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Development and Stability of MSMEs in Uttar Pradesh: A District Wise Analysis

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Abstract:
This study examines the district-wise development and stability of MSMEs across Uttar Pradesh, The analysis is based on secondary data collected at five different points in time, allowing for a comparative understanding of industrial progress and lag across districts. The study evaluates four key parameters: industrial concentration, productivity, employability, and infrastructure and investment. These indicators help capture both the scale and quality of industrial activities within each district. By analyzing these factors, the paper seeks to identify districts imbalances and provide insights for policy formulation aimed at achieving more balanced and inclusive industrial growth. The paper is organized into five main sections: introduction, literature review, objectives, methodology, and conclusion, offering a comprehensive approach to understanding industrial disparity in the state.

Keywords: Industrial Development, Regional Disparity, Uttar Pradesh, Industrial Concentration, Productivity, Employability, Infrastructure and Investment

Introduction:

Uttar Pradesh (UP), the most populous state in India, exemplifies this complexity, offering a mixed landscape of industrial development that highlights stark regional contrasts. Despite being a critical player in the national economy, Uttar Pradesh grapples with severe disparities in industrialization that can impact the livelihoods, opportunities, and overall quality of life for millions of its residents. This thesis aims to explore the intricate dynamics of regional disparity in industrial development in Uttar Pradesh, focusing specifically on the factors that not only contribute to but also perpetuate these inequalities.

Industrial performance denotes the overall efficacy and operational excellence of an industry in terms of productivity, cost-effectiveness, innovation, and sustainability. It encapsulates an industry's ability to optimize resources, uphold quality standards, foster technological advancement, and contribute meaningfully to economic growth and global competitiveness.

Industrial development plays a pivotal role in the economic growth and structural transformation of any region. It drives employment generation, enhances productivity, encourages technological advancement, and contributes significantly to the gross domestic product (GDP). In a vast and diverse state like Uttar Pradesh (UP), industrial development is not uniform across its numerous districts, leading to marked

disparities in economic performance and social welfare. Understanding the extent and nature of these disparities is crucial for formulating effective regional development policies and ensuring balanced economic growth.

Several factors contribute to industrial disparity within UP. These include geographical advantages such as proximity to raw materials and markets, availability of skilled labor, infrastructure development, government policies, and historical economic patterns. For instance, districts in western UP, closer to the national capital region, tend to attract more industries due to better connectivity and infrastructure, whereas many eastern and Bundelkhand districts lag behind.

The socio-economic factors present in different districts also crucially affect industrial development. Educational attainment, labor skill availability, gender dynamics, and the entrepreneurial climate all play vital roles in determining how effectively a region can leverage its resources for industrial success.

Industrial disparity refers to the uneven distribution and growth of industrial activities across different geographical regions. In the context of Uttar Pradesh, it implies significant variations in industrial concentration, productivity, employment, and investment among its 75 districts. Such disparities result in economic imbalances that affect living standards, income distribution, and social development. Districts with higher industrial activity often benefit from better infrastructure, higher income levels, and more employment opportunities, while districts with limited industrial presence may experience persistent poverty, underemployment, and outmigration.

Review of Literature:

Tarver and Spencer (2016) emphasize Structural Change Theory, which views economic growth as driven by shifts between sectors. They stress that regions must manage these transitions to prevent stagnation. In Uttar Pradesh, where agriculture is dominant, understanding how industry can grow from this base is key to achieving balanced regional development.

The literature shows that socio-economic factors like education, skills, and labor markets play a key role in industrial growth. Reddy and Singh (2017) suggest that areas with better education and vocational training are more suited for industrialization due to a more skilled workforce.

Chadha and Sharma (2018) emphasize that infrastructure—such as transport, electricity, and technology are keys to industrial growth. However, they argue that infrastructure alone cannot drive development without supportive policies that consider local socio-economic factors and governance.

Government policies to boost industrial growth have been widely studied. Majumdar (2019) examines Uttar Pradesh's industrial policies and finds that while programs like the "Uttar Pradesh Industrial Investment Policy" have helped some districts, their success has been inconsistent due to differences in local governance and involvement of stakeholders.

