



Tracing Economic Growth and Structural Transformation in Bihar

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Abstract - This paper analyses Bihar's economic growth trajectory during 2010–2025, with a focus on structural transformation across agriculture, industry, and services, and the constraints limiting the state's development potential. Using data from the Bihar Economic Survey (2024–25), Government of India publications, India Brand Equity Foundation (IBEF), the Confederation of Indian Industry (CII) Vision Report (2024), and other secondary sources, the study finds that Bihar's nominal Gross State Domestic Product (GSDP) expanded by more than 3.5 times over the past decade. However, despite this growth, the state continues to lag behind the national average in terms of per capita income, industrialisation, employment diversification, infrastructure development, and human development indicators. Inter-state comparisons and district-level analysis reveal significant regional disparities and uneven sectoral growth, reflecting structural imbalances within the economy. The paper identifies key bottlenecks related to industrial policy, investment climate, human capital formation, and agricultural productivity, and highlights policy levers necessary for achieving inclusive, sustainable, and broad-based economic transformation in Bihar.

Keywords - Economic Growth; Structural Transformation; Bihar; GSDP; Industrialisation; Regional Disparities; Human Development; Inclusive Growth.

I. INTRODUCTION

Bihar, located in eastern India, is the country's third most populous state, with an estimated population of over 127 million according to the Census projections for 2024. Despite its demographic significance, Bihar has historically remained one of India's economically lagging states, characterised by low levels of industrialisation, heavy dependence on agriculture, limited infrastructure, widespread poverty, and high rates of outward migration. For several decades, these structural constraints have resulted in low per capita income, limited employment diversification, and persistent regional disparities within the state.

Since the early 2010s, however, Bihar has exhibited relatively rapid headline economic growth, reflected in a sharp increase in its Gross State Domestic Product (GSDP). This growth has often positioned Bihar among the faster-growing states in India in nominal terms, raising important questions regarding the nature, sustainability, and inclusiveness of this expansion. In particular, concerns remain regarding whether economic growth has been accompanied by meaningful structural transformation—defined as a shift of resources and labour from low-productivity agriculture to higher-productivity industrial and service sectors—and whether such changes have translated into improvements in employment outcomes, industrial capacity, and human development indicators.

Against this backdrop, the present study seeks to provide a comprehensive analysis of Bihar's economic growth and structural transformation over the period 2010–2025. The specific objectives of the research are fourfold: first, to analyse Bihar's growth performance in comparison with national and selected peer states; second, to examine changes in the sectoral composition of output and employment across agriculture, industry, and services; third, to assess inter-state and intra-state (district-level) disparities in economic performance; and fourth, to identify key structural constraints as well as strategic policy opportunities for achieving sustainable, inclusive, and broad-based economic growth. By integrating macroeconomic trends with regional and sectoral perspectives, this paper aims to contribute to the



literature on sub-national growth dynamics and development challenges in India's less-developed states.

II. GROWTH PERFORMANCE OF BIHAR'S ECONOMY

The study is based entirely on secondary data obtained from multiple authoritative and publicly available sources to ensure reliability and consistency. The primary source of state-level economic data is the Bihar Economic Survey (various issues, with emphasis on 2024–25), which provides detailed information on Gross State Domestic Product (GSDP), sectoral composition of output, district-level indicators, public finance, and socio-economic variables. Supplementary macroeconomic data have been drawn from publications of the Government of India, including the Ministry of Statistics and Programme Implementation (MoSPI), NITI Aayog, and the Reserve Bank of India (RBI), particularly for inter-state comparisons and national benchmarks.

In addition, industry- and investment-related information has been sourced from reports of the India Brand Equity Foundation (IBEF) and the Confederation of Indian Industry (CII) Vision Report (2024) to assess trends in industrialisation, infrastructure development, and private investment. Human development and social sector indicators have been compiled from national datasets such as the National Family Health Survey (NFHS), Periodic Labour Force Survey (PLFS), and other relevant government publications. Where necessary, population estimates are based on Census projections for the post-2011 period. All monetary values are reported in current prices unless otherwise specified.

The analysis adopts a mixed descriptive and comparative methodological approach to examine Bihar's economic growth and structural transformation over the period 2010–2025. Growth performance is assessed using indicators such as nominal and real GSDP growth rates, sector-wise value-added shares, and per capita income trends. Structural transformation is examined through changes in the relative contribution of agriculture, industry, and services to GSDP, along with shifts in employment patterns where data permit.

