

Growth and Performance of the MSME Sector in Odisha, India

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Abstract:

This study analyses the growth and performance of the MSME sector in Odisha, India, utilising secondary data sourced from the Odisha Economic Surveys, Indian Economic Surveys, and Annual Reports of MSME, covering the period from 1991 to 2021-22. The study analyses the outcomes using percentages, compound annual growth rates, and other relevant metrics. The results demonstrate that MSME units, investment, and employment exhibit CAGRs of 0.19, 0.22, and 0.17, respectively, from 1991 to 2022. The data indicate gradual yet steady progress, particularly during the initial phase of India's economic reforms. Between 2006 and 2015, the compound annual growth rates (CAGRs) for MSME, investment, and employment were 0.84, 0.99, and 0.71, respectively. The surge was propelled by government initiatives aimed at fostering entrepreneurship and enhancing financial access, alongside Odisha's integration into both national and global markets. The Compound Annual Growth Rates (CAGRs) for MSMEs were 1.49 for revenue, 1.81 for investment, and 1.23 for employment from 2016 to 2022, indicating robust performance during this period. Government initiatives such as "Make in India" and support for start-ups and women entrepreneurs have contributed to this growth. Export performance exhibited a notable compound annual growth rate of 30% from 2015-16 to 2021-22. The repair and services sector drove growth, succeeded by manufacturing and forest-based industries, underscoring Odisha's diversified economic foundation. It is recommended that the government enhance MSME financing by increasing financial inclusion to support growth; prioritising skill development to prepare workers for emerging sector demands; improving export facilitation through investments in market access and international trade partnerships; promoting digital transformation to assist MSMEs in adopting competitive technologies; and maintaining policy support to foster MSME-friendly initiatives for continued industrial advancement.

Key Words: MSME, Growth, Performance, Odisha, India

I. Introduction

Micro, small, and medium enterprises (MSMEs) play a significant role in generating employment besides increasing production, income, and exports. Being labour-intensive and rural areas accounting for 55.34 percent of all operating MSME firms (Census of MSME 2006-07), this sector can reduce regional disparity and income inequality and contribute to self-reliance in India (Singh & Mallaiah, 2022). Additionally, robust backward and forward linkages enable the MSME sector to potentially integrate into the broader development of India's manufacturing sector. This sector would also support the Central Government's recent initiatives, "Startup India" and "Make in India." The performance of MSMEs has been unimpressive in India. Several headwinds might be preventing this sector from reaching its full potential. Studies show that factors such as the quality of human capital (Ismail et al., 2014), financial accessibility (Cole et al., 2004), and outdated technology (Philips et al., 2012) influence increasing efficiency. For example, the financing pattern in the MSME suggests that in India, 78% of the total financial requirements come from informal or self-financed sources (Census of MSME, 2006-07). There is a skill gap among entrepreneurs in setting up these MSMEs and managing them efficiently. They have difficulty adopting appropriate technology. This study examines the present state of micro, small, and medium enterprise in Odisha, as these entities are vital to the development of any economy.

The paper is comprised of five distinct sections. The initial segment is dedicated to the introduction. The subsequent section examines the previous research pertaining to the performance of MSMEs. The third section elucidates the objective of the study. The fourth section encompasses the data and tools employed in the analysis of data. The fifth section presents a thorough analysis of the growth and performance of the MSMEs in Odisha.



The final section elucidated the principal findings and proposed strategic policy recommendations.

II. Studies on Performances of MSMEs

Dolai et al. (2015) investigated the growth and performance of MSMEs in India before and after 1999-2000. They discovered that the percentage of SMEs in exports and employment relative to organised sector employment has consistently increased during the period of protection and transition. Manna and Mistri (2017) found that service units are performing better than manufacturing in employment generation in India. Singh and Mallaiah (2022) conducted a state-bystate analysis to assess the performance of MSMEs in India by using the MSME Census 2011. They found that MSMEs in India are 37 per cent efficient on average, with Himachal Pradesh, Mizoram, Assam, Jharkhand, and Goa having the highest efficiency; the least efficient states are Chandigarh, Lakshadweep, Rajasthan, and Maharashtra. Harani & Babu (2017) analysing the performance of MSMEs in India found that MSMEs are wellpositioned to support national programmes like 'Make in India" and have the potential to propel industrial growth. Das (2014)looked at productivity, creation of jobs, and exports of MSMEs in Odisha and India during 2006-2012. They found that the expansion of MSMEs boosts our nation's exports, employment, and output both within the state and internationally. Mallick et al. (2021) found that the growth rate of MSME output has been increasing over the years persistently in Odisha from 1990 to 2016.

