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**Research Article**

## Industrial Growth in Bhagalpur between Agricultural Dependence and Potential of Power Projects and Cottage Industries

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### Abstract

Bhagalpur district of Bihar has been known as an agrarian economy with very little and erratic industrial diversification. The economic structure is still dominated by activities of the primary sectors, especially by the agrarian production, which accounts for the highest percentage of both production and employment. Despite the establishment of important infrastructure like that of Kahalgaon Thermal Power Plant (one of the most important industrial investments in eastern Bihar), the district has not seen commensurate industrial growth or structural transformation. Industrial growth has been modest, spatially concentrated and poorly linked with the local economy. This article focuses on discussing the possibility of industrial development in Bhagalpur from the pure economic point of view. It focuses on the sectoral composition of the district, the role of power infrastructure, the performance of agro-based cottage industries like rice milling, sugar processing, etc. & key economic constraint affects the diversification. Based on secondary economic data, government reports, and regional development indicators, the study measures how much the resources available have been converted into productive industrial results. The analysis shows that though Bhagalpur has the requirements for industrial growth, including availability of energy, agricultural raw materials, and a high labour force, these requirements have not been utilised fully due to structural bottlenecks. Insufficient industrial investment, underdeveloped industrial estates, poor access to institutional credit for small and medium enterprises and poor linkages to regional and national markets have hampered the growth of manufacturing. Agro-based and cottage industries, whilst significant for value addition at the local level and job creation, function at low technological and productivity levels, which in turn constrains the ability of the economy to grow at a sustainable rate. The article concludes that the fact that Bhagalpur has not diversified from an agricultural perspective is not due to a scarcity of resources, but the gap in policy and investments. A joint industrial policy focusing on agro-processing expansion, effective use of power infrastructure, better logistics and focused financial support to manufacturing enterprises would be required to achieve long term sustainable growth in the district economy.

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**KEYWORDS:** Industrial Growth, Economy of Bhagalpur, Power Projects, Agro-based Industries, Economic Diversification.

## 1. INTRODUCTION

Industrial growth is one of the main determinants of economic development since it improves productivity, creates nonagricultural jobs, and increases per capita income. In the case of Bhagalpur, it is evident in restrictive economic growth, as in the narrowing of the structure of production dominated by agriculture. Although the district has a high availability of agricultural raw materials, as well as effective access to power infrastructure, the secondary sector is very underdeveloped.

From the economic point of view, Bhagalpur represents the phenomenon of incomplete structural transformation, where the process of migration of labour and output from agriculture to industry is a sluggish process. This article explores the industrial potential of Bhagalpur in terms of the power generation potential, small agro-based industries, and the economic barriers that ensure agricultural dependency.

## REVIEW OF LITERATURE

- Hirschman, A. O. (1958). The strategy of economic development. Hirschman places the importance of infrastructure and industrial investment in spurring unbalanced growth in developing economies. The work emphasises the potential forward and backward linkages and industrialising effects of power projects and core industries when backed up by other complementary investments.
- Lewis, W. A. (1954). Economic development with unlimited supplies of labour. Lewis is the proponent of the dual-sector model to analyse the transition from the agrarian economy to the industrial economy. The study is relevant to the case of Bhagalpur, where surplus labour from agriculture is not absorbed optimally in the industry, backwards, and thus there is limited productivity growth and structural transformation.
- Kuznets, S. (1966). Modern economic growth. Kuznets examines patterns of structural change, focusing on the decline in the proportion of agriculture and the increase in industry and services. The framework assists in gauging the slow industrial transition and continued agricultural dependence of Bhagalpur.
- Government of Bihar. (2023). Bihar Economic Survey 2022-23. Department of Finance, Government of Bihar. The Economic Survey provides data for the districts on sectoral contribution, industrial output and infrastructure. It draws attention to the limited industrial base in Bhagalpur and to agro-processing and the availability of power as possible growth opportunities.
- NITI Aayog. (2021). MSME development in India & employment generation. Government of India. This report appraises the role of micro, small and medium enterprises in regional economic growth. It highlights the importance of agro-based and cottage industries in the value addition and employment of the people, and how the sector is limited due to finance, technology, and market access.
- Rosenstein-Rodan, P. N. (1943). Problems of Industrialisation of Eastern and South-Eastern Europe.

Rosenstein-Rodan applies the "Big Push" theory, which suggests that concerted investment is required for industrial take-off. The concept explains why isolated projects such as power plants may not generate wider-based growth in industry without supporting industries.