Comparative analysis is employed to situate Bihar's performance relative to selected peer states with similar socio-economic characteristics, as well as to national averages. Inter-state comparisons focus on growth rates, sectoral composition, industrial output, and human development indicators, while intra-state analysis uses district-level data to highlight spatial disparities and uneven development within Bihar. Simple growth decomposition and ratio analysis are used to identify sectoral drivers of growth and structural change.

The study further incorporates qualitative policy analysis by reviewing government policy documents, vision reports, and development strategies to identify key constraints and potential policy levers. Given data limitations and the descriptive nature of the study, the analysis does not employ advanced econometric modelling; instead, it emphasises trend analysis, cross-sectional comparisons, and contextual interpretation to draw policy-relevant insights.

Limitations of the Study

The study is subject to certain limitations. First, reliance on secondary data may involve inconsistencies arising from periodic revisions in national and state accounts. Second, district-level employment and industrial data are limited in availability and frequency, constraining deeper quantitative analysis at the micro level. Finally, the use of nominal values in some instances may overstate growth trends due to inflationary effects. These limitations are acknowledged, and results are interpreted with due caution.

Growth Performance of Bihar (2010–2025)



Bihar's economic growth trajectory during the period 2010–2025 has been marked by relatively high aggregate growth rates, particularly in the post-2010 decade, positioning the state among the faster-growing economies in India in headline terms. The state's Gross State Domestic Product (GSDP) has expanded substantially over this period, recording more than a three-and-a-half-fold increase in nominal terms. This growth reflects a combination of low initial base effects, increased public expenditure, expansion of the services sector, and gradual improvements in infrastructure and connectivity.

Trends in GSDP Growth

During the early 2010s, Bihar consistently registered GSDP growth rates above the national average, supported largely by public investment, construction activity, and services-led expansion. Although growth moderated during periods of national economic slowdown notably following demonetisation, the implementation of the Goods and Services Tax (GST), and the COVID-19 pandemic the state demonstrated relative resilience and a faster post-pandemic recovery compared to several peer states. The rebound in economic activity after 2021–22 was driven primarily by renewed government spending, urban construction, trade, transport, and other service-sector activities.

However, when adjusted for population growth, Bihar's per capita income growth appears considerably more modest. Despite sustained GSDP expansion, per capita income remains among the lowest in India, reflecting the state's high population density and demographic pressure. This divergence between aggregate growth and per capita outcomes highlights the limited translation of headline growth into individual economic well-being.

Sectoral Contribution to Growth

An examination of sectoral contributions reveals that Bihar's growth has been uneven across sectors. The services sector has emerged as the dominant driver of GSDP growth, accounting for an increasing share of total output over the study period. Sub-sectors such as trade, transport, communication, public administration, education, and health services have exhibited steady expansion, largely supported by government expenditure and urban demand.

Agriculture continues to employ a significant proportion of the workforce but contributes a declining share to GSDP, consistent with broader patterns of structural change. While agricultural output has grown in absolute terms supported by improvements in crop productivity, irrigation, and diversification the sector remains vulnerable to climatic variability, flooding, and limited value addition.

In contrast, the industrial sector has shown relatively weak and inconsistent growth. Manufacturing and organised industrial activity remain underdeveloped, with limited private investment and a small contribution to state income compared to national averages. Construction has been the most dynamic component within the secondary sector, driven by public infrastructure projects, housing, and road development, rather than industrial expansion per se.

Comparison with National and Peer-State Performance

A comparative assessment indicates that while Bihar's growth rates often exceed the national average, this performance is partly attributable to its low initial economic base. In absolute and per capita terms, the state continues to lag behind most major Indian states and several economically comparable peers. States with similar demographic and historical characteristics have been more successful in leveraging industrialisation and export-oriented manufacturing to sustain long-term growth.

Moreover, Bihar's growth pattern remains consumption- and government-expenditure-driven, with limited contribution from private investment and industrial productivity gains. This raises concerns



regarding the sustainability and quality of growth, particularly in the context of employment generation for a rapidly growing labour force.

Spatial Dimensions of Growth

Growth performance within Bihar has also been spatially uneven. District-level analysis reveals significant disparities between urban and rural areas, as well as between districts with better infrastructure and market access and those characterised by agrarian dependence and limited connectivity. Urban centres such as Patna have captured a disproportionate share of economic activity, particularly in services, while many rural districts continue to exhibit low productivity and limited non-farm employment opportunities.

