

PART - II

Chapter-3

Industrialisation and Slum Population of Baroda City

Baroda¹²⁸ is a major city in the state of Gujarat in India. It is situated about 100 kms away from Ahmedabad (once known as the Manchester of Gujarat) and 400 kms away from Bombay, the industrial capital of India. It is in the middle of the most developing industrial belt from Vapi to Mahesana, known as "The Golden Corridor" of Gujarat. The city is situated at the junction of the Bombay-Delhi and Bombay-Ahmedabad section of the Western Railway. It is well connected by road, rail and air to the major part of the country and the world.¹²⁹

3.1 Profile of Baroda City

3.1.1 Historical Background

The historical city of Baroda was founded around 1000 BC on the banks of the river Vishwamitri. One belief is that the name Vadodara is derived from Vatapatraka (leaf of the banyan tree). The name Vatapatraka was given to the settlement, which flourished on the left bank of the Vishwamitri at Ankotaka (now known as Akota) because of the presence of banyan trees in abundance¹³⁰. Since ancient times, Vadodara always has been a service and administrative center, a stop gap on the grand trunk route.¹³¹ Mauryas, Guptas, Chalukyas, Solankis, Moguls and Marathas have ruled the city. The successive rulers have left behind a rich heritage of culture and architecture.

¹²⁸ The official name of Baroda is Vadodara. We have used name Baroda to maintain consistency with title of the thesis.

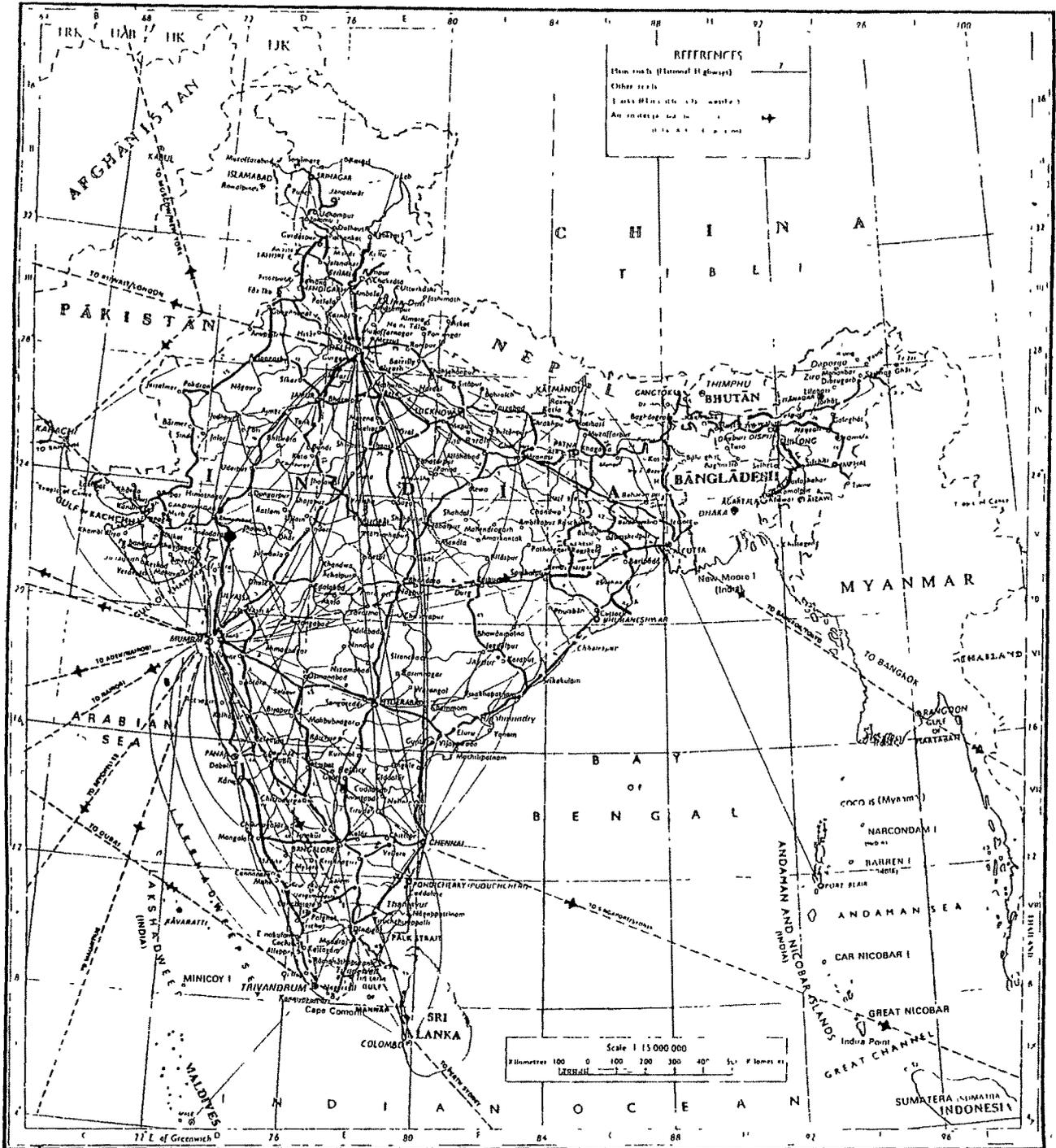
¹²⁹ See map-1.