Sinha (2020) emphasizes that policies work best when they align with regional needs and involve local communities. This reveals a gap in current research, which lacks comprehensive studies assessing policy effectiveness from the viewpoints of different stakeholders in industrial development.

Kumar et al. (2021) highlight the role of social capital and networks in promoting industrial growth. They find that strong community ties and local business connections foster collaboration and innovation, supporting long-term development. However, further research is needed to measure these effects specifically in Uttar Pradesh.

An emerging focus is on incorporating sustainable practices in industrial growth. Patel and Gupta (2022) explore the challenges and opportunities for green technology adoption in Uttar Pradesh's industries.

They note that despite increased awareness of sustainability, many industries still prioritize short-term profits over long-term environmental concerns, revealing a gap in eco-friendly industrialization discussions.

Samidh Pal (2023) examines inter-regional and intra-industry disparities in selected Indian manufacturing sectors and states. Using the Output-Capital Ratio, Capital-Labor Ratio, and Output-Labor Ratio, the research assesses differences in labor and capital efficiency and capital intensity. It also compares per capita income disparities across six major industrial states. The findings show that unequal distribution of skilled labor and advanced technology leads to capacity underutilization. To reduce these disparities, the paper recommends policies promoting labor training and technology adoption across all regions, aiming to lessen regional inequality and boost economic growth nationwide. On the basis above discussion, it is relevant to study the development and stability of MSMEs in Uttar Pradesh.

Objective of the study:

- To examine the district wise development of MSMEs and it`sstability.
- To identify top five and bottom five districts in Uttar Pradesh on the basis of industrial development indicators.
- To suggest district-specific strategies for balanced industrial development of Uttar Pradesh.

Data source and Methodology of the study:

Area of the Study: The study considers districts wise industrial performance of Uttar Pradesh on the basis of eight indicators. In this regard- Saharanpur, Muzaffarnagar, Shamli, Bijnor, Moradabad, Sambhal, Rampur, Amroha, Meerut, Baghpat, Ghaziabad, Hapur, G.B.Nagar, Bulandshahr, Aligarh, Hathras, Mathura, Agra, Firozabad, Etah, Kasganj, Mainpuri, Badaun, Bareilly, Pilibhit, Shahjahanpur, Farrukhabad, Kannauj, Etawah, Auraiya, Kheri, Sitapur, Hardoi, Unnao, Lucknow, Rae Bareli, Kanpur Dehat, Kanpur Nagar, Fatehpur, Barabanki, Jalaun, Jhansi, Lalitpur, Hamirpur, Mahoba, Banda, Chitrakoot, Pratapgarh, Kaushambi, Allahabad, Faizabad, Ambedkar Nagar, Sultanpur, Amethi, Bahraich, Shrawasti, Balrampur, Gonda, Siddharth Nagar, Basti, Sant Kabir Nagar, Mahrajganj, Gorakhpur, Kushinagar, Deoria, Azamgarh, Mau, Ballia, Jaunpur, Ghazipur, Chandauli, Varanasi, Sant Ravidas Nagar, Mirzapur and Sonbhadra.

Data Source: This study is mainly an Analytical and Descriptive in nature. The study is based upon the secondary data. Data has been collected from various sources i.e. District wise development indicator

Points of Time and Periods of Time: The study seeks to compare regional variation at the five points of time for all duration 2000-01 to 2023-24 for all taken variables.

Parameter and Indicators: In order to find the industrial performance in various districts of Uttar Pradesh, four parameters and eight indicators have been taken. These indicators are as follows:

Parameter	Indicators
Industrial Concentration	No. of small-scale industries per lakh population
	No. of industrial area per lakh population
Industrial production	Per capita gross value of industrial productionin (Rs.
	Net value added per worker in register working factory(‘000Rs.)

