Trends in the growth of MSME units, investment, and employment in Odisha

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By

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DECLARATION

I, Sita Majhi, hereby declare that this dissertation entitled "Trends in the growth of MSME units, investment, and employment in Odisha" submitted by me under the guidance and supervision of Dr.B.Nageswara Rao of University of Hyderabad, is a *bonafide* research work, which is also free from plagiarism. I also declare that it has not been submitted previously in part or full to this University or any other University or Institution for the award of any degree or diploma. I hereby agree that my thesis can be deposited in Shodhganga/INFLIBNET.

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CERTIFICATE

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Signature of M.Phil. Supervisor

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Sita

Dedicated to my Living God

Maa-Bapa

Smt. Sukamani Majhi

Sri. Janmajay Majhi

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ABBRIVIATION

MSMEs	Micro Small and Medium Enterprises
SSI	Small Scale Industry
SMEs	Small and Medium Enterprises
ARI	Agro and Rural Industry
CSO	Central Statistics Office
MOSPI	Ministry of Statistics and Programme Implementation
IPR	Industrial Policy Resolution
SEZ	Special Economic Zone
OSIC	Odisha Small Industries Corporation
OSP	Odisha Startup Policy
EM	Entrepreneur Memorandum
UAM	Udyog Aadhar Memorandum
LFPR	Labour Force Participation Rate
GSDP	Gross State Domestic Product
GDP	Gross Domestic Product
FDI	Foreign Direct Investment
CAGR	Compound Annual Growth Rate

SCs	Scheduled Castes
STs	Scheduled Tribes
OBCs	Other Backward Castes
WPI	Waited Price Inflation
FERA	Foreign Exchange Regulation Act
MRTP	Monopoly and Restrictive Trade Practice
ISI	Import Substitution Industrialisation
ASI	Annual Survey of Industry
DI	Directorate of Industry

Chapter 1

INTRODUCTION

1.1: Introduction:

Industrializations play an essential part in the collective economic expansion of India. In India, there is a shortage of capital and an abundance of labour. In such a situation, industrialization plays an important role in helping the country embark upon a higher rate of growth by providing the necessary capital base for the all-around expansion of other sectors including agriculture (Sujit, 2001).

Rural establishment and khadi firms which constitute the Micro, Small and Medium Enterprises (MSMEs) of the country play an essential part in the industrial sector because it's contribution to export and employment is more. In October 1999, the Indian government instituted the Ministry of Small Scale Industries and Agro & Rural Industries (SSI& ARI) in order to formulate different plans and policies for the development of these industries. Later in September 2001, the Ministry was segregated into two separate Ministries, namely, Ministry of Small Scale Industries, as well as, Ministry of Agro and Rural Industries. However, when the Micro, Small and Medium Enterprises Development (MSMED) Act 2006 came into force on 2nd October 2006, both the ministries were merged into a single Ministry, namely, "Ministry of Micro, Small and Medium Enterprises (MSMEs)."

The development commissioner of MSME has led three censuses of registered SSI units. In 1973-74 the first census was conducted. There were 2.58 lakh SSI units registered. As a result of this census it was found that only 1.4 lakh units were functioning. During 1990-92 the second census took place where 9.87 lakh SSI units were registered, among these only 5.82 lakh units were found functioning. In 2001-02 the third census took place where 13.74 lakh registered units were found to be functioning. In the unregistered sector 19,579 urban blocks and rural villages were surveyed out of that 19.46 unregistered sectors was found out. Lastly, in 2006-07 the fourth all India census took place where 15.52 lakh registered units were functioning. The share of registered units including 12 states only (Tamil Nadu, Gujarat, Uttar Pradesh, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Bihar, Punjab West Bengal, and Haryana) was 88.25 percent. Per unit, employment went up from 4.48 persons in the 3rd census to 5.93 persons in the 4th census. In the case of the unregistered sector, 2.45 crores unregistered units were estimated this was generated 5.02 crores employment. The share of unregistered units including 10 states only (Uttar Pradesh, Maharashtra, West Bengal, Tamil Nadu, Andhra Pradesh, Karnataka,

Kerala, Rajasthan, Madhya Pradesh, and Odisha) was 75.21 percent. (Fourth all India census report 2006-07)

1.2: Background:

"During post-independence, the government of India has taken many initiatives to promote industrialization. Different plans and policies were introduced to the further development of the industrial sector and generate more employment. These reforms and policies were the Industrial Policy 1948, Industrial Policy 1956, the introduction of Mahalanobish Model (second five-year plan) which mainly focused on heavy industry, Industrial Policy 1977, Industrial Policy 1980, and, Industrial Policy 1991. The main motto of this sector is to overcome poverty and provide a better standard of living, which will automatically push the growth and development of the economy. In the post-independence period, the share of agriculture, industry and service sector has changed. The percentage share of agriculture and industry to Gross Domestic Product (GDP) was reduced from 18.29 percent and 34.44 percent in 2006 to 17.35 percent and 28.85 percent in 2016 respectively. But the percentage share of service to GDP was increased from 46.6 percent in 2006 to 53.8 percent in 2016.

If we want to know about the historical background of MSMEs in India during the post-independence period, the President of India amended the Government of India (Allocation of Business) Rules, 1961 and subsequently the Ministry of Agro and Rural Industries (India) and the Ministry of Small Scale Industries (India) were merged into a single ministry, the Ministry of Micro, Small and Medium Enterprises. After that all micro, tiny, small, and medium enterprises are clubbed in one broad group as Micro, Small and Medium Enterprises (MSMEs). After the enactment of Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, the small and medium sector has been clearly defined as micro, small and medium enterprises with effect from 2nd October 2006 (S.N.Bastia).

The Micro, Small & Medium Enterprises (MSMEs) contribute significantly to India's GDP alongside contributing to income generation, employment boost, exports and overall growth in the country's economy. As per the reports by the Central Statistics Office (CSO) and the Ministry of Statistics and Programme Implementation (MoSPI), this sector contributes around 8 percent to the GDP, 40 percent of the total exports and 45 percent of the manufacturing output. As per the

Fourth All India Census of the Micro, Small and Medium Enterprises, the total numbers of enterprises of the MSME sector are 361.76 lakh of which 15.64 lakh are registered enterprises. It has also been recorded that the MSME sector offers employment to around more than 80 million people in India. Realizing the significance a separate Department of Micro, Small & Medium Enterprises has been created with an objective to facilitate, promote and enhance the competitiveness of MSMEs in the state.

During the seventies and eighties government of Odisha had little role in small scale sector, because of that limited success was achieved with the small scale sector in the state. In Odisha, the process of industrialization in the four decades from 1951 to 1991 was less focused than in many other states of India (IPR 2001). In Odisha itself, MSME units are generating maximum employment next to agriculture. Citing about MSME in Odisha, an organization named Odisha Small Industries Corporation Ltd. (OSIC) was established way back in 1972 as a wholly owned Corporation of Government of Odisha. The basic objective of this organization was to aid, assist and promote the MSMEs in the State for their sustained growth and development to gear up the industrialization process in the State. Although there are a number of other State Corporations looking after various aspects of industrial development, yet this is the only Corporation in the State exclusively engaged in the development of the MSMEs which form the backbone of the industrial sector in the state.

Under the patronage of honorable Chief Minister Sri. Naveen Patnaik, the Government of Odisha has been successful in organizing MSME trade fair with an objective to promote start-ups. Sri. Pattnaik is carrying forward the same sanguine approach turning Odisha into an industrial cluster which was the dream of his father and then Chief Minister Sri. Biju Pattnaik. These trade affairs play duel role for the start-ups. Firstly, the start-ups get ample motivations by the government's initiatives which boost their interests and they go for more expansions. Secondly, the new start-ups especially the new ones' come into the notice of big players who intern act as venture capitalists and angel investors for them. In a bid to encourage innovation and entrepreneurship among youth, Shri Patnaik also provides Youth Innovation Awards to business ideas of the start-ups. Some of the successful start-ups of Odisha are Krishna Industries, Bubuna Chemicals, Mechem Pvt. Ltd., etc. In a process to make the startups stand-up at a faster pace, the govt. of Odisha has made a single window clearance system. With a target of making the state home to at

least 1,000 start-ups over the next five years, Odisha government recently had announced a new policy called the Odisha Startup Policy (OSP), 2016. OSP envisages Odisha being among the top three start-up hubs in the country by 2020 through strategic partnerships, conducive ecosystem, investments, and policy intervention. The policy will be implemented within five years and comprises of three Is – Institutions, Industry and Incubation. A start-up capital infrastructure fund (up to Rs. 25 crores) would be provided by the state government to the Department of MSME through budgetary provisions" (S.N.Bastia- https://mudira.nalcoindia.co.in/GYANALOK/Attachments/1_E_164378_MSME%20Sector%20in%20Odisha.pdf).

MSMED Act2006, the MSME is divided into two Classes:

1. The first one is called Manufacturing Enterprises, which refers to the outcome that is related to- the investment in Plant & Machinery.

Table 1.1: MSME Classification in the manufacturing sector

Type of Enterprises	Particulars	Level of Investment
Micro	Investment in Plant & Machinery	up to Rs.25 lakhs
Small	Investment in Plant & Machinery	exceeding Rs.25 lakhs but withinRs.5 crores
Medium	Investment in Plant & Machinery	exceeding Rs. 5 crores but within 10 crores

2. Service Enterprises- the service enterprises are distinguished concerning the investment in equipment.

Table 1.2: MSME Classification in the Service sector

Type of Enterprises	Particulars	Level of Investment
Micro	Investment in Equipment	up to Rs.10 lakhs
Small	Investment in Equipment	exceeding Rs.10 lakhs but wthinRs.2 crores
Medium	Investment in Equipment	exceeding Rs.2 crores but within Rs.5 crores

The MSME enterprises are classified into two categories like 1. Registared and 2. Un-registared. The Enterprises registered with District Industries Centres (by filling up Entrepreneur

Memorandum II) in the State/ UTs., Khadi and Village Industries Commission or, Khadi and Village Industries Board, Coir Board up to 31.03.2007 and factories under the coverage of section 2m (i) and 2m (ii) of the Factories Act 1948 used for the annual survey of industries are included in the registered sector. The enterprises engaged both in the activities of manufacturing services which are not registered with District Industries Centre (no case of filling up EM-II) on or before 31-03-2007 are considered as Unregistered MSMEs. In September 2015, EM-II was replaced by Udyog Aadhar Memorandum (UAM). Its main agenda was to promote the ease of doing business.

If we see the performance of MSMEs at all India level by state, the performance of MSMEs manufacturing sector is high in the states like Tamil Nadu, Uttar Pradesh, West Bengal, Andhra Pradesh and Gujarat in terms of labour force participation rate (LFPR) (56.1 percent), literacy rate (79.9 percent), gross state domestic product (GSDP) to gross domestic product (GDP) ratio (7.1 percent), GSDP compound annual rate of growth (CAGR) (6.2 percent) and foreign direct investment (FDI) in state at USD 2.7 billion whereas the state like Madhya Pradesh, Rajasthan, Bihar, Odisha and Assam the performance of this sector is very poor in terms of LFPR 51.6 percent, literacy rate 68.5 percent, GSDP to GDP ratio was 2.8 percent and FDI was 0.04 billion (N.R. Jena and L.R. Thatte, 2018).

In States like Punjab, Haryana, Maharashtra, and Gujarat, the level of economic development are found to be much higher than the poor and backward States like Assam, Bihar, Odisha, Madhya Pradesh (Meher, 1999). This study give more focused in the state Odisha because of lower performance of MSMEs. It also tries to check the trends in the growth of MSME units, investment, and employment in Odisha. Odisha is considered as a backward State but is said to be rich in minerals and other natural resources.

In Odisha, MSME plays a pivotal part in the economic expansion of the state. The percent share of MSMEs to Gross State Domestic Product (GSDP) is seen to increase day by day and this has resulted in the generation of more employment, after the agricultural sector. In 2016-17 the agricultural sector percent share was reduced to 19.91 percent from 55 percent which prevailed in 1950-51.The percent share of industry and service sector increased to 80.09 percent from 45 percent. In Odisha MSME has become an evolving sector. The highest numbers of MSMEs were built in various districts, namely, Sundargarh, Cuttack, Sambalpur, Ganjam and Khurda in

between 2016-17. The repairing and service sector as well as the textile sector cover the biggest numbers of MSME units among other manufacturing unit.Various plan and policy initiated by the government of Odisha are (a). Industrial Policy Resolution (IPR) 2001, (b). Industrial Policy Resolution 2007, (c). Public sector reform (2009-10), (d). Industrial Policy Resolution (IPR) 2015, (e). MSME Development policy 2015, (f). Special Economic Zone (SEZ) 2015.

But in spite of implementation of various policies and schemes, the Odisha's MSME sector facing challenges to sustain the double digit growth. Initially, it is needed to study and understand about the trends in the growth of units, investment, and employment among MSMEs not only size but also by social groups owned by different communities to promote the inclusive growth in Odisha. By keeping in this point of view, the present study tries to analyse the trend in the growth of MSME units, investment, and employment in Odisha. And also analyse trends among enterprises of a social group (SC, ST, and Non-SCs/STs). This study examines the issue of trends in the growth of MSMEs by identifying the following objectives which are needed to be study.

1.3: Objectives:

The main objectives of the study are:

1. To understand trends in the growth of MSME units, investment, and employment.
2. To study the trends among enterprises by social group.

1.4: Methodology:

This study rests on secondary source of data. The data has been collected from Directorate of Industry Odisha, Economic Survey, All India Census of MSMEs report, as well as, Census (2011). This study analyse trends in the growth of MSME units, investment, and employment in Odisha from 1979-80 to 2016-17 and by social group from 1999-00 to 2013-14. The three-year moving average growth rates (3yr MAGR), decadal rate of growth and compound annual rate of growth (CAGR) are used to analyse the data collected from these sources and thus assessed the growth trend of MSME units, investment, and recruitment in the MSMEs sector. The data has taken in the cumulative form and calculate the percentage share, rate of growth as well as three

year moving average growth rate. Before calculating investment growth rate, inflation is adjusted by waited price inflation (WPI) through splicing method (2004-05 base year).

Chapter 2

REVIEW OF LITERATURE

The Micro, Small and Medium Enterprises (MSMEs) play an important role for employment generation as well as growth and development of an economy. This chapter contain review of literature which gives a broader idea of existing work. "Trends in the growth of MSME units, investment, and employment in Odisha" is the study area which divides this chapter into four different issues. This can explain as follows:

2.1: Performance of three sectors (agriculture, industry and service) in the economy

Krishna (2012) study has taken the past six decades (since 1950) and has explained the industrial development in India. This study has given more emphasis on growth of output and employment in the reform period. He has divided the whole period into five phases from 1951-52 to 2010-11 on the basis of policy regime and pattern of growth. The first phase (1951-66) evolved industrial development strategy which include three five year plans. The first five year plan (1951-56) gives more importance for the development of agricultural sector whereas the second five years plans (1956-1961) due to the growth of heavy industry (introduction to Mahalanobis model). Due to less export, import substitution industrialisation (ISI) strategy was come into existence. The average annual rate of growth (AAGR) during the third plan (1961-66) was lower (2.8%) than the second plan (4.3%). In the second stage (1967-80) with reinforce of import substitution procedure and burden of different government controls, specially, Foreign Exchange Regulation Act (FERA), Monopoly and Restrictive Trade Practices (MRTP) Act, and small scale industrial reservations was introduced. Industrial rate of growth in this period was low (4.1%) as compared to previous phase (6.3%). In the third phase (1981-90) industry GDP growth expanded by 3 rates focuses from 4.1 to 7.1 percent. At the end of this period there was balance of payments crisis because of the 1990 Gulf War and oil price hike. In the fourth phase (1991-2000) after the crisis, different plans and policies (foreign trade policy, reforms in industrial deregulation, and fiscal consolidation etc.) were introduced to overcome the problem. As a result GDP rate of growth increased to more than 7 percent per annum and industry sector growth to 9 percent (1991-94). In the fifth phase (2001-11) GDP growth to 7.9 percent per annum and industrial growth accelerated to 7.8 percent per annum.

Bal, Das, and Chandra (2015) have given more emphasis on the percentage share of three sectors (agriculture, industry and service) to GSDP of Odisha, sub-sector of industrial growth, contribution of Odisha to India's registered manufacturing sector, growth trends of registered

manufacturing sector both in pre-liberalised and liberalised periods, and productivity of registered manufacturing sector. They have used Annual Survey of Industry (ASI) data for the observation. For examining the structural change of GSDP and the growth rates of sub-sectors of industry cover the period from 1980–81 to 2012–13. In 1980-81 to 1989-90 the average share of agriculture, industry and service sector to GSDP of Odisha was 46.9, 25.2 and 27.3 percent. The average share of agriculture was reduced to 17.3 percent in 2010-11 to 2012-13, at the same time the average share of industry as well asservice sector was increased to 34.0 and 48.7 percent. (Odisha Economic Survey 2012-13). the average share of construction was higher (48.9%) followed by registered manufacturing sector (16.7%) in 1980-81 to 1989-90. The average share of construction was reduced to 26.3% and registered manufacturing sector was increased to 39.3% in 2010-11 to 2012-13. This study has given more focused on the major registered manufacturing industries (five major groups— food products, basic metal and alloys, paper along with paper products, chemicals along withchemical products, and non-metallic mineral based products) in Odisha. The shares of these five groups of industries to the total output of the organised manufacturing industry represent 78.94% (1980-81 to 2005-06). They examined the capital-labour ratio, labour and capital productivity in the five groups of industries. The trends of rate of growth for labour productivity in the pre-liberalised period (1981-82 to 1990-91) shows 10% growth per annum whereas in the liberalised period it was insignificant growth. On the other hand, capital productivity fell (6%) the entire period. The trends of the capital–labour ratio of aggregate industry were higher during the study period. Labour productivity was highest in the basic metal and alloys product whereas capital accumulation was highest in the paper and paper products. Chemical and chemical products, and basic metal and alloys product represent positive growth in total factor productivity. The study found that most of the industries have followed capital-intensive technique rather than labour-intensive technique of production which increased industrial output and not proportionately increase the employment opportunities of the people.

Sahu and Sethi (2017) studied how the three sectors (agriculture, industry, and service) are interrelated. The development of one sector relates to the development of another sector (like agricultural sector provides raw material, man power to industry and service sectors again industry and service sector provides fertiliser, pesticides to agricultural sector). But as compared to agricultural sector the development of service and industry sector was high. The

share of service sector to GSDP was high (51.2%) as compared to industry (33.4%) and agriculture (15.4%) (Economic Survey of Odisha 2014-15).

2.2: Issues of industrial location, migration and environmental effect.

Roth (1970) study focuses on the industrial location and industrial policy of India. Industrial locations mainly prefer those areas which are industrially backward or private sector area. The development of the industry in such place automatically declined regional disparities and increased infrastructural facilities. Huge monetary expenditure and economic deliberations on raw materials, power, labour and proximity to market must be given.

Reinschmiedt and Jones (1977) study emphasized the impact of industrialization on rural communities. This paper states that industrialization has a positive impact on the community as a whole because as industry exists, post-employment is increasing than pre. This article focuses on rural industrialization and comes to the conclusion that if rural industrialization increases, employment also increases thus improving the relative income position of low-income residents in rural areas.

Srivastava and Sasikumar (2003) has analysed the internal and international migration. They found that for the development of industry migrant labourers are more preferred to local labourers by the employers because they are cheaper (because of lack of strong labour union) and do not develop a social relationship with the place of destination.

Bhaduri (2007) studied the process of industrialization and the industrialization itself raises many questions. He poses questions about the chief actor of driving the industrialization, the sectoral composition of the commodity resulting due to industrial growth and about the winners and the losers in the industrialization process. This paper states that the existing neoliberal ideology which imagines that the profits of high growth trickle down automatically to the poor is not only empirically uncertain but politically foolish in a parliamentary democracy. This is because of the fact that the rapidity of trickling down remains undetermined since the government has to maintain a minimum degree of legality to win the election. Land which is the primary source of livelihood for the ordinary people is for instance transferred from ordinary people to Private Corporation, displacing people and destroying their livelihood. Thus in this process, the private corporation is the gainers and the ordinary people like the peasant and

tenants, agricultural workers and artisan, tribal and fisherman etc. are the loser. For them, their natural resources which are their only means of livelihood are given away to feed the large corporation in the name of development.

Saikia (2009) studied the industrial location in the post-liberalization period. This study states that in general, the most important factors determining industrial location are availability of good market and infrastructure, transport and communication, land laws and regulations, availability of finance and equipment, human resources, forward and backward linkages, technology and knowledge spill over, organisational behaviour, state regulations and the political support.

Bhaduri and Patkar (2009) examined because of industrialisation people lose their livelihood and also it hamper the environment badly. It is the weaker section of the people who sacrifice more for the successive industrial development. So the government has to be taken care about these poor and vulnerable groups of the people in the industrial area.

Mishra (2010) focused both on analytical and empirical relationship between agriculture, industry and mining sector. Because of industrialisation, not only natural resources get damaged but also there occurs a fall in agricultural growth. This is leading to migration of a large number of unskilled workers. Such a situation has led Banikanta Mishra to state, "Leave Odisha alone, without gold medals and golden handcuffs and allow its people to think about themselves".

2.3: Role of MSMEs in the employment generation

Thomas (1979) in his study on the relationship and the differences between small scale and large scale industry found out that while the large scale industry generates more indirect employment than small scale industry, small scale industry generates more direct employment than large scale industry. Large scale industry basically prefers skilled and quality (in terms of productivity) employment as compared to small scale industry. The total wages paid to workers need not necessarily be higher and the income-generating capacity per worker is much lower in small scale than large scale industry. More working capital and less fixed capital are used by the small scale industry but large scale industry utilizes less working capital per unit of output. Also, large scale industry uses better technology which is able to utilize raw materials efficiently which is not seen in the small industry. Large scale industry also generates more profit and invests it in future as compared to the small scale.

Vyasulu and Kumar (1997) on the basis of ASI data has studied both state and district levels trends and structure of industries in Odisha from 1966-67 to 1988-89. Basically, four variables have been studied for this purpose: the number of factories, value-added, number of employees and investment of fixed capital. The partial productivity and capital intensity of seven selected industries at the state and district level were computed. The findings of the study revealed that there is limited growth of dominant industries in the state and the pattern of industrialization is highly inadequate. Also, the inadequate growth of employment and number of factories even in the event of the rise in the growth rates in the value-added and fixed capital demands more careful study. Along with this the negative value addition in some of the industries also merits deeper study.

Meher (1999) while doing the on district level analysis has mainly focused on development disparities in a backward region. Economic development in states like Punjab, Maharashtra, and Gujarat was found to be much higher than the poor and backward states like Assam, Bihar, Odisha, and Madhya Pradesh. The efforts of the government in India to reduce regional disparities through country's five-year plans have been elusive. It has been observed that the promotion of industrial investment in backward regions hardly generates employment opportunities for the local manpower (Babu cited in Meher, 1991) and the income generated within the region may not remain confined at the local level (Government of Maharashtra cited in Meher, 1991).

