Chapter IV

ECONOMY

[•]The economic history of the World during the 20th century has dramatically demonstrated that the process of urbanization and economic progress are mutually reinforcing. Urbanization is closely associated with increasing levels of income and improvements in social indicators

such as life expectancy, literacy, infant mortality and access to infrastructure and social services. Data and many supporting studies conclude that cities, especially bigger cites, mean higher productivity and higher per capita incomes. During 21 century, regardless of ideology, cities are loci and motors of economic and social change. Studies have shown that urban-based economic activity account for more than 50 percent of GDP in all countries. Cities and towns are not only the loci of production, but they are also loci of the most important impacts of globalization and hence the places of change and expectation of the future. Undervalueing urban areas can unwittingly place the economic and social future of countries at risk. Improved understanding of the multiple interactors between globalization and city can therefore contribute to identifying new strategies for protecting and maintaining urban economies.

4.02 The transformation of the global economy during the last two decades is perhaps the most important dimension of globalization because it has supported the diffusion of global culture and provoked deep and broad adjustments within countries and cities what began as trade in goods and services is now accompanied by the flow of capital and exchange of currencies in world financial markets. Information technology has allowed the birth of global interest rates and the increasing movement of capital to new opportunities for immediate and short-term financial benefits. Concern about 'footloose industries' have given way to cyber markets for finance and investment. At city level, the rapid entry of new, mostly foreign investors, and new capital led to changes in the composition of economic activity, particularly favouring financial services and those industries able to benefit from connectivity. *

4.03 The need for integrated economic and physical planning has been highlighted by many economists as well as urban planners. As Nigel Harris observes:

> "The city is a framework for the concentration and organisation of power and economic activity for the aggregation and disaggregation of resources. The city's prime advantage is precisely its concentration of activities and skills. Concentration today supports the technical advance which ensures mastery of the economy of the

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[•] The State of the World's Cities 2004

> future. To sustain the city's advantages requires much more rapid change within than outside the city. Activities cluster and disperse, are merged and subdivided; some are eliminated, all within a changing modern economy. The future of the urban area likewise is shifted with speed. Buildings rise and are demolished, new streets and railways are forced through.
>
> City planning however often seems to freeze the city's form, to trap it in a physical mode that makes change more difficult. To the planner, the city is too often not an instrument of economic change and growth but an architectural form or a public good for a particular class of consumer or a status symbol of the national government. Where resources are very scarce, the opportunity cost of planning in isolation from the central priorities of economic development is high. (Nigel Harris, 1978)"

4.04 Modern metropolitan planning involves integration of economic, social, environmental, infrastructure and management aspects. Employment and income generation policies must play a key role in urban planning since the main cause of urban poverty is severe limitations of income to the urban poor.

Tamil Nadu over view

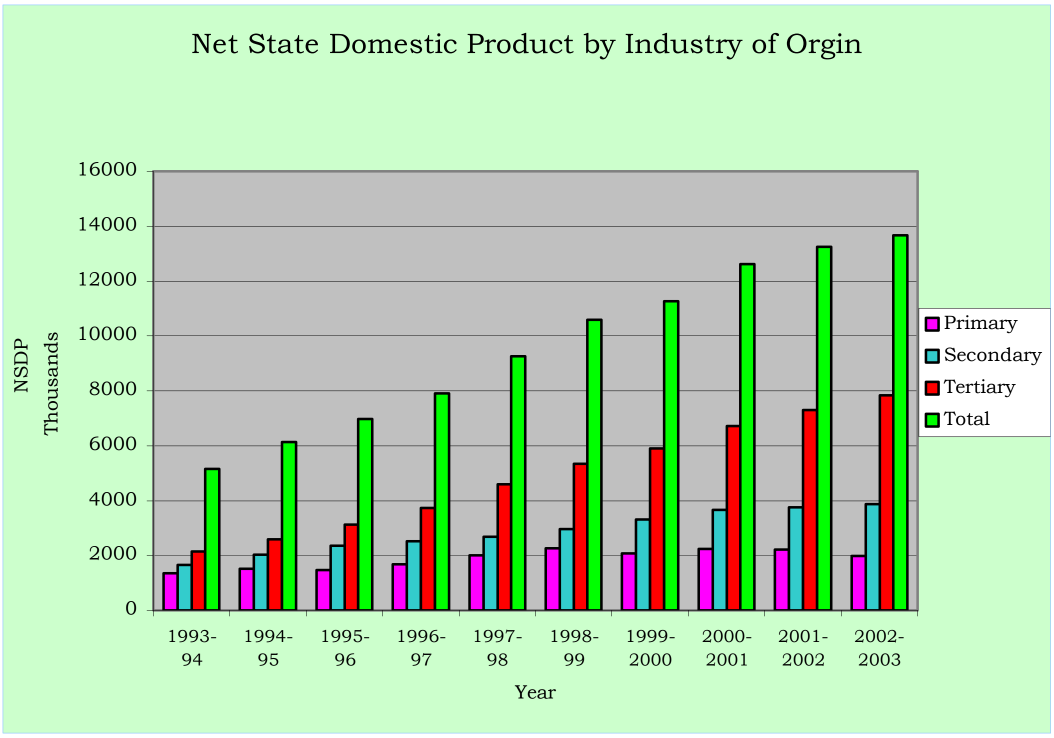
4.05 Tamil Nadu emerged as the third largest economy in India with State Domestic Product of Rs.1530 billion in 2002-2003.

4.06 The table No 4.01 shows the growth of the Tamil Nadu State income in various sectors from 1993 to 2003.

Table No. 4.01: Net State Domestic Product (NSDP) in TN by industry of origin

Sl. No.	Year	Primary	Secondary	Tertiary	Total	Per capita Income (Rs. in lakhs)
1	1993-94	1355029	1660933	2148360	5164322	8955
2	1994-95	1512212	2019035	2596334	6127561	10503
3	1995-96	1472400	2367212	3132304	6971916	11818
4	1996-97	1668087	2507392	3736627	7912106	13270
5	1997-98	2001844	2680994	4586147	9268985	15388
6	1998-99	2256692	2972778	5349845	10579315	17394
7	1999-2000	2065946	3317462	5890654	11274062	18367
8	2000-2001	2231340	3670174	6708443	12609957	20367
9	2001-2002	2212614	3744409	7299696	13256719	21239
10	2002-2003	1980870	3870118	7827099	13678087	21738

Source: Statistical Hand Book of Tamil Nadu, 2003



4.07 The Table No. 4.02 depicts the percentage change in the growth of Gross Domestic Product in Tamil Nadu.

Table No: 4.02. Growth in Gross State Domestic Product (1993-94) Prices - A Trend Analysis

