CHAPTER - III

AN OVERVIEW OF MANUFACTURING AND SERVICE SECTOR AND PROFILE OF THE STUDY AREA

3.1 MANUFACTURING SECTOR

Manufacturing holds a key position in the Indian economy, accounting for nearly 16 per cent of real GDP in FY12 and employing about 12.0 per cent of India’s labour force. Growth in the sector has been matching the strong pace in overall GDP growth over the past few years. For example, while real GDP expanded at a CAGR of 8.4 per cent over FY05-FY12, growth in the manufacturing sector was marginally higher at around 8.5 per cent over the same period. Consequently, its share in the economy has marginally increased during this time to 15.4 per cent from 15.3 per cent. Growth however has remained below that of services, an issue that has not escaped the attention of policy makers in the country.

Strong growth has been accompanied by a change in the nature of the sector - evolving from a public sector dominated set-up to a more private enterprise-driven one with global ambitions. According to UNIDO, India (with the exception of China) is currently the largest producer of textiles, chemical products, pharmaceuticals, basic metals, general machinery and equipment, and electrical machinery. In the coming year, the sector’s importance to the domestic and global economy is set to increase even further as a combination of supply-side advantages, policy initiatives, and private sector efforts set India on the path to a global manufacturing hub.
The sub-sectors that stand out in India’s manufacturing sector

Among sub-sectors in manufacturing, the top five are food products, basic metals, rubber and petrochemicals, chemicals, and electrical machinery. Together they account for over 66.0 per cent of total revenues in manufacturing. However, these verticals rely primarily on domestic demand for a major part of their revenues.

Manufacturing sector’s recent growth spurt: Clues from IIP

Manufacturing accounts for a large chunk of Indian industry, a fact borne out by the sector’s 75.5 per cent share in the Index of Industrial Production (IIP). With CAGR of 8.7 per cent during FY05-FY12 (FY 12 includes data from April 2011 to Feb 12), the manufacturing sector helped the overall industrial sector get over low growth in the other two sub-segments of IIP, Mining and Quarrying (14.2 weightage in IIP) and Electricity (10.3 weightage in IIP) witnessed CAGR of 3.4 per cent and 5.8 per cent respectively. On an even more encouraging note, the manufacturing sector has strengthened in FY11 compared to the previous fiscal – an analysis of 121 sub-sectors by the Confederation of Indian Industry (CII) reveals that only 5 of them recorded declines in FY11 compared to 25 in FY10. At the same time, key sub-sectors like machine tools, ball and roller bearings, textile machinery, and utility vehicles recorded either excellent (above 20 per cent) or high (10-20 per cent) growth, thereby adding to value creation in manufacturing.
Contribution of Manufacturing Sector in India:

- Though India banks heavily on its services sector for growth, the manufacturing sector too plays a significant role in the Indian economy, contributing nearly 16 per cent 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 per cent growth in the last four years (2004-08), with a record 12.3 per cent in 2006-07.
- India is fast emerging as a global manufacturing hub. Be it automobiles or computer hardware, consumer durables or engineering products, all are being manufactured by multinationals in India.
- Moreover, according to a report by the Federation of Indian Chambers of Commerce and Industry (FICCI) and Yes Bank, India is poised to become the global manufacturing hub for luxury brands over the next five years with manufacturing of luxury items becoming a US$ 500 million industry during this period.
- India has all the requisite skills in product, process and capital engineering, thanks to its long manufacturing history and higher education system. India’s cheap, skilled manpower is attracting a number of companies, spanning diverse industries, making India a global manufacturing powerhouse.
FUTURE OF INDIAN MANUFACTURING SECTOR

- Base for export to third countries - Hyundai Motors using India as export base for foreign markets, currently exporting to 8 countries and looking at expanding exports to markets in the European Union and Latin America. The company has also set up an R & D center at its Chennai plant.
- World class R & D facilities
- Emergence as global manufacturing hub with presence of MNCs such as LG, Samsung, Hyundai, Pepsi, GE, General Motors, Ford, Suzuki etc.
- Segments showing high potential: automobiles, steel, aluminium, cement, auto ancillaries, forging and pharmaceuticals
- The share of manufacturing sector accounts for only 17% in our GDP which is very low compared to China, Malaysia and Thailand where manufacturing contributes to 1/3rd or more in their GDP.
- Kapil Sibbal asks NRIs to Invest more in the manufacturing sector to create more job opportunities.