Summary Assessment

Overall, Bihar's growth performance during 2010–2025 reflects a paradox of rapid aggregate expansion alongside persistent structural weaknesses. While the state has achieved notable gains in terms of headline GSDP growth and post-pandemic recovery, the limited pace of industrialisation, low per capita income, and pronounced regional disparities constrain the developmental impact of this growth. These trends underscore the need to shift from growth driven primarily by public spending and services toward a more balanced, investment-led, and employment-intensive growth model.

III. GROWTH PERFORMANCE OF BIHAR (2010–2025)

Size and Growth Trends

Between 2011–12 and 2023–24, Bihar's economy recorded a substantial expansion, with Gross State Domestic Product (GSDP) at current prices increasing from ₹2.47 lakh crore to ₹8.54 lakh crore representing growth of more than 3.5 times. In real terms (at constant 2011–12 prices), GSDP grew from ₹2.47 lakh crore to ₹4.64 lakh crore, indicating an expansion of nearly 1.9 times. In 2023–24, Bihar achieved a nominal growth rate of approximately 14.5 per cent and a real growth rate of around 9.2 per cent, both of which exceeded the national average. Projections suggest that the state's GSDP may reach nearly ₹10.97 lakh crore by 2025–26, reflecting sustained growth momentum.

Despite these impressive headline figures, the interpretation of growth requires caution. A significant component of Bihar's high growth rates can be attributed to a low initial base. Consequently, rapid aggregate expansion has not translated proportionately into improvements in individual economic well-being, as reflected in persistently low per capita income levels.

Per Capita Income Trends and Living Standards

Bihar's per capita income has increased steadily over the past decade, rising from ₹25,379 in 2011–12 to ₹66,828 in 2023–24 at current prices. In real terms, per capita income in 2023–24 stood at approximately ₹36,333. While this growth indicates some improvement in average income levels, Bihar continues to rank among the lowest in the country in per capita income.

In comparative perspective, Bihar's per capita income remains less than half of the national average and significantly below that of both economically advanced states and several neighbouring states. This persistent income gap underscores the disconnect between aggregate economic growth and improvements in living standards, highlighting concerns related to inclusiveness and inequality.

Inter-State Comparison of Growth Performance



Although Bihar has frequently recorded growth rates above the national average, its absolute economic position remains weak. Compared to states such as Maharashtra and Tamil Nadu, Bihar's per capita income and industrial output are substantially lower. Even relative to neighbouring and demographically comparable states such as Jharkhand, Odisha, and Uttar Pradesh, Bihar lags in terms of industrial development and urbanisation.

These patterns suggest that Bihar's growth has been driven largely by consumption and public expenditure rather than by private investment, productivity gains, or export-oriented industrialisation. As a result, the sustainability and employment-generating capacity of this growth remain limited.

Spatial Dimensions of Economic Growth

Economic growth within Bihar has been unevenly distributed across districts. Urban centres particularly Patna have captured a disproportionately large share of economic activity, driven by services such as education, finance, administration, and trade. Other districts, including Muzaffarpur, Gaya, Begusarai, and Bhagalpur, have exhibited moderate growth based on agro-processing, tourism, petroleum and fertilisers, and traditional manufacturing respectively.

In contrast, large parts of northern and eastern Bihar remain predominantly agrarian, with limited diversification and lower income levels. This spatial concentration of growth has reinforced regional disparities and constrained balanced development across the state.

IV. STRUCTURAL TRANSFORMATION AND SECTORAL SHIFTS

Changing Sectoral Composition of Output

Bihar's sectoral composition of GSDP has undergone gradual change during the period under study. By 2023–24, the tertiary (services) sector accounted for approximately 58.6 per cent of GSDP, emerging as the dominant driver of economic growth. The expansion of services has been led primarily by trade, transport, communication, education, health, and public administration, with public expenditure playing a significant role.

The secondary sector contributed about 21.5 per cent of GSDP and experienced only moderate growth. Industrial activity remains limited, with manufacturing accounting for a small share of output compared to more industrialised states. Growth within the secondary sector has been driven largely by construction and utilities rather than by factory-based or export-oriented manufacturing.

The primary sector's share declined to around 19.9 per cent of GSDP, reflecting both structural change and relatively slower growth compared to services.

Agriculture, Employment, and Productivity

Despite the declining share of agriculture in output, the sector continues to employ over 60 per cent of Bihar's workforce, indicating low labour productivity and incomplete structural transformation. Agriculture remains dominated by crops such as paddy, maize, and wheat, with gradual diversification into horticulture and fisheries.