¹³⁰ *The District Census Hand Book* 1991, p 40.

¹³¹ SOCLEEN Planning cell (1997) pp.1-4

MAP-I

LOCATION OF BARODA IN INDIA



Project on Lambert Conformal Orthomorphic

Based upon Survey of India Map with the permission of Surveyor General of India

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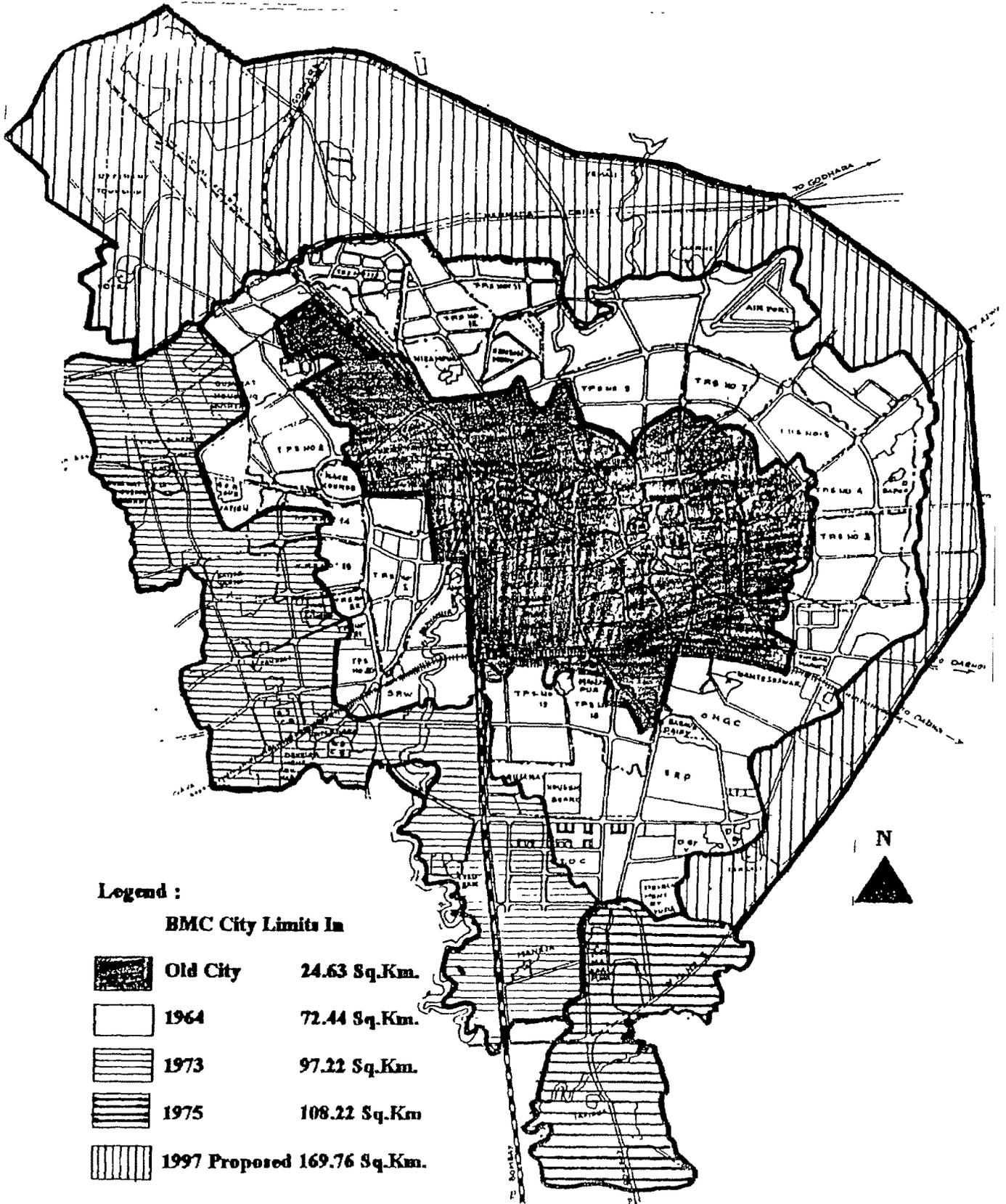
The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the topographic base line

• Vadodara (Baroda)

TJK TAJIKISTAN
 TKM TURKMENISTAN
 UZB UZBEKISTAN

MAP- II

VADODARA – EXTENSIONS OF MUNICIPAL LIMITS



The remarkable development of the city took place during 1875-1940 during the rule of Maharaja Sayajirao Gaekwad III. This period is considered as a period of renaissance in the history of Baroda. The rule of Maharaja Sayajirao Gaekwad III gave fame and name to the city as "The Cultural City", Sanskar Nagari, of Gujarat.