III. Objective of the study

To study the growth, investment, employment and export performance of MSMEs in Odisha

IV. Data and Methodology

Data:

The study is based on secondary data. The sources of secondary data are Odisha Economic Surveys, Indian Economic Surveys, Annual Reports of MSME, etc.

Tools: The data are analysed by using tables, percentages, compound annual growth rates

(CAGR) etc.

CAGR= (Ending year/Starting year) ^ (1/Number of Years)-1

V. Growth and Performance of MSME in Odisha

Micro, Small, and Medium Enterprises are crucial for Odisha's economic growth, significantly

contributing to employment fostering and entrepreneurial initiatives. Table 1 displays data on the growth of Micro, Small, and Medium Enterprises in Odisha from 1991-92 to 2021-22, along with the compound annual growth rates. The development of Micro, Small, and Medium Enterprises in Odisha from 1991-92 to 2021-22 shows notable progress in unit numbers, investment levels, and job creation. In 1991-92, there were 2,233 operational MSME units, which attracted an investment of \Box 5,203 lakh and provided employment for 15,545 individuals. During the period of 2005-2006, the number of units increased significantly to 49,767, with investment rising to □2,05,746 lakh and employment growing to 2,55,126. This expansion highlights the sector's growing influence on the state's economy. From 2005-06 to 2015-16, there was significant growth, with MSME units increasing to 1,75,993 and investments exceeding 10 lakh crore. The employment sector saw a notable rise, creating positions for 731,277 individuals. This indicates a growing focus on industrialisation and the development of small enterprises during this period. In 2021-22, Odisha's MSME sector reached a significant milestone with 5,35,913 units, an investment of 25,65,590 lakh, and employment for 19,34,893 individuals. The significant growth in this sector highlights its essential role in driving economic development, contributing to job creation, and fostering entrepreneurship across the state. The Compound Annual Growth Rate provides insight into the sustained growth pattern of MSMEs in Odisha. From 1991 to 2022, the compound annual growth rates for MSME units, investment, and employment were 0.19, 0.22, and 0.17, respectively. From 1991 to 2005, the compound annual growth rates for MSME units, investment, and employment were 0.24, 0.29, and 0.21, respectively. This period, characterised by the liberalisation of the Indian economy, saw the initial stages of industrial development as Odisha began its initiatives to attract investment in the MSME sector. The policies implemented during this period, including reforms in licensing, financial incentives, and infrastructure development, enabled a controlled growth in MSME units and job opportunities. Between 2006 and 2015, the compound annual growth rates for MSME units, investment, and employment were 0.84, 0.99, and 0.71, respectively, reflecting a phase of significant growth dynamics. Odisha's heightened focus on entrepreneurship and small-scale industrialisation is responsible for the increase in MSME activity. Government initiatives, such as improved credit access, subsidies, and investment in rural and semi-



urban regions, may have been crucial. The integration of Odisha into national and global markets has significantly improved capital investments and employment opportunities in the MSME sector. From 2016 to 2022, there was a significant increase, with a CAGR of 1.49 for MSME units, 1.81 for investment, and 1.23 for employment.

Table 1: Growth of	I MISIVIE UIIIIS,	investment and Empl	oyment în Ouisna
Year	Units	Investment (Lakh)	Employment
1991-92	2233	5203	15545
2005-06	49767	205746	255126
2015-16	175993	1008931	731277
2021-22	535913	2565590	1934893
Compound Annual	Growth Rate (%)	
1991-2022	0.19	0.22	0.17
1991-2005	0.24	0.29	0.21
2006-2015	0.84	0.99	0.71
2016-2022	1.49	1.81	1.23

Table 1: Growth of MSME Units, Investment and Employment in Odisha

Source: Odisha Economic Surveys, 1990-91 to 2022-23

This expansion results from several factors, including government initiatives for MSMEs, enhanced financial inclusion, technological advancements, and the digital transformation of business practices. The Odisha government's policies to promote MSME growth, including incentives for women entrepreneurs, start-ups, and support for underdeveloped regions, have likely contributed significantly to this notable growth surge. The rapid expansion of MSME units in this period suggests that Odisha's MSME sector has benefitted from the implementation of the "Make in India" initiative, as well as other national programs such as the "Pradhan Mantri Mudra Yojana" (PMMY) and "Start-Up India." The growth of employment in Odisha's MSME sector shows a steady increase, marked by a notable rise in recent years. Between 1991 and 2022, the compound annual growth rate of total employment was 0.17. The significant acceleration from 2016 to 2022, marked by a CAGR of 1.23, suggests that the current policy framework has created a conducive environment for job creation. The growth of MSME units and investments closely correlates with the rise in employment, suggesting that MSMEs have successfully accommodated the growing workforce, especially in rural and semi-urban areas. From 1991

