

AN INTRA-URBAN ANALYSIS OF HUMAN RESOURCE DEVELOPMENT - A STUDY OF AHMEDABAD CITY

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ABSTRACT : The development process accelerated by the influx of infrastructural facilities promotes lasting satisfaction of human needs and improves the quality of human life. However, prior to the development of infrastructural facilities, understanding the basic resource qualities of the population is required. In this context, an attempt is made to analyse the inter-zonal variation in the pattern of human resource development in Ahmedabad city, as reflected through demographic indicators. The ten chosen indicators are both positive and negative indicators of development and accordingly their weightage is determined. The positive indicators of human resource are density of population, female literacy, female participation in work, etc., and size of household, proportion of children, sex-ratio, dependency ratio and houses to households ratio as negative indicators. The micro-urban variation in the pattern of human resource development provides the base for further correlation, analysis and understanding of physical and social infrastructural facilities and taking corrective measures to achieve desired level of social well-being.

INTRODUCTION

Ahmedabad has grown 12 times in urban area and 14 times in terms of population during 1901-91. However, the increase in absolute area (14.93 sq.km in 1901, 52.47 sq. km in 1951) and population (1,85,889 in 1901 to 8,37,165 in 1951) is much less during the first half of the 20th century than during the latter half. At present Ahmedabad ranks 7th largest city among 23 'million cities' of India. (next only to Bangalore 4.13 million). The post 1951 growth is mainly due to the diversified industrial, commercial and administrative functions of the city.

'Population' is a target group for various developmental programmes and to monitor and measure the success of the programmes the Human Resource component need to be analysed and understood. In this section an

attempt is made to analyse the inter-zonal variation in the patterns of human resource development as reflected through the indicators such as density of population (per hectare), percentage of male literacy, percentage of female literacy, percentage of main workers and percentage of female workers (as positive indicators); average size of household, percentage of children below the age of 6, sex-ratio, dependency ratio and houses to household ratio (as negative indicators). On the background of this spatial pattern of human resource development, the social and physical infrastructure facilities can be better analysed, correlated, understood and planned. The river Sabarmati is a natural device between the city, East Ahmedabad and West Ahmedabad. The Eastern Ahmedabad including City area (the walled city) accounts for 78 percent of the total city area with

Table 1**Municipal Zones and their Wards for Administrative Purpose and Convenience**

Municipal Zones		Census Wards
1	Central Zone	Khadia (1, 2, 3), Kalupur, Gheekanta, Dariapur, Vadigam, Shahpur, Khanpur, Manekchowk, Jamalpur, Raikhad, Dudheshwar, Madhupura, Girdharnagar and Asarwa (16 wards)
2	North Zone	Chamanpura, Naroda, Saraspur, Potaliya, Sardarnagar, Naroda-Muthia, Saijpur-Bogha (7 wards)
3	East Zone	Bapunagar, Rakhial, Gomtipur, Rajpur, Amraiwadi, Khokhra-Mehamadabad, Odhav, Bage-E-Firdosh (8 wards)
4	South Zone	Maninagar, Kankaria, Behrampur, Danilimda, Isanpur, Vatwa (6 wards)
5	West Zone	Vadaj, Naranpura, Sabarmati, Gandhigram, Paldi, Vasna (6 wards)

37 wards (out of 43 wards), 80 percent of the city population and 79 percent of the total workers of the city.

INTRA-URBAN ZONES

With 590 years of historical growth and development founded in 1411, the city, has formed three distinct structural zones namely the Walled city, the Eastern Ahmedabad and Western Ahmedabad in their chronological order. These three ecological units are distinct in their structural and functional morphology as well as socio-economic and cultural characteristics. However, from the point of view of urban analysis it is desired to have further micro-units for better understanding of social areas. The Municipal Corporation for its administrative and functional purposes has made 5 zones namely Central, Western, Northern, Eastern and Southern Zones (Table 1) However, from the ecological and cultural points of view the Central, Northern and Eastern Zones have not been correctly delineated. The river course and the historical wall with its 13 gates are taken generally as natural and cultural features respectively to identify cohesive ecological intra-urban zones. Similarly, major railwaylines (towards Delhi

and Mumbai) and major road arteries (Satellite and Drive-in-roads) are taken into consideration for further delineation of micro-urban units as they influence the pattern of intra-urban interaction.

