

CHAPTER -1

INTRODUCTION

Manufacturing is the process of converting raw materials, components, or parts into finished goods that meet a customer's expectations or specifications. Manufacturing commonly employs a man-machine setup with division of labour in a large scale production. Manufacturing industry refers to those industries which involve the manufacturing and processing of items and indulge in either creation of new commodities or in value addition. The manufacturing industry accounts for a significant share of the industrial sector in developed countries. The final products can either serve as a finish good for sale to customers or as an intermediate goods used in the production process. In short, we can say that manufacturing industry refers to any business that transforms raw materials into finished or semi-finished goods using machines, tools and labour. Manufacturing sectors include production of food, chemicals, textiles, machines and equipment.

The growth of organized manufacturing sector is a necessary condition for balanced growth of economy which ensures creation of jobs for the large workforce joining the job market every year. Economic history of developed and developing countries clearly demonstrates immense contribution of manufacturing to economic growth and to job creation through relocation of labour force from the traditionally low wage low productivity sector like agriculture to the higher wage manufacturing sector. In the context of India, where liberalization and reform of the industry was started from mid 1980s, it was expected that the employment scenario both in terms of quantity as well as quality would get a respectable boost contributing to the inclusive growth across the country. The growth of manufacturing as well as growth of employment in the organized sector did not measure up to the expectations during the 1990s. The decade of 1990s has been characterized as “Jobless” growth as despite growth in manufacturing, employment levels have been low and stagnating. Therefore, the government’s policy concern for expanding employment opportunities in organized manufacturing.

Classification of Manufacturing Sector in India

The manufacturing sector covers all manufacturing, processing and repair & maintenance services units irrespective of their employment size, investment and location. The first

classification of the manufacturing sector is into two broad sub-sectors: (i) registered or organised; and, (ii) unregistered or unorganised. The data on manufacturing in the organised sector is collected through Annual Survey of Industries (ASI), annually, whereas, the data on unorganised sector is collected by National Sample Survey Organisation (NSSO).

Registered (Organised) manufacturing sector : The registered manufacturing sector includes all factories covered under sections 2m (i) and 2m (ii) of the Indian Factories Act (IFA), 1948 which refers to the factories employing 10 or more workers and using power or those employing 20 or more workers but not using power on any day of the preceding 12 months.¹

Unregistered (Unorganised) manufacturing sector: The unregistered manufacturing sub-sector, a complement set to the registered manufacturing sub-sector, covers all the residual units which are not covered under the registered manufacturing sector. Thus, the unregistered manufacturing sector covers all the manufacturing, processing, repair & maintenance services units employing less than 10 workers and using power or less than 20 workers and not using power. The data on unorganised sector is collected through periodic surveys by the NSSO.

Contribution of Manufacturing Sector in Indian Economy

The structural transformation of the Indian economy over the last three decades has been spectacular growth of the services sector, which now accounts for about 50 percent of the GDP. However, the rapid growth of the services sector much before the manufacturing industry attaining maturity is not a healthy sign. A knowledge -based economy cannot be sustained in the long run unless it is adequately supported by a growing manufacturing economy. Moreover, a service economy cannot continue to thrive on a long-term basis in a country where over 80 percent of the population is education below the middle-school level. Some sectors, such as IT, ITES and pharmaceuticals, will compete globally, employing perhaps 2 percent of the population and bringing wealth to many parts of India. At the same time, around 60 percent of the population will remain dependent on the agricultural sector, sharing less than one-quarter of India's GDP. Without reform, the agriculture will continue to suffer from endemic underemployment, low wages and monsoon dependency. This will result in continued urban migration, but without the development of an industrial sector, this will lead to rising unemployment in the cities. Recognition that this pattern is unsustainable is growing.

¹ The 'organised sector' in India is defined by the size of establishment in terms of number of workers.

It is estimated that India needs to create 7-8 million new jobs each year outside agriculture to stay at its current unemployment level of 7 percent. Manufacturing jobs are ideal for workers transitioning out of agriculture, as service jobs require high level of education and professionalism. The revival of manufacturing sector can create close to 2.5 Million new jobs every year. With the removal of all quantitative restrictions on imports and the falling import tariffs under the WTO regime, it is all the more important for the Indian industry to improve its competitive edge. The sheer volume of international trade with over 70 percent of the seven trillion dollar market being in processed manufacturing, strongly indicates the necessity of developing global competitiveness in this sector. Thus, the above 8 percent growth of manufacturing industry in India is critical to ensure healthy balance of income parity, employment generation and sustenance of growth.