EMPLOYMENT IN THE INDIAN MANUFACTURING SECTOR

In the near future, the manufacturing sector will witness a high demand for experienced professionals that will drive operations in the sector. India is also rising as the worldwide manufacturing hub with a lot of companies shifting their manufacturing base to India. This is mainly because of availability of strong English–speaking workforce including researchers and engineers.
Indian manufacturers are now more optimistic about growth in business activities to bring considerable profits. According to market analysts, close to 30 lakh employments spread across all strata will be created this year and by 2015 the working population in the manufacturing sector is predicted to grow by 2.8 crore. India’s current GDP is estimated at US$650 billion and is expected to grow to US$1,390 billion by 2016 of which the automobile sector is presently contributing nearly 5%.

The first quarter of 2011 saw a robust increase in jobs. Hiring in the manufacturing sector was recorded at 44%. Auto sector and light engineering are expected to show some recovery as evident from recent trends of increasing sales of automobiles and consumer goods.

Increasing productivity levels and optimised costs over the last year have resulted in growth in jobs in this sector. In the third and fourth quarter of 2011, hiring of newcomers with specialised skills will be robust. The Indian manufacturing sector exhibits abundant regional variation between the organised and the unorganised segments in terms of both productivity and wage levels.

To generate skilled workforce in this sector, access to education in rural areas should be integrated. Through technology education and reach, the manufacturing industry would certainly manage to experience tremendous industrial growth. It is also essential to continuously upgrade these manpower skills in technical and techno managerial dimensions. Time and again, India has been ranked low on the ability to retain its qualified manpower when compared with the reference group of countries. Therefore,
the Indian manufacturing talent pool is at the mercy of countries that create conditions conducive to the nurturing and advancement of its talent pool.

**Manpower shortage**

In the coming years, numerous high-tech companies will encounter a shortage of manpower due to the following reasons:

With the industry expected to grow at a 20-30% annually, Indian companies will need to hire thousands of engineers and scientists over the next decade. These numbers are based on an estimate of 20% employment growth. Companies might not grow at a smooth pace as predicted; there will be years when workers are added at a very fast rate, and others when few are hired. However, job growth overall will follow the trend indicated.

This industry especially in India employs a high percentage of engineers and scientists with M.S. or Ph.D. degrees. Consequently, the demand for these degree holders is much greater than the supply. The supply of graduates is assumed to increase at 15% per year. Demand is greatest for Ph.D. engineers and scientists; ranging from 20% of the total supply in 2007 to 52% of the total supply in 2011. Thus, it is clear that there is soon to be a critical shortage of M.S. and Ph.D. engineers with the skills the industry needs.

The engineering students are not in sync with the needs of today’s high-tech manufacturing companies; while the supply of graduates is enough for the industry, the skill levels are far below of what is required. Hiring
companies have no resort but to invest in expensive, multiyear training programmes in order to obtain skilled and productive employees.

**Importance of manufacturing sector in India’s economic growth**

The structural transformation of the Indian economy over the last three decades has seen spectacular growth of the services sector, which now accounts for about 50 per cent 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 per cent of the population’s education is below the middle-school level.

Some sectors, such as IT, ITES and pharmaceuticals, will compete globally, employing perhaps 2% of the population and bringing wealth to many parts of India. At the same time, around 60% 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.

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 per cent of the seven trillion dollar market being in processed manufacturing, strongly indicates the necessity of developing global competitiveness in this sector. Income parity, employment generation and sustenance of growth.

**Industrial growth**

The manufacturing sector grew by 8.9% in 2004-05, comfortably outperforming the sector’s long-term average growth rate of 7%. The sector has remained one of the engines of economic growth since the start of 2005-06. Industrial growth averaged 7.1% per annum in the 1980s. It accelerated slightly to 7.6% per year in the first five years following the beginning of the economic policy reform process in 1991. In the second half of the 1990s industrial growth trended lower at around 5% per annum. However, since 2002-03 industrial growth has accelerated markedly on the back of recent strong GDP growth. Rising disposable incomes, easy access to finance and the changing attitudes of India’s rapidly rising middle class (with a traditional focus on savings) have resulted in a consumer lending boom. Industrial growth rose above 8% in 2004-05, with consumer durables and non-durables showing exceptionally strong growth. Capital-goods
production has been growing at double-digit rates since 2002-03, suggesting increased investment in the industrial sector and the economy as a whole.

MANUFACTURING SUB-SECTORS

Automotive

The automotive industry’s turnover stood at US$19.1bn in 2003-04 and has been one of the fastest-growing sectors in recent years. Rising income levels, continuing poor public transport systems, wider availability of car finance and the increase in the young population are the main drivers of growth. Total production of vehicles rose from 4.2 m units in 1998-99 to 7.3 m units in 2003-04. In volume terms, vehicle production is dominated by two-wheelers, which accounted for 5.6 m units of total production in 2003-04. The production of passenger cars stood at 842,000 units in 2003-04, followed by three-wheelers (340,000), commercial vehicles (275,000) and multi-purpose vehicles (146,000).