Thus, the Walled city (Central zone) includes 12 wards of the old city enclosed by the wall and the gates. The Northern zone (of Eastern Ahmedabad) covers 6 wards extending from the Sabarmati river in the west upto the railway line (Delhi line) in the east. Its north-south extension is from the Walled city in the south upto the Municipal limit in the north (including cantonment, airport and Dudheshwar water works areas). The Eastern zone covers 13 wards situated east of Delhi and Mumbai railway line. The Southern zone has 6 wards situated between the river, the walled city and the railway line (Mumbai line). Thus, Eastern Ahmedabad has 4 micro-urban zones. The Western Ahmedabad has 3 micro-urban units - Northern zone of Western Ahmedabad covering 3 wards situated north of Drive-in-road, Western zone of Western Ahmedabad covers one ward situated between Drive-in road and Satellite road and lastly the Southern zone of Western Ahmedabad situated south of Satellite road covers two wards (Table 2).

Table 2**Reorganization of Intra-Urban Zones**

Micro-Urban Zones	Census Wards
1 Central Zone	Khadia (1, 2, 3), Kalupur, Gheekanta, Dariapur, Vadigam, Shahpur, Khanpur, Manekchowk, Jamalpur, Raikhad (12 wards)
2 Eastern-North	Dudheshwar, Madhupura, Girdharnagar, Asarwa, Chamanpura, Sardarnagar (6 wards)
3 Eastern	Naroda Road, Saraspur, Potaliya Talav, Bapunagar, Rakhial, Gomtipur, Rajpur-Hirpur, Amraiwadi, Khokra-Mehmdabad, Saijpur-Bogha Naroda-Muthia, Odhav, Bage-E-Firdosh (13 wards)
4 Eastern-South	Maninagar, Kankaria, Behrampur, Danilimda, Isanpur, Vatwa (6 wards)
5 Western-North	Wadaj, Naranpura, Sabarmati (3 wards)
6 Western	Gandhigram (one ward)
7 Western-South	Paldi, Vasna (2 wards)

DISTRIBUTION OF POPULATION

Ahmedabad is the largest city of Gujarat State with its population of 28,76,710 (1991). The city is sprawled over 192 sq. km. area having 43 census wards. Among them Vatwa ward (Southern zone of East Ahmedabad) with several industries is the largest in terms of area accounting for 14.67 percent of the city area. Another ward Isanpur of the same zone accounts for another 8.35 percent of the city area. The Smallest ward in terms of area is Dariapur (Walled city-Central zone) which covers 0.13 percent of the city area. The wards having more than 4 percent of city population are Shaijpur-Bogha (5.61), Vadaj (4.85), Sardarnagar (4.05) and Amraiwadi (4.03) and wards with less than 1 percent of population are Saraspur (0.95), Dariapur (0.95), Dariapur (0.95), Gheekanta (0.86), Khadia-I (0.80) and Kalupur-North (0.73) and Kalupur-South (0.70). The intra-urban distribution of population is shown by Lorenz curve (Figure 1). There are 3 wards of Central zone (Vadigam, Jamalpur and Dariapur) with more

than 1000 persons per hectare accounting for 0.50 percent of the City area and 3.72 percent of the city population. This shows the very high concentration of population with land-man ratio of 1 : 7.5. The next high concentration of population is also in the Central zone (Khadia-2, Manekchowk, Khanpur, Shahpur and Khadia-I) and has more than 500 persons per hectare (but less than 1000) and 1.43 percent of City area, 6.19 percent of city population and Land-man ratio of 1 : 4.33. There are 11 wards of Central, Northern and Eastern zones (Eastern Ahmedabad) which have the density of 250 to 500 persons per hectare and account for 10.17 percent of city area and 23.81 percent of city population (Table 3) (Land-man ratio 1 : 2.34). The 19 wards of Western Ahmedabad and Eastern Ahmedabad (mainly North and East zones) have density of 100-250 persons per hectare and account for 51.98 percent of area and 54.18 percent of population indicating land-man ratio of 1 : 1.04. Lastly there are 5 wards mostly of Southern zone of Eastern Ahmedabad with less than 100 persons per

