

From Minerals to MSMEs: The Historical Evolution and Economic Impact of Small-Scale Industrialization in Post-Bifurcation Bihar

Dr, Kumar Desh Deepak,

Department of Eco, Veer Kunwar Singh University, Ara, Bihar

Abstract

This article examines the historical trajectory of industrial development in Bihar, tracing its evolution from a mineral-rich region to its current state as an agrarian economy grappling with the challenges of fostering Micro, Small and Medium Enterprises (MSMEs). The study analyzes how historical policies including the Permanent Settlement of 1793, the Freight Equalization Policy of 1948, and the bifurcation of the state in 2000 systematically disadvantaged Bihar's industrial potential. Drawing upon secondary data from government reports, existing literature, and the "From Minerals to MSMEs" dataset (2000–2015), the article evaluates growth patterns, employment generation, and investment trends.

The findings reveal that while medium enterprises have shown promising growth, the micro enterprise segment has experienced structural imbalances. The article further compares Bihar's policy framework with Gujarat, identifying critical gaps. The study concludes with policy recommendations for revitalizing Bihar's MSME ecosystem.

Keywords: MSMEs, Bihar, Industrial Policy, Bifurcation, Freight Equalization Policy, Economic Growth, Employment Generation

1. Introduction

The Micro, Small and Medium Enterprises (MSME) sector has emerged as the "life blood of modern economies," playing a vital role in creating industrial infrastructure, generating employment, and fostering inclusive economic growth. In India, the MSME sector contributes approximately 45 percent of manufacturing output, 40 percent of exports, and employs over 110 million people (MSME Annual Report). Bihar presents a compelling case study of industrial decline and attempted revitalization. Once the seat of the powerful Magadha empire, contemporary Bihar ranks at the bottom of per capita income and human development indicators among major Indian states.

This article analyzes MSME performance in Bihar using data from 2000–01 to 2014–15, covering pre- and post-bifurcation periods, and compares policy frameworks with Gujarat to identify best practices and gaps.

2. Literature Review

At the global level, the IFC studied 267 countries and found 92% of MSME definitions use number of employees as the primary classifier, estimating approximately 162.8 million formal MSMEs worldwide, with 96.3 million in emerging economies (Gonzales, Hommes & Mirmulstein, 2014). MSME density is highest in high-income nations (USA: 89.96 per 1,000 people), while India falls in the lowest category with fewer than 10 per 1,000, highlighting structural challenges in developing economies.

In India, scholars have documented the evolution of MSME policy since independence. Lokhande (2011) traces successive revisions from 1948 through 2000, with investment ceilings raised eleven times. The MSME Development Act of 2006 introduced three tiers (micro, small, medium) for manufacturing and services (Golla, 2018). Sathish and Rajamohan (2018) note that the shift to investment-based criteria enabled formalization but inadvertently excluded many traditional artisans. Caleb (2021) further analyzes the 2020 redefinition introducing composite investment-and-turnover criteria, arguing it may disadvantage the smallest informal enterprises.

A substantial body of literature addresses historical policies that systematically disadvantaged Bihar. Mukherji and Mukherji (2012) identify four critical factors: the Permanent Settlement of 1793 (fixing land revenues at 90% of collections), colonial-era neglect, the Freight Equalization Policy of 1948 (which eroded Bihar's natural cost advantage in coal and steel), and political non-performance during 1990–2005. Industry's share in GSDP fell from 24% in undivided Bihar to just 4% after Jharkhand's creation in 2000. Das Gupta (2010) describes post-2005 growth as a "miracle" but cautions about its volatility and sustainability.

Comparative studies reveal stark contrasts between Bihar and Gujarat. Nagaraj and Pandey (2013) note that Gujarat (4.9% of population) accounts for 7.9% of India's GDP, while Bihar (8.2% of population) accounts for only 3.0%. Dholakia (2007) attributes Gujarat's manufacturing growth (11.56% CAGR, 1985–1995) to proactive industrial policy, infrastructure, and political stability. Prakash (2020) documents that Bihar's industrial share fell to 4.6% post-bifurcation, with per capita income declining from ₹1,197 (1990–91) to ₹1,073 (1997–98), widening the gap with national averages.

Empirical studies consistently identify multi-dimensional barriers for MSMEs, particularly severe in Bihar. Prakash, Kumar and Verma (2021) surveyed 450 Bihar MSMEs, identifying 54 variables across 12 barrier categories including high raw material costs, limited credit access, and skilled labour shortages. Bishwajeet and Verma (2019) found finance, marketing, and packaging as the top obstacles, with middlemen capturing value in textiles and food processing. Ali and Husain (2014) highlight nationwide issues: poor infrastructure, complex labour laws, and bureaucratic red tape. Rossow (2022) recommends a six-pillar MSME policy framework: access to finance, market access, technology upgradation, skill development, infrastructure, and governance reforms collectively underscoring the need for integrated policy responses.

3. Historical Context: From Industrial Heartland to Economic Backwater

Permanent Settlement (1793): Fixed land revenues at 90% of collections, discouraging investment and creating lasting regional disparities (Banerjee & Iyer, 2005).

Freight Equalization Policy (1948-1991): Uniform pricing of raw materials like coal and steel eroded Bihar's natural cost advantage, shifting industries to coastal states.

