

Part 1 Chapter 4

Regional Economy

4.1 Introduction

- 4.1.1** Mumbai's contribution to economic growth has been significant. Nearly 40 percent of State Domestic Product (SDP) originates in Mumbai. Mumbai with its port, manufacturing industries (traditional and modern), government, financial institutions, trade and services represents one of the most diversified and vibrant local economies. Mumbai, therefore, fits in the classical description of city as "engine of economic growth". Understanding of regional economic trends is necessary for formulation of an appropriate regional development policy. The observations about the economic growth of MMR in the Regional Plan, 1973 were based on data available for the period 1960-61 to 1964-65 (BMRPB, 1974).

4.2 Regional Income

- 4.2.1** It was observed in the Regional Plan, 1973 that the growth rate of regional income for Greater Mumbai (63%) and MMR (61%) was significantly higher as compared to that of Maharashtra (45%). In the case of per capita income also similar trend prevailed - Greater Mumbai (45%), MMR (38%) and Maharashtra (33%).
- 4.2.2** For the purpose of revision of Regional Plan, the trends in Regional Domestic Product (RDP) and per capita income are first analysed to understand the changes that have taken place in the 1980s.

4.2.3 Data and Assumptions

The Directorate of Economics and Statistics, Government of Maharashtra collects and compiles Net State Domestic Product (NSDP) figures by industrial origin for the State as a whole. The NSDP estimates are broadly classified in the primary, secondary and tertiary sectors and published in its annual publication - Economic Survey of Maharashtra. There are certain methodological problems regarding allocation of NSDP to individual districts or smaller areas. However, district-wise estimation of Domestic Product (DP) under some assumptions was made available for the year 1978-79 to a committee appointed by the Government of Maharashtra (GOM, 1984). Similar estimate for later years viz. 1980-81, 1984-85 and 1989-90 pertaining to the districts of Greater Mumbai, Thane and Raigad encompassing MMR are obtained.

The following assumptions are made here for computing RDP and per capita income for MMR:

1. The total Domestic Product of the districts of Greater Mumbai, Thane and Raigad is treated as RDP though MMR includes only part of Thane and Raigad districts.
2. Allocation of the state level NSDP estimates is made to the districts using suitable indicators.
3. About 88, 81 and 83 percent of the total NSDP for the years 1980-81, 1984-85 and 1989-90 respectively, could be assigned to all the districts.

4. Data on construction and electricity at the district level are not assigned and therefore excluded from both NSDP and its district-wise allocation for calculating percentages in 3 above.

4.2.4 Economic Trends

The basic data regarding Domestic Product at current prices for 1980-81, 1984-85 and 1989-90 are given in the following tables:

Table-4.1 Greater Mumbai, Thane and Raigad Districts

Table-4.2 MMR and Maharashtra.

To make a meaningful comparison of DP and per capita income, the values are reduced to constant prices at 1980-81 level. Table-4.3 shows sector-wise DP values at constant prices for the districts of Greater Mumbai, Thane and Raigad derived from Table-4.1. In the case of Greater Mumbai the growth rate of 3.93% of the secondary sector during 1980-89 is found to be slower than 6.05% observed for the tertiary sector. It is to be noted that the growth in the unorganised manufacturing sector (9.42% p.a.) is substantially large as compared with the growth of the registered manufacturing sector activities in Greater Mumbai at 2.82% p.a. during the same period. There is a gradual change in the share of secondary and tertiary sectors in the total DP of Greater Mumbai in 1980-89 period. This is reflected by the fact that share of secondary sector declined from 48.80% in 1980-81 to 45.49% in 1989-90 while that of tertiary sector increased from 45.75% to 51.15% in the corresponding years. (Figure-4.1) The growth rate of total DP of Greater Mumbai in 1980-89 period is 4.75% per annum whereas the per capita income has registered a moderate growth rate of 2.82%. It is seen from Table-4.3 that in case of Thane district also the growth of secondary sector (7.60%) is less as compared to that of the tertiary sector (11.72%) during 1980-89. In Raigad district the performance of secondary sector is found to be better than that of tertiary sector. Further, unlike for Greater Mumbai and Thane districts, the growth in registered manufacturing sector is more than that in unregistered manufacturing sector.

The comparative picture of MMR and Maharashtra at constant prices is given in Table-4.4. It is observed that over the period 1980-89 the growth of primary, secondary and tertiary sectors in Maharashtra is more than that found for the corresponding sectors in MMR. The total RDP of MMR increased at 5.89% p.a. and per capita income at 3.18% over 1980-89, while the corresponding growth rates for Maharashtra are 6.28%

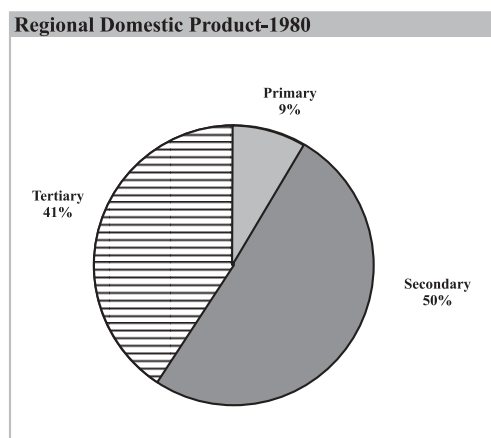


Figure 4.1

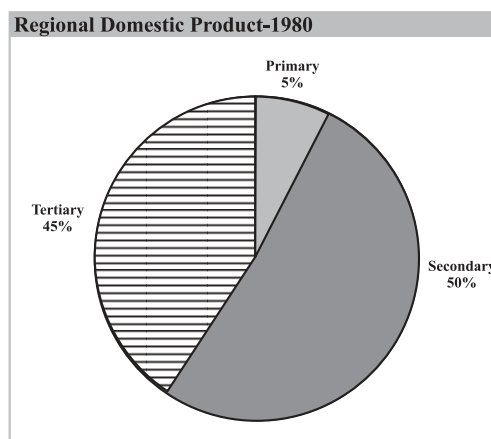


Figure 4.2

Sectorwise and Districtwise Domestic Product at Current Prices												(Rs. in Lakhs)
Sectors	Greater Mumbai			Ann. Comp. Growth %	Thane			Ann. Comp. Growth %	Raigad			Ann. Comp. Growth %
	1980-81	1984-85	1989-90		1980-81	1984-85	1989-90		1980-81	1984-85	1989-90	
Agriculture Forestry Fishing Mining	15518	21885	25609	5.72	9560	14617	23545	-10.53	8362	13004	18391	9.15
					782	1530	277	-10.89	140	100	58	-9.33
	3455	5001	7241	8.57	3436	2908	2638	-2.89	651	1008	1057	5.53
	6				167	1	13	-24.70	4	11	114	45.09
Primary	18979	26886	32850	6.29	13945	19056	26473	7.38	9157	14123	19620	8.84
Reg.Mfg	147711	188938	332502	9.43	52512	58045	163518	13.45	6660	7442	54705	26.36
Unreg.Mfg.	21494	33169	77644	15.34	8103	13492	37122	18.42	1624	2360	6360	16.38
Gas,Water	631	1099	3672	21.61	159	343	1058	23.44	54	117	344	22.84
Secondary	169836	223206	413818	10.40	60774	71880	201698	14.26	8338	9919	61409	24.84
Transport	24895	36558	89554	15.29	3321	6820	15192	18.41	735	1492	3765	19.90
Communications	3636	6975	16187	18.05	855	1852	5025	21.75	154	316	796	20.02
Trade,Hotel	73047	99888	164850	9.47	12125	18200	33872	12.09	3641	5230	9199	10.85
Banking	18731	35120	60381	13.89	3002	6662	14240	18.88	403	739	1234	13.24
Real Estate	9252	14258	23267	10.79	1638	2681	7804	18.94	559	929	3159	21.22
Public.Admin.	8564	16081	35822	17.23	2236	4889	13188	21.80	708	1397	3372	18.94
Other Services	21093	33886	134893	22.90	4950	8914	58115	31.48	1419	2120	6765	18.95
Tertiary	159218	242766	524954	14.17	28127	50018	147436	20.21	7619	12223	28290	15.69
Total	348033	492858	971622	12.08	102846	140954	375607	15.48	25114	36265	109319	17.75
Population	8243405	8879158	9743236	1.87	3351562	4003499	4999542	4.54	1486452	1609925	1778787	2.01
Per Capita Income (In Rs.)	4221.96	5550.73	10050.02	10.12	3068.60	3520.77	7512.83	10.46	1689.53	2252.59	6145.71	15.43

Source: Estimates prepared by Directorate of Economics and Statistics, GOM, Feb. 1992

Table-4.1

Sectorwise Estimated Domestic Product at Current Prices for MMR and Maharashtra							(Rs in Crores)	
Sector	Mumbai Metropolitan Region			Annual Comp. Growth Rate %	Maharashtra		Annual Comp. Growth Rate %	
	1980-81	1984-85	1989-90		1980-81	1984-85		1989-90
Agriculture	334.40	495.06	675.45	8.12	3748.00	5246.00	9305.64	10.63
Forestry&Fishing	84.64	105.47	112.71	3.23	221.42	359.37	1068.09	19.11
Mining	1.77	0.12	1.27	-3.62	56.63	117.23	257.90	18.35
Primary	420.81	600.65	789.43	7.24	4026.05	5722.60	10631.63	11.39
Reg. &UnRegd. Mfg.	2381.04	3034.46	6718.51	12.38	3880.05	5321.45	11794.92	13.15
Construction					677.80	1310.44	3648.32	20.57
Gas,Water	8.44	15.59	50.74	22.06	22.93	46.84	55.87	10.40
Secondary	2389.48	3050.05	6769.25	12.27	4580.78	6678.73	15499.11	14.50
Transportation&Communication	335.96	540.13	1305.19	16.28	712.49	1415.38	3222.38	18.26
Banking&Pub.Admin	336.44	648.88	1282.37	16.03	1164.29	2401.88	4700.01	16.77
Other Services(Trade,Hotel,Real Estate)	1277.24	1861.06	4419.24	14.79	3246.06	4825.81	11017.46	
Tertiary	1949.64	3050.07	7006.80	15.27	5122.84	8643.07	18939.85	15.64
Total	4759.93	6700.77	14565.48	13.23	13729.67	21044.40	45070.59	14.12
Population	13081419	14492581	16521564	2.63	62782818	68738614	76984045	2.29
Percapita Income(in Rs.)	3638.70	4623.59	8816.04	10.33	2186.85	3061.51	5854.54	11.56

Includes Districts of Greater Mumbai, Thane, Raigad
Source: Economic Survey of Maharashtra 1991-92 and 1992-93

Table-4.2

Sectorwise and Districtwise Estimated Domestic Product at 1980-81 Prices													(Rs in Lakhs)	
Sectors	Greater Mumbai			Ann. Comp Growth(%)	Thane			Ann. Comp. Growth(%)	Raigad			Ann. Comp. Growth(%)		
	1980-81	1984-85	1989-90		1980-81	1984-85	1989-90		1980-81	1984-85	1989-90			
Agriculture Forestry Fishing Mining	15518.00	16681.84	13771.66	-1.32	9560.00	11141.80	12661.71	3.17	8362.00	9912.30	9890.06	1.88		
	0.00	0.00	0.00		782.00	998.09	112.62	-19.37	140.00	65.23	23.58	-17.96		
	3455.00	4246.50	3955.07	1.51	3436.00	2469.27	1440.89	-9.20	651.00	855.92	577.34	-1.33		
	6.00	0.00	0.00		167.00	0.64	5.48	-31.59	4.00	7.01	48.09	31.82		
Primary Growth Rate(%) Share in Total(%)	18979.00	20928.33	17726.73	-0.76	13945.00	14609.80	14220.70	0.22	9157.00	10840.46	10539.07	1.57		
	5.45	2.47	-3.27		13.56	1.17	-0.54		36.46	4.31	-0.70			
		5.42	3.36			13.16	6.84			38.49	17.42			
Reg.Mfg. Unreg.Mfg. Gas and Water	147711.00	152363.44	189762.13	2.82	52512.00	46808.67	93321.31	6.60	6660.00	6001.38	31220.68	18.73		
	21494.00	27089.28	48340.58	9.42	8103.00	11018.98	23111.88	12.35	1624.00	1927.42	3959.69	10.41		
	631.00	642.61	2189.09	14.82	160.00	343.58	1058.60	23.36	54.00	68.41	205.08	15.98		
	169836.00	180095.34	240291.80	3.93	60775.00	58171.23	117491.79	7.60	8338.00	7997.22	35385.44	17.42		
Secondary Growth Rate(%) Share in Total(%)	48.80	1.48	5.94		59.09	-1.09	15.10		33.20	-1.04	34.64			
		46.64	45.49			52.41	56.49			28.40	58.49			
Transport Cmmunication Trade Hotel Banking Real est. Service Publi Admin Other services	24895.00	27486.40	45267.47	6.87	3321.00	5127.67	7679.20	9.76	735.00	1121.77	1903.12	11.15		
	3636.00	5244.20	8182.15	9.43	855.00	1392.44	2540.02	12.86	154.00	237.59	402.36	11.26		
	73047.00	75101.52	83327.85	1.47	12125.00	13683.80	17121.51	3.91	3641.00	3932.21	4649.88	2.75		
	18731.00	27307.70	31662.55	6.01	3002.00	5180.07	7467.16	10.66	403.00	574.61	647.08	5.40		
	9252.00	11086.37	12200.74	3.12	1638.00	2084.62	4092.26	10.71	559.00	722.35	1656.51	12.83		
	8564.00	12503.85	18784.32	9.12	2236.00	3801.46	6915.52	13.37	708.00	1086.24	1768.21	10.70		
	21093.00	26348.20	70735.11	14.39	4950.00	6931.12	30474.31	22.38	1419.00	1648.41	3547.43	10.72		
	159218.00	185078.23	270160.19	6.05	28127.00	38201.17	76289.98	11.72	7619.00	9323.19	14574.59	7.47		
	45.75	3.83	7.86		27.35	7.95	14.84		30.34	5.18	9.35			
	47.94	51.15			34.42	36.68			33.11	24.09				
Total Growth Rate(%)	348033.00	386101.90	528178.71	4.74	102847.00	110982.20	208002.47	8.14	25114.00	28160.87	60499.11	10.26		
		2.63	6.47			1.92	13.39			2.90	16.53			
Population Growth Rate(%)	8243405	8879158	9743236		3351562	4003499	4999542		1486452	1609925	1778787			
		1.87	1.87			4.54	4.54			2.01	2.01			
Per capita income (in Rs.) Growth Rate(%)	4221.96	4348.41	5420.98	2.82	3068.63	2772.13	4160.43	3.44	1689.53	1749.20	3401.14	8.08		
		0.74	4.51			-2.51	8.46			0.87	14.22			

Source: Economic Survey of Maharashtra 1991-92 and 1992-93

Table-4.3

and 4.06%. It is seen that the share of primary sector in Maharashtra has decreased from 29.32% in 1980-81 to 23.43% in 1989-90 and that of secondary sector remained constant around 35% percent. The share of tertiary sector is observed to be steadily growing for both MMR and Maharashtra.

The comparison of MMR and the rest of Maharashtra is made in Table-4.5. It is seen that growth rates for the rest of Maharashtra for primary, secondary and tertiary sectors are greater than those corresponding to MMR over the period 1980-89. Even the growth rate of per capita income for the rest of Maharashtra (4.39%) is found to be higher than that for MMR (3.18%). This suggests that the economic performance of the rest of Maharashtra was better than that of MMR during the eighties.