Rani and Unni (2004) have analyzed the impact of economic reforms on the organized and unorganized manufacturing sectors. This paper explains the growing trend on the basis of specific trade and industrial policies. Different industries have different impacts based on economic policies pursued. Such policies give more emphasized on the growth of the automobile industry and the infrastructure sector which helped the growth of the manufacturing industry, especially in the unorganized segment and the generation of quality employment. This study has explained the growth in the organized and unorganized manufacturing sector during the partial liberalization and liberalization period. For this purpose, the period from 1984 to 2001 was divided into three sub-periods. The unorganized sector was adversely and employment growth was negative due to initial reform policies and the decline in employment was observed across all industries, especially in the textile industry. Also, the reforms of the early 1990s did not help

the unorganized sector to grow, and employment continued to be negative. However, the promotional policies for small scale industries with the aim of expanding their capacities and raising their investment limits led to the surged in the unorganized segment in the 1990s. This growth also helped in the generation of employment in most of the industries. The metal and machinery based industry, which suffered badly in the initial reforms, also picked up its momentum in the late 1990s. Although the employment generating potential in these industries was low, the quality of employment improved.

Padhi and Adve (2006) tell how capitalism which developed in industrial areas like Gandhamardan, Baliapal, Gopalpur, Chilika, Kashipur, Niyamgiri, Lower Sukhtel and Kalinganagar in the name of development and industrialization had to face strong resistance by the people. It was asserted by the government that the Tata Project would create employment opportunities for the displaced. But less than one in ten displaced families got employment in the case of four other plants that was already been set up in Kalinga Nagar. Such mythical promise of the development of backward areas has left most of the tribal and other rural areas of India underdeveloped.

Meher and Sahoo (2008) examined the socio-economic background and the entrepreneur spirit among Oriya entrepreneurs in the SSI units. This study emerges from a primary survey where 145 SSIs from 3 cities that are Bhubaneswar, Cuttack, and Raurkela were taken during late 1990. It was found that, there was an inadequate scope to mitigate poverty by private market economy as well as very difficult to provide permanent employment opportunity to unskilled workers by large scale industries because this sector highly related to capital intensive technique. At the mid 1980 many SSIs units were set up, out of these some were run their industries with barely prepared thoughtful plan and also used traditional method to improve their business. Some SSIs units were run their industries without depends on state government. Because of these problems around 60% of the registered units in the organized factory sector were sick in the early 1990s.

Papola (2008) focused mainly on the employment challenges faced by India which is taken in ten core elements (technological change, trade and investment, sustainable livelihoods, skills development, macro policy, active labour market policies, entrepreneurship development, social protection, conditions of work and poverty reduction). The author pointed out the poor quality of employment in India, especially in the informal sector. While examining the reasons behind

poverty, he studied the feasibility of poverty alleviation through employment generation. Most of the people in the agricultural sector, workers in the unorganized sector and informal sector are poor. This has led to unemployment and low income and productivity. Also, these poor workers do not enjoy any social security or any social protection in the workplace. The demand for such unskilled or low skilled workers in most of the industries is also low. This low employment is also alarming as Papola found that employment in the industrial sector is declining years after years as compared to GDP growth rate.

Kannan and Raveendran (2009) analyze the growth trends of the organized manufacturing sector at disaggregate levels. The paper shows that there is an increasing division between the formal and informal sections of the Indian manufacturing sector. The paper says that since the employment rate is not increasing in the same direction as the growth in GDP, India is suffering from jobless growth.

Alivelu (2011) has focused mainly on two types of industrialization in Odisha. One is the fast-growing resource-based manufacturing sector comprising steel and ferroalloys, which are highly capital intensive and dominated by large private and public sector firms, the other being the stagnant non-resource based manufacturing sector mostly dominated by small and medium firms. As compared to many states in India the stipulated minimum wage in the organized manufacturing in Odisha is much lower. Also, it was found that on an average the labor productivity in Odisha is the lowest while Gujarat recorded the highest labor productivity. The fast-growing resource-based manufacturing sector has been very successful in Odisha, with high rates of output growth and labor productivity levels better than comparable states and the all India average.

Papola (2012) studied the employment growth in the post-reform (1991) period. The study found that the employment growth was 2.39 percent from 1987-88 to1993-94 which was reduced to 1.04 percent during 1993-94 to 1999-00. It was again increased to 2.39 percent during 1999-00 to 2000-04 after that (additional five year) there was no significant progress in employment. The rate of growth of employment was inversely related with rate of growth of GDP. There was declined in the rate of growth of employment in one hand and the other hand there was increased in the rate of growth of GDP which was 5 percent during 1983-84 to 1993-94, increased to 6.3 percent in 1993-94 to 2004-05 and again increased to 9 percent in 2004-05 to 2009-10. Elasticity

of employment (the ratio of employment to the rate of growth of GDP) was continuously declined. That was 0.42 percent during 1987-88 to 1993-94, 0.16 percent during 1993-94 to 1999-00 and 0.02 percent during 2005-10.

Pattnaik and Nayak (2013) have examined the employment intensity of secondary sector in India. It was found constant elasticity of employment in India during study period. The most important determining factors of elasticity of employment were productivity of labour, foreign trade, investment, growth of GDP, and percentage share of service sector to GDP. Manufacturing as well as construction sector is the part of industry which constitutes around 95 percent of industry sector employment. Because of continuous increase in employment in informal sector there was fall in employment in formal manufacturing sector which is a big problem in India. It was also found that over a period of time, construction, the sub-sector of the manufacturing sector has been rising continuously. Because of lack of productivity the unskilled worker shifted from manufacturing sector to construction sector. Thus there is a failure to create employment in a high productivity area in the secondary sector, especially the manufacturing sector.

Sen and Salim (2014) have made an attempt to study (from 2006 to 2014) the performance of MSMEs units, investment, and employment in West Bengal. The cost of capital is less with huge employment in MSMEs is the major benefit. It was found that there is existence of regional disparities among district in terms of MSMEs units, investment, and employment. The actual complications face by the state is that absence of entree to global market, high cost of credit, and inadequate infrastructure facilities etc.

Suman (2015) studied the recital of MSMEs in India during pre as well as post liberalization era. The study period was from 1973-74 to 2012-2013. MSMEs occupy a dynamic role for the development Indian economy. MSMEs employ more workers than big industry with less cost and also have a significant contribution to export and production. Development MSMEs reduce regional imbalances and promising equal distribution of national income. There was over 6000 product which is being manufactured by the MSMEs sector. Total export in this sector was 40 percent whereas manufacturing output was 45 percent. The share of this sector to India's GDP was 8%. The performance of MSMEs during post liberalisation period has found significant improvement than the pre liberalisation period. This has been proved by the paired sample 't' test.

The main purpose of the study on "Challenges for industrialization in India: state versus market policy" by Siddiqui (2015) has been to examine the growth and significance of the secondary sector in India. This study points out that even after the two decades post-neoliberal reform (1991) period, industrial growth especially the manufacturing sector has still not seen rapid expansion. The rate of growth of manufacturing sector was 8.2 percent during 1980 which was reduced to 6.4 percent during 1991. Neoliberal policies have not flourished to create jobs and have not been able to improve the living condition of a significant proportion of the population. This is because the rate of growth of employment was slow i.e. less than 1 percent per annum, disproportionate policy and economic interventions.

Parida, Pradhan et.al (2016) using both primary and secondary data this study analysed the productivity, employment, as well as growth in India's manufacturing sector (from 1980-81 to 2012-13). Five (5) labour-intensive industries (textile, sports goods apparel, footwear, furniture and industries) within five states (Tamil Nadu, Punjab, Haryana, Uttar Pradesh and Delhi.) in India have taken into account. It was found that labour intensive manufacturing industry was continuously declined in total factor productivity since 1980. The rate of growth of productivity of labour in labour-intensive industries declined in all manufacturing industries in the two periods because output was less reactive to employment generation in the sector as well as unskilled workers. The rate of growth of productivity of capital in labour-intensive industries was came down during the post-reforms period because absorption of more unskilled labour in the sector with low output. The highest (99 percent) percentage of firm owners was from apparel industry and lowest (54 percent) from textile industry. The average level investment for setting up of factory was lowest in furniture industry whereas highest in textile industry. The study also found that more numbers of unskilled workers were engaged in textile, footwear sports good and furniture industries whereas less in apparel industry. Because of more unskilled workers were engaged in the mentioned industries, productivity as well as efficiency in these industries was low.

Rachyeeta and Priti (2016) have analysed comparatively how skilled deficiency exists in the MSMEs sector mainly in Odisha. As compared to the large industrial sector, MSME has the potential to generate huge employment. Two districts namely Khurda and Malkangiri were selected for the analysis of skill differences. As per the Odisha Human Development report 2005,

Khurda is forward and Malkangiri is a backward district. It was found that due to lack of skill in Malkangiri the MSME sector did not employee much more personal than in Khurda district.

Pathak and Manjari (2016) have studied the progression and recital of the MSMEs sector in Uttarakhand along with made an effort to understand the difficulties handled by the progression of MSMEs. Because of natural disaster (Flood) in 2013 more than 19000 registered MSMEs sector loss almost Rs. 531.20 crores. According to the Directorate of Industries (DI), the position of Entrepreneurs Memorandum (EM-II) has increased from 1500 in 2007-08 to 2669 on 30th June 2015. The finding states that more than 90 percent of units registered are under the micro sector. The manufacturing of food and beverage product has a larger share than the other product in the state due to rich agricultural resources available in the region. But at the same time, hilly terrains of the state pose an obstacle to attract investment in the manufacturing sector.

MeerAvalishaik, Ramesh *et.al* (2017) have found that over the last 7 year (from 2006-07 to 2012-13) MSME sector has generate more (4.75%) employment. The compound annual rate of growth (CAGR) of total working enterprises was 4.39 percent, employment was 4.75 percent and market value of fixed assets of MSMEs was 6.64 percent (from 2006-07 to 2012-13). The share of manufacturing and service sector MSME to India's GDP was -1.53% and 1.82% during the study period. However, government has taken many initiatives (KVIC and SIDO) for expand the productivity.

Yadav and Kumar (2017) analysed the growth, employment along with output configuration of MSMEs within the Indian economy. This reading not only gave more focused to discover the employment elasticity with respect to output but also trying to analyse the growth, employment and output configuration. It was found that, the progression of MSMEs and employment had been quite high during the period 2001-02 to 2011-12. These findings are based on the analysis of two types of changes, absolute and relative change. The average productivity of employment has increased (4.1%) during the entire period 2001-02 to 2011-12. But the marginal productivity of employment increased (20.91%) during first phase (2001-02 to 2005-06) and declined (1.54%) during the second phase (2005-06 to 2011-12). The average productivity of investment has seen rising trend (8.1%) in the first phase but it was constant (-12.4%) in the second phase. This paper also found the rate of growth of export to be very impressive. The export of the

MSMEs grew at 14.82% whereas the output had been growing at 20.58% during 2001-02 to 2011-12.

Kaur (2017) has specially analysed the role of MSME sector in India's GDP along with the magnitude of employment generated by the MSMEs apart from looking into other aspects of MSMEs like its definition and the government policy towards MSMEs. The time period of the study was 2001-12. The share of MSMEs to India's GDP was 37.54% during 2012-13. Out of this the share of manufacturing sector MSME to GDP was 7.04% and services sector MSME was 30.50%.This study found out that MSME ranked second to agriculture in terms of employment generation.

Das (2017) focused especially on the functional scenario of MSMEs in Indian economy. It was found that, MSMEs sector in terms of employment generation inhabits 2nd place after agricultural sector. However, in spite of such relevance of this sector, inadequate credit along with capital, poor along with insufficient facility of infrastructure as well as absence of skilled human resources were some of the major challenges faced by these sectors.

Sankar (2017) studied that the employment generation in the MSMEs sector in Thiruvallur district of Tamil Nadu. Thiruvallur is one of the industrially developing and forward districts which made it suitable to select this district. In the case of a number of industrial units, metallurgy units were higher (750 units) followed by computer-related (700 units) activities. More than 27319 MSEs engaged in the manufacturing of various products like Leather, Chemical Textiles, and Engineering .This study has taken 5-year data from 2012 to 2016 and analyses whether employment is generated or not in MSMEs sector. It was found that more than 78 percentage of employment created in MSME sector which was supplied by the unregistered enterprises.

Manna and Mistri (2017), Gade (2018) found that after the MSME Act 2006, there has been progressive growth and the upward trend of MSMEs. The findings showed that while there is a declining trend of the contributions of manufacturing units from 2006-07 to 2012-13 and service sectors is showing an increasing trend. The possible reason could be the preference of the people to invest more in the service sector than manufacturing units. Among the manufacturing units, investment in plants and machinery were very high. Also, there was huge numbers of working

enterprises in the unregistered sector along with it generates more employment opportunities. It was also found out that most of the states in India had unregistered MSMEs and these unregistered sectors are mainly labor intensive while registered MSMEs sectors are on the capital intensive sector and this sector produces more output than the unregistered sector.

Balasubramanian and Madhavan (2017), Gilda, et. al. (2016), Kishore (2016) this study examined the comparative performance of the growth of the MSMEs with all industrial sectors in India (from 1993 to 2014). And also tries to focus on the sector-wise analysis (included 10 products like food, apparel, metal, repair personal household goods, repair motor vehicle, textile, furniture, non-metallic mineral, wood product and machinery.) of MSME and their contribution. It was found that the rate of growth of MSME was more (18.45) in 2010-11 followed by 2013-14 (17.18), and the negative rate of growth was recorded in 2000-01 (6.1). In the entire industrial sector there was documented highest rate of growth in 1995-96 (12.1) and the decreasing rate of growth in 2000-01 (2.7). The finding states that the contribution of the food and beverage industry was higher than in other industries. The lower contribution came from repairing along with maintenance of motor vehicles.

Seena and Swarupa (2018) analysed the growth and performance of a number of units, employment, investment, and goods and services after dividing Kerala into three separate regions that are southern, centre and northern region. It was found that MSME plays an essential part in the growth of an economy. It pushes small sector to grow along with the growth of the large industry.

2.4: Performance of MSMEs by social group

Meher and Sahoo (2008) studied that a large (53.10 percent) part of the entrepreneur emanates from upper caste (Brahmin, Kshatriya, and Karna), 29.65 percent are from medium castes (Khandayat and Banian- Jewellery makers; Chasa- Farmer), 16.55 percent are from lower castes (Oil man- Teli; Badhei- carpenter; Tanti- weaver) and 0.69 percent is from Scheduled Caste (SC). The preponderance of the SSI entrepreneur within Odisha suffered the serious insufficiency of working capital which is actually a big problem.

Nichter and Goldmark (2009) raises the question that what is the main reason of MSE units enlarge very fast while others remain stagnant? They focused on four factors of this issues that

are individual entrepreneur characteristics (it includes educational qualification, working experience, and gender), firm characteristics (include firm age, formalities, and access to finance), relational factors (it includes social network or value chains), and contextual factors (business environment). It also pointed out the vertical and horizontal linkages for the progression along with development of small firms (Nichter and Goldmark, 2009).

Thorat and Sadana, (2009) this study mainly focused on the caste discrepancies in the ownership of private enterprises. The percentage share of total private enterprise in the country among SCs and STs was lower than their share in the country's population whereas among OBCs this share was almost similar but in other categories, it exceeded from the population share. Ownership proportion in total private enterprises in rural India among SCs was 10 percent, STs was 4.6 percent, OBCs was 40.57 percent, and others was 44.83 percent whereas share in population among SCs, STs, OBCs, and Others were 10 percent, 21 percent, 43 percent, and 25 percent respectively. In case of urban India the percentage share of ownership of private enterprise among OBCs and others also more than the SCs and STs Share. In India SCs and STs Households owned a very smaller proportion of private enterprises and also among them they work more of household enterprises which are run with family labor. Own account enterprises are usually operated with low capital and use traditional techniques. The low turnover generates low income and results in high poverty among these households. SCs and STs was lacking behind for accessing of ownership of private capital because of refutation of property right in farm and non-farm enterprises.

Deshpande and Sharma (2013) mainly focused on the involvement of dalit (SCs), adivasi (STs) and women in the MSMEs sector. For comparative study the all India census data 2001-02 and 2006-07 has taken into account. This study found that in the ownership of registered manufacturing MSMEs, there was existence of caste and gender disparities. SCs and STs were less (21.6 percent) represents as compared to their population share. At the same time non SCs-STs were over (30.7 percent) represented in 2004-05. Almost 90 percent of the units were own by the OBCs and others, whereas rest owned by SCs and STs. As compared to the population shares, the share of OBCs in enterprise ownership was almost equal to their share in population (41.2 percent) whereas SCs ant STs (19.7 and 8.4 percent) of the total population. From 2001-02 to 2006-07 caste disparities have increased but gender disparities decreased. In the rural area the

proportion of SCs, STs, OBC and women ownership was higher than urban area. As compared to upper caste firms the female ownership was higher among SCs and STs.

Grisna and Qaanita (2013) this study gives more focused on the performance of SME sector in Indonesia. Four factors that affects the performance of SME such as entrepreneurial aspect (this includes optimism, motivation, self-efficiency along with management), huge competition of human resources (it includes skill, knowledge along with capabilities), innovativeness (it includes new idea, new techniques, and new product creativities), and sustainability (include growth and profitability).The author of this study tries to check how these four-factor affects the performance of SMEs in Indonesia. They found that out of this four-factor the entrepreneurial aspect affects more than the competence of human resources whereas the effects of innovativeness and sustainability were very negligible. For this explanation it was cleared that entrepreneurial aspect has advanced predisposed because the success of the business was determined by the owner characteristics

Wang (2016) in this study 119, developing countries were taken into consideration for the analysis of the obstacles of SMEs (from 2006 to 2014). They pointed out major five obstacles (financing, huge competition, taxation, electricity as well as political instability). Out of these obstacles, the important obstacle of the developing country is the problem of finance (13.51 percent) followed by practices of competition (11.29 percent). It is believed that continuous growing firms have a larger demand for funds as compared to less growing firms. Those SMEs comes under state ownership can have very limited financing problems than those comes under private SMEs.

Conclusion

Based on the above reviews it is concluded that within the three sector that is agriculture sector which is also known as primary sector, industry sector which is also known as secondary sector and service sector which is also known as tertiary sector, the share of employment to GDP is increasing both in secondary and tertiary sector but some studies (MeerAvalishaik et. al2017, Yadav and Kumar 2017, Papola 2012, Papola 2008) criticized it that no doubt employment

increases due to industrialization but it is not increasing proportionately with increase in the share of GDP/output. While secondary and tertiary sectors provide employment to the people, there is another debate (Saikai 2009, Srivastava and Sasikumar 2003, Garniak 2017) for the location of industry which is the main cause of displacement that force to the local people to migrate to some other place. It also hampers nature and natural resources (Bhaduri and Patkar 2009, Bhaduri 2007). After the agricultural sector, MSMEs is the second sector which generates more employment opportunities but some study (Yadav and Kumar 2017) shows it is stagnant or low during some period (2005-06 to 2011-12). There are other debates related to productivity, skilled and unskilled workers. Studies (Philip 2004, Parida et. al. 2016, Pattnaik and Nayak 2013, Rachyeeta and Priti 2016) based on registered and unregistered MSMEs units shows that most of the MSMEs units come under unregistered sector due to a lot of official formalities and some other reasons. Limited studies (Thorat and Sadana 2009, Nichter and Goldmark 2009, Deshpande and Sharma 2013) were focused on the performance of MSMEs by social group. Based on this study it can be said that there exists some gap in these studies. Most of the studies focused on growth and performance of MSEM but less focused on sector classification and their percentage share as well as trends in the growth of MSME units, investment along with employment by social group in Odisha. Thus such gap necessitates the need for study in this area and for this study the State of Odisha has been chosen.

Chapter 3

Trends in the rate of growth of Units, investment, and employment in MSMEs (Odisha)

This chapter deals with the trends in the rate of growth of units, investment as well as employment in Micro, Small along with Medium sizes enterprises in Odisha from1980 to 2017. Actually this period can be divided into pre-and post-reforms period for better understanding on the impact of new economic reforms over the rate of growth of units, investment, and employment in MSMEs (Odisha). But the availability of data limiting the study in this point of view and it is carried out for total period. This chapter concentrates on three parts like A- Trends in the rate of growth of units, investment along with employment by category of MSME (Manufacturing and Servicing), B - The trends in rate of growth of units, investment, and employment of MSME by size category and C - Changes in trends and pattern in the rate of growth of units, investment, and employment in MSME by product (12 major products).

3.1A: Trends in rate of growth of units, investment along with employment by category of MSME (Manufacturing and Servicing):

The MSMEs sector is the largest employment generating sector in Indian economy and are associated with very low capital-labour ratio when compare with the large scale industrial units. The share of industries in Odisha's GSDP was 43.6 percent in 2011-12 which was reduced to 34.8 percent in 2017-18; though Odisha is a mineral-rich State and it has immense potential for industrialization (Odisha Economic Survey 2017-18). At the end of 2016-17, a total of 3.22 lakh MSME units were functioning in Odisha with an amount of investment of 15960.08 corers by generating 13.34 lakhs of employments opportunities. The present scenario of MSMEs in Odisha has given below.

Table 3.1: The Cumulative numbers of MSME units, investment along with employment both in manufacturing and service sector during 1979-80 to 2016-17.

Name of the sector	**Units (in numbers)**	**Investment (in lakhs)**	**Employment (in persons)**
Manufacturing	119282 (43.87)	614688.25 (45.08)	716415 (60.33)
Servicing	152588 (56.13)	748848.06 (54.92)	471026 (39.67)
Total	271870 (100)	1363536.31 (100)	1187441 (100)

Source: Directorate of Industry, Odisha (2018)

Note: Figure in parentheses represents percentages. The above numbers represents in cumulative form.

In table 3.1 it is marked that the number of MSMEs set up in Odisha were 271870 units with 13 lakh investment and 1187441 persons employed during 1979-80 and 2016-17. The percentage share of units and amount of investment are more in the service sector. The shares were 43.87% and 45.08% for units and investment in manufacturing as lower than service 56.13% and 54.92% respectively. But the share of employment of manufacturing is higher 60.33% compared to service 39.67% during the same period.