to 2022, there was a consistent increase in the number of units, investment, and employment within Odisha's MSME sector, particularly in the latter half of this period. The sector has expanded as a result of targeted policy initiatives, enhanced financing, and infrastructure advancements. The significant CAGR growth from 2006 to 2022 indicates the increasing importance of MSMEs in Odisha's economy, enhancing entrepreneurship, productivity, and employment opportunities.

Product-wise growth of Number of MSME units in Odisha

Tables 2 presents an extensive overview of the Micro, Small, and Medium Enterprises sector in Odisha, emphasising product-specific growth and the Compound Annual Growth Rate of MSME units from 2010-11 to 2021-22. This analysis delves into the performance of distinct sectors within the MSME network, highlighting the temporal shifts and their wider ramifications for the economic and industrial framework of the state. The MSME sector in Odisha has experienced significant expansion from 2010-11 to 2021-22, with the total number of units rising from 1,11,856 to 5,35,913—an impressive increase of 379.1%.



Cotosorra	Number of MSME units			% Change	CAGR of Number of MSME units in Odisha			
Category	2010-11	2015-16	2021-22	(2010-11 to 2021- 22)	2010- 2022	2010- 2016	2016- 2022	
Food and allied	24798	31662	48,109	94	0.057	0.042	0.072	
Chemical and allied	2856	3485	4,998	75	0.048	0.034	0.062	
Electrical and Electronics	1128	1549	2,873	154.7	0.081	0.054	0.108	
Engineering and metal based	12469	15311	19,987	60.3	0.04	0.035	0.045	
Forest and wood based	6799	1468	25,507	275.2	0.116	-0.225	0.609	
Glass and ceramics	8182	9867	12,170	48.7	0.034	0.032	0.036	
Livestock and leather	443	576	823	85.8	0.053	0.045	0.061	
Paper and Paper products	2876	3603	5,146	78.9	0.05	0.038	0.061	
Rubber and plastics	1760	1976	2,370	34.7	0.025	0.019	0.031	
Textiles	8331	12861	23,611	183.4	0.091	0.075	0.107	
Misc. manufacturing	6241	11819	51,160	719.7	0.192	0.112	0.277	
Repairing and services	35973	110910	3,39,159	842.8	0.206	0.206	0.205	
Total	111856	214087	5,35,913	379.1	0.139	0.114	0.165	

Table 2: Product-wise growth of Number of MSME units in Odisha

Source: Odisha Economic Surveys, 1990-91 to 2022-23

The expansion rate has varied significantly across different product categories, as indicated by the observed growth rates and compound annual growth rates during the period. Each sector's performance reflects its unique opportunities and challenges, including resource accessibility, market demand, regulatory frameworks, and technological advancements. The repair and services sector is the primary contributor to the growth of MSMEs in Odisha, demonstrating an 842.8% increase in the number of units from 2010-11 to 2021-22. The number of MSME units in this sector increased significantly, from 35,973 in the fiscal year 2010-11 to 339,159 by 2021-22. A compound annual growth rate of 0.206 supports the expansion, demonstrating consistency in both the 2010-2016 and 2016-2022 intervals. Rising disposable incomes, enhanced urbanisation, and industrial development in Odisha have influenced the rapid expansion of the repair and service sector. This sector has a low barrier to entry, making it an accessible opportunity for new entrepreneurs. The improvement of transport networks and digital services in Odisha has notably advanced the growth of repair and maintenance

businesses, particularly in rural and semi-urban areas. The miscellaneous manufacturing sector saw significant growth, with a 719.7% rise in MSME units, increasing from 6,241 in 2010-11 to 51,160 in 2021-22. The compound annual growth rate of this sector is 0.192, indicating robust growth, especially highlighted by a notable rise to 0.277 from 2016 to 2022. The diverse features of the manufacturing sector, encompassing a range of products, have enabled its growth in response to evolving market demands. This category likely includes sectors that manufacture consumer goods, industrial products, and specialised items while benefiting from state initiatives to support small-scale manufacturing. The forest and wood-based industries experienced a notable growth of 275.2% during the designated period. Units increased from 6,799 in fiscal year 2010-11 to 25,507 in 2021-22, demonstrating a significant compound annual growth rate of 0.609 during the period from 2016 to 2022. This indicates a notable shift from the initial period (2010-2016), when the CAGR was -0.225, implying that the sector faced substantial challenges during those vears. The extensive forest resources of Odisha and



