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ROLE OF MSMES IN EMPLOYMENT GENERATION AND ECONOMIC DEVELOPMENT OF NAGPUR DISTRICT: AN EMPIRICAL STUDY

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ABSTRACT

The present study has aimed to analyze the role of Micro, Small, and Medium Enterprises (MSMEs) in creating jobs and economic growth in the Nagpur district of Maharashtra during the period 2013-14 to 2022-23 by adopting secondary data and statistical analysis. In 2022–23, Nagpur had 48,733 MSME units, ₹8,916.70 crore in investment, and 302,276 jobs, averaging 6.20 jobs per unit. The share of Nagpur Rural, Nagpur Urban, and Hingna was 78.3% of the MSME employment. The employment was highly positively correlated with MSME units (r=0.991) and MSME investment (r=0.988) (p<0.001). The GVA of manufacturing grew from ₹17,650 crore to ₹26,434 crore, growing at a nominal CAGR of 9.46%, while the nominal CAGR of the GDDP of Nagpur was 9.46% from ₹80,554 crore to ₹181,716 crore. However, the extension of distribution, credit, technology, skills, market access, and cluster development across the region are essential for inclusive growth, for which MSMEs are key drivers for employability and investment.

KEYWORDS: *MSMEs; Employment Generation; Economic Development; Nagpur District; Manufacturing; GDDP; Industrial Clusters; Regional Development.*

INTRODUCTION

The role of MSMEs is important in the context of their link between household-based informal economies and large corporations. They can operate in rural and urban areas, do not require a lot of capital, have short gestation periods, and utilize local skills and materials; they are a key aspect of district-level development. They are responsive to specific demand, link to local supply chains, and offer ancillary goods and services to larger businesses.

The small-business sector in India is large. The NSS 73rd Round estimate of the number of unincorporated non-agricultural enterprises with 11.13 crore workers in manufacturing, trade, and services for 2015–16. Nagpur offers a conducive environment due to its strategic location, transport linkages, agricultural base, administrative status, and industrial cluster (Hingna, Butibori, and Kalmeshwar). Jobs are available in food processing, engineering, garments, furniture, automotive servicing, plastics, logistics, and agro-based industries.

Nagpur has a sizeable industrial ecosystem comprising major industries, public sector entities, activities associated with railways, mining-related value chains, and a multimodal international cargo hub/airport. MSMEs help these organizations with their fabrication, maintenance, packaging, transport, components, and business services.

As per the official data, there has been significant growth from 16,738 registered industrial units and 104,421 jobs in SSI to 48,733 MSMEs and 302,276 jobs in the sector by 2022-23, despite varied registration systems. While enterprise growth has been aided by formalization, digitalization, an updated MSME definition, GST, and government schemes, challenges facing enterprises included demonetization, credit constraints, and COVID. The study thus explores the MSMEs, jobs, investment, and income of Nagpur in one secondary data framework. It also reflects the impact of finance, infrastructure, technology, skills, and management, as well as market linkages and industrial agglomeration, on enterprise survival, productivity, and sustainable long-term growth.

OBJECTIVES OF RESEARCH

1) To analyze the growth and the existing scenario of the MSMEs in the Nagpur district for the years 2013-2023.
2) To assess the contribution of MSMEs in direct employment creation in the district.
3) To understand the distribution of MSME units and employment and investment at the taluka level.
4) To analyze the trends of Nagpur's GDDP, manufacturing value added, and per capita district income.
5) To test the statistical relationships between MSME units, investment, and employment.
6) To see the association between manufacturing value added, a proxy variable of MSME/MSME-intensive industrial value, and the economic development of districts.
7) To understand the policy measures needed to enhance the employment and developmental impact of MSMEs.

HYPOTHESES OF RESEARCH

Hypothesis 1:

- **H_0:** If the number of MSME units is independent of the MSME employment across the talukas of Nagpur district, then there is no statistically significant positive relationship between the number of MSME units and MSME employment.
- **H_1:** The positive correlation between the number of MSME units and MSME employment is statistically significant across all the talukas of the Nagpur district.