If we see the trends in decadal compound annual rate of growth (CAGR) of total units, it was 10.75 percent in 1981-90 (see table 3.2) whereas investment and employment were 17.26 % and 9.97% in the same decade. The rate of growth of units was fall from 5.08% in 1991-00 to 4.78 % in 2001-10 and investment reduced from 10.93% to 8.95% in the same decade. The growth rates of employment almost stagnant at 3% in the next two decades. The decadal CAGR of units, investment, and employment increased to 12.75%, 17.02%, and 8.31% in 2011-17. At the same time the rate of growth of units and employment in manufacturing sector declined up to third decades and increased in fourth decade (2011-17). But the rate of growth of investment in manufacturing sector declined in the entire decades. The rate of growth of employment in the manufacturing sector has directly related to the rate of growth of investment because this sector was based on more labour intensive technique. The most important point is that the rate of growth of units and employment in service sector declined in the second decade (1991-00) and small increased in the third decade (2001-10). Again in the fourth decade the rate of growth of units and employment increased. But the rate of growth of investment in service sector increased in the second decade and declined in the third decade, again increased in the fourth decades. Here the rate of growth of employment in service sector has directly related to the rate of growth of units but not directly related to the rate of growth of investment because of the nature of capital intensive technique.

Table 3.2: Decadal Compound Annual Rate of growth (DCAGR) of manufacturing and service sector during 1981 to 2017

	Manufacturing (%)			Servicing (%)			Total (%)		
Year	Units	Invs.	Empl.	Units	Invs.	Empl.	Units	Invs.	Empl.
1981-90	10.16	17.21	9.74	15.45	18.45	13.71	10.75	17.26	9.97
1991-00	4.34	10.21	3.54	8.72	21.14	8.02	5.08	10.93	3.92
2001-10	3.28	8.06	2.91	9.03	14.29	8.40	4.78	8.95	3.68
2011-17	6.16	7.59	3.71	21.57	36.37	21.00	12.75	17.02	8.31

Source: calculated from collected dada (Directorate of Industry, Odisha 2018)

Table 3.3: Decadal change of per unit investment and per unit employment both in Manufacturing and servicing MSMEs (from 1981 to 2017)

Year	Manufacturing Inv. (000)	Servicing Inv. (000)	Manufacturing Emp. (person)	Servicing Emp. (person)
1981-90	115.77	34.32	8.15	3.71
1991-00	211.63	71.39	7.66	3.61
2001-10	339.82	157.93	7.16	3.20
2011-17	497.14	338.27	6.73	3.19

Source: calculated from collected dada (Directorate of Industry, Odisha 2018)

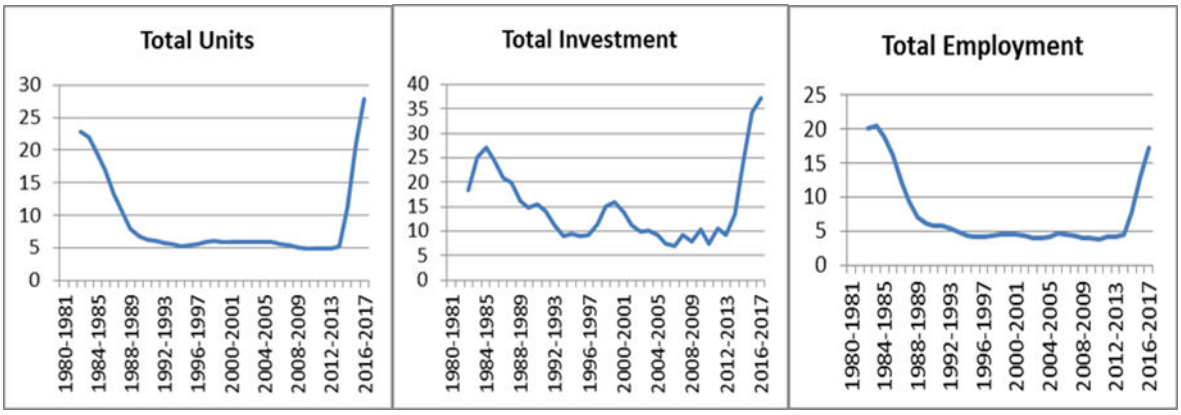
Note: for calculating per unit investment first of all inflation is adjusted through wholesale price index (WPI). After getting inflation adjusted investment, calculate per unit investment= inflation adjusted investment/units.

Table 3.3 shows the decadal changes in investment and employment per unit both in manufacturing and service sectors from 1981 to 2017. It is increased per unit in investment and manufacturing sectors continuously from 1981-90 to 2011-17. In 1981-90 the investment in manufacturing sector per unit was 115.77 thousand which increased to 211.63 thousand in 1991-00, 339.82 thousand in 2001-10 and 497.14 thousand in 2011-17 respectively. At the same time the average amount of employment in this sector was 8.15 persons in 1981-90 which did not

change (7 persons) for the two decades and then it reduced to 6.73 persons in 2011-17. In 1981-90 the average level of investment in service sector was 34.32 thousand and which was increased to 71.39 thousand in 1991-00, 157.93 thousand in 2001-10, and 338.27 thousand in 2011-17. The average level of employment in service sector was almost stagnant at 3 persons during all time periods. This is an overview of decadal changes of per unit investment and employment both in manufacturing and service sector.

From the 3yr Moving Average Rate of growth (MAGR) of total units investment, as well as, employment during 1980 to 2017 from the following figure 3.1, it helps to understand the trends in growth rates of total Units, investment, and employment over the period from 1980 to 2017.

Figure 3.1, it helps to understand the trends in growth rates of total Units, investment, and employment over the period from 1980 to 2017.



Source: Calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

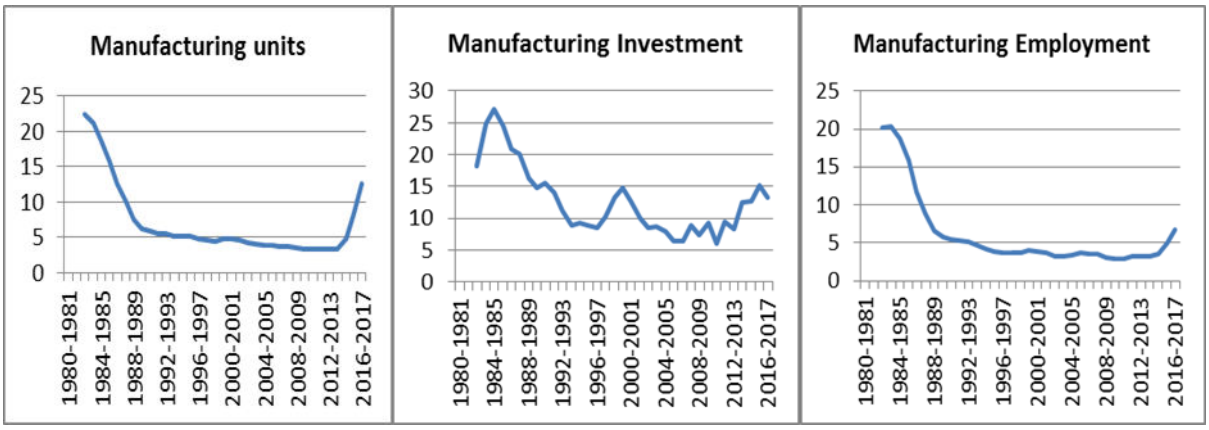
Note: first, annual rate of growth is calculated in the total MSMEs units, investment, and employment and then three year moving average rate of growth is calculated for better understanding of long-term trends.

The rate of growth of total units and employment first reduced from 1980 to 1990 and remained constant at almost 5% from 1991 to 2012 and again increased after 2013 onwards. The rate of growth of total investment first increased to 27.11% in 1984-85 and later reduced to 8.87% in 1995-96. In 1999-00 this rate of growth increased to 16.01 percent, subsequently fluctuate between 11 to 9% (from 2000 to 2012). From 2013-14 onwards the rate of growth of investment heightened from 13.49% to 37.08%. The rate of growth of total units and investment was higher

than the rate of growth of total employment after 2013. The trend in the growth of total units, investment along with employment suddenly increased after 2013, it may be because of policy changes.

The rate of growth of manufacturing units and employment was 22.52 and 20.16 percent in 1982-83 which reduced to 6.31 and 5.74 percent in 1989-90 (see figure 3.2). The rate of growth of units was stagnant between 5 to 3 percent from 1990-91 to 2012-13 and then went up to 12.52 percent in 2016-17. The rate of growth of employment varied between 5 to 3 percent from 1990-91 to 2013-14 and went up to 6.78 percent in 2016-17. The rate of growth of investment first went up to 27 percent in 1984-85 and then declined. It fluctuates between 5 to 15 percent from 1992-93 to 2012-13. Subsequently it starts increasing. After 2013-14 the rate of growth of units and investment was more than the rate of growth of employment in manufacturing sector.

Figure 3.2: 3yr MAGR of Manufacturing units, investment, as well as, employment over the period (from 1980 to 2017)

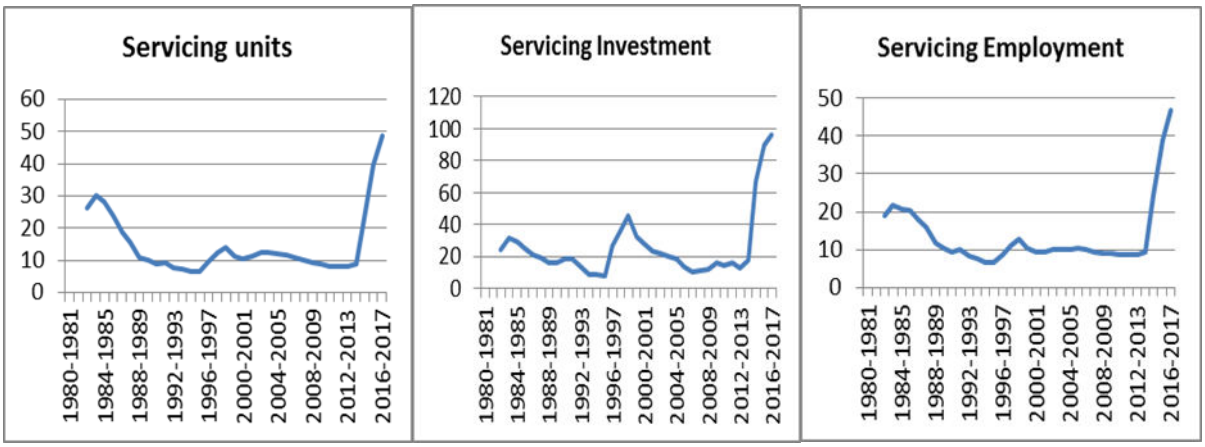


Source: Calculated from MSME units, investment, and employment in manufacturing sector (Directorate of Industry, Odisha 2018)

Figure 3.3 shows the rate of growth of units in service sector increased from 26.09 to 30.28 percent, investment increased from 23.98 to 31.88 percent, and employment increased from 19.15 to 21.87 percent respectively (from 1982-83 to 1983-84). Again the rate of growth of units reduced from 28.15 to 6.59 percent, investment reduced from 29.01 to 8.11 percent, and employment reduced from 20.85 to 6.47 percent (from 1984-85 to 1995-96). The rate of growth of units in service sector went up to 14.17 percent, investment went up to 45.56 percent, and employment went up to 12.79 percent in 1998-99. The rate of growth of unit varies between 8 to

11 percent whereas employment varies between 9 to 10 percent (from 1999-00 to 2013-14). 2014-15 onwards the rate of growth of units increased from 23.12 to 48.92 percent whereas employment increased from 24.44 to 46.79 percent (up to 2016-17). The rate of growth of investment reduced from 32.10 to 17.93 percent (from 1999-00 to 2013-14). From 2014-15 to 2016-17 this rate of growth increased from 66.61 to 95.94 percent.

Figure 3.3: 3yr MAGR of Servicing units, investment, as well as, employment over the period (from 1980 to 2017)

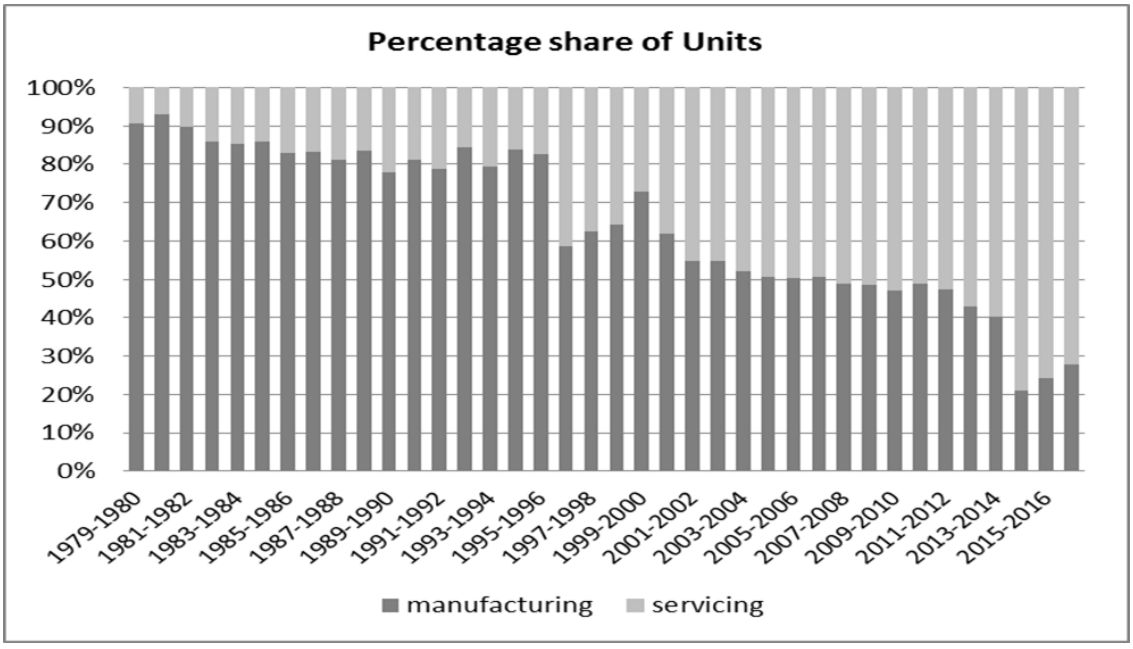


Source: Calculated from MSME units, investment, and employment in service sector (Directorate of Industry, Odisha 2018)

For better understanding of the trends in the growth of MSMEs units, investment, and employment, in manufacturing and service sector, focus must be given to the share of units, investment, and employment in these sectors. The percentage share of manufacturing units declined over the year whereas servicing units increased (see figure 3.4). The percentage share of units in the manufacturing sector was 90.59 percent in 1979-80 which was increased to 93.11 percent in 1980-81. This share fluctuate between 89.62 to 82.65 percent (from 1981-82 to 1995-96); it reduced to 58.59 % in 1996-97 but reached 72.73% in 1999-00. From 2001-02 to 2013-14 the share of units was varied between to 40 to 54 percent and then drastically reduced to 21.04 percent in 2014-15 after that went up to 27.87 percent in 2016-17. Similarly the percentage share of units in service sector was 9.41 percent in 1979-80 which was slightly reduced to 6.89 percent in 1980-81. The percentage share of this sector varied between 10.38 to 17.35 percent (from

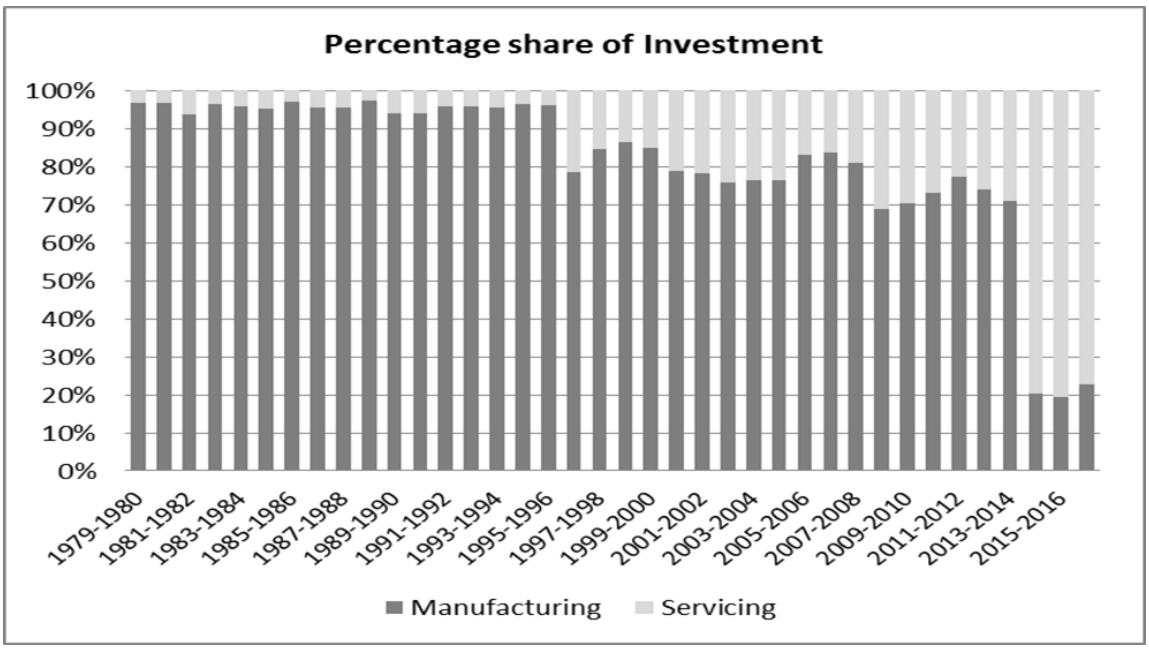
1981-82 to 1995-96). This share quickly increased to 41.41 percent in 1996-97 and then reduced from 37.48 to 27.27 percent (from 1997-98 to 1999-00). This share fluctuated between 45 to 57 percent (from 2001-02 to 2013-14) after that went up to 78.96% in 2014-15; it came down to 72.13% in 2016-17. Reasons for these changes are given below.

Figure 3.4: Percentage share of MSMEs units both in manufacturing and service sector over the period (from 1979 to 2017)



Source: calculated from total MSME units, Directorate of Industry, Odisha 2018

Figure 3.5: Percentage share of MSMEs Investment both in manufacturing and service sector over the period (from 1979 to 2017)



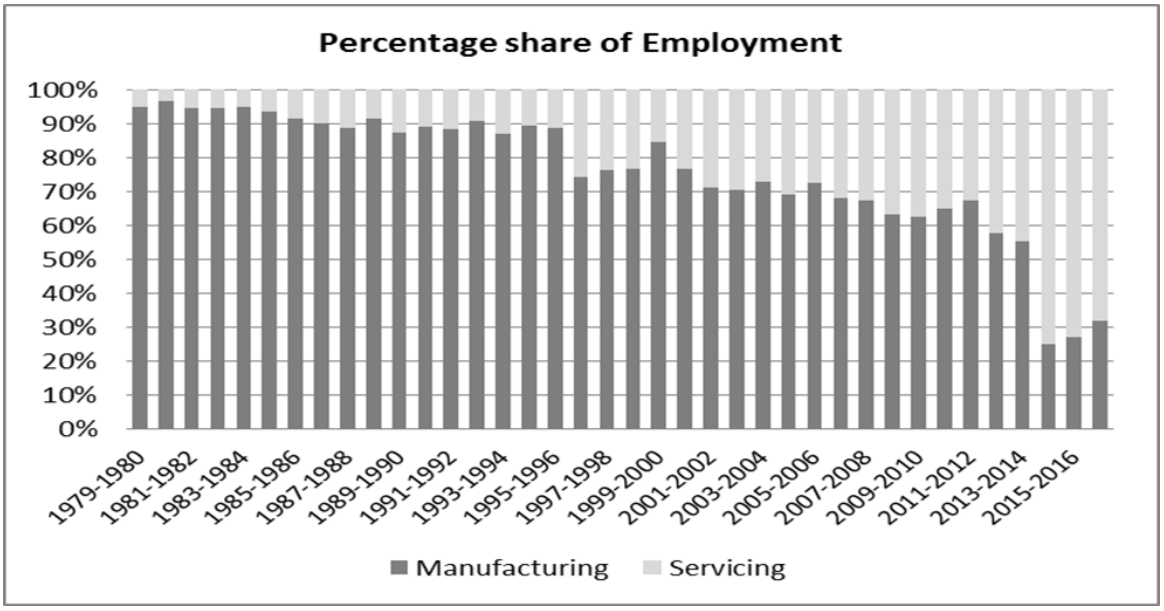
Source: calculated from total MSME investment, Directorate of Industry, Odisha 2018

The amount of investment in manufacturing sector was almost stagnant at 96 percent from 1979-80 to 1995-96 and then reduced to 78.43 percent in 1996-97 (see figure 3.5). This share fluctuate between 84 to 71 percent (from 1996-97 to 2013-14) subsequently reduced to 20.22 percent in 2014-15 and 19.40 percent in 2015-16. In 2016-17 this share marginally increased to 22.64 percent. But the fact is that the share of investment also declined in the entire period. Similarly the share of investment in service sector was almost stagnant at 3.80 percent from 1979-80 to 1995-96. This share was fluctuating between 21 to 29 percent from 1996-97 to 2013-14 subsequently increased to 79.78 percent in 2014-15 and 80.60 percent in 2015-16. This share reduced to 77.36 percent in 2016-17.

The percentage share of employment in manufacturing sector was 94.82 percent in 1979-80 which was increased to 96.62 percent in 1980-81 (see figure 3.6). This share fluctuate between 88.68 to 94.57 percent (from 1981-82 to 1995-96) and then reduced to 74.35 percent in 1996-97 subsequently went up to 84.51 percent in 1999-00. This share vary between 55 to 76 percent from 1991-92 to 2013-14. After 2013-14 this share reduced to 25.12 percent (2014-15) and

marginally increased to 27.06 percent in 2015-16 and 31.82 percent in 2016-17. The percentage share of employment in service sector was 5.18 percent in 1979-80 which reduced to 3.38 percent in 1980-81 and then fluctuated between 5 to 11 percent (from 1981-82 to 1995-96). This share suddenly increased to 25.65 percent in 1996-97 and then reduced from 23.58 to 15.49 percent (from 1997-98 to 1999-00). The share of employment in this sector fluctuated between 23 to 44 percent (from 1990-91 to 2013-14). In 2014-15, it became 74.88% and later came down to 68.18% in 2016-17.

Figure 3.6: Percentage share of MSMEs Employment both in manufacturing and service sector over the period (from 1979 to 2017)



Source: calculated from total MSME employment, Directorate of Industry, Odisha 2018

3.1a: The expected reasons for the changes in the percentage share of manufacturing and service sector Odisha

The following point is noteworthy: while in the manufacturing sector, the percent share of units and employment declined over the years, that in the service sector increased. Again the percentage share of investment in manufacturing sector is highly fluctuated than service sector because manufacturing sector depends on labour intensive technique and service sector depends on capital intensive technique. The probable cause could be the preference of the people to invest more in the service sector than manufacturing sector (Manna and Mistri 2017, Gade 2018).