the increasing demand for forest products account for the significant transformation and substantial expansion that ensued. The industry has rebounded owing to governmental regulations favouring forestbased enterprises and an increasing awareness of sustainable resource utilisation and eco-friendly products. Forest and wood-based industries are expanding in response to global sustainability and ecological awareness initiatives. The textile sector, a key component of Odisha's economy, saw a significant increase of 183.4% in MSME units, rising from 8,331 in 2010-11 to 23,611 in 2021-22. The compound annual growth rate for the textile sector over the entire duration was 0.091, while the subsequent period (2016-2022) showed a higher growth rate of 0.107, compared to 0.075 in the earlier period of 2010-2016.

Odisha's textile industry is significant due to its rich legacy in handloom and fabric production. The government has advanced traditional and modern textile crafts via handloom clusters and textile parks. Demand in domestic and international markets, along with government support, has contributed to the growth of the Odisha textiles sector. The electrical and electronics sector experienced significant growth, with a 154.7% increase in units from 1,128 in 2010-11 to 2,873 in 2021-22. The cumulative annual growth rate for this sector was 0.081, with an increased rate of 0.108 in the following period (2016-2022). The development and urbanisation in Odisha have heightened the demand for electrical and electronic goods, thereby enhancing this sector. The government's emphasis on technological advancement and infrastructure enhancements, especially in electrification and renewable energy initiatives, has facilitated the development of electrical and electronics MSMEs.

The food and allied sector exhibited steady growth, with a 94.0% rise in the number of units. increasing from 24,798 in 2010-11 to 48,109 in 2021-22. The sector's compound annual growth rate was 0.057, with an increased rate of 0.072 observed from 2016 to 2022. The agricultural foundation and raw material accessibility in Odisha enhance the potential for the food processing industry. Rising consumer demand for processed food and government initiatives to boost food processing businesses are driving the sector's growth. Improvements in transportation and storage infrastructure, along with advancements in food technology, have facilitated the growth of foodrelated MSMEs. The chemical and allied industries saw a significant growth of 75.0% from 2010-11 to 2021-22, with the number of units increasing from

2,856 to 4,998. The CAGR of 0.048 indicates moderate growth, while the sector shows accelerated expansion in the following period, at 0.062 for 2016–2022. Chemical industries provide vital resources for agriculture, healthcare, and industrial sectors. The observed growth in this sector indicates that chemical industries are capital-intensive, potentially restricting the involvement of smaller firms. Odisha's industrial policies promoting diversification and value addition may have facilitated steady sector growth.

The engineering and metal-based sector grew by 60.3% during this period, with units rising from 12,469 in 2010-11 to 19,987 in 2021-22. The compound annual growth rate for this sector was 0.040, with a slight increase to 0.045 during the period from 2016 to 2022.

Odisha's engineering and metal-centric industries depend on its mineral and metal resources. The sector's limited growth may result from competition with larger, capital-intensive firms and global market dynamics. The sector is essential to Odisha's economic growth, supplying materials for various other sectors. Other sectors exhibited a gradual expansion during the period. The livestock and leather sector saw significant growth of 85.8%, with a compound annual growth rate of 0.053. The glass and ceramics sector saw a 48.7% increase in units, with a CAGR of 0.034. Similarly, the paper and paper products sector grew by 78.9% with a CAGR of 0.050, while the rubber and plastics sector expanded by 34.7% with a CAGR of 0.025. Despite limited growth, these sectors are essential to Odisha's MSME framework, facilitating product addressing diversity and various industry requirements. The MSME sector in Odisha demonstrates adaptability to evolving market dynamics and technological advancements, evidenced by its consistent growth. The growth of MSMEs in Odisha from 2010-11 to 2021-22 indicates a shift in the industry. Government initiatives, natural resources, and entrepreneurial activities have contributed to the growth of MSME units across various industries. Repair services, miscellaneous manufacturing, and forest-based industries have driven expansion, while textiles and food processing have also shown notable performance.