Table 3

Intra-Urban Distribution of Population in Ahmedabad - 1991

Ward No.	Ward Rank based on density of population	Density of population per Ha.	(1)		(2)	
			% of Area	Cum. % of Area	% of Pop.	Cum. % of Pop.
7	Vadigam	1126	0.17	0.17	1.29	1.29
11	Jamalpur	1103	0.20	0.37	1.50	2.79
6	Dariapur	1076	0.13	0.50	0.93	3.72
2	Khadia-2	954	0.16	0.66	1.03	4.75
10	Manekchowk	652	0.24	0.90	1.04	5.79
9	Khanpur	631	0.41	1.31	1.71	7.50
8	Shahpur	586	0.41	1.72	1.61	9.11
1	Khadia-1	579	0.21	1.93	0.80	9.92
29	Gomatipur	495	0.43	2.36	1.43	11.35
5	Gheekanta	483	0.27	2.63	0.86	12.20
3	Kalupur-South	460	0.23	2.86	0.70	12.91
22	Asarwa	449	0.40	3.26	1.20	14.11
23	Chamanpura	442	1.16	4.41	3.41	17.52
4	Kalupur-North	431	0.26	4.67	0.73	18.25
24	Naroda	345	1.11	5.78	2.55	20.80
31	Amraiwadi	342	1.76	7.54	4.03	24.83
32	Khokhra Mehdabad	341	1.39	8.93	3.18	28.00
21	Girdharnagar	277	1.62	10.55	2.99	31.00
27	Bapunagar	265	1.54	12.09	2.73	33.72
17	Naranpura	238	2.22	14.32	3.53	37.25
33	Maninagar	233	1.79	16.11	2.79	40.04
20	Madhupura	228	1.15	17.25	1.74	41.78
30	Rajpur-Hirpur	220	2.03	19.28	2.98	44.76
28	Rakhial	201	1.48	20.77	2.00	46.76
38	Saijpur Bhoga	200	4.20	24.96	5.61	52.36
14	Vasana	189	3.14	28.10	3.96	56.32
16	Vadaj	178	4.09	32.18	4.85	61.17
26	Potalia Talav	165	3.54	35.73	3.90	65.07
25	Saraspur	156	0.91	36.63	0.95	66.02
19	Dudheshwar	154	1.63	38.26	1.67	67.69
18	Sabarmati	145	2.90	41.16	2.81	70.50
13	Paldi	142	1.49	42.65	1.41	71.91
36	Danilimda	137	2.57	45.22	2.35	74.26
41	Bage Firdaus	124	2.05	47.27	1.70	75.96
12	Raikhad	117	2.09	49.36	1.64	77.60
35	Beherampura	115	3.66	53.02	2.80	80.40
15	Gandhigram	103	5.01	58.03	3.44	83.44
37	Sardarnagar	100	6.03	64.06	4.05	87.89
40	Odhav	94	4.80	68.86	3.01	90.90
34	Kankaria	82	2.88	71.75	1.58	92.48
43	Isanpur	66	8.35	80.10	3.68	96.16
39	Naroda-Muthia	57	5.23	85.33	2.00	98.16
42	Vatwa	19	14.67	100.0	1.84	100.00

hectare which account for 35.93 percent of City area and 12.11 percent of city population, and reflect a land-man ratio of 1 : 0.34. The concentration of population as shown by the Lorenz curve indicates 0.50 percent area with 3.72 percent population, 1.93 percent area with 9.92 percent of population, 12.09 percent of area and 33.72 percent population and 64.06 percent of area and 87.89 percent of population (Figure 1 and 2).

DENSITY OF POPULATION

The density of population varies from 19 persons per hectare in Vatwa ward (due to industrial activity) to 1126 persons per hectare in Vadigam of the Walled city. Jamalpur and Dariapur also of the Walled city have more than 1000 persons per hectare. (Figure 2). Out of seven micro-urban areas, the Central zone has the highest density of population - 435 persons per hectare (75). The Southern zone of Eastern Ahmedabad comprising of

Maninagar, Kankaria, Behrampura, Danilimda, Vatwa and Isanpur has the lowest density of population (66 persons per hectare) and the lowest number of houses per hectare. Similarly the average size of household is large i.e. 5.73 persons per household in the Central zone which may be due to their extended unitary family or may be due to their traditional, conventional and conservative values resulting into their non-acceptance of family planning practices. This phenomena of large household contributes not only to the Internal Living Density (ILD) but also to the External Living Density (ELD). The average size of household is relatively moderate in the Eastern Ahmedabad (5.03 to 5.43 persons per household) (Table 5) and low in the Western Ahmedabad (4.89 to 5.04). The smaller average size of household in the Western zone is mainly due to the high socio-economic level in terms of high literacy, high female literacy, higher level of education, high level of income