Secondary sector is managed by manufacturing and construction. Manufacturing and construction constitute more employment than service sector. However, due to the rise in informal sector employment, there has been a demolition of productive jobs in organized manufacturing sector. It was also found that over a period of time, construction, the sub-sector of the manufacturing sector has been rising continuously. The unskilled labour shifted from manufacturing sector to construction sector because of lower productivity. So that, it was very problematic situation to generates more productive labour in the manufacturing sector (Pattnaik and Nayak, 2013). The rate of growth of manufacturing sector declined over the year because neoliberal policies have not flourished to create jobs and have not been able to improve the living condition of a significant proportion of the population (Siddiqui, 2015). Because of these reasons the percentage share manufacturing sector declined over the year.

3.1B: The trends in rate of growth of units, investment, and employment of MSME by size category:

The above (part 3.1A) is the aggregate explanation of MSME units, investment, and employment both in manufacturing and service sector over the year. For more details of MSMEs we can look into trends in terms of units, investment, and employment by size category.

Table 3.4: The overall share of units, investment, and employment with respective percentage share of MSMEs during 1999-00 to 2016-17

	No. of Unit	Investment (crore)	Employment (in persons)
Micro	208744 (96.07)	7698.02 (61.56)	750224 (90.97)
Small	8512 (3.92)	4519.69 (36.14)	73321 (8.89)
Medium	33 (0.02)	286.95 (2.29)	1120 (0.14)
Total	217289 (100)	12504.66 (100)	824665 (100)

Source: Directorate of Industry, Odisha (2018)

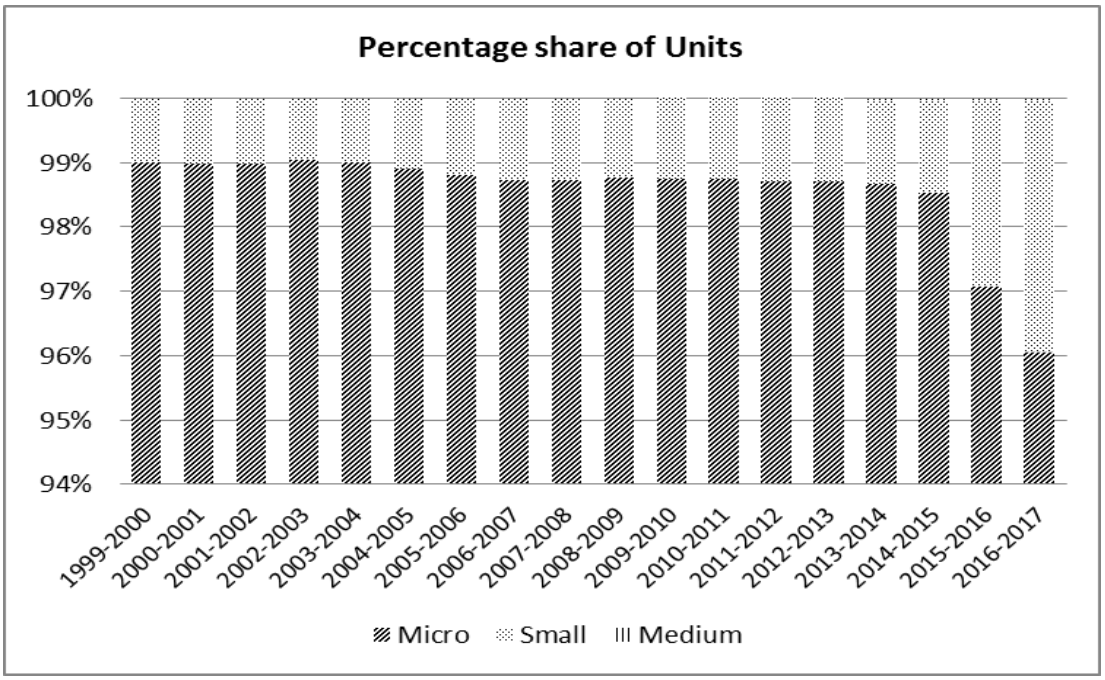
Note: Figure in parentheses represents percentages. The numbers in the figure represents cumulative form.

Table 3.4 evident that out of total MSMEs units, investment, and employment, the percent share of units, investment, and employment in micro enterprises was higher than the small and medium enterprises during 1999-00 to 2016-17. The micro enterprises highly depends on labour intensive

technique, the small enterprises depends on both labour and capital intensive technique and the medium enterprises depends on capital intensive technique. The percent share of units, investment, and employment in micro enterprises was 96.07, 61.56, and 90.97 percent. Simultaneously, the percent share of units, investment, and employment in small enterprises was 3.92, 36.14, and 8.89 percent whereas the percent share of units, investment, and employment in medium enterprises were 0.02, 2.29, and 0.14 percent respectively. The percenta share of units, investment, and employment in SMEs was very less in Odisha.

The percent share of units in micro enterprises was almost stagnant (see figure 3.7) at 99 percent from 1999-00 to 2003-04 after that it fluctuated between 98.91 to 98.54 percent (from 2004-05 to 2014-15). This share has reduced to 97.09 in 2015-16 and 96.07 percent in 2016-17 respectively but the percentage share in this sector was more than 90 percent over the year. The percent share of units in small enterprises was almost stagnant at 0.99 percent (from 1999-00 to 2003-04) and again fluctuated between 1.01 to 1.44 percent (from 2004-05 to 2014-15). This share increased to 2.90 percent in 2015-16 and 3.92 percent in 2016-17. At the same time the number of units in medium enterprises was not set up from 1999-00 to 2008-09. So the percent share of units in medium enterprise was constant between 0.01 and 0.02 percent (from 2011-12 to 2016-17).

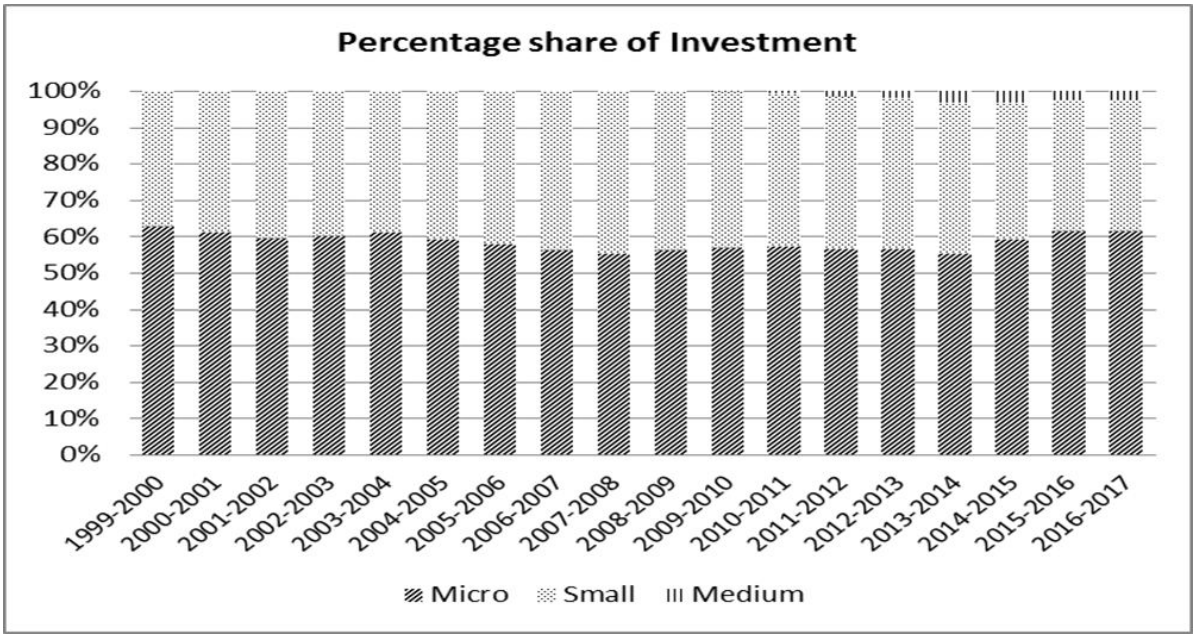
Figure 3.7: Percentage share of units in MSMEs (1999-00 upto 2016-17)



Source: Calculated from total MSME units, Directorate of Industry (2018)

Figure 3.8 shows the percentage share of investment in MSMEs from 1999-00 up to 2016-17. The percentage share of investment in micro enterprise fluctuated between 62.90 to 59.27 percent from 1999-00 to 2004-05 and again varied between 57.75 to 59.01 percent (from 2005-06 to 2014-15). This share increased to 61.56 percent in 2016-17. The percentage share of investment in small enterprises was fluctuate between 37.10 to 38.95 percent (from 1999-00 to 2003-04) and again varied between 40.73 to 41.45 percent (from 2004-05 to 2013-14). This share has reduced from 37.66 percent to 36.14 percent (from 2014-15 to 2016-17). The percentage share of investment in medium enterprises was increased from 0.35 to 3.33 percent (from 2009-10 to 2014-15) and then reduced to 2.29 percent in 2016-17.

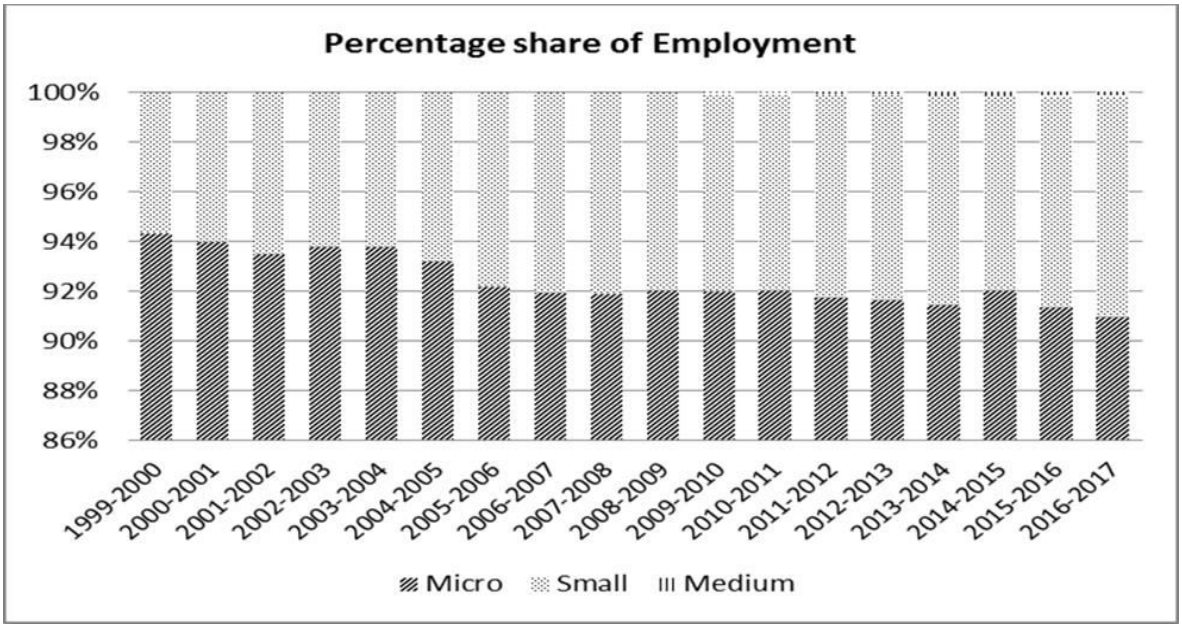
Figure 3.8: Percentage share of Investment in MSMEs (1999-00 upto 2016-17)



Source: Calculated from total MSME investment, Directorate of Industry (2018)

Similarly the percentage share of employment in MSMEs shows below in figure 3.9. The percentage share of employment in micro enterprises fluctuated between 94.36 to 93.21 percent (from 1999-00 to 2004-05) and then almost stagnant at 92 percent (from 2005-06 to 2014-15). This share reduced to 90.97 percent in 2016-17. The share of employment in small enterprises was 5.64 percent in 1999-00 which was increased to 7.81 percent in 2005-06 and then almost stagnant at 8 percent in the remaining year. The percentage share of employment in medium enterprises was 0.03 percent in 2009-10 which was increased to 0.14 percent in 2016-17.

Figure 3.9: Percentage share of Employment in MSMEs (1999-00 upto 2016-17)



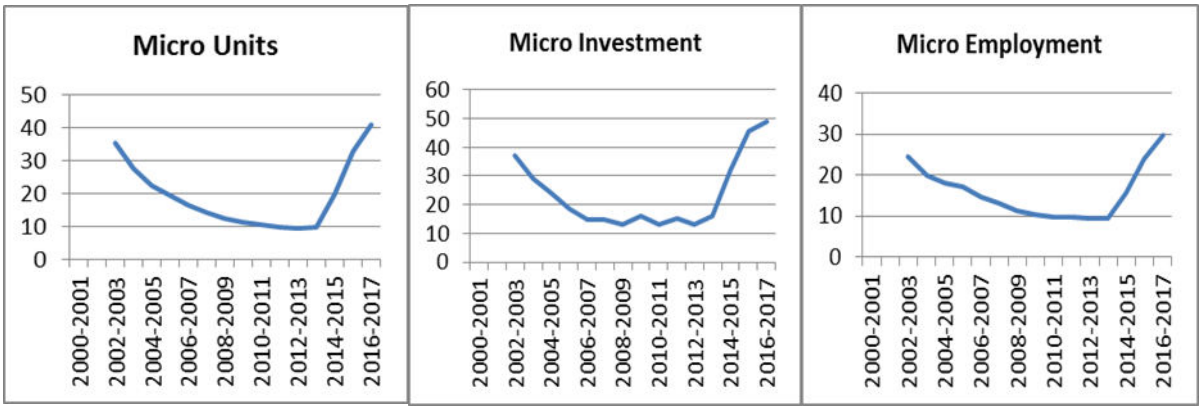
Source: Calculated from total MSME employment, Directorate of Industry (2018)

Figure 3.10 shows the 3year MAGR of micro units, investment, as well as, employment from 2000 to 2017. The rate of growth of micro units, investment, and employment was 35.27, 37.14, and 24.46 percent in 2002-03. The rate of growth of micro units reduced from 27.39 to 10.42 percent (from 2003-04 to 2010-11) and remains stagnant at 9 percent (from 2011-12 to 2013-14). This rate of growth increased to 40.96 percent in 2016-17. The rate of growth of micro investment reduced from 29.27 to 14.63 percent (from 2003-04 to 2005-06) and varied between 14.99 to 16.06 percent (from 2006-07 to 2013-14). This rate of growth increased from 32 to 49.05 (from 2014-15 to 2016-17). The rate of growth of employment reduced from 20.04 to 10.48 percent (from 2003-04 to 2009-10) and remains constant at 9 percent (from 2010-11 to 2013-14). This rate of growth went up to 29.76 percent in 2016-17.

The 3 year MAGR of small units, investment, and employment is shows in figure 3.11. The rate of growth of small units was 33.10 percent in 2002-03 which reduced to 10.73 percent in 2009-10. This rate of growth remained stagnant at 10 percent (from 2010-11 to 2013-14) after that the rate of growth of units increased from 25.64 to 99.01 percent (from 2014-15 to 2016-17). Simultaneously, the rate of growth of investment in small enterprises was 42.74 percent in 2002-03 which reduced from 29.65 to 9.14 percent (from 2003-04 to 2010-11). This rate of growth increased from 13.43 to 36.77 percent (from 2011-12 to 2016-17). The rate of growth of

employment in small enterprises was 28.93 percent in 2002-03 which reduced to 20.50 percent in 2004-05. Subsequently, it went up to 27.70 in 2005-06. This rate of growth reduced to 20.86 percent in 2007-08 and then varied between 11 to 13 percent (from 2008-09 to 2014-15), after that, it escalated to 33.18 percent in 2016-17.

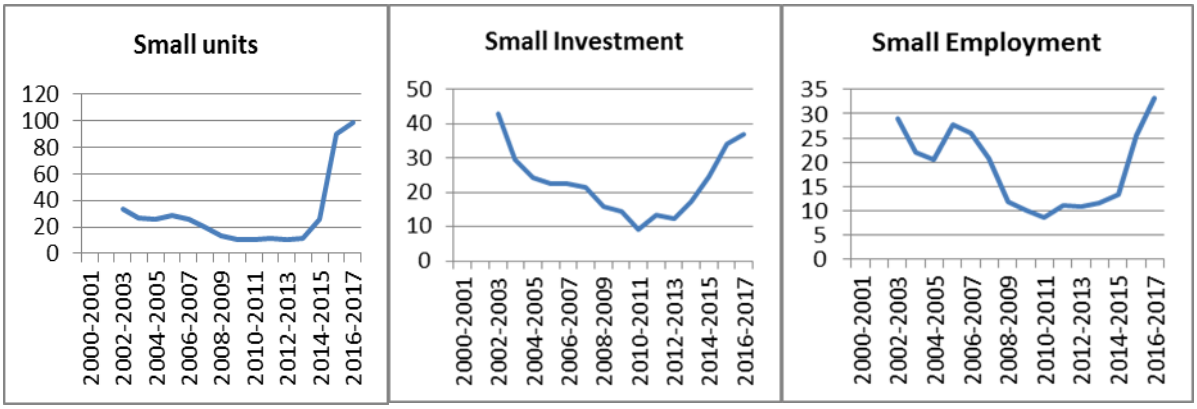
Figure 3.10: 3yr MAGR of Micro units, investment, and employment over the period (from 2000 to 2017)



Source: Calculated from MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

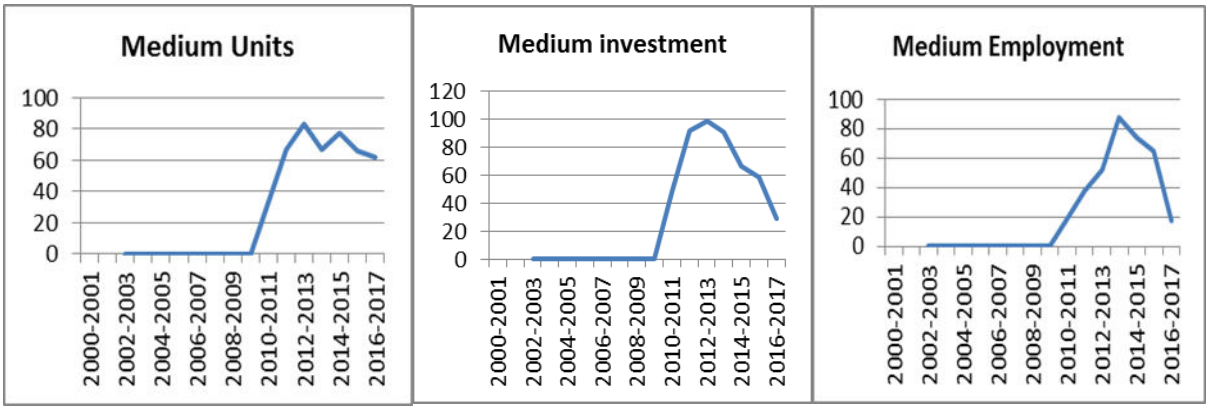
Figure 3.12 shows that the trends in 3 year MAGR of medium units, investment, and also employment. The rate of growth of units, investment, and employment in medium enterprises was zero from 1999-00 to 2009-10 because the medium enterprises were not set up during that period. The rate of growth of medium units was increased from 33.33 to 83.33 percent (from 2010-11 to 2012-13) and then reduced to 66.67 percent in 2013-14. This rate of growth again increased to 77.78 percent 2014-15 and then reduced to 61.71 percent in 2016-17. The rate of growth of investment in medium enterprises increased from 48 to 100 percent (from 2010-11 to 2012-13) and then reduced from 90 to 28 percent (from 2013-14 to 2016-17). The rate of growth of employment in medium enterprises increased from 19.56 to 87.57 percent (from 2010-11 to 2013-14) and then reduced from 74.18 to 17.22 percent (from 2014-15 to 2016-17). It is clear that the rate of growth of employment was less than that of units and investment in the entire sector (micro, small and medium).

Figure 3.11: 3yr MAGR of Small units, investment, and employment over the period (from 2000 to 2017)



Source: Calculated from MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.12: 3yr MAGR of Medium units, investment, and employment over the period (from 2000 to 2017)



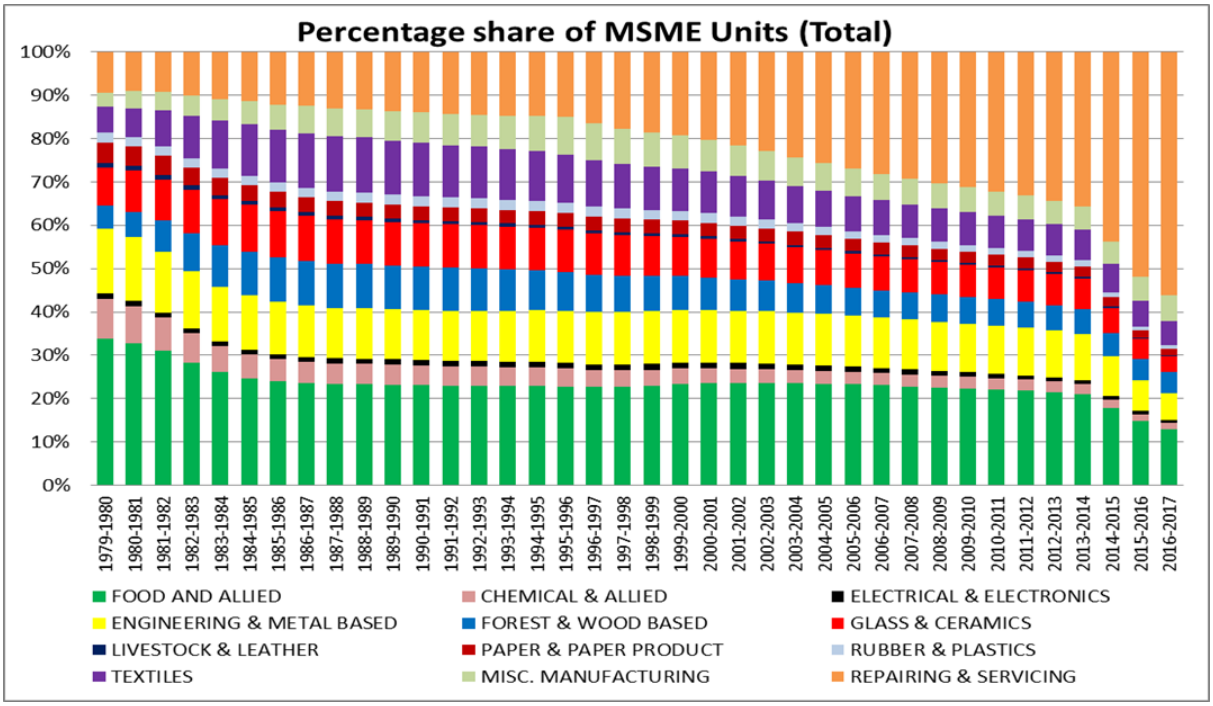
Source: Calculated from MSME units, investment, and employment data (Directorate of Industry, Odisha 2018).