Year	Primary Sector	Secondary Sector	Tertiary Sector	GSDP
1994-95	11.25	15.66	10.82	12.56
1995-96	(-) 12.56	8.83	8.50	3.45
1996-97	(-) 0.84	1.99	10.29	4.96
1997-98	8.51	2.26	11.90	7.82
1998-99	9.04	1.61	6.19	5.21
1999-2000	(-) 4.77	10.00	7.51	5.81
2000-01(RE)	4.56	5.88	9.45	7.35
2001-02(QE)	(-) 2.04	(-) 0.19	6.36	2.68
2002-03(AE)	(-) 12.28	0.16	5.13	0.55
AAGR	0.10	5.13	8.46	5.60

Note: R.E – Revised Estimates, Q.E. – Quick estimates, A.E. – Advanced Estimates:
Source: Department of Economics and Statistics, Chennai-6

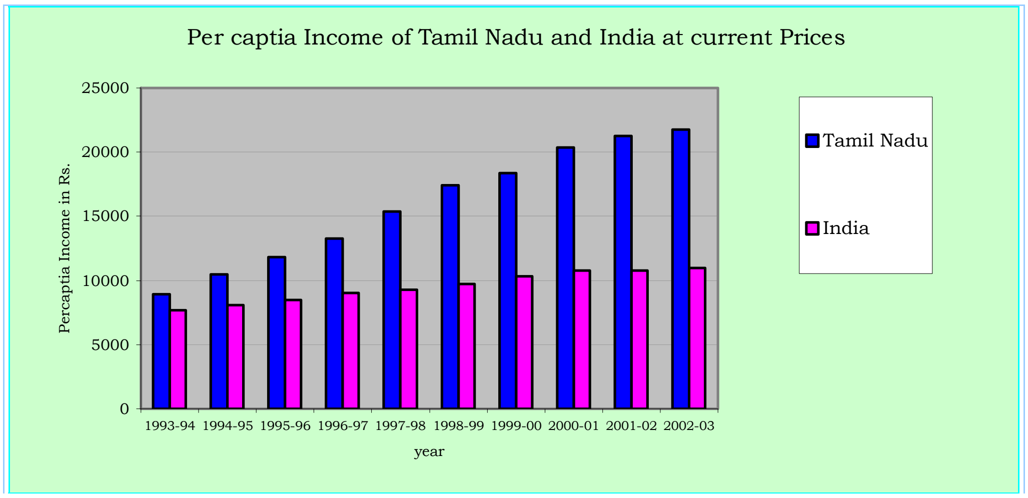
4.08 At the National level, the Gross Domestic Product grew by 6 percent via-a-vis 5.6 percent in Tamil Nadu. In per capita terms, it increased by 3.97 percent at the National level whereas it was at 4.29 percent in Tamil Nadu.

Table No.4.03: Per capita Income of State and India at current prices

Sl.No.	Year	Tamil Nadu Rs.	India Rs.
1	1993-1994	8955	7690
2	1994-1995	10503	8088
3	1995-1996	11818	8499
4	1996-1997	13270	9036
5	1997-1998	15388	9288
6	1998-1999	17394	9733
7	1999-2000	18367	10306
8	2000-2001	20367	10754
9	2001-2002	21239	10774
10	2002-2003	21738	10964

Source: Statistical Hand Book of Tamil Nadu 2003

4.09 The percapita income of Tamil Nadu State has risen from Rs.8, 955 in 1993-94 to Rs.21, 738 in 2002-2003.



Structural Transformation:

4.10 The economic structure of Tamil Nadu has metamorphosised from Primary sector in 1960s to tertiarised activities in 2000s. The percentage share of primary sector has declined from 43.5 percent in 1961 to 16 percent in 2002.

4.11 As regards the secondary sector, though it has increased from 20 percent in 1960 to 35 percent in 1996, it has declined subsequently. The percentage share of secondary sector in 2002-03 is only 29, which is mainly because there is a receding trend in the manufacturing sector.

Table No: 4.04: State Economy - Structural changes (in percentage)

Year	Primary Sector	Secondary Sector	Tertiary Sector	Total
1960-61	43.51	20.27	36.22	100
1970-71	34.79	26.88	38.33	100
1980-81	25.92	33.49	40.59	100
1990-91	23.42	33.10	43.48	100
1995-96	21.90	34.84	43.27	100
2000-01	19.04	30.49	50.47	100
2002-03	15.97	29.71	54.32	100

4.12 There is considerable increase in the growth of tertiary sector whose share is 54 percent in 2002 and the main reasons attributed to such a rapid growth is the contribution by the Information Technology, Information Technology Enabling Services and Business Process Outsourcing.

4.13 The industrial base of Tamil Nadu is diversified in the manufacturing sectors of automobile, textiles, leather and chemicals. Tamil Nadu is one of the leading States, which attracts more investment in IT. In terms of Foreign Direct Investment (1991-2003) Tamil Nadu stood third in the Nation. The new Industrial Policy of Tamil Nadu 2003 emphasize on optimal use of resources, upgradation of managerial skills and administration, technical improvements and modernization in the filed of manufacturing sector and infrastructure.

4.14 The industrial production in Tamil Nadu, which was passing through a tough phase in the past, has shown a moderate increase in 2002-2003, which is 2.4 percent as against 1.4 percent in 2001-2002. Textile products other than mills' registered a growth of 31.9 percent followed by 'other manufacturing' (26.7percent), 'non-metallic mineral products' (18.0percent) and 'paper and paper products' (12.4percent). The other groups which registered positive growth are 'machinery and equipments' (8.9percent), 'wool, silk and synthetic fibre textiles' (7.7percent) 'metal products and parts' (4.3percent) and 'transport equipment and parts' (4.3percent). In terms of use-based classification except the Basic Goods industries, the other industries i.e. capital goods, intermediate goods and consumer goods have shown moderate growth. The consumer durable goods have recorded the highest growth rate of 16.5percent.

Information Technology Industries:

4.15 The Information Technology (IT) Industry in India is among the fast growing segments of the Indian Industry, compounded with an annual growth rate exceeding 50 percent. Tamil Nadu's contribution to IT industry is significant. The key elements which have made Tamil Nadu an important place in this area are availability of skilled and educated man power, comparatively higher standard of Educational Institutions, sound infrastructure and lower costs of operation.