A comparative picture of the performance of MMR, Maharashtra and India is presented in Table-4.6. It is seen that growth rate for the secondary sector of MMR is less than that for Maharashtra and India during 1980-89. The share of all the sectors for Maharashtra in India has remained constant over 1980-89. Although the share of total DP of MMR in Maharashtra has remained constant, there is a decline in all the individual sectors, particularly that in the secondary sector. The rate of growth in per capita income of MMR is slightly more than that of India during the 1980-89 period.

4.3 **Employment Scene**

4.3.1 **Previous Employment Projections**

The Mumbai Metropolitan Regional Planning Board while preparing the Regional Plan for MMR, 1970-91 made projections of employment on the basis of 1961 Census and other employment data then available. The other notable attempt in this direction is that of City and Industrial Development Corporation Ltd. (CIDCO) made projections through its Urban Growth Model and Employment Projection Model. These projections are given below;

Projections of BMRPB

The projected total labour force in the urban area of the Region for year 1991 is 45,80,587 composed of 41,37,741 males and 4,42,646 females. It was derived from the population forecasts and was based on the following assumptions (BMRPB, 1974):

1. The participation of the persons within the age group of 0-14 years would decline by 30 percent among males and 50 percent among females between 1961-1991.
2. The participation rates of males and females which were 89.76 percent and 14.88 percent respectively in the age group of 15-59 years as observed in 1961 would remain at the same level in 1991.
3. The participation rate for persons in the 60+ age group as observed in 1961 will be valid in 1991 also.

The factory employment in MMR up to 1991 was also projected by BMRPB. It was based on the assumption that share of factory employment of Maharashtra to that of India would be 20% and Mumbai's share of factory employment in Maharashtra would be 70%. Accordingly, projected factory employment for MMR is 1.2 million in 1981 and 1.4 million in 1991, with the corresponding figures of 0.96 million and 1.06 million for Mumbai.

Sectorwise Estimated Domestic Product at 1980-81 Prices for MMR & Maharashtra										(Rs in Crores)	
Sectors	Mumbai Metropolitan Region			Annual comp. Growth(%)	Maharashtra			Annual Comp. Growth(%)			
	1980-81	1984-85	1989-90		1980-81	1984-85	1989-90				
Agriculture	334.40	377.36	363.23	0.92	3748.00	3998.76	5004.26	3.26			
Forestry&Fishing	84.64	86.35	61.09	-3.56	221.42	244.27	452.54	8.27			
Mining	1.77	0.08	0.54	-12.44	56.63	74.72	108.78	7.52			
Primary	420.81	463.79	424.87	0.11	4026.05	4317.75	5565.59	3.66			
Annual Compound Growth (%)		2.46	-1.74			1.76	5.21				
Share in Total(%)	8.84	8.83	5.33		29.32	26.73	23.43				
Reg&Unreg.Mfg.	2381.04	2452.09	3897.16	5.63	3880.05	4306.68	6889.26	6.59			
Construction					677.80	814.68	1397.77	8.37			
Gas,Water	8.45	10.55	34.53	16.93	22.93	27.39	33.31				
Secondary	2389.49	2462.64	3931.69	5.69	4580.78	5148.75	8320.34	6.86			
Growth Rate (%)		0.76	9.81			2.97	10.07				
Share in Total (%)	50.20	46.89	49.35		33.36	31.88	35.02				
Trasport & Communications	335.96	406.10	659.74	7.79	712.49	1064.16	1628.84	9.62			
Banking&Pub.Admin	336.44	504.54	672.45	8.00	1164.29	1867.59	2464.59	8.69			
Other Servies(Trade,Hotel,Real Estate)	1277.24	1415.39	2278.06	6.64	3246.06	3752.33	5777.33	6.62			
Tertiary	1949.64	2326.03	3610.25	7.09	5122.84	6684.08	9870.76	7.56			
Growth Rate(%)		4.51	9.19			6.88	8.11				
Share in Total (%)	40.96	44.28	45.32		37.31	41.39	41.55				
Total	4759.94	5252.45	7966.80	5.89	13729.67	16150.58	23756.69	6.28			
Growth Rate(%)		2.49	8.69			4.14	8.02				
Population	13081419	14492582	16521565	2.63	62263000	68396568	75311048	2.14			
Growth Rate(%)		2.59	2.66			2.38	1.94				
Percapita Income(in Rs)	3638.70	3624.23	4822.06	3.18	2205.11	2361.31	3154.48	4.06			
Growth Rate(%)		-0.10	5.88			1.73	5.96				

* Includes Districts of Greater Mumbai, Thane&Raigad
Source : Economic Survey of Maharashtra, 1991-92 and 1992-93

Table-4.4

The projection of 1.92 million tertiary sector employment in 1991 in Greater Mumbai is based on annual growth rate of 4.4% observed over a short period of 1960-61 to 1964-65. The procedure followed in arriving at these projections is basically that of extrapolation of observed trends and does not take into account any policy change.

The employment in primary sector in MMR is projected to be of very little significance viz. dropping down to 1 percent of total employment in 1991 as compared to 1.89 percent in 1961 employment. It would be confined to only the small rural parts of the region.

CIDCO Estimates

CIDCO developed a model for projecting the urban growth in the MMR (CIDCO, 1973). It analysed time series data about population, total employment, jobs in manufacturing sector and number of migrants added to Mumbai in a given time interval. The projections for each economic sector for the years 1991 and 2001 are obtained as given in Table-4.7 on the basis of the statistically significant relations:

1. The number of jobs in manufacturing sector in time t is a function of number of such jobs in this sector in time $t-1$.
2. Total number of jobs in the economy in time t is a function of number of jobs in manufacturing sector in the time t .
3. Number of immigrants to Mumbai is a function of difference between total population in two immediate time periods.
4. Population at the end of a given time period t is equal to sum of population at the end of period $t-1$, net migration and natural addition during the period $(t-1, t)$.
5. Number of jobs in activities other than construction and public administration in time is a function of total population in time.
6. Number of jobs in construction activities is a function of total number of jobs in economy at time.
7. Number of jobs in public administration in time t is a function of time itself.

Another attempt to forecast employment structure was attempted by CIDCO through the Employment Projection Model developed by Operations Research Group (ORG, 1974). It used year wise employment data between 1961 and 1971. It exogenously projected the employment in public services, chemical and engineering manufacturing, textiles and railways along with population and import-export handled by Mumbai Port. The employment in rest of the sectors is found dependent on the employment in above four sectors projected independently. These projections are given in Table-4.8. According to this, the total establishment employment in 1986 is about 2.3 million out of which 25.5% is in manufacturing sector (both registered and unregistered), 10.97% in transport other than railways, 9.47% in public services and 8.48% in insurance and banking.

Employment Projection by Urban Growth Model					(In Thousands)	
Sector	1981		1991		2001	
	Lower	Upper	Lower	Upper	Lower	Upper
Manufacturing	1249.74	1314.26	1708.52	1854.09	2341.75	2631.05
Public Administration	102.83	107.97	115.05	121.21	127.25	134.47
Construction	54.40	87.93	70.91	118.48	91.83	158.49
Gas, Power & Water Supply	17.56	22.24	22.85	30.31	28.81	40.10
Sanitary Services	37.93	39.24	47.63	50.98	58.63	63.31
Health & Medical Services	49.88	52.90	64.41	70.76	80.83	92.47
Educational Services	70.00	80.23	91.35	108.92	115.41	143.75
Trade & Commerce	482.50	694.76	548.69	866.82	615.24	1067.52
Transport & Communication	294.63	351.40	349.00	439.61	406.79	542.82
Other Services	212.36	225.12	256.04	282.59	310.00	358.62
TOTAL EMPLOYMENT	2634.02	2955.55	3287.58	3841.67	4108.94	5014.29

Source : New Bombay Draft Development Plan, 1973.

Table-4.7

4.3.2 Employment Analysis

The data on employment has been collected from various sources (their details are given in Annexure-A.4.1). An analysis of employment data so collected is presented here.

Primary Census

The demographic census conducted every ten years provides a comparative picture about employment changes. In spite of definitional changes from census to census and clubbing of categories, the general trends regarding employment distribution are valuable. The employment in different categories in Greater Mumbai according to primary census of 1961, 1971, 1981 and 1991 are presented in Table-4.9. It is clear that total employment has grown by 30 percent in 1961-71 as well as 1971-81 decade but by 20 percent during 1981-91. The employment in each category has generally grown in absolute number. As expected, the share of employment in agriculture and allied categories has decreased.

The share of industrial employment other than that engaged in household industries has continued to remain dominant but its share is steadily declining even in the incremental employment over the last three decades. The share of trade and commerce in the incremental employment is observed to be increasing. A shift in employment base from manufacturing to service sector is now emerging.

It is to be noted that the ratio of employment (resident workers) to total population has declined over the last few decades i.e. from 40.6% in 1961 to 36.8% in 1971 to 34.7% in 1981 and to 34.6% in 1991.

Economic Census

The information about employment by place of work is provided by the economic census. The analysis of data obtained from the economic census of 1971, 1980 and 1990 is

Estimates by Employment Projection Model					
Category	1971	1986	% Growth Over 1971	Add. Employment 1971-86	% of Total Additional Employment
Dependent Variables					
1 Insurance	15724	21352	35.79	5628	0.82
2 Banking	35399	67607	90.98	32208	4.68
3 Retail Trade	142203	206345	45.10	64142	9.33
4 Wholesale Trade	46685	67156	43.85	20471	2.98
5 Road Transport	24531	31636	28.96	7105	1.03
6 Utilities	22825	37622	64.83	14797	2.15
7 Communication	27889	47394	69.94	19505	2.84
8 Profesional Services	13467	19840	47.32	6373	0.93
9 Educational Services	58495	98514	68.41	40019	0.93
10 Medical & Health Services	35940	63072	75.49	27132	3.95
11 Personal Services	30880	40000	29.53	9120	1.33
12 Construction	34258	55979	63.40	24721	3.16
13 Food & Beverages	26813	36130	34.75	9317	1.35
14 Miscellaneous Manufacturing	74233	96002	29.32	21769	3.17
15 Non-Metallic Mineral	20995	24415	16.29	3420	0.50
16 Printing & Publishing	33159	47490	43.26	14331	2.08
17 Unregistered Textile	14284	31665	121.68	17381	2.53
18 Unregistered Chemical & Rubber	8792	16717	90.14	7925	1.15
19 Unregistered Engineering	39170	80073	104.42	40903	5.95
20 Repairs	15300	26027	70.11	10727	1.56
21 Business Services	57552	63290	9.97	5738	0.83
22 Miscellaneous Commerce	24039	36802	53.09	12763	1.86
23 Hotels & Restaurants	74895	116331	55.32	41436	6.02
24 Recreation	15896	17757	11.71	1861	0.27
25 All other Transport	52733	128194	143.19	75461	10.97
TOTAL	946157	1477410			
Exogenous Employment Variables					
26 Public Services	87563	152684	74.37	65121	9.47
27 Chemical & Engineering (Regd.)	237400	310540	34.20	79140	11.51
28 Textile (Regd)	240056	230934	-3.95	-9122	-1.33
29 Railway	104690	126043	20.40	21353	3.10
30 Total Employment*	1615866	2297611	42.19	690745	
Exogenous Non-employment Variables					
Population ('00)	59685	93184	56.13		
Import\Export **	15035	24804	64.98		

* Establishment employment ** Figures pertain to 1970.

Source : New Bombay Draft Development Plan, 1973.

Table-4.8

Employment in Greater Mumbai according to Primary Census										
Census Category	1961	1971	1981	1991	% Growth rate			% Share in incremental emp.		
					'61-'71	'71-'81	'81-'91	'61-'71	'71-'81	'81-'91
Cultivators	4840 (0.29)	2672 (0.12)	3177 (0.11)	3402 (0.10)	-44.79	18.90	7.08	-0.42	0.08	0.04
Agricultural Labourers	1949 (0.12)	2958 (0.13)	2467 (0.09)	2521 (0.07)	51.77	-16.60	2.19	0.20	-0.07	0.01
Livestock, Forestry, Fishing, Hunting & Plantations,Orchards and Allied Activities	25131 (1.49)	20088 (0.91)	30601 (1.07)	17122 (0.50)	-20.07	52.33	-44.05	-0.99	1.59	-2.35
Mining and Quarrying	N.A.	1944 (0.09)	3095 (0.11)	5683 (0.17)	N.A.	59.21	83.62	N.A.	0.17	0.45
Manufacturing,Processing Servicing and Repairs in Household Industries	23042 (1.37)	29142 (1.33)	71245 (2.49)	50997 (1.48)	26.47	144.48	-28.42	1.19	6.36	-3.52
Other than Household Industries	665530 (39.46)	900361 (40.96)	1112902 (38.91)	1212966 (35.31)	35.28	23.61	8.99	45.92	32.11	17.41
Construction	44906 (2.66)	67012 (3.05)	95768 (3.35)	145539 (4.24)	49.23	42.91	51.97	4.32	4.34	8.66
Trade & Commerce	303817 (18.00)	491515 (22.36)	623615 (21.80)	855297 (24.90)	61.78	26.88	37.15	36.70	19.96	40.32
Transport,Storage and Communication	189260 (11.22)	236899 (10.78)	287274 (10.04)	388794 (11.32)	25.17	21.26	35.34	9.31	7.61	17.67
Other Services	428193 (25.39)	445507 (20.27)	629912 (22.02)	752411 (21.91)	4.04	41.39	19.45	3.39	27.86	21.32
Total	1686668 (100.00)	2198098 (100.00)	2860056 (100.00)	3434732 (100.00)	30.32	30.12	20.09			

Source : Census of India - 1961, 1971 1981 and 1991

Table-4.9

presented below to get an idea about sectoral and spatial changes in employment in Greater Mumbai and the rest of MMR.

Sectoral and Spatial Changes

The establishment employment in Greater Mumbai which was 15.28 lakhs in 1971 increased to 21.99 lakhs in 1980 and to 24.26 lakhs in 1990. The employment in MMR excluding Greater Mumbai which was 6.09 lakhs in 1980 has gone up to 7.97 lakhs in 1990. This implies higher growth in employment in areas outside Greater Mumbai. The number of establishments in Greater Mumbai has increased from 1.68 lakhs in 1971 to 2.84 lakhs in 1980 to 4.23 lakhs in 1990. In the outer MMR the number of establishments increased from 0.87 lakhs in 1980 to 1.62 lakh in 1990.

The comparative picture of employment in 1971, 1980 and 1990 as per the economic census in Greater Mumbai is presented in Table-4.10. It is seen that the share of manufacturing sector employment in the total which was 43.8% in 1971, has declined to 36% in 1980 and further to 28.5% in 1990. The share of employment in trade sector on the other hand has gone up from 18.5% to 24.8% during 1971-80 and to 29.1% in 1990. The declining share of manufacturing employment in the incremental employment during 1980-90 in contrast with considerable rise in the corresponding trade and services sectors clearly indicates the shift in the nature of economic activities in Greater Mumbai. The construction sector is also steadily gaining in employment over the last twenty years.

The detailed distribution of establishments and employment according to the first level of National Industrial Classification (NIC) scheme in various wards of Greater Mumbai in 1990, is presented in Table-4.11. The Wards A, B, C and D together accounted for 7.16 lakhs of employment which is about 30% of the total employment of 24.26 lakhs. In the remaining part of the island city the employment was 6.34 lakhs and the suburbs contained about 11 lakhs of employment. The employment of 3.61 lakhs in Ward A is the largest among all the Wards. Out of this, 2.28 lakhs employment is in finance and services sectors. The manufacturing sector employment is now found to be more in suburbs and not in the central Mumbai (Wards E, F and G) as it used to be in the past.