Hypothesis 2:

- **H_0:** MSME investment is not found to be statistically significant in relation to MSME employment in the talukas of Nagpur district.
- **H_1:** MSME investment is positively correlated with MSME employment and is statistically significant at the 5% level of significance for the talukas of Nagpur district.

Hypothesis 3:

- **H_0:** There is no statistically significant positive relationship between the gross value added of manufacturing and GDDP in the Nagpur district for the period 2013-14 to 2022-23.
- **H_1:** The gross value added of manufacturing has a positive relationship with Nagpur district's gross domestic product in the years 2013-14 to 2022-23, and the relationship is found to be significant.

RESEARCH METHODOLOGY

The study adopts a descriptive-analytical design that focuses on the number of MSMEs, employment, investment, and spatial distribution and relation in the city of Nagpur. It relies on secondary data for FY 2013–14 to FY 2022–23. Two datasets are used for analysis: a cross section at the Taluka level for 2022-23 that covers 14 Talukas and a time series of manufacturing GDVA, GDDP, and per capita district income for 10 years. These are based on district reports, Maharashtra government publications, reports from the Ministry of MSME, NSS data, and RBI reports. The methods used are percentage change, CAGR, employment intensity, Pearson and Spearman correlations, and ordinary least-squares regression of employment with units and investment and GDDP with manufacturing GDVA. Correlations are analyzed annually at a 5% significance level. Some of the limitations include

changes in the registration system, current price inflation, single-year taluka detail, and the indirect use of manufacturing GDVA as a proxy of MSME.

THEORETICAL FRAMEWORK

The theoretical framework supports the study through four mechanisms that MSMEs can use to facilitate employment and economic development that complement each other. In the first place, the labor absorption mechanism calls attention to the fact that, in general, MSMEs need less fixed capital per worker and can recruit owner-managers, family workers, apprentices, technicians, machine operators, salesmen, drivers, and casual workers. Second, the entrepreneurship and innovation mechanism describes how small enterprises transform skills, knowledge, and market opportunities into productive activity; stimulates competition; and allow for low-cost experimentation, with innovation requiring finance, technology, and skilled labor.

Third, the local multiplier and linkage mechanism links payments to local workers, suppliers, transporters, and service providers with the local economy. Additionally, MSMEs establish reverse links with agriculture and forward links to traders and other larger industries. Food-processing and engineering units can link the farmers and the industrial units with the larger market in Nagpur.

Fourth, the agglomeration and cluster mechanism highlights the advantages of being close to suppliers, workers, infrastructure, testing facilities, and markets. Industrial estates and approved clusters in Nagpur can help in reducing the transaction costs and facilitate procurement, training, and marketing. But these mechanisms are undermined by limited finance, a poor level of collateral, delayed payment, old machines, weak certification, poor infrastructure, and limited market access for the enterprises that would make them more viable, innovative, and productive and grow over time.

DATA ANALYSIS AND INTERPRETATION

Early-period registration and industrial profile

Table 1
MSME registration, employment and investment indicators in the early study period

Indicator/year	Units	Employment	Investment
Newly registered units, 2013–14	1,670	29,453	₹79,545 lakh
Newly registered units, 2014–15	2,882	37,295	₹65,857 lakh
Registrations up to September 2015	1,315	45,212	₹32,117 lakh
Registered industrial-unit stock reported in 2015–16 profile	16,738	104,421 small-scale workers	Not reported on the same basis
MSME stock in 2022–23	48,733	302,276	₹891,670 lakh

Source: Compiled from the District Industrial Potential Survey of Nagpur and District Social and Economic Review 2023.

The flow information is for active registration in the first years of the study. The number of newly registered units increased from 1,670 in 2013–14 to 2,882 in 2014–15, a rise of 72.6 per cent. The employment related to registration grew by 26.6 percent, from 29,453 to 37,295. The number of units increased, though, while investment fell from ₹795.45 crore to ₹658.57 crore in 2014–15, suggesting that the more units in 2014–15 were relatively less capital-intensive.