4.16 As per the Economic Appraisal Report 2002-2003, the Tamil Nadu State is the second largest software exporter in the country next to Karnataka. The number of software companies which was 10 in 1993-94 and exported software to the tune of only Rs.2.4 crores expanded to 934 software units and exported software to the tune of Rs.6315.51 crores in 2002-03 accounting for 17 percent share in all India. It is noted that the global recession did not hinder the software export from Tamil Nadu.

Table No: 4.05: Growth of Software/Hardware Industry in Tamil Nadu

Year	Software Industry		Hardware Industry	
	No. of units	Value of exports (Rs. in Crores)	No. of units	Value of exports (Rs. in Crores)
1993-94	10	2.400	-	-
1999-00	601	1914.00	8	399.82
2000-01	766	3116.00	12	575.65
2001-02	865	5223.00	10	482.43
2002-03	934	6315.51	11	698.25

Source: Software Technology Parks of India, Chennai and SPC Note

Information Technology Enabled Services

4.17 Focusing the immense employment opportunities in Information Technology Enabling Service, Government of Tamil Nadu has taken several steps to leverage the strength of the State to make Tamil Nadu as the prime destination for Information Technology Enabled Services.

Agencies that promote industries in Tamil Nadu

Tamil Nadu Industries Development corporation (TIDCO):

4.18 Tamil Nadu Industries Development Corporation (TIDCO) established in 1985 played a vital role in infrastructure development for industrial growth in Tamil Nadu, including CMA. TIDCO has promoted 75 projects in Tamil Nadu with the employment potential of 1.38 lakh persons. Recently the Government of India has given in principle approval for setting up of Special Economic Zone (SEZ) at Ennore; it is proposed to be implemented by the Ennore SEZ Company formed for this purpose.

Small Industries Development Corporation (SIDCO)

4.19 Small Industries Development Corporation (SIDCO) established in 1970 has developed 74 industrial estates in Tamil Nadu. In CMA, it has developed industrial estates at Ambattur, Guindy, Thirumudivakkam, Thirumazhisai, Thirumullaivoyal, etc. It has constructed 4244 sheds in Tamil Nadu with an employment potential of 41,450.

State Industries Promotion Corporation of Tamil Nadu (SIPCOT) Limited:

4.20 State Industries Promotion Corporation of Tamil Nadu (SIPCOT) limited, a fully owned premier institution, established in the year 1972, has been a catalyst in development of small, medium and large scale industries in Tamil Nadu. The main function of SIPCOT is to establish, develop, maintain and manage industrial complexes, parks and growth centers in Tamil Nadu.

4.21 SIPCOT has created industrial complexes and parks in various strategically located places in Tamil Nadu. SIPCOT has developed the Information Technology Park at Siruseri (3 km south of CMA) extending over an area of 868 acres with all attendant facilities.

Electronic Corporation of Tamil Nadu (ELCOT):

4.22 The Electronic Corporation of Tamil Nadu (ELCOT) is a pioneer in implementing IT related projects in the State. It is the nodal agency for the Government of Tamil Nadu in implementing IT policy and programmes. As on 2002-03, it had promoted 39 projects at the cost of Rs.426 crores in the joint, associate and escort sectors covering a wide range of electronic products.

Distribution of Enterprises and Establishment in CMA:

4.23 Considering the fact that the economy is moving towards liberalization, the need to highlight and monitor its impact has become essential, the Department of Economics and Statistics, Govt. of Tamil Nadu has conducted the Economic Census, in 1998 fourth in the series and published the report in 2000 (when it was conducted, the Kancheepuram District was not bifurcated and hence the Thiruvallur District did not come into existence). The data contained therein are with reference to the following definitions:

(a) Enterprise - is an undertaking engaged in production and or distribution of goods and or services not for the sole purpose of own consumption.

(b) Own Account Enterprises - are enterprises owned and operated with the help of household reasons only.

(c) Establishments – are enterprises operating with at least one hired worker on a regular basis.

Table No.4.06: Distribution of Enterprises, Establishments and Employment in Chennai and Kancheepuram Districts										
		Chennai District			Kancheepuram District			Tamil Nadu		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1	Distribution of Enterprises									
	OAE	0	38682	38682	31270	26622	57892	918631	506292	1424923
	Establishment	0	109321	109321	20101	25722	45823	489475	599726	1089201
	Total	0	148003	148003	51371	52344	41742	1408106	1106018	2514124
2	No. of Persons working									
	OAE	0	49090	49090	42577	39428	82005	1470096	764967	2235063
	Establishment	0	566747	566747	115941	118769	234710	2113270	2842692	4955962
	Total	0	615837	615837	158518	158197	316715	3583366	3607659	7191025
3	Employment per enterprise									
	OAE	-	1.3	1.3	1.4	1.5	1.4	1.6	1.5	1.6
	Establishment	-	5.2	5.2	5.8	4.6	5.1	4.3	4.7	4.6
	Total	-	4.2	4.2	3.1	3.0	3.1	2.7	3.3	2.9
4	No. of Agriculture									
	OAE	0	476	476	9788	2101	11889	224374	26814	251188
	Establishment	0	603	603	2099	533	2632	40345	11377	51722
	Total	0	1079	1079	11887	2634	14521	264719	38191	302910
5	Employment in Agriculture									
	OAE	0	608	608	14348	2662	17010	339897	39996	379893
	Establishment	0	2175	2175	8379	2141	10520	135275	41824	177099
	Total	0	2783	2783	22727	4803	27537	475172	81820	556992
6	Non-Agriculture									
	OAE	0	38206	38206	21482	24521	46003	694257	479478	1173735
	Establishment	0	108718	108718	18002	25185	43191	44913	588349	1037479
	Total	0	146824	145824	39484	49710	89194	739170	1067827	2211214
7	No. of hired workers in non-agriculture									
	Establishment	0	459753	459753	96466	92731	189197	1654318	2203040	3857358

OAE - Own Account Enterprises

4.24 Agriculture enterprise and establishments in Chennai and Kancheepuram Districts account for minimum and contribute about 5.15 percent to Tamil Nadu. The non-Agriculture enterprise for these two districts works out to 10.58percent of the State. The employment per enterprise is also high when comparing the State average. Number of hired workers in the CMA districts works out to 16.8percent of the State.

4.25 Indian economy is going through structural changes. The share of value added by the primary sector is consistently declining whereas the share of non-primary sector has been increasing Tamil Nadu and CMA are not exceptions to the trend.

