High Focus States by the National Health Mission (NHM), excluding the northeastern region due to their poor health indicators and infrastructure deficits requiring targeted intervention. This study provides an extensive economic analysis of health sector performance across eight such states; Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Uttarakhand, Rajasthan and Odisha over the period 2017 to 2022. These states collectively bearing a disproportionate share of the country's disease burden and health-related poverty are prioritized under the National Health Mission for focused intervention. The main objective of this research is to evaluate economic dimensions of health financing, cost-effectiveness of interventions, financial protection against catastrophic health expenses and efficiency of resource allocation. Using a longitudinal quantitative methodology, the study integrates secondary data from National Health Accounts, Global Burden of Disease studies, National Family Health Surveys and governmental sources to assess trends in per capita government health expenditure, out-of-pocket expenditure (OOPE) burdens, cost per disability-adjusted life year (DALY) averted, incidence of catastrophic health expenditure as well as allocative and technical efficiency through Data Envelopment Analysis. Additional economic indicators such as fiscal effort relative to Gross State Domestic Product (GSDP) and productivity losses due to health-related absenteeism were also examined. This paper reveals significant heterogeneity in health financing patterns and economic efficiency among the states. Government health expenditure growth varied substantially with Uttarakhand and Bihar exhibiting the highest compound annual growth rates though Bihar's absolute

per capita spending remains low due to limited fiscal capacity. OOPE burdens are critically high in Uttar Pradesh and Jharkhand, often exceeding government spending levels and indicating insufficient financial protection. Catastrophic expenditure incidence rose alarmingly between 2014 and 2018, affecting up to 29% of households in some states. Cost per DALY averted varied from Rs. 27,451 in Bihar to Rs. 65,432 in Uttarakhand, indicating a 2.4-fold difference in economic efficiency. States with lower costs per DALY despite higher disease burdens such as Bihar and Uttar Pradesh suggest higher returns on incremental health investment. Conversely, states with higher spending but lower efficiency like Uttarakhand, may face diminishing returns and resource misallocation. Efficiency scores reveal substantial scope for optimizing technical and allocative mechanisms with many states operating below potential output levels. The economic loss due to health-related productivity decline was estimated at Rs. 54,120 crores annually, underscoring health's critical linkage to economic growth and poverty alleviation. This paper recommends policy and programme measures; Health investments should prioritize increased government spending targeted at primary and preventive care to reduce out-of-pocket expenses. Expanding financial protection through comprehensive insurance coverage is essential to shield vulnerable households from catastrophic health costs. Efficient resource allocation and governance reforms must be strengthened to improve health system performance. Multisectoral collaboration addressing social determinants like education, sanitation and nutrition is critical for sustainable health outcomes.

## **Socioeconomic Determinants of Out-of-Pocket Expenditure and Health Financing Strategies Among the Elderly in Jharkhand: Evidence from LASI Wave 1**

**Mary Nancy Tirkey**, Independent Researcher, Ranchi

The economic vulnerability of India's ageing population is an emerging public health concern, particularly in states like Jharkhand, where high poverty levels, inadequate health infrastructure, and limited insurance coverage heighten financial risk. In such contexts, the burden of out-of-pocket expenditure (OOPE) often drives elderly households into financial distress, affecting their access to timely healthcare and overall wellbeing. While national-level studies have examined patterns of OOPE among older adults, limited evidence exists on how elderly households in poorer states cope with healthcare costs and what socioeconomic and demographic factors shape these expenses. Understanding these determinants and the coping mechanisms adopted by households is essential for designing targeted financial protection policies.

This study aims to examine the socioeconomic and demographic determinants of OOPE among the elderly (aged 45 years and above) in Jharkhand and to assess the health-financing strategies—such as the use of savings, borrowing, or sale of assets—adopted to meet inpatient and outpatient healthcare costs, with attention to variations across income groups, caste categories, and insurance status.

The analysis uses data from the Longitudinal Ageing Study in India (LASI) Wave 1 (2017–18), focusing on a Jharkhand subsample of 123 inpatients and 1,054 outpatients aged 45 and above. Descriptive statistics summarize expenditure patterns and financing sources, while multivariate regression models identify socioeconomic determinants of OOPe and associated coping strategies. Log-linear regressions are applied for expenditure levels and logistic regressions for financing mechanisms. Inequalities are further assessed by gender, rural–urban residence, and type of care. All analyses are conducted using Stata 16.

Preliminary findings reveal substantial inequalities in OOPe across income, caste, education, and insurance coverage, with economically disadvantaged and socially marginalized groups bearing a disproportionately higher financial burden. Although inpatient care incurs higher absolute OOPe, outpatient spending also contributes significantly to cumulative strain. A sizeable share of elderly respondents rely on distress financing—including borrowing and sale of assets—to manage healthcare expenses. Insurance coverage shows limited protective effects due to gaps in awareness, enrolment, and effective utilization.

The study underscores the urgent need to strengthen financial risk protection for Jharkhand's elderly population through expanded and effective insurance coverage, improved public healthcare accessibility, elderly-specific financial support schemes, and targeted interventions for vulnerable subgroups.

## **Strengthening Health Systems for Equity and Universal Health Coverage: Analysing District-Level Inequities in Maternal and Child Health in Jharkhand's Progress Toward Universal Health Coverage**

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Jharkhand, since its inception in 2000, has faced significant challenges in strengthening its health system. While some states have made considerable progress toward national and global health goals, such as those outlined in the National Health Policy 2017 and Sustainable Development Goal 3.8 on achieving Universal Health Coverage (UHC), Jharkhand continues to struggle with deep-rooted disparities. This study explores how far the state has progressed toward UHC and examines the differences in access to maternal and child health services across its 24 districts, highlighting where inequities remain most entrenched. The study utilised data from various rounds of the National Family Health Surveys, the Sample Registration System (SRS), and the Population Census. Using the World Health Organisation's framework for UHC monitoring, a composite Service Coverage Index was developed to assess progress. Five essential indicators from the Reproductive, Maternal, Newborn, and Child Health (RMNCH) domain were used: institutional deliveries, skilled birth attendance, antenatal care with four or more visits, postnatal care within two days, and full child immunisation. To capture disparities, measures such as range, coefficient of variation, and disparity ratios were calculated, and

districts were grouped into a performance–progress matrix to identify areas requiring focused policy attention. Our findings show that Jharkhand has made notable progress in expanding health services over the past two decades. Institutional deliveries, for example, rose from 61.9 per cent in 2015–16 to 75.8 per cent in 2019–21, reflecting stronger service delivery and increased utilisation. However, this overall improvement hides wide gaps between districts. A 33.7 percentage-point difference separates the highest and lowest performers, with Purbi Singhbhum achieving 94 per cent institutional deliveries compared to only 60.3 per cent in Dumka. Some districts, such as Pashchimi Singhbhum and Saraikela-Kharsawan, made remarkable progress, while others, like Deoghar, showed minimal gains. Compared with other Empowered Action Group states, Jharkhand's performance reflects moderate advancement toward UHC, but persistent weaknesses in maternal and child health outcomes and financial protection continue to hold back equitable progress. The urban–rural divide further exacerbates these disparities, particularly in maternal care and health financing. Policy efforts should prioritise geographically differentiated investments in health infrastructure, service delivery, and human resource capacity, particularly within high-burden districts, with sustained community engagement.

## **Health Care Access Barrier among Tribal Women of Jharkhand: Evidence from NFHS-5 (2019-2021)**

**Ananya Barman**, Research Scholar, International Institute of Population Sciences (IIPS), Mumbai

This study examines the spatial distribution of barriers to accessing healthcare facilities among tribal women aged 15–49 years across all 24 districts of Jharkhand. By foregrounding the experiences and perspectives of women themselves, the study highlights the gendered dynamics that shape healthcare access and underscores their implications for development planning and policy design.

A composite indicator was developed to measure the level of healthcare access barriers faced by women. It incorporates eight key constraints: obtaining permission to visit a facility, arranging money for treatment, distance to the health centre, lack of transportation, absence of an escort, shortage of female healthcare providers, absence of healthcare personnel, and unavailability of drugs. Each constraint was categorized as a big, small, or no problem. These responses were aggregated to classify women into four levels of access barriers—no barrier, low barrier, moderate barrier, and high barrier.

To identify the determinants of healthcare barriers, an ordered logistic regression model was applied, with the composite barrier level as the dependent variable and wealth index, educational attainment, and type of residence (urban or rural) as the key explanatory variables. All analyses were conducted at a 5% significance level. Spatial variations were visualized through district-level maps to identify areas where women face the highest barriers, reflecting the demand-side challenges of healthcare access. The study relies on self-reported data and does not incorporate supply-side constraints.

Findings indicate that only 5% of tribal women reported no barrier to accessing healthcare, while about 33% faced all eight types of barriers. Rural, poor, and uneducated women experience significantly

greater barriers than their urban, wealthier, and more educated counterparts, suggesting that education and income act as strong protective factors. Spatial disparities are evident: 16–17% of tribal women in rural Lohardaga and Pakur reported no barriers, whereas around 12% of rural women in Ranchi faced high barriers.

The study emphasizes the need to promote economic development to improve women's healthcare access. Strengthening the functioning of Primary Health Centres (PHCs) and ensuring adequate staffing and resource management in Community Health Centres (CHCs) are critical for reducing access barriers and improving health outcomes for tribal women in Jharkhand.

## **Health Inclusion Through Pradhan Mantri Jan-Aarogya Yojana: A Micro-Level Study of Tribal Households in Jharkhand**

**Sweta Sharan**, Assistant Professor, Magadh Mahila College, Patna

**Naboshree Bhattacharya**, Assistant Professor, Amity University, Ranchi

Public–private partnerships (PPPs) in health insurance are central to advancing Universal Health Coverage (UHC) in low- and middle-income countries. In India, the Pradhan Mantri Jan Arogya Yojana (PM-JAY) stands as the world's largest government-funded health assurance scheme, providing ₹5 lakh annual coverage per family and facilitating over 45 lakh hospital admissions across 18,000 empaneled facilities. In Jharkhand—a state with substantial tribal populations and persistent healthcare infrastructure gaps—the implementation of PM-JAY presents unique challenges for equitable access and effective service delivery. Against this backdrop, the study undertakes a comprehensive micro-level assessment of PM-JAY in Jharkhand, with particular attention to the performance of PPP models, utilization patterns, financial protection outcomes, and equity implications for tribal and marginalized communities.

Using a convergent parallel mixed-methods design, the study integrates quantitative analyses of administrative claims data, household surveys of PM-JAY beneficiaries, and facility assessments of empaneled hospitals with qualitative stakeholder interviews. Key indicators include coverage rates, service utilization, reductions in out-of-pocket expenditure, provider performance, and disparities across socioeconomic and geographic groups. Logistic regression analysis is used to examine the determinants of access for tribal populations in the study area.

The expected findings point to heterogeneous coverage and utilization patterns, with tribal communities—especially those in remote settings—likely experiencing lower enrollment and service uptake due to limited infrastructure, administrative bottlenecks, and lower awareness. Financial protection is anticipated to improve for enrolled households, though gaps may persist based on geography and socioeconomic status. Provider performance assessments are expected to show variability across public and private facilities, while qualitative insights will likely highlight challenges such as complex claims processes, delayed reimbursements, insufficient provider networks in tribal regions, and cultural factors influencing care-seeking behavior.



Overall, the study is expected to reveal persistent equity gaps in scheme penetration, service quality, and financial protection. By identifying these barriers and the limitations of existing PPP models, the findings aim to inform more responsive policy strategies—such as strengthened community health worker engagement and culturally sensitive service delivery—to enhance PM-JAY's reach and contribute to UHC in marginalized settings.

## **Determinants and Prevalence of Anaemia Among Women(15-49 years) in Jharkhand**

**Rajnee Kumari**, Assistant Professor, Dr. Shayama Prashad Mukherjee University, Ranchi

Anaemia is a major and challenging public health problem among the females of reproductive age group in Jharkhand. In Jharkhand poverty, limited access to health care, lack of nutritional awareness has exacerbated the problem of anaemia. Empirical evidence reveals that 65.3% of women in Jharkhand are anaemic, a marginal increase from NFHS-4 (65.2%) much above the national level (59%) NFHS-5. Anaemia reduces women's productivity, maternal health, and overall well-being, leading to intergenerational health consequences. Government multiple interventions such as the Anaemia Mukht Bharat , Poshan Abhiyan , anaemia continues to affect a large proportion of married women in Jharkhand. High prevalence among socio-economically disadvantaged and tribal populations indicates persistent gaps in awareness, nutrition intake, and healthcare accessibility. Understanding the various determinants is crucial for designing targeted interventions. The prime objective of the paper is to analyze the prevalence and determinants of anaemia among married women aged 15–49 years in Jharkhand. This study is based on secondary data derived from the National Family Health Survey, government reports, and relevant empirical studies. Descriptive and comparative analysis of NFHS data was conducted to examine the prevalence of anaemia among women. Factors significantly associated with anaemia include low literacy, poor dietary diversity, low BMI, higher parity, limited access to antenatal care, and inadequate iron-folic acid (IFA) consumption. Tribal and economically backward districts such as West Singhbhum and Latehar show the highest prevalence. Anaemia among married women in Jharkhand remains alarmingly high and is strongly linked to socio-economic and nutritional inequalities. To alleviate this, integrated strategies involving nutrition education, dietary diversification, IFA supplementation, and improved maternal health services are essential. Strengthening community-based awareness, monitoring mechanisms and tribal-specific interventions will be vital for achieving anaemia reduction targets in the state.



## Strengthening Health System Resilience for Tribal Women in Jharkhand

**Richa Pandey**, Research Scholar, Indian Institute of Information Technology, Ranchi

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**Anuj Singh**, Assistant Professor, Indian Institute of Information Technology, Ranchi

This research focuses on the systemic hindrances and chances of enhancing healthcare provision and results among tribal women in the system of Primary Healthcare (PHC) in Jharkhand. It will assess the preparedness, cultural competency, and last-mile accessibility of the state's public health system in addressing the reproductive, maternal, and nutritional health needs of women from Scheduled Tribe (ST) communities. The study takes a mixed-methods research design, which combines both primary and secondary data. The quantitative element examines National Family health Survey (NFHS) and Health Management Information Systems (HMIS) data on tribal high concentration districts in order to test the following important indicators, According to NFHS (2020-21) data the rates of institutional births (75.8%) and the rates of anemia (65.3%) in Jharkhand. The qualitative aspect will entail in-depth interviews (IDIs) and focus group discussions (FGDs) among tribal women, Accredited Social Health Activists (ASHAs), and Block Medical Officers (BMOs) and exploring lived experiences, cultural beliefs, influencing health seeking behaviors, and issues surrounding infrastructure and human resource retention in the rural locations. The initial findings show the presence of a significant negative relationship between community remoteness, measured by travel time to PHCs, and maternal and child health outcomes, as well as the constantly high levels of anemia. Qualitative data will identify language issues, doctors shortage in the female category, lack of trust in modern medicine that is perceived to be culturally insensitive, and high turnover of health workers which can be attributed to poor incentive measures and poor local political involvement. All these findings incline towards a shift in paradigm towards equity rather than universal care model that is culturally congruent. The suggestions of the policy are the introduction of compulsory language and cultural sensitization of healthcare providers, incentivized tribal health cadres, and the institutionalization of participatory and decentralized health governance via local bodies. The paper is unique in its intensive, triangulated mixed-methods framework that is specific to Jharkhand and provides action-oriented and granular information that links structural predictors of remoteness and service disparity with cultural and systemic obstacles. It focuses on the voices of tribal women and frontline health workers, providing the essential evidence to inform fair, strong, and culturally responsive health system change.