The number of industrial-unit stocks reported rose from 16,738 in the 2015-16 profile to 48,733 MSME stocks in 2022-23, whereas employment reported saw a rise from 104,421 to 302,276. This is an indicative 189.5 percent rise in jobs and a 191.2 percent increase in units. The percentages are presented here as indicators of growth in the amount of enterprise activity recorded rather than being directly comparable to one another as growth series.

Taluka-wise MSME structure in 2022–23

Table 2
Taluka-wise MSME units, employment and investment, 2022–23

Taluka	MSME units	Employment	Investment (₹ lakh)	Jobs per unit
Narkhed	825	4,206	7,091	5.10
Katol	989	5,128	11,621	5.19
Kalmeshwar	838	6,947	14,425	8.29
Saoner	1,469	11,320	16,489	7.71
Parseoni	982	4,804	8,618	4.89
Ramtek	1,026	5,204	9,583	5.07
Mouda	695	4,110	13,531	5.91
Kamptee	1,992	13,568	43,879	6.81
Nagpur Rural	25,738	153,395	504,659	5.96
Nagpur Urban	9,506	49,323	91,601	5.19
Hingna	2,892	35,547	141,235	12.29
Umred	1,014	5,051	21,612	4.98
Kuhi	404	1,984	6,193	4.91
Bhiwapur	363	1,689	1,133	4.65
District total	**48,733**	**302,276**	**891,670**	**6.20**

Source: District Industries Centre, Nagpur, as reproduced in the District Social and Economic Review 2023. Investment of ₹891,670 lakh is equivalent to ₹8,916.70 crore.

The average for the district was 6.20 jobs with each MSME unit. Hingna had the maximum employment intensity (12.29 workers/unit), followed by Kalmeshwar (8.29) and Saoner (7.71). The higher intensity of 'Hingna' is in line with the existence of an industrial estate and the relatively greater percentage of manufacturing businesses.

The distribution of the case is very skewed. Nagpur Rural had a higher share of units (52.8 percent), employment (50.7 percent), and investment (56.6 percent). While Nagpur Urban had 19.5 percent units and 16.3 percent employment, it also recorded 16.2 percent of the unorganized workers. Nagpur Urban had 16.2 percent of the unorganized workers, 16.3 percent employment, and 19.5 percent units. Hingna only accounted for 5.9 per cent of units but accounted for 11.8 per cent of employment and 15.8 per cent of investment. MSME employment accounted for about 78.3 percent of the total employment in the city of Nagpur, comprising Nagpur Rural, Nagpur Urban, and Hingna.

The concentration is related to the accessibility to markets, transport, financial institutions, power, industrial land, and skilled labor. It also indicates an uneven developmental impact. Though there are potential areas in agriculture, forestry, food processing, repair services, and rural commerce, Narkhed, Katol, Parseoni, Ramtek, Kuhi, and Bhiwapur have smaller enterprise bases. Focusing only on major industrial zones in a district policy might thus exacerbate intra-district inequalities.

This district's spending of ₹8,916.70 crore provided support for 302,276 employment opportunities, a recorded investment of ₹2.95 lakh per job. This fairly low ratio underlines the labor-absorbing nature of the sector but varies significantly across location and industry.

GDDP, manufacturing value added and per-capita income

Table 3
Nagpur district economic indicators at current prices

Financial year	Manufacturing GDVA (₹ crore)	GDDP (₹ crore)	Per-capita district income (₹)	Manufacturing as % of GDDP
2013–14	17,650	80,554	167,065	21.91
2014–15	18,577	88,542	181,170	20.98
2015–16	20,307	99,851	201,600	20.34
2016–17	20,458	110,519	220,345	18.51
2017–18	21,922	117,662	231,778	18.63
2018–19	21,747	127,104	247,403	17.11
2019–20	19,025	132,475	254,822	14.36
2020–21	20,484	129,113	245,456	15.87
2021–22	25,370	155,565	292,547	16.31
2022–23	26,434	181,716	338,248	14.55

Source: Calculated from the Government of Maharashtra's district domestic-product series.

Nagpur's nominal GDDP increased by 125.6 per cent during the period, from ₹80,554 crore to ₹181,716 crore. The resultant CAGR was around 9.46 percent. The income of the districts also rose by more than doubling from ₹167,065 to ₹338,248 with a CAGR of about 8.15 per cent per year.