Steel

India produced 31.8m tonnes of crude steel in 2004-05, making it one of the ten largest steel producers in the world. A variety of grades are produced and the quality is at par with producers such as South Korea and the US. Increased demand from China as well as strong domestic demand, particularly by consumer-durables and automotive manufacturers and the construction sector are the key drivers of production growth. Around 40% of output is produced in integrated steel plants; the remaining comes from mini-plants, of which over 180 exist, almost all in the private sector.
Light Engineering

The size of Indian Light Engineering industry is estimated at US $ 7 billion. In India, the light engineering industry has a diverse industrial base with significant unorganized market. It is estimated that light engineering sector contributes to 8-10% of total exports of the country and its exports were US $3 billion in 2002-03. The exports from the light engineering industry in India mainly consists of structured steel products; motorcycles, cycles and auto components; electrical, electronics, telecommunication and automation equipments; hand and machine tools; fans, filters and pumps; and metal machine tool parts.

The Light Engineering Industry is a diverse industry with a number of distinctive sectors and sub sectors. This sector includes low-tech items like castings, forgings and fasteners to the highly sophisticated micro-processor based process control equipment and diagnostic medical instruments. This group also includes industries like bearings, steel pipes and tubes etc. The products covered under the engineering industry are largely used as input to the capital goods industry.

Pharmaceuticals

The Indian Pharmaceutical Industry today is in the front rank of India’s science-based industries with wide ranging capabilities in the complex field of drug manufacture and technology. A highly organized sector, the Indian Pharma Industry is estimated to be worth $ 4.5 billion, growing at about 8 to 9 percent annually. The Indian Pharmaceutical sector is highly fragmented with more than 20,000 registered units. It has expanded drastically in the last two decades. The leading 250 pharmaceutical
companies control 70% of the market with market leader holding nearly 7% of the market share.

**Machine Tools**

An industry, which has undergone a radical shift in its paradigm thinking, the Indian machine tool industry is now recognized as a provider of low-cost high quality lean manufacturing solutions. The industry resiliently supports all its users to enhance productivity as well as improve competitiveness, for the betterment of the end user. The Indian machine tool industry is approximately a US$ 500 million industry. There are 138 major companies manufacturing metal cutting, metal forming, conventional and automated machine tools.

The sector grew by 10 percent in 2002-03. Approximately 6 per cent of the production is exported. Exports include CNC lathes, vertical machining centres, grinding machines, etc. Major export destinations include USA, Germany, China, Italy, Mexico, Canada, UK and Brazil. Most manufacturers have their own in-house R&D and there exists tremendous scope for institutional collaboration for development of new technology.

**Textiles**

Textiles account for around one -fifth of total export earnings. Because the government discriminated for decades against integrated textile mills, with the aim of helping cottage handlooms, most mills closed down. Mills currently produce only 4% of textiles output. Despite government assistance, the share of handlooms in total output is only 18%; the remaining is produced by power looms located in sheds outside the mills, which allow them to escape the restrictions.
Production in the textile industry is based on a decentralised system with continuing small-scale reservation for many items. The phasing out of the Agreement on Textiles and Clothing (ACT) at the beginning of 2005 is likely to benefit the Indian textile industry. The industry has a natural competitive advantage in terms of a strong and large multi-fibre base, abundant cheap skilled labour and presence across the entire value chain of the industry ranging from spinning and weaving to the final manufacture of garments.

**Computer hardware**

The rapid growth of software exports has attracted thousands of people into the industry and has stimulated the demand for computers. Sales of personal computers rose by 20% in 2004-05, to 3.6m. Import liberalisation and the entry of foreign manufacturers has transformed this industry, which, until five years ago, was tiny and dominated by a few Indian manufacturers. The ease of importing components has nurtured hundreds of unbranded assemblers, which command 62% of the market share.

**3.2 SERVICE SECTOR**

**SERVICE**

Service is Intangible. It is an economic activity that does not result in ownership but creates value for the customers. Providers of services constitutes the Tertiary sector of Indian economy.
Service Sector

Service sector is the lifeline for the social economic growth of a country. It is today the largest and fastest growing sector globally contributing more to the global output and employing more people than any other sector. The real reason for the growth of the service sector is due to the increase in urbanization, privatization and more demand for intermediate and final consumer services. Availability of quality services is vital for the well being of the economy.