## **The Role of Anganwadi Scheme on Nutritional Status of Children: Special Reference to Chouparan Block of Hazaribagh District of Jharkhand**

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Public–private partnerships (PPPs) in health insurance are central to advancing Universal Health Coverage (UHC) in low- and middle-income countries. In India, the Pradhan Mantri Jan Arogya Yojana (PM-JAY) stands as the world's largest government-funded health assurance scheme, offering ₹5 lakh annual coverage per family and facilitating more than 45 lakh hospital admissions across 18,000 empaneled facilities. In Jharkhand—a state with significant tribal populations and persistent healthcare infrastructure gaps—the implementation of PM-JAY presents distinct challenges in achieving equitable access and effective service delivery. Against this backdrop, this study undertakes a comprehensive micro-level assessment of PM-JAY implementation in Jharkhand, focusing on the performance of PPP models, utilization patterns, financial protection outcomes, and equity implications for tribal and marginalized communities.

The study employs a convergent parallel mixed-methods design, integrating quantitative analyses of administrative claims data, household surveys of PM-JAY beneficiaries, and facility assessments of empaneled hospitals with qualitative stakeholder interviews. Key indicators examined include coverage rates, service utilization trends, reductions in out-of-pocket expenditure, provider performance, and disparities across socioeconomic and geographic groups. Logistic regression analysis is used to identify determinants of access for tribal populations in the study area.

Expected findings indicate heterogeneous coverage and utilization patterns, with tribal communities—particularly those in remote and underserved regions—likely experiencing lower enrollment and service uptake due to limited infrastructure, administrative hurdles, and low awareness. While PM-JAY is anticipated to provide tangible financial protection for enrolled households, disparities may persist based on geography, socioeconomic status, and proximity to empaneled hospitals. Provider performance assessments are expected to reveal significant variability between public and private facilities, and qualitative insights will likely highlight implementation challenges such as complex claims processes, delayed reimbursements, insufficient provider networks in tribal regions, and cultural and linguistic barriers shaping care-seeking behavior.

Overall, the study is expected to identify persistent equity gaps in scheme penetration, service quality, and financial protection. By highlighting these barriers and the limitations of current PPP models, the findings aim to inform targeted policy strategies—such as strengthened community health worker engagement and culturally sensitive service delivery approaches—to enhance PM-JAY's reach and contribute to UHC in marginalized settings.

## Dietary Calcium Insecurity: Hidden Challenge in Women's Food and Nutrition Security

**Tahreem Ekram**, Research Scholar, Ranchi University, Ranchi

Women's nutritional well-being is central to public health, economic productivity, and intergenerational development. While food security programs in India have improved access to staple foods, the growing challenge of nutrition insecurity, particularly micronutrient deficiencies, remains insufficiently addressed. Among these, dietary calcium insecurity stands out as a critical yet overlooked concern. Calcium, essential for bone health, neuromuscular function, and metabolic regulation, is inadequately consumed by women across socioeconomic groups, posing long-term risks for health and productivity. This study examines dietary calcium intake among women and explores the socioeconomic, dietary, and lifestyle determinants contributing to calcium insecurity.

Using a cross-sectional research design, the study surveyed 100 women aged 18–40 years residing in Bahu Bazar and Kanta Toli in Ranchi. Participants represented diverse occupations, including teaching, office work, sales, and domestic labor, to understand variations in dietary practices and food and nutrition security. Data were collected through a pre-tested structured questionnaire, a 24-hour dietary recall, and a Food Frequency Questionnaire (FFQ) to assess intake of calcium-rich foods. Nutrient estimates were derived using the Indian Food Composition Tables (IFCT). Household food security was measured using the Household Food Insecurity Access Scale (HFIAS).

Findings reveal that 60% of respondents belonged to the middle-income group and were relatively well-educated, yet lacked nutritional awareness. According to the HFIAS, 80% of households were food secure and 20% experienced mild insecurity; none faced severe food insecurity. Despite this, dietary calcium intake was critically low: no respondent met the Recommended Dietary Allowance (RDA), most consumed only 400–500 mg per day, half the RDA, and 20% consumed less than 200 mg. The coexistence of food security with nutrition insecurity highlights limited awareness and poor dietary diversity.

To address these gaps, the study recommends integrating calcium into national nutrition initiatives such as POSHAN Abhiyaan and ICDS, strengthening the Public Distribution System with calcium-rich staples like ragi, soybean, and Bengal gram, and launching targeted awareness and behaviour change campaigns on the long-term risks of calcium deficiency. These strategies can enhance women's dietary calcium intake and support broader nutrition security goals.

## **Budgetary Provisions for Combating Malnutrition and Hunger in Jharkhand: An Analysis of the Department of Food, Public Distribution and Consumer Affairs**

**Neha Prasad**, Research Scholar, Ranchi University, Ranchi

Combating malnutrition and hunger in Jharkhand demands not only adequate financial allocations but also efficient fund utilization and accountability in programme implementation. Effective policy formulation and fiscal planning for addressing malnutrition and hunger depend not merely on the size of budgetary allocations but on the efficiency of fund utilization, timely expenditure, and equitable distribution of resources. While per capita budget analyses are often employed in assessing the adequacy of public spending, such approaches tend to overlook critical dimensions of fiscal performance, such as intra-departmental variations, delays in fund release, and uneven district-level distribution. The requisition for new schemes or higher budgetary allocations must therefore be grounded in a comprehensive analysis of past financial trends rather than on ad hoc assessments or per capita expenditure estimates. The Department of Food, Public Distribution and Consumer Affairs has a crucial responsibility in ensuring food security of vulnerable people. However, a persistent mismatch between allocations and outcomes often raises questions about fiscal efficiency and service delivery. The paper undertakes a five-year trend analysis of scheme-wise budgets of DoFPD&CA, assessing variations between ‘Budget Estimates’ and ‘Actual Expenditures’ of Department. The study also assesses district-level resource distribution and administrative mechanisms influencing performance of NFSA. The findings reveal wide and consistent gaps between BE and AE across all schemes, indicating underutilization of funds and procedural inefficiencies. A few misaligned schemes are also included under DoFPD&CA that affect the delivery of food-grains. Structural weaknesses include data fragmentation in budget documents, poor classification of establishment expenditure, delayed fund release, insufficient provisions for subsidiary tasks and weak identification of eligible households. District-level disparities, inadequate staffing, and poor grievance redressal further hindered the effective implementation of the NFSA. The paper concluded that fiscal abundance alone is insufficient to achieve food and nutritional security. The DoFPD&CA requires transparent fund flow systems, evidence-based budgeting, and stronger institutional coordination. Enhancing administrative capacity and accountability mechanisms is essential to ensure equitable and efficient service delivery.

## **Beyond Staples: Exploring Dietary Diversification and Nutrition Trends In Jharkhand Using NSS Consumption Data**

**Sunil Kumar Mishra**, Senior Fellow, Institute for Human Development, New Delhi

**Vikas Dubey**, Senior Research Associate, Institute for Human Development, New Delhi

Dietary diversification is a critical determinant of nutritional security, particularly in economically and socially vulnerable states such as Jharkhand. This paper examines patterns of food consumption

and nutrition transition in Jharkhand using unit-level data from the National Sample Survey (NSS) Consumption Expenditure Survey (latest available round). Moving beyond the conventional focus on staple foods, the study analyses household-level consumption of cereals, pulses, milk and milk products, fruits, vegetables, eggs, fish, and meat, along with calorie and protein intake.

The analysis reveals a continued dominance of cereals in the food basket, especially among rural and low-income households, indicating persistent dependence on staple-based diets. However, emerging signs of dietary diversification are observed among urban households and higher expenditure classes, marked by increased consumption of milk products, fruits, and animal-source foods. Despite this shift, significant inter-district, rural–urban, and income-based disparities remain. A substantial proportion of households fail to meet recommended calorie and protein norms, with nutritional deficits more pronounced among Scheduled Tribes and casual labour households.

The findings highlight a slow and uneven nutrition transition in Jharkhand, constrained by poverty, limited market access, and livelihood insecurity. The study underscores the need for region-specific nutrition-sensitive policies, strengthening of public distribution diversification, promotion of horticulture and livestock, and targeted interventions for vulnerable groups to ensure inclusive dietary diversification and improved nutritional outcomes.

## **Socioeconomic and Demographic Determinants of Child Malnutrition: Evidence from School-Going Children (aged 6–12 years) in Jharkhand**

**Dhiraj Mani Pathak**, Assistant Professor, St. Xavier's College, Ranchi

**Zeba Ashraf**, Research Scholar, Department of Economics, Ranchi University

**Ashish Ranjan**, Research Scholar, Department of Economics, Ranchi University

India's nutritional transition highlights a significant paradox: even with the country's rapid economic growth, child malnutrition remains a persistent issue. Jharkhand serves as a prime example of this disparity, with 45% of children under five experiencing stunted growth, 20% suffering from wasting, and 47% being underweight (NFHS-5; NITI Aayog, State Nutrition Profile: Jharkhand, 2022). While national and international efforts have concentrated on early childhood nutrition, the school-age cohort (6–12 years) remains strikingly under-researched. This phase often termed as middle childhood is pivotal for physical growth, cognitive development, and emotional maturation, yet it is neglected in existing literature and government surveys. This study seeks to fill that empirical gap by adopting a quantitative cross-sectional design. The objective of the study is to know the socioeconomic and demographic determinants of malnutrition among school-going aged 6–12 years children in Ranchi district of Jharkhand. The present study employs a multistage sampling to ensure the representation of both urban and rural areas. It combines anthropometric indicators derived from the WHO (2007) Growth Reference with detailed information on household composition, maternal education, living

conditions, and school environments. The study aims to shift India's nutrition policy from "early survival" to "sustained human development". This will also assist policymakers in enhancing school nutrition and WASH initiatives, contributing to India's advancement towards achieving SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-Being).

## **Women Breadwinners and Their Challenges Towards Food and Nutrition Security in Jharkhand**

**Ishaan Krishnan**, Student, Jharkhand Raksha Shakti University, Ranchi

**Anshu Kumari**, Student, Jharkhand Raksha Shakti University, Ranchi

**Priya Namrata Topno**, Assistant Professor, Jharkhand Raksha Shakti University, Ranchi

Food and nutrition are fundamental needs for every individual, yet many still live in conditions of food insecurity. Jharkhand, an agrarian, tribal state of India, faces persistent challenges related to food and nutrition security, particularly among rural and urban poor. Women play a pivotal role in ensuring the nutritional wellbeing of their household. Although they serve multiple roles – as nurturer, caregivers, homemaker, providers and breadwinners, the gender inequality, socio-cultural norms and entrenched discrimination continue to marginalize women. Constraints such as unequal access to resources, limited decision making power, and time poverty intensify the burden on women, especially those heading household. Women-headed household often faces significant barrier in accessing adequate and nutritious food, making them more vulnerable to chronic food insecurity. The four pillars of food security- availability accessibility, utilization and stability – becomes difficult to achieve for women breadwinners in Jharkhand. This paper aims to understand the challenges faced by women who serves as income earners and their households. This study adopts a qualitative approach using case study method to gather the insights from women breadwinner and secondary data through journals, reports, article documentaries which are used to substantiate the primary data. The lived experiences of these women would enable to identify the pathways to improve sustainable food and nutrition security.

## **Food Security, Health and Nutrition amongst Particularly Vulnerable Tribal Groups (PVTG's) women of Jharkhand**

**Sania Jamal**, Research Scholar, Jamia Milia Islamia, New Delhi

The state of Jharkhand celebrates its silver jubilee by completing 25 years of formation which can also be considered as an evaluation of its accomplishments, developments and progress from a nascent stage to an established stage. The land of the forest has women as their integral part as conservers, producers however their visibility in food security, health and nutrition seemed glimmering. The numbers show that malnutrition is rampant among children below five years of age, they were stunned

and undernourished while women were battling with anemia and vitamins deficiencies. There were high incidences of malnutrition, deficiencies, undernutrition and anemia prevalent in PVTG's women and children, their health and nutritional status tends to be more worrisome. The objectives of the research paper highlight the issues and challenges that women and children face in accessing their food and nutritional security. It will also discuss the government initiatives and policies meant for improving the nutritional levels of the mothers and their children. The research paper will include the primary as well as secondary source of data. It will elaborate the key findings and provide policy recommendations and suggestions for the improvement of public policy for the future purpose.

## **An Empirical Analysis of the Impact of Socio-economic Factors on Malnutrition among Children Aged Under Five Years in Jharkhand**

**Zeba Ashraf**, Research Scholar, Department of Economics, Ranchi University

**Dhiraj Mani Pathak**, Assistant Professor, Department of Economics, St. Xavier's College

Child undernutrition remains one of the most persistent public health and development challenges in India. The problem is more severe in economically and socially disadvantaged regions such as Jharkhand. Despite progress in national programmes and economic indicators, child malnutrition continues at an alarming level. As reported by the National Family Health Survey (NFHS-5, 2019–21), 39.4 percent of children under five years in Jharkhand are stunted, 22.4 percent are wasted, and 39.4 percent are underweight. These figures are significantly higher than national averages. The present study aims to examine the impact of socio-economic factors on the nutritional status of children aged under five years in Jharkhand. The dependent variables of the study are stunting, wasting, and underweight, while a set of socio-economic factors are considered as independent variables. The analysis is based on unit-level data from NFHS-5 obtained from Demographic and Health Survey (DHS). The study employs descriptive statistics, chi-square tests, and bivariate logistic regression models to explore the association between variables. The study seeks to provide an evidence-based understanding of how socio-economic conditions shape child nutritional outcomes in Jharkhand

## **Strengthening PM POSHAN Scheme: A Multi Sectoral Approach in Jharkhand**

**Shiv Kumar Mahato**, Research Scholar, Ranchi University

The PM POSHAN (Mid Day Meal) Scheme is a social programme that is one of the core social programmes of India, which helps in improving the nutritional status and attendance of school-going children. The program is partially effective in States such as Jharkhand due to malnutrition and illiteracy among children. The paper advocates that a multi-sectoral approach is not only helpful



but also necessary for enhancing the PM POSHAN scheme and assuring its role as a catalyst for the holistic development of children in Jharkhand. The paper is based on a comprehensive review of policy documents, observations from secondary sources of data that are supported by insights from educational stakeholders, community representatives, and school management bodies. The analysis highlights that the PM POSHAN scheme currently operates largely through the educational department. Supplementary support from Panchayati Raj Institutions and local administrations are also valuable for the progress of scheme in a correct manner. The empowerment of tribal communities as key stakeholders in the participatory development process ensures the scheme's long-term sustainability and effectiveness in the unique context of Jharkhand. The study proposes an integrated operational model that emphasizes collaboration across various departments, including Education, Health, and Family Welfare. The study also considers Women and Child Development, Panchayati Raj, Food and Public Distribution, and Rural Development as a progressive tool if it is linked with the scheme, with proper maintenance of discipline in every department during the regulation of the programme. The paper concludes that it is necessary to shift from a single-department execution model to a collaborative model where each and every department comes together and plays their specific role and takes accountability during the process of the PM POSHAN scheme in Jharkhand.