Product-wise growth of investments in MSME sector in Odisha

The growth and investment trends for products in the Micro, Small, and Medium Enterprises sector in Odisha are shown in Table 3. These trends reveal important patterns that can be



used in many different areas. This examination integrates both the increase in absolute investments and the compound annual growth rate, offering a nuanced understanding of the evolution of various industrial sectors throughout the 12-year span from 2010 to 2022. Table 4 presents information indicating a notable increase in investments across all MSME categories in Odisha from 2010-11 to 2021-22. The aggregate investment in the MSME sector escalated from 4035.96 crores in the fiscal year 2010–11 to 25655.90 crores in 2021–22, signifying a remarkable overall percentage increase

of 535.7%. This indicates that the MSME sector has experienced a significant influx of capital during this timeframe, highlighting its critical role in the economic advancement of the state. Moreover, the repair and services sector exhibits an astonishing growth rate of 2179.2%, closely followed by the miscellaneous manufacturing sector, which has experienced a remarkable increase of 953.9%. The data suggests that the service sector, in conjunction with various manufacturing activities, has been instrumental in the advancement of MSMEs in Odisha.

	Number of MSME units			% Change	CAGR of Number of MSME units in Odisha		
Category	2010-11	2015-16	2021-22	(2010-11 to 2021- 22)	2010- 2022	2010- 2016	2016- 2022
Food and allied	1105.32	1850.15	2561.24	131.7	0.07	0.09	0.06
Chemical and allied	206.22	289.52	383.48	86	0.05	0.06	0.05
Electrical and Electronics	48.62	86.85	167.86	245.2	0.11	0.1	0.12
Engineering and metal based	827.18	1108.77	1436.29	73.6	0.05	0.05	0.04
Forest and wood based	71.77	153.79	387.24	439.6	0.15	0.14	0.17
Glass and ceramics	489.22	725.07	843.84	72.5	0.05	0.07	0.03
Livestock and leather	7.32	13.77	19.68	168.9	0.09	0.11	0.06
Paper and Paper products	98.7	161.28	247.6	150.9	0.08	0.09	0.07
Rubber and plastics	146.05	273.92	339.51	132.5	0.07	0.11	0.04
Textiles	121.53	286.3	559.32	360.2	0.14	0.15	0.12
Misc. manufacturing	173.24	51043	1825.79	953.9	0.22	1.58	-0.43
Repairing and services	740.78	5126.05	16884.1	2179.2	0.3	0.38	0.22
Total	4035.96	10585.9	25655.9	535.7	0.17	0.17	0.16

Table 3: Product-wise growth of investme	ents in MSME sector in Odisha
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Source: Odisha Economic Surveys, 1990-91 to 2022-23

The food and allied sector, a significant portion of MSMEs, has seen a marked rise in investments. Capital investment in this category increased significantly, from \Box 1105.32 crores in the fiscal year 2010-11 to \Box 2561.24 crores by 2021-22, reflecting a rise of 131.7%. The compound annual growth rate for this sector from 2010 to 2022 is 0.07, with a higher rate of 0.09 from 2010 to 2022. This indicates that although the sector has seen significant growth in total investment, the rate of growth has somewhat slowed in the latter half of the period. The chemical and allied sector has shown modest growth compared to other sectors, with

investments increasing from $\Box 206.22$ crores in 2010-11 to $\Box 383.48$ crores in 2021-22, marking an 86% rise. The compound annual growth rate for this sector is 0.05 for the periods 2010-2022 and 2016-2022, indicating a slight increase from 0.04 recorded during 2010-2016. The steady growth of the chemical industry indicates its crucial but relatively modest role in the industrial development of Odisha.

The electrical and electronics sector demonstrated significant growth, with investments rising by 245.2%, from \Box 48.62 crores in 2010-11 to \Box 167.86 crores in 2021-22. The compound annual growth rate for this sector is 0.11 over 12 years, reflecting its growing importance in a technology-



driven economy. The growth from 2016 to 2022 was more significant, with the CAGR increasing to 0.12 from 0.10 observed between 2010 and 2016, indicating a marked acceleration in recent years. The engineering and metal-based industries sector, a crucial part of MSMEs in Odisha, grew from \square 827.18 crores in 2010-11 to \square 1436.29 crores in 2021-22, indicating a 73.6% increase. The compound annual growth rate is modest at 0.05 over the entire period. The growth rate exhibited a slight decrease from 2016 to 2022 (0.04), indicating a deceleration in the sector's advancement. Despite this slowdown, the engineering and metal-based sectors continue to be a crucial part of Odisha's MSME landscape. The forest and wood-based sector experienced a significant increase in investments, rising by 439.6% from □71.77 crores in 2010-11 to □ 387.24 crores in 2021-22. The compound annual growth rate for this sector is 0.15, making it the second-highest among all sectors. It increased to 0.17 from 2016 to 2022, highlighting the notable progress of this sector in recent years. The state's rich forest resources and an increasing emphasis on sustainable and eco-friendly materials drive the expansion. Investment in glass and ceramics rose significantly by 72.5% during the study period, increasing from 2489.22 crores in the fiscal year 2010-11 to 2843.84 crores by 2021-22. The compound annual growth rate for this sector is 0.05 over the entire period, declining to 0.03 from 2016 to 2022. The glass and ceramics industry, though important, has not experienced the rapid growth seen in other sectors.