In advanced economies the growth in the primary and secondary sectors are directly dependent on the growth of services like banking, insurance, trade, commerce, entertainment etc.

Indian Service Sector

In alignment with the global trends, Indian service sector has witnessed a major boom and is one of the major contributors to both employment and national income in recent times. The activities under the purview of the service sector are quite diverse. Trading, transportation and communication, financial, real estate and business services, community, social and personal services come within the gambit of the service industry.

One of the key service industry in India would be health and education. They are vital for the country’s economic stability. A robust healthcare system helps to create a strong and diligent human capital, who in turn can contribute productively to the nation’s growth.
Post Liberalization

The Indian economy has moved from agriculture based economy to a knowledge based economy. Today the IT industry and ITE'S industry are the dominant industry in the service sector. Media and entertainment have also seen tremendous growth in the past few years.

SUBSECTORS

Information Technology Industry

The Information Technology industry has achieved phenomenal growth after liberalization. The industry has performed exceedingly well amidst tough global competition. Being knowledge based industry; India has been able to leverage the global markets, because of the huge pool of engineering talent available and the proficiency in English language among the middle class.

ITES sector

The ITES sector has also leveraged the global changes positively to emerge as one of the prominent industries. Some of the services covered by the ITES industry would be:

- Customer interaction services -Non voice and Voice.
- Back office, revenue accounting, data entry, data conversion, HR services.
- Medical Transcription.
- Content development and animation.
- Remote education, market research and GIS
Retailing

Prior to liberalization, India had one of the most underdeveloped retail sectors in the world. After liberalization the scenario changed dramatically. Organized retailing with prominence on self service and chain stores has changed the dynamics of retailing. In most of the tier I and tier II cities supermarket chains mushroomed, catering to the needs of vibrant middle class. This indirectly contributed to the growth of the packaged food industry and other consumer goods.

Financial Services-Banking And Insurance

Prior to liberalization these two sectors were controlled and regulated by the government. Nationalized banks and insurance companies had a firm grip over the market. After liberalization the banking and insurance domain opened up for private participation.

Banking Sector

The three major changes in the banking sector after liberalization are:

- Step to increase the cash outflow through reduction in the statutory liquidity and cash reserve ratio.
- Nationalized banks including SBI were allowed to sell stakes to private sector and private investors were allowed to enter the banking domain. Foreign banks were given greater access to the domestic market, both as subsidiaries and branches, provided the foreign banks maintained a minimum assigned capital and would be governed by the same rules and regulations governing domestic banks.
• Banks were given greater freedom to leverage the capital markets and determine their asset portfolios. The banks were allowed to provide advances against equity provided as collateral and provide bank guarantees to the broking community.

Insurance Sector

The Insurance Regulatory and Development Authority Act 1999 (IRDA Act) allowed the participation of private insurance companies in the insurance sector. The primary role of IRDA was to safeguard the interest of insurance policy holders, to regulate, promote and ensure orderly growth of the insurance industry. The insurance sector could invest in the capital markets and other than traditional insurance products, various market link insurance products were available for the end customer to choose from.

Future Trends

• Globally outsourcing industry would continue to grow.
• Following the success of US and UK, more countries in the European Union would outsource their business.
• Technological power shift from the West to the East as India and China emerge as major players.
• Political backlash over outsourcing would come down as companies reap the benefit of outsourcing.

Recent trends in Indian service sector

• By services sector we mean the tertiary sector, which is the largest of the three constituent sectors in terms of contribution to Gross
Domestic Product (GDP) in India. The service sector comprises trade, hotels and restaurants, transport, storage, communication, financing, insurance, real estate and business services, community services (public administration and defense) and other services. This sector provides services of final consumption nature as well as intermediate nature, the latter accounting for a major share. Substantial parts of services such as transport and communications are in the form of intermediate inputs for production of other goods and services.

Performance of service sector

- The performance table of services sector gives figures of the annual growth rates of GDP at factor cost and the services sector and its three constituent categories from 2001-02 onwards — that is the growth rates recorded by the three components of services:
  - A. Trade, hotel, transport and communication,
  - B. Financing, insurance, real estate, and
  - C. Community, social and personal services.

Reasons for Growth of Service Sector

India stands out from other emerging economies because its growth has been led by the service sector. The Sector constitutes a large part of the Indian economy both in terms of employment potential and its contribution to national income. The services sector contributes to more than half of the GDP in India, i.e., 55.8%(2007-08) and 60.7% as per the recent data. The Service exports in India have grown up from US $ 19.1 billion to US $ 73 billion in 2006. The sector covers a wide range of activities.
Both demand and supply factors have led to this growth. On the demand side, the high growth of services output was mostly attributed to factors such as increasing input usage of services by other sectors, mainly manufacturing sector (i.e. higher domestic demand); higher foreign demand due to trade liberalization; and high income elasticity for services. On the supply side, the increased trade in services following trade liberalization policies and other reforms in the 1990s induced this growth.