The comparative picture of employment in 1971, 1980 and 1990 in various parts of Greater Mumbai is presented in Table-4.12. There is a marginal decline namely, 4% in the share of employment in CBD of Greater Mumbai over 1971-90 period, but more than 10% reduction in the share of employment in the remaining parts of island city has taken place. The employment in the suburbs has more than doubled during 1971-90 with manufacturing sector dominating the scene. The employment in the city which constituted 71.8% of the total in 1971 is reduced to 55.7% in 1990 implying a shift in employment towards suburbs in line with the population shift observed over last two decades. The employment changes in different parts of Mumbai during 1971-90 are shown in Figure-4.3.

The employment in office sector in Greater Mumbai, which was 3.52 lakhs in 1980 is increased to 6.29 lakhs in 1990 (Table-4.13). The share of office sector employment in CBD of Greater Mumbai which was 54.7% of the total in 1980 is reduced to 47.5% in 1990.

Establishment Employment in Greater Mumbai in 1971, 1980 and 1990									
NIC Group	Description	Year						% Share in Incremental Employment during	
		1971		1980		1990			
		Emp.	Est.	Emp.	Est.	Emp.	Est.	1971-1980	1980-1990
0 & 1	Agriculture, Hunting, Fishing Forestry, Mining & Quarrying	11832 0.77%	1496 0.89%	24009 1.09%	2913 1.02%	10839 0.45%	2042 0.48%	1.81	-5.81
2 & 3	Manufacturing, Repairs including Household Industries	669946 43.84%	39835 23.67%	791080 35.97%	71411 25.13%	690621 28.47%	73495 17.36%	18.05	-44.35
4	Electricity, Gas and Water	14325 0.94%	314 0.19%	14388 0.65%	796 0.28%	10997 0.45%	566 0.13%	0.01	-1.50
5	Construction	5525 0.36%	463 0.28%	14028 0.64%	2772 0.98%	20082 0.83%	5656 1.34%	1.27	2.67
6	Wholesale & Ratail trade, Restaurants & Hotels	282045 18.46%	82241 48.87%	545591 24.81%	139926 49.23%	705127 29.07%	212916 50.28%	39.27	70.44
7	Transport, Storage & Communiuation	127336 8.33%	6139 3.65%	209883 9.54%	11708 4.12%	131472 5.42%	23414 5.53%	12.30	-34.62
8	Financing, Insurance, Real Estate Business Services	187525 12.27%	16768 9.96%	138849 6.31%	11382 4.00%	248541 10.25%	19738 4.66%	-7.25	48.43
9	Community, Social & Personal Services	229730 15.03%	21040 12.50%	303557 13.80%	31501 11.08%	578945 23.87%	81612 19.27%	11.00	121.58
10	Others			157996 7.18%	11798 4.15%	29257 1.21%	3979 0.94%	23.54	-56.84
	TOTAL	1528264 100.00%	168296 100.00%	2199381 100.00%	284207 100.00%	2425882 100.00%	423419 100.00%		

Source : Economic Census 1971, 1980 & 1990.

Table-4.10

Ward-wise Distribution of Employment in Greater Mumbai - 1990												
Ward	Est — Emp	0 Agri.	1 Min. & Qur.	2 & 3 Mnfg.	4 E.G. & W.	5 Const.	6 Trade	7 Trans.	8 Finance	9 Services	10 Others	Total
A	Est	57	0	1165	59	284	13415	1564	5923	3925	994	27386
	Emp	534	0	11923	946	2871	83716	20180	119581	108162	13372	361285
B	Est	1	0	1254	15	94	13131	3634	1150	1865	134	21278
	Emp	1	0	6340	36	356	49647	18310	7636	10423	614	93363
C	Est	1	3	3301	7	141	26710	2576	1685	2934	603	37961
	Emp	2	15	16251	53	431	93518	9124	10004	15478	2485	147361
D	Est	3	0	2595	5	189	10593	438	1097	4642	267	19829
	Emp	7	0	18197	35	719	43932	2091	10828	36471	1555	113835
C.B.D.	Est	62	3	8315	86	708	63849	8212	9855	13366	1998	106454
	Emp	544	15	52711	1070	4377	270813	49705	148049	170534	18026	715844
E	Est	9	0	7147	35	156	12375	1503	773	4718	296	27012
	Emp	33	0	67253	188	704	44870	7293	6181	37226	1413	165161
F	Est	14	2	3359	34	242	14486	1315	888	7250	190	27780
	Emp	101	4	52945	330	1932	47036	13992	11242	69645	942	198169
G	Est	84	9	8264	56	346	19427	2265	1409	9014	339	41213
	Emp	189	30	100160	1118	1685	67314	13511	20267	63099	2820	270193
Rest of Island	Est	107	11	18770	125	744	46288	5083	3070	20982	825	96005
	Emp	323	34	220358	1636	4321	159220	34796	37690	169970	5175	633523
H	Est	179	5	2174	45	581	13218	1027	864	6118	45	24256
	Emp	743	23	12905	5702	1567	35907	12777	8030	38079	200	115933
K	Est	321	10	9087	40	626	17595	1431	1625	8513	261	39509
	Emp	1902	140	93695	446	2354	60464	6946	18150	46255	1571	231923
L	Est	50	24	5371	51	279	12664	1970	403	4603	329	25744
	Emp	303	102	53862	368	833	35388	6300	2755	19473	1592	120976
M	Est	74	1	5676	53	533	12474	1290	758	6141	78	27078
	Emp	181	1	37604	341	1224	28567	4204	6860	30642	400	110024
N	Est	87	0	3309	41	472	10727	1245	640	4995	128	21644
	Emp	218	0	27653	102	916	25015	4620	7357	23990	963	90834
P	Est	668	2	11701	63	752	13998	1310	1069	6660	163	36386
	Emp	4638	9	80308	396	2042	35378	7063	7121	28539	716	166210
R	Est	324	1	5355	30	696	13015	1076	877	5889	122	27385
	Emp	1338	1	56151	260	1785	30530	2375	5341	25663	458	123902
S	Est	72	3	2128	10	104	4794	338	200	2128	12	9789
	Emp	193	23	33744	284	221	12552	945	4506	10346	29	62843
T	Est	38	0	1609	22	161	4294	432	377	2217	18	9168
	Emp	108	0	21630	392	442	11293	1741	2682	15454	127	53869
Suburbs	Est	1813	46	46410	355	4204	102779	10119	6813	47264	1156	220959
	Emp	9624	299	417552	8291	11384	275094	46971	62802	238441	6056	1076514
Gr.Mumbai	Est	1982	60	73495	566	5656	212916	23414	19738	81612	3979	423418
	Emp	10491	348	690621	10997	20082	705127	131472	248541	578945	29257	2425881

Source : Economic Census 1990

Table-4.11

Spatial Distribution of Employment in Greater Mumbai in 1971, 1980 and 1990.													
Location		0 Agri.	1 Min. & Qur.	2 & 3 Mnfg. Gr.	4 E.G.& W.	5 Const.	6 Trade	7 Trans.	8 Finance	9 Services	10 Others	Total	% Emp. in G.Mumbai
C.B.D.	1971	27	0	10752	50	278	31042	2235	13191	5582	0	63157	
		0.04%	0.00%	17.02%	0.08%	0.44%	49.15%	3.54%	20.89%	8.84%	0.00%	100.00%	
Establishments	1980	74	5	13231	149	795	45422	4045	7205	8370	6968	86264	
		0.09%	0.01%	15.34%	0.17%	0.92%	52.65%	4.69%	8.35%	9.70%	8.08%	100.00%	
	1990	62	3	8315	86	708	63849	8212	9855	13366	1998	106454	
		0.06%	0.00%	7.81%	0.08%	0.67%	59.98%	7.71%	9.26%	12.56%	1.88%	100.00%	
	1971	250	0	67216	1966	2538	134908	58504	149564	100447	0	515393	33.72%
		0.05%	0.00%	13.04%	0.38%	0.49%	26.18%	11.35%	29.02%	19.49%	0.00%	100.00%	
Employment	1980	329	585	93508	7377	6751	213678	104526	104286	102034	73983	707057	32.15%
		0.05%	0.08%	13.22%	1.04%	0.95%	30.22%	14.78%	14.75%	14.43%	10.46%	100.00%	
	1990	544	15	52711	1070	4377	270813	49705	148049	170534	18026	715844	29.51%
		0.08%	0.00%	7.36%	0.15%	0.61%	37.83%	6.94%	20.68%	23.82%	2.52%	100.00%	
Rest of Island	1971	81	0	15490	128	79	23990	2676	2051	7114	0	51609	
		0.16%	0.00%	30.01%	0.25%	0.15%	46.48%	5.19%	3.97%	13.78%	0.00%	100.00%	
Establishments	1980	244	8	22919	217	405	35462	3758	1608	8626	2774	76021	
		0.32%	0.01%	30.15%	0.29%	0.53%	46.65%	4.94%	2.12%	11.35%	3.65%	100.00%	
	1990	107	11	18770	125	744	46288	5083	3070	20982	825	96005	
		0.11%	0.01%	19.55%	0.13%	0.77%	48.21%	5.29%	3.20%	21.86%	0.86%	100.00%	
	1971	853	0	359601	9161	902	78614	40576	26119	67621	0	583447	38.18%
		0.15%	0.00%	61.63%	1.57%	0.15%	13.47%	6.95%	4.48%	11.59%	0.00%	100.00%	
Employment	1980	728	76	357519	1961	2102	127034	44311	15261	90246	53017	692255	31.47%
		0.11%	0.01%	51.65%	0.28%	0.30%	18.35%	6.40%	2.20%	13.04%	7.66%	100.00%	
	1990	323	34	220358	1636	4321	159220	34796	37690	169970	5175	633523	26.12%
		0.05%	0.01%	34.78%	0.26%	0.68%	25.13%	5.49%	5.95%	26.83%	0.82%	100.00%	
Suburbs	1971	1386	2	13593	136	106	27209	1228	1526	8344	0	53530	
		2.59%	0.00%	25.39%	0.25%	0.20%	50.83%	2.29%	2.85%	15.59%	0.00%	100.00%	
Establishments	1980	2564	18	35261	430	1572	59042	3905	2569	14505	2056	121922	
		2.10%	0.01%	28.92%	0.35%	1.29%	48.43%	3.20%	2.11%	11.90%	1.69%	100.00%	
	1990	1813	46	46410	355	4204	102779	10119	6813	47264	1156	220959	
		0.82%	0.02%	21.00%	0.16%	1.90%	46.51%	4.58%	3.08%	21.39%	0.52%	100.00%	
	1971	10521	208	243129	3198	2085	68523	28256	11842	61662	0	429424	28.10%
		2.45%	0.05%	56.62%	0.74%	0.49%	15.96%	6.58%	2.76%	14.36%	0.00%	100.00%	
Employment	1980	22032	259	340053	5050	5175	204879	61046	19302	111277	30996	800069	36.38%
		2.75%	0.03%	42.50%	0.63%	0.65%	25.61%	7.63%	2.41%	13.91%	3.87%	100.00%	
	1990	9624	299	417552	8291	11384	275094	46971	62802	238441	6056	1076514	44.38%
		0.89%	0.03%	38.79%	0.77%	1.06%	25.55%	4.36%	5.83%	22.15%	0.56%	100.00%	
Greater Mumbai	1971	1494	2	39835	314	463	82241	6139	16768	21040	0	168296	
		0.89%	0.00%	23.67%	0.19%	0.28%	48.87%	3.65%	9.96%	12.50%	0.00%	100.00%	
Establishments	1980	2882	31	71411	796	2772	139926	11708	11382	31501	11798	284207	
		1.01%	0.01%	25.13%	0.28%	0.98%	49.23%	4.12%	4.00%	11.08%	4.15%	100.00%	
	1990	1982	60	73495	566	5656	212916	23414	19738	81612	3979	423418	
		0.47%	0.01%	17.36%	0.13%	1.34%	50.29%	5.53%	4.66%	19.27%	0.94%	100.00%	
	1971	11624	208	669946	14325	5525	282045	127336	187525	229730	0	1528264	100.00%
		0.76%	0.01%	43.84%	0.94%	0.36%	18.46%	8.33%	12.27%	15.03%	0.00%	100.00%	
Employment	1980	23089	920	791080	14388	14028	545591	209883	138849	303557	157996	2199381	100.00%
		1.05%	0.04%	35.97%	0.65%	0.64%	24.81%	9.54%	6.31%	13.80%	7.18%	100.00%	
	1990	10491	348	690621	10997	20082	705127	131472	248541	578945	29257	2425881	100.00%
		0.43%	0.01%	28.47%	0.45%	0.83%	29.07%	5.42%	10.25%	23.87%	1.21%	100.00%	

Source : Economic Census - 1971, 1980 & 1990.

Table-4.12

The rest of the MMR i.e. MMR excluding Greater Mumbai had an employment of 6.09 lakhs in 87,720 establishments in 1980 which has increased to 7.97 lakhs and 1.62 lakhs respectively in 1990. The distribution of employment in various towns and rural areas is presented in Table-4.14. Bhiwandi urban in 1990 has the highest employment of 1.71 lakhs followed by 1.54 lakhs in Thane and 1.32 lakhs in Kalyan. The manufacturing sector dominates in outer MMR as about 50% of the total employment in 1990 is found in this sector.

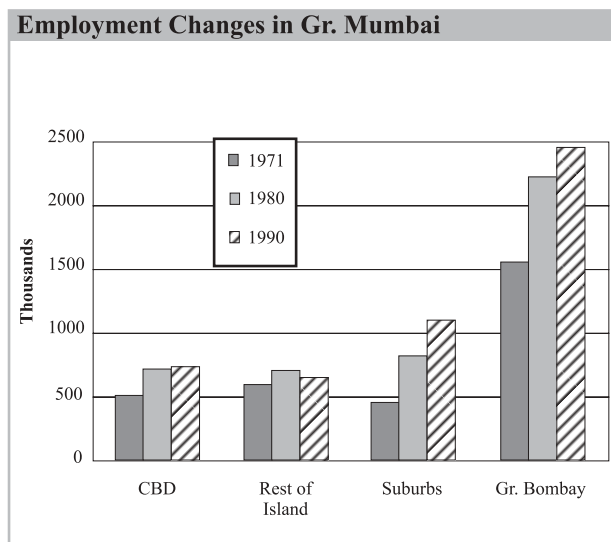


Figure 4.3

Establishment Size wise Distribution

The establishments employing between 2 and 4 employees are 1.86 lakhs out of the total of 4.23 lakhs in Mumbai in 1990 (Table-4.15 and Figure-4.4). Those with one

Locational Distribution of Employment in Office Sector in Greater Mumbai - 1980 & 1990.						
Area	1980			1990		
	Establishment	Employment	Emp./Est.	Establishment	Employment	Emp./Est.
C.B.D.	11815 50.65%	192888 54.72%	16.33	16619 39.21%	298716 47.50%	17.97
Rest of Island City	4250 18.22%	70435 19.98%	16.57	8408 19.84%	136023 21.63%	16.18
Suburbs	7260 31.13%	89145 25.29%	12.28	17352 40.94%	194077 30.86%	11.18
Greater Mumbai	23325 100.00%	352468 100.00%	15.11	42380 100.00%	628817 100.00%	14.84

Note : Two digit N.I.C. division representing office sector used are 73,80 to 89, 90, 92, 94, 95 and 98.

Source : Economic Census 1980 & 1990.

Table-4.13

employee, may be on own account, are 1.34 lakhs followed by 0.68 lakhs employing between 5 and 9 persons.

Thus, a trend is emerging of smaller establishments i.e. those employing less than five persons account for 75% of the total establishments.