## Food Security: A Thematic Discussion

**Apparna Kumari**, Research Scholar, Ranchi University

Since the very beginning, India has been suffering from the adverse situation of the production of foodgrains, which has played an important role for the people of India. Rice has been treated as the most important food grain for livelihood. The growth of production of foodgrains had variations in trends among the states of India. It is a challenge for the government as well as the economic system to provide food grains in sufficient quantities at an affordable rate and to fulfill the nutritional requirements for the growing population. Food security has four pillars. Every pillar has its own specific quality and consistency. Availability, Accessibility, Utilisation, and Stability are the four core components that are used to study food security in the State, National, and International levels. However, in some circumstances, some countries use more than these 4 pillars, or some may consider fewer than the given number of pillars. These things vary just because of the geographical, historical and economic differences among the nations. Availability concerns the physical and economic presence of food that is achieved through domestic production or imports. Access involves the physical and economic means to obtain sufficient, safe, and nutritious food. Nobel laureate Amartya Sen's entitlement theory focuses on an individual's ability to acquire an adequate diet. Utilization is the body's ability to absorb nutrients requiring non-food essentials like safe water, healthcare, and sanitation for proper biological function. Finally, stability ensures that there is a continuous availability and access to food over time, which are protected from shocks like the climate crisis or seasonal shortages. This implies that for stability,



a time dimension is required and effort must be made to protect from the climate crisis and events like seasonal low supply of food. The primary cause of food insecurity is poverty. However, modern understanding has changed poverty into multidimensional poverty and people are verified according to the components of this new theme.

## **Improving the Food Security Nutrition Status of Women and Children Through Distinctive Intervention of Peer Group Counselling**

**Ajay Anand Shrivastava**, State Nodal Officer - Health and Nutrition, Jharkhand State Livelihood Society, Government of Jharkhand

Food security, nutrition, diet diversity, and poverty are intrinsically interconnected, creating a cycle that reinforces disadvantage and does not allow the harnessing of the human potential to the maximum. There is strong empirical evidence to suggest that dearth of access to adequate food, access to entitlements related to food, lack of nutrition, leading to undernutrition, greater disease burden, and reduced productivity and greater episodes of illness, and poverty. Poor nutrition weakens immunity, leads to frequent episodes of illness infections which accentuates malnutrition—especially in women, and children who are the most vulnerable. Ill health then restricts a woman's ability to work, reducing income opportunities and keeping families trapped in poverty. Conversely, improvements in food security, nutrition, diet diversity, strengthen health, enhance learning and earning potential, and break the intergenerational cycle of poverty.

Nutrition, food security and women collectives: To harness the social capital optimally substantial investments in ameliorating the nutrition, and food security is a must. 33 lakhs, and more families, pan Jharkhand are members of women collectives, and are a part of inclusive growth, economic progress and social development. Presently along with farm- livelihoods, financial inclusion, social development, the woman has been working in the realm of nutrition, food security. Food security and nutrition are closely strengthened by women's collectives, which empower women to improve household diets, manage resources, adopt better farming and food practices, and access schemes and markets. The interventions include peer group counselling to improve the food security and nutrition status of women (pregnant and lactating), infants, and children.

Tenets of peer group counselling (PGC): One of the scheduled Self-Help Group (SHG) Meeting is scheduled and conducted at the household of the pregnant woman/lactating mothers. This is done in the presence of the mother-in-law and husband (the key decision makers in the households). The pregnant woman is counseled by her peers on nutrition security, diet diversity, hygiene, combating the regressive traditions and taboos, food security, schemes and entitlements. The objective is to give the pregnant woman the necessary confidence during her pregnancy on all the key aspects of nutrition, health, diet diversity, undernutrition, anaemia and other micronutrient deficiencies. The peer group counselling has had major and definitive impacts in food and nutrition security through poshan vatika,

intra-family food distribution, poultry rearing, enhanced consumption of millets, lentils, green leafy vegetables, Iron-folic and IFA tablet consumption, countering the regressive practices on food for pregnant woman, lactating mothers, gender empowerment and other pertinent issue on nutrition.

#### The Anatomy of numbers

Peer Group Counselling (PGC) led to clear gains in maternal nutrition: all women consumed 4.59 food groups compared to 4.1 in non-PGC areas, while pregnant women consumed 5.09 vs 4.1.

Minimum Dietary Diversity Score (MDDS) achievement rose to 50.8% for all women and 67.8% for pregnant women, against 37.1% in non-PGC areas. Haemoglobin levels improved markedly (11.53 g/dl vs 9.66 g/dl). Overall, PGC, nutri-gardens, and stronger service access significantly enhanced diet diversity and micronutrient status. Thus peer group counselling (PGC) has worked wonders ensuring diet diversity, nutrition and food security.

# IMPROVING QUALITY OF EDUCATION

## **An Econometric Analysis of Access to Higher Education in The Context of Wagner's Law in Jharkhand**

**Rishi Raj**, Research Scholar, National Institute of Educational Planning and Administration, New Delhi

The paper examines the access to higher education in Jharkhand in the context of Wagner's law, which indicates that the public expenditure increases with economic growth or vice versa. The study utilises annual time series data covering the period from 2002 to 2022. The stationarity of the variables is assessed through unit root tests, while the Johansen cointegration approach is employed to examine the existence of a long-run equilibrium relationship among them. The short-run dynamic adjustments are investigated using a vector error correction model, and the directions of short-run causal interactions are identified through the Granger causality approach. Findings: The existence of a long-run equilibrium among public expenditure, institutional availability, and enrollment, supporting Wagner's Law in the higher education context. Normalised cointegration coefficients show that the number of colleges plays a crucial role in enhancing GER, while public expenditure and population have weaker long-term effects. The VECM reveals rapid adjustment to equilibrium, with institutional and financial factors significantly influencing short-run enrollment changes, whereas demographic effects are positive, but their effect takes time to appear. Granger causality tests highlight a unidirectional relationship from the number of colleges to GER and from population growth to institutional expansion. Moreover, the expansion of colleges also Granger-causes higher public expenditure, which partially validates Wagner's Law, which postulates that economic development and institutional expansion lead to higher public expenditure. Short-run strategies should emphasise institutional expansion and human resource development to enhance access to higher education. Establishing new colleges in underserved areas, upgrading existing institutions, and increasing the recruitment and training of qualified teachers are essential strategies for raising the Gross Enrolment Ratio. In the long run, focus should be on building an integrated higher education ecosystem that balances quantity with quality. This includes enhancing infrastructure, ensuring equitable distribution of colleges across regions, and linking funding mechanisms to performance and inclusive outcomes.

## **Bridging the Skill Gap: Assessing the Mismatch between Higher Education Output and Skill Development Priorities in EAG States**

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As India transitions towards a knowledge-driven economy, a synchronised relationship between higher education output and skill development is needed. This study examines this interface analytically in the Empowered Action Group (EAG) states (Jharkhand, Bihar, Chhattisgarh, Madhya Pradesh, Odisha, Rajasthan, Uttarakhand, and Uttar Pradesh). These states are home to over 40% of India's population but lag in per capita GSDP, gross enrolment ratio (GER), and employability. Despite expanding access to higher education, these states have a tenacious skills deficit, raising concerns about the relevance and effectiveness of academic output in meeting labour market requirements. Objectives of the study are: 1. To compare the out – turn in higher education among EAG states 2. To assess the skill development priority index of the EAG states 3. To examine the relationship between higher education output and skill development performance across the EAG States. This study is based on 'human capital theory', which considers education and skill acquisition as complementary drivers of productivity and growth. Secondary data were obtained from the All-India Survey on Higher Education (AISHE, 2020–22), the National Skill Development Corporation (NSDC, 2021), and the UNICEF-YUVAH State Skills Index Report (2024). Analytical methods include index based comparisons, Pearson and Spearman correlation analyses, and descriptive statistics. The population, industry, labour supply, and vocational education sub-indices of the SDPI are also integrated. Preliminary findings reveal clear disparities. Uttar Pradesh has the highest SDPI (80.3), suggesting a persistent huge skills shortage despite a large educational inflow. Bihar and Rajasthan are similarly inclined towards skills and have therefore set up higher skill prioritisation levels, whereas Chhattisgarh and Uttarakhand are on the lower side. Correlation analysis indicated that the positive relationship between SDPI and higher education output was only weak to moderate, which implies a mismatch in the system: states with a high output of graduates are not the ones with a shortage of skills. The high share of students in the arts and social sciences and the low share in technical fields have intensified the gap between educational qualifications and labour market requirements. Policy Implications Policy implications highlight the need to integrate skill-oriented courses into higher education, expand vocational infrastructure in high-SDPI states, and promote academic-industry partnerships to ensure employment-driven education. Particular emphasis is placed on inclusive frameworks that address gender and social inequalities, robust monitoring mechanisms, and diverse regional strategies, rather than blanket interventions.

## Higher Education in Jharkhand after 25 Years: Crisis, Challenges and Prospects

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The present paper examines the dynamics of higher education in Jharkhand by exploring the existing crisis and challenges while assessing issues related to access, quality and prospects. The state of Jharkhand was carved out of Bihar in the year 2000, with its rich tribal heritage and abundant natural resources, yet marked by deep socio-economic diversity and inequalities. It remains home to numerous marginalised communities whose development and inclusion are central to the state's progress. Higher education is a critical driver of socio-economic development, human resource development, social mobility and economic growth. The trajectory of higher education reflects a complex interplay of expansion, inequality, and institutional challenges. The present paper is primarily based on secondary data from All India Survey on Higher Education (AISHE) reports published by the Ministry of Education, Government of India and in addition, relevant information has been gathered from government publications, policy documents, state education department reports, and research studies related to higher education in Jharkhand. Despite the establishment of several universities and colleges, significant disparities persist in Jharkhand's higher education landscape. The Gross Enrolment Ratio (GER) in the state remains below the national average, reflecting limited access and participation among students from marginalised backgrounds. Scheduled Tribe (ST), Scheduled Caste (SC) and rural students continue to face economic barriers that restrict their entry into higher education. Persistent gender disparities further exacerbate inequalities in enrolment and attainment. Moreover, the chronic shortage of infrastructure and faculty further undermines the quality and effectiveness of higher education institutions in the state. To strengthen higher education in Jharkhand, a comprehensive and inclusive policy approach is essential. The state must prioritise equitable access, quality improvement, and institutional capacity building as the core pillars of reform. Expanding higher education institutions in educationally backward districts and ensuring better connectivity can also address regional disparities. Quality enhancement should be achieved by strengthening infrastructure, recruiting to address faculty shortages and improving teaching standards. Curriculum revision aligned with skill development, local industry needs, and the National Education Policy (NEP) 2020 can make education more relevant and employment-oriented. There is a pressing need to promote research, innovation, and digital learning. Establishing research centres in state universities, encouraging collaboration with national institutions, and providing digital infrastructure in rural colleges can bridge the knowledge and technology gap. Sustainable development of higher education in Jharkhand requires a coordinated effort between the government, academic institutions, and civil society. A long-term vision emphasising inclusivity, excellence, and innovation is essential to transform Jharkhand's higher education landscape.

## **A Discussion on Status of Higher Education in Jharkhand**

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The NEP 2020 aims to bridge the gap between the current state of learning outcomes and what is required through quality, equity and integrity into the education system from the early stage of childhood education to higher education. The NEP 2020 visualizes an educational atmosphere filled with Indian ethos that would transform India into an equitable vibrant knowledge society by the provision of high quality education to all. The core vision of the policy is to make India a leader in the sphere of global knowledge. Higher education plays an important role in achieving sustainable livelihoods and economic development. It makes a student more meaningful in the sense of leading life with dignity. It gives the opportunity to a person to play as a workforce that enables economic independence. Higher education finally transforms the normal human being into a specialised human capital that contributes to economic growth and development. Jharkhand is a mineral rich state which consists of about 26% of tribal population in it. It also consists of various types of colleges and universities that include state, public and some colleges of national importance also. The Gender parity index in Jharkhand is almost same to the national average and has remained more than one except SC's. An overseas scholarship program has also been organised for the backward castes, tribals and minorities. Though efforts have been made for the enhancement of quality education in higher institutions by the government, the State of Jharkhand has been facing several issues which are a matter of concern. The issues may be categorized as poor infrastructure, insufficient funding, no appointment of faculty members in state universities since 2008, delayed or no promotional opportunities to teachers of state universities and complete failure to retain the students who are opting their colleges or universities in other states for their further higher studies.

## **Access and Equity in Higher Education in India: Where have we reached so far?**

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The Ernst and Young Report (2015) on Higher Education in India projected that by 2030, India would be among the youngest nations globally, with nearly 140 million individuals in the college-going age group, and one in every four graduates worldwide emerging from the Indian higher education system. This projection underscores the pivotal role of higher education as a foundation for developing an equitable, knowledge-driven, and sustainable economy. Against this backdrop, the present study critically examines the policies, reforms, and implementation mechanisms concerning access and equity in India's higher education landscape, with an aim to evaluate their effectiveness, identify persistent challenges, and suggest possible directions for future development. The research adopts an extensive literature-based analytical approach. A wide range of scholarly articles sourced from databases such

as Scopus, EBSCO, Google Scholar, and Sci-Hub were reviewed alongside key policy documents and reports issued by the Government of India. The analysis particularly focused on the effectiveness of the higher education objectives delineated in the National Education Policy (NEP) 2020, including access, equity, quality, excellence, and value-based education. The study further explored infrastructural challenges, policy execution gaps, and support mechanisms that influence equitable access to higher education across different regions and social groups. The findings reveal a notable improvement in India's Gross Enrolment Ratio (GER) in higher education for the age group 18–23, which increased from 23.7 in 2014–15 to 28.4 in 2021–22. A significant development is the sustained rise in female enrolment, with the Female GER surpassing the Male GER consecutively for the past five years, reaching 28.5 in 2021–22. Furthermore, India's higher education infrastructure has expanded remarkably—from 26 universities and 695 colleges in 1947 to 1,168 universities, 45,473 colleges, and 12,002 stand-alone institutions by 2021–22—making it the world's second-largest higher education system, after China. Despite these achievements, deep-seated disparities persist. The rural–urban divide continues to constrain equitable access, particularly for students from rural, tribal, and economically weaker backgrounds. Intra-state variations further intensify inequity, with high-quality institutions concentrated mainly in urban and peri-urban regions. Moreover, transition rates from secondary to tertiary education remain low due to economic, cultural, and academic factors contributing to dropout rates. The issue of reservation has remained central and contentious in India's educational discourse. Out of nearly 100 constitutional amendments, 16 have addressed reservation, reflecting its complex socio-political implications. While affirmative action has improved access for marginalised groups, evidence suggests that benefits are often concentrated among the relatively advantaged strata within these groups, perpetuating intra-group hierarchies rather than reducing inequality. In conclusion, while the principles outlined in the National Policy on Education—access, equity, quality, excellence, and relevance—remain pertinent, their realisation demands a pragmatic and context-sensitive action plan. To advance equity, future policies must identify and address factors inhibiting access for socially backward groups, evaluate the comparative impact of positive discrimination and efficiency arguments, and explore legally viable, comprehensive models that consider socio-economic indicators such as family background, parental literacy, economic status, and habitation. Strengthening these dimensions will be essential to transforming India's demographic advantage into an inclusive and equitable higher education ecosystem.

