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January-June, 2025



Editor
R.K. Verma

Special Issue on
Viksit Bharat@2047: Concerns of Eastern India

Indian Institute of Public Administration
Bihar Regional Branch, Patna

Indian Institute of Public Administration Bihar Regional Branch, Patna

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INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

Bihar Regional Branch

Vermas, Shiva Path, New Purendrapur, Patna 800 001

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Editorial

Our PM's Mission VIKSIT BHARAT@2047 has been in discussions involving the question – how to achieve this goal of making India a developed and strong nation as well as making it a junction for international community? In this context, the need of even development pace of each and every region of the country is a precondition. The situation reveals that the eastern Indian states, especially Bihar, Jharkhand, Odisha and West Bengal are placed below in the development parameters as compared to the rest of the regions of the country, evident from the fact that in six tiers of development parameters, Bihar and Jharkhand are placed at bottom in 6th tier. Also there prevail intra-regional disparities evident from the fact that West Bengal is placed in 5th tier and Odisha in the 4th. With this view in mind Easter Zonal Conference of Indian Institute of Public Administration on VIKSIT BHARAT@2047: CONCERNS OF EASTERN INDIA was organized by Bihar Regional Branch held in the premises of BIPARD, Gaya on 22nd January, 2025. In the Zonal Conference, it was decided to bring out a special number of Bihar Journal of Public Administration (UGC-CARE List with Impact Factor 6.129) on the theme. As such, it is a matter of immense pleasure to present the Vol. XXII, No. 1-S, Jan-June, 2025 on the theme Viksit Bharat@2047: Concerns of Eastern India before the readers. It is believed that the present issue will be useful for both the policy makers and persons having academic interest.

The present Special Number encompasses the various issues of eastern region of the country related to all-round development. The subjects like challenges and policy suggestions for economic development, magnitude of food security, issues in governance, social development, women's role, inter-state cooperation for disaster management and conservation & management of traditional water bodies for irrigation and other uses in the Eastern region have acquired place in the present special number.

A number of state specific issues has been covered in the present Special Number of BJPA. Important among them are Bihar's prospects of government initiatives for makhana cultivation, global recognition and marketing, challenges and prospects of Bihar's economic development, possible role of Bihari migration and unemployment in Bihar, public health care expenditure, disaster preparedness for infamous Kosi region of Bihar, village level justice delivery, policy issues in malnutrition of women and children in Bihar, addressing the cause of destitutes by Bihar Government and role of women in strengthening village republic. The tribal issues in the Region have been addressed by two contributors. Besides, the

impressionistic notes of veteran bureaucrats on the subject have found place in it. In addition to it, there are two papers in Hindi also covering issues like social rehabilitation of victims of disaster and women led development through Jeevika scheme in Bihar.

The IIPA Bihar Regional Branch and the Editorial team express thankfulness to external support from expert reviewers and the contributors. At last, though utmost care has been taken to maintain the quality, yet we shall feel obliged to have suggestions from readership for improvements in the Journal.

Editor

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EASTERN INDIA POISED TO USHER IN A NEW ERA: A STUDY IN THE CONTEXT OF VIKSIT BHARAT@2047

Mrinal Kumar Chatterjee*

Abstract

The Mission 'Viksit Bharat@2047' cannot be achieved unless the states of Eastern India are developed. With this view in mind, the present paper attempts to assess the state of socio-economic development in Bihar, Jharkhand, Odisha and West Bengal and specific features of economies of these states. It further goes to underline the inhibiting factors and challenges faced by these states, issues in governance and politics and suggesting strategies to accelerate the pace of socio-economic development in this region.

Keywords: Agriculture, Eastern India, Governance, Labour, Poverty, Politics.

INTRODUCTION

India's journey towards becoming a developed nation by 2047 hinges significantly on the performance of its eastern states, comprising of West Bengal, Odisha, Bihar, and Jharkhand, particularly the latter two states. For Bihar and Jharkhand are among the poorest state of India. West Bengal, once a major contributor accounting for 10.5% of GDP in 1960-61, has seen a steady decline to just 5.6% currently. Its per capita income has also dropped from 127.5% of the national average to 83.7%, falling behind states like Rajasthan and Odisha.

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* Note: The present paper is a revised version of the paper presented in the Eastern Zonal Conference of IIPA on the topic held at BIPARD, Gaya on 22.1.25

According to the report by the Economic Advisory Council to the Prime Minister (EAC-PM) released on September 18, 2024, the poorest states like Uttar Pradesh and Bihar have seen their GDP contributions dwindle, with Uttar Pradesh's share falling from 14% in 1960-61 to 9.5% and Bihar contributing only 4.3% despite being the third-most populous state.

The concept of beta convergence suggests that poorer regions should grow faster than richer ones over time. This theory has not played out as expected in India's eastern states. Despite their rich mineral resources, strategic locations, and vast potential, these states have historically lagged behind in economic development, presenting both a challenge and an opportunity for India's growth aspirations. Bihar's per capita GDP (\$1376) is comparable to that of Mozambique (\$1283), but the state's under-five mortality is higher (58 vs 54.8). In comparison Kerala's economy is often likened to a European country like Portugal due to its similar focus on services, a relatively high literacy rate, and a comparable per capita income.

As India strides towards becoming a global economic powerhouse, the development of the eastern states becomes essential for balanced national growth and reducing regional disparities. With their vast agricultural base, mineral wealth, long coastal length (Odisha, 480 km and West Bengal 210 km) and emerging industrial potential (in case of West Bengal there has been long legacy of industries till about 1960s, when industries started closing down or shifting base), the eastern states are poised to contribute significantly to the country's development trajectory. However, overcoming the persistent issues of poverty, low literacy rates (except West Bengal, as per 2011 census), inadequate infrastructure, lack of opportunities, political bickering are essential to unlocking this potential. So are overcoming a 'snail would be put to shame' work culture, a nihilistic mind set, visionless political class and a mal-functioning and often demoralised bureaucracy.

CHALLENGES FACED BY EASTERN STATES

Economic Factors

Underdeveloped Industrial Sector: These states have not been able to establish a robust industrial base, or squander it (like in the case of West Bengal) primarily due to historical neglect, lack of investment, political bickering, inadequate infrastructure and lack of a social ecosphere conducive to trade and industry.

This underdevelopment has led to limited job opportunities in the formal sector and stunted economic diversification, forcing a large portion of the population to rely on low-productivity agricultural and informal sectors.

Freight Equalisation Policy (1952): It aimed to encourage factories to be built anywhere in India by subsidizing mineral transportation costs. However, it had detrimental effects on the eastern states of India by reducing incentives to establish industries near mining areas, thereby encouraging the development of factories farther away and adversely affecting the economic prospects of these states.

Low Social Progress: Social Progress Index (SPI) rankings shows that no state from the eastern region ranks among the high tiers of social progress (Tier 1 and Tier 2). West Bengal, and Odisha rank in Tiers 4 and 5, indicating lower middle and low social progress. Bihar and Jharkhand rank in Tier 6, representing very low performance in social progress. Analysis of 112 aspirational districts shows that the majority of districts in Bihar and Jharkhand rank among the bottom 20 nationwide.

Labour Market Issues

Most eastern states reported a labour force participation rate (LFPR) above 60% for the population aged 15-59 in 2022-23, while Bihar's LFPR stood at only 50.9%, indicating lower workforce engagement. However, when it comes to workforce quality, over 83% of the workforce in these states falls into the semi-skilled category.

This suggests a predominance of low-skilled labour that may struggle to drive productivity and economic growth. It also perpetuates poverty. Among the four eastern India states, Bihar is particularly susceptible because of its very large young and unskilled workforce.

Dependence on Agriculture

A high reliance on agriculture, often characterized by low productivity and outdated farming practices, has hindered economic growth and income stability in these states.

The agricultural sector's vulnerability to climate variations and market fluctuations further exacerbates economic instability. The agricultural sector's vulnerability to climate variations and market fluctuations further exacerbates economic instability.

Social and Human Development Issues

Low Literacy Rates: Particularly in states like Bihar and Jharkhand, persistently low literacy rates and poor quality education have impeded skill development and workforce quality.

This educational deficit has created a vicious cycle of low-skilled human resource, reduced productivity, and limited economic opportunities.

HIGH POVERTY RATES

Persistent poverty has hindered social mobility and economic progress. In 2024, Jharkhand had a multidimensional poverty rate of 28%, which is the second highest in India, after Bihar.

High poverty rates have trapped large segments of the population in a cycle of low education, poor health, and limited economic opportunities, making it difficult to break out of intergenerational poverty.

Historical and Geographical Factors

The eastern states of India bear the lasting impact of exploitative colonial policies that systematically stunted their industrial growth and economic development. British rule focused on extracting resources from these regions without investing in long-term development, creating a foundation of economic backwardness that has persisted long after independence.

The challenging terrain of many areas in these states, including dense forests, mountainous regions, and extensive river systems, has resulted in poor connectivity. This geographical isolation has significantly limited access to markets and resources, hindering economic integration with more developed regions of the country.

Vulnerability to Natural Disasters

The eastern states are particularly susceptible to frequent natural disasters such as cyclones, floods, and droughts. From the 1960s to the mid-2000s, 65% of global tropical cyclone fatalities were located in the Bay of Bengal. The west coast of India is less prone to cyclones. Odisha has faced no less than ten major cyclones in the last 12 years from 2012 and designated as a “Very High Damage Risk Zone-A” by the National Disaster Management Authority (NDMA). West Bengal has also suffered a lot. A tropical cyclone of specific intensity when it strikes the east coast of India and Bangladesh, usually produces a higher storm surge compared to that when such a cyclone strikes elsewhere in the world. This is because of the special nature of the coastline, the shallow coastal ocean topography and the characteristics of tide in the North Bay of Bengal region. Bihar is recognized as India's most flood-prone state, with approximately 76% of the population in North Bihar living under the persistent threat of severe flooding. Bihar makes up 16.5% of India's flood-affected area and contains 22.1% of India's flood-affected population. These recurring calamities have repeatedly disrupted development efforts and economic activities, destroying infrastructure and livelihoods, and necessitating constant rebuilding (a very potent source of corruption) rather than progressive development.

Governance and Political Challenges

Competitive federalism has been detrimental for poor states in India by exacerbating existing inequalities. Richer states, with better infrastructure and resources, attract more investments and skilled labour, leaving poorer states struggling to compete.

This leads to a widening gap in development, as poorer states face challenges in funding essential services and attracting economic opportunities.

Political bickering leading to a limbo in decision making, extortion by lumpen elements with political backing creating a sense of insecurity – keep the investors away, especially in Bihar and West Bengal.

STRATEGIES TO DEVELOP THE EASTERN STATES

Despite the roadblocks, bottle-necks and irritants eastern states can be developed if there is a political and social will. Here are some issues and ideas that need to be implemented.

A Growth-conducive Social Eco-system: The eastern states must have a growth-conducive social eco-system, which include rule of law, sense of security and wellbeing, opportunity of education and good health facility. The administration must ensure that. Build sound institutions that allow virtuous circles of innovation, expansion and peace (Acemoglu, Daron and Robinson, James A., 2013). Do not confuse industrialization with the construction of factory buildings rather than a capacity and skill building process through certain stages. (Yulek, Murat, 2018).

Economic Growth Initiatives: The eastern states require targeted investments in infrastructure to improve connectivity and facilitate economic activities. Policies to attract private sector investments and promote industrialization are necessary.

Enhancing connectivity through projects like the Eastern Dedicated Freight Corridor can facilitate the movement of goods and reduce transportation costs, making the region more attractive for industrial investments.

States like Odisha and Jharkhand, rich in minerals, could benefit from policies promoting value-added industries, such as setting up steel plants and refineries close to mining areas.

Social Development: Comprehensive skill development programs are crucial for improving the quality of the workforce in the eastern states. Initiatives to improve social indicators, particularly in health and education, are essential.

States like Odisha, Bihar and West Bengal have seen positive outcomes from such programs, but more needs to be done to ensure that the local workforce can meet the demands of emerging industries. Improving social indicators in health and education is vital. So is employment/engagement.

Labour Market Improvements: Measures to increase labour force participation, especially among women, are needed. The promotion of entrepreneurship and small businesses can create more employment opportunities.

For instance, West Bengal's successful implementation of microfinance programs, with help of the Association of Microfinance Institutions in West Bengal, or Odisha's 'Mission Shakti' programme have empowered women to start small businesses, leading to improved family incomes and greater financial independence.

Encouraging entrepreneurship through programs like Start-Up India and providing access to credit for small businesses can create more employment opportunities. This approach has proven effective in states like Bihar, where initiatives to support small-scale industries have led to significant job creation.

Cooperative Federalism: By fostering collaboration between the central and state governments, resources and expertise can be more effectively allocated to address regional disparities.

This approach encourages shared responsibilities in policy implementation, infrastructure development, and socio-economic programs, ensuring that Eastern states receive the necessary support to overcome challenges.

Regional Cooperation: The four eastern states may have greater cooperation under an institutional framework to help inter-state trade and business; and amicable resolution of inter-state issue.

Governance and Policy: Strengthening local governance structures is crucial to ensure effective implementation of development programs. Collaborative efforts between state and central governments are necessary to address regional imbalances.

The Krushak Assistance for Livelihood and Income Augmentation (KALIA) scheme is a program by the Government of Odisha to help farmers grow their agriculture, increase their income, and relieve their debt. Similarly, the Subhadra Yojana, launched by the Odisha government in 2024 and the Kanyashree Scheme, launched by the West Bengal government in 2013, exemplifies good governance and effective policy by aiming to enhance the educational and economic status of women/girls from economically disadvantaged backgrounds.

Address Regional Disparities: State governments in the eastern region must intensify their efforts to address regional disparities within the state and promote equitable development. This includes implementing policies to improve social indicators and boost economic growth across the state.

Realizing Potential: The eastern states have the potential to become engines of growth. The rich mineral resources of Jharkhand and Odisha offer opportunities for developing industries like steel, aluminium, and cement, which can contribute to the nation's industrial output.

Promoting MSMEs in the eastern states of India can be advanced by enhancing access to financing and credit facilities, coupled with comprehensive support in technology and skill development and fostering a conducive business environment through streamlined regulations.

Bottom-up Development Model: The states must adopt bottom-up development model instead of top-down. The civil service is chiefly responsible for policy formulation by providing ideas and relevant information. They should promote 'bottom-up' approach. Allow the PRIs and ULBs to come up with ideas. Allow indigenous skills and solutions, wherever possible and feasible. Don't go for 'one size fits all' kind of idea or solution. Think long term. In India the major problem lies in implementation. Be realistic while planning. Be honest while implementing. Don't go for fancy ideas, go for workable, sustainable ideas and proper implementation.

In fact the development model could be synced with Sustainable Development Goals (SDG) of United Nations (UN). Here are some ideas:

- a. Empower local governments (PRI and ULB) with greater financial autonomy and capacity-building programs to address SDGs like poverty alleviation (SDG 1) and quality education (SDG 4).
- b. Enhance data-driven decision making. Establish robust data collection and monitoring systems to track progress on SDGs at district and block levels. Leverage GIS for real-time insights into sectors like health (SDG 3) and climate action (SDG 13).
- c. Promote public-private partnership. Foster collaborations with private companies and NGOs for infrastructure development, education, and health initiatives. Encourage corporate social responsibility (CSR) efforts aligned with SDGs.
- d. Strengthen Social Protection Schemes. Improve the implementation and delivery of programmes like MGNREGA, PMAY, and PM-KISAN to tackle poverty, hunger, and inequality (SDGs 1, 2, and 10). Focus on reducing leakages and increasing transparency.
- e. Renewable Energy Adoption. Develop policies to accelerate the deployment of solar, wind, and biomass energy projects in rural areas to achieve affordable and clean energy targets (SDG 7).
- f. Sustainable Urban Development. Design and implement urban planning strategies focusing on waste management, green spaces, and public transportation to achieve sustainable cities and communities (SDG 11).
- g. Address Climate Resilience. Develop region-specific climate adaptation and disaster resilience plans, particularly for flood-prone areas like Bihar and Odisha, to align with SDG 13.

- h. Leverage Technology for Governance. Implement digital governance tools for service delivery, grievance redressal, and citizen engagement. Use mobile apps and platforms for health, education, and skill development initiatives.
- i. Capacity Building for Civil Servants. Provide targeted training for civil servants and local officials on SDG integration into planning and governance to ensure alignment with regional priorities.
- j. Participation of PRIs, ULBs and civil society in the development process. Create mechanisms for active community involvement in policy formulation and implementation, especially in sectors like clean water and sanitation (SDG 6) and gender equality (SDG 5). Palli/Gram Sabha is a good system, provided it does not fall into political quagmire.
- k. Issues of Equity and Inclusion, especially SCs, STs, Women and other vulnerable groups. Education, economic empowerment, legal enforcement, and community engagement – are the four important areas to focus to promote equity and inclusion for marginalized groups. This could be done by:
 - Enhance Access to Quality Education. Establish well-funded schools in underserved areas with scholarships, mentoring programs, and residential facilities for SCs, STs, and girls. Focus on reducing dropouts, especially among adolescent girls.
 - Economic Empowerment Initiatives. Promote entrepreneurship and skill development programs tailored for SCs, STs, and women. Provide financial assistance, market linkages, and training to foster self-reliance.
 - Inclusive Policy Design and Implementation. Formulate policies with a focus on the specific needs of marginalized communities, ensuring adequate representation of SCs, STs, women, and other vulnerable groups in the policy-making process.
 - Strengthen Affirmative Action. Expand and reinforce affirmative action policies in education, employment, and governance to provide opportunities for SCs, STs, and other disadvantaged groups.
 - Strengthen Legal Protections. Enforce existing anti-discrimination and anti-violence laws effectively. Establish fast-track courts to address cases of caste-based violence, gender-based violence, and other forms of discrimination.
 - Address Social Stigma. Conduct awareness campaigns to challenge caste-based discrimination, gender stereotypes, and other forms of bias. Engage community leaders, schools, and media in fostering a culture of equality.
 - Ensure Land and Resource Rights. Ensure secure land tenure for SCs and STs, particularly in tribal regions, by enforcing land rights and protecting natural resource access. Support sustainable livelihood projects.

- **Make Healthcare Accessible.** Improve healthcare services in tribal and rural areas by deploying mobile clinics, telemedicine services, and culturally sensitive healthcare workers. Focus on maternal and child health, particularly for women in vulnerable communities.

ODISHA POISED TO SURGE

When it comes to development every state (or for that matter area) has some common and general issues; and some issues typical of that area/state. It takes time and close physical interaction to understand and appreciate those issues. It could be cultural, socio-psychological, logistical or political.

Since I have been living and working in Odisha, as a journalist and then as a media academician, with research interest in development for over 60 years, I am a relatively better position to flag some issues typical to Odisha.

Odisha has an agriculture-based economy which is in transition towards an industry and service-based economy. It has enormous growth potential in terms of natural resources as well as human resources. With about 4.7% of India's land mass and 3.58% of the population, the State is 8th largest and 11th most populous in the country. It has 11% of the total water resources of the country with 21.01 lakh hectare meter of replenishable ground water to meet any magnitude of water requirement. There is a coastline of 480 kms. It is also endowed with 6.70 lakh hectare of inland fresh water area and 4.18 lakh hectare of brackish water area which provide enormous potential for fish production. In the mineral side, Odisha is one of the richest States having Chromite, Nickel, Bauxite ore and Coal deposits to the extent of 97.9%, 92.5%, 50.98%, 33.17% and 24.61% respectively of the total deposits of the country.

The economy of Odisha is one of the fastest growing economies in India since 2012. Odisha has done reasonably well in infrastructure, education, and health sector. Skill development and up-skilling has received government priority. Its image as a poor, underdeveloped state with antiquated infrastructure has changed.

However, there are 'still miles to go. Regional disparities within the state persist. Work culture has not improved considerably, especially in the government sector. Last mile implementation/connectivity of development programmes is still a huge problem. These fault-lines need to be addressed together by the government and the people, especially the civil society.

Here are some of my ideas to accelerate the growth in Odisha and make it more inclusive and meaningful:

- A. **Focus on Education, Health and Wellness; and Livelihood:** Improve quality of education. Provide skill-training and create facility of up-skilling. Healthy human resource will bring in faster and quality development. The transition

from agrarian economy to industrial and service economy requires handholding and up-skilling.

- B. Leverage advantages. Odisha is a water and power surplus state. Use and maintain water bodies and water-ways. Create more water bodies. Reduce ground water extraction through policy intervention and by creating water bodies. Leverage surplus power, water and minerals to attract large industries.
- C. Gradual reduction of Welfarism and 'freebie' culture: Hyper welfarism is often politically motivated and becomes socio-economically counter-productive; there are arguments against this thesis too. A 'freebie culture' within a society can lead to a negative cycle of dependency, resource misallocation, decreased motivation to work, and potential economic strain, as people become accustomed to receiving things without paying, often impacting the quality of services and hindering long-term infrastructure development, particularly when used as a political tactic to garner votes. While it may temporarily alleviate poverty in some cases, it can also create an entitlement mentality where individuals expect free goods and services, discouraging personal responsibility and productivity. Kautilya's Artha Shastra also deals with this question and opines against it (Pathak, Ashok, 2022). Doing away with freebie culture or even reducing it requires political will, but it is one of the requirements to increase productivity, individual initiative for growth and social and self-esteem.
- D. Improve work-culture, social and workplace etiquette, cleanliness in public places; provide basic amenities (like clean toilets, safe drinking water, fast public transport, etc.). These are important to create an ecosphere which would boost the image of the State and directly benefit tourism and hospitality industry. As a research study shows, workplace cleanliness has large socio-economic benefits. (Sharma, Gouri, 2018)
- E. Humanising bureaucracy and police. A public-centric bureaucracy, responsive and 'rule of law' focused police, fast and efficient medical service- these are not just hall marks of a developed and development-focused state, but are necessary to make a country or state develop.

As India moves forward, the development of its eastern states must catch up.

Their vast natural resources, strategic locations, and untapped human potential position them uniquely to become the new growth engines of the Indian economy. By fostering inclusive growth, bridging regional disparities, and unleashing the latent potential of these states, India can ensure a more balanced and sustainable path to becoming a developed nation.

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WEB LINKS

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EASTERN INDIA TODAY AND THE ROAD TO VIKSIT BHARAT@2047: CHALLENGES AND POLICY SUGGESTIONS

Aviral Pandey*

Abstract

The goal of Viksit Bharat@2047 is to make India prosperous, inclusive, and strong in the global economy. However, this goal will be difficult to achieve without reducing the wide disparities between different regions – especially in Eastern India. Although the region possesses abundant natural resources and large population, it continues to lag behind in both economic and social development. Agriculture remains unproductive, industrial growth is limited, and essential infrastructure such as roads and electricity does not match the level seen in developed states. These challenges are closely linked to high poverty, low literacy, poor access to higher education, and low employment opportunities. Weak governance, climate-related risks, and challenges related to policy implementation further exacerbate the situation. Given this background, this paper examines the challenges facing Eastern India and proposes policies to make the region developed (Viksit) by 2047. The policy recommendations include enhancing agricultural productivity, promoting industrial development – particularly in mineral-rich states – expanding transport and digital infrastructure, and increasing investment in education and skill development. Effective planning and stronger institutions will also be critical in enabling the region to contribute meaningfully to India's vision of becoming a Viksit Bharat by 2047.

Keywords: Eastern India, Malnutrition, Agriculture, Inclusive Growth, Viksit Bharat 2047.

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INTRODUCTION

As India nears 100 years of independence, the vision of *Viksit Bharat* (Developed India) stands at the forefront of its national development strategy (Mohapatra & Pohit, 2024; Sharma & Chowhan, 2025). With an ambitious target of achieving a \$30 trillion GDP by 2047 (under the goal of *Viksit Bharat @ 2047*) (Mohapatra & Pohit, 2024), the country aims to position itself among the world's most advanced economies. However, the path to this vision is fraught with complex and uneven challenges. While macroeconomic indicators have reflected steady growth in recent decades, realising this long-term aspiration requires a development strategy that is both inclusive and regionally balanced – ensuring that all parts of the country participate in, and benefit from, economic progress. A critical obstacle in this regard is the persistent regional disparity, particularly between the eastern region and other parts of India (Bakshi et al., 2015; Pandey & Gautam, 2020). Despite being endowed with rich cultural heritage, abundant natural resources, and strategic geographic advantages, eastern India continues to face structural socio-economic challenges that have constrained its economic contribution (Sinha et al., 2007). Addressing these entrenched imbalances is not only imperative for the development of the region itself but also essential for achieving India's broader goals of inclusive growth, economic resilience, and long-term national stability. At the outset, available data reveals that eastern India – home to more than one-fifth of the country's population – continues to lag behind the national average on multiple socio-economic indicators. Despite its demographic significance, the region reports persistently low per capita income and poor outcomes in health, education, and employment (Bhattacharya, 2024; Khare, 2014). These structural deficits have entrenched poverty and limited upward mobility for large segments of the population. The growing developmental gap between eastern India and more prosperous states not only reinforces inter-regional inequality but also poses a substantive challenge to India's ambition of attaining high-income status by 2047 (Muralidharan, 2024). If these disparities remain unaddressed – both across states and within the eastern region itself – the broader goal of building a truly inclusive and developed nation may remain elusive. It is therefore imperative to critically examine the current socio-economic realities of eastern India, identify the barriers to its progress, and formulate regionally grounded strategies to enable its meaningful integration into the national development trajectory envisioned under *Viksit Bharat@2047*.

Against this backdrop, the present article contributes to the evolving discourse on India's development trajectory by critically examining the socio-economic conditions of the eastern Indian states – Bihar, Jharkhand, Odisha, and West Bengal. These states, despite their demographic weight and resource endowments, remain peripheral in India's growth narrative. The article seeks

to offer a comprehensive assessment of the challenges confronting the region, its potential contribution to national development, and the policy frameworks necessary to harness this potential. The structure of the paper is as follows: Section I contextualises the overall economic situation of eastern India within the broader national framework. Section II explores the socio-economic profile of each state, with attention to inter- and intra-regional disparities. Section III evaluates key development indicators, including education, health, and nutrition. Section IV analyses the structural constraints impeding growth. Section V gives conclusion and policy recommendations.

Section I

OVERALL SITUATION OF EASTERN INDIA IN INDIA'S ECONOMY

Eastern India has long struggled to convert its substantial economic potential into sustained growth. Despite being home to over a quarter of the country's population, the region contributes only 12.29% to India's GDP (see Table 1), underscoring a persistent and deep-rooted economic imbalance. While successive central governments have promoted competitive federalism as a pathway to balanced regional development, economic outcomes remain spatially skewed. Southern and western states have emerged as the primary drivers of India's GDP, whereas the north displays mixed progress and the eastern region continues to lag behind, unable to fully capitalise on its demographic weight and natural resource endowments.

This underperformance is not solely a contemporary phenomenon but has historical antecedents rooted in colonial and post-colonial political economy. Under British colonial rule, eastern India – especially Bengal – was a key economic centre, driven by trade, agriculture, and early industrialisation. However, the partition of Bengal in 1947, the decline of the jute industry, and the subsequent loss of Calcutta's economic centrality marked a turning point in the region's fortunes. The post-independence period saw limited public investment, policy neglect, and centralised planning models that disproportionately favoured more politically influential or industrially promising regions. The shift from planning to liberalisation in the 1990s further exacerbated these disparities, as eastern India, with its weaker institutional capacity and infrastructure deficits, struggled to attract private capital and integrate into global markets.

Sectoral breakdowns reinforce these disparities. Although the region retains a largely agrarian character, it contributes just 13% to India's agricultural GDP, signalling low productivity and structural vulnerabilities in the farm sector. Its share in manufacturing and construction stands at a modest 14%, reflecting slow-

paced industrialisation and underdeveloped supply chains. Meanwhile, the services sector – which has powered India’s economic growth over the past two decades – accounts for only 12% of GDP from the eastern region. In terms of external trade, the picture is starker: states such as Gujarat, Maharashtra, Tamil Nadu, and Karnataka dominate export volumes and industrial linkages, while resource-rich eastern states remain peripheral in national and global trade networks.

On the other hand, disparities persist even within the eastern region. West Bengal leads with 42.31% of the region’s GDP, followed by Odisha (23.13%), Bihar (21.49%), and Jharkhand (13.07%). Each state faces distinct structural constraints. Bihar, despite its large population (8.5% of the national total), ranks only 15th in national GDP (Gross Domestic Product) contribution, reflecting chronic under-investment, a weak industrial base, and entrenched poverty. Odisha and Jharkhand possess vast mineral wealth, yet suffer from infrastructural bottlenecks, regulatory uncertainty, and socio-political tensions that impede industrialisation. West Bengal, once an industrial powerhouse, experienced economic stagnation in the post-reform era, partly due to political volatility, de-industrialisation, and a delayed embrace of market-oriented reforms.

Table 1: Economic and Demographic Disparities in Eastern India

<i>Indicator</i>	<i>Eastern India</i>	<i>Non-Eastern India</i>	
Share in India's GDP (%)	12.29	87.71	
Share in Agricultural GDP (%)	13	87	
Share in Manufacturing & Construction (%)	14	86	
Share in Services GDP (%)	12	88	
Share in India's Population (%)	26.09	73.91	
<i>State</i>	<i>Share in Eastern India's GDP (%)</i>	<i>Share in India's Population (%)</i>	<i>Rank in India's GDP Contribution</i>
West Bengal	42.31	7.54	6
Odisha	23.13	3.47	14
Bihar	21.49	8.5	15
Jharkhand	13.07	2.72	18

Source: Author’s Compilation using Economic Survey of India, 2024-25 & RBI.

Section II

ECONOMIC AND SOCIO-ECONOMIC LANDSCAPE OF EASTERN INDIA: STATE WISE ANALYSIS

An Analysis of NSDP and Per Capita Income

Eastern India's developmental challenges are not only inter-regional but also intra-regional in nature. While the region as a whole lag behind India's more prosperous southern and western states, significant disparities exist within the region itself. An analysis of Net State Domestic Product (NSDP) for 2022–23 highlights this internal differentiation: West Bengal leads with ₹13,78,859 crore, followed by Bihar (₹6,81,761 crore), Odisha (₹6,70,176 crore), and Jharkhand (₹3,60,689 crore) (see Table 2). However, these aggregate numbers obscure considerable variation in economic growth paths shaped by the differing historical legacies, structural constraints, and policy frameworks of each state.

Over the decade from 2012–13 to 2022–23, the NSDP growth trajectories of these states reveal both resilience and volatility. Bihar recorded high growth in 2012–13 (14.4%) and 2016–17 (13.7%) – periods marked by public investment in infrastructure and social sector schemes – but suffered a contraction of –3.33% in 2020–21 during the pandemic. Nonetheless, it rebounded sharply with growth rates of 14.5% and 15.61% in 2021–22 and 2022–23 respectively. Jharkhand, with its mining-dependent economy, exhibited sharp fluctuations: peaks of 16.7% in 2012–13 and 16.5% in 2014–15 was followed by contractions in 2015–16 (–6.4%) and 2020–21 (–5.42%). Odisha's growth was relatively more stable, peaking at 20.5% in 2016–17, driven by mineral exports and infrastructure investment. West Bengal demonstrated a steady upward trend, reaching 16.61% in 2021–22, though its overall industrial contribution has not kept pace with past trajectories.

Although these figures suggest a measure of economic resilience – particularly in the post-pandemic recovery – the per capita NSDP tells a more sobering story of persistent developmental inequality within the region. Bihar continues to rank at the bottom, with its per capita NSDP rising from ₹24,487 in 2012–13 to only ₹54,111 in 2022–23, indicating limited translation of growth into individual well-being (Table 3). In contrast, Jharkhand increased from ₹47,360 to ₹91,874 over the same period, benefitting from its industrial base, albeit with limited employment absorption. Odisha emerged as the regional frontrunner with ₹1,45,202, followed closely by West Bengal at ₹1,39,442 – figures that reflect the role of diversified economies, better infrastructure provisioning, and more stable investment climates. Annual per capita NSDP growth rates further underline the economic volatility that characterises the region. Bihar's modest but steady gains were interrupted

by a pandemic-induced contraction of -4.74% in 2020–21. Jharkhand displayed similar vulnerability, with sharp declines in 2015–16 and 2020–21, mirroring the instability of resource-driven growth. Odisha's per capita income grew robustly in 2021–22 (22.51%), supported by post-pandemic export demand. West Bengal maintained a consistent trajectory, albeit with a contraction of -4.72% in 2020–21 before recovering to 15.98% in 2021–22 (Table 5).

These economic patterns are shaped not only by policy decisions but also by the longer arc of regional political economy. Eastern India has historically suffered from extractive colonial legacies, limited infrastructural development, and uneven integration into post-independence industrialisation drives (Gaikwad, 2014). Bihar and Jharkhand, in particular, have struggled with fragmented land relations, weak state capacity, and political instability, which have constrained their development paths (Prakash, 1998; Sharma, 2005). Odisha and West Bengal, while relatively better positioned, face their own structural constraints, including underutilisation of port infrastructure and limited private investment outside urban centres (Panda & Jena, 2020).

Table 2: Growth of Net State Domestic Product (NSDP) at Current Prices

State/UT	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Bihar	14.4	11.8	8.1	7.7	13.7	11.4	12.2	10.3	-3.33	14.5	15.61
Jharkhand	16.7	7.3	16.5	-6.4	15.6	14.1	13.4	0.9	-5.42	21.76	10.7
Odisha	14.2	11.9	5.3	3.3	20.5	13.2	13.5	7.58	0.61	23.35	15.57
West Bengal	14.0	14.4	5.5	11.4	9.4	12.2	12.8	6.83	-4.12	16.61	14.94

Source: Author's Compilation using Economic Survey of India, 2024-25 & RBI.

Table 3: Per Capita Net State Domestic Product at Current Prices

State/UT	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Bihar	24487	26948	28671	30404	34045	36850	40715	44175	42083	47498
Jharkhand	47360	50006	57301	52754	60018	67484	75421	75016	69963	84059
Odisha	54762	60687	63345	64835	77507	87055	98005	104633	103203	126437
West Bengal	58195	65932	68876	75992	82291	91401	103920	110316	105109	121904

Source: Author's Compilation using Economic Survey of India, 2024-25 & RBI.

Table 4: Rank-wise Per Capita NSDP (PCNSDP) at Current Prices (2022-23)

<i>State</i>	<i>Per Capita NSDP (INR)</i>	<i>Rank (as Per PCNSDP)</i>
Odisha	145202	1st
West Bengal	139442	2nd
Jharkhand	91874	3rd
Bihar	54111	4th

Source: Author's Compilation using Economic Survey of India, 2024-25 & RBI.

Table 5: Growth of Per Capita Net State Domestic Product (NSDP) at Current Prices

<i>State/UT</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>	<i>2018-19</i>	<i>2019-20</i>	<i>2020-21</i>	<i>2021-22</i>
Bihar	12.6	10.1	6.4	6.6	12.0	8.2	10.5	8.5	-4.74	12.87
Jharkhand	14.8	5.6	14.6	-7.9	13.8	12.4	11.8	-0.5	-6.74	20.15
Odisha	13.2	10.8	4.4	2.4	19.5	12.3	12.6	6.76	-1.37	22.51
West Bengal	12.9	13.3	4.5	10.3	8.3	11.1	13.7	6.15	-4.72	15.98

Source: Author's Compilation using Economic Survey of India, 2024-25 & RBI.

Section III

SOCIAL INDICATORS AND DEVELOPMENT TRENDS

Demographic and Health Indicators: Socio-Economic Linkages

The social and health indicators of Eastern India offer critical insights into the region's developmental trajectory and persistent challenges. While notable progress has been achieved in key metrics such as birth rates, death rates, and infant mortality rates (IMR), stark inter-state disparities endure across Bihar, Jharkhand, Odisha, and West Bengal. In 2020, Bihar and Jharkhand reported birth rates of 25.5 and 22.0 per 1,000 population, respectively – significantly higher than the national average of 19.5. By contrast, Odisha and West Bengal have witnessed a demographic transition, with lower fertility rates aligning more closely with national trends and those of relatively advanced states. Mortality patterns also exhibit considerable variation. Death rates in Bihar (5.4) and Jharkhand (5.2) fall below the national average, whereas Odisha, with a higher rate of 7.3, signals enduring challenges in healthcare access and delivery (see Table 6). Similarly, progress in reducing IMR has been uneven: Odisha continues to grapple with elevated infant mortality, while West Bengal performs comparatively better in child health outcomes. These demographic dynamics have significant implications for economic development in the region.

Health outcomes directly influence labour supply, the quality of human capital, and overall productivity. A healthier population is more likely to contribute to a skilled and efficient workforce, thereby shaping trends in Net State Domestic Product (NSDP) and per capita income (PCI). Bridging gaps in healthcare infrastructure – particularly in maternal and child health services, disease prevention, and primary care – is imperative for fostering inclusive and sustainable growth in Eastern India.

Table 6: Key Demographic Indicators of Eastern India (2020)

State	Birth Rate	Death Rate	IMR
Bihar	25.5	5.4	38
Jharkhand	22.0	5.2	29
Odisha	18.2	7.3	40
West Bengal	15.9	6.1	22
National Average	19.5	6.0	30

Source: Author’s Compilation using Economic Survey of India, 2024-25 & RBI.

EDUCATIONAL DISPARITIES AND ECONOMIC DEVELOPMENT IN EASTERN INDIA

Education remains a cornerstone of economic development, yet Eastern India continues to underperform relative to national benchmarks in literacy and human capital formation. Bihar, which reported a literacy rate of merely 13.5% in 1951, had reached only 61.8% by 2011 – still among the lowest in the country. In comparison, Jharkhand (66.4%), Odisha (72.9%), and West Bengal (76.3%) have made more substantial gains, though they continue to lag behind India’s more advanced states (see Table 7). This persistent educational divide has far-reaching implications for labour market dynamics, skill acquisition, and overall productivity. Higher literacy levels are closely associated with improved employment prospects and more robust economic performance. The correlation is reflected in regional economic indicators: West Bengal, which has the highest literacy rate in the region, also reports the largest Net State Domestic Product (NSDP), at ₹13,78,859 crore in 2022–23. In contrast, Bihar, with the lowest literacy rate, also records the lowest per capita income (₹54,111) (see Table 7). Odisha and West Bengal have been relatively successful in leveraging their more educated populations to diversify their economies and attract investment in industrial and service sectors. Still, eastern India continue to grapple with high school dropout rates , due to poverty, poor educational infrastructure, and low aspiration for transition rates to secondary and tertiary education (Shukla & Tiwari, 2024). These constraints limit the quality of the workforce and hinder long-term economic mobility. Addressing these structural challenges is vital for realising the region’s developmental potential. Strengthening school infrastructure, ensuring equitable access to quality education, and scaling

up vocational and technical training programmes are critical policy imperatives. In particular, targeted interventions in Bihar and Jharkhand can help cultivate a more skilled and competitive labour force, thereby fostering inclusive economic growth and mitigating regional disparities.

Table 7: Literacy Rates and Economic Indicators in Eastern India

<i>State</i>	<i>Literacy Rate (%) (2011)</i>	<i>NSDP (Rs. Crore, 2022-23)</i>	<i>Per Capita Income (Rs., 2022-23)</i>
Bihar	61.8	681,761	54,111
Jharkhand	66.4	360,689	91,874
Odisha	72.9	670,176	1,45,202
West Bengal	76.3	13,78,859	1,39,442

Source: Author's Compilation using Economic Survey of India, 2024-25 & RBI.

BROADER SOCIO-ECONOMIC DISPARITIES IN EASTERN INDIA

A multidimensional socio-economic assessment of Bihar, Jharkhand, Odisha, and West Bengal reveals persistent disparities across indicators such as population growth, poverty, education, employment, and healthcare (see Table 8). Bihar, the most populous state in the region, continues to grapple with high poverty (26.6%), weak human development outcomes, and urban unemployment levels reaching 7.7%. These challenges are compounded by structural deficits in education, healthcare, and basic infrastructure. Jharkhand and Odisha, though endowed with rich mineral resources, have struggled to convert this advantage into broad-based industrial development. Weak infrastructure, administrative hurdles, and uneven access to services have limited their economic diversification and growth. West Bengal, with a more diversified economic base, performs comparatively better on several socio-economic parameters. However, deep-rooted structural challenges continue to inhibit its full developmental potential. Several critical gaps emerge from the data. Bihar's low secondary-to-higher-secondary transition rate (57.8%) and high dropout rate (20.5%) highlight the urgent need for systemic educational reform and targeted skill development. Jharkhand, despite reporting the lowest rural unemployment rate (0.9%), continues to face serious deficits in public health infrastructure, reflected in a maternal mortality ratio (MMR) of 56. Odisha and Bihar report even higher MMRs – 119 and 118 respectively – underscoring significant shortcomings in maternal and reproductive health services. Odisha, while making progress in education, still reports the highest dropout rate (27.3%) among the four states, raising concerns about future workforce preparedness. West Bengal shows relatively stronger performance, with a lower poverty rate (8.6%) and an 80% transition rate to higher secondary education. However, rural employment challenges persist, as reflected in a rural unemployment rate of 3.6%.

Table 8: Socio-Economic Analysis of Bihar, Jharkhand, Odisha, and West Bengal

<i>Indicator/State</i>	<i>Bihar</i>	<i>Jharkhand</i>	<i>Odisha</i>	<i>West Bengal</i>
Population 2011 (in '000)	1,04,099	32,988	41,974	91,276
Decadal Population Growth Rate (2001-2011)	25.40%	22.40%	16.30%	19.80%
Sex Ratio 2011 (Females per 1000 Males)	918	948	979	950
Health Index (2019-20)	31	55	44.31	N/A
Maternal Mortality Ratio (2018-20)	118	56	119	103
Poverty Headcount Ratio (2022-23)	26.60%	23.30%	11.1%	8.6%
Rural Unemployment Rate 2022-23 (%)	3.60%	0.90%	3.60%	1.5%
Urban Unemployment Rate 2022-23 (%)	7.70%	6.30%	6.20%	3.8%
Secondary Drop-out Rate 2021-22	20.50%	9.30%	27.30%	18%
Secondary to Higher Secondary Transition Rate (2021-22)	57.8%	83.8%	49.9%	80%

Source: Author's Compilation using Economic Survey of India, 2024-25 & RBI.

POOR SOCIAL OUTCOME: NUTRITIONAL DISPARITIES

The region, particularly states like Bihar and Jharkhand, continues to grapple with high rates of malnutrition, which have significant economic repercussions. These malnutrition issues directly hinder workforce productivity, educational attainment, and socio-economic mobility. Stunting, a key indicator of chronic malnutrition, remains a major concern. Bihar and Jharkhand report alarmingly high stunting rates compared to Odisha and West Bengal, despite some improvements over time. Table 9 highlights the prevalence of stunting in children under five, with Bihar having the highest rate in Eastern India at 42.9% in NFHS-5, although this has decreased from 60.9% in NFHS-1. Jharkhand follows closely with a stunting rate of 39.6%. In contrast, Odisha has made substantial progress, reducing its stunting rate to 31%, while West Bengal has improved to 33.8%.

Wasting, an indicator of acute malnutrition, remains a pressing issue, especially in Bihar and Jharkhand. Table 10 shows that Bihar and Jharkhand have high wasting rates, with Bihar at 22.9% and Jharkhand at 22.4% in NFHS-5. Odisha has made notable progress, reducing its wasting rate to 18.1%, while West Bengal's rate stands at 20.3%, still higher than Odisha but better than Bihar and Jharkhand. Underweight prevalence, which reflects both chronic and acute malnutrition, remains a significant challenge in Bihar (41%) and Jharkhand (39.4%), as shown in Table 11. In comparison, Odisha (29.7%) and West Bengal (32.2%) have lower underweight rates. Though all states have seen improvements, Bihar and Jharkhand

remain disproportionately affected by malnutrition, contributing to a persistent cycle of poverty and underdevelopment.

Table 9: Children under 5 Years Who are Stunted
(Height-for-Age) (%) across States and UTs of India

States/UTs	NFHS-1 (1992-93)	NFHS-2 (1998-99)	NFHS-3 (2005-06)	NFHS-4 (2015-16)	NFHS-5 (2019-21)
Bihar	60.9	53.7	55.6	48.3	42.9
Jharkhand	–	–	49.8	45.3	39.6
Odisha	48.2	44	45	34.1	31
West Bengal	–	41.5	44.6	32.5	33.8

Source: Author's Compilation using different rounds of NFHS Reports.

Table 10: Children under 5 Years Who are Wasted
(Weight-for-Height) (%) across States and UTs of India

States/UTs	NFHS-1 (1992-93)	NFHS-2 (1998-99)	NFHS-3 (2005-06)	NFHS-4 (2015-16)	NFHS-5 (2019-21)
Bihar	21.8	21	–	20.8	22.9
Odisha	21.3	24.3	19.5	20.4	18.1
Jharkhand	–	–	32.3	29	22.4
West Bengal	–	13.6	16.9	20.3	20.3

Source: Author's Compilation using Different Rounds of NFHS Reports.

POOR SOCIAL OUTCOMES: NUTRITIONAL DISPARITIES AND ECONOMIC IMPLICATIONS

Nutritional outcomes across Eastern India reveal a deeply embedded social crisis, with Bihar and Jharkhand continuing to exhibit some of the highest rates of malnutrition in the country. These nutritional deficiencies carry profound economic implications, impeding workforce productivity, learning outcomes, and long-term socio-economic mobility. Despite incremental progress, chronic and acute malnutrition remain pervasive, particularly in the form of stunting, wasting, and underweight prevalence among children under five. Stunting – a key indicator of chronic undernutrition and long-term deprivation – remains alarmingly high in Bihar and Jharkhand. According to NFHS-5 data, Bihar reports the highest stunting rate in the region at 42.9%, a marginal improvement from 60.9% recorded in NFHS-1. Jharkhand follows closely at 39.6%. In contrast, Odisha and West Bengal have recorded more substantial reductions, with stunting rates at 31% and 33.8%, respectively (see Table 9). These disparities reflect both historical underinvestment in health infrastructure and the uneven implementation of

nutrition-related interventions. Wasting, which reflects acute malnutrition and is often linked to recent illness or food insecurity, is similarly elevated in Bihar (22.9%) and Jharkhand (22.4%), far exceeding national thresholds for concern. Odisha has made measurable progress, reducing its wasting rate to 18.1%, while West Bengal, though faring better than Bihar and Jharkhand, still records a rate of 20.3% (see Table 10). Underweight prevalence – a composite measure reflecting both chronic and acute malnutrition – reinforces the regional divide. Bihar (41%) and Jharkhand (39.4%) significantly surpass Odisha (29.7%) and West Bengal (32.2%) in underweight rates (see Table 11).

Table 11: Underweight Children under 5 Years (Weight-for-Age)
(%) Across Four States and All India Comparison

<i>States/UTs</i>	<i>NFHS-1 (1992-93)</i>	<i>NFHS-2 (1998-99)</i>	<i>NFHS-3 (2005-06)</i>	<i>NFHS-4 (2015-16)</i>	<i>NFHS-5 (2019-21)</i>
Bihar	62.6	54.4	55.9	43.9	41
Odisha	53.3	54.4	40.7	34.4	29.7
Jharkhand	N/A	N/A	56.5	47.8	39.4
West Bengal	56.8	48.7	38.7	31.6	32.2

Source: Author's Compilation using different rounds of NFHS Reports.

Table 12: Nutritional Indicators in Eastern India (NFHS-5)

<i>States</i>	<i>Stunting (%)</i>	<i>Wasting (%)</i>	<i>Underweight (%)</i>
Bihar	42.9	20.8	41.0
Jharkhand	39.6	22.0	36.1
Odisha	31.0	18.3	29.5
West Bengal	32.3	17.4	30.1
National Avg.	35.5	19.3	32.1

Source: Author's Compilation using NFHS 5's Report.

A comparison with national averages further accentuates the disparities. As shown in Table 12, Bihar exceeds the national average across all three indicators: stunting (42.9% vs 35.5%), wasting (20.8% vs 19.3%), and underweight (41% vs 32.1%). Jharkhand similarly surpasses national levels, particularly in stunting and wasting. In contrast, Odisha and West Bengal align more closely with or fall below national averages, pointing to relatively more effective nutrition and public health interventions. These nutritional disparities are not just social challenges but critical economic constraints. States with better nutritional outcomes – such as Odisha and West Bengal – also report higher per capita incomes and stronger productivity. Conversely, Bihar and Jharkhand's persistent malnutrition rates contribute to a low-skilled, undernourished workforce, perpetuating poverty and

stalling economic advancement. Tackling malnutrition, therefore, is not solely a health imperative but a prerequisite for sustainable economic development.

Section IV

KEY CHALLENGES HINDERING DEVELOPMENT IN EASTERN INDIA

Eastern India continues to grapple with persistent socio-economic disparities that hinder its overall growth and contribution to India's economic trajectory. Despite being endowed with abundant natural resources, fertile agricultural land, and a vast labour force, the region lags behind in key developmental indicators. This section examines the critical challenges affecting Eastern India's development, focusing on agriculture, industry, and infrastructure.

AGRICULTURAL PRODUCTIVITY GAPS AND STRUCTURAL CHALLENGES

Agriculture serves as the primary livelihood source for a majority of the population in Eastern India, yet it remains plagued by low productivity, outdated farming techniques, and inadequate infrastructure. Problem associated with agriculture can be seen in terms of productivity gap. Despite the region's fertile land, its agricultural output is below the national average, significantly lagging behind states like Punjab. Limited access to irrigation, inefficient credit facilities, and weak market linkages continue to hinder agricultural performance (NABARD, 2023). Additionally, climate change-induced vulnerabilities, such as floods and droughts, exacerbate agrarian distress, pushing small and marginal farmers into economic insecurity (Department of Science and Technology, 2020). Without substantial investment in mechanisation, irrigation, and financial support systems, agricultural productivity in Eastern India will remain stagnant, affecting overall economic stability.

Table 13: Agricultural Productivity in Eastern India (2023-24)

<i>State</i>	<i>Rice (kg/Ha)</i>	<i>Wheat (kg/Ha)</i>	<i>Coarse Cereals (kg/Ha)</i>	<i>Pulses (kg/Ha)</i>	<i>Total Foodgrain (kg/Ha)</i>	<i>Oilseeds (kg/Ha)</i>
Bihar	2541	3150	5896	852	3106	1163
Jharkhand	1378	2110	1975	1078	1436	807
Odisha	2081	1894	1989	566	1798	927
West Bengal	3064	3127	6529	979	3141	1330
India	2882	3559	2283	881	2515	1314
Punjab	4516	5045	3801	916	4737	1574

Source: Economic Survey of India, 2024& RBI Database.

INDUSTRIAL BACKWARDNESS AND WEAK MANUFACTURING BASE

The industrial sector in Eastern India continues to be constrained by structural bottlenecks, including inadequate infrastructure, regulatory inefficiencies, and limited private sector engagement (Bajar & Meenakshi, 2015). The region accounts for a disproportionately small share of the country's total factories and small-scale industries, underscoring its peripheral role in India's overall industrial landscape (see Tables 14 and 15). Despite the rich mineral endowments of Jharkhand and Odisha, large-scale industrialisation has failed to take root at the desired scale (Richards, 2022). High energy costs, persistent shortages of skilled labour, and cumbersome regulatory frameworks have impeded the growth of manufacturing and heavy industry. Odisha, while attracting some investment in mineral-based industries, faces challenges in backward and forward linkages that constrain its broader industrial ecosystem and its role in employment generation (Rout & Pradhan, 2023).

Table 14: Share of Factories in Eastern India

<i>State</i>	<i>Share of India's Total Number of Factories (%)</i>
Bihar	1.31
West Bengal	1.14
Jharkhand	1.28
Odisha	4.04

Source: Economic Survey of India, 2024 & RBI Database.

Table 15: Small-Scale Industry (SSI) Performance

<i>State</i>	<i>Percentage Share in India's Gross SSI Output</i>	<i>Percentage of Total India's SSI</i>	<i>Productivity</i>
Bihar	1.31	4.94	0.27
West Bengal	6.26	7.33	0.85
Jharkhand	0.45	1.26	0.36
Odisha	1.86	3.69	0.5

Source: Economic Survey of India, 2024 & RBI Database.

Jharkhand's potential remains similarly underutilised, reflecting the broader disjuncture between resource availability and industrial output. West Bengal, which historically held a prominent place in India's industrial map, continues to grapple with an ageing and inadequately modernised industrial base. Although the state has fared relatively better than its regional counterparts, the lack of sustained innovation and investment has limited its ability to regain its former industrial dynamism (Banerjee et al., 2002). Bihar remains among the least industrialised

states in the country, with persistent challenges in attracting capital investment, despite policy efforts aimed at improving its business climate. Revitalising industrial growth in Eastern India demands a comprehensive policy response. Priorities must include the development of modern industrial corridors, investment in physical and digital infrastructure, streamlining of regulatory procedures, and targeted skill development initiatives. Without strategic intervention, the region risks missing the broader national shift toward industrial-led economic growth and employment generation.

INFRASTRUCTURE BOTTLENECKS AND BUSINESS ENVIRONMENT CONSTRAINTS

Eastern India's development trajectory continues to be impeded by persistent infrastructure gaps and a challenging business environment, both of which reduce the region's attractiveness for investment and industrial growth (see Table 16). Short transport connectivity, fragmented logistics networks, and inconsistent power supply contribute to elevated operational costs, limiting competitiveness for enterprises across sectors. While electricity availability has improved in recent years, concerns persist regarding the quality and reliability of supply, particularly in Bihar and Jharkhand. These inconsistencies affect industrial efficiency and constrain the scalability of economic activities. Additionally, urban centres such as Kolkata and Patna are grappling with overstretched infrastructure (Haque et al., 2019; Alakshendra, 2019).

Table 16: Infrastructure and Ease of Doing Business Metrics

<i>State</i>	<i>Electricity Availability (kWh per capita)</i>	<i>National Highway Length (km)</i>	<i>National Highway Share (%)</i>	<i>State Highway Length (km)</i>	<i>State Highway Share (%)</i>	<i>Ease of Doing Business Rank (2019)</i>
Bihar	394.1	6,132	4.2	4,006	2.23	26
West Bengal	738.7	3,633	2.49	4,143	2.31	9
Jharkhand	420.4	5,897	4.04	1,232	0.69	5
Odisha	985.5	3,910	2.68	3,612	2.01	29
India	1,340.40	1,46,145	–	1,79,535	–	–

Source: Economic Survey of India, 2024& RBI Database.

Rapid urbanisation has outpaced the expansion of essential services, resulting in traffic congestion, inefficient public transport, and housing shortages, all of which erode the productivity and liability of these cities. Regulatory and institutional constraints further complicate the investment climate. Delays in land

acquisition, procedural hurdles in project approvals, and inconsistent enforcement of regulations contribute to policy uncertainty and hinder the timely execution of infrastructure projects. These barriers reduce investor confidence and slow down the pace of structural transformation in the region. A robust policy response is needed to address these systemic challenges. Prioritising investment in multimodal transport corridors, expanding renewable energy infrastructure, and strengthening urban planning frameworks are essential to improve the region's economic competitiveness. Simultaneously, governance reforms that streamline approval processes and enhance institutional coordination will be critical to unlocking the potential of public and private investments.

Section V

CONCLUSION AND POLICY SUGGESTION

A critical appraisal of Eastern India's development trajectory reveals a region structurally marginalised from the national growth narrative, despite its considerable natural resource base and demographic significance. The region continues to underperform across core economic sectors – agriculture, industry, and services. This economic underdevelopment is reflected in equally concerning social indicators: high poverty levels, low literacy and limited access to higher education, underemployment, and a gendered gap in participation. Furthermore, climate vulnerability and weak governance – characterised by limited planning capacity and delays in implementation – exacerbate developmental disparities and reduce the effectiveness of public investment. If these challenges remain unaddressed, the region's structural exclusion risks becoming entrenched, posing a serious barrier to the achievement of an inclusive and equitable *Viksit Bharat @2047*. Addressing these constraints demands a region-specific, multi-dimensional strategy anchored in structural transformation. First, agricultural productivity must be enhanced through targeted investment in irrigation infrastructure, promotion of sustainable practices, strengthening of storage and marketing systems, and greater access to institutional credit and risk mitigation tools, particularly in climate-sensitive areas. Second, industrial revitalisation – especially in mineral-rich states like Odisha and Jharkhand – requires addressing logistical bottlenecks, ensuring reliable energy supply, reforming land acquisition processes, and creating policy stability to attract long-term private investment. Third, a substantial push is needed in physical and digital connectivity to integrate Eastern India into national and global value chains. Parallel to these efforts, human capital development must be prioritised through robust vocational and technical training systems aligned with emerging sectoral needs, alongside policies to expand access to higher education and promote gender inclusion. Lastly, governance reforms – centred on decentralised planning,

administrative efficiency, and transparency – are essential to improve service delivery and ensure the effective implementation of development initiatives. A sustained and coordinated approach across these domains will be vital to reposition Eastern India from a peripheral to a pivotal role in India's developmental future.

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FOOD SECURITY QUESTION IN EASTERN INDIAN STATES: MAGNITUDE AND POLICY OPTIONS

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Abstract

Literature attempts to understand the factors affecting food security, and in turn, factors are being affected by the food insecurity that has an impact on countries prosperity. Socio-economic factors such as food prices, income, climate, war, urbanization, infrastructure, R&D, and environment influence food security, as do availability, affordability, quality, safety, and sustainability of food. Food insecurity ultimately hampers the nation's productivity and growth and creates a cycle of poverty. Hence, 'food security' can also be a means to achieve nation prosperity. The policies to cope with the situation of food insecurity are only partially effective and limited by availability.

It may be apprehended that food security is neither a natural phenomenon nor the product of an unbalanced Malthusian equation. The world has ample food. Food production has been faster than the unprecedented population growth of the past decades. In fact, today's farmers produce more than enough food and calories for all 7.8 billion people on earth. Yet nearly 10-12 per cent of people don't have enough food to eat. Food security is a matter for factual investigation in a given situation.

The article attempts to analyze the concept of food security and examine the status of food security in the four Indian states, i.e. Bihar, West Bengal, Jharkhand, and Odisha, and analyze the reasons for food insecurity. It also analyzes the factors that are essential to mitigate the risk of food insecurity.

Keywords: Food Security, Food Crisis, Food Prices, Availability, Affordability, Accessibility, Inequality, Eastern India.

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INTRODUCTION

Inequitable growth and jobless growth provide fuel for social unrest, rising crime, and growing food insecurity. India's top 10% of the population holds 77.4% of the total national wealth. The contrast is even sharper when the top 1% holds 51.53% of the national wealth while the bottom 60%, the majority of the population, own merely 4.8% of the national wealth. The wealth of the top 9 billionaires is equivalent to the wealth of the bottom 50% of the population in India. High levels of wealth disparity subvert democracy (Oxfam, 2023). India has experienced jobless and job-loss growth during 2011-12/2021-22 (Vikas, 2024).

The latest hunger estimate ranked India in 111 place out of 125 nations in 2023, which clearly indicates that the issue of food and nutrition security in India represents a serious concern. In 2023, India has the highest child wasting rate (18.7 per cent in the world), and 58.1 per cent of women aged 15–24 are anaemic, reflecting acute under nutrition. Globally, each day about 25,000 people, including more than 10,000 kids, die from hunger and related causes. (Homes, 2025).

(Government of India, 2025) apprehended and warned that there will be a slowdown, high inflation, jobless and job-loss growth, unemployment, poor productivity, a low LFPR rate of women, high consumption of ultra-processed foods, unskilled labour, a declining trend of net FDI, a trade deficit, a trust deficit, a widening current account deficit, and a and a lowering incremental capital-output ratio. The deflation mode of the economy is worsening the economic condition and increasing the challenges before the economy needs deregulation. The author apprehended that the intention of the government is deregulation, which will further deepen the crisis and food insecurity for the poor.

It is highly likely that affordability is a major barrier to improving diets in India. However, both dietary and retail price data are scarce – in the public domain at least – making it difficult to even characterize the problem of affordability of nutritious diets. Household data from the National Sample Survey Organization (NSSO) Consumption Expenditure Survey is only available at infrequent 5-year intervals, with the last round dating to 2011–12. The 63.3% share of the rural Indian population in 2011 unable to afford the cost of the recommended diet (CoRD) even with 100% of income spent or 527.4 million people (Raghunathan, Headey, & Herforth, 2021).

One of the confounding features of the era of rapid economic growth in India before and after the Independence has been the stubborn persistence of malnutrition across the states, while some states are lagging behind, i.e. Bihar, Jharkhand, Odisha and West Bengal. It is well known that across a range of indicators of nutritional status of women and children, India is a laggard among fast-growing economies. While improvements in nutritional status have occurred, they have been marginal

relative to the pace of economic growth, prompting a recent suggestion that the nation should ask the legislatures and bureaucrats, 'How are the children growing? Rather than 'How is the economy growing?'

Today, India faces what is known as the triple burden of malnutrition – the coexistence of inadequate calorie intake and under nutrition among a large section of the population, excess intake of dietary energy leading to obesity, using fast food, and related health issues among another section of the population, and pervasive micronutrient deficiencies. Evidence from both nationally representative surveys and smaller studies underscores these phenomena. The Economic Survey of India (2024-25) has already raised its concern about 'fast food.'

National Family Health Survey-5, for instance, suggests that the nutritional status of children below 5 years of age is worsening in India. Stunting or chronic malnutrition has increased in 11 of the 17 states. The proportion of severely wasted children has increased in 13 of the 17 states. Children who are stunted (low height with respect to age) or wasted (low weight with respect to height) are more vulnerable to diseases and illness. The proportion of children who are underweight has increased in 11 of the 17 states that NFHS-4 estimates (2015-16). In Bihar, 41% or more of the children under the age of five years are underweight, followed by Jharkhand (39.4%), West Bengal (32.2%), and Odisha (32.2%), compared to the national average (32.1%). Infant Mortality Rate (IMR) has marginally declined in nearly all states. IMR remains high in Bihar (47 deaths per 1,000 live births), followed by Jharkhand (37.9), Odisha (36.3), and West Bengal (22.0), compared to the national average (35.2%). Consequences can be seen in anaemic children and women in India. There are 69.4% children and 63.6% non-pregnant women who are anaemic in Bihar, while the respective figures were 69.0% and 71.7% for West Bengal, 67.5% and 65.7% for Jharkhand, and 64.2% and 64.4% for Odisha, compared to 67.1% and 57.2% at the all-India level (GoI, 2021).

As for child nutritional status and child mortality rate, India is doing worse than some sub-Saharan African countries and South Asian neighbours; close to 45 per cent are stunted and 23 per cent wasted. While each aspect of the triple burden of malnutrition is relevant and demands specific attention, the prevalence of under nutrition and micronutrient deficiencies among vast numbers of people despite impressive economic growth remains among the most important challenges for policymakers. Under nutrition is a consequence of a multiplicity of factors, but food security as it is currently understood lies at the very heart of it.

Research Question

How many people do not have enough food to eat? Where do they live? How have their numbers and geographical distribution changed? Which factors have an impact on food security, and what are the possible remedies to resolve it?

The article is organized as follows: the research question and objectives are followed by Introduction. Section II provides a conceptual framework for the study. Section III covers literature of review. Section IV analyse the nature and dynamics of the food security situation at macro level. Section V analyse the secondary data related to the sample states and the last section provides the conclusions and policy recommendation.

The objectives

- i. To analyze the status of food security in the states of Bihar, Jharkhand, Odisha, and West Bengal.
- ii. To analyze the nature and dynamics of the food security situation in the states of Bihar, Jharkhand, Odisha, and West Bengal.
- iii. To suggest policy interventions to improve the food security situation in the states of Bihar, Jharkhand, Odisha, and West Bengal.

Section II

THE CONCEPT OF FOOD SECURITY

The term “food security,” although interpreted in many ways, is defined here as access by all people at all times to enough food for an active and healthy life. Its essential elements are the availability of food and the ability to acquire it. Food insecurity, in turn, is the lack of access to enough food. There are two kinds of food insecurity: chronic and transitory. *Chronic food insecurity (overt hunger)* is a continuously inadequate diet caused by the inability to acquire food. It affects households that persistently lack the ability either to buy enough food or to produce their own. *Transitory food insecurity (hidden hunger)* is a temporary decline in a household's access to enough food. It results from instability in food prices, food production, or household incomes, and in its worst form, it produces famine.

The costs of inadequate diets to families and nations are considerable. Inadequate diets increase vulnerability to disease and parasites. Food insecurity leads to serious health risks and stunted and wasting growth in children. Food insecurity reduces strength for tasks requiring physical effort. They curtail the benefit from schooling and training programs. And they result in a general lack of vigor, alertness, and vitality. These outcomes reduce the productivity of people in the short and long terms, sacrifice output and income, and make it more difficult for families and nations to escape the cycle of poverty.

KEY ASPECTS OF FOOD SECURITY

Food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 1996). Several definitions have been provided by different institutions that may define food security in terms of the following four key aspects:

- (a) **Food Availability (production and agricultural resilience):** There should be availability of adequate food within the nation through domestic production, net imports (commercial or food aid), and carry-over of stocks.
- (b) **Food Accessibility/Affordability (economic resilience):** Individuals should be capable of purchasing food and of being able to procure food through safety nets.
- (c) **Sustainability and adaptation (environmental resilience):** Adaptation refers to adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects.
- (d) **Food Utilization:** Consumption of food by the household in a proper form. It also takes into account food preparation, storage, and utilization; food safety; nutritional safety; and dietary balance.
- (e) **Food Vulnerability:** Vulnerability of the population to food insecurity due to physiological, economic, social, or political reasons.

Section III

LITERATURE REVIEW

Hunger is a worsening problem. Although some mainstream discourses paint a picture of rising economic prosperity that is reducing poverty and hunger, the world has seen an intensification of the problem of hunger. Even though the world produces more food than the total global population requires, sharp increases in food prices that occurred in global and national markets in recent years increased the number of hungry and malnourished people (FAO, 2009) while vast volumes of food go to waste (Gustavsson, Cederberg, Sonesson, Otterdijk, & Meybeck, 2011).

(Sharma, Pooja, & Gulati, 2012) classified the various Indian states based on two indices of malnutrition, namely, the Normalized Adult Malnutrition Index (NAMI) and the Normalized Child Malnutrition Index (NCMI), and found that all the eastern states fell in the top two categories of malnutrition, with Odisha faring the worst among them. A similar study conducted by the M.S. Swaminathan Research Foundation (MSSRF, 2008) classified various Indian states based on a composite index of food insecurity based on seven indicators and found that the eastern states such as Jharkhand fell under the category of 'very high' food insecurity, while Bihar

and Odisha were classified under 'high' food insecurity. West Bengal was relatively better off with moderate levels of food insecurity.

(Rahman, 2015) studied the role of consumer food subsidies in improving nutritional intake and diet quality by evaluating expansion of the coverage of the government food assistance program coverage in the hunger-prone state of Odisha in India. He found that after the intervention of the government program, the proportion of households consuming below the recommended dietary allowance of calories, fats, and proteins had declined significantly. (Kochar, 2005) examined the outcome of greater consumer subsidy or implicit income transfer to the below-the-poverty-line (BPL) households owing to the change in the Public Distribution System (PDS) from a universal to a targeted scheme in 1997. She finds that allocation of a greater wheat subsidy to the BPL households did not lead to any improvement in their overall calorie intake.

(Kaushal & Muchomba, 2013) also evaluate the impact of the transition from a universal to a targeted PDS on the nutritional intake using nationally representative data for the period 1993-94 and 2009-10. However, over time, a variety of criticisms were made against the function of the PDS, including cost ineffectiveness, its marginal impacts, and the percentage of leakages (Nawani, 1994) (Radhakrishna & Hanumantha, 1993). The performance of the PDS, which has been successful elsewhere in India, has been the worst in states like Bihar, Odisha, and Jharkhand, among others. There is reportedly a very high prevalence of targeting errors (errors of exclusion and inclusion) and unauthorized diversion of PDS food grains in most of the above states (Khera, 2011), and (Kaushal & Muchomba, 2013) study whether this improvement in PDS led to greater consumption of nutrients. They find no significant relationship between higher nutritional intake and PDS participation.

(Swaminathan, 2003) (Drèze, 2004) (Jha & Acharya, 2016) & (Vyas, 2000) reviewed the importance of the state, market, and civil society, which play an important role in reducing food insecurity. Imperfection in the market was also the cause of food insecurity. (Basu, 2011) was concerned with the problems of high food inflation and food insecurity, and he pointed out that a lack of storage infrastructure was the cause of food inflation in India. (Himanshu, 2013) concluded that food security is widely varied with government policies, individual capacity, and community characteristics. While, (Tondon & Landes, 2011) observed that household food security depends on the household's behavior, whereas PDS and MDM play an important role in food security outcomes. (Deaton & Drèze, 2009) observed that in spite of the increase in real income and no long-term increase in the relative price of food, real per capita expenditures have declined. The proportionate decline was larger among better-off sections of the population.

The war has also had an impact on food security. Armed conflicts lead to hunger and reduced food production and economic growth in developing and

transition countries. Reciprocally, food and economic insecurity and natural resource scarcities – real and perceived – often precipitate violence. "Food wars," hunger is deliberately used as a weapon (Messer, 1990). Such conflicts have been an important factor in famine since the 1980s (Bohle, 1993) (Messer, E, 1994) (Macrae & Zwi, 1993).

Despite India's status as a fast-growing and emergent economy, it lags many similar economies in food security (Narayanan, 2015). The food insecurity assessment indicates that the PoU (prevalence of undernourishment) for India is 15.2 %, which is greater than the global PoU of 10.8%. Other so-called emerging economies, such as China and Brazil, have PoUs of 9.6% and 6.1%, respectively (FAO, 2015).

India has also been addressing food insecurity by providing government subsidies of seeds, fertilizer, and other agricultural resources to farmers. Much of India's rural population cannot achieve food security due to economic and social barriers to food. India is attempting to address this deficiency through legislation such as the National Food Security Bill, which seeks to reinforce the individual Indian's right to food (Narayanan, 2015). Literature indicates that food security in India can be achieved by paying higher attention to issues such as climate change, integrated water management, agricultural pricing, and crop insurance (Brahmanand, Kumar, Ghosh, Chowdhury & Singh, 2013).

Food Price and Food Security: One major source of food and nutrition insecurity in the 21st century has been food price volatility. After decades of stagnation, international food prices spiked sharply in what became widely known as the 2008 global food crisis. Prices spiked again in 2010–11, however, and then more recently in 2021–2022 in the wake of COVID-19 and Russia's invasion of Ukraine (Headey, Derek; Bachewe, Fantu; Marshall, Quinn; Raghunath, Kalyani; Mahrt, Kristi, 2024).

The trend of real wages may throw a sharp light on poverty and ultimately food affordability. (Raghunathan, Headey, & Herforth, 2021) stated that the real wages of skilled nonfarm workers fell by 24% during March-June, 2022, while wages of male and female agricultural workers fell by 22% and 21%, respectively. Notable, also, is that women's wages in the farm sector are persistently almost 20% lower than male wages, similar to findings in rural India.

Section IV

THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

The world has ample food. The growth of global food production has been faster than the unprecedented population growth of the past many decades, although

recently food insecurity across the country has widened. Global hunger is still far above pre-pandemic levels. The COVID-19 and Ukraine war have immense impact on food security. The economic recovery from the pandemic has contributed to this, but there is no doubt that the modest progress has been undermined by rising food and energy prices magnified by the war in Ukraine. There is no room for complacency, though, as hunger is still on the rise throughout Africa, Western Asia, and the Caribbean (FAO, 2015).

Due to the pandemic, in 2022, around 2.4 billion people, comprising more women and people living in rural areas, did not have access to nutritious, safe, and sufficient food all year round, of which about 900 million (11.3 per cent of people in the world) were severely food insecure. The proportion of the world population facing chronic hunger in 2022 was about 9.2 per cent, compared with 7.9 per cent in 2019. The data revealed that almost 3.2 billion people worldwide could not afford a healthy diet in 2020. The persisting impact of the pandemic on people's disposable income, different wars, the rising cost of a healthy diet, and the overall rise in inflation also continued to leave billions without access to an affordable healthy diet. Millions of children under five years of age continue to suffer from stunting (148 million), wasting (45 million), and overweight (37 million). Despite progress in reducing child under nutrition – both stunting and wasting – the world is not on track to achieve the associated 2030 targets, and neither is any region on track to attain the 2030 target for low birth weight (FAO, 2023).

THE STATE OF FOOD SECURITY AND NUTRITION IN INDIA

The persisting challenge of under nutrition in India remains a major hindrance to achieving Sustainable Development Goals (SDGs), both directly and indirectly related to hunger and food security as well as other health-related outcomes. This paper provides a spatial overview of dimension-specific as well as overall food security status in Bihar, Jharkhand, Odisha, and West Bengal. It also explores the status of availability, access, accessibility and overall food security and identifies some important policy variables for food security.

In India, 233.9 million people were undernourished or food insecure in 2020-22, while 247.2 million people were undernourished or food insecure during 2004-06. In 2021, 1043 million people (74.1% of the total population, or 104 crore) were unable to afford a healthy diet due to rising costs around the estimated cost of \$3 per day (FAO 2023). In 2023-24, at current prices, average per capita income per day in India was \$5.46, \$1.96 for Bihar, \$4.97 for West Bengal, \$3.39 for Jharkhand, and \$5.26 for Odisha (Government of India, 2025).