Table No.4.07: Non-Agriculture Establishments by size, class of employment

Sl. No.	Employment Size	Chennai District		Kancheepuram District		Tamil Nadu	
		No.	Percent	No.	Percent	No.	Percent
1.	1 – 5	86284	79.37	37132	85.97	871654	84.02
2.	1 – 9	12684	11.67	2949	6.83	92149	8.88
3.	10 – 14	4560	4.19	1238	2.87	37029	3.57
4.	15 – 19	1767	1.63	598	1.38	13346	1.29
5.	20 – 24	1069	0.98	285	0.66	7662	0.74
6.	25 – 49	1652	1.52	552	1.28	10078	0.97
7.	50 – 99	588	0.54	276	0.64	3763	0.36
8.	100 – 199	72	0.07	79	0.18	1025	0.10
9.	200 – 499	25	0.02	62	0.14	539	0.05
10.	500 and above	12	0.01	20	0.05	234	0.02
	Total	108713	100.00	43191	100.00	1037479	100.00

Source: Economics Census of Tamil Nadu, 1998

4.26 From the above, it is seen that the non-agriculture establishments in1998 with 50 and above workers was only 0.64 percent in Chennai and 1.01percent in Kancheepuram Districts against 0.53 percent for the State. The number of non-agriculture establishments in Chennai and Kancheepuram Districts work out to 10.67 percent of the State figures.

Industries in CMA.

4.27 Major industries in CMA are automobile and transport equipment manufacture and their ancillary industries, railway coach building, petro chemicals and fertilizers, automotive tyres, bicycles, electrical and other machinery, and leather products. Some of the large units are located at Ennore, Thiruvottiyur, Manali, Sembiam, Padi, Ambattur, and Porur and along GST Road apart from the Integral Coach Factory at Perambur, and Heavy Vehicles Factory at Avadi. Many small and medium scale industries are located at Vyasarpadi, Ambattur, Villivakkam, Guindy and Thirumazhisai and industrial estates at Madhavaram, Kodungaiyur, Poonamallee, Noombal, Perungudi, Seevaram and Sholinganallur. Simpson, Addison and TVS industries are located in the heart of the City along Anna Salai. MEPZ spreading over an area of 261 acres is functioning at Tambaram. Leather tanneries and leather based industries are located at Pammal and Madhavaram. Thermal Power Plants are located at Basin Bridge and Ennore. Many of the smaller units are scattered in various parts of the Chennai City and the rest of CMA. Industrial estate for leather goods is being developed at Thirumudivakkam.

4.28 Large-Scale automobile engineering, glass and ceramic industries are located within 50 Km. from CMA at Marai Malai Nagar, Irungattukottai, Sriperumbudhur, Thiruvallur and Gummudipoondi; to mention a few are Mahindra Ford factory - manufacturing cars at Marai Malai Nagar, Hyundai Car factory and Saint Gobin Glass factory at Sriperumbudur, Spartek Ceramic tile manufacturing industry and Hindustan Earth Movers and HM Mitsubishi at Thiruvallur. Mahindra Industrial Park developed over an area of 1300 acres located along GST Road (near Chengalpattu) is about 42 Km. from CMA.

4.29 Tamil Nadu accounts for about 21percent passenger cars, 33percent commercial vehicles and 35percent automobile components produced in India. Chennai, the 'Detroit of India' is emerging as a major export hub for cars in South East Asia. In July 2005, the Government of India has decided to establish a new testing and homologation centre near Chennai. It is expected to bring about large savings in the foreign exchange spent on testing exportable vehicles at overseas facilities and also attract foreign exchange inflows by providing a competitive platform for manufacturer abroad to test their vehicles here.

4.30 Tamil Nadu accounts for 70percent of leather tanning companies in India and 38percent of leather footwear and components; most of the footwear industries are located within CMA. A cluster of chemical industries is located at and around Manali in CMA. The following table No.4.08 lists the type of factories in CMA.

Table No.4.08: Number of factories in Chennai, Thiruvallur and Kancheepuram Districts 2002-2003

Sl. No.	Description of Industries	Districts				Tamil Nadu	Percentage to State
		Chennai	Tiruvallur	Kanchee-puram	Total		
1	Food Products and Beverages	85	130	113	328	4166	7.87
2	Tobacco Products	19	3	5	27	237	11.39
3	Textiles	42	44	73	159	6565	2.42
4	Wearing apparel; Dressing and Dyeing	1067	383	258	1708	2105	81.14
5	Tanning & Dressing of Leather products	181	100	279	560	1486	37.69
6	Wood and Products of wood and cork, except furniture; Straw and Plating Materials	11	14	16	41	331	12.39
7	Paper and Paper Products	53	92	56	201	707	28.43
8	Publishing, Printing and Reproduction of Recorded Media	273	31	14	318	927	34.30
9	Coke, Refined petroleum products and Nuclear Fuel	9	18	10	37	67	55.22
10	Chemicals and chemical products	133	182	162	477	2441	19.54
11	Rubber and Plastic Products	121	164	115	400	976	40.98
12	Non-Metallic mineral products	22	132	185	339	1119	30.29
13	Basic Metals	79	238	79	396	921	43.00
14	Fabricated metal products, except Machinery and equipments	233	278	156	667	1263	52.81
15	Machinery and Equipments	170	284	150	604	1536	39.32
16	Office, accounting and computing machinery	6	6	11	23	29	79.31
17	Electrical Machinery and apparatus	96	95	74	265	497	53.32
18	Radio, Television & Communication Equipment and apparatus	63	18	69	150	215	69.77
19	Medical Precision & Optical instruments watches and Clocks	27	22	27	76	108	70.37
20	Motor vehicles, trailers and semi-trailers	96	199	134	429	585	73.33
21	Other Transport Equipments	61	67	41	169	293	57.68
22	Furniture	35	16	45	96	279	34.41
23	Sale, Maintenance & Repair of Motor vehicles and Motor cycles, retail sale of automotive fuel	168	36	40	244	881	27.70
24	Retail trade except of motor vehicles and motor cycles; repair of personal and household goods	25	7	3	35	61	57.38
25	Supporting & Auxiliary transport activities; Activities of travel agencies	6	0	2	8	16	50.00
26	Computer and Relates activities	1	0	0	1	2	50.00
27	Recreational cultural and sporting activities	7	0	2	9	9	100.00
28	Other service activities	10	5	0	15	15	100.00

Source: Annual survey of Industries Frame 2002-2003. Director of Economics and Statistics

4.31 The above table indicates that 70percent of the industries in the sectors of dressing and dyeing, office, accounting and computing machinery, medical precision and optical instruments, watches and clocks, motor vehicles, trailers and semi trailer Industries in the State is located in Chennai, Thiruvallur and Kancheepuram Districts.