However, the sector faces persistent constraints, including fragmented landholdings, climatic vulnerability, limited irrigation coverage in certain regions, weak market linkages, and underdeveloped food-processing infrastructure. These structural challenges limit income growth in rural areas and contribute to underemployment and migration.

Industrialisation and Services-Led Transformation



Bihar's pattern of structural transformation has been characterised by a premature shift toward services in the absence of a strong industrial base. While services have contributed significantly to output growth, many service-sector activities are non-tradable, low productivity, and dependent on public spending. Consequently, their capacity to generate large-scale, high-quality employment remains limited.

The weakness of manufacturing and organised industry has constrained Bihar's ability to absorb surplus agricultural labour and leverage its demographic advantage. This has resulted in continued reliance on informal employment and outward migration as key livelihood strategies.

4.4 Inter-State Comparison of Economic Structure

A comparison of sectoral composition across states highlights Bihar's structural disadvantages. While Bihar's services share exceeds that of neighbouring states such as Jharkhand and Odisha, its industrial share is substantially lower. Low levels of urbanisation (around 12 per cent) and relatively low literacy rates further constrain industrial growth, agglomeration economies, and productivity improvements.

District-Level Structural Variation

Structural transformation within Bihar has been spatially uneven. Districts with better infrastructure, urban centres, and administrative importance have experienced faster shifts toward services and construction activities. In contrast, many districts remain heavily dependent on agriculture with limited sectoral diversification.

The concentration of economic activity in a few districts has reinforced regional inequalities and underscores the need for a more decentralised development strategy that promotes secondary cities, agro-processing clusters, and region-specific industrial growth.

Investment, Infrastructure, and Policy Environment

Recent economic growth has been supported by rising capital formation, particularly since the mid-2010s, driven largely by public investment in infrastructure and rural development. Programmes such as Saat Nischay and the Pradhan Mantri Gram Sadak Yojana have improved rural connectivity and market access, while near-universal household electrification by 2022 represents a major infrastructural milestone.

The Bihar Industrial Investment Promotion Policy (2023) reflects renewed policy emphasis on promoting MSMEs, ethanol production, food processing, and textiles. While these initiatives signal a strategic shift toward diversification, their effectiveness will depend on implementation capacity, private-sector participation, and complementary investments in skills, logistics, and urban infrastructure.

V. CHALLENGES AND CONSTRAINTS

Despite sustained aggregate growth since the early 2010s, Bihar continues to face multiple structural, institutional, and socio-economic constraints that limit the depth, inclusiveness, and sustainability of its development process.

Low Industrialisation and Weak Private Investment

One of the most significant constraints on Bihar's economic transformation is the persistently low level of industrialisation. Manufacturing contributes only a modest share to GSDP, and organised industrial activity remains limited. Factors such as inadequate industrial infrastructure, limited access to land, logistical bottlenecks, regulatory complexities, and perceptions of high risk have discouraged large-scale private investment. As a result, the state has been unable to develop strong manufacturing clusters or integrate effectively into national and global value chains.

Employment Deficit and Labour Market Informality

Bihar's growth has not been sufficiently employment-intensive. A large share of the workforce remains concentrated in low-productivity agriculture or informal non-farm activities. The limited expansion of manufacturing and high-productivity services has constrained the absorption of surplus agricultural labour, leading to widespread underemployment and persistent outward migration. Informality dominates employment across sectors, resulting in low wages, limited social security, and high vulnerability to economic shocks.

Agricultural Constraints and Rural Distress

Although agriculture remains central to livelihoods, the sector is characterised by low productivity and limited value addition. Fragmented landholdings, dependence on monsoon rainfall, frequent floods, and inadequate post-harvest infrastructure continue to suppress farm incomes. Weak market linkages and limited agro-processing capacity further constrain diversification and rural non-farm employment. These challenges contribute to persistent rural distress and reinforce income inequality between rural and urban areas.

Human Capital Deficits

Bihar faces substantial human capital challenges, including relatively low literacy rates, poor learning outcomes, skill mismatches, and inadequate healthcare access. While school enrolment has improved, the quality of education and workforce skills remains a concern. These deficits limit labour productivity, reduce employability in higher-value sectors, and weaken the state's attractiveness for investment.

Infrastructure and Urbanisation Constraints

Despite recent improvements, infrastructure gaps persist in areas such as industrial parks, logistics, warehousing, urban transport, and sanitation. Bihar's low level of urbanisation restricts agglomeration economies, innovation, and productivity growth. The absence of well-developed secondary cities has concentrated economic activity in a few urban centres, exacerbating regional disparities.