THE STATE OF FOOD SECURITY PARAMETERS AND FOOD SECURITY

However, the Indira Gandhi Institute of Development Research (IGIDR), Mumbai, and the Institute of Human Development (IHD), New Delhi, have prepared the Food Security Atlas Report of Rural Bihar, Jharkhand, and Odisha, considering the Food Security Index, which was estimated as a synthesis of the three dimensions of food security (availability, access, and utilization), as follows:

Food Security Atlas of Bihar

The Food Security Atlas of Bihar (2018), as prepared by (IGIDR & IHD, 2018) indicates that the South and South-Eastern districts (Jamui, Banka, Nawada, and Gaya) as well as the North-Eastern districts (Dharbhanga, Purnia, Supaul, and Araria) were found to be insecure in terms of the availability dimensions as compared to the Central and Western districts. In terms of the food access index, most districts belonging to the North-Central region (East Champaran, Sitamarhi, and Sheohar) were insecure compared to the other regions. In terms of the utilization index, On the other hand, districts in the southern region of Bihar (Jamui, Banka, Gaya, Aurangabad, Rohtas, Buxar, and Nalanda) were insecure, whereas the districts in the northern region were relatively secure for the same. The food security outcome index finds Sheikhpura and Gaya, which belong to the south and southeast corners of Bihar, as the two most insecure districts. The southern, south-eastern, and north-eastern parts of Bihar are less advanced agriculturally and have high tenancy. Most of the individual dimension-specific insecure districts food security outcome index-specific insecure districts are mainly from the southern, south-eastern, and north-eastern parts of Bihar. The development of these specific regions is very crucial.

Food Security Atlas of Jharkhand

The Food Security Atlas of Jharkhand (2022), as prepared by (IHD, IGIDR, 2022), indicates that the most food-secure districts of Jharkhand are Purbi Singhbhum, Ranchi, Dhanbad, Hazaribagh, and Ramgarh. All these districts are mining-industrial, highly urbanized, and developed districts. Together, they form the development corridor of Jharkhand. Whereas Jamtara, Garhwa, Pakur, Sahibganj, and Godda are found to be the most food insecure. Godda, Sahibganj, and Pakur districts in the Santhal Pargana region collectively form the zone of high food insecurity. The priority districts are those districts that fall in 'insecure' or 'highly insecure.' The food insecurity situation of Dumka, Deoghar, Jamtara, Pakur, and Sahibganj from the Santhal Pargana region and Pashchimi Singhbhum district belonging to the Kolhan region has been marked as 'alarming.' Among the 24 districts of Jharkhand, 14 districts are on the priority list. Region-wise, the entire

belt of the Santhal Pargana region has been marked as 'alarming' in terms of its food insecurity situation. All the districts of the Santhal Pargana region, except Godda, have been flagged off as exhibiting alarming levels of food insecurity based on both input and outcome indicators. Even Godda district from the Santhal Pargana region has been categorized among the districts 'needing high attention' in terms of food security input variables.

Food Security Atlas of Odisha

The Food Security Atlas of Rural Odisha (2022), as prepared by (IHD, IGIDR, 2022), indicates that eight districts, including Nabarangapur, Koraput, Malkangiri, Gajapati, Rayagada, Kandhamal, Kalahandi, and Nuapada, fall in the extremely food-insecure category. Among these eight districts, six belong to the KBK (Kalahandi, Balangir, and Koraput) region, while the remaining two districts are dominated by the ST population. In terms of the food utilization index, the eastern coastal districts like Baleshwar, Bhadrak, Jagatsinghapur, Cuttack, and Kendrapara, and the western districts like Bargarh and Jharsuguda are either secure or moderately secure. On the other hand, the two southern districts of Kandhamal and Debagarh and Gajapati, the coastal district of the northern region, are found to be the most food-insecure districts. In terms of the outcome index, the two most food-insecure districts either fall in the KBK region or are tribal-dominated. On the other hand, the coastal districts like Jagatsinghapur, Jajapur, Kendrapara, and Nayagarh are the most food-secure districts in Odisha in terms of the outcome index.

Food Security Situation of West Bengal

In West Bengal, the percentage of food-insecure people has decreased from 2004-05 to 2011-12. The situation of food insecurity is quite higher in rural West Bengal than in urban West Bengal. Food insecurity is relatively high for socially disadvantaged classes – STs and SCs. Food insecurity across households is significantly explained by the socio-economic and cultural factors of the households. The chance of food insecurity decreases with higher average years of schooling of the households. The households belonging to the lower castes are deprived in different dimensions; therefore, their chance of food insecurity is higher for STs, OBCs, and SCs. Economic factors, namely share of food in total consumption and per capita cultivable land, negatively and significantly explain the food insecurity. The BPL survey report indicates that the districts of Maldah, 24 Parganas (North), Nadia, Dinajpur Dakshin, Jalpaiguri, Dinajpur Uttar, Purulia, and Coochbehar are more food insecure than other districts.

Section V

FOOD INSECURITY SITUATION IN THE SELECTED STATES

To compare socio-economic indicators across Indian states (Bihar, Jharkhand, Odisha, and West Bengal) and India as a whole. The analysis focuses on identifying patterns, disparities, and key insights across selected states, income, agriculture, consumption, health, and poverty metrics.

Selected four states are very populous states in India, comprising around 1/4th (22.46 %) of the population, while these states altogether own only 13.54% of the total income (GNI), which is a root cause of income inequality. In terms of GDP/per capita income, Bihar is lagging behind, followed by Jharkhand, West Bengal, and Odisha. Bihar's per capita income is 1/3rd of the national level. These states are predominated by the agriculture sector, where three times the average population is engaged than its share in income (GDP) at the national level. Bihar's agriculture dependency ratio is high, followed by two times in Odisha, West Bengal, and Jharkhand, which is reflected in terms of per day per capita consumption expenditure and food consumption (\$) in rural areas. Table 1 shows that these states could not meet the average expenditure (Per Day Per Capita) at the national level, which is \$1.62 on total consumption and \$0.76 on food consumption. It may be apprehended that 60 to 70% of the population of these states could not meet the average income and average consumption of quality food.

Table 1: Socio-Economic Indicators of Food Security in Bihar, Jharkhand, Odisha and West Bengal in India

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>Indicators/Indian States</i>	<i>Bihar</i>	<i>Jharkhand</i>	<i>Odisha</i>	<i>Best Bengal</i>	<i>India</i>
Population 2023, (million)	126.76 (9.14%)	39.47 (2.84%)	46.28 (3.34%)	99.08 (7.14%)	1387.28 (100.00%)
NSDP/NNP at Current Prices in (crore) (2011-12 Series) (2023-24)	771435 (3.0%)	418528 (1.63%)	757540 (2.95%)	1531371 (5.96%)	25696663 (100.00)
Share of Agriculture in GSDP (constant price)	20.56	23.00	20.60	18.13	15.58
Per Capita Income Per Day (\$), 2023 Current Prices	1.94	3.39	5.26	4.97	5.46
Availability of food per person per day (gram)	349.93	345.71	589.08	566.84	623.51
Per Day Per Capita Consumption Expenditure (\$) (rural)	1.44	1.16	1.32	1.42	1.62
Per Day Per Capita Consumption (Food) Expenditure (\$) (rural)	0.76	0.56	0.64	0.73	0.76

1	2	3	4	5	6
Indicators/Indian States	Bihar	Jharkhand	Odisha	Best Bengal	India
% Population engaged in Agriculture (2021)	58.40	38.68	44.70	32.40	43
% of Agriculture Labour in Total Main Worker	14.47	11.24	14.56	10.28	10.40
Child & Adolescent Mortality	4.14	2.57	1.57	1.06	2.06
Maternal Health	37.21	29.75	14.83	11.43	19.17
Life expectancy (2022)	69.2	69.4	69.8	72.1	69.
% of Population, Multidimensional Poor 2019-21	33.76	28.81	15.68	11.89	14.96
% of Population (Rural), Multidimensional Poor 2019-21	36.95	34.93	17.72	15.15	36.95
Note: 1\$ = 85 Rs.; 60% population MPCE is less than avg. MPCE; Under \$2.15_International Poverty Line_2023					

Source: Structured from Economic Survey of India and respective States, NFHS-5 data, PLFS data.

FAO (2023) says that people are unable to afford a healthy diet due to the estimated cost of \$3 per day. It seems that around 971 million (97 crores) people in India could not afford a healthy diet, including 89 million (8.9 crores) in Bihar, 28 million (2.8 crores) in Jharkhand, 32 million (3.2 crores) in Odisha, and 69 million (6.9 crores) in West Bengal.

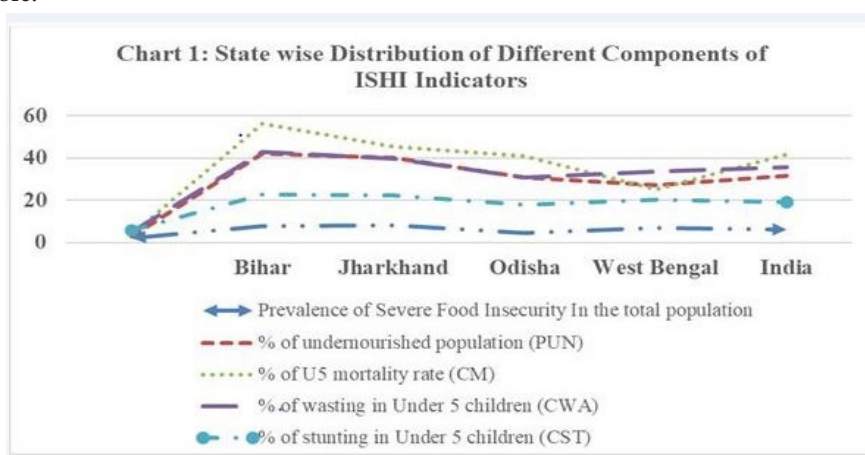
Table 1 indicates that Bihar has the highest poverty rate (33.76% overall, 36.95% rural), followed by Jharkhand (28.81% overall, 34.93% rural), Odisha (15.68% overall, 17.72% rural), and West Bengal (11.89% overall, 15.15% rural). India's averages are 14.96% overall and 36.95% rural. Bihar's high poverty rate, especially in rural areas, exacerbates food insecurity, as limited income restricts access to food and healthcare. West Bengal and Odisha perform better, likely due to higher per capita income and lower agricultural dependence, but they could not meet the average performance at the national level.

Bihar has the highest child and adolescent mortality rate (4.14), followed by Jharkhand (2.57), Odisha (1.57), and West Bengal (1.06), compared to India's 2.06. Bihar's high mortality rate signals poor healthcare access and nutritional deficiencies. Bihar again fares worst in maternal health issues (37.21), followed by Jharkhand (29.75), Odisha (14.83), and West Bengal (11.43), against India's 19.17 while West Bengal's lower rate suggests better maternal healthcare systems. West Bengal leads life expectancy with 72.1 years, followed by Odisha (69.8), Jharkhand (69.4), and Bihar (69.2), compared to India's 69.7. West Bengal's higher life expectancy aligns with its better health indicators. Poor health outcomes in Bihar and Jharkhand,

particularly for children and mothers, correlate with higher poverty and lower consumption, undermining food security. West Bengal's stronger health metrics support its relatively better socio-economic status.

Among the four selected states, Odisha (589.08 gm/person/day) has higher availability of the food grains than West Bengal (566.84 gm/person/day), Bihar (349.93 gm/person/day), and Jharkhand (345.71 gm/person/day). All four states could not meet the average availability of the food grains at the national level (623.51 gm/person/day). Bihar (349.93 gm/person/day) has lowest availability of food grains among these states indicates its food grains dependency on other states. Average food grain consumption in India could be 364.4 grams per person per day in 2021-22 (Kumar, Joshi , & Pratap S, 2009). Odisha shows strengths in food availability and income but has moderate poverty and agricultural dependency.

State wise Distribution of Different Components of ISHI Indicators: Chart 1, as structured from table 'A' of the appendix present the socio-health indicators and food security measures for Bihar, Jharkhand, Odisha, West Bengal, and India as a whole.



Note: ISHI: India State Hunger Index Indicators

Source: NFHS-5 (2020-21), and (Sadhu, Kim, & Subramanian, 2025)

Jharkhand is facing severe food insecurity for 8.2% or 3.23 million people, followed by Bihar (7.8% or 9.88 million), West Bengal (7.1% or 7.03 million), and Odisha, which has the lowest (4.5% or 2.08 million). Altogether, 86.01 million (8 crore) people have been facing severe food insecurity in the country, indicating the hunger situation of the country. Bihar has the highest undernourished population (42.20%) and Jharkhand (40.32%), significantly above the national average (31.52%), followed by Odisha (30.77%) and West Bengal (27.28%).

Section VI

CONCLUSION

Despite hundreds of policy interventions, Indian states are suffering from malnutrition, hunger, and food insecurity. It may be apprehended that in future, food insecurity will be widened and more persons will be facing food insecurity in these states. This hints towards government intention in particular and the people of the nation in general needing review and some radical macro policies to overcome such a terrific situation. The prevalence of such levels of food insecurity and malnutrition in eastern India is a stark reminder that the various government-sponsored measures to alleviate food deficiency in the poverty-ridden pockets have actually not reached the targeted population. Whether this improvement in PDS and MDM leads to greater consumption of nutrients, No. There is no significant relationship between higher nutritional intake and PDS/MDM participation. Inflationary conditions of food led by costly agricultural inputs worsen the condition of the food security situation in India. The inflation reduces the real wage of poor people. Unaffordability, remains strikingly higher for women than men due to lower wage earnings for women (20 per cent lower than men).

The study indicates that affordability is the main factor since despite having food entitlements followed by food availability. Food security statements may be translated readily into statements of ownership of food by persons, i.e., affordability. Unequal wealth and income distribution has an impact on food accessibility and food insecurity in these states also.

Low per capita income and consumption expenditure in Bihar and Jharkhand limit food access, particularly in rural areas, while West Bengal and Odisha fare better due to higher incomes. But certain parts of these district facing acute malnourishment and hunger. High agricultural dependence in Bihar, Jharkhand, and Odisha supports food production but makes these states vulnerable to agricultural shocks. West Bengal's diversified economy reduces this risk. Poor health and high poverty in Bihar and Jharkhand hinder effective food utilization, as malnutrition and illness persist. West Bengal's better health metrics suggest improved utilization. Bihar's large population and high poverty, combined with Jharkhand's low consumption, indicate unstable food security. Odisha and West Bengal are also facing food insecurity, but the situation is better than Bihar and Jharkhand. The analysis highlights the disparities in socio-economic conditions affecting food security, with Bihar facing the most significant challenges and West Bengal showing relative strength.

POLICY RECOMMENDATIONS

These states need to prioritize poverty alleviation, healthcare infrastructure, and income diversification to reduce agricultural dependence and improve food access. Bihar and Jharkhand need to focus on increasing rural consumption through income support and agricultural productivity to address low food expenditure. Odisha also needs to enhance rural consumption and sustain health improvements to bridge gaps in food access. West Bengal needs to continue diversifying the economy and strengthening healthcare to maintain food security gains. Invest in agricultural resilience, rural infrastructure (health and education), and social safety nets to address multidimensional poverty and ensure food security across all the states. Diversification of livelihood may be accompanied by micro and small enterprises, which is a second employment absorption area. PDS and MDM need more nutrition-oriented policy than ever. Recent decades saw jobless and job-loss growth, which suggest labor-intensive industrialization and labor-centric policy in India. Unequal distribution of wealth and income has an impact on the masses' food insecurity needs redistribution of means of production.

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WOMEN'S SUSTAINABLE DEVELOPMENT IN EASTERN INDIA: A CRITICAL AGENDA OF *VIKSIT BHARAT* GOAL

Shefali Roy* and Shatakshi Anand**

Abstract

Viksit Bharat @2047 prioritizes inclusive development and social welfare to ensure everyone benefits from economic progress and expand social security, healthcare, education, and participation. The government is focusing on four major groups: 'Garib' (Poor), 'Mahilayen' (Women), 'Yuva' (Youth), and 'Annadata' (Farmer). This article examines the challenges and strides marching side by side in the process of change to the status of women in eastern India who are still the weaker section of the society. East India is a region of India encompassing of Bihar, Jharkhand, Odisha, and West Bengal. They often lag in socio-economic indices. They face a very complex situation, possessing high potentials with deep rooted challenges. Focusing on them is crucial for national progress. Accelerating their growth is also vital for Viksit Bharat goal. This work has put women of eastern India at the pivot around which issues revolve. If India aspires to become a pioneer in global economy, it must uplift eastern India in general and their women in particular.

Keywords: Women, Socio-Economic Development, Education, Health, Eastern States.

INTRODUCTION

On December 19, 1946, Constituent Assembly member Hansa Mehta¹ said:

"What we have asked for is social justice, economic justice, and political justice. We have asked for that equality which can alone be the basis of mutual respect and understanding and without which real cooperation is not possible between

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man and woman. Women form one-half of the population of this country and, therefore, men cannot go very far without the cooperation of women. This ancient land cannot attain its rightful place, its honoured place in this world without the cooperation of women. In this context role of women must be assessed and reflected upon particularly in eastern India. Aligning *Viksit Bharat* goal with SDG 5 becomes complementary.



Viksit Bharat cannot be imagined without the balanced development of our eastern region. Influenced by PM Modi's *Purvodaya Mission*,² Union Education Minister Dharmendra Pradhan said that Odisha and other east Indian states like Bihar, Jharkhand West Bengal have the potential to be the growth drivers of a prosperous India. "Our collective efforts towards holistic development and prosperity of eastern India will be with Odisha as the epicentre," (The New Indian Express, December 03, 2023) Odisha is a star performer, West Bengal is Catching up but Bihar and Jharkhand are still lagging. Moreover, excellence in one area cannot be the indicator to assess the potentiality of any state. Odisha and West Bengal are outperforming the National and East averages across Child and Maternal & Reproductive health indicators. The performance of Bihar and Jharkhand is lagging the National and East zone averages across almost all healthcare themes. The Mission Antodaya data captures cross-thematic performance of districts and states across 26 selected developmental indicators. Across the East zone, West Bengal is delivering better results than the national cumulative score across the 26 developmental indicators leaving Bihar, Jharkhand, and Odisha far behind the national score. (Bharat East Report: 2023) This puts Bengal on a higher pedestal than Odisha. One fact is crystal clear that Bihar and Jharkhand are on par whereas Bengal and Odisha are slightly in a better position, This work shows concern as to why not the strategy should be bottom-up starting from the weakest state. It requires a serious debate and critical analysis.

Looking at its history it can be asserted that 1950s saw industrial progress in East India. Bihar and Odisha struggled with economic issues during the British rule and in the beginning of post independent India due to rising naxalism and frequent natural calamities such as flood and cyclone and drought. But in recent

years, the state of Odisha has shown impressive growth record and developed steadily. The economic boom since 2005 started, but not evenly across the region. West Bengal remained better on many fronts. Jharkhand became a separate state on 15 November 2000 from Bihar. In the modern times, these states have seen rapid changes because of many mineral and metal based industries, coal based thermal powers units, oil refineries, ports, textile industries and well established public and private educational institutes. West Bengal, Odisha, Bihar and Jharkhand rank 6th, 14th, 16th and 18th in the list of Indian states by GDP. Odisha has shown consistent growth in the state GDP and received the recognition of the fastest-growing economy among the states in East India. Social progress index (SPI) ranking shows not a single state from eastern region are in high tiers of social progress. West Bengal and Odisha ranks in tier 4 and 5, whereas Bihar and Jharkhand in tier 6. NITI Ayog report SDG India index 2023-24 puts Bihar and Jharkhand at the lowest ebb with the score of 57 and 62 points.

Women's status in all the states are in an alarming level. There are multiple issues concerning women which needs to be addressed for steady development. Eastern Indian women face challenges that originate from cultural, social, economic, and regional factors. Persistent gender biases often limit women's access to education, employment, and leadership roles. Traditional gender roles can restrict women's freedom and career aspirations. However, the condition of women in eastern India varies significantly across states, urban and rural areas, and socio-economic groups, which makes the study more engaging.

SOCIO-ECONOMIC CONDITIONS

So far as education is concerned, it reflects a mix of progress and perennial challenges. While there have been improvements over the past few decades, the region lags the national average and other parts of India due to socio-economic issues such as poverty, gender inequality, and inadequate infrastructure.

Education

Below is an analysis of the current state of women's education in Eastern India.

Literacy Rates: The national female literacy rate was 65.46%, but many Eastern Indian states fell below this: Bihar: 51.5%, Jharkhand: 55.4%, Odisha: 64%, West Bengal: 70.5 % (2011 Census). Based on government reports and surveys, literacy rates have improved: Bihar: ~60%, Jharkhand: ~65%, Odisha: ~70% and West Bengal: ~75% (Recent Estimates 2023). Bihar and Jharkhand continue to rank among the lowest. School Enrolment and Dropout Rates.

Primary Education (Classes 1-5): According to the Unified District Information System for Education (UDISE) 2021-22, the Gross Enrolment Ratio (GER) for girls in Eastern India ranges between 95-100%, aligning with the national average (101.4%). However, dropout rates remain high in states like Bihar and Jharkhand (5-7%), driven by poverty and early marriage.

Secondary Education (Classes 9-10): GER is below the national average of 79.6%—Bihar (55%), Jharkhand (60%), Odisha (75%). West Bengal (85%) and Mizoram (90%) perform better. Dropout rates are alarming, with over 40% of girls in Bihar discontinuing education at this level.

Higher Education: The All-India Survey on Higher Education (AISHE) 2020-21 reports a national GER of 27.3%, but Eastern India lags – Bihar (15%), Jharkhand (18%), Odisha (22%) and West Bengal.

The introduction of specific stipends for female students as well as making education free for them are two unique policies that governments should prepare to boost the education of women, much if some nations have already made considerable progress in this direction. (Shahidul & Karim, 2015) Schemes like Samagra Shiksha have improved infrastructure and enrolment, narrowing gender gaps in primary education. Under Samagra Shiksha, various interventions have been targeted for reducing drop-out of girls, which include opening of schools in the neighbourhood to make access easier for girls, free uniform and text-books to girls up to class VIII, additional teachers and residential quarters for teachers in remote/hilly areas, appointment of additional teachers including women teachers, stipend to CWSN girls from class I to class XII, separate toilets for girls, teachers' sensitization programmes to promote girls participation, gender-sensitive teaching-learning materials including text books etc. In addition, to reduced gender gaps at all levels of school education, Kasturba Gandhi Balika Vidyalayas (KGBVs), which are residential schools from class VI to XII for girls belonging to disadvantaged groups such as SC, ST, OBC, Minority and Below Poverty Line (BPL), are sanctioned in Educationally Backward Blocks. Further, in Kendriya Vidyalayas, girls have been exempted from paying tuition fees from class I to XII and education is free for girls in classes from VI to XII who happen to be the only child of their parents. (PTI.12).

Other affirmative actions are in a row with no less impact. Beti Bachao Beti Padhao as a scheme promotes girls' education through awareness campaigns and scholarships, with significant implementation in Bihar and Jharkhand. Within the scheme Mid-Day Meal, free meals have boosted enrolment and attendance, particularly for girls, across Eastern India. Kasturba Gandhi Balika Vidyalaya (KGBV): These residential schools target disadvantaged girls. Digital Education: Post-COVID-19, platforms like DIKSHA have expanded access to education in rural areas, benefiting girls all over. Despite these programmes the desired result is not visible.

Bihar and Jharkhand are states which face the most severe challenges, with low literacy, high dropouts, and socio-economic constraints, while Odisha and West Bengal undergoes moderate progress, with better infrastructure and higher literacy rates.

Health

As regards health, maternal and infant mortality rates have reduced due to better healthcare access and schemes like Janani Suraksha Yojana, but still eastern regions are below national level, and it requires a proper attention. Nutritional condition of Bihar is poor where more than half of the women in pregnancy and reproductive span period are anaemic, percentage of women having below normal BMI is second highest in India and percentage. Although, Bihar has shown improvement in maternal health such as antenatal care service, postnatal care, consumption of iron and folic acid, institutional births but still the figures are below the other states and national level. Besides literacy, child marriage, tobacco consumption in women has increased but utilisation of contraception method has declined in Bihar. Therefore, the government needs to properly implement the currently running health programs with special focus on Bihar so that nutritional and maternal health status of women could improve which is very much related to the family and society (Alok: 2014). Slightly less than two-thirds of women (64%) in Odisha have anaemia, including 29 percent with mild anaemia, 33 percent with moderate anaemia, and 3 percent with severe anaemia. Anaemia is particularly high among rural women, women age 15-19 or 40-49, and scheduled tribe women, but anaemia exceeds 53 percent for every group of women. Anaemia among women has increased by 13 percentage points NFHS. The NFHS 3 survey reveals that the 62.7% of the ever-married women in the age group of 15 to 49 years in Odisha have anaemia which is one of the main causes of maternal mortality besides having low Body Mass Index (BMI). The National Rural Health Mission set up to reduce maternal mortality as one of its goals is too medical and misses out on the social component which is so important to women's health which continues to be below any normal standard of acceptance.

In health parameters, the tribal women are very much poorer than the non-tribal women. Malnutrition is pervasive among tribal women. There is also a high prevalence of anaemia among the tribal women in Jharkhand. The utilization of maternal health care is also very less among the tribal women than non-tribal women in Jharkhand. Use of modern methods of contraception is also significantly less among the women, mainly tribal. All these will likely to have not only an adverse long-term impact on their own health and wellbeing but also on their children. In India, the National Health Services have often neglected the tribal people in general and tribal women in particular. Due to socio-economic status,

cultural stigma, lack of health care facilities, lack of knowledge regarding health and disorders can affect the health and nutritional status of underprivileged women in west Bengal. A study revealed that more than half of the women population (58%) is unable to access public health facilities (Dalal & Dawad: 2009). Extensive research points to the benefits that education has for girls and women. Women with at least some formal educations are more likely than uneducated women to marry later, use contraception, have fewer children, and be better informed about their own nutritional and other needs, as well as of their children (Population Reference Bureau, 2011)

The success of plans and policies depend on Safety and Social Empowerment for which government is committed and has made strategic moves like One Stop Centres 'Sakhi.' Over 150 centres were established in Eastern India by 2023, with Bihar (40) and West Bengal (35) leading, to achieve the goal of having a centre in every district by 2047. Crime against women as per National Crime Records Bureau (NCRB) shows higher crime rates in eastern India against the national average of 66.4%. Target is to reduce crime rates by 50% which appears to be less approachable.

FEMALE LABOUR FORCE

India's score on the World Economic Forum's 2023 Gender Gap Index is 0.635, with Eastern India estimated at 0.58. The target is to reach 0.85 by 2047. As India, seek to advance women's economic empowerment, not only is it imperative to focus on increasing labour force participation, but also to ensure good quality work and decent wages. Alarming, India's female Labour Force Participation Rate (LFPR) – the share of working-age women (between the ages of 15-59), who report either being employed, or being available for work is at a historic low of 25.3% in 2017-18 (PLFS, NSSO 2017-18). Labour Force Participation Rate (LFPR): In 2023, Eastern India's female LFPR is 22%, below the national average of 32%. The goal is to increase it to 50% by 2047. Indeed, an ambitious projection of the Indian government. In Jharkhand, tribal women's employment options and access to urban areas are largely limited to domestic work. 78% of the migrant female population surveyed were engaged in domestic work, which represented the highest category of employment for women from the village (Wadhawan, 2013). Domestic work is still not considered "work" that promotes capital accumulation and social production so this is further add to their woes. However, earlier mostly men relocated to urban areas, but now, a significant number of single women are moving to cities in search of job opportunities (Sharma, 2018). Women as a work force face wage disparity in all the states. In Odisha, the choice to move out usually rested with the family, and the number of single women and girls who migrated was minimal. It was noted that women's decisions to migrate are influenced by

the prevalent caste system. Usually, women do not leave their communities to travel and hunt for jobs elsewhere; they stay in the community. (Shanthi, 2006) investigated the level of employment-oriented movement of women as well as the inter-state differences in its magnitude. Limited access to formal employment is visible in all the states with varying degrees. In agriculture and informal sectors, women work without fair pay or recognition. To economically empower women, ensuring their equal access and control over economic resources, and guaranteeing that they can use them to exert increased control over other areas of their lives, is imperative (Taylor and Perez Nieto, 2014). Women are increasingly participating in self-help groups (SHGs) under programs like the National Rural Livelihood Mission (NRLM), especially in states like Odisha and Bihar. But the integrated impact on states of eastern India is not very encouraging.

WOMEN IN POWER STRUCTURE

Women are invisible in sharing power structure and in decision making process. Women's political representation has also improved in local governance (Panchayati Raj Institutions and Urban Local Bodies), where reservations for women have ensured their participation. Bihar happens to be the first state to give 50% reservation to women in PRIs and ULBs. Bihar reported 54% female panchayat representatives, and Jharkhand 48%, and the target is to increase effective participation to 75% by 2047. But even then, political participation among them has been traditionally lower than the national average. (Mukherjee, 2012). The nature and extent of participation of women is limited to a few areas of rural local governance system and not up to the expected extent. (Rout&Sahu,2012). Women's Reservation Bill (2023) With 33% reservation in Parliament and state legislatures, which has many riders can enable Eastern Indian women for greater political representation by 2047. But it is an assumption to be tested with time and experience. Too early to be judgmental on this issue.

The 2030 Agenda for Sustainable Development Reaffirms the universal consensus on the crucial importance of gender equality and its contribution to the achievement of the 17 Sustainable Development Goals. Goal 5 tries to infuse a spirit of gender equality. The proposed Sustainable Development Goal 5 addresses this and reads "Achieve gender equality and empower all women and girls". Goal 5 aims at achieving gender equality and empower all women and girls. Its targets include end of all forms of discrimination and violence against women and girls, as well as elimination of harmful practices and the recognition and value of unpaid care and domestic work. Other targets stress the importance of ensuring women's full and effective participation and equal opportunities for leadership as well as universal access to sexual and reproductive health and reproductive rights. International commitments to advance gender equality have brought about

improvements in some areas: child marriage and female genital mutilation (FGM) have declined in recent years, and women's representation in the political arena is higher than ever before. But the promise of a world in which every woman and girl enjoys full gender equality, and where all legal, social, and economic barriers to their empowerment have been removed, remains unfulfilled. In fact, that goal is probably even more distant than before, since women and girls are being hit hard by the COVID-19 pandemic, in terms of physical and mental health. Hillary Clinton called on women on International Women's Day to "repair the damage" to lead to a "better trajectory" for women's rights following the COVID-19 pandemic. (Coleman, 2021).

EPILOGUE

Affirmative action's of Government play significant role in improving the condition of women. While there have been significant strides in education, healthcare, economic growth and political participation, deep-rooted patriarchal norms, economic challenges, and social inequalities continue to suppress the status of women in this region. Eastern India's transformation depends on targeted, inclusive, and sustainable interventions. At the current rate of progress, it will take 131 years to reach full parity w.e.f. 2023. The next 131 years, starting in 2023, for eastern states in India to develop and visit India @2047, a dream project along with the sustainable development goal 2030, will put the beneficiaries at their wits' end. Humble effort is to make all aware of the harsh reality and feasibility of the ambitious goal Viksit Bharat@2047.

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ENDNOTES

1. Hansa Mehta was appointed as a member of the Constituent Assembly. She played a crucial role in drafting the Indian Constitution, particularly in shaping policies related to gender equality.
2. Mission Purvodaya was launched in 2020 for the accelerated development of eastern India



ASSESSING SOCIAL DEVELOPMENT IN EASTERN STATES OF INDIA FOR VIKSIT BHARAT @2047

Barna Ganguli*

Abstract

The article assesses the status and progress of social development in the Eastern Indian states of Bihar, Jharkhand, Odisha, and West Bengal in the context of achieving the national vision of 'Viksit Bharat @2047' – a developed, inclusive, and equitable India. Despite notable efforts in recent decades, these states continue to face structural challenges such as poverty, inadequate healthcare, educational disparities, low economic participation of women, etc. However, they also exhibit significant potential, with improving enrolment rates, better health indicators with digital connectivity, and a growing focus on women's empowerment and skill development. The study analyzes key indicators of social development – liked emography, health, education and gender equity. The paper also identifies gaps for specific interventions. The conclusion of the paper underscores the need for collaborative, multi-sectoral strategies that ensure no community or region is left behind in India's journey toward a developed future.

Keywords: Inclusive, Vikshit Bharat, Social Sector, Health, Nutrition.

INTRODUCTION

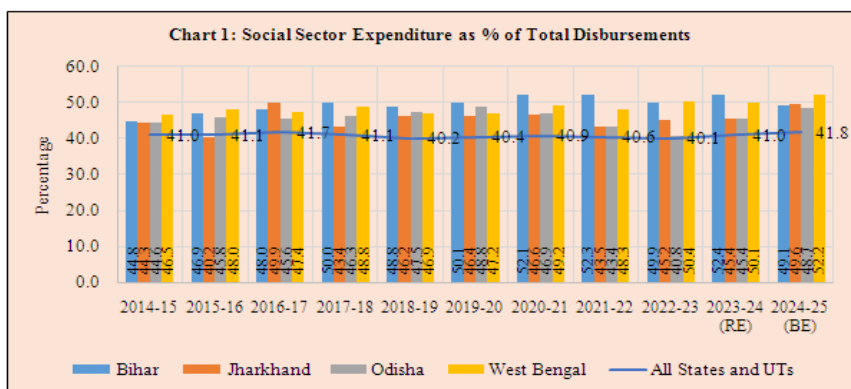
India's ambitious vision of becoming a developed nation by 2047 – coinciding with the anniversary of its independence – rests on the foundational principle of inclusive growth. While the country has made considerable strides in economic and infrastructural development, regional disparities remain a significant challenge. Among the most affected are the eastern states of India – notably Bihar, Jharkhand,

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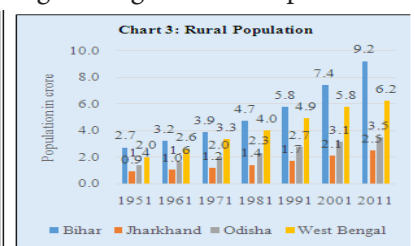
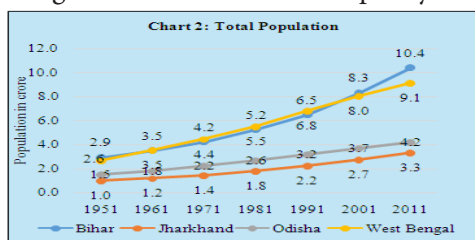
West Bengal, and Odisha – which continue to lag in key social development indicators. A comprehensive assessment of social development in these states is crucial to shaping targeted interventions that align with the goals of Viksit Bharat @2047. Social development encompasses critical areas such as education, health, gender equity, employment, housing, sanitation, and access to basic services – all of which determine the quality of life and the capacity for economic participation. The section below tries to assess some of the factors of social development in these states so that a proper road map can be prepared to achieve the target of Vikshit Bharat by 2047.

EXPENDITURE ON SOCIAL SECTOR IN PROPORTION TO TOTAL BUDGET

Social expenditure plays a crucial role in achieving the broader development objective of fostering socially inclusive, economically robust, and democratically resilient societies. Numerous efforts have been made to evaluate the quality of life across countries globally, as well as among the various states within India. The share of social sector spending in total government expenditure is a key factor influencing economic growth. Investments in the social sector – such as education, healthcare, and infrastructure – not only boost productivity but also help align private and societal interests, thereby promoting inclusive development (Arora, 2001; Mundle, 1998; Dev and Ravi, 2007; Majumder, 2005; Kannan and Pillai, 2007; Sen and Karmakar, 2007; Guha and Chakraborty, 2003). In India, a major sector of social sector expenditures is incurred by the State Governments. In the constitutional division of responsibilities between the Centre and States, sectors that ensure the provision of basic needs are the primary responsibility of State governments, with the support of the Centre. Among the social sectors, education is in the concurrent list, though the bulk of expenditure is incurred by the State. On the other hand, although medical and public health are in the domain of the States, the Centre plays an important role and finances several Centrally-sponsored programmes and almost the entire family welfare programmes, which include maternal and child health services. Similar is the case with sanitation. Thus, it becomes important for any analysis on social sector development to find out how much the state spends on social expenditure out of its total expenditure. Chart 1 shows that the share of expenditure on the social sector in the total disbursements is high for all four states compared to the national average. But when compared among themselves, it is seen that with an average of 49.5 per cent and 48.6 per cent, Bihar and West Bengal are the leading states, followed by Odisha 45.8 per cent and Jharkhand 45.5 per cent. Overall, all these states are spending less than 50 per cent on their social sector needs. As, expenditure on social sector means inclusive development, so special focus is required in this sector to achieve the target of Vikshit Bharat by 2047.

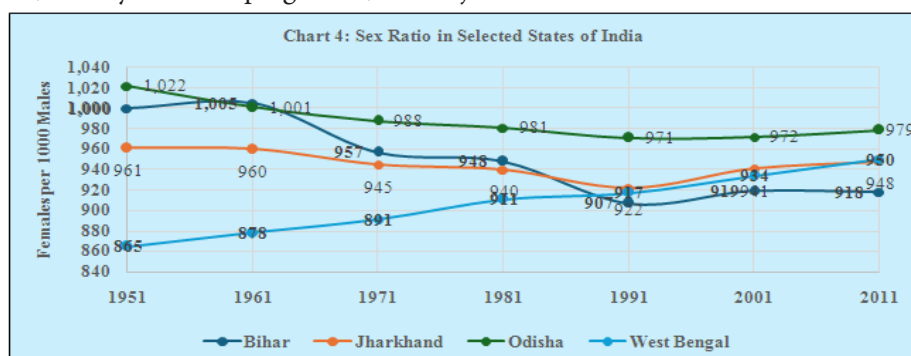


The study of demography is very important for policy design. Until and unless the size and nature of the population are known, the policy will not be holistic. Thus, to design a roadmap for 2047, it is important to understand the nature of the population. The combined population of these four eastern Indian states has seen substantial growth since 1951. Between 1951 and 2011, the population of Bihar increased 3.6 times and that of West Bengal by 3.5 times. Among these states, the population increase in Odisha is lower at 2.9 times in these seven decades. While the rural population, which is again another concern for development, is higher in Bihar, followed by West Bengal. Although with the penetration of the development process, the deprivation of the rural population is decreasing but it is still a major concern for the coming years. Chart 2 and 3 give details of the total and rural population in these four states. Another important metric is Population density, which provides insights into how people are distributed across a region. Among these states, in 2011, the highest density was in Bihar 1106 per sq. km and the lowest of Odisha at 270 per sq. km. The density of Odisha was also lower than the national average at 382 per sq. km in 2011. This indicator helps to assess pressure on resources, infrastructure, and services, and guides planning in areas like housing, transportation, and healthcare. High- or low-density patterns can also indicate economic activity levels, migration trends, and environmental impact, making it essential for informed policy-making and regional development.



Source: Censuses, Registrar General of India

Sex ratio, an indicator of gender balance in a population, indicates the number of females per 1,000 males. A healthy sex ratio reflects social equality and balanced demographic development. In 2011, Odisha had the highest sex ratio among the four eastern states at 979, followed by West Bengal (950), Jharkhand (948), and Bihar with the lowest at 918, highlighting regional disparities in gender distribution. The sex ratio of Bihar is even lower than the national average of 943 females per 1000 males. The chart below also shows how gender disparity gradually increased in states like Bihar. So, to achieve the goal of 2047, proper monitoring of the sex ratio, mainly in developing states, is a major concern.



Source: Censuses, Registrar General of India

PROGRESS IN EDUCATIONAL STATUS

Education is the most powerful means to promote development. Ensuring inclusive and equitable education is not only a fundamental objective but also key to building a fair society where every individual can aspire, succeed, and contribute to the nation. The National Education Policy (NEP) 2020 reinforces the vision of inclusiveness, emphasizing the need to close social gaps in access, participation, and learning outcomes as a core goal of educational development initiatives.

Table 1 compares the status of Gross Enrolment Ratio (GER), Dropout Rate and Retention Rate of students at secondary level in four states (Bihar, Jharkhand, Odisha and West Bengal). The GER reveals disparities across educational levels. While the West Bengal boasts a GER of 101.3 per cent, it is 45.6 per cent for Bihar. The Jharkhand and Odisha are at 62.2 per cent and 82.1 per cent, respectively. For all India, it is 77.4 per cent. Regarding gender gap, it has reported decrease in all the four states including India. But among all, the decrease is highest for West Bengal and Bihar respectively. Dropout rates also vary across different states from 12.8 per cent in Odisha to 25.6 per cent in Bihar and for India it is 14.1 per cent. Disparities among states further increase when dropout is compared between boys and girls. It is seen that the dropout for boys in West Bengal is higher than that of girls, while

for the rest of the states, this difference is less. Retention rates reflect a similar trend, varying from 82.3 per cent in West Bengal to 49.1 per cent in Jharkhand. For all India, the retention rate is 63.8 per cent. It is good to note here that retention of girls in all four states and India is higher than that of boys.

Table 1: Indicators of Education

<i>States and India</i>	<i>2023-24</i>			
	<i>Boys</i>	<i>Girls</i>	<i>Gender Gap</i>	<i>Overall</i>
Bihar	43.1	48.3	-5.2	45.6
Jharkhand	59.8	64.7	-4.9	62.2
Odisha	81.5	82.6	-1.1	82.1
West Bengal	98.5	104.2	-5.7	101.3
India	76.8	78	-1.2	77.4
Dropout Rate (Class 9 to 10) (Secondary)				
<i>States and India</i>	<i>2023-24</i>			
	<i>Boys</i>	<i>Girls</i>	<i>Gender Gap</i>	<i>Overall</i>
Bihar	26.2	25.1	1.1	25.6
Jharkhand	15.2	15.1	0.1	15.2
Odisha	14.1	11.3	2.8	12.8
West Bengal	21.5	14.2	7.3	17.8
India	15.5	12.6	2.9	14.1
Retention (Class 1 to 10) (Secondary)				
<i>States and India</i>	<i>2023-24</i>			
	<i>Boys</i>	<i>Girls</i>	<i>Gender Gap</i>	<i>Overall</i>
Bihar	54.0	59.6	-5.6	56.7
Jharkhand	46.6	51.7	-5.1	49.1
Odisha	74.2	77.2	-3	75.6
West Bengal	77.4	87.5	-10.1	82.3
India	63.1	64.6	-1.5	63.8

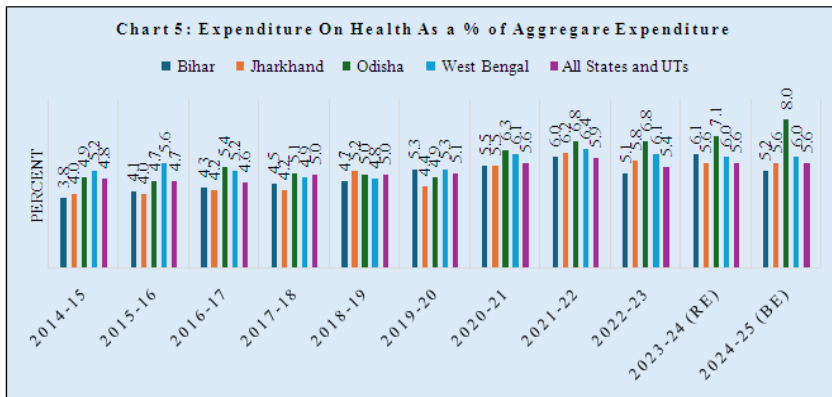
Source: Udise, 2023-24

To achieve the target of NEP 2020 and Vikshit Bharat, holistic schooling along with vocational and digital education with well-equipped school infrastructure is needed to achieve a GER of 100 per cent and reduce the annual average dropout rate to 7.67 per cent at the secondary level as per the target of Sustainable Development Goal 4. Also, the need for skill education in schools has become significantly important with the advent of automation, artificial intelligence (AI), internet of things (IoT), big data, and robotics etc. Thus, focused intervention at

the elementary, secondary and higher education level is needed to achieve the fixed target of 2047.

Exploring Health and Nutritional Scenario

Access to affordable healthcare is an imperative prerequisite of a healthy society. The right to healthcare is recognized as a fundamental right in many countries, such as Canada, Cuba, and Italy. While the Constitution of India does not explicitly guarantee access to healthcare, Article 41 encourages the government to provide support in cases of illness, old age, and disability. India has seen immense progress across different socio-economic indicators since its independence. However, this development has been highly uneven when the indicators are compared across states. One of the major indicators of comparison is expenditure on health. In these ten years (2014-15 to 2024-25), Odisha has shown a significant increase in health expenditure, recording an increase of 3.1 percentage points. Next, is the Jharkhand and Bihar. The lowest increase is recorded in the expenditure of West Bengal and India. The National Health Policy 2017 advocates that states should allocate at least 8 per cent of their budget to health but as per actual expenditures, none of these states have spent even 7 per cent on Health.



Note: Health includes Expenditure on Medical and Public Health and Family Welfare

Source: State Finances: A study of Budgets, RBI

OUTCOME OF THE HEALTH INVESTMENT

As per the latest available data of the Sample Registration System (SRS), the Life Expectancy at Birth (LeB) among states varies between 69.2 years in Bihar to 72.1 years in West Bengal. Also, except Bihar and Jharkhand, both West Bengal (WB) and Odisha (70.3 years) have LeB above the national average of 69.8 years. As seen above, states like WB and Odisha are spending more on health and are getting

better outcomes. Maternal Mortality Ratio (MMR) in a region is a measure of the reproductive health of women in the area. Many women in the reproductive age-span die due to complications during and following pregnancy and childbirth or abortion. Thus, tracking MMR is very important for a progressive society. Among these four states, the highest MMR is recorded in Odisha and the lowest in Jharkhand (Table 2). It is also praiseworthy that Jharkhand has already attained the target 3.1 of the Sustainable Development Goals of the United Nations, which aims at reducing the global maternal mortality ratio to less than 70 per 100,000 live births. Also, among these four states, the IMR is highest in Odisha (35) and lowest in WB (18). For Bihar and Jharkhand, IMR remains constant as in 2020. The progress of MMR and IMR is an indicator of better mother and child facilities, which are provided through the flagship schemes of the Central and State governments.

All health issues for both mother and child are related to nutrition. In countries like India, public concerns regarding nutrition are low birth weight, high mortality and morbidity rates of women, maternal undernutrition, obesity, infant mortality, etc. According to the performance of the state in the development trajectory, gaps in health-related outcomes widen significantly. While analysing the data for these four states, it is noted that stunting, wasting, and underweight are highest in Bihar, followed by Jharkhand. Also, it is seen that anaemia in children and women is above 50 per cent in all four states and India. This is a serious concern and needs focused intervention to achieve the goal of Vikshit Bharat by 2047.

Table 2: Health and Nutrition Status

<i>Indicators</i>	<i>Bihar</i>	<i>Jharkhand</i>	<i>Odisha</i>	<i>West Bengal</i>	<i>India</i>
Life Expectancy at Birth (Years) (2017-21)	69.2	69.3	70.3	72.1	69.8
Maternal Mortality Ratio (number of maternal deaths per 100,000 live births) (2017-21)	100	51	135	109	93
Infant Mortality Rate (the number of infant deaths (under one year of age) per 1,000 live births in a given year) (2021)	27	25	35	18	27
Nutritional Indicators (NFHS-5, 2019–21)					
Stunting (<5 yrs)	42.9	39.6	31.0	33.8	35.5
Wasting (<5 yrs)	22.9	22.4	18.1	20.3	19.3
Underweight (<5 yrs)	41.0	39.4	29.7	32.2	32.1
Children aged 6-59 months who are anaemic	69.4	67.5	64.2	69.0	67.1
Anaemia in women (15–49 yrs)	63.5	65.3	64.3	71.4	57.0

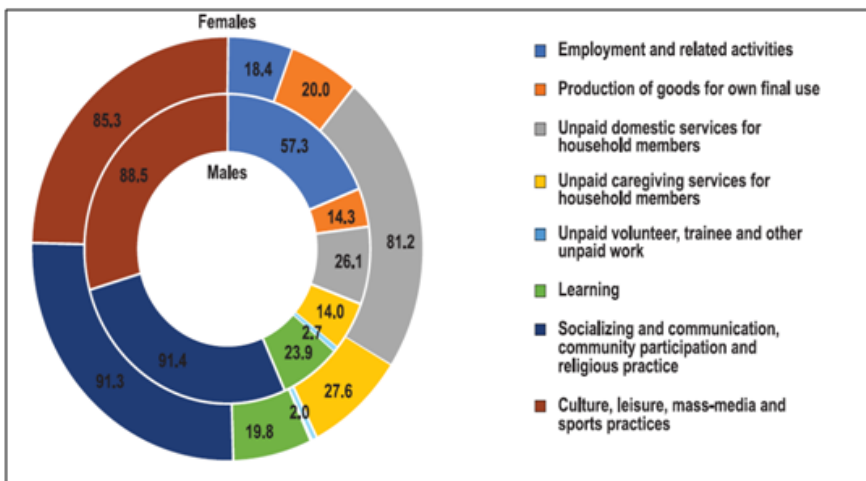
Source: SRS and NFHS-2019-21

Several nutrition programmes in India, such as POSHAN Pakhwada, the Supplementary Nutrition Programme under Anganwadi Services, and Midday Meals, aim to enhance the nutritional status of children, adolescent girls, pregnant women, and lactating mothers. POSHAN Abhiyaan specifically targets the reduction of stunting, wasting, underweight, and anaemia among children and women, while the Supplementary Nutrition Programme offers take-home rations and hot cooked meals. Additionally, the Government of India leverages technology like the “Poshan Tracker” to monitor and track the delivery of nutrition services. To ensure effective multi-sectoral coordination, the government has also established the National Council on India's Nutrition Challenges. Thus, these are initiatives to fight against malnutrition in the coming years.

PARTICIPATION OF WOMEN IN THE ECONOMY

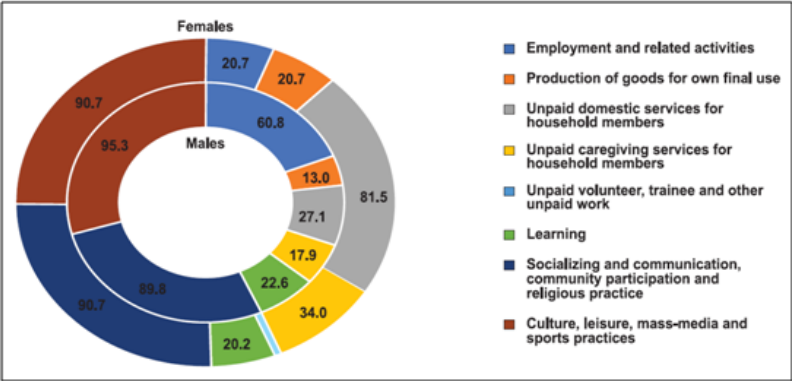
The agenda of development cannot be complete without discussing women. Gender equality is important for achieving inclusive growth. It involves ensuring equal access to decent work, social protection, education and active economic participation of women. Employment of females is directly connected to empowerment. As per the Time Use Survey conducted by the MOSPI in 2019 and 2024, the participation of females in employment and related activities (Aged 6 years and above) has increased from 18.4 per cent to 20.7 per cent. On the other hand, the participation of women in unpaid domestic services has increased slightly from 81.2 per cent to 81.5 per cent, respectively. The chart 6 and 7 show how time sharing has changed gradually for women with development.

Chart 7: Percentage of persons participating in activities (2019)



Source: Mospi

Chart 8: Percentage of persons participating in activities (2024)



Source: Mospi

FEMALE LABOUR FORCE PARTICIPATION RATE FEMALE LABOUR FORCE PARTICIPATION RATE

The Labour Force Participation Rate (LFPR) is a key indicator of an economy’s vitality and long-term growth prospects. Women’s participation in the labour force is shaped by a range of complex economic and social factors. Historically, female LFPR has been consistently lower than that of males, largely because women undertake the majority of unpaid work. Even when women engage in paid employment, they are disproportionately represented in the informal sector and among low-income groups. Additionally, women often face significant wage disparities compared to men. Notably, LFPR is particularly low among urban women. From the table below, it is revealed that the LFPR has increased marginally in India (0.6 Percentage points), in a moderate manner in Bihar (2.2 percentage points) and significantly in Odisha, representing 7.9 percentage points. But the LFPR registered a decrease of 10.7 percentage points for Jharkhand. While preparing the roadmap of Vikshit Bharat, it is important to assess the progress of the states individually to have a holistic growth.

Table 3: Female Labour Force Participation in Economy (persons aged 15 years & above)

States and India	2011-12	2023-24	Change over the period
Bihar	18.1	20.3	2.2
Jharkhand	46.5	35.8	-10.7
Odisha	30.1	38.0	7.9
Jharkhand	18.7	31.7	13.0
India	31.1	31.7	0.6

Source: CSO and PLFS

Presently, both state and central governments are focusing on employment generation and improving employability to boost the female labour force participation rate (FLFPR) along with the overall labour force participation rate. The Government has implemented a range of schemes such as Stand Up India, MUDRA Yojana, Start-up India, Pradhan Mantri Street Vendors Atma Nirbhar Nidhi (PM SVA Nidhi), Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Credit Guarantee Fund Scheme for Micro and Small Enterprises (CGMSE), Pt. Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), and Rural Self-Employment and Training Institutes (RSETIs) for women. These initiatives aim to provide employment, self-employment opportunities, and improved access to credit. A key flagship scheme, the Prime Minister's Employment Generation Programme (PMEGP), offers credit-linked subsidies to promote self-employment through the establishment of micro-enterprises in the non-farm sector. Notably, a large proportion of the beneficiaries under these schemes are women. Recognizing Self-Help Groups (SHGs) as agents of change, nearly 10 crore women across 90 lakh SHGs are now playing a transformative role in the rural economy. To further strengthen their technical skills and financial resilience, the Government has launched targeted initiatives such as Namo Drone Didi and Lakhpati Didi, especially focused on empowering women in rural areas. To enhance women's employability, the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) delivers skill training through a broad network that includes Women Industrial Training Institutes (ITIs), National Vocational Training Institutes (NVTIs), and Regional Vocational Training Institutes (RVTIs). Additionally, the Prime Minister's Internship Scheme offers vocational education and skill development opportunities specifically tailored for women, equipping them with the capabilities needed for meaningful employment.

CONCLUSION

The social development landscape in Bihar, Jharkhand, Odisha, and West Bengal presents a complex picture of progress, disparity, and opportunity. While each state has made notable advances – educational indicators, health status and upliftment of women but still significant gaps remain in health outcomes, quality education, social equity, and economic inclusion. For India to achieve the vision of 'Viksit Bharat @2047', the concerns of these Eastern states must be prioritized in national development strategies. Focused efforts on reducing regional inequalities, strengthening grassroots governance, and investing in human capital – particularly in education, healthcare, and skill development – are critical. Basically, accelerating social development in Bihar, Jharkhand, Odisha, and West Bengal is vital to building an inclusive, resilient, and truly developed India by 2047. A collaborative approach between the Centre, state governments, civil society, and communities

will be key to unlocking the region's full potential and ensuring that development reaches the last mile.

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GOVERNANCE AND DEVELOPMENT IN EASTERN INDIA: PATHWAYS TO *VIKSIT BHARAT* BY 2047

Richa Gautam*

Abstract

This article delves into the often-overlooked engine of development – governance – as a transformative force in the journey toward Viksit Bharat@2047, with Eastern India as its analytical core. Despite being richly endowed with both natural bounty and human potential, the region remains mired in developmental lag, held back by deep-rooted structural and institutional barriers. At the heart of this inertia lies a governance deficit – subtle yet significant. Against this backdrop, the article reimagines governance not merely as a backdrop to policy but as a double-edged force – a driver when enabling, a deterrent when absent. The study advocates for moving beyond one-size-fits-all frameworks, calling instead for a nuanced, state-specific governance approach that resonates with the socio-political fabric unique to Eastern India. Using a qualitative, comparative case study method, and drawing from a rich tapestry of secondary data – government reports, policy documents, and scholarly work – it uncovers key governance bottlenecks. More importantly, it spotlights grassroots innovations that are quietly reshaping governance paradigms: Mo Sarkar in Odisha, Jeevika in Bihar, and Kanyashree in West Bengal. These cases illustrate that participatory, inclusive, and adaptive governance is not just idealistic theory, but a pragmatic pathway to equitable development. For India to realise its 2047 vision, Eastern India must not be left behind – it must be brought to the centre of the nation's development imagination.

Keywords: Development, Eastern India, Governance, Institutional Reform, Viksit Bharat@2047.

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INTRODUCTION

Eastern India (Bihar, Jharkhand, Odisha and West Bengal) stands as a paradox within India's grand developmental saga – a region teeming with potential, yet persistently trailing behind. It boasts abundant natural wealth, a vibrant historical legacy, rich cultural traditions, and a young, energetic population. Yet, it continues to grapple with low per capita incomes, lagging educational outcomes, fragile healthcare systems, and uneven industrial growth (Prakash, 1998; Mitra & Bhattacharyya, 2018; Economic Survey of India, 2024–25). These developmental gaps endure despite repeated waves of economic liberalisation, expanding welfare schemes, and significant investment in infrastructure. This contradiction transforms Eastern India from a regional concern into a national litmus test – for India's dream of becoming a developed nation by 2047 to materialise, the eastern corridor cannot remain in the shadows; it must rise as a vital axis of transformation.

History, too, tells a tale of promise and loss. Once vibrant centres of commerce, education, and administration – cities like Patna, Bhagalpur, Ranchi, and Kolkata – served as intellectual and economic nerve centres in both pre-colonial and colonial eras. But the exploitative economics of colonialism, compounded by post-independence policy neglect and fragmented regional planning, pushed Eastern India to the margins of India's development narrative (Debnath, 2013). Today, the legacies of this marginalisation echo in crumbling infrastructure, endemic poverty, low human development indicators, and widespread unemployment – especially among youth and women.

At the heart of this underperformance lies a critical, often underestimated variable: governance. Governance here transcends bureaucratic protocol – it embodies the architecture of accountability, citizen-state relationships, and the machinery of public service delivery. It is both a reflection and a driver of development. Good governance fosters trust, empowers citizens, builds social capital, and ensures that the benefits of growth reach the last mile. Yet in Eastern India, governance has often suffered from bureaucratic inertia, political flux, fragile fiscal health, and entrenched social divisions – caste, ethnicity, gender – all acting as centrifugal forces (Jenkins, 2004). These challenges are further compounded by weak state capacity in several pockets, leading to erratic service delivery and widespread exclusion. At the heart of this underperformance lies a critical, often underestimated variable: governance. Governance here transcends bureaucratic protocol – it embodies the architecture of accountability, citizen-state relationships, and the machinery of public service delivery. It is both a reflection and a driver of development. Good governance fosters trust, empowers citizens, builds social capital, and ensures that the benefits of growth reach the last mile. Yet in Eastern India, governance has often suffered from bureaucratic inertia, political flux, fragile

fiscal health, and entrenched social divisions – caste, ethnicity, gender – all acting as centrifugal forces (Jenkins, 2004). These challenges are further compounded by weak state capacity in several pockets, leading to erratic service delivery and widespread exclusion.

However, the story is not one of unbroken despair. Recent years have witnessed sparks of innovation – state-led governance experiments that are rewriting old assumptions. Odisha's Mo Sarkar uses technology and citizen feedback to inject transparency into administration. Bihar's Jeevika empowers rural women through self-help groups, transforming livelihoods from the ground up. West Bengal's Kanyashree scheme leverages direct benefit transfers to keep girls in school and delay early marriages, earning international accolades. These initiatives demonstrate that when governance is rooted in local realities and fuelled by political resolve, it can become a transformative force (Manor, 2006).

The trajectories of Indian states since 1991 further illuminate the decisive role of governance. Bihar and Andhra Pradesh, once on similar socio-economic footings, took dramatically different paths post-liberalisation. As Zarhani and others argue, the divergence stemmed less from colonial hangovers and more from political choices, leadership strategies, and institutional agility. It was the ability to balance vertical ties with the Centre and horizontal pressures from local constituencies that determined their respective developmental arcs.

This insight has profound implications for Eastern India. Governance here must be tailored – not templated. A uniform, top-down policy prescription from the Centre risks missing the diversity and complexity of the region. What's needed is a state-specific, context-sensitive governance strategy – one that listens as much as it leads.

Against this backdrop, the article examines governance as a key driver for achieving Viksit Bharat by 2047, with a specific focus on Eastern India. It aims to analyze the deeply ingrained structural and institutional barriers that hinder effective governance, while also highlighting innovative practices that hold transformative potential. The article is structured into five sections. The first section reviews key literature, situating governance within academic and policy debates. The second section presents eastern India's State Profiles, analyzing the political economy and institutional frameworks of Bihar, Jharkhand, Odisha, and West Bengal. The third section examines the structural and institutional bottlenecks hindering effective governance. The fourth section delves into the catalysts of change, highlighting innovative governance practices emerging from Eastern India. Finally, the fifth section concludes the paper by synthesizing key insights and offering targeted policy recommendations to address governance challenges in Eastern India, thereby fostering inclusive and transformative development.

Section I

REVIEW OF LITERATURE

The evolving discourse on governance and development has moved far beyond simplistic metrics of economic growth, steering instead toward a richer, multidimensional understanding anchored in institutions, politics, and citizen engagement. At the core of this evolution lie three closely woven threads: *good governance*, *development*, and *institutional effectiveness*. The World Bank (1997) defined good governance as a framework encompassing transparency, accountability, rule of law, and citizen participation, all geared toward efficient service delivery. Amartya Sen (1999) expanded the canvas of development itself, framing it not as GDP growth alone but as an expansion of human capabilities, freedoms, and agency.

Across global contexts, the governance-development nexus is illuminated through diverse experiences. In the Global North, particularly Europe and North America, inclusive governance institutions, decentralised planning, and technological integration have consistently underpinned developmental progress. Scandinavian nations, for instance, exemplify how equity and social cohesion are sustained through participatory local governance. Meanwhile, the United States and Canada demonstrate how performance-based metrics and digital governance tools have redefined administrative responsiveness and accountability.

Turning to the Global South, East Asian "developmental states" such as South Korea and Singapore offer compelling evidence of how state-led planning, disciplined bureaucracy, and investment in human capital – particularly education – can drive industrial transformation and upward social mobility. Here, the state emerges not merely as a facilitator but as an architect of change. Yet, decentralisation remains a common denominator: from participatory budgeting in Brazil to grassroots planning in Kerala, global experience suggests that empowering local institutions and communities is not optional – it is essential.

This global tapestry of governance models offers profound lessons for India – especially for Eastern India, a region whose development has long been constrained not by the absence of resources but by the persistence of historical neglect, institutional inertia, and socio-political fragmentation. The fundamental question, therefore, is no longer *how much resource is available*, but *what kind of institutions are in place to deliver change*? In this reframed debate, context-aware, inclusive, and locally anchored governance reforms emerge as the true engines of transformation for lagging regions.

A growing body of empirical and comparative research underscores this institutional turn. Zarhani's (2019) influential study of Bihar and Andhra Pradesh

illustrates how governance choices – shaped by political vision, leadership, and institutional agency – can set states on radically different developmental trajectories. Bihar’s prolonged entanglement in caste-based populism and clientelism contrasts sharply with Andhra Pradesh’s technocratic, reform-oriented approach under leaders like Chandrababu Naidu, who prioritised administrative innovation and digital governance. Similarly, Dreze and Sen (2013) argue that inclusive development rests on the pillars of public reasoning, democratic engagement, and institutional responsiveness – elements that remain unevenly distributed across Eastern India. Deeply embedded caste hierarchies, patriarchal norms, and fragmented political landscapes (Roy, 2013) continue to distort governance mechanisms, rendering public service delivery inconsistent and often exclusionary.

Yet, even amidst these structural headwinds, Eastern India is not without hope – or precedent. A set of homegrown, innovative governance models has emerged in recent years that challenge the narrative of stagnation. These experiments – crafted through local knowledge, political commitment, and adaptive strategies – prove that governance is not a fixed constraint but a dynamic tool. It can be reimaged, retooled, and repurposed to serve the people more effectively. Against this backdrop, the present article turns its analytical lens to these very models, seeking to uncover how governance, when grounded in local realities and supported by strategic vision, can serve as a catalyst for unlocking Eastern India’s long-delayed development. The goal is clear: to explore how the region can not only catch up, but lead, in India’s journey towards *Viksit Bharat@2047*.

Section II

STATE PROFILES – POLITICAL ECONOMY AND GOVERNANCE STRUCTURES

Eastern India’s governance architecture is shaped not only by its historical marginalisation but also by deeply embedded state-specific political and institutional dynamics that go beyond broader conceptual discussions. Each state within the region – Bihar, Jharkhand, Odisha, and West Bengal – offers a distinct governance narrative rooted in its unique post-independence evolution, fiscal position, and bureaucratic organisation. Bihar’s governance challenges are compounded by one of the lowest own-tax revenue to GSDP ratios in India (approximately 6.2% as per RBI State Finances, 2023), reflecting limited fiscal autonomy. This constrains its capacity to innovate or scale up welfare delivery, even as schemes like Jeevika offer promise. In contrast, Jharkhand, despite its mineral wealth, struggles with fragmented administrative institutions and weak bureaucratic continuity – over 10 different chief ministers since 2000 – and exhibits the classic symptoms of a

‘resource curse,’ including low reinvestment in human capital and poor mining governance frameworks.

Odisha has demonstrated comparatively stronger fiscal discipline, leveraging mining royalties and externally aided projects (EAPs) to bolster social and disaster-resilience programs. Its adoption of the 5T governance framework – Technology, Teamwork, Transparency, Time, and Transformation – illustrates an administrative model that blends top-down efficiency with citizen-centric delivery. However, inter-district disparities remain stark, especially in KBK (Kalahandi-Balangir-Koraput) regions, where HDI indicators remain far below the state average (GDL Subnational HDI, 2021). West Bengal’s trajectory is marked by administrative politicisation and labour rigidities inherited from its Leftist past. Although the state has moderately improved on indicators like female education and health, its industrial stagnation and inconsistent policy regime have weakened investor confidence and long-term institutional stability.

Another critical governance concern across Eastern India is the limited effectiveness of decentralised institutions. While the 73rd and 74th Constitutional Amendments provided a framework for Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs), fiscal and functional devolution remains minimal in practice. Bihar and Jharkhand, in particular, lag in empowering local bodies with autonomous planning and budgeting powers. Odisha fares better, with experiments in Gram Panchayat Development Plans (GPDs), though implementation gaps persist. Furthermore, digital governance penetration remains uneven. While Odisha and West Bengal have launched mobile-based citizen grievance systems and service portals, Jharkhand’s rural connectivity and digital literacy levels remain among the lowest in India, limiting e-governance adoption.

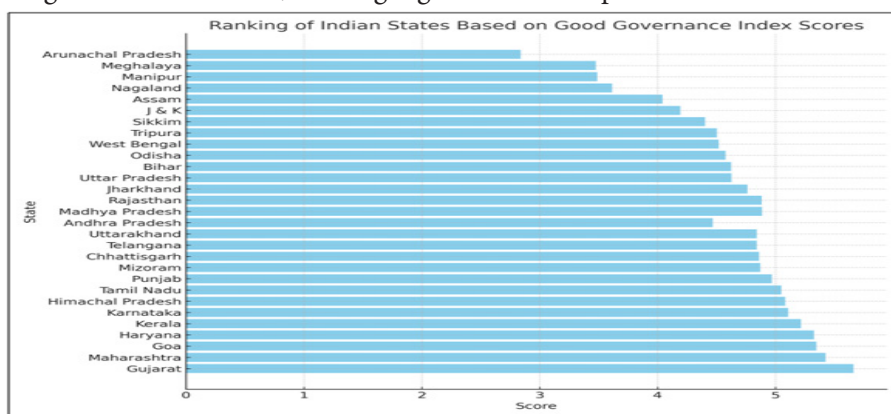


Figure 1: Ranking of Indian States Based on Good Governance Index Scores

Source: Author’s Compilation using report on Good Governance Index Assessment of the state of the state of Governance 2020-21, Department of Administrative Reforms and Public Grievance, GOI.

The regional governance gap is further evidenced by the Good Governance Index (GGI) 2021, where all four states cluster in the bottom half – Bihar (18th), Jharkhand (17th), Odisha (15th), and West Bengal (13th) (See Figure 1). Key lagging areas include public infrastructure, transparency, policing efficiency, and e-services. Additionally, analysis of the Public Affairs Index (PAI) 2022² shows that Eastern states score low on indicators of governance equity and sustainability. This is particularly concerning given that over one-third of India's Scheduled Tribes and a significant share of its multidimensionally poor reside in this region (NITI Aayog, 2021). Importantly, inter-state comparisons highlight differentiated capacities to absorb and implement central schemes. For example, while Odisha has effectively utilised flagship programs like PMAY-G and MGNREGS, fund utilisation rates in Bihar and Jharkhand remain inconsistent. Administrative bottlenecks, staff shortages, and delayed fund flows hamper execution. Moreover, cadre management and bureaucratic autonomy vary widely – with Odisha having a more stable IAS and state services cadre compared to the frequent transfers and politicisation seen in Jharkhand and Bihar. Thus, while the region shares structural burdens – demographic pressures, fiscal limitations, and social stratification – the nature and quality of governance are shaped by state-specific institutional cultures, political legacies, and administrative strategies. These factors must be disaggregated and analysed in context to chart a feasible roadmap toward the goals of *Viksit Bharat@2047*. Eastern India's success in this national ambition will hinge on how effectively it can translate.

Section III

STRUCTURAL AND INSTITUTIONAL BOTTLENECKS

As the previous section underscored, Eastern India is not without instances of innovation or intent. However, the region's developmental potential continues to be throttled by a stubborn web of structural and institutional constraints – less visible than headline policies but far more corrosive in practice. These are not merely operational hiccups; they are foundational bottlenecks that prevent governance from evolving into a genuinely transformative force.

At the heart of the challenge lies a bureaucratic apparatus that remains mired in inertia (Prakash, 1998; Mitra & Bhattacharyya, 2018; Dayal, 1998). Most state administrations in the region are still governed by colonial-era rules of business, opaque hierarchies, and paper-heavy protocols. Staff vacancies – especially at lower administrative tiers – cripple service delivery, while performance-linked evaluations are rare, if not altogether absent. The revolving door of postings and

frequent political reshuffling sap institutional memory and dismantle continuity in implementation. This administrative volatility has created a culture where long-term planning is a casualty of short-term political pressures, and where officers often act as crisis managers rather than developmental strategists.

This fragility extends down to the grassroots. Despite three decades of decentralisation reforms, Panchayati Raj Institutions in states like Bihar and Jharkhand remain fiscally starved, technically understaffed, and functionally constrained. In Odisha and West Bengal, although local self-governments have greater traction, their autonomy is still limited by top-down planning and erratic fund flows. In many tribal and remote districts, local institutions exist more on paper than in practice, often bypassed in critical decisions around land, welfare, or resource use (Sarren, 2017).

Fiscal stress further compounds this paralysis. Eastern Indian states are perennially caught in a low-equilibrium trap of limited own-resource mobilisation and excessive reliance on central transfers. For instance, Bihar and Odisha raise less than 30% of their total expenditure through own tax revenues, drastically reducing their fiscal agility. Even well-intentioned state-led programs often suffer from delayed execution due to poor cash flows, lack of convergent planning, or capacity constraints in fund absorption. Odisha, a partial outlier, has made progress through improved mining royalties and prudent budget management (Irshad, 2024), yet even here, investments in backward districts remain insufficient to reverse decades of neglect.

The political economy of governance in the region also remains volatile. In Jharkhand, fragile coalition governments have meant policy instability, while in Bihar and West Bengal, populist politics have often prioritised identity assertion and electoral symbolism over deep institutional reform (Kumar, 2018; Sarkar 2024). The politicisation of the bureaucracy is not just anecdotal – it shows up in data. An analysis also shows that on average IAS tenure in India is less than eighteen months³, undermining leadership at the top of critical departments like education, health, and rural development.

Beneath these formal structures lie even deeper social and cultural impediments. Caste-based exclusion, gender hierarchies, and the persistent marginalisation of Adivasi voices continue to produce asymmetric access to state services. While welfare architecture exists on paper, ground-level implementation is often distorted by gatekeeping, informal networks, and bureaucratic bias. Tribal populations in regions like Santhal Parganas or southern Odisha still struggle with land rights, language barriers in accessing schemes, and poor representation in local governance.

Technological and infrastructural constraints further blunt the potential of new governance tools. While digital governance holds promise, the rural-urban digital divide in Eastern India is among the widest in the country. Jharkhand and Bihar has less than 50% tele-density in India (TRAI, 2024), while many remote areas lack basic power or mobile connectivity. As a result, digital grievance redressal systems, DBT platforms, and e-health tools remain underutilised. Meanwhile, civic participation remains anaemic. Social audits are sporadic, grievance forums are poorly attended, and awareness of legal instruments like the RTI Act remains minimal among rural households. In these conditions, transparency and accountability become rhetorical ideals rather than actionable norms.

These deeply interwoven challenges cannot be solved through technocratic tweaks alone. They demand a paradigm shift in how governance is envisioned and practised: one that is decentralised yet cohesive, inclusive yet performance-oriented, and responsive yet resilient. As the following case studies will show, such transformation is possible – even within the constraints of Eastern India’s complex political economy. But it requires sustained political will, administrative reform, and, most critically, trust in the agency of citizens themselves.

Section IV

CATALYSTS OF CHANGE: INNOVATIONS IN GOVERNANCE FROM THE EAST

As eastern India grapples with deep-rooted institutional challenges, a parallel story of innovation and reform has quietly taken shape. Across Odisha, Bihar, West Bengal, and Jharkhand, pioneering state-led initiatives have reimaged public administration, community empowerment, and citizen engagement. These governance experiments, tailored to local contexts, are more than just policy interventions – they are blueprints for participatory transformation in regions long considered development laggards (See Table 1). Before we move into detailed case narratives, it is worth acknowledging the strategic significance of these models. Each initiative responds to distinct socio-political challenges, yet together they represent a collective departure from business-as-usual governance. They offer replicable frameworks for embedding accountability, inclusion, and resilience into the core of developmental processes.