Industrial Employment	No.of employee in registered working factory per lakh of population
	Average worker per registered working factory
Industrial Infrastructure	Per Capita Electricity Consumption (K.W.H.)
	Total length of pucca road per lakh population

Analysis and Discussion of the study:

The analysis of industrial development of economic regions of Uttar Pradesh is as following:

Table no- 1: No. of small-scale industries per lakh population

Top 5 Districts									
2000-01		2011-12		2019-20		2022-23		2023-24	
District	Value	District	Value	District	Value	District	Value	District	Value
Meerut	46.39	G.B.Nagar	44.71	G.B.Nagar	515.82	G.B.Nagar	1314.74	G.B.Nagar	1738.82
Ghaziabad	40.87	Meerut	39.20	Ghaziabad	255.13	Lucknow	694.95	Ghaziabad	908.87
Lalitpur	36.93	Lalitpur	33.39	Lucknow	228.02	Ghaziabad	647.60	Lucknow	887.55
Pilibhit	33.19	Ghaziabad	29.26	Agra	220.63	Kanpur Nagar	557.43	Varanasi	879.63
Muzaffarnagar	32.17	Pilibhit	28.58	Kanpur Nagar	178.71	Meerut	556.78	Meerut	861.87
Bottom 5 Districts									
2000-01		2011-12		2019-20		2022-23		2023-24	
Balrampur	3.29	Balrampur	3.84	Lalitpur	4.74	Bahraich	92.81	Balrampur	165.51
SantKabir Nagar	3.54	SantKabir Nagar	4.02	Balrampur	11.62	Balrampur	101.14	Bahraich	167.23
Kushinagar	4.16	Kushinagar	4.07	Banda	14.51	Badaun	117.12	Kheri	190.66
Shrawasti	5.16	Shrawasti	5.51	Kheri	14.69	Shrawasti	120.63	Sitapur	198.21
Azamgarh	5.62	Siddharth Nagar	7.88	Bahraich	18.69	Sitapur	130.51	Shrawasti	209.26

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 1 shows a significant growth in small-scale industries per lakh population across districts over the years. G.B. Nagar consistently led among the top five districts from 2011-12 onwards, showing remarkable industrial expansion, followed by Ghaziabad and Meerut. Lucknow and Kanpur Nagar also

emerged as strong performers in recent years. On the other hand, districts like Balrampur, Shrawasti, Bahraich, and SantKabir Nagar consistently remained in the bottom five, though they have shown gradual improvement over time. The gap between top and bottom districts widened considerably, reflecting regional disparities in industrial development.

Table no- 2:No. of industrial area per lakh population

Top 5 Districts									
2000-01		2011-12		2019-20		2022-23		2023-24	
District	Value	District	Value	District	Value	District	Value	District	Value
G.B.Nagar	0.42	G.B.Nagar	0.36	Amethi	0.69	Amethi	0.71	Amethi	0.89
Ghaziabad	0.4	Rae Bareli	0.32	G.B.Nagar	0.48	G.B.Nagar	0.45	Ghaziabad	0.45
Banda	0.38	Mathura	0.32	Rae Bareli	0.29	Rae Bareli	0.27	G.B.Nagar	0.41
Sultanpur	0.38	Ghaziabad	0.28	Kanpur Nagar	0.27	Kanpur Nagar	0.27	Mathura	0.29
Rae Bareli	0.38	Kanpur Dehat	0.21	Ghaziabad	0.26	Ghaziabad	0.24	Kanpur Dehat	0.2
Bottom 5 Districts									
01/01/2000		2011-12		2019-20		2022-23		2023-24	
Allahabad	0.02	Allahabad	0.02	Kheri	0.02	Kheri	0.02	Jaunpur	0.02
Lalitpur	0.03	Bareilly	0.02	Gorakhpur	0.02	Gorakhpur	0.02	Kheri	0.02
Jalaun	0.03	Muzaffarnagar	0.02	Muzaffarnagar	0.03	Saharanpur	0.02	Gorakhpur	0.02
Aligarh	0.03	Hardoi	0.02	Deoria	0.03	Muzaffarnagar	0.03	Saharanpur	0.02
Bareilly	0.03	Kheri	0.02	Saharanpur	0.03	Deoria	0.03	Badaun	0.02

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 2 indicates that Amethi has emerged as the leading district in terms of industrial areas per lakh population in recent years, overtaking G.B. Nagar, which had been dominant in earlier years. Rae Bareli, Ghaziabad, and Kanpur Nagar also maintained a consistent presence among the top performers. Meanwhile, districts like Kheri, Gorakhpur, Muzaffarnagar, and Saharanpur remained at the bottom, showing little to no growth over the years. The overall trend suggests slow expansion in industrial areas across most districts, with a few exceptions showing steady progress.