Financial allocations for livestock and leather rose significantly by 168.9%, increasing from \Box 7.32 crores in the fiscal year 2010-11 to □19.68 crores by 2021-22. The compound annual growth rate is 0.09 over the entire period, with a decrease to 0.06 from 2016 to 2022. Consistent growth and modest investment levels position the sector as a minor contributor to the broader MSME landscape in Odisha. The paper and paper products sector has shown significant growth, with investments increasing by 150.9%, from □98.70 crores in the fiscal year 2010-11 to \Box 247.60 crores in 2021-22. The compound annual growth rate over the entire period is 0.08, reflecting consistent growth. The growth rate showed a slight decline in the latter half of the period (0.07 for 2016-2022), indicating that while the sector is still expanding, its growth momentum has lessened. Investment in the rubber and plastics sectors grew significantly by 132.5%, increasing from 2146.05 crores in the fiscal year 2010-11 to 339.51 crores by 2021-22. The sector showed a compound annual growth rate

of 0.07 overall, declining to 0.04 from 2016 to 2022, suggesting expansion but a recent slowdown in growth. The textiles sector saw a significant rise in investment, increasing by 360.2%, from \Box 121.53 crores in 2010-11 to \Box 559.32 crores in 2021-22. The compound annual growth rate for textiles is 0.14 overall, with a higher rate of 0.15 from 2010 to 2016, followed by a decline to 0.12 from 2016 to 2022. This highlights the importance of the textiles industry in the state's MSME sector, despite a slight slowdown in growth.

Investments in miscellaneous manufacturing increased by 953.9%, driven by a notable rise from 173.24 crores in 2010-11 to □51043 crores in 2015-16 before stabilising at \Box 1825.79 crores in 2021-22. The compound annual growth rate indicates volatility, with a rate of 1.58 from 2010 to 2016, followed by a negative rate of -0.43 from 2016 to 2022, signifying contraction in this sector. Investments in the repairs and services sector have increased significantly, rising by 2179.2% from 2740.78 crores in 2010-11 to □16884.05 crores in 2021-22. The compound annual growth rate for this sector is 0.30 overall, reflecting significant growth, with a notable 0.38 from 2010 to 2016, followed by a decrease to 0.22 from 2016 to 2022. The MSME sector in Odisha exhibits a CAGR of 0.17, indicating robust growth. Growth trends differ across sectors. Repairs and services have expanded significantly, enhancing micro, small, and medium enterprises. Textiles, forest and wood-based industries, and electrical and electronics are also experiencing growth. Rubber and plastics, glass and ceramics, and chemical sectors have experienced slower growth; however, they may gain from state intervention and support.

Product-wise growth of employment in MSME sector in Odisha

Table 4 presents the employment generation rate and the compound annual growth rate of employment within the MSME sector in Odisha. This provides significant insights into the structural changes in the sector from 2010 to 2022. The data illustrates the varying growth rates of different sectors and highlights the significance of MSMEs in job creation in Odisha.

Employment in the MSME sector increased significantly from 648,851 in 2010-11 to 1,934,893 in 2021-22, reflecting a growth of 198.2%. The sectors most significantly contributing to employment growth include repair and service industries, various manufacturing sectors, and forest and wood-based industries. The repair and services



sectors have emerged as the primary contributor, with employment figures rising from 114,085 in 2010-11 to 992,355 in 2021-22, reflecting a growth rate of 769.8%. The miscellaneous manufacturing

sector saw significant growth, with employment rising by 450.1%, from 30,400 in 2010-11 to 167,240 in 2021-22.