Small Scale Industries

4.32 Special emphasis is always given to the development of Small Industrial Sector considering the strength of inherent merits it has on low capital investment, short gestation period, high employment generating potential, capability to induce industrial base etc.

4.33 In the Small-scale industrial sector, there were 56,913 units in Chennai Districts and 37,531 in Kancheepuram and 17,843 in Thiruvallur District as on 31-03-2007, which works out to about 21.16 percent of the units in the State (5,30,552 Units); it was 23percent of the units in the State (1,10,783 units) in 1989. Small-scale industrial sector is high in metals, rubber and plastic products, metal products, electrical machinery, transport equipments, leather and fur products and non-metallic mineral products in Chennai, Kancheepuram and Thiruvallur Districts.

Information Technology:

4.34 Chennai is perhaps the only city in India to have all the top 10 IT Indian multi national companies and the 3 IT majors viz. Infosys, Tata Consultancy Services Ltd and Wipro which have acquired lands in and around Chennai to meet their expansion plans. The Tidal Park I and the IT Park at Siruseri have already been developed in Chennai and its environs. The Tidel Park I is fully functional. The private IT developers have been enthused to build enough IT space and the Government is certain of creating 2.5 million sq.ft of IT space in private as well as in public sectors in the coming years to meet the growing requirements of national and international clients. The first phase of Knowledge Industrial Township is being planned by a Special Purpose Vehicle viz. ELCOT Infrastructure Ltd. in Sholinganallur along the IT Corridor.

4.35 Further, to meet the increasing demand for such parks in the State, steps are being initiated to establish TIDEL Park II with a floor space of 1.5 million sq.ft. in Chennai city. It may be noted that a joint sector IT Park in an area of 1700 acres is being developed with participation of TIDCO, IL&FS and Mahindra near Chengalpattu.

Sales Tax

4.36 Sales tax is the most important head of the tax revenue to the Government. From the table it could be seen that Chennai Metropolitan Area accounts for threefourth of the total sales tax collection in the State. The share has increased from 69percent in 1994-95 to 76 percent in 2003-04.

Table No. 4.09: Sales Tax collection in Chennai Metropolitan Area and Tamil Nadu (1990 - 2004 year-wise)

Year	Sales Tax collected (Rs. in Crores)		Share of CMA as percentage of State
	Chennai Metropolitan Area (CMA)	Tamil Nadu	
1994-1995	2886.56	4164.84	69.31
1995-1996	3458.41	5023.37	68.35
1996-1997	4125.50	5751.19	71.73
1997-1998	4462.62	6062.68	73.61
1998-1999	4881.30	6582.60	74.15
1999-2000	5509.94	7380.66	74.65
2000-2001	6575.54	8647.97	76.04
2001-2002	6776.86	8895.75	76.18
2002-2003	7758.86	10191.60	76.13
2003-2004	8897.10	11734.30	75.82

Source: Commissioner for Commercial Taxes

Trade and Commerce:

4.37 The working of economy and the generators of economic momentum are reflected by the volume and value of trade and commerce transacted in the area. Chennai city is the commercial centre of great importance in the southern part of India, having a major seaport and international airport. The direct relevance to economy is the movement of trade and commerce between Chennai and the rest of the world. Increase in port traffic and airport cargo handling and also increase in the sales tax collections and banking transactions indicate the increase in total volume of trade in CMA.

Chennai Port:

4.38 Chennai Port is the largest among all the ports of Tamil Nadu, and is one of the most important ports of India. It is well equipped in terms of shipping facilities (23 berths including 4 exclusive berths for containers), marine services and other associated facilities like warehouses and storages. There are 12 warehouses and the total area of the warehouses is 71,653 sq.m. owned by Chennai Port. Further, 61,222 sq.m. area for warehouse/storage was allotted to private parties. The Port has full-fledged container terminals with road and rail connections which offer all the advantages that containerization could provide such as packaging, landing, pilferage prevention and speedy transportation of cargo. The Port measures a water-spread area of 170 hectares and a land extent of 238 hectares. Table Nos. 3.11 & 3.12 indicate the export and import details of principal commodities at Chennai Port respectively. The principal items of imports are petroleum, oil, lubricants, fertilizers, food grains and fibres. The main items of export are ores (mainly iron ores) granite stones, quartz, Barytes, hides and skins, chemical and cotton goods. The growth of the Chennai Port in terms of cargo handled value of imports and exports are respectively given in Table no. 4.10. Chennai Port handles 60percent of the total cargo handled by the State. The total number of containers handled during 2003 - 2004 was 5, 39,265 showing an increase of 67percent in the last 5 years. The passenger traffic shows an increase of 22percent in the last five years.

Table No.4.10: Export of Principal Commodities - Chennai Port (Tonnes)

Year	Petroleum & oil lubricants	Iron Ore	Other Ores	Food Grains	Containerised Cargo	Other Cargo	Total
1999-2000	1.342.508	6,258,614	299.268		1,958,537	1,146,363	11005290
2000-2001	957,245	7,048,678	535,769		2,880,038	1,063,959	12485689
2001-2002	914,555	7,481,950	613,840		2,757,349	1,258,712	13026406
2002-2003	952,608	7,944,621	443,017		3,536,476	1,204,723	14081445
2003-2004	1,310,489	7,519,527	619,246	19,499	4,106,304	2,832,750	16407815
GRAND TOTAL	5,477,405	36,253,390	2,511,140	19,499	15,238,704	7,506,507	67006645

Note: Other Cargo includes chemicals, Granite stones etc. excludes transshipment Cargo