Table no- 3: Per capita gross value of industrial production in (Rs.)

Top 5 Districts							
2000-01		2011-12		2019-20		2020-21	
Districts	Value	Districts	Value	Districts	Value	Districts	Value
G.B.Nagar	118162.41	G.B.Nagar	337425.83	G.B.Nagar	712340.39	G.B.Nagar	719567.14
Ghaziabad	27082.04	Mathura	150277.99	Mathura	145093.96	Mathura	106899.75
Sonbhadra	12261.03	Ghaziabad	62208.02	Ghaziabad	76643.38	Kanpur Dehat	63077.52
Kanpur Dehat	8713.28	Muzaffarnagar	29433.55	Kanpur Dehat	68967.72	Ghaziabad	59376.88
Kanpur Nagar	8316.84	Kanpur Dehat	28787.07	Hapur	53839.58	Hapur	55762.46
Bottom 5 Districts							
2000-01		2011-12		2019-20		2020-21	
Chitrakoot	9.9	Azamgarh	11.82	Azamgarh	7.29	Pratapgarh	9.86
Shrawasti	19.37	Pratapgarh	15.12	Ballia	8.54	Ballia	17.06
Pratapgarh	22.97	Lalitpur	41.37	Pratapgarh	9.61	Banda	87.03
Banda	23.72	Ballia	52.65	Banda	14.37	Kaushambi	97.33
Mahoba	47.13	Mahoba	215.71	Kaushambi	201.58	Azamgarh	178.6

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 3 highlights G.B. Nagar as the clear leader in per capita gross value of industrial production across all years, showing strong and consistent industrial output. Mathura and Ghaziabad also maintained high rankings, although Mathura saw a decline in recent years. Kanpur Dehat showed notable improvement, entering the top ranks later on. In contrast, districts like Azamgarh, Pratapgarh, Ballia, and Banda consistently remained at the bottom, reflecting low levels of industrial productivity. While some lower-ranked districts showed marginal improvement, the gap between top and bottom districts remains significant.

Table no- 4: Net value added per worker in register working factory ('000Rs.)

Top 5 Districts							
2000-01		2011-12		2019-20		2020-21	
Districts	Value	Districts	Value	Districts	Value	Districts	Value
Auraiya	6005.85	Sonbhadra	1254216.56	Lalitpur	13415.61	Lalitpur	14694.22
Kanpur	2012.74	Auraiya	814922.81	Bahraic	10589.98	Auraiya	5848.28

Dehat				h			
Jalaun	1817.59	Sultanpur	526369.1	Saharanpur	4974.21	Ambedkar Nagar	4679.27
Mirzapur	1583.63	Kanpur Dehat	169380.19	Rae Bareli	3554.73	Saharanpur	4616.78
Badaun	1321.74	Lucknow	160062.56	Bulandshahr	3379.74	Jalaun	3834.38
Bottom 5 Districts							
2000-01		2011-12		2019-20		2020-21	
Shrawasti	-68	Mahoba	1410.04	Mainpuri	-1278.44	Deoria	-395.09
Jhansi	17.41	Pilibhit	1759.97	Basti	-843.63	Azamgarh	-353.12
Bahraich	20.34	Etawah	1781.67	Mathura	-689.69	Basti	-295.7
Deoria	27.51	Pratapgarh	1893.56	Mau	-214.06	Mau	103.07
Mau	37.74	Gorakhpur	1946.44	Sultanpur	-151.8	Sultanpur	107.17

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 4 explains that significant fluctuations in net value added per worker across districts over time. Auraiya and Lalitpur stood out with the highest values in different years, indicating strong industrial productivity in registered factories. Other districts like Sonbhadra, Bahraich, and Saharanpur also made notable appearances among the top performers. In contrast, the bottom-ranking districts, including Shrawasti, Mau, Basti, and Deoria, frequently reported negative or very low values, highlighting inefficiencies or underperformance in their industrial sectors. The contrast suggests uneven industrial growth and productivity across regions