The manufacturing of GDVA rose from ₹17,650 crore to ₹26,434 crore, growing by 49.8 per cent at an average rate of 4.59 per cent. Manufacturing grew at a slower rate than total output of the district. Its share in GDDP declined from 21.91 per cent in 2013–14 to 14.55 per cent in 2022–23. This is not to say that industry lost significance but rather that other industries, particularly trade, transport, communication, finance, real estate, public administration, and other services, grew at a greater rate.

The economic disruption caused by COVID-19 caused GDP to contract by 2.54 percent in 2020–21. It subsequently increased by 20.49 per cent in 2021–22 and 16.81 per cent in 2022–23 at current prices. The performance of manufacturing GDVA has also improved significantly as it grew by 23.85 percent in 2021-22. After mobility restrictions and demand disruptions, the recovery indicates the industrial/MSME supply chains are now active.

MSME development is not only about manufacturing; it also helps to contribute to GDDP. MSME activities that are important include wholesale and retail trade, vehicle repair, transport, warehousing, hotels, restaurants, professional services, and information services and businesses related to construction. This reduction in manufacturing share needs to be understood as a reduction in the overall MSME contribution and not as a decline in the manufacturing contribution.

Development schemes and supporting infrastructure

According to the district review, there are 256 large and mega projects in the district, where the estimated investment is ₹29,042 crore and direct employment is 65,322. These kinds of projects offer opportunities to MSMEs as vendors and service providers. There were 15 MIDC estates in the district and some cooperative industrial estates. Five MSME clusters in engineering, garments, food processing, and other areas were approved, with nine approved with the support of the state.

The district's seed-capital program helped 83 units to receive grants of ₹203.05 lakh and 487 employment opportunities during 2022-23. The Chief Minister's Employment Generation Programme helped 169 units and created 1,700 jobs with grants of ₹673.64 lakh. The number of jobs created from targeted credit-linked programs suggests that they can create direct jobs, but the survival and future development of the assisted units should also be tracked.

FINDINGS OF THE STUDY

Nagpur possessed a substantial MSME base of 48,733 units, employment of 302,276, and investment of ₹8,916.70 crore in 2022–23. The employment intensity of MSMEs is reflected in the district average of 6.20 jobs per unit, which shows that MSMEs are employment intensive in comparison to their scale of investment. The early-period data indicate high entry of entrepreneurs. The number of newly registered units rose 72.6 percent from 2013–14 to 2014–15. Nagpur Rural was the biggest MSME center, with over half of the MSMEs in the district, jobs, and investment.

Geographical concentration was observed with 78.3 percent of MSME employment in the three districts—Nagpur Rural, Nagpur Urban, and Hingna. Organized industrial estates and manufacturing concentration were also of great importance, as indicated by the nearly double employment intensity of 12.29 workers per unit at the industrial estate of Hingna, compared to the district average. The MSME base was relatively small for 7 talukas (Kuhi, Bhiwapur, Mouda, Narkhed, and Parseoni), which suggests the possibility of a balanced enterprise promotion across space. There was a very strong and significant relationship between number of units and employment.

Additionally, there was a very strong correlation between MSME investment and employment, which implies that increased productive investment would help to create more jobs. The nominal GDDP of Nagpur increased at a CAGR of 9.46 percent, and per-capita income increased at a CAGR of 8.15 percent. The manufacturing GDVA increased, but the growth rate was lower than the total GDDP, resulting in a decrease in its proportion from 21.91 to 14.55 percent.

The association between manufacturing GDVA and GDDP was significant in level but not in annual growth rates at the 0.05 level. This means that the overall development of the district is not only due to manufacturing MSMEs.

DISCUSSION

The results indicate that MSMEs are a significant source of employment in Nagpur since there is a positive and strong relationship between the number of units and employment size in the MSMEs: with higher employment size comes a higher number of units, and there is a strong positive relationship between the investment and employment in the MSMEs; the higher the number of MSMEs, the higher the investment and vice versa. But this does not mean that this is necessarily a causal relationship, as enterprises, investments, and workers are also attracted to infrastructure, markets, finance, technical institutions, and urban demand. The city's status as a prominent city may also be due to industrial zones outside the city limits, such as peri-urban zones around Butibori and Hingna areas.