## **Digital Inclusion and Educational Equality Under NEP 2020: A Comparative Study of Muslim Women's Participation in STEM Education in Jharkhand**

**Zeba Shaheen**, Research Scholar, Ranchi University, Ranchi

NEP Policy 2020 envision inclusive, equity, and technology-driven education that promotes equal access and quality learning opportunities for all. However, differences persist among marginal communities,



especially Muslim women in Jharkhand. This paper discusses the current educational scenario of Muslim women in Jharkhand through the lens of NEP 2020, focusing on the challenges in digital learning, higher education participation and representation in STEM education in comparing their growth with other religious groups. The main objectives of the study are to understand the educational opportunities and barriers faced by Muslim women in Jharkhand under NEP 2020, especially in digital and STEM Education. To compare the status of Muslim women in higher and STEM education with that of women from other religious and social groups, in order to highlight patterns of inclusion and exclusion. To analyse how NEP 2020's goals of gender equality and minority inclusion are reflected in local policy initiatives and institutional practices in Jharkhand. The study follows on secondary data-based descriptive and analytical research design. Data sources include the AISHE 2023, NSS report, Census 2011, Niti Aayog report, state state-level education statistics. The methodology adopts a comparative and interpretative approach, examining patterns of educational participation among Muslim women in relation to other communities. Findings reveal that while NEP 2020 promotes inclusivity and equity, its implementation remains uneven for Muslim women in Jharkhand. They face major obstacles like the digital divide, limited institutional support, and socio-religious stereotypes. To improve inclusion, the paper recommends targeting digital literacy programs, expansion of scholarships and stronger implementation of NEP 2020 in minority dominated regions, community-based initiatives, local language bridge courses and, more importantly, partnership with madrasa. And lastly, equity and access are applied. In conclusion, NEP 2020 provides a strong foundation for inclusive education, but without focused attention to minority women's realities, its goal remains partially achieved.

## **Human Capital and Inclusive Growth in Jharkhand: An Economic Analysis of Education and Skill Development**

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Jharkhand has multiple resources, but still has issues related to poverty and inequity. The objective of this paper is to see how important human skills and knowledge are for improving everyone in the state. The primary objectives of this paper are to: Determine the potential earnings of a person investing in education to see how much money is being lost when children do not perform well in school; examine the match between the skills that people already have and the skills needed to fill available jobs in the state; investigate how different populations, specifically tribal populations (26.2% of the population), acquire skills and knowledge, and the impact that has on their income and quality of life. The study uses a quantitative economic analysis using a variety of large-scale nationally representative datasets. Foundational learning levels and gaps in education are examined using Annual Status of Education Report (ASER) data from 2022 and 2024. Labour Market Trends, including unemployment rates, Worker Population Ratio(WPR), and Sectoral employment, are studied using Periodic Labour Force Survey (PLFS) data from 2021-23. Broader measures of human capital, such as literacy rates and years



of education, are obtained from the National Family Health Survey (NFHS-5, 2019-21). [7,8] This study uses the Mincer earnings function to calculate returns to education and other econometric models to determine the main factors affecting labour market outcomes, taking into account the demographic and regional differences. This study has identified a paradox of high enrollment coupled with low realisation of human capital. Although reported school enrollment among children ages 6-14 is 98.4% according to ASER 2022, learning outcomes remain critically low.[4] For example, according to ASER 2024, only 19.6% of Class 3 students in Jharkhand can read a Class 2-level text, and only 45.3% of Class 5 students.[3] These educational gaps further translate into major labour market issues. The youth (ages 15-29) unemployment rate was 4.7% in 2022-23.[5] Additionally, there is a stark difference between sexes; NFHS-5 shows female literacy at 61.7% compared to 81.3% for men, and only 33.2% of females have completed 10 years or more of schooling compared to 46.6% of males. [7] With the tribal population, the Census 2011 reported lower literacy, with only 57.1% of the tribal population being literate.[2] Similarly, the labour market represents this, with the female Work Participation Rate (35.2%) being high yet excessively low productivity agriculture, with 86% of rural women being employed in low productivity agriculture.[6] The study proposes a three-part policy strategy derived from these findings. To begin, as a response to the learning crisis, we recommend the introduction of targeted, evidence-based remedial education programs focusing on early grade foundational literacy and numeracy (FLN). Second, to address the skills gap, we propose incentives to expand industry-oriented vocational training, as only 1% of the 15+ population has received formal vocational training. This will include public-private partnerships to ensure all career programs adequately reflect the needs of the market. Third, to encourage inclusive growth, we propose specific interventions for women and tribal youth. This can include conditional cash transfers to families for completing secondary education and scholarship programs to promote vocational training. The aim here is to break the cycle of low levels of human capital and poverty across generations.

## **Role of Anganwadi Workers in Strengthening Early Childhood Education in Jharkhand**

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The Anganwadi Worker plays a vital role in strengthening the educational foundation of early childhood of children. Anganwadi Workers (AWWs) act as the second mother and childcare worker in the community and the district, as they are the first link between the community and the education system, in a society or a community, especially in remote locations - rural or tribal areas. The Integrated Child Development Scheme (ICDS) provides pre-school education, health care, and nutrition to children between the ages of 0-6 years. The incredible work of AWWs is to improve school adaptation and enhance children's learning habits through innovative activities such as folk songs (lok geets), storytelling (lok katha), and to make them habituated for the primary school. In Jharkhand,

where literacy level and access to quality education remain a challenge, Anganwadi workers contribute continuously to motivate and counsel the society by conducting community awareness programs and encouraging children and their parents to enrol their children on primary school. With little salary, limited resources, and multidisciplinary work, their effortless contribution towards enhancing the foundation of the state in education and a healthy society is remarkable. They become an unseen teacher of the state. The objective of this paper is to explore the role of Anganwadi Workers (AWWs) in enhancing early childhood education in Jharkhand. This study adopts a qualitative approach using interviews and the focus group discussion method to gather information from Anganwadi workers and parents, and secondary data through journals, government reports, educational statistics and ICDS guidelines. The findings reveal that Anganwadi workers bring about transformative changes among children. There is a need for capacity development training for the AWWs to equip them with child-centric pedagogies.

## **Institution Response to Tribal Access to Inclusive Education: An Assessment of Institutional Preparedness in Implementation of National Education Policy of 2020**

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The present research paper is an outcome of the ICSSR short-term collaborative research study conducted in Jharkhand state from 2023 to 2024 to understand the state institution's preparedness in implementing the Central government's new education policy of 2020. As it is a fact that education is central to human development, and State has been playing a key role in ensuring the right to education for each child from the urban centres to the remotest areas with its various education policies and programmes. But, what is observed during the study is that education is a subject of conflict in Indian federal politics where the local government implements the public policy, whereas the central and state governments regulate every aspect of the policy. Though the objective of the new policy is to bring inclusiveness in education, where each gets access to education at each level. The objective of the research paper is to first understand the NEP-2020 in the context of Jharkhand, which is a backward, tribal dominated and less represented in the education system. Secondly, the study attempted to list out the best practices that the schools may have initiated or implemented to comply with the central guidelines of NEP 2020. Thirdly, the study tried to identify the scope and limitations of NEP 2020 towards enhancing Gross Enrolment Ratio in schools of Jharkhand and to suggest measures for smooth implementation of the New Education Policy-2020. The study primarily included all the stakeholders of NEP-2020, and data were collected through the direct interview method. We collected the responses of 1200 respondents /stakeholders directly or indirectly involved in the implementation process. These stakeholders include: (1) Principal/Vice Principal/School Management Committee (2) Teachers, (3) Parents (4) Students/Alumni, (5) Civil Society and

(6) Government Officials (State/ District/Block Level). With separate open-ended questionnaires, response was collected, and analysis was made. The study was carried out in five different districts of five different administrative zones of Jharkhand. The study also included focus group discussions with village-level leaders, local activists, politicians and NGO workers. **Key Findings** Almost all the schools covered under the study, both government and private, have accepted the fact that they have to implement the new education policy with all limitations and crunches. The new education policy is accepted as a central government policy, rather than accepting the fact that it promotes collaborative learning among tribal communities, encourages the students to engage in peer learning, share best practices, and provides better access to early childhood education while introducing local languages. The government initiated teacher training, but it is limited and selective to certain regions and schools. Ineffective monitoring and a lack of a grievance redressal mechanism are reported by a segment of stakeholders.

## **Measuring Gendered Gaps in Literacy and Work in Jharkhand: A District-Level Study Using Sopher's Index**

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This study looks at where and why gender gaps in education and work persist across Jharkhand's districts. I set out to (1) measure male–female differences in literacy and labour-force participation using Sopher's Index, (2) compare these gaps within SC and ST communities, and (3) break the workforce down by major occupational groups—cultivators, agricultural labourers, household-industry workers, and other workers—to see which districts and job categories show the deepest imbalances. Using district-level figures from the Census of India (2011), I computed Sopher's Index for literacy and combined main + marginal workforce participation for the whole population and separately for SC and ST groups. I also calculated occupation-specific indices and mapped the district values with choropleth maps to highlight geographic clustering and local contrasts. The aim was to create a clear, descriptive picture of where disparities are concentrated rather than to test causal models. The findings paint a consistent picture: gender gaps in both literacy and work are widespread and cluster in particular places. Districts that have significant tribal and rural populations usually show higher Sopher values, indicating broader male–female disparity and female gaps. When the workforce is disaggregated, agricultural categories—especially cultivators and agricultural labourers—show the sharpest gender imbalances; household-industry and other worker categories vary more across the state. Looking at social groups, many SC and ST districts show elevated relative gender disparities even when their overall literacy or participation rates differ, which suggests that gender disadvantage compounds with caste/tribe and local context.

# PUBLIC INSTITUTION AND SERVICE DELIVERY AND PARTICIPATORY DEVELOPMENT

## **Collaborative pathways, advancing tribal development through participatory government, governance and Inclusive strategies**

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The paper aims to (i) conceptualize participatory governance as a multidimensional framework for tribal empowerment; (ii) examine the theoretical intersections between inclusive development and collaborative governance within the tribal context; and (iii) identify institutional and policy mechanisms that can strengthen tribal participation in decision-making processes. This study adopts a conceptual approach, drawing upon existing literature, theoretical frameworks, and policy analyses rather than empirical data collection. It systematically reviews interdisciplinary sources on participatory governance, inclusive development, and the empowerment of indigenous communities. A thematic conceptual synthesis method is employed to critically analyze the intersection of governance structures and community engagement in tribal regions. The study also integrates insights from social capital theory, participatory planning models, and indigenous governance frameworks to construct a conceptual model illustrating the transformative potential of collaborative pathways in tribal development. The conceptual exploration suggests that tribal development must evolve from a welfare-oriented paradigm to one grounded in co-creation, cultural legitimacy, and participatory decision-making. Effective governance emerges when traditional and formal institutions align through shared accountability and mutual respect. The analysis also indicates that inclusivity, trust building, and adaptive governance strategies constitute the foundational pillars of successful tribal empowerment. Furthermore, integrating indigenous knowledge systems into development planning enhances policy responsiveness, sustainability, and community ownership. The paper recommends designing participatory institutions that formalize community representation within governance structures. Policies should adopt a convergence model aligning the efforts of local self-governments, NGOs, and tribal councils. Establishing Tribal Development Forums at the regional levels can facilitate dialogue, capacity-building, and participatory monitoring. Additionally, policymaking must embrace a rights-based approach that safeguards cultural

identity while promoting educational, technological, and economic inclusion through collaborative planning frameworks.

## **The Role of PESA Act 1996 in Enabling Tribal Communities as Active Stakeholders in Jharkhand's Development**

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The creation of Jharkhand on 15 November 2000 symbolized the fulfilment of long standing dreams of self-determination and socio-economic justice of its tribal communities for self-governance, cultural preservation and equitable development. However, despite constitutional safeguards and developmental initiatives, the tribal regions of Jharkhand, being rich in mineral and forest resources, continue to face socio-economic marginalization and governance deficits. The Panchayats (Extension to the Scheduled Areas) Act, 1996 (PESA) was enacted to bridge this gap by empowering Gram Sabhas in Scheduled V Areas to function as the foundation of self-governance, ensuring that development emerges from the community itself. It enables Gram Sabhas to participate in decision-making regarding resource management, local development planning and social welfare schemes. By strengthening these village-level institutions, the Act facilitates a bottom-up approach where tribal communities become active stakeholders rather than passive recipients of government policies. Empowered Gram Sabhas can play a transformative role in improving education, employment and healthcare at the grassroots level. In education, they can oversee school functioning, promote literacy programs and integrate traditional knowledge with formal curricula. In employment, they can prioritize skill development, monitor implementation of livelihood schemes such as MGNREGA and create local income-generating opportunities. In healthcare, Gram Sabhas can ensure access to primary health services, improve sanitation and nutrition and monitor maternal and child health programs. Active participation of tribal communities in these processes is central to inclusive and sustainable development in Jharkhand. Their involvement ensures that development initiatives respect local ecology, preserve cultural identity and align with the real needs of the community. By functioning as decision-makers and co-creators of development, tribal communities can transform Gram Sabhas into powerful instruments for socio-economic justice. This paper argues that the successful implementation of PESA is not merely a constitutional and legal requirement but also a developmental necessity. It can convert the original vision behind Jharkhand's formation into reality by enabling tribal communities to become active partners in education, employment, healthcare and overall governance, thereby contributing meaningfully to the state's inclusive growth and prosperity. This seminar paper explores the role of PESA in strengthening participatory decision-making, protecting traditional resource management systems and promoting tribal autonomy in Jharkhand's developmental process. It critically examines the current status of PESA implementation in the state, identifies key institutional and administrative challenges and highlights best practices that reflect the transformative potential of empowered Gram Sabhas. Situating PESA within Jharkhand's broader vision of inclusive growth and self-reliant development, the study concludes that

true progress can only be achieved when tribal communities become equal stakeholders and decision-makers in governance through transparent, participatory and sustainable institutional mechanisms.