MO SARKAR: REDEFINING PUBLIC SERVICE THROUGH THE CITIZEN’S LENS

In Odisha, governance reform has taken a bold turn toward the citizen. With its flagship 5T framework – Teamwork, Transparency, Technology, Time, and

Transformation – the state has launched Mo Sarkar (My Government) as an ambitious attempt to place people at the centre of service delivery. Introduced on October 2, 2019, as a tribute to Gandhian ideals, the initiative signals a shift from top-down control to bottom-up accountability. What distinguishes Mo Sarkar is not just its feedback-based architecture but the seriousness with which that feedback is treated. Phone numbers of service recipients are collected at the point of contact, and high-ranking officials – including the Chief Minister – personally follow up. Praise is rewarded, negligence punished. An integrated IT platform supports this loop, providing real-time analytics to reform underperforming departments. Mo Sarkar has demystified the state for citizens, particularly in sensitive sectors like policing and health, where trust was historically fragile. By turning the citizen into an auditor and agent of reform, the initiative has nurtured a culture of respect, responsiveness, and reform within the bureaucracy.

JEEVIKA: BUILDING LIVELIHOODS, EMPOWERING WOMEN, STRENGTHENING RURAL DEMOCRACY

In Bihar, governance innovation has grown from the ground up. The JEEViKA program, operating since 2006 under the Bihar Rural Livelihoods Promotion Society, is not merely a livelihood project – it is a revolution in rural governance. By mobilizing more than 1.2 crore women into Self-Help Groups (SHGs) and federating them into community-based institutions, JEEViKA has created a living laboratory of decentralized development. At its heart lies a bold proposition: that poor rural women, once organized and empowered, are capable of managing credit, diversifying livelihoods, delivering welfare, and governing themselves. The community-driven structure gives SHGs authority to plan, implement, and monitor interventions. Through this design, JEEViKA has facilitated financial inclusion, promoted sustainable agriculture and enterprise, and expanded access to health, nutrition, and education. Its relevance was especially visible during the COVID-19 crisis, when JEEViKA groups stepped in as first responders – producing PPEs, distributing essentials, and spreading awareness. The initiative stands today not just as a symbol of economic resilience but as a proof of concept that social capital, when institutionalized, can drive rural transformation. As Bihar charts its trajectory toward Viksit Bharat@2047, JEEViKA is poised to remain a cornerstone of its development vision.

Table 1: Comparative Snapshot of Governance Innovations in Eastern India

<i>Aspect</i>	<i>JEEViKA (Bihar)</i>	<i>Kanyashree Prakalpa (West Bengal)</i>	<i>Mo Sarkar (Odisha)</i>	<i>Hamari Yojana, Hamara Vikas (Jharkhand)</i>
Launch Year	2006	2013	2019	2020
Primary Focus	Women's livelihoods & empowerment	Girls' education & delayed marriage	Citizen-centric service delivery	Participatory rural planning
Target Group	Rural women	Adolescent girls	Public service users	Rural communities
Governance Approach	SHGs, decentralized institutions	Conditional cash transfers	Feedback-driven model	Gram Sabhas, local plans
Tech Use	Basic SHG tracking	Online disbursement system	Real-time IT feedback loop	Online planning & training
Key Outcomes	Poverty reduction, women's agency	Higher school retention, less child marriage	Improved accountability & access	Strengthened local participation
Scalability	Very high	High	Growing across departments	Emerging, pilot phase
Challenges	Sustainability, financial oversight	Coverage gaps, delays	Sustained engagement, adaptability	Inclusive participation

KANYASHREE PRAKALPA: CHAMPIONING ADOLESCENT RIGHTS AND ASPIRATIONS

West Bengal's Kanyashree Prakalpa, launched in 2013, illustrates how focused social investment, backed by digital infrastructure and community mobilisation, can challenge entrenched norms. Designed as a conditional cash transfer program, Kanyashree incentivizes girls to stay in school and delay marriage. The K1, K2, and K3 benefits span school years to tertiary education or vocational training – offering both continuity and aspiration. What sets Kanyashree apart is its governance DNA. It leverages an end-to-end digital platform – Kanyashree Online 2.0 – for registration, monitoring, and fund transfer, ensuring transparency and efficiency. But the scheme goes beyond technical prowess. It consciously engages local institutions – schools, Panchayats, and urban bodies – thus embedding adolescent empowerment into the local governance framework. With over 7 million beneficiaries, the initiative has led to measurable declines in child marriage and school dropouts, while boosting self-confidence and civic engagement among girls. Initiatives such as Kanyashree Clubs and Sabhas foster peer solidarity and activism, turning beneficiaries into

change-makers. More than a welfare scheme, Kanyashree represents a moral and institutional commitment to reshaping gendered futures through governance.

HAMARI YOJANA, HAMARA VIKAS: PLANNING FROM THE GRASSROOTS IN JHARKHAND

Jharkhand's Hamari Yojana, Hamara Vikas exemplifies the power of bottom-up planning. Launched to strengthen participatory development in rural areas, this initiative champions the centrality of Gram Sabhas in identifying needs, setting priorities, and shaping project execution. Unlike top-heavy bureaucratic planning, this model locates agency in the village, ensuring that plans are both locally relevant and widely owned. Its success lies in how it retools existing institutions. Training modules for Panchayati Raj representatives and volunteers build capacity in finance, governance, and implementation. The program also acts as a bridge, aligning village-level plans with state and central schemes to ensure coherence and efficient resource use. By promoting transparency, community oversight, and inclusive participation, Hamari Yojana, Hamara Vikas revives the constitutional vision of participatory democracy. In regions marked by tribal marginalization and infrastructural deficits, it offers a pathway to context-sensitive and just development.

Section V

CONCLUSION AND POLICY RECOMMENDATIONS

In the evolving story of India's development, Eastern India is quietly but decisively shaping a new narrative – one where governance is not imposed from above but grown organically from the ground up. As the country marches toward the ambitious goal of becoming a Viksit Bharat by 2047, the governance experiments in Odisha, Bihar, West Bengal, and Jharkhand offer a masterclass in how regional innovation can power national transformation. Initiatives like Mo Sarkar in Odisha, JEEViKA in Bihar, Kanyashree in West Bengal, and the emergent Hamari Yojana, Hamara Vikas in Jharkhand go beyond bureaucratic reforms; they embody a philosophy – of putting people before process, and participation before prescription. These are not just schemes; they are living models of citizen-centric governance – where local cultures, socio-economic realities, and grassroots wisdom shape the development agenda.

The success of JEEViKA and Kanyashree is especially instructive. By empowering women, enhancing financial inclusion, and expanding access to education, they've catalysed upward mobility in regions long constrained by structural poverty. In contrast, the newer Jharkhand initiative and Odisha's feedback-driven Mo Sarkar mark a second generation of governance reform – anchored in transparency,

participatory planning, and direct citizen-state interface. Together, these initiatives reveal a critical truth: the path to Viksit Bharat will not be paved by uniformity, but by the courage to be locally relevant. Eastern India, often portrayed as a development laggard, may well emerge as a laboratory for democratic deepening and inclusive growth – if supported by bold policy innovation and sustained political will. To scale the promise of these region-specific governance models and unlock the full potential of Eastern India as a development frontier, five transformational shifts are essential:

1. Governance as a Dynamic Feedback Loop

In a Viksit Bharat, governance must evolve from being merely rule-bound to being *responsive and reflexive*. Real-time, decentralised monitoring systems – driven by both qualitative and quantitative insights – can ensure that policy design is continuously refined by lived realities. Governance should listen, learn, and adapt.

2. Breaking Down Silos: Towards Seamless Statecraft

JEEViKA and Kanyashree succeed because they straddle multiple domains – education, health, social protection, and livelihoods. The future lies in this integrated governance architecture, where line departments work not in isolation but as enablers

3. Strengthening the Last Mile: Capacity and Trust

No policy can succeed where implementation is weak. Strengthening the capabilities of local actors – from Panchayati Raj Institutions to SHGs and frontline workers – is crucial. Initiatives like *Hamari Yojana*, *Hamara Vikas* must be seen not just as planning exercises but as leadership incubators that can democratise development from below.

4. Democratising Decision-Making

Inclusivity is the bedrock of effective governance. Governance models must actively *centre the voices of women, youth, Dalits, Adivasis, and minorities* in both design and delivery. Eastern India's demographic diversity offers the ideal ground for building deep participatory governance – where citizens are not just beneficiaries but co-creators of public policy.

5. Digital by Design, Not Just Digitised

The digital revolution must be harnessed for inclusion, not just efficiency. Building smart, secure, and user-friendly tech interfaces – like those in Kanyashree and Mo

Sarkar – can reduce leakage, build trust, and create data-rich governance ecosystems that respond to real needs in real time.

In conclusion, if India is to become a *Viksit Bharat* by 2047, it must embrace the idea that governance cannot be exported – it must be co-created. Eastern India, with its legacy of struggle and resilience, holds a unique promise. By scaling these bold, region-specific models, India can convert its developmental asymmetries into laboratories of reform. These governance innovations show us that the future lies not in replicating best practices blindly, but in nurturing *next practices* – those that are locally rooted, digitally empowered, and socially inclusive. Eastern India, once seen as peripheral to India's growth story, could well become its pulse point – the place where India learns how to govern with empathy, equity, and effectiveness. Such regionally anchored, citizen-driven governance is not just a step toward better development – it is the foundation of a more democratic, resilient, and truly developed India.

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ENDNOTE

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INTER-STATE COORDINATION IN DISASTER MANAGEMENT: CHALLENGES AND FUTURE DIRECTIONS FOR REGIONAL RESILIENCE IN EASTERN INDIA

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Abstract

Eastern India, comprising Bihar, Jharkhand, Odisha, and West Bengal, frequently experiences natural disasters such as floods, cyclones, heat waves, and droughts. Given the geographic contiguity and ecological inter-connectedness of this region, such hazards often have trans boundary consequences, affecting multiple states simultaneously or sequentially. For instance, floodwaters from one state often flow into another due to shared river systems, and cyclones striking the coast impact vast inland areas across state borders. However, despite the recurring nature of such events, inter-state coordination in disaster preparedness, mitigation, and response remains relatively underdeveloped. This study critically examines the role of inter-state coordination in disaster management within Eastern India and analyses the related challenges to suggest future directions for enhancing regional resilience through cooperative mechanisms. For this purpose, the article explores relevant policy frameworks, case studies, state disaster management plans, government reports, and academic studies. In the times marked with increasing frequency and intensity of disasters due to climate change, this paper underscores the urgent need for integrated regional strategies towards a sustainable and inclusive disaster risk governance model in Eastern India.

Keywords: Agriculture, Eastern India, Governance, Labour, Poverty, Politics.

INTRODUCTION

Eastern India, comprising states like Bihar, West Bengal, Odisha, and Jharkhand, is marked by diverse geographical and climatic features that make it highly vulnerable

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to a spectrum of natural disasters. This region lies in the subtropical monsoon climatic zone, which results in seasonal floods, cyclones, heatwaves, droughts, and earthquakes (Joy, 2021; Gupta, 2022).

The disaster dynamics in Eastern India is particularly complex due to the interconnectedness of hydrological systems, shared ecosystems, and socio-economic interdependencies (Wei et al., 2021). This interdependence across state boundaries necessitates a shift from isolated disaster response mechanisms to integrated, inter-state coordination strategies. Effective disaster risk reduction (DRR) in such a context requires coordinated early warning systems, joint contingency planning, resource sharing, and real-time communication between states.

Despite the establishment of frameworks like the Disaster Management Act (2005) and the Sendai Framework for Disaster Risk Reduction (2015–2030), the regional operationalisation of inter-state coordination remains a significant governance challenge. Therefore, the present study attempts to analyse the challenges and examine the opportunities by reflecting on the success stories of coordinated responses in this region, and seeks to understand how regional resilience can be strengthened through institutional and policy-level reforms.

LITERATURE REVIEW

India's disaster management framework, established under the Disaster Management Act, 2005, mandates preparedness and response across all administrative levels (GoI, 2005; NDMA, 2009; NDMA, 2019). However, it lacked explicit provisions for inter-state collaboration during transboundary disasters – a gap recently addressed by the Disaster Management (Amendment) Act, 2025, enforced on April 9, 2025, though its impact remains to be assessed. Eastern India – covering Bihar, Odisha, West Bengal, and Jharkhand – is especially vulnerable to recurring floods and cyclones (IMD, n.d.). Events like the 2008 Kosi floods, which affected over 2.3 million people in Bihar, underscore the need for robust inter-state and international coordination (Gangwar et al., 2022). Similarly, the Mahanadi water dispute between Odisha and Chhattisgarh illustrates tensions over upstream interventions (Ashok, 2018). Emerging heatwave vulnerabilities in the region further necessitate collaborative heat action plans (Kumar & Chakraborty, 2025). While India aligns with global frameworks like the Sendai Framework and has revised its national plans accordingly (NDMA, 2024; UNISDR, 2015), the lack of institutionalised inter-state mechanisms persists. As the National Plan notes, states may seek mutual support (NDMP, 2019), yet formalised coordination remains essential for regional resilience.

RESEARCH OBJECTIVES AND METHODOLOGY

This study broadly aims to examine how Eastern Indian states of Bihar, West Bengal, Odisha, and Assam, which are frequently exposed to regional hazards, coordinate disaster management efforts in the face of transboundary hazards such as floods, cyclones, and heatwaves. It seeks to explore the common disaster patterns in the region, assess institutional and administrative factors influencing inter-state coordination, and understand the mechanisms, both formal and informal, that facilitate or hinder such cooperation. The research adopts a qualitative approach focusing on multiple case studies of significant transboundary disasters, supported by document review and secondary data analysis. The study relies on triangulation of multiple secondary sources, including official reports, policy documents, and academic literature, to provide a robust and validated understanding of regional coordination challenges and opportunities for enhancing inter-state disaster governance in one of India's most vulnerable zones.

TRANSBOUNDARY HAZARDS AND REGIONAL VULNERABILITY IN EASTERN INDIA

The eastern Indian states of Bihar, Jharkhand, Odisha, and West Bengal are highly susceptible to a wide range of natural and anthropogenic hazards, making them some of the most disaster-prone regions in the country. Eastern India, in general, is highly vulnerable to natural hazards, particularly floods, due to its geographical location, climatic variability, and socio-economic conditions. States of Bihar, Jharkhand, West Bengal alongwith Assam are consistently categorised as high-risk zones for climate-induced extreme events. Among these, flooding, exacerbated by intense monsoonal rainfall, river erosion, and poor drainage infrastructure, emerges as a major hazard, posing significant threats to food security, livelihoods, and the achievement of Sustainable Development Goals (SDGs) in the region (Sam et al., 2021).

Bihar, characterised by its predominantly rural population and vulnerable geo-climatic setting, experiences recurring floods, earthquakes, droughts, fire incidents, lightning and extreme temperature events. Approximately 73% of Bihar's geographical area is flood-prone, with rivers originating in Nepal contributing to high sedimentation and monsoon-driven inundations that account for nearly 30–40% of India's annual flood damages. Moreover, seismic activity poses a significant risk as major parts of the state fall under seismic zones IV and V, making it prone to high-intensity earthquakes such as the devastating quake of 1934 (Bihar State Disaster Management Authority [BSDMA], n.d.; Kumar, Garg, & Sharma, 2019). In addition, parts of southern and southwestern Bihar regularly suffer from

agricultural droughts due to erratic rainfall and the growing impacts of climate change.

Jharkhand, sharing similar climatic challenges, is increasingly exposed to multi-hazard threats including heat waves, floods, cyclones, lightning strikes, and forest fires. Its vulnerability is amplified during the pre-monsoon and monsoon periods (March to October), where temperature extremes and hydrometeorological events occur with greater frequency. The state is also among the 23 heat-prone regions of India and experiences a rising trend in disaster occurrences due to both natural and anthropogenic drivers (DST& SDC, 2021).

Odisha's subtropical location and extensive coastline of 480 km contribute to its high vulnerability to hydro-meteorological hazards. The state faces two cyclone seasons – April to May and September to November – with a disproportionately high share of the cyclonic storms that cross India's eastern coast. Around 35% of all such storms have historically impacted Odisha, often accompanied by storm surges and coastal inundation. River systems like the Mahanadi and its tributaries exacerbate the flood risk, affecting large areas regularly. The western parts of Odisha also face recurrent droughts, leading to crop failures, water stress, and out-migration, while flash floods, landslides, and moderate earthquakes pose additional threats (Swain, 2024; OSDMA, 2019).

West Bengal, too, is acutely exposed to multiple hazards, particularly cyclones, floods, and droughts. The state's geographical location along the Bay of Bengal and the lower Gangetic basin makes it highly vulnerable to both inland flooding and coastal cyclonic disturbances. The region has faced some of the most severe cyclones in history that devastated large parts of the Sundarbans and adjacent districts. In addition, river systems such as the Teesta, Damodar, Kansabati, and Subarnarekha contribute to frequent flood events across the state's plains (West Bengal Department of Disaster Management, 2015). Climate change has intensified these events, making them more frequent and severe.

Recognizing these shared vulnerabilities, the national climate vulnerability assessment has identified Bihar, Jharkhand, Odisha, and West Bengal among the most climate-sensitive states in India, stressing the need for prioritised adaptation and regionally coordinated mitigation efforts (DST& SDC, 2021). The interconnectedness of various hazards in these states necessitates a coordinated regional approach to disaster management. The Sendai Framework for Disaster Risk Reduction (2015–2030) emphasizes the importance of regional collaboration in managing such transboundary risks. Besides, the intersection of high exposure, dense populations, and socio-economic fragility necessitates a holistic, multi-hazard risk governance approach tailored to the ecological and developmental contexts of these states.

Eastern India has faced multiple high-impact disasters in recent years, underscoring the need for stronger and more coherent disaster risk governance, particularly in the area of inter-state coordination. Events such as Cyclone Amphan (May 2020) and Cyclone Fani (May 2019) affected multiple states and exposed systemic vulnerabilities in managing large-scale emergencies. The super cyclonic storm Cyclone Amphan severely impacted and caused massive destruction to eastern India, especially West Bengal and Odisha, leading to more than hundred fatalities and widespread infrastructural damage amounting to US\$ 13 billion in West Bengal alone. It had directly affected more than six crore people in Bengal, and around 45 lakh people in Odisha. The simultaneous COVID-19 pandemic further complicated evacuation and relief efforts due to social distancing requirements, creating additional pressure on response agencies (Zargar, 2020). Although inter-state support was not prominently documented during the crisis, but there are evidences of help sought by the West Bengal Chief Minister from the neighbouring state of Odisha, along with the central government. The scale and complexity of overlapping emergencies highlighted the need for institutionalised coordination frameworks across state lines for joint response planning, medical logistics, and humanitarian relief. (Sarkar, Basu, & Roy, 2020). Similarly, Cyclone Fani, which made landfall in Odisha in May 2019 as an extremely severe cyclonic storm, led to the evacuation of over a million people and caused extensive damage to infrastructure and livelihoods. While Odisha's early warning systems and evacuation efforts were praised, restoration of essential services faced challenges, particularly due to the shortage of manpower for repairs and relief distribution. The post-disaster restoration phase reflects the limitations in surge capacity and raises the possibility that more collaborative interstate support mechanisms could have mitigated delays in service resumption (Wired, 2019; PTI, 2019).

Eastern states of Bihar, Jharkhand, Odisha, and West Bengal continue to experience prolonged heatwaves, with temperatures soaring way above 40°C almost every year over the past decade. Heatwaves, until recently, were not formally recognised as disasters under the Disaster Management Act 2005 despite the increasing frequency and severity of heatwaves, leading to inadequate preparedness and response strategies. This led to fragmented and reactive response strategies across states (Arasu & Pathi, 2024; Dash, 2024). A Parliamentary panel in 2025 recommended the inclusion of heatwaves in formal disaster management plans, acknowledging a national and inter-state policy gap in dealing with climate-induced hazards (PTI, 2025). The absence of a unified strategy highlights the need for coordinated heat action plans across adjoining states, especially those sharing climatic zones and vulnerable populations.

The 2017 monsoon floods also revealed systemic weaknesses. Widespread flooding affected states such as Bihar, Assam, Jharkhand, Odisha, and West Bengal,

impacting over 30 million people across India. According to ActionAid (2017), the floods led to large-scale displacement, destruction of homes and crops, and prolonged disruptions in livelihoods. While state-level responses were mobilised, the lack of a coordinated response framework led to overlapping efforts and delays in aid delivery. These shortcomings underscore the importance of building a collaborative regional disaster response system, particularly for flood-prone eastern states that are hydrologically interconnected. The recurring monsoon-induced flooding in the Damodar basin further illustrates the need for improved coordination. In August 2021, heavy rainfall in Jharkhand led the Damodar Valley Corporation (DVC) to release significant volumes of water from Maithon and Panchet dams. The release contributed to flooding in the downstream districts of West Bengal, including Howrah, Hooghly, South 24 Parganas, Purba and Paschim Bardhaman. Concerns were raised by the West Bengal government regarding the timeliness and scale of information shared about the release of water (Basu, 2021). This indicates the lack of a clearly defined inter-state protocol for reservoir management and real-time communication during high-intensity rainfall events, reinforcing the need for a basin-wide, collaborative flood management strategy.

Together, these events emphasize that while individual states have developed capacities in disaster response, there remains a pressing need for integrated inter-state coordination mechanisms to address transboundary risks, optimise resource sharing, and ensure timely and efficient responses to complex and cascading disasters.

EXISTING INTER-STATE COORDINATION MECHANISMS

Inter-state coordination in disaster management in Eastern India has progressed significantly over the last two decades, driven by recurring transboundary disasters and institutional mandates. Even though an integrated framework dedicated solely to inter-state coordination for all disaster types is yet to be erected, a multi-layered approach leveraging national mandates, regional platforms, issue-specific collaborations, and modern technological solutions is evolving. In this context, formal protocols exist under national legal frameworks, but much of the on-ground cooperation also depends on informal, ad hoc mechanisms coupled with varying degrees of institutionalisation and operational consistency.

The National Disaster Management Authority (NDMA), established under the Disaster Management Act, 2005, is the apex body responsible for laying down policies, plans, and guidelines for disaster management across India. These guidelines inherently emphasize the need for inter-state cooperation, particularly in situations where the impact transcends administrative boundaries. For instance, the NDMA's guidelines on flood management or cyclone preparedness outline

protocols that implicitly require coordination in early warning dissemination and response strategies between potentially affected states. The Act further mandates the creation of State Disaster Management Authorities (SDMAs) and District Disaster Management Authorities (DDMAs). While their primary jurisdiction is within their respective states, the Act envisions a coordinated approach. Section 38(2)(e) of the Act, for example, tasks the SDMAs with coordinating and monitoring the implementation of the National Policy, the National Plan and the State Plan. This implies a responsibility to align their actions with national directives that often necessitate inter-state collaboration. Similarly, DDMAs in bordering districts are expected to communicate and coordinate on preparedness and response measures for shared hazards, although formal, standardised protocols for this are still evolving. The National Disaster Response Force (NDRF), constituted under Section 44 of the 2005 Act, is a specialised force capable of responding to disasters across the country. Its deployment in transboundary events inherently requires close coordination with the administrative machinery of multiple affected states. The NDRF acts as a central responder and facilitator, often bridging communication gaps and assisting in the joint execution of rescue and relief operations. The 2005 Act, though a landmark legislation, largely focuses on a centralised command structure with State Disaster Management Authorities (SDMAs) and District Disaster Management Authorities (DDMAs). While it mandates the National Disaster Management Authority (NDMA) to develop policies and guidelines, it provides limited clarity on frameworks for horizontal coordination between states (GoI, 2005). The National Platform for Disaster Risk Reduction (NPDRR) serves as a multi-stakeholder forum where inter-state coordination strategies can be discussed and formulated. Furthermore, the National Disaster Response Force (NDRF), while a central force, plays a crucial coordinating role when deployed in multi-state disaster scenarios.

The legal framework for inter-state coordination has been further strengthened with the enactment of the Disaster Management (Amendment) Act, 2025, which institutionalises several mechanisms critical for collaborative disaster governance. The Act empowers state governments to establish State Disaster Response Forces (SDRFs) and Urban Disaster Management Authorities (UDMAs) in metropolitan regions, enhancing localised and regional coordination. Moreover, the Act formally recognises the role of the National Crisis Management Committee (NCMC) as a statutory mechanism for managing inter-state emergencies, streamlining coordination across central ministries and affected states. The amendment also mandates the creation and upkeep of state-level disaster databases, facilitating cross-border information sharing, early warning dissemination, and synchronised disaster response (GoI, 2025). These reforms complement the pre-existing mandates of the Disaster Management Act, 2005 and align with recommendations of the 15th

Finance Commission regarding performance-based resource allocation and inter-state disaster preparedness (Kumar, n.d.; Press Information Bureau [PIB], 2023).

The Inter-State Council (ISC), established under Article 263 of the Constitution of India, is designed as a forum for discussing matters of common interest between the Union and the States, and among the States themselves. While its primary focus is broader than just disaster management, the Council has the potential to play a significant role in fostering better inter-state coordination on this front. For instance, discussions on water resource management impacting flood risks and broader environmental policies with disaster implications have been brought before the Council (ISC, n.d.). Reports from the Sarkaria Commission, Punchhi Commission and Second Administrative Reforms Commission have also emphasized the Council's potential role in fostering inter-governmental cooperation on various sectors, including disaster management (ISC, n.d.; ISC, 2010; Government of India [GoI], 2008). However, due to its infrequent meetings, its direct and extensive impact on specific transboundary disaster coordination protocols in Eastern India has been limited, with Zonal Councils and issue-specific bodies often playing a more direct role (Gupta & Bahuguna, 2022).

The Eastern Zonal Council (EZC), established in 1956, provides a crucial regional platform for Bihar, Jharkhand, Odisha, and West Bengal to address shared vulnerabilities, including disaster management. Comprising Chief Ministers and relevant ministers, the Council facilitates information sharing on preparedness and response, policy coordination for harmonised strategies, joint planning for transboundary hazards, and the coordination of resource mobilisation during large-scale events (Ministry of Home Affairs [MHA], n.d.). It has occasionally deliberated on cross-border disaster risks, especially in the aftermath of major floods or cyclones (PIB, 2015). While specific minutes detailing extensive disaster management coordination are not available, there are evidences of Council meetings having addressed related issues such as water sharing and flood management in the river basins impacting the four states (ANI, 2023).

Several disaster-related risks in Eastern India, particularly floods, originate from shared river basins. In this context, inter-state coordination has emerged through institutions such as the Ganga Flood Control Commission (GFCC), established in 1972 under the Ministry of Jal Shakti, which facilitates flood control planning and its management through inter-state consultation among Bihar, Jharkhand, Uttar Pradesh, and West Bengal; and the Damodar Valley Corporation (DVC), a statutory body managing flood moderation, hydropower, and irrigation infrastructure across Jharkhand and West Bengal (Raju & Taron, 2019). The Central Water Commission (CWC) plays a crucial role in monitoring water levels and issuing flood forecasts that are relevant across state borders (PIB, 2021). The principle of Integrated Water Resources Management (IWRM) further underscores the need

for coordinated approaches within the river basins of the region, encompassing disaster risk reduction (Shah & Van Koppen, 2014). These mechanisms have the technical mandate to assess and plan transboundary water management, but they are underutilised for disaster preparedness and joint flood mitigation. Moreover, coordination gaps often arise in high rainfall years. For example, the 2021 flooding in Bihar and West Bengal saw local media and public officials raising concerns over dam releases without adequate downstream alerts in various river basins affecting the region (Balani, 2014; Davies, 2021; Ray, 2021).

Besides, the Central Water Commission's (CWC) Flood Early Warning System (FEWS) uses telemetry and hydrological models to forecast floods for major rivers in Eastern India. Similarly, during Cyclone Fani (2019), the India Meteorological Department (IMD) provided timely state-specific warnings and track predictions to Odisha and West Bengal via various channels, facilitating coordinated evacuations and resource pre-positioning (IFRC, 2019). Similarly, West Bengal's SDMA (WBSDMA) has its own alert system to issue early warnings and forecasts (PTI, 2019). Digital platforms like Common Alerting Protocol (CAP), Integrated Flood Warning System (IFLOWS), and Real-Time Hydro-Met Data Networks offer new opportunities for coordinated early warning systems, but interoperability across state agencies remains a bottleneck (PIB, 2021).

Beyond formal structures, inter-state coordination often occurs on an issue-specific or ad-hoc basis, particularly for events like disease outbreaks or environmental emergencies. State health departments coordinate with each other and with the Union Ministry of Health and Family Welfare during epidemics and other health emergencies of considerable scale (Ministry of Health and Family Welfare [MoHFW], n.d.). Similarly, state forest departments collaborate with national bodies like the National Green Tribunal (NGT) and the Ministry of Environment, Forest and Climate Change (MoEFCC) for environmental disasters impacting multiple states (Ministry of Environment, Forest and Climate Change [MoEFCC], n.d.).

CHALLENGES TO EFFECTIVE INTER-STATE COORDINATION IN EASTERN INDIA

Despite growing awareness of disaster risks and the need for cooperative approaches, effective inter-state coordination in Eastern India faces significant systemic, institutional, and operational challenges that hinder the development of a cohesive regional disaster management framework.

A key impediment is the absence of formal mechanisms for inter-state coordination within India's disaster governance. The Disaster Management Act, 2005, lacks explicit directives for inter-state cooperation, leading to often ad hoc

responses during transboundary disasters (GoI, 2005). Coordination largely relies on the discretion of senior officials or Union Ministries, lacking clear legal and procedural foundations. Although this concern has been addressed by the Disaster Management (Amendment) Act, 2025, and explicit provisions have been made for ensuring inter-state coordination in case of transboundary disasters, drawing any analysis on their implementation will be premature in the current context.

Also, differing political priorities, administrative approaches, and varying capacities among Eastern states frequently impede collaborative action. For instance, rescue operations and resource mobilization following Cyclone Amphan (2020) experienced delays potentially linked to political tensions and differing risk communication strategies, coupled with the twin challenge posed by Covid-19 (Moula, 2020). Furthermore, disparities in budgetary allocations, preparedness levels, and financial assistance influence states' ability and willingness to engage in effective collaboration (Nandy, 2019; Das, 2019).

While national agencies like IMD and CWC provide hazard forecasts, their effective integration and harmonised interpretation at the inter-state level remain a challenge. Timely and consistent alerts often do not reach local institutions in shared risk zones, such as the Kosi (Nepal–Bihar) or Subarnarekha (Jharkhand–Odisha–West Bengal) river basins. This results in uncoordinated evacuation measures within interconnected hazard areas (Deshpande, 2022; Ministry of Earth Sciences [MoES], 2018). Also, the exchange of timely and accurate data, crucial for coordinated risk management, is hampered by data silos between state agencies in Eastern India. For example, the sharing of real-time water discharge information from upstream dams in Jharkhand to downstream authorities in Odisha and West Bengal is often inadequate, contributing to flooding without sufficient early warning (OB Bureau, 2024; Roy, 2021).

Besides, uneven infrastructure development across states, including embankments, cyclone shelters, health facilities, and communication networks, creates coordination difficulties (Kumar & Acharya, 2011). For example, Odisha's significant investments in disaster resilience post-Cyclone Phailin (2013) contrast with the limited cyclone shelter availability in neighbouring Jharkhand, impacting joint evacuation and sheltering efforts (Jena & Kouamé, 2023).

Moreover, while the Eastern Zonal Council and Inter-State Council are mandated to facilitate coordination between the states concerned, disaster management has often received insufficient priority on their agendas. Furthermore, they are mere advisory bodies, and the limited representation of ground-level actors in these forums reduces the practical relevance of discussions (Gupta & Bahuguna, 2022; GoI, 2008).

To sum it up, despite the existence of a comprehensive legislative and institutional framework in India, which offers a foundation for coordinated disaster response, it is marked by gaps in horizontal coordination between states. And, the path to inter-state disaster coordination in Eastern India is impeded by institutional fragmentation, political and administrative divergences, and technical limitations.

FUTURE DIRECTIONS FOR ENHANCING INTER-STATE COORDINATION IN EASTERN INDIA

Based on the above analysis, it is evident that enhancing inter-state coordination for disaster management in Eastern India requires not only policy reforms and infrastructural improvements but also a cohesive approach to build trust, enhance transparency, and prioritise collaborative action across all levels of governance. In this context, the following future directions aim to improve inter-state coordination and facilitate a regionally resilient disaster management framework in Eastern India:

- Operationalize the Disaster Management (Amendment) Act, 2025 by formulating step-by-step inter-state response protocols, establishing standing joint committees, creating integrated regional disaster databases, and institutionalising regular simulation drills across states.
- Establish structured high-level dialogues among state leaders and form joint task forces to proactively address transboundary disaster risks. Simultaneously, strengthen the disaster governance role of regional bodies like the Eastern Zonal Council (EZC) and incorporate inter-state coordination mechanisms into State and District Disaster Management Plans (SDMPs and DDMPs).
- Accelerate the integration of interoperable digital platforms across states for real-time sharing of early warnings, hazard data, and resource information. While national efforts, such as NDMA's proposed National Disaster Communication Network (NDCN), highlight this need, full cross-state interoperability remains in progress.
- Develop a standardised regional framework for interpreting and disseminating national early warnings, complemented by joint training programs to build a shared understanding of risk communication and coordinated response among agencies across states.
- Formalise inter-state data-sharing agreements, building on the National Data Sharing and Accessibility Policy (NDSAP), to ensure reliable and timely exchange of disaster-related information. While foundational principles exist, tailored agreements specific to disaster scenarios remain largely undeveloped.
- Formulate a regional resource mobilisation plan for mutual assistance, and launch joint capacity-building initiatives to address variations in preparedness

levels. Though NDMA guidelines promote resource sharing and joint trainings, a unified plan encompassing all Eastern states is yet to be fully realised.

- Prioritise disaster risk reduction and inter-state collaboration on the agenda of the EZC, with mechanisms to include grassroots stakeholders in deliberations to enhance the contextual relevance and implementation of regional strategies.

CONCLUSION

The present study of inter-state coordination in disaster management within Eastern India highlights the critical need for effective collaboration among the states of Bihar, West Bengal, Odisha, and Jharkhand, particularly in the face of shared vulnerability to natural disasters such as floods, cyclones, and heatwaves. While there has been a growing recognition of the importance of regional cooperation, the existing frameworks are often limited by institutional, administrative, and resource-related challenges. Therefore, strengthening these coordination mechanisms is essential for fostering regional resilience and minimising the socio-economic impacts of disasters. Therefore, the present study advocates a more collaborative, data-driven, and inclusive approach to disaster risk management in Eastern India, and puts across the understanding that encouraging stronger partnerships for enhanced community resilience in the region will strengthen Eastern India to better withstand future disasters, thereby enabling it to contribute cumulatively to the broader goal of national disaster resilience.

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DWINDLING TRADITIONAL WATER BODIES IN EASTERN INDIA: PROSPECTS OF REVIVAL FOR IRRIGATION AND OTHER USES

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Abstract

Eastern Indian states are water rich states. Historically, the region had abundance of traditional water bodies like ponds, tanks, kata, khata, ahar, pynes and nala etc which have dwindled fast in las few decades. The data reveals that the gap between demand and supply of water is widening in the country and Bihar remains in the severe category of the gap, which will have its economic, environmental, social and health implications. Further, in the eastern region of India, ground water development has not been at the desired level in the sharp contrast to other regions of India. The issue has been largely ignored by both policy masters and social scientists. Thus, there is urgent imperative to look for judicious and optimal use of the huge reserve of ground water resources in the region that can bring about sizable improvements in the economy of the region, which is basically agrarian. There should be appropriate policy reforms for conservation of ground water through revival of these traditional water bodies in the region.

Keywords: Tanks/Ponds, Ground-Water, Decline, Irrigation, Socio-economic Uses, Eastern India

INTRODUCTION

The fast growing population, degrading environment and climate change, especially in Eastern India have created the urgent need of conserving surface water and recharging underground water for future. Despite being rich in water resources, the region's per capita usable water availability is much below the Indian average

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due to high density of population. The situation varies among the states within the region, viz. per capita water availability is highest in Odisha as compared to the lowest in Bihar. Ironically, net annual ground water availability is very high (70 percent of the region) in Bihar and West Bengal combine (TERI: 2017). It is worth noting that the major source of water has been the rain fall and the region has good rainfall. But the rain fall has always been inconsistent even in the monsoon season due to inconsistent forest area. It requires tapping of rain water harvesting. The management of rainwater harvesting through artificial and natural water bodies (except rivers) has been a feature of this region. Once Willcocks (1930) had placed the water system of Bengal (including present Bihar and Jharkhand) equal to the best in the world of Nile region. Ponds/tanks, Ahar, Pynes etc. are highest existing form of water resources in the region. These water bodies have declined fast in the region but the policy of revival of these water bodies has not been on priority as compared to southern and other regions of India. Data shows that the emphasis on policy and investment for improvement of these water bodies (tanks etc.) has been more in southern states as compared to eastern states, especially, Bihar, Jharkhand, Odisha and West Bengal (Pant & Verma: 2010).

The distribution of rainfall in the states of Eastern Region, reflected in the following table-1, shows that actual rainfall is declining from average rainfall. Surface water bodies are the most potential source of rain water harvesting and utilising the stored water during scarcity period. These water bodies are known by different names in different areas ponds, tanks, pokhar, talab, Ahar, Pynes, khata in Bihar and Jharkhand and pukur, pokhar, kata, etc. in states like West Bengal and Odisha. The Water Bodies Census Report 2024 reveals that the region has maximum number of such bodies in the form of different names amounting to more than fifteen lakhs and size (water spread area) ranges from .01 ha to 100 ha. The following table 2 presents the real picture in the states under study.

Table 1: Deviation of Rainfall from Normal to Actual in 2023

<i>States of Eastern India</i>	<i>Actual Rainfall (mm)</i>	<i>Average Rainfall (mm)</i>
Bihar	991.35	1222.25
Jharkhand	1108.18	1325.58
Odisha	1401.74	1469.97
West Bengal	1819.0	1739.25

Source: India-WRIS, 2023, <http://indiawris.gov.in/wris/#/>

Table 2: Availability of Waterbodies (in numbers)

<i>State</i>	<i>Type of Water bodies</i>					<i>Total</i>
	<i>Ponds Tanks</i>	<i>Lakes</i>	<i>Reservoir</i>	<i>Percolation tanks</i>	<i>others</i>	
Bihar	39248	2693	2126	312	1414	45793
Jharkhand	91580	135	3763	12008	112	107598
Odisha	174696	579	1606	4474	482	181837
West Bengal	464859	1349	280585	610	77	747480

Source: calculated on the basis of Water Bodies Census Report – 2024 by jalshakti-dowr.gov.in

USES OF GROUND WATER

The ground water is used in irrigation, cultivation of aqua fruits, fisheries (pisciculture), domestic uses and social cultural uses. It is said that nearly 90 percent of ground water is used for irrigation for different crops which poses danger of fast depletion of ground water table on one hand and shrinking average landholding size on the other in eastern region. In such situation, conserving and recharging available ground water have become urgent attention. There is urgent need of shifting to climate resilient agricultural practices. Water use efficiency needs to be improved at grassroots level (Kumar et al: 2024). This can be done only by conserving and recharging ground water by reviving and improving the traditional water bodies. The policy of mechanical tube wells (electric or diesel operated pumps) for fetching ground water for agriculture during 1970s has adversely affected the water table without recharging it. So far Bihar is concerned, its primary source of water has been ground water with annual extraction of 29 BCM (billion cubic meters) mainly for irrigation and domestic uses whereas the annual recharge of ground water has been 31 BCM. Though it reveals that Bihar has no alarming situation of recharging groundwater but it should be noted that ground water recharge is not even throughout the regions and throughout the year. The drought prone areas of Bihar face danger of groundwater recharge.

TRADITIONAL WATERBODIES IN THE REGION

As discussed earlier, the eastern region of India has been rich in harvesting rainwater and overflow of rivers through its traditional water bodies which supported the irrigation and other uses during period of scarcity. the need of irrigation arises from the fact that the spatial and temporal distribution of rainfall does not generally come in accordance with the requirements of the crops cultivated over space and time. This makes conservation, storage and conveyance of the rain water imperative. The traditional water bodies had been part and parcel of rural life as

they served multiple needs of the rural populace in these parts. The topography of this region facilitated it.

Historically, these water structures were *bandh*, *talab*, *pokhar*, *pukur*, *ahar*, *pains*, *khata*, *goria* etc. In the past, the skills of association and cooperation were fostered and developed to a degree that the tasks which had been beyond the means and enterprise of the individual cultivators had been successfully carried through by united efforts of the community. The cooperation was seen not only in the construction, but also in the maintenance and repair of *bandhs*, tanks and other irrigation works. People's collective action found place in operation and maintenance works as well. The maintenance work included desilting of *ahar* and *pyne* beds, and regular repair of embankments. Apart from these routine activities, an important task was to keep constant vigil, particularly during monsoon against sudden damage of protective works, which could occur due to natural cause or due to man-made reasons. The operational works included cutting and closing embankments for diversion, erection of *bandhs* or *garandis* across the *pynes*, opening and closing of outlets and at times even resorting to manual water lifts to irrigate uplands. Repairs of feeder and water-distribution channels and embankments were taken up immediately after the onset of first rainfall. But the system declined gradually.

MULTIPLE USES OF SUCH WATER BODIES

These traditional water bodies in eastern India have been of great significance since ancient times.

Although, the extent of tank irrigation has been declining sharply particularly post 1960s in the entire region. These waterbodies have been serving the needs of all social sections in varying degrees. Though primary use of these traditional waterbodies had been irrigation, yet other socio-economic uses were and even now are availed by the local people in the region, such as ponds are used in cultivation of fish and pisciculture, cultivation of aqua fruits like makhana, bhent flowers, cultivation of lotus flowers, domestic purposes like bathing, washing of cattle and using tanks for religious purposes like Chhath and such other religious rituals. The study on tank in eastern India (Pant & Verma: 2010) finds that of the surveyed tanks, three fourths of the tanks in the region were under multipurpose uses and rest were exclusively for irrigation, domestic and for fisheries purposes. The income generated from these tanks by fisheries and cultivation of aqua crops amounted to on an average of rupees sixty thousand per year per tank, highest being over lakh rupees and the lowest was over twenty five thousand. It was calculated that the income accrued from per acre of tank area was highest in Bihar followed by Jharkhand, West Bengal and Odisha. The reason behind the situation was

governmental interventions for development of fisheries in Bihar. But the study did not undertake the areas of aqua cultivation in Bihar that fall in the districts of Mithila region namely Katihar, Purnea, Supaul, Saharsa, Darbhanga, Madhubani, Madhepura, Araria, Kishanganj, and Sitamarhi. The state Government intervention to development of makhana cultivation, processing and recognition and marketing at global level. The Government has formed the Makhana Board for the purpose. It further finds that the irrigation efficiency of tank water comes to about 2.5 acres of irrigated field area per acre of tank area, however, the figures slightly varied from state to state and again Bihar and Odisha led with highest capacity of tank irrigation. All these reflect that such water bodies have potential of socio-economic benefits to the rural populace and also beneficial for recharging ground water.

REASONS OF DECLINE IN EASTERN INDIA

The study conducted with support of IWMI Tata Programme in 2010 traces the reasons of decline of these waterbodies (Pant and Verma: 2010). There are three important reasons for the decline of *ahar-pyne* system in Bihar and Jharkhand: First, until the abolition of *zamindari* system, the *zamindars* used to maintain these systems as they had the capital resources and vested interest in doing so. Tenants were required to pay *gilandazi* (for improvement of irrigation works) charges. After the *zamindari* abolition there are no regular budgetary outlays for the repair of these systems. The only possible avenues of repair were hard manual labour during drought period, JRY, some relief schemes, food for work programme and also MI department which can spend some plan funds for the renovation of these systems. Second, a large number of alternatives have come before the farmers during the post Independence period in the form of new canal schemes and tubewells. The growth of tubewells, particularly during the post green revolution period is phenomenal. This has been aided by high doses of government subsidies for private tubewells back in 1970-71. Further, wells in alluvial are a much more reliable source for irrigation than tanks and *ahar-pynes*. Even at the start of 20th century while wells were irrigating 29 per cent of area, tank irrigation was limited to 18 per cent. So much so, that by 2001, while *ahar-pynes* were irrigating 1.6 per cent area the area irrigated by tubewells had increased to 26.6 per cent. The third reason for the declining performance of *ahar-pyne* system in south Bihar's irrigation is non-integration of these systems in the new diversion schemes undertaken by the state's Irrigation department after Independence. The problem got accentuated on account of not taking over these systems formally and legally.

So far West Bengal and Odisha are concerned, the study (Ibid.) finds that the reasons in West Bengal were: (i) increase in number of owners due to family divisions, (ii) growing disinterest of owners in cultivation, (iii) lack of sense of responsibility among tenants and (iv) labour intensive modes of fetching water

from these waterbodies. Traditionally zamindars, rajas or high caste landlords in the state owned the tanks and bandhs. But with the passage of time, they lost control or ownership over the tanks gradually due to abolition of zamindari. The reasons behind decline in Odisha were: (i) the disappearance of the institution of gountia (the village headman) after zamindari abolition, (ii) shifting dependence on canal water due to the completion of Hirakud dam, (iii) the large tanks were transferred to the panchayat which lacked resources to maintain them, (iv) scarcity of free labour for maintenance of tanks (community participation named Goam in Bihar and bethi in Odisha) and (v) encroachment of the land forming part of the tanks was found to be a common feature in all states. The encroachment of tank land was done by dominant castes in these states, but with passage of time these lands were settled to landless SC/ST communities by governments.

The cause of decline of such water bodies (WBs) is also owe to shift in policy of maintenance responsibilities. In 1854, the colonial rulers had policy of making investment for maintenance of these WBs by government and separate funds were provided. Later, in 1903 Irrigation Commission recognized the importance of small irrigation works and assessed that such works were responsible for more than half the irrigated area in the country. Pant and Verma observe, "Today tanks come under various agencies, departments and tiers of government within a state; there is no proper coordination among them" (Pant & Verma: 2010, p. 135). After independence things continue but in the wake green revolution emphasis was placed on larger irrigation mechanisms and exploitation of ground water. This policy shadowed the maintenance, and development of these tiny water structures, as the irrigation policies focused on institutional reforms in spite of their rehabilitation and maintenance.

PROSPECTS OF REVIVAL

It cannot be denied that these traditional water bodies served the rural society of eastern India as life blood since ancient times till past five decades. But these have dwindled fast in last five decades due to various reasons discussed above. Thus this becomes an urgent imperative to think for reviving these waterbodies for improving livelihood of rural families with modern innovations by the appropriate policies.

The source of water of these structures is mainly the rain water but they also catch water of floods, overflow of rivers and even overflow of canal water in their catchment areas. This makes them useful for irrigation and other purposes during water scarce periods. The hydrological system of the region also attributed by these water bodies also which are ignored while making the irrigation planning and policies. As such, even the policies of rejuvenation of these WBs go ineffective. It must also be noted that for the administrative purposes the irrigation departments of state governments have been split into three – namely departments of minor

irrigation and major and medium, named in Bihar as Water Resource Department and Minor Water Resource Department headed by ministers separately. The policies and programmes are not made in consultation of each other. Further the tanks are looked after by Department of Animal and Fisheries Resources also which give emphasis on fish cultivation in these tanks (called 'jalkars'). However, Department's priority changes with change period. In the year 2023-2024, the Fisheries Resource Directorate had budget allocations in the programmes like *Matsya Prasar Yojana* (Fish Extension Scheme) in which fishermen were provided fund for visits and training of improved fish cultivation. *Mukhyamantri Talab Matsyiki Vikash Yojana* (Mukhyamantri Tank Fisheries Development Scheme) in which funds were allocated for construction of tanks in 293.1 acres. *Samekit Chaur Vikas Yojana* (Consolidated floodplain lakes Development Scheme) in which funds were allocated for construction of six tanks of one hectare each and renovation of private tanks of 150 hectares. It can be imagined that these departments may overlap works of tanks and also may ignore some important work.

Thus there is need of integrating the policies of Major Irrigation, Minor irrigation and Fisheries Departments for rejuvenation of traditional water bodies. In fact, planning of irrigation through tanks is not integrated with the larger irrigation development interventions within the hydrological system. Thus the initiatives to rehabilitate the tanks go ineffective.

It has been experienced in this region that such water bodies maintained by communities have remained in better conditions. Besides only banking on infrastructural and technological initiatives, the management (maintenance, monitoring and distribution of water) aspect should also be reformed. A study by Bhatt et al argues that "Participatory irrigation management (PIM) involving conjunctive use of rain, canal and ground water should be exploited with government policy support. There is a need to provide adequate power supply and low cost diesel operated pumping devices for development and management of ground water resources in the region. Group/cooperative tube well irrigations should also be encouraged to promote ground water use." (Bhatt et al.: 2015). Some previous studies have endorsed the argument. Pant in his study opined that "The ingenuity of the inhabitants has helped devise a system, of participatory irrigation management by which the natural drainage is blocked and the water is impounded. Even today ahar-pyne provides a shining example (Pant: 1998, p. 3133). Another study of Irrigation Chak Society in Sone Command Area in Bihar (covering Patna, Gaya, Jehanab, Rohtas, Buxar and Bhojpur districts) has reflected those agricultural fields, which fell under the operation of Irrigation Chak Societies had better water distribution system and economic dividends (Pant, Niranjana & Verma, R.K. (1983).

Thus, it is highly recommended that the management and maintenance of traditional water bodies should be exclusively handed over to the local community. Of course, there will be need of some governmental investment at the initial stages. There is need of devising a policy for participative tank management for multiple uses.

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ENDNOTES

1. "Gilandazi is a form of investment as the capital spent on it attracts a dividend of 40 to 50 per cent in the first year itself, and in some cases 100 per cent.
2. Earlier gountiaj use to charge water rents from users but after Independence the gountias were neither getting water charges from the users in any form, nor were they spending money on the maintenance of such tanks.
3. Saucer shaped water filled depressions having 50 to 400 cm water depth, are predominantly found in north Bihar, West Bengal, Eastern Uttar Pradesh and Assam.
4. Commonly known as 'Goam' which stands for collective voluntary action by local people in the South Bihar region

State Specific



MAKHANA REVOLUTION IN BIHAR: TRANSFORMING TRADITION INTO A GLOBAL SUPERFOOD

Sanjay Kumar Agrawal*

Abstract

Agriculture is the main stay of Bihar's economy and has several unique potentialities to boost economic development at a fast pace, most potential of them is cultivation, processing and marketing of '*Makhana*'. *Makhana*, also known as fox nut or gorgon nut, is a significant agricultural product of Bihar, contributing to 85% of the world's production. It is linked to the culture of the Mithila region of Bihar since hundreds of years, and it is rich in nutrients and is source of manganese, potassium, magnesium, thiamine, protein and phosphorus. It is now being popularized as 'Super Food' in the world market. This aquatic crop is primarily cultivated in the Mithilanchal region, and the key producing districts are: Katihar, Purnea, Supaul, Saharsa, Darbhanga, Madhubani, Madhepura, Araria, Kishanganj, and Sitamarhi. The improvement in cultivation, processing and marketing of *Makhana* can substantially contribute to our PM's mission of 'Viksit Bharat@2047' and of course 'Viksit Bihar'. With this view in mind, the present article, examines the significance of *makhana* project in the context of economic development and the concerned policy process. Finally, the article underlines the huge potentiality of socio-economic development through cultivation, processing, global recognition and marketing of *makhana* by transforming from the traditional methods to improved methods.

Keywords: Makhana, Value-Adding, Global-Reach, Makhana Board, Mithilanchal, Bihar.

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THE BACKGROUND

The cultivation of Makhana has seen a remarkable transformation over the past decade with shift from traditional pond system of cultivation to field system, with an increase of about 171 per cent in Makhana cultivation area, at present Makhana is being produced in more than 35 thousand hectares with more than 56,000 MT of makhana seed production. The government of India has awarded Geographical Indication (GI) tag to Mithila Makhana on 16th August 2022, in a bid to help farmers get the maximum price of their produce. “Mithila Makhana” which, as indicated by its name, is cultivated in the Mithila region of Bihar is the fifth agricultural product from Bihar which has received the GI tag (certificate in Appendix). The production of makhana has gone-up almost double in last one decade, as revealed in the following graph.



A DECADE LONG JOURNEY OF DEVELOPMENT

The last decade has brought remarkable growth in the makhana sector in terms of quantity, quality and reach as well. Department of Agriculture, Bihar with designing and executing customized interventions for makhana has led the revolution in makhana cultivation and production, significantly boosting the local economy and empowering farmers in the region. By implementing innovative techniques and providing necessary resources, the department has enhanced both the quality and quantity of makhana output, positioning Bihar as a leading producer in the industry.

ICAR – National Research Centre (NRC) on makhana, Darbhanga and Bhola Paswan Shashtri Agricultural College, Purnea under the Bihar Agriculture University, Sabour are two technical institutions playing a crucial role in the advancement of makhana cultivation and production in Bihar. These centers are actively involved in research and development to improve farming practices, develop high-yielding varieties, and address challenges faced by farmers. SwarnaVaidehi and Sabour Makhana-1 are two improved varieties of makhana

developed by NRC for makhana, Darbhanga and BAU, Sabour respectively. With support of these institutions seed production of high yield varieties of makhana (Swarna Vaidehi, Sabour makhana-1) is being done and distributed among the farmers. Seed production of high yielding varieties of makhana seeds is also being done through our progressive farmers leading to enhanced availability of quality seeds.



One of the crucial interventions has been the new cropping system for makhana promoted amongst the farmers i.e. shift from pond system (stagnant perennial water bodies) to field system (at a shallow water depth of just about 30 cm) with farmers having options to cultivate other rabi crops post makhana.

Further, Makhana-fish-water chestnut cultivation in integrated mode is also being done bringing better returns to farmers.

The Department through its initiatives is trying to follow value chain approach for development of makhana sector. Through different schemes and initiatives, we are focusing on pre-production, production and post production stages of the produce. Makhana Vikash Yojana is a dedicated scheme facilitating: (i) makhana Seed Production and area Expansion, (ii) Capacity Building of makhana producers (iii) R&D to improve technology for Makhana harvesting, grading and popping and (iv) Market Linkage and Product Promotion. The Department also undertakes demonstration of makhana production in farmers field/pond so as to promote the good practices of cultivation as well as create an example for other farmers to adopt. Department is also exploring makhana cultivation to the chaur areas of the State so as to utilize the water logged land for production activities. In fact, convergence with other schemes is being strongly facilitated, including initiatives for irrigation of makhana fields under PMKSY (Pradhan Mantri Krishi Sinchai Yojana), the promotion of drone spraying, etc.



Makhana storage support initiative has also been implemented since last two financial years extending support in establishment of makhana storage infrastructure enabling proper storing of the product and reducing the distress sale by farmers. Another addition has been the financial assistance for the makhana harvesting kit which is being traditionally used for the harvesting purposes.

Centre of Excellence on makhana is being established in Purnea district which will act as a one stop centre for the makhana produce i.e. demonstrating and imparting learnings on the farm to plate cycle of the produce.

Promoting mechanization in the cultivation and post cultivation stages of makhana as this is quite a labour intensive crop. While makhana harvesting machine prototype has been developed by BAU, Sabour, Bhagalpur, CIPET (Central Institute of Petrochemicals Engineering and Technology), Ludhiana has developed popping machine for makhana. Under the Farm Mechanization scheme being implemented by the Department subsidy is provisioned @70% (unit cost Rs. 2 lakh) for the popping machine.



EXPORT AND GLOBAL REACH

Bihar's Makhana has gained international recognition, with exports reaching countries such as the United States, Canada, Nepal, Australia, Bangladesh, the United Kingdom, and Gulf nations like the UAE, Qatar, and Saudi Arabia. The global demand for Makhana is on the rise, with a projected Compound Annual Growth Rate (CAGR) of about 7% from 2019 to 2023. Annually more than 200 ton of makhana is exported from India. However, absence of a dedicated HSN (Harmonized Systems) code for makhana makes it difficult to track the export properly.

Government of India has also given a go-ahead on establishment of APEDA's regional office in Patna, Bihar and Department has already allotted space for the same. This will also boost the efforts in enhancing exports of makhana from Bihar.

VALUE ADDITION AND PROCESSING

Significant efforts have been made to enhance the value chain of Makhana. The introduction of high-yielding varieties like SwarnaVaidehi and Sabour Makhana-1, along with mechanization in processing, has improved productivity and quality. The establishment of processing units and storage infrastructure has facilitated better market access and reduced distress sales. Currently with value addition variety of

products of makhana are available in market and the processors are coming up with newer products. These include roasted and flavoured makhana, makhana mixture, makhana powder, makhana RTE such as kheer mix, makhana pasta, cookies, baby food, smoothie mix, nutri. mix, etc.

Department of Agriculture is promoting agro-processing investment in Bihar by creating an enabling environment for seven crops, including Makhana, under the Bihar Agriculture-Investment Promotion Policy (BAIPP). The policy incentivizes agri. investors including Farmer Producer Companies (FPCs) in Bihar and aims to enhance income of farmers through better returns gained through better processing of produce and create enabling environment in the state for setting-up of agribusiness infrastructure.

Also, under the Pradhan Mantri Formalization of Micro Food Processing Enterprises Scheme (PMFME scheme), a centrally sponsored scheme, Makhana is identified as ODOP for districts of Araria, Darbhanga, Katihar, Madhubani, Saharsa and Supaul. The scheme is being implemented by Directorate of Food Processing, Department of Industries, Bihar across the State for extending Credit-linked capital subsidy and other support to micro-entrepreneurs.

POPULARIZING MAKHANA

The Department has facilitated dedicated multi-stakeholder events around makhana including buyer-seller meets. Promoting awareness amongst the consumers on this unique and nutritional produce through various media modes. Organizing promotional events bringing all value chain actors on a common platform for knowledge sharing and linkages. These events are bringing major exporters like Fair Exports (Lulu Group), KMS Exports, etc. institutional buyers (Reliance, ITC, BigBasket, etc.), processors (Mr. Makhana, Mithila Makhana, etc.) and the farmers on a common platform creating direct linkage for better market opportunities.

In order to enhance the information on this makhana a GI tagged produce Bihar across the country the Department plans to advertise its unique features/qualities in the major metro cities across the country. Infact for the first time Department organized makhana conclave in Bengaluru in December 2024 in an effort towards popularizing this product in South India.

Social media platforms are also being utilized to increase the awareness of this highly nutritional produce.

With an aim for higher reach, we had also communicated to the Ministry of Aviation as well as concerned airline to ensure availability of makhana based snacks in the flights as a healthy option for the commuters. A dedicated stall for makhana and makhana based products has been setup at Darbhanga airport. Further, we have also sensitized Railways to promote makhana under their One Station One

Product initiative and also to provide makhana based snacks in their train menu. (Author is happy to note that as a passenger, he had experienced the pleasure of enjoying makhana as snacks in Vande Bharat).

EMPLOYMENT AND ECONOMIC IMPACT

Makhana cultivation and processing have become vital sources of employment and income for rural communities in Bihar. More than 5 lakh families are engaged in makhana cultivation, harvesting, popping and processing. Further, in the last few years the price realization to makhana farmers has also improved. Earlier price fluctuation was witnessed a lot in case of makhana with farmer getting approx. Rs. 80 per kg of makhana seed or guri and maximum of Rs. 250-350 for makhana pop at source. However, with the better market linkages, awareness of farmers as well as consumers with higher demand, the said price has improved with approx. Rs. 250 per kg for makhana seed and approx. Rs. 650 per kg for makhana pop.

MAKHANA BOARD IN BIHAR – PAVING THE WAY FOR AGRICULTURAL INNOVATION AND ECONOMIC GROWTH

This is a great news for Bihar that the Finance Minister, Government of India announced the creation of Makhana Board and that too in Bihar in FY 2025-26 budget with an initial budget of 100 cr. The Makhana Board will play a transformative role in developing the makhana sector in India, enabling farmers to increase their incomes, creating new job opportunities, boosting exports, and promoting sustainable practices.

The board as the apex body for makhana sector's development will formulate and implement strategies for the organized development of makhana cultivation, processing, and marketing. This includes establishing quality standards and certification processes to ensure that makhana meets both domestic and international market requirements, thereby enhancing its marketability and consumer trust. Investing in research and development to improve the quality, yield, and resilience of makhana crops. This could lead to the development of new varieties and cultivation techniques, promoting sustainable farming practices.

Investment in infrastructure such as processing units, storage facilities, and transportation networks will reduce post-harvest losses and improve supply chain efficiency. The board will focus on promoting makhana in new markets, both domestically and internationally, to increase demand and create new opportunities for farmers and exporters. It will also facilitate developing a strong brand identity for Indian makhana to distinguish it from competitors and position it as a premium superfood. It will assist exporters with market intelligence, trade regulations, and promotional activities to boost makhana exports.

The establishment of the board is expected to increase income for farmers by ensuring better pricing through organized markets and reducing dependency on middlemen. It will also create employment opportunities in rural areas through the growth of processing industries and market-related activities. By creating a unified platform for stakeholders across the value chain, the Makhana Board will ensure that the full economic potential of makhana is realized, benefiting farmers, processors, and consumers alike.

CONCLUSION

In conclusion, the Department of Agriculture in Bihar has adopted a progressive approach by spearheading the development of the makhana sector, transforming it from a traditional crop to a globally recognized superfood. Through strategic interventions such as shifting cultivation practices, promoting mechanization, and enhancing market linkages, the department has successfully bolstered the makhana's growth and sustainability. By encouraging innovation through research institutions and Central government's initiative for establishing the Makhana Board, Bihar is paving the way for agricultural innovation and economic growth, ensuring that makhana producers benefit from improved quality, increased productivity, and expanded market access. These efforts not only empower local farmers but also position Bihar as a leading force in the global makhana market, showcasing its commitment to advancing agriculture while promoting sustainable practices.

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भौगोलिक उपदर्शन रजिस्ट्री

Geographical Indication Registry

सम्बन्धी का भौगोलिक उपदर्शन (रजिस्ट्रेशन तथा संरक्षण) अधिनियम, 1999
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VIKSHIT BIHAR BY 2047: CHALLENGES AND WAY FORWARD

Bakshi Amit Kumar Sinha*

Abstract

Bihar has witnessed a double-digit economic growth since 2005. During these two decades, the state has recorded significant progress on almost every socio-economic and fiscal outcome. However, Per Capita Income of the state is lowest in the country and one-third of the national PCI. One third of the population are still below the poverty line with a regional economic disparity. Almost half of the population depended on Agriculture for their livelihood. In addition, state is still facing low rank in human development, i.e. health and education, skilling gap, etc., coupled with lack of industry-linked curriculum, low industrial and overall finances. The Credit Deposit Ratio of the state is below the National average.

The government of India envisioned the nation as Vikshit Bharat (developed India) by 2047. This goal will not be achieved without making developing states into developed states, especially states like Bihar, Jharkhand, Orisa, etc, who are lagging behind. In this background, the paper quantifies the development path for Bihar as well as India till 2047 in terms of Gross State Domestic Product/Gross Domestic Product. Paper also diagnoses crucial challenges that will come in the way of achieving the goal of becoming Vikshit Bihar by 2047. Further, this paper comes out with several ways forwards through which Bihar could find its space in the row of developed states on the year of centenary of India's independence.

Keywords: Climate Change, Economic Transformation, Fiscal Challenge, Migration, Poverty, Private Investment, Technological Adoption, Vikshit Bharat, Vikshit Bihar.

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INTRODUCTION

The Government of India envisioned 'Vikshit Bharat' by making a 30 trillion United States' Dollar (US\$) Economy by 2047 and the Prime Minister of India announced this vision on Independence Day (August 15) of 2021. It is to be worked out that the Per-capita Income of the country will be around 20,000 US Dollar. In Indian currency, the economic size is estimated to be Rs. 3605 lakh crore and the Per-capita income will be Rs. 21.8 lakh by 2047. The NITI Aayog has designed the road map for development by estimating export of 8.67 trillion US Dollar, investment of Rs. 1273 lakh crore and saving of Rs. 1340 lakh crore by 2047.

The Union budget for 2023-24, the first budget in the Amrit Kaal, envisioned India as a technology-driven and knowledge-based economy with strong public finances and a robust financial sector. As per the Budget Speech (2023-24) of Union Government, the country's demographic dividend, prospering middle class, expanding digital economy, and sustainability-focused economy are going to act as pillars of strength in successfully attaining the vision for 2047. Further, it stressed to achieve the above-mentioned transformational objectives of Viksit Bharat envisioned for 2047, the country must continue to focus on "Sabka Saath, Sabka Vikas, Sabka Vishwas, and Sabka Prayas." Further, the budget outlined that the strong public finances and a robust financial sector is a key in this journey. Building world-class infrastructure and facilities in both rural and urban areas with eliminating unnecessary interference by the government in the lives of citizens and promoting digital economy and governance will make this journey more achievable. Developing 3-4 global champions in every sector by merger or restructuring and boosting indigenous industry and innovation will be another factor. Becoming self-reliant in defence and space sectors and enhancing India's role in the world will make India at the forefront. Fostering green growth and climate action by increasing renewable energy capacity and reducing carbon emissions will boost sustainable development. Empowering the youth with skills and education and creating more employment opportunities will invigorate inclusive development. Partnering with foreign Research and Development (R&D) organizations to build top 10 labs in the country and bringing at least 10 Indian Institutions among the top 100 globally will make the country at the central stage, globally.

The Budget 2024-25 focused on '*Purvodaya*' considering Bihar, Jharkhand, Odisha, West Bengal and Andhra Pradesh together as the growth engine of the nation. Four states (Bihar, Jharkhand, Odisha and West Bengal) together constituted the old Bengal Presidency and during the course of time they were separated from it. At one point of time these states were united. Together, they constitute 22.3 % of population, 12.7% of area and 13.7% of the national economy. The Union Budget 2024-25 also focused on the '*Purvodaya: for Vikash Bhi – Virasat Bhi*'. Among these

states, Bihar is progressing fast with a double-digit economic growth in recent years and recorded third highest economic growth in 2023-24 among the states and union territories of the country, after Assam and Telangana.

Bihar is at the lowest rung in terms of per-capita income in the country. The state is behind the national average on accounts of many socio-economic indices. Therefore, the country will not achieve the target of Vikshit Bharat by 2047 without developing the states which are lagging behind in the development process such as Bihar, Jharkhand, etc. In this backdrop, the paper focuses on the different dimensions of the development prospects and the challenges that will come on the way of development to attain Vikshit Bihar (developed Bihar) by 2047.

RESEARCH METHODOLOGY

This article is based on secondary data and adopts quantitative as well as qualitative approaches to research. For assessment of the economic growth and development path of the goal by 2047, the paper utilises data from the Ministry of Statistics and Programme Implementation (MoSPI). The Government of India projected the country's economic size to be a 30 trillion United State Dollar (USD) and per-capita income is projected to be 20,000 USD by 2047. The exchange rate is taken to convert USD into Indian Rupees (INR) an amount of Rs. 86.

The government of India has aimed to become a 30 trillion USD economy to achieve Vikshit Bharat at a per-capita income of 20,000 USD by 2047. Based on these figures, the paper computed Bihar's economic size, assuming 10 percent of India's economic size by 2047 (which is now only 3 percent). The assumption is based on three factors:

- (i) Bihar's population share will be 10 percent of the national population share by 2047;
- (ii) Bihar's Gross State Domestic Product at current prices will be 10 percent of the Country's economy (Gross Domestic Product) by 2047; and
- (iii) Bihar's per-capita income equalises to National per-capita income by 2047.

The authentic sources of data form the base of the article. The demographic indicators have been taken from Census 2001 and 2011 of the Registrar General of India (RGI), while educational data pertained from the District Information System on Education (DISE). The article uses different years and different budget documents for fiscal indicators' data. Other documents are used to diagnose the current progress of Bihar's development such as poverty incidence, infrastructure development, e-governance programme, private investment, agriculture productivity, etc. The different departments of the state government are the sources of this information base, apart from the poverty incidence that has been taken from the NITI Aayog.

ROAD MAP OF VIKSHIT BIHAR AND VIKSHIT BHARAT AT 2047

In order to achieve this aspirational goal, the state has to grow its GSDP at current prices at an average annual growth of 17.7% to reach Rs. 360 lakh crore and PCI at 16.4% to touchRs. 21,84,812 by 2047. At the national level, GDP has to increase by 11.5% annually to reach Rs. 3605 lakh crore and PCI has to grow by 11.4% annually to reach Rs. 21,84,812 by 2047 to reach the goal. It is illustrated through Chart 1A & 1B and Chart 2A & 2B.

Chart 1A: Bihar’s Development Path of Gross State Domestic Product (in lakh crore)

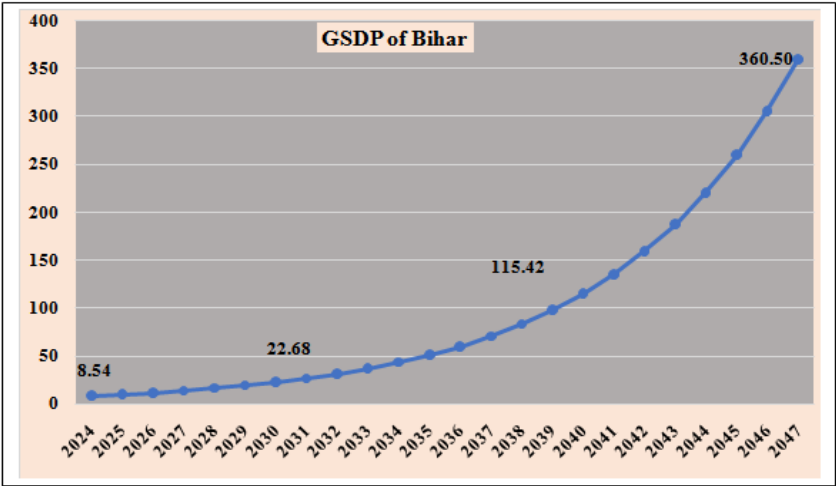
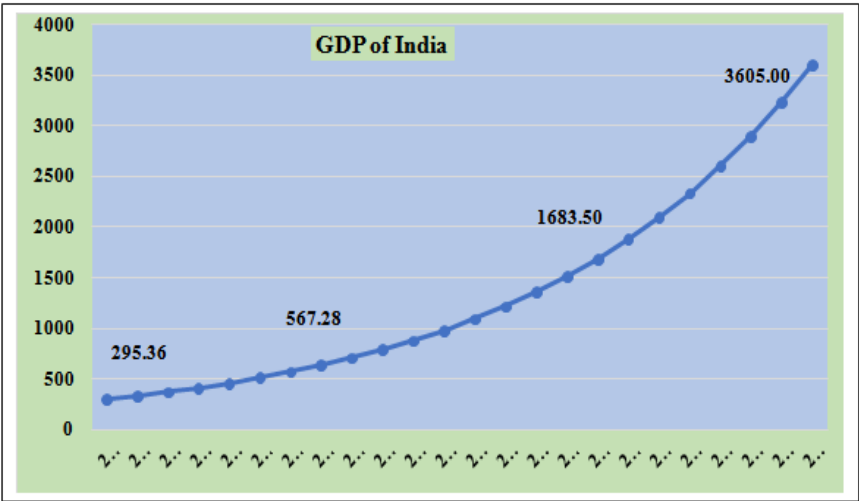


Chart 1B: India’s Development Path of Gross State Domestic Product (in lakh crore)



Source: Projected by Author

Chart 2A: Development Path of Bihar's Per Capita Income (in Rupees)

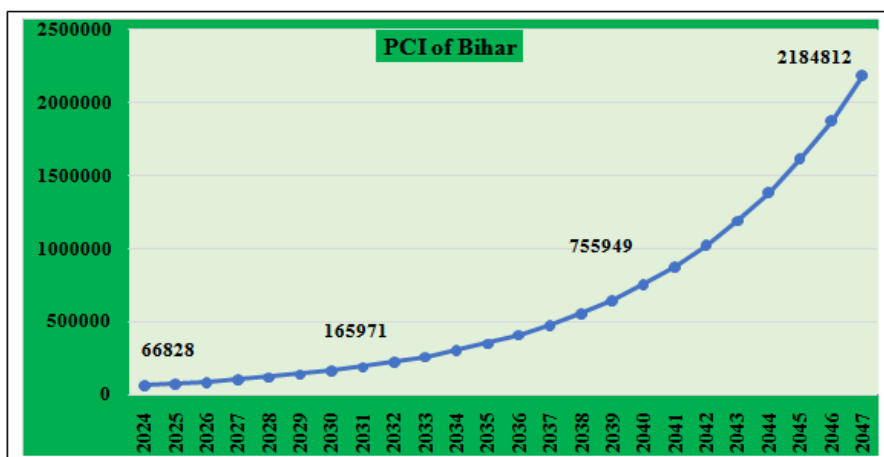
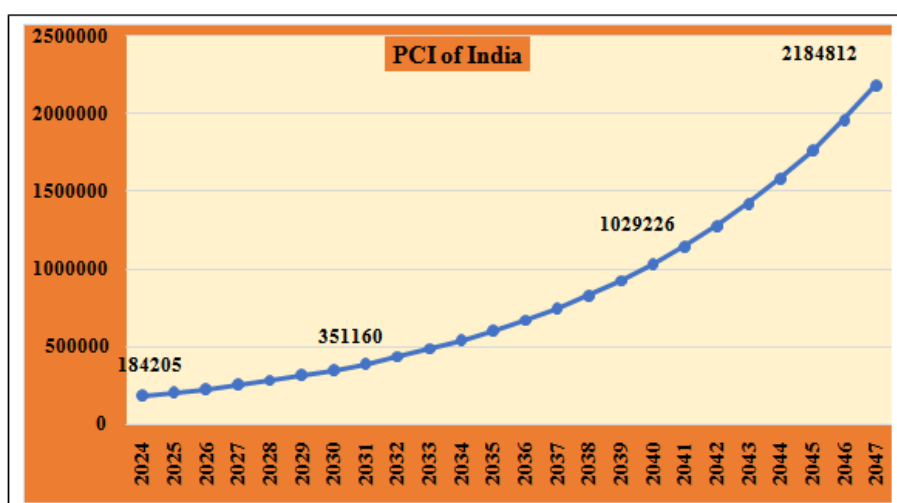


Chart 2B: Development Path of India's Per Capita Income (in Rupees)



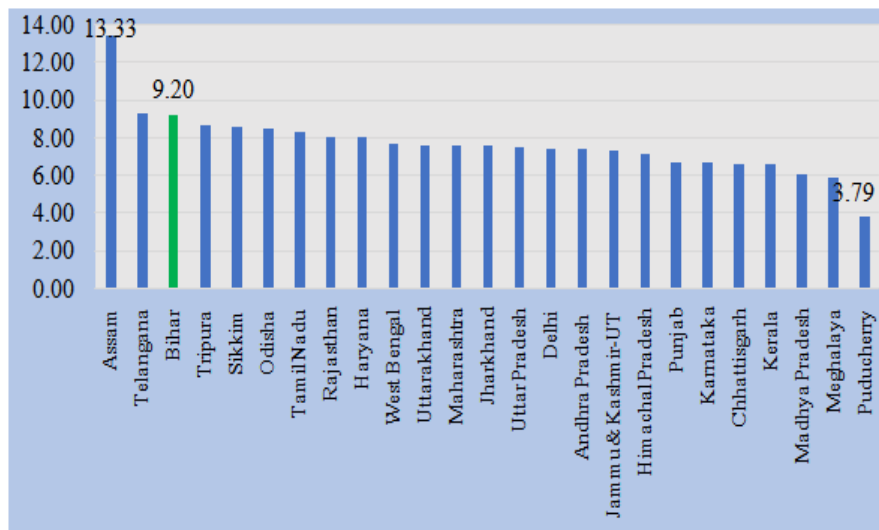
Source: Projected by Author

CHALLENGES ON THE WAY OF VIKSHIT BIHAR

Bihar is still facing multiple development challenges and many are historically inherent development challenges. These historical deprivations of the public policies are freight equalisation, less central investments, etc. During the nineties and early twenties, Bihar recorded sluggish economic development at every front. They were low economic growth, dilapidated infrastructure, negligible private investment,

high out migration, low health and educational attainments. However, the state progressed much on the economic growth and recorded double digit growth since 2005 and 9.2 percent growth during 2023-24. Bihar registered the third highest economic growth among Indian states and union territories, after Assam and Telangana (Chart 3).