Table- 5:No.of employee in registered working factory per lakh population

Top 5 Districts							
2000-01		2011-12		2019-20		2020-21	
Districts	Value	Districts	Value	Districts	Value	Districts	Value
G.B.Nagar	4391.39	G.B.Nagar	12145.01	G.B.Nagar	14994.61	G.B.Nagar	14525.68
Ghaziabad	1098.97	Ghaziabad	1611.25	Ghaziabad	1668.58	Moradabad	1195.78
Sonbhadra	960.53	Amroha	1146.48	Moradabad	1202.99	Ghaziabad	1139.11
Bijnor	641.74	Kanpur Nagar	1062.68	Agra	1177.42	Kanpur Nagar	1035.79
Kanpur Nagar	572.71	Agra	900.79	Kanpur Nagar	1050.25	Amroha	994.24
Bottom 5 Districts							

2000-01		2011-12		2019-20		2020-21	
Shrawasti	1	Pratapgarh	4.77	Azamgarh	1.11	Banda	1.68
Chitrakoot	1.77	Azamgarh	6.06	Ballia	1.16	Ballia	1.75
Banda	2.08	Ballia	12.96	Banda	2.1	Pratapgarh	5.14
Pratapgarh	5.29	Banda	16.89	Pratapgarh	6.37	Azamgarh	11.54
Mahoba	7.11	Deoria	17.23	Basti	13.47	Deoria	13.67

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 5 reveals that G.B. Nagar consistently had the highest number of employees in registered working factories per lakh population, reflecting its strong industrial base. Ghaziabad, Kanpur Nagar, and Moradabad also maintained prominent positions, showing stable industrial employment. In contrast, districts like Azamgarh, Ballia, Banda, and Pratapgarh consistently remained at the bottom, indicating very limited industrial workforce participation. While top districts showed steady or increasing employment levels, bottom districts experienced minimal change, highlighting persistent regional disparities in industrial job creation.

Table no- 6:Avg. worker per register working factory

Top 5 Districts							
2000-01		2011-12		2019-20		2020-21	
Districts	Value	Districts	Value	Districts	Value	Districts	Value
Sonbhadra	550.7	Sonbhadra	790.83	Sonbhadra	812.93	Sonbhadra	537.36
Kushinagar	236.5	Lalitpur	504	Hamirpur	406.88	Hamirpur	383.88
Balrampur	146	Kushinagar	188.91	Lalitpur	404	Lalitpur	284.5
Basti	130.3	Amroha	170.01	Auraiya	202.88	Mirzapur	208.69
Amroha	111.5	Badaun	99.23	Amroha	180.16	Auraiya	186.95
Bottom 5 Districts							
2000-01		2011-12		2019-20		2020-21	
Mahoba	1.95	Mahoba	7.08	Azamgarh	5.18	Ballia	5.33
Banda	3.5	Mainpuri	7.47	Ballia	5.25	Banda	5.67
Mirzapur	4.2	Etawah	7.63	Banda	8.4	Mainpuri	7.03
Pratapgarh	4.62	Pratapgarh	10	Mainpuri	13.16	Pratapgarh	16.91
Chandauli	7.9	Hathras	19.27	Siddharth Nagar	14	Fatehpur	17.26

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 6 illustrates that Sonbhadra consistently had the highest average number of workers per registered factory, indicating the presence of large-scale industrial units. Other districts like Lalitpur,

Hamirpur, Auraiya, and Amroha also recorded relatively high worker averages in various years, suggesting more concentrated industrial employment. On the other hand, districts such as Mahoba, Banda, Ballia, and Pratapgarh remained at the bottom, with very few workers per factory, implying smaller or less operational units. The stark contrast highlights uneven industrial capacity and factory scale across regions.

Table-7: Per capita electricity consumption (K.W.H.)