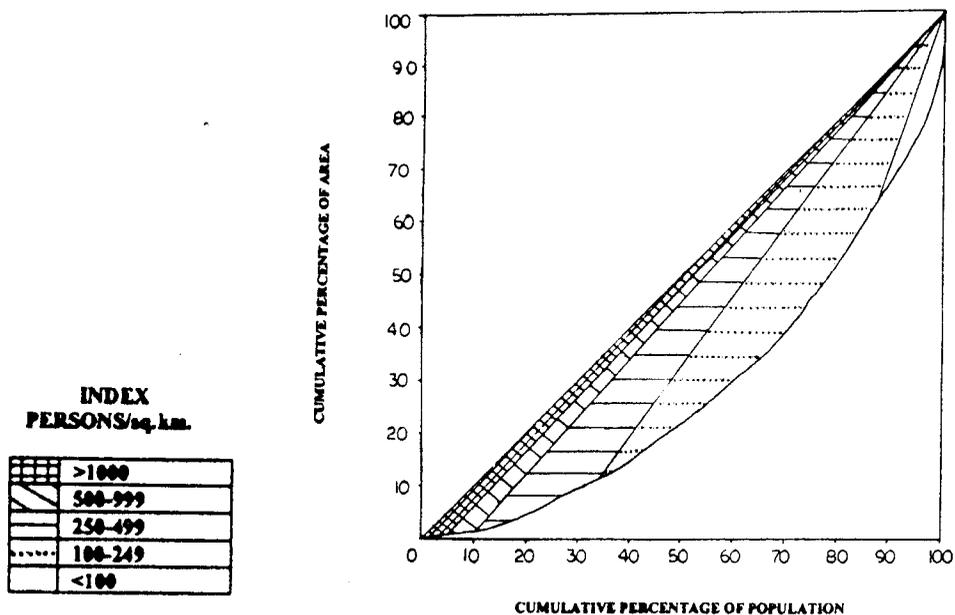


Fig. 1 : Concentration of Urban Population in Ahmedabad City - 1991

and standard of living. Thus, in terms of absolute area, the three micro-zones of the Eastern Ahmedabad have more area with maximum of 6519 hectares of South-Eastern zone. Among the three micro-zones of Western Ahmedabad the North-Western zone has 1769 hectares. The concentration of absolute population size is observed in all the micro-urban zones of Eastern Ahmedabad (Table 4).

LITERATE POPULATION

Literacy is another indicator of human resource development and more realistically the female literacy. The highest male literacy (81.52 percent) is observed in the Western Micro-zone (Gandhigram ward) of Western Ahmedabad and the lowest (69.88 percent) in the Northern micro-zone of Eastern Ahmedabad covering Dudheshwar, Madhupura, Asarwa and Chamanpura areas. The Gandhigram ward also shows highest female literacy (74.51 percent) whereas the lowest rates (55.52 percent) are recorded by the Eastern micro-zone of Eastern Ahmedabad characterised by industrial activity and workers. The inter-zonal variability is high in case of female literacy (19 percent) compared to male literacy (11 percent).

PARTICIPATION IN ECONOMIC ACTIVITY

Less than one-third of the city population is participating in the economic activities and it is less than 6 percent in case of female participation in work. There is considerable variability in the rate of participation in work by micro-urban zones (Table 4). There is 22 percent of participation in work in the Eastern zone of Eastern Ahmedabad and 31 percent in the Western and Southern zones of Western Ahmedabad. The female participation in work varies from 4 percent in the Eastern zone of Eastern Ahmedabad to 10 percent in the Western zone of Western Ahmedabad. Thus the dependency ratio is highest (3.31) in the Eastern zone and is lowest (2.19) in the Western zone (Gandhigram ward).

Inter-zonal occupational pattern shows interesting features. Among the activities of secondary sector 'other than household industry' has higher percentage of work force. The spatial variability is 17.67 percent in Southern zone of Western Ahmedabad (Paldi, Vasna) to 66.26 percent in the Eastern zone of Eastern Ahmedabad (Naroda Road, Saraspur, Bapunagar, Rakhial, Gomtipur, Amraiwadi,

Table 4

Inter Zonal Pattern of Human Resource Indicators - 1991 (Positive Indicators)

Micro urban zones	Area (in Ha.)	Population	Density of pop (per Ha.)	Percentage of male Literacy	Percentage of female Literacy	Percentage of Main workers	Percentage of female workers
1 Central zone	916	3,98,410	435	77.95	67.81	28.81	5.04
2 Western-North	1769	3,22,006	182	76.18	66.15	29.85	6.43
3 Western	963	99,001	103	81.52	74.51	31.23	9.79
4 Western-South	889	1,54,426	173	78.70	71.04	31.06	9.03
5 Eastern-North	2302	4,33,301	188	69.88	55.92	28.07	4.98
6 Eastern	5855	10,37,003	177	70.96	55.52	21.58	3.87
7 Eastern-South	6519	4,32,563	66	70.44	57.40	29.56	6.14
Ahmedabad City	19213	28,76,710	150	73.01	59.95	28.90	5.61