The establishments employing more than 100 persons are 1,850 and account for 6.74 lakhs of employment. Those employing between 10 and 99 covered 5.54 lakhs while those between 5 and 9 covered

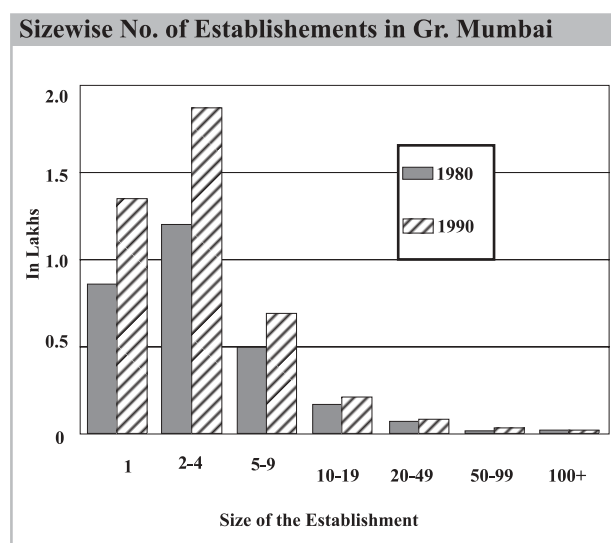


Figure 4.4

Town/Village-wise number of Establishments & Employment in outer MMR according to NIC Divisions - NEC 1990.												
Town/ village	Est — Emp	0 Agri.	1 Min. & Qur.	2 & 3 Mnfg.	4 E.G.& W.	5 Const.	6 Trade	7 Trans.	8 Finance	9 Services	10 Others	Total
Vasai (U)	Est — Emp	59 143	0 0	183 706	4 83	7 24	717 1385	110 899	36 344	474 1851	0 0	1590 5435
Virar (U)	Est — Emp	7 32	0 0	400 2853	5 62	11 20	869 1608	97 245	91 325	340 1157	0 0	1820 6302
Sopara (U)	Est — Emp	7 8	0 0	252 945	0 0	27 60	850 1865	11 15	17 89	253 910	0 0	1417 3892
Manikpur (U)	Est — Emp	2 2	2 52	87 420	0 0	5 51	204 447	2 2	4 57	97 357	0 0	403 1388
Sandor (U)	Est — Emp	13 36	0 0	49 281	0 0	5 5	58 127	0 0	6 60	27 194	0 0	158 703
Gokhivare (U)	Est — Emp	57 380	1 50	66 514	0 0	12 24	74 195	15 38	2 9	44 128	0 0	271 1338
Navghar (U)	Est — Emp	4 6	0 0	438 2971	0 0	14 39	938 2688	38 103	59 305	322 1029	0 0	1813 7141
Vasai (R)	Est — Emp	852 2595	152 959	1272 7993	6 42	89 285	2041 4360	190 743	49 190	983 2980	0 0	5634 20147
Kalyan (U)	Est — Emp	545 1751	8 160	4159 51812	57 1306	704 2046	15186 32384	995 4194	1068 7415	7329 30671	0 0	30051 131739
Kalyan (R)	Est — Emp	414 755	4 23	131 551	0 0	53 73	342 453	17 27	5 11	320 643	0 0	1286 2536
U'Nagar (U)	Est — Emp	207 654	1 2	3645 27838	17 125	179 521	8966 18884	539 1326	483 1849	2716 10681	0 0	16753 61880
U'Nagar (R)	Est — Emp	211 414	0 0	99 440	1 15	44 56	574 929	18 36	6 15	280 556	0 0	1233 2461
Thane (U)	Est — Emp	300 906	36 618	4656 72759	32 250	420 1654	13040 31254	1002 3779	930 8101	6118 34548	2 5	26536 153874
Thane (R)	Est — Emp	14 38	24 485	43 236	0 0	26 28	99 201	15 134	0 0	63 132	0 0	284 1254
Mira-Bhayandar (U)	Est — Emp	269 978	0 0	4195 27324	18 87	114 362	4083 10274	227 740	266 975	1215 3979	0 0	10387 44719
New Bombay (U)	Est — Emp	136 283	0 0	1598 34581	36 258	205 1396	4111 13911	571 2141	484 3938	1894 11261	0 0	9035 67769
Bhivandi (U)	Est — Emp	213 513	5 22	11880 128968	12 265	111 357	7168 18646	981 3546	305 1151	3826 15890	1 2000	24502 171358
Khoni (U)	Est — Emp	0 0	0 0	62 1260	0 0	0 0	84 100	0 0	3 3	35 42	0 0	184 1405

Table : 4.14 Contd.

Town/ village	Est — Emp	0 Agri.	1 Min. & Qur.	2 & 3 Mnfg.	4 E.G.& W.	5 Const.	6 Trade	7 Trans.	8 Finance	9 Services	10 Others	Total
Kon	Est	3	0	53	0	3	142	92	2	69	0	364
(U)	Emp	7	0	292	0	8	276	191	2	165	0	941
Bhivandi	Est	585	171	867	0	123	2245	1158	45	1420	0	6614
(R)	Emp	1091	1331	9538	0	664	4359	3852	137	4304	0	25276
Karjat	Est	312	3	196	35	90	513	45	22	321	0	1537
(R)	Emp	661	10	546	157	94	801	84	40	693	0	3086
Pen	Est	33	2	260	1	31	548	60	19	247	1	1202
(U)	Emp	271	7	1122	30	71	1184	296	257	1115	4	4357
Pen	Est	230	38	251	4	76	460	87	12	390	0	1548
(R)	Emp	551	240	1372	14	93	931	110	47	1086	0	4444
Panvel	Est	7	3	351	11	62	1413	218	72	639	0	2776
(U)	Emp	11	5	1323	190	195	3231	1488	486	3164	0	10093
Taloje Panchal	Est	0	0	37	0	8	105	23	1	38	0	212
(U)	Emp	0	0	213	0	8	193	46	5	90	0	555
N. Mumbai Panvel	Est	34	4	275	3	49	561	136	20	263	114	1459
(U)	Emp	77	92	3799	25	68	2554	237	106	723	2000	9681
Panvel	Est	531	44	452	10	118	1316	253	16	700	20	3460
(R)	Emp	1368	278	4776	122	294	2706	839	61	2320	372	13136
Alibag	Est	97	0	100	3	10	451	31	36	373	0	1101
(U)	Emp	587	0	391	79	103	1268	819	317	3603	0	7167
Alibag	Est	293	0	391	7	96	838	111	14	594	0	2344
(R)	Emp	881	0	3075	56	157	1523	204	71	1815	0	7782
Uran	Est	20	2	103	1	27	483	60	18	239	0	953
(U)	Emp	42	813	418	1	130	1110	187	147	1164	0	4012
Kegaon	Est	18	0	7	0	0	25	6	0	7	0	63
(U)	Emp	42	0	320	0	0	47	6	0	11	0	426
Uran	Est	293	1	229	6	96	753	121	14	371	0	1884
(R)	Emp	1896	2	580	360	529	1154	287	51	1147	0	6006
Khopoli	Est	27	2	238	32	43	655	108	27	344	0	1476
(U)	Emp	52	17	5959	389	335	1463	504	185	1947	0	10851
Khalapur	Est	94	3	148	6	34	548	87	12	310	0	1242
(R)	Emp	301	5	605	45	106	1026	159	55	938	0	3240
Grand Total	Est	5887	506	37173	307	2892	70460	7424	4144	32661	138	161592
	Emp	17332	5171	396781	3961	9856	163537	27277	26804	141294	4381	796394

Source : Economic Census 1990.

Ward-wise number of Establishments and Employment in Gr. Mumbai according to Size of the Establishment - NEC 1980 & 1990.

Ward	Year	Total		1		2 - 4		5 - 9		10 - 19		20 - 49		50 - 99		100 +	
		Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp
A	1980	19568	329159	3172	2675	7110	19777	4544	29894	2207	29154	1459	43991	546	37412	530	166456
	1990	27386	361285	5597	5597	10119	28186	5526	35871	2931	39446	2051	61621	701	47863	461	142701
	1980	17174	103395	2945	2892	8280	23311	4217	26793	1294	16350	327	9186	62	4200	49	20663
	1990	21278	93363	4204	4204	11137	31751	4519	27961	13425	1059	8100	56	3626	20	4296	
	1980	30409	140453	5827	5556	15306	42797	7253	45573	1621	20121	325	8931	56	3591	21	13884
C	1990	37961	147361	7684	7684	20761	58463	7914	47843	1271	15607	259	7235	53	3311	19	7218
	1980	19113	134155	4682	4054	8474	23719	4018	25487	1255	16258	468	13614	136	9400	80	41623
	1990	19829	113835	4521	4521	9745	26986	3749	23435	1181	15187	475	13598	90	6205	68	23903
C.B.D.	1980	86264	707162	16626	15177	39170	109604	20032	127547	6377	81883	2579	75722	800	54603	680	242626
	1990	106454	715844	22006	22006	57162	145386	21708	135110	6442	83665	3068	90554	900	61005	568	178118
E	1980	25041	192309	6489	5885	11279	31067	4845	30918	1643	20707	525	14923	132	8818	128	79991
	1990	27012	165161	5555	5555	13633	37539	5753	35963	1436	17868	452	12369	79	5070	104	50797
F	1980	19076	200462	6607	6221	8004	21161	2655	16820	1080	13744	472	13831	131	8658	127	120027
	1990	27780	198169	10581	10581	11315	29950	3593	22941	1328	17331	592	17210	173	11767	198	88389
G	1980	31904	299484	9907	9793	13147	34841	5269	34419	2110	27215	912	27057	243	16127	316	150032
	1990	41213	270193	13270	13270	17316	46850	6819	43509	2371	30381	964	27847	261	17758	212	90578
Rest of Island	1980	76021	692255	23003	21899	32430	87069	12769	82157	4833	61666	1909	55811	506	33603	571	350050
	1990	96005	633523	29406	29406	42264	114339	16165	102413	5135	65580	2008	57426	513	34595	514	229764
H	1980	17465	85102	7253	7093	7391	19161	1873	11884	582	7461	246	7495	69	4616	51	27392
	1990	24256	115933	9862	9862	10418	27487	2697	16826	774	10177	328	9560	103	6916	74	35105
K	1980	18733	155367	6369	6300	7819	20656	2600	17000	1166	15128	517	15040	133	8997	129	72246
	1990	39509	231923	12955	12955	16459	44352	6413	40827	2336	30076	894	25978	230	15192	222	62543
P	1980	25163	175332	8297	8036	9415	25059	4768	31844	1879	23949	584	16199	126	8374	94	75850
	1990	36386	166210	11529	11529	15419	41662	6677	42639	1962	24608	597	16850	128	8071	74	20851
R	1980	13910	90643	6133	6035	5282	13565	1448	9472	609	7941	298	8946	65	4369	75	40315
	1990	27385	123902	11253	11253	11451	29824	3027	19110	1048	13334	437	12309	94	6390	75	31682
L	1980	14204	109696	5439	5019	5907	15384	1821	11656	591	7628	271	7869	82	5357	93	56783
	1990	25744	120976	8590	8590	11507	30647	3951	24953	1154	14560	375	10533	104	6888	63	24805
M	1980	13563	64654	5705	5487	5788	14642	1312	8198	451	5892	198	5859	60	3978	49	20598
	1990	27078	110024	11868	11868	11168	29318	2711	16987	810	10323	356	10530	93	6354	72	24644
N	1980	14215	89957	6271	5883	5697	14762	1409	8999	490	6289	190	5752	73	5189	85	43083
	1990	21644	90834	9656	9656	8425	21985	2245	14243	790	10178	369	10582	84	5888	75	18302
T	1980	4667	29356	1803	1756	1885	4883	564	3592	220	2916	118	3472	41	2619	36	10118
	1990	18957	116712	7455	7455	7912	20643	2306	14565	740	9545	335	9475	96	6632	113	48397
Suburbs	1980	121920	800107	47270	45609	49184	128112	15795	102645	5988	77204	2422	70632	649	43499	612	346385
	1990	220959	1076514	83168	83168	92759	245918	30027	190150	9614	122801	3691	105817	932	62331	768	266329
Gr.Mumbai	1980	284205	2199524	86899	82685	120784	324785	48596	312349	17198	27198	6910	202165	1955	131705	1863	939061
	1990	423418	2425881	134580	134580	186785	505643	67900	427673	21911	272046	8767	253797	2345	157931	1850	674211
% to Total	1980	100.00%	100.00%	30.58%	3.76%	42.50%	14.77%	17.10%	14.20%	6.05%	10.04%	2.43%	9.19%	0.69%	5.99%	0.66%	42.69%
	1990	100.00%	100.00%	31.78%	5.55%	44.11%	20.84%	16.04%	17.63%	5.00%	11.21%	2.07%	10.46%	0.55%	6.51%	0.44%	27.79%

Source : Economic Census 1980 & 1990.

Table-4.15

4.26 lakhs of employment (Figure-4.5).

The distribution of establishments according to employment size in the rest of MMR is given in Table-4.16 Like in Mumbai, the establishments employing less than 4 persons constitute a major share viz. 79.36% of the total of 1.62 lakh establishments. The establishments employing more than 100 persons are just 497 (0.31%) but cover 20.6% of the total employment.

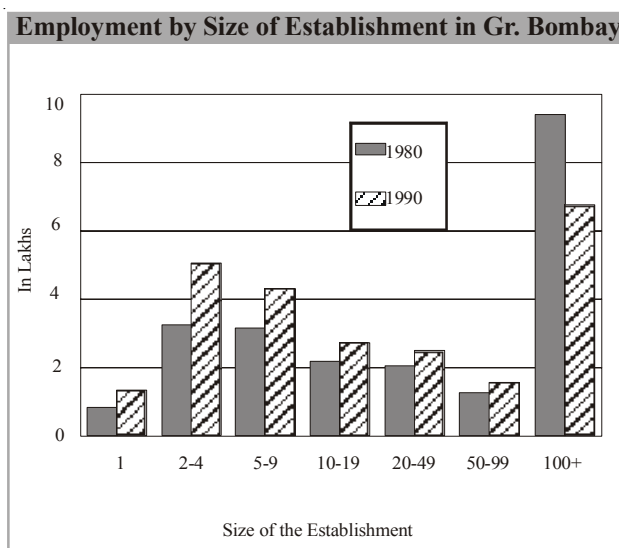


Figure 4.5

Employment Market Information Report

The data from Regional Employment Exchanges of Greater Mumbai, Thane and Alibag have been collected to analyse the changes in employment in public sector and private sector establishments employing more than 24 persons in Mumbai and employing more than 10 persons in the rest of the MMR. The data are grouped in the following six categories of employment:

1. Central Government;
2. State Government;
3. Quasi Central Government;
4. Quasi State Government;
5. Local Bodies; and
6. Private Sector (employing more than 24 persons in Greater Mumbai and more than 10 persons in Thane and Raigad districts).

Employment changes in Greater Mumbai

The category-wise employment variation in Greater Mumbai over the period 1980-90 is presented in Table-4.17. The public sector employment has grown from 6.39 lakh in 1980 to 7.11 lakh in 1990. The private sector employment has however showed a marked decline from 6.22 lakhs to 4.69 lakhs over the same period. The total employment in the organised sector in Greater Mumbai has therefore decreased by 7% i.e. from 12.61 lakhs in 1980 to 11.8 lakhs in 1990. Only the employment in Quasi-Central Govt. has increased but in Central Govt. it has decreased by more than 10,000, while that in Quasi- State Govt. has remained more or less constant. The private sector employment has shown sudden reduction in 1983 and the declining trend has continued. These changes are clearly brought in Figure-4.6.

The data about number of establishments in various categories in Greater Mumbai are given in Table-4.18. There is a marginal change in number of establishments in public sector except those under Quasi-Central Government where the number has increased from 307 in 1980 to 577 in 1990. The number of private sector establishments has declined from 2,656 in 1980 to 2129 in 1990.