Chart 3: Economic Growth of Indian States and Union Territories in 2023-24 (in percentage)



SOCIO-ECONOMIC CHALLENGES

Table 1 provides socio-economic overview of Bihar, comparing with the all-India average. As data shows, Bihar faces high population density with 1106 persons on a square km of geographical area as on 2011, compared to almost one third at the all-India figure of 382. This posed a huge population burden on every segment of resources. Though Bihar recorded high economic growth in the country during recent decades; however, the state is still on the last ladder in terms of per-capita income. The state’s per-capita income is almost one third of the national per-capita income. More than one third population of the state is still below the poverty line. Further, the state having low income coupled with the low Credit-Deposit Ratio (CDR), resulted in low private investments in the state, making the state deprived more.

Table 1: Socio-economic Indicators of Bihar and India

Indicators	All-India	Bihar
Density (persons per sq. km.) (2011)	382	1106
Economic growth rate (Constant price) (2023-24) in percent	8.15	9.2

Indicators	All-India	Bihar
Economic growth rate (Current price) (2023-24) in percent	9.6	14.47
Per Capita GSDP at Current price (2023-24) in Rupees	1,84,205	66,828
Multi Dimension Poverty Ratio (2023-24) in percent	14.96	33.76
Infant Mortality Rate (Female) (2020) per 1000 Birth	28	29
Infant Mortality Rate (Male) (2020) per 1000 Birth	28	26
Maternal Mortality Ratio (2018-20) per 1000 Birth	97	118
Life Expectancy Rate (Male) (2016-20) Age in years	68.6	69.7
Life Expectancy Rate (Female) (2016-20) Age in years	71.4	69.2
CD Ratio (2023-24)	79.6	56.3
WPR 2022-23 (15 Years and above) in percent	56	47

Source: Ministry of Statistics and Programme Implementation (MoSPI), Registrar General of India, NITI Aayog, State Level Banker's Committee (SLBC).

POVERTY AND REGIONAL DISPARITY

Bihar has faced high poverty incidence for a long time. Over the period of time, the national level poverty incidence gradually declined with a higher pace compared to the rate of poverty reduction in Bihar. Table 2 found that Bihar has almost stagnant poverty incidence over 4 decades (1974-2004). Half of the population fell under Below Poverty Line (BPL) that is not the case with national poverty incidence. Bihar still faces one-third poverty incidence, while around 1.25 crore poor come out from poverty line during 2015-16 to 2019-21. The poverty alleviation is a humongous challenge in the way of achieving development goals for Bihar.

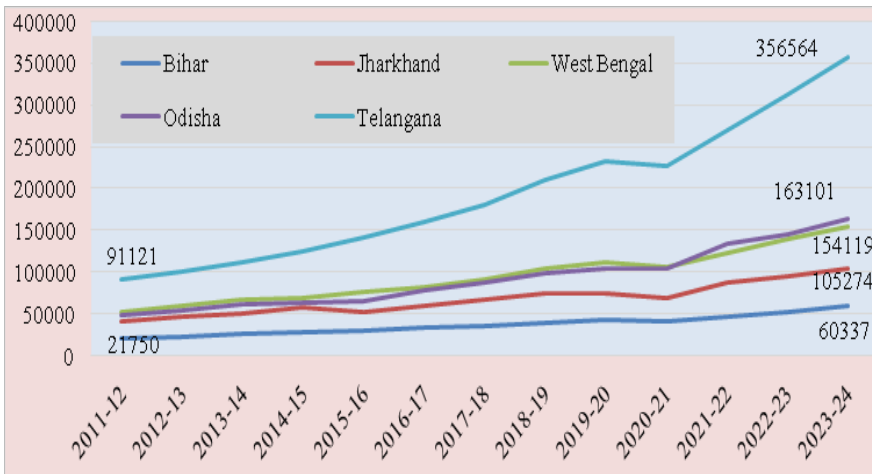
Table 2: Trend of Poverty Ration in India and Bihar

Year	Bihar			India		
	Rural	Urban	Total	Rural	Urban	Total
Lakdawala Committee Methodology						
1973-74	63.00	53.00	61.90	56.40	49.00	54.90
1983-84	64.40	47.30	62.20	45.70	40.80	44.50
1993-94	58.20	34.50	55.00	37.30	32.40	36.00
Tendulkar Committee Methodology						
2004-05	55.70	43.70	54.40	42.00	25.50	37.20
2011-12	34.10	31.20	33.70	25.70	13.70	21.90
Multi-Dimension Poverty Index (MPI)						
2015-16	56.00	23.85	51.89	32.59	8.65	24.85
2019-21	36.95	16.67	33.76	19.28	5.27	14.96

Source: Planning Commission and NITI Aayog, GoI

As discussed above, Bihar recorded the lowest rank in terms of per-capita income (PCI) in India. Chart 4 presents the per-capita income of selected states of India to present the situation of Bihar by comparing its neighbouring states and the state with highest per capita income. As data shows, the gap between different states is gradually becoming wider and wider over the years; however, the gap is wider if one compares Bihar with other states. The gap in PCI between Bihar and Karnataka was around 4 times in 2011-12, which rose to nearly 6 times in 2023-24. Clearly, it is evident from the Chart-4 that Bihar has to record much higher growth in per capita income to achieve the goal of Viksit Bihar by 2047 to converge national PCI. As income promotes the cycle of economic development by influencing through consumption, saving, investment in human development and production. As a result, the economy will be shifted at a higher base.

Chart 4: Per-Capita Income in-equality among selected states (in Rupees)

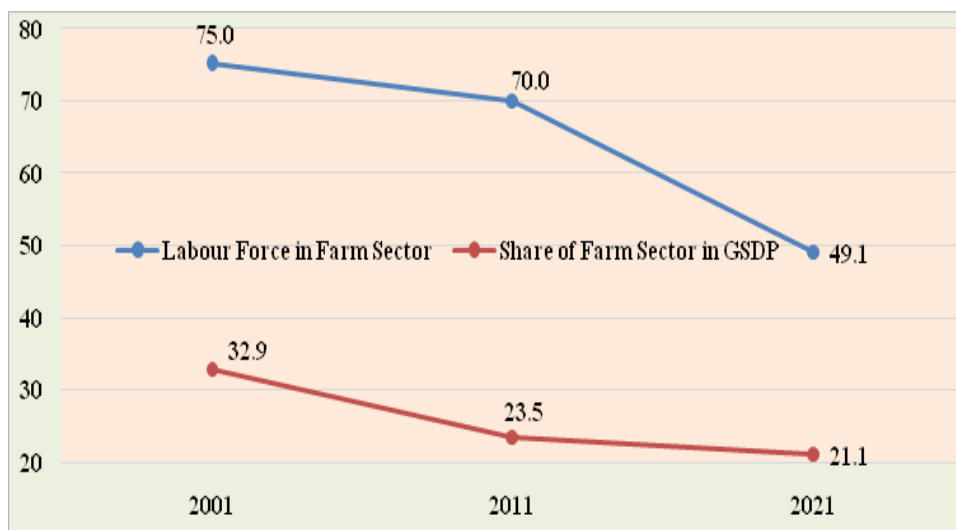


Source: Ministry of Statistics and Programme Implementation (MoSPI), Government of India

SLOW ECONOMIC TRANSFORMATION

Economic theory suggests that the majority of economies passed through economic transformation to become developed. In order to diagnose the economic transformation process in Bihar, especially after the separation of Jharkhand in 2000. Chart 5 demonstrates the workforce engaged in the farm and non-farm sector during 2001 to 2021 for Bihar. As evident from the data presented in the Chart-5, Bihar recorded slow economic transformation during 2001-11. However, farm sector workforce shifted to the non-farm sector during 2011-21 was faster compared to the previous decade. Half of the labourforce of Bihar is still engaged in the farm sector for several reasons such as less opportunity in industry and service

sector, poverty level, unskilled labourforce, etc. The economic transformation among females is even slower. **Chart 5: Economic Transformation in Bihar (2001-2021)**



During 2001 to 2011, Bihar recorded only 5 percentage points shift of farm sector labour force into non-farm sector with the highest transformation registered during 2011 to 2021. Therefore, the state has to attract private investment to provide higher job opportunities in the industry as well as the services sector in coming years to pace-up the economic transformation. However, the state has given more than 10 lakh government jobs and created nearly 20 lakh private employment after 2021. The state government has also organised a global investment conclave to attract private investments in Bihar.

Table 3: Socio-Economic Profile Among Different Social Groups in Bihar

<i>Indicator</i> <i>All</i>		<i>2001</i>			<i>2011</i>			<i>Improvement</i>		
		<i>SC</i>	<i>ST</i>	<i>All</i>	<i>SC</i>	<i>ST</i>	<i>All</i>	<i>SC</i>	<i>ST</i>	
Work Partici- pation Ratio	Person	33.7	39.7	45.2	33.4	36.6	41.0	0	-3	-4
	Male	47.4	49.2	52.9	46.5	46.8	49.5	-1	-2	-3
	Female	18.8	29.5	36.9	19.1	25.6	32.2	0	-4	-5
Sectoral Share in Main Workers (in percentage)										
Cultivators	Person	32.2	8.7	23.9	25.3	8.6	18.3	-7	0	-6
	Male	34.0	9.6	27.2	27.1	9.3	20.2	-7	0	-7
	Female	23.2	6.4	15.5	17.7	6.5	13.7	-5	0	-2

<i>Indicator</i> <i>All</i>		<i>2001</i>			<i>2011</i>			<i>Improvement</i>		
		<i>SC</i>	<i>ST</i>	<i>All</i>	<i>SC</i>	<i>ST</i>	<i>All</i>	<i>SC</i>	<i>ST</i>	
Agriculture Labourers	Person	42.8	75.4	60.9	44.7	69.4	65.0	2	-6	4
	Male	39.3	72.5	56.9	42.7	68.0	62.5	3	-4	6
	Female	60.4	83.6	71.0	52.9	73.4	71.0	-7	-10	0
Household Labourers	Person	3.6	3.2	2.7	3.6	3.0	2.2	0	0	-1
	Male	3.1	2.9	2.0	2.8	2.3	1.7	0	-1	0
	Female	5.6	4.1	4.4	7.1	5.1	3.5	1	1	-1
Other Labourers	Person	21.4	12.7	12.6	26.4	19.1	14.5	5	6	2
	Male	23.6	15.1	13.9	27.3	20.4	15.7	4	5	2
	Female	10.8	5.9	9.1	22.2	15.1	11.9	11	9	3

Source: Census of India, Office of Registrar General of India (RGI), Government of India

LOW HUMAN DEVELOPMENT

Human development is essential for economic development, especially for developing states like Bihar, Jharkhand, etc., who are still at the lower rung of the list. A good health enables the workforce to perform well at work and less spent on health issues. It also increases the peoples' longevity as well as happiness. They create some investable savings. Educated society provides skilful labourers to the industries and knowledge economy is the key for achievement of higher economic growth. Education also provides better opportunities in employment as well as the opportunity to choice of freedom.

Mortality rates present the nutritional status as well as overall health outcomes. Bihar has improved its health indicators in recent decades. Comparing Bihar with the national average, situation is similar in terms of all mortality indicators; however, Bihar is still lagging in terms of maternal mortality rates. Therefore, the state needs investment in health infrastructure, human resource and technological innovations.

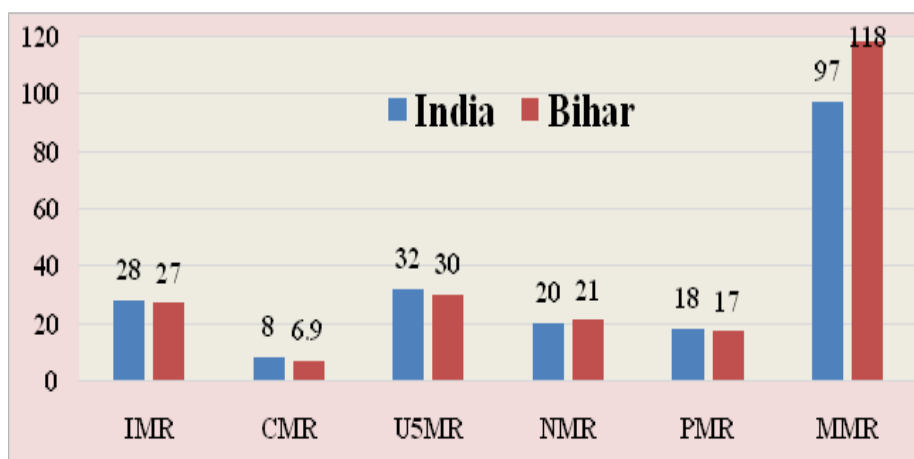
Table 4: Health Outcomes of Bihar and India

<i>Year</i>	<i>Indicators</i>	<i>Infant Mortality Rate (IMR)</i>	<i>Child Mortality Rate (CMR)</i>	<i>Under-Five Mortality Rate (U5MR)</i>	<i>Neo-Natal Mortality Rate (NMR)</i>	<i>Peri-Natal Mortality Rate (PMR)</i>	<i>Maternal Mortality Rate (MMR)</i>
India							
2020	Total	28	8	32	20	18	97
	Rural	31	9	36	23	21	-
	Urban	19	5.3	21	12	12	-

Year	Indicators	Infant Mortality Rate (IMR)	Child Mortality Rate (CMR)	Under-Five Mortality Rate (U5MR)	Neo-Natal Mortality Rate (NMR)	Peri-Natal Mortality Rate (PMR)	Maternal Mortality Rate (MMR)
2015	Total	37	10	43	25	23	130
	Rural	41	12	48	29	26	-
	Urban	25	7	28	15	15	-
Bihar							
2020	Total	27	6.9	30	21	17	118
	Rural	27	7	31	22	18	-
	Urban	25	6.5	27	17	12	-
2015	Total	42	12	48	28	24	165
	Rural	42	12	48	29	24	-
	Urban	44	11	47	20	20	-

Source: Sample Registration System, Government of India

Table 6: Different Mortality Rates in Bihar and India (2020)



The state government has been spending its 20 percent budget on education to provide quality education at large. Several policy decisions have been taken during the last two decades including computerised education, posak yojana, cycle yojana, scholarship, etc. to the school students. Due to these interventions, enrolment has been improved in the elementary and secondary level, however, drastic decline has been recorded in the level of higher secondary as well as higher education levels. Bihar is still behind the national level in terms of enrolment.

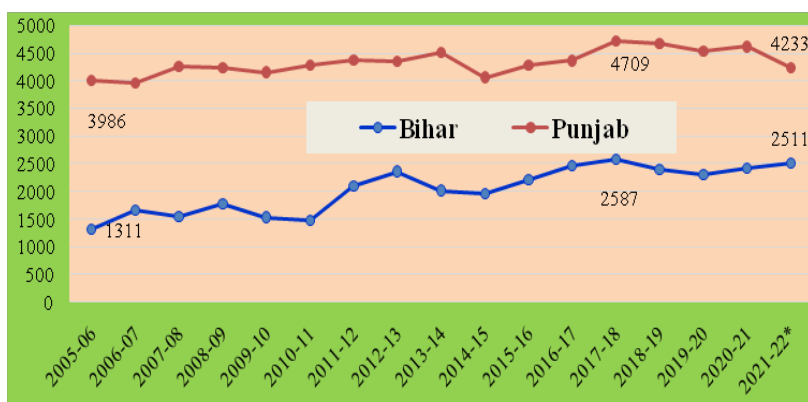
Table 5: Educational Indicators of Bihar and India (2023-24)

Education Level India		All		SC		ST	
		Bihar	India	Bihar	India	Bihar	India
Elementary (1 to 8)	Boys	99.3	95.1	108	115	103	194
	Girls	101	97.4	111	119	103	192
	Total	100	96.2	110	117	103	193
Secondary (9-10)	Boys	79.7	63.1	84.2	68.6	77	130
	Girls	79.4	66.8	85.6	79.1	79.2	135
	Total	79.6	64.9	84.9	73.5	78.1	133
Higher Secondary (11-12)	Boys	57	35.6	59.5	39.1	50.5	79.3
	Girls	58.2	36.2	63.7	43.5	53.6	80
	Total	57.6	35.9	61.5	41.1	52	79.6
Higher Education	Boys	26.7	16.6	22.4	13.3	18.8	22
	Girls	27.9	15.1	23.9	9.7	19.1	17.4
	Total	27.3	15.9	23.1	11.5	18.9	19.7

Source: UDISE

LOW AGRICULTURE PRODUCTIVITY

As shown in Chart 5, nearly 50 percent of the farm sector labour force earn only 21 percent of the state's income. Due to the decline in the primary sector's share, which has been supplemented by the service sector, a slow process of economic transformation is registered in the state. Almost half of the population depend on agriculture for their livelihood and the majority of agricultural pursuit is not a profitable business as it is struggling with low productivity.

Chart 7: Productivity of Foodgrains in Bihar and Punjab (in kg/ ha.)

As per Bihar Economic Survey Report 2024-25, nearly 95 percent is foodgrains, of which 93 percent is cereals in 2023-24¹. Chart 7 provides a trend of foodgrains productivity in Bihar and Punjab. The data shows that Bihar has recorded a jump in terms of productivity of foodgrains from 1311 kg/ha. in 2004-05 to 2511 kg/ha. in 2021-22. However, if the productivity of foodgrains of Bihar compared with Punjab, it is nearly half. Therefore, Bihar's agriculture sector needs crop diversity as well as technological improvements for high yield and promote agriculture activities as profitable business. Agriculture entrepreneurship should be encouraged with a strong forward and backward linkages as well as promote food processing industries.

LACK OF PRIVATE INVESTMENT

Bihar has historically been deprived of private investment due to several reasons, such as adoption of the national freight equalisation policy, less central investment in the state, etc. It still persists as Bihar barely constitutes 1.3 percent of total number of factories, 0.8 percent of fixed capital, 0.7 percent of private employment, 1.0 percent of Value of Output, 0.8 percent of Net Value Added in the national share. It is a matter of concern and a main hurdle in the path of development of the state.

Table 6: Status of Industries in Bihar and India

<i>Indicator</i>		<i>2011-12</i>	<i>2022-23</i>
Number of factories (in '000)	India	218	253
	Bihar	3.23	3.31
Bihar's Share in All-India		1.49	1.31
Fixed capital (Rs.'000 crore)	India	1950	4122
	Bihar	7.55	31.95
Bihar's Share in All-India		0.39	0.78
Persons engaged (in '000)	India	13430	18495
	Bihar	127	135.4
Bihar's Share in All-India		0.95	0.73
Value of output (Rs. '000 crore)	India	5776	14487
	Bihar	60.17	142.54
Bihar's Share in All-India		1.04	0.98
Net Value Added (Rs. '000 crore)	India	837	1880
	Bihar	5.64	14.39
Bihar's Share in All-India		0.67	0.77

Source: Bihar Economic Survey, 2024-25

In order to address the above challenges, the state government has taken numerous strides through policy changes as well as other initiatives. The Bihar state investment promotion policy was framed in 2006 and revised every 10 years i.e. 2015-16 and in 2025-26, according to the current need. Apart from this, start-up policy, textile policy, leather policy, electric vehicle policy, tourism policy, ethanol policy, etc. have been framed and implemented in the state.

The state has organised a global business connect-2024 to attract investment. A total of 423 Memorandum of Understanding (MOU) have been signed involving an investment of around Rs. 1.80 lakh crore in IT, ITES, AI&ML, Plastic, Toy, Food Processing, etc. sectors. The state government has also started many credit programme, such as Mukhyamantri Mahila Udyami Yojana, Mukhyamantri SC/ST/EBC Udyami Yojana, Mukhyamantri Yuva Udyami Yojana and Mukhyamantri Minority Udyami Yojana. These schemes provide a credit of Rs. 10 lakh, of which Rs. 5 lakh is given as a grant and remaining Rs. 5 lakh on a very nominal interest of only 1 percent Mukhyamantri Laghu Udyami Yojana.

CONCERN OF OUT MIGRATION

Migration is a macroeconomic issue that highlights many pertinent issues. As per census 2011, around 30 percent of the migrants migrated for employment while another 27 percent moved with HHs, 2 percent each migrated for business and education from Bihar (Chart-8A). They are scattered all across the length and breadth of the nation, from Jammu to Kerala and Rajasthan to Assam. Though, the most favoured destinations for them have been the economically prosperous states like Delhi, Haryana, Punjab, Gujarat, Maharashtra and Karnataka (Chart-8B). As shown in Table 7, around 95 percent migration were within the state while 4 percent interstate and the rest 1 percent outside the country. A total of 2.74 crore people were migrated in all forms – (i) internal/ within state migrants (2.57 crore), (ii) inter-state migrants (11.11 lakh) and (iii) international migration (3.99 lakh).

Table 7: Migrant Population of Bihar

<i>Census Year</i>	<i>Total Population</i>	<i>Total Migrants</i>	<i>Internal Migrants</i>	<i>Interstate Migrants</i>	<i>International Migrants</i>
1991	6,45,30,554	21529825 (33.36)	20303129 (31.46)	1031566 (1.59)	190130 (0.29)
2001	8,29,98,509	20480976 (24.67)	18649877 (22.47)	1619031 (1.95)	21015 (0.25)
2011	10,40,99,452	27244869 (26.17)	25728400 (24.71)	1111954 (1.07)	398592 (0.38)

Source: Census 1991, 2001 and 2011, Registrar General of India, Government of India.

The impact of migration in economic terms is remittances on the household economy could be via changes in income, income distribution and the pattern of expenditure and investment. It adds to the state's economy. Overall migration can have both costs and benefits for households and individuals as well as economies and societies. Migration needs to be facilitated through a proper development strategy.

Chart 8A: Out Migration from Bihar by Reason - 2011 (in percent)

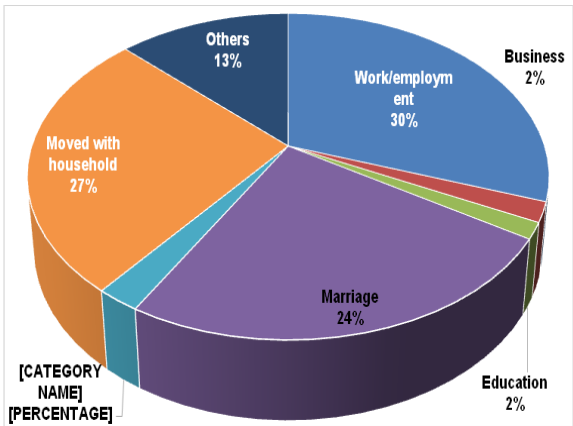
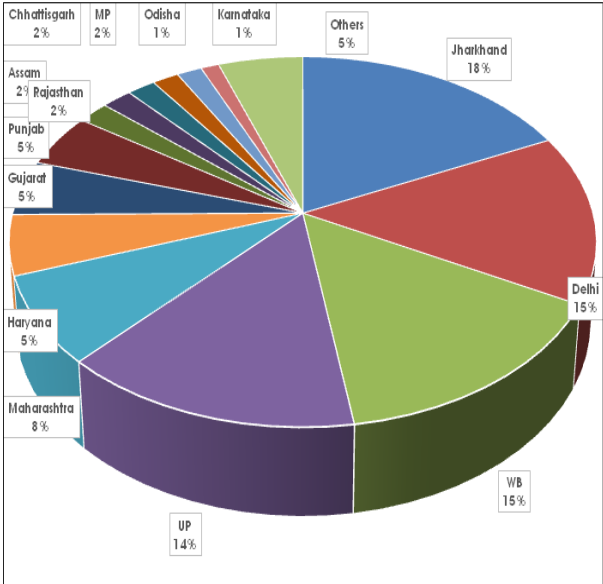


Chart 8B: Out-migration to other States from Bihar - 2011 (in percent)



Note: Others include 20 states which have negligible share in out-migration.

FISCAL CHALLENGES

The state government has multiple challenges on account of the fiscal front. These challenges include expenditure on welfare to strengthen people's requirements, expenditure on infrastructure strengthening, boosting the social sector (education, health, social welfare, etc.), maintaining fiscal discipline, and many more. During the last two decades, Bihar has considerably marched ahead in many of its fiscal outcomes. State government has been spending its resources judiciously among the sectors – general, social and economic sectors. However, as the state has limited own revenues, it faces many challenges on every segment – i) resource mobilisation, (ii) expenditure management, (iii) debt management, and (iv) deficit management.

As evident from Table 8, the tax:GSDP ratio is low and registered only 5.6 percent. Infact, the state's revenue is substantially dependent on central funds (tax devolution and central grants). Central transfers constitute nearly 73 percent of revenue receipts of the state. The other concern of the state finances of Bihar is high debt outstanding to GSDP ratio of 35.67 percent, however, within prescribed limit of debt-indicative path set by the Fifteenth Finance Commission. The state has been substantially spending on development heads (63 percent). As much as 11 percent of the state budget is spent on creation of infrastructure in the state on account of capital outlay.

Table 8A: Selected Fiscal Indicators of Bihar State Finances

<i>Indicator</i>	<i>2021-22</i>	<i>2022-23</i>	<i>2023-24 BE</i>	<i>2024-25 BE</i>	<i>2024-25 BE</i>
Revenue					
Total Revenue (Rs. crore)	158798	172688	193347.2	226798	260831
State Own Revenue (Rs. crore)	38839	48153	53617.75	61625.86	67740.57
Tax GSDP Ratio	5.20%	5.90%	5.66%	5.56%	5.44%
Expenditure					
Capital Outlay (Rs. crore)	23678	31520	36453.02	29415.91	40531.84
Development Expenditure (Rs. crore)	134057	160475	168516	176866.4	206818.5
Total Expenditure (Rs. crore)	193123	231904	252082.4	278725.7	316895
GSDP (Rs. crore)	647394	746417	854429	976514	1094264
Share of Social Services (%)	42	41	36	39	40
Share of Economic Services (%)	25	27	29	23	24
% of CO in TE	12%	14%	14%	11%	13%
% of Development Expenditure in TE	69%	69%	67%	63%	65%
% of Development Expenditure in GSDP	21%	21%	20%	18%	19%

<i>Indicator</i>	<i>2021-22</i>	<i>2022-23</i>	<i>2023-24 BE</i>	<i>2024-25 BE</i>	<i>2024-25 BE</i>
Debt					
Outstanding Debt (Rs. crore)	257510	293307	332740.9	362036.3	406476.1
Outstanding Debt to GSDP Ratio	38.10%	39.00%	38.94%	37.07%	37.04%
Deficit					
Gross Fiscal Deficit (Rs. crore)	25551	44823	35659.89	29095.43	32718.31
GFD: GSDP Ratio	3.80%	6.00%	4.17%	2.98%	2.98%
Revenue Deficit/Surplus (Rs. crore)	422	11288	-2833.06	-1121.41	-8831.18

Source: Different Budget Documents of Government of Bihar

CHALLENGES OF TACKLING DISASTER AND CLIMATE CHANGE

Bihar has a very versatile ecological system and experiences multiple-seasons. More than dozens of rivers are present in the state, including international rivers. Due to a high population density and riverine plains, green area is less. Due to geographical conditions, Bihar faces multiple natural disasters like floods and droughts frequently. The flood devastates human and animal lives as well as damaged crops and infrastructures. Due to less rainfall, people extract groundwater for irrigation, drinking water and other utilities, groundwater level decreased remarkably. The dependence on fossil fuel for transportation and power generation increases air pollution. However, many measures have been taken during the last decade to improve the environment and climate.

WAY FORWARDS FOR VIKSHIT BIHAR AT 2047

Private Investment: Industrialisation is a key to economic transformation and also for a gainful employment generation. A substantial private investment is required in the state in the food processing industry, IT/ITeS, textile, power, plastic, toy, leather, sugar, BPO, etc. Setup industrial corridors; boost MSME through credit, tech-support and market linkages; improve connectivity to ports via roads, rail, and inland waterways are some of the key areas. Encourage innovation through incubators, venture funding, and mentorship. The latest technology should be adopted to make the product competitive and as per market demand. Develop high-end technical and vocational training centers for mass skilling to make the labour industry ready. Industry 4.0 should be adopted in the state for global business. In this path, ease of doing business has to be improved in a mission mode. A long-term roadmap for industrial development should be framed with multi-stakeholder consensus. The role of credit is very important to boost private investments in the state. Therefore, the state government should closely monitor

the funding of the industrial projects with banking and financial institutions for its smooth finances. Land records should also be updated.

Promote Knowledge-Based Economy: In modern global perspective, knowledge is the key to development and the service sector plays a crucial role in the development process. Therefore, the state should proactively invest in the knowledge sector. In order to accrue the benefit of Industry 4.0, it should be adopted as fast as possible. Artificial Intelligence and Machine Learning (AI&ML), Block Chain, Internet of Things (IoT), etc. are the key domein.

Create World-class soft and hard Infrastructure: Expansion of education, health,transport, energy, urban and IT infrastructure in the state is the need of hour to signify the economic development of the state.

Technological Adoption:Research and Development (establish centre of excellence in every sector) in the area of agriculture, industry, health and education is necessary to march ahead in economic development. Agriculture should be linked with industries and export-based production.

Robust Public Finance Management:State should augment its own revenue and improve tax:GSDP ratio. Prioritise expenditure and link the with quality and reach of health and education;skilling labour and provide employment opportunities through labour intensive private investment for better Human Development Outcomes.Economic Transformation should be based on manufacturing. Fiscal consolidation should be adopted and retained with limited debt outstanding.

Sustainable Rural and Urban Development: In order to achieve sustainable development, planned cities should be developed instead of concentrating in urban areas in a haphazard manner. Develop urban ecosystems with sustainable rural development connectivity with IT and transport communication.

Resilient and Sustainable Environment: The state should adopt a sustainable development path through Green Development, Water Conservation, Biodiversity Conservation and Green Energy promotion.

CONCLUSION

Bihar has a humongous challenge to stand in a row of developed states by 2047. The state has to keep its pace of economic growth at a rate of 17.7 percent at current prices annually for the next 22 years. However, the current growth rate is around 15 percent. The paper found that the gap in human development,i.e health and education; skilling gap; lack of industry-linked curriculum;low industrial and overall finances;low Per Capita Income;high poverty incidence; frequent disasters, etc. are the main challenges in achieving this goal.

By adopting the path of 'development with justice', complement the macroeconomic level growth focus with a microeconomic level all-inclusive welfare focus, the state should promote digital and knowledge-based economy, profitable agriculture and allied activities, technology-enabled development, energy transition, and climate action, robust public finance management, substantial private investment (rely on a virtuous cycle starting from private investment with public capital investment helping to crowd-in private investment), mass skilling as per industry demand. State should focus its development of youths, women, farmers, investors and innovators as the development agents. Apart from these, gender equality and contribution of women in the economy is also essential for better economic outcomes that will add up into the economic pace. Bihar needs paradigm shift on socio-economic and institutional aspects.

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EXPLORING THE ROLE OF THE DIASPORA IN SOCIO-ECONOMIC DEVELOPMENT IN EASTERN INDIA: A FOCUS ON BIHAR

Sanjay Kumar*

Abstract

Bihar has seen a steady flow of people leaving for domestic cities and international destinations. This is primarily due to poverty, unemployment, and a lack of industrial growth. The diaspora's most apparent contribution has been sending money back home, which is a big help with education, healthcare, and household spending. However, there are still a lot of other high-impact contributions that are not used enough, like sharing knowledge, lobbying for political change, investing in businesses, and working together across borders. Thus, in the light of the mission of Viksit Bharat@2047, the present article looks at the Bihari diaspora's potential for development, especially in light of Eastern India's long-standing social and economic problems and the high rates of people leaving the country. On the basis of analysis, the study suggests several policy changes that could help change diaspora engagement from a passive remittance-based model to a more active and participatory development strategy. These include setting up the Bihar Diaspora Engagement Council (BDEC), making the "Bihar Connect" digital portal, giving out diaspora fellowships, and starting cultural and educational exchange programs.

Keywords: Bihar's diaspora, socio-economic development, remittances, Eastern India, diaspora engagement, Bihar, migration, institutional framework.

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INTRODUCTION

The socio-economic aspects and the elevated migration culture in Bihar have long been interrelated phenomena. Numerous migrants have traditionally travelled out of Bihar and other Eastern Indian states such as Jharkhand, West Bengal, and Odisha to various parts of India and foreign lands to seek better livelihood opportunities. The initial migration patterns arose during the colonial regime with the indentured labour system; now, these continue under the pretext of low- and high-skilled labour migration (Tinker, 1974; Tumbe, 2012).

The states of Kerala and Punjab converted the diaspora into an agent of development, but Bihar's attempts have been scattered and remain under-institutionalised (Kapur, 2010; Khadria, 2009). Notwithstanding its massive remittances, Bihar remains behind in several human development indicators, such as education, health, and per capita income (Bihar Economic Survey, 2023).

There has been much research on how the diaspora can be used effectively in Western and Southern India, but not much on how Eastern states, especially Bihar, can make policies to do the same. Most of the research that has been done so far has looked at remittance flows and migration trends without looking at how institutions can help diaspora members get involved in structured ways (Deshingkar & Farrington, 2009; Mohapatra, 2018). This study fills that gap by looking at Bihar in depth and comparing it to similar states, giving a policy-based framework for development that includes everyone in the diaspora.

THE BIHARI DIASPORA: COMPOSITION AND CHARACTERISTICS

The Bihari diaspora is socio-economically diverse, comprising:

- **Blue-collar migrants** are in cities like Mumbai, Delhi, and the Gulf countries.
- **White-collar professionals** in global IT hubs, universities, and research institutions abroad.

Remittances from these migrants support millions of households in Bihar, but their long-term developmental impact remains limited (Srivastava & Sasikumar, 2005). While individual contributions are visible regarding education and healthcare, systematic engagement from the state is lacking.

NEED FOR STRUCTURED DIASPORA ENGAGEMENT

Kerala's NORKA and Gujarat's NRI Division provide examples of how diaspora engagement can be institutionalised to serve both state development goals and diasporic aspirations (Kannan & Hari, 2002). These models:

- Build trust between the government and the diaspora,
- Offer investment support and incentives,

- Facilitate knowledge exchange in public institutions.

Bihar has yet to implement a comparable mechanism, resulting in missed opportunities to leverage diaspora capital, both financial and intellectual (Mohapatra, 2018).

RESEARCH GAP AND OBJECTIVES

While much has already been written in the literature on Indian diaspora engagement, especially in southern and western states, little seems to have been done in the eastern Indian setting. Bihar, as a key contributor to the migrant labour force of India, is underrepresented in the academic literature on diaspora and development (Khadria, 2009; Mohapatra, 2018). This study, therefore, sets out to investigate:

- The nature and extent of the socio-economic development contributions of the diaspora to Bihar.
- What hampers effective engagement?
- What policy mechanisms should Bihar implement to exploit diaspora resources better?

SIGNIFICANCE OF THE STUDY

Bihar has many structural-developmental problems, and many people are leaving the state. Using the potential of its diaspora can make a big difference. This study helps create a framework for engaging the diaspora in a specific region by looking at best practices from Bihar and nearby states like Odisha and West Bengal. The results also give policymakers ideas on how to make development plans that include everyone and let everyone have a say in similar areas where people live.

MIGRATION AND DIASPORA: A DEVELOPMENTAL PERSPECTIVE

In the last twenty years, academic discussions about migration and development have changed a lot. Earlier research focused on the economic effects of remittances. More recent research recognises how Diasporas can help development, such as advocating for political change, sharing knowledge, and making charitable donations (de Haas, 2010). Structured partnerships between the Indian states of Kerala, Punjab, and Gujarat and their Diasporas have changed how things are done in their home states (Kapur, 2010; Khadria, 2009). Kapur (2010) says that remittances, political lobbying, and institutional reform are three important ways Diasporas affect development in their home countries. Strong state institutions and policies that are friendly to the diaspora improve these functions.

The Indian Experience of Diaspora Engagement

India has a large diaspora that has an impact on the whole world. More than 32 million people are in it (MEA, 2023). The Ministry of External Affairs has set up programs like PravasiBharatiya Divas and Overseas Citizen of India (OCI) status to encourage Indians living abroad to get involved in the country's development. NORKA in Kerala and NRI Sabha in Punjab are two examples of decentralised efforts to make diaspora involvement a part of the system (Kannan & Hari, 2002; Rajan & Zachariah, 2017).

Even though these are national-level efforts, the experience in different regions is very different. States with proactive diaspora policies have been able to get remittances and investments in skills and capital (Mohapatra, 2018). Hospitals, schools, and vocational training centres in Kerala and Gujarat, funded by the diaspora, are good examples of targeted social investment.

GAPS IN DIASPORA ENGAGEMENT IN EASTERN INDIA

Historically, many people have been leaving Eastern India, especially Bihar, Jharkhand, West Bengal, and Odisha. However, there is not enough research on or using its diaspora engagement. Bihar has many people living abroad, but no specific government agency organises development contributions (Srivastava & Sasikumar, 2005). Because of limited access to financial products and poor infrastructure, most remittances are spent instead of invested (Tumbe, 2012).

The Odisha Society of the Americas (OSA) is helping Odisha's diaspora get more involved, which is good. OSA helps charitable projects and encourages cultural ties between the diaspora and the state (OSA Report, 2021). Because of political instability and a slow-moving government, West Bengal has not been able to attract steady investment (Bhattacharya, 2016).

The study uses both primary and secondary data: Secondary Data includes reports on RBI remittances, NSSO migration data, the Bihar Economic Survey (2023), and documents from the Ministry of External Affairs. We got the primary data by doing semi-structured interviews with 15 people, including Bihari diaspora members, bureaucrats in the Planning Department, NGO representatives, and people who had just moved back to Bihar. A purposive sampling method was used to select participants who migrated from Bihar or work in diaspora engagement. The sample included: Migrant labourers in the Gulf, IT professionals in the U.S., Diaspora association members and Policy experts and government officials. We used NVivo software to code the qualitative data from the interviews thematically. We used descriptive statistics to examine the government reports' quantitative data and find remittance trends and migration patterns.

FINDINGS AND ANALYSIS

Patterns of Remittance

Remittances are significant to Bihar's economy because they help families pay for food, school, and health care. However, few households use remittances to invest in businesses or build community infrastructure, making it harder for this kind of money to have a long-term effect on development.

According to the RBI (2022), Bihar received an estimated ₹60,000 crore in remittances annually. The following table summarises the primary areas of remittance utilisation:

Table 1: Allocation of Remittance Income in Bihar Households

Use of Remittances	Percentage Share
Household Consumption	63%
Education	18%
Healthcare	12%
Savings & Emergency Fund	5%
Business or Infrastructure Investment	2%

While remittances improve quality of life, their low reinvestment into productive ventures undermines potential multiplier effects. This aligns with findings from Srivastava and Sasikumar (2005), emphasising the consumption-oriented use of remittances.

Scientific Analysis

Regression models show a positive correlation between remittance dependency and school enrolment rates ($R^2 = 0.72$) but a statistically insignificant effect on local employment creation ($p > 0.1$), indicating a consumption bias without productive impact.

INSTITUTIONAL AND TRUST GAPS

Interviews show that diaspora members often want to help with development projects but are held back by red tape, a lack of information, and transparent processes. Interview data (n = 15) revealed recurring themes of trust deficit, policy ambiguity, and administrative hurdles. Thematic coding produced the following frequency map:

Table 2: Frequency of Institutional Barriers Cited by Diaspora Members

<i>Barrier Identified</i>	<i>No. of Mentions</i>
Bureaucratic Delays	12
Lack of Information Channels	10
Absence of Dedicated Institutions	9
Policy Inconsistency	8
Corruption Concerns	7

Model Used

A grounded theory approach was adopted to analyse interview transcripts. Using NVivo, open and axial coding generated five dominant categories of institutional bottlenecks.

People said there was a significant "trust deficit" between the diaspora and the government.

COMPARATIVE INSIGHTS FROM EASTERN INDIA

- **Odisha:** The Odisha Society of the Americas (OSA) has successfully mobilised philanthropic and cultural efforts, including funding schools and health camps.
- **West Bengal:** Despite having a globally recognised intellectual diaspora, the state has struggled to attract diaspora investments due to political instability.
- **Jharkhand:** The tribal diaspora, though smaller, has actively participated in educational and rights-based advocacy, particularly in collaboration with NGOs.

<i>State</i>	<i>Diaspora Engagement Strategy</i>	<i>Challenges</i>	<i>Outcomes</i>
Odisha	Odisha Society of the Americas (OSA), cultural philanthropic linkages	Coordination with local bodies	Positive engagement, grassroots projects
West Bengal	Academic diaspora, literary festivals, occasional policy initiatives	Political polarisation, unstable investment climate	Underutilised human capital
Jharkhand	Tribal diaspora involved in education advocacy	Low-scale diaspora, limited funding	Effective micro-level interventions

Interpretation

Odisha's success demonstrates that non-financial engagement, primarily through identity and heritage, can create strong developmental linkages. West Bengal shows that intellectual capital alone does not guarantee results without political coherence.

Although smaller in scale, Jharkhand reflects how even modest diaspora groups can drive localised change when supported.

KNOWLEDGE AND SKILLS TRANSFER

Bihari professionals living abroad want to help with local development, especially in education, health care, and technology. There are no structured ways to share knowledge, such as visiting faculty programs, mentorship programs, or digital collaboration.

From the interview pool, 9 out of 15 diaspora professionals expressed willingness to contribute through remote mentorship, curriculum design, and medical camps. However, the absence of institutional programs (e.g., the Diaspora Visiting Faculty Scheme) creates a bottleneck. Survey data shows:

<i>Interest Area</i>	<i>% Respondents Willing to Contribute</i>
Education (e.g., curriculum development)	60%
Healthcare (telemedicine, short-term missions)	47%
Entrepreneurship Mentorship	33%
Public Policy & Governance Advising	27%

Scientific Insight

Network theory analysis suggests that diaspora knowledge contributions follow “weak-tie” models, i.e. sporadic and informal – rather than “strong-tie” institutionally supported channels. A structured mechanism (e.g., State Diaspora Knowledge Portal) could convert weak ties into high-impact developmental assets.

POLICY RECOMMENDATIONS

Establish a Bihar Diaspora Engagement Council (BDEC)

A state-level statutory body, the BDEC would act as the nodal agency to coordinate all diaspora-related activities in Bihar. It would maintain a dynamic database of diaspora members and institutions, act as a single-window facilitation platform, and ensure policy coherence. Like Kerala’s NORKA model (Kannan & Hari, 2002), the BDEC can provide credibility and continuity in state–division relations, which is essential to overcoming trust deficits (Mohapatra, 2018).

LAUNCH 'BIHAR CONNECT' DIGITAL PLATFORM

This online portal would be an integrated digital interface enabling diaspora registration, real-time project updates, partnership opportunities, and knowledge-sharing sessions. Comparable to the Gujarat government's 'Global Gujaratis Network,' such platforms offer streamlined communication and enable the diaspora to contribute in structured and transparent ways (Kapur, 2010).

INCENTIVISE DIASPORA INVESTMENTS

The government should provide policy instruments such as tax incentives, investment protection guarantees, simplified clearances, and fast-track approvals to attract diaspora-led businesses and social enterprises. Evidence from successful diaspora investment programs in Tamil Nadu and Punjab indicates that such measures not only increase capital inflows but also promote entrepreneurial innovation (Rajan & Zachariah, 2017).

CULTURAL AND EDUCATIONAL EXCHANGE PROGRAMS

Targeting second-generation diaspora members, these programs can build emotional and identity-based connections to Bihar through curated heritage visits, immersive language courses, and cultural festivals. The Odisha Society of the Americas (OSA) has fostered diaspora engagement through cultural outreach (OSA Report, 2021).

INTRODUCE DIASPORA FELLOWSHIPS

Short-term fellowships should enable diaspora professionals to engage in teaching, consulting, or administrative innovation within Bihar's public sector. These can be modelled after visiting fellow schemes used in international development cooperation frameworks and help convert the diaspora's tacit knowledge into developmental outcomes (de Haas, 2010).

Such policy recommendations aim to shift the current paradigm from passive remittance reception to active co-development, thereby positioning the diaspora as a strategic partner in Bihar's socio-economic transformation.

CONCLUSION

The Bihari diaspora is still a largely untapped resource for development in the state's overall social and economic growth. Remittances have been crucial in reducing poverty, raising educational levels, and stabilising household consumption (Srivastava & Sasikumar, 2005). However, their full potential for development is not being used because there are not enough institutional mechanisms, outreach

is scattered, and people do not trust each other (Mohapatra, 2018). Also, relying too much on remittances to develop the diaspora makes it harder for them to significantly impact policy, innovation, and investment in Bihar.

Experiences from states like Kerala and Odisha show the importance of structured engagement and new policies. Kerala's Non-Resident Keralites Affairs Department (NORKA) has made diaspora relations a part of the government and helped development projects get off the ground by coordinating the use of remittances, setting up ways for people to file complaints, and creating programs to help migrants reintegrate into society when they return (Kannan & Hari, 2002). Odisha's work with the Odisha Society of the Americas (OSA) has shown how cultural and identity-based connections can help start social and philanthropic projects that are both long-lasting and rooted in the community (OSA Report, 2021). These examples show that diaspora engagement can go beyond symbolic gestures and lead to fundamental social and economic changes when part of well-defined institutional frameworks.

This study shows how important it is for Bihar to change its current diaspora strategy from one that relies on remittances to one that encourages sharing knowledge, making investments easier, creating policies together, and cultural diplomacy. The results of a mixed-methods approach, which included qualitative interviews and secondary data analysis, show serious problems with building trust, a lack of coordination, and a lack of digital infrastructure to connect diaspora members with local stakeholders. The study also shows that diaspora professionals are willing to work in areas like education, healthcare, technology, and entrepreneurship if given clear and structured ways.

The research suggests that the state should make policy and structural changes, such as creating a Bihar Diaspora Engagement Council, launching the "Bihar Connect" digital platform, offering diaspora fellowships, and creating targeted incentive frameworks. We need to design these interventions with input from both the diaspora and the communities in Bihar, based on what they have lived through and what they hope for.

Ultimately, Bihar needs to see the diaspora as more than people sending money home. They are transnational development partners whose emotional, cultural, and intellectual ties to the state are substantial assets. Bihar can turn its history of people leaving the state into a substantial development benefit by using engagement methods that are inclusive, participatory, and based on technology. The state's long-term development vision needs to include diaspora capital, which includes money sent home, professional knowledge, global networks, and social power (Kapur, 2010; de Haas, 2010). This kind of change will not only bring new life to Bihar's growth story but will also make sure that the diaspora stays involved in shaping the future of Eastern India in a world that is becoming more connected.

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PUBLIC HEALTH CARE EXPENDITURE IN BIHAR: AN OBSERVATION

Soni Kumari* and Anil Kumar Gope**

Abstract

Public health-care expenditure contributes significantly to enhancing health outcomes of its population, which is among the most impoverished in India. Therefore, the objectives of this research paper is to critically analyze the level, trends, and patterns of public healthcare expenditure in Bihar and to examine how this spending affects the health outcomes in the state. The study design is exploratory in nature. It focuses on Bihar state, covering the period from 2017 to 2024. It was found that the government's focus shifted from general upgrades in healthcare facilities and services towards targeted interventions like vaccination drives, expanding healthcare infrastructure, and specific capital outlays like new hospitals and medical colleges. However, the percentage of its budget dedicated to health does not consistently align with or exceed the average of other states. Therefore, the study underscores the importance of a robust institutional framework, transparency, and accountability mechanisms to enhance the efficiency of public health expenditure as well as health outcome.

Keywords: Health-Care Expenditure, Infant mortality rate (IMR), Maternal Mortality Rate (MMR), Sustainable Development Goals (SDG).

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INTRODUCTION

In recent times, our country's healthcare system has faced increasing strain. The COVID-19 Pandemic has highlighted the weaknesses in India's existing medical care infrastructure, revealing its inadequacies in managing medical crises. The state of Bihar is similarly affected by this circumstance. The "availability, accessibility, and affordability" of healthcare facilities is an important element for enhancing public health among the many variables influencing people's well-being. The "National Health Policy, 2000" seeks to provide medical services to all societal segments to ensure that to attain "universal health coverage" (UHC). Public provision of healthcare services is essential in a democracy that prioritise social welfare such as India. Ensuring adequate capital allocation for healthcare services is crucial for achieving social welfare and promoting equity.

It is suggested that health should be viewed as a process rather than just a condition. The W.H.O. explains health as "a state of complete physical, mental, and social well-being, and not just the absence of disease or disability." Health plays essential functions in human development and significantly impacts the general welfare of the community. Maintaining good health enhances workforce productivity and aids in the economic advancement of a nation. Nobel laureate Amartya Sen highlighted that "health contributes to a person's basic capability to function, to choose the life he or she has reason to value" (Sen, 1985). Assuring a basic standard of Health service's for the community is an essential aspect of the procedure of growth.

REVIEW OF LITERATURE

Over time, a great deal of empirical research has been done to examine how public health spending affects health outcomes. The desire for increasing public health spending is driven by political, economic, and ethical issues (Musgrove, 1996). Nonetheless, financial limitations frequently compel governments to cut back on their health spending. Examining the connection between public spending and population health is therefore essential. The research encompasses cross-national comparisons (Gupta et al., 2002; Weitzman, 2017), analyses research has been conducted at the National level '(Deolalikar, 2005; Bhalotra, 2007; Farahani et al., 2010; Barenberg et al., 2017; Panda and Patra, 2021)' and also focuses on specific regions, including Asian countries '(Narayan et al., 2010), African countries (Anyanwu and Erhijakpor, 2009; Novignon, 2012; Ssozi and Amlani, 2015)', OECD member states '(Hitiris and Posnett, 1992; Linden and Ray, 2017), and European nations (Lippi et al., 2016; Van den Heuvel and Olaroju, 2017)'. There seems to be conflicting evidence in the literature on the necessity of public spending on Healthcare. While some research (Bhalotra, 2007; Berger and Messer, 2002; Anand and Ravallion, 1993; or, 2000, 2001; Baldacci et al., 2002' Barenberg et al., 2017) have

found a positive impact, others have discovered that public Health care expenditure (PHCE) has a negligible influence on health outcomes. Poor health outcomes have been linked to financial difficulties instead of insufficient health investment. according to research by 'Carrin and Politi' (1995) and 'Demery and Walton' (1998). Numerous cross-national studies, including those by Gupta et al. (2002), McGuire et al. (1993), Musgrove (1996), and Kim and Moody (1992), have corroborated previous findings and concluded that income levels play a significant function in determining the well being of the community. Furthermore, 'Demery and Walton' -1998;- St Leger -2001' and Young -(2001) discovered a strong correlation between socioeconomic characteristics and population health.

RESEARCH GAPS

The review reveals that most studies focus on developed nations, such as those in the European Union, OECD, USA, and Canada, while others target low income and developing nations. In contrast, there are relatively few studies addressing this issue in India, despite it being one of the fastest-growing and developing economies. Therefore, this succinct overview draws attention to the ongoing and unresolved controversy surrounding the connection in health outcomes and health spending. This study aims to analyze state-level empirical data regarding this topic. The findings will assist policymakers in establishing a basis for effective policies. It is also highly relevant for achieving the Sustainable Development Goals (SDGs) and advancing towards state-level universal health care in India. The study's emphasis, which spans the years 2017 through 2024, is Bihar. The research offers a critical evaluation of the patterns in health outcomes and public health spending over this period.

Public Health Care Expenditure in India

As stated by 'Prinja et al. (2012)', providing 'Universal Health-care' in India, via both government and non-government organisations would require an expenditure of approximately Rs. 1,713 per person per year. In order to attain nationwide universal health care delivery, the Indian government would have to set aside approximately 3.8% of its GDP. Similarly, the 12th Five Year Plan documents says that "over the next few years, the allocation to the health sector as a ratio of GDP will be increased to 2.5%," in accordance by the suggestion of the "High Level Expert Group" on health.

The data provided shows various health expenditure metrics for selected countries, This comprises per capita health expenditure in US dollars, public health spending as a proportion of GDP, and current health spending as a percentage of GDP. Surprisingly, at 21.8% of GDP, Afghanistan has the highest current health

spending, despite having one of the lowest per capita expenditures at \$81.32. In contrast, the USA has the highest per capita health expenditure at \$12,473.79, with a significant 16.57% of its GDP allocated to current health expenditure and 18.2% to public health. Advanced countries such as Germany, France, Canada, and the UK also show high percentages and per capita expenditures, ranging from around 10.5% to 12.9% of GDP. On the other hand, countries like Zimbabwe, Nepal, and India display much lower expenditure levels, with Zimbabwe having the lowest current health expenditure as a percentage of GDP at 2.79% and a minimal per capita expenditure of \$62.74. The global averages for current health expenditure are 10.35% of GDP and \$1,265.62 per capita, highlighting the wide disparities in health spending across different nations.

Table 1: Health Spending in India Compared to Other Countries Worldwide

<i>Country</i>	<i>Current health expenditure as percentage of GDP.</i>	<i>Per capita current health expenditure (In US Dollar)</i>	<i>Public health expenditure as per cent of GDP</i>
Australia	10.54	7055.37	10.5
Afghanistan	21.8	81.32	8
Canada	11.15	6207.18	12.7
Bhutan	3.85	120.43	11.47
Germany	12.65	6191.04	12.9
France	12.31	5380.88	12.3
Nepal	5.42	65	5.42
India	3.28	74	2.1
Sri Lanka	4.07	166.00	3.8
South Africa	8.27	583.67	8.3
USA	16.57	12473.79	18.2
United Kingdom	11.34	5138	12.4
Zimbabwe	2.79	62.74	2.3
Global	10.35	1265.62	11

Source: World Bank Groups, World Bank Open Data.

Notes: Data of the year 2021 and 2022.

PUBLIC HEALTH-CARE EXPENDITURE: A INTER-STATE COMPARISON

In India, public healthcare spending refers to all federal and state government expenditures on family welfare, public health, medical education, and research, including both urban and rural health services. In India's federal system, providing

health services is firstly the accountability of state governments. The topic “Public health and sanitation, hospitals, and dispensaries” is listed in the sixth entry of the “State List” in the Indian Constitution’s seventh schedule. However, responsibilities such as “Population control and family planning,” “Legal, medical, and other professions,” and “Lunacy and mental deficiency, including facilities for the care or treatment of individuals with mental health issues,” fall under entries 20A, 26, and 16 of the ‘Concurrent List’. Programs through central sector and centrally supported initiatives can also be started by the central government; however, state governments are primarily responsible for carrying them out.

The considerable disparities in health expenditure across Indian states, revealing a complex landscape of financial commitment to healthcare. States like Maharashtra and Uttar Pradesh, with large populations, report the highest total expenditures, reflecting their substantial health budgets. However, this does not necessarily equate to higher per capita spending, as shown by Maharashtra’s relatively lower per capita expenditure compared to states with smaller populations but higher individual spending, such as Kerala. Kerala’s exceptionally high per capita expenditure of ₹10,607 highlights a strong focus on health services relative to its population size, in contrast to Bihar’s significantly lower figure of ₹1,588. This variation suggests that while some states have the financial capacity to invest heavily in health per person, others struggle with lower per capita expenditures, potentially impacting the quality and accessibility of healthcare services. The average per capita expenditure of ₹4,863 across India provides a comparative benchmark, indicating that many states fall below this average, which may point to challenges in achieving equitable healthcare access across the country.

Table 2: Analysis of Public Health-care expenditure: A Cross-State Comparison

<i>State</i>	<i>State Total Expenditure (₹ in crore)</i>	<i>Per capita state Total Health Expenditure (in ₹)</i>
Andhra Pradesh	27105	5114
Madhya Pradesh	23497	2831
Chhattisgarh	9906	3416
Bihar	19218	1588
Tamilnadu	35001	4605
Gujarat	28498	4130
Odisha	16214	3603
Jharkhand	11737	3089
Kerala	37124	10607
Assam	10019	2863
West Bengal	50005	5103

<i>State</i>	<i>State Total Expenditure (₹ in crore)</i>	<i>Per capita state Total Health Expenditure (in ₹)</i>
Maharashtra	77501	6301
Uttar Pradesh	84841	3721
Uttarakhand	4046	3678
Karnataka	35761	5418
Rajasthan	30547	3916
Punjab	15353	5118
Haryana	15017	5178
India	655822	4863

Source: National Health account estimate (NHA) for India, 2020-21.

PUBLIC HEALTH-CARE EXPENDITURE IN BIHAR

The Budget of 2018-2019 for health was around ₹4,200 crore. It focused on upgrading healthcare facilities, enhancing Services for maternal and pediatric health and improving medical education. In 2019-20 the allocation saw an increase to approximately ₹4,700 crore. There was a focus on strengthening primary health care, upgrading district hospitals, and increasing access to essential medicines. In 2020-21 Due to the COVID-19 pandemic, the budget for health was significantly enhanced to around ₹6,500 crore. This increase was directed towards managing the pandemic, expanding testing facilities, and improving healthcare infrastructure. The health budget in 2021-22 continued to see an increase, with allocations around ₹7,200 crore. Emphasis was placed on vaccination drives, COVID-19 management, and strengthening health systems. The budget 2022-23 was approximately ₹7,800 crore, focusing on improving healthcare delivery, investing in medical equipment, and expanding health insurance schemes. In 2023-24 the allocation was around ₹8,500 crore, aimed at enhancing health services, upgrading medical colleges, and addressing public health challenges. These figures reflect the state's commitment to improving healthcare, particularly as a outcome to the COVID-19 Pandemic and ongoing public health needs. For the most current and detailed information, checking the latest state budget documents or official sources would be advisable.

To create a state cancer institute at the 'Indira Gandhi Institute of Medical Sciences' in Patna, a funding of ₹120 crore has been provided. Additionally, a cancer hospital will be established at Sri Krishna Medical College and Hospital in Muzaffarpur, with a budget of ₹150 crore. Health care spending in Bihar accounts for only 4.4% of the state's overall budget, which is slightly below the average of 18 other states. In 2019-20, Bihar's allocation for health was 4.6% of its total spending, which is lower than the 5.2% average for states in 2018-19. In the same

year, the federal and state governments will begin constructing 11 new medical colleges. An amount of ₹1,430 crore has been approved for the expansion of Patna Medical College Hospital, increasing its capacity to 5,000 beds and allowing for 250 additional students. The National Health Mission has been allocated ₹2,352 crore. Of the ₹528 crore set aside for medical colleges, ₹1,321 crore will be used for human resources in health and medical education. Bihar spends 5.2% of its overall budget on healthcare, slightly less than the state average of 5.3%. The urban health services budget is ₹2,659 crore, and ASHA workers are set to receive bonuses totaling ₹360 crore. Bihar has dedicated 6.3% of its overall budget to healthcare, surpassing the 5.5% average among other states. The urban health services budget is ₹3,156 crore, and ASHA employees will receive ₹120 crore in bonuses. Bihar has allocated 7.2% of its overall budget to healthcare, which is higher than the average of 6% in other states. The state has earmarked ₹3,691 crore for urban health services and ₹1,830 crore for capital investments in health services, with a total healthcare budget allocation of 7%, surpassing the 6.3% average of similar states. Bihar has also committed ₹3,620 crore to the National Health Mission. Despite these efforts, the state's health budget, at 5.7% of total spending, remains below the 6.2% average for comparable states.

Table 3: Health Expenditure of Bihar

<i>Year</i>	<i>Budgeted Expenditure (₹ In Crores)</i>	<i>Revised expenditure (₹ In Crores)</i>	<i>Expenditure (₹ In Crores)</i>	<i>% change from RE to BE</i>
2017-18	8234	8284	7002	-15%
2018-19	7002	7534	7794	3%
2019-20	7794	8025	9157	14%
2020-21	9157	10315	10602	3%
2021-22	10602	11171	13012	30%
2022-23	13012	17506	15898	-9%
2023-24	15898	20183	16704	-17%
2024-25	16704	19296	14488	-25%

Source : Bihar budget, prsindia.

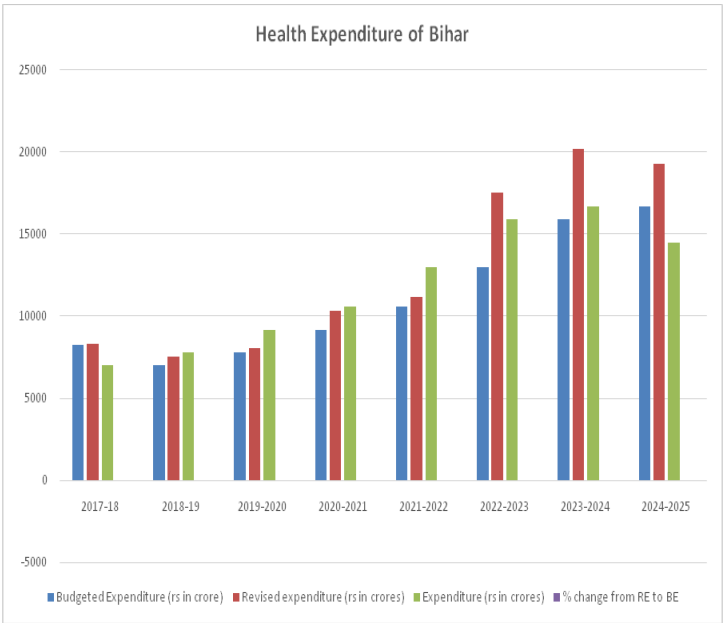


Figure 1: Health Expenditure of Bihar

Interpretation: The table provides an overview of Bihar’s health expenditure over several fiscal years, highlighting budgeted, revised, and actual expenditures along with the percentage change from the revised to the budgeted amounts. From 2017-18 to 2024-25, the data shows fluctuating trends in health spending, indicating inconsistencies between the planned and actual use of funds. In the earlier years, such as 2017-18, the actual expenditure was 15% lower than the revised estimates, showing underutilization of the budget. In contrast, years like 2019-20 and 2021-22 experienced significant positive deviations, with actual spending exceeding revised estimates by 14% and 30%, respectively, suggesting higher-than-expected health-related expenses.

However, in the later years, particularly from 2022-23 onwards, there is a notable trend of overestimation, where actual expenditures consistently fell short of revised estimates. For instance, 2022-23 saw a 9% drop, while 2024-25 exhibited a substantial 25% decrease, indicating challenges in meeting the anticipated spending levels. These variations reflect potential inefficiencies in budgeting or difficulties in deploying the allocated resources effectively. Overall, the table highlights the complexities in accurately predicting health expenditure needs, with significant discrepancies pointing to potential areas for improving budget forecasting and financial management in Bihar’s health sector.

GROWTH TREND OF HEALTH EXPENDITURE IN BIHAR

Between 2015 and 2022, Bihar experienced a notable increase in its annual growth rate of health expenditure. This growth can be attributed to increased government focus on improving healthcare infrastructure and services in the state. Enhanced funding has facilitated the expansion of medical facilities, the initiation of health programs, improvement of existing ones. As a result, Bihar has seen a gradual but significant rise in its overall health spending, contributing to better health outcomes for its population.

Table 4: Trend of Annual growth rate of health expenditure

<i>Year</i>	<i>Annual Growth rate.</i>
2015	10.2%
2016	12.8%
2017	14.3%
2018	15.7%
2019	16.5%
2020	31%
2021	12.6%
2022	9.4%

Source : Bihar economic survey

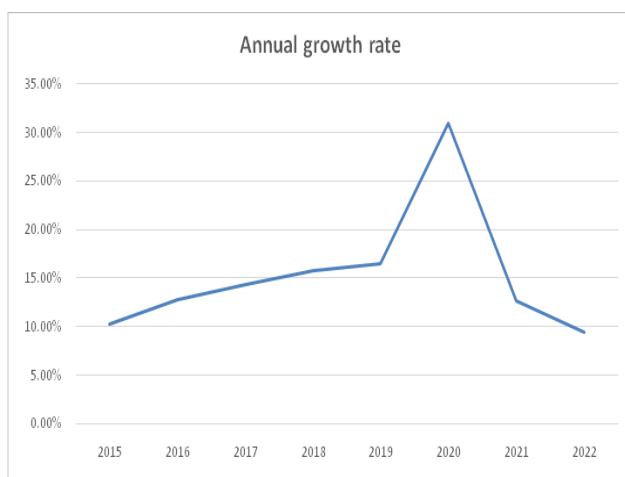


Figure 2: Annual growth rate of Bihar

TREND OF INFANT MORTALITY RATE (IMR) IN BIHAR

Infant mortality rate (IMR) in Bihar has been a significant public health concern. Despite improvements in healthcare infrastructure and access, Bihar still faces challenges in reducing IMR compared to many other Indian states. Factors like inadequate healthcare facilities, poor sanitation, malnutrition, and limited access to essential services contribute to the challenges faced prenatal and postnatal care contribute to higher infant mortality rates. Efforts are ongoing to address these issues through government programs, increased healthcare funding, and community health initiatives aimed at improving maternal and child health outcomes.

Table 5: Trend of infant mortality rate in Bihar

<i>Year</i>	<i>IMR per 1000 live birth.</i>
2015	42
2016	38
2017	35
2018	32
2019	39
2020	27
2021	29
2022	42
2023	38

Source : pib

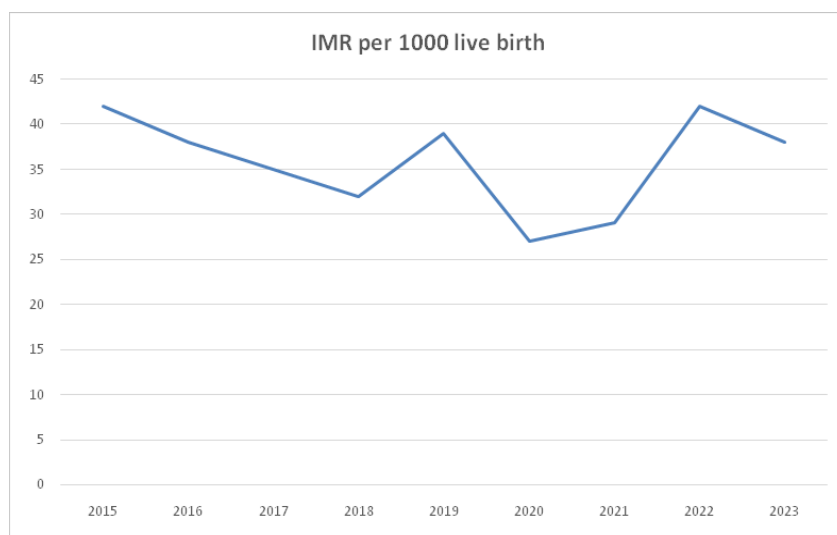


Figure 3: Trend of infant mortality rate in Bihar

Interpretation: The table presents the Infant Mortality Rate (IMR) per 1,000 live births from 2015 to 2023, showing fluctuations over the years. Between 2015 and 2018, IMR decreased steadily from 42 to 32, indicating improvements in healthcare and infant survival. However, in 2019, there was a noticeable increase to 39, followed by a sharp decline to 27 in 2020, the lowest IMR recorded in the period. In 2021, the rate slightly increased to 29, but it spiked again in 2022, returning to 42, and then decreased to 38 in 2023.

Overall, the data reflects a period of improvement in infant health until 2018, interrupted by instability in the following years. The sharp rise in 2019 and fluctuations from 2021 to 2023 suggest that external factors such as healthcare challenges or socioeconomic issues may have influenced these changes, pointing to the need for targeted public health interventions.

TREND OF MATERNAL MORTALITY RATE (MMR) IN BIHAR

Bihar, one of India's most populous states, continues to face significant challenges in maternal health, reflected in its high maternal mortality rate (MMR). As of recent reports, Bihar's MMR remains higher than the national average, contributing to a substantial proportion of maternal deaths in the country. Several factors contribute to this troubling statistic, including limited access to quality healthcare, inadequate infrastructure in rural areas, and a deficiency of medical experts with training. Moreover, socio-economic elements include poverty, low literacy rates among women, and cultural practices that discourage institutional deliveries further exacerbate the problem. Despite government initiatives aimed at improving maternal health outcomes, such as Janani Suraksha Yojana and the establishment of health centers, many women in Bihar still face barriers to receiving timely and effective maternal care. Reducing Bihar's maternal mortality rate requires not only enhancing healthcare facilities but also increasing awareness about maternal health and ensuring better outreach to marginalized communities.

Table 6: Trend of maternal Mortality rate in Bihar

<i>Year</i>	<i>MMR per 100,000 live births</i>
2011-2013	208
2014-2016	165
2015-2017	165
2016-2018	149
2018-2020	118

Source: pib

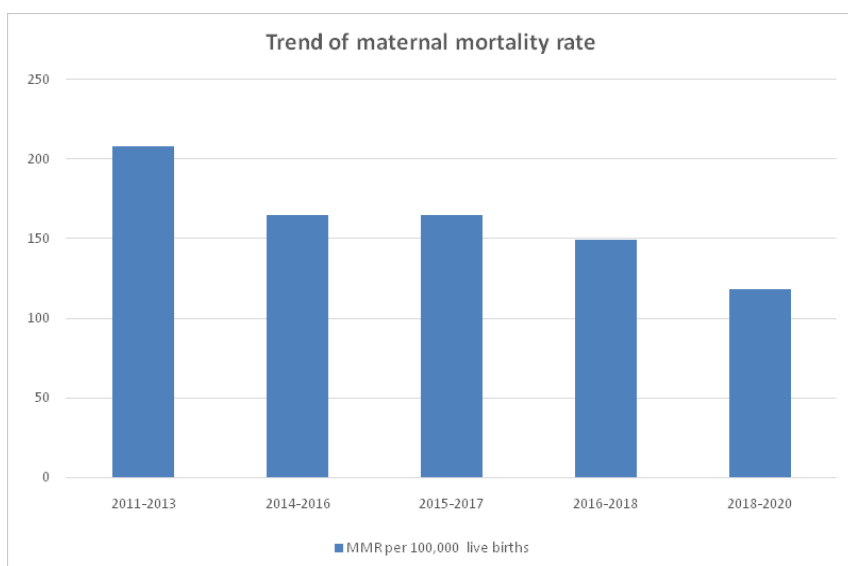


Figure 4: Trend of maternal mortality rate

Interpretation: The data highlights a clear downward trend in maternal mortality over the years. From 2011-2013, the MMR stood at 208 deaths per 100,000 live births. This number significantly decreased to 165 in the period 2014-2016 and remained stable at the same level for 2015-2017. The downward trend continued as MMR dropped further to 149 in 2016-2018 and reached its lowest value of 118 in the 2018-2020 period.

This steady decline reflects improvements in maternal healthcare, better access to medical services, and enhanced interventions for maternal health during childbirth. The overall reduction in MMR suggests that efforts to improve maternal health have been effective, leading to a significant decline in maternal deaths over the last decade.