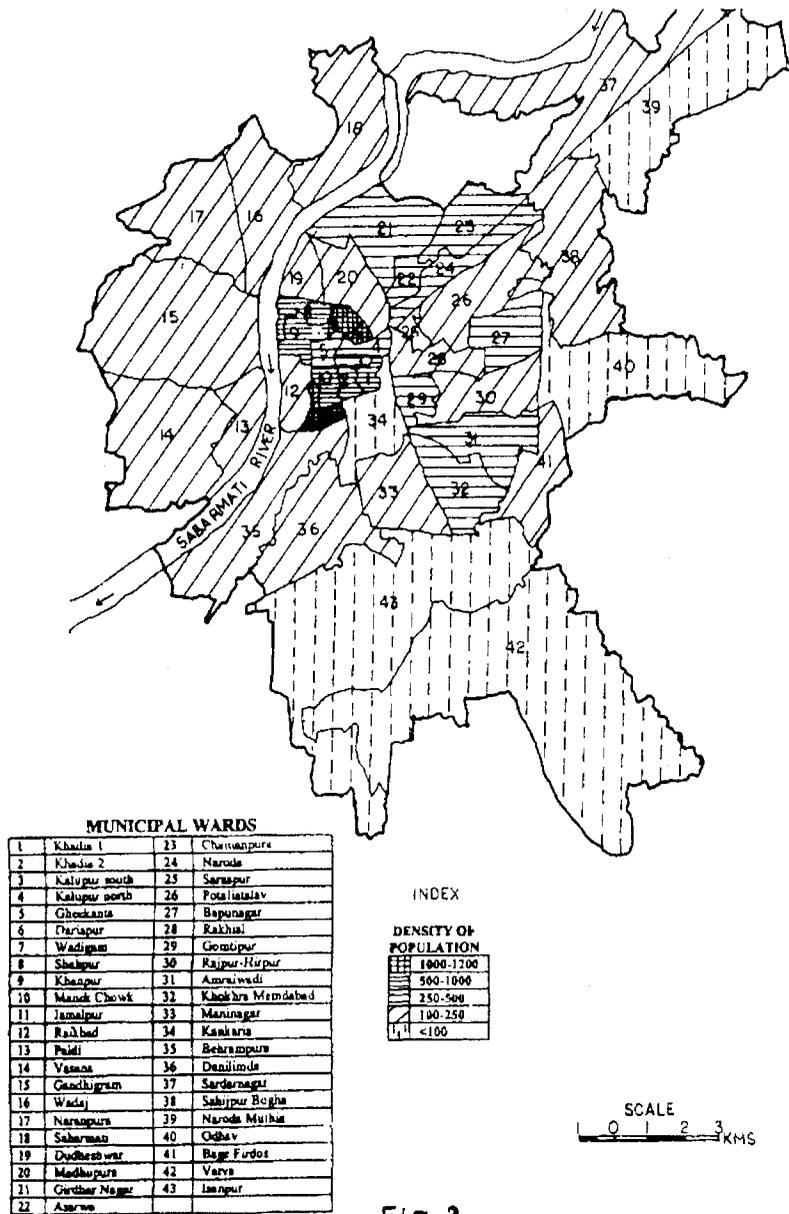


Fig. 2 : Interward Variation in Density of Population - 1991

Odhav etc.). The average percentage of work force in the entire Eastern Ahmedabad is about 49 percent and comparable figure for Western Ahmedabad is 29 percent and for the Central zone (Walled city) it is 30 percent.

The Central zone has old manufacturing units related to textiles. The construction activity is more prominent in the Western Ahmedabad with the construction workers residing in Northern zone (9 percent) and Southern zone

Table 5

**Inter-Zonal Pattern of Human Resource Indicators -1991
(Negative Indicators)**

Micro-Urban Zones	Average size of Household	Percentage of children below age-6	Sex-Ratio	Dependency Ratio	Houses to Households
1. Central Zone	5.73	12.81	932	2.45	1.009
2. Western-North	4.89	14.14	909	2.33	1.001
3. Western	4.98	10.27	889	2.19	1.003
4. Western-South	5.04	11.76	940	2.21	1.002
5. Eastern-North	5.43	16.37	871	2.55	1.002
6. Eastern	5.17	16.41	801	3.31	1.011
7. Eastern-South	5.03	15.75	889	2.37	1.003
Ahmedabad City	5.21	15.09	889	2.45	1.006

(9 percent). The work force engaged in trade and commerce is mainly concentrated in the Central zone (35 percent) and Southern zone of Western Ahmedabad (35 percent) followed by Western zone (34 percent) and Northern zone of Western Ahmedabad (32 percent) (Figure 3 and Table 6). These two major urban ecological units (Central and Western) of Ahmedabad has important commercial land-use developments both of old and new one. The work force engaged in 'other services' show relative concentration in Western