Source: Port Trust, Chennai, 600 001

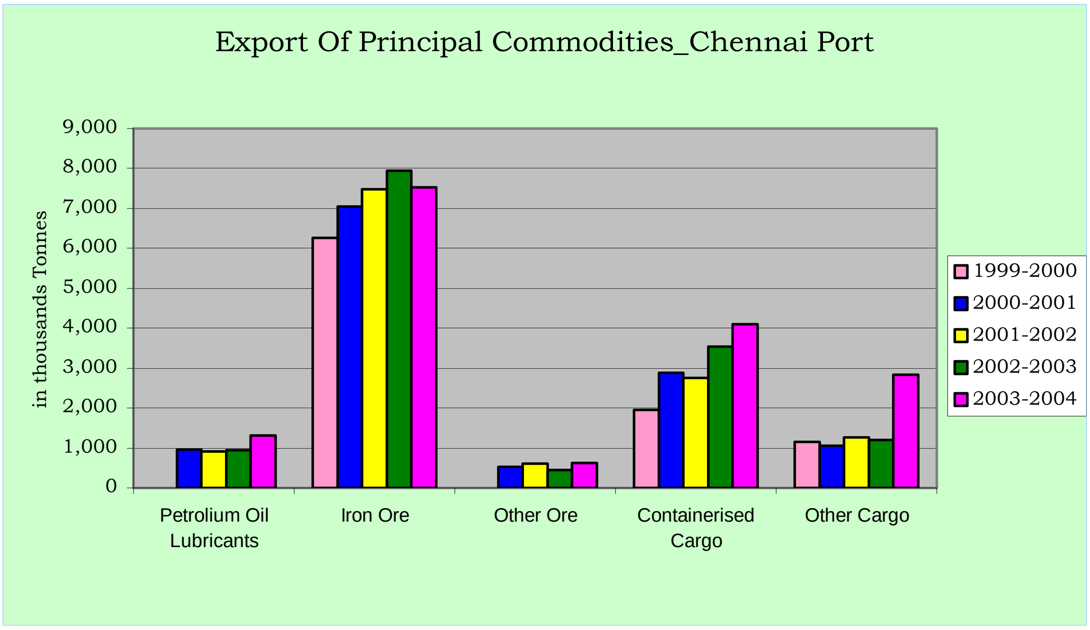

Export Of Principal Commodities_Chennai Port

Table No. 4.11: Import of Principal Commodities - Chennai Port (Tonnes)								
Year	Petroleum, Oil, Lubricants	Fertilizers (Finished)	Fertilizers (Raw)	Food Grains	Coal & Coke	Containerized Cargo	Other Cargo	Total
1999-2000	8,829,356	729,094	479,435	135,878	12,522,036	2,017,669	1,724,263	26437731
2000-2001	7,938,115	459,578	466,210	0	14,990,972	3,109,181	1,770,370	28734426
2001-2002	7,559,293	459,246	351,657	0	9,655,623	3,099,695	1,963,546	23089060
2002-2003	7,993,042	420,178	287,647	0	5,818,291	3,682,829	1,403,674	19605661
2003-2004	7,890,436	411,972	326,061	0	5,630,922	4,521,936	1,520,908	20302235
Source: Port Trust, Chennai								

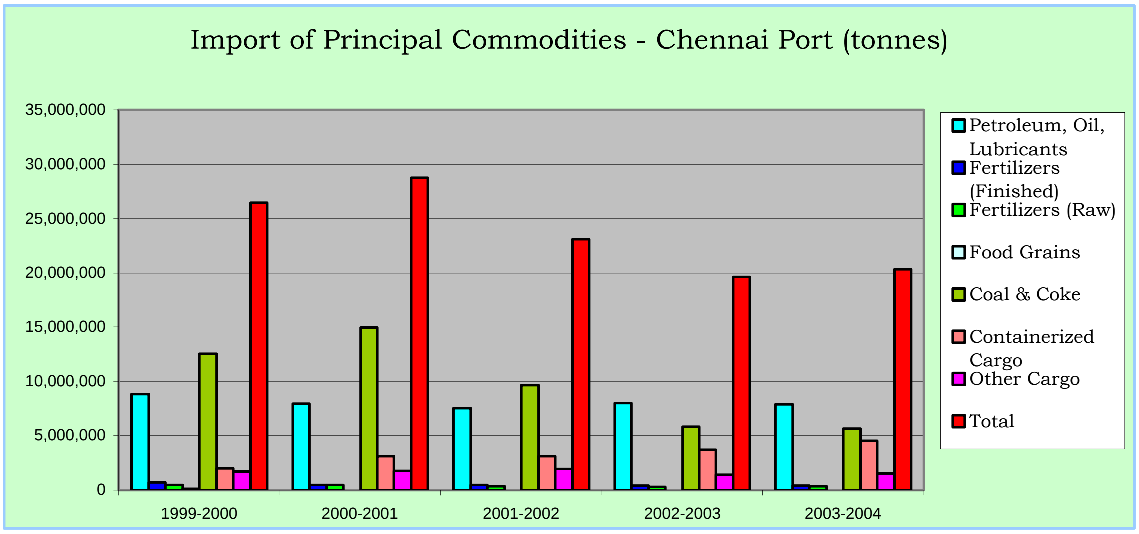
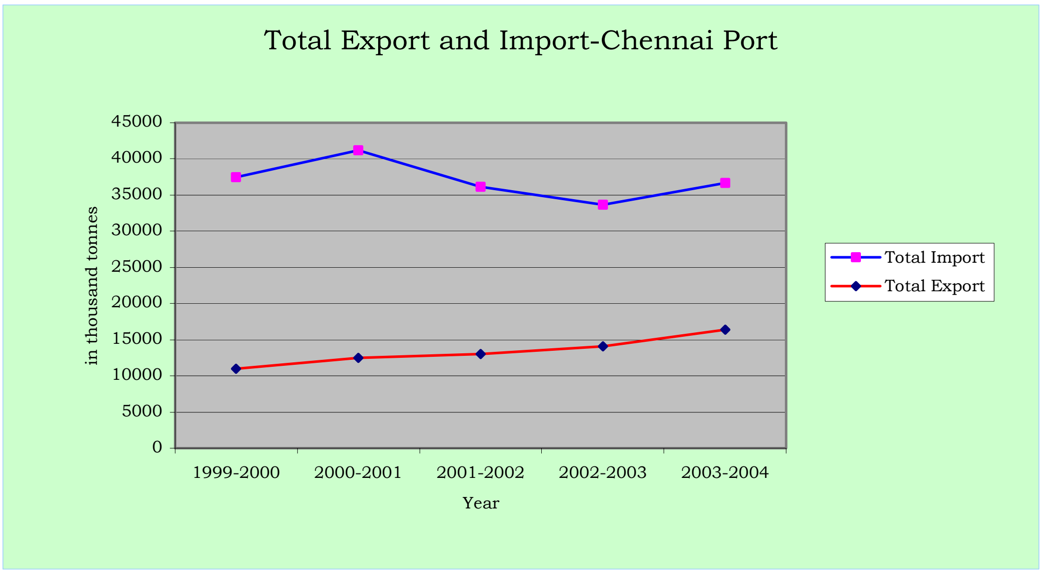


Table No. 4.12: Value of Foreign Imports and Exports - Chennai Port Trust (Rs.in Crores)					
	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Imports	19277.72	22969.75	22791.28	23903.74	31145.51
Exports	12945.26	15001.17	15194.39	18747.71	24110.03
Source: Port Trust, Chennai-600 001					