## **Uneven Progress in Human Development among the Tribal Population of Jharkhand**

**Bibha Kumari**, Research Scholar, Vinobha Bhave University, Hazaribagh

The current work analyses the role of health and education in improving the level of human development among the Schedule Tribes (STs) of Jharkhand. The study tries to understand how these two parameters contribute to Human Development and also identify the inter-district comparison. The specific aim of the paper is to know the inter-district status in terms of health and education, analyse factors affecting them and impact of government schemes in improving the condition. It analyses how these dimensions affect socio-economic advancement and identifies persistent inter-district disparities. The objectives include assessing educational attainment and health status, examining factors shaping these outcomes, and evaluating the effectiveness of government welfare schemes for tribal communities. The research utilizes a mixed-methods approach, drawing on both primary and secondary data. Five districts—Ramgarh, Khunti, West Singhbhum, Dumka, and Latehar—were purposely selected due to their high concentrations of tribal populations. A multi-stage stratified random sampling method selected 335 households, representing 1,593 individuals. Primary data were collected using structured, pre-tested schedules; secondary data sources included Census 2011, the National Family Health Survey (NFHS-5), and Jharkhand Economic Surveys. Key indicators analysed were Gross Enrolment Ratio (GER), Gender Parity Index (GPI), Dropout Rate (DOR), Life Expectancy, Infant Mortality Rate (IMR), and Maternal Mortality Rate (MMR). The Human Development Index (HDI) was calculated by aggregating education, health, and income dimensions to assess inter-district variation. Results indicate significant disparities in educational and health outcomes across tribal districts. Khunti and West Singhbhum demonstrate relatively stronger performance, while Latehar and Dumka fall below the state average. Despite improvements in literacy and enrolment, dropout rates at the secondary level remain high. Health indicators show gradual progress, but IMR and MMR persist at elevated levels due to restricted access to healthcare. The analysis underscores the importance of female literacy, healthcare infrastructure, and socio-economic inclusion in shaping human development. The study recommends enhancing education and health delivery systems in tribal-majority areas, prioritizing secondary education, maternal healthcare, and female literacy. Strengthening the implementation of welfare schemes and integrating indigenous knowledge into education and health initiatives are crucial for achieving inclusive and sustainable human development in Jharkhand.

## **Dynamics of Social Development in Jharkhand: A Regional Perspective**

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Jharkhand, with its five commissioners, is a region of diverse social and cultural landscapes. However, the policy framework, designed for the entire state, does not account for regional differences, resulting in uneven outcomes. This paper, with its regional perspective, aims to analyse the sociodemographic status of Jharkhand in the context of health and education, and identify the pattern of social development across the state's five commissioners. The Social Index (SI) of Jharkhand has been developed to identify disparities in the state's regional development. The socio-demographic development indicators were obtained from the fifth round of the National Family Health Survey (2019-2020) and the fourth round. The social growth across the district has been analysed. The results show that regional disparities exist across the commissioners in the state. For instance, districts in South Chhota Nagpur of the state are performing well, while most districts in the Santhal Pargana region are part of the state's less developed region. Women with 10 or more years of schooling (%) is lowest in Pakur district and highest in Ranchi. Women aged 20-24 years who were married before the age of 18 are the highest in Jamtara district (Santhal Pargana) and the lowest in Simdega. Again, the percentage of all women aged 15-49 years who are anaemic<sup>22</sup> (%) is the highest in the Pakur district (Santhal Pargana), while it is the lowest in the Chatra district. Institutional Delivery is the lowest in Dumka (Santhal Pargana). The result shows that out of five commissioners in the state, Santhal Pargana is behind in all sorts of social development. Policy Recommendation: The findings of this study not only underscore the existing disparities but also illuminate the potential for significant improvement in Santhal Pargana. This potential for growth serves as a beacon of hope, inspiring optimism for policy formulation and providing a crucial benchmark for monitoring demographic and health-related Sustainable Development Indicators in Jharkhand with a regional perspective.

## **Child Nutrition Disparities in Jharkhand: Evidence-Based Insights from NFHS-5**

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In developing countries, child nutrition remains a significant public health concern, and socioeconomic disparities have a profound impact on nutritional outcomes. By moving up from 18th to 14th place in the health index, Jharkhand has shown encouraging progress, indicating improvements in overall health performance. The purpose of this study is to assess the degree of socio-economic inequality in child nutrition indicators and to employ rigorous analytical techniques to identify the significant causes



of these disparities. Three important nutritional outcomes— stunting, underweight, and wasting— were measured for inequality using the Erreygers Corrected Concentration Index. The study used nationally representative data from NFHS-5. Mother characteristics (education, age at first birth, media exposure, preceding birth interval), household characteristics (religion, caste, residence, household size, number of children under five), health service utilization (ICDS services), and child characteristics (age, birth order, sex, anaemia status, immunization status, breastfeeding duration) comprised a comprehensive set of control covariates. Significant contributors to the observed inequalities were found using the Erreygers decomposition method. The findings indicate significant pro-rich disparities in child nutrition, with the lowest inequality index (5.0) observed in children who are not experiencing wasting, and the highest inequality index (17.1) in non-stunted and appropriately weighted children (16.37). According to decomposition analysis, the leading causes of nutritional disparities are child age, residence, anaemia status, maternal education, and media exposure; the effects of ICDS services and the preceding time before delivery are comparatively minor. The results discern that, although there are still notable socioeconomic disparities in child nutrition outcomes, wasting shows comparatively less inequality than stunting and underweight. In addition to the state's proven ability to improve its health system, targeted interventions addressing maternal education, rural-urban disparities, anaemia prevention, and increased media outreach could significantly reduce these disparities and improve the nutritional status of children.

## **Multidimensional Poverty Analysis in Jharkhand: A Regional and Socio-demographic Assessment**

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The National Multidimensional Poverty Index Report 2023, published by NITI Aayog, identifies Jharkhand as one of the most multidimensionally poor states in India. The scale and depth of deprivation highlighted in the report underscore the need for a nuanced examination of the structural patterns, drivers, and regional disparities shaping poverty in the state. This paper examines the multidimensional nature of poverty in Jharkhand through regional and socio-demographic lenses to identify the most vulnerable groups, the most deprived regions, and the dimensions contributing most significantly to poverty. The study aims to inform targeted policy responses that enable sustainable poverty reduction. Using data from the National Family Health Survey (NFHS-5), the study constructs a Multidimensional Poverty Index (MPI) based on the Alkire-Foster methodology. The index incorporates three core dimensions—health, education, and standard of living—assessed through a set of deprivation indicators at both the household and individual levels. In addition to MPI estimation, logistic regression is employed to identify correlates and structural determinants of poverty across demographic and geographical groups. The results reveal that Jharkhand has an overall MPI value of 0.133 and a headcount ratio of 30.9%, indicating that nearly one in three people is multidimensionally



poor. Sharp regional disparities are evident: the Santhal Pargana region is the most deprived, with an MPI of 0.183 and a poverty incidence of 42.0%, while North Chotanagpur performs relatively better with an MPI of 0.095 and a headcount ratio of 23.4%. Social group analysis shows that Scheduled Tribes are the most vulnerable (MPI 0.196), followed by Scheduled Castes (MPI 0.162), reflecting structural inequities and entrenched marginalisation. A clear rural–urban divide persists, with rural Jharkhand exhibiting significantly higher deprivation. Among the three dimensions, the standard of living contributes the highest share of deprivation (42.7%), followed by health (32.1%) and education (25.1%). These patterns point to gaps in basic services, including sanitation, drinking water, housing, and asset ownership. The findings suggest the need for targeted interventions prioritising rural and tribal regions, improving education and healthcare systems, investing in climate-resilient infrastructure, and strengthening social protection. Addressing these gaps is essential for reducing poverty and advancing equitable and sustainable human development in Jharkhand.

## Understanding the Implementation of the Graduation Approach to Address Extreme Poverty: The Case of Jharkhand, India

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Jharkhand, one of India's most resource-rich states, was established in 2000 and has a population of 33 million, of which over 25 per cent are Scheduled Tribes. Nineteen of its twenty-four districts fall under India's 112 aspirational districts, placing Jharkhand among the less developed states. Poverty remains high, especially among disadvantaged and indigenous communities. Despite development schemes such as MGNREGA, NRLM, and targeted tribal welfare initiatives, structural barriers—including landlessness, low education levels, remoteness, limited livelihood opportunities, and social exclusion—persist. Particularly Vulnerable Tribal Groups (PVTGs) continue to face extreme poverty, with traditional welfare initiatives struggling to address their multifaceted deprivation. The Graduation Approach has emerged as an evidence-based model to address extreme poverty through a sequenced, multidimensional framework. Pioneered by BRAC in Bangladesh and now implemented globally, it combines asset transfer, livelihood training, financial inclusion, mentoring, and social empowerment to build sustainable livelihoods over three years. In Jharkhand, the strategy has been piloted through development agencies and integrated livelihood missions, targeting the poorest and most marginalised, including PVTGs.

This paper examines the implementation of the Graduation Approach in Jharkhand using qualitative and descriptive analysis based on secondary data. It explores design adaptation and institutional processes within the state, analysing how government and community institutions operationalised its key components. Drawing on reports, policy briefs, evaluation studies, and academic literature, it identifies enabling factors in implementation. Findings suggest improved women's participation in decision-making, increased livelihood diversification, financial literacy, and measurable movement of beneficiary households out of extreme poverty. Integration with self-help groups and village

organisations under JSLPS has strengthened local accountability and community ownership. The paper concludes that institutional convergence, consistent mentoring, and context-appropriate livelihood options are essential for effectiveness. Strengthening interdepartmental cooperation, embedding Graduation principles in state poverty frameworks, and establishing strong monitoring systems to track post-graduation outcomes are key policy priorities.

## **Women's Livelihood and Empowerment through SHGs and MMSY: A Study in Nawadih Block, Bokaro District, Jharkhand**

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This study explores the role of Self-Help Groups (SHGs) in creating livelihood opportunities for disadvantaged women in Nawadih Block, Bokaro District, Jharkhand, with specific focus on beneficiaries of the Jharkhand Mukhya Mantri Maiya Samman Yojana (MMSY). It examines the scheme's impact on financial security, livelihood activities, challenges faced by women while initiating income-generating work, and the coping mechanisms facilitated through SHGs. The study also proposes policy measures to strengthen women's empowerment in rural Jharkhand. Primary data were collected from 19 SHG women across 10 panchayats in Nawadih using purposive sampling. All respondents were involved in livelihood activities. A structured interview schedule with open and closed questions was used during October 2025 SHG meetings. The study follows a mixed-methods approach, combining quantitative analysis with qualitative insights from interviews, focus group discussions, and case studies. Secondary data were sourced from government reports, SHG records, and newspapers.

Preliminary analysis indicates significant positive outcomes from SHG participation and MMSY benefits. Quantitatively, 36% of respondents joined SHGs through NRLM, while others joined through JSLPS and community resource persons. SHGs provided microloans and livelihood support through activities such as grocery shops, farming, livestock, vegetable selling, and skill training. Around 85% of participants accessed MMSY benefits. Qualitatively, women reported improved financial security, enhanced social status, increased self-reliance, and confidence in public interaction. Key challenges included delayed MMSY payments, employment constraints, and agricultural losses due to excessive rainfall. Overall, SHGs have strengthened socio-economic empowerment, aligning with existing evidence of improved employment opportunities and decision-making among rural women in Jharkhand. Policy recommendations are (1) expanding SHG participation among eligible women and supporting livelihood-based income generation; (2) increasing widow and disability pension amounts for stronger social security; and (3) providing market linkages and enterprise funding through NABARD partnerships. These measures can further accelerate women-led sustainable development in rural Jharkhand.

## **Jharkhand Opportunities for Harnessing Rural Growth (JOHAR): An Initiative for Strengthening Livelihood in Jharkhand**

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Jharkhand is recognized for its thriving agriculture sector, and has achieved Gross State Domestic Product (GSDP) of around USD 55.29 billion at current prices in 2023-24. Jharkhand is renowned for its natural resources and despite having the country's largest mineral resources and impressive economic performance during the 2012-17 the dilemma is it has the second lowest income level among all states in India. The poverty incidence in Jharkhand remains at 37%. The identity of Jharkhand is its rural landscape, with the majority of the population residing in rural areas the development of these areas is crucial for the development of the state. According to the World Bank Report a majority of the rural households depend on agriculture and allied sectors for their livelihood, but the contribution of these sectors to household income is limited. Nearly 60% of the labor force in Jharkhand depends on agriculture and allied sectors for their livelihood. A large proportion of the farming community which includes mostly the marginal and small farmers practice rain-fed, single-cropped subsistence farming. Agricultural productivity has been low due to rugged terrain, limited irrigation, subsistence farming, lack of financial credit and market accessibility. The development of these rural areas is possible by enhancing their income and strengthening their livelihood. According to de Haan and Zoomers, livelihood is the means, activities, entitlement and assets by which people make a living attempting to meet their various consumption and economic necessities, cope with uncertainties and respond to new opportunities. In this context the JOHAR project was initiated in 2017 co-funded by the state government and the World Bank and implemented by Jharkhand State Livelihood Promotion Society (JSLPS). The JOHAR project is a holistic package of rural livelihood intervention aiming to enhance and diversify the income of targeted rural households. The study is mainly based on the secondary data collected from Economic Survey of Jharkhand, Reports from JSLPS and World Bank. The project operated in 17 districts of Jharkhand through SHGs, Village Organization (VO). The project encouraged marginalized communities especially women to engage in High Value Agriculture (HVA), livestock, fisheries and non-timber forest produce. By organizing Producer Groups (PGs) and Farmer Producer Organization (FPOs) the project improved the farmers' access to credit, technology and market. All these enhanced the income of households engaged in JOHAR by 35% against the target of 30%. However, the need of the hour is to strengthen the market linkages, create digital platforms for marketing for farm produce. Since, the project operates with the help of SHGs and lack of financial credit is evident it is necessary that the members should be trained in digital financial literacy. Capacity building should be enhanced as skill gaps persist in production and marketing for strengthening livelihood and long- term sustainability.

## Community Initiatives for Rejuvenation of Jumar River

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The Jumar River, flowing through Ranchi, Jharkhand, has faced severe degradation due to encroachment, pollution, and loss of natural flow. While government projects such as sewage treatment and afforestation are underway, sustainable rejuvenation can only be achieved through strong community participation. Local communities, educational institutions, and civic groups can play a transformative role in this regard via focussed initiatives.

**Riverbank Cleanup and Waste Management:** Regular clean-up drives organized by residents, schools, and NGOs can remove plastic and solid waste choking the river. Setting up waste segregation units and ensuring proper disposal of household and market waste can prevent garbage from reaching the river. Communities near the riverbanks can adopt “zero waste zones” with door-to-door waste collection and awareness campaigns.