**CURRENT SCENARIO**

Services sector in future will provide about 70 per cent of the new job opportunities in the economy. Share of agriculture in total employment is already falling. In the coming years, the share of services would increase. New employment possibilities in the services sector are construction, trade, transport, storage, financial services, communication and personal services.

Employment in manufacturing would also expand, but its contribution to the total increase in employment would only be around 17 per cent. Thus, given the employment trends as emerging from diverse sources and the employment potentials at the sectoral levels, it may be argued that a broadbased high growth of GDP would lead to higher employment in the economy, with services sector playing a lead role.

The number of service sector jobs (skilled and unskilled) has increased in India. A survey conducted by the country's Labor Ministry indicated that during the last quarter, employment in the industry rose to 15.72 million. The research revealed that two sectors have shown the
strongest improvement in terms of hiring levels; Information Technology and Business Process Outsourcing. Commenting on the findings, Nimish Adani, chief executive of workosaur.com, told Channel News Asia: "As far as employment is concerned, there have been certain short-term initiatives taken by the government.” There has been an infusion of stimulus packages in sectors which were labor intensive. So, there has been a marginal improvement." Finance Services sector is growing with rapid rate, Finance sector is the second preferred choice of management students at postgraduate level in top B-Schools in India.

COIMBATORE DISTRICT PROFILE
HISTORY

Coimbatore District formed part of the Kongu country, the history of which dates back to the Sangam age. It is found that in early days the area was inhabited by tribes, the most predominant among them being the Kosars who are reported to have had their headquarters at Kosampathur which probably later became the present Coimbatore. However, tribal predominance did not last long as they were over-run by the Rashtra Kutas. From Rashtrakutas the region fell into the hands of the Cholas who were in prominence at the time of Raja Raja Chola. On the decline of Cholas the Kongu territory was occupied by the Chalukyas and then by the Pandyas and the cysalas. Due to internal strife in the Pandyan kingdom, the Muslim rulers from Delhi happened to interfere. Thus the area fell into the hands of Madurai Sultanate from whom the Vijayanagar rulers wrestled for the region during 1377-78 after overthrowing the Madurai Sultanate. For a few years the area remained under independent control of Madurai Nayaks.
During the period of Muthu Veerappa Nayak and later during the period of Tirumal Nayak internal strife and intermittent wars ruined the kingdom. As a consequence during the period of Tirumal Nayak, the Kongu region fell into the hands of the Mysore rulers from whom hyder Ali took over the area. However, consequent on the fall of Tippu Sultan of Mysore in 1799, the Kongu region came to be ceded to the East India Company by the Maharaja of Mysore who was restored to power by the East India Company after defeating Tippu Sultan. From then till 1947 when India attained Independence, the region remained under British control who initiated systematic revenue administration in the area.

To begin with, Coimbatore was in two parts for purposes of revenue administration. In 1804, the areas were merged into one and brought under one District Collector. During that time, Mr.H.S.GREAME, [I/C] from 20/10/1803 to 20/01/1805 was the Collector. In 1868, the Nilgiris District was bifurcated from the Coimbatore District. At the opening of the present century there were ten taluks in the district viz., Bhavani, Coimbatore, Dharapuram, Erode, Karur, Kollegal, Palladam, Pollachi, Satyamangalam and Udumalaipettai. The name of Satyamangalam taluk was subsequently changed as Gopichettipalaiyam. Avinashi taluk was formed in the year Karur taluk happened to be transferred to Tiruchirappalli district.

In 1927, some villages of Bhavani taluk together with a few villages from Salem district were constituted into Mettur Area but very soon i.e. in 1929, this area was transferred to Salem district. Again in the year 1956 considerable area of the district, viz., the whole of Kollegal taluk was transferred to Mysore State as part of the States Re-organisation Scheme. In 1975, Satyamangalam sub-taluk was upgraded as a full fledged taluk.
Again in 1979, Perundurai sub-taluk of Erode and Mettuppalaiyam sub-taluk of Avanashi were also upgraded into independent taluks. Thus the total number of taluks in the district came to twelve. This, however, did not last long. In the same year (1979) six taluks were bifurcated from the district to constitute a new district viz., Erode. Under G.O. Ms. No. 1917 Revenue dt. 31-8-79, Government of Tamil Nadu the following six taluks were bifurcated from the then Coimbatore district to form Erode district. Bhavani, Gopichettipalaiyam, Satyamangalam, Erode, Perundurai and Dharapuram. That time Coimbatore contains nine taluks before bifurcation of Tiruppur as a separate District viz. Coimbatore (North), Coimbatore (South), Mettupalayam, Avanashi, Palladam, Tirupur, Pollachi, Udumalpettai and Valparai. As per G.O.Ms. No. 617, 618 Revenue dt 24.10.2008, Government of Tamil Nadu the four taluks from Coimbatore District (i.e. Tiruppur, Udumalpet, Palladam and Avinashi(Part)) and three taluks from Erode districts (i.e. Dharapuram, Kangeyam and Perundurai (Part)) were bifurcated and formed another new District as Tiruppur District.