Ahmedabad (29 percent) especially in the Western micro-urban zone (Gandhigram ward) (35 percent) whereas other micro-zones have about 20 to 22 percent of the work force in 'other services.' The three micro-urban zones of Eastern Ahmedabad have the predominance of industrial workers exceeding more than 40 percent each. Among these, the Eastern micro-urban zone comprising of Bapunagar, Gamtipur, Amraiwadi, Odhav, Naroda Road, etc., has about 56 percent of workers in secondary activity. The other two micro-urban

Table 6

Inter-Zonal Variation in Socio-Economic Aspects - 1991

Micro-Urban zones	No. of Houses per Ha.	Percentage of Scheduled Caste Pop.	Percentage of Scheduled Tribe Pop.	Percentage of Workforce in		
				Secondary	Trade & Comm	Trans, Comm. & Other Services
1. Central Zone	75	5.12	0.47	32.96	35.31	31.74
2. Western-North	37	12.86	0.93	31.04	32.03	36.93
3. Western	21	2.70	0.84	25.69	35.75	35.69
4. Western-South	34	12.34	1.22	28.56	35.75	35.69
5. Eastern-North	35	14.05	1.70	40.08	29.02	30.90
6. Eastern	34	15.32	0.37	55.97	17.72	26.31
7. Eastern-South	13	16.83	0.99	44.06	22.55	33.39
Ahmedabad City	29	13.07	0.80	42.92	25.98 ^s	31.10

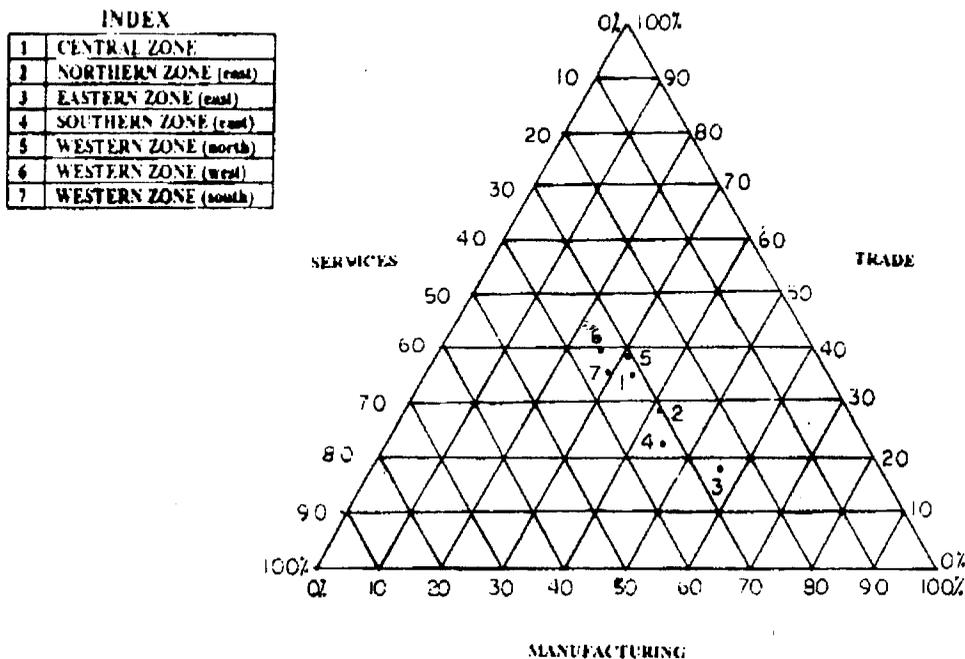


Fig. 3 : Occupational Structure of Ahmedabad City - 1991

zones also have the important industrial areas such as Asarwa, Girdharnagar, Sardarnagar, Vatwa and Isanpur. As regards the distribution of workers in trading and commerce activity, the south western, central, western and north-western micro-urban zones emerge as significant one. In these zones the percentage of workers vary from 32 to 36. The important areas in terms of concentration of workers in these activities are Paldi, Vasna, Manekchowk, Vadigam, Gheekanta, Kalupur, Khadia, Ambavadi, Ellisbridge, Navrangpura, Naranpura, Vadaj and Sabarmati. Except the Eastern micro-zone all other zones have the distribution of workers engaged in transport, communication and other services ranging between 30 to 40 percent. Eastern micro-zone has only 26 percent of workers in this activity. The inter-zonal variation in the percentage of workers is maximum (26 to 56) in case of

secondary activities compared to the range of percentages in trading (18 to 36) and transport and other services (26 to 40). This aspect brings out significant phenomena of spatial concentration in case of industrial workers (30) followed by traders (18) and transport and service class (14).