The trends in rate of growth of units, investment, and employment even among MSMEs are different by their product. The trends determine by the availability of raw material, government policies and access to other inputs.

3.1C: Changes in trends in the rate of growth of units, investment, and employment in MSME by product

The above explanation is an overview of not only the trends in the growth of MSME units, investment, and employment in manufacturing and service sector but also that of MSMEs in Odisha separately. The present study also gives more focus on the trends in the growth of MSME units, investment, and employment by product. The data is collected from Directorate of Industry, Odisha. There are twelve products which are included in the analysis. They are food and allied, chemical and allied, electrical and electronic, engineering and metal based, forest and wood-based, glass and ceramics, livestock and leather, paper and paper product, rubber and plastics, textiles, miscellaneous manufacturing and repairing and servicing product. The data has been taken from 1979-80 to 2016-17. The percentage share of MSMEs units, investment, and employment of twelve products is given below.

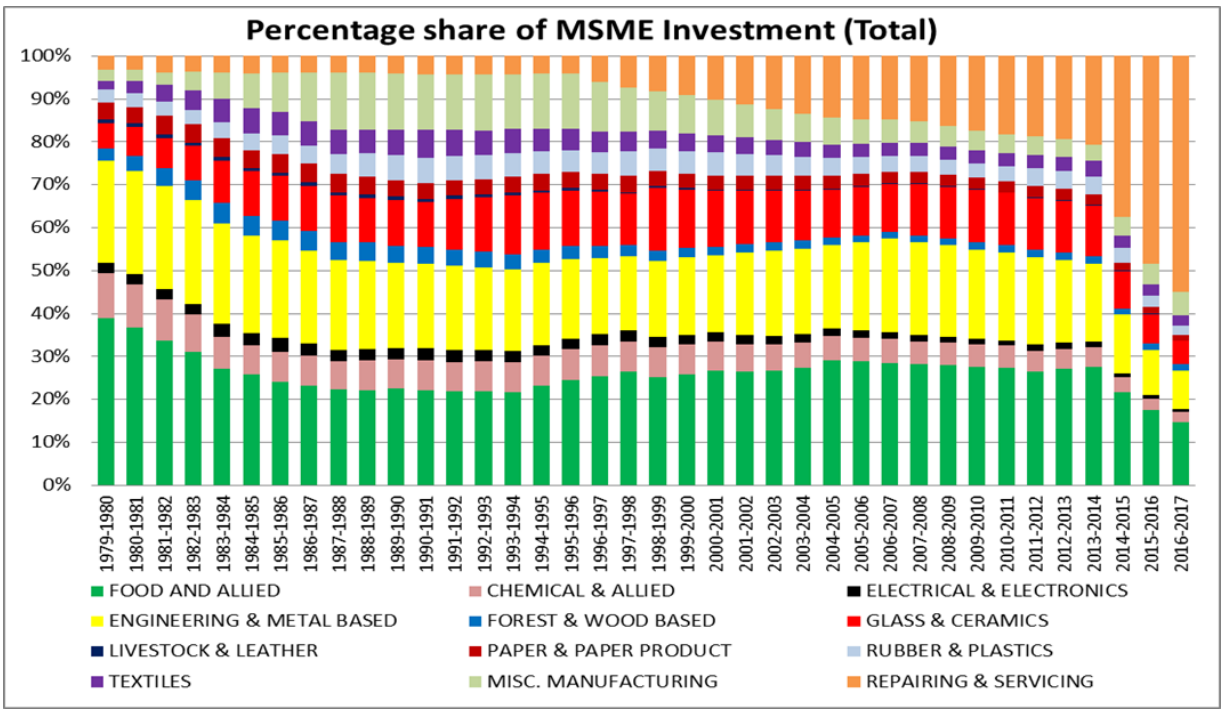
Figure 3.13: Percentage Share of 12 Products of MSME Units in Total MSME unit over the period (from 1979 to 2017)



Source: calculated from total MSME units, Directorate of Industry, Odisha (2018)

Figure 3.13 shows that the percentage share of total MSMEs units in the 12 product from 1979-80 to 2016-17. The percentage share of unit in food and allied product was high in Odisha over the year than the other product in the state due to rich agricultural resources available in the state. The percentage share units in food and allied product was high followed by repairing and servicing product, engineering and metal based product, textile product, glass and ceramics product, and forest and wood based product. The percentage share of these products was high over the year in the state not only rich agricultural resources but also mineral rich state. Except repairing and servicing product the percentage share units in the remaining products first declined and remain almost stagnant or fluctuate. After 2013-14 these share declined whereas the percentage share of repairing sector increasing over the year, may be people preferences to shift this sector or may be demand for this product increasing or may be policy changes. The percentage share of units in livestock and leather product was lower over the year followed by electrical and electronics, rubber and plastic, paper and paper product, chemical and allied product, and miscellaneous manufacturing product. The percentage share units in livestock and leather product declined over the year. The important consideration is that this product business basically done by Scheduled Caste (SC) and they earned less income. Year after year the growth of economy changes, policy changes, literacy rate changes, etc. So people of this category aware of their standard of living, they wanted to shifted from their occupation to other different occupation. So that the percentage share of this product declined over the year (Deshpande and Sharma, 2013).

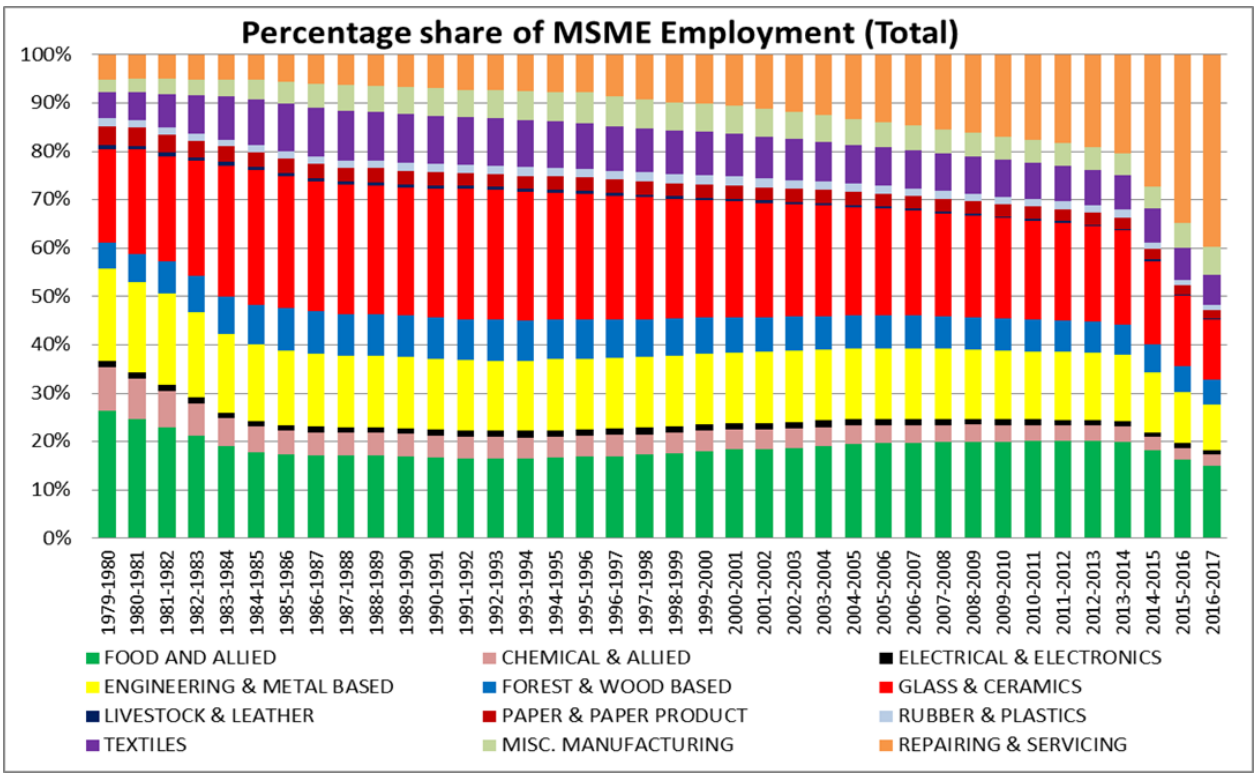
Figure 3.14: Percentage Share of 12 Products of MSME Investment in total MSME investment over the period (from 1979 to 2017)



Source: calculated from total MSME investment, Directorate of Industry, Odisha (2018)

Figure 3.14 shows the percentage share of 12 products of MSME Investment in total MSME investment over the period from 1979 to 2017. The percentage share of investment in food and allied product was high followed by engineering and metal based product, glass and ceramics product, repairing and servicing product, and miscellaneous manufacturing product. The percentage share investment of these products declined after 2013-14 whereas the percentage share of investment in repairing and servicing product increased in the same period. The percentage share of investment in livestock and leather product was low over the year followed by electrical and electronics product, forest and wood based product, paper and paper product, textile product, rubber and plastic product, and chemical and allied product.

Figure 3.15: Percentage Share of 12 Products of MSME Employment in total MSME employment over the period (from 1979 to 2017)



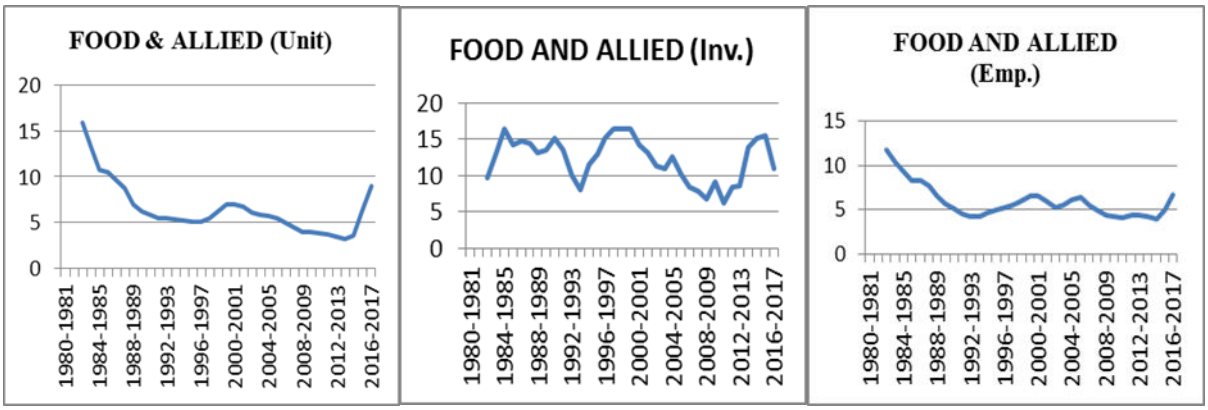
Source: calculated from total MSME employment, Directorate of Industry, Odisha (2018)

Figure 3.15 shows that the percentage shares of MSMEs employment in the 12 products during 1979-80 to 2016-17. The percentage share employment in glass and ceramics product was high over the year followed by food and allied product, engineering and metal based product repairing and servicing product, textile product, and forest and wood based product. The percentage share of these products declined after 2013-14 whereas the percent share of employment in repairing and servicing products increased in the same period. The percent share of employment in food and allied products, textile product, forest and wood base product was high in the beginning because it follows the trends in the growth of units as well as it was highly based on labour intensive technique, after 2013-14 the percent share of these products was declined because of lower labour productivity. However, the percent share of repairing and servicing product and engineering and metal based product was high because of high labour productivity as well as nature of capital intensive technique (Bal, Das, and Chandra, 2015). The percentage share of employment in electrical and electronics product was low over the years followed by livestock

and leather products, rubber and plastics products, paper and paper product, chemical and allied product, and miscellaneous manufacturing products. Productivity in labour intensive industries declined because of shortage of skilled labour; it further led to a declined in the percentage share of employment in all manufacturing sectors. (Parida, Pradhan et.al, 2016).

For a better understanding of the trends in the growth of MSMEs units, investment, and employment of 12 products, three year moving average rate of growth has been used as explained below.

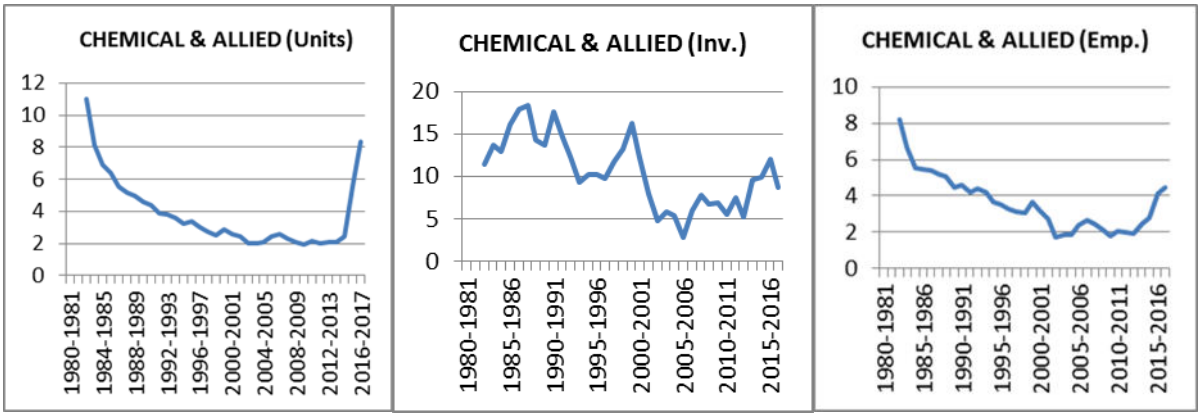
Figure 3.16: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Food, along with Allied product over the period from (1980 to 2017)



Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.16 shows that the 3 year MAGR of total MSMEs units, investment, and employment in food along with allied product from 1980-81 to 2016-17. The rate of growth of units and employment of this product first reduced from 15.83 to 5.83 percent and 11.81 to 5.06 percent (from 1982-83 to 1990-91) then fluctuated between 5 to 6 percent and 4 to 5 percent (from 1991-92 to 2015-16) subsequently slight increased to 8.95 percent and 6.69 percent in 2016-17. At the same time investment of this product first increased from 9.77 to 16.39 percent (1982-83 to 1984-85) and remains stagnant at 14 percent (from 1985-86 to 1989-90) then went up to 11.47 percent in 1994-95. After 1994-95 this rate of growth increased from 12.99 to 16.47 (1995-96 to 1999-00) then reduced from 14.25 to 8.59 percent (2000-01 to 2012-13). Again it was increased to 15.50 percent in 2015-16 then drastically came down to 10.96 percent in 2016-17.

Figure 3.17: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Chemical along with Allied product over the period (from 1980 to 2017)



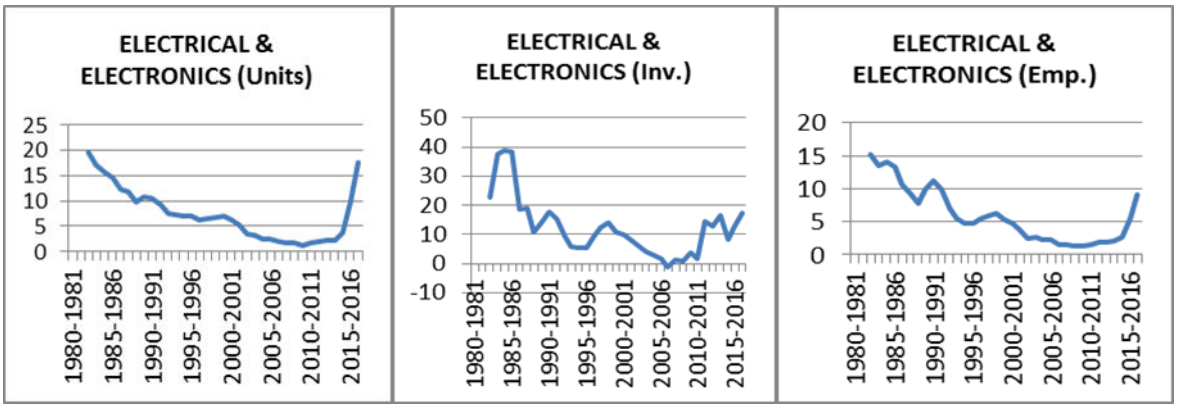
Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.17 shows that the 3 year MAGR of total MSMEs units, investment, as well as, employment of chemical along with allied product from 1980 to 2017. The rate of growth of units and employment of this product first reduced from 10.98 to 2.00 percent and 8.23 to 1.72 percent (from 1982-83 to 2002-03) then remains stagnant at almost 2 to 3 percent (from 2003-04 to 2015-16) and then marginal increased to 8.32 percent and 4.45 percent respectively (2016-17). The rate of growth of investment in this product first increased and varied between 18 to 16 percent (1980-81 to 1999-00) and start reduced from 12.11 to 2.75 percent (1999-00 to 2005-06). After 2006-07 this rate of growth remains stagnant at 7 or 6 percent (up to 2012-13) then it went up to 11.99 percent in 2015-16 afterwards it reduced to 8.69 percent.

Figure 3.18 shows the 3 year MAGR of total MSMEs units, investment, and employment of electrical, as well as, electronics product from 1980 to 2017. The rate of growth of units and employment in this product first reduced from 19.55 to 9.85 percent and from 15.12 to 7.77 percent (from 1982-83 to 1988-89) subsequently went up to 10.56 percent and 11.13 percent (1990-91). Again the rate of growth of units and employment reduced from 9.26 to 2.33 percent and from 9.91 to 2.30 percent (from 1991-92 to 2005-06) after that stagnant at 1 percent (from 2006-07 to 2011-12) and then increased from 2.12 to 17.61 percent and from 1.97 to 9.08 percent respectively (from 2012-13 to 2016-17). The rate of growth of investment first increased from 22.92 to 38.77 percent (from 1982-83 to 1984-85) and then reduced from 38.4 to 13.90 percent (from 1985-86 to 1988-89). This rate of growth went up to 17.57 percent in 1990-91 and start

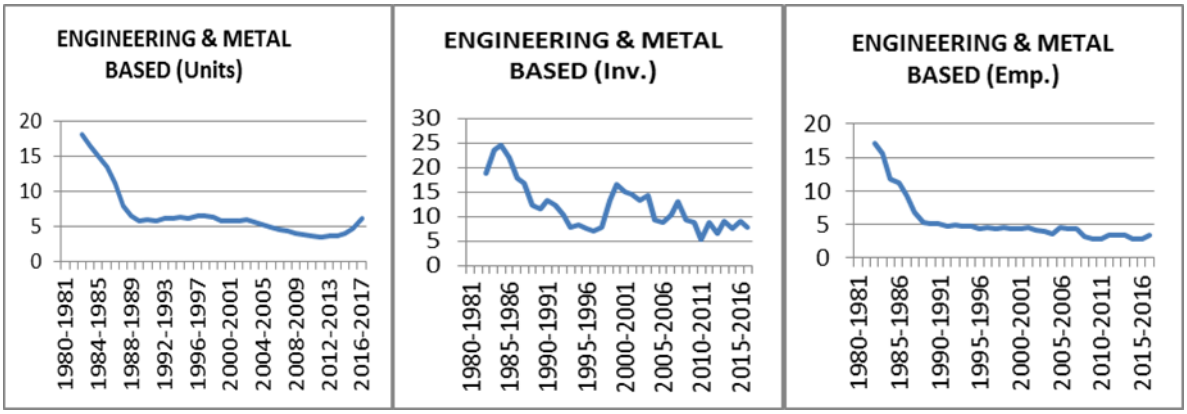
reduced from 15.25 to 9.57 percent (from 1991-92 to 1996-97) after that fluctuated between 12 to 17 percent (from 1997-98 to 2016-17).

Figure 3.18: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Electrical along with Electronics product over the period (1980 to 2017)



Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.19: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Engineering along with metal based product over the period (from 1980 to 2017)



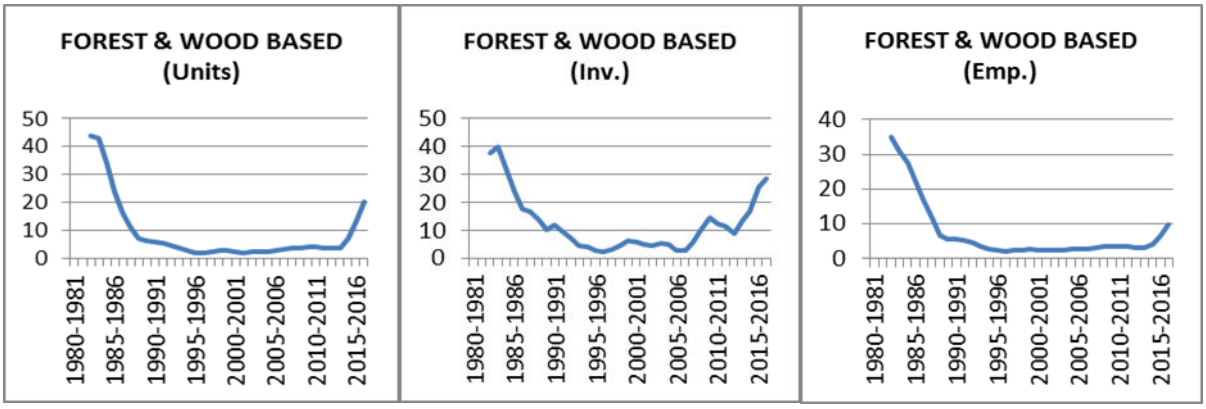
Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.19 shows that the 3 year MAGR of units, investment, and employment of engineering along with metal based product from 1980 to 2017. The rate of growth of units of this product

first reduced from 18.11 to 5.73 percent and employment reduced from 17.19 to 4.83 percent (from 1982-83 to 1991-92). The rate of growth of units fluctuated between 5 to 4 percent and employment fluctuated between 4 to 2 percent (from 1992-93 to 2015-16) subsequently the rate of growth of units and employment went up to 6.15 and 3.41 percent in 2016-17. The rate of growth of investment first increased from 18.93 to 24.68 percent (from 1982-83 to 1984-85) and then reduced from 22.08 to 7.83 percent (from 1985-86 to 1997-98). This rate of growth reduced from 13.42 to 7.79 percent (from 1998-99 to 2016-17).

Figure 3.20 shows that the 3 year MAGR of units, investment, as well as, employment of forest along with wood based product from 1980 to 2017. The rate of growth of units in this product first reduced from 42.80 to 3.57 percent, investment reduced from 39.94 to 4.46 percent, and employment reduced from 31.22 to 3.47 percent (from 1982-83 to 1993-94). Subsequently the rate of growth of units and employment fluctuated between 2 to 3 percent whereas investment fluctuated between 4.10 to 13.32 percent (from 1994-95 to 2013-14). After 2013-14 the rate of growth of units, investment, and employment was suddenly increased from 6.93 to 20.23 percent, from 16.92 to 28.44 percent, and from 4.01 to 9.75 percent respectively (up to 2016-17).