Some very important educational and cultural institutions like Baroda College, School of Indian Music, Kalabhavan Technical Institute (now part of the Maharaja Sayajirao University of Baroda as various faculties) were started by him. The establishment of a training college for women, schools and boarding houses for Dalits and other backward classes by him reflected his vision for progressive society. The establishment and development of several educational institutions, hospitals, railways and industries took place during his reign. The city was the capital of the Baroda State till it was merged with the Bombay State at the time of independence in 1947. In 1960 separate states of Gujarat and Maharashtra were formed from the bigger bilingual Bombay State. Vadodara district became part of the Gujarat State. The city is head-quarter of the Baroda district since then.

3.1.2 Urbanisation and Population growth

The increasing degree of urbanisation is the consequence of the capitalist development of the economy. The nature of urbanisation largely depends on the nature of industrialisation, shaped by historical and socio-cultural factors of the area.

In Baroda City the growth rate of the population was negative during the first few decades of the century (table-3.1). It became positive from 1931 onwards. It can be observed from the table that from 1951 onwards the growth rate of urban population in Baroda is higher than the growth rate of population in the Gujarat State. The three cities, Ahmedabad, Surat and Baroda are grouped as very 'high' concentration centres

in terms of population distribution ¹³² Comparison of the population growth rate of these three city shows us that Ahmedabad has reached a saturation point and Surat and Baroda have become alternative 'pull centres'. The growth rate of population in Ahmedabad was 45.94% during the decade 1971-81 and 28.94% during 1981-91 In Surat the growth rate was 92.63% and 62.03% respectively ¹³³

Table 3.1

Growth Rate of Population: Baroda and Gujarat
(1901 to 1991)

Year	Population	Decennial growth rate	Growth rate of urban pop. in state (%)
1901	1,03,798	-	-
1911	99,435	-4.28	-9.70
1921	94,712	-4.66	11.60
1931	1,12,860	19.16	14.90
1941	1,53,301	35.83	38.40
1951	2,11,407	37.83	35.80
1961	309,716	46.50	20.10
1971	4,78,422	50.94	41.00
1981	7,44,881	57.04	41.40
1991	1031346	34.40	34.40

Source: District Census Handbook, Baroda, 1991

Baroda was in the middle range, between Ahmedabad and Surat, with the population growth rate 50.94% during 1961-71 and 57.04% during 1971-81

¹³² Das, B. (1996) pp.78-85

¹³³ Ghosh, A. et al (1995) p. 19.

The decennial growth rate in Baroda was highest during 1971-81. It is significant to note that this was also a period of intensive industrialisation in Baroda. In the last four decades, the city population has grown five folds in Baroda. The rate of growth has slowed down during the last decade 1981-1991. This was part of the declining trend of urban growth rate in Gujarat as well as in the rest of India.

It is important to note that the growth of the city population was not due to natural increase of the population mainly but caused by two major factors:

- (1) Intensive growth of the population i.e. migration of the people from the rural areas of the Baroda district as well as from the other districts of Gujarat and other states
- (2) Extensive growth i.e. widening the geographical boundaries of the city. The old city of Baroda was accommodated in 24.63 sq. km. In 1964, the city limits were expanded up to 72.44 sq. km. In 1991 Census the area of the Baroda Municipal Corporation was enumerated as 108.26 sq. km. The proposal to expand the municipal limits up to 169.76 sq. km. is under consideration (see map -2)

The city is divided into ten administrative wards. Ward wise population is given in the Table 3.2. The growth rate of the population in all the wards of the city is not homogeneous. Some of the wards are experiencing negative growth rate. Particularly the older wards around the centre of the city i.e. the 'City' ward and Babajipura had negative growth rate during the last decade. The other older wards like Raopura, Wadi, Fatehpura and Kisanwadi have moderate growth rate i.e. less than 50%. Newly developed wards at the periphery of the city are expanding very fast. Sayajigunj (S), Sayajigunj (W) and GIDC ward have seen a growth rate of more than 50% over the past years.

The nature of concentration of various activities in these wards is also different. We can observe from the map-3 that City ward (no.1), Fatehpura (no.2), Babajipura

(no.5), Raopura (no. 8) are geographically located in the middle of the city. These wards have concentration of trade, commerce and residential areas. Wadi (no 3), GIDC (no.4), Sayajigunj North (no.7) and Gorawa (no.10) have major industrial concentration.

Table 3.2

Wardwise Population of Baroda City

Ward no.	Name of ward	Population	Sex ratio	Percentage of city population
1	City ward	53383	939	5.17%
2	Fatehpura	117289	907	11.37%
3	Wadi	87158	928	8.45%
4	GIDC	133947	870	12.98%
5	Babajipura	70057	887	6.79%
6	Sayajigunj (S)	126343	894	12.25%
7	Sayajigunj (w)	112389	833	10.89%
8	Raopura	112750	926	10.93%
9	Kisanwadi	110926	927	10.75%
10	Gorwa	107104	904	10.38%
Total		1031346	898	100%

Source: District Census Hand Book 1991.