Table 4: Froduct-wise growth of employment in MSME sector in Ouisna							
	Employment % Change			CAGR			
Category	2010-11	2015-16	2021-22	(2010-11 to 2021-22)	2010- 2022	2010- 2016	2016- 2022
Food and allied	130336	164157	2,21,095	69.6	0.05	0.04	0.05
Chemical and allied	22020	25686	31,846	44.6	0.03	0.03	0.04
Electrical and Electronics	7196	8801	13,121	82.3	0.05	0.03	0.07
Engineering and metal based	91623	107003	1,25,855	37.4	0.03	0.03	0.03
Forest and wood based	42761	55152	90,649	112	0.06	0.04	0.09
Glass and ceramics	132580	146757	1,54,340	16.4	0.01	0.02	0.01
Livestock and leather	2535	2964	3,562	40.5	0.03	0.03	0.03
Paper and Paper products	15846	18986	24,814	56.6	0.04	0.03	0.05
Rubber and plastics	10422	12135	13,742	31.9	0.02	0.03	0.02
Textiles	49047	66558	96,274	96.3	0.06	0.05	0.06
Misc. manufacturing	30400	52460	1,67,240	450.1	0.15	0.1	0.21
Repairing and services	114085	351561	9,92,355	769.8	0.2	0.21	0.19
Total	648851	1012220	19,34,893	198.2	0.1	0.08	0.11

Table 4: Product-wise growth of employment in MSME sector in Odisha

Source: Odisha Economic Surveys, 1990-91 to 2022-23

The forest and wood-based sector saw a significant employment growth of 112% during the study period. The rich forest resources of Odisha have likely supported the development of this sector, influenced by a rising demand for sustainable products and construction materials. Employment in the food and allied sectors of Odisha's economy increased significantly by 69.6%, rising from 130,336 to 221,095. This increase aligns with the heightened emphasis on food processing and agrobased industries, driven by the state's agricultural foundation. The compound annual growth rate for this sector was 0.05 from 2010 to 2022, reflecting a steady, albeit modest, advancement. Employment in the chemical and allied industries rose by 44.6% during the specified period. Although the absolute numbers are lower than in other sectors, the consistent growth indicated by a CAGR of 0.03 from 2010 to 2022 implies a stable demand for chemical products, particularly fertilisers and industrial chemicals.

Employment in the electrical and electronics sector increased significantly, rising by 82.3% from 7,196 to 13,121. The sector exhibited a compound annual growth rate of 0.05 from 2010 to 2022, with a significant increase in growth during the latter half, reflected in a CAGR of 0.07 from 2016 to 2022. Employment in the engineering and metal-based sectors increased by 37.4%, from 91,623 to 125,855. This sector plays a crucial role in Odisha's industrial base, primarily due to its abundant mineral resources, particularly in iron and steel. The compound annual growth rate of 0.03 over the entire period indicates modest expansion, especially in comparison to other sectors. Employment in the glass and ceramics sector increased by 16.4%, rising from 132,580 in 2010-11 to 154,340 by 2021-22, with a compound annual growth rate of 0.01 during the period analysed. The livestock and leather sectors saw a significant growth of 40.5%. Nonetheless, it remains one of the smaller industries in terms of employment, with



only 3,562 individuals involved in this sector during the 2021-22 period. The compound annual growth rate of 0.03 suggests steady, gradual growth, likely driven by demand for leather goods and related dairy production sectors.

The paper and paper products sector saw a 56.6% rise in employment, increasing its workforce from 15,846 to 24,814. This increase indicates a persistent demand for packaging materials, despite the ongoing digitisation in various sectors. The sector exhibited a compound annual growth rate of 0.04 from 2010 to 2022, reflecting steady expansion over this period. Employment in the rubber and plastics sector rose significantly by 31.9%, increasing from 10,422 in the fiscal year 2010-11 to 13,742 by 2021-22. The sector exhibited a compound annual growth rate of only 0.02, reflecting market saturation in rubber and plastic goods, coupled with significant competitive pressures from larger industries. The textile sector saw a significant employment increase of 96.3%, from 49,047 to 96,274 positions. The observed growth is attributable to Odisha's traditional weaving industry and government initiatives promoting textiles. The compound annual growth rate of 0.06 in the sector from 2010 to 2022 indicates rising demand for textiles in domestic and international markets. From 2010 to 2022, the compound annual growth rate of total employment in Odisha's MSME sector was 0.10, indicating steady growth over the years. The repair and services sector exhibited the highest compound annual growth rate at 0.20, reflecting rapid growth in employment opportunities in this field. Increased industrial activity, agricultural mechanisation, and rising demand for repair and maintenance services in urban and rural areas drive this expansion. The miscellaneous manufacturing sector demonstrated a compound annual growth rate of 0.15, reflecting the diverse nature of manufacturing activities in the state, often associated with local demands and small-scale production. Conversely, the glass and ceramics industries, as well as rubber and plastics, demonstrated lower growth rates, with CAGRs of 0.01 and 0.02, respectively. This may arise from limited market expansion or competition from other states and nations with enhanced production capabilities.