Tehsil-wise number of Establishments and Employment according to Size of the Establishment - NEC 1990																	
Tehsil	Total		1		2-4		5-9		10-19		20-49		50-99		100+		% Emp. in 50+
	Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp	Est	Emp	
Thane (R)	284	1254	146	146	88	215	21	136	15	206	13	452	1	99	0	0	7.89
Thane (U)	45958	266362	16745	16745	19285	50433	6151	39154	2250	29320	1016	29269	265	17646	246	83795	38.08
Bhiwandi (R)	6614	25276	3170	3170	2416	5934	529	3472	335	4200	139	3723	12	863	13	3914	18.90
Bhiwandi (U)	25050	173704	4935	4935	9637	27424	4180	27500	4625	63545	1579	41125	75	4507	19	4668	5.28
Ulhasnagar (R)	1233	2461	731	731	446	1038	33	203	12	155	10	262	1	72	0	0	2.93
Ulhasnagar (U)	16753	61880	7149	7149	7089	18446	1894	11785	443	5656	135	3794	29	1967	14	13083	24.32
Kalyan (R)	1286	2536	708	708	535	1192	26	172	12	145	4	119	0	0	1	200	7.89
Kalyan (U)	30051	131739	13782	13782	12138	30716	2522	15738	866	11389	474	14259	146	9966	123	35889	34.81
Vasai (R)	5634	20147	2363	2363	2280	5786	602	3865	270	3500	100	2755	13	852	6	1026	9.32
Vasai (U)	7472	26199	2972	2972	3216	8247	852	5414	302	3826	101	2711	20	1363	9	1666	11.56
Khalapur (R)	1242	3240	593	593	522	1228	80	519	32	409	14	423	1	68	0	0	2.10
Khalapur (U)	1476	10851	667	667	528	1356	138	890	69	903	44	1380	14	955	16	4700	52.12
Karjat (R)	1537	3086	843	843	613	1417	61	381	13	174	4	100	3	171	0	0	5.54
Karjat (U)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pen (R)	1548	4444	805	805	516	1250	155	1025	59	730	11	310	1	55	1	269	7.29
Pen (U)	1202	4357	526	526	484	1186	118	730	53	671	15	447	3	217	3	580	18.29
Panvel (R)	3460	13136	1729	1729	1338	3160	250	1603	87	1058	40	1148	10	634	6	3804	33.79
Panvel (U)	4447	20329	2049	2049	1710	4341	407	2562	141	1832	90	2575	30	2083	20	4887	34.29
Alibag (R)	2344	7782	1233	1233	892	2132	138	873	48	601	26	772	4	245	3	1926	27.90
Alibag (U)	1559	8318	699	699	511	1291	206	1350	78	1018	44	1293	12	749	9	1918	32.06
Uran (R)	1884	6006	1089	1089	552	1292	144	1013	58	779	35	1052	3	165	3	616	13.00
Uran (U)	1016	4438	458	458	419	1066	81	509	35	447	16	451	2	138	5	1369	33.96
TOTAL	162050	797545	63392	63392	65215	169150	18588	118894	9803	130564	3910	108420	645	42815	497	164310	25.97
% TO TOTAL	100.00	100.00	39.12	39.12	40.24	21.21	11.47	14.91	6.05	16.37	2.41	13.59	0.40	5.37	0.31	20.60	

Table-4.16

Source : Economic Census 1990.

Sector-wise Employment in Greater Mumbai 1980-90										(In Thousands)	
Sector\Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Central Govt.	240	241	222	220	228	229	226	227	230	228	224
State Govt.	70	74	74	74	75	75	75	74	59	74	83
Quasi Govt. (Central)	185	190	214	231	238	252	252	246	238	244	242
Quasi Govt. (State)	15	13	14	17	15	15	15	16	16	15	17
Local Bodies	129	134	135	138	138	139	140	148	151	144	145
Total (Public Sector)	639	652	659	680	694	710	708	711	695	705	711
Private Sector	622	624	620	568	528	514	501	490	476	465	469
Total (Pub+Pvt)	1261	1276	1279	1248	1222	1224	1209	1201	1171	1170	1180

Source : Employment Market Information Reports for Greater Mumbai.

Table-4.17

Sector-wise Establishments in Greater Mumbai 1980-90.											
Sector\Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Central Govt.	234	234	233	233	235	235	233	225	211	223	222
State Govt.	219	223	224	224	222	222	232	230	199	229	229
Quasi Govt. (Central)	307	318	528	541	545	551	553	553	554	560	577
Quasi Govt. (State)	37	39	53	56	57	60	63	70	69	70	70
Local Bodies	89	86	86	86	86	87	85	85	81	86	86
Total (Public Sector)	886	900	1124	1140	1145	1155	1166	1163	1114	1168	1184
Private Sector	2656	2291	2280	2249	2219	2111	2067	2098	1998	2092	2129
Total (Pub+Pvt)	3542	3191	3404	3389	3364	3266	3233	3261	3112	3260	3313

Source : Employment Market Information Reports for Greater Mumbai.

Table-4.18

The general restrictive policy regarding recruitment has resulted in near constant or decline in employment in the case of Central Government, State Government and Quasi-State Government in Mumbai. The vacancies created in these categories by superannuation, resignation, voluntary retirement, etc. are either not filled or filled to the minimum possible extent. The Quasi-Central Government employment and number of establishments have nevertheless shown the increase

in Mumbai mainly on account of expansion of branches of the nationalised banks, spurt in the activities of Oil and Natural Gas Commission, Jawaharlal Nehru Port at Nhava-Sheva, Mazgaon Docks, etc.

The employment in private sector is governed by many factors e.g. seasonal nature of production, temporary increase in production, strikes and lock-outs etc. It also happens that the number of employees in some months go below 25 and the establishments concerned in Mumbai stop reporting and many a time do not start reporting even if the number has increased subsequently. The analysis of the reasons

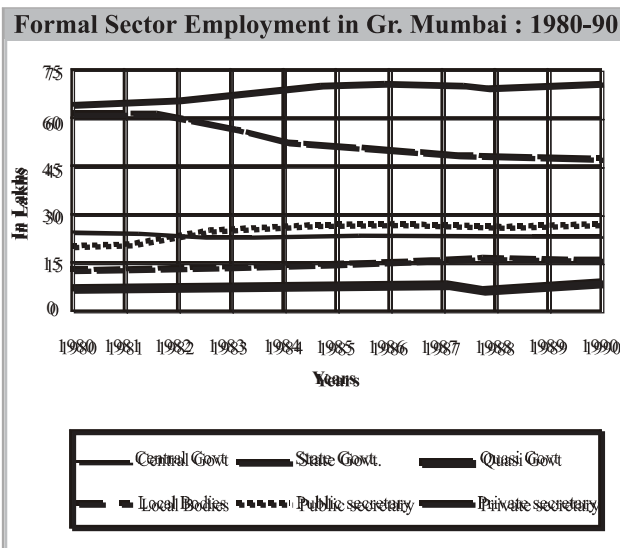


Figure 4.6

mentioned in various employment market reports of Mumbai bring out the following major reasons for decline in private sector employment:

1. discharge of badli workers;
2. termination of leave substitutes;
3. termination of casual workers in seasonal activities like circus, horse races, salt extraction and so on;
4. cut back in activities due to shortage of power supply and raw materials and decrease in demand;
5. strikes and closure of business; and
6. operation of voluntary retirement scheme.

The share of female employment in total of public and private sector employment in Greater Mumbai over the period 1980-88 is given in Table-4.19.

It can be seen that there is a steady growth in the share of female employment both in public and private sectors. Its share in public sector employment is relatively more than that in private sector.

Annual Survey of Industries

The time series data about employment in different manufacturing industries in Mumbai and MMR provide a fairly detailed comparative picture. The employment figures for Mumbai are given in Table-4.20.

Share of Female Employees		
Year	% Share of Female Employees	
	Public Sector	Private Sector
1980	12.85	7.40
1981	13.50	7.37
1982	14.51	7.42
1983	14.52	8.27
1984	14.41	8.90
1985	14.37	9.14
1986	14.69	9.58
1987	15.17	9.59
1988	17.46	9.50

Table-4.19

It can be seen from Table-4.20 that employment in cotton textile, textile products, wood and wood products, paper products, alloys and manufacturing industries has declined over 1980-81 to 1990-91 period although it has gone up in few cases during some in between years. The employment in the remaining manufacturing industries has shown growth. Noteworthy is the gain in employment in wool, silk and synthetic fibers manufacturing industry. The decline in employment in traditional cotton textile and near stagnation in chemical industry is clearly emerging. Other industries are not compensating the decline in employment in the traditional sector and therefore, the total manufacturing sector employment of 5.81 lakhs in 1980-81 has reduced to 4.21

Year wise Employment in different Industries of Greater Mumbai as per ASI records														
Nature of Industry	Industry Code	Total Employment in Greater Mumbai										Anul. Compd. Growth Rate 81 to 91		
		1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90		1990-91	
Food Processing Beverages Cotton Textiles Wool, Silk, Synthetic Fibre, Textile Textile Products Wood, Wood Products Paper Products Leather Products Rubber, Plastic, Petro. Products Chemicals & Products Non Mettalic Minerals Metals & Alloys Metal Products Machinery & Tools Electrical Machinery Transport Equipments Manufacturing Industries Repair Services	20 & 21	11843	15566	12569	13469	21619	22170	15545	18560	16610	17375	17556	4.02%	
	22	5268	5466	3592	3319	4795	6375	4635	4759	3378	3626	3368	-4.37%	
	23	121582	95969	69735	75854	68909	81868	82170	64271	62735	57367	62968	-6.37%	
	24 & 25	51330	62537	55549	55963	57795	80621	54966	60270	49694	50813	47905	-0.69%	
	26	20823	19891	17109	16202	14574	17400	16279	17236	19667	17738	18438	-1.21%	
	27	3342	2633	2818	2666	1759	2810	2349	2196	1681	1479	1527	-7.53%	
	28	29545	29134	27835	27378	25462	29649	24459	23839	20087	21005	20217	-3.72%	
	29	5385	1219	1140	964	2564	3154	2921	3065	3322	2841	3128	-5.29%	
	30	26371	27327	27782	26742	24316	26547	23864	45987	51957	50999	44553	5.38%	
	31	63237	62166	52190	53019	50064	82374	54981	19601	22728	20667	21113	-10.39%	
	32	13118	13430	11364	11054	10452	14425	10086	8685	8453	8769	8124	-4.68%	
	33	28787	24868	23143	21010	19027	28947	17765	13998	12765	11772	8256	-11.74%	
	34	38259	39594	37366	30685	33064	35227	29241	26338	30648	22156	24617	-4.31%	
	35	39816	38880	38704	39495	36224	50251	32629	37036	36358	39661	37449	-0.61%	
	36	45421	44226	40752	59481	44664	53793	41230	38853	38698	33845	37221	-1.97%	
	37	61733	60743	62106	44278	44443	46008	40577	34694	37005	28100	26837	-7.99%	
	38	14734	14344	12285	11148	10580	13912	10988	11824	12673	13478	12565	-1.58%	
	39									12451	11599	21956	24719\	
	Sub-Total		580594	557993	496039	492727	470311	595531	464685	443663	440058	423647	420561	-3.17%
Electricity, Gas & Steam	40 & 41	10650	13561	4591	4785	8487	6607	5097	5767	6869	9651	7813	-3.05%	
Water Works & Supply	42	212	288	188	160	670	689	457	147	2304	534	763	13.66%	
Storage, Warehousing	74	160	172	134	98	98	249	84	161	266	106	27	-16.30%	
Communications	75	0	0	0	0	58	0							
Sanitary Services	91	386	411	0	0	0	0							
Recreation & Cultural Services	95	1569	1399	0	0	0	0							
Personal Services	96	1587	1630	0	0	0	0							
Repair Services	97	7911	7874	8205	8247	9055	8972	8478	8035	4092	3420	4476	-5.54%	
SUB-TOTAL		22475	25335	13118	13290	18368	16517	14116	14110	13531	13711	13079	-5.27%	
GRAND TOTAL		603069	583328	509157	506017	488679	612048	478801	457773	453589	437358	433640	-3.24%	

Table-4.20

Source : Annual Survey Of Industries.

lakhs in 1990-91. The employment picture in service industry like water supply, repairs, etc. is following a similar declining trend.

The details of employment in MMR including Greater Mumbai are given in Table-4.21. The share of employment in Mumbai has not only dominated but has in fact increased in total manufacturing sector employment in MMR over the years in contrary to the expectation e.g. share of employment of Mumbai was 79.4% in 1980-81 which has gone up to 81.8% in 1990-91. This implies significant reduction in employment in the outer MMR. In terms of numbers, the employment in manufacturing sector in rest of MMR which was 1.64 lakhs in 1976-77 was reduced to 1.50 lakhs in 1980-81 and further to 0.93 lakhs in 1990-91. The changes in total employment for Mumbai and MMR as per ASI records for the period 1980-81 to 1990-91 is shown in Figure-4.7.

Inspectorate of Factories

The data on number of factories and workers in Greater Mumbai, Thane and Raigad districts in MMR along with the corresponding figures for Maharashtra since 1961 are presented in Table-4.22. It is seen that for Greater Mumbai as well as MMR, there has been a growth in employment in the periods 1961-71 and 1971-81, but, over 1981-91 there is a marked decline in this employment. It may however be noted that the number of factories covered has increased in Greater Mumbai, Thane and Maharashtra over all these years. This means, after 1981, the growth in number of factories is not necessarily contributing to the growth in employment. Till 1971, the share of Mumbai in number of factories in Maharashtra was more than 50 percent but in 1991 it came down to 32 percent. The maximum employment in Mumbai is 6.14 lakhs and for Thane is 1.33 lakhs both observed in the year 1980. The time-series on factory employment for 1961-91 period is presented in Figure-4.8.