Now Coimbatore District has only two revenue divisions of Coimbatore and Pollachi and contains six taluks namely Coimbatore (North), Coimbatore (South), Mettupalayam, Sulur, Pollachi and Valparai. This bifurcation considerably reduced the size of the present Coimbatore district.

Now Coimbatore is administered by the Coimbatore Municipal Corporation which comprises 100 wards grouped into five zones. It is situated on the banks of the Noyyal River in western Tamil Nadu and is surrounded by the Western Ghats on all sides. It is well connected by road, rail and air with major towns and cities in India.
Coimbatore is an important textile and manufacturing hub of Tamil Nadu. Other important industries include software services, education and healthcare. Coimbatore has been ranked 4th among Indian cities in investment climate by a survey done by the Confederation of Indian Industry (CII).

**Geography**

Coimbatore is situated in the west of Tamil Nadu, bordering the state of Kerala. It is surrounded by the Western Ghats mountain range on the West and North, with reserve forests and the (Nilgiri Biosphere Reserve) on the northern side. The Noyyal River runs through Coimbatore and forms the southern boundary of the corporation.

The city sits amidst Noyyal's basin area and has an extensive tank system fed by the river and rainwater. The eight major tanks / wetland areas of Coimbatore are - Singanallur, Valankulam, Ukkadam Periyakulam, Selvampathy, Narasampathi, Krishnampathi, Selvachinthamani, and Kumaraswami tanks. Sanganur pallam, Kovilmedu pallam, Vilankurichi-Sinanallur Pallam, Karperayan Koil pallam, Railway feeder roadside drain, Tiruchy-Sinanallur Check drain and Ganapathy pallam are some of the streams that drain the city.

The eastern side of the Coimbatore district, including the city is predominantly dry. The entire western and northern part of the district borders the Western Ghats with the Nilgiri biosphere as well as the Anaimalai and Munnar ranges. A western pass to Kerala, popularly referred to as the Palghat Gap provides its boundary. Because of its close proximity
to the Western Ghats, the district is rich in fauna. The Coimbatore urban wetlands harbour around 116 species of birds. Of these, 66 are resident, 17 are migratory and 33 are local migrants. Spot-billed Pelican, Painted Stork, Open Billed Stork, Ibis, Spot-billed Duck, Teal, Black Winged Stilt are some of the migratory birds that visit Coimbatore wetlands regularly.

Apart from the species common to the plains, wild elephants, wild boar, leopards, tigers, bison, various species of deer, Nilgiri Tahr, sloth bear and black-headed Oriole can also be found. The Anamalai Wildlife Sanctuary 88 km (55 mi) in the Western Ghats at an altitude of 1,400 meters covers an area of 958 km². Among the region’s livestock animals are Kangeyam bulls. This breed, which helped the region gain a foothold in the dairy industry, are found only in Coimbatore and neighbouring districts. More than 20% of the district is classified as forest, lying in the west and north. The forests here are abundant in commercially significant trees such as teak, sandalwood, rosewood and bamboo. The Nilgiris slope of the Mettupalayam range is rich in sandalwood trees and bamboo. They vary from rich tropical evergreen forests of Punachi range to jungles of shrubs in southern ranges.

Climate

Coimbatore has a pleasant, salubrious climate due to its proximity to thickly forested mountain ranges and the cool breeze blowing through the Palghat gap which makes the consistently hot temperatures more pleasant. Under the Köppen climate classification, the city has a tropical wet and dry climate, with the wet season being from October to December due to the northeast monsoon. Coimbatore is located at an elevation of about 411
meters. The mean maximum and minimum temperatures vary between 35°C (95° of the respondents) and 18°C (64° of the respondents). Highest temperature ever recorded is 41°C (106° of the respondents) and lowest is 12°C (54° of the respondents).