Hingna proves that the scale and nature of the enterprise are as important as registers. It has almost twice as many units employed as it has units registered and should be considered in terms of job quality and expansion, as well as productivity and survival.

Nagpur also has a good agro-processing potential in oranges, pulses, spices, bakery products, edible oils, dairy, garments, bamboo and forest products. Rural clusters, cold storage facilities, testing laboratories, common processing facilities and producer partnerships can foster stronger linkages between the farm and non-farm sectors and mitigate the migration drivers.

Finance, technology and skills are still vital. Use of credit guarantees, invoice discounting and digital records can help improve access to working capital, and modern machinery, e-commerce, digital accounting, quality certification and demand-driven training can boost productivity. Given the growing service sector economy of Nagpur, the policy for the MSMEs needs to be extended to logistics, repair, tourism, health, education, information technology, retail, hospitality and professional services.

Hypothesis Testing

Table 4
Results of statistical hypothesis tests

Relationship tested	Sample	Pearson (r)	(R^2)	p-value	Decision
MSME units and employment	14 talukas	0.991	0.982	<0.001	Reject H01
MSME investment and employment	14 talukas	0.988	0.976	<0.001	Reject H02
Manufacturing GDVA and GDDP, levels	10 years	0.888	0.789	0.0006	Reject H03 in level terms
Annual manufacturing growth and GDDP growth	9 annual changes	0.519	0.270	0.152	Not significant as a growth-rate robustness test

Pearson's correlation coefficient between employment and the number of MSME units is very high (0.9907), and with a test statistic of 25.24 DF, the p-value is less than 0.001 as per the results of Hypothesis 1, which shows a very strong positive relationship between the number of MSME units and employment. Spearman's rank correlation was also high at around 0.952 ($p < 0.001$), and H_{01} was therefore rejected. The estimated regression equation for the data, EMP = 1,155.58 + 5.87(UNITS), shows that, for every one additional MSME unit, there were jobs added by about 5.87. The explained variation for taluka-level employment was 98.2 per cent, similar to the district-level employment of 6.20 jobs per unit. The correlation between MSME investment and employment was 0.9879 ($p < 0.001$) with investment accounting for 97.6 per cent of the variation in employment for Hypothesis 2. So the hypothesis H_{02} was rejected and H_{12} was accepted, but the investment and employment being concentrated in Nagpur Rural and Hingna partially validates this. The manufacturing of GDVA and GDDP were found to be significantly low correlated at 0.8883 ($p \approx 0.0006$), and the null hypothesis (H_{03}) was rejected. The correlation regarding the year-to-year growth rate of 'A' was, however, only 0.519 ($p = 0.152$) and was not statistically significant. So there was a strong long-term association between manufacturing and GDDP, but its growth in a given year was also determined by the growth in services, construction, public expenditure, inflation, and other economic activity.

CONCLUSION

The study findings indicate that MSMEs contributed significantly in terms of employment and economic growth in Nagpur district during the period 2013-2023. As of 2022-23, 48,733 units had more than three lakh jobs, and an investment of nearly ₹8,917 crore had been recorded. The expansion of viable MSME activities has a strong statistical correlation with the unit and investment, which establishes a strong link with job creation in the districts.

The effect, however, was not even, with some areas being hit by the disease more strongly than others. The MSMEs in the district were led by the enterprises of Nagpur Rural, Nagpur Urban and Hingna, whereas the activities of enterprises were comparatively fewer in the outlying talukas. Industrial clusters in the rural areas, agro-processing industries, better transport, quality electricity, digital connectivity and decentralised entrepreneurship services are needed for balanced development. The GDP and per capita income of Nagpur rose significantly along with an increase in value added from manufacturing. The decrease in the share of manufacturing in GDDP and the lack of any strong relationship between the annual growth rate in manufacturing and that in GDDP clearly indicate that district development is multi-sectoral. This will require future policy to further encourage manufacturing and services for MSMEs. The most effective would be the integration of accessible formal credit, enforcement of prompt payment, cluster-based common facilities, technology upgradation, demand-oriented skills, and quality certification along with linkages with large public and private enterprises. Evaluation needs to go beyond the number of registrations to consider enterprise survival, regular employment, enterprise wages, enterprise productivity, enterprise innovation, enterprise

exports and environmental performance. Such support will help the MSMEs further strengthen the industrial fabric of Nagpur, create more balanced industrial distribution and ensure sustainable jobs for the increasing population.