Shops and Establishments Records

The Municipal Corporation of Greater Mumbai maintains records pertaining to shops, commercial establishments, residential hotels, restaurants

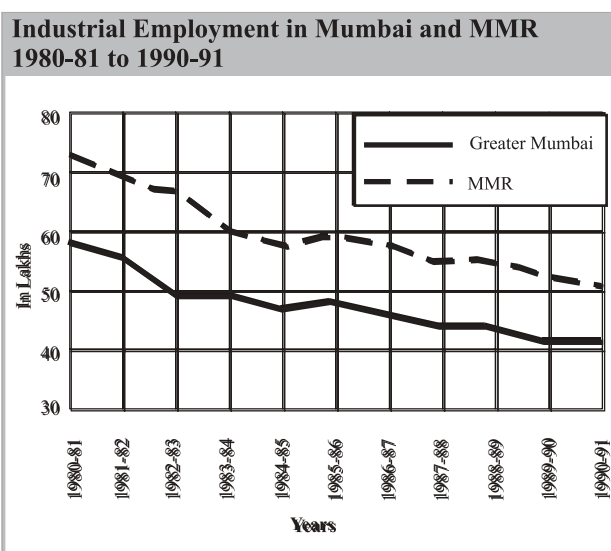


Figure 4.7

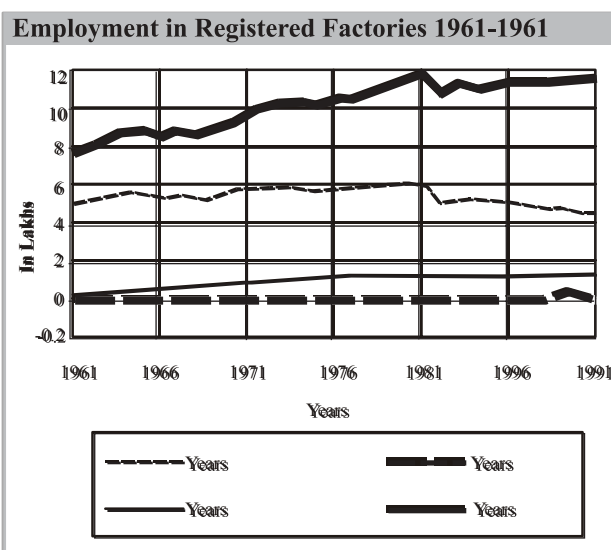


Figure 4.8

Year wise Employment in different Industries of MMR as per ASI records												
Nature of Industry	Industry Code	Total Employment in MMR										Anul. Compd. Growth Rate 1981 to 91
		1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Food Processing	20 & 21	18294	22037	19422	16955	26475	22170	20827	23731	21596	21347	23268
Beverages	22	6229	6322	4418	4006	5675	6375	5630	5877	4302	4855	4647
Cotton Textile	23	125278	99900	80449	79474	73615	81868	85731	69141	67576	63691	67724
Wool, Silk, Synthetic Fibre, Textile	24 & 25	65013	76460	76748	64269	66350	80621	60647	66420	56888	59874	54852
Textile Products	26	22626	21489	18941	17513	15542	17400	17304	18515	21140	18958	20217
Wood, Wood Products	27	4077	3341	3440	3018	2181	2810	2894	2407	1953	2292	1738
Paper Products	28	32882	32378	31311	30025	28065	29649	27218	26749	22844	23520	22308
Leather Products	29	5423	1271	1219	1177	2816	3154	3019	3364	3502	2945	3193
Rubber, Plastic, Petro. Products	30	31397	31856	32658	31150	27285	26547	27733	84452	91981	94417	85624
Chemicals & Products	31	110393	105654	92264	82574	77886	82374	89166	23342	26746	24403	26277
Non Metallic Minearls	32	18978	19479	16267	16795	14088	14425	14486	13472	13676	13254	13264
Metals & Alloys	33	46239	40462	45801	32030	30331	28947	26658	26055	24546	21117	18714
Metal Products	34	45757	46391	44746	37161	38222	35227	35952	32465	36746	29750	31161
Machinery & Tools	35	58391	52393	57962	57076	52921	50251	48679	51900	48327	53061	48202
Electrical Machinery	36	54107	53145	51922	67283	51653	53793	49634	48184	48810	43443	47339
Transport Equipments	37	68248	68016	69187	51266	51311	46008	46321	41361	43399	33600	31172
Manufacturing Industries	38	17446	16841	15705	13663	12899	13912	14365	14161	15233	15598	14813
Repair Services	39								12996	12505	24317	26951
Sub-Total		730778	697435	662460	605435	577315	595531	576264	564592	561770	550442	541464
Electricity, Gas & Steam	40 & 41	70499	17630	80331	5804	9335	6607	5853	6417	7550	10333	8149
Water Works and Supply	42	320	454	325	266	780	689	515	201	2430	810	828
Storage, Warehousing	74	160	242	134	166	118	249	158	161	330	106	30
Communications	75					58						
Public Admin. & Defense Services	90		411	138								
Sanitary services	91											
Community Services	94	386										
Recreation & Cultural Services	95	1569	1399									
Personal Services	96	1693	1784	80								
Repair Services	97	8951	8972	9290	8984	9997	8972	9278	8712	4171	3548	5059
International & Other	98			41								
SUB-TOTAL		83578	30892	90339	15220	20288	16517	15804	15491	14481	14797	14066
GRAND TOTAL		814356	728327	752799	620655	597603	612048	592068	580083	576251	565239	555530

Source : Annual Survey Of Industries.

Table-4.21

Factories and Employment as per Inspectorate of Factories records										
Year	Greater Mumbai		Thane		Raigad		Total		Maharashtra	
	No. of Factories	Workers	No. of Factories	Workers	No. of Factories	Workers	No. of Factories	Workers	No. of Factories	Workers
1961	4064	505390	493	35399	76	2943	4633	543732	8233	787379
1962	4326	522862	514	38820	77	3393	4917	565075	8762	810297
1963	4509	552389	534	45568	72	4164	5115	602121	9090	858780
1964	4626	572738	575	52710	70	4186	5271	629634	9207	893363
1965	4635	572447	674	62030	81	4673	5390	639150	9472	903293
1966	4490	552672	727	66302	82	4681	5299	623655	9043	879341
1967	4472	556351	788	71575	83	4810	5343	632736	9186	893822
1968	4571	539005	769	79319	81	5553	5421	623877	9116	887174
1969	4831	551937	825	88947	85	6091	5741	646975	9570	927098
1970	4933	568498	854	96601	86	6656	5873	671755	9863	951623
1971	5732	592646	965	107084	99	7866	6796	707596	10241	997675
1972	5139	586283	1048	113693	103	8820	6290	708796	10382	1006941
1973	5424	602542	1043	110522	116	9587	6583	722651	10663	1037875
1974	5707	588409	1143	122368	132	10194	6982	720971	10975	1038868
1975	5930	568876	1199	119515	144	10649	7273	699040	11425	1014727
1976	6155	579210	1354	126374	155	11567	7664	717151	11923	1048087
1977	6081	576559	1271	133324	152	12545	7504	722428	12344	1067914
1978	6617	599793	1204	129469	145	11758	7966	741020	13162	1101179
1979	7011	594918	1249	133535	133	12255	8393	740708	14164	1131915
1980	7382	614243	1220	133638	148	14007	8750	761888	15170	1176537
1981	7770	603785	1247	129047	150	14201	9167	747033	16594	1192129
1982	7541	510581	1255	126808	150	14609	8946	651998	17359	1098497
1983	7417	521076	1274	123776	144	14107	8835	658959	18007	1136833
1984	7562	524841	1251	114312	141	14323	8954	653476	18316	1119644
1985	7509	515080	1290	117784	123	14399	8922	647263	18922	1128806
1986	7761	515467	1279	114595	127	14535	9167	644597	19966	1149575
1987	7598	499297	1333	113310	122	14753	9053	627360	20609	1138000
1988	7860	474351	1484	117331	119	14383	9463	606065	21785	1134454
1989	7971	462956	1869	122244	223	23024	10063	608224	23057	1160065
1990	7933	444834	1950	125703	305	30054	10188	600591	23410	1162651
1991	7832	447492	2099	125273	315	26365	10246	599130	24119	1168570

Source : Inspectorate Of Factories.

Table-4.22

and eating houses and theatres in Greater Mumbai. The information about number of such establishments in city and suburbs and the total employment is included in its annual administrative report. The relevant details for the years 1984-85 and 1989-90 are given in Table-4.23. It is seen that there is an overall increase in number of establishments in each category in all parts of Mumbai. The employment has increased by 1,32,222 and stood at 9.02 lakhs in 1989-90. It may be noted that employment in commercial establishments in CBD has increased by 50,000 during 1985-90 period.

4.3.3 Employment in Informal Sector

The employment market is generally divided in two segments. One is called organised or formal sector and the other as unorganised or informal sector. In the literature there are many definitions and characterisations making distinction between the two (Joshi & Joshi, 1976; Papola, 1981)). The informal sector is formed by the workers engaged mainly as self-employed as against the wage labourers of the “enumerated” sector. The new entrants to the urban labour market, particularly migrants from rural areas, are forced to work in this informal sector for want of skills and experience required for the jobs in the formal sector. According to one definition (ILO, 1972) the informal sector has the following characteristics: easy entry for new enterprises, reliance on indigenous resources, family ownership, small scale of operations, unregulated and competitive market, labour intensive technology and informally acquired skill of workers.

One estimate of the employment in the informal sector in Mumbai in 1961 was made by deducting the figures of employment collected by Directorate of Employment from those of the census (Joshi & Joshi, 1976). This figure was 7.52 lakhs out of the total 1961 census employment figure of 16.87 lakhs i.e. 44.5%. About 30% of these persons were engaged in various services, 26.6% in trade and 25.9% in manufacturing activities.

Using the same definition of employment in formal sector viz. that in public sector and private sector having more than 24 employees in Greater Mumbai and the figures of the total employment from census and economic census of 1971, 1981 and 1991 the corresponding estimates of employment in the informal sector is given in Table-4.24.

It is seen that if the total employment as reported in primary census is taken then the share of informal sector employment is 49%, 55.4% and 65.6% in 1971, 1981 and 1991 respectively. On the other hand, if economic census total is used, the corresponding share of informal sector employment is 26.1%, 42% and 51.3%. In any case there is an indication of rising trend in the informal sector employment in Mumbai. If it is argued that the definition of formal sector should include employment in establishments employing more than 10 persons then another estimate of informal sector employment will be obtained. For instance, according to 1990 economic census the employment in establishments having less than 10 employees was 10.68 lakhs and if it is assumed to be completely in private sector, then the share of informal sector employment is 44%.

Growth of Employment in Registered Shops & Establishments in Greater Mumbai																																					
Ward	Shops						Commercial						Residential Hotels						Restaurants & Eating Houses						Theatres						Total						% Share in incr. growth in Emp. during 1985-90
	Est.		Emp.		Emp.		Est.		Emp.		Emp.		Est.		Emp.		Est.		Emp.		Est.		Emp.		Est.		Emp.		Est.		Emp.						
	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90	84-85	89-90							
A	6926	6092	23527	13810	16964	19555	96368	169653	169	155	5925	7856	1002	473	10886	9399	1	17	488	358	25062	26292	137194	201076	48.31%												
B	7681	5307	16703	17393	11309	8623	43467	44402	68	73	267	294	477	484	3409	3604	11	1	33	33	19546	14488	63879	65726	1.40%												
C	20965	19612	33954	33538	16471	16867	35358	20860	49	64	317	446	4052	633	6310	6111	6	11	72	75	41543	37187	76011	61030	-11.33%												
D	12229	12253	35525	36460	7949	8472	59102	48736	92	92	880	1130	890	897	7050	5540	45	40	651	518	21205	21754	103208	92384	-8.19%												
C.B.D.	47801	49952	109709	101201	52693	53517	234295	283651	378	384	7389	9726	6421	2487	27655	24654	63	69	1244	984	107356	106409	380292	420216	30.19%												
E	9680	9625	11502	15494	6197	7120	25488	19761	30	35	217	354	840	885	5997	6156	11	14	167	168	16758	17679	43371	41933	-1.09%												
F	10363	11008	12612	15595	3449	4027	18854	22419	45	47	274	449	957	966	6016	6547	24	27	311	365	14838	16075	38067	45375	5.53%												
G	13349	14286	15143	18190	8157	11130	51480	65558	42	39	1112	895	1337	1539	8128	8755	19	20	1589	1042	22904	27014	77452	94440	12.85%												
Island City	81193	84871	148966	150480	70496	75794	330117	391389	495	505	8992	11424	9555	5877	47796	46112	117	130	3311	2559	161856	167177	539182	601964	47.48%												
H	9305	11412	8529	12302	2476	4199	11830	12576	58	65	1261	1538	605	655	4078	4323	17	20	308	298	12461	16351	26006	31037	3.80%												
K	12464	15675	24394	25910	5296	9058	27798	56304	60	94	3420	4804	1111	1236	5867	6611	25	26	289	262	18956	26089	61768	93891	24.29%												
P	8452	9210	7274	10250	5765	7763	35057	38979	24	32	140	175	631	707	3569	3820	9	13	166	147	14881	17725	46206	53371	5.42%												
R	6885	10802	7854	10667	2033	3813	8239	10997	11	12	46	92	543	808	2764	3037	8	17	159	148	9480	15452	19062	24941	4.45%												
W.Suburbs	37106	47099	48051	59129	15570	24833	82924	118856	153	203	4867	6609	2890	3406	16278	17791	59	76	922	855	55778	75617	153042	203240	37.96%												
L	6721	8900	4968	9180	2978	4335	11659	6595	6	11	24	45	654	685	2502	2700	7	6	73	30	10366	13937	19226	18550	-0.51%												
M	6180	10856	4025	7718	1945	3018	8000	11088	24	34	288	167	665	1023	2065	3689	7	12	120	151	8821	14943	14498	22813	6.29%												
N	4959	5773	5324	4816	1554	2105	9412	10348	3	2	16	15	422	438	2354	2332	17	16	54	77	6955	8334	17160	17588	0.32%												
S	5179	6370	4358	9180	1790	2578	10772	12825	4	6	26	41	541	507	2529	2600	3	4	53	57	7517	9465	17738	24703	5.27%												
T	2815	3345	2350	4299	1242	1434	5411	7136	6	7	54	15	235	309	915	1489	6	11	75	76	4304	5106	8805	13015	3.18%												
E.Suburbs	25854	35244	21025	35193	9509	13470	45254	47992	43	60	408	283	2517	2962	10365	12810	40	49	375	391	37963	51785	77427	96669	14.55%												
Grand Total	144153	167214	218042	244802	95575	114097	458295	558237	691	768	14267	18316	14962	12245	74439	76713	216	255	4608	3805	255597	294579	769651	901873													

Source : Municipal Corporation of Greater Mumbai. **Table-4.23**

Informal Sector Employment in Greater Mumbai								(in '000s)
Year	Primary Census	Economic Census	Formal Sector			Informal Sector according to		
			Public	Private	Total	Primary Census	Economic Census	
1	2	3	4	5	6	(2-6)	(3-6)	(2-3)
1961	1687	N.A.	330	552	882	805	N.A.	N.A.
1971	2198	1528	492	638	1130	1068	398	670
1981	2864	2199	652	624	1276	1588	923	665
1991	3434	2426	711	469	1180	2254	1246	1008

Table-4.24

4.4 Projection of Regional Income

- 4.4.1** The estimate of future Regional Domestic Product for MMR is useful for a number of planning and policy decisions. In particular, it would help in projecting the employment in MMR. Although the Domestic Product figures for MMR are available for only a few years, those for Maharashtra and India are available for a longer time period (Table-4.25 & 4.26). It is observed from these Tables that growth rate varies considerably from year to year and largely depends on the performance of the agriculture sector.
- 4.4.2** It is however observed that the share of total Net State Domestic Product of Maharashtra in that of India and the share of total DP of MMR in Maharashtra show a very little variation over the time period under the consideration (Table-4.27 & 4.28). Similarly, the share of total DP of MMR in that of India is found to be constant for most of the time (Table-4.29). This observation suggests that if estimates of future DP of India are made then those of MMR could be proportionately derived by applying the ratios of the past.
- 4.4.3** The Planning Commission has set a target of achieving a growth rate of 5.6% in GDP and of 2.6% in employment by the end of the Eighth Five Year Plan. The corresponding growth rates for various sectors of economy along with the expected elasticities are projected (Table-4.30). It is further expected that India's GDP would grow at the rate of 6.05% during 1997-01 and at 6.51% during 2001-06 period (Papola, 1981). Assuming that later growth rate would hold good up to the year 2011, the GDP of India is computed for the years 2001 and 2011 (Table-4.31).
- 4.4.4** Next, the future RDP for MMR is derived from that of India by applying the ratios as observed in the year 1989-90 in respect of RDP of MMR to that of India. The resulting estimates are given in Table-4.32. The growth rate for the period 1989-2001 is thus projected to be 5.4% and 6.05% for 2001-11. This is one possible estimate and is called Scenario-I.
- 4.4.5** The nature of economic activities of MMR is however quite different from that of India e.g. agriculture and other primary sector activities occupy a very small portion in MMR economy. The employment elasticity ratios for MMR (Refer last column in Table-4.33) which are significantly different from those observed for India (Refer columns 3 & 4 in Table-4.30). Moreover, the economy of Mumbai in particular, is in transition, that is, from the dominant manufacturing activities of the past to the financial and other services and introduction of higher end capital intensive technologies having potential to change the nature and location of some of the activities. It therefore seems in order to independently project the RDP of MMR which is called Scenario-II. For this purpose,