- Ministry of Power, Government of India. (2022). Power sector annual report on performance. The report focuses on the economic contribution of thermal power projects to the development of the region. It adds that the availability of electricity is not enough to ensure industrial growth unless it is coupled with manufacturing and investment policies.
- Planning Commission of India 2014. Report on agro-based industries. This report examines the possibilities of agro-processing industries in the agrarian areas. It recognises rice and sugar milling as transitional industries, which can be helpful for diversification if infrastructure, credit and market linkages can be improved.

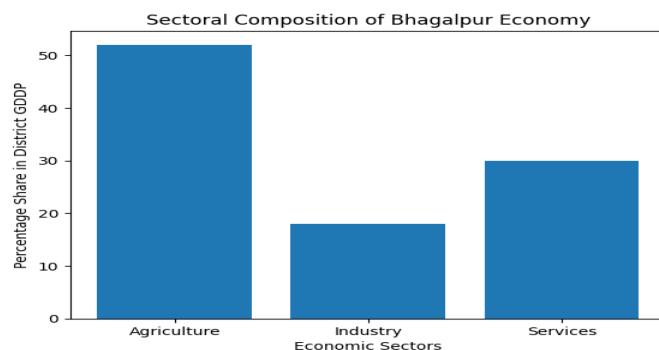
### Structure of the Economy of Bhagalpur

The economic architecture of Bhagalpur is preeminently characterised by the significant agricultural contribution to the overall economic performance of the district in terms of income and employment. The main staple foods (paddy, wheat, maize, and sugarcane) dominate agricultural production, while industrial production is largely small-scale processing facilities and informal manufacturing activities.

Table 1: Sectoral Composition of Bhagalpur District Economy

Sector	Share in District GDDP (%)
Agriculture	52
Industry	18
Services	30

Source: Government of Bihar. (2023). Bihar Economic Survey 2022-23. Department of Finance, Government of Bihar.



**Economic Interpretation:** The tables and graphs accompanying the paper show how agriculture accounts for over fifty per cent of the total output of the district, while industry is less than one-fifth. This sharp disproportion in the sectoral structure is proof of an inadequate industrial base and limited value addition. From an economic point of view, such an asymmetrical structure limits the growth of productivity and reduces the elasticity of employment because the agrarian

sector is not well positioned to absorb surplus labour productively.

### Power Infrastructure/ Industrial Potential

The Kahalgaon Thermal Power Plant is one of the largest coal based Thermal Power plants in Eastern India, which is a huge capital investment for the district of Bhagalpur. In economic terms, a secure power supply is a required input of industrialisation, which will make the cost of production lower and help in achieving economies of scale. Nevertheless, the existence of the power plant has not resulted in remarkable industrial growth in the surrounding region. The main obstacle is a lack of complementary investments, such as industrial parks, manufacturing clusters and related logistics infrastructure, that would create industrial linkages. Accordingly, the generated electricity is more distributed to the regional grid instead of supplying local industries. Thus, although the power project facilitates an increase in the availability of energy to the industrial sector, its contribution to industrial output and district employment is limited by weak industrial linkage effects.

### Agro-Based/ Cottage Industries

Agro-based enterprises form the main segment of the industrial activity of Bhagalpur. Rice milling units are used for locally grown paddy, and small sugarcane processing units depend on sugarcane growing near the plants. These enterprises are responsible for the value addition and provide seasonal employment opportunities. On the economic front, such industries help to reduce post-harvest losses and improve incomes in rural areas. The growth contribution of the industries is, however, limited due to small-scale operations, low capital intensity, obsolete technology and poor access to institutional finance. The overwhelming presence of units of the informal sector is further limiting the possibilities for productivity improvements and reinvestments. Consequently, agro-based industries in Bhagalpur do not resemble growth-oriented manufacturing units, but rather subsistence-level operations.

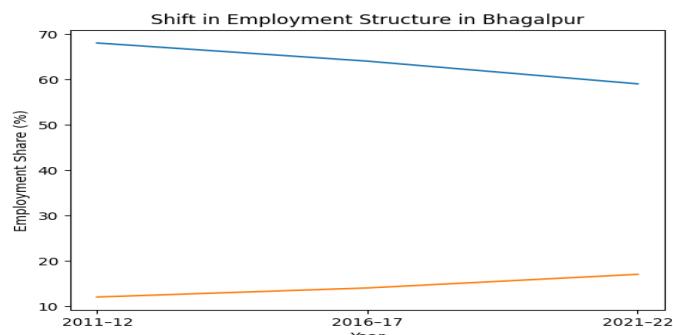
### Structure of Employment and Absorption by industries

Among the important indicators of the development of the industry is the sector-wise distribution of employment. Bhagalpur still retains a high agricultural employment, but there is a gradual shift towards industry.