PROPORTION OF CHILDREN

In addition to higher dependency ratio and larger size of household, the higher proportion of children (below the age of 6) also may be considered as negative indicator of human resource development. The micro-urban zones of Eastern Ahmedabad have relatively higher percentage of children compared to the zones of Western Ahmedabad. The Eastern zone has maximum (16.41) percentage and Western zone has minimum (10.27), percentage of children.

Table 7

Inter-Zonal Pattern of Human Resource Development - 1991
(Rank based on type of Indicator)

Micro-Urban zones	Density of Population	Male Literacy	Female Literacy	Main Workers	Female Workers	Size of H.H.	Children below age-6	Sex-Ratio	Dependency ratio	Houses to house-holds	Total Rank	Index Value
1. Central zone	1	3	3	5	5	7	3	7	5	6	45	64.29
2. Western-Noth	3	4	4	3	3	1	4	5	3	1	31	44.29
3. Western	6	1	1	1	1	2	1	4	1	4	22	31.43
4. Western-South	5	2	2	2	2	4	2	6	2	2	29	41.43
5. Eastern-North	2	7	6	6	6	6	6	2	6	2	49	70.00
6. Easter	4	5	7	7	7	5	7	1	7	7	57	81.43
7. Easter-South	7	6	5	4	4	3	5	3	4	4	45	64.29

$$\text{Knox's Index : } I_j = 100 \frac{\sum R_j}{N-C}$$

Where R = Rank of j-th unit

N = Number of areal units

C = Number of variables

* Index value (I_j) Lower the index value

higher is the social development and vice versa

SEX-RATIO

The proportion of females per 1000 males shows core-peripheral contrasts. The Central zone has 932 females per 1000 males, the Eastern Ahmedabad with industrial activity has 873 females and the Western Ahmedabad records 914 females. This shows sharp gradient on the eastern periphery than on the western periphery. The low female proportion in the outer areas is due to the preponderance of male immigrants. The high female proportion of the Central zone is perhaps due to male out-migration. Among the seven micro-urban zones, the Eastern zone (industrial activity and workers) has the lowest female proportion - 701 females per 1000 males followed by Northern (871) and Southern (889) zones of Eastern Ahmedabad. Among the three micro zones of Western Ahmedabad, Western zone has relatively low (889) proportion of females (Table 5).

HOUSES TO HOUSEHOLDS

The Eastern Ahmedabad has more number of households than the number of houses. The short fall of houses is to the extent of 2189 in the Eastern Ahmedabad, in the Central zone it is 650 and in the Western Ahmedabad it is only 214. This perhaps indicates the proportion of houseless households taking shelter in the rickety structures of slums or sharing part of the house as tenants. The houseless population is relatively more in the Eastern and Central zone compared to other zones (Table 5).

The schedule-caste population is 16 times more than the schedule-tribe population in the city. However, their concentration is in the outer areas rather than in the Central zone. The percentage of scheduled caste population is highest in the Southern zone of Eastern Ahmedabad (16.83 percent) especially in Behrampur, Danilimda, Vatwa and Isanpur areas and the lowest percentage of scheduled