Figure 3.20: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Forest along with wood based product over the period (from 1980 to 2017)



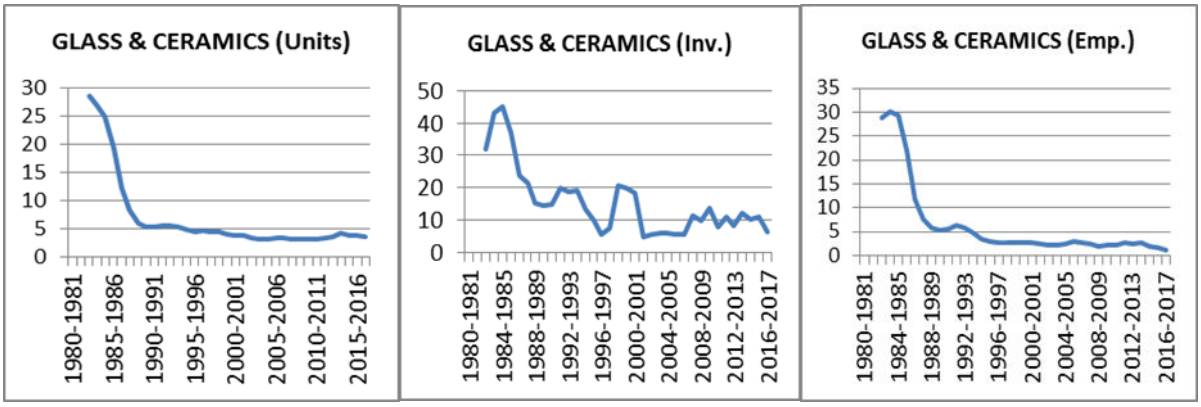
Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.21 shows that the 3year MAGR of units, investment, as well as, employment of glass and ceramics product from 1980 to 2017. The rate of growth of units in this product reduced from 28.40 to 5.27 percent and employment reduced from 30.19 to 5.57 percent (from 1982-83

to 1990-91). The rate of growth of units fluctuated between 5 to 3 percent (from 1991-92 to 2016-17) whereas the rate of growth of employment was stagnant at 2 percent (from 1996-97 to 2014-15) and reduced to 1 percent in 2016-17. The rate of growth of investment first increased from 31.81 to 44.97 percent (from 1982-83 to 1984-85) and then reduced from 36.98 to 7.52 percent (from 1985-86 to 1997-98). This rate of growth suddenly went up to 20.81 percent in 1998-99 and then fluctuated between 18.35 to 11.06 percent (from 1999-00 to 2015-16) subsequently reduced to 6.26 percent in 2016-17.

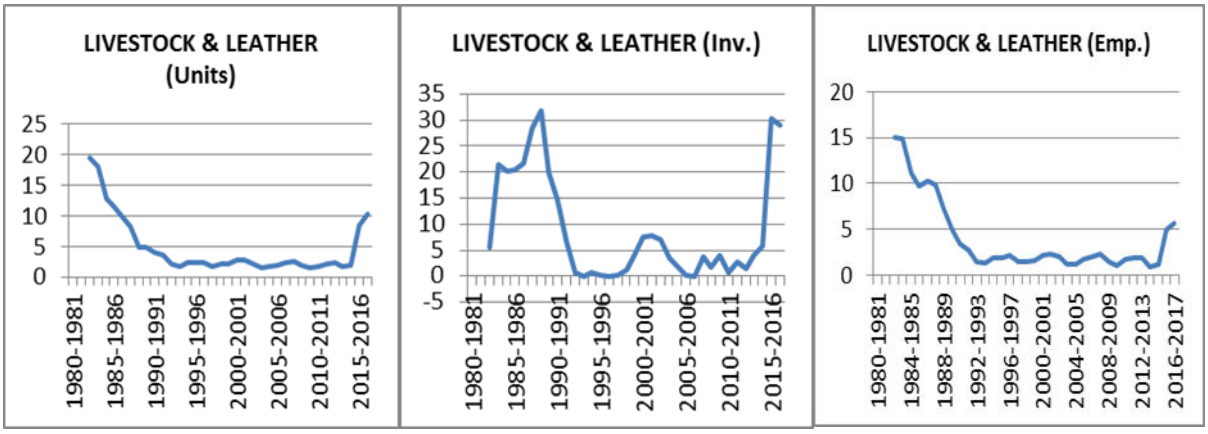
Figure 3.22 indicates the 3 year MAGR of units, investment along with employment of livestock, as well as leather product from 1980 to 2017. The rate of growth of units in this product first reduced from 19.60 to 1.78 percent and employment reduced from 15.08 to 1.29 percent (from 1982-83 to 1993-94) after that both units and employment was stagnant between 1 to 2 percent (from 1994-95 to 2014-15). After that the rate of growth of units increased to 10.25 percent and employment increased to 5.61 percent in 2016-17. At the same time investment first increased from 5.61 to 31.67 percent (from 1982-83 to 1988-89) and then reduced from 19.94 to -0.13 percent (from 1988-89 to 1993-94). This rate of growth fluctuated between 0.69 to 5.68 percent (from 1993-94 to 2014-15) and after that it increased to 30.35 percent in 2015-16 and again marginally reduced to 28.96 percent in 2016-17.

Figure 3.21: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Glass along with Ceramics product over the period (from 1980 to 2017)



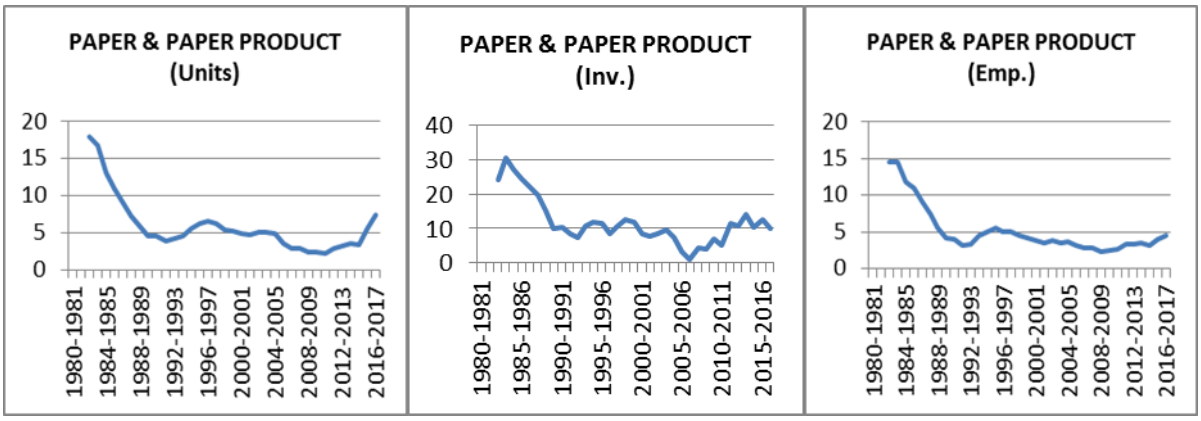
Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.22: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Livestock along with Leather product over the period (from 1980 to 2017)



Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.23: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Paper and Paper product over the period (from 1980 to 2017)



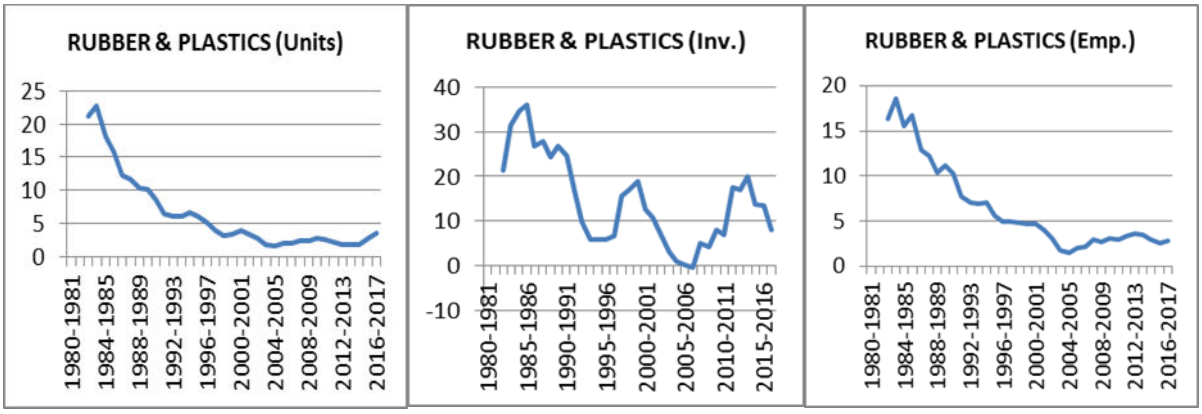
Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.23 shows that the 3 year MAGR of units, investment, as well as, employment of paper along with paper product from 1980 to 2017). The rate of growth of units reduced from 16.75 to 4.23 percent, investment reduced from 30.39 percent to 7.35 percent, and employment reduced from 14.46 to 3.38 percent (from 1982-83 to 1992-93). The rate of growth of unit slightly increased from 4.55 to 6.23 percent and employment increased from 4.42 to 5.04 (from 1993-94 to 1997-98) and then reduced from 5.43 to 2.91 percent and from 4.49 to 2.56 percent (from 1998-99 to 2011-12). The rate of growth of units increased from 3.18 to 7.36 percent and

employment increased from 3.30 to 4.43 percent (from 2012-13 to 2016-17). The rate of growth of investment fluctuated between 10 to 11 percent (from 1993-94 to 1999-00) and again decreased from 11.54 to 5.09 percent (from 2000-01 to 2010-11). This rate of growth went up to 12.62 percent in 2015-16 and again reduced to 10 percent in 2016-17.

Figure 3.24 shows that the 3 year MAGR of units, investment, as well as, employment of rubber along with plastics product from 1980 to 2016-17. The rate of growth of units and employment of this product continuously reduced from 22.69 to 1.59 percent and from 18.55 to 1.45 percent (from 1982-83 to 2004-05). The rate of growth of units remained constant at 2 to 1 percent and employment was constant at 2 to 3 percent (from 2005-06 to 2016-17). The rate of growth of investment first increased to 35.93 percent (1985-86) and then reduced from 26.65 to 6.60 percent (from 1986-87 to 1996-97). After that investment increased from 15.56 to 19.02 percent (from 1997-98 to 1999-00) and then reduced from 12.69 to -0.29 percent (from 2000-01 to 2006-07). Again start increased from 5.04 to 19.89 percent (from 2007-08 to 2013-14) and then reduced from 13.64 to 8.03 percent (from 2014-15 to 2016-17).

Figure 3.24: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Rubber along with Plastics product over the period (from 1980 to 2017)



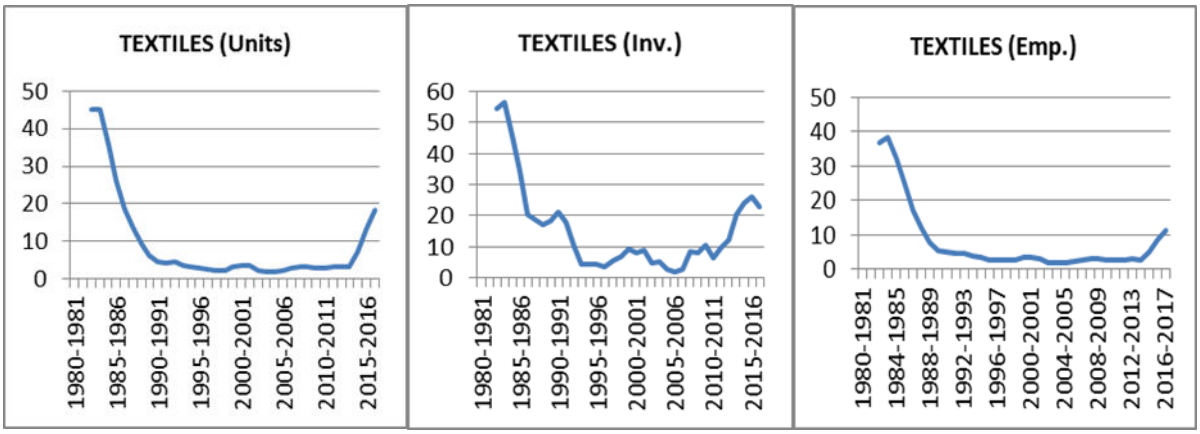
Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.25 shows that the 3 year MAGR of units, investment, as well as, employment of textile product from 1980 to 2017. The rate of growth of units and employment in this product reduced from 44.96 to 4.65 percent and from 38.21 to 4.95 percent (from 1983-84 to 1990-91). The rate

of growth of unit remains constant between 4 to 3 percent and employment remains stagnant between 4 to 2 percent (from 1991-92 to 2013-14). After that the rate of growth of units and employment increased from 7.29 to 18.17 percent and from 5.22 to 11.12 percent (from 2014-15 to 2016-17) respectively. At the same time investment first reduced from 56.44 to 16.94 percent (from 1980-81 to 1987-88) then remained constant. It started declining from 10.33 to 6.62 percent (from 1991-92 to 1997-98). In 1998-99 the rate of growth of investment increased to 9.38 percent. After that it fluctuated between 8 to 9 percent (from 1999-00 to 2010-11) then increased from 12.33 to 17.56 percent (from 2011-12 to 2016-17) respectively.

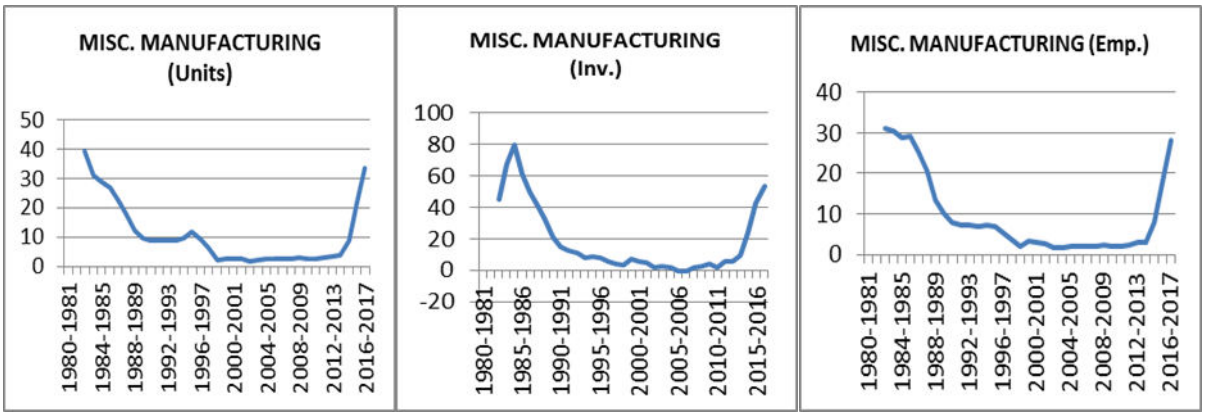
Figure 3.26 shows that the 3 year MAGR of units, investment, as well as, employment of miscellaneous and manufacturing product from 1980 to 2017. The rate of growth of units and employment in this product reduced from 31.13 to 8.89 percent and from 30.45 to 6.98 percent in the year 1980-81 to 1992-93. The rate of growth of unit and employment increased marginally in 1993-94 and declined it then remained fluctuated between 1 to 2 percent (from 1994-95 to 2012-13). From 2013-14 to 2016-17 the rate of growth of units and employment increased from 8.85 to 38.28 percent and from 7.87 to 28.86 percent respectively. At the same time rate of growth of investment in this product was 67.52 went up to 79.50 percent (1983-84) and then reduced from 61.30 to 1.72 percent (from 1984-85 to 2003-04). The rate of growth of investment was negative (-0.39 percent) in 2004-05 to 2005-06 after that it increased marginally from 1.93 percent to 9.87 percent (from 2006-07 to 2012-13). From 2013-14 to 2016-17 the rate of growth of investment suddenly jumped significantly from 24.13 to 41.50 percent.

Figure 3.25: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Textiles product over the year (from 1980 to 2017)



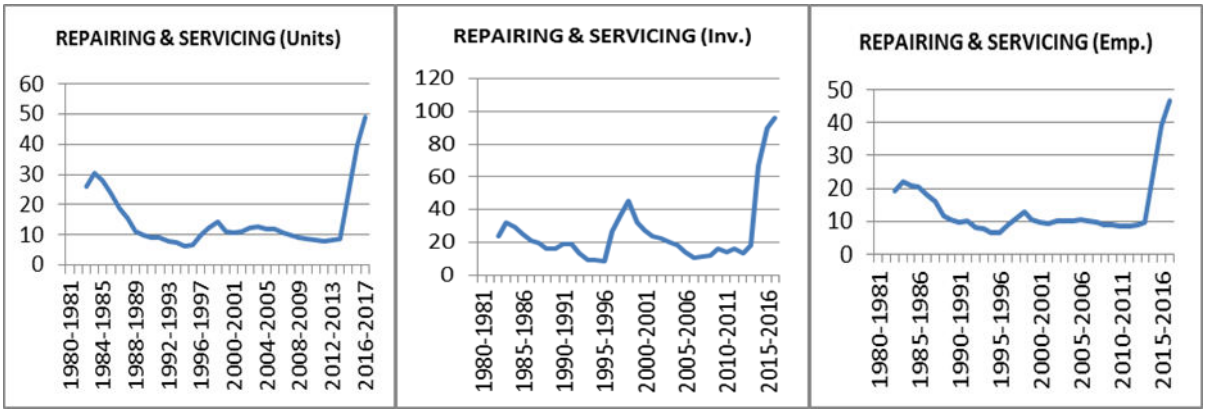
Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.26: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Miscellaneous Manufacturing product over the period (from 1980 to 2017)



Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.27: The 3yr MAGR of MSMEs Units, Investment, as well as, Employment in Repairing and servicing product over the period (from 1980 to 2017)



Source: calculated from total MSME units, investment, and employment data (Directorate of Industry, Odisha 2018)

Figure 3.27 shows that the 3 year MAGR of units, investment, as well as, employment of repairing and servicing product from 1980 to 2017. The rate of growth of units in this product reduced from 30.28 to 6.59 percent, investment reduced from 31.88 to 8.11 percent, and employment reduced from 21.87 to 6.47 percent (from 1980-81 to 1994-95). The rate of growth of units showed a slight increment from 9.75 to 14.17 percent (from 1995-96 to 1997-98) and then remained stagnant between 11 to 8 percent (from 1998-99 to 2012-13). Employment also increased from 8.72 to 12.79 percent (from 1995-96 to 1997-98) and then remains stagnant between 10 to 8 percent (from 1998-99 to 2012-13).After 2013-14 the rate of growth of unit increased from 23.12 to 48.92 percent and then reduced to 39.99 percent (2016-17). Employment increased from 24.44 to 46.79 percent (after 2013-14) and then reduced to 36.30 percent in 2016-17. From 1995-96 to 1997-98 the rate of growth of investment increased from 26.46 to 45.56 percent and then reduced from 32.10 to 13.17 percent (from 1998-99 to 2012-13). From 2013-14 to 2015-16 investment again increased from 66.61 to 95.86 percent and then reduced to 48.78 percent (2016-17).

3.1b: Reasons for lower trends in the growth of units, investment, and employment in MSME sector in Odisha:

Extensive review of literature suggests that the reasons for under representation in MSMEs are as follows;

(a) Age of Firm- the relationship between age of firm and growth of MSMEs in developing countries is vigorous. Newly established MSMEs grow more rapidly than the old one because the new one easily adopts the changing pattern of a new technique (modern techniques) whereas the old one cannot because they followed the old technique (traditional technique). Sometimes the old entrepreneur faces the problems to adopt the new machinery which the existing low skilled employee unable to operates and for this, he cannot generate more and more employment for the operation of that machinery because of lack of finance as well as profit.

(b) Formality and informality- formality which may be said registered sector that reap all the benefits from the govt. like finance but informality (unregistered) which is very common in developing countries cannot access this benefit.

(c) Access to finance- MSMEs face more problems to access finance than large firm because of lack of collateral bias.

(d) Social networks- the extensive social network can help an entrepreneur a lot because they obtain more information as well as resources; they can overcome the main hindrances of cost of transaction, regulation, and contract enforcement.

(e) Value chains- MSMEs may be involved in various activities, including primary production, assembly, and service provision. The important point of the value chain is the strong demand from the end market which automatically helps for the growth of small firms.

(f) Inter-firm cooperation- it includes both vertical and horizontal linkages. For the better performance of any firms, these two linkages are more important.

Chapter 4

Trends in the rate of growth of Units, investment, and employment in MSMEs by Social group

4.1: Trends in rate of growth of units, investment, and employment in MSMEs by social group in Odisha:

A country can substantiate its economic growth or development only when it achieves the inclusive growth. In this line, India is targeting at marching towards inclusive growth. The inclusive growth can be understood by region (regional exclusion), by social group (caste discrimination or social exclusion) and precipita income (economics exclusion). But this analysis focuses on only the status of MSME by social group in Odisha. But first we will see the scenario of MSME at all India level by social group. The number of units is on the basis of the social identity (caste identity) of the owner of the unit or entrepreneur.

4.2: Trends at all India level:

According to Handbook for MSME entrepreneurs 2017, the definition of SC/ST enterprise as follows-

"a. In case of proprietary MSE, proprietor shall be SC/ST

b. In case of partnership MSE, the SC/ST partners shall be holding at least 51% shares in the unit

c. In case of private limited companies, at least 51% shares shall be held by SC/ST promoters" (Handbook for MSME entrepreneurs, 2017).

Table- 4.1: Percentage share of enterprises and employment among social groups (2005)

	SCs	STs	OBCs	General
Population share	16.4	7.7	42.7	33.2
share of enterprise ownership	9.8	3.7	43.5	42.9
Share of employment	8.1	3.4	40	48.5

Source: Handbook for MSME entrepreneurs 2017

The above table shows that the percentage shares of enterprises and employment among social groups (Economic Census 2005) in India. The General category and OBCs accounted 33.2 percent and 42.7 percent of India's population but owned 42.9 and 43.5 percent of all enterprises which employed 48.5 and 40 percent of non-farm workers whereas SCs and STs accounted 16.4 percent and 7.7 percent of India's population but owned 9.8 percent and 3.7 percent of all enterprises which employed 8.1 percent and 3.4 percent of non-farm workers respectively. It is evident that the percentage share of enterprise ownership exceeded the percentage share of the

population among General and OBCs categories but in the case of SCs and STs, it was less. Simultaneously, the percent share of employment among General and OBCs was high whereas among SCs and STs it was negligible during the same period.