Domestic Product (DP) at Factor Cost at 1980-81 Prices, Maharashtra											(Rs in Crores)
Sectors	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	
Agriculture	3749.1	3951.6	3709.7	3931.1	3819.1	3793.7	3124.1	4168.7	4453.3	5374.6	
Forestry & Fishing	450.8	449.4	442.3	487.0	505.3	424.1	408.6	454.2	473.4	628.0	
Mining	53.5	57.1	62.4	69.0	84.2	88.5	57.0	67.3	76.1	99.8	
Primary Growth	4253.4	4458.1	4214.4	4487.1	4408.6	4306.3	3589.7	4690.2	5002.8	6102.4	
		4.81%	-5.47%	6.47%	-1.75%	-2.32%	-16.64%	30.66%	6.66%	21.98%	
Reg. & Unreg. mfg.	4142.80	3925.50	4108.60	4456.60	4404.40	5125.40	5536.60	5471.10	6198.90	7163.30	
Construction	1003.50	1039.60	1077.00	1115.80	1155.90	1197.50	1240.60	1285.20	1331.40	1379.30	
Electricity, Gas & Water	142.40	154.40	148.50	164.20	202.90	228.70	249.50	255.40	294.10	325.80	
Secondary Growth	5288.70	5119.50	5334.10	5736.60	5763.20	6551.60	7026.70	7011.70	7824.40	8868.40	
		-3.20%	4.19%	7.55%	0.46%	13.68%	7.25%	-0.21%	11.59%	13.34%	
Transport & Communications	2526.90	2646.80	2899.30	3004.00	2995.70	3302.10	3426.80	3694.00	3949.80	4448.60	
Banking & Pub.Admin.	3044.30	3251.10	3621.20	3878.00	4132.00	4542.70	4777.30	4675.10	5392.60	6143.00	
Other Services											
Tertiary Growth	5571.20	5897.90	6520.50	6882.00	7127.70	7844.80	8204.10	8369.10	9342.40	10591.60	
		5.86%	10.56%	5.54%	3.57%	10.06%	4.58%	2.01%	11.63%	13.37%	
Grand Total Growth	15113.30	15475.50	16069.00	17105.70	17299.50	18702.70	18820.50	20071.00	22169.60	25562.40	
		2.40%	3.84%	6.45%	1.13%	8.11%	0.63%	6.64%	10.46%	15.30%	

Table-4.25

Net Domestic Product (NDP) at Factor Cost at 1980-81, Prices, India											
Sectors	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	(Rs in Crores)
Agriculture	40056.00	42643.00	41957.00	47053.00	46918.00	46991.00	46425.00	46425.00	54477.00	55779	
Forestry & Fishing	4035.00	4104.00	4067.00	4150.00	4206.00	4199.00	4006.00	4006.00	4164.00	4324	
Mining	1474.00	1669.00	1790.00	1741.00	1678.00	1691.00	1933.00	1923.00	2077.00	2224	
Primary Growth	45565.00	48416.00	47814.00	52944.00	52802.00	52881.00	52364.00	52354.00	60718.00	62327.00	2.65%
Reg.Mfg.&Unreg.Mfg.	18698.00	20259.00	21660.00	23914.00	25419.00	26413.00	28327.00	30412.00	33006.00	35460	
Construction	5771.00	6072.00	5736.00	6131.00	6346.00	6679.00	6881.00	7140.00	7509.00	7639	
Electricity, Gas&Water	912.00	993.00	1019.00	1068.00	1219.00	1321.00	1470.00	1563.00	1838.00	2092	
Secondary Growth	25381.00	27324.00	28415.00	31113.00	32984.00	34413.00	36678.00	39115.00	42353.00	45191	6.70%
Transport&Communications	3724.00	3926.00	4064.00	4333.00	4759.00	5230.00	5557.00	6008.00	6545.00	7036	
Banking&Pub.Admin	8651.00	8978.00	10111.00	10658.00	11821.00	12996.00	14571.00	16105.00	17758.00	19089	
Other Services	27019.00	28457.00	29916.00	31348.00	32655.00	34740.00	36248.00	38164.00	41008.00	43337	
Tertiary Growth	39394.00	41361.00	44091.00	46339.00	49235.00	52966.00	56376.00	60277.00	65311.00	69462	6.36%
Grand Total Growth	110340.00	117101.00	120320.00	130396.00	135021.00	140260.00	145418.00	151746.00	168382.00	176980.00	5.11%

Table-4.26

Share of NSDP of Maharashtra in India										
MAH/INDIA	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
Primary	0.0933	0.0921	0.0881	0.0848	0.0835	0.0814	0.0686	0.0896	0.0896	0.0824
Secondary	0.2084	0.1874	0.1877	0.1844	0.1747	0.1904	0.1916	0.1793	0.1793	0.1847
Tertiary	0.1414	0.1426	0.1479	0.1485	0.1448	0.1481	0.1455	0.1388	0.1388	0.1430
Total	0.1370	0.1322	0.1336	0.1312	0.1281	0.1333	0.1294	0.1323	0.1323	0.1317

Table-4.27

Share of DP of MMR in Maharashtra			
MMR/MAH	1980-81	1984-85	1989-90
Primary	0.1045	0.1074	0.0763
Secondary	0.5216	0.4783	0.4725
Tertiary	0.3806	0.3480	0.3658
Total	0.3467	0.3252	0.3353

Table-4.28

Ratios of DP of MMR to that of India			
Sectors	1980-81	1984-85	1989-90
Agriculture	0.0083	0.0080	0.0065
Forestry&Fishing	0.0210	0.0205	0.0141
Mining&Quarrying	0.0012	0.0000	0.0002
Primary	0.0092	0.0088	0.0068
Manufacturing	0.1273	0.0965	0.1099
Construction	0.0000	0.0000	0.0000
Gas&Water	0.0093	0.0087	0.0165
Secondary	0.0941	0.0747	0.0870
Transport&Communications	0.0902	0.0853	0.0938
Banking&Pub.Admin	0.0389	0.0427	0.0352
Other Services	0.0473	0.0433	0.0526
Tertiary	0.0495	0.0472	0.0520
Grand Total	0.0431	0.0389	0.0450

Table-4.29

Sectoral Value Added and Employment Growth During Eighth Plan (1992-97)					
Sectors	Sectoral Growth Rate (Value Added) %	Employment Elasticity			Employment Growth Rate Using Elasticity As in (5) (6)
		Achieved 1977-78 to 1983 (3)	Achieved 1983 to 1987-88 (4)	Target For 8 th.Plan (5)	
(1)	(2)	(3)	(4)	(5)	(6)
Agriculture	3.1	0.49	0.36	0.50	1.60
Mining&Quarrying	8.0	0.67	0.85	0.85	6.80
Manufacturing	7.3	0.68	0.26	0.50	3.70
Construction	4.7	1.00	1.00	1.00	4.70
Electricity,Gas&Water	7.8	0.74	0.48	0.50	3.90
Transport&Communication	6.6	0.92	0.35	0.60	3.90
Other Services	6.0	0.99	0.42	0.70	4.20
Total	5.6	0.54	0.38	0.47	2.6

Source : Govt. of India Eighth Five Year Plan (1992-'97),
Planning Commission, New Delhi, 1992

Table-4.30

Projection of India's DP			(Rs in Crores)
Sectors	2001	2011	
Agriculture	78039.78	105901.64	
Forestry&Fishing	6049.66	8209.52	
Mining&Quarrying	5185.57	11195.25	
Primary	89275.01	125306.41	
Manufacturing	76972.51	155715.88	
Construction	12660.48	20040.88	
Gas&Water	4779.34	10128.75	
Secondary	94412.33	185885.50	
Transport&Communication	14212.00	26929.43	
Banking&Pub.Admin.	36236.62	71282.92	
Other Services	82266.56	161830.78	
Tertiary	132715.18	260043.13	
Grand Total	316402.52	571235.04	

Table-4.31

the growth of various sectors in MMR over the period 1980-90 is examined and likely future growth rates are projected and the NSDP for the years 2001 and 2011 are computed as given in Table-4.34. The growth rate of RDP of MMR for the period 1990-2001 is expected to be 6.71% and 7.06% for the period 2001-11. It is to be noted that the RDP estimates for MMR under the Scenario-II (Table-4.34) are lower than those projected under Scenario-I (Table-4.32).

Projection of DP and Employment for MMR (Scenario-I)				
Sectors	MMR NSDP (Rs. in Crores)		MMR Employment	
	2001	2011	2001	2011
Primary	608.56	854.18	33503	32988
Manufacturing	8459.52	17113.65	1395929	1670078
Construction	0.00	0.00		
Gas&Water	78.88	167.17	2766	1385
Secondary	8538.40	17280.82	1398695	1671463
Transport&Communcation	1332.61	2525.09	113707	76402
Banking&Pub.Admin	1276.51	2511.08	493474	916485
Other Services	4324.43	8506.81	2288672	3345375
Tertiary	6933.55	13542.98	2895853	4338262
Grand Total	16080.51	31677.98	4328051	6042713

MMRDA Estimates

Table-4.32

4.5 Projection of Employment in MMR

- 4.5.1** On the basis of RDP estimates for MMR it is possible to project the employment by making use of the productivity trends. The productivity in terms of RDP per employee is obtained by using data on employment available from the Economic Census of 1980 and 1990. These figures are given in Table-4.33 from which it is observed that there has been an increase in productivity in all the sectors over the period 1980-90.
- 4.5.2** For Scenario-I, the productivity ratios as observed in 1989-90 for MMR are assumed to remain constant in future also and corresponding employment figures are obtained as given in Table-4.32 (Refer last two columns). The projected employment for the years 2001 and 2011 is 4.33 million and 6.04 million, respectively. These however appear to be on the higher side especially that for the year 2011. For the Scenario-II, the increased productivity per employee as projected in Table-4.33 on the basis of the past trends are used. The employment of 4.14 million and 5.43 million are thus projected for the year 2001 and 2011 respectively as given in Table-4.35. According to this estimate the employment would grow at a rate of 2.28% during 1989-01 and at 2.76% during 2001-11 which appears more plausible. The likely spatial distribution of projected employment is given in Chapter-13.
- 4.5.3** It is interesting to compare the growth of employment and population for MMR in future. Population has been independently projected by the Ratio Method elsewhere and is expected to reach 18.5 million in 2001 and 22.4 million in 2011. It is seen from Table-4.36 that growth rate for employment is increasing whereas that of population would be reducing. The ratio of employment to population is therefore expected to increase.

Sectorwise Productivity in MMR									
Sectors	RDP (Rs. in Crores)		Employment		RDP/EMP		Projected RDP/EMP.		EMP. Elasticity
	1980-81	1989-90	1980	1990	1980-81	1989-90	2001	2011	1980-89
Agriculture Mining&Quarrying	419.04 1.77	424.33 0.54	44245 2830	27786 5560	0.0095 0.0006	0.0153 0.0001	0.0140 0.0001	0.0150 0.0001	0.6202 6.4915
Primary	420.81	424.87	47075	33342	0.0089	0.0127	0.0140	0.0150	0.7015
Manufacturing Construction Electricity&Water	2381.04 25.88	3897.16 445.05 100.77	1123394 23437 16261	1087402 29938 14958	0.0021	0.0036	0.0057	0.0086	0.5914
Secondary	2406.92	4442.98	1163092	1132298	0.0021	0.0039	0.0051	0.0068	0.5274
Transport&Communication Banking &Pub.Admin. Other services	335.96 336.44 1277.24	659.74 672.45 2278.06	227970 145916 1224279	158749 275345 1622541	0.0015 0.0023 0.0010	0.0042 0.0024 0.0014	0.0066 0.0030 0.0022	0.0100 0.0035 0.0034	0.3546 0.9441 0.7431
Tertiary	1949.64	3610.2476	1598165	2056635	0.0012	0.0018	0.0032	0.0050	0.6949
Grand Total	4777.37	8478.09	2808332	3222275	0.0017	0.0026	0.0039	0.0056	0.6466

Table-4.33

Projection of DP of MMR Using past Trend (Scenario-II)					
Sectors	Annual Compound Growth(%)			NSDP (Rs. in Crores)	
	1980-89	1990-01	2001-11	2001	2011
Agriculture	0.14	0.75	0.50	460.68	484.24
Manufacturing	5.63	6.00	5.25	7397.98	12340.54
Construction					
Electricity gas &water	16.30	10.00	9.00	287.50	680.61
Secondary	7.05	6.11	5.40	7685.48	13021.15
Transport &Communication	7.79	7.00	7.00	1388.66	2731.71
Banking &pub. Admn	8.00	6.50	6.50	1344.33	2523.49
Other Services	6.64	7.00	7.50	4794.97	9882.59
Tertiary	7.09	7.70	8.46	7527.96	15137.78
Grand Total	6.58	6.71	7.06	15674.12	28643.17

Table-4.34

Future Employment in MMR (Scenario-II)		
SECTORS	Projected Employment	
	2001	2011
Primary	31261	30214
Manufacturing Construction	1290134	1434711
Electricity,Gas&Water	26673	42097
Secondary	1316807	1476808
Trasport&Communications	208839	273879
Banking&Pub.Admin	448109	720996
Other Services	2134505	2932855
Tertiary	2791454	3927730
Grand Total	4139521	5434752

Table-4.35

Projected Population and Employment of MMR (Scenario-II)					
	1971	1981	1991	2001	2011
Employment	1760500	2822300	3228763	4139521	5434752
Annulal Compound Growth(%)		4.83	1.35	2.28	2.76
Population	7777310	11078029	14534364	18486559	22440973
Annulal Compound Growth(%)		3.6	2.75	2.43	1.96
Employment/Population	0.2264	0.2548	0.2221	0.2239	0.2422

Table-4.36

4.6 Projection of Household Income Distribution

4.6.1 It is observed that with the overall economic growth the income distribution has also changed. Significant reduction has occurred in proportion of population below the poverty line during 1977-78 and 1983-84 as given in Table-4.37;

In order to estimate the effective demand for various services it is necessary to project the income distribution.

The distributional impact of economic growth on real incomes of the people can be assessed by analysing time- series data on income and its distribution. A study of 'Levels and Patterns of Living in Gujarat conducted by Murthy and Shah in 1986 explored the impacts of macro growth rates on income distribution. Their economic analysis indicated that with a 1 percent annual compound growth rate in rural per capita monthly expenditure, the percentage point decline in rural poverty over a 10 year period would be 9.59 and in urban poverty, it would be 10.22 . These were used as a basis for projecting income distribution for future years (1990-2000) in working out 'Housing Strategies for the Eighth Plan : A Perspective for Gujarat State' (Mehta and Mehta, 1990).

In the absence of any periodic surveys for MMR, per capita expenditure data collected in various NSS Rounds for Urban Maharashtra is used as a proxy to incomes. Expenditure data for 4 time periods covering a total period of 14 years is used. (Table-4.38)

Percentage of population below Poverty Line		
	1977 - 78	1983 - 84
Urban	38.2	28.1
Rural	51.2	40.4

Source : *Seventh Five Year Plan, 1985-90, Vol.I, Planning Commission, GOI*

Table-4.37

In order to assess the changes that have occurred in the distribution of per capita expenditure from 1973-74 to 1987-88 it is necessary to first adjust the expenditure classes to constant prices. This has been done by using the CPI ratios of respective years to the base year (Table-4.39).

The Monthly per Capita Expenditure adjusted to 1974 prices for the above years along with cumulative percentages of house holds is given in Table-4.40.

The values of per capita expenditure at 1974 prices for population in each of the 20 percentile groups and also percent households for various values of per capita expenditure are worked out. These are given in Table-4.41 & 4.42.