The average sex ratio of the city population is 898 women per 1000 men. This is lower than the average sex ratio of Gujarat State i.e. 934. The sex ratio in the various wards is also not homogeneous. Sex ratios in the newly expanding areas are lower compared to the older wards of the city.

The literacy rate for the entire city population has increased from 48.6% in 1951 to 71.1% in 1991. According to the 1991 census the female literacy rate is 65.4% and male rate is 76.2%.

7.26 % of the city population belongs to Scheduled Castes and 3.01% belongs to Scheduled Tribes.

3.2 Industrialisation and Employment

3.2.1 The Process of Industrialisation

The process of industrialisation of the city dates back to 1805 during the reign of Maharaja Sayajirao Gaekwad. The first cotton textile mill was started in 1805 and in 1907 Alembic Chemical was established. Sarabhai group of industries, Sayaji Iron and Jyoti Limited were some of the industries started before independence. But Baroda was not an industrial city like Surat or Ahmedabad before the 1960s. Intensive industrialisation took place after the public sector giants were established on the outskirts of the city.

The "Cultural City" of Baroda, also known as seat of learning turned to a major industrial city during the 2nd Plan period, when emphasis was given to the development of infrastructure and key industries through development of public sector. As part of this national economic trend, major industries like the Gujarat Refinery (1965), Gujarat State Fertiliser Corporation (1967) and Indian Petrochemical Corporation (1969) were established near Baroda. This was the beginning of intensive industrialisation and urban growth in Baroda through establishment of several link industries of small and medium scale with forward and backward links. Baroda's locational advantage with its

links with major growth centres in and outside the state through national highways and a railway network has boosted its economic importance ¹³⁴

3.2.2 The Present Scenario of Industries and Employment

At present there are three co-operative industrial estates, fourteen privately organised industrial estates, five industrial complexes and two GIDC estates in and around the city. Many of the major large and medium scale industries are not located in the city but on the periphery in Vadodara Taluka and district. However, they have significant impact on the economy of the city. IPCL, GSFC, Refinery and other industries located in the Nandesari Industrial estate are some such examples. The development of industrial areas in Padra and Vaghodia talukas also has some effect on the economy of Baroda.

Table-3.2

Large, Medium and Small Scale Industrial Units

Industrial units	Small scale units			Large and Medium scale units		
	Number of units on - 31-3-97	Investment in Rs. lakhs	No. of persons employed	Number of units on - 31-3-95	Investment in Rs. lakhs	No. of persons employed
Baroda taluka	8073	10352	61507	93	482600	19755
Baroda district	19839	20630	76731	159	549900	1905

Source: District Industrial Centre, Baroda.

According to the data available at the District Industrial Centre, as at 31 March 1997, there were 8073 small scale units in the taluka and the number of large and medium scale units were 93 (Table 3.3). 42 out of 93 large and medium scale

¹³⁴ Ghosh, A. et al (1995) p. 18-19

industries in Baroda taluka are located in the Baroda city and the rest at the periphery of the city, mainly in and around the Nandesari industrial estate. 38% of large and small-scale industries (SSI) are located in the Nandesari Industrial estate and 21% in Makarpura. 58% of small-scale units are also located in the Makarpura area

If we look at the nature of industries, the majority (41%) are engineering and electrical industries, 20.4% are chemical industries, 7.56% plastics industries, 5% optical industries the rest of them constitute various other industries. The growth of industrialisation has stagnated in the city since the last few years and new centres of growth are planned in the District at Padara and Kelanpur. Various schemes to give incentives to industries if they start their industry in any of the less developed areas (announced by the government) to attract industries to these new growth centres

Small-scale industries (SSI) are considered more labour intensive compared to large and medium scale industries. The growth rate of SSI in Baroda district has declined during the last few years. The growth rate of SSI was 8.76% in 1992-93 and

Table 3.4

Investment and Employment in SSI in Baroda District

Year	No. of units	Investment in lakhs	Employment	Units/Employment ratio	Investment /employment ratio
Up to March '86	4965	5799.65	40989	8.25	14149
Up to March '91	6620	13292.91	52088	7.86	25520
Up to March '95	9357	28593.93	70723	7.55	36278
Up to March '98	11660	22077.39	78817	6.75	28010

Source: Computed from the data provided by District Industrial Centre, Baroda.

3.16% in 1995-96. There was a marginal increase in 1996-97.¹³⁵ Not only has the growth rate of SSIs been declining, the employment opportunities in SSIs are also declining. It is evident from table 3 4 that the numbers of employees per unit have declined from 8.25 in 1985-86 to 6.75 in 1997-98. At the same time the investment to employment ratio has increased. This shows that the new units are more capital intensive.