So, the world over the manufacturing sector is recognised for creating mass employment for low skilled workers in the modern sector. With a rapid decline in the capacity of agriculture to offer jobs and the limited scope of the modern services sector to absorb relatively unskilled labour that has been displaced from agriculture, expectations are that the manufacturing sector will create mass employment for this displaced lot. In India, also the role of the manufacturing sector is recognised to be critical not only for facilitating large-scale employment but also for enabling high GDP growth.²

Manufacturing Industry in India has gone through various phases of development over the period of time. Since independence in 1947, the Indian manufacturing sector has travelled from the initial phase of building the industrial foundation in 1950's and early 1960's, to the license-permit Raj in the period of 1965-1980, to a phase of liberalization of 1990's, emerging into the current phase of global competitiveness. It has grown at a robust rate over the past ten years and has been one of the best performing manufacturing economy.³

Much of the growth in employment in manufacturing in recent years has taken place in the unorganized segment of this sector. Also, there has been growing informal employment in the

²'Indian Manufacturing Industry Technology and Prospect', *Technology Promotion Unit Investment and Technology Promotion Branch* (2005).

³ Banerjee, C (2011), '**Economic reforms will help drive growth**' *The Financial Express*, Confederation of Indian industry.

organized manufacturing sector. Thus, in terms of the quality of employment generated, manufacturing has not performed well. Employment in the organised manufacturing sector in India remained virtually stagnant in the 1980s. In sharp contrast, there has been a substantial increase in employment in this sector in the 1990s. Between 1980-81 and 1990-91, employment in organised manufacturing grew at the rate of only 0.53 percent per annum and growth on output of manufacturing generated at 7 percent per annum. This came as a surprise to economists because in the previous decade (1970s) 5 percent growth in organised manufacturing output has generated a 3.8 percent increase in employment. In the next five years, 1990-91 to 1995-96, the growth rate was much higher at 4.03 percent per annum, comparing favourably with the growth rate achieved in the 1970s (about 3.8 percent per annum between 1970-71 and 1980-81).

In the period 1990-91 to 1997-98 (the last year for which data are available), the growth rate of employment in organized manufacturing was 2.69 percent per annum, well above the growth rate achieved in the 1980s and higher than the growth rate of the labour force. Slower growth in employment in the manufacturing sector has resulted in sharp decline of share of labour in the value added. It came down to a level of only 25 percent in the late 1990s, from about 40 percent in the early 1980s. Special policy attention to the creation of employment in manufacturing is necessary as evidence suggests that a high growth in output itself may not be a guarantee to creation of sufficient employment.⁴

There was registered manufacturing employment of 8 million people-about 3/4th were workers and the rest supervisors and managers in the year 1999-2000. They represented 2 percent of the economy's workforce producing about 11 percent of domestic output and using about 25 percent of renewable capital stock. Where 1980's was a period of jobless growth in this industry, the 1990's witnessed a boom for 4 years during 1992-96. In 2001-02, 1.3 million people lost their jobs. It was mostly workers who lost their jobs but employment of managers increased steadily, though they too experienced job losses. Growth rates of workers and supervisors in the year 1980-81 and 2000-01 was, 0.9 percent and 2.2 percent, respectively.⁵

At the present time, the development process across the world has entailed a shift of labour from agriculture to manufacturing and services. In aggregate terms this has often been through

⁴Goldar, B (2000), 'Employment Growth in Organized Manufacturing in India', *Economic & Political Weekly*, 1 April, pp 1191-95.

⁵ApranaVyas (2008) 'Organized Manufacturing Employment Government's Fault?', *The Viewspaper*, February 23.

an intermediate stage in which labour has moved from agriculture to the unorganized traditional manufacturing (and services) and from there to organized modern manufacturing. The manufacturing sector too plays a significant role in the Indian economy, contributing nearly 16 percent to the GDP (in 2006-07). Encouraged by an increasing presence of multinationals, scaling up of operations by domestic companies and an ever expanding domestic market, the Indian manufacturing sector has been averaging a 9 percent growth in the last four years (2004-08), with a record 12.3 percent in 2006-07.⁶

The manufacturing sector contributes about 15.6 percent of India's GDP, with estimated revenue of about Rs 40 lakh crore in 2008–09. Manufacturing exports grew by a compounded annual rate of 16.2 percent during the first four years of XI Plan (2007-08 to 2010-11). Engineering products emerged as the most dynamic sector with its share in total manufacturing exports increasing from 35 percent in 2007-08 to 39.8 percent in 2010-11.⁷