Top 5 Districts									
2000-01		2011-12		2019-20		2022-23		2023-24	
Districts	Value	Districts	Value	Districts	Value	Districts	Value	Districts	Value
Sonbhadra	2888.64	Ghaziabad	871.49	G.B.Nagar	2402.49	G.B.Nagar	2547.13	G.B.Nagar	2761.78
Ghaziabad	751.35	Lucknow	697.5	Ghaziabad	1128.81	Ghaziabad	1215.58	Ghaziabad	1296.86
Kanpur Nagar	452.47	Muzaffarnagar	487.53	Lucknow	969.68	Lucknow	1105.24	Lucknow	1149.34
Lucknow	414.07	Meerut	485.4	Meerut	814.2	Hapur	973.81	Hapur	975.79
Agra	309.83	Kanpur Nagar	449.81	Hapur	809.03	Kanpur Dehat	903.22	Kanpur Dehat	953.25
Bottom 5 Districts									
2000-01		2011-12		2019-20		2022-23		2023-24	
Siddharth Nagar	32	Shrawasti	30.32	Siddharth Nagar	105.88	Balrampur	133.3	Balrampur	127.16
Kushinagar	39.58	Kushinagar	54	Balrampur	106.22	Siddharth Nagar	144.07	Siddharth Nagar	159.74
Balrampur	44.39	Balrampur	60.72	Bahraich	119.57	Mahrajganj	148.38	Mahrajganj	160.41
Mahrajganj	44.61	Siddharth Nagar	60.87	Kushinagar	133.19	Bahraich	153.78	Kushinagar	163.89
Sitapur	47.06	Sitapur	67.1	Mahrajganj	136.11	Kushinagar	163.54	Bahraich	170.1

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 7 evaluates that G.B. Nagar has become the consistent leader in per capita electricity consumption in recent years, reflecting its strong industrial and urban development. Ghaziabad and Lucknow also maintained high consumption levels, indicating robust infrastructure and economic activity. Districts like Hapur and Kanpur Dehat have shown rising trends, joining the top ranks in later years. In contrast, districts such as Siddharth Nagar, Balrampur, Kushinagar, and Bahraich consistently

remained at the bottom, with minimal changes, pointing to limited industrialization and lower energy access or usage. The overall pattern reveals growing regional disparities in electricity consumption.

Table no- 8: Total length of pucca road per lakh population

Top 5 Districts									
2000-01		2011-12		2019-20		2022-23		2023-24	
Districts	value	Districts	value	Districts	value	Districts	value	Districts	value
Mahoba	170.14	Sonbhadra	272.11	Sonbhadra	354.93	Mainpuri	441.42	Mainpuri	440.67
Kanpur Dehat	157.03	Mirzapur	193.56	Jalaun	302.32	Sonbhadra	336.97	Sonbhadra	372.97
Lucknow	156.56	Mainpuri	181.27	Etawah	264.35	Etah	296.39	Mirzapur	304.28
Lalitpur	131.28	Saharanpur	174.02	Kaushambi	253.18	Mirzapur	275.5	Etah	296.74
Hamirpur	130.17	Chandauli	172.59	Mainpuri	245.27	Etawah	265.65	Etawah	270.25
Bottom 5 Districts									
2000-01		2011-12		2018-19		2022-23		2023-24	
Gonda	48.88	Bahraich	58.08	Moradabad	72.51	Kanpur Nagar	63.55	Kanpur Nagar	67.39
Bahraich	49.66	Aligarh	86.48	Hapur	75.22	Muzaffarnagar	77.87	Moradabad	80.73
Basti	50.3	Ballia	86.49	Shamli	82.15	Moradabad	81.87	Meerut	83.76
Siddharth Nagar	50.38	Varanasi	87.04	Meerut	85.76	Meerut	84.61	Muzaffarnagar	91.5
SantKabir Nagar	51.26	Kheri	89.16	Kheri	88.37	G.B.Nagar	97.55	G.B.Nagar	97.3

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Table no 8 shows that districts like Sonbhadra, Mainpuri, and Mirzapur have consistently ranked among the top in terms of pucca road length per lakh population. It is indicating strong road infrastructure development over the years in these districts. Mainpuri showed a particularly sharp rise in recent years. Other districts such as Etawah and Etah also emerged as high performers in the later years. On the other hand, districts including Kanpur Nagar, Moradabad, Meerut, and Muzaffar nagar consistently appeared among the bottom, suggesting slower improvements in road infrastructure relative to population growth. This highlights a growing disparity in road development across regions.