Due to the presence of the mountain pass, more elevated parts of the district benefit from the south-west monsoon in the months from June to August. After a warm, humid September, the main monsoon starts from October lasting till early November. These monsoons are brought about by the retreating monsoon. The average annual rainfall is around 700 mm with the North East and the South West monsoons contributing to 47% and 28% respectively to the total rainfall.

**FIGURE NO.4.1**

**GEOGRAPHICAL LOCATION OF COIMBATORE IN TAMILNADU STATE AND TALUK MAP**
Demographics

As per the 2001 census, Coimbatore had a population of 1,250,446 within Municipal Corporation limits. The 2011 census data for post-expansion city limits is not available and only the population of urban agglomeration is available - 2,151,466. In the urban agglomeration, males constitute 50.08% of the population and females 49.92%. Coimbatore has an average literacy rate of 89.23%, higher than the national average of 74.04%. Male literacy is 93.17% and female literacy is 85.3% with 8.9% of the
population under 6 years of age. The Sex ratio was 964 females per 1000 males. In 2005, the crime rate in the city was 265.9 per 100,000 people, accounting for 1.2% of all crimes reported in major cities in India. It was ranked 21st among 35 major cities in India in the incidence of crimes. In 2011, the population density in the city was 10,052 per km² (26,035 per mi²).

The native language spoken in the Coimbatore city is mainly Kongu Tamil, a dialect of Tamil language. The city's population is predominantly Hindu, along with a sizable Muslim population. Christians, Sikhs and Jains are also present in small numbers. Coimbatore also has a large number of Malayalasis, mainly from Palakkad, Telugus and North Indians, mainly Gujaratis, who are engaged in trade and commerce. During the 1970s the city witnessed a population explosion as a result of migration fueled by increased economic growth and job opportunities. Around 33% of the city's population lives in slums.

Economy

With more than 25,000 small, medium and large industries, the city's primary industries are engineering and textiles. Coimbatore is called the "Manchester of South India" due to its extensive textile industry, fed by the surrounding cotton fields. The district also houses the country's largest amount of hosiery and poultry industries. The city has two special economic zones (SEZ), the Coimbatore Hi-Tech Infrastructure (CHIL) SEZ and the Coimbatore TIDEL park, and at least five more SEZs are in the pipeline. As of 2005, when Tirupur was a part of Coimbatore district, Coimbatore was the highest revenue earning district in Tamil Nadu. In 2010, Coimbatore
ranked 15th in the list of most competitive (by business environment) Indian cities.

An insignificant little town prone to droughts and earthquakes till the early years of the 20th century, Coimbatore experienced a textile boom in the 1920s and 1930s. Though, Robert Stanes had established Coimbatore's first textile mills as early as the late 19th century, it was during this period that Coimbatore emerged as a prominent industrial centre. Narayanaswamy Naidu's Dhandayuthapani Foundry, D. Balasundaram Naidu's Textool, the Lakshmi Machine Works, the Kalleeswara Mills and the Somasundra Mills are some of the important textile and machine units which emerged during the early 1900s.

Coimbatore has trade associations like CODISSIA, COINDIA, SITRA and COJEWEL representing various industries in the city. Coimbatore also has a 160,000 square feet (15,000 m²) trade fair ground, built in 1999. It was named COINTEC due to its hosting of INTEC (Small Industries Exhibition). The Trade Fair complex, one of the country's largest, was built in six months, and is owned by CODISSIA (Coimbatore District Small Industries Association). It is also the country's largest pillar-free hall, according to the Limca Book of Records.

Coimbatore houses a large number of small and medium textile mills. It also has central textile research institutes like the Central Institute for Cotton Research (CICR)- Southern Regional station and the Sardar Vallabhai Patel International School of Textiles and Management. The South Indian Textiles Research Association (SITRA) is also based in Coimbatore. The city also houses two of the Centers of Excellences (COE)
for technical textiles proposed by Government of India, namely Meditech, a medical textile research centre based at SITRA, and InduTech based in PSG College of Engineering and Technology. The neighbouring town of Tirupur is home to some of Asia’s largest garment manufacturing companies, exporting hosiery clothes worth more than ₹50,000 million.

The city is the second largest software producer in Tamil Nadu next to Chennai. IT and BPO industry in the city has grown greatly with the launch of TIDEL park and other planned IT parks in and around the city. It is ranked at 17th among the global outsourcing cities. Companies like Tata Consultancy Services, Cognizant Technology Solutions, IBM, Robert Bosch GmbH, Tata Elxsi, Dell, Aditi Technologies, CSS Corp and KGISL are having a presence in the city. Coimbatore is already the second largest hub in India for Cognizant Technology Solutions as it employs around 5000 people in its Coimbatore centre and is planning to double its capacity here. Software exports stood at ₹710.66 Crores (7.1 billion) for the financial year 2009-10 up 90% from the previous year.