According to the CII-BCG (The Confederation of Indian Industry) study, the manufacturing sector employed 58 million or just about 12 percent of the workforce in 2008. As exports have played a very important role in growth in recent years. The share of manufactured goods has increased from 65 percent in 1990-91 to 70 percent in 2009-10. It is plausible to hypothesis that most exports would be based on comparative labour advantage and, therefore, fast export growth would lead to rapid growth in employment in the export-oriented sectors.⁸

Manufacturing sector contributes about 15 percent of India's GDP and 50 percent to the country's exports in present. By 2012, it is estimated, based on current economic projections, that this sector will employ a further 12–13 million out of nearly 89 million additional people who will enter the workforce. Studies have estimated that every job created in manufacturing has a multiplier effect, creating 2–3 jobs in the services sector. In a country like India, where employment generation is one of the key policy issues, this makes this sector a critical sector to achieve inclusiveness in growth.⁹

India is a young country with over 60 percent of population in the working age group of 15-59 years. India will have to create 220-250 million jobs between now and 2025 if it has to exploit its

⁶ **Contribution of Manufacturing Sector in India (2011), “HULT International business school”.**

⁷ Government of India: Ministry of Commerce & Industry, Department of Commerce (2012), “Boosting India's manufacturing Export”, Working Report.

⁸ Papola, T.S and Sahu, P P (2012), ‘Growth and Structure of Employment in India: Long-Term and Post-Reform Performance and the Emerging Challenge’, *Institute for Studies in Industrial Development*, Indian Council of Social Science Research (ICSSR).

⁹ Banerjee, C (2011), ‘Economic reforms will help drive growth’ *The Financial Express*, Confederation of Indian industry.

demographic dividend. A large share of these jobs will have to be for the migrating labour from rural to urban areas, which will see rural population decreasing from about 70 percent in 2010 to less than 63 percent by 2025. This means about 50-60 million low skilled people will move out of agriculture and related jobs, and will be looking at alternate employment options. It is estimated that every job created in manufacturing has a multiplier effect of creating four additional jobs in related activities. Thus, job creation in the sector can be a major instrument for reaping the demographic dividend.

Labour productivity varies by sub-sectors in manufacturing. While some sectors like metals are capital intensive on account of the nature of production processes required and hence, inherently not labour intensive, other sectors like textiles and paper are employment intensive. At the same time, it is expected that labour productivity for all sectors should gradually improve over time. Looking at the disaggregated historical growth of the sub-sectors of manufacturing, a similarly distributed growth of approximately 11-13 percent would yield an additional approximate 80-120 million jobs by 2025, assuming an annual improvement of 3 percent in labour productivity. Thus, an improvement in the growth of the manufacturing sector would have significant benefits on employment as well.¹⁰

Statement of the Problem

Productive employment enhances income-earning capabilities of people, which ultimately leads to a reduction in poverty. The impact is greater when employment is of higher quality and real wages are higher. Historically speaking, structural change in employment in India has been very slow. The manufacturing sector in India is crucial for main reason: It has significant potential to provide modern employment to a growing labour force. This sector of India with its future opportunities and high employment potentials embraces the path to the economic development of country. So, it is very important to examine the present situation of employment in manufacturing sector. The study looks at the performance of organised manufacturing sector of India in terms of employment generation since 2000s. Following objectives have been set to be fulfilled for the present study.

¹⁰Maira, A (2011), 'A Plan to Grow Indian Manufacturing', *Indian School of Business Insight*, Volume 9 Issue 3.

Objectives of the Study

- To study state-wise trends of manufacturing employment and output in India.
- To study the inter-state variations in the impact of output growth on growth of employment.
- To examine inter-state differences in productivity growth and elasticity of substitution between labour and capital.

Chapterisation Scheme

The entire subject matter of the present work has been organized into the following 5 chapters in addition to the present first chapter on introduction and describes performance of manufacturing sector in India's employment growth from 1980s to 2000s. Chapter 2 provides a brief survey of selected earlier studies around the issue on employment generation and labour intensity in the organised manufacturing sector in India. Chapter 3 presents the methodology adopted and sources of data. The empirical analysis and findings of the study are presented in chapter 4. Chapter 5 contains the conclusions and policy implications which flow from the material presented in the previous four chapters.