Table – 4.2: Trends in Employment Generation and Enterprise Ownership and among social groups

	1990	1998	2005
Share of enterprise ownership			
Non-SCs/STs	87.5	87.3	86.4
OBCs		37.5	43.5
SCs	9.9	8.5	9.8
STs	2.6	4.2	3.7
Share of employment			
Non-SCs/STs	90.6	89.4	88.5
OBCs		33.8	40
SCs	7.4	6.9	8.1
STs	2	3.8	3.4

Source: Handbook for MSME entrepreneurs 2017

Table -4.2 shows that the trends in enterprise ownership and employment generation among social groups. It is evident that the share of enterprise ownership in Non-SCs/STs was almost stagnant (87 percent) in 1990 and 1998 but marginally reduced to 86 percent in 2005 whereas OBCs share increased from 37.5 percent in 1998 to 43.5 percent in 2005. The share of employment in the General category reduced from 90.6 percent in 1990 to 88.5 percent in 2005 whereas OBCs share was increased from 33.8 percent in 1998 to 40 percent in 2005. Simultaneously, the share of enterprise ownership in SCs category was almost stagnant at 9 percent in 1990 and 2005. However, the share of employment went up from 7.4 percent in 1990 to 8.1 percent in 2005. The share of enterprise ownership and share of employment among STs Category was almost same at 2 percent in 1990 and 3 percent in 2005. The whole analysis states that the trends of enterprise ownership employment are high in General and OBCs categories whereas SCs and STs is less over the year (from 1990 to 2005).

The share of employment among SCs and STs was very low as compared to General and OBCs categories due to their difficulties in the expansion of the size of their enterprises. This can be

because of either caste based discrimination or lack of knowledge and financial problem. It is very difficult for SCs and STs to expand the size of their enterprises under these conditions. Lyer et. al (2012) found that the average size of firms owned by SCs and STs are smaller (1.72 and 1.89 percent) than those owned by Non-SCs/STs (2.13 percent) as shown in table 4.3. The average size of the enterprise in urban India was higher than rural India among social groups over the year. In India majority of private enterprises are single or more person firms (self-employed people). The percentage of firms owned by SCs was higher (65 percent) than STs and Non-SCs/STs (56 and 57 percent) in 2005. Firms owned by SCs and STs are less likely to access institutional source of finance compared to Non-SCs/STs. If we see the different sources of finance of production units, the distribution of sources of finance is recorded by the annual report of Ministry of MSME 2016, they are moneylender (1 percent), self-finance(78 percent), self-help groups (1 percent) and others (Annual Report 2016-17 Ministry of MSMEs). One of the major reasons to not access institutional finance is that the status of unregistered firms. Almost 88 percent of SCs and STs Enterprises or units were not registered whereas among Non-SCs/STs it was less as 77.4 percent in 2005.

Table - 4.3: Firms scale and characteristics based on caste category

Characteristic features		**Caste categories of enterprise owners**		
	Year	Non-SCs/STs	SCs	STs
Average size of enterprise	2005	2.13	1.72	1.89
	1998	2.37	1.88	2.09
	1990	2.59	1.86	1.95
Percentage of firms with only one person	2005	0.569	0.647	0.559
	1998	0.521	0.589	0.484
	1990	0.553	0.608	0.501
Percentage of firms with institutional finance	2005	0.036	0.026	0.036
	1998	0.03	0.024	0.029
Percentage of unregistered firms	2005	0.774	0.881	0.874

Source: Handbook for MSME entrepreneurs 2017

Table – 4.4: Firms scale and characteristics by caste category in rural and urban India:

Caste category of enterprise owner in rural and urban India (2005)						
Characteristic features	Non- SCs/STs		SCs		STs	
	Rural	Urban	Rural	Urban	Rural	Urban
Average size of enterprise	1.89	2.47	1.63	1.93	1.79	2.27
% firms with only one person	NA	NA	NA	NA	NA	NA
% firms with institutional finance	0.036	0.037	0.025	0.027	0.033	0.045
% unregisterd firms	0.865	0.643	0.927	0.767	0.926	0.678

Source: Handbook for MSME entrepreneurs 2017

4.3: Trends in units, investment, and employment in MSME by social group in Odisha:

Odishs is one of the States which has significant SC/ST populated States in India. According to 2011 census, SC and STs contributes 17.12% and 22.84% to the total population. The level of literacy is also lower tp compare with the country level. But Odisha is one the best State which has rich natural resources. The trends of rate of growth in units, investment, and employment at the State level obviously depends on the empowerment of the marginalised sections. The trends of units, investment, and employment are different among different social groups. It is very much interesting to see the differences in these trends. We can understand these trends through understanding the demographic and occupational structures of Odisha.

Table – 4.5: Demographic statistics of Odisha

	Demographic profile	
A	Population of Odisha	
	SCs population	7188463 (17.12)
	STs population	9590756 (22.84)
	Non-SCs/STs population	25194999 (60)
	Total	41974218 (100)
B	Decennial population growth (1991-2011)	14

C	The density of population per square kilometers	270
	Sex ratio (Females per 1000 males)	979
D	Literacy rate	
	SCs literacy rate	69.02
	STs literacy rate	52.24
	Total	72.87

Source: Census 2011

The above table shows Odisha's demographic profile. As per the 2011 census, Odisha's total population is 4,19,74,218. Out of which scheduled caste (SCs) population of Odisha is 7188463, scheduled tribe (STs) is 9590756 and non-SC/ST is 25194999. Decennial population growth (1991-2011) is 14.0 percent. The total literacy rate in Odisha is 72.87 percent (census 2011). Out of which SCs literacy rate is 69.02 percent and STs Literacy rate is 52.24 percent respectively.

Table 4.6 shows that the occupational structure in the social category. It is evident that the percentage share of main workers among SCs and STs was very less than Non-SCs/STs (census 2011). The percentage share of main workers among SCs was 16.53 percent, STs was 21.77 percent, and Non-SCs/STs was 61 percent. The share of marginal and non-workers among SCs was almost stagnant at 17 percent. Among STs, the share of marginal workers was higher (54 percent) than non-workers (20 percent) and among Non-SCs/STs the share of non-workers was higher (63 percent) than marginal workers (46.68 percent).

Table - 4.6: Occupational structure by caste in Odisha in 2011

	Main workers	Marginal workers	Non-workers
SCs	1769767 (16.53)	992458 (17.73)	4198137 (17.18)
STs	2331475 (21.77)	1991838 (53.59)	4821097 (19.73)
Non-SCs/STs	6606301 (61.70)	2612847 (46.68)	15413395 (63.09)
Total	10707543 (100)	5597143 (100)	24432629 (100)

Source: Census 2011,

Note: percentage is calculated to the total by each social group

Table – 4.7: the total number of units, investment, and employment with a respective percentage share of MSMEs by social groups (from 1999 to 2013)

	Units (in numbers)	Investment (in lakh)	Employment (in persons)
SCs	4001 (5.62)	16722.47 (3.77)	16429 (4.84)
STs	3298 (4.63)	9465.08 (2.13)	11177 (3.29)
Non-SC/ST	63945 (89.75)	417600.14 (94.10)	311997 (91.87)
Total	71244 (100)	443787.69 (100)	339603 (100)

Source: Directorate of Industry, Odisha

Note: figure in parenthesis represents a percentage. Average size of investment and employment per unit by social group to be calculated.

Table 4.7 indicates the total number of units, the amount with an investment or shares of investment, and employment by social groups in MSMEs during 1999 and 2013. The total number of MSMEs was 71244 units with investment of Rs. 443787.69 lakhs and an employment of 339603 persons. Out of these, the percentage share of MSMEs units of SCs was 5.62 percent, investment was 3.77 percent, and employment was 4.84 percent in 2013. The percentage share of units, investment, and employments of STs were 4.63, 2.13 and 4.84 percent respectively. Further, the percent share of MSMEs units, investment, and employment of Non-SCs/STs

category was 89.75, 94.10 and 91.87 percent. The most important consideration of this explanation is that the percentage share of units, investment, and employment of Non-SCs/STs were higher than SCs and STs Categories. As compared to the ownership of units among SCs and STs their population share was high that was 17.12 percent and 22.84 percent respectively but the enterprise owned by Non-SCs/STs was beyond their population share (60 percent). This shows the imbalance of the performance among social groups. The promoting agencies will have to keep these imbalances in mind while framing the policies for the development and promotion of MSMEs in future so as to make the sector more vibrant and also to ensure the balanced and inclusive growth of the economy.

Table – 4.8: Changes in the share of investment and employment in MSMEs by social groups during 1999-00 and 2013-14

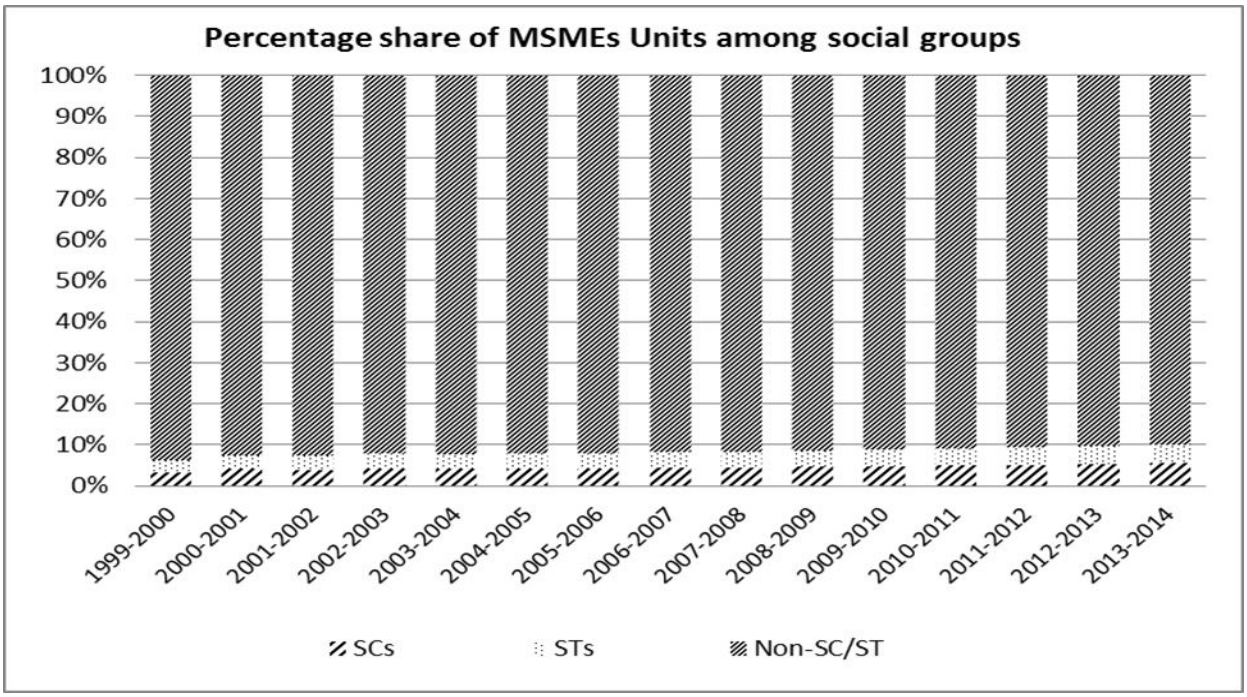
	Share of Investment		
	SCs	STs	Non-SC/ST
1999-00	4.97	1.39	93.65
2013-14	3.77	2.13	94.10
	Share of Employment		
1999-00	3.32	1.59	95.10
2013-14	4.84	3.29	91.87

Source: Directorate of Industry, Odisha

The percentage share of investment in MSMEs among SCs was 4.97 percent in 1999-00 which was reduced to 3.77 percent in 2013-14 but the percentage share of employment was 3.32 percent that increased to 4.48 percent in the same period (see table 12). The percentage share of investment and employment among STs was 1.39 percent and 1.59 percent in 1999-00 which was increased to 2.13 percent and 3.29 percent in 2013-14 respectively. The percentage share of investment among Non-SCs/STs was 93.65 percent in 1999-00 which was increased to 94.10 percent in 2013-14 but the percentage share of employment reduced from 95.10 percent to 91.87 percent in the same period. Based on this observation it is evident that the percent share of investment and employment among SCs and SCs was very lower than Non-SCs/STs.

Figure 4.1 displays the percent share of MSMEs units among social categories in total MSMEs units from 1999-00 to 2013-14. The percentage share of MSMEs units of SCs was 3.48 percent in 1999-00 which was stagnant around 4 percent from 2000-01 to 2009-10 and again remains stagnant at 5 percent from 2010-11 to 2013-14. The percentage share of units in STs category was 2.71 percent in 1999-00 after that it was constant around 3 percent from 2000-01 to 2009-10. This share remains constant at 4 percent from 2010-11 to 2013-14. The percentage share of MSMEs units in Non-SCs/STs was 93.81 percent in 1999-00 which was reduced to 92.50 percent and remains constant from 2000-01 to 2009-10. This rate of growth again reduced to 90 percent and remains stagnant from 2010-11 to 2013-14. But still, the percentage share of units in this category was higher than the SCs and STs categories over the year.

Figure- 4.1: Percentage Share of MSME Units among social groups in total MSME units over the period (from 1999 to 2013)

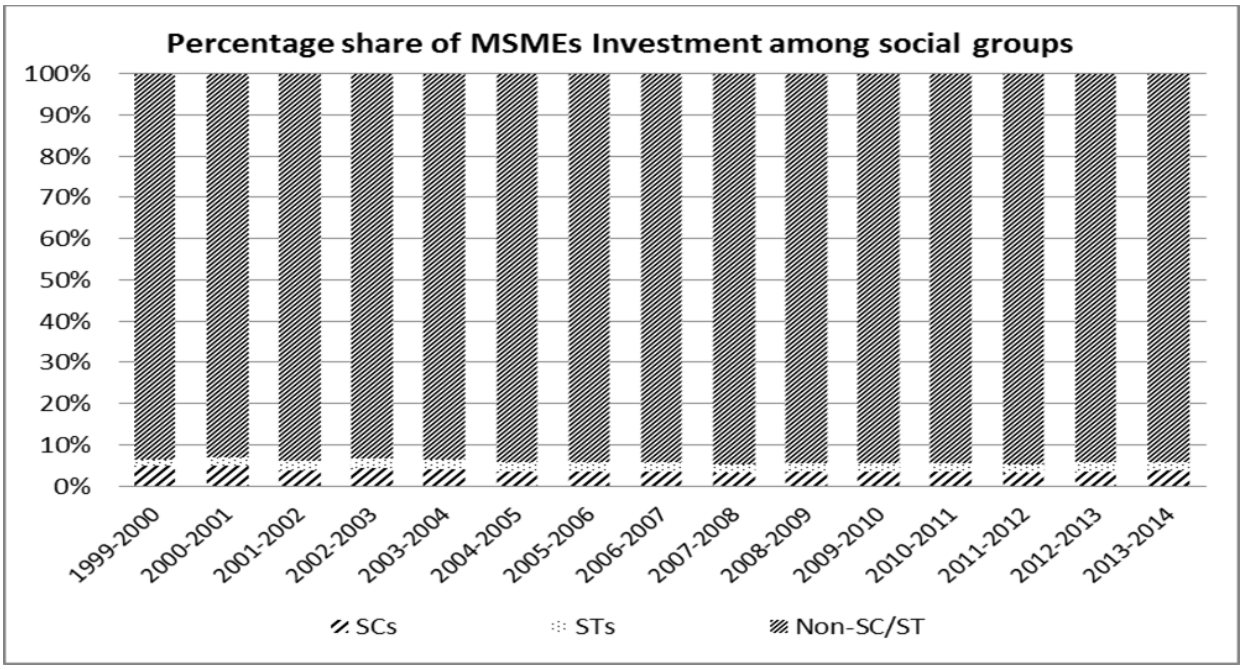


Source: Calculated from total MSME units, Directorate of Industry (2018)

Figure -4.2 shows the percentage share of MSMEs investment among social groups from 1999-00 to 2013-14. The percentage share of investment in SCs units was around 5 percent in 1999-00 which was reduced to 3.60 in 2004-05. This rate of growth remains stagnant at 3 percent from 2005-06 to 2013-14. The percentage share of investment in STs units was 1.39 percent in 1999-00 which was constant around 2 percent from 2000-01 to 2013-14. The percentage share of

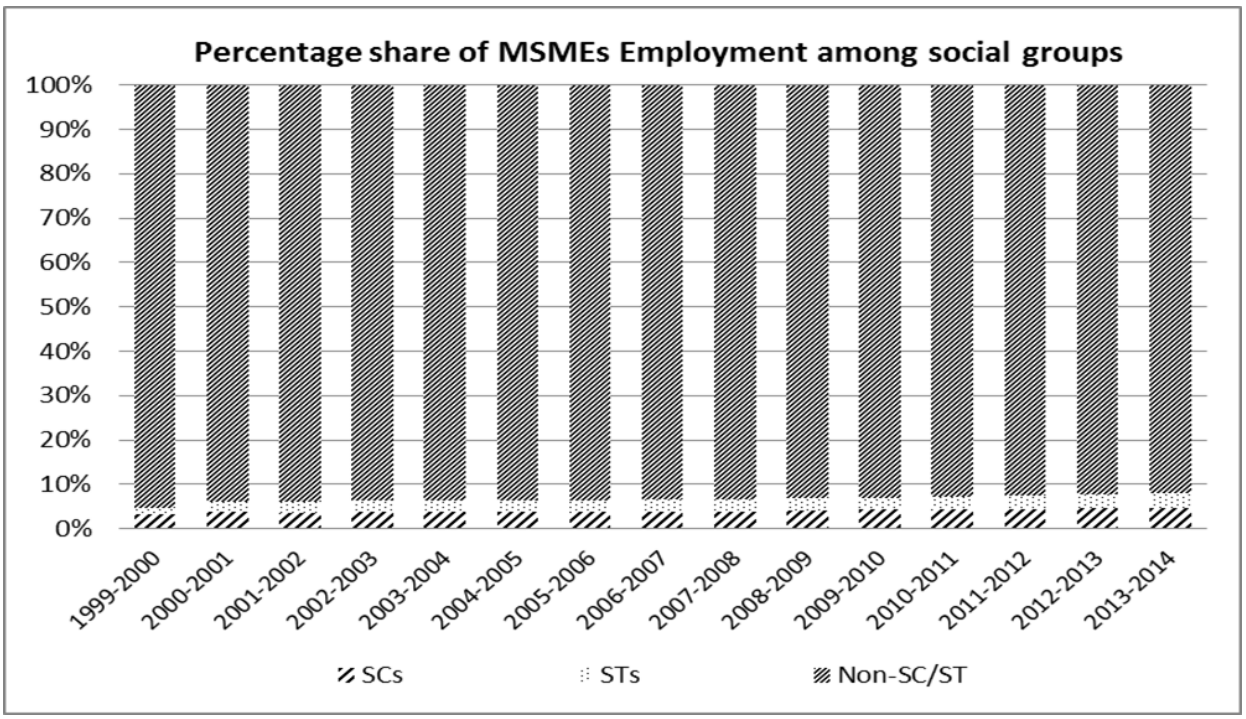
investment in Non-SCs/STs category fluctuated between 93 to 94 percent from 1999-00 to 2013-14. Similarly, figure 7.3 shows the percentage share of MSMEs employment among social groups from 1999-00 to 2013-14. The percentage share of employment in SCs units varied between 3 to 4 percent from 1999-00 to 2013-14 whereas STs between 2 to 3 percent. Also, the percent share of employment in Non-SCS/STs category was 95.10 percent in 1999-00 which was reduced to 93.83 percent and remains constant from 2000-01 to 2007-08. This rate of growth was again stagnant around 92 percent from 2008-09 to 2013-14.