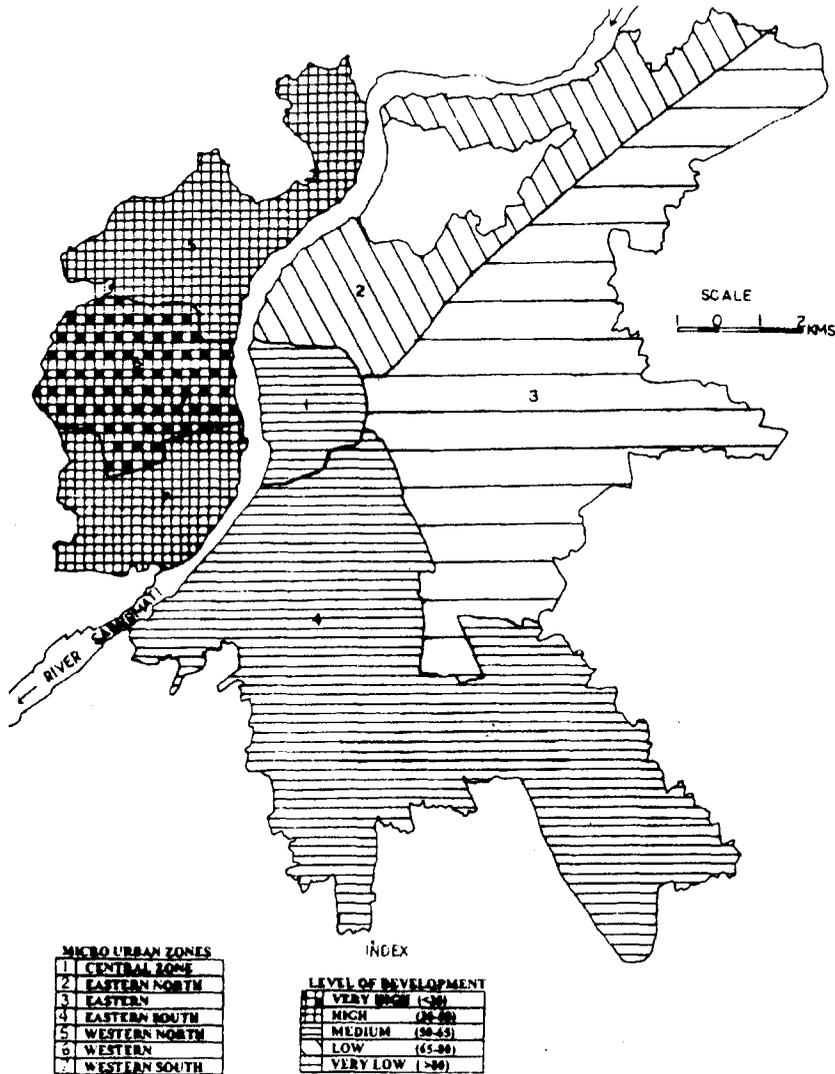


Fig. 4 : Inter-Zonal Levels of Human Resource Development - 1991

caste population is recorded in the Western zone of Western Ahmedabad (2.70).

The Southern zone (Behrampura, Vatva, Isanpur) of Eastern Ahmedabad and Northern zone of Western Ahmedabad (Sabarmati) are relatively low lying areas with sewerage farm, industrial units and thermal power plant are less preferred by others for residential purpose. However,

scheduled-caste population is relatively high in these micro-urban zones (16.83 and 12.86 percent respectively) on account of low land values and low level of environmental quality.

COMPOSITE LEVEL OF HUMAN RESOURCE DEVELOPMENT

For measuring the levels of human resource development of each of the micro-urban zones,

ten demographic indicators were chosen. Density of population, male literacy, female literacy, main workers, female workers (positive indicators), size of household, children below the age of 6, sex-ratio, dependency ratio and houses to households (as negative indicators). The ranking of positive and negative indicators is done in descending and ascending order respectively. Using Knox's index of social well-being the values have been calculated for all the micro-urban zones. Here the index value is inversely related to the level of development i.e. the micro-zone with least index value is more developed.

Among the seven identified micro-urban zones, West zone (Gandhigram ward, Ellisbridge, Navrangpura and Ambavadi areas) of Western Ahmedabad show lowest index value - 31.43 indicating highest level of human resource development. The zone has high male and female literacy, high rate of male and female participation in work with low dependency ratio, low percentage of children (below the age of 6) and smaller size of household. The other two micro-urban zones of Western Ahmedabad also show relatively high level of human resource development. The South zone (Paldi, Vasna) with 41.43 and North zone (Sabarmati, Vadaj and Naranpura) with 44.29 index values show high level of human resource development (Table 7). These areas are mainly inhabited by middle class urban residents. The Central zone (walled city) with 64.25 and the Southern zone of

Table 8

**Inter-Zonal Variation in Levels of
Human Resource Development**

Levels of Development	Micro-Urban Zone (with index value)
Very High	Western zone of Western Ahmedabad (31.43)
High	South zone (41.43) and North zone (44.29) of Western Ahmedabad
Moderate	Central zone (walled city) (64.25) and Southern zone (64.29) of Eastern Ahmedabad
Low	Northern zone of Eastern Ahmedabad (70.00)
Very Low	Eastern zone of Eastern Ahmedabad (81.43)

Eastern Ahmedabad with 64.29 (Kankaria, Maninagar and Isanpur, etc.) and the Northern zone (Dudheshwar, Madhupur, Asarwa, etc.) with 70.00 index value show low level of human resource development. The Eastern zone covering areas of Naroda Road, Saraspur, Gomtipur, Rakhial, Amraiwadi, Bapunagar, Odhav etc. show the lowest level of human resource development with 81.43 index value (Figure 4, Table 8).

The foregoing analysis provide adequate insight into the inter-urban zonal variation in some selected reflective demographic indicators of human resource development.

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