Apart from large, medium and small-scale industries registered with the District Industrial Centre, some units are also registered with the Vadodara Municipal Corporation under the Shops and Establishments Act. The numbers of units covered under various categories in this Act in 1996 were; shops- 23098, industrial institutes- 8027, lodging- 96, restaurant- 504, theatre and entertainment-11 in 1996. The total number of units is 31736. In 1993 total units registered under this Act were 33657. Thus we can observe a slight decline or stagnation in this category also. It is possible that a large number of units belong to these categories are functioning but do not get registered and operate in the informal sector.

3.2.3 Workers in the 1991 Census

The decline in the industrial employment is also reflected in the census data. The percentage of industrial workers in the total working population is declining (Table 3.5). The data about workers employed in various categories according to 1991 Census show that the workers employed in industries (other than household industries) are 30.77%. Comparison with earlier census data reveals that the percentage of the total workforce working in other than household industries has declined from 34% in 1971 to

¹³⁵SOCLEEN Planning cell (1997) p.18-19.

30.77% in 1991. There is an increase in workers involved in trade and commerce from 17.51% in 1971 to 21% in 1991. In construction, it has increased from 3.59% to 5.85%.

Table 3.5

Distribution of Workers by Category and Sex (1991)

Category of workers	Male	Female	persons	% Of total workers	% of women in the category
Cultivators	2602	115	2717	0.88	4.23
Agricultural labourers	2082	610	2692	0.87	22.65
Livestock, Fishing, Forestry etc.	2624	281	2905	0.60	9.67
Mining and quarrying	3446	193	3639	0.95	5.30
Household Ind.	1296	536	1832	1.19	41.35
Other than Household Ind.	91147	3336	94483	30.77	3.53
Construction	16410	1550	17960	5.85	8.63
Trade and commerce	60138	4325	64463	21.00	6.70
Transport, comm. and storage	27051	1041	28092	9.15	3.70
Other services	66446	21800	88246	28.74	24.70
Marginal workers	1010	1253	2263		55.36
Total workers	274252	35040	309292		
Non workers	268965	453089	722054	-	62.74
Total population	543217	488129	1031346	-	47.32

Source: District Census Handbook 1991

There is a general decline in industrial employment due to stagnation in increase in number of industrial units. The other reason is that the existing units are also changing their technology or product and reducing their workforce through various

kinds of voluntary retirement schemes. Many of them are shifting production from their own factories and giving contracts for production to other small scale and ancillary units largely belonging to the informal sector. These developments have contributed to the rise of the informal sector in the city.

3.2.4 Women's Employment:

The census data in Table 3.5 shows that women are concentrated overwhelmingly in the category of other services. This category includes workers engaged in services like electricity, gas, water, public administration and defence services, sanitary services, medical and health services, recreational and cultural services and personal services. This category includes almost all people who do not come under any other category i.e. from the highest administrator of the city like collector to a domestic worker involved in personal service. It includes people in government jobs as well as self-employed and within self employed a professional like doctor or lawyer and also 'general labourers who are accustomed to work in various miscellaneous jobs'.¹³⁶ Women constitute 24.70% of the workforce of the category.

The other categories of work in which women are involved in large numbers are industry, construction, trade and commerce, transport, communication and storage. Looking at the various categories of workers, women constitute 55.36% among marginal workers, 41.35% in household industries, 24.70% in other services and 22.65% of agricultural labourers. Most of the enterprise and/or employment in these categories consist of informal sector.

The average work participation rate is 50.48% for males and 7.17% for females in Baroda city. If we look at the data for various wards, the WPR for male ranges

¹³⁶ District Census Hand Book 1991, p.18

between 48.9% to 53.55% (table-3 6). Raopura has the lowest WPR for male and City ward has the highest. But the difference is not very high. In case of females, the lowest WPR is 5.30% in the city ward and 9.25% in the Sayajigunj(S). The gap is almost double. The lowest WPR for females is in the same ward i.e. the city ward, where the WPR for males is highest. In Sayajigunj (S), where the WPR for females is highest, the WPR for male is below the city average for men. According to this data only 33,787 women are recorded as workers in the 1991 Census.

Table-3.6

Ward wise Distribution of Male and Female Workers (1991)

Ward no.	Name of ward	Main Workers		Marginal Workers		Work participation rate	
		Male	Female	Male	Female	Male	Female
1	City ward	14666	1296	76	77	53.55	5.30
2	Fatehpura	30992	3841	161	77	50.69	7.20
3	Wadi	23021	2328	108	68	51.17	5.70
4	GIDC	36817	3675	135	223	51.60	6.25
5	Babajipura	18574	2150	68	144	50.23	6.96
6	Sayajigunj (S)	33107	5273	94	248	49.78	9.25
7	Sayajigunj (w)	30355	3671	139	61	49.73	7.45
8	Raopura	28082	4101	62	139	48.09	7.81
9	Kisanwadi	29248	3904	121	150	51.10	7.59
10	Gorwa	28380	3548	46	66	50.54	7.10
Total		273242	33787	1010	1253	50.48	7.17

Source: District Census HandBook 1991.