Figure -4.2: Percentage Share of MSME Investment among social groups in total MSME Investment over the period (from 1999 to 2013)



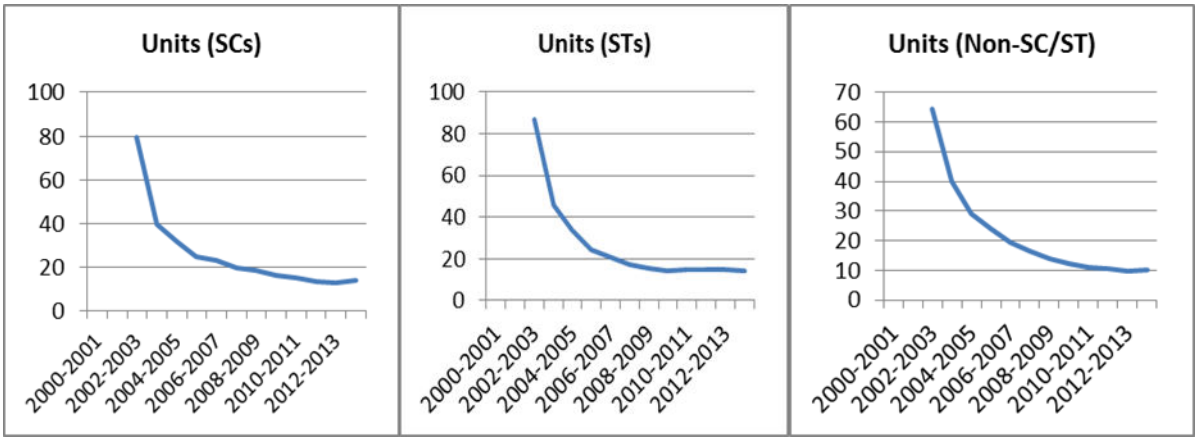
Source: Calculated from total MSME investment, Directorate of Industry (2018)

Figure - 4.3: Percentage Share of MSME Employment among social groups in total MSME employment over the period (from 1999 to 2013)



Source: Calculated from total MSME employment, Directorate of Industry (2018)

Figure -4.4: Three-year moving average rate of growth of MSMEs Units among social groups over the period (from 2000 to 2013)

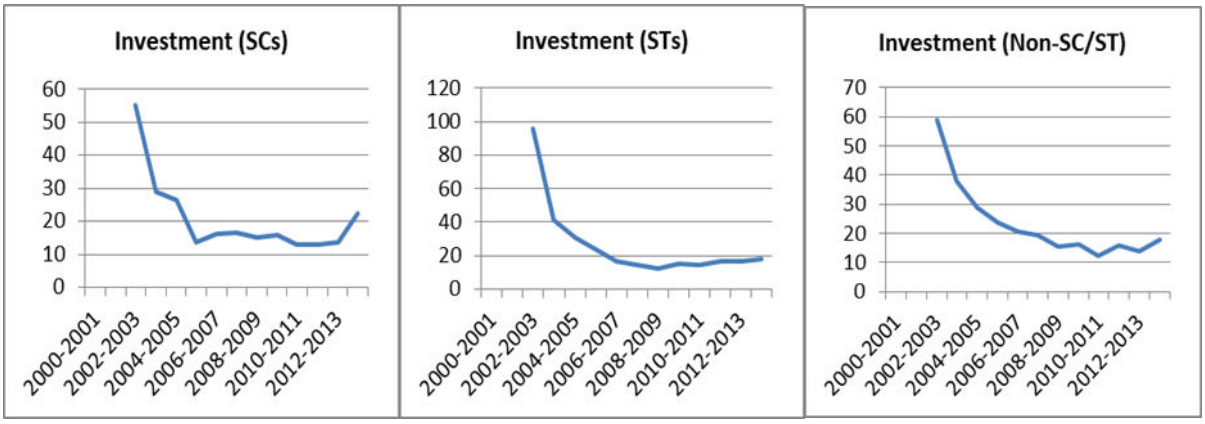


Source: Calculated from total MSME units, Directorate of Industry (2018)

The 3 year MAGR of MSMEs units among different social groups presented shown in figure 7.4 (from 2000-01 to 2013-14). The rate of growth of MSMEs units, investment, and employment

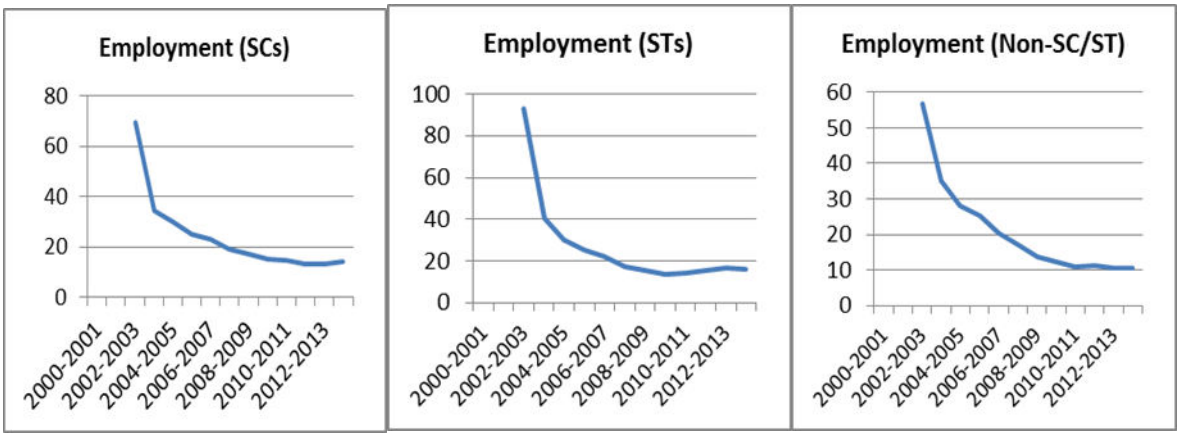
among social groups were continuously declined over the year. The rate of growth of units in SCs reduced from 79.68 percent to 14.23 percent, STs reduced from 87.11 percent to 14.16 percent, and Non-SCs/STs reduced from 64.44 percent to 10.11 percent respectively. Figure 7.5 shows the three-year moving average rate of growth of MSMEs investment among social groups (from 2000-01 to 2013-14). The rate of growth of investment in SCs units was 55.20 percent in 2002-03 which was reduced from 28.99 percent to 13. 72 percent (from 2003-04 to 2005-06) and remains stagnant around 16 percent (from 2006-07 to 2009-10). This rate of growth again reduced to 12.89 percent in 2010-11 and start increased from 13.18 percent to 22.33 percent (from 2011-12 to 2013-14). The percentage share of investment in STs units was 95.75 percent in 2002-03 which was reduced from 41.69 percent to 12.48 percent (from 2003-04 to 2008-09) and then increased from 15 to 18.11 percent (from 2009-10 to 2013-14). The percentage share of investment in Non-SCs/STs category was 58.83 percent in 2002-03 which was reduced from 37.82 percent to 15.34 percent (from 2003-04 to 2008-09). This rate of growth went up to 16.43 percent in 2009-10 subsequently reduced to 13.82 percent in 2012-13 and again increased to 17.83 percent in 2013-14. Figure 7.6 shows the three-year moving average rate of growth of MSMEs employment among social groups from 1999-00 to 2013-14. The rate of growth of employment among social groups continuously declined in the entire year. The rate of growth of employment in SCs units reduced from 69.75 to 13.92 percent, STs reduced from 93.12 to 15.94 percent, and Non-SCs/STs reduced from 56.63 to 10.43 percent respectively.

Figure - 4.5: Three-year moving average rate of growth of MSMEs Investment among social groups over the period (from 1999 to 2013)



Source: Calculated from total MSME investment, Directorate of Industry (2018)

Figure -4.6: Three-year moving average rate of growth of MSMEs Employment among social groups over the period (from 1999 to 2013)



Source: Calculated from total MSME employment, Directorate of Industry (2018)

Table -4.9: Changes in the average size of investment and employment by social group

	Average size of Investment			
	SCs	STs	Non-SC/ST	Total
1999-2000	6.75	2.42	4.73	4.73
2012-2013	3.84	2.89	6.13	5.86
	Average size of employment			
	SCs	STs	Non-SC/ST	Total
1999-2000	5.10	3.14	5.43	5.36
2012-2013	4.13	3.39	4.90	4.79

Source: Directorate of Industry, Odisha

Table 4.9 shows the average size of investment and employment by social group (1999-00 and 2012-13). It is evident that the average size of investment among SCs reduced from 6.75 percent in 1999-00 to 3.84 percent in 2012-13 and also average size of employment reduced from 5.10 percent to 4.13 percent. The average size of investment and employment among STs almost stagnant at 2 and 3 percent during the period whereas the average size of investment among Non-SCs/STs went up from 4.73 percent in 1999-00 to 6.13 percent but average size of employment

reduced from 5.43 percent to 4.90 percent. The average size of investment and employment was better among Non-SCs/STs than SCs and STs.

4.4: The determining factors of growth and development MSMEs-

The determining factors of growth and development MSMEs as follows

1. Individual entrepreneur characteristics
   (a) "Education is an important characteristic of an entrepreneur because more educated owners are likely to grow more quickly than less educated. Most empirical evidence actually suggests that firms with well-educated owners and managers are more efficient" (Burki and Terrell, 1998: Tan and Batra 1995).
   (b) Work experience has contribution in MSMEs' growth in at least two ways, first one is direct, by expanding skills and knowledge; and the second is indirect, by social networks of expanding entrepreneurs. An entrepreneur with additional years of work experience normally has faster growing MSMEs.
   (c) Gender and household- men entrepreneur performance in MSMEs is higher than women (Mead and Liedholm, 1998). "Women usually face unequal rights and obligations which restrict their mobility and burden them with unequal household responsibilities" (Downing and Daniels, 1992).
   (d) Entrepreneurial aspects- this aspect is most important because, for the success of any business organization, human behaviour (this includes motivation, self-efficacy, optimism, and self-management) is more crucial.
   (e) Human resource Competence - this is determined by the performance of individual as well as firm. For facing new challenges competence of human resource is required with the increasingly fierce market competition. Competence includes workplace skill which is based on knowledge and abilities.
   (f) Innovation- it is mainly based on new ideas and new techniques. Innovation may cost saving or revenue-enhancing in the point of views of the firm. The entrepreneur is creative which involves the introduction of new markets, products, and supply of inputs.

(g) Sustainability- "sustainability mainly focuses on meeting the needs of the present generation without compromising the future" (https://www.iisd.org/topic/sustainable-development). It means for the growth and development of MSMEs it required various factors (like inputs of labor, capital, technology, etc.) that may be sustainable.

4.5: Reasons for the lower performance of SCs and STs Entrepreneurs:

According to the national sample survey, in rural India, the proportion of household involved in self-employed enterprises among SCs was 34.3 percent, STs was 45.7 percent, OBCs was 56.2 percent, and others was 61.4 percent whereas in urban India this proportion among SCs, STs, OBCs, and Others were 29.4 percent, 26.3 percent, 40.3 percent, and 38.6 percent respectively (2004-05). This specifies a meaningfully lesser share of STs and SCs in the ownership of private capital. This study mainly focused on the caste based disparities in ownership of private enterprises. The percent share of total private enterprise in the country among SCs and STs was lower than their share in the country's population whereas among OBCs this share was almost similar but in other categories, it exceeded from the population share. Ownership proportion in total private enterprises in rural India among SCs was 10 percent, STs was 4.6 percent, OBCs was 40.57 percent, and others was 44.83 percent whereas share in population among SCs, STs, OBCs, and Others were 10 percent, 21 percent, 43 percent, and 25 percent respectively. In case of urban India the percentage share of ownership of private enterprise among OBCs and others also more than the SCs and STs Share. In India SCs and STs Households owned a very smaller proportion of private enterprises and also among them they work more of household enterprises which are run with family labor. Own account enterprises are usually operated with low capital and use traditional techniques. The low turnover generates low income and results in high poverty among these households. SCs and STs was lacking behind for accessing of ownership of private capital because of refutation property right in farm and non-farm enterprises (Thorat and Sadana, 2009)

Four factors that affects the performance of SME such as entrepreneurial aspect (this includes optimism, self-management, motivation, self-efficacy), human resources competence (it includes skill, knowledge, as well as capabilities), innovativeness (it includes new idea, new techniques, and new product creativities), and sustainability (include growth and profitability).The author of this study tries to check how these four-factor affects the performance of SMEs in Indonesia.

They found that out of this four-factor the entrepreneurial aspect affects more than the competence of human resources whereas the effects of innovativeness and sustainability were very negligible. Entrepreneurial aspect has a higher influence because the success of the business got determined by the characteristics of the owner (Grisna and Qaanita, 2013).

Why do some MSEs expand rapidly while others stagnate? They focused on four factors of this issues that are individual entrepreneur characteristics (it includes education, work experience, and gender), firm characteristics (include firm age, formalities, and access to finance), relational factors (it includes social network or value chains), and contextual factors (business environment). It also pointed out the vertical and horizontal linkages for the growth and development of small firms (Nichter and Goldmark, 2009).

Wang (2016) in this study 119, developing countries were taken into consideration for the analysis of the obstacles of SMEs (from 2006 to 2014). They pointed out major five obstacles (financing, huge competition, taxation, electricity as well as political instability). Out of these obstacles, the important obstacle of the developing country is the problem of finance (13.51 percent) followed by practices of competition (11.29 percent). It is believed that continuous growing firms have a larger demand for funds as compared to less growing firms. Those SMEs comes under state ownership can have very limited financing problems than those comes under private SMEs.

Other obstacles of SMEs include the difficulty to acquire land, to obtain business license, as well as, permits. Apart from these other factors such as corruption, crime,unskilled workforce, macroeconomics instability, transportation, and regulations such as customs and trade and labor regulations become a barrier to SMEs.

Chapter 5

CONCLUSION

5.1: Finding of the Study:

As the whole explanation it is evident that MSMEs plays an important role for the growth of an economy as well as greater role for generating employment opportunities. Out of total MSME units and total investment the percentage share of units and investment in manufacturing sector was less (43.87 percent and 45.08 percent) than service sector (56.13 percent and 54.92 percent) whereas the percentage share of employment was more (60.33 percent) in manufacturing sector than service sector (39.67 percent). The CAGR of manufacturing units, investment, and employment declined in the entire decades whereas CAGR of servicing units and employment reduced from 1981-90 to 1991-00 and then increased in 2001-10. The CAGR investment increased from 1981-90 to 1991-00 and then declined but more than units and employment. The rate of growth of employment in the manufacturing sector has direct relation to the rate of growth of investment because this sector was based on more labour intensive technique. The most important point is that the rate of growth of units and employment in service sector declined in the second decade (1991-00) and small increased in the third decade (2001-10). But the rate of growth of investment in service sector increased in the second decade and declined in the third decade. Here the rate of growth of employment in service sector has directly relation to the rate of growth of units but not directly related to the rate of growth of investment because of the nature of capital intensive technique.

The three year moving average rate of growth of total MSME units, investment, and employment was reduced from 1980 to 1990 and then fluctuate from 1991 to 2012. After 2013 this rate of growth suddenly increased. Similarly the rate of growth of manufacturing and servicing units, investment, and employment was reduced from 1980 to 1990 and then fluctuate from 1991-2012. After 2013 this rate of growth increased but the rate of growth of employment was less than the rate of growth of units and investment. The percentage share of manufacturing units declined over the year whereas servicing units increased. The percentage share of investment fluctuate over the year whereas percentage share of employment in manufacturing sector declined over the year and employment in service sector increased but less than proportionately.

Out of total MSMEs the percentage share of units, investment, and employment in micro enterprises was more than the MSME (from 1999-00 to 2016-17). The product wise trends and patterns of MSME units, investment, and employment is also an important part of this study. The

percentage share units in food and allied product was high followed by repairing and servicing product, engineering and metal based product, textile product, glass and ceramics product, and forest and wood based product. The percentage share of these products was high over the year in the state not only rich agricultural resources but also mineral rich state. The percentage share of units in livestock and leather product was lower over the year followed by electrical and electronics, rubber and plastic, paper and paper product, chemical and allied product, and miscellaneous manufacturing product.

The percentage share of investment in food and allied product was high followed by engineering and metal based product, glass and ceramics product, repairing and servicing product, and miscellaneous manufacturing product whereas the percentage share of investment in livestock and leather product was low over the year followed by electrical and electronics product, forest and wood based product, paper and paper product, textile product, rubber and plastic product, and chemical and allied product.

The percentage share employment in glass and ceramics product was high over the year followed by food and allied product, engineering and metal based product repairing and servicing product, textile product, and forest and wood based product. The percentage share of employment in electrical and electronics product was low over the year followed by livestock and leather product, rubber and plastic product, paper and paper product, chemical and allied product, and miscellaneous manufacturing product.

Out of total MSME units, investment, and employment among social group, the percentage share of Non-SCs/STs was higher than SCs and STs from 1999-00 to 2013-14. As compared to the ownership of units among SCs and STs their population share was high that was 17.12 percent and 22.84 percent respectively but the enterprise owned by Non-SCs/STs was beyond their population share (60 percent). This shows the imbalance of the performance among social groups. The promoting agencies will have to keep these imbalances in mind while framing the policies for the promotion and development of MSMEs in future so as to make the sector more vibrant and also to ensure the balanced and inclusive growth of the economy. Three year moving average rate of growth of units, investment, and employment among social group declined over the year. The average size of investment among Non-SCs/STs went up from 4.73 percent in 1999-00 to 6.13 percent in 2013-14 but employment reduced from 5.43 percent to 4.90 percent in

the same year. The average size of investment and employment among SCs declined whereas the average size of investment and employment among STs was stagnant in the mention year.

5.2: Suggestion:

Though the percentage share of units, investment, and employment among SCs and STs was increasing but it is not sufficient so that govt. should focused in these group for their development in the performance of MSMEs sector. Their educational qualifications may not be very high. The govt. should make initiative for improvement of their skill as well as give more focused of awareness of skilled based programme or scheme. As the reasons for lower rate of growth or lower percentage share of MSME units, investment, and employment explained. Based on these problems govt. should take initiative to low cost with adequate and timely credit, no collateral requirements, improve the access to equity capital, expand market, and improve the infrastructural facilities.

5.3: The scope for future research:

This study is limited to trends in the growth of MSME units, investment, and employment in Odisha. Though theoretically the relation between units, investment, and employment has been explained but empirical analysis has not been done. So to examine at what extent the performance of MSMEs help for the development of this state, this remains as a further area of research.

BIBLOGRAPHY

Alivelu, G., Samal, A., Chakravarty, D., & Sen, K. (2011). A Thousand Industries in a Thousand Days? State Business Relations and the Puzzle of Orissa's Industrial Performance. *Centre for Economic and Social Studies. Working Paper No.97*, 1-36.

Anggadwita, G., & Mustafid, Q. Y. (2014). Identification of factors influencing the performance of small medium enterprises (SMEs). *Procedia-Social and Behavioral Sciences*, *115*, 415-423.

Bal, C., Das, A., & Kumar, S. C. (2015). Silver Lining in Odisha's Organised Manufacturing Sector. *Economic & Political Weekly*, *50*(15), 69-79.

Balasubramanian, K. & Madhavan, S. (2017). Sector wise analysis of MSME– Contribution To Growth of Indian Industry, *International Journal of Management Studies*, volume- IV, issue 1, 84-92

Bhaduri, A. (2007). Alternatives in industrialisation. *Economic and Political Weekly*, 1597-1601.

Bhaduri, A., & Patkar, M. (2009). Industrialisation for the People, by the People, of the People. *Economic and political weekly*, 10-13.

Das, P. (2017). Micro, Small and Medium Enterprises (MSME) in India: Opportunities, Issues & Challenges. *Great Lakes Herald*, *11*(1), 77-89.

Deshpande, A., & Sharma, S. (2013). Entrepreneurship or survival? Caste and gender of small business in India. *Economic and Political Weekly*, 38-49.

Gade, S (2018). MSMEs' Role in Economic Growth–a Study on India's Perspective, *International Journal of Pure and Applied Mathematics*, volume-118, No.18, 1727-1741

Gilda, F., Abdol, R. N. & Babak, Y. (2016). Role of MSMEs in Economic Growth of India, *International Journal of Multidisciplinary Research and Modern Education*, volume-II, issue 1, 199-211

Jena, N. R., & Thatte, L. R. (2018). Performance of the Micro, Small and Medium Enterprises (MSMEs) Manufacturing Sector in Select States in India: The Concept Of MSMEs Manufacturing Business Facilitator (MSME-MBF) Index. *Academy of Entrepreneurship Journal*, *24*(1), 1-22.

Kannan, K. P., & Raveendran, G. (2009). Growth sans employment: A quarter century of jobless growth in India's organised manufacturing. *Economic and Political weekly*, 80-91.

Kaur, G. (2017). Economic reforms and micro, small and medium enterprises. *International Journal of Research-Granthaalayah*, *5*(5), 394-404.

Kishore, S. (2016). Growth of Micro, Small and Medium Enterprises (MSMEs) in India. *BIMS International Journal of Social Science Research*, *1*(2), 6-13.

Krishna, K. L. (2012). 'Idiosyncratic'industrial Development In India: Employment Implications. *An Sinha Institute Of Social Studies Patna–800001*, *22*(1), 5.

Manna, P. & Mistri, T. (2017). Status of Micro Small and Medium Enterprises (MSME) in India: A Regional Analysis, *IOSR Journal Of Humanities And Social Science*, volume- 22, issue 9, 72-82

Meher, R., & Sahoo, R. (2008). Socio-economic background of the entrepreneurs and the industrial climate of the small scale sector industries in Orissa. *The Journal of Entrepreneurship*, *17*(2), 169-188.

Mishra, B. (2010). Agriculture, industry and mining in Orissa in the post-liberalisation era: An inter-district and inter-state panel analysis. *Economic and political Weekly*, 49-68.

Mouhammed, A. H. (2011). Important theories of unemployment and public policies. *Journal of Applied Business and Economics*, *12*(5), 100-110.

Nichter, S., & Goldmark, L. (2009). Small firm growth in developing countries. *World development*, *37*(9), 1453-1464.

Padhi, R., & Adve, N. (2006). Endemic to development: police killings in Kalinga Nagar. *Economic and Political Weekly*, 186-187.

Papola, T. S. (2008). Employment challenge and strategies in India. *New Delhi: ILO Sub regional Office for South Asia, ILO Asia-Pacific Working Paper Series*, 1-27.

Papola, T. S. (2013). Employment Growth During the Post-Reform Period. *Indian Journal of Labour Economics*, *56*(1), 1-15

Parida, P.C., Pradhan, K.C. & Sarangi, T. (2016). Employment, Productivity and Output Growth of Labour Intensive Manufacturing Industries in India, *National Institute of Labour Economics Research and Development (NILERD)*, 1-65

Pathak, P. & Agewal, M. (2016). Evaluation of Growth and Performance of Micro, Small and Medium Enterprises: A Study of Uttarakhand Region, India, *International Journal of Advanced Research*, Volume 4, Issue 6, 554-562

Pattanaik, F., & Nayak, N. C. (2013). Employment intensity of secondary sector in India: trends, patterns and determinants. *Journal of Regional Development and Planning*, *2*(2), 157-173.

Rani, U., & Unni, J.(2004). Unorganised and organised manufacturing in India: Potential for employment generating growth. *Economic and Political Weekly*, 4568-4580.

Reinschmiedt, L., & Jones, L.L. (1977). Impact of industrialization on employee income distribution in rural texa communities. *Journal of Agricultural and Applied Economics*, 9(2), 67-72.

Roth, I. (1970). Industrial location and Indian government policy. *Asian Survey*, *10*(5), 383-396.

Sahu, K. & Sethi, N. (2017). Sectoral Linkages and Economic Development in India, *Samikshya-DE&S Journal on Socio-economic Issues*, volum II, 76-84

Sankar, P. J. (2017). Dependability Of Micro Small & Medium Enterprises In Employment Formation In Tamil Nadu With Special Reference To Thiruvallur District, *International Journal of Innovative Research in Management Studies*, Volume 2, Issue 8, pp.1-6

Seena, P.P. & Swarupa, R. (2018). Growth and Performance of Small Scale Industries/Micro Small and Medium Enterprises in Kerala-Region Wise Analysis, *International Journal of Management Studies*, volum- v 2(1), 177-122

Sen, K. & Salim, S. (2014). Micro, Small and Medium Enterprises in West Bengal-An Inter-District Analysis, *International Journal of Science and Research*, volume-5, issue 2, 225-230

Shaik, M., Kankipati, A., Ramesh, K. V., & Babu, G. (2017). Performance of MSME's Sector in India, *International Journal of Economics and Management Studies*, volume-4, issue 3, 11-15

Siddiqui, K. (2015). Challenges for industrialisation in India: State versus market policies. *Research in World Economy*, *6*(2), 85-98.

Srivastava, R., & Sasikumar, S. K. (2003, June). An overview of migration in India, its impacts and key issues. In *Regional Conference on Migration, Development and Pro-Poor Policy Choices in Asia* (pp. 22-24).

Suman, D. (2015). Liberalisation and performance of Micro, Small and Medium Enterprises: A comparative study, *Journal of Management Sciences and Technology*, 2(3), 1-5

Thomas, T. (1979). Relationship between Small-Scale and Large-Scale Industry A Different View. *Economic and Political Weekly*, M29-M36.

Thorat, S., & Sadana, N. (2009). Caste and ownership of private enterprises. *Economic and Political Weekly*, 13-16.

Vyasulu, V., & Kumar, A. A. (1997). Industrialisation in Orissa: trends and structure. *Economic and Political Weekly*, M46-M53.

Wang, Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries?–An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, *16*(3), 167-176.

Yadav A.K., & Kumar, Y. (2018). Growth, Employment and Output Generation in MSME in India: An Analysis, *Nilerdworking Paper Series WPS, 5/2017* (No. id: 12754).

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