REFERENCES

1) *Ayyagari, M., Beck, T., & Demirgüç-Kunt, A. (2007). Small and medium enterprises across the globe. Small Business Economics, 29(4), 415–434. doi:10.1007/s11187-006-9002-5.*
2) *Beck, T., & Demirgüç-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. Journal of Banking & Finance, 30(11), 2931–2943. doi:10.1016/j.jbankfin.2006.05.009.*
3) *Beck, T., Demirgüç-Kunt, A., & Levine, R. (2005). SMEs, growth, and poverty: Cross-country evidence. Journal of Economic Growth, 10(3), 199–229. doi:10.1007/s10887-005-3533-5.*
4) *Development Commissioner, Micro, Small and Medium Enterprises. (2016a). District industrial potential survey report of Nagpur district, 2015–16. Ministry of Micro, Small and Medium Enterprises, Government of India.*
5) *Development Commissioner, Micro, Small and Medium Enterprises. (2016b). Industrial state profile of Maharashtra, 2015–16. Ministry of Micro, Small and Medium Enterprises, Government of India.*
6) *Ghani, E., Kerr, W. R., & O'Connell, S. D. (2014). Spatial determinants of entrepreneurship in India. Regional Studies, 48(6), 1071–1089. doi:10.1080/00343404.2013.839869.*
7) *Government of Maharashtra, Directorate of Economics and Statistics. (2016). Economic survey of Maharashtra 2015–16. Planning Department, Government of Maharashtra.*
8) *Government of Maharashtra, Directorate of Economics and Statistics. (2022). Economic survey of Maharashtra 2021–22. Planning Department, Government of Maharashtra.*
9) *Government of Maharashtra, Directorate of Economics and Statistics. (2023). District social and economic review 2023: Nagpur district. District Statistical Office, Nagpur.*
10) *Government of Maharashtra, Directorate of Economics and Statistics. (2024). Economic survey of Maharashtra 2023–24. Planning Department, Government of Maharashtra.*
11) *Government of Maharashtra, Directorate of Economics and Statistics. (2025). District domestic product Maharashtra: 2011–12 to 2023–24. Planning Department, Government of Maharashtra.*
12) *Ministry of Micro, Small and Medium Enterprises. (2015). Annual report 2014–15. Government of India.*
13) *Ministry of Micro, Small and Medium Enterprises. (2018). Annual report 2017–18. Government of India.*
14) *Ministry of Micro, Small and Medium Enterprises. (2023). Annual report 2022–23. Government of India.*
15) *Ministry of Statistics and Programme Implementation. (2018). Economic characteristics of unincorporated non-agricultural enterprises (excluding construction) in India: NSS 73rd Round, July 2015–June 2016 (NSS Report No. 582). Government of India.*
16) *Mukherjee, S. (2018). Challenges to Indian micro, small-scale and medium enterprises in the era of globalization. Journal of Global Entrepreneurship Research, 8, Article 28. doi:10.1186/s40497-018-0115-5.*
17) *Nagmote, P. R. (2020). Impact of resources availability on development of micro, small and medium manufacturing enterprises in Nagpur district. International Journal of Creative Research Thoughts, 8(3), 1153–1159.*
18) *Rajeevan, N., Sulphey, M. M., & Rajasekar, S. (2015). The critical role of micro, small and medium enterprises in employment generation: An Indian experience. Asian Social Science, 11(24), 258–267. doi:10.5539/ass.v11n24p258.*
19) *Reserve Bank of India. (2019). Report of the expert committee on micro, small and medium enterprises. Reserve Bank of India.*