Table- 9: Performance stability of Industrial Development in Districts

Coefficient of Variance					
Indicators	2000-01	2011-12	2019-20	2022-23	2023-24
No. of small-scale industries per lakh population	50.58	45.22	111.41	63.16	54.97
No. of industrial area per lakh population	105.92	88.06	157.07	159.45	172.67
Per capita gross value of industrial productuon in(Rs.)	333.47	300.52	311.48	321.54 (2020-21)	-
Net value added per worker in register working factory('000Rs.)	164.53	261.15	157.98	136.82 (2020-21)	-
No.of employee in registered working factory per lakh population	227.96	342.17	378.73	373.31 (2020-21)	-
Avg. worker per register working factory	156.63	153.18	154.25	120.09 (2020-21)	-
Per capita electricity consumption (K.W.H.)	194.72	110.92	78.50	72.60	74.08
Total lenth of pucca road per lakh population	0.00	0.00	0.00	0.00	0.00

The coefficient of variance for all variables, used to assess the stability of industrial performance across the districts of Uttar Pradesh, is presented in Table 9. This table highlights the variations and trends in industrial performance among the districts.

Source: calculated by author, data available on district wise development indicator (2000-01 to 2023-24)

Above Table 9 shows that coefficient of variance of indicators related to MSMEs development across districts are vary significantly by indicator. Industrial area per lakh population and employment in registered factories are exhibit consistently high variation. It is reflecting wide districts differences in industrial infrastructure and workforce distribution. The number of small-scale industries also shows considerable fluctuation, peaking during certain years. Per capita industrial output and value added per worker reveal moderately high variability in these industries. It is suggesting uneven productivity across districts. Electricity consumption shows a steady decline in variation, indicating more uniform access over time. However, pucca road length shows no recorded variation, implying either uniform reporting or data limitations.

Conclusion:

The study concludes that MSMEs development at district level in Uttar Pradesh exhibits significant instability. A few districts consistently lead in industrial indicators such as the number of small-scale

industries, industrial areas, per capita industrial production, and employment in registered factories. These districts have better infrastructure, higher productivity, and greater electricity consumption, reflecting concentrated industrial growth. Conversely, many districts lag behind with minimal industrial presence and lower productivity levels.

Over time, while some improvements are visible—especially in electricity access and road infrastructure—the uneven distribution of industrial development remains a key challenge. The high variation in indicators like- industrial areas and employment are points to persistent inequality. To foster balanced economic growth, policy interventions must focus on strengthening industrial infrastructure and opportunities in underdeveloped districts, enabling more equitable regional industrialization throughout the stat

References:

1. Baliyan,SK (2016). "Economic growth and structural change of industrial sector in Uttar Pradesh." Indian Journal of Economics and Development 12 (4), 671-678, 2016
2. Jaiswal,A (2012). "The changing occupational structure and economic profile of textile industry of Banaras, Uttar Pradesh." Journal of Social Sciences 30 (1), 89-98, 2012
3. Kaur, K. Mishra, PK. (2017). "Socio-economic development of Uttar Pradesh: an empirical analysis." Indian Journal of Economics and Development 5, 8, 2017
4. Kaushal, P (2023). "An Assessment of Industrial Sector Efficiency of The State of Uttar Pradesh." Knowledgeable Research: A Multidisciplinary Journal 1 (06), 1-10, 2023
5. Khan, MR. Abdulla.(2019). "Dynamics of MSME industry in Uttar Pradesh and Maharashtra: an analysis of sugar firms." SEDME (Small Enterprises Development, Management & Extension Journal) 46 (4), 235-247, 2019Lal, A (2015). "Handloom Industry in Uttar Pradesh: Major Challenges and Prospects." Dynamics of Public Administration 32 (1), 31-46, 2015.
6. Mehta, GS (2012). "Agro-processing industry in Uttar Pradesh." Planning Commission Government of India: New Delhi, 2012
7. Pandey, V. (2013). "Trends, opportunities & challenges in small scale and cottage industries in Uttar Pradesh." Asian Journal of Technology & Management Research 3 (02), 2013.
8. Rasul, G. Sharma, E.(2014). "Understanding the poor economic performance of Bihar and Uttar Pradesh, India: a macro-perspective." Regional Studies, Regional Science 1 (1), 221-239, 2014.
9. Singh, SP. Agarwal, S(2006). "Total factor productivity growth, technical progress and efficiency change in sugar industry of Uttar Pradesh." The Indian Economic Journal, 54 (2), 59-82, 2006