**Community led Afforestation and Bio-fencing:** Planting native trees and grasses along the riverbanks can reduce soil erosion, restore biodiversity, and create green buffers. Local self-help groups, youth clubs, and school eco-clubs can lead “Adopt-a-Stretch” programs, where each group maintains a designated section of the riverbank. Regular monitoring of tree survival rates can make afforestation efforts more effective.

**Water Quality Monitoring and Citizen Science:** Low cost testing kits can empower local volunteers to measure water quality parameters such as pH, turbidity, and dissolved oxygen. These data can be shared with the Jharkhand State Pollution Control Board and local municipalities to track pollution sources. Involving citizens in scientific monitoring increases accountability and environmental literacy.

**Restoration of Traditional Water Bodies and Check Dams:** Communities can work towards reviving ponds, wells, and small check dams that feed the Jumar River. These water bodies act as natural recharge structures, improving groundwater levels and sustaining flow during dry seasons. Village level water user associations can take responsibility for desilting, fencing, and maintaining these structures.

**Awareness and Cultural Engagement:** Reviving cultural and religious associations with the river such as organizing eco-friendly Chhath Puja or “Nadi Utsav”- can foster emotional and cultural association with the river. Educational campaigns in local languages, art competitions, and storytelling events can spread awareness about the river’s importance.

**Participatory Planning and Local Governance:** Community representatives can be included in planning committees under local bodies like Gram Panchayats and Urban Wards. Participatory decision-making ensures that rejuvenation plans align with local needs, promoting long-term ownership and sustainability. By combining traditional wisdom with modern environmental practices, community-based initiatives can restore the ecological and cultural vitality of the Jumar River, transforming it into a living, thriving waterway once again.

## Bottom up accountability? Information, Expectations and Civic Action in India

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Why do transparency reforms yield inconsistent effects on civic engagement across low-and middle-income contexts? In this paper, we study how citizens' prior beliefs about government performance shape their response to negative performance information. We conduct a large-scale randomized field experiment with 2,107 adults across 50 villages, in one of India's poorest districts targeted by a national transparency initiative. We designed a seven-minute video, benchmarking the district's declining rank in health, education and infrastructure against neighbouring districts and informing about formal grievance channels. Citizens randomly assigned to watch the video significantly updated their beliefs about their district's poor relative performance and increased their civic engagement. They were 4 percentage points more likely to sign petitions and 8.4 percentage points more likely to attend grievance redressal workshops immediately after watching the video. Participation gains were concentrated entirely among citizens who initially overestimated their district's rank, while the intervention left beliefs about individual ability to influence public service delivery unchanged. One month later, beliefs about relative performance converged, yet citizens who initially overestimated their district's rank remained significantly more likely to meet civic officials and voice opinions on social media. We develop a simple theoretical model with two belief components--performance gaps from aspirational level of public services and perceived influence over the government - demonstrating that closing the first gap alone can improve civic participation through an accountability channel. These findings illuminate how prior beliefs mediate the transparency program's effectiveness and have policy implications for 180 million Indian citizens living in India's poor-performing districts.

## Indigeneity and Protective Land Tenure Regimes: A Case Study of Chotanagpur Tenancy Act in Urban Ranchi

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Land governance measures which seek to prevent the commodification of land and restrict market transactions to protect the interests of indigenous landowners are at odds with the global rush for land deals. Chotanagpur Tenancy Act, 1949 (CNTA), in place in specific districts of Jharkhand, is one such protective land tenure regime that prohibits the sale of land owned by Scheduled Tribes (STs) to members outside the ST communities. This paper examines the land market in urban areas of Ranchi city in Jharkhand and the manner in which CNTA is negotiated by state and non-state actors involved in land deals in the city. It specifically aims to understand 1) the provisions of the

CNTA that are designed to prevent alienation of land, 2) the role of the land bureaucracy in the implementation of CNTA and 3) how CNTA is being circumvented in urban Ranchi and through what processes land is being transferred to non-tribals. The paper is based on a critical reading of the CNTA, rules, regulations and records of land ownership and transactions in urban Ranchi. The methodology also included semi-structured interviews and open-ended interviews with officials of the land bureaucracy, middlemen, and landowners of ST land in the Argora neighborhood in Ranchi. The study finds that restrictions under the CNTA have created a niche in transactions involving tribal land which is occupied by middlemen belonging to the ST communities. The study also finds that the CNTA is circumvented in different ways in order to enable transactions of tribal land, and this process is facilitated by lawyers, middlemen and officials of the land bureaucracy. The implementation of the CNTA has unequal outcomes, since buyers of tribal land benefit from the lower prices prevalent due to the legal restrictions, while the economic elite within the ST communities (middlemen and buyers) benefit from such land transactions. The paper thus contributes to the important policy debate around the role of protective land tenure regimes, and whether the protection of indigenous rights is in contradiction with the incorporation of indigenous communities in the economy as market subjects.

## **Spatial Study of Right to Service Act in The Context of Scheduled Areas of Jharkhand**

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This paper is a spatial study of the Jharkhand Right to Service Act 2011, a service guarantee act in the state of Jharkhand, in the context of 5th scheduled areas of the state. The article paper attempts to highlight the positive impact of the Jharkhand Right to Service Act 2011, enacted here to promote good governance, has had in these areas, as well as the challenges facing the Act's effectiveness in these regions. Right to service Act is in force in Jharkhand since 2011. It is also known as Jharkhand Rajya Sewa Dene ki Guarantee Act 2011. The main objective of this act is to provide time bound services to the citizens. For this a maximum time limit is set for the listed citizen services. Within this stipulated time, the public servant has to deliver the said service to the citizen. The act is equally applicable to all citizens in all parts of the state but many districts of the state fall under the schedule 5 areas where many local / customary provisions are already applicable. In these areas the presence of customary law, rights of traditional gram sabha etc and the current panchayati raj units exist together. In this situation it is natural that the services coming under the right to service act 2011, which are to be executed with the help of panchayati raj institutions may face a situation of overlapping with the traditional system in the scheduled areas. Digital divide, literacy rate and awareness are also important factors impacting implementation of the Right to Service Act. In case of need for any certificate like caste, income or residence, field investigation report or genealogical family tree should be done on time because timely execution is the basic spirit of this act. But these are done by traditional head / pradhan, which interferes with the timebound delivery of services. Similar other points are covered in this article.

# EMPOWERMENT AND HERITAGE: SUPPORTING TRIBAL & MARGINALISED COMMUNITIES, ADVANCING GENDER EQUALITY, AND CELEBRATING CULTURAL TRADITIONS

## Democratic Decentralization, Political Empowerment and Developmental Participation: A Case Study of Elected Tribal Women in Jharkhand

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The Panchayati Raj Institutions (PRIs) in India, especially with constitutional mandates for women's reservation, are envisioned as a cornerstone for decentralised development and empowering marginalised communities. However, the intersection of gender and tribal identity creates a complex landscape where the promise of partnership is often mediated by deep-seated patriarchal norms within both formal and traditional governance structures. This paper attempts a critical examination of democratic decentralisation as a vehicle for the political empowerment of tribal women in Jharkhand. Focusing on the experiences of Oraon women elected to PRIs in the state, the study interrogates the complex interplay between gender, tribe, governance, and development. Being part of ongoing research and thus a working paper, methodologically, this paper comes from a mixed methods case study of Brambey Gram Panchayat in Mandar Block of Ranchi district. Its methods include quantitative surveys and in-depth interviews with elected women representatives at one level and conversations and non-participant observation with other stakeholders, including male leaders, traditional authorities (Mahto, Pahan), and community members on the other. Framed by the theoretical lenses of feminist institutionalism, intersectionality and notion of constitutional remedies, this paper also moves beyond the numerical representation guaranteed by constitutional mandates. In doing so, it analyses the substantive agency and decision-making power of women who navigate both the formal PRI system and the entrenched traditional tribal governance (Parha Panchayat). The study also examines the role of information and communication technologies (ICTs) as enablers for participation and empowerment. The findings reveal a "partnership paradox": although the constitutional provisions of reservations and democratic



decentralisation have helped women to be better represented, their substantive empowerment is still limited by low literacy levels, limited access to resources, lack of awareness, persistent patriarchal social structure, lack of institutional support, etc. The findings also reveal a persistence of a “dual patriarchy”. This, on one hand, is reflected in the form of often-visible sidelining of elected women representatives within the formal state apparatus. On the other hand, it is entangled by the parallel authority of the traditional Parha Panchayat that continues to dominate community dispute resolution and resource management. Nevertheless, this study also finds that being included in the local political system and leadership, these elected women representatives are gradually developing their confidence, awareness, and recognition within the community. Information and Communication Technologies (ICTs) emerge as enablers that offer a potential pathway to information and autonomy. However, their use is often mediated by patriarchal familial and social norms. The paper concludes by arguing that the process of empowerment is not a given, but continues to be dynamic and negotiated. It looks forward to bringing out policy recommendations, which include areas like capacity building, gender sensitivity, use of information technology, and mentorship networks to take up leadership at the grassroots level by tribal women. It also emphasises that the concept of representation does not guarantee gender justice without institutional change. It, thus, also recommends introducing or including feminist oriented reforms in governance structures. Key words: Democratic Decentralisation, Developmental Participation, Tribal Women, Panchayati Raj Institutions, Feminist Institutionalism, Intersectionality, Jharkhand.

## **Poverty, Patriarchy, and Protection – A Field Study of Child Marriage Practices in Bero Block, Ranchi District, Jharkhand**

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Despite legal prohibitions in place, the practice of child marriage continues to pose a serious challenge, especially amongst rural and tribal communities of Jharkhand. The study assesses the extent, drivers and socio-economic implications of child marriages in Bero Block, Ranchi District. The main focus of the study is on identifying motivational factors, social /public perceptions and institutional efforts undertaken to mitigate this evil practice, which has serious negative impacts on maternal health and quality of life. Despite the fact that the Prohibition of Child Marriage Act (2006) is in place, economic deprivation, gender inequality, cultural practices, and lack of education are the key factors behind these practices. The study uses a purposive sampling technique and involved adolescent girls (aged 13–18 years), parents, schoolteachers and village leaders across multiple panchayats to deepen understanding of the subject. Both quantitative and qualitative data were collected using a mixed-method approach combining household surveys, focus group discussions, and key informant interviews. The findings of the study reveal that financial instability due to economic precarity, fear of social disapproval,



the interrupted education-fuelled by a lack of a regular source of income, safety concerns, gendered domestic expectations and lack of adequate school infrastructure, play an important role in shaping early marriage decisions. Even when the awareness campaigns are ongoing, many parents regard early marriage as a socio-economic well-being for their daughters. The persistence of child marriage practices stems from poverty, entrenched patriarchal structures, as a tool for protecting girls/daughters and ineffective institutional enforcement. The study recommends the implementation of community-based strategies that emphasise more opportunities for girls' education, parental counselling, and promotion of livelihood development to create a favourable socio-economic ecosystem. Improving the synergy between government agencies and NGOs will help create a conducive environment that aligns education with livelihood development. The study stresses an urgent need for regionally tailored and participatory actions to eliminate child marriage and advance adolescent empowerment in Jharkhand.

## **Multidimensional Assessment of Financial Inclusion Vulnerability among Widowed Women in Coastal Odisha (India)**

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Despite the enormous progress that has been made in India within the realm of financial inclusion, a sizeable proportion of marginalised women, particularly widows, continue to be denied access to fundamental banking services. As a result, the purpose of this research is to carry out a comprehensive analysis of the vulnerability of widowed women in the coastal regions of Odisha to financial inclusion. To carry out the above-cited research objective, this study uses a primary data sample of 240 widows across urban and rural areas from two coastal districts of Odisha, i.e., Jagatsinghpur and Balasore. With the help of the composite index method, this study constructs a Financial Inclusion Vulnerability Index (FIVI) across four critical dimensions: availability, accessibility, usability, and quality, along with the calculation of the overall Financial Inclusion Vulnerability Index (FIVI). The major findings of this study reveal that almost 63% of the sampled widows fall under the high-vulnerability category. Furthermore, this study finds that though many widowed women have opened bank accounts in their names, a significant portion of widowed women face severe financial vulnerability in terms of usability (79%) and quality (79%) indices. Additionally, the rural-urban division further aggravates these discrepancies, with rural widow facing more difficulty than their urban counterparts due to their low social mobility, low income, low digital awareness, limited banking infrastructure, and unfriendly behaviour of banking staff. The study highlights the necessity of adopting a more nuanced policy approach that goes beyond mere account ownership to address the deeper challenges of banking usability and service quality. The findings of this study will be of greater assistance to policymakers, financial institutions, government bodies, and individuals engaged in the field of development in their efforts to adopt policies that are more gender-inclusive and sensitive to the region. These policies will truly encourage widowed women to fully reap the benefits of banking and empower them to live a life with more dignity.

## **Beyond Income: Mapping the Determinants of Multidimensional Poverty Among Tribal Communities of Jharkhand**

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This study explores the structural, cultural, and socio-economic determinants of poverty among tribal communities in Jharkhand, India, focusing on three districts: Ranchi, Khunti, and Godda. Moving beyond income-based metrics, it adopts the Multidimensional Poverty Index (MPI) framework—Health, Education, and Standard of Living—to capture lived experiences of deprivation. The objective is to generate context-sensitive insights that reflect tribal life experiences and inform inclusive policy frameworks. A qualitative research design was adopted to capture the nuanced realities of poverty among tribal populations. A semi-structured interview schedule was developed around the three core MPI dimensions. Data were collected through in-depth interviews with 15 tribal stakeholders, including community leaders, health workers, educators, and activists from the Malpahariya, Oraon and Munda tribes. Content analysis was employed to interpret transcripts, using open coding and categorisation to identify patterns across health, education and living standards. Secondary data sources such as NFHS-5, the Global MPI, and government reports supported triangulation. The study identifies key factors shaping multidimensional poverty among tribal communities in Jharkhand. In the health dimension, deprivation persists due to weak infrastructure, malnutrition, alcoholism, unhygienic living conditions, and cultural resistance. Maternal and child health services remain underutilised because of low awareness, language barriers, and mistrust of formal systems. In the education dimension, exclusion results from inaccessible schools, inadequate infrastructure, teacher absenteeism, and language disconnects. Culturally irrelevant curricula contribute to high dropout rates and low literacy, especially among girls, while child labour and early marriage further restrict educational outcomes. In the standard of living dimension, most tribal households live in kuccha houses with poor sanitation, unsafe drinking water, limited electricity, financial exclusion, and weak access to government schemes. Seasonal distressed migration deepens economic vulnerability. Other structural factors, notably gender inequality and land insecurity, limit women's participation and undermine livelihood stability. Overall, findings show that tribal poverty is structural and multidimensional, driven by geographic isolation, social exclusion, weak service delivery, and limited institutional responsiveness. Policy recommendations call for a culturally sensitive, community-based approach: strengthening rural health infrastructure; introducing mother-tongue-based multilingual education and vocational training; enhancing women's representation in local decision-making; promoting livelihood diversification through local enterprises, microfinance, and sustainable agriculture; improving dissemination of welfare information in local languages; and institutionalising regular monitoring of tribal-specific

multidimensional poverty indicators. Addressing tribal poverty in Jharkhand requires shifting from top-down welfare models to inclusive, participatory, and contextually grounded strategies aligned with Sustainable Development Goal 1.2.