Table 2: Employment Structure in Bhagalpur (Sector-wise, %)

Year	Agricultural Employment (%)	Industrial Employment (%)
2011-12	68	12
2016-17	64	14
2021-22	59	17

Source: Ministry of Statistics and Programme Implementation. (2022). Periodic Labour Force Survey. Government of India.



**Economic Interpretation:** From the tabular data and the graphical representation, we can determine that there is a gradual fall in the number of agricultural employees with a slight increase in industrial employment. This pattern implies a sluggish process of diversification; however, the pace of change is not high enough to create a significant multiplier effect. From an economic point of view, the spotting down of the unemployment of labour to industry leads to spotting down the underemployment, temporary migration, and negligible wage growth.

### Constraints to Industrial Diversification

**Lack of industrial expansion in Bhagalpur is constrained by several economic impediments:**

- First, limited private investment is a disincentive to industrial expansion, and the lack of well-established industrial estates and less-than-ideal transport connectivity increases transaction costs.
- Second, small-scale enterprises experience limited access to credit, which makes it difficult to adopt new technology; informality also results in limited access to governmental incentives and financial support.
- Third, weak integration of markets lowers competitiveness: local industries are unable to insert themselves into regional and national supply chains and do not scale operations.
- Fourth, dominance in the sector of agriculture has made the economy vulnerable to climatic risks and price fluctuations, and has discouraged long-term planning for industrial development.

### Economic Implications of Dependence on Agriculture

Heavy dependence on agriculture limits the options for income and employment diversification. Agriculture has less productivity than manufacturing, thus limiting the growth of district income. In the absence of industrial expansion (surplus labour continues to be trapped in low-income activities, perpetuating poverty and out-migration). Industrial diversification would breed more value addition, a more stable employment situation and improved resilience to agricultural shocks.

### Policy Guidelines for Industrial Development

From a developmental planning point of view, Bhagalpur needs to adopt an integrated industrial planning. The promotion of agro-processes clusters connecting agricultural output and available power supply is a viable way towards strengthening value chains. Quite a large investment in roads, storage and industrial land is required to attract private capital. Credit facilities suited to the needs of MSMEs; technology upgrading programmes. All this can improve the productivity of cottage industries. Skill development in accordance with the demands of the manufacturing sector can also raise labour productivity and ease the absorption of industrial sector.

### CONCLUSION

The slow industrial growth in Bhagalpur cannot be attributed only to the inadequacy of resources, rather the structural and policy constraints play a decision-making role. The existence of a major power work and an abundance of agricultural raw material are the basis for diversification. Nonetheless, low levels of investment flows, poor infrastructure and poor market integration contribute to agricultural dependence. A coherent industrial policy focusing on agro-based manufacturing, infrastructure development and promotion of private investment is what Bhagalpur needs for itself to become a more diversified and resilient regional economy.

### REFERENCES

1. Hirschman AO. *The strategy of economic development*. New Haven (CT): Yale University Press; 1958. p. 63–89.
2. Lewis WA. Economic development with unlimited supplies of labour. *Manchester Sch Econ Soc Stud*. 1954;22:139–165.
3. Kuznets S. *Modern economic growth*. New Haven (CT): Yale University Press; 1966. p. 92–118.
4. Todaro MP, Smith SC. *Economic development*. London: Pearson Education; 2020. p. 387–412.
5. Government of Bihar. *Bihar Economic Survey 2022–23*. Patna: Department of Finance, Government of Bihar; 2023. p. 211–235.
6. Ministry of Power, Government of India. *Annual report on the power sector*. New Delhi: Government of India; 2022. p. 74–96.
7. Ministry of Statistics and Programme Implementation. *Periodic Labour Force Survey*. New Delhi: Government of India; 2022. p. 52–78.
8. Planning Commission of India. *Report on agro-based industries in India*. New Delhi: Government of India; 2014. p. 101–124.
9. NITI Aayog. *MSME development and employment generation in India*. New Delhi: Government of India; 2021. p. 45–67.
10. Rosenstein-Rodan PN. Problems of industrialisation of Eastern and South-Eastern Europe. *Econ J*. 1943;53(210):202–211.
11. World Bank. *Enhancing productivity in agriculture-based economies*. Washington (DC): World Bank; 2020. p. 33–58.
12. Sen A. *Development as freedom*. New Delhi: Oxford University Press; 1999. p. 87–110.

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