RESULT AND DISCUSSION

From 2018-19 to 2023-24, Bihar's health budget increased from ₹4,200 crore to ₹8,500 crore, reflecting a steady commitment to enhancing healthcare. Key focus areas included upgrading healthcare facilities, improving maternal and child health, medical education, primary healthcare, and response to COVID-19. Bihar allocated 4.4% to 7.2% of its total spending on Health, which varied relative to the national averages (5.2% to 6.3%). Considerable investments in urban health services, with allocations reaching ₹3,691 crore in some years. Incentives for ASHA workers were consistently funded, with allocations such as ₹360 crore in certain years.

The health budget in Bihar shows a clear trend of increased investment, particularly driven by the dealt faced by the COVID-19 pandemic. The government's focus shifted from general upgrades in healthcare facilities and services towards targeted interventions like vaccination drives, expanding healthcare infrastructure, and specific capital outlays like new hospitals and medical colleges.

Despite the increases, Bihar's allocation towards health as a percentage of its overall spending often lagged behind the mean allocations by different states. This suggests room for further prioritization of health in the state's budget, especially given the ongoing public health challenges. Notably, Bihar's allocations improved in later years, surpassing the national average in some instances, reflecting a strategic response to urgent healthcare needs.

The investment in specific projects, like the cancer institutes and expanded medical college capacities, highlights a recognition of the need for specialized and advanced healthcare services in the state. Furthermore, the significant allocations towards urban health services and ASHA workers demonstrate a balanced approach, addressing both urban health challenges and community-level healthcare delivery.

The data on Infant Mortality Rate (IMR) from 2015 to 2023 shows significant fluctuations, highlighting periods of improvement and instability in infant healthcare. Between 2015 and 2018, the IMR steadily declined from 42 to 32, suggesting advancements in healthcare services and increased infant survival rates. However, in 2019, there was a sharp rise to 39, followed by a substantial decrease to 27 in 2020, the lowest rate recorded. This pattern suggests that improvements in healthcare might have been interrupted by external factors in 2019 but were quickly addressed by 2020. Nevertheless, the IMR fluctuated again, with a slight rise to 29 in 2021 and a sharp increase to 42 in 2022, before reducing to 38 in 2023. These shifts could indicate underlying socioeconomic or healthcare system challenges, particularly during the later years, necessitating targeted interventions to stabilize infant health outcomes.

In contrast, the data on Maternal Mortality Rate (MMR) from 2011 to 2020 reflects a more consistent and positive trend. From 2011-2013, the MMR was 208 deaths per 100,000 live births, but it saw a significant reduction to 165 by 2014-2016, remaining stable over the next period. The decline continued to 149 by 2016-2018, reaching its lowest value of 118 in 2018-2020. This clear downward trend points to sustained improvements in maternal healthcare, with better access to medical services and more effective maternal health interventions during childbirth. The steady reduction in MMR reflects the success of public health initiatives aimed at improving maternal health, marking significant progress in reducing maternal deaths over the last decade.

Overall, Bihar's evolving health budget indicates a growing commitment to improving healthcare outcomes, although aligning with or exceeding national averages consistently could further enhance health service delivery and public health metrics in the state.

CONCLUSION

Bihar has shown a fluctuating trend in its allocation for health expenditure over the years. Despite several significant investments, including setting up cancer institutes, expanding medical college capacities, and increasing funds for Health services and personnel, the state's expenditure on Health as a percentage of its total Budget has varied. At times, it has been below, at other times above, the average allocation of other states. Overall, while Bihar has made considerable financial commitments to improve its healthcare infrastructure and services, the percentage of its budget dedicated to health does not consistently align with or exceed the average of other states.

To improve health outcomes, Bihar needs to increase its budget allocation for health, focus on efficient utilization of resources, and ensure equitable distribution of medical-care services, especially in rural and neglected areas. Additionally, investment in preventive care, medical-care infrastructure, and training of medical-care professionals is essential. Strengthening partnerships with the private sector and enhancing accountability through robust monitoring mechanisms can also play a essential functions in optimizing Health expenditures and ultimately enhancing the gross health status of Bihar's population. The study comes to the conclusion that the best way to maximize public health care expenditure in Bihar is to have a synergistic approach that involves both motivated and well-trained staff and effective organizational departments. In order to address the major health issues facing the state and achieve long-lasting improvements in public health outcomes, a comprehensive approach is necessary.

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DISASTER PREPAREDNESS MESSAGE DESIGN TO ENHANCE INFORMATION PROCESSING AND PERSUASION: A CASE OF KOSI REGION

Sweta Rani* and Dheeraj Kumar**

Abstract

Climate change is causing natural disasters to occur more frequently and with greater intensity across the globe. As a result, disaster risk communication has become a critical process, involving the exchange of information and opinions among individuals, organizations, and institutions. This interactive process typically includes messages that explain the nature of the risks, express concerns, and shape opinions about risk management – particularly within governmental and institutional frameworks. Theoretically informed message design can play a crucial role in increasing public awareness of disaster risks and influencing attitudes and behavioral intentions related to preparedness. This study draws on communication theories such as framing and the heuristic-systematic model to guide the development of messages aimed at improving flood preparedness for communities affected by the Kosi River in North Bihar. The Kosi River poses a significant and persistent threat due to frequent flooding in its basin, especially in the Supaul district. The region continues to experience considerable losses from these recurring floods. The study examines specific message components, including decision aids, language framing, and temporal framing. Findings suggest that presenting flood preparedness messages in simpler, more accessible language promotes systematic information processing, enhances people's confidence in their ability to understand and act on the information, and leads to more persuasive communication. Furthermore, research on decision aids indicates that their use may result in more deliberate behavioral responses, reinforcing the persuasive impact of the message.

Keywords: Disaster Communication, Risk Preparedness, Vested Interest theory, Kosi River.

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INTRODUCTION

Human communication has been explored across a wide range of disciplines, beginning with classical rhetoric and extending into fields such as psychology, sociology, anthropology, geography, organizational studies, computer science, journalism, and modern marketing. For the millions of Indians vulnerable to natural disasters – such as earthquakes, floods, landslides, wildfires, and more – having a comprehensive understanding of the risks they face is essential for disaster preparedness and effective recovery (Thayyib Sahini, 2010). Disaster risk communication supports this goal by delivering clear, accessible information about potential hazards, as well as outlining the benefits and drawbacks of different risk reduction strategies and insurance options. Disaster risk refers to the likelihood of fatalities, injuries, damage, or destruction resulting from a hazardous event within a given timeframe. Disaster communication, when applied to risk, is broadly defined as a social exchange of information between members of society about any form of risk – whether individual, societal, political, or environmental – that may be intentional or unintentional (Susmayadi et al., 2014). Recently, disaster risk communication has evolved from a one-way flow of information to a more interactive exchange between authorities and at-risk populations. This shift acknowledges that those who may be impacted by a disaster must be actively engaged in communication processes, not just passive recipients of expert knowledge. A natural disaster is described as a significant disruption to a community's normal functioning – one that overwhelms its ability to respond using internal resources (Lang, Fewtrell, and Bartram, 2001). Communication during such emergencies aims to inform the public about the immediate and long-term consequences of the event and how it could impact their survival and well-being (Sheppard, Janoske, and Liu, 2012). Disaster communication involves a continuous exchange of information and perspectives among individuals, groups, and institutions. It includes various messages addressing the nature of the risk, expressing concerns, and reacting to governmental or institutional risk management efforts. Often referred to as public awareness or public education, disaster risk communication seeks to raise awareness among communities and stakeholders about the dangers they face and the protective actions they can take (Knight, 2013). Effective communication in this context should be based on strategic planning informed by scientific findings and social insights. Tailoring risk messages to specific groups ensures better understanding and encourages appropriate risk-reducing behavior.

One fifth of all flood-related deaths worldwide occur in India, one of the nations with the worst flood damage. Bihar is India's most flood-prone state, with 76 percent of the population, in the north Bihar living under the recurring threat of flood devastation (Kumar, 2019). The Kosi flood disaster of 2008 in Bihar and Nepal brings two important flood control-related concerns to light. This study

discusses the key reasons for the failure of flood management in the Kosi, through stakeholder interviews and observations in the aftermath of the flood (Sinha et al., 2008). When it comes to long-lasting and recurrent flood hazards, the Kosi River in the plains of North Bihar offers a problem. Despite more than 50 years of flood control management in the basin, the river still causes a lot of misery through frequent floods. Kosi, the sorrow of Bihar, has remained an enigma for the number of avulsions it has had till date causing huge floods everytime. The Kosi River in the plains of North Bihar provides a challenge because of the risk of long-lasting flooding. The river still causes a lot of pain through severe flooding despite a long history of flood control operations in the basin dating back more than 5 decades. About 1,000 villages in five districts Supaul, Araria, Madhepura, Purnia and Saharsa were affected, involving three million people, of whom about one million were evacuated. The state has been facing the repetition of the loss due to flood almost every year. It rains heavily here, between 100 and 200 cm. The majority of the rain occurs throughout a four-month period from June to September. Due to the low gradient of the north Bihar plain's slope, the lower courses of the rivers experience considerable siltation, and the water from these rivers' spills across agricultural fields (Arora and Pandey, 2016). The damage caused by the flood is of the tune of about rupees hundred crore every year. One of the worst floods to have hit Bihar was in the Kosi region. The Kosi is a trans boundary river between Nepal and India and is one of the largest tributaries of the Ganga. In order to control the powerful Kosi, a dam was built in Nepal, and in the late 1950s, the eastern and western Kosi embankments were created as well. But then there were breaches in the Kosi embankment during 1963, 1968, 1971, 1980, 1984, 1991, and 2008 and till today. Floods frequently occur in the Kosi basin even when there is no breach in the embankments. The Kosi is known for changing its courses. In the past 200 years, the Kosi has changed its course and is now flowing towards the border of the Darbhanga and Madhubani districts in the east, where it was once flowing near Purnia (Kumar Jha and Tripathi, 2013). The necessity of risk communication has risen at a time when virtually the entire globe is coping with the pandemic covid'19. 'Risk communication,' is a strategy of communicating successfully with populations that are at high risk, stress, or controversy. Excessive amounts of information, particularly through social media, have produced world conditions that are just as challenging to manage with as the pandemic (Government of Bihar, World Bank, 2010). The only possible frame work for classifying multiple types of ethical issues in risk communication research and practice to help continue a discussion initiated in 1990 by Morgan and Lave. We explore some of the ethical difficulties that each step in the process of developing risk communication techniques seems to bring up (such as choosing which issues to express, understanding the problem, and dealing with restrictions) (Varghese et al., 2021).

METHODOLOGY

Considering the nature and the requirements of the study, the study follows Mix method research design. Mixed methods research is a procedure for collecting, analyzing, and “mixing” both quantitative and qualitative research and methods in a single study to understand aresearch problem (Gay, Mills, & Airasian, 2009). The five blocks (Supaul- Kishanpur, Supaul, Basantpur, Raghopur and Pratapganj) of Supaul district (Bihar)were selected as the research area. The Survey aim stoassess the effectiveness of disaster communication by eliciting response from affected population. The responses were collected from the 500 respondents of thefive blocks of the Supaul district (Kishanpur, Supaul, Basantpur, Raghopur and Pratapganj) with the help of area sampling.



DEMOGRAPHIC

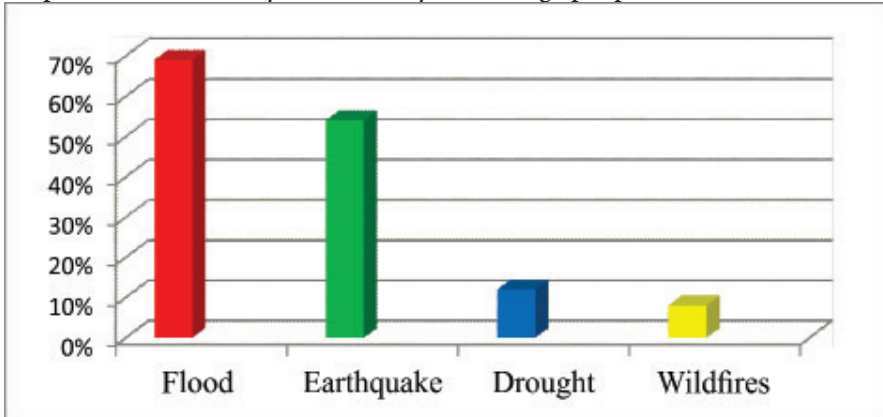
If we look into the demographic profile of the respondents, 49% were female while 51%were male. In the age categorization, 13% respondents were in between (18-27), 17%were in between (28-37), 23% were in (38-47), 14% were in (48-57), 11% in (58-67) and 22%were (68 and above).

Education Qualification

<i>Illiterate</i>	<i>Primary</i>	<i>Secondary</i>	<i>Higher Secondary</i>	<i>Under Graduate</i>	<i>Post Graduate</i>
3%	12%	35%	15%	15%	20%

NATURAL DISASTER EXPERIENCE

- In this question, respondents were all owed to choose more than one answer. Most witnessed natural disaster by people of Supaul is as expected. The Drought experience was mostly answered by the old age people who were above 58.



- When the people from different blocks of Supaul were asked, whether they have experienced Kosi flood or not, maximum number of the respondents agreed that they have faced it in their life. The question was measured on Likert Scale. 2% of the respondents said that they never faced flood personally in their life, 12% said they rarely faced it as they were the victims of 2008 Kosi flood but after that they shifted their home. 34% of the respondents said sometimes they do face it when there is high flow in Kosi. 12% said they often face it as their block is situated on the bank of Kosi and 13% said that they always face flood because they live near the river only due to their ancestral land.
- The people of Supaul were asked that whether they are ready with the preventions if there any flood occurs in the future. 15% people said that they are not ready at all as they live near river only, 46% said moderately they have arranged their preparedness as in every monsoon they do. 18% of the respondents said that they are very much aware of the preparedness and they have the arrangements. 11% respondents said they are extremely ready as they have multi-stored building to cope with it.

INFORMATION ACCESS AND MEDIA HABIT

- According to the people of the Supaul block, there is rarely any disaster mock drill exercise in the area or school of their children. As only 12% respondents said that they rarely saw any mock drill, whatever they have seen was mostly by NGO groups. 49% of the respondents said that they never saw any mock drill

but as per the govt. record, disaster mock drill exercises and announcements are being done on particular intervals in these areas.

- Mostly people especially women do not know about the govt. disaster scheme for them. As 67% of the respondents answered that they don't know about any such scheme, out of which 58% were women respondents.
- 100% respondents agreed that the disaster related messages delivered by the government are in Hindi medium and it's convenient to them. Also they agreed on the effectiveness of the messages sent by the government of Bihar for preparedness or help aid were helpful to them. Mostly messages received by the respondents were in the form of SMS and sometimes announcements made by the loud speakers. But according to the respondents, if the message would be in the form of video or audio or loud speaker in their own local language it would be easier to understand the message for everyone.

SUGGESTIONS BY THE RESPONDENTS FOR CAMPAIGN

Message should be in Maithili Language. There should be subject related to disaster prevention in each and every school. SMS is not enough for message distribution; it should be also on social media and whatsapp. Mock drill should be there on proper interval especially during monsoon.

DISCUSSION

For effective risk communication, White space as one of risk communication media has been developed by Ritsumeikan University. This program covers three communities adjoining Ritsumeikan University, including Kinugasa community, and uses one-seg channel. (Johnson, 1999). Accurate information given to the general public of Supaul (Bihar), elected authorities and community leaders, and the media lowers danger, saves lives and property, and accelerates recovery. New media such as the internet, email, blogs, text messaging, and cellphone photographs, as well as the growing importance of first informers, are altering government and media responsibilities. For public officials, a quick introduction and perspective on the media, including discussion of how the media thinks and operates, as well as the public as the end-recipient of information. Ritsumeikan University, which has established an alternative risk communication medium called "white space," served as a model for the methodology that this research develops. The Kosi disaster message designs were poorly constructed. Sometimes press releases were only available in newspapers, making them inaccessible to the public. The lack of risk communication media for tourists increases this vulnerable situation (Hassan et al., 2012). There is need to upgrade the existing risk communication frameworks of Supaul for Kosi disaster as an efficient method to close the theory to practice loop in disaster communications in Bihar. Several public communication theories

are contained within risk communications: According to the principle of “trust determination,” persons who are angry are more likely to mistrust the messenger of the news. As a result, public trust must gradually be established. According to the mental noise theory, people who are unhappy find it hard to hear, comprehend, and recall the messaging. According to experts, in this case, messaging should be brief, repeated to aid in memory, and utilize visual aids whenever possible. According to the hypothesis of negative dominance, people who are under stress are more likely to find the bad in everything. Too many negative words should be avoided in communications to prevent giving them more weight. In order to understand how to communicate with the public effectively and how to incorporate risk communications into a public relations strategy, it is essential to grasp the four theories that together constitute the basis for risk communications.

CONCLUSION

Despite more than 50 years of flood control efforts in the watershed, the river still causes significant floods and misery. This research gives an extensive investigation of flood hydrology and revisits the flooding issue in the Kosi River basin. In some areas of the basin, we combine the hydrological study with a GIS-based flood risk mapping. Substantial discharge fluctuation and high sediment input from an uplifted hinterland are typical hydrological characteristics of the Kosi River. The flood risk map provides a cost-effective way to plan mitigation measures in flood-prone locations and is validated with long-term inundation maps (Disaster and Authority, 2004).

A brief overview of the media from the perspective of public officials, including a description of the way the media thinks and works and the public as the final consumer of information. Techniques for interacting with the media and working together to provide information and messages before, during, and after a public crisis, as well as the issues that may arise as a result.

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MIGRATION AND UNEMPLOYMENT IN BIHAR: POLICY APPROACHES FOR SUSTAINABLE DEVELOPMENT

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Abstract

Bihar, one of the most densely populated states in India, grapples with major issues concerning out-migration, joblessness, and economic underdevelopment. The state's persistent out-migration is mainly caused by a scarcity of local job opportunities, poor infrastructure, and insufficient industrial growth, prompting a significant portion of Bihar's population especially its youth to relocate to urban areas within India and overseas in pursuit of better opportunities. This exodus of human capital intensifies the unemployment crisis in the state, resulting in a depletion of skilled and semi-skilled labour that could otherwise aid in fostering local economic development. These patterns impede Bihar's economic growth and exacerbate its developmental obstacles. To tackle this ongoing trend of out-migration and joblessness, it is crucial to adopt a sustainable development strategy. By combining education, job creation, and infrastructure development, Bihar can mitigate out-migration, keep its workforce, and promote sustainable economic growth over the long term, which will ultimately enhance the socio-economic conditions of its people. This paper examines the relationship between out-migration, unemployment, and sustainable development, suggesting solutions to tackle these interrelated issues.

Keywords: Keywords: Migration, Unemployment, Remittances, Development, Policy, Bihar

JEL Classification: Q12, F24

INTRODUCTION

Even with advancements in areas like agriculture and education, Bihar still faces significant unemployment issues, especially in its urban and semi-urban areas. The

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lack of adequate job opportunities in the industrial and service sectors compels many individuals in search of better employment to migrate, leading to a “brain drain” and a reduction in the local workforce. These patterns impede Bihar’s economic growth and exacerbate its developmental obstacles. Bihar, one of the most populated and economically struggling states in India, has experienced considerable out-migration over recent decades. This movement, largely fuelled by insufficient job opportunities, inadequate economic infrastructure, and low levels of industrialization within the state, has led many of its residents to seek employment in urban centres both domestically and internationally. The trend of out-migration carries significant consequences for Bihar’s socio-economic framework, as it affects not only the state’s labour force but also its potential for development. The unemployment problem in Bihar continues to be a significant challenge, exacerbating high poverty levels and restricting the possibilities for local economic development. While there have been advancements in areas like agriculture and education, the lack of adequate jobs in the industrial and service sectors continues to drive young, skilled, and semi-skilled individuals to leave in pursuit of better prospects. This trend frequently leads to a loss of talent and a reduction in the local workforce, obstructing the state’s potential for growth. In the realm of development, migration serves as a transformative force that can alter both the areas where people originate from and where they move to. For the regions sending migrants, this phenomenon can create new developmental prospects through remittances and opportunities for knowledge exchange when migrants return home. In contrast, the regions receiving migrants can experience economic expansion, cultural diversity, and increased innovation. Nonetheless, if migration is not effectively managed, it can create challenges such as difficulties with social integration, rising economic disparities, and pressures on the environment. Thus, migration plays a crucial role in the development process, influencing the spatial and structural dynamics of both the sending and receiving regions.

Despite advancements in areas such as agriculture and education, Bihar still faces significant unemployment issues, particularly in urban and semi-urban regions. The absence of industrial expansion and a robust service sector compels skilled and semi-skilled workers to pursue employment opportunities in other locations, resulting in both a “brain drain” and a loss of valuable labour. These patterns hinder the state from achieving its developmental potential and threaten long-term economic stability. Tackling these problems necessitates a holistic strategy centred on sustainable development. Essential tactics should involve generating local job opportunities, enhancing training programs, upgrading infrastructure, and promoting industrial expansion within the state. Furthermore, investing in eco-friendly technologies and sustainable methods can create new employment and align with international development objectives. By formulating a comprehensive strategy that emphasizes education, job creation,

and infrastructure enhancement, Bihar can decrease out-migration and encourage sustainable economic development, ultimately enhancing the living conditions of its inhabitants and contributing to long-term progress.

Sustainable development in Bihar, therefore, relies on tackling these fundamental issues. To alleviate the impacts of out-migration and joblessness, strategies should prioritize creating employment opportunities within the state, enhancing skill development initiatives, upgrading infrastructure, and promoting industrial expansion. Investing in eco-friendly technologies and sustainable methods can open up new job prospects while aligning with global development objectives. By cultivating a landscape that offers economic stability and prospects for residents, Bihar can diminish migration trends and encourage lasting, inclusive progress. In this regard, establishing a comprehensive development strategy that combines education, skill training, infrastructure enhancement, and job creation is essential for addressing both unemployment and out-migration issues, thus contributing to sustainable economic advancement in the state. Migration in Bihar is a long-established occurrence that has profoundly influenced the socio-economic environment of the state. Bihar, one of India's most densely populated and economically disadvantaged states, has seen extensive migration stemming from a mix of social, economic, and institutional causes. The migration trends in the state are intricate, with a considerable segment of its population relocating to urban regions within India and overseas in search of improved opportunities, while the state simultaneously grapples with creating adequate local employment and development.

This article examines the underlying reasons for out-migration and unemployment in Bihar, suggesting solutions through sustainable development frameworks. Migration functions within a larger context of social, cultural, economic, and institutional elements that influence both the regions' people leave and those they move to. Lastly, institutional factors like labour regulations, immigration laws, and social welfare systems are essential in determining the patterns and outcomes of migration from Bihar.

LITERATURE REVIEW

Bihar, which has a population of 104.1 million (GOI, 2011), is the third most populated state in India, following Uttar Pradesh and Maharashtra. If Bihar were to exist as an independent nation, it would be the 12th most populous globally, ranking behind countries such as Egypt, Ethiopia, and the Philippines, and just after Mexico, Japan, and Russia. Although it occupies only 3% of India's total land mass, Bihar comprises 9% of the nation's population, making it the most densely populated state in India. From 2001 to 2011, Bihar saw a population growth rate of

25.1%, the highest in the country, while the national average was 17.6%. Bihar is the most rural state in India, with just 11.3% of its population residing in urban regions. Between 2001 and 2011, the rate of urbanization in the state progressed slowly, rising by only 0.8% (GOI, 2011). A considerable portion of India's impoverished population lives in Bihar, where 33.8% of residents are below the poverty line. In 2011, Bihar represented 9% of the country's total population, yet it constituted 13% of India's poor. The state is experiencing a notable outflow of people due to issues such as severe poverty, high population density, and significant pressure on its agricultural land.

While regions like Bihar, which had potential for industrialization, faced hardships, more developed areas in northern and western India were able to foster industrial growth due to their pre-existing industries and infrastructure. Ghosh and Gupta (2009) refer to this disparity as a form of the resource curse. Bihar was also excluded from the Green Revolution during the 1960s and 1970s, as the initiative focused on specific agricultural regions with assured irrigation, leaving Bihar behind. Since the 1960s, Bihar has experienced relative economic decline compared to other states in India, primarily due to widespread poverty, insufficient socio-economic infrastructure, and low levels of investment. These factors have hindered the state's growth and development. According to Rodgers et al. (2012), this decline is largely attributed to the lack of investment in key sectors. The state's poverty and underdevelopment have perpetuated its struggle to catch up with more prosperous regions of India. As a result, Bihar has lagged behind in terms of economic progress. Bihari workers have played a crucial role in fulfilling labor needs across India (Tsujita, Oda, & Ghosh, 2010). As they found more job opportunities in other states, their living standards and consumption levels have risen considerably (Sharma, 1997). To enhance their income, these "optimizing peasant migrants" navigated risks and uncertainties by opting for temporary migrations (Yang, 1979).

In the late 1960s and early 1970s, the Green Revolution transformed northwest India, leading to an increased demand for agricultural labour (Singh, 1995). As Bihar remained trapped in economic stagnation, many agricultural labourers migrated to the prosperous states of Punjab and Haryana (Rodgers & Rodgers, 2011). This rural-to-rural migration soon extended to nearby industrial towns and urban centres, with the Delhi region, the capital, becoming a popular destination for migrant workers.

Over time, migration began to shift toward non-agricultural jobs, including rickshaw pulling, construction work, carpentry, masonry, and part-time roles in the informal sector (Ansari, 2001). Employment opportunities were the main driving force behind this migration, with states like Bihar often seeing labourers move to Delhi (UT), Maharashtra, Gujarat, Punjab, and Haryana (Keshri & Bhagat,

2012). Migration trends in Bihar have changed over time. Initially, it was short-term and tied to the agricultural calendar, but migration has shifted to a longer duration, with many migrants losing touch with both agricultural work and local job opportunities in their home villages (Datta, 2016). Following alterations in cropping practices and the introduction of mechanized farming, there was an over-saturation of labour demand in areas benefitting from the Green Revolution after the 1980s, which led to a significant rise in labour migration from Bihar to major cities such as Delhi, Mumbai, Surat, and Kolkata (Sarkar, 2019). Recently, this trend has become more established, with an increased emphasis on metropolitan regions. Nowadays, many Biharis view migration and remittances as crucial for their economic survival (Deshingkar, 2006).

MIGRATION TRENDS FROM BIHAR

The migration patterns in Bihar, as indicated by the census data from 1991 to 2011, reveal a transformation in internal migration trends, with both inter-state and international migration experiencing slight fluctuations over the years.

Although the overall number of migrants in the state saw a minor decrease from 2001 to 2011, the percentage of migration increased from 24.67% in 2001 to 26.17% in 2011. Internal migration, especially within the state, rose after a drop in 2001, climbing from 22.47% in 2001 to 24.71% in 2011. On the other hand, interstate migration showed a decline in 2011, falling to 1.07% of the total population, down from 1.95% in 2001 and 1.59% in 1991. This pattern implies that while Bihar still experiences some outflow of its residents to other states, the rate of interstate migration is comparatively low and has decreased in recent years. Meanwhile, international migration has remained limited but has shown a slow upward trend, increasing from 0.29% in 1991 to 0.38% in 2011 (Table 1).

Table 1: Streams of Migration

<i>Census Year</i>	<i>Total Population</i>	<i>Total Migrants</i>	<i>Internal Migrants</i>	<i>Interstate Migrants</i>	<i>International Migrants</i>
1991	6,45,30,554	2,15,29,825	2,03,03,129	10,31,566	1,90,130
2001	8,29,98,509	2,04,80,976	1,86,49,877	16,19,031	2,12,015
2011	10,40,99,452	2,72,44,869	2,57,28,400	11,11,954	3,98,592

Source: Compiled from Census of India, 1991, 2001 and 2011, D-series

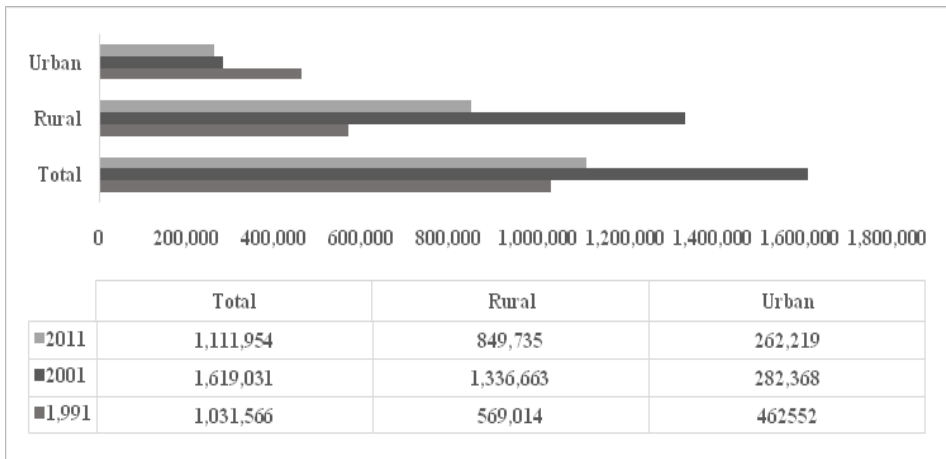


Figure 1: Migration across regions

Source: Compiled from Census of India 1991, 2001 and 2011, D-series

In 1991, more than half of the migrants came from rural areas, accounting for about 55.21% of the total migrants, while urban migrants made up around 44.79%. Although the urban migration rate was substantial, it was significantly smaller compared to rural migration. By 2001, the proportion of rural migrants rose sharply to approximately 82.62%, indicating a substantial increase in rural-to-rural migration over the decade. In contrast, the share of urban migrants fell to just 17.38%. In 2011, the percentage of rural migrants decreased slightly from 2001 but still constituted the majority of migrants. Meanwhile, the share of urban migrants increased to 23.54%, reflecting a trend towards further urbanization and possibly greater urban growth compared to the previous decade (Figure 1).

Table 2: Reasons for Migration and Their Percentages

Reason for Migration	Number of Migrants	Percentage
Work/Employment	4,73,161	2.31%
Business	42,119	0.21%
Education	85,672	0.42%
Marriage	1,60,15,036	78.17%
Moved After Birth	75,569	0.37%
Moved with Household	9,42,910	4.61%
Others	28,46,509	13.91%

Source: Calculated using Census 2011, D-Series data on migration.

Overall, the data shows that while marriage is the dominant reason for migration in Bihar, work/employment and household-related movements also play

a significant role. This indicates that while work-related migration constitutes a smaller percentage of the total migration, it is still a significant driver of movement, especially in the context of individuals moving from rural to urban areas for better economic prospects (Table 2).

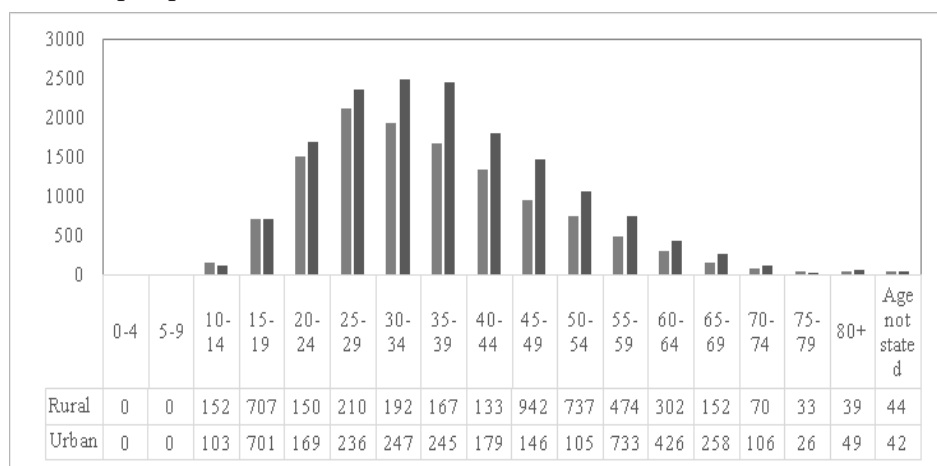


Figure 2: Moved outside the state by age group “with work/employment as the reasons of migration with duration of residence 0-9years.

Source: Census of India, 2011

The data indicates that the largest number of migrants for work and employment in Bihar are found within the age groups of 20-34, with peak migration occurring between ages 25-34. This suggests that a significant portion of individuals are migrating in search of better job opportunities, career advancement, or improved economic prospects during their early to mid-adult years. The trend highlights that young and middle-aged adults are the primary contributors to labour migration, likely driven by the need for employment, skill development, and income generation. As individuals age, migration for work decreases, pointing to the fact that older adults may have more established careers or family obligations that make migration less feasible. This demographic insight is important for policymakers, employers, and researchers, as it helps them understand the labour force dynamics, plan for regional workforce development, and tailor migration policies to address the needs and challenges of the younger and more mobile working-age population. It also provides valuable data for employers seeking to target potential migrant workers and design workforce strategies that account for age-related migration patterns (Figure 2).

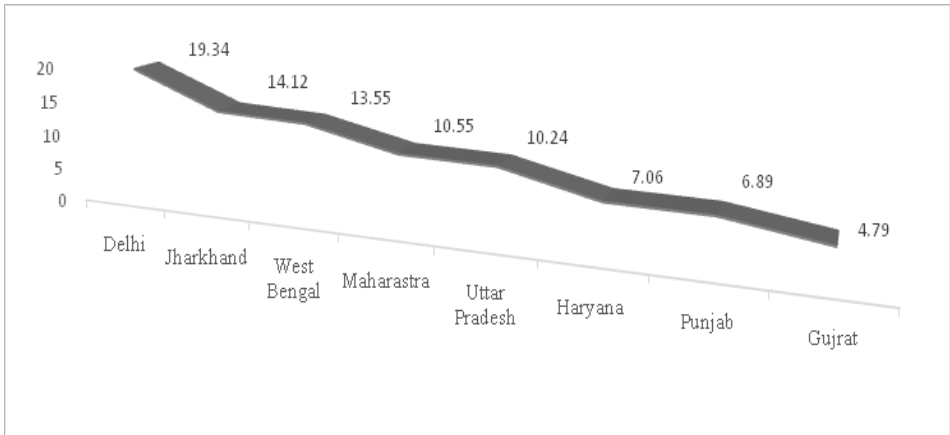


Figure 3: Major destination states

Source: Census of India, 2011

The migrants from Bihar are mainly attracted to urban and industrial centres throughout India, where job openings in both formal and informal sectors are plentiful. The large number of migrants heading to Delhi, Jharkhand, West Bengal, and Maharashtra shows that individuals are predominantly searching for jobs in the industrial, construction, and service industries. Additionally, the nearby states of Uttar Pradesh, Haryana, and Punjab are further enticing, providing job prospects in agriculture, construction, and other fields. Although Gujarat has a lower migration rate, it continues to be a desirable destination for those aiming to engage with its expanding industrial market (Figure 3).

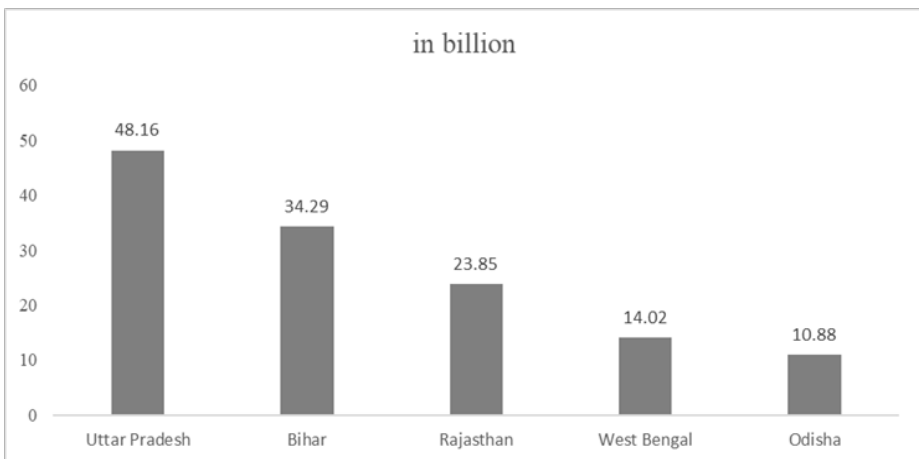


Figure 4: States receiving highest share of remittances

Source: NSSO 64th round

According to the NSSO 64th round, domestic remittances in India amount to a total of ₹325.4 billion. Of this, ₹198 billion comes from interstate transfers, while ₹127 billion comes from intrastate transfers, all transacted by approximately 22 million migrants. Interstate remittances make up 61% of the total remittance flow. The states that receive the highest volume of remittances are Uttar Pradesh, Bihar, and Rajasthan, which highlights the significance of out-migration from these regions. Migrants from these states primarily move to destinations like Delhi, Maharashtra, and Gujarat. Even though these states receive substantial amounts of remittances, the per capita value of these remittances remains low, indicating that many migrants likely occupy unskilled or low-wage occupations. This shows that while a large number of migrants are making significant contributions to the economies of their home states through remittances, their earnings in their host countries may be relatively low (Figure 3).

MIGRATION, UNEMPLOYMENT, AND LIVELIHOODS: POLICY STRATEGIES FOR BIHAR'S DEVELOPMENT

In order to tackle the issues of migration and joblessness in Bihar, it is essential to implement effective policy measures that promote sustainable economic development, generate job opportunities, and regulate migration patterns in a way that is advantageous for both migrants and the state. Below are several key policy measures that could prove beneficial:

(1) Skill Enhancement and Vocational Training

- There is a necessity for focused skill development initiatives, particularly for the youth, to enhance job readiness across various sectors, including manufacturing, construction, information technology, agriculture, and services.
- The government can work alongside industry groups to establish additional training centres and ensure that the skills taught correspond with the requirements of industries in both urban and rural regions.
- Encourage Digital Literacy and Technology-Based Education to address the evolving job landscape, the emphasis should be on providing digital literacy and technical skills in rural communities. Collaborating with international online learning platforms to offer affordable courses can prepare young individuals with the skills that align with contemporary industry needs.

(2) Generating Jobs through Infrastructure Development

- **Enhance Infrastructure Initiatives:** The advancement of infrastructure, especially in rural regions, can lead to substantial job creation. Major projects such as building roads, electrifying rural areas, establishing water

supply systems, and implementing housing initiatives can employ migrant workers and aid in lowering the unemployment rate in the state.

- **Establish Industrial Zones and MSME Clusters:** Bihar should prioritize the development of industrial zones and clusters for micro, small, and medium-sized enterprises (MSMEs), focusing on industries like textiles, food processing, and handicrafts. These efforts can generate local employment and minimize out-migration, as individuals will have job opportunities available closer to their homes.

(3) Promote Agro-based and Rural Entrepreneurship

- **Agro-Processing Industries:** Bihar is endowed with abundant agricultural resources. By concentrating on agro-processing sectors like food packaging, dairy production, and horticulture, the state can create employment opportunities and retain its rural workforce. This initiative will also elevate income levels in rural communities and offer job prospects to individuals who might otherwise leave in search of work.
- **Encourage Rural Entrepreneurship:** Offering financial assistance, mentorship, and access to markets for rural entrepreneurs can nurture local enterprises. Government initiatives such as the Prime Minister's Employment Generation Programme (PMEGP) could be further enhanced to bolster small businesses in rural Bihar.

(4) Improve Employment Guarantee Initiatives

- **Broaden the MGNREGA and Other Rural Employment Initiatives:** The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has already acted as a safety net for numerous migrant workers during the pandemic. Widening the scope of MGNREGA and additional rural employment initiatives can create job opportunities within the state, particularly in rural regions, thereby lessening the need for migration in search of employment.
- **Focused Employment Schemes for Women and Underprivileged Groups:** Tailored employment programs should be established for women, Scheduled Castes/Scheduled Tribes communities, and other marginalized groups, offering training and jobs in areas such as handloom weaving, local crafts, and small-scale agriculture.

(5) Enhance Education and Youth Job Opportunities

- **Revamp the Education System:** Improving the standard of education and prioritizing vocational and skills-based learning can provide young individuals with the necessary abilities to thrive in the local job market, thereby decreasing the need to migrate to other regions in search of work.
- **Programs for Youth Employment:** Create state-level initiatives to facilitate the employment of young individuals across various sectors such as

agriculture, technology, and services. These programs can be aligned with private sector investments, ensuring that young people secure meaningful employment within the state.

(6) Enhance Regional Collaboration

- **Foster Inter-State Alliances:** Bihar has the potential to establish collaborations with key destination states such as Delhi, Maharashtra, and Gujarat to enhance support mechanisms for migrant labourers, encompassing legal protections, healthcare access, housing solutions, and financial inclusion initiatives.

CONCLUSION

In summary, the migration trends originating from Bihar, largely motivated by unemployment and the scarcity of local economic prospects, underscore the crucial role of out-migration in preserving the livelihoods of numerous households within the state. A significant portion of migrants seeks improved job opportunities primarily in regions such as Delhi, Maharashtra, and Gujarat, making migration an essential approach for tackling unemployment and economic challenges in Bihar. Nevertheless, the prevalence of low-skilled, low-paying jobs among these migrants highlights that the fundamental issue of insufficient skill development and local job availability remains a pressing obstacle. For many families in Bihar, migration has evolved into a principal livelihood strategy, with remittances functioning as a key income source. Although a substantial number of remittances return to Bihar, the relatively low per capita remittance figures reveal the limited skill sets of many migrants, emphasizing the need to enhance education and vocational training initiatives in the state. By addressing these skill deficiencies, it is possible to create greater local employment opportunities and lessen the state's reliance on out-migration for economic stability. From a policy standpoint, it is imperative for the state government to concentrate on establishing a supportive environment for sustainable growth by promoting local job creation, enhancing infrastructure, and investing in human capital. This could involve encouraging the development of small and medium enterprises, boosting agricultural productivity via technology, and promoting industrialization in vital sectors. Policies that focus on advancing the education system, skill development, and the establishment of additional formal sector employment can assist in alleviating the push factors that compel migration.

Bihar has seen significant variations in its unemployment rates over the last ten years, frequently exceeding the national average. In the height of the COVID-19 lockdown in April and May 2020, the unemployment rate in the state escalated to 46%, which was markedly higher than the national average of 24% at that time. By July 2022 to June 2023, the unemployment rate fell to 3.9%, although it remains above the national average of 3.2%. In the end, for Bihar to attain sustainable growth, it is

crucial to diminish the economic inequalities that drive its population to migrate in search of improved prospects. This necessitates integrated policies aimed at job creation, skill enhancement, and infrastructure development, rendering Bihar a more appealing location for residence and work, rather than depending solely on migration as a means of livelihood.

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MUKHYAMANTRI BHIKSHAVRITI NIVARAN YOJANA IN BIHAR: ADDRESSING THE CAUSE OF DESTITUTION

Bhawna Gupta*, Akhilesh Singh Tomar and Atul Kriti*****

Abstract

Destitution and beggary plagues Indian society, which requires urgent state's intervention. Indian Judiciary (Delhi High Court and Supreme Court) has also held it as violation of fundamental rights of most vulnerable people. In 2011-12, Bihar initiated the "Mukhyamantri Bhikshavriti Nivaran Yojana (MBNY)" with the goal to safeguard the rights of beggars by ensuring their care, protection, development, and socio-economic and cultural empowerment. As per the Saksham Portal (Bihar), 6740 persons have been rehabilitated from begging in Bihar. This study seeks to present a critical analysis of the MBNY scheme drawing on primary data collected through observation and interviews of select NGOs and government officials associated with this scheme. Additionally, for comprehensive analysis, census reports, NITI Aayog indices, and Government of Bihar reports have been utilised. Recently, the Government of India has introduced SMILE-75 for the comprehensive rehabilitation for beggars. This initiative is commendable and the authors suggest a multi-faceted strategy for long term effectiveness.

Keywords: Urban Poor, Destitute, Beggary, Marginalised, Livelihood, MBNY, Bihar

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INTRODUCTION

People who are poor and vulnerable face multiple constraints when encountering “poverty traps” and many resort to begging to survive. Poverty is defined as chronic or structural social insecurity caused by insufficient overall economic development. It is linked to other insecurities arising from traditional contingencies such as job loss, disability, old age, death, and so on, which are referred to as “second-order insecurities” or “conventional social insecurity (Mani, 2014). The most severe kind of poverty is destitution. Human Development Report 1997 (UNDP, 1997) gives three perspectives on poverty, namely income, basic needs, and capability perspectives. According to income perspective, a person is poor if his/ her income level is below the defined poverty line. On the other hand, basic needs perspective states that poverty is the deprivation of material requirements for minimally acceptable fulfilment of human needs, including food. The capability perspective reconciles the notion of absolute and relative poverty since relative deprivation in incomes and commodities can lead to an absolute deprivation in minimum capabilities.

The phenomenon of begging occurs because of a lack of access to civic amenities like food, health, and shelter, and is further aggravated by natural calamities, rising inequalities, and the absence of adequate social security schemes. Street beggars are defined as “individuals, including children, elderly people, people with disabilities, and families, who normally beg or make their living from the streets or public spaces such as shopping areas, churches, and mosques by asking people for money and food. Further, Malik (2012) classified Indian beggars into three distinct categories, though not exhaustive: The first consists of the ones for whom begging is a vocation; the second comprises people who are forced into begging, and the third includes those who beg due to circumstances (Namwata, 2012, Adugna, 2006).

Indian Context

India is a country where “poor and pauperism” are common occurrences; in fact, beggary has traditionally been regarded as a heroic act. In Buddhism, Jainism, and Hinduism, “Bhiksha” (alms) is well-known. Muslims also adhered to “Zakat,” despite the fact that it had arisen as an unconventional religious doctrine. Although “beggary” has religious mendicancy as its origin, it has socioeconomic repercussions that have elevated it to a significant societal issue (Sarkar, 2007).

The history of India’s anti-begging laws extends back to the time before independence. European Vagrancy Act of 1869 set the tone for the nation’s anti-begging laws. The Act provided for penalty, conviction, and additional imprisonment for any Europeans found soliciting alms. A series of dedicated laws, including The Bengal Vagrancy Act (1943), The Mysore Prohibition of Beggary Act (1944), The

Bombay Beggars, Act (1945), and Tamil Nadu Prevention of Begging Act (1945) were enacted pre-independence to criminalise begging. Post-independence, The Bombay Prevention of Begging Act (1959) was enacted which defined begging as “soliciting or receiving alms in a public place, whether or not under any pretence such as singing, dancing, fortune-telling, performing or offering any article for sale; or entering on any private premises for the purpose of soliciting or receiving alms, exposing or exhibiting with the object of obtaining or extorting alms, any sore, wound, injury, deformity or disease whether of a human being or animal; or having no visible means of subsistence and wandering, about or remaining in any public place in such condition or manner, as makes it likely that the person doing so exist soliciting or receiving alms; or allowing oneself to be used as an exhibit for the purpose of soliciting or receiving alms; but does not include soliciting or receiving money or food or given for a purpose authorizes by any law, or authorized in the manner.”

According to Census 2011, there are 4,13,670 beggars/vagrants in India. In Bihar, the number of beggars is 29,723 which comprises 14,842 males and 14,881 females (Census 2011). Bihar has the fourth largest population of beggars in India (See Table 1).

Table 1: Top 5 states in India w.r.t. Population of Beggars (Census 2011)

S. No.	State/UT	Beggars/ Vagrants		
		Males	Females	Total
1.	West Bengal	33086	48158	81244
2.	Uttar Pradesh	41859	23976	65835
3.	Andhra Pradesh	16264	13954	30218
4.	Bihar	14842	14881	29723
5.	Madhya Pradesh	17506	11189	28695
	INDIA	2,21,673	1,91,997	4,13,670

Source: GOI, PIB (2021, December 14) <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1781351>

In the absence of a uniform central law to prevent begging, most of the states and Union territories in India relied on the Bombay Prevention of Begging Act, 1959. Some of the states went to the extent of criminalizing begging and adopting punitive measures to tackle it. From time immemorial, these vulnerable people have been punished for being poor.

In *Harsh Mander vs Union of India* and *Karnika Sawhney vs Union of India*, the Delhi High Court in 2018 declared those provisions of the Bombay Prevention of Begging Act as null and void that criminalized begging. Further, The Supreme Court of India in 2021 accepted a Public Interest Litigation filed by Kush Kalra. The

Supreme Court refused to take an elitist view of criminalizing begging and said “no person would like to beg unless he/she is forced to do so” (Mahapatra, 2021).

Further, 22 states in India adopted anti-beggary laws based on the above-mentioned legislation. It is in this context that Bihar’s MBNY is a progressive and solution-oriented scheme. Along similar lines, the Government of Odisha enacted the “SAHAYA” Scheme and the Union Ministry of Social Justice launched a comprehensive scheme named Smile-75 (Support for Marginalised Individuals for Livelihood and Enterprise) for welfare of beggars/ vagrants in seventy-five identified Municipal Corporations (PIB, March 2022). The Ministry had identified 10 cities for undertaking a pilot project on the comprehensive rehabilitation of persons engaged in the act of begging. The pilot project began in 7 cities namely Delhi, Bangalore, Hyderabad, Indore, Lucknow, Nagpur, and Patna for welfare of beggars with focus extensively on rehabilitation, provision of medical facilities, counselling, awareness, education, skill development, economic linkages and convergence with other Government welfare programmes etc. (PIB, Aug 2022).

RATIONALE AND OBJECTIVE OF THE STUDY

Bihar performs poorly in the majority of the development indices among Indian states. According to the NITI Aayog Multidimensional Poverty Index 2021, (NITI Aayog, 2021a), Bihar stood first with over half the population identified as multi-dimensionally poor. SDG Index 2021 released by NITI Aayog ranks Bihar as the worst-performing state with it being at the bottom in SDG 1-No Poverty and SDG 2-Zero Hunger (NITI Aayog, 2021b). Begging in Bihar is more of an urban phenomenon. While begging is not unknown in rural areas, beggars in rural hamlets and villages are rare. (ILO, 2014) Rural places just do not have enough people to support many beggars because of the low population density. The identity of the beggar and his or her close relatives would also be well known in relatively small-scale social systems. Abandoning a relative in need would hurt the immediate and broader family. Families in such societies probably wouldn’t let a relative beg unless they were completely unable to provide the necessary support. However, urban places can offer both more anonymity and a larger support system. Beggary is endemic to various parts of Bihar and Patna bears no exception to this. Patna district has the highest rate of urbanization in Bihar. Data from the MBNY dashboard indicates that the extent of beggary in Patna is very high and as many as 3253 beggars were covered in the survey (see Figure 1).

METHODOLOGY OF THE STUDY

The study, conducted in Patna city in October- November, 2022 employed interview schedules administered to beggars in different locations namely, Hanuman Mandir, Railway Station, Gandhi Maidan, Gaughat, and Boring Road Patna. Primary data was collected based on the objectives of the study, including personal characteristics such as age, gender, birthplace, educational background, income, and marital status. The researchers adopted a convenient sampling method and could collect data from 78 individuals engaged in begging across different age groups and genders. This sample comprises 40 females, 35 males, and 3 others, including 8 children.

Formal and informal interviews with government officials and NGOs supplemented the study. Secondary data sources included reports from NITI Aayog, Census 2011, PIB, newspaper coverage and Bihar Government websites.

OVERVIEW OF MBNY

In 2011-12, the Bihar government launched the Mukhyamantri Bhikshavriti Nivaran Yojana (MBNY) also known as 'Pehchaan' to address the pervasive issue of begging proactively. MBNY aims to protect and promote the rights of beggars by ensuring their care, protection, development, and socio-economic and cultural empowerment through enabling policies and programmes. Key activities under MBNY include:

- (a) "operation of male/ female rehabilitation homes;
- (b) facilitating beggar's access to the benefits of government programmes;
- (c) organization of identified beggars into self-help groups (SHGs);
- (d) imparting functional literacy and vocational training to the beggars;
- (e) rescue, and rehabilitation of child beggars; and
- (f) legal and medical aid to identified beggars." (Saksham website)

The interventions target beggary prevention and vulnerability reduction leading to a dignified life for the ultra-poor. The majority tends to be landless rural women in the long run. SSUPSW branded as 'SAKSHAM' under the Department of Social Welfare (Bihar government) oversees the implementation of MBNY.

Initially, the government initiated a comprehensive approach towards beggars, involving surveying, providing identity, reuniting them with their families, and then providing benefits from existing rehabilitation programs so that they do not revert to beggary. However, if a beggar is unwilling to join the family or his family cannot be located, the scheme provides food and healthcare, as well as appropriate skills to assist in his or her employment or to create self-employment opportunities by providing working capital for sustainability. Their activities are being observed

to prevent them from getting into beggary again. In the fiscal year 2016-17, 1375 identity cards were issued to surveyed beggars across five districts so that they could benefit from MBNY and other welfare programmes. These identity cards play an important role as they bridge the gap between beggars and government programmes (Mittal, 2021). Restored beggar or beggar families, including child beggars, received a one-time payment of Rs. 2000 to start anew (TOI, 2021). Major initiatives under the scheme include:

Rehabilitation Homes (Seva Kutirs and Shanti Kutirs)

The Social Welfare Department, the rehabilitation homes for male beggars are called *Seva Kutirs* whereas the rehabilitation homes for women are popularly known as *Shanti Kutirs*. There is a third type of rehabilitation home for mentally retarded individuals. These homes offer basic services such as food, counselling, lodging, clothing, recreation, and medical care. It is important to highlight that the MBNY rehabilitation home is not custodial and thus anybody who is brought here may or may not continue to stay.

In November 2022, under MBNY, there are two rehabilitation homes and eleven short-stay cum classification centres (Seven *Seva Kutirs* for male beggars and Six *Shanti Kutirs* for female beggars) operating in seven districts (Mittal, 2021). Under the MBNY scheme “SAKSHAM” has engaged an agency to run a *Short Stay Home cum Classification Centre* to provide rehabilitation, classification, and referral services to people in beggary and ultra-poor.

Skills Training Centres (Kaushal Kutirs)

In addition, *Kaushal Kutirs* offers beggars employment opportunities through skill development and training programmes. They aim to improve relevant skills so that they can find work and avoid falling into poverty again. In 2021, 982 beggars received skills training in five districts, and 4,820 were reunited with their families. Three centres provided training to 360 individuals, supplemented by social security benefits like widow and old age pensions (TOI, Feb. 2021).

Self-Help Groups and Producer Groups

Producer Groups provide technical and financial assistance to people in beggary to create opportunities for employment and income generation. Beggars were encouraged to form Self-Help Groups (up to 10 members) and rehabilitation efforts included issuance of Aadhar cards and bank linkages for some groups involved in production of masalas and jute items for sale (TOI, Feb. 2021). In 2021, 14,753 beggars were identified in a state-wide survey, with 52 self-help groups

formed comprising 520 members (TOI, Feb 2021). Beggars in a group took up jute handicraft, which not only promoted self-employment but also instilled in them the belief that they could become self-sufficient (Prabhat Khabar, 2022).

The next section covers the findings from data collected from interview schedules administered to 78 individuals engaged in begging. Understanding these findings and challenges can inform policymakers, social workers, and stakeholders involved to make suitable interventions and address the root causes of begging in Patna city.

KEY FINDINGS

Respondents' Characteristics

In this section, the demographic profile of the respondents, encompassing factors such as age, place of birth, gender, and educational background is examined.

According to Census 2011, the people above 50 years of age in Bihar comprised 13.28 per cent of the State population (PIB, 2020). However, our sample (See Table 2) comprises 52.6 per cent of people above 50 years of age. According to the reasons cited by the respondents, the primary causes of begging among the elderly in Bihar are poverty, old age, and family disorganization (broken families and the death of a spouse). People aged 25-50 years comprise 37.16 per cent of Bihar's population. In our sample, 30.8 per cent of people are from that age group. The reasons for begging as cited by the respondents are poverty, unemployment, disability, and natural calamities. The person with less than 25 years is 56.92 per cent of the State population. In our study, the share of this age group is 16.7 per cent. The main causes of begging among them are poverty, the death of parents, and natural calamities.

"The Census 2011 pegged Bihar's urbanization at a mere 11.3 per cent compared to the national urbanization figure of 31.2 per cent. While the state accounts for 8.6 per cent of India's total population, it has only 3.1 per cent of the country's total urban population" (Jha, 2022).

Since the urbanization rate in Bihar is very low, our sampling indicating beggars born in rural Bihar is 83.3 per cent and 12.8 per cent in urban areas. Researchers also found three individuals who did not know their birthplace. In our sample, the number of females is more than the number of male beggars. Three persons belong to the third gender. The major causes of beggary among females are the death of a spouse, abandonment by children, and lack of adequate social security schemes.

Table 2: Demographic profile of the respondents:

<i>Age</i>	<i>Male</i>	<i>Female</i>	<i>Others</i>
Above 50 years	19	22	-
Between 25 and 50 years	09	12	03
Less than 25 years	07	06	-
Birth in a Rural/ Urban area			
Urban area	03	04	03
Rural area	32	26	-
Marital Status			
Unmarried	10	08	03
Widow	-	19	-
Married	15	13	-
Widower	10	-	-
Education Qualification			
Literate	06	00	-
Illiterate	29	40	03

Source: Primary Survey

Out of a sample of 78 respondents, 28 were married and 21 were unmarried. 18 respondents were found widowed and 11 were widowers (Table 2). The death of a spouse coupled with the absence of adequate social security schemes to support the poor was one of the primary causes of people being pushed to begging.

According to the Census 2011, the literacy rate of Bihar was 69.83 per cent which was the lowest among all the states in India. For the purpose of census 2011, a person aged seven and above, who can both read and write with understanding in any language, is treated as literate (knowindia.gov). We found that seventy-two out of seventy-eight respondents were illiterate (Table 2).

Table 3: Income distribution of respondents (n=78)

<i>Income per Day</i>	<i>Less than Rs. 100</i>	<i>More than Rs. 100</i>
	68	10

Source: Primary survey

87 per cent of beggars in Bihar earned less than a hundred rupees in a day (Table 3). The problem of begging in Bihar seems to be an endemic phenomenon as 85 per cent of beggars were into begging for more than two years. Those who were recently pushed into begging were either because of natural calamities (mostly floods) were kids whose parents had passed away or were disowned by families because of leprosy. Further, 66 out of 78 respondents were involved in begging for more than 2 years (Table 4).

Table 4: Time period since involved in Begging (n=78)

<i>Since when have you been into Begging?</i>	<i>Between 1-2 Yrs.</i>	<i>More than 2 Yrs.</i>
	12	66

Source: Primary survey

It is pertinent to mention here that COVID-19 lockdown put the lives of beggars in danger and gave birth to a new class of beggars who were not involved in begging earlier. Mentally challenged, poor and disabled underwent multiple hardships during lockdown and subsequently resorted to begging due to further marginalisation.

Causes of Begging

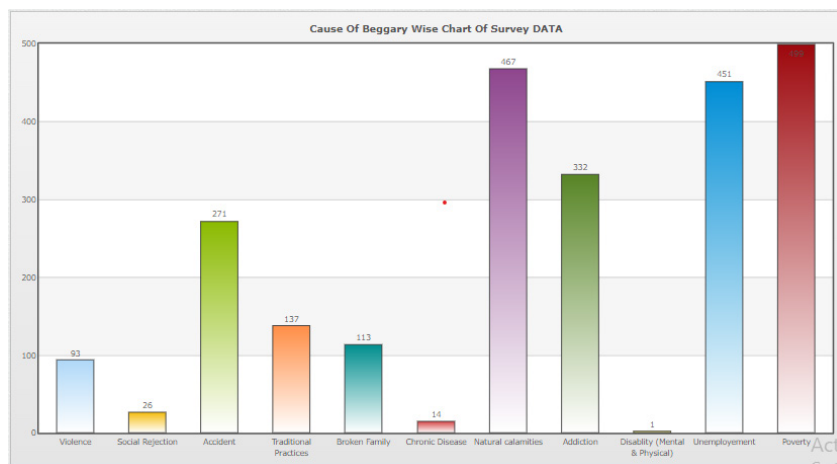
There exist many causes of this menace, ranging from mental and physical disability, poverty, unemployment, and the giving custom among others. Despite mentioning the above causes, two underlying causes remain common – poverty within a family or underemployment which results in a family being unable to support disabled member(s), and also the absence of security from government social policies which in turn forces these members of the family to beggary. Research conducted highlights poverty, unemployment, old age, disability, and familial tragedies as primary drivers of begging as seen in Table 5.

Table 5: Causes of Begging

<i>Causes of Begging</i>	<i>No. of Persons</i>			
	<i>Males</i>	<i>Females</i>	<i>Others</i>	<i>Total</i>
Poverty/Unemployment	06	09	00	15
Poverty/Unemployment, Old Age	06	10	00	16
Poverty/Unemployment, Differently Able (Divyang)	05	02	00	07
Poverty/Unemployment, Disowned by Family	01	03	00	04
Poverty/Unemployment, Natural Calamities	02	01	00	03
Poverty/Unemployment, Disorganisation of Family, and Old Age	07	05	00	12
Poverty/Unemployment, Death of Parents	01	00	00	01
Poverty/ Unemployment, Differently Able (Divyang), and Old Age	01	02	00	03
Disowned by Family	02	03	03	08
Family Occupation	02	01	00	03
Differently Able (Divyang)	02	01	00	03
Death of Parents	02	01	00	03

Source: Primary Survey

This is corroborated by other sources. The survey conducted by SSUPSW (Saksham) also indicates that poverty, unemployment and natural calamities are ranked among the top three causes of destitute in Bihar resorting to beggary (See Figure 2).

Figure 2: Causes of Beggary in Bihar – Cause-wise chart of Survey Data (Saksham Portal)

Source: Saksham Portal (MMBNY/Dashboard.aspx) Accessed on 8.5.2024

Awareness about the MBNY scheme and benefits availed

The importance of raising awareness about the scheme among destitute and beggars cannot be overstated. Table 6 shows that 28 respondents out of 78 had heard about the scheme either from a friend or from an NGO whereas 50 were not aware of the scheme. This stark lack of awareness underscores the need for a proactive approach to address this challenge

Table 6: Awareness among respondents (n=78)

<i>Questions</i>	<i>Response</i>	
	<i>Yes</i>	<i>No</i>
Have you heard about MBNY?	41%	59%
Are you a beneficiary of the MBNY Scheme?	23%	77%

Source: Primary Survey

It was found that 18 (23 per cent) respondents were beneficiaries of the MBNY scheme. Table 7 provides insights into the specific facilities accessed by beneficiaries, highlighting the gender distribution and the range of services utilized under the MBNY scheme. One male beneficiary has availed a comprehensive package of benefits.

Further, raising awareness among destitute and beggars is essential for promoting their welfare, The respondents of the study also included those beneficiaries who had run away from the rehabilitation homes due to various reasons.

Table 7: Facilities provided to beneficiaries (n=18)

<i>Benefits Availed</i>	<i>No. of Persons</i>		
	<i>Males</i>	<i>Females</i>	<i>Total</i>
Training Centre	00	05	05
Night Shelter/ Rehabilitation	02	00	02
Ration Card, Bank Account, Night Shelter/ Rehabilitation	01	01	02
Night Shelter/ Rehabilitation, Training Centre	02	00	02
Aadhar Card, Ration Card, Bank account, Night Shelter/ Rehabilitation, Monetary Help	01	00	01

Source: Primary Survey

The low awareness levels of the MBNY scheme, coupled with the fact that some beneficiaries had fled rehabilitation centres, serve as an indicator of the need for improved outreach and communication strategies to ensure that vulnerable populations are aware of and able to access the scheme's benefits effectively.

ISSUES AND CHALLENGES IN IMPLEMENTATION

The Scheme has been a lifeline for many, especially in the aftermath of COVID-19, which left countless people without livelihoods and widened income inequality. However, its implementation faces several hurdles. Issuing identity cards, particularly for the elderly and disabled, remains a major challenge, as these are essential for accessing welfare benefits. The government's role varies—acting as a facilitator in some districts while directly managing the scheme in others, often with temporary staff, which affects consistency. Rehabilitation centres in Patna, run by NGOs, are doing their best but struggle with limited capacity (only 50 people each) and a low retention rate (50 per cent). Many individuals either lack identity proof or choose not to stay. These centres provide food, counselling, basic amenities, skill training, and even reunite some individuals with their families, but the rising number of beggars demands more resources and better infrastructure.

CONCLUSION AND RECOMMENDATIONS

MBNY is a welcome scheme to protect and promote the rights of beggars by ensuring their care, protection, development, and socio-economic and cultural empowerment through enabling policies and programmes. It has partially contributed to achieving its desired objectives. Not only has it catered to the poorest of the poor in selected clusters of districts of Bihar, but it has also inspired other states and the Centre to formulate policies for the welfare of beggars who otherwise get very little attention in the national debates. The authors believe that the best way to deal with begging as a problem is to stop it before it becomes endemic. Judiciously framed welfare schemes and timely implemented social security measures have the potential to save people from getting into poverty and push them into begging. The fact that it has been running for a decade and yet we have an increasing population of beggars reaffirms the need for that support. The nation's government, NGOs, and civil society can all make a significant contribution to the rehabilitation and avoidance of beggars. Awareness about the scheme needs to increase and sustained financial backing is crucial for its success. Rehabilitation homes need a revamp to increase the retention rate and better serve their purpose. Indeed, in the twenty-first century when we embrace the idea of growth and development, nobody should have to resort to begging for basic needs.

To make the scheme effective, it is important to take steps to identify vulnerable groups early, ensure timely release of government funds, and strengthen social security schemes like MGNREGA and DAY-NULM. Further, to enhance community engagement, religious institutions can be involved and stakeholders like police and caregivers trained to support rehabilitation efforts with empathy. In addition, steps can be taken to provide meaningful vocational training to help individuals gain employment, raise awareness about the challenges beggars face, and educate communities to combat stigma.

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JUSTICE DELIVERY AT GRASSROOTS LEVEL IN BIHAR: A STUDY OF GRAM KATCHAHRY

Ahmad Nawaj* and Bipul Kumar**

Abstract

The Panchayati Raj System is not completely a post-independence development. Such political institutions also existed in ancient India and were popularly known as the Sabha, which was composed of respected elderly people or the Gumasta (village headman). The basic unit of governance was a village. The ancient Panchayat worked through the councils constituted by the people and discharged administrative functions such as managing local affairs and resolving and settling disputes. Eventually, with the 73rd Constitutional Amendment, the Panchayati Raj Institution was given constitutional recognition in 1992, thereby, legally binding on all states for its operationalisation. The Panchayat System aims to promote socio-economic progress at the grassroots level. However, the justice delivery system at the local level was not included in the 73rd Constitutional Amendment. The judicial Panchayat system was overlooked in the Constitutional Amendment of 1992. Therefore, the main aim of this paper is to examine the constitutional status of the Panchayat justice system, its power, function, and operation at the Panchayat level in Bihar, known as Gram Katchahry.

Keywords: Panchayati Raj System, Local self-government, Justice, Gram Katchahry

INTRODUCTION

Justice is at the core of India's Constitution, which tries to forge unity among the diverse social groups based on linguistic, religious and regional affiliations. The

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Preamble to the Constitution clearly underscores the significance of justice and grants social, economic and political justice to all its citizens. However, in practice, the ideal of access to justice has met with several challenges with regard to judicial structures, compounded by ever-increasing population with multiple layers of socio-economic inequalities, which can be easily understood with the ever-rising pendency of cases across the judicial pyramid from the Supreme Court to the District Courts. In light of the above discussion, the paper seeks to understand the grassroots' judicial system, which has been a matter of great discussion across academia and policymakers since the passage of Gram Nyayalaya Act 2008. Notably Bihar takes the lead in this regard as it established Gram Katchahry way back in 1947 (Verma: 2009). The main aim of the paper is to examine the constitutional status of the Panchayat Justice System, its powers, functions and operations at the Panchayat level in Bihar based on the available literature and insights from the field survey.

HISTORICAL BACKGROUND OF NYAYA PANCHAYATS

From ancient times, the institution of Nyaya Panchayats has existed in India which played a very important role in dispute resolution in the villages. During the Vedic age, there were traces found in the existence of the Panchayat system. The Vedic Sabha and Samiti had elected their bodies including representatives in character. In the Vedic period, villages had their own legislative assemblies known as Sabha and the Capital region had the central legislative assembly known as Samiti. These institutions of Sabha and Samiti which are described in Rigveda, are in one place described as twin daughters of Prajapati (Altekar, 2008). There were also facilities available with full voting rights for women. The ancient Indian Republic was a state, where the strong were just and the weaker were more secure (Ibid). The Vedic king was the protector of the people and the local self-governing bodies of ancient India ran parallel in the villages. They were like the backbone of the true Indian democratic system.

Elderly people of the villages used to resolve disputes among villagers. Those elderly people were aware of the locals, their social conditions, customs, language and practices of people and, therefore, they could easily determine the reason behind any dispute among the people. All the evidence to prove their respective cases was present in the village and there was no question of providing proofs as the Panches resolved the problems before the people, and public opinion was accepted as a powerful influencing factor in dispute resolution. And the other side, witnesses could not speak lies in front of the Panches and also in the presence of other villagers who knew the truth. Decisions of the Panches were final. Thus, all these acts facilitated quick, inexpensive, and fair decisions.

In ancient times, Smriti texts like Yajnavalkya, Narad, Kautilya, Gautama, Brihaspati, Bhrigu, Manu were full of references to some village institutions viz., Kula, Sreni, and Puga. Kula was the judicial assembly of relations by blood or marriage, Sreni was a court of judicial assembly with consisting members of the same trade or calling and Puga was the court of fellow villagers of the same locality but came of different caste or calling (Majumdar et al, 1977). In the year 1673, the president of the East India Factory at Surat set up a Community Panchayat in Bombay which decided disputes amongst the people related to their caste and community. The pre-independence period tried to bring back the existence of the local units of the administration through a flood of light on the aspect that some efforts were made to reorganise rural self-government through Panchayat.

During the ancient, medieval, and modern eras, the growth of Panchayats has gone through many ups and downs. The famous Mayo's resolution of 1870 accelerated the development of local-level institutions by expanding their powers and responsibilities. In 1882 Lord Ripon envisioned a democratic framework for these local level institutions. We can say that Mayo's Resolution of 1870 on decentralisation, Lord Ripon's famous Resolution of 1882, the Report of Royal Commission on decentralisation 1909, the Government of India Resolution of 1915, and the Montague-Chelmsford Report of 1918 stand as milestones in reorganising and working of the village courts. Although these institutions did not intend to reproduce the characteristics of old-time Panchayats. Thus, India's practice of setting up local self-governance has been one long story of seeking access to village people through their participation in the working of village courts. In general, India created an institutional infrastructure in the thirst for public participation. The British rulers set up High Courts, first in Calcutta then followed by Bombay and Madras under the Indian High Court Act of 1861 to mitigate and solve the disputes. The people also realised the power of the State was behind the courts but not behind the old village Panchayats. So, the importance of the Panchayat system day-by-day started losing its faith and significance. The commission took steps for the subject of local self-government. It strongly recommended the development of Panchayats at the village level to administer village affairs. In 1920 such enactments were passed in different states. A lack of strong control over the administration of justice in villages showed the weakness of the system. Nyaya Panchayats solve disputes by using customs. Generally, the elderly people of the village were in influential positions in these Nyaya Panchayats. During the period of British colonialism, village life was greatly disturbed and the system of the Nyaya Panchayats fell into oblivion. During the non-cooperation movement (1920), Gandhi ji boycotted the law of courts and favoured the village Panchayat system for settling disputes which was beneficial for the poor peasants so that they did not have to go too far from their village to seek justice. It was also to save their hard-

earned money and time and exploitation by the lawyers. Gandhi ji also advocated for Panchayati Raj System at village level governance. So, Indian National Congress in the Constituent Assembly strongly stated that Panchayati Raj Institutions (PRIs) were the basic foundational structure of our ancient political set-up and for that reason Article 40 was included in the Constitution after a long deliberation.

The 73rd Constitutional Amendment does not specifically mention judicial powers for Panchayats (Mathew, 1995). Some states granted judicial powers to Panchayats, and Bihar is one of them. Prior to 73rd amendment some states established Nyaya Panchayat like Himachal Pradesh, Karnataka, Uttar Pradesh and Bihar. The provisions of establishing Judicial Panchayats (Nyaya Panchayats) in different states vary widely regarding their respective constitutional jurisdiction, power and authority (Pal, 1999).

The informal court system at the lowest level (village level) had to face many ups and downs from ancient to modern times. During the British period, the Royal Commission on Decentralisation in 1907 was the first attempt to highlight the constitution and development of village Panchayats with administrative and judicial powers in petty civil and criminal matters. Madras was the first state to set up such panchayats through legislation of the Village Court act 1888. After Madras, most of the states set up such Panchayats across the country. Such village court known as Nyaya Panchayat contained many ideals to resolve the problem at the village level. They were exempted from strict procedural rules. The non-applicable of such procedural rules would allow Nyaya Panchayats to use customary processes during the hearing of disputes. However, after the independence, the workload of Nyaya Panchayats in some states fell consistently. On the other side number of civil and criminal cases in formal courts rose consistently. Nyaya Panchayats failed to understand the legal provisions which were employed during the dispute-resolving process. However, the Nyaya Panchayat experience gave valuable insights into the design of rural justice reform in India. So, the creation of an alternative body was desired in place of Nyaya Panchayat for the dispensation of justice at the rural level. The 114th Report of the Law Commission of India suggested the creation of Gram Nyayalaya in 1986.