Coimbatore has a large and a diversified manufacturing sector facilitated by the presence of research institutes like Tamil Nadu Agricultural University, SITRA and large number of engineering colleges producing about 50,000 engineers. Some of the prominent industries in Coimbatore include L&T, BOSCH, PSG, Sakthi group, Lakshmi Machine Works (LMW), Premier Instruments & Control Limited (PRICOL), Premier Evolvics, LGB, Revathi Equipment Ltd, ELGI Equipments, Craftsman Automation Pvt Ltd, Shanthi Gears, Roots Industries. Wind Energy major Suzlon has set up a foundry & machine shop in Coimbatore. Along with it
Hansen Transmission, a Belgian Company which manufactures gearboxes for windmills is setting up a plant here with an investment of Rs.940 cr.

Manufacturing of automotive components is also important to Coimbatore's economy. Maruti Udyog and Tata Motors source up to 30% of their automotive components from Coimbatore. Some of the auto component makers in Coimbatore include Robert Bosch GmbH, PRICOL and Roots Industries. Coimbatore has more than 700 wet grinder manufacturers with a monthly output as of March 2005 to 75,000 units and is home to a common facility for the manufacturers of wet grinders. Coimbatore’s motor and pump manufacturing industry supplies over 40% of India’s requirements.

Coimbatore is one of the major gold jewellery manufacturing hub in India, renowned for making cast jewellery and machine made jewellery. The city is home to about 3000 jewellery manufacturing companies and to over 40,000 goldsmiths. The jewellery manufacturers have an active association called Coimbatore Jewellery Manufacturers' Association, and have also jointly established Coimbatore Gem and Jewellery Industries Private Limited (Cojewel), which is a common facility with niche goldsmith machinery to be used by the members of the association. Several jewellery retail chains like Kirtilal's are based in Coimbatore or have their manufacturing base in Coimbatore. Owing to the presence of a large number of jewellery manufacturers and the strong engineering base, the city is home to a number of companies manufacturing jewellery making machinery. The city is also a major diamond cutting centre in South India. For example Kirtilal's Jewellers alone have 5 diamond cutting and polishing centres in Coimbatore.
Coimbatore has some of the oldest flour mills in India. The large scale flour mills, which cater to all the southern states, have a combined grinding capacity of more than 50,000 MT per month. The city houses many famous high capacity flour mills like India Roller Flour Mills (which is closed now) and Coimbatore Roller Flour Mills. These flour mills have been around for decades and were in the outskirts of the city at one time. Now they are in the middle of the city owing to increasing urbanization.

In the recent years, the city has seen growth in the hospitality industry. Five star hotels like Taj Surya, Hilton Garden Inn and Le Meridien, four star hotels like Aloft and several three star hotels like Park Plaza, The Residency, CAG Pride and Mangala International have presence in the city. Coimbatore is the largest non-metro city for e-commerce in South India.

**Culture**

Coimbatore and its people have a reputation for entrepreneurship. Though it is generally considered a traditional city, Coimbatore is more diverse and cosmopolitan than all other cities in Tamil Nadu except for Chennai. The city conducts its own music festival every year. Art, dance and music concerts are held annually during the months of September and December (Tamil calendar month - Margazhi) at Rajalakshmi Fine Arts. The heavy industrialisation of the city has also resulted in the growth of trade unions. There are numerous temples in and around the city. The mosques on Oppanakara Street and Big Bazaar Street date back to the period of Hyder Ali. Christian missions date back to 1647 when permission was granted by the Nayak rulers to set up a small church in Karumathampatti 12 km (7.5 mi). Sikh Gurudwaras and Jain Temples are also present in Coimbatore.
Education

Coimbatore is an educational hub of the region. As of 2010, the Coimbatore district is home to 7 universities, 54 engineering colleges, 2 medical colleges, 35 polytechnics Colleges and more than 70 Arts and Science Colleges and a large number of schools. The city has reputed state owned universities like Tamil Nadu Agricultural University (est. 1971), Bharathiar University (1982), Anna University Coimbatore (2007) and private universities like Avinashilingam University (1987), Amrita University (2003), Karunya University (2004) and Karpagam University (2005). The city also houses research institutes like Central Institute for Cotton Research, Sugarcane Breeding Institute, Institute for Forest Genetics and Tree Breeding, Indian Council for Forestry Research and Education and Tamil Nadu Institute of Urban Studies. There are also plans to establish a "world class" university in the region and to convert the Government Arts College into a unitary type university.