## **Promoting Women Entrepreneurship in Tribal Regions of Jharkhand: Issues and Policy**

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In Jharkhand, going by the geography of settlements, infrastructure deficiencies, lack of connectivity to the wider market spaces, low access to formal education and skill training tribal women are seriously disadvantaged to pursue a livelihood strategy of entrepreneurship that would also create opportunities of job creation in the local area. Additional constraints are created by the conventional perception regarding role of women as confined to the household and certain primary survival activities as collecting firewood, fetching water from nearby waterbodies, fishing, tending domestic livestock, etc. Drawing upon primary data, this paper discusses a range of policy initiatives those address issues in business capacity building in tribal women, provision of generic facilities to enhance competitiveness of enterprises and creating opportunities for local job creation. In terms of skill development initiatives both traditional crafts and modern business skills are to be emphasized through introducing formal education and vocational training. These would include vital soft skills as basic literacy, numeracy skills and familiarity with essential digital technology literacy and applications. Special microfinance support tailored to tribal areas to start and scale up business needs to be designed. Involving tribal women entrepreneurs in regular events and workshops would facilitate knowledge exchange and their capacity building. Further, attempts at simplifying and streamlining various regulatory processes, etc. would go a long way in curtailing procedural delays and confusion in operating businesses smoothly. Supporting tribal women entrepreneurship is closely linked to provision of improved and accessible basic infrastructure as road connectivity, electricity, and internet access to create an enabling environment for businesses.

## Unpacking the Loop: A Feminist Analysis of ‘Humans in the Loop’

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Women from the Global South provide invisible human labour behind AI systems. They feed algorithms, clean code, train machine learning tools, moderate and transcribe content to be used by AI systems. Despite their involvement in skilled technological work, their role is often overlooked. They are underpaid, undervalued, and lack protection through labour laws. In the Indian context, data annotation has become a major industry among women from marginal groups, often centred in smaller towns and rural areas. Drawing from the documentary ‘Humans in the Loop’, this paper offers a feminist reading of the everyday life of a tribal woman data-labeller in Jharkhand, whose interaction with AI is shaped by the intersecting vulnerabilities of her gender, tribal identity, social isolation, her subordinate position in the organisational hierarchy as well as her social location as a divorced woman. Taking cue from Kate Crawford’s insight that AI is “neither artificial nor intelligent” but built on hidden human labour, this paper attempts to explore how the protagonist’s contribution to data work remains structurally invisible within systems driven largely by corporate priorities. Abeba Birhane’s critique of algorithmic colonisation further helps situate her experience within a global AI ecosystem where models developed with Western values, assumptions, and norms often misalign with the social and cultural contexts of Indian users, especially among tribal and other marginalised communities. In parallel, Lilly Irani’s work on the cultural labour of microwork provides a lens to understand how such layered identities of workers and their aspirations are compressed within global AI supply chains.

This also reflects a broader pattern in which women and other marginalised groups are concentrated in subordinate positions within the scientific field, while men, especially from privileged social backgrounds, take up prominent positions. The supposed lack of “technical skills” required for more sophisticated roles is often cited as justification, ignoring the long history of exclusion of ‘others’ in the science and technology industry.

## Harnessing Jharkhand’s Demographic Dividend: A Political Demography Analysis Using NFHS and PLFS

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As Jharkhand marks 25 years of statehood, its youthful population structure offers a critical opportunity to accelerate economic and social development. Yet the implications of this demographic moment extend beyond labour markets and human development indicators. This paper adopts a political demography lens to analyse how Jharkhand’s demographic transitions—youth bulge, fertility decline,

education expansion, and migration patterns—shape political pressures, governance demands, and the prospects for inclusive development. The study draws on NFHS (Rounds 4 and 5) and PLFS data to examine age structure, labour force participation, unemployment, education, and social group disparities, with a focus on tribal and rural populations.

The analysis demonstrates that while Jharkhand's demographic profile is conducive to a future demographic dividend, several structural constraints—such as low female labour force participation, high youth unemployment, pronounced ST–non-ST inequalities, and continued out-migration—create distinct political-demographic challenges. These demographic patterns influence the nature of political mobilisation, regional developmental demands, and the responsiveness required from state institutions. Education gains among tribal youth, rising aspirations amid limited non-farm opportunities, and uneven regional transitions contribute to emerging governance pressures that shape the state's development trajectory.

By integrating demographic analysis with insights from political demography, the paper identifies districts where youth concentration, unemployment burdens, and social disadvantage are likely to generate heightened political demands. It argues that realising Jharkhand's demographic dividend will require not only economic strategies—such as skill development and employment diversification—but also governance reforms that strengthen state capacity, deepen participatory development, and address structural inequities that influence political engagement. The findings offer a forward-looking framework for aligning Jharkhand's demographic potential with inclusive, accountable, and sustainable development.

## **Political Empowerment of Adivasi Women in Jharkhand: As Architects of Change**

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India, being the largest democracy in the world, was founded on the grounds of representative democracy. This principle advocates the inclusion of all the sections of society in the political arena, even the marginalised sections of society. Representation of Adivasi women in politics is essential for representative politics to be effective. It will bring in policy changes and inclusion of Adivasi women in higher positions of decision-making that will change the course in different areas of life. A true development will be ensured when the Adivasi women's voice gets a platform where their concerns and issues will be heard and subsequently addressed. Objective of this paper is to analyse the degree of representation of Adivasi women in the Panchayats, the Jharkhand state legislative assembly and Parliament; To outline and identify the barriers that hinder their participation in the Political arena; To analyse whether the quota system has translated into empowerment of Adivasi women in politics; To access the role of political parties in increasing the participation of Adivasi women in state politics. The methodology used for the above Research paper is both descriptive and analytical. The Primary and secondary sources have been analysed and examined, including research papers, government data,

and books. The study attempts to understand the need as well as the importance of the representation of Adivasi women in the political sphere. The participation of Adivasi women is crucial for changing the course of development in Jharkhand. Representation of Adivasi women in the political sphere is negligible, the only exception being at the panchayat level. The representation of Adivasi women is more ornamental and less substantial. Socio-cultural barriers lead to low representation of Adivasi women in the political arena. Reservation has a positive impact on the inclusion of Adivasi women in representation at the lower level (panchayat). Political parties must promote women's leadership and participation. The government should work towards gender-based budgeting. Efforts must be taken towards political training and capacity development. Efforts must be taken to curb the socio-economic barriers and the patriarchal mindset of the society that hinders Adivasi women's representation in politics. Tokenism politics should be replaced by meaningful and effective representation of Adivasi Women based on their calibre. The reservation policy of the Government should be implemented with full efficacy via sub-reservation of the seats for Adivasi women.

## **Regional Tribal Communities of Jharkhand and their Contribution to Tribal Societal Development**

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Regional Tribal knowledge is the wisdom that indigenous communities in Jharkhand have developed over generations, which they acquire through stories, folk songs, rituals, and their personal experience, rather than books or other written records. Their path to know the world is deeply connected with nature, community, and sustainable living. For tribals, land, water and forest are not just mere resources but an inseparable part of their identity and way of life. They believe in living in harmony and peaceful coexistence with nature, rather than taking advantage of it for profit. This paper will offer an in-depth analysis of the tribal people, who truly have the belief that nature is a living entity deserving utmost respect. Beneath their core ideology is the powerful slogan *Jal, Jungle, Zameen*, which shows their unwavering commitment to Land, water, and forests, which are the main pillars of their identity, survival, and resistance. They practice farming, medicine, and collective responsibility in ways that protect the ecology and ensure that future generations can flourish. Their deep understanding is common within families and communities, and is not confined to single individuals. However, colonialism and modern education systems have overlooked or erased much of Tribal knowledge, treating it as less valuable. However, today, researchers and activists are working to identify and restore Tribal knowledge as a vital way to understand the world. This paper is based on ethnographic fieldwork, including interviews with community members and local leaders across various tribal regions in Jharkhand, and shall make an attempt to analyze as to how Regional tribal wisdom and their deep knowledge system, can help find the healthier solutions for problems like climate change, social justice, and ethical guidance in the So-called modern world that we can live in.

## **From Roots to Routes: Assessing the Socio-economic and Cultural Consequences of Migration among Tribal Communities in Jharkhand**

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The plinth of the state of Jharkhand was made with the resolve that the tribal community of Jharkhand will finally get what it deserves. The empowerment of the tribes of the state of Jharkhand was to ensue after the creation of the state. However, the dream that had been sought to be realised seems as distant, if not more, even in 2025. This paper shall concentrate on the phenomenon of migration of the tribals from the state of Jharkhand. Migration of tribals from the state generally takes place because of distress and failure to make ends meet in their homelands. Being uprooted for this very reason leads to numerous debilitating circumstances and scenarios. This paper shall make an attempt to understand the reasons and compulsion behind the migration of tribals from the state of Jharkhand. It shall try to understand the difficulties that a tribal person has to contend with once they migrate to a new place. The paper shall analyse the manner in which tribals negotiate with the new setting and the people, and the numerous challenges that they face. The paper shall also examine the impact that migration has on the quality of life of the tribals upon migration. A thorough analysis of the impact on the minds and mental stability of the migrating tribals shall be done. The contribution of migration towards weakening the family structure and community life shall also be undertaken. The impact of migration on tribal identity and tribal culture shall also be discussed. The paper shall also seek to find immediate and long-term solutions to the problems related to tribal migration. The study is based on mixed methods and is qualitative in nature. The research study findings are empirical in nature and rely on both primary and secondary sources.

## **From Marginalisation to Mainstream: Evaluating Development Interventions in Tribal Communities through Socio-Economic Enablers**

**Siddhi Pandey**, Research Scholar, Ranchi University

This paper had threefold objectives: 1. To systematically identify the key socio-economic enablers of tribal mainstreaming through the literature review. 2. To evaluate and rank these enablers using the Best–Worst Method (BWM) to determine their relative significance and impact. 3. To propose actionable policy and institutional recommendations that strengthen priority enablers for inclusive and digitally relevant tribal development. The study combines a systematic literature review with input from experts in the field to find five main enablers: Social Inclusion & Cultural Preservation (SICP), Livelihood & Economic Empowerment (LEE), Education & Skill Development (ESD), Policy & Governance Support (PGS), and Infrastructure & Connectivity (INC). It also finds 15 sub-enablers.



Experts used the Best-Worst Method (BWM) to compare how important each sub-enabler was in each dimension. We used linear optimisation to figure out the weights, then we got the global ranks by multiplying the local weights by the main-enabler weights. Key Findings: Findings reveal that Livelihood & Economic Empowerment (0.369) is the most significant enabler, followed by Education & Skill Development (0.298) and Policy & Governance Support (0.162). At the sub-enabler level, vocational training and revitalisation of indigenous skills (ESD2) ranked highest overall, followed by SHG enterprise development (LEE3) and tool banks for farmers (LEE2). Governance levers like financial availability for indigenous enterprises (PGS1) are also very important. Digital and financial literacy (ESD1) is the sixth most important of the 15 sub-enablers. This means it is more important than many cultural, governance, and infrastructure indicators. It highlights the growing importance of this approach as a means to include people in the digital age. These findings show that, although most initiatives are oriented towards skills and jobs, digital skills are becoming increasingly important for long-term integration. Expected Policy Contribution: The findings present an evidence-based prioritisation approach for tribal development initiatives, supplying policymakers and practitioners with explicit direction on resource allocation. By showing how livelihood diversification, government accountability, cultural preservation, and digital empowerment can lead to a better scenario if they are prioritised strategically based on their need in a particular sector, the study gives a balanced and useful guide for inclusive development for tribals.

## **Adivasi Youth and Politics: A Study of Market Economy and Cultural Identity in Jharkhand**

**Sujit Kumar**, Assistant Professor, Azim Premji University, Bangalore

This study is an attempt to understand the changing urban landscape of Jharkhand and the behaviour of Adivasi youth towards the market economy, particularly land market and real estate sector. A part of an ongoing project, the primary data for the study is being collected from two urban centres of Ranchi and Dumka covering the two major geographical locations of Chotanagpur and Santhal Pargana, respectively. However, our focus here is to analyse the situation in Ranchi, the state capital. It should be noted that Adivasi land in Jharkhand is governed by protective legislations. Whereas Chotanagpur Tenancy Act, 1908 applies to land market in Ranchi, land in Dumka is regulated by Santhal Pargana Tenancy Act, 1949. The historical context in which these legislations were brought intended to restrict the transfer of Adivasi land to non-Adivasi people. However, a boom in real estate ever since the creation of the state in 2000 has changed the meaning of land even for the Adivasi communities. Many Adivasi youth today engage in land transactions and are builders and contractors in real estate sector. In addition to this, there is a growing demand among the Adivasi entrepreneurs represented under the Jharkhand Tribal Chamber of Commerce and Industry for providing necessary facilities to encourage and ensure their participation in the state economy. While it can be argued that the awareness towards market economy is still to see maturity there is no denying the fact that the community is opening to



the idea of entering neoliberal economy as equal partners. Moreover, a robust politics based upon the ethnic identity of Adivasis is also visible in the state. Many Adivasis engaged in market economy are closely associated with the identity politics and are looking for apertures to engage with Adivasi civil society which is reluctant to loosen the protective legislations given the possibility of easy acquisition of land. The changing scenario needs to be factored in to relax the legal bottlenecks for ensuring greater participation by the community

## स्थानीय एवं जनजाति समुदायों की सांस्कृतिक विरासत का संवर्धन

**डॉ. एल्विन बखला**, विभागाध्यक्ष (सहायक प्राध्यापिका), राजनीति विज्ञान विभाग, चतरा महाविद्यालय, चतरा, विनोबा भावे विश्वविद्यालय, हजारीबाग।