GRAM NYAYALAY ADHINIYAM 2008

Under Section 3(1) of the Gram Nyayalaya Act 2008, the Government of India has empowered the State Governments to establish one or more (as per the terms of the Act) 'Gram Nyayalayas' for each Panchayat or group of intermediate Panchayats in the district. Gram Nyayalaya Act 2008 (Act No. 4 of 2009) [7 January 2009] - was enacted to provide access to justice to the citizens at their nearest place, to establish Gram Nyayalayas at the rural level and to ensure that people get speedy justice at the local level. The Gram Nyayalaya must be administered by a Judicial Officer who

will have the same powers as that of a First-Class Magistrate. The Gram Nyayalaya can operate as a mobile court in any area under its jurisdiction. The first Gram Nyayalaya in the country was established in 2009 at Beriya in Madhya Pradesh. This ambitious programme was implemented in many states. According to the Act, each Gram Nyayalaya is to be headed by a single Nyayadhipati who must possess the qualification of a Judicial Magistrate of the First Class. Currently, 15 states have implemented the Gram Nyayalayas with 488 notified and 328 functional according to the Department of Justice, Government of India.

GRAM NYAYALAYA VIS-a-VIS GRAM KATCHAHRY

The Bihar government has not been in favour of establishing Gram Nyayalayas as it has a well-structured Gram Katchahry in Bihar. Under Section 106 of the Bihar Panchayati Raj Act, 2006, the village court has the right to try crimes committed under certain sections mentioned in the ensuing sections. Except for Section 430, under all other sections, there is a provision for giving punishment of imprisonment of two years or less or a fine. The crimes committed under all the sections of GK can also be tried by the Gram Nyayalaya. While the court has the power to sentence imprisonment, the Katchahry has the right to impose a maximum fine of one thousand rupees for the crimes under these sections. The main purpose of the Katchahry is to settle the dispute between the two parties amicably through compromise, while the Gram Nyayalaya will settle the case based on merits and demerits and impose punishment as per the penal code. Thus, while the purpose of the Gram Katchahry is conciliatory cum transformative in nature, the Gram Nyayalaya court will take its decision based on the prevailing law. In civil cases, the Gram Katchahry has the right to hear suits worth not more than Rs 10,000. There is no upper limit for the Gram Nyayalaya. Thus, there is a clear clash of authority between the Gram Nyayalaya and the Gram Katchahry in both criminal and civil cases.

GRAM KATCHAHRY IN BIHAR

In Bihar at the village level, there are two systems of governance. The Gram Panchayat is led by a Mukhiya for development functions while the Gram Katchahry is headed by a Sarpanch for judicial functions. Before the 73rd constitutional amendment, the Sarpanch (leader of the GK) was chosen by the Panches from among themselves. In other words, the Sarpanch was indirectly elected by the state before the Bihar Panchayati Raj Act of 1947.

The Bihar Panchayati Raj Act of 1947 aimed at promoting development activities alongside justice delivery at the Panchayat level through Gram Katchahry (GK), a unique and innovative local institution. The GK system existed before the

constitution came into force, and the Bihar Panchayati Raj Act of 1947 formalised provisions for its establishment. Subsequent elections for GKs were held alongside Gram Panchayats (GPs) in 1952, 1955, 1962, 1966, 1972 and 1978. GP elections were held every three years, but after 1965, elections became irregular. For nearly two decades, no GP elections were held until 2001. Nitish Kumar led the National Democratic Alliance (NDA) to pass the “Bihar Panchayati Raj Act of 2006”, which demarcated the functions of Gram Panchayat and Gram Katchahry. Elections were held for Gram Panchayat and Gram Katchahry simultaneously in 2006, with a provision of election for Sarpanch and Panch to be directly elected by the voters.

Composition

The office of a Gram Katchahry (GK) consists of a Sarpanch, a Up Sarpanch, Panches, a Nyaya Mitra and a Gram Katchahry Secretary. Sarpanch and Panch are directly elected by the voters. Up Sarpanch is selected among the Panches. Through the act post of “Nyaya Mitra,” a law graduate was provided to assist the GK with legal matters. There is also a provision for a Secretary to support the GK as a record keeper of all its activities. Nyaya Mitra and Gram Katchahry Secretary are appointed on a contractual basis by the Government of Bihar. Sarpanch, Up Sarpanch and Panch get honorarium of Rs. 5000, Rs. 2500 and Rs. 800 respectively. Nyaya Mitra and Gram Katchahry Secretary get remuneration of Rs. 7000 and Rs. 6000 respectively. The office of a Gram Katchahry reports to the Block Panchayati Raj Officer (BPRO). As per the Act, cases under GK should be resolved within six weeks from the date of filing, and no longer than a year. GK cannot hear cases against state or central government employees.

Powers

As per the Bihar Panchayati Raj Act 2006, under sub-section (1) of section 90 of this Act and as amended in 2016, the village court has been given the rights of a Magistrate under the provisions of the Indian Penal Code. Sections 140, 142, 143, 145, 147, 151, 153, 160, 172, 174, 178, 179, 269, 277, 283, 285, 286, 289, 290, 294, 323, 334, 336, 341, 352, 356, 358, 374, 403, 426, 428, 430, 447, 448, 502, 504, 506 and 510 of the Indian Penal Code through Bihar Panchayati Raj Act 2006 and 2016. The jurisdiction has been given to the village court. Apart from this, cases arising under the Bengal Public Gambling Act and Cattle Trespass Act have also been brought under the jurisdiction of the village court.

The 73rd Constitutional Amendment was a key moment in establishing an effective Panchayat system across India. In Bihar, particular focus was given to the justice delivery system through the Gram Katchahry at the village level. However,

there have been some changes in its powers and functions from its inception to the present day.

Jurisdiction of Gram Katchahry

(a). Criminal Jurisdiction of Gram Katchahry

As per the Act, Gram Katchahry has the jurisdiction within the local limits of the Gram Panchayat for the trial of the following offences as given in table-1.

Table 1

S. No.	Act	Section	Offence Description
1.	IPC, 1860	140	Wearing garb or carrying token used by soldier, sailor or airman
2..	IPC, 1860	142	Being member of unlawful assembly
3.	IPC, 1860	143	Punishment for unlawful assembly
4.	IPC, 1860	145	Joining or continuing in unlawful assembly
5.	IPC, 1860	147	Punishment for rioting
6.	IPC, 1860	151	Joining assembly after it has been commanded to disperse
7.	IPC, 1860	153	Wantonly giving provocation with intent to cause riot
8.	IPC, 1860	160	Committing affray
9.	IPC, 1860	172	Absconding to avoid service of summons or other proceeding
10.	IPC, 1860	174	Non-attendance in obedience to public servant
11.	IPC, 1860	178	Refusing oath or affirmation required by public servant
12.	IPC, 1860	179	Refusing to answer public servant
13.	IPC, 1860	269	Negligent act likely to spread infection of disease
14.	IPC, 1860	277	Fouling water of public spring or reservoir
15.	IPC, 1860	283	Danger or obstruction in public way or navigation line
16.	IPC, 1860	285	Negligent conduct with fire or combustible matter
17.	IPC, 1860	286	Negligent conduct with explosive substance
18.	IPC, 1860	289	Negligent conduct with animal
19.	IPC, 1860	290	Public nuisance in unspecified cases
20.	IPC, 1860	294	Obscene acts and songs
21.	IPC, 1860	294A	Keeping lottery office
22.	IPC, 1860	323	Voluntarily causing hurt
23.	IPC, 1860	334	Causing hurt on provocation
24.	IPC, 1860	336	Act endangering life or personal safety of others
25.	IPC, 1860	341	Wrongful restraint
26.	IPC, 1860	352	Assault/criminal force other than on grave provocation

S. No.	Act	Section	Offence Description
27.	IPC, 1860	356	Assault/criminal force in attempt to commit theft
28.	IPC, 1860	357	Assault/criminal force in attempt to confine person
29.	IPC, 1860	358	Assault/criminal force on grave provocation
30.	IPC, 1860	374	Unlawful compulsory labour
31.	IPC, 1860	403	Dishonest misappropriation of property
32.	IPC, 1860	426	Mischief
33.	IPC, 1860	428	Mischief by killing or maiming animal (value ₹10)
34.	IPC, 1860	430	Mischief by injury to irrigation works/diverting water
35.	IPC, 1860	447	Criminal trespass
36.	IPC, 1860	448	House-trespass
37.	IPC, 1860	502	Sale of defamatory printed/engraved substance
38.	IPC, 1860	504	Intentional insult to provoke breach of peace
39.	IPC, 1860	506	Criminal intimidation (threat to cause death or grievous hurt)
40.	IPC, 1860	510	Misconduct in public by drunken person
41.	Bengal Public Gambling Act, 1867	—	All offences under the Act
42.	Cattle Trespass Act, 1871	24	Penalty for causing damage to crops, etc.
43.	Cattle Trespass Act, 1871	26	Penalty for forcibly rescuing cattle or damaging pound

Source: Bihar Panchayati Raj Act, 2006.

The bench cannot take cognisance of any offence under the section, which are described in table-2 and table -3 shows the limitations of jurisdiction of GK.

Table 2: Offences Over Which Gram Katchahry Cannot Take Cognisance

S. No.	IPC Section	Offence Description	Condition(s) Under Which Gram Katchahry Cannot Take Cognizance
1.	379	Punishment for theft	If value of stolen property exceeds ₹10,000 OR accused falls under any of the conditions below
2.	380	Theft in dwelling house, etc.	Same as above
3.	381	Theft by clerk or servant of property in possession of master	Same as above
4.	411	Dishonestly receiving stolen property	Same as above

Source: Bihar Panchayati Raj Act, 2006.

Table 3: Conditions Where Gram Katchahry Lacks Jurisdiction

Condition No.	Condition Description
(i)	Accused has been previously convicted of an offence under Chapter XVII of IPC with imprisonment of 3 years or more
(ii)	Accused has been previously fined for theft by any bench of Gram Katchahry
(iii)	Accused has been bound over to be of good behaviour in proceedings under Section 109 or 110 of CrPC, 1973

Source: Bihar Panchayati Raj Act, 2006.

(b) Civil Jurisdiction of Gram Katchahry

Gram Katchahry has jurisdiction to hear and determine the following classes of suits:

When the value of the suit does not exceed ten thousand rupees, namely – suits for money due on contracts; suits for the recovery of movable property or the value of such property; suits for the recovery of rent; and suits for compensation for wrongfully taking or injuring movable property, or for damaged property caused by cattle trespass; All suits of partition except wherein complicated question of law or title is involved; But where the Gram Katchahry is of the view that where in a suit for partition, complicated question of law or title is involved, Gram Katchahry shall transfer such suit to the court of competent jurisdiction.

As per the Act, Gram Katchahry cannot take cognisance of the following – (a) on a balance of partnership account, or (b) for a share or part of a share under an intestacy or for a legacy or part of a legacy under a will, or (c) by or against the Central or State Government or servants of such Government in their official capacity or (d) by or against minors or persons of unsound mind, or (e) for the assessment, enhancement, reduction, abatement or apportionment of rent of immovable property, or (f) of a mortgagee of immovable property for the enforcement of the mortgage by foreclosure or sale of the property for the redemption of the mortgage or (g) for determining the right, title and interest in immovable property, (h) with regard to any matter in which proceeding is pending before a court of competent jurisdiction prior to coming into effect of this Act. (i) against the Gram Panchayat Mukhiya or any other member of the Executive Committee, a Sarpanch or a Panch.

Elections and Reservation

Bihar Panchayati Raj Act 2006 provided that the Sarpanch and Panches are elected directly in each electoral area. GK operated alongside the Gram Panchayat. For a population of around 7,000, the voters of the Gram Panchayat directly elect the Sarpanch. There are provisions for proportionate reservation for Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs) based on their

population. A 33% reservation for women was included in the Panchayat elections. There was a provision for the election of the Up-Sarpanch from the elected Panches. Later through the Bihar Panchayati Raj Act of 2006, a proportional reservation for SCs and STs based on their population, a maximum of 20% reservation for OBCs and 50% reservation for women of all categories was provisioned. However, it was found during the field work that women Sarpanch and Panches are not aware of their rights, rules and regulations of a Gram Katchahry (Field Survey, 2025).

Major Amendments

The system of the Third-Tier judiciary of Bihar is innovative, unique and unparalleled across the country (Pal, 2019). However, the system is not receiving support from the state government to optimise its potential by way of providing justice at the doorstep of the people. It is more bent towards the Sarpanch than the Gram Katchahry (Ibid.). Bihar Panchayati Raj Act 1993 gave the power to GK to impose fines of up to Rs. 1,000. It also provided the authority to issue a verdict of up to three months' imprisonment. But later it was amended through the Bihar Panchayati Raj Act of 2006, wherein GK had no power to impose imprisonment but the power to impose fines up to Rs. 1,000. As per the Act cases under GK should be resolved within six weeks from the date of filing, and no longer than a year. GK cannot hear cases against state or central government employees.

CONCLUSION

The Gram Katchahry system has been set up by the Government of Bihar to settle local disputes peacefully and harmoniously through discussions in a familiar setting across all 8,463 GKs in Bihar. However, these grassroots institutions have limited infrastructure. A lot of the GKs in Bihar do not have their buildings. Despite these contradictions and challenges, the Gram Katchahry system has not failed in its unique role of resolving disputes at the local level with community participation. It will be evident from the statistics that highlight the significance of the Panchayat-level judicial system. Therefore, the government should address its issues and take steps to strengthen it.

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FOOD SECURITY AND NUTRITIONAL STATUS OF WOMEN IN BIHAR: SOME POLICY ISSUES

Iha Rashmi Verma*

Abstract

Ensuring food security to one and all citizens is the prime responsibility of state. So far India is concerned, it has larger share of population facing food insecurity. India, despite being self-sufficient in food commodities, according to the UN report, it has sizeable number of population who face food insecurity, malnutrition and health problems caused by malnutrition. Corona pandemic has added to the problem. It is considered that every citizen of a country has entitlement over the food, irrespective of ability to afford. As such, the Food Security Act (FSA) was passed in 2013. We know that food travels through a rout from field to kitchen in which the state apparatus has significant role to play, especially in reaching the food at the time of need to even those who cannot afford it. Despite implementation of food security law and availability of food commodities, the women in Bihar lag behind having sufficient nutrition. Thus, it becomes an urgent imperative to examine aspects of implementation of FSA in the context of access to food and nutrition. Bihar is such state that has greater incidence of malnutrition among people, especially women and children as reflected in NFHS 2019-21. The present paper intends to underline some policy issues.

Keywords: FSA, Implementation, Women, Nutritional Status, Bihar

INTRODUCTION

Based on the 1996 World Food Summit, Food security refers to physical and economic access to the sufficient and safe nutritious food for all to meet their dietary requirements and food preference for an active and healthy life. In nutshell, Food

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Security has four dimensions 'Availability, Accessibility, Affordability and Utilisation and all of them are interconnected. Impediments in any of these dimensions would challenge food security at all levels, from personal to community. 'Availability' is ensured by domestic production, import capacity, food stocks and food aid, 'Accessibility' refers to the situation in which food is within reach of every person, there no barrier on access to food, 'Affordability' requires that every individual has either enough money to buy or free access of those who cannot afford to sufficient safe and nutritious food to meet one's dietary needs and finally 'Utilisation' refers absorption which is the proper biological use of food, requiring a diet providing sufficient energy and essential nutrients, potable water, and adequate sanitation (FAO: 1996)

In order to achieve food security in equitable manner to all the citizens of India, Parliament enacted Food Security Act, 2013. It is responsible to provide food security at rate of 75% in rural and 50% in Urban areas under targeted PDS. The Act makes provision for the eligible person would be entitled to receive 5kg of food grains per person per month at subsidized rate of Rs 3/2/1 per kg for rice wheat coarse grain. The Act also provides that Food grains are distributed at subsidized rates, ensure targeted Public Distribution System and nutritional support to women and children. Pregnant and lactating women would be entitled to nutritious meals, free of charge under the MDM and ICDS schemes. Further, the provision of Food Security Allowance is there and finally the transparency in public distribution system (PDS) to avoid loop holes and leakage of PDS food. With a view to proper implementation of FSA, in addition to PDS, some other programmes have been launched by governments like, Mid-day Meal Scheme, Integrated Child Development Services Scheme, Mega Food Parks, Sampada Yojana etc.

Although the different schemes pertaining to Food Security have been implemented to the central and state level as well yet several data reveals that the inter and intra state disparity still persists and within them the most vulnerable section of society the women are mostly affected. According to the Global Food Security Index 2022, India has a prevalence of undernutrition of 16.3%. Further, 30.9% of children in India are stunted, 33.4% are underweight, and 3.8% are obese. In the 2023 SFSI index, a new parameter called 'Improvement in SFSI Rank' was added, which assesses improvement in each state's rank from the year before. The steepest fall in scores over five years was seen in Maharashtra, which scored 45 out of 100 in 2023 compared to 74 out of 100 in 2019. This is followed by Bihar, which scored 20.5 in 2023 compared to 46 in 2019. Figure showing District wise prevalence of child malnutrition in Bihar according to NFHS-5 (2019-20) reveals highest number of stunting and underweight children are found in Araria district of Bihar whereas lowest found in Gopalganj district. A Food Atlas of Rural Bihar 2009 has classified the districts into four categories in context of food security status namely,

secured, moderately secured, moderately insecure and severely insecure. Of which 7 districts including Patna and Rohtas are secured, 11 districts moderately secured, 12 are severely insecure (IHD: 2009). The secured and moderately secured districts are better in agriculture. The severely insecure districts call for specially targeted policies to improve the outcome of food security-aimed interventions.

NUTRITIONAL STATUS OF WOMEN

The condition of women has also been discouraging in terms of nutritional status at national level according to NFHS 5, iron and folic acid deficiency anaemia affect 57 percent of women. Prevalence of anaemia in adolescent girls (15-19 years) is also alarming at 59.1 percent in 2019-21 as compared to 54.1 percent in 2015-16. In Bihar almost in every district, more than 50 percent of women are anaemic. In districts, like Araria, Supaul, and Purnea, the prevalence of anaemia in women is almost 70 percent. These alarming data exposes the inability of several schemes on delivering desired result rather the conditions ns amongst women have worsened. As per a recent report by UNICEF, “Malnutrition in women is rooted in poor care practices at the individual, household, community and societal levels”.

Women play an important role in areas such as ensuring adequate quantity of food at the household level; adequate quality of food available; an understanding of the nutrition needs of different members of the household; and distribution of food according to the needs of each member of the household these Economically financial inclusion is important for women to access loans and credit, and to make transactions. This Could have positive effects in smoothing consumption, lowering financial risks and costs, providing Security, increasing saving and investment rates, and facilitating new business opportunities. Here Bihar’s JEEViKA self-help groups comes into picture which has also promoted Women’s financial literacy by working with cellophane providers for digital financial inclusion of women this would help women have positive implications on household consumptions, and nutritional health. Looking at the economical aspect the NFHS 5 data reveals women aged between 15-19 years constitute percentage who have money that they can decide how to use, percentage who have a bank or savings account that they themselves use, percentage who know of a microcredit programme, percentage who have taken a loan from a microcredit programme are 33.1%, 68.0%, 55.5%, 3.7 %, 26.9% , respectively. Women aged 20-24 shows different figures on those parameters they are as follows – 47.9%, 73.7%, 59.1%, 8.4%, 31.6% women aged between 25-29 years of age showing different figures on those parameters – 51.6%, 78.0%, 55.8%, 15.6%, 41.0%, women aged between 30-39 years of age shows another figure on those parameters – 55.7%, 83.6%, 60.6%, 20.5%, 54.3%, Women aged between 40-49 years of age shows different figures based on those parameters 56.9%, 80.6%, 66.3%, 24.4%, 62.7%.

Secondly social aspects such as castes and tribes shows different figures. Percentage of Scheduled caste women having mild, moderate, severe and any anaemia are 28.9%, 33.6% 2.1%, 64.6% respectively which amounts to total 9,530 women. Scheduled tribe women facing mild, moderate, severe and any anaemia are 29.4%, 32.6%, 2.7 %,64.7% respectively which amounts to total 1,379 women. Other backward class women facing mild, moderate, severe and any anaemia are 30.0%, 31.0%, 2.0%, 63.0%, respectively which amounts to 22,638 women Other categories in those four domains are as follows 29.8%, 31.5%, 2.3%, 63.6%, which amounts to total 6,760 women. The statistics reveals that lower caste's women and also the tribal women are showing high level of iron deficiency. Caste/tribe Percentage if women who have money that they can decide how to use amongst Scheduled caste is 48.7%, Scheduled tribe 40.6%, Other backward class 48.9% and Other 49.1% .Percentage who have a bank or savings account that they themselves use consist of 76.7% of SCs, 72.0% of Scheduled tribe, Other backward class 77.2%, and/Other 76.3 %. Percentage of women who know of a microcredit programme amongst SCs, STs, OBCs, and Others are 61.8%, 48.2%, 60.6%, 54.7% respectively. Percentage of women who have taken a loan from a microcredit program Scheduled caste 17.8%, Scheduled tribe 19.5 Other backward class 14.4% and Other 8.6%.

It is, also to be noted that amongst percentage of women covered under any health insurance or finance scheme under different age groups 15-19 9%, 20-24 6.2%, 25-34 10.3% and 35-49 14.5% adolescent girls who are covered under such financial scheme are least in number which may make them prone to health issues during their adulthood. Amongst them SCs, STs, OBCs and Other are as follows Scheduled caste 14.9%, Scheduled tribe 11.1%, Other backward class 9.6% and other 7.7%. This data indicates larger population of women amongst SCs are prone to health hazards.

Thirdly education plays an important part in generating awareness about the importance of a nutritious diet. In Bihar, as in India, higher levels of mothers' education are associated With a lower prevalence of malnutrition in children under The age of 5. Female population aged 6 years and above who never attended school in urban Bihar are 74.2%, and in rural Bihar 58.7% and total amounts to 61.1% Women who are literate in urban area 72.9%, in rural area 51.6% and total amounts 55.0% which is quite lower than men whose literacy rate stands at 76.2% according to NFHS 5 2019-21. Women with 10 or more years of schooling 28.8% while for men it is higher, that is 42.8%. Talking about digital literacy Women who have ever used the internet amounts to 20.6% while for men it is 43.6%.

Lastly the prevalence of unspoken laws of a traditional household that is to save the lion's share of the food for men, followed by children while Women are often expected to feed themselves with what is left. This kind of Orthodox practices are more prevalent in Bihar which in turn leads to inadequate amount of nutrition

taken by women. It is to be noted here that Children's malnutrition is determined by the caring capacity of mothers. Caring Capacity and caring practices are overwhelmingly influenced by the status of Women in the household and society.

SCHEMES FORMULATED FOR FOOD AND NUTRITIONAL SECURITY

Under NFSA two types of ration card are provided to families - Priority Household (PHH) Ration Card-Members of families that satisfy the requirements set out by the state governments are issued this card. 5 kg. of grains per person per month will be provided to each family. Antyodaya Anna Yojana (AAY) Ration Card-State government offers these cards to verified residents. Total number of ration cards in Bihar are over 1.79 crores for 8.7 crore persons of which over 1.64 crore fall in rural areas and merely 14.8 lakh in urban areas. PHH Cards amounts to 1.56 crore for 7.56 crore people and AAY cards to over 22.93 lakh for 1.14 crore persons (Available on <https://state.bihar.gov.in/fcp/CitizenHome.html>).

Normally, each family is allotted 35 kg of grains each month. There are around 25 lakh household under Antyodaya scheme who continue to avail nutrition and food at subsidized rate. Under the Act a Grievance redressal scheme has been set up at district and state level according to which complain related to no n availability of food grain would reach to officials within 30 days and be resolved within 15 days. To improve PDS the state government has spent 388 crore to implement door step delivery process under which stock grain will reach PDS shops. A web portal of Bihar stare food corporation was also launched to ensure transparency through GPS tracking and monitoring of vehicles delivering food grains from godowns to PDS dealers. The Mid Day Mal scheme introduced in Bihar in 2005 became the primary factor for the improvement in the number of enrolment, retention and attendance in government school. Even after implementation of several schemes the statistics reveal the condition have not improved rather deteriorated to lower level. The reasons may vary like for MDM some districts in Bihar have large chunk of population engaged in agriculture and farmers from these districts thus depend entirely on seasonal income and hardly have any monthly income hence making it difficult for them to ensure meals two times a day in the off-season. Apart from that it is found that Many governments have begun to give dry rations but reports from Bihar have noted that the government is still to distribute the rations which, it has used to feed people in quarantine during COVID-19 pandemic. In addition to that due to rampant corruption in the implementation of MDMS and sporadic incidents of food poisoning, teachers are getting a bad name which probably is inhibiting them to take an active step towards this cause. consumer affairs, food and public distribution minister said that the NFSA is supposed to cover 71 crore people across the country. However, 39 lakh of these 71 crore people are not receiving benefits as they do not have ration cards Among these 39 lakh poor people, Bihar accounts for

14 lakh. Another article from Hindustan Times reveals India is wasting up to 67 million tonne of food every year, a government study shows. That's more than the national output of countries such as Britain. This amount of food can feed whole of Bihar for an year. Also it is noticed that numerous schemes are implemented for women such as The Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) ensures the participation of women by requiring that one-third of total person days of work created goes to women. Women's share of MNREGA employment stood at 52 per cent in Bihar in 2018–19. "Nayee Pidhi Swasthya Gaurantee Karyakram under which medical check-up of children and adolescent girls is being conducted and all beneficiaries are being provided health cards. Despite such initiatives statistics reveals a discouraging figures as reflected in NFHS 5 data above. The loopholes that prevails within the schemes and it's Implementations brings us to a conclusion that both economical aspect and social aspects is equally responsible for their underperformance, and besides that the negligence on the part of government and administration with respect to proper distribution of food has major repercussions on different states.

REVIEW OF LITERATURE

According to **Swaminathan (2001)** India has achieved satisfactory Progress on the production side but in spite of this, food insecurity is very common at The household level and poverty is the root cause behind this insecurity. He is of the View, that availability is not the problem, but the accessibility to the available food is the main problem so, the new agriculture should aim to provide not only more and More food, but also some employment opportunities in the farm and non-farm sector So that people gain some income to access the food. **Amartya Sen** has been the pioneer of the idea of 'entitlement' of poor over food from the period way back in 1980s. Amartya Sen's work on food security focused on the idea that access to food, not just food availability, is the key to preventing famine. He argued that people can have plenty of food available, but still lack the means to obtain it. Thus he advocated that food should be secured for those who cannot afford as matter of right (entitlement). Sen's "entitlement approach" emphasizes that people's access to food is determined by a combination of factors, including their entitlements, which are the combination of what they can produce and what is provided by society (Sen, Amartya: 1982). The study by **Pingali et al. (2017)** has taken another angle by arguing that accessibility of staple food grains (wheat, rice, maze etc.) does not necessarily lead to nutritional sufficiency. The authors are of view that governmental policies aim at more on meeting the hunger and the calorie deficiency rather than focusing on ensuring balanced diet. This has led to prevalence of undernutrition despite welfare schemes and implementation

of National Food Security Act (NFSA). Authors further argue that the policies neglect quality and diversity of diets as well as behavioural changes towards better nutrition, hence the transition in policy towards ensuring food security has been slow. They further opine that NFSA does not intend to break the traditional farming and populist political control of food policy and hence the prospects for it to successfully address nutrition security beyond calorie sufficiency are limited. However, the study indicates towards policy of promoting the practices of non-traditional staple food grains. Similar view point was propounded by **Rahman (2016)** in his study conducted in hunger prone districts of Odisha. The study by **Banerjee et al. (2022)** explains that the maternal and child health improvement in India has been moderate over the decade. Still, a significant proportion of the women are suffering from poor health and young mothers are at more risk to deliver LBW babies. He suggests that It is highly recommended to integrate maternal and child health programmes with the ongoing health policies to improve the situation while taking additional care of the young pregnant mother and their nutritional health. **Gopalan (1995)** analyzed challenges related to production and distribution of food Such as inequitable distribution rather than inadequate production and malnutrition of children due to inequitable distribution of food in India. This paper also examined the 'Nutritional Status' and 'Social Development' in different states using the data derived from NNMB and NFHS. He found that there is existence of inequalities in social development of states and prevalence of under nutrition children and women in backward states. He suggested that inequality cannot be corrected through given tokens to collect food and introduction of many popular programs but only through creation of income generation and support to income generating skills among the poor. **Ramachandran (2006)** analysed food security scenario in South Asia with respect to women. She found that rapid progress is there during last few decades, but this progress has failed in reduce women and children malnutrition. This paper argued that the role of women in providing food and nutrition security at the household and individual level needs to be examined, if the paradox of persisting malnutrition along with macro level food sufficiency to be resolved.

Some studies examine the food public distribution in the context of the role of politics and economics. **Jos E Mooij (1999)** explains how political contents have influenced the administration of food distribution in Indian States. Similarly, **Barbara Harris-White (1993)** has examined the political and economic contents in food distribution system in South Asian countries and finds that it generates rural capitalism. In spatial terms capital should always be analysed as a local phenomenon because the economy plays itself out in specific social and environmental contexts. Food Security is a question of not only production but distribution or attacking the underlying factors that cause hunger and undernutrition. The issue is further

compounded by regional disparities and most importantly, individual families or intra-household food situation. Even within a household, women face the brunt of chronic malnutrition as they are affected by age old gender discrimination (**Ghosh, 2000**).’

The above literature review reflects that despite welfare schemes and NFSA, the nutritional status of people is very discouraging. Further, implementation of NFSA is a complex phenomenon and it involves various social, economic, local and administrative factors. The goal of ensuring food security is not limited to access to food commodities but to ensure adequate nutrition to those who are more vulnerable, i.e. women and children, especially in the areas of food insecurity. Thus, it makes an urgent imperative to examine the implementation of NFSA in terms of ensuring food and nutrition to the vulnerable groups of people.

ISSUES NEED TO BE ADDRESSED

Keeping in view the above necessity, the present study intends to underline the effectiveness of implementation of the NFSA 2013 and its success rate in terms of providing Food security and nutrition to people in general and women in particular with respect to state of Bihar. The selection of Bihar state is governed by the fact that it is among the states being most affected by food insecurity. Keeping the discouraging statistics in view it becomes all the more important to address the role of administration and parties associated with the implementation of schemes under NFSA in different districts of Bihar and explore the factors that kept the beneficiaries especially women deprived even after years of implementation of policy despite Bihar being the first state to implement it.

The situation indicates towards certain queries such as – Despite provision of NFSA and sufficient availability of food, why do the figures of undernutrition is high in India especially amongst women in India in general and in Bihar in particular? Is the food administration diligent and committed to implementation of the measures of food security? Are the women beneficiaries aware of the numerous schemes of food security available for them in the areas under study? What are the factors responsible for inhibiting proper implementation of food security measures for women? Are women adequately eager and prompt to avail the facilities pertaining to food security? What are the possible means to make them (women beneficiaries) aware and prompt in availing the benefits of the schemes? Do stakeholders associated with MDM schemes such as teachers need to be provided with appropriate facilities and encouragement for improving the nutrition and hygiene for girl students?

As such It becomes an urgent imperative to explore the factors responsible for prevalence undernutrition despite welfare schemes and NFSA. This Attracts our attention towards the role of food administration in adequate implementation

of various schemes run by state government for nutritional security of women, exploring the factors responsible for disparity in the nutritional status of women among different districts of Bihar, examining the degree of awareness amongst women, about the various schemes available in the districts under study and their consciousness and eagerness to avail the benefits of schemes by them and the issue of impact of income, education and social status on nutritional health of women.

The situation leads us to the conclusion that – despite availability and accessibility of food, the undernutrition among women and children still prevails, especially in backward areas and poor sections of our society, implementation of NFSA by food administration at the public interface is less responsive, beneficiary women are more likely to be poorly aware of government schemes and also less conscious in availing the benefits properly and the other conditions of life say hygiene, shelter, basic amenities, health and education are uncondusive to intake of proper nutrition.

It is high time to make policy to ensure nutrition among poor, children and women. Only then we can hope to achieve the goal of Viksit Bihar by 2047.

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ROLE OF WOMEN IN STRENGTHENING VILLAGE REPUBLIC: A STUDY OF BIRAUL BLOCK, DARBHANGA (BIHAR)

Diwakar Kumar Jha* and Shweta Chandra**

Abstract

The 73rd Constitutional Amendment Act (CAA) has two basic aims – first, to realise the Gandhian dream of Gram Swaraj (village republic) and second, accelerate the pace of rural development. Gandhi's village republic encompasses inclusive governance and economic self-reliance. He also believed that without active and equal participation of women in the local public affairs, we cannot imagine to achieve these goals. It is true that the institution of village republic existed from ancient period, especially in Bihar but foreign invasions and colonial rule had ruined such institutions of self-governance. Bihar took the lead in establishing Panchayat Raj system just after independence but it did not continue properly. Passing through various phases from recommendations of Balwant Roy Mehta committee to 64th Constitutional Amendment Bill, Panchayati Raj Institutions (PRIs) were finally revived by 73rd CAA which ensured women's participation through reservation of seats for them. But maladies emerged in the shape of phenomenon of 'proxy leadership', popularly known as 'Mukhiya Pati'. After passage of almost three decades, thus, it makes an urgent imperative to examine the actual and self-assertive role of elected women panchayat representatives (EWPRs), underlining the challenges faced by them and suggesting measures for their substantive roles. As such, the present paper attempts to explore the actual role played by women in Panchayati Raj Institutions (PRIs) by conducting a survey in Biraoul Block of Darbhanga district of Bihar. On the basis of empirical study, the paper finds that women's participation in decision-making processes has potential to bring forth even such issues that are often overlooked and thus, enriching the

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local governance. However, they face challenges like patriarchal norms, lack of education, leadership training and e-readiness.

Keywords: Village Republic, Women, Governance, Decision-Making, PRIs, Bihar

INTRODUCTION

The idea of Village Republic has a long history in India, dating back to the ancient times. Even if the king or other central authority was crucial to state operations, local institutions had a great deal of autonomy and influence. A few historical pieces of evidence demonstrate how small groups and communities took care of their basic needs and requirements, including basic civic amenities, dispute resolution, basic arrangements for the impoverished, the creation of local job opportunities, group efforts to protect the village, preparations for food and other necessities in the event of a disaster, basic education, health facilities, and much more (Verma: 2009). The Women participation in local governance was witnessed from the Indus Valley Civilization (3500-1800 BC) to the Vedic or Aryan Civilization (1800-600 BC). The two parts Vedic civilisation - Pre-Early Age (1800-1200 BC) and Later Vedic Age (1200-600 BC). During the Early Vedic Age, women got high regards in the society. They participated in the local administration or Panchayati Raj System. To control the authority of the king, there existed 2 local bodies known as “Sabha” and “Samiti”. During the Early Vedic Age the prominent female personalities were- (1) Apalla, (2) Gargi, (3) Lopamudra, (4) Viswabara, (5) Sikata, (6) Ghosha etc. They were not only the women intelligent figures of high repute, but also, they participated in the “Sabha” and “Samiti”, which controlled the autocracy and aristocracy of the king (Behra: 2022). In the ancient India Every attempt by a monarch to restrict the autonomy of local governing bodies (Panchayats, Sabha, Samiti, etc.) to centralise the entire operation of the kingdom causes resistance and discontent among the populace and local elites. Manor (1991), advocating strongly the cause of local communities, writes, “often there existed a distant, formally all-encompassing empire, but actual political suffering was caused on an everyday basis by neighbourhood tyrants. There were also considerable powers of self-regulation by these communities.” The village republic model has evolved over time and has been influenced by various socio-political changes, including colonialism, urbanization, and modernization. While the traditional village republics may have faced challenges and adaptations in contemporary times, elements of their governance principles and community organization continue to influence local governance structures in rural India. Efforts to revitalize and empower village-level institutions, such as Panchayati Raj Institutions, often draw inspiration from the principles of the village republic. Women have played an equally significant role in human development at par with their male counterparts.

India resides in villages. More than six lakh villages are home to nearly 70 per cent of Indian population. Village panchayats have long been an essential part of India's socio-political structure. The concept of democratic decentralisation can be manifested in these PRIs which have been ingrained in our country's political culture from even before independence. The 73rd amendment enacted by the Parliament in 1992, has the revolutionary potential to create true democratic decentralisation at the grassroots (village) level and represented a historic opportunity to transform rural India. It mandated that resources, responsibility, and decision-making power be devolved upon rural grassroots people through Panchayati Raj Institutions from the state governments. Their main goal was to realise Mahatma Gandhi's dream of reaching power to the people through Panchayats. Because Panchayati Raj meant administration by mutual consultation, consent, and consensus, and it fit closely into the ancient cultural patterns in India. Emphasizing the ideology of Panchayati Raj Gandhi viewed, "India lives in her village. Independence must begin at the bottom, thus making every village a republic or Panchayat, enjoying full powers.". He particularly envisaged and envisioned the concept of Gram Swaraj. "Gandhiji had aptly remarked that independence must begin at the bottom. And it is to emphasise that women's empowerment should also start from the villages, the grass-root level units" (source: http://yojna.gov.in/public-account_2016sep.aso).

The 73rd Constitutional Amendment Act of 1992 has assured their substantial (one third) entry in PRIs which was increased to fifty per cent in Bihar Panchayati Raj Act 2006. Article 243D of the Constitution of India provides for not less than one-third reservation for women out of total number of seats to be filled by direct election and number of offices of chairpersons of Panchayats. According to the Ministry's information, 20 States have by now provided 50% reservation for women in Panchayati Raj institutions in their respective State Panchayati Raj Act (source: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1658145>). However, many elected women panchayat representative are still excluded from the decision making process and political sphere. The advancement of women depends on their involvement in decision making process. The main reason behind it has been socio-cultural deprivations meted out to them. Women's political participation may only be facilitated by institutional arrangements. In India, women have capacity to transform the political landscape.

OBJECTIVES AND METHODOLOGY

In view of the above situation, the present paper intends to explore the ground reality of women's substantive participation in the decision making process at least in panchayati raj institutions. In the process, the socio-economic status of Women Mukhiya (women gram panchayat heads), their educational and occupational status as well as effectiveness of their participation in these bodies have been examined.

The present research is based on both secondary and primary sources of data collection. In other words, the present research adopts both descriptive and analytical methods. The panchayat election report of 2021 and concerned literature constituted the secondary sources of data collection. In order to ascertain the opinion of mukhiyas, local bureaucracy and people's representatives, a survey was conducted by using interview and observation techniques. All the elected women gram panchayat heads (mukhiyas) of the selected Biraul Block of Darbhanga district were covered and in order to enrich the research, the local bureaucracy and people's representatives were also interviewed.

POLITICAL SYSTEM AND DECISION-MAKING AT GRASSROOTS LEVEL

It is an established fact that women have been subjugated, deprived and oppressed and perpetuated for ages through institutionalised methods. So far SC women is concerned, they 'bear the triple burden of caste, class and gender.' It has been largely argued that women's status in society can be improved only if they are visible in political sphere (Stacy and Price: 1981). From a conceptual perspective, allowing women to hold positions in political institutions facilitates them to ladder up in social status (Kumari: 2016). Panchayati Raj institutions can be considered as a critical tool for improving women's status and breaking the glass-ceiling. Various factors, including the attitude and intention of elected women panchayat representatives (EWPRs) towards the introduction of various development programmes and their ability to link different segments of the village population with the introduced programmes, make them empowered. Consequently, this strategy would lead to a higher and more robust degree of women's empowerment.

DATA AND DISCUSSIONS

The demographic profile of the selected Block is reflected in the following Table-1 which is based on Census 2011

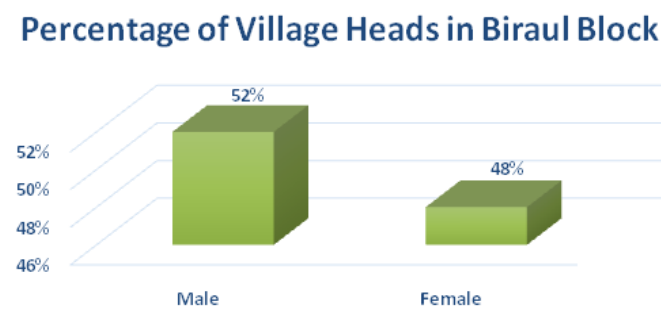
Table 1: Demography Biraul Block

<i>Total Population</i>	<i>286113</i>
Male	149326
Female	136787
SC Population	54359
SC Male	28259
SC Female	26100
ST Population	187
Male	84
Female	103

<i>Total Population</i>	<i>286113</i>
Literate Population	122956
Male	78581
Female	44375
Illiterate Population	163157
Male	70745
Female	92412

Source: Census 2011

The Graph 1 depicts the share of women in Panchayat bodies in the selected Block.

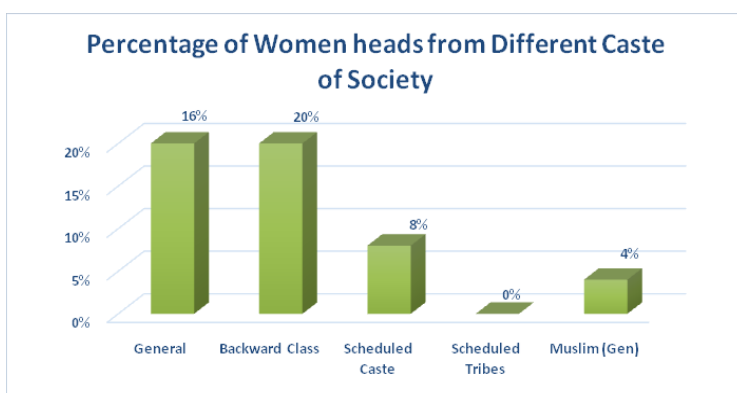


Graph 1: Share of Women in PRIs

Source: Report of Panchayat Elections 2021, State Election Commission, Bihar

It is noticeable that the Women representatives have been elected from reserved seats only, except in one case (i.e, Bhavanipur Panchayat) where a female candidate won on general seat. It shows that the condition of women in active politics at the local level largely depends upon the percentage of seats reserved for them. However, it must not be forgotten that social inclusion is a process which takes time to bear fruits. In several cases across the district (Darbhanga) and state (Bihar) women representatives (especially Mukhiyas) have done remarkable job in their respective field. And they have been awarded by the State and the Central government.

The caste composition of EWPRs in Biraul Block is depicted in the following Graph-2:

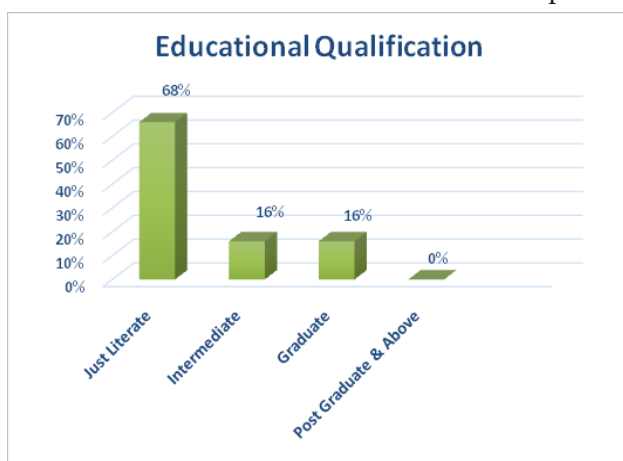


Graph 2: Caste Composition

Source: Report of Panchayat Elections 2021, State Election Commission, Bihar

The provision for reservation of 50 per cent seats facilitated equal opportunity to the half of the population in the society. Out of 48 per cent of EWPRs 20 per cent belonged to general category among which 4 per cent was from Muslim community. 20 per cent of EWPRs were from backward classes and 8 per cent were from Scheduled Castes.

The educational status of EWPRs has been shown in Graph-3

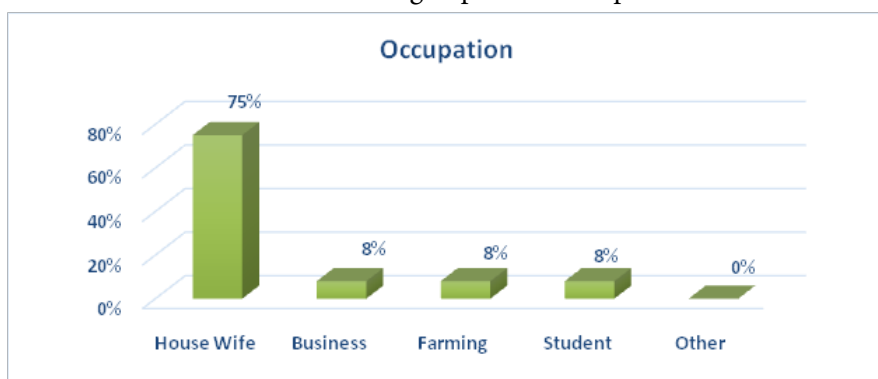


Graph 3: Educational Status

Source: Report of Panchayat Elections 2021, State Election Commission, Bihar

Bihar is amongst the least literate state in India. The literacy rate of Darbhanga district is around 56.56% (as per 2011 Census) and the literacy rate in Biraoul block is around 43% only. The literacy rate amongst women is around 16%. Out of the EWPRs (Mukhiya) 68% were simply literate. 16% per cent of them were intermediate and 16% are graduate. Those who were educated up to intermediate and graduate levels were younger in age. The literacy rate amongst the women is a matter of concern not only in Biraoul block but in entire Bihar State. The low literacy rate amongst the women representatives made it difficult for them to communicate with the local bureaucracy and other stake holders of the local government. Thus, it results into the policy paralysis and slow down the process of development.

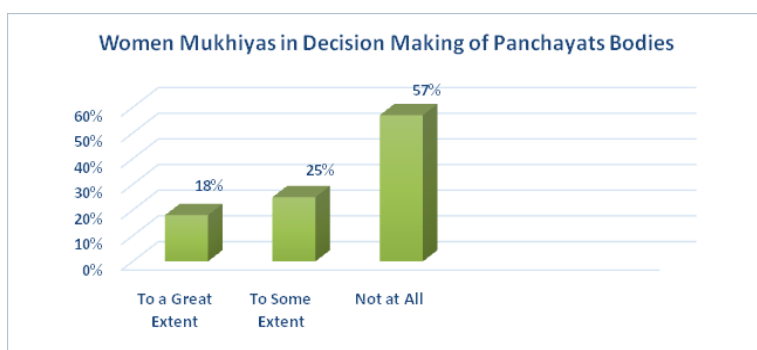
The Graph-4 reflects that most of the EWPRs were housewives. The share of women from other occupations were meagre. From the figures of occupational status, it can be easily inferred that their financial dependence may adversely influence their role in decision-making in political and public affairs.



Graph 4: By Occupation

Source: Report of Panchayat Elections 2021, State Election Commission, Bihar

Graph – 6 above depicts that merely 18 per cent of women mukhiyas played their role in PRIs effectively as compared to 25 per cent to ‘some extent.’ Majority of them (57 per cent) did not play roles at all, meaning that their roles were played by males counterparts of their family.



Graph 6: Degree of Effective Role Played by EWPRs

Source: Ascertained by the authors by observation and interviews

However, during the survey it was found that women-mukhiyas falling in the young and educated categories exerted self-assertive roles in PRIs. A young women mukhiya belonging to OBC category named Kalpana Priya (26 Years) of Kamarkala Panchayat claimed that the young women took active part in local political affairs even though they belong to socially backward classes. Another young woman mukhiya (27 years old) of Pokhran North Panchayat said that she never missed the meetings and put proposals, took part in discussions in such meetings by her own. On the other hand it was found that a woman of 56 years of age holding post of mukhiya of Sonpur Paghari Panchayat in the Block could not play self-assertive roles and male family member acted on her behalf.

OPINION OF PEOPLE'S REPRESENTATIVE (MEMBER OF PARLIAMENT)

The member of Lok Sabha representing Biraal Block was also of opinion that the establishment of local government was crucial to the nation's growth. He argued that because the district lacks trade and industries, the people of the district can be benefited greatly from the use of local resources by way of both rural and urban local bodies. He admitted that local governments are using a variety of programmes to play a significant role in the development process. He hailed the provision of reservation for women and other weaker sections in local bodies and ought to be replicated at the macro-level politics. He admitted that conditions of women in our society is not conducive for their empowerment. He lamented that there are a few shortcomings in the way local local self-government. The elected panchayat representatives are less active in development work properly. They donot keep vigil over the ongoing development works. He advocated for involvement of voluntary organisations in the politically sensitising women and other weaker sections. This has been found fruitful in Bihar (Verma & Singh: 2001) He was of opinion that

the governments (state and central governments) alone are unable to guarantee development in every way.

OPINION OF LOCAL BUREAUCRACY TOWARDS WOMEN'S ROLES

District authorities understood the value of the decentralised growth and governance that occurred through local government organisations. They said that while both rural and urban local bodies are operating effectively in the district. Rural local bodies receive more attention than urban local bodies since they encompass a smaller geographic region. Regarding the issue of local government economic efficiency, they stated that both the administration and the government should be concerned. They said that local governments, both urban and rural, are dependent on grants and finances from the state government and that they are not generating resources in accordance with their needs. ULBs generate resources through taxes whereas despite provisions PRIs fail to impose taxes, hence they face financial crunches. PRIs totally depend on the state government and grants-in-aid. According to their opinion, local entities will be better able to make decisions that meet their needs if they become financially independent. Regarding the role of women in local bodies, they opined that EWPRs need capacity building programmes. However, they claimed that not only their situation improving but the society also get stronger as well. Officials also acknowledged that women's representatives are often less aware, have low literacy rates, and have little practical knowledge of local organisations. They frequently rely on the male member of their family to complete tasks, which poses a challenge for the administration. It has been observed that women's representation is limited to signature authority in many cases. It is difficult for women delegates to voice their concerns during meetings with the district administration. Acceptance of women out of their domestic affairs is no more a taboo. However, it has been observed that the pace for the change is not that much fast, but theirs (Women's) role in Shaping society and managing its affairs cannot be undermined. They admitted that in most the cases Women Village Heads (Mukhiya) are unable to take part in public affairs, as such the male member of their family played the roles. They don't have their own understanding of local political affairs.

CONCLUSIONS AND SUGGESTIONS

The whole gamut of discussion makes us to conclude that women in PRIs can play significant roles in realising the dream of village republic (Gram Swaraj) and accelerating the pace of rural development as their inclusion enhances effectiveness in governance, ensures inclusive representation, and fosters holistic development at the grassroots level. Moreover, women leadership cultivates an inclusive culture

and empowerment, inspiring future generations. As agents of change, women in Panchayati Raj Institutions exemplify resilience, dedication, and vision, crucial for building the vibrant and equitable communities. Therefore, fostering and supporting their active engagement remains imperative for realizing the true potential of local governance and achieving sustainable development goals.

However, women leadership faces immense challenges from society and patriarchal norms. It is high time to enable them to exert self-assertive roles in social and political domains. For this there is an urgent imperative to a) facilitate the emergence of new generation of women leadership, b) raising awareness of legal provisions of their roles and responsibilities among EWPRs c) spreading education among them and imparting training for enabling them to play substantive roles d) involving them in implementation of schemes of state and central governments e) enabling them to handle information technology through appropriate infrastructure and training and f) voluntary organisations should be involved for their political sensitization.

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Tribal Issues



NATURE OF KURMI (SADAN) MOVEMENTS AND ITS IMPACT ON ADMINISTRATION AND POLITICS OF JHARKHAND

Prince Kumar* and Seema Mamta Minz**

Abstract

The non-tribal ethnic group Kurmi (Sadan) community are native of Jharkhand and enjoyed tribal status till 1950. But they have been deprived of Scheduled Tribe status from 1950 itself. Since then, the community has been struggling to get their due, i.e. status of Scheduled Caste. The nature of their movement has been changing over the periods. The community has also been part of Jharkhand movement. But in recent years, their struggle has not only been aggravated but attracted attention of policy makers and political actors of Jharkhand. No doubt granting them ST status has constitutional implications, particularly Art. 341 and 442 of Indian constitution. It will not only be beneficial for them in protection of their socio-economic and political but also strengthen their claim that they are the sons of Jharkhand soil. The movement definitely attracts the attention of political parties for electoral prospects. As such, the present paper tries to study the role of Jharkhand movement in the Kurmi's demand for ST status, underline the change in nature of protest and its impact on policy process.

Keywords: Jharkhand Movement, Kurmi Sadan, Scheduled Tribe, Jharkhand Politics.

INTRODUCTION

The national parties and regional parties are configuring their party leaders with new faces, influential and renowned personalities. As result all parties have begun to give space in organizational power structure of parties for the leadership from the

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community viz. replacement of Mr. Rajesh Thakoor by Mr. Keshav Mahto Kamlesh by Congress (ToI: 2024),¹ Similarly, Sudesh Mahato (President), and Chandra Prakash Chaudhary by AJSU, Bidyut Varan Mahto and Ram Tahal Chaudhary by BJP (Bhartiya Janta Pary), Mathura Prasad Mahto, Baby Devi, Jai Prakash Bhai Patel by JMM (Jharkhand Mukti Morcha) and Jairam Mahto who recently emerged a prominent figure among the political faces in Kurmi community². It also indicates a noticeable presence of a community that was long back hidden behind the curtain of tribal population. Within the non-tribal communities there are two distinct groups known by the vernacular nomenclatures of the Dikus and the Sadans. The Dikus are those migrants, who came with British officers, and dominated over natives and they exploited the native settlers. The Zamindaars, Sahukaars, Traders, Merchants, landlords, administrators, etc. come under this category. (Nathan, 2003 p. 121). Unlike Dikus, Kurmi Sadan is considered as insiders who have shared a long history of their co-existence with the Adivasis. In due course of time, they have developed a symbiotic relationship with the tribes that led to the creation of a composite culture. (Nathan, 2003, p. 120) In Jharkhand, Kurmis have adopted many rituals, and festivals of the Adivasis. They have even infused Sarna religion (the tribal terminology for their religion) with their own religion. They generally speak Sadani, kurmali, sadri, panch pargania and kortha. In many of the Adivasi revolts, Kurmi Sadan too participated in large number. According to Stuligross, Jharkhand's 'sons of the soil' were either 'Sadans' or 'tribespeople'. Sadans were those people, typically lower-caste Hindus, who migrated to the region during the centuries before the twentieth century and were gradually incorporated – both socially and economically – into the fabric of Jharkhand village life. 'Tribespeople' belong to one of 32 tribes in the region that are officially recognised on the National Schedule of Tribes. (Stuligross, 2008, p. 85). There are many scholars who claim that there is a blurred difference between Kurmi (Sadan) and Adivasis, and both have faced similar oppression and exploitation. This is the reason why many believe that Kurmi are also Adivasis. In this context, Arun Singh has claimed that There is another misconception that in Jharkhand the Adivasis are a minority-only 40 per cent of the total population. The truth is that the other 42 per cent of Kurmis, Cheros and Haitians and Momins are also Adivasis; their culture and economy are still tribal. In the few centuries, these tribes have come under attack from Hindu culture to lose some of the tribal traits. The point that they are not Scheduled Tribes does not make them Hindus. According to the separatists, only 18 per cent of Jharkhand's population is nontribal, comprising the Punjabis, Marwaris, Bengalis, Biharis and Oriyas. (Sinha, 2008, p. 55)

The early history of Jharkhand explicitly informs the existence of *Kurmis*. S.C. Roy described them as a service class that shared a working relationship with *Adivasis*. In his understanding, *Adivasi* villages usually had service classes in their villages like Lohras, Chikbaraik, Ahirs, and Kumhars, whose service and labour

were essential for them. For instance: "Oraon tribe whose principal occupation was agriculture considered derogatory to engage themselves in non-agriculture works like weaving, basketry or wicker work, pottery, and working in iron. Thus, for performing these particular works artisan group resided in their village like Lohras who made or mend the Oraon ploughshares and other tools and implements, Ahirs, who tend their cattle, Kumhars who made earthen ware for their domestic use and tiles to roof their huts with, Jolahas and Chik Baraik who weaved their clothes, Turis, Mahalis or Ors who weaved or plaited their baskets and Goraitis. (Roy 1915 p. 68). Similarly, the British called them *Sadan* who were chiefly Hindu Raiyats. (Roy 1946 p. 168). Even today in Jharkhand, West Bengal and Odisha they are known by several names like Kurmi, Kudmi, Mahato, Mahanto, Kurumi . (Islam 2020: 570)

Apparently, their early invisibility in Jharkhand context may have several reasons and chiefly it was the *Adivasis* dominance of landownership that kept the *Kurmi* away from the visibility or got the treated them outsiders. Further the early settlement of the *Kurmi* constituted the service providers of the *Adivasis*. Thus, less landownership, and subordinate status made the *Kurmi* as unseen community of Jharkhand. Even during the time of undivided Bihar, the *Adivasi* got major attention from the government as if only the *Adivasi* were living in Jharkhand. On the other hand, the *Kurmi* under the shadow of *Adivasi* and *Adivasi* culture remained unrecognized or less noticed.

JHARKHAND MOVEMENT AND SADAN

Undoubtedly Jharkhand movement started by the Adivasi leaders and for the cause of Adivasi issues: Jal, Jameen and Jungle. As the initial phase of Jharkhand movement was dominated by the tribal leader especially by the Christian tribal leaders therefore no glimpse of *Sadan* visible in this phase. The first voice of separate state came from the Chotanagpur Unnati Samaj³ when Simon Commission visited Ranchi in December 1928. The leaders of Chotanagpur Unnati Samaj proposed the Chotanagpur area along with Santhal Pargana and Sambalpur (present Odisha) be formed as separate province. (Rana, 1992, 475).

Thus, during the first phase of Jharkhand movement the *Kurmi Sadan* could probably failed to venture with tribe in the movement. On the other hand, their marginalized position in the socio-political setup made them weak to take leading role in the movement. The second phase prelude *Kurmi Sadan* to the Jharkhand movement with a prominent role. In this regard the two important events of Jharkhand movement are mention-worthy that gave favourable atmosphere for the launch of *Kurmi Sadan* in a prime role. First: the Government of India constituted a State Reorganization Commission (SRC) on 29 December 1953 with the commission members like Saiyid Fazl Ali (Governor of Orissa) as its Chairman,

Hirday Nath Kunzru, (Member of Council of State) and Kevalam Madhava Panikkar (Ambassador of India in Egypt) as members. (Rana 2023: 89, Kujur 2003:18). “It was on 22 December 1953, the then Prime Minister of India made a statement in Parliament to the effect that a commission would be appointed to ‘objectively and dispassionately’ the question of the organisation of the States of the Indian Union so that the welfare, the people of each constituent unit as well as the nation as a whole is promoted. This was followed by the appointment of this, Commission under the Resolution of the Government of India in the Ministry of Home Affairs, No. 53/69/53-Public, dated 29th. December 1953” (Report of the State Reorganization Commission 1955 : i). The commission submitted its report in September 1955. (Pooja, 2019: 7717).

The SRC brought hope in the Jharkhand movement because it was constituted for reorganization of the states of India. According to Ignés Kujur “To this commission was given the task of investigating of different lingual and cultural areas of all the states of the Union and find out their social, cultural, economic, geographic, and administrative link to them, on results of their findings they were to recommend alteration of their boundaries by amalgamation or bifurcation as also by the formation of new state.” (Kujur, 2003:18). Quite contrary to the expectation of Jharkhand leaders the State Reorganization Commission (SRC) refused the proposal of separate Jharkhand. However, it created hopelessness among the supporters of Jharkhand movement but brought a boon for the *Kurmis* who were hitherto treated as secondary and marginal. As a result of the SRC refusal on the proposal of separate Jharkhand, the leaders and the parties got severe disappointment, that eventually forced them to self-analyse on their strategy, and mission. It was unanimously felt by the then leaders to combine other ethnic groups because, among the various factors; for the rejection of SRC on Jharkhand proposal, the prominent was the low percentage of the adivasi population. In the 1940s, the *Adivasis* constituted only 44% of the total population of Jharkhand, and the rest population constituted *non-Adivasis* like *Sadans* and *Dikus*. (Horo 2023:4). This conveyed that due to massive demographic change, *Adivasis* had become a minority in their own homeland. In such circumstances, it was very clear that ethnicity alone could not become the political base of the movement. On the other hand, to break the unity of the people and disrupt the movement, opponents started propagating that after the creation of the Jharkhand State, the *non-Adivasis* would be expelled. (Soren, 1992 :20)

Thus, Jharkhand movement has created a favourable situation for the rise of *Kurmi* as a powerful community of Jharkhand. In fact, the *Kurmi* took the advantage of this political turmoil of Jharkhand movement in the most fruitful manner. The *Kurmi* took the lead in the formation of regional party that came into existence during the Jharkhand movement. No doubt the history of present ruling party i.e.

Jharkhand Mukti Morcha (JMM) and the origin of current regional opposition party All Jharkhand Student Union (AJSU) are the result of Jharkhand movement in which the kurmi leader contributed either as a founder or as a decision maker. Binod Bihari Mahto was the founder member of JMM whereas Nirmal Mahto brought new spark to the Jharkhand movement. Apart from these two prominent figures, Tek Lal Mahato, and Shailendra Mahato also contributed to Jharkhand movement. After the formation of Jharkhand state Sudesh Mahto and Chandra Prakash Chaudhary lead the AJSU party, that play vital role in Jharkhand political arena.

The second historic event that favoured *Kurmi Sadan* to rise in the socio-political horizon was the event in the year 1963 when the Jharkhand party merged with the Congress party. Afterwards many regional and national parties were originated which were not affiliated with missionaries or tribal groups. The outcomes of the political amalgamation of Jharkhand and Congress party featured with non-Christian tribal leaders and nontribal leaders as well like Lal Harihar Nath Sahdev (Rana 1991:637,639-640). From this phase of Jharkhand movement, the *Kurmi Sadan* continued to influence the movement and at the same time strengthen their socio-political position in Jharkhand. Thus, the *Kurmi* participation in Jharkhand movement gives a clear sign of *Kurmi* empowerment, and recognition in Jharkhand.

KURMIS (SADAN): DEMAND FOR ST STATUS

Binod Bihari Mahto the founder member of JMM popularly known as ‘Binod Babu’ and ‘Bhisma Pitama of Jharkhand’. (Hindustan, 16 December 2022) who not only united his people but during Jharkhand movement he turned as a social reformer around 1960-70 and actively promoted education in many parts of present-day Jharkhand. During his lifetime, he used to donate most of his salary in the establishment of schools and colleges. For the social upliftment of his community, he opened an organisation called the ‘Shivaji Samaj’ in 1967 on the name of Chatrapati Shivaji Maharaj. (Kumar, 2024: 96) His organisation fought against some ongoing evil practices in his community like superstition, alcoholism, the dowry system, child marriage etc. Simultaneously, his organisation promoted Kurmi language, culture and festivals. His organisation led many protests due to which his organisation was often called as terrorist organisation. Another Kurmi face is quite crucial to understand the role of Jharkhand movement in the identity formation of *Kurmi Sadan*.

Another protagonist Kurmi leader name Nirmal Mahato took the place of president ship in JMM political party (Sinha, 2008: 182) and due to some ideological dispute with the JMM leaders he with his young group formed All

Jharkhand Student Union. (Sinha, 2008: 239) Thus, the Jharkhand movement made huge effect in identity formation of *Kurmi Sadan*. It is a ground reality of socio-political sphere of India that the community is treated as a political tool, to gain political power that's why caste politics is an irony of Indian politics. With this reality the community want to make political identity. Quite clearly, the joining of *Kurmi* in Jharkhand movement after independence resulted into an obvious outcome of identity formation of *Kurmi Sadan*. Prakash rightly said that "Once such community was created, it began to seek political recognition from, first, the colonial state and then post-colonial Indian state" (Prakash, 2001: 51)

At this background *Kurmi's* demand for the status of Scheduled Tribe (ST) got strong political backing after the Jharkhand formation. The *Kurmi's* struggle for the ST status has a long history when they had been enlisted as Other Backward Class in 1951 that delisted their Scheduled Tribe status of 1931 census (Prasad and Mitra, 2023: 1, 2). Since then, the Kurmis have been demanding for their previous ST status. However, their demand for ST status travelled a long journey. The history of *Kurmi's* protest for the ST status can be seen in following points⁴: (a) inclusion in 1931 Census and exclusion in 1950, (b) Government of Jharkhand recommended in favour in 2004 (c) following the recommendation, the matter was referred to the Tribal Research Institute (TRI), which concluded that Kurmis are a sub-caste of Kunbis rather than a tribal community (d) on this assessment, the Central government dismissed the demand.

THE PRESENT CONTEXT

In present context the demand of *Kurmi Sadan* for the ST status turned out with noticeable, powerful protests and to greater extent one can see unity in them because recent *Kurmi* protests affect Jharkhand and West Bengal both states. ⁵The changes in the demand of ST status by the *Kurmi Sadan* demonstrates many factors. Indian society has undergone huge changes due to social reforms, education, development programs, welfare economy and so on. These factors jointly induced a sense of awareness for their own rights and self-determination. In connection with Jharkhand movement the changing socio-political paradigm of *Kurmi Sadan* can be well understood, at the same time it also discloses the reason behind the change in the mode of *Kurmi* protest.

In later phase of Jharkhand movement when the Jharkhand Mukti Morch (JMM) formed in 1973 the *Kurmi Sadan* became more affluent and internally influential in the major regional political parties. This radical change in the socio-political stature of *Kurmi* has proportionally changed the magnitude of *Kurmi*

protest for ST status. At present with their violent protest and rallies the *Kurmis* are not only demanding for the ST status but they also protest for the Kurmali language as an official language in the 8th schedule of the Indian Constitution (Indian Express 24 February 2024, Hindustan Times, Sep. 15, 2023). Thus, there is a noticeable difference between the early kurmi movement and the present one and to some extent the credit goes to Jharkhand movement for such change.

In nutshell one can see that the Jharkhand movement directly and indirectly helped the Kurmi Sadan in making them a prominent figure in socio-political sphere. It also strengthens their claim of early settlers in Jharkhand state. Their role in the Jharkhand movement was remarkably effective and crucial. Whereas the role of Jharkhand movement in the formation of Kurmi identity is evidently visible. In coming years their struggle for ST status is expected to be more vigorous, persuasive, and pressure builder. In any case the contribution of Jharkhand movement in current demand of Kurmi for ST status can not be ignored.

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ENDNOTES

- 1 Times of India, August 17, 2024. News item Congress leader Mallikarjun Kharge on Friday appointed former MLA Keshav Mahto Kamlesh as the new President of the Party's Jharkhand Unit, replacing Rajesh Thakur.
- 2 In the Lok Sabha election 2024 a new face from the community named Jairam Mahto established a strong candidature in Jharkhand politics by polliing nearly 3.5 lakh votes.
- 3 Jharkhand Unnati Samaj was formed by the educated Christian Adivasis of Lutheran and Anglican Mission at the advice of Bishop Kennedy of Anglican Mission, Ranchi in 1915.
- 4 The Mooknayak <https://en.themooknayak.com/tribal-news/demand-for-st-status-kurmi-communitys- struggle-rolls-west-bengal-politics>
- 5 The Hindu May 23, 2024 01:06 am IST - Purulia, Jhargram (W.B.) retrieved from <https://www.thehindu.com/elections/lok-sabha/kurmis-enter-poll-fray-in-jangalmahal-to-push-for-st-status/article68200771.ece> . The Kurmi of Jangalmahal entered in poll fray. "With the Trinamool Congress as BJP remained silent on the demand of the Kurmis



COMMUNICATION SYSTEM AND DEVELOPMENT OF TRIBAL COMMUNITIES OF SOUTH BIHAR

Sunita* and Rajeev Kamal Kumar**

Abstract

The present study has been conducted among two tribal communities namely Santhal and Sauria Paharia of Banka and Bhagalpur districts respectively in south-east Bihar. The aim of the present study is to understand the exposure of tribal communities to the mass media and role of folk media in the development process. The study possesses a few questions i.e. whether modern media is accessible to Santhal and Sauria Paharia and what is their level of exposure? and whether use of traditional media along with modern media is necessary to increase their participation in the development process? This study is based mainly on qualitative methods including in-depth-interview and observation. The study reveals that both the tribal communities do not have much access to modern mass media and they are still more dependent on traditional mode of communication. They feel more comfortable with their traditional media and hence it has better scope in educating, motivating and making them aware about development processes. It can play a crucial role in the development process among tribal communities. Its integration into development efforts ensures that the strategies are culturally relevant, widely accepted, and more effective in bringing about long-lasting change.

Keywords: Santhal, Sauria Paharia, mass media, traditional media, tribe, communication

INTRODUCTION

India is a vast country having a number of social groups and each social group continues as a culturally homogeneous and distinct social character. With a

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population of more than 10.2 crores, India has the single largest tribal population in the world (Census, 2011). The Scheduled Tribe (ST) population represents one of the most economically impoverished and marginalized groups in India. Different studies show that, tribal people over the years have become the most disadvantaged, exploited and neglected people in our society. Their deep-rooted problems are not being addressed properly by the agencies (Vidarthi 1981, Mohanty 2004, Kumar and Kapoor 2009, Reddy et al., 2010). The tribal people are unique in ethnic traits, language, social organization, economy, religious beliefs, customs and demographic features. The cultural pattern varies from tribe to tribe and region to region (Basu, 2000). The Indian Government has recognized the Scheduled Tribes in the government gazette. The Tribal population is identified as original inhabitants of India. Yet, as the tribes have more or less, retained their separate social identity and, on the whole, can be regarded as comparatively isolated and economically backward, they have been placed under the category of Scheduled Tribes (Vidarthi, 1977).

Before bifurcation of the state, Bihar had a large tribal population, which later shifted to the newly created state of Jharkhand. At present, the state of Bihar still has more than thirteen lakhs (13,36,573) tribal population. The state has 33 tribes including nine Particularly Vulnerable Tribal Groups (PVTGs). These tribes have been given numerous rights and concessions by the Constitution, but most of them have been living in abject poverty. Unemployment and poverty are the biggest problems for them. According to the RGI report 2011, 49.8 per cent of STs are marginal workers. Their educational level is also very low (51.1 per cent) as compared to any other caste group of the state. Formal education has made very little impact on tribal societies. Their health indicators are also very poor due to inaccessibility of public health facilities. The government has launched several development programmes over the years. However, the intended goals could not be achieved due to policy formulations and problems in implementation of these programmes. This is one of the reasons the tribal communities are still lagging far behind on all the development indicators (Vidarthi 1981, Basu, 2000, Kumar 2015, MTA 2013).

Economic development among the tribal people largely depends upon agriculture and its allied activities. Since more than one-fifth of the ST population depends on agriculture and forests, their ability to cope with the changing economic scenario, especially in taking advantage of the new economic avenues is minimal. Despite the promotion of various development schemes and programmes, these tribes remain largely deprived of the benefits. Lack of education, unemployment, poverty, ignorance and apathy of government officials, lack of information and awareness are contributing factors towards under development (Danda, 1991; Sekar and Ramasam, 1996; Padhi, 2005).

The communication system and development of tribal communities are deeply interrelated, especially in terms of social development, economic growth, social integration, and cultural preservation. South Bihar is home to a variety of tribal communities, including the Santhals, Mundas, Oraons, and Ho, among others. In the present study, the role of communication system in the development of Santhal and Sauria Paharia is examined. It seems to appear that these groups are still underprivileged like most other tribal groups of the state. *Santhal* has the highest population (4,06,076) among all the STs of the state. The literacy rate of *Santhal* is only 43.1 per cent in Bihar, which is lower than the national average for STs. Similarly, the literacy rate of *Sauria Paharia* is also only 45.8 per cent (Census, 2011; MTA, 2013). In addition to this, unemployment and poverty are other major problems for these communities. One of the important ways to improve the developmental status of these tribal groups is to make the development more participatory and need based. But it is a common fact that the tribals are largely illiterate and unaware about the government schemes due to poor communication systems.

In this backdrop, the aim of the present study is to understand the exposure of the *Santhal* and *Sauria Paharia* to the mass media. It also examines their accessibility to media and their level of exposure to the modern media. This study also seeks to understand whether the use of traditional media along with modern media has any significance in increasing their awareness level as well as participation in the development process and availing the development programs and schemes being run by the government.

MATERIALS AND METHODS

The present study has been conducted among two tribal communities, i.e. *Santhal* in Banka and *Sauria Paharia* in Bhagalpur districts of Bihar. *Santhal* is the largest tribe in the state; whereas *Sauria Paharia* has a very low population and belongs to a 'Particularly Vulnerable Tribal Group' (PVTG). This is an empirical study and based mainly on qualitative research methods including in-depth-interview and field observations of studied communities. A descriptive approach has been adopted for presenting the role of communication systems in development of tribal communities. The findings from the study have also been substantiated adequately from the secondary sources.

The study area and respondents were selected through a stratified random sampling method. The first unit of sampling was the selection of districts through purposive sampling, based on the availability of tribal population. The second unit of sampling was Blocks and villages- Sahupokhar and Kauawaran villages from Baunsi block of Banka and Kutubpur and Ramzanipur villages from Kahalgaon

block of Bhagalpur district were selected. These villages were selected again on the basis of availability of sufficient tribal population. Since the nature of study is qualitative, more open ended and unstructured questions were used for gathering information. The ethical consideration was taken into account while conducting the field study and data collection.

A total of 200 respondents are taken for this study (Table 1). Out of this, 100 respondents belong to *Santhal* (25 each from Kauawaran and Sahupokhar villages of Baunsi block and Bangalgadh and Gorwakura villages of Chanan and Katoria blocks in Banka district) and 100 belong to *Sauria Paharia* tribal group (50 each from Ramzanipur village and Kutubpur village of Kahalgaon block in Bhagalpur district). More than two villages were selected in case of Santhal in Banka district due to population availability.