Ennore Port

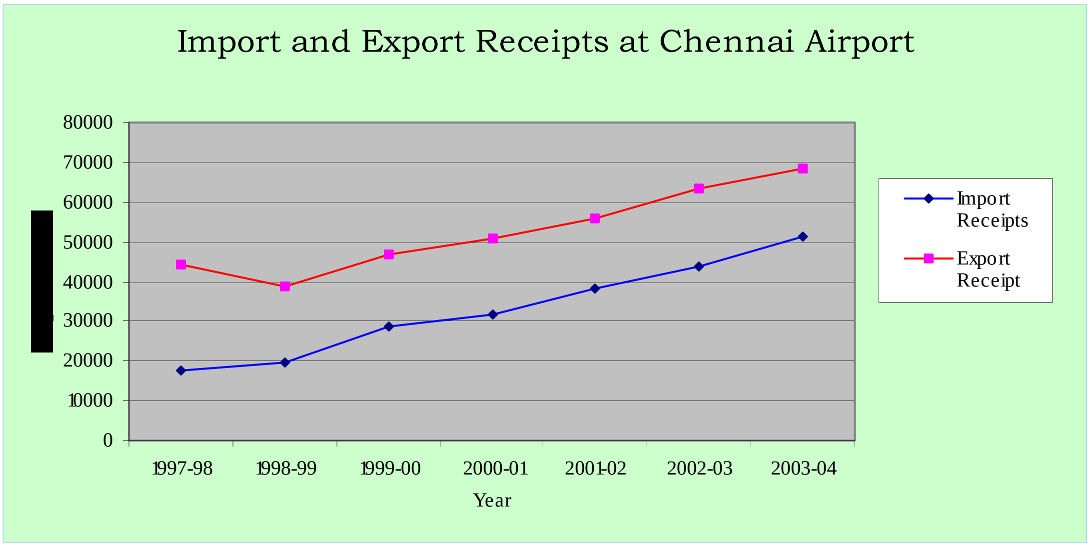
4.39 The Port of Ennore was conceived as a result of Government of India (GOI) policy of locating thermal plants at the coast in order to avail the least cost option of transportation of coal through coastal shipping. The Port was inaugurated on 1st Feb.2001 and the commercial operations commenced on 22nd June 2001. Currently Ennore Port is operating with two coal berths catering to thermal coal requirements of North Chennai Thermal Power Station (NCTPS), Mettur and Ennore Thermal Plants of TNEB. The Port is expanding in a major way by developing Liquid Cargo, LNG, additional coal, iron ore, car and container terminals with additional 10 berths. By 2011, Ennore Port will have capacity to handle 70 million tonnes of cargo including 1.5 million containers and 2 lakhs cars. Development of a port specific SEZ near the port is being planned by TIDCO for enhancing the economic opportunities of the port as well as the region.

Chennai Airport

4.40 The Chennai Airport is one of the major National and International Airports in India. It handled about 20.54 lakh international passengers and 25.01 Lakhs domestic passengers and cargo of about 1.19 lakh tonnes (international) and 0.35 lakh tonnes (domestic) in 2003-2004, and has a significant share in total passengers as well as cargo handled in the four major airports. The international passengers handled by Chennai Air-port have increased 4-fold from 1991 to 2004 whereas the domestic passengers have increased 2-fold in the same years.

Table No.4.13: Import and Export receipt at Chennai Airport							
Import/Export Year	1997- 98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
Import Receipts	17766	19780	28721	31739	38305	43570	51120
Export Receipts	44138	38928	46702	50577	55866	63264	68443

Source: Airports Authority of India



4.41 Textile constituting major part of the export receipt i.e. 38.3percent, followed by leather constituting 25.84percent. Electronic goods constitutes major part of the import receipt i.e. 23.05percent followed by personal effects constituting 21.44percent.

4.42 Sixteen international carriers operate from Chennai. Chennai can expect to attract more international carriers after the expansion programme. Government of India has given its consent to expand and modernize the Chennai Airport to handle future air traffic and make it a world-class major airport. Government of Tamil Nadu will make available 1457 acres of land to Air-port Authority of India adjoining the existing airport in the north. The expansion and modernization of Airport will have major impact of the economy of the CMA/the State.

Banking

4.43 The dominant position of Chennai in the State economy is reflected by the trends in banking sector. The banking infrastructure in Tamil Nadu was extensive and the banking network in Chennai, Kancheepuram District and Thiruvallur District is found to be quite strong. The performance in banking could be examined by the indicators like number of branch offices, size of deposits and advances and credit deposit ratio. Bank credit deposit ratio denotes the level of investments in the City being an indicator frequently used by economists. Bank deposit per capita indicates the finance level and disposable income of the population. Table No.4.15 indicates the position of banking in Chennai, Kancheepuram and Thiruvallur Districts. Around 16.5 Percent of the total number of bank branches in Tamil Nadu is found to be concentrated in Chennai City. Deposits and advances account for 42 and 48 percent respectively of the State figures. The capacity of Chennai City in credit absorption appears to be very good and it keeps on rising. Further foreign banks also entered in the fray and their operation also gradually expanding. Apart from Banks, large Non-Banking Finance companies also provide financial services in CMA.

4.44 The Table No. 4.14 indicates that there are 780 banks in Chennai City alone (apart from the private financial institutions).

Table No.4.14: Banking Sector in Chennai, Kancheepuram & Thiruvallur Districts

Districts	Bank (nos.)	Deposits (Rs. in lakhs)	Advances (Rs.in Lakhs)	Credit Deposit Ratio (in percentage)
Chennai	780 (16.43)	35654.02 (41.29)	43010.75 (57.66)	120.63
Kancheepuram	158 (3.33)	2896.09 (3.35)	956.88 (1.26)	33.04
Thiruvallur	140 (2.95)	2192.53 (2.54)	849.155 (1.14)	38.73
Tamil Nadu	4746	86343.39	74587.43	86.38

Note: The figures in parenthesis are percentages to State level

Source: Reserve Bank of India

Employment

4.45 As per Census 2001, the total no. of workers in Tamil Nadu is 278 lakhs and the rate of increase in the employment in the last decade is 1.4percent against the population growth of 1.1percent per annum.

4.46 The comprehensive profile of employment in CMA has been made on the basis of secondary sources including Census data. The participation rate i.e. proportion of main workers to the population of CMA was 30.74percent in 1991 and 30.96percent in 2001. The corresponding figures for Chennai City was 30.50percent in 1991 and 31.79percent in 2001. The number of marginal workers both in the Chennai City and in CMA is negligible. The table No. 4.15 gives the main workers classified by industrial category for Chennai City and CMA.