स्थानीय या आदिवासी शब्द बहुत ही प्राचीन और सुन्दर शब्द है। जो अपनी समृद्ध सांस्कृतिक विरासत के लिए प्रसिद्ध है। ये जनजातियाँ अपनी अनुठी परम्पराओं, कलाओं, संगीत, नृत्य, भाषा, शिल्प और प्रकृति के साथ गहरे संबंधों के लिए जानी जाती हैं। झारखण्ड की जनजातीय जीवन-शैली में प्रकृति प्रेम, सामुहिक जीवन और पर्व त्योहारों में सहभागिता के साथ अध्यात्मिकता का अनोखा संगम देखने को मिलता है। झारखण्ड में लगभग 33 जनजातीय समुदाय को मान्यता दी गयी है इन समुदायों की अपनी अलग क्षेत्रीय भाषा जिसमें संथाली, मुण्डा, उराँव, खड़िया, खोरठा, नागपुरी या कुडमाली हो आदि हैं। वे अपने पर्व-त्योहारों में सांस्कृतिक अभिव्यक्ति का परिचय देते हुए खाश अवसरों पर खाश परिधान में एकता, सामुहिकता और भाईचारे का मिशाल पेश करते हैं। जिन्हें हम सोहराई, करमा, सरहुल आदि में देख सकते हैं। नृत्य में झुमर, डमकच, फगुआ, पाइका और छऊ शामिल हैं। इन अवसरों पर वे पारम्परिक वाद्ययंत्रों जैसे-मांदर, ढोल, बंसी, नगाडा, ठाक, शहनाई झांझ व करताल आदि का प्रयोग करते हैं। झारखण्ड की जनजातियों पथरों, लकड़ियों, मिट्टी व घास-पूस से भी सुन्दर कलाकृति बनाते हैं वे पथरों को काटकर शिल-बट्टा, देवी-देवताओं की मूर्तियों, मिट्टी के सुन्दर बर्तन, बांस से टोकरी, सूप, दउरा व खजूर के पत्तों से चटाई एवं लम्बे घास को काटकर झाड़ू व धान की बाली से घर के दरवाजे को शृंगारने के लिए सुन्दर कलाकृति बनाते हैं। कुछ जनजाति समुदाय लोहे औजार से आत्म रक्षा के साथ-साथ शिकार खेलने व मछली पकड़ने के लिए जाल एवं कुमनी आदि बनाते हैं। महिलाएँ अपने घरों को भी खाश डिजाइन व आकृति के साथ दीवारों को सजाते हैं। कुछ जनजातीय महिलाएँ जंगल के सखुआ पत्तों से खाने के प्लेट, कटोरे आदि बनाते हैं।

### शोध के उद्देश्य

1. स्थानीय व जनजातीय समुदायों की सांस्कृतिक विरासत की पहचान, संरक्षण व विकास की दिशा में कार्य करना।
2. जनजातीय समुदायों की सांस्कृतिक विरासत को वैश्विक पटल पर रखकर एक नई पहचान दिलाना।
3. नई पीढ़ी को अपनी संस्कृति से परिचित कराकर उनके प्रति सम्मान एवं गर्व के भाव लाना।
4. सरकार का ध्यान आकृष्ट कर इनके संरक्षण व विकास हेतु सार्थक कदम उठाने की मांग करना।

शोध पद्धति इस शोध में मिश्रित पद्धति का उपयोग किया जायेगा। प्राथमिक श्रोत में आंकड़ा संग्रह हेतु जनजातीय समुदाय के बुद्धिजीवियों एवं बुजुर्गों से प्रश्नावली व साक्षात्कार लिया जायेगा। साथ ही स्थानीय लोगों के मिलकर लोक परम्पराओं एवं संस्कृति की जानकारी प्राप्त की जायेगी। द्वितीयक श्रोत में उपलब्ध किताबों, जर्नल के लेखों, शोध पत्रों सरकार द्वारा प्रकाशित आंकड़ों तथा

अभिलेखों एवं समाचार पत्र-पत्रिकाओं में लिखे गये लेखों द्वारा जानकारीयाँ प्राप्त की जायेगी। आवश्यकतानुसार ऑनलाईन श्रोतों का भी सहारा लिया जायेगा।

### निष्कर्ष

झारखण्ड की संस्कृति की पहचान का आधार आदिवासी विरासत है। जो सदियों पुरानी लोक परम्पराओं, आदर्शों, मान्यताओं, रीति-रिवाजों, भाषा, कला, धर्म, खान-पान, व्यवहार एवं उनके सम्पूर्ण जीवन शैली में दिखाई देती है, जो उन्हें अन्य समुदायों से अलग और खाश बनाती है। यहाँ चलना ही नृत्य व बोलना ही संगीत की स्थानीय कहावत को दर्शाता है। इसे बचाने हेतु हम सब को मिलकर कार्य करने की आवश्यकता है।

### सिफारिश

झारखण्ड की अबुआ सरकार से आग्रह है कि वे झारखण्ड के जनजातियों की सांस्कृतिक विरासत की पहचान कर उनके संवर्धन हेतु एक राज्यस्तरीय सांस्कृतिक विरासत केन्द्र खोलकर अगली पीढ़ी के लिए संरक्षित करें क्योंकि जो समुदाय अपनी सांस्कृतिक भाषा और पहचान को नष्ट होने से नहीं बचाता वह स्वयं नष्ट हो जाता है।

## A Study on the Impact of Social Media on Modern Fashion Trends among Indigenous Tribal Youth

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This study looks at how social media are impacting contemporary fashion trends among indigenous tribal youth (15–30 years, male and female) of the Gomia and Kanke blocks of Jharkhand, and what is the give-and-take between the traditional and modern styles. In such predominantly tribal regions, access to smartphones, internet services and social media sites increases the ease with which youth can monitor global and regional trends in fashion that they tend to appropriate, adopt or resist in their own attire. The research attempts to find out how peer groups, influencers, and visual culture of such sites as Instagram, TikTok, and Facebook influence clothing, color set preferences, hybrid fashion, and even standards of beauty among youth. It also takes into account how these influences converge with native cultural values, indigenous dress patterns, gender roles, economic limitations, and identity politics. Though there lies possibility of cultural renaissance, like young people blending tribal patterns, weaves and indigenous clothing into contemporary wear, or native designers taking inspiration from indigenous styles for urban fashion, there is also danger of cultural dilution, erosion of ritual significance of indigenous wear, unrealistic consumption, and the pull to fit into outside notions of beauty or fashion. Using a mixed methods approach that integrates surveys, in-depth interviews, observations, and social media content analysis, the study is designed to chart change patterns, perceptions of authenticity, and youth agency in constructing modern fashion. The results will be able to inform debates on cultural sustainability, youth identity construction, the power of media in peripheral areas, and policy environments that favor indigenous artisans, safeguard heritage patterns, and empower tribal youth to enter fashion without losing their cultural heritage.

## पहाड़, पत्थर और परंपरा: झारखंड की आदिवासी साहित्यिक विरासत का पुनः अन्वेषण

Anurag Jaiswal, Research Scholar, Ranchi University

झारखंड भारतीय उपमहाद्वीप का वह सांस्कृतिक भूभाग है जहाँ प्रकृति, मनुष्य और साहित्य एक-दूसरे से इतने गहरे जुड़े हैं कि इनके बीच किसी प्रकार की पृथक्ता की कल्पना भी असंभव प्रतीत होती है। इस प्रदेश के पहाड़, पत्थर, जंगल और नदियाँ केवल भौतिक संरचनाएँ नहीं बल्कि जीवित साहित्य हैं-ऐसा साहित्य जो हज़ारों वर्षों से आदिवासी समाज की स्मृतियों, अनुभवों, संघर्षों, विश्वदृष्टि और सामुदायिक चेतना को अपने भीतर सुरक्षित रखे हुए है। यहाँ की जनजातियाँ- मुंडा, संथात, उराँव, हो, खड़िया, बिरहोड़, पहाड़िया और असुर-लिखित ग्रंथों की परंपरा से अधिक मौखिक साहित्य पर आश्रित रही हैं, और इस मौखिक परंपरा ने ही झारखंड को “Indigenous Living Cultural Systems” का सर्वाधिक जीवंत केंद्र बनाया है।

इन समुदायों के लिए प्रकृति केवल पृष्ठभूमि या संसाधन नहीं बल्कि स्वयं एक साहित्यिक पात्र है। पर्वत पिता हैं, धरती माता है, जंगल जीवन है, और नदी वह आवाज़ है जो सभ्यता के आरंभ से आज तक बहती रही है। यही कारण है कि झारखंड की संस्कृति में “पहाड़-पत्थर-परंपरा केवल एक रूपक या भूगोल का विवरण नहीं है, बल्कि यह आदिवासी साहित्य का आधारभूत दर्शन है, जिसके माध्यम से मनुष्य-प्रकृति-समुदाय के संबंधों की व्याख्या की जाती है। आदिवासी गीतों, मिथकों, कहावतों, अनुष्ठानों, लोकगाथाओं और कथाओं में प्रकृति एक संवेदनशील सत्ता के रूप में क्रियाशील है। पेड़, वृक्ष, पक्षी, जल, अन्न, ऋतु और पशु-ये सभी इन साहित्यिक रचनाओं में जीवन चक्र के प्रतीक, संवाददाता और अनुभव संवाहक बनकर उपस्थित होते हैं।

झारखंड के शैलचित्र विशेषकर इस्को, सतपहाड़ और पंचगेटिया- इस साहित्यिक-सांस्कृतिक परंपरा के सबसे प्राचीन और सबसे विश्वसनीय दस्तावेज़ हैं। पत्थरों पर उकेरी गई आकृतियाँ आदिवासी कथा-स्मृति की दृश्य अभिव्यक्ति हैं। नृत्यरत्न मानव समूह, शिकार दृश्य, स्त्री-उर्वरता प्रतीक, पशु, सूर्य, वृक्ष और सामूहिक अनुष्ठान- ये सभी वे विषय हैं जो आज भी संथाली सोहरों, उराँव लीलाओं, मुंडारी इतिहास-गीतों, हो पारंबा कथाओं और जनी शिकार गाथाओं में जीवंत मिलते हैं। इस प्रकार शैलचित्र और मौखिक साहित्य एक साझा सांस्कृतिक निरंतरता का निर्माण करते हैं- एक दृश्य भाषा में, दूसरा ध्वनि और शब्द की भाषा में।

यह शोध पत्र इसी सर्वांगीण विरासत शैलचित्रों, मौखिक परंपराओं, स्त्री-प्रतीकों, पारिस्थितिक ज्ञान, सामुदायिक संरचनाओं, भाषाई विविधता, मिथकीय आख्यानों और लोक विश्वासों का गहन अध्ययन प्रस्तुत करता है। साथ ही यह आधुनिकता, उद्योगीकरण, शहरीकरण, विस्थापन और भाषाई क्षरण जैसी चुनौतियों का भी विश्लेषण करता है, जो इस विरासत को संकट की स्थिति में ले जा रही हैं। यह अध्ययन न केवल अतीत की ओर लौटकर पहचान की खोज करने का प्रयास है, बल्कि यह भी समझता है कि 21वीं सदी में झारखंड अपनी साहित्यिक और सांस्कृतिक परंपराओं को कैसे पुनर्जीवित कर रहा है और भविष्य के लिए किन नीतिगत हस्तक्षेपों की आवश्यकता है।

## Roots and Routes: Social, Economic and Cultural Transformations in a Multi-Caste Village of Jharkhand

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This study examines the social, economic, and cultural transformations unfolding in rural Jharkhand, a state marked by rich ethnic, linguistic, and caste diversity. With 26.2% Scheduled Tribe and 12.1%

Scheduled Caste population (Census 2011; projected 2021), Jharkhand represents both a melting pot of integration and a salad bowl of distinct identities. These dynamics have historically shaped cooperation and conflict around land, forests, and livelihoods, reflected in the region's long tradition of agrarian and tribal resistance. Focusing on Gengara, a multi-caste village in Patamda Block, East Singhbhum District, this ethnographic study explores inter-community coexistence and contemporary shifts driven by education, markets, migration, and state-led programs such as MGNREGA, PM-KISAN, and JSLPS. Data from participant observation, household surveys (N=358), in-depth interviews, and oral histories (N=14) are analyzed to trace both historical continuities and current transformations. Findings reveal a sharp decline in agriculture's significance: only about 38% of households now depend primarily on farming. Mechanization, shrinking landholdings (average <0.8 ha), and erratic rainfall have pushed villagers toward wage labor, outmigration (to Jamshedpur, Goa, Gujarat, Chennai), and small-scale enterprises like retail, transport, and masonry. While caste still influences occupation and social mobility, educational expansion, local political participation, and inter-caste collaboration through SHGs are gradually eroding rigid hierarchies. A "half-baked democratic culture" has emerged, embracing formal equality but constrained by persistent inequalities. Cultural practices such as, Chait mela, Saraswati puja, Bandna and Makar festivals; Karam, Tusu, Bhadu, and Chhou songs and dances are being reinterpreted under media and consumer influence, mixing ritual devotion with modern display. Gender roles are evolving as women increasingly join micro-credit groups and livelihood programs, yet household authority remains largely patriarchal. Youth aspirations center on education, salaried jobs, and urban lifestyles, prompting high spending on private schooling and healthcare, often exceeding income and leading to indebtedness through SHGs or informal borrowing. Economic liberalization and welfare expansion have improved income and consumption but fostered conspicuous spending, particularly among youth. Around 95% of households own Android smartphones (average cost ₹12,000), and 50% possess motor vehicles (average cost ₹1,00,000), reflecting growing aspirations but limited productive reinvestment. Frustration over unemployment and unmet ambitions fuels alcoholism, gambling, and permanent migration, exposing the psychological and economic strains of transition. Personal aspirations increasingly override collective concerns, weakening community cohesion. Policy implications emphasize: (1) strengthening rural livelihoods through skill development, value added agriculture, and enterprise promotion; (2) ensuring caste- and gender-sensitive development; (3) enhancing financial and institutional support for women's collectives; (4) improving quality education, vocational training, and digital access; and (5) embedding cultural and ecological sensitivity in governance.

## **Livelihood Strategies of Interstate Migrant Labourers in India: The Case of Jharkhand Labourers**

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Migration of labourers from Jharkhand, to other regions of India has a long history. It is believed that lack of sustainable employment opportunities pushes the labourers, particularly the youth of the state to other states of India in hordes. This paper tries to unravel the livelihood strategies of Jharkhand's labourers in the destination states by analysing the unit level data of close to half a million labourers who had moved out of the state in search of employment and other means of livelihood before the enforcement of Covid induced lockdown in 2020.

The data for this study comes from the household level data of close to 6 lakh migrant labourers who have returned to their native state of Jharkhand in the aftermath of Covid induced lockdown. The data were collected by the members of self-help groups at the behest of Jharkhand government. Among these labourers, close to 7.5 per cent were women.

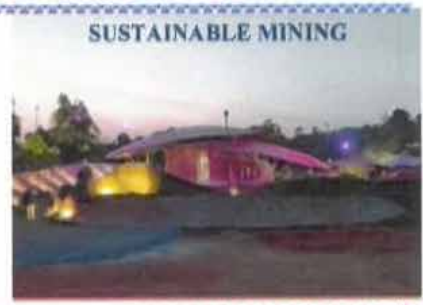
The paper finds that more than 70 per cent labourers of the state, both male and female, had moved to the agglomerated growth centres in the relatively developed states of India in search of employment and other means of livelihood. Most of them were barely literate or in possession of job skills that provide them a decent means of livelihood. In the destination states they were engaged in more than 200 types of works, but majority of them worked as low skilled labourers in informal sectors in primary, secondary and tertiary sectors. Quite a few of them also worked in hazardous factories and in rough mountain terrains by risking their lives. Despite working long hours in a day more than 90 per cent of them failed to earn more than Rs. 10000 in a month. This shows the hyper precarity of migrant labourers. The paper urges the policymakers to frame some more enforceable policies and laws so that the migrant labourers earn a decent income at the destination states, including in some amendments in Corporate Social Responsibility Act 2013 of India.



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