It could be seen from the above analysis that there is a total 18 point (i.e. 1.28 point per annum) decline in the percentage of households in the lowest expenditure category of Rs. 58 per capita per month (which is equivalent to the MMR Poverty Line of Rs. 250 per capita per month or Rs. 1290/household/month at 1991 prices) over the 14 year period. The proportion of households in that category has come down from 48% in 1973-74 to 30% in 1987-88 (actually the proportion reduces to 26% in 1983). This is higher than the 1983 estimate (NIUA, 1986) of 23.3% for urban Maharashtra.

The Per capita State income for comparable years is given in Table -4.43 :

It is observed that when the growth in the per capita State Income is 3% and more, changes in the expenditure distribution during those periods are prominent. From the overall assessment made so far, it would be safe to conclude that when

Percentage Distribution of Population According to Monthly Per Capita Expenditure Classes for Urban Maharashtra					
MPCE classes (in Rs.)	28th. NSS round Oct 73-June 74	MPCE classes (in Rs.)	32nd. NSS round Jul 77-Jun 78	38th. NSS round Jan 83-Dec 83	43 rd. NSS round Jul 87-June 88
0 -34	12.78	0 - 30	1.75	0.11	0.00
34 - 43	15.47	30 - 40	5.32	0.25	0.00
43 - 55	17.22	40 - 60	18.41	2.54	0.18
55 - 75	20.23	60 - 70	9.46	2.62	0.37
75 - 100	14.22	70 - 100	23.13	12.13	4.91
100 - 150	12.97	100 - 150	21.17	24.59	16.45
150 - 200	3.41	150 - 200	9.66	18.83	20.06
200 and above	3.70	200 - 300	9.57	21.67	25.81
		300 & above	3.53	17.26	32.22

Table-4.38

there is a growth of about 3% in per capita income per annum in the State Economy, there is a 1 point decline per year in the proportion of households in the low income categories during the corresponding period.

General Consumer Price Index numbers for working class in Mumbai (1961=100)		
Year	Index.No	Ratios to 1974
1974	275	—
1978 - 79	325	1.18
1983 - 84	559	2.03
1987 - 88	791	2.88
CPI converted from 1982 to 1960 base		
1989 - 90	916	3.33
1991 - 92	1183	4.30

Table-4.39

4.6.4 Future Income Distribution

The income distributions for Greater Mumbai, Rest of MMR and MMR obtained from the results of the Multi-purpose Household Survey have been projected for each 5-year period up to the year 2021. During the last 10 year period, i.e. from 1980-81 to

Percentage Distribution of population according to Monthly Percapita Expenditure for Urban Maharashtra at constant Prices							
Monthly PC Expenditure	Cumulative % of Hhs.	Monthly PC Expenditure	Cumulative % of Hhs.	Monthly PC Expenditure	Cumulative % of Hhs.	Monthly PC Expenditure	Cumulative % of Hhs.
@ 1973 - 74 Prices Oct 73 - Jun74		@ 1974 Prices Jul77 - Jun78		@ 1974 Prices Jan 83 - Dec83		@ 1974 Prices Jul87 - Jun88	
34	12.78	25	1.75	15	0.11	10	0.00
43	28.25	34	7.07	20	0.36	14	0.00
55	45.47	51	25.48	30	2.90	21	0.18
75	65.70	59	34.94	34	5.52	24	0.55
100	79.92	85	58.07	49	17.65	35	5.46
150	92.89	127	79.24	74	42.24	52	21.19
200	96.30	169	88.90	98	61.07	70	41.97
200+	100.00	254	96.47	148	82.74	104	67.78
		254+	100.00	148+	100.00	104+	100.00

Source : Economic Survey of Maharashtra 1983 - 84, 1988 - 89, & 1991 - 92

Table-4.40

1990-91, the per capita State income has grown at a compound rate of 3.79% p.a. Based on the above analysis, it is assumed that the per capita income would grow by about 3% in the coming years envisaging 1 point decline in the proportion of low income households every year.

Per Capita Expenditure for Population in Various Percentile Groups				
Population Percentage	Per capita Expenditure at 1974 prices			
	1974	1978	1983	1988
20	38	46	51	49
40	50	65	71	66
60	71	88	100	96
80	102	133	143	182
100	102+	133+	143+	182

Table-4.41

Distribution of Households according to various Values of Per Capita Expenditure								
Per capita Expenditure 1974 prices	1974		1978		1983		1988	
	Cumul. % Hhs	Actual % Hhs	Cumul. % Hhs	Actual % Hhs	Cumul. % Hhs	Actual % Hhs	Cumul. % Hhs	Actual % Hhs
58	48	48	35	35	26	26	30	30
100	78	38	65	44	60	42	62	41
150	92	14	83	18	82	22	75	13
200	96	4	0	7	88	6	83	8
250	98	2	97	7	94	6	91	8
250+	100	2	100	3	100	6	100	9

Table-4.42

The proportion of low income households is therefore reduced by 2 points from 1989 to 1991 and by 5 points in each of the 5 - year period thereafter. While the decline is more in the lowest income categories, the increase is less in the highest categories envisaging a gradual shift of households from lower to higher income categories. In view of lack of detailed data on sub-regions within MMR, this method is also adopted for projecting income distributions for Greater Mumbai and Rest of MMR. The income distribution and points reduced and increased in each category for the entire period are given in the following tables. Proportion of households under the poverty line is graphically shown in Figure-4.9.

Per capita State Income at 1970 - 71 prices		
Year	Income	Annual Compound Growth Rate(%)
1973 - 74	798	—
1977 - 78	964	4.84
1983 - 84	1025	1.03
1987 - 88	1158	3.1
1973 - 74 to 1987 - 88		2.7
Per capita State Income at 1980 - 81 Prices		
1980 - 81	2427	—
1991 - 92	3522	3.79

Table-4.43

Employment Data Sources

The data on employment are available from different sources. The coverage however varies in terms of unit of collection and the frequency. Since the data are collected with a specific purpose in hand, there are problems of compatibility among the figures obtained from those sources. Nevertheless, the time series of employment data does provide indication of changes. Given below are details of various sources of employment data and limitations they suffer from.

A.4.1 Primary Census:

The census carried out every ten years in the country is a major data source for understanding demographic and employment changes. The employment data are mainly collected through individual slip. In 1971 census additional establishment schedule was canvassed to obtain information about employment in different establishments.

There has been a change in definition of worker from census to census. For instance, in 1961 census the person is classified as a worker if he/she had worked regularly during the last season or if he/she had worked at least for a day in

regular (non-seasonal) work during the preceding fortnight. In the 1971 census a person is treated as a worker only if he/she spent his time mainly in work or if he worked at least for a day in regular (non-seasonal) work during the preceding week. In 1981, a person is classified as a main worker if he/she was engaged in work for the major part of the year i.e. at least 183 days in the preceding one year, while those who worked for sometime during the last year but not for the major part of the year were treated as marginal workers. The main worker of 1981 corresponds to the worker of 1971 and the main worker and marginal worker together of 1981 corresponds to the worker of 1961. The definition of worker used in the 1991 census is the same as used in the 1981 census.

The basic limitation of census data obtained from the individual slip is that information is about employment by place of residence and not by the place of work. This means the employment figures for a given spatial unit do not

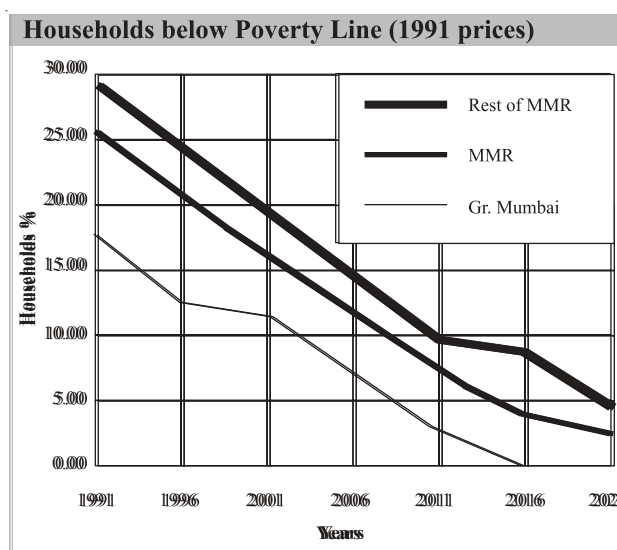


Figure 4.9

Projected Distribution of Households by Monthly Income								
Gr.Mumbai								
	Percentage of Households							
Income at 1991 prices	1989 Survey	1991	1996	2001	2006	2011	2016	2021
Upto 650	4.70	3.70	1.20	0.00	0.00	0.00	0.00	0.00
651-970	4.74	3.99	2.49	0.00	0.00	0.00	0.00	0.00
971-1290	13.80	13.55	12.55	11.24	6.74	2.74	0.00	0.00
1291-1940	20.56	20.81	21.31	21.81	21.31	20.31	18.05	13.05
1941-3230	25.90	26.90	28.40	29.90	30.90	31.90	32.90	33.40
3231-6450	23.38	24.13	26.63	29.13	31.63	34.13	36.63	39.13
6451-12900	6.91	6.91	7.41	7.91	9.41	10.91	12.41	14.41
Rest of MMR								
	Percentage of Households							
Income at 1991 prices	1989 Survey	1991	1996	2001	2006	2011	2016	2021
Upto 650	9.41	8.41	5.91	3.41	0.91	0.00	0.00	0.00
651-970	11.77	11.02	9.52	8.02	6.52	3.43	0.00	0.00
971-1290	13.88	13.63	12.63	11.63	10.63	9.63	8.63	4.63
1291-1940	19.24	19.49	19.99	20.49	20.99	21.49	20.84	19.84
1941-3230	24.16	25.16	26.66	28.16	29.66	31.16	32.66	33.66
3231-6450	16.65	17.40	19.90	22.40	24.90	27.40	29.90	32.40
6451-12900	4.88	4.88	5.38	5.88	6.38	6.88	7.88	9.38
MMR								
	Percentage of Households							
Income at 1991 prices	1989 Survey	1991	1996	2001	2006	2011	2016	2021
Upto 650	6.19	5.23	2.90	1.33	0.37	0.00	0.00	0.00
651-970	6.96	6.27	5.03	3.12	2.69	1.48	0.00	0.00
971-1290	13.82	13.58	12.58	11.39	8.35	5.71	3.87	2.15
1291-1940	20.13	20.39	20.84	21.30	21.18	20.82	19.31	16.21
1941-3230	25.37	26.34	27.77	29.22	30.39	31.58	32.81	33.54
3231-6450	21.26	21.95	24.20	26.51	28.86	31.23	33.62	36.02
6451-12900	6.27	6.25	6.68	7.12	8.16	9.17	10.38	12.08

Table-4.44

necessarily reflect the number of persons working in that area but only the number of residents who are employed somewhere.

A.4.2 Economic Census:

To obtain information about establishments and employment a separate economic census is being conducted. First such census was carried out in 1971 along with general census and it was followed by that in 1977 , 1980 and 1990.

It covers all enterprises (which include establishments and own account) in the non-agriculture sector and those in agriculture sector excluding those engaged in crop production and plantation. The following particulars of each establishment are recorded:

1. name of the establishment or proprietor;
2. whether the establishment belongs to public, private or co-operative sector;
3. average number of persons working daily last week or in the last working season including proprietor and/or family workers;
4. whether it is a household industry, registered factory or unregistered workshop;
5. description of the products, processing or servicing done;
6. type of fuel and power used;
7. description of goods bought/sold;
8. whether it is wholesale or retail establishment; and
9. description of the establishment it used for any other purpose such as school, hospital, railway station, etc.

Thus the establishment schedule covers all the census houses where one or more persons actually work.

The employment data reported by the establishment does not necessarily give either total employment in geographic area under consideration or employment in all establishment within that area because the establishment schedule covers employment located in establishment only and leave out hawkers, domestic servant and other such persons who are economically active but not located in a formal establishment with an address.

A.4.3 Regional Employment Exchange Office:

The employment information collected by decennial census gives a picture at two points of time separated by a period of ten years. Therefore, to know the current employment status a programme for collecting employment market information was started and it is operated through various employment

exchanges. To ensure the data flow it has been made statutory for all the public sector organisations in the State and private sector establishments employing more than 24 persons in Greater Mumbai district and employing more than 10 persons in the remaining districts to file the quarterly returns in the prescribed format. Some of the employment exchanges bring out a quarterly report covering a few aspects of employment trends on the basis of these returns. The reports in respect of Gr. Mumbai are brought out regularly but, not so by the employment exchanges of Thane and Raigad Districts in MMR.

The information under Employment Market Information (EMI) programme is collected for each establishment on employment details as given below:

1. name of the establishment;
2. postal address;
3. description of business;
4. NIC code;
5. year of establishment;
6. date of registration with Regional Employment Exchange;
7. employment information at the end of each quarter classified by sex;
8. vacancies notified/filled;
9. manpower required next year; and
10. nature of establishment i.e. public or private.

The coverage of this programme is quite limited as it excludes employment in agriculture, household establishments, self employed and private establishments employing less than 10 persons. Further, due to constraints on resources the system of data collection, compilation and taking up action against defaulters is very weak. The tabulation is never done to analyse spatial distribution of employment in a given district.

A.4.4 Annual Survey of Industries (ASI):

Information on employment and other aspects about factories registered under Factories Registration Act is available annually under this survey. It covers the registered factories in two groups viz. (a) Census Sector and (b) Sample Sector. Factories employing 50 or more persons and using power or those employing 100 or more persons and not using power fall in the Census Sector. The remaining factories fall in sample sector. All the factories in census sector are enumerated whereas a sample of factories is covered in sample sector. The design of schedule is same for both census and sample sector.

Besides collecting information about number of employees and their emoluments, it covers the fixed and working capital, value of plant and

machinery, value and quantity of products, NIC code, value added, depreciation, fuel and materials consumed etc. Generally, the tabulation is done at a district level but special tabulation is done for the Mumbai Metropolitan Region and therefore, a time series data on above mentioned parameters for MMR are available for the last 10 years.

A.4.5 State Inspectorate of Factories:

This gives the information on registered sector of manufacturing industries only viz.

1. those factories employing 10 or more persons and working with the aid of power or
2. those employing 20 or more persons and working without aid of power and
3. those registered under Section 85 of the Factories Act.

The worker here is defined as a person employed directly or indirectly in any manufacturing process and thus includes clerical and supervisory personnel in addition to manual workers. The number of workers refer to average number of persons working daily throughout the year and not the total number on the roll of the factories. The coverage of employment is almost total for factory Sector and employment in non- responding factories is estimated on the basis of previous year's employment. The defense factories are excluded from this coverage.

A.4.6 Shops and Establishment Registers:

The information collected under this scheme is restricted to only certain selected urban areas of some of the states where this scheme is applicable. The information relevant to employment is about

1. year of establishment,
2. number of employees,
3. postal address of establishment, and
4. economic activity of establishment.

This information on establishments and employment for Mumbai is based on shops register, cinema and theatre register, hotels and restaurants register, residential hotel register and commercial establishments register and is published by the Municipal Corporation of Greater Mumbai in its Annual Administrative Report.

The limitations of this data are that the records for individual establishment are many a times not up to date, and the employment covered is only about a part of total work force.

Given the general perception that migration (or influx as is popularly called) is the cause of many problems and the need for promoting growth centres in backward areas, policies for restricting employment generation are commonly advocated. Within the excessive concentration of employment in South Mumbai has been seen as the key structural problem. The Industrial Location Policy and the Office and Wholesale Trade Policy have attempted to restrict the employment growth in South Mumbai since mid-seventies. (The only dissenting note to these general policies appears in the report of the Bombay Development Plan Advisory Committee in 1988).