3.3 Slums in Baroda

3.3.1 Growth of Slums

A definition of a slum, in the report on urban land policies of the UN is given as,

“A building, group of buildings or area, characterised by overcrowding, deterioration, unsanitary conditions or absence of facilities or amenities, which, because of these conditions or any of them, endanger the health, safety and morality of its inhabitants or the community.”¹³⁷

According to E. E. Bergel (1990) slum is not just physical appearance of housing situation but reflects the actual living condition of people. The phenomenon of the emergence of slums in cities is mainly connected with the growth of industries and processes connected with urbanisation. In most of the developing and underdeveloped countries, industrialisation and urbanisation has not accompanied proper urban planning and this has resulted in the growth of slums populated by people migrating from rural areas to the urban areas in search of work. Rural to urban migration was the root of the emergence of slums in the early phase of industrialisation. The present scenario is much more complex. Slum dwellers in city slums do not consist of recent migrants only. Many of them are born and brought up in the city slums. Thus slums provide "shelter" to the core of urban poor who cannot afford better jobs, incomes and shelter in spite of hard work and contribution to the development of the city for years. Approximately 25% of the urban population live in the slums of various cities of the India. The proportion ranges from 20% to 60% in various cities.

The tremendous growth of the Baroda city has also resulted in increase in the number of slum pockets and proportion of slum population in the city population. The

¹³⁷ Quoted from Nels, A. (1990) p. 37.

census gives data about slum population for only notified and recognised slum areas According to 1991 census data, only 4.31% of the city population live in slums of Baroda. Three major slum surveys have been conducted in Baroda by various agencies According to the study by Parikh (1992) 22.00 % of the population of Baroda lives in slum.¹³⁸ This is nearer to the reality compared to the census data. The study has not counted the temporary settlements of people who migrate every year to the city during some months. A considerable number of people also stay on pavements and construction sites. If we include them in the estimate of slum population the percentage of people staying in poor housing environments may go up.

Table-3.7

Growth of Slums in the City

Year	No. of slums	Families	Population	Decennial growth	Average family size	% of city population
1972*	192	11130	49950	-	4.49	10.40%
1982#	210	21292	94700	90%	4.45	12.80%
1992+	336	50239	226100	139%	4.50	22.00%

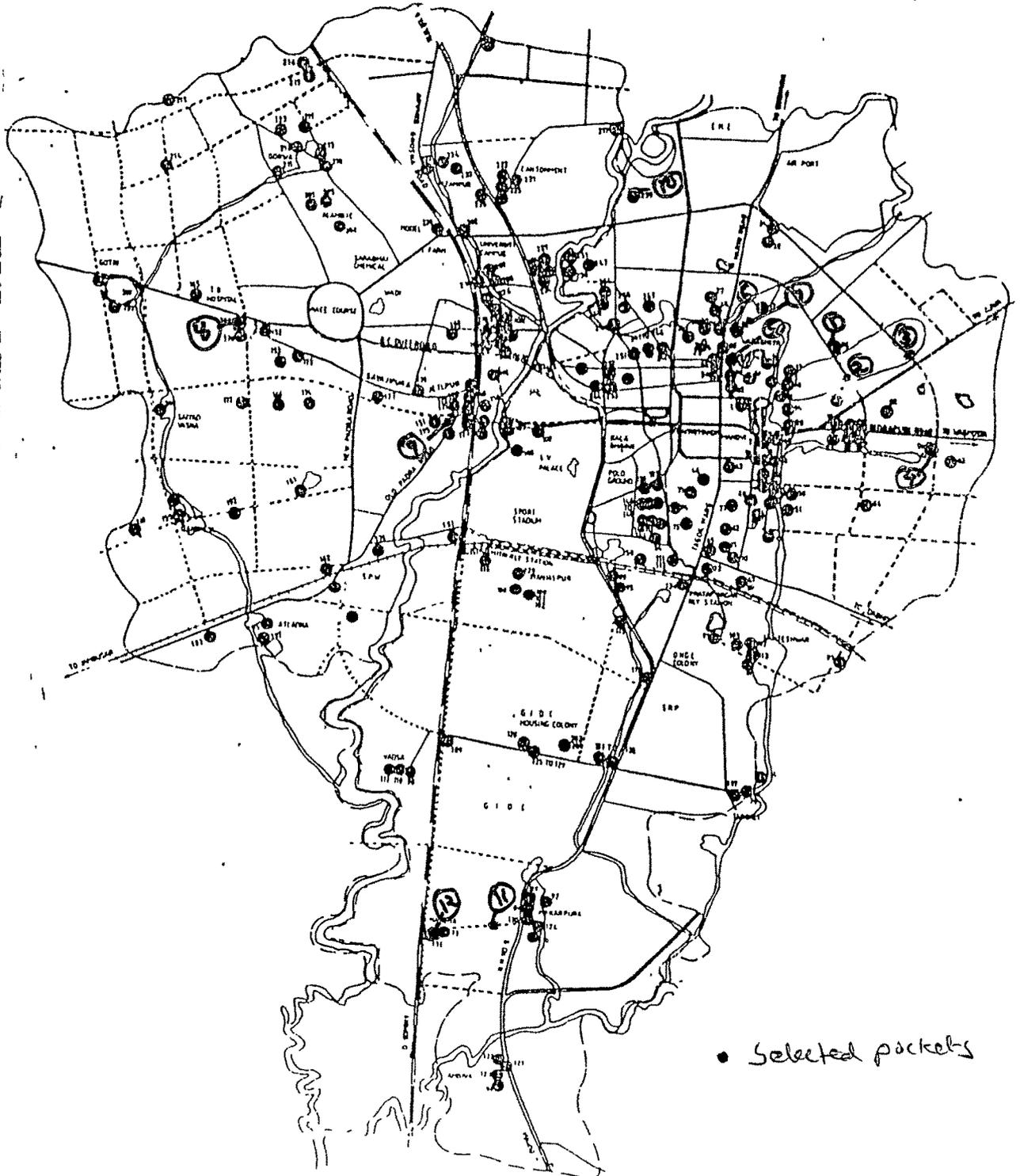
Source: * ORG (1972).
 # ORG (1982).
 + Parikh, H.(1992).