Table 1: Area and tribe wise Sample Respondents

<i>Tribes</i>	<i>District/ Block</i>	<i>Villages</i>	<i>No. of Respondents</i>
Santhal	Banka/ Baunsi	Kauawaran	25
		Sahupokhar	25
	Banka/ Chanan	Bangalgadh	25
		Gorwakura	25
Sauria Paharia	Bhagalpur/ Kahalgaon	Ramzanipur	50
		Kutubpur	50
		Total	200

STUDY AREA AND PEOPLE

The study districts Banka and Bhagalpur are situated in south-east side of Bihar, bordering the neighbouring state of Jharkhand. The total population of STs in Banka district is 90,432, which is 4.4 per cent of the ST population. Sahupokhar and Kauawaran villages have been selected from Baunsi block of Banka district. This block has the highest population of Santhal tribe in the district (Census, 2011). Santhals mainly live in the state of Jharkhand, Bihar, West Bengal, Odisha and Assam. They have a significant presence in Bihar. The Santhal society is one of the oldest and largest tribal group of India. Santhali is the prime language spoken by the Santhals. This tribe also has a script of their own called “*Ol Chiki*”. There are twelve clans among the *Santhals*, they are *Hasdak*, *Murmu*, *Kisku*, *Hembrom*, *Marandi*, *Soren*, *Tudu*, *Baske*, *Besra*, *Core* and *Pauria*. Among these clans the last two have been lost (SC and ST Research and Training Institute Bhubaneswar, 2014, Dey, 2015).

The rich cultural heritage, unique traditions, and socio-economic challenges have shaped the identity of Santhals. They have a vibrant culture with traditional

beliefs, customs, and practices, focusing on the worship of natural spirits and deities. They celebrate festivals like Karam, Sohrai, and Tusu with enthusiasm, and their Austroasiatic language is spoken by a significant portion of the community (Singh, 2016; Verma, 2010). Basic needs are fulfilled by the natural resources mainly land, forest trees and plants. They are also engaged in fishing and cultivation. They follow the *Sarna* religion. Traditional art and crafts hold important positions in their lives. They also possess a magnificent skill of making musical instruments, mats and baskets out of the plants. They have a well-established political organization (*pirh* or *pargana*) (Dey, 2015; Guha and Ismail, 2015; Ghosh, 2010; Biswas, 1956; Singh, 1998).

The second studied district is Bhagalpur, where Sauria Paharia is selected. There are three sub-divisions, four statutory towns, 16 blocks, and 1515 villages in this district. Bhagalpur district is 15th in terms of population (30,37,766) and 17th in terms of area (2,569 sq.km.) in Bihar. The district has 67,180 tribal populations, which is 2.21 per cent of ST population (Census, 2011). Kutubpur and Ramzanipur villages have been selected for the study. Sauria Paharia is one of the nine primitive tribal groups of Bihar and Jharkhand. Sauria is the name of a Tribal community and Paharia means hill. Hence, Sauria Paharia means a tribe settled in the hilly ranges with specific identity such as language, food habits and culture (Singh, 1998). A good number of these tribal groups are living in Kahalgaon of Bhagalpur district in Bihar also (Malley 1938; Kumar and Sinha, 2016). The Paharias belong to the Austro-Asiatic sub-family of the Austric family of languages. Sauria Paharia is also known as 'Maler' in 'Malto' language which is their dialect, which means persons living on hills (Chatterjee and Sarkar, 2016). The cultural tapestry of the Sauria Paharias is woven with vibrant festivals like Karam, Sohrai, and Tusu, which are celebrated with traditional dances, music, and rituals (Singh, 2016; Verma, 2010).

Their artistic expression is evident in their traditional crafts, including pottery, bamboo work, and metalwork. From a religious standpoint, the *Sauria Paharias* primarily follow animism, believing in the existence of spirits and supernatural forces. Some members of the tribe also adhere to Hinduism as their primary religion. As a Particularly Vulnerable Tribal Group (PVTG), the *Sauria Paharias* face significant socioeconomic challenges. Their limited access to resources, low literacy rates, and dwindling population size have hindered their development. Some PVTG groups, including the *Sauria Paharias*, are on the brink of extinction (Sahani and Nandy, 2013). Their economic activities primarily revolve around shifting cultivation, supplemented by other sources of income such as selling firewood, fruits (mango, cotton, jackfruit, tamarind, custard apple), paddy, livestock, and labor. Their reliance on forest resources extends to collecting timber, firewood, grass, bamboo, and various edible or useful plants found in their jungle (Kumar and Sinha, 2016; Chatterjee and Sarkar, 2016).

SAMPLE CHARACTERISTICS

Before discussing the existing communication systems and their role in the development of Santhal and Sauria Paharia communities of Bihar, it is pertinent to discuss their socio-economic characteristics. Economy and education are two most important indicators of human development along with health. The main occupation of both the studied tribes has been agriculture along with other allied activities. However, these communities were traditionally involved in slash and burn or shifting cultivation. They still rely on agriculture and are engaged in the activities of farming and farm laborers. In addition to this, they are engaged in collecting minor forest produces (MFP), making bamboo products, engaged as labourers on daily wages, etc. Both these communities have also been engaged in making and selling liquor till the recent past. However, all kinds of liquor have been banned by the state government in 2016. They said that this decision of the Government has also affected their economy adversely.

It has been observed that Sauria Paharia faces more difficulties in agricultural work as they reside in more interior parts of the hills. Most of them do not have a regular occupation and source of income. More than half of them is either engaged in agriculture (39 per cent) or daily wage work (44 per cent). More Santhal respondents are dependent upon agricultural activities (59 per cent) than the Sauria Paharias (19.0 per cent). Some of them are also engaged in petty business, service and other activities. They are mostly engaged in marginal activities and dependent upon forest; hence their source of income is not fixed. Seasonal migration is very common among them. Both these tribes also migrate on a regular basis to other states for earning wages. The economic condition of both the studied tribes is very poor. Monthly family income for most of the families of these studied communities (71 per cent for Santhals and 86 per cent for Sauria Paharias) is less than Rs. 5000/ (Table-2).

Table 2: Main occupation and monthly family income of respondents

<i>Main occupation</i>											
<i>Tribe</i>	<i>Agriculture</i>		<i>Labourer</i>		<i>Business</i>		<i>Job</i>		<i>Other</i>		<i>Total</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Santhal	59	59.00	26	26.00	1	1.00	1	1.00	13	13.00	100
Sauria Paharia	19	19.00	62	62.00	2	2.00	2	2.00	15	15.00	100
Total	78	39.00	88	44.00	3	1.50	3	1.50	28	14.00	200
<i>Monthly income of family</i>											
<i>Tribe</i>	Below Rs. 3000		Rs. 3001- 5000		Rs. 5001- 10000		Rs. 10001- 15000		Above Rs. 15000		<i>Total</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Santhal	23	23.00	48	48.00	27	27.00	1	1.00	1	1.00	100
Sauria Paharia	21	21.00	65	65.00	13	13.00	1	1.00	0	0.00	100
Total	44	22.00	113	56.50	40	20.00	2	1.00	1	0.50	200

Education plays a vital role in the development of the individual and society. But the educational level of most of the respondents is found to be very low. Most of them (56 per cent) are illiterate. The difference in literacy level for both the studied tribes is very less, but the literacy level of *Santhal* is slightly better. A few of them (14 per cent) have also matriculation and intermediate level of education (Table 3).

Table 3: Literacy level of respondents

Tribe	Illiterate		Literate / Primary		Middle		Matriculation		Intermediate and above		Total
	N	%	N	%	N	%	N	%	N	%	
Santhal	52	52.00	26	26.00	11	11.00	4	4.00	7	7.00	100
Sauria Paharia	60	60.00	24	24.00	8	8.00	5	5.00	3	3.00	100
Total	112	56.00	50	25.00	19	9.50	9	4.50	10	5.00	200

ACCESS AND EXPOSURE TO MAINSTREAM MEDIA

This section presents the existing communication system of studied tribes and role of media in their development, i.e. how the communication system is related with development and help in availing the government development programmes and also mainstreaming them. It has been found in different studies that the tribals are still more connected to their traditional media and inter-personal communication (Subramanyam and Mohan, 2006; Mathiyazhagan et. al., 2007). The decisions related to the society and community are taken in consultation with all the community members. The community members know directly and have first-hand contact with each other. They have strong solidarity and bonding due to more we-feeling. Both these communities use traditional media and are largely dependent upon inter-personal communication (Sunita and Kumar, 2020).

Access and exposure levels of respondents to three mainstream mass media, i.e. newspaper, radio, and TV is shown in table 4. It can be observed that the majority (91.0 per cent) of the respondents do not have direct access to the newspaper and hence they do not read it (94.50 per cent). If we see the tribe wise reading habit, only five per cent Santhals and six per cent Sauria Paharias read newspapers. This is also due to the prevalent illiteracy among studied tribes. Those who read newspapers also buy the newspaper rarely, as most of them read it outside at tea shops or at their neighbour's house.

If we see the access to radio of the studied tribes, it is far better than newspapers, as 37.50 per cent respondents said that they listen to radio. Out of the two studied tribes, *Santhal* has better access to radio than *Sauria Paharia*. Those who have access to radio also own the radio (23.50 per cent). Radio ownership is also more among *Santhals*. The accessibility to TV is lesser (only 5 per cent) due to the poor economic condition. The electricity is also not available in the villages of *Sauria*

Paharia. They do not own the TV set, but sometimes they casually watch TV at tea shops or outside the village (Table 4).

Table 4: Access/exposure of respondents to mainstream media

<i>Access to mainstream media</i>	<i>Response</i>				
Access and exposure to newspaper	Yes		No		Total
Tribe	N	%	N	%	
Santhal	8	8.00	92	92.00	100
Sauria Paharia	10	10.00	90	90.00	100
Total	18	9.00	182	91.00	200
Do you read newspaper?					
Santhal	5	5.00	95	95.00	100
Sauria Paharia	6	6.00	94	94.00	100
Total	11	5.50	189	94.50	200
Access to radio					
Santhal	42	42.00	58	58.00	100
Sauria Paharia	33	33.00	67	67.00	100
Total	75	37.50	125	62.50	200
Do you own radio?					
Santhal	27	27.00	73	73.00	100
Sauria Paharia	20	20.00	80	80.00	100
Total	47	23.50	153	76.50	200
Access to television					
Santhal	2	2.00	98	98.00	100
Sauria Paharia	3	3.00	97	97.00	100
Total	5	5.00	195	97.50	200
Do you own television?					
Santhal	2	2.00	98	98.00	100
Sauria Paharia	0	0.00	100	100.00	100
Total	2	2.00	198	99.00	200

ACCESS TO MOBILE, SMART PHONES AND COMPUTER

Mobile, smart phones, internet, etc., are the latest and easiest mode of digital communication for the present generation. However, the access and use of these media varies from area to area and different social strata. It is more accessible and used in urban areas than rural and tribal areas. It is also less accessible to the poor and marginalized section of the society. Tribal communities still have less or limited

access to these media. Accessing and using modern media in tribal communities also involves overcoming several barriers while recognizing unique opportunities.

It can be observed from table 5 that only 43 per cent respondents have access to mobile/ smart phones. Most of them have only one phone in the family. Respondents either have personal phones or any of the family members own it. It was also found in the discussion that they do not have more than one mobile phone in the family. The access to mobile phones is more among Santhals (50 per cent) as compared to Sauria Paharia (36 per cent). It was also found that the Sauria Paharia's village do not have electricity connection, and hence those who possess the mobile, they have to charge their mobile outside the village. They have to pay Rs. 5/- for one-time battery charging from the market. Some of them also use solar chargers. It was further investigated whether they are comfortable in using these phones- i.e. whether they use the mobile only for calls or also for text messages and other purposes. On this, only 10.50 per cent respondents answered positively (12.00 per cent Santhal and 9 per cent Sauria Paharia). The study further reveals that the studied tribal communities do not have access to computers. Only 2.50 per cent of respondents are computer literate. Rest of the respondents did not know the use of computers and the internet (Table 5).

Table 5: Access to mobile/smart phones and computer

Access to mobile and computer	Yes		No		Total
	N	%	N	%	
Do you have mobile in your family?					
Santhal	50	50	50	50	100
Sauria Paharia	36	36	64	64	100
Total	86	43	114	57	200
Can you read, write and send messages on mobile?					
Santhal	12	12	88	88	100
Sauria Paharia	9	9	91	91	100
Total	21	10.5	179	89.5	200
Are you a computer literate?					
Santhal	2	2	98	98	100
Sauria Paharia	3	3	97	97	100
Total	5	2.5	195	97.5	200

ACCESS TO OTHER CHANNEL OF COMMUNICATION

The studied tribal communities were also asked about a few other sources of communication and information, such as magazines, banners, pamphlets, etc., to understand the reach of information related to any government development programs and schemes. It was found that they do not have access to any of these sources. Less than three per cent of respondents have access to magazines, of which most of them do not read them regularly. Poor literacy rate, poverty and lack of interest may be the reasons for the low level of accessibility of these sources. They do not have much access to printed advertising materials, such as banners, pamphlets, posters, etc. A little more than one-third (35.50 per cent) of the respondents have accepted that they have seen these types of advertising materials. Of these, more (48.00 per cent) respondents from Sauria Paharia community gave a positive response in this regard. Only a few respondents (nearly 19 per cent) took interest in reading them, but nobody has remembered the content of the advertisement. The respondents also revealed that they did not get promotional messages from any agency regarding development programs of the government. Nobody has accepted receiving any type of promotional messages in the last two years.

Table 6: Access and exposure to other source of communication

<i>Access and exposure to other source of communication</i>	<i>Yes</i>		<i>No</i>		<i>Total</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Do you have access to any type of magazine/journal?					
Santhal	3	3.00	97	97.00	100
Sauria Paharia	2	2.00	98	98.00	100
Total	5	2.50	195	97.50	200
Have you ever seen poster, banner, pamphlet, hoarding or any other such material?					
Santhal	23	23.00	77	77.00	100
Sauria Paharia	48	48.00	52	52.00	100
Total	71	35.50	129	64.50	200
Do you read and remember it?					
Santhal	18	18.00	82	82.00	100
Sauria Paharia	19	19.00	81	81.00	100
Total	37	18.50	163	81.50	200

POPULAR MODE OF COMMUNICATION

It has been found in earlier studies among tribal communities that the preference for traditional media is very high. The present study also came up with similar findings. When asked about the most effective means of advertising and information, 45.5 per cent respondents (*Santhal*- 32 per cent; *Sauria Paharia*- 59 per cent) said that inter-personal communication is the most effective means for advertising

and spreading awareness among them. Also, 42 per cent respondents said that traditional folk media would be most effective in advertising. Only nine per cent of respondents were in favour of mass media as a channel of communication for awareness generation. They also suggested that community TV and radio should be installed in villages for awareness generation. More than half (60.5 per cent) respondents preferred traditional folk media, 19.5 per cent modern mass media and 16.5 per cent preferred inter-personal communication for entertainment. Only 3.5 per cent of respondents use other media like newspapers, games, etc., for information and entertainment (Table 7).

On being asked about reasons for their liking these media, 56.50 per cent (*Santhal*- 58 per cent and *Sauria Paharia*-55 per cent) replied that they like both media but they do not have access to mainstream media. Nearly one-fourth of respondents also said folk media are easily accessible and easy for them to understand the message. Folk art and culture are very much prevalent among the studied communities as well (Table 8).

Table 7: Popular mode of communication among respondents

<i>Medium you like the most for communication and information</i>									
<i>Tribe</i>	<i>Inter-personal communication</i>		<i>Traditional media</i>		<i>Mass media</i>		<i>Any other</i>		<i>Total</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Santhal	32	32.00	57	57.00	8	8.00	3	3.00	100
Sauria Paharia	59	59.00	27	27.00	10	10.00	4	4.00	100
Total	91	45.50	84	42.00	18	9.00	7	3.50	200
<i>Medium you like the most for entertainment</i>									
Santhal	13	13.00	66	66.00	18	18.00	3	3.00	100
Sauria Paharia	20	20.00	55	55.00	21	21.00	4	4.00	100
Total	33	16.50	121	60.50	39	19.50	7	3.50	200

Table 8: Reason behind liking the media

<i>Reasons of liking the above media</i>									
<i>Tribes</i>	<i>Easily accessible</i>		<i>Easy to understand</i>		<i>Like both media, but mainstream media is not available</i>		<i>Others</i>		<i>Total</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Santhal	20	20.00	5	5.00	58	58.00	17	4	100
Sauria Paharia	28	28.00	6	6.00	55	55.00	11	5	100
Total	48	24.00	11	5.50	113	56.50	14	9	200

FOLK MEDIA: PREVALENT MODE

As mentioned elsewhere, the tribal communities are more expressive and communicative through their local folk media. They understand the messages easily through these media. Folk media, which includes traditional forms of communication like storytelling, songs, dance, drama, and oral traditions, holds a special place in tribal culture. Integrating it into development strategies may be of great advantages and opportunities to increase the participation of tribal.

This study shows that 79 per cent respondents (75 per cent *Santhal* and 83 per cent *Sauria Paharia*) have exposure to folk media like drama, puppet show, street plays, etc. We can say that folk media are the most easily available source of communication for the studied tribe. When asked about the place where they saw these drama/ puppet shows/ street plays, most of them replied that they have seen it in local fairs, some of them have seen it in their own village. It means the majority of people have access to this type of media. The study further reveals that 52 per cent respondent (*Santhal*: 57 per cent; *Sauria Paharia*: 47 per cent) had got the chance to know the health/social/economic awareness from the traditional media. The local government at block and Panchayat levels adopt IEC strategies sometimes to make the rural people aware about the government programmes and schemes related to mother and child care, nutrition, epidemics, waste and sanitation, etc. (Table 9).

Table 9: Level of exposure of studied tribes to folk media

<i>Ever seen drama/ puppet show/ street plays?</i>					
<i>Tribe</i>	<i>Yes</i>		<i>No</i>		<i>Total</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Santhal	75	75.00	25	25.00	100
Sauria Paharia	83	83.00	17	17.00	100
Total	158	79.00	42	21.00	200
Ever heard any information about health / social/ economic awareness from traditional media					
Santhal	57	57.00	43	43.00	100
Sauria Paharia	47	47.00	53	53.00	100
Total	104	52.00	96	48.00	200

Table 10: Association of folk media and mass media

<i>If you have song and dances in your language on TV and radio, would you like to see it?</i>					
<i>Tribe</i>	<i>Yes</i>		<i>No</i>		<i>Total</i>
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Santhal	90	90.00	10	10.00	100
Sauria Paharia	65	65.00	35	35.00	100
Total	155	77.50	45	22.50	200

According to the present study 77.5 per cent of respondents admitted that they would like to watch regional programmes in their local language on TV and radio.

However, nine per cent of respondents have no interest in watching these types of programmes on TV and radio (Table 10).

CONCLUSION

The present study tries to understand the existing communication system and different media being used by Santhal and Sauria Paharia in Banka and Bhagalpur districts of Bihar. It also presents the level of their exposure to modern mass media and digital media and how do they connect to outer world. The studied tribal groups Santhal and Sauria Paharia are living in remote areas and have limited connectivity to the outer world. Lack of education, unemployment, lack of awareness and distance from outer world are few reasons for being them underdeveloped. They do not have access to modern mass media. They are so poor that they cannot afford newspaper, television, radio, computer and even mobile phones. They are more dependent on inter-personal mode of communication. Both the studied tribes have rich traditional mode of communication and in the absence of proper access to modern mass media they are still dependent upon it. They also accepted that they have difficulty in understanding the messages properly through modern mode of communication. It has been found from the study that the folk media is easily available to them. The folk media is found to be very effective in the development process of tribal communities.

Folk media is embedded in the tribal culture and resonates deeply because it reflects their values, beliefs, and cultural practices. For the studied communities, the folk media is familiar and trusted, unlike modern media. It can be used as a key tool for preserving and promoting cultural heritage within tribal communities as well. It can act as a bridge between modern practices and traditional knowledge and also encourages active participation from community members, as many forms of it are interactive and communal. Using folk media, the developmental messages can be developed according which is more relatable and engaging. These messages are more likely to be accepted and implemented when conveyed in culturally appropriate formats. Therefore, for effective communication the Government and non-government agencies should use traditional media along with modern media for educating them in an effective manner.

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FROM CONSERVATION TO GOVERNANCE: THE ROLE OF TRIBAL WOMEN IN COMMUNITY FORESTRY

Meenakshi Nayak* and Tattwamasi Paltasingh**

Abstract

Forest conservation for environmental sustainability is a fundamental task for forest governance, and the role of women in this process is highly contentious. In many regions, tribal women have long been the custodians of forests and play an indispensable role in the sustainable use and conservation of natural resources. Tribal women's participation in "community forestry" can give them a voice and make use of their knowledge to effectively preserve the forest environment. Community forest institutions (CFIs) in India are mainly governed under joint forest management (JFM). Literature reveals significant gaps in gender-inclusive collective action within CFIs for natural resource management. Based on the secondary data sources, the paper tries to assess the institutional designs of forest governance in India, Odisha. Further, the paper explores the role of tribal women's contribution to forest conservation through CFIs and their impact. The research also highlights the challenges they face, including equity concerns, inaccessibility, restricted rights, and control in CFI. The study further identifies policy implications for the tribal women. Incorporating a special focus on Odisha, the paper calls for a paradigm shift toward more inclusive governance models that recognise the rights, access, and knowledge of tribal women, thereby recognising their contributions to conservation.

Keywords: Community forestry, CFI, Tribal Women, Forest Governance, Conservation, Odisha

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BACKGROUND AND CONTEXT

The notion of ‘Community forestry’ in forest management incorporates local communities in the decision-making process for land use and forest management through CFIs. Public participation was among the priorities at the 1992 Rio de Janeiro United Nations Conference on Environment and Development (UNCED), which was based on Rio Declaration principles 10 and 22 (Basu, 2020). India is recognised as a frontrunner in the development of regulations that involve populations who depend on forests in the management of forest resources. The second-largest tribal community in the world resides in India, and their social, cultural, and economic lives are thought to be significantly impacted by forests. The livelihoods of around 300 million people in India are reliant on forests, and almost 70% of the population depends on them for energy (Padhi & Patel, 2021). Since the 1970s, when national parks, protected areas (PAs), and sanctuaries were established, several laws have increased the strain on tribal communities. Like many other countries in the Global South, CFIs have worked to balance conservation and development objectives in India since the 1980s (Jain, A. 2022).

Tribal women are the primary forest stakeholders owing to the nature of their occupations and domestic duties. The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), among other documents, uphold the rights of women (Nayak, 2024). The global underrepresentation of tribal women in CFIs has gained attention. The inclusion of tribal women in CFIs with a significant number can provide them with a voice and enable them to raise awareness of issues that significantly affect their lives (Agarwal, 2015). Regardless of the official representation of women in CFIs, their participation is merely symbolic (Agarwal, 2010). To provide an improved understanding, the following section attempts to provide a brief overview of the historical perspective of CFI in India.

Community Forestry of Odisha: Brief Appraisal

There is a total of 104.3 million tribal people in India, of which 94.1 million reside in rural forest areas. Orissa’s forest covers 61204 sq. Km, which makes up almost 39% of the state’s total land area (Census, 2011). There are 62 types of tribal groups residing in Odisha, which comprise 22 % of the total population of the state (Paltasingh & Paliwal, 2014). The state’s primary forest types are tropical semi-evergreen, tropical moist deciduous, tropical dry deciduous, and sub-tropical broad-leaf hill forests (FSI, 2019). Of the 46,989 revenue villages in Odisha, 29,302 have their forest tracts. There are 1,779,953 hectares of forest inside the revenue boundaries of these localities. Reserve forests lie on the border of another 12,000 settlements (Nayak & Berkes, 2008). Odisha has been at the forefront of the evolution of community forestry. There were around 5622 Self-Initiated Forest

Protection Committees (SIFPCs) alone in Odisha employed to manage 74000 hectares of Reserve and *Keshra* Forests. SIFPCs have been driven by cultural identity, environmental deterioration, or even community pride. Odisha appears to have had its initial attempts at community forest management (CFM) as early as the 1930s. However, SIFPCs were first recognised following the Central Government order on JFM modification in 2001. Approximately 9905 JFM Committees cover 880187 hectares in Odisha. Nevertheless, out of nearly 10,000 communities having community forest management, fewer than 2000 were placed under JFM in the last 10 years. (Bhattacharya et al, 2010).

The majority of studies on gendered engagement in natural resource management in India focused on women's involvement in JFM, often ignoring the larger role of women. The overarching objective of the paper is to critically examine the role of tribal women's contribution to forest conservation through CFIs with a focus on Odisha. It also assesses the impacts of CFIs on the rights of tribal women. Against this backdrop, the first section discusses the policies and institutional designs of forest governance in India and the Odisha scenario. The following section highlights the role of tribal women's contribution to forest conservation through CFIs with a focus on Odisha. The research also highlights the challenges they face, including accessibility, equity, rights, and control in CFIs. The concluding section discussed policy implications for tribal women and offered suggestions to improve CFI policies for their upliftment.

POLICIES OF FOREST GOVERNANCE

It is important to comprehend certain key policies that led to form CFIs in India while talking about forest governance. The major forest policies are highlighted in the following sub-sections.

The National Forest Policy

The Indian National Forest Policy of 1988 recognised the development, regeneration, and preservation of forests with the help of tribal people in forest fringe areas, to strike a balance between livelihood objectives and forest protection. (GoI, 1988)

The Panchayats (Extension to the Scheduled Areas) Act (PESA) (1996)

PESA 1996 grants local self-governance (Gram Sabha) the authority and ownership right to manage community resources and NTFP through community-based forest management in Schedule V areas (GoI, 1996). JFM, on the other hand, creates new local forest management or protection committees that are overseen by the Forest Department.

Indian Forest Act (IFA)

The Indian Forest Act came into effect in 1927, which took effect after the Indian Forest Act of 1878, distinguished between “Reserved,” “Protected,” and “Village” forests. In Reserve Forests, residents have no rights; in Protected Forests, inhabitants are prohibited by law; and Village Forests serve to meet local needs (Eliasa, 2020). Based on the 42nd Amendment, in 1980, the central government modified the Indian Forest Act (1927) to prevent state governments from designating any reserved forest as non-reserved without first obtaining the central authority’s consent (Divan & Rosencranz, 2022). The Indian Forest Act paved the way for the Forest Rights Act (FRA), 2006.

Scheduled Tribes (STs) and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006

The FRA 2006 regulations were first issued in 2008 and subsequently revised in 2012. The Act addresses the ‘historical unfairness’ and grants rights to land and other resources to STs and other forest inhabitants. It acknowledges two categories of forest rights: Community Forest Rights (CFRs) and Individual Forest Rights (IFRs) over forest lands (Satpathy, 2017). It enables residents to participate in preserving and managing the forest ecosystems actively. More than 16 lakh IFR titles have been distributed in India so far, and 150 million forest dwellers have been granted recognition of forest rights over at least 40 million hectares of forest land spread across more than 170,000 villages. The FRA 2006 criteria are followed while implementing JFM (RRI, 2015). Without local communities’ involvement, the aforementioned forest policies would not be able to operate. To ensure the smooth implementation of forest acts, an institutional forest governance framework has been established, as delineated in the following section.

INSTITUTIONAL DESIGNS OF CFIS

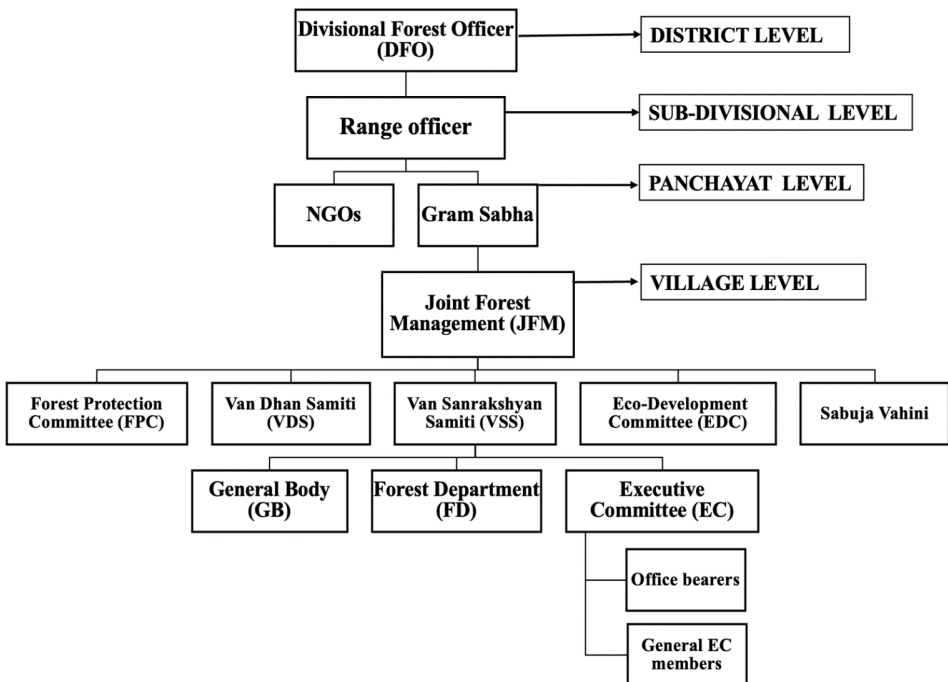
The forest is governed through the state-led CFIs in India. JFM is a form of CFI that prioritises communication between local user groups and the FD over forest product sharing, duties, control, and decision-making authority (Bhattacharya et al, 2010). A State Forest Department (SFD) official, an Executive Committee (EC) consisting of 10 to 15 village representatives, and a General Body (GB) composed of all adult villagers make up the JFM Committee (JFMC). EC is essential because it establishes guidelines for forest usage, product extraction, profit sharing, and dispute resolution among users. It also establishes sanctions for violating these guidelines and outlines recommended practices for protecting forests. EC members were not technically elected but rather appointed by broad consensus (Agarwal, 2015). Each group must have one representation on the EC if SCs and STs make

up more than 10% of the village's population. Women comprise one-third of the EC, and A minimum of one landless member should be elected (Eliasa, 2020). At present, 106,482 JFMC are implemented, which spans 22.01 million hectares of forests distributed over 28 Indian states and union territories. Madhya Pradesh has the highest number (14,428) of JFM (Bhattacharya et al, 2010). There are regional and level-specific variations in the organisation of JFM. The JFM structure in Odisha is explained in the next section.

Structure of JFM in Odisha

Odisha established its regulations and put JFM into effect in 1993. A total of 6,45,741 families are included in the 12,494 JFMs that comprise 19.76% of the forest area in Odisha (Padhi & Patel, 202). JFM encompasses Forest Protection Committees (FPCs), Van Sanrakshan Samiti (VSS), Eco-development Committees (EDCs), Van Dhan Samiti (VDS) and *Sabuja Vahini* (green brigade). GB, EC and FD are the core committees within each village-level FPC. These Committees were established in villages within a 5 km radius. The FD collaborates with NGOs to provide services. The institutional structure of CFIs in Odisha is depicted in the chart in Figure 1.

Figure 1: Institutional structure of CFI in Odisha



Source: Developed by the authors

Van Sanrakshan Samiti (VSS)

In the majority of villages in Odisha, the FPC is named as VSS, which operates in a single village. It was created to safeguard forests that are well-stocked (with less than 40% canopy cover). Despite the fact that VSS is meant to receive 50% of any significant harvest and 100% of intermediate produce, its members only receive wages for collecting the produce (Jain, A. 2022). The Gram Sabha gives its decision regarding the formation of VSS to the range officer and the Divisional Forest Officer (DFO). The chairperson, vice-chairperson, secretary, treasurer, and 11–14 additional members of VSS are usually chosen by the Gram Sabha. The number of SC & ST in the executive body is proportional to their VSS membership. The Secretary must be an employee of the forest department. Typically, 1 to 3 members of the executive committee were designated as office-bearers. The actual state of VSS in Odisha is that meetings are not held on a regular basis and that no records are kept (Bhattacharya et al, 2010).

Eco-development Committees (EDC)

Odisha government has embraced eco-development as an approach through the JFM Resolution (2008) to gain community support for PA management. EDC aims to preserve biodiversity by providing alternate sources of income in order to lessen reliance on biomass (Siripurapu & Geores, 2016).

Van Dhan Samiti (VDS)

Although Orissa modified its NTFP policy in March 2000, just 60 produce items were transferred to *gram sabha* with a limited authority, while the FD retained control over the main revenue-generating NTFPs. Due to limited market access and the difficulty of holding onto stocks, people are being pushed to sell NTFPs at cheap prices. An initiative that deserves mention is the recent formation of Van Dhan Samities (VDS), which works for the protection and marketing of forest products. This plan's flaw is that VDS functions similarly to a lot of other marketing agents (Jain, A. 2022).

Sabuja Vahini (green brigade)

The state government of Odisha in 2002 established Sabuja Vahini (SV) or the “green brigade,” in a few PAs to assist the authorities who are having trouble safeguarding the forests because of a staffing deficit. The legal framework does not permit SV members to fight poachers or smugglers with armed force. Consequently, the SV restricts their operations to encourage individuals, investigate suspects, and alert the authorities to any questionable behaviour. However, because a new institution

established outside of the CFI framework would generate further challenges, they are covered under the JFM (Singh, 2001).

Nonetheless, the institutional frameworks discussed above may operate better if they give women a platform to share their traditional forest management skills. The role of tribal women in CFIs has been critically examined in the section that follows.

ROLE OF TRIBAL WOMEN IN CFIS TO CONSERVE FOREST

Traditional knowledge, including information on forest management, agricultural diversification, and medicinal plants, herbs, roots, and tubers, is primarily held by tribal women (Shiva, 2010). They typically rely on shorter-gestation-period items like firewood, fodder, and NTFP (Haque, 2020). In contrast, males generally rely on timber (Kelkar et al., 2003). In addition, women took part in patrolling by substituting for absent male family members and also joined mixed patrols regularly. Tribal women spend hours each day in the forests and raising the alert, keeping surveillance, and even capturing forest offenders. (Agarwal, 2005). World Summit on Sustainable Development (WSSD) and the World Commission on Environment and Development (WCED) formally recognise “women” as one of nine significant civil groups whose participation is essential to the successful implementation of sustainable development (Nayak & Paltasingh, 2024). Increasing the number of women in EC helped women to voice their views (Nayak & Paltasingh, 2023). Interestingly, landless women in EC were more likely to attend meetings and voice their opinions because they felt more driven to do so by their own needs rather than by social conventions (Agarwal, 2015). Communities typically regulate forest use by either completely prohibiting entry or permitting limited extraction of specific products, thereby enabling regeneration and preservation. The quality of protection of forests improve with the participation of women in EC (Agarwal, 2009a). Women give priority to issues that are primarily within their purview, such as housing, childcare, health, education, drinking water and sanitation, and other human services (Agarwal, 2010). In several instances, Indian forests have been managed by women’s committees such as *Mahila Samitis* and Self-Help Groups (SHGs). The *Mayurbhanj* District in Odisha has an all-female executive committee and an all-female patrol force. The women meet their livelihood needs by combining their guard assignments with household duties such as gathering fuel wood, fodder, and other forest goods (Siripurapu & Geores, 2016).

Significance of Tribal Women’s Role in CFIs

Tribal women’s involvement in CFIs improves their decision-making, influences the rules of forest use, reduces rule violations, improves forest preservation, and

lessens the chances of a shortage in firewood (Agarwal, 2009a). It is more probable that tribal women will follow EC's regulations, encourage other village women to follow them, and voice their complaints to the committee (Agarwal, 2001). Additionally, understanding the characteristics of various firewood species or tree fodder species is helpful for forest development and enrichment planting. Women's presence in CFI can utilise their knowledge and preferences during tree plantation and managing common pool resources. Additionally, they are more effective at preventing smugglers from stealing trees and preventing intruders from entering nearby villages (Agarwal, 2009b; 2015). In contrast to patrols led by men, all-female patrols can prevent outsiders out of the forest without being accused of rape or molestation. All this provides yet another reason why women's greater presence on the EC could improve forest conditions. Despite playing both reproductive and productive roles (managing forests and contributing to the local economy), tribal women's diverse contributions are often overlooked due to persistent systematic undervaluation (Paltasingh and Lingam, 2014).

CHALLENGES CONFRONTED BY TRIBAL WOMEN IN CFIs

Even though women are the single largest users and protectors of forests but their 'involvement' in the CFI is marginal. Despite being a member of CFI, tribal women face numerous challenges like equity issues, access to CFIs, restricted rights and control within CFI.

Tribal Women's Access to CFIs

Access to forest resources through CFI is crucial for tribal women since it is their subsistence. Nevertheless, several factors, which are listed here, prevent them from accessing the CFIs: i) In meeting proceedings, tribal women are typically entirely silenced; ii) social and cultural norms constrain women from participating in such meetings; iii) Women's participation in JFM is further discouraged by their low levels of formal education and ignorance. iv) they do not get any prior information regarding meetings; v) inappropriate meeting time when women are unable to take time off from household chores; vi) Women's perception that attending such gatherings will not benefit them; vii) scepticism among the forest department officials regarding women's inclusion in CFI; viii) gender stratification; ix) absence of ownership rights (Agarwal, 2009). In addition, women frequently left EC because their husbands disapproved of their participation in public events and would assault them if they went to EC meetings. Lack of access to institutions has a negative impact on women's involvement in JFM. (Manfre and Rubin, 2012). Additionally, there are dangers of violating social customs and values that set the boundaries of participation, like losing one's family or social networks, feeling guilty or humiliated, or damaging one's reputation (Siripurapu & Geores, 2016).

Equity Concerns

The paradoxical circumstance known as “participatory exclusions” occurs even in institutions that appear to be participatory. Exclusions get multiplied with poverty, caste, different tribal communities, and gender, referring to disenfranchised populations. The equity and welfare outcomes of CFI formation could depend on the stringency of forest use regulations. Women in general are more adversely affected by strict regulations because of their substantial reliance on the forest. Despite the existence of official reports on women’s participation, women’s actual involvement was restricted to preparing meals for government staff. The minutes methodically left out the viewpoints of any women who could have attended the meeting (Agarwal, 2001). The inequity in participation is illustrated by the fact that only one-third of the EC are women representatives. Concerns about equity are not sufficiently addressed by quotas alone, as they may promote a tokenistic presence. The effectiveness of “threshold criteria” and reserved-seat rules has been questioned by researchers (Mohanty and Sahu, 2012). Women have always been excluded from all communal matters and through their husbands or other male family members. Men agreed to include women in the patrolling team in 1990 when they were having trouble protecting forests from women head loaders. Men who supported women’s involvement were usually motivated by a desire for equal representation rather than the notion that women might make different decisions than men or possess more knowledge of the local ecology. Their symbolic participation was only to sign the records. The majority of the women believe such meetings are merely a formality, intended to show off to the visiting dignitaries, and have little practical value (Agarwal, 2009b).

Restricted Rights and Control Within CFI

Even though indigenous women possess an enormous amount of information regarding forest management, rights to the resources, power and authority in CFIs are being controlled by conservative societal norms (Satpathy, 2017). Higher caste men of the community continued to have exclusive authority over CFM decision-making. Generally men justify their belief about women that they cannot raise voice in public, especially when there are older men around and they are comfortable within their households. The male members never cooperate and encourage women’s regular participation (Nayak & Berkes, 2008). The time, money, and effort required to attend meetings and keep up with network communication are among the numerous costs associated with CFIs, which are one of the biggest barriers keeping women from taking part. The written word is used more frequently in formalization and institutionalization process. The forms of language and means of communication in higher order networks are an obstacle (Singh, 2001). The shift from “women-in- themselves” to “women-for-themselves” would be necessary for

women to have a sense of shared identity for furthering their shared goals (Agarwal, 2015).

CONCLUSION AND IMPLICATIONS FOR POLICIES

Research on the ecological impacts of CFI revealed that grazing, forest fire suppression, and assisted natural regeneration enhanced the status of natural regeneration, raised grass yields, and enhanced other site characteristics (Bhattacharya and Joshi, 2002). There are examples of JFM implementation in Andhra Pradesh and Odisha leading to the recovery of growing stock, enhanced natural regeneration, decreased biotic pressure, increased production of grasses and feed, and improved water regime. During its first phase (1990–2000), JFM was a time of experimentation, action, and participation. It not only produced noticeable results in terms of the restoration of degraded forests, but it also produced a flow of benefits in the form of wage income, employment, and NTFPs, especially grasses and fodder. However, the latter stage has been a period of decline (Bhattacharya et al, 2010).

Villagers' participation in CFI has decreased, and their collection of shared rights has been eroded. A close relationship with the Forestry Department has replaced several institutional ties between the community and other organisations, as well as reciprocal ties with nearby villages. A significant flaw of CFIs has been identified as the ongoing disparity in authority and power between the Forest Department and the communities. A specific forest area can be formally delineated and assigned to a revenue village, which is the only unit of management recognised by JFM policy. JFM appears to only include villages that have a history of protecting their forests and are free from significant disputes (Nayak & Berkes, 2008). Additionally, other elements such as cultural variety, socioeconomic stratification, and rural leadership were not included. JFM had moved to a system of paid viewers. The micro plan lacked sensitivity to the customs and was quite stiff. (Nayak & Paltasingh, 2023).

Despite being a tremendous project for a sustainable, participatory environment, the study discovered that community forestry still has numerous shortcomings, particularly when it comes to the role and status of tribal women. Women continued to be sidelined, in the background, and powerless to do anything. They walk a long distance to attend the EC Meetings just for the sake of attendance, where their opinions are ignored. Women also get low wages in forest work and sometimes face sexual assaults while guarding the deep forest (Nayak & Paltasingh, 2024). Women's SHGs, separate meetings for women, training for public speaking, hiring women for field staff, and small-scale income-generating activities for women are some ways to break down the cultural barriers that have historically prevented women from participating in public forums. Awareness and gender sensitive training programmes need to be implemented. Facilitating NGOs

to link CFIs to ensure women's presence in mixed-gender CFIs. Region-specific developmental goals must be sensitive to changing livelihood patterns and internal differences between classes. Similar to agricultural commodities, NTFP items require the establishment of procedures for a minimum support price. Instead of such outstanding accomplishments, CFI has not produced the anticipated outcomes, necessitating adjustments and improvement. Increased tourism, external interference, rising poverty, and limited access to forests and resources pose serious concerns for local ST women who are closely associated with the forest.

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Notes



An Impressionistic Note on VIKSIT BHARAT@2047: SOME CONCEPTUAL AND APPLIED ISSUES

Anand Vardhan Sinha¹

“Viksit Bharat@2047” represents India’s ambitious vision of becoming a developed nation by the centenary of its independence. This vision aligns with the roadmap outlined during Azadi Ka Amritkaal (2022-2047), a transformative 25-year period aimed at building a prosperous, inclusive, and globally respected India. The goal is to fulfill the dreams of the nation’s freedom fighters while addressing contemporary challenges and harnessing opportunities in a rapidly changing global landscape. Prime Minister Narendra Modi encapsulated the essence of this vision by stating, “We are sowing the seeds today for a golden India of tomorrow, where every Indian has the opportunity to realize their fullest potential.”

“Viksit Bharat@2047” envisions a developed India by the centenary year of its independence. This vision represents not just an aspiration but a roadmap to transform India into a global leader in economic, technological, and social domains. It reflects the collective ambition of 1.4 billion citizens to create an inclusive, self-reliant, and resilient nation.

CONCEPT OF VIKSIT BHARAT

A developed India, or Viksit Bharat, aims to achieve high standards of living, economic prosperity, social justice, and sustainable development. It involves a multi-dimensional approach encompassing economic growth, technological innovation, education, health, environment and good governance.

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Key Pillars of Viksit Bharat@2047

1. Economic Growth and Self-Reliance

Economic prosperity is a cornerstone of development. India's goal is to achieve a \$30 trillion economy by 2047, fuelled by industrial growth, a robust manufacturing sector, and global trade partnerships. Initiatives like Atmanirbhar Bharat (Self-Reliant India) emphasize reducing import dependency and boosting domestic production.

2. Technological Advancement

India aims to emerge as a global hub for technology, focusing on artificial intelligence, robotics, space exploration, and green technologies. Programs like Digital India and investments in startups and innovation will drive this transformation.

3. Social Equity and Empowerment

A developed India is one where all citizens, irrespective of caste, gender, or religion, enjoy equal opportunities. Empowering marginalized groups, bridging the gender gap, and ensuring accessible education and healthcare for all are vital for achieving social equity.

4. Education and Skill Development

By 2047, India aspires to build a knowledge-driven economy. Transforming the education system, with a focus on research, innovation, and vocational skills, will empower the youth to meet global standards. The New Education Policy (NEP) 2020 lays the foundation for this vision.

5. Environmental Sustainability

Development must align with environmental protection. India's commitment to achieving net-zero carbon emissions by 2070 and promoting renewable energy sources underscores its dedication to sustainable growth. Efforts like Mission LIFE (Lifestyle for Environment) promote responsible consumption and conservation.

6. Good Governance and Digital Transformation.

Transparent, accountable, and citizen-centric governance is essential. E-governance initiatives, real-time public grievance redressal systems, and increased digital literacy will ensure effective governance and public trust.

Challenges on the Path to 2047

While the vision is ambitious, challenges such as poverty, regional disparities, unemployment, corruption, and climate change need to be addressed. Political will, public participation, and effective policy implementation are critical for overcoming these hurdles.

Role of Citizens

Achieving Viksit Bharat@2047 requires active participation from every citizen. Social responsibility, environmental consciousness, and adherence to constitutional values are integral to building a developed and united nation.

Role of Citizens

Viksit Bharat@2047 symbolizes the collective dream of an empowered India that stands as a beacon of progress and inclusivity. With unwavering determination, innovative strategies, and collective effort, India can achieve this vision and secure a brighter future for generations to come.

VIKSIT BIHAR 2047

In this Note, the focus will be on the specific challenges of Bihar within Eastern India and how we can leverage advanced governance tools, including Artificial Intelligence (AI) and the Internet of Things (IoT), to make Bihar truly Viksit (Developed).

As we discuss the path to development, let us remember the words of Mahatma Gandhi:

“The soul of India lives in its villages.”

For Bihar, a predominantly rural state, this means prioritizing grassroots development and adopting innovative strategies to empower its people.

Challenges in Bihar’s Development Journey

1. Economic Underperformance

Despite robust GDP growth of over 10% in recent years, Bihar’s per capita income remains one of the lowest in the country at Rs.54,383, compared to India’s average of Rs.21,72,000 (Economic Survey of Bihar, 2022-23).

2. Lack of Industrialization

With minimal industrial infrastructure and low private sector investments, Bihar contributes less than 1% India’s industrial output.

3. Agricultural Dependency

Nearly 75% of Bihar’s workforce depends on agriculture, which is vulnerable to floods, droughts, and climate change.

4. Infrastructure and Connectivity

While strides have been made in rural road construction, issues like inadequate rail and air connectivity, low power consumption (348 KWh per capita), and insufficient digital infrastructure remain barriers to development.

THE ROLE OF GOVERNANCE, AI, AND IOT IN TRANSFORMING BIHAR

Smart Governance through AI

Governance in Bihar must adopt AI-powered solutions to enhance efficiency, transparency, and decision-making.

- AI in Education:
 - Implement AI-driven adaptive learning platforms in schools to personalize education for students based on their needs and progress.
 - Predict student dropout trends using AI algorithms and target interventions accordingly.
 - Example : States like Andhra Pradesh have piloted AI-powered education monitoring systems, which Bihar can emulate.
- AI for Welfare Distribution:
 - Use AI to identify genuine beneficiaries of welfare schemes by analyzing socio-economic data.
 - Prevent leakages in programs like the Public Distribution System (PDs) through facial recognition and blockchain-backed monitoring.
- AI in Policy Design:
 - Develop predictive models to anticipate the impact of policies in areas such as employment, agriculture, and health.
 - For example, AI can predict flood patterns and their socio-economic impact, enabling proactive disaster management.

IoT for Agriculture and Infrastructure

IoT can revolutionize Bihar's agriculture and infrastructure sectors, addressing key challenges like low productivity, disaster management, and urban-rural connectivity.

- IoT in Agriculture;
 - Deploy IoT sensors in fields to monitor soil health, water levels, and crop growth in real-time.
 - Create "smart irrigation" systems that optimize water usage, especially in flood-prone areas of North Bihar.
 - Enable direct market access for farmers via IoT-enabled e-market platforms, reducing exploitation by intermediaries.
- IoT for Urban and Rural Development:
 - Install IoT-enabled streetlights, waste management systems, and air quality monitors in urban centers like Patna, Gaya and Muzaffarpur.

- Utilize IoT for real-time tracking of infrastructure projects, ensuring timely completion and resource optimization.
- Smart Flood Management:
 - Use IoT sensors along major rivers like the Ganga, Kosi, and Gandak to monitor water levels and send real-time alerts to communities.
 - Integrate this system with AI-based flood prediction models for disaster preparedness.

PATHWAYS TO MAKE BIHAR VIKSIT BY 2047

Economic Growth and Industrialization

- Agri-Industrial Zones : Establish Agri-Industrial Parks focusing on food processing and agro-based industries, leveraging Bihar's agricultural strength.
- Ease of Doing Business : Digitize all state-level clearances to attract investments. Develop industrial hubs near major cities and improve logistics through dedicated freight corridors.

Education and Skill Development

- AI-Powered Learning : Expand AI-driven learning management systems to deliver quality education to remote areas.
- Skill Development Hubs : Integrate IoT-enabled simulators and virtual labs in skill training centers under programs like Kushi Yuva Program.
- Focus on Higher Education : Make Bihar a center for higher education and research by expanding institutions like Nalanda University into global knowledge hubs.

Digital Infrastructure

- Expand broadband connectivity to all villagers under the Digital India initiative.
- Launch a Digital Bihar Dashboard to monitor governance metrics such as healthcare delivery, rural electrification, and welfare schemes in real time.
- Promote local tech entrepreneurship by creating innovation zones in Patna, Bhagalpur and Gaya.

Healthcare Transformation

- Use AI-powered diagnostic tools in public health centers to detect diseases early, particularly in rural areas.
- Establish telemedicine units connected to district hospitals, enabling rural patients to consult specialists remotely.

- Deploy lot in healthcare logistics to monitor the supply of medicines and vacancies.

INNOVATIVE SOLUTIONS FOR BIHAR'S DEVELOPMENT

Smart Villages

- Develop “smart villages” equipped with solar-powered energy grids, digital classrooms, lot-based water supply systems, and telemedicine centers.
- Example : Partner with programs like the Sansad Adarsh Gram Yojana to create model villages.

Green Energy Projects

- Establish solar farms in regions with high sunlight exposure and biogas plants in rural areas.
- Integrate renewable energy into agricultural operations, such as solar-powered cold storage units for perishable goods.

Heritage Tourism Through Digital Innovation

- Use augmented reality (AR) and virtual reality (VR) to promote Bihar's heritage sites, including Bodh Gaya, Nalanda and Vikramshila area in Bhagalpur district.
- Launch digital platforms for e-ticketing and virtual tours of key tourist attractions.

CONCLUSION: A VISION FOR BIHAR 2047

As we move toward Viksit Bharat@2047, Bihar must embrace innovation and technology to overcome its challenges. The effective use of AI, IoT, and digital governance can bridge gaps in education, healthcare, agriculture, and infrastructure.

Let us commit to transforming Bihar into a land of opportunity, where technology empowers the marginalized, governance fosters inclusivity, and every citizen contributes to the nation's prosperity.

As Prime Minister Narendra Modi said :

- The future of India lies in technology, and the future of technology lies in India”
Let us ensure that Bihar not only participates in this future but leads it. Together, let us build a Viksit Bihar, and in doing so, contribute to the dream of a Viksit Bharat.

The intellectual and cultural heritage of Bihar is second to none in terms of range and guality. The hallowed ancient glory of the State seems set for return, may be with brighter luminosity. With the Centre's recent grant of CLASICAL LANGUAGE status to PALI and PRAKRIT, the two ancient languages of Bihar, so closely associated with Lord Buddha and Bhagwan Vardhaman Mahaveer, the two all-time High Icons of Bihar, respectively, and the Prime Minister, Sri Narendra Modi's green-signal to the reincarnation of the ancient VIKRAMSHILA UNIVERSITY in the vicinity of its ruins near Kahalgaon (District-Bhagalpur) in course of his public address at Bhagalpur on the 24th February, 2025, on the model of NALANDA UNIVERSITY, the State would experience an unprecedented and unequalled ascent to the top in the field of academics and scholastics as never before.



A Suggestive Note on VIKSIT BHARAT@2047 AND EASTERN INDIA: NEED OF CAPACITY BUILDING AND TRAINING OF DEVELOPMENT BUREAUCRACY

Amitabh Ranjan*

Abstract

PM Narendra Modi's vision of Viksit Bharat@2047 makes an urgent imperative to look into the empowerment and capacity building of bureaucracy. Changes in policy priorities change due to changes in political regimes in eastern Indian states. The situation instigates us to look into capacity building of development bureaucracy in the state. In this context Mission Karmyogi needs reference which aims to reform civil services and enable them to offer services in an effective and efficient manner. This is a bold move by the Government of India to democratise the training process and level the playing field for all. It seeks to address existing system difficulties like as complexity and red tape through a capacity-building strategy that works at the person, institutional, and procedural levels. This mission can overcome all of its flaws provided the programme is driven by a long-term vision and ongoing motivation. Bihar aims to introduce innovations and practices in the field of rural governance, municipal administration, revenue management and e-governance. This has become more critical in the present context when organizational dynamics are increasingly globalized. Capacity Building (herein after CB) is associated with the idea of enhancing or developing skills and Competencies at an individual level, i.e. training of employees. Capacity Building is a much broader concept that should be considered from a systemic perspective, which involves different clusters, as individuals, organizations, institution and society.

Keywords: Capacity Building, Training, Mission Karmyogi, Development, Eastern India

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THE BACKDROP

It is established fact that the Eastern region has been struggling to achieve the substantial economic development, despite having ample potential, as compared to other regions of India. It will be evident from the fact that the region constitute one fourth of country's population but contributes merely 12.2 per cent of India's GDP. Despite successive Central governments have attempted to check the regional imbalances in development and achieve economic outcomes in the region remained spatially discouraging. It will be evident from the fact that NSDP (Net State Domestic Product) statistics of 2022-2023 shows West Bengal has Rs. 13,78,859 crores, Bihar Rs. 6,81,761, Odisha Rs. 6,70,176, and Jharkhand has Rs. 3,60,689 as compared to NDP (Net Domestic Product) of India Rs. 88,18,000 approximately. However, these aggregate numbers obscure considerable variation in economic growth paths shaped by the differing historical legacies, structural constraints, and policy frameworks of each state.

Historically speaking, the eastern India had the nerve of education, trade and administration of the country; centered at cities of colonial and even pre-colonial periods like Patna, Ranchi, Kolkata (Calcutta), Bhagalpur etc. But the colonial administration robbed the region by economic exploitation and pushed it behind the rest of the regions. The region, after independence, carried the legacy of marginalization, telling upon the prospects of youth and women. The underperformance of the region owes to weakness of implementation mechanism especially, bureaucracy which embodies the responsibilities of accountability, citizen-state relationships and delivery of public services etc. As such good governance has been suffering from bureaucratic inertia, political flux, crippled fiscal health and social divisions like castes, gender and educational status.

However, in past few years, the innovative steps and governance experiments have shown promise, viz. MO Sarkar of Odisha, Kanyashree of West Bengal, Jeevika of Bihar etc. have demonstrated the prospects. If such schemes are nourished properly by micro level development bureaucracy and political resolve, pace of development will be faster. The above situation indicates towards necessity of capacity building and training of civil servants and elected panchayat representatives (EPRs) involved in development tasks.

Of course, there are several instances of development initiatives in the region but the development pace has been arrested by institutional and structural constraints rather than policies. There are some foundational maladies in governance. Scholarship on the subject opine the real challenge lies in bureaucratic apparatus and its relationship with EPRs. It has been argued that the state administration in the region are suffering from colonial modes of business, latent hierarchies and red-tapism. Besides, there are shortage of staff, especially at lower administrative echelon, crippled service delivery and lack of performance based evaluation. The

situation makes an urgent imperative to impart intensive training and ensure capacity building of the civil servants.

Further, creation of participatory instruments for fast pace of development has been experimented right from Community Development Programmes in 1950s to present Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs) under 73rd and 74th constitutional amendments. But eastern India is still lagging behind the desired results from these local bodies. The main reasons of their being less effective are – lack of training of elected representatives of local bodies and their executive functioning in collaboration with local bureaucracy. No doubt several attempts are being taken to impart training to them but there lacks the consistent efforts for capacity building in them.

CAPACITY BUILDING, TRAINING AND DEVELOPMENT

Let us have an idea of capacity building, training and development in the context of development mechanism i.e. bureaucracy and participatory institutions. **Capacity building** has become increasingly vital to the success of modern organizations in order to enable it to compete on Competencies. To quote *United Nations Development Programme (UNDP)*, “In the global context, Capacity refers to the ability of individuals and Institutions to make and implement decisions and perform functions in an effective, efficient and sustainable manner at individual, institutional and systemic levels. Competencies as underlined by United Nations can be classified threefold, firstly, Behavioural Competencies that refers to talent requirements for leadership, solving problems, decision making, and team building, secondly, Domain Competencies that refers to competence in functions of specific domain like department or agency or services and thirdly, Functional Competencies in the areas of project management, budgeting, communication, e-governance competency etc. Functional competencies are common among many domains, cutting across MDOs (multi domain operations), as well as roles and activities, for example, project management, budgeting, communication etc. are required for many roles across MDOs. Capacity building is the development of an organization's core skills and capabilities, such as leadership, perception of goals, strategy, management, administration including that of human resource, finances and legal aspects, programme development, implementation, resource generation, and further skills of handling diversity, promoting partnership and collaborations, delivery of services and external relations in order to build the organization's sustainability and effectiveness.

Training can be perceived as the systematic process of changing the behaviour and/or attitude of people in a certain direction to increase goal achievement within the organization. It involves, to facilitating learning of new skills, enhancing the

existing knowledge or bringing attitudinal and behavioral changes among the officials. According to National Training Policy (2012), the emerging changes like rapid economic growth, devolution of funds, functions and functionaries down to micro levels, enhanced transparency facilitated by Right to Information and ICT, challenges of globalization, climate change and extremism and so on have created a complex and challenging environment in which the civil servants have to function, added with the responsibilities of coping with rising expectations of their performance as well as the aspirations and needs of the people. The broad areas for imparting training are as follows: - Knowledge, Skill and Attitude, Performance, Career development, Human resource development and Organizational development.

Though the term **development** seems as a distant concept from training, yet these terms are deeply interrelated. Training can be defined as “acquisition of skills, concepts, or attitudes that results in improved performance in an on-the-job environment” whereas Development can be defined as “expansion of an individual’s capacity to function effectively in his or her present or future job and work organization”. Training, typically, concentrates on improving an employee’s performance in the given job on one hand and development concentrates on preparing individuals engaged in organisations for development for new assignments, roles or duties. The importance of training and development cannot be overemphasized since it has been found an effective instrument in bringing the efficiency in work processes, procedures and also developing a conducive environment in an organization leading to achieving the organizational goals and aspirations.

MISSION KARMYOGI

Mission Karmayogi is the National Programme for Civil Service Capacity Building (NPCSCB) initiated by Government of India in 2019. The government of India has developed a plan to make the training programmes more effective, particularly for the government officials of different categories. The plan document brings out the details of the processes of the training programmes, focus of the training programmes, areas to be identified and the monitoring of the efficiency in the post training period.

Mission Karmayogi attempts to bridge this gap in continuous training by making an elaborate structure of training hierarchy under direct supervision of the Hon’ble Prime Minister. A Capacity Building Commission (CBC) has also been established to coordinate C B activities at the Central Govt. level. iGOT (Integrated Online Government Training) Platform has also been created where online training courses are being uploaded to carry the programmes. This online training may cater to a wide range of, and remote audience also. The Department of Personnel & Training (DoPT) has come out with three types of competencies – behavioural, domain and

functional - competencies. This becomes more crucial for the government officials as they have dominant role in policy formulation, planning and implementation of government schemes and programmes of development. The training provides the officials different types of skills and orientation towards a problem to facilitate efficient decision process in the organisation. There are large financial resources being invested by the government on training to senior officers for enhancing capacity and thus contribute for the efficient functioning of the departments and the organizations. This is in this background that the Government of India has initiated a revolutionary changes in the training strategies and techniques and bring required qualitative improvements in the training and development under the banner of 'Mission Karmyogi'. This is a unique model in many ways which aims to provide and develop a comprehensive framework to sharpen the planning, implementation and decision making process at different levels.

EPILOGUE

Eastern India's demographic diversity offers the ideal ground for building efficient participatory governance—where citizens are not just beneficiaries but co-creators of public policy. In short, the present note emphasizes that the importance of capacity building, training and development cannot be overlooked since it has been found to be an effective instrument in bringing the efficiency in work processes, procedures and also developing a conducive environment in an organization leading to achieving the organizational goals and aspirations, especially the SDGs (sustainable development goals). It would also bridge the gap of inter-regional and intra-regional disparities. This is in this background that the Government of India has initiated a revolutionary changes in the training strategies and techniques and bring required qualitative improvements in the training and development under the banner of 'Mission Karmyogi'. This is a unique model in many ways which aims to provide and develop a comprehensive framework to sharpen the planning, implementation and decision making process in administrative echelons – from top to bottom. It can easily be recommended that emphasis should be given on training and capacity building of not only bureaucracy but also the elected representatives of Panchayati Raj Institutions and Urban Local Bodies.

PROCEEDINGS OF EASTERN ZONAL CONFERENCE OF IIPA ON
VIKSIT BHARAT@2047: CONCERNS OF EASTERN INDIA
22ND JANUARY, 2025

IIPA Bihar Regional Branch organized the Eastern Zonal Conference of IIPA on “Viksit Bharat@2047: Concerns of Eastern India” in collaboration with Bihar Institute of Public Administration and Rural Development (BIPARD), Gaya held on 22nd January, 2025. The Conference was participated by representatives of Regional and Local Branches of IIPA from states of West Bengal, Odisha, Jharkhand and Bihar. There were altogether four Sessions -Inaugural Session, Plenary Session-I, Plenary Session-2 and Valedictory Session. In all these sessions, there were live discussions. Following is the session-wise proceedings:

INAUGURAL SESSION

The session was presided over by Shri Vijoy Prakash, IAS (retd), the Chairman of IIPA Bihar Regional Branch. The Director General of IIPA, New Delhi Shri S. N. Tripathi, IAS (retd) graced the occasion as the Chief Guest. Shri A V Sinha, IAS (retd) and Shri Amitabh Ranjan, the Registrar IIPA were the guests of Honour.



The session began with welcome address delivered by **Dr. Henna Tabassum** who after brief introduction of the Conference addressed every guest, delegates from Branches and august gathering

The Theme of the Conference was introduced by **Prof. Ravindra K. Verma** Hony. Secretary, Bihar Regional Branch. He threw light on the significance of Eastern India in terms of demography, economy and its importance in the historical perspective. Prof. Verma successfully set the tone of the Zonal Conference. He raised very pertinent questions for serious discussion in the Conference and pointed out the Rural-Urban Divide, Regional Disparities, Disparities among Eastern Indian States, etc. He marked that Odisha has progressed much faster in the recent period compared to other three states – Bihar, Jharkhand and West Bengal. However, Odisha also has a place in 4th tier of 6 tiers of development parameters. He stressed on Eastern India by saying that without developing this region of India, it will be difficult to achieve PM's dream of Vikshit Bharat by 2047. In his speech, he also focused on water management system and cited one of his research projects that how community managed system of old water bodies was effective, both socially and economically and these traditional water bodies, wetlands etc. needs to be revived. Finally, Prof. Verma put some questions before the house for directed discussions in terms of fast pace of development of the region. He emphasized that Eastern India has to play its important role in making Vikshit Bharat by 2047. The inaugural session had exhaustive discussions on the subject.



Welcome Address



Theme Introduction



Vote of Thanks



PPT presentation of Theme



Address of Guest of Honour

In his Guest of Honour Speech **Shri A V Sinha** delivered a pointed talk focused on the development of Bihar. He stressed on the role of educational institutions in

mainstreaming of vulnerable section of the society. He cited that the old glory of Bihar as an educational hub can achieve development goal by reinvigorating its two world fame Institutions – (i) Nalanda University and (ii) Vikramshila University. He focused on education system of ancient Bihar and pleaded for reviving the glory on ancient education system.

Other Guest of Honour **Shri Amitabh Ranjan** threw light on the development and objectives of Indian Institute of Public Administration (IIPA) in details and its journey till date. He proudly elaborated the role of IIPA in the course of development of the nation. He also indicated the achievements of IIPA in the areas of research and development, training of officials of Indian and state administrative services including high level officials of defense services for enhancing their governance capacity, publications, conferences, seminars, need-based researches for suggesting policies, etc. He pointed out that the local talent of the Eastern part of the nation cannot be ignored. Further Shri Ranjan emphasized that the labour force of these states are the factors of economies of many developed states by playing role as a labourer in the field of agriculture sector or in industrial sectors. To him it is urgent imperative to serve the interest of development of Eastern States, especially for Bihar by discussing several grassroots level interventions. He emphasized that Bihar has achieved many milestones but they are not showcased in proper manner, such as achievements of cycle scheme for girl students. He pointed out that the Eastern Region has a great potential but need to execute the things in right direction and in right spirit. It needs strategic, attitudinal and behavioural changes among civil servants as well as by capacity building training elected panchayat representatives to achieve the development goal. He congratulated the IIPA Bihar Branch for publishing Bihar Journal of Public Administration, the only UGC-CARE listed Journal published by any IIPA regional branches.

In his Chief Guest address, DG, IIPA **Shri S N Tripathi**, IAS (retd), threw light on each and every segment of development and stressed on the role of Bureaucracy in India. He explained that the bureaucrats have changed many systems to accrue the benefits of the development to people at large. He cited number of examples that made ease of living and reduce corruption and time and empower people in a massive way. He argued that the Academia has the power to change the society by suggesting the correct strategy towards the development and they should play their role in a very conducive manner. He pointed-out that the two key factors are necessary to achieve the states' development goals, whether it is Bihar or any other Eastern States - (i) generation of individual's income and (ii) good governance. Finally, Shri Tripathi elaborated the hand holding approach of Academia-Bureaucracy-Industry for the holistic development of the nation, region and society. He applauded the IIPA Bihar Branch for such an academic-bureaucracy joint collaborative discussion and also suggested to go for such type of meetings of academic-bureaucracy. He

appealed that academicians and bureaucrats should not only make suggestions but act by their own. He appreciated the excellence of work progressed by the IIPA Bihar Branch and announced to provide significant ex-officio position to Director General of BIPARD. He also requested the Director General of BIPARD to provide an Office Space in BIPARD, Patna for smooth running of IIPA Bihar Branch. He mentioned that many states governments which have provided space and budget for IIPA Regional Branches.

In his presidential address, **Shri Vijoy Prakash, the Chairman of IIPA, Bihar Regional Branch**, aligned his remarks with the theme of the conference. He emphasized that Bihar is the youngest state in India, and its development hinges on harnessing this youthful population productively and effectively. He highlighted the challenges posed by technological drawbacks and labor migration, which could lead to significant unemployment. Shri Prakash cited numerous examples where human labor is being replaced in various sectors, including agriculture, manufacturing, services, biotechnology, and other domains. He shed light on both the advantages and disadvantages of technological advancements. Shri Prakash elaborated the developmental role of different industrial revolutions, which were driven by innovations related to (i) Fire, (ii) Steam Engine, (iii) Electricity, and (iv) Information Technology. He noted that while India adopted the use of fire early on, the adoption of the other three industrial revolutions lagged behind compared to developed regions of the world. He emphasized that we are now in the midst of a new industrial revolution—Industry 4.0—which is based on transformative technologies such as Artificial Intelligence (AI), Robotics, Blockchain, and the Internet of Things (IoT). These technologies are playing a pivotal role in driving national development. He pointed out that countries like China and those in Europe and US have rapidly adopted these technologies, propelling their growth. Shri Prakash explained how Bihar has fallen behind in adopting technology, which has hindered its ability to benefit from the industrial revolutions. To accelerate economic development, he stressed the need for the state to embrace technological change at the grassroots level, starting from schools. He emphasized the importance of changing the mindset of bureaucrats and creating a holistic environment to attract investment. The ease of doing business must be promoted, and the bureaucracy should adopt a welcoming attitude to foster a private investment-friendly environment for development. He further suggested that the state should increase spending on innovation and encourage research and development. Shri Prakash highlighted the important role of land-related issues in the development path. He underscored the importance of skill development, resource development, and micro-skilling, which can create ample opportunities for holistic growth in the state. He advocated for a market-efficient economy rather than a public investment-driven economy. In the end, Shri Prakash expressed his heartfelt gratitude to Shri

K.K. Pathak, IAS, for his support in organizing such an excellent programme and providing world-class hospitality.

At the end of the inaugural session **Dr. Nishant Kumar**, Joint Secretary, IIPA Bihar Branch proposed the Vote of Thanks. He has also pointed out the significance of each and every delegates who were there to make the Zonal Conference a success. The Branch's UGC-CARE listed journal 'Bihar Journal of Public Administration Vol. XXI No. 2 ' was released in the session.



Release of Bihar Journal of Public Administration, 21(2) December, 2024

PLENARY SESSION 1

The first Plenary session was presided over by Prof. S P Singh, Chair Professor of PRIs and Registrar, Chankya National Law University, Patna, co-chaired by Prof Anil Kumar Ojha of B R A Bihar University, Muzaffarpur. Dr. Bakshi Amit K Sinha was the Discussant in the session. Dr. K ANarain was the rapporteur.

The Key-Note Address was delivered by **Prof. Saroj Kumar Verma**, former Dean of Social Sciences, J P University, Chapra. In his address Prof. Verma emphasized the need of improving the education with advanced knowledge in these states especially Bihar and Jharkhand for achieving the sustainable development goals. He argued that it is an urgent imperative to create adequate educational infrastructure and include skill development in syllabus at every level. He further suggested that the sports should be given priority and encouragement with a view to unlock the potential of the youth in these states. He argued that sports instill many personality traits like confidence, cooperation, commitment etc. conducive to development among youth. He also raised the point of promotion of cooperative

federalism irrespective of parties in power in the Centre and in the states. State and Centre should work hand in hand for development of the region.

Dr. Aviral Pandey, Division of Economics, A N Sinha Institute of Social Studies, Patna in his presentation entitled “Eastern India: Unlocking the Potential for Viksit Bharat by 2047” presented a comparative account of the four states in terms of the GDP growth, Social Progress, industry, agriculture and opportunities in Eastern India. He highlighted that, despite impressive double-digit economic growth, Eastern India continues to lag behind other parts of the country (with few exceptions), leading to widening regional disparities. The presentation emphasised the urgent need for inclusive and effective growth strategies to ensure the region both benefits from and contributes meaningfully to the vision of *Viksit Bharat*. Dr. Pandey pointed out the economic decline of key states like West Bengal, whose share of the national GDP fell substantially in the recent year 2023-2024 from the year 1960-61. Excluding other factors, challenges such as inadequate infrastructure, poor outcomes in education and skilling, low quality employment generation, pervasive poverty, malnutrition, and low worker productivity have contributed to the decline in share of these states of India’s GDP and have been identified as significant barriers to development of states of Eastern India. These issues have also led to distress-driven out-migration from these states. The presentation called for targeted interventions in areas such as poverty reduction, industrial diversification (adopting models like small-scale enterprises and the Town and Village Enterprise model), and rural infrastructure development, including improvements in roads, irrigation, electricity, and connectivity. Specific recommendations for agriculture included the adoption of modern technology, improved irrigation systems, profitable crop diversification, and development of agro-processing industries. Dr. Pandey also stressed the importance of health and education reforms, such as expanding rural healthcare services, addressing maternal and child malnutrition, and enhancing school infrastructure and vocational training programs. He identified emerging opportunities in sectors like the circular economy, water conservation, and digital platforms, which could drive sustainable growth in the region. The presentation concluded with a strong emphasis on reducing the rural-urban divide and fostering public-private partnerships to harness resources and innovation. Dr. Pandey highlighted the need for a holistic and inclusive roadmap to uplift Eastern India and align its development trajectory with the goals of *Viksit Bharat*.

Prof. Jitendra Narayan, Ex-Dean of LNMU Darbhanga, Bihar, explained how the political economy of the policy paradigm has affected the growth of Eastern Indian states. Both central and state-level policy dilemmas, as well as governance issues, have impeded the growth of this region. For example, the Freight Equalization Policy negatively impacted industrial growth in these states. Additionally, state-

level conditions have influenced the presence of industrialists and the business class. He also highlighted that, while female participation in the active workforce has declined, but women have contributed significantly through their roles in family building and other unpaid labour that often goes unrecognised. Furthermore, he stressed the need to improve the quality of education to transform the region into a *Viksit Bharat* and emphasized the critical role of good governance in achieving this goal. He also argued that caste-politics in the region in general and Bihar in particular has adversely arrested the pace of development evident from pace of development in the sectors of agriculture, industry and trade, education and health care, development of technology and so on. However, Bihar has witnessed sizeable development in infrastructure, gender justice, education of girls and environment recently. He suggested to accelerate such programmes on war-footing.