Export performance of MSME sector in Odisha

According to Odisha Economic Survey (2021-22) the export performance of MSMEs in Odisha from 2015-16 to 2021-22, revealing a remarkable growth trajectory throughout this timeframe. During the fiscal year 2015-16, the exports from MSMEs were assessed at □19,746 crore, establishing the foundational data for the analysis provided. By the fiscal year 2019-20, exports experienced a remarkable surge, reaching \Box 47,242.3 crore, more than doubling within a span of four years. This notable increase illustrates the efficacy of market penetration strategies and the growing demand for Odisha's MSME products in the international arena. The period from 2019-20 to 2021-22 showcases an extraordinary increase, as exports soared to \Box 1,27,232.48 crore. This indicates an approximate 170% growth within a mere twoyear span, illustrating the enhanced presence of Odisha's MSMEs in global markets. The Compound Annual Growth Rate for the interval spanning from 2015 to 2022 is documented at 0.30, equivalent to 30% annually. This reflects a sustained and robust expansion in exports, propelled by improved production capacities, elevated quality benchmarks, and expanded market accessibility. The data suggests that Odisha's MSME sector has gained from policy interventions including enhanced logistics, financial incentives, and skill development programs, which have collectively led to this noteworthy performance.

VI. Conclusion

Odisha's MSMEs' growth and performance demonstrate economic transformation and resilience. Over the past three decades, the MSME sector has grown, boosting job generation, investment, and the state's industrial landscape. Between 1991-92 and 2021-22, there was an increase in MSME units from 2,233 to 5,35,913. Underpinned by legislative reforms, infrastructural development, and a growing entrepreneurial spirit, Odisha's economy has changed qualitatively. From 1991 to 2022, MSME units, investment, and employment have CAGRs of 0.19, 0.22, and 0.17. These figures show consistent but slow progress, especially during India's early economic liberalisation. Growth accelerated from 2006 to 2015, with MSME, investment, and employment CAGRs of 0.84, 0.99, and 0.71. Government attempts to promote entrepreneurship and financial access, and Odisha's integration into national and global markets contributed to this boom. The growth trajectory from 2016 to 2022 was significantly stronger, with MSME CAGRs of 1.49, investment 1.81, and employment 1.23. Strategic government policies like "Make in India" and startup and women entrepreneur encouragement have contributed to this amazing growth. Digital transformation and technology have helped MSME firms adapt and



compete in a fast-changing economy. A detailed look at MSME's product-wise growth shows substantial industry differences. The repair and services sector drove a staggering 842.8% increase in MSME units from 2010-11 to 2021-22. Demand for maintenance services is rising due to urbanisation and increasing disposable incomes. The 719.7% increase in various manufacturing units demonstrated Odisha's industry diversity. The timber and wood-based industries, textiles, and sectors have electrical and electronics all experienced growth at varying rates. The textile industry, ingrained in Odisha's culture, has benefitted from government assistance and increased domestic and international demand. Due to urbanisation and technical advances, the electrical and electronics sectors have grown, indicating a more industrialised economy. Odisha's industrial landscape is dynamic, as MSME investment trends show. MSMEs saw a 535.7% growth in investment from \[\]4,035.96 crores in 2010-11 to \[\]25,655.90 crores in 2021-22. The repair and services sector led this rise with 2,179.2% investment growth. This money has helped start new businesses and improve current ones. MSME employment has also increased, rising by 198.2% from 648,851 in 2010-11 to 1,934,893 in 2021-22. The demand for repair services in a rapidly urbanising terrain has spurred this employment rise, mostly in the repair and services sector. The various manufacturing and forest and wood-based sectors have also created demonstrating the sector's ability jobs, to accommodate an expanding workforce. Odisha's MSME export performance has strengthened its economic importance. With a 30% CAGR, MSME exports increased from 19,746 crores in 2015-16 to 1,27,232.48 crores by 2021-22. Production capacity, quality, and strategic market penetration drove this rise. Thus, the MSMEs in Odisha have emerged as crucial drivers of economic progress, job creation, and entrepreneurial spirit. In this regard, it is advisable for the government to bolster MSME financing by advancing financial inclusion to stimulate growth; emphasising skill development to equip workers for the demands of emerging sectors; enhancing export facilitation through investments in market access and international trade collaborations; encouraging digital transformation to aid MSMEs in embracing competitive technologies; and sustaining policy support to nurture MSMEfriendly initiatives for ongoing industrial progress.

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