Table No: 4.15: Occupational structure CMA _ 1991 and 2001

1991			2001		
	Chennai City	CMA		Chennai City	CMA
Total Workers	1173062	1675512	Total Workers	1488364	2519278
Main Workers	1171739	1669213	Main Workers	1380757	2284457
Main Cultivators	883	19778	Main Cultivators	15149	33170
Main Agriculture Labourers	199	70085	Main Agriculture	5849	33390
Fishing & Forest	9982	15422	Main House Hold	25836	43394
Mining	1245	3484	Main Others	1333923	2174503
Manufacturing House Hold	7683	20271	Marginal workers	107607	234821
Manufacturing & others	275916	423253	Marginal Cultivators	2026	5728
Main Construction	74856	104913	Marginal Agricultural	1233	22681
Main Trade	300928	372672	Marginal House Hold	5156	10511
Main Transport	125853	166648	Marginal Others	99192	195901
Main Others	374194	472687	Non Workers	2855281	4859201
Marginal Workers	1323	6299			
Non Workers	2668334	3753958			

Source: Census of India

4.47 The workers in primary activity constitute 6.52 percent in CMA and 1.05 percent in City 1991. In 2001, it was 2.91 percent and 1.52 percent respectively in CMA and Chennai City. The percentage of workers in household industry of manufacturing sector more or less remains same in Chennai City and CMA. The percentage of workers in other services has shown a higher increase both in the City and CMA.

4.48 The workers in primary activity are dwindling and it is negligible compared to total, both in Chennai City and in CMA. The occupational structure of Chennai City and CMA reveals that major share of the work force is engaged in tertiary sector.

Non-workers

4.49 The percentage of non- workers was 65.73 percent in City and 69.14 percent in CMA during 2001. Among males, 45.88 percent are non-workers and the corresponding figure for females was 86.48 percent in Chennai City. However, in CMA, 48.83percent and 90.63percent are non-workers, among males and females respectively. The percentage of female non-workers is high in both City and CMA.

Employment in organised sector.

4.50 The following are the distribution of employment in public and private organised sector in Chennai city and Kancheepuram districts.

Table No. 4.16: Employment of organized sector in Chennai, Kancheepuram (including Thiruvallur District)

Year	Chennai Dist.			Kancheepuram & Thiruvallur Districts		
	Public	Private	Total	Public	Private	Total
2000-01	281287	102358	383645	100491	124626	225117
2001-02	316553	94674	411227	108013	136234	244247
2002-03	314743	64914	379657	109678	132298	241976
2003-04	322961	69280	392241	100163	112341	212504
2004-05	323221	68785	392006	81032	118461	199493

Source: Commissionerate of Employment & Training, Chennai - 600 032

4.51 In Chennai District, over these years from 2000, employment in the organized public sector was increasing whereas in private sector it was decreasing with little variance in the total employment figures in this organized sector.

4.52 Chennai and Kancheepuram together contribute about 26percent of employment in organized sector to the State total in 2002-03. Of the total public sector employment, the employment opportunity in Chennai and Kancheepuram Districts are 20percent and 7percent respectively in 2002-03. The percentage of the same in private sector in Chennai and Kancheepuram Districts are 7.8 and 15.9

4.53 Informal sector generally denotes the activities and services, which are readily associated with low wages and low level of skills.

The informal sector comprises broadly in the following groups:

- Self-employed traders, hawkers and family based workers
- Employees and workers in predominantly low wage paying sectors like rickshaw-pulling, repair of bicycles, personal services, etc.

- Employees and workers in comparatively better wage paying occupation such as construction, manufacturing and repair activities.

4.54 When comparing the Census data of 2001 total employees and available figures in Table No. 4.16 on organized sector employment, the employees in informal sector would be in the order of 10.8 lakhs in Chennai City.

Employment Projection:

4.55 Table No.3.17 (chapter III) gives the information about the age structure in CMA from 1961 to 2001.

Table No: 4.17: CMA-Age Structure -2001 & 2011

Age Group	2001		2011
	Male	Female	
0-4	7.92	7.91	6.37
5-9	8.33	8.43	7.21
10-14	9.23	9.17	8.66
15-19	9.72	9.64	9.89
20-24	10.32	10.83	10.52
25-29	10.00	10.95	10.47
30-34	8.69	8.30	8.67
35-39	8.12	8.20	8.51
40-44	6.54	5.89	6.45
45-49	5.79	5.34	5.96
50-54	4.58	4.11	4.61
55-59	3.12	3.06	3.45
60-64	2.73	2.80	3.10
65-69	1.77	1.95	2.29
>70	1.29	1.40	3.84
Not stated	1.87	2.00	0.00

4.56 It is assumed that age structure proportion will stabilise in the ratio projected for 2011.The age group between 15-60 is taken as the eligible age group for employment. It is found that this age group has increased from 59.66 percent in 1961 to 66.02 percent in 2001 and it is assumed that this age group will stabilize at 69.15 percent as projected for 2011 upto 2026.The ratio as found in the last 3 decades is taken as 48% and 52% for male and female for CMA population.

4.57 The percentage of workers as per 2001 Census works out to 54.6 % out of the male population and 18.26 % out of the female population. It is assumed that in future years by 2011, 87.5 % of male and 30% of the female eligible working population will be willing to work and for them jobs would have to be created. Similarly this % for male and female is assumed as 90% and 33% for 2016, 92.5%and 36% for 2021 and 95% and 40% for the year 2026, considering the improvements in the education level, aptitude and willingness to work etc in future years. Based on the above criteria, projection for demand for jobs upto 2026 has been made and tabulated in table No. 4.18.

Table No: 4.18: Employment Projection CMA_2026 (in lakhs)

	2011	**2016**	**2021**	**2026**
Population	88.71	99.66	111.98	125.82
Eligible Workers 15-60 (69.15%)	61.34	68.92	77.43	87.01
Eligible Male Workers (52%)	31.90	35.84	40.26	45.24
Eligible Female Workers (48%)	29.44	33.08	37.17	41.76
Male Willing to Work	27.91	32.25	37.25	42.98
Female Willing to Work	8.37	10.64	13.41	17.19
Total	36.28	42.89	50.65	60.17
Additional Jobs to be created	10.09	16.70	24.47	33.99
Male Willing to Work %(assumed)	87.5 %	90 %	92.5 %	95 %
Female Willing to Work %(assumed)	30 %	33 %	36 %	40 %