The growth rate of slum population is much higher than the growth rate of city population (Table 3.7). During 1981-91, the city growth rate has declined but the growth rate in slums has increased tremendously The growth is not because of the natural population growth because the average family size in slums has remained same. But the

¹³⁸This unpublished study was conducted for the Vadodara Municipal Corporation by Himanshu Parikh The same data is published in the annual report of the Baroda Citizen Council and used by several local government agencies as an authentic estimate of the slum population of Baroda.

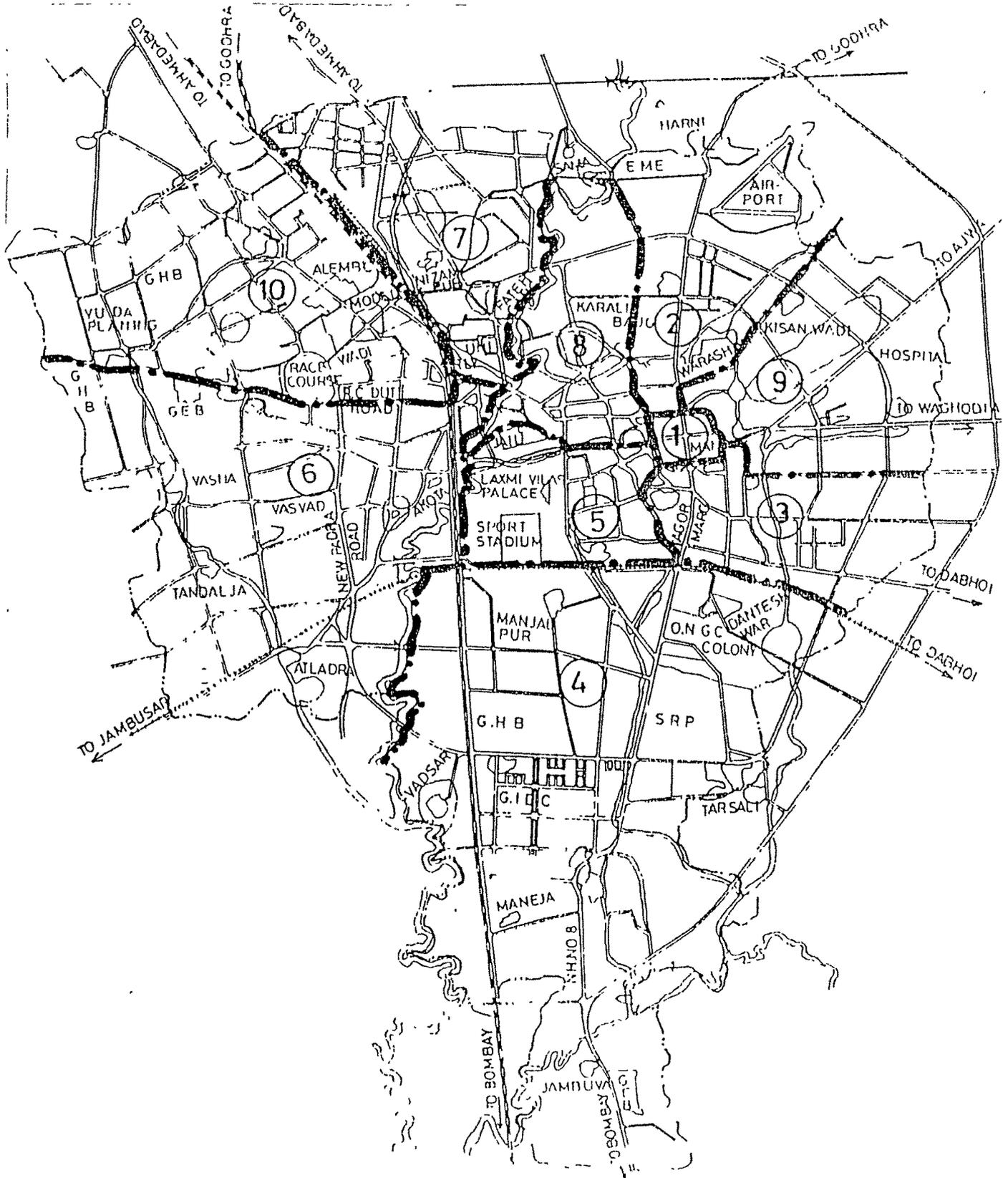
MAP - III

LOCATION OF SLUMS IN BARODA



MAP - IV

WARDS OF BARODA CITY



number of slum pockets has increased. More and more people are coming to the city in search of work and for other reasons and end up in the city slums.

The distribution of the slum population is not even in all the ten wards of the city. It ranges from 151 families in ward no.1 i.e. City ward to 12782 families in ward no. 9 i.e. Kisanwadi. All the wards do not have similar proportion of slum population to the ward population. Kisanwadi has the highest proportion of ward population in slums. More than half of the people in this ward stay in 94 slum pockets of the ward. Wadi is another ward having more slum population compare to the city average

Table 3.8

Slum Pockets in Wards of Baroda City

Ward no.	Name of ward	No. of slum Pockets	No of families in slum	Slum pop. As % of ward pop.
1	City ward	1	151	1.3
2	Fatehpura	22	5026	18.08
3	Wadi	29	5241	27.1
4	GIDC	40	5173	17.4
5	Babajipura	7	1405	9.0
6	Sayajigunj (S)	47	7411	9.0
7	Sayajigunj (w)	35	4764	19.1
8	Raopura	30	4997	19.9
9	Kisanwadi	94	12782	51.91
10	Gorwa	30	3378	15.1
Total		335	50328	22.01

Source: District Census Handbook 1991
Parikh, H. 1992

3.3.2 Some Important Studies on Baroda Slums

It is very difficult to get a real picture about the socio-economic characteristics and problems faced by the slum population. This important segment of the population is branded as "illegal" and "unauthorised" under the present municipal laws. Since the official data do not provide a real picture of the slum population we have to rely on several studies undertaken by various organisations.