Institutional and Governance Challenges

Institutional capacity constraints, including limited administrative efficiency, slow project implementation, and coordination challenges across departments, continue to affect policy outcomes. In addition, fiscal dependence on central transfers constrains the state's ability to finance large-scale development initiatives independently. Strengthening governance and implementation mechanisms remains critical for translating policy intent into tangible outcomes.

VI. POLICY RECOMMENDATIONS

Addressing Bihar's structural challenges requires a comprehensive and coordinated policy approach that shifts the growth model toward productivity, employment generation, and inclusiveness. The following policy recommendations emerge from the analysis.

Promote Manufacturing-Led and MSME-Centric Industrialisation

Bihar should prioritise manufacturing-led growth by developing sector-specific industrial clusters in areas such as agro-processing, textiles, leather, food processing, ethanol, and light engineering. Strengthening MSMEs through improved access to credit, technology upgradation, market linkages, and simplified regulatory frameworks can generate employment at scale. Industrial policies should focus on plug-and-play infrastructure, land banks, and faster approvals to attract private investment.

Enhance Agricultural Productivity and Value Addition



Agricultural policy must shift from a focus on output expansion to productivity enhancement and value addition. Investments in irrigation, flood management, mechanisation, and climate-resilient farming are essential. Strengthening farmer-producer organisations (FPOs), expanding cold storage and warehousing, and promoting food processing industries can improve market integration and raise farm incomes. Linking agriculture with agro-based industries can also stimulate rural non-farm employment.

Invest in Human Capital and Skill Development

Improving the quality of education and healthcare is critical for long-term growth. Policy efforts should prioritise learning outcomes, vocational education, and skill development aligned with industry needs. Expanding technical institutes, industrial training centres, and apprenticeship programmes can help bridge skill gaps and enhance employability, particularly for youth and migrants.

Accelerate Urbanisation and Develop Secondary Cities

Bihar's development strategy should actively promote planned urbanisation and the growth of secondary cities as engines of economic transformation. Investments in urban infrastructure, housing, public transport, and municipal governance can support agglomeration economies and decentralise growth away from Patna. Urban centres should be linked to industrial corridors and logistics networks to facilitate industrial expansion.

Strengthen Infrastructure and Connectivity

Continued investment in transport, logistics, power reliability, digital infrastructure, and industrial utilities is essential. Improving last-mile connectivity, multimodal transport, and warehousing can reduce transaction costs and enhance competitiveness. Digital infrastructure can also support service-sector growth, governance reforms, and financial inclusion.

Improve Governance, Institutional Capacity, and Policy Implementation

Effective implementation is as important as policy design. Strengthening institutional capacity, improving inter-departmental coordination, and adopting outcome-based monitoring frameworks can enhance policy effectiveness. Transparent regulatory systems, time-bound clearances, and predictable policy environments are critical for building investor confidence.

Foster Inclusive and Regionally Balanced Growth

Targeted interventions are needed to address regional disparities within Bihar. Backward districts require focused investments in infrastructure, education, healthcare, and livelihood diversification. Social protection programmes should be strengthened to ensure that vulnerable groups benefit from growth and are protected against economic shocks.

VII. CONCLUSION

Bihar's economy has experienced significant aggregate growth between 2010 and 2025, with GSDP expanding more than 3.5 times in nominal terms and real growth rates consistently above the national average. This expansion, driven largely by services and public expenditure, has transformed the state from a predominantly agrarian economy toward a service-dominant structure. However, the growth remains uneven in both sectoral and spatial terms. Industrialisation is limited, per capita income remains low, and a majority of the workforce continues to depend on low-productivity agriculture. District-level disparities further underscore the uneven nature of Bihar's structural transformation.

The state's development trajectory highlights both opportunities and constraints. Rapid growth and improved infrastructure provide a foundation for investment-led industrialisation, skill development, and urbanisation. At the same time, persistent challenges including weak industrial base, labour market



informality, agricultural vulnerabilities, human capital deficits, and institutional bottlenecks constrain the potential for inclusive and sustainable development.

Realising Bihar's growth potential will require a comprehensive strategy that promotes manufacturing and MSME-led industrialisation, enhances agricultural productivity and value addition, invests in human capital, strengthens infrastructure, and fosters balanced regional development. Effective governance, targeted policy implementation, and strategic public-private collaboration are essential to ensure that future growth is inclusive, employment-intensive, and capable of raising living standards across the state.

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