Prof. Mrinal Chatterjee, (Regional Director, Indian Institute of Mass Communication (IIMC), Dhenkanal) representing the **Odisha Regional Branch**, discussed the current situation of Eastern Indian states and explained how they have lost their share in India's GDP. Using West Bengal as an example, he highlighted the key factors contributing to this decline. He disagreed to consider historical facts as significant factor responsible for decline. He emphasised several policy suggestions to promote development in the region, including improvements in education and skill development, infrastructure, and the adoption of context-specific technologies. Prof. Chatterjee specifically pointed out that while small-scale Gobar Gas plants may not be sustainable at the farmer level, they could be more viable when managed on a larger scale, citing the example of making *Diyas* from *Gobar* in Southern states as a model. Due to expansion of use of *gobar-diya* around temples, the rise of machines of manufacturing *diyas* have been witnessed. He argued that technological advancements, skill development, and business promotion linked to such innovations could create substantial employment opportunities in Eastern India. Additionally, he highlighted the looming challenges related to water scarcity in the region and stressed the need for proactive water conservation measures. A key concern, according to Prof. Chatterjee, is the quality of education, and he referred the ASER report to underscore the necessity for quality assurance in education across the region. He pointed out that dropout ratio is higher in both the states of Bihar and Odisha. Hence there is need of giving priority to skilling the youth. Prof Chatterjee further informed that conditions of health services are not sufficient in the region and people depend on southern states for health services. He also emphasized the improvement of better connectivity in the region for which suggested the improvement of waterways by using rivers that may be cheaper mode of transport. He pleaded that the bureaucracy at the point of citizen-interface should gather real data from the field and should not depend on only official data. Bureaucrats should interact with citizens and get acquainted with their problems

viz. interacting with labourers, a bureaucrat can diagnose the problems and find the solutions.

A great deal of question-answer discussions was held. Those IIPA members who actively participated were DrAnjani Kumar Ghosh, DrShamshad Ansari and DrShradha Rishi of Magadh University, Dr Kumar AmrendraNarain of R. N. College, Hajipur and DrKavitaKumari of Txshila College, Patna. The Chairman of the Session **Prof S P Singh** summed up the proceedings of the session.

PLENARY SESSION II

Plenary session-II was chaired by Prof. Jitendra Narayan and co-chaired by Shri Om Prakash Yadav, IAS (retd). Dr. Awadhesh Kumar Singh, Secretary Muzaffarpur Local Branch was Discussant and **Dr. Rajesh Kumar**, Joint Secretary of Bihar Regional Branch along with Dr. Aviral Pandey were the Rapporteurs in the session.



Viksit Bihar @2047

Dr. Bakshi Amit Kumar Sinha, Faculty, Bihar Institute of Public Finance and Policy, Government of Bihar, Patna in his exhaustive presentation entitled “Viksit Bihar@2047: Challenges and Way Forward” first of all clarified the PM Modi’s vision of Viksit Bharat@2047 by making India a 30 trillion US Dollar Economy. He pleaded that it is essential to work out to increase the Per-capita Income (PCI) of the country by 20000 US Dollar. He referred the design of road map of NITI Aayog for development by estimating export of 8.67 trillion US Dollar, investment of Rs. 1273 lakh crore and saving of Rs. 1340 lakh crore. He also presented the size of Bihar economy as Viksit Bihar by 2047 and said that PCI of Bihar should be in parity of the national average, fast annual growth of SGDP at the rate of over seventeen percent, PCI at the rate of over sixteen percent and faster pace of social progress. Indicating the basic challenges before Bihar in the way of achieving the goal of Vikshit Bihar

he enumerated the following: the population density putting burden on resources; lowest PCI nearly one third of the national PCI, One third population below poverty line, lower CD Ratio of state, the gap in human development, i.e health and education, skilling gap, lack of industry-linked curriculum, Low Industrial and overall finances. In addition, Bihar faces multiple natural disasters like floods and droughts frequently. He added that Bihar had almost stagnant poverty incidence for over four decades from 1974 to 2004. He also compared the economic scenario of Bihar with states of other parts of India. Mentioning the strengths of Bihar, he informed that it has a very versatile ecological system and experiences multiple-seasons. Further, more than dozens of rivers including international rivers and traditional water bodies. Finally, he recommended to a) Promote Knowledge-Based Economy; b) create World-class soft and hard Infrastructure; c) Expand Road, Rail and Air connectivity; c) Robust PFM and Augmentation of Own Revenue; d) improve quality and reach of Health and Education for better Human Development Outcomes; e) Skilling labour and provide Employment opportunities through Labour Intensive Private Investment including tourism sector; f) Manufacturing based Economic Transformation; g) Technological Adoption in Agriculture with Industry-linked and Export-based Production; h) develop planned cities instead of concentration in urban areas; h) Participatory Approach (PPP, Civil Society, NGOs and other Development Partners); Research and Development (establish centre of excellence in every sector) and i) Technological Use and j) Resilient and Sustainable Environment (Green Development, Water and Energy Conservation).



Presentations by representatives of Branches of IIPA

PRESENTATION ON PRISHOWRAH LOCAL BRANCH MUZ. LOCAL BRANCH

Prof. S. P. Singh, in his presentation, dwelt upon the role of Panchayati Raj Institutions (PRIs) for the achieving the goal of Viksit Bharat by 2047. He argued that participation of community in the process of rural development can be facilitated by PRIs. The elected panchayat representatives can provide responsive

governance at the doorsteps of citizens, however, he lamented that PRIs have been proved inadequately successful. He said that elected panchayat representatives (EPRs) are not properly trained to handle the development process and harnessing the locally available resources up to optimum level. He said that most of the EPRs belong to young age, hence they can be more useful in development process. He further discussed about the role of Gram katchahary in betterment of the rural areas. He argued that people get into disputes on even trivial issues, as result people face problems in trials and other tough procedures. Prof Singh elaborated the procedures of resolution of disputes and success stories of amicable resolution of debates. He informed that lakhs of trivial cases have so far been amicably resolved in Bihar since 2016. He opined that the resolution of conflicts once done by Gram Katchaharies are resolved for ever whereas disputes settled in judicial courts may go to higher courts and appeals. He also informed that still there are problems in delivery of justice by Gram Kachahary, such as lack of proper training for acquainting them with legal provisions and procedures, lack of deputing 'Nayay Mitras', transfer of cases from judicial courts, non-cooperation of police personnel and delay in disbursement of funds meant for Gram Katchahary. He suggested to impart training to EPRs and representatives of Gram Katchahary like Panchs and Sarpanchs and ensure cooperation of lower level bureaucracy to facilitate panchs and sarpanchs to resolve the cases amicably. This will add to the pace of rural development in the state.

Dr. Amitava Datta of Howrah Local Branch, in his presentation, emphasized to achieve inclusive socio-economic growth and equitable distribution of its fruits. He argued that entire eastern region is suffering from severe inequality in terms of economic development, social progress, high incidence of poverty and also education, however, there are intra-regional disparities. The federal system in India is working in less cooperative way. The vertical share of tax revenue is delayed by Centre. The political reasons adversely affect the development in this region. He argued that the eastern region lag behind India in terms of Net State Domestic Product (NSDP), Per Capita NSDP, Per Capita Income, Birth Rate, Fertility Rate, Mortality Rate, Nutritional Status and of course Education. He further mentioned that peace in society can only lead to 'Viksit' status but the region, especially West Bengal suffers from violence and hatred. The Crime rate in WB has also gone up. There is also the persistent phenomenon of constrained Centre-State relation. All these hamper the faster pace of development in the region. Finally, he suggested that the administration of these states should establish peace, equality and adopt pro-poor policies.

Dr. Arun Kumar of Jharkhand Regional Branch, Ranchi (ex-Director, Technical Education, Govt of Jharkhand) in his presentation elaborated the poor socio-economic conditions of the state despite having ample mineral resources and

medicinal vegetation. He stated that the state lags behind the other three states in terms of School Education Quality Index. He argued that the local people have the knowledge of plants of medicinal value but due to lack of adequate infrastructure and policy to develop herbal medicine by using advance technology and also marketing mechanism, the resources of the state are not adequately harnessed. There is urgent need of unlocking the potential of people of Jharkhand through appropriate policies. He suggested that the human resources of the state should be properly developed to adopt livelihood based on traditional wisdom with modern techniques. He presented the sad plight of tribal population who suffer miseries due to non-education syndrome. He said that they are deprived of their rights over forests on one hand and they depend mostly on traditional occupations on the other. He mentioned the programmes launched by Jharkhand Government for their betterment but lamented that the tribal population are not being provided with adequate opportunities to adopt technology. The state also suffers from corruption in administration. Mentioning the contribution of private sector especially TATA Co. by establishing industries and providing facilities and securities to its employees, he suggested that the private sector should be facilitated to contribute to the pace of development of the state.

Dr. Awadhesh Kumar Singh, Secretary, Muzaffarpur Local Branch emphasized the significance of grassroots governance in rural areas as it constitutes over two thirds of population and contributes nearly 46 percent to national income. He argued that though the reservation policy in local self-governments especially in PRIs (Panchayati Raj Institutions) has provided space to almost all weaker sections, yet the EPRs follow the patterns of state politics and fail to contribute to rural development process. Mentioning the PM's Aspirational Block Programme (ABP) on the line of Aspirational District Programme, he expressed hopes that ABP would revolutionize governance and drive to achieve SDGs at the block levels by the efforts of block level civil servants. Reacting on poor performance of Gram Kachaharies, he said that as the elected Gram Kachahari members are ill-equipped, they lack adequate awareness, lack of trust of litigants in it and dominant village social structure and lack of proper training. He further discussed the issue of proper implementation of development schemes in Bihar. He said that reasons of arrested development of the state are - poor people's participation in the implementation of development schemes, prevalent corruption both among officials and EPR and Elected members of Urban Local Bodies, the labour class being unskilled, poor education system, poor industrialisation and so on. He expressed happiness that Bihar has potential to develop and the PRIs gradually have begun showing promise in utilising the available resources.



A great deal of discussion took place in the Discussion session in which Shri Om Prakash Yadav, IAS (retd) shared his administrative experience and said that if the bureaucrats at the point of citizen's interface establish rapport with the people, he can be successful in resolving problems with the help of local people as he did at Munger. Dr Pankaj Kumar of Jharkhand Regional Branch, Dr Awadhesh Kumar Singh of Muzaffarpur, **Dr Rajesh Kumar** of Bihar Regional Branch, Mrs Abhilasha of Bihar Technical Service Commission, Prof Manish Sinha of MagadhUnivesity, Dr Shashank of Patna were among the members who took active part in the discussions. **Prof Jitendra Narayan** appreciated the presentations and summed the proceedings of the session and put forward the suggestion to use the traditional Indian knowledge system with new technology.

VALEDICTORY SESSION

Valedictory Session was chaired by Prof Mrinal Chatterjee of Odisha Regional Branch and Co-chaired by Shri O P Yadav, IAS (retd). Shri Arya Gautam, Senior Assistant Director and Shri Ajay Kumar Singh Assistant Director of Bihar Institute of Public Administration and Rural Development (BIPARD), Gaya were the Special Guests in the Session. DrAviral Pandey and DrBakshiA K Sinha presented the Rapporteur's Report. Closing Remarks was delivered by Shri Vijoy Prakash, IAS (retd), Chairman of the Branch and Prof Ravindra K Verma, Hony. Secretary of the Branch proposed the Vote of Thanks.

Prof. Mrinal Chatterjee addressed the valedictory session with his observations about the discussions in the session. DrAviral Kumar presented the Rapporteur's Report. Shri Ajay Kumar Singh, Assistant Director, BIPARD, Gaya presented his speech on behalf of BIPARD. He played ppt on BIPARD Next-Gen Lab describing the achievements and repositories of BIPARD. Further, he appreciated the proceedings of the Eastern Zonal Conference of IIPA and expressed willingness to mutually cooperate in the activities of Bihar Regional Branch and take the benefits of IIPA in fulfillment of the objectives of BIPARD. In his concluding remarks, Shri, IAS (retd) said that the recommendations of the

Conference will throw light in introducing appropriate policies to achieve the goal of Viksit Eastern India and Viksit Bharat by 2047. He suggested that emphasis should be given to proliferate technology down at grassroots level, especially in schools and provisions should be made to make people to use it fruitfully. Prof Ravindra K Verma proposed the vote of thanks in which he expressed gratitude to delegates of IIPA from Bihar, Jharkhand, West Bengal and Odisha, officials, technical and supportive staff of BIPRAD, and the Trainee Officials who contributed a lot in successful organization of the Conference. He specially expressed his thankfulness to **Dr Rajesh Kumar, the Joint Secretary of the Branch** for his tireless efforts in preparations of the Conference both at Patna and Gaya.

RECOMMENDATIONS

Finally, Dr. Verma pointed out that what was the most important achievement of the Eastern Zonal Conference of IIPA was - **‘Bringing Eastern India to the Forefront of ‘National Development Debate’**. He further presented the following recommendations of the Conference for approval of the House:

- Policy masters should not only confine to State-Specific Policy but **‘Region Centric Roadmaps for Inclusive Growth’**, however, each state requires a customized policy roadmap that considers its unique **context, available resources, and local economic dynamics** through better coordination, region-specific groups can be developed across states in this region.
- As the agriculture is the mainstay of the economy of the region, it is essential to strengthen **‘Agriculture and profitable output** as well as promoting **Agro-based industries and Enterprises’** especially at medium, small and micro levels for Sustainable Growth
- As India including Eastern states have majority of youth population, it is urgent imperative to go for **youth-specific policies** like employment generation, non-farm livelihood in rural areas, providing training in use of technology and so on.
- Emphasis should be given on enhanced Role of **‘Technology, Health, Skill, and Education’** to transform the region into a key contributor to India’s workforce. By strengthening educational infrastructure and fostering entrepreneurship, the population (Demographic Dividend) can transition these states from being **‘aidbeneficiaries’** to **‘active economic participants’**.
- It is high time to go for **‘Strengthening Infrastructure’** for Economic Growth. For which the Conference identified connectivity particularly, **roads, electricity, and digital connectivity, as a critical enabler of economic transformation** of this region. It will integrate the region into national and global markets for unlocking the full economic potential.

- There is urgent need of **Empowering 'Local Governance' for Grassroots Development**, as such the role of Panchayati Raj institutions and Gram Katcharis was underscored as essential in driving sustainable and decentralised development. It will improve local governance and facilitate better implementation of policies and programmes.
- **Gender-centric policies** are the demand of the time for the region, as the **women workforce** are marginally utilized in the region. The premium should be placed on **'Care Economy'** also.
- It was also felt that the non-state actors like **'Corporate Sector' and Civil Society Organisations'** should give their hundred percent for development of the region.
- It was also discussed that policies should be introduced to raise the **income of Bihar** by improving profitable agriculture, promoting entrepreneurship, MSMEs and internal resources
- The situation demands that State and Centre should work hand in hand irrespective of party affiliations and true **Cooperative Federalism** should be promoted

The present Eastern Zonal Conference of IIPA set the stage for a focused and strategic push toward *Viksit Bharat @ 2047* by identifying key challenges and actionable solutions for eastern India's development. The next phase should involve policy formulation, targeted interventions, and coordinated implementation to ensure that the region realises its full potential as an economic powerhouse within the broader vision of a developed India.

SOME GLIMPSES OF THE PREMISES AND PRINT MEDIA



Relaxing moments Group Photo of Delegates



Corridor of Nitishala (BIPARD)



Hindi Section

महिला नेतृत्व में ग्रामीण विकास: बिहार की जीविका योजना का एक अध्ययन

सुरज कुमार* एवं विवेक प्रकाश सिंह**

सार संक्षेप

बिहार राज्य में अधिकांश आबादी ग्रामीण इलाकों में रहती है और उनकी आय का स्रोत कम है, जिस कारण भारत का सबसे गरीब राज्य बिहार है। बिहार सरकार के ग्रामीण विकास मंत्रालय और विश्व बैंक के संयुक्त पहल जीविका योजना एक गरीबी उन्मूलन योजना है, जिसका उद्देश्य ग्रामीण महिलाओं की सामाजिक-आर्थिक स्थिति में सुधार लाना है। जीविका योजना महिला सशक्तिकरण के लिए एक नया मंच लेकर आई है। वर्तमान अध्ययन का उद्देश्य जीविका योजना के माध्यम से महिला सशक्तिकरण के विभिन्न आयामों का विश्लेषण करना और महिला लाभार्थियों के सामने आने वाली प्रमुख बाधाओं का पता लगाना है। प्रस्तुत अध्ययन में प्राथमिक तथा द्वितीयक स्रोतों का उपयोग किया गया। प्रस्तुत अध्ययन के परिणाम यह ईंगित होता है कि जीविका योजना से जुड़ने के बाद महिलाएँ सामाजिक-आर्थिक सशक्तिकरण रूप से सशक्त हुई हैं। अध्ययन में यह भी पता चला कि लाभार्थियों को विभिन्न आय सृजन गतिविधियों में प्रमुख बाधाओं का सामना करना पड़ता है जैसे कि उचित विपणन की कमी, कम कीमत आदि।

मुख्य बिन्दु - महिला-केन्द्रित, ग्रामीण विकास, जीविका योजना, पूर्णिया, बिहार

भूमिका

एक राष्ट्र का सर्वांगीण और समरसतापूर्ण विकास तभी संभव हो सकता है जब महिलाओं को समाज में उनकी प्रस्थिति में सुधार हो सके। प्रारंभ से ही केंद्र सरकार, राज्य सरकार और अन्य संस्थानों द्वारा महिलाओं को सशक्त बनाने के लिए शिक्षा, अधिकारों और रोजगार से जुड़ी कई योजनाओं का क्रियान्वयन किया जा रहा है। ये योजनाएँ महिलाओं को आर्थिक, सामाजिक और राजनीतिक रूप से सशक्त बनाने में अग्रसर हैं। जीविका योजना ने बिहार प्रदेश की पहचान भारत ही नहीं, बल्कि विश्व पटल पर भी दिलाई है। इस योजना के तहत 2005 में बिहार के पाँच जिलों - गया, नालंदा, मुजफ्फरपुर, मधुबनी और पूर्णिया

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में पायलट प्रोजेक्ट के रूप में इसकी शुरुआत हुई थी। पायलट प्रोजेक्ट के तौर पर गया जिला के बोध गया प्रखंड, नालंदा जिला के हरनौत प्रखंड, मुजफ्फरपुर जिला के बोचहाँ प्रखंड, मधुबनी जिला के राजनगर प्रखंड और पूर्णिया जिला के धमदाहा प्रखंड का चयन किया गया था। पहले चरण में जीविका योजना की शुरुआत वर्ष 2007 में बिहार प्रान्त के छह जिले - गया, नालंदा, मुजफ्फरपुर, मधुबनी, पूर्णिया और खगड़िया जिला के तीन-तीन प्रखंडों सहित कुल 18 प्रखंडों में हुआ। वर्तमान में, जीविका योजना का विस्तार बिहार के सभी 38 जिलों के कुल 534 प्रखंडों में हो चुका है।

वर्तमान में जीविका योजना के अन्तर्गत 10.83 लाख से अधिक स्वयं-सहायता समूहों का गठन किया जा चुका है, जिसमें 1.26 करोड़ से अधिक महिलाएँ जुड़ी हैं। पूर्णिया जिले में 37.5 हजार से अधिक स्वयं-सहायता समूहों का गठन हो चुका है, जिसमें 4.34 लाख से अधिक महिलाएँ शामिल हैं। महिलाओं के आर्थिक विकास का एक महत्वपूर्ण स्रोत के रूप में जीविका योजना को माना जा रहा है, क्योंकि महिलाएँ समूह के माध्यम से ऋण प्राप्त कर लघु और सूक्ष्म व्यवसाय चला रही हैं। कभी घर की दहलीज से बाहर नहीं निकलने वाली महिलाएँ अब जीविका योजना से जुड़कर सशक्त हो रही हैं, जिससे उनकी आर्थिक और सामाजिक स्थिति सुदृढ़ हो रही है और वे अपने परिवार के आर्थिक विकास में महत्वपूर्ण योगदान दे रही हैं। साथ ही, वे अन्य लोगों के लिए रोजगार सृजन करने का कार्य भी कर रही हैं।

इन्हीं परिस्थितियों के आलोक में प्रस्तुत अध्ययन जीविका योजना के मूल्यांकन का एक अनुभवपरक प्रयास है। इसमें पूर्णिया जिले के ऐसे चार अनुमण्डलों का चयन किया गया जहाँ जीविका कार्यक्रम का कार्यान्वयन चल रहा है, जैसे - पूर्णिया सदर, बायसी, बनमनखी और धमदाहा। सोद्देश्य निदर्शन पद्धति से प्रत्येक अनुमण्डल से 25 उत्तरदाताओं का साक्षात्कार हेतु चयन किया गया। उत्तरदाताओं के चयन में आयु के आधार पर दो श्रेणियों में - 18 से 45 वर्ष एवं 45 वर्ष ऊपर के आयु वर्गों में रखा गया है। इसके अतिरिक्त तथ्य संकलन के द्वितीय स्रोतों का भी उपयोग किया गया।

साहित्यिक समीक्षा

अन्य राज्यों में ग्रामीण महिला उद्यमियों के अध्ययन प्रकाश में आए हैं। पश्चिम बंगाल के अध्ययन नदिया जिला में स्वयं सहायता समूहों द्वारा किया गया एक अध्ययन में पाया गया कि स्वयं-सहायता समूह के सदस्य गैर-सदस्यों के अपेक्षा उनका व्यक्तिगत विकास, पारिवारिक निर्णय लेने की क्षमता, आर्थिक सशक्तिकरण, घरेलू परामर्श, और राजनीतिक स्वतंत्रता का विकास अधिक हुआ है (Garai, Mazumder, Maiti: 2012)। राजस्थान में स्वयं-सहायता समूहों के एक अध्ययन में पाया गया कि जिन सखियों को बैंक के लेनदेन, कृषि तथा गैर कृषि आधारित व्यवसायिक प्रशिक्षण दिया गया उनको स्वरोजगार स्थापित करने का अवसर पैदा हुआ है जिससे उनकी सामाजिक और आर्थिक स्थितियाँ बदली हैं, अब आत्मनिर्भर, सूक्ष्म उद्यमी और निर्णय लेने की क्षमता में वृद्धि हुई है (Choudhary :

2015)। पंजाब में फिरोजपुर, लुधियाना एवं होशियारपुर जिले में स्वयं-सहायता समूहों पर किए गए एक अध्ययन में निष्कर्ष आया कि सूक्ष्म ऋण लेने के बाद से महिलाओं में आय अर्जित करने, संपत्ति अर्जित करने में, महिलाओं का जीवन स्तर, निर्णय लेने की क्षमता, स्वयं का खर्च करने की क्षमता, पारिवारिक कल्याण निर्णय लेने की क्षमता, बच्चों की शिक्षा, स्वास्थ्य एवं विवाह के संबंध के निर्णय लेने की क्षमता बढ़ी है (Kapila, Singla, & Gupta: 2016)। इसी प्रकार स्वयं-सहायता समूहों का अध्ययन उड़ीसा के खोरधा, बेगुनिया, भुवनेश्वर, चिल्का और बालियंता प्रखण्डों में भी किया गया जिसमें पाया गया कि महिलाएँ स्वयं-सहायता समूह से जुड़ी हुई महिलाओं के मनोवैज्ञानिक, आर्थिक और सामाजिक पहलुओं पर सशक्तिकरण हुआ है (Mohanty & Mishra: 2018)।

अध्ययन क्षेत्र की संक्षिप्त रूपरेखा

पूर्णिया जिला बिहार राज्य का एक महत्वपूर्ण जिला है जो अपनी संस्कृति, इतिहास और प्राकृतिक सौंदर्य के लिए जाना जाता है। परन्तु यह जिला बिहार के बाढ़ ग्रसित क्षेत्र में आता है तथा गरीबी एवं अशिक्षा भी व्याप्त है। यहाँ ग्रामीण क्षेत्र की आबादी 89.49 प्रतिशत है वहीं शहरी क्षेत्र की आबादी मात्र 10.51 प्रतिशत है। यहाँ की साक्षरता दर 51.08 प्रतिशत है, जिसमें पुरुषों की साक्षरता दर 59.60 प्रतिशत तथा वहीं महिलाओं की साक्षरता दर 42.34 प्रतिशत है। यहाँ की अर्थव्यवस्था मुख्य रूप से कृषि, व्यवसाय और उद्योगों पर आधारित है। यहाँ जातिगत समस्या, धार्मिक संरचनाएँ, सामाजिक, राजनीतिक और आर्थिक असमानता मुख्य रूप से विद्यमान है। इन्हीं तथ्यों के आधार पर पूर्णिया जिला का चयन किया गया है।

तथ्यों का विश्लेषण

शोध कार्य में तथ्यों का विश्लेषण एक महत्वपूर्ण चरण है, जिसमें संग्रहित डेटा को समझने, व्याख्या करने और निष्कर्ष निकालने के लिए विभिन्न तरीकों और तकनीकों का उपयोग किया जाता है।

तालिका 01: जीविका योजना के बारे में जानकारी के संबंध में उत्तरदाताओं के दृष्टिकोण

जीविका योजना के बारे में जानकारी	उत्तरदाताओं का आयु समूह									
	18 से 45 वर्ष					45 वर्ष से अधिक				
	पूर्णिमा सदर	बायसी	बनमनखी	धमदाहा	कुल	पूर्णिमा सदर	बायसी	बनमनखी	धमदाहा	कुल
सरकारी	3	4	3	5	15	2	3	1	2	8
विज्ञापन से	(20.00)	(26.67)	(20.00)	(33.33)		(20.00)	(30.00)	(10.00)	(20.00)	
सरकारी	3	5	6	3	17	3	2	2	4	11
कर्मचारी से	(20.00)	(33.33)	(40.00)	(20.00)		(30.00)	(20.00)	(20.00)	(40.00)	
समूह	7	3	4	6	20	4	3	4	2	13
के अन्य सदस्यों से	(46.67)	(20.00)	(26.67)	(40.00)		(40.00)	(30.00)	(40.00)	(20.00)	
अन्य	2	3	2	1	8	1	2	3	2	8
	(13.33)	(20.00)	(13.33)	(6.67)		(10.00)	(20.00)	(30.00)	(20.00)	
कुल	15	15	15	15	60	10	10	10	10	40
	(100.00)	(100.00)	(100.00)	(100.00)		(100.00)	(100.00)	(100.00)	(100.00)	

तालिका 01 से स्पष्ट है कि जीविका योजना के बारे में जानकारी के संबंध में 18 से 45 वर्ष के आयु के उत्तरदाताओं में पूर्णिमा सदर अनुमंडल के 20.00 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 20.00 प्रतिशत सरकारी कर्मचारी से, 46.67 प्रतिशत समूह के अन्य सदस्यों से तथा 13.33 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है। बायसी अनुमंडल के 26.67 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 33.33 प्रतिशत सरकारी कर्मचारी से, 20.00 प्रतिशत समूह के अन्य सदस्यों से तथा 20.00 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है। बनमनखी अनुमंडल के 20.00 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 40.00 प्रतिशत सरकारी कर्मचारी से, 26.67 प्रतिशत समूह के अन्य सदस्यों से तथा 13.33 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है। धमदाहा अनुमंडल के 33.33 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 20.00 प्रतिशत सरकारी कर्मचारी से, 40.00 प्रतिशत समूह के अन्य सदस्यों से तथा 6.67 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है।

तालिका 01 से स्पष्ट है कि जीविका योजना के बारे में जानकारी के संबंध में 45 वर्ष से अधिक के आयु के उत्तरदाताओं में पूर्णिमा सदर अनुमंडल के 20.00 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 30.00 प्रतिशत सरकारी कर्मचारी से, 40.00 प्रतिशत समूह के अन्य सदस्यों से तथा 10.00 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है। बायसी अनुमंडल के 30.00 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 20.00 प्रतिशत सरकारी कर्मचारी से, 30.00 प्रतिशत समूह के अन्य सदस्यों से तथा 20.00 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है। बनमनखी अनुमंडल के 10.00 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 20.00 प्रतिशत सरकारी कर्मचारी से, 40.00 प्रतिशत

सुरज कुमार एवं विवेक प्रकाश सिंह

समूह के अन्य सदस्यों से तथा 30.00 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है। धमदाहा अनुमंडल के 20.00 प्रतिशत उत्तरदाताओं को सरकारी विज्ञापन से, 40.00 प्रतिशत सरकारी कर्मचारी से, 20.00 प्रतिशत समूह के अन्य सदस्यों से तथा 20.00 प्रतिशत उत्तरदाताओं को अन्य स्रोत से प्राप्त हुआ है।

तालिका 02: जीविका योजना से जुड़ने का उद्देश्य के संबंध में उत्तरदाताओं के दृष्टिकोण

जीविका योजना से जुड़ने का उद्देश्य	उत्तरदाताओं का आयु समूह									
	18 से 45 वर्ष					45 वर्ष से अधिक				
	पूर्णिमा सदर	बायसी	बनमनखी	धमदाहा	कुल	पूर्णिमा सदर	बायसी	बनमनखी	धमदाहा	कुल
आत्मनिर्भर के लिए	5 (33.33)	4 (26.67)	2 (13.33)	3 (20.00)	14	2 (20.00)	1 (10.00)	4 (40.00)	2 (20.00)	9
सूक्ष्म रोजगार के लिए	2 (13.33)	3 (20.00)	3 (20.00)	4 (26.67)	12	2 (20.00)	2 (20.00)	2 (20.00)	2 (20.00)	8
बचत करने की आदत डालने के लिए	2 (13.33)	3 (20.00)	4 (26.67)	5 (33.33)	14	3 (30.00)	4 (40.00)	1 (10.00)	2 (20.00)	10
जीविकोपार्जन के लिए	3 (20.00)	2 (13.33)	4 (26.67)	2 (13.33)	11	1 (10.00)	1 (10.00)	2 (20.00)	1 (10.00)	5
बच्चों के शिक्षा के लिए	3	3	2	1	9	2	2	1	3	8
कुल	15 (100)	15 (100)	15 (100)	15 (100)	60	10 (100)	10 (100)	10 (100)	10 (100)	40

तालिका 02 से स्पष्ट है कि जीविका योजना से जुड़ने का उद्देश्य के संबंध में 18 से 45 वर्ष के आयु के उत्तरदाताओं में पूर्णिमा सदर अनुमंडल के 33.33 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 13.33 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 13.33 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 20.00 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 20.00 प्रतिशत उत्तरदाता बच्चों के शिक्षा के लिए जीविका योजना से जुड़ी है। बायसी अनुमंडल के 26.67 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 20.00 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 20.00 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 13.33 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 20.00 प्रतिशत उत्तरदाता बच्चों के शिक्षा के लिए जीविका योजना से जुड़ी है। बनमनखी अनुमंडल के 13.33 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 20.00 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 26.67 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 26.67 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 13.33 प्रतिशत उत्तरदाता बच्चों के शिक्षा के लिए जीविका योजना से जुड़ी है। धमदाहा अनुमंडल के 20.00 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 26.67 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 33.33 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 13.33 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 6.67 प्रतिशत उत्तरदाता बच्चों के शिक्षा के लिए जीविका योजना से जुड़ी है।

तालिका 02 से स्पष्ट है कि जीविका योजना से जुड़ने का उद्देश्य के संबंध में 45 वर्ष से अधिक आयु के उत्तरदाताओं में पूर्णिया सदर अनुमंडल के 20.00 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 20.00 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 30.00 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 10.00 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 20.00 प्रतिशत उत्तरदाता बच्चों की शिक्षा के लिए जीविका योजना से जुड़ी है। बायसी अनुमंडल के 10.00 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 20.00 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 40.00 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 10.00 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 20.00 प्रतिशत उत्तरदाता बच्चों की शिक्षा के लिए जीविका योजना से जुड़ी है। बनमनखी अनुमंडल के 40.00 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 20.00 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 10.00 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 20.00 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 10.00 प्रतिशत उत्तरदाता बच्चों की शिक्षा के लिए जीविका योजना से जुड़ी है। धमदाहा अनुमंडल के 20.00 प्रतिशत उत्तरदाता आत्मनिर्भरता के लिए, 20.00 प्रतिशत उत्तरदाता सूक्ष्म रोजगार के लिए, 20.00 प्रतिशत उत्तरदाता बचत करने की आदत डालने के लिए, 10.00 प्रतिशत उत्तरदाता जीविकोपार्जन के लिए जबकि 30.00 प्रतिशत उत्तरदाता बच्चों की शिक्षा के लिए जीविका योजना से जुड़ी है।

तालिका 03: जीविका योजना से महिलाओं के आत्मविश्वास और स्वतंत्रता के संबंध में उत्तरदाताओं के दृष्टिकोण

जीविका योजना से महिलाओं के आत्मविश्वास और स्वतंत्रता	उत्तरदाताओं का आयु समूह									
	18 से 45 वर्ष					45 वर्ष से अधिक				
	पूर्णिया सदर	बायसी	बनमनखी	धमदाहा	कुल	पूर्णिया सदर	बायसी	बनमनखी	धमदाहा	कुल
सहमत	12	13	14	15	53	9	7	8	7	31
	(80.00)	(86.67)	(93.33)	(100.00)		(90.00)	(70.00)	(80.00)	(70.00)	
असहमत	3	2	1	0	6	1	3	2	3	9
	(20.00)	(13.33)	(6.67)	(0.00)		(10.00)	(30.00)	(20.00)	(30.00)	
कुल	15	15	15	15	59	10	10	10	10	40

तालिका 03 से स्पष्ट है कि जीविका योजना से महिलाओं के आत्मविश्वास और स्वतंत्रता के संबंध में 18 से 45 वर्ष के आयु के उत्तरदाताओं में पूर्णिया सदर अनुमंडल के 80.00 प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है जबकि 20.00 उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो असहमत है। बायसी अनुमंडल के 86.67 प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है जबकि 13.33 उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो असहमत है। बनमनखी अनुमंडल के 100.00 प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है। धमदाहा अनुमंडल के शत-प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है।

तालिका 03 से स्पष्ट है कि जीविका योजना से महिलाओं के आत्मविश्वास और स्वतंत्रता के संबंध में 18 से 45 वर्ष के आयु के उत्तरदाताओं में पूर्णिया सदर अनुमंडल के 90.00 प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है जबकि 10.00 उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो असहमत है। बायसी अनुमंडल के 70.00 प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है जबकि 30.00 उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो असहमत है। बनमनखी अनुमंडल के 80.00 प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है जबकि 20.00 उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो असहमत है। धमदाहा अनुमंडल के 70.00 प्रतिशत उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो सहमत है जबकि 30.00 उत्तरदाता को आत्मविश्वास एवं स्वतंत्रता में वृद्धि हुआ है, से वो असहमत है।

सारणी 04क: जीविका योजना से महिलाओं के राजनीतिक सहभागिता

जीविका योजना से महिलाओं के राजनीतिक सहभागिता	उत्तरदाताओं का आयु समूह											
	45 वर्ष से अधिक											
	पूर्णियाँ सदर			बायसी			बनमनखी			धमदाहा		
	सहमत	असहमत	योग	सहमत	असहमत	योग	सहमत	असहमत	योग	सहमत	असहमत	योग
मतदान करने का स्वतंत्र अधिकार	14 (93.33)	1 (6.67)	15	13 (86.67)	2 (13.33)	15	14 (93.33)	1 (6.67)	15	14 (93.33)	1 (6.67)	15
राजनीतिक सहभागिता	5 (33.33)	10 (66.67)	15	6 (40.00)	9 (60.00)	15	7 (46.67)	8 (53.33)	15	9 (60.00)	6 (40.00)	15
राजनीतिक जागरूकता	13 (86.67)	2 (13.33)	15	14 (93.33)	1 (6.67)	15	14 (93.33)	1 (6.67)	15	13 (86.67)	2 (13.33)	15
नेतृत्व क्षमता का विकास	11 (73.33)	4 (26.67)	15	5 (33.33)	10 (66.67)	15	8 (53.33)	7 (46.67)	15	9 (60.00)	6 (40.00)	15

तालिका 04क से स्पष्ट है कि जीविका योजना से महिलाओं के राजनीतिक सहभागिता के संबंध में 18 से 45 वर्ष की आयु के उत्तरदाताओं में पूर्णिया सदर अनुमंडल 93.33 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से सहमत है, जबकि 6.67 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से असहमत है। 33.33 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 66.67 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 86.67 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 13.33 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 73.33 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत

सारणी 04ख: जीविका योजना से महिलाओं की राजनीतिक सहभागिता

जीविका योजना से महिलाओं के राजनीतिक सहभागिता	उत्तरदाताओं का आयु समूह											
	18 से 45 वर्ष											
	पूर्णिया सदर			बायसी			बनमनखी			धमदाहा		
	सहमत	असहमत	योग	सहमत	असहमत	योग	सहमत	असहमत	योग	सहमत	असहमत	योग
मतदान करने का स्वतंत्र अधिकार	9 (90.00)	1 (10.00)	10	8 (80.00)	2 (20.00)	10	9 (90.00)	1 (10.00)	10	10 (100)	0 (0.00)	10
राजनीतिक सहभागिता	3 (30.00)	7 (70.00)	10	4 (40.00)	6 60.00	10	5 50.00	5 50.00	10	2 (20.00)	8 (80.00)	10
राजनीतिक जागरूकता	9 (90.00)	1 (10.00)	10	7 (70.00)	3 (30.00)	10	7 (70.00)	3 (30.00)	10	8 (80.00)	2 (20.00)	10
नेतृत्व क्षमता का विकास	7 (70.00)	3 (30.00)	10	8 (80.00)	2 (20.00)	10	9 (90.00)	1 (10.00)	10	8 (80.00)	2 (20.00)	10

है, जबकि 26.27 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है। बायसी अनुमंडल 86.67 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से सहमत है, जबकि 13.33 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से असहमत है। 40.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 60.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 93.33 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 6.67 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 33.33 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत है, जबकि 66.67 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है। बनमनखी अनुमंडल 93.33 प्रतिशत उत्तरदाता मतदान करने के स्वतंत्र अधिकार से सहमत है, जबकि 6.67 प्रतिशत उत्तरदाता मतदान करने के स्वतंत्र अधिकार से असहमत है। 46.67 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 53.33 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 93.33 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 6.67 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 53.33 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत है, जबकि 46.67 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है। धमदाहा अनुमंडल 93.33 प्रतिशत उत्तरदाता मतदान करने के स्वतंत्र अधिकार से सहमत है, जबकि 6.67 प्रतिशत उत्तरदाता मतदान करने के स्वतंत्र अधिकार से असहमत है। 60.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 40.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 86.67 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 13.33 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 60.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत है, जबकि 40.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है।

तालिका 04ख से स्पष्ट है कि जीविका योजना से महिलाओं के राजनीतिक सहभागिता के संबंध में 45 वर्ष से अधिक आयु के उत्तरदाताओं में पूर्णिया सदर अनुमंडल 90.00 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से सहमत है, जबकि 10.00 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से असहमत है। 30.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 70.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 90.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 10.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 70.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत है, जबकि 30.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है। बायसी अनुमंडल 80.00 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से सहमत है, जबकि 20.00 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से असहमत है। 40.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 60.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 70.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 30.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 80.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत है, जबकि 20.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है। बनमनखी अनुमंडल 90.00 प्रतिशत उत्तरदाता मतदान करने के स्वतंत्र अधिकार से सहमत है, जबकि 10.00 प्रतिशत उत्तरदाता मतदान करने के स्वतंत्र अधिकार से असहमत है। 50.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 50.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 70.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 30.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 90.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत है, जबकि 10.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है। धमदाहा अनुमंडल 100 प्रतिशत उत्तरदाता मतदान करने का स्वतंत्र अधिकार से सहमत है। 20.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से सहमत है, जबकि 80.00 प्रतिशत उत्तरदाता राजनीतिक सहभागिता से असहमत है। 80.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है इससे सहमत है, जबकि 20.00 प्रतिशत उत्तरदाताओं की राजनीतिक जागरूकता बढ़ी है वो इससे असहमत है। 80.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे सहमत है, जबकि 20.00 प्रतिशत उत्तरदाताओं के नेतृत्व क्षमता का विकास हुआ है इससे असहमत है।

निष्कर्ष

निष्कर्ष के तौर पर कहा जा सकता है कि आज भी भारतीय समाज में लैंगिक असमानता और भेदभाव की समस्या बनी हुई है, जिसको कम करने में बिहार के महत्वाकांक्षी योजना

के रूप में जीविका योजना महत्वपूर्ण भूमिका निभा रही है। इसके माध्यम से महिलाएँ न सिर्फ आर्थिक रूप सशक्त हो रही हैं बल्कि सामाजिक और राजनीतिक रूप से सशक्त हो रही हैं। जीविका योजना से जुड़कर नए व्यवसाय एवं सूक्ष्म रोजगार स्थापित कर परिवार के आर्थिक विकास में सहयोग कर रही हैं। साथ ही अन्य लोगों के लिए रोजगार सृजन करने का कार्य भी कर रही हैं।

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सामाजिक पुनर्वास एवं आपदा प्रबंधन अधिनियम 2005: प्रावधान एवं कार्यान्वयन तंत्र

कविता राज*

सार संक्षेप

हमारे प्रधानमंत्री के विकसित भारत@2047 के संकल्प को साकार करने में आपदा पीड़ितों का समुचित सामाजिक पुनर्वास महत्वपूर्ण है। आपदा प्रबंधन में किए गए प्रयासों में सबसे महत्वपूर्ण है कि पीड़ित समुदायों का पुनर्वास सुनिश्चित किया जाए। आपदा प्रबंधन में सामाजिक पुनर्वास एक सतत प्रक्रिया है जिसमें संवेदनशील वर्गों, यथा - बच्चे, बूढ़े, गर्भवती स्त्री, विकलांग, अनाथ, अकेली महिलाओं को आपदाओं के प्रभाव से बचाने के लिए विशेष सामाजिक सहारा देने का प्रयत्न किया जाना आपदा प्रबंधन का ही एक अंग है। पुनर्वास प्रक्रिया के अन्तर्गत अव्यवस्थित एवं ध्वस्त तंत्रों (जलापूर्ति, विद्युत आपूर्ति, संचार एवं परिवहन की आपूर्ति आदि) के नवीनीकरण, क्षतिग्रस्त तंत्रों की मरम्मत तथा क्षतिग्रस्त एवं ध्वस्त मकानों, भवनों सड़कें, रेलों, पुलों तथा उपयोगिता के अन्य साधनों के पुनर्निर्माण, रोजगार, आदि को शामिल किया जाता है। आपदा प्रबंधन की राष्ट्रीय नीति 2005 में वर्णित है कि किसी भी महाआपदा के घटित होने पर सामान्यतः प्रभावित समुदाय हेतु अस्थायी जीविका विकल्प पैदा करने की आवश्यकता उत्पन्न होती है और राज्य सरकार को चाहिए कि वे अपने आपदा प्रबंधन योजना प्रक्रिया में इस पहलू को मान्यता दें। ऐसे किसी भी विकल्प में यह सुनिश्चित करना आवश्यक है कि दी गई सम्पत्ति, आधारभूत संरचना एवं जोखिम रहित सुविधाएं, स्थायी भरण-पोषण योग्य तथा लागत-प्रभावी हो। आपदा घटित होने के बाद सामाजिक पुनर्वास होता है तो उस दौरान विज्ञान एवं प्रौद्योगिकी की भूमिका अत्यंत ही महत्वपूर्ण हो जाती है। इन्हीं विचारों के आलोक में प्रस्तुत अध्ययन आपदा प्रबंधन के अवयव के रूप में सामाजिक पुनर्वास के प्रावधानों, उसमें सुना प्रौद्योगिकी की भूमिका का परीक्षण एवं संभावित चुनौतियों को चिह्नित किया गया है।

मुख्य शब्द - आपदा प्रबंधन, सामाजिक पुनर्वास, अधिनियम 2005, कार्यान्वयन तंत्र, प्रौद्योगिकी, बिहार।

भूमिका

आपदा प्रबंधन की ठोस कार्य योजना कितनी जरूरी है, यह जानने के लिए कुछ समय पूर्व जारी डिजास्टर मैनेजमेंट इन इंडिया नामक रिपोर्ट के अनुसार भारत का 85 प्रतिशत भाग

*डॉ. कविता राज, सहायक प्रोफेसर एवं अध्यक्ष, लोक प्रशासन विभाग, ए.एन. कॉलेज (NAACग्रेड ए+), पटना (पाटलीपुत्र विश्वविद्यालय का एक अंगीभूत इकाई)

एक या अधिक आपदाओं के दायरे में आता है। 40 मिलियन हेक्टेयर जमीन बाढ़ के दायरे में आती है तथा भारत के कुल भू-क्षेत्र का 8 प्रतिशत चक्रवात और 68 प्रतिशत सूखे के दायरे में आता है। पिछले एक सौ वर्षों में भारत में बाढ़, सूखा, चक्रवात, भूस्खलन, भूकंप, तूफान तथा सूनामी जैसी प्राकृतिक आपदाओं की संख्या में बेतहाशा वृद्धि हुई है। इससे न केवल जीवन को भारी क्षति हो रही है बल्कि पुनर्वास तथा पुनर्निर्माण के लिए अथाह धन व्यय करना पड़ रहा है। रिपोर्ट में इसका कारण भौगोलिक परिस्थितियां, संसाधनों की कमी, आपदाओं के पूर्व-प्रबंधन की कमी तथा आपदाओं के पश्चात् सक्रियता में विलम्ब आदि को बताया गया है।

आपदाएं अपने साथ आर्थिक, मानसिक, पीड़ा, सम्पत्ति का विनाश, परिजनों से बिछड़ाव, असामाजिक तत्वों द्वारा अत्याचार, मूल संस्कृतियों तथा स्थानीय उद्योगों का विनाश लाती है। आपदा प्रबंधन में आपदा पुनरुत्थान एक महत्वपूर्ण अवस्था है क्योंकि यह एक ऐसा समय होता है जब आपदा के बाद के परिणाम में सरकारी और गैर-सरकारी संस्थाओं द्वारा की जाने वाली सहायता सामान्यतः कम होने लगती है और प्रभावित समुदाय को अपनी व्यवस्था स्वयं ही करनी पड़ती है। यह वह प्रक्रिया है जिसमें पूर्व स्थिति को फिर से बहाल करने में सहायता की जाती है, अर्थात् रिकवरी में समुदाय को रहने की आवश्यक सुविधाएं उपलब्ध कराए जाने पर बल दिया जाता है - मसलन, ऊर्जा आपूर्ति, जल आपूर्ति, भोजन सामग्री की आपूर्ति, कूड़ा-करकट निपटाने की व्यवस्था, आवास, परिवहन, संचार-व्यवस्था, विनिर्माण और वाणिज्य, प्राथमिक उत्पादन, स्वास्थ्य, कानून और व्यवस्था, स्थानीय सरकार, मनोरंजन संस्कृति तथा शिक्षा। अर्थात् समुदाय जिन्हें आपदाओं का सामना करना पड़ा उन्हें व्यक्तिगत, पारिवारिक तथा सामुदायिक संरचना को पुनर्स्थापित करने के लिए सहायता प्रदान करने की प्रक्रिया आपदा पुनरुत्थान है। आपदाओं के पश्चात् आपदा प्रबंधन का तात्पर्य है आपदा पुनरुत्थान की दो अवस्थाएं हैं, पुनर्वास तथा पुनर्निर्माण (UNDRO: 1991)। पुनर्वास के तहत प्रभावित लोगों की भौतिक परिवेश, सामाजिक भलाई और मनोवैज्ञानिक सीमाएं सुधारकर, उनके जीवन को पुनर्वासित करने में उनकी सहायता करने की प्रक्रिया है। पुनर्वास के तीन प्रकार हो सकते हैं - भौतिक पुनर्वास, सामाजिक पुनर्वास, मनोवैज्ञानिक पुनर्वास (Aysan: 1993)।

सामाजिक पुनर्वास आपदा पुनरुत्थान का महत्वपूर्ण पहलू है। इसमें संवेदनशील वर्गों तथा बच्चे, बूढ़े, गर्भवती स्त्री, विकलांग, अनार्य अकेली महिलाओं को आपदाओं के प्रभाव से बचाने के लिए विशेष सामाजिक सहारा देने का प्रयत्न किया जाता है। पीड़ित समुदाय को पुनः जीवन जीने के लिए प्रेरित करने का प्रयास किया जाता है। इसके तीन पहलू हो सकते हैं - मौजूदा स्वास्थ्य सुविधाओं और संरचनाओं को और मजबूत बनाना, क्षतिग्रस्त क्षेत्रों में शिक्षा संबंधी गतिविधियों की पुनः स्थापना तथा आपदा पीड़ित बच्चों और महिलाओं का पुनर्वास। आपदा प्रबंधन में सामुदायिक पुनर्वास के तहत निम्नलिखित अवयव प्रमुख हैं-

पुनर्वास: स्वास्थ्य, शिक्षा एवं आवासन

आपदाओं में जीवन की हानि के साथ-साथ स्वास्थ्य समस्याएँ भी उत्पन्न होती हैं। जिनको आपदा प्रबंधन का प्रमुख अंग कहा जाता है। उदाहरणार्थ - आपदाओं के कारण बहुत लोगों की जानें जाती हैं तथा बहुत बड़ी संख्या में लोग घायल हो जाते हैं जिसके लिए तत्काल चिकित्सा की जरूरत होती है। साथ ही आपदाओं में बीमारी एवं महामारी फैलने लगती है। अतः पुनर्वास में स्वास्थ्य सुविधाओं की व्यवस्था करना आवश्यक है जिसके तहत गंभीर रूप से घायल लोगों की चिकित्सा, अस्पतालों में पीड़ितों की देखभाल हेतु चिकित्सा उपकरण, दवाइयों, एम्बुलेंस की उपलब्धता तथा आपातकालीन व्यवस्था सुनिश्चित करना, महामारियों की रोकथाम आदि सम्मिलित होते हैं।

शिक्षण व्यवस्था में सुधार

हमने कोरोना महामारी के दौरान देखा कि उसका बच्चों के शिक्षण पर सर्वाधिक प्रतिकूल प्रभाव पड़ा। महामारी के दौरान या बाद में बच्चों के शिक्षा पर ध्यान देना अति आवश्यक है जिसके तहत शिक्षकों और बच्चों के बीच निरंतर परामर्श, बच्चों को नियमित रूप से स्कूल भेजना, उनके लिए पुस्तक एवं लेखन सामग्री उपलब्ध कराना, मीड-डे-मील को स्वास्थ्यपरक बनाए रखना, विद्यालय शिक्षा समितियों को सक्रिय रखना, स्थानीय लोगों की इसमें भागीदारी सुनिश्चित करना और बालिकाओं की सुविधाओं का ख्याल रखना आपदा प्रबंधन में सामाजिक पुनर्वास के प्रमुख कदम आते हैं।

बच्चों और महिलाओं का पुनर्वास

आपदा से पीड़ित लोगों में विधवा, अनाथ, अकेली महिलाओं, किशोरियों तथा बुजुर्गों को ज्यादा सहायता की आवश्यकता पड़ती है। उनकी पहचान कर उनसे संबंधित आंकड़ों का संधारण भी महत्वपूर्ण बन जाता है। विस्थापित परिवारों को उनके परिजनों को मिलवाने का प्रयास करना, उनका कॉन्सिलिंग करना, महिलाओं को घरेलू उद्योगों तथा पारम्परिक उद्योगों से जोड़ने के लिए रोजगार सृजन करना एवं व्यावसायिक प्रशिक्षण देना, बच्चों को उनके माताओं के साथ रखने की व्यवस्था ताकि वे अनाथ न हो सकें, नवजातों के लिए दूध की व्यवस्था करना, अनाथों की देखभाल, किशोरियों की वेश्यावृत्ति में जाने से रोकने का प्रयत्न करना तथा स्वयं-सहायता समूह बनाने को प्रेरित करना आदि सामाजिक पुनर्वास के अंग हैं (सिंह: 2006)।

आपदा प्रबंधन अधिनियम 2005 में सामाजिक पुनर्वास

आपदा प्रबंधन अधिनियम 2005 की परिभाषा के अनुसार आपदा प्रबंधन, योजना, आयोजन, समन्वय को लागू करने की निरन्तर और एकीकृत प्रक्रिया है, जो किसी भी आपदा से उत्पन्न खतरे को रोकने अथवा तीव्रता अथवा दुष्परिणाम को कम करने अथवा न्यूनीकरण,

कोई भी आपदा का सामना करने के लिए तैयारी और क्षमता निर्माण, किसी भी भयंकर आपदा स्थिति अथवा तीव्रता का आकलन, खोज और बचाव, पुनरूत्थान और पुनर्निर्माण के लिए आवश्यक अथवा उपयुक्त है।

आपदा प्रबंधन एक सतत् प्रक्रिया है जिसमें तीनों चक्र या अवस्थाएं एक-दूसरे से जुड़ी हैं। यानी तैयारी ऐसी हो जिससे हम अनुक्रिया में सफल हों। पुनरूत्थान कार्य इस प्रकार हो कि आनेवाली आपदा का उस पर अधिक प्रभाव न पड़े यानी पुनरूत्थान कार्यक्रम से आपदा के जोखिमों को न्यूनीकृत किए जाने की संकल्पना अवश्य निहित हो। इस प्रकार आपदा प्रबंधन में आपदा रिकवरी कहीं न कहीं आपदा तैयारी से जुड़ी होती है। आपदा प्रबंधन में तीसरा और महत्वपूर्ण कार्य है आपदाओं के घटित होने के पश्चात् सामान्य जन-जीवन की स्थिति बहाल करना। आपदाओं की स्थितियों में सब कुछ तहस-नहस हो जाता है, परिणाम की भयावहता आपदा की प्रचण्डता पर निर्भर करती है। फिर भी तत्काल अनुक्रिया के बाद प्रशासन का कार्य लोगों को उनके निवास स्थान तक पहुँचाना और उनको जीविकोपार्जन के योग्य बनाना होता है। टूटे और ढहे मकानों की मरम्मत से लेकर जीवन की मूलभूत आवश्यकताओं की पूर्ति करने का कार्य भी आपदा प्रबंधन की इस प्रक्रिया में शामिल है। आपदाओं के पश्चात् आपदा प्रबंधन का तात्पर्य है आपदा पुनरूत्थान यानी आपदा रिकवरी जिसकी दो अवस्थाएं हैं, पुनर्वास तथा पुनर्निर्माण। पुनरूत्थान की प्रक्रिया 5 से 10 वर्ष या इससे अधिक भी हो सकती है। इस प्रक्रिया में नवीन ढाँचों के निर्माण में दीर्घकालीन नियोजन के तत्व शामिल होते हैं जो कहीं न कहीं आपदा न्यूनीकरण की अवधारणा से सम्बद्ध होते हैं। इस प्रक्रिया में सभी विभागों के समन्वयन के साथ पुनरूत्थान कार्यक्रमों को लागू किया जाता है।

इन अवयवों के कार्यान्वयन हेतु आपदा प्रबंधन अधिनियम 2005 की धारा 6 के तहत नेशनल डिजास्टर मैनेजमेंट ऑथोरिटी का गठन किया गया। इस प्राधिकरण को जिम्मेवारी दी गई कि वह आपदा प्रबंधन हेतु नीतियां बनाने, योजना बनाने तथा दिशा-निर्देश (Laying down the policies, plans and guidelines for disaster management) देगा तथा यह सुनिश्चित करेगा कि उन दिशा-निर्देशों को राज्य प्राधिकरणों द्वारा उनका समुचित पालन करे तथा राज्य स्तर पर योजना बनाए (Laying down guidelines to be followed by the State Authorities in drawing up the State Plans) इस अधिनियम में आपदा प्रबंधन में सामाजिक पुनर्वास को महत्व दिया गया है। अधिनियम की उद्देशिका में ही सामाजिक पुनर्वास को स्थान दिया गया है। धारा 2(viii), में सामाजिक पुनर्वास एवं संबंधित अंतःसंरचना के निर्माण को मूल उद्देश्यों में रखा गया है। पुनः धारा 36(iv) में राज्यों के आपदा प्रबंधन प्राधिकरणों के लिए सामाजिक पुनर्वास के नीति बनाने तथा योजना बनाने की जिम्मेवारी दी गई है। धारा 38(k) तथा 39(iii) के तहत राज्य सरकारों को इस हेतु वित्तीय प्रावधान करने की व्यवस्था की गई है। अधिनियम धारा 41(डी) के तहत स्थानीय स्तर के आपदा प्रबंधन को सामाजिक पुनर्वास एवं अंतःसंरचनाओं के निर्माण की जिम्मेवारी दी गई तथा

इस हेतु धारा 46(2) के तहत इस हेतु वित्तीय प्रावधान किए जाने तथा धारा 65(c) के तहत इस हेतु राज्य सरकार से वित्त की मांग कर सकते हैं (GoI: 2005)।

सामाजिक पुनर्वास: कार्यान्वयन तंत्र

इन प्रावधानों के कार्यान्वयन एवं अनुश्रवण हेतु कई संस्थाएं निर्मित की गई हैं। जैसे केन्द्रीय स्तर पर अधिनियम की धारा 3 के तहत डिजास्टर मैनेजमेंट ऑथोरिटी की स्थापना की गई है। उसी अधिनियम की धारा 14 एवं 25 के तहत क्रमशः राज्य स्तर एवं जिला स्तर पर आपदा प्रबंधन प्राधिकरणों की व्यवस्था की गई है। इन प्राधिकरणों को भिन्न अधिकार दिए गए तथा संबंधित सरकारों को उनके साथ सहयोग करने की जिम्मेवारी दी गई है। यहाँ उल्लेख करना आवश्यक है कि इन प्राधिकरणों को राज्य स्तर पर संबंधित सरकारों तथा जिला स्तर पर जिलाधिकारियों द्वारा सहयोग एवं सहायता की जिम्मेवारी दी गई है। बिहार राज्य में बिहार स्टेट डिजास्टर मैनेजमेंट ऑथोरिटी का प्रावधान किया गया जो इन सामाजिक पुनर्वास से संबंधित कार्यक्रमों का कार्यान्वयन हेतु विभिन्न विभागों एवं सरकारी एजेंसियों के बीच समन्वय स्थापित करने में महत्वपूर्ण भूमिका निभाता है। इसके अलावा सामाजिक पुनर्वास हेतु बिहार में अलग एक लोक सहभागी संस्था का गठन किया गया है जिसे बिहार आपदा पुनर्वास एवं पुनर्निर्माण सोसाइटी के नाम से हम जानते हैं। यह एक सोसाइटीज रजिस्ट्रेशन एक्ट 1860 के तहत पंजीकृत सोसाइटी है जो आपदा ग्रसित क्षेत्रों में पुनर्वास एवं पुनर्निर्माण का कार्य करती है। इसमें सरकारी पदाधिकारियों सहित स्थानीय समाजसेवियों एवं समाजसेवी संगठनों का योगदान होता है (GoB: 2015)।

हर आपदा अपने साथ एक अवसर भी लाती है। इसे एक उदाहरण से समझते हैं। एक बार महान वैज्ञानिक एडिशन की प्रयोगशाला में आग लग गई और उनके सारे जीवन भर की खोजें यंत्र उसमें जलकर खाक हो गया। तब किसी ने पूछा कि अब आप क्या करेंगे, तो उनका जवाब था दोबारा नई शुरूआत। उन्होंने कहा मेरी गलतियां भी आज समाप्त हो गई तो मुझे सारी चीजों को सही ढंग से दोबारा खोजना और उन पर कार्य करना है। इस प्रकार वो आपदा से विचलित नहीं हुए, बल्कि उन्होंने उसे एक अवसर के रूप में लिया। इसके कुछ दिनों पश्चात उन्होंने बल्ब का आविष्कार किया जो आज तक मानव सभ्यता को अपने प्रकाश से प्रज्ज्वलित कर रहा है। यहां एक चीज स्पष्ट होती है वह है इंसान का नजरिया, आशावादी व्यक्ति आपदा में भी अवसर देखा है। इस बात से स्पष्ट होता है कि अगर व्यक्ति भविष्य को लेकर आशावादी हो तो वह आपदाओं को अवसर में बदल सकता है। आपदा एक अचानक होने वाले विध्वंसकारी घटना है जो व्यापक स्तर पर जनजीवन को प्रभावित करती है। आपदा प्राकृतिक हो या मानव जनित हो परंतु दोनों ही रूप में बहुत ही खतरनाक है क्योंकि इससे गंभीर आर्थिक प्राकृतिक और सांस्कृतिक नुकसान होता है, आपदा एक नकारात्मक घटना है जिनका ख्याल भी मनुष्य के मन में आते ही उसे विचलित कर देता है और अवसर एक बेहद सुनहरा शब्द है जिसकी सबको चाह होती है। प्रकृति

में मनुष्य, जानवर, पेड़-पौधे, पक्षी सभी अवसर की तलाश में होते हैं, पुरानी सोच को तोड़कर नए सत्य और यथार्थ की तरफ मोड़ने देने का कार्य विज्ञान एवं प्रौद्योगिकी के द्वारा संभव हो पाता है।

सामाजिक पुनर्वास में प्रौद्योगिकी का उपयोग

आपदा घटित होने के बाद सामाजिक पुनर्वास होता है तो उस दौरान विज्ञान एवं प्रौद्योगिकी की भूमिका अत्यंत ही महत्वपूर्ण हो जाती है। गहन परामर्श, परस्पर संवाद निरन्तर प्रशिक्षित करना एवं जागरूक करना भी पुनर्वास का सामाजिक पहलू है। पुनर्वास कार्यों के लिए आवश्यक है कि पुनर्वास केन्द्रों के सभी उपकरणों और व्यवस्थाओं को दुरुस्त रखा जाए। प्रत्येक आपदा के राहत और पुनर्वास कार्यों के उपरान्त भी उनकी व्यवस्था की पूर्ति करना भी पुनरुत्थान कार्य है। लगभग प्रत्येक जिले में एक बड़ा क्षेत्र आपदा राहत केन्द्र और पुनर्वास केन्द्र के रूप में चिह्नित और सुनिश्चित करना चाहिए।

पुनर्वास कार्य की सफलता इस बात पर भी टिकी होती है कि आपदा संभावित क्षेत्रों को पहले से ही घोषित किया जाए जिससे लोग आवश्यक बचाव एवं राहत हेतु एहतियात उपलब्ध कर सकें। लोगों को यह भी ज्ञात होना चाहिए कि किस आपदा हेतु कौन-कौन सी सामग्री उपयोगी है और उसी के अनुरूप तैयार रहने के लिए जागरूक करना चाहिए। पुनर्वास के लिए मनुष्यों के साथ-साथ पशुओं, पेड़-पौधों के लिए भी राहत व्यवस्था की योजना होनी चाहिए। आपदा प्रबंध की इस प्रक्रिया को पर्यावरण संरक्षण तथा निरन्तर प्रक्रिया के तहत रखना चाहिए।

सामाजिक परिवर्तन के लिए आवश्यक है कि हम समय के हिसाब से उपयोग करें। विज्ञान एवं प्रौद्योगिकी के माध्यम से हताहत समुदाय को स्वावलंबन बनाया जा सकता है (वह चाहे कृषि का क्षेत्र हो या फिर महिलाओं के विकास से संबंधित हो या बच्चों के शिक्षण कार्य से संबंधित हो। उत्पादन व आय के वर्तमान स्तर को बढ़ाने या बनाए रखने के लिए मौजूदा आजीविकाओं का सुदृढ़ बनाना, घरेलू-आधारित उद्यमों, जिनमें सिंचाई, शिल्प, खान-पान की सेवाएँ शामिल हों। सिंचाई (विस्तार, जल प्रबंधन में सुधार), मिट्टी की उर्वरता में सुधार और वैकल्पिक फसलों जैसे मशरूम का संवर्धन, विशेषज्ञ सब्जियाँ, ग्रीन हाउस पौधों, सूखे और/या कटे हुए फूल आदि। जोखिम कम करने के लिए लोगों की निपटने की रणनीतियों को सुदृढ़ बनाना, विविधीकरण फसलों, आपदा रोधी और अन्य देशी फसलों का संवर्धन और उत्पादन। उपज पश्चात सुविधाओं व भंडारण के तरीकों में सुधार करना। आपदा-रोधी संरचनाओं के निर्माण यानी खाई, बाँध, नालियाँ, बाढ़ सुरक्षा या समुद्री दीवारें, सड़कों व घरों की उच्चस्तरीय स्थापना, भूकम्प, प्रतिरोधक निर्माण, इत्यादि के लिए विज्ञान एवं प्रौद्योगिकी का बहुत ही महत्वपूर्ण स्थान माना जाता है।

सामाजिक पुनर्वास की चुनौतियां

आपदा पुनरुत्थान का प्रबंधन करना एक महत्वपूर्ण प्रक्रिया है। यद्यपि यह एक सतत प्रक्रिया भी है जिसमें लम्बे समय तक समुदाय की जीवन क्षमता बनाए रखने की क्रिया अंतर्निहित है। यदि आपदा पुनरुत्थान का प्रबंधन सही समय और कार्यक्षमता के अनुरूप नहीं होता है तो इसका प्रभाव विपरीत भी हो सकता है। सामाजिक पुनर्वास की प्रक्रिया में समुदाय को मानसिक आघात पहुँचा होता है, जीवनयापन की मूलभूत आवश्यकताओं की तत्काल पूर्ति विज्ञान एवं प्रौद्योगिकी के माध्यम से संभव नहीं है। विज्ञान उनकी रोजगार की, रहने की, शिक्षा की व्यवस्था को फिर से बहाल करने का प्रयास कर सकता है लेकिन भूख की तत्काल जरूरतों, मानसिक आघात को कम करने में विज्ञान एवं प्रौद्योगिकी की भूमिका कभी भी प्राथमिक संसाधन के रूप में नहीं हो सकती है। सामाजिक पुनर्वास में विलम्ब होना, विभागों में समन्वयन का अभाव, सूचना का संगत न होना, वित्त का अभाव, अधिकारी तंत्र पर कार्यभार, राजनीतिक मुद्दे और पुनरुत्थान कार्यक्रमों में लागू करने में एक समस्या है। उन कार्यक्रमों का लगातार छेड़छाड़ करना। कभी-कभी घटनाएं इतना नुकसान करती हैं कि अनुक्रिया में निर्धारित धन और संसाधन के अतिरिक्त खर्च हो जाता है जिससे पुनरुत्थान कार्यक्रमों के निर्धारित धन और संसाधनों का जुटाना भी चुनौती हो जाती है (IGNOU: 2006)। निष्कर्षतः लोक प्रशासन के क्षेत्र में आने वाली सभी चुनौतियां आपदा प्रबंधन के लिए भी लागू होती हैं।

देश में आपदाओं से निपटने की मुख्य जिम्मेदारी प्रधानमंत्री के नेतृत्व में गठित राष्ट्रीय आपदा प्रबंधन प्राधिकरण की है, जो कि आपदा से सुरक्षा और भारत निर्माण का दावा भी करता है। इस प्राधिकरण के जिम्मेदार लोगों का यह कहना है कि समग्र, सक्रिय और विभिन्न आपदाओं को समाहित करनेवाली प्रौद्योगिकी आधारित रणनीति बनाई है, जो सरकारी एजेंसियों और गैर-सरकारी संगठनों के सामूहिक प्रयासों के जरिये आपदा प्रबंधन की जिम्मेदारी संभालती है, किंतु आपदाओं के समय ये दावे धरे के धरे रह जाते हैं, जैसा कि उत्तराखंड में भी देखने को मिला। ऐसा लगता है कि यह प्राधिकरण अब तक कोई ठोस कार्य योजना तैयार नहीं कर पाया है और दावों तक ही इसकी भूमिका सीमित रह गई है। देश में आज भी आपदाग्रस्त लोगों को भगवान के भरोसे छोड़ दिया जाता है।

निष्कर्ष

सामाजिक पुनर्वास आपदा पुनरुत्थान का महत्वपूर्ण पहलू है। इसमें संवेदनशील वर्गों तथा बच्चे, बूढ़े, गर्भवती स्त्री, विकलांग, अनाथों, अकेली महिलाओं को आपदाओं के प्रभाव से बचाने के लिए विशेष सामाजिक सहारा देने का प्रयत्न किया जाता है। पीड़ित समुदाय को पुनः जीवन जीने के लिए प्रेरित करने का प्रयास किया जाता है। पुनर्वास प्रक्रिया के अन्तर्गत अव्यवस्थित एवं ध्वस्त तंत्रों (जलापूर्ति, विद्युत आपूर्ति, संचार एवं परिवहन की आपूर्ति आदि) के नवीनीकरण, क्षतिग्रस्त तंत्रों की मरम्मत तथा क्षतिग्रस्त एवं ध्वस्त मकानों, भवनों,

सड़कें, रेलों, पुलों तथा उपयोगिता के अन्य साधनों के पुनर्निर्माण, रोजगार, आदि को शामिल किया जाता है, यद्यपि यह एक लम्बी तथा महंगी प्रक्रिया है। ऐसे किसी भी विकल्प में यह सुनिश्चित करना आवश्यक है कि उत्पन्न की गई सम्पत्ति, आधारिक संरचना एवं सुख-सुविधाएं जोखिम रहित, स्थायी भरण-पोषण योग्य तथा लागत दक्ष हो। आपदा घटित होने के बाद सामाजिक पुनर्वास होता है तो उस दौरान विज्ञान एवं प्रौद्योगिकी की भूमिका अत्यंत ही महत्वपूर्ण हो जाती है। आपदा अनुक्रिया तथा आपदा पुनरुत्थान में अल्पकालीन तथा दीर्घकालीन नियोजन की प्रक्रिया आपदा न्यूनीकरण की प्रक्रिया से सम्बद्ध है। स्थानीय लोगों की मदद तथा विकास कार्यक्रमों को परियोजनाओं से जोड़कर आपदा पुनरुत्थान के कार्य संपन्न किए जाने चाहिए। अर्थात् (Linking, Relief and Rehabilitation with Development-LRRD) की अवधारणा को आपदा रिकवरी में रखा जाना चाहिए। यह आवश्यक है कि हम राष्ट्रीय आपदा प्रबंधन प्राधिकरण को सफेद हाथी न बनने दें और इसे इस प्रकार सक्रिय करें कि आपदाओं से तबाही को कम से कम किया जा सके। सरकारी स्तर पर तो ठोस प्रयास आवश्यक ही हैं, जनता को भी इस संबंध में प्रशिक्षित व जागरूक बनाना होगा। इसके लिए कितना अच्छा होता कि शिक्षा के प्रारंभिक स्तर से उच्च स्तर तक आपदा प्रबंधन को अनिवार्य रूप से पाठ्यक्रम में सम्मिलित किया जाए।

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बिहार के महामहिम राज्यपाल सह कुलाधिपति **श्री राजेन्द्र विश्वनाथ आर्लेकर** के मार्गदर्शन में मगध विश्वविद्यालय प्रगति, उत्कृष्टता और परिवर्तनकारी उपलब्धियों की असाधारण यात्रा पर द्रुतगति से अग्रसर है। अटूट प्रतिबद्धता के साथ माननीय कुलपति प्रो. एस. पी. शाही के दूरदर्शी नेतृत्व में विश्वविद्यालय नई उचाइयों पर पहुंचने तथा शिक्षा और शोध में अभूतपूर्व मानक स्थापित करने की ओर अग्रसर है। माननीय कुलपति ने विश्वविद्यालय के छात्रों, शिक्षकों और अन्य सभी हितधारकों को अकादमिक क्षेत्र में उत्कृष्टता प्राप्त करने के लिए नई जिम्मेदारियां सौंपी हैं तथा उनके अबतक के कार्यकाल के दौरान निम्नांकित उल्लेखनीय कार्य पूर्ण हुए हैं।

- स्नातक और स्नातकोत्तर स्तर पर पारंपरिक और व्यावसायिक पाठ्यक्रमों के विभिन्न सत्रों को नियमित करने हेतु वर्षों से लंबित परीक्षाएं आयोजित कर परिणाम घोषित किये गये।
- विश्वविद्यालय एवं महाविद्यालयों में वर्ग संचालन सुचारु रूप से हो तथा छात्र-छात्राओं की 75 प्रतिशत सुनिश्चित हो, इसके लिए गंभीर प्रयास लगातार जारी है।
- दो लाख दस हजार से अधिक प्रमाण-पत्र का निराकरण करते हुए संबंधित विभाग / महाविद्यालयों को भेज दिए गए हैं।
- मगध विश्वविद्यालय ने व्याख्यानों, संगोष्ठियों और कार्यशालाओं का आयोजन कर अकादमिक उत्कृष्टता में उल्लेखनीय वृद्धि की है।
- शिक्षण कौशल, अंतर-विषयक अध्ययन और शोध में नवाचारों को बढ़ावा देने के लिए यू0 जी0 सी0 द्वारा स्थापित मानदण्डों को लागू किया गया है।
- सत्र 2023-24 से स्नातक स्तर पर राष्ट्रीय शिक्षा नीति 2020 लागू कर दी गई है।
- अवकाश प्राप्त 90 प्रतिशत शिक्षक एवं शिक्षकेतर कर्मियों की समस्याओं का समाधान किया जा चुका है।
- जन शिकायत कोषांग का गठन किया गया है और प्राप्त आवेदनों का तत्समय निष्पादन किया जा रहा है।
- विश्वविद्यालय द्वारा मार्च, 2023 से मई 2024 तक कुल 87 परीक्षाएं आयोजित की गई हैं।
- अवकाश प्राप्त शिक्षक एवं शिक्षकेतर कर्मियों को सेवानिवृत्ति के दिन ही पेंशन भुगतान करने की परम्परा पुनः आरंभ की गयी है।
- नेक में अच्छी ग्रेडिंग हेतु विश्वविद्यालय परिवार कृत संकल्पित है।
- विश्वविद्यालय के भवनों के जीर्णोद्धार एवं नवीन भवनों के निर्माण हेतु अन्तर राष्ट्रीय स्तर के वास्तुकार द्वारा DPR तैयार किया जा रहा है।
- विश्वविद्यालय के छात्र हित में गठित प्लेसमेंट सेल के अंतर्गत परिसर स्थित प्रबंधन विभाग के 09 छात्रों का बंधन बैंक में कैपस प्लेसमेंट हुआ।