In 1982 the Operation Research Group did a detailed survey of all the slums. In 1988 the National Institute of Urban Affairs (NIUA) did a sample survey of 213 households from Baroda slums. In 1992 Institute of Social Science (ISS) conducted a sample survey of 400 households and in 1994 the Baroda Citizen Council (BCC) did a detailed slum survey for estimating potential beneficiaries of Nehru Rozagar Yojana. The sample size and objectives of all these studies are very different so there is a difficulty in comparing the results but the common conclusions were that the majority of the people came in the city in search of work. The situation of housing and electricity is comparatively better in Baroda slums compared to other cities, and has been improving over the years. The major difficulties are lack of drainage and latrines.

The employment situation is such that the number of self-employed and irregularly employed is increasing among the slum dwellers of Baroda. Proportion of women employed turns out to be very low in each of the surveys.

In the study of ORG (1982) the WPR for male in Baroda slums was 56.6% and for women it was recorded as 5.8%. The study had considered WPR for the population above 6 years. In the ISS study (1992) WPR for slum population was recorded as 22.5% for adult men and 5% for adult women. In the BCC survey (1994) of all the slums in Baroda the WPR for men was found to be 51.66% and for women it was 4.7% of total population. The strikingly low WPR for women was mentioned in the ISS study in

following words, " The percentage of working female adults in the work force in incredibly low at only 5 per cent which indicates that out of total adult female population of 435 only 22 or 5 per cent are engaged in any type of earning activities."¹³⁹

Table 3.9

Selected Pockets and Families

No.	Name of the pocket	Ward No.	Total families	Selected families
1	Zanda chok	9	409	42
2	Husaini chok	9	152	15
3	Shivashakti nagar	9	180	20
4	Jayram nagar	9	150	15
5	Varasia vagharivas	9	250	25
6	Kumbharwada	2	168	17
7	Harijanvas	2	90	9
8	Savaiya nagar	6	143	12
9	Shivajipura	6	165	16
10	Sanjay nagar	7	660	61
11	Vallabh nagar	4	125	9
12	Jashoda colony	4	1221	116
	Total	.	3713	357

Source: Parikh, H. and Vadodara Municipal Corporation

¹³⁹ Ghosh, A. et al. (1995) p. 32

These observations raise several issues. Women in Baroda slums are not economically active or there is a problem of under-enumeration? Are women involved in such activities, which remain invisible and irregular? What is the relationship between low work participation rate and the nature of industrialisation in the city? These are some of the issues that will be addressed in the following chapters.

3.3.3 Selected Slum Pockets and Number of Families

For the examination of these issues we have selected twelve slum pockets of Baroda city for primary data collection as per the methodology explained in chapter one. The list of selected pockets from five wards of city and number of families residing in the pockets is given in the Table 3.9.