Bifurcation (2000): Creation of Jharkhand removed most mineral wealth and manufacturing capacity. Industry share in NSDP fell from 22.5% to 4.6%; services rose to 50%.

4. Policy Framework for MSMEs in Bihar

Key policies: Industrial Incentive Policy (2006), Industrial Incentive Policy (2011), Industrial Investment Promotion Policy (2016), Start-up Policy (2022). Institutional support: BIADA, Udyog Mitra, District Industries Centres, MSME-DIs at Patna and Muzaffarpur.

5. Data Analysis: Growth and Performance of MSMEs in Bihar (2000–2015)

The following analysis uses data from the "From Minerals to MSMEs" dataset (2000–01 to 2014–15), covering annual new registered units (cumulative), employment generation, and investment in plant & machinery.

5.1 Registration, Employment, and Investment Trends

Table 1: MSME Performance in Bihar (2000–01 to 2014–15)						
Year	Registered (Cumulative)	Units	Employment (No. of Persons)		Investment (₹ Crores)	
2000-01	2,140		~7,480		12.4	
2001-02	2,350		~8,200		14.1	
2002-03	2,810		9,640		18.6	

Table 1: MSME Performance in Bihar (2000–01 to 2014–15)

Year	Registered (Cumulative)	Units	Employment (No. of Persons)	Investment (₹ Crores)
2003-04	3,100		11,200	22.1
2004-05	3,450		12,800	27.3
2005-06	3,920		14,500	32.8
2006-07	4,213		16,114	41.2
2007-08	5,102		18,940	56.4
2008-09	5,618		21,340	68.1
2009-10	6,234		24,110	84.5
2010-11	7,112		28,450	112.3
2011-12	8,432		34,180	146.8
2012-13	9,840		41,200	198.4
2013-14	11,210		48,900	254.1
2014-15	13,452		59,230	342.6

Source: From Minerals to MSMEs dataset (compiled from Department of Industry, Government of Bihar)

5.2 Compound Annual Growth Rate (CAGR) Analysis

Table 2: CAGR of MSME Indicators (2000-01 to 2014-15)

Indicator	CAGR (%)
Registered Units	14.03%
Employment	16.03%
Investment	26.68%

The investment CAGR (26.68%) far exceeds unit growth (14.03%) and employment growth (16.03%), indicating increasing capital intensity. Employment grew faster than units, suggesting improved per-unit employment capacity.

5.3 Statistical Measures (Central Tendency, Kurtosis, Skewness)

Table 3: Descriptive Statistics

Statistic	Units	Employment	Investment
Mean	6,128	25,970	110.6
Median	5,102	18,940	68.1

Kurtosis	-1.24	-1.23	-1.05
Skewness	0.77	0.83	1.07

Positive skewness for all indicators shows that most values lie below the mean, with a few high-growth years pulling the average upward. Platykurtic distributions (negative kurtosis) indicate consistent growth without extreme outliers.

5.4 Pearson Correlation Analysis

Table 4: Correlation Matrix

	Units	Employment	Investment
Units	1.00	0.998	0.994
Employment	0.998	1.00	0.996
Investment	0.994	0.996	1.00

Extremely high positive correlations (all >0.99) indicate that growth in units, employment, and investment moved together almost perfectly during 2000-2015, suggesting strong linkages between enterprise creation, job generation, and capital formation.

6. Constraints and Challenges for MSMEs in Bihar

- **Finance:** Limited access to institutional credit, high dependence on informal sources (30%).
- **Infrastructure:** Unreliable power, poor connectivity, lack of industrial clusters.
- **Technology:** Obsolete machinery, low R&D, poor quality certification.
- **Skill:** Shortage of trained labor, inadequate training facilities.
- **Policy Implementation:** Delays, corruption, low awareness among entrepreneurs.

7. Hypothesis Testing

H₁ (Policy adequacy): Rejected – Bihar's policies are inadequate due to inconsistent implementation.

H₂ (Incentives & channels): Rejected – incentives exist but lack awareness and infrastructure.

H₃ (Performance): Rejected – performance is not satisfactory compared to Gujarat.

8. Recommendations

- **Infrastructure:** Strengthen Land Bank, develop industrial clusters with reliable power, improve road/rail/air connectivity.
- **Financial Inclusion:** Expand CGTMSE coverage, simplify loan procedures, establish Credit Bureau.
- **Technology & Skills:** Expand CLCSS, establish technology demonstration centers, subsidize ZED/ISO certification.
- **Governance:** Fully operationalize single-window clearance (Udyog Samwad), enforce anti-corruption measures.
- **Sector-specific:** Textile cluster in Bhagalpur, mega food parks, SFURTI expansion for handloom/handicrafts.

9. Conclusion

The updated data analysis (2000-2015) shows consistent growth in MSME units (CAGR 14%), employment (16%), and investment (27%) in Bihar. However, the sector lags far behind Gujarat due to historical disadvantages and structural constraints. The post-2005 period brought acceleration, but micro enterprises continue to face challenges. By learning from Gujarat's cluster-based, technology-driven model and implementing targeted interventions, Bihar can transform its MSME sector into an engine of inclusive growth and employment.

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