

## Chapter – 2 : City Demographic Profile

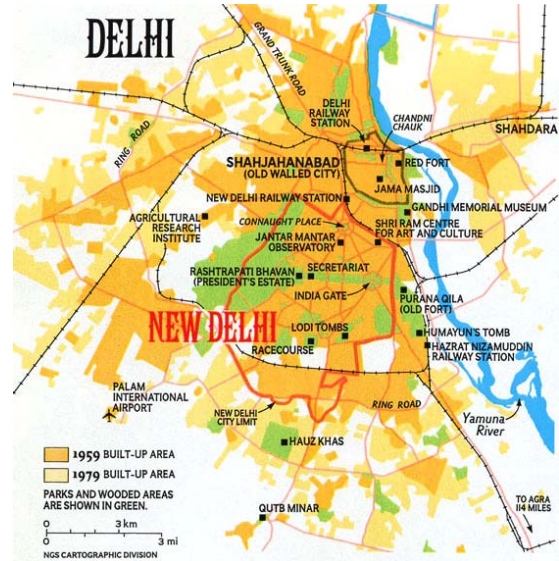


## CHAPTER - 2 CITY DEMOGRAPHIC PROFILE

### 2.1 INTRODUCTION - LOCATION, GEOGRAPHY AND CLIMATE

Delhi is located in northern India between the latitudes of 28°-24'-17" and 28°-53'-00" North and longitudes of 76°-50'-24" and 77°-20'-37" East. It has an area of 1,483 sq. kms. with a maximum length of 51.90 kms and greatest width of 48.48 kms. It shares borders with the States of Uttar Pradesh and Haryana.

The Yamuna River and terminal part of the Aravali hill range are the two main geographical features of the city. The Aravali hill ranges are covered with forest and are called the Ridges; they are the city's lungs and help maintain its environment.



The average annual rainfall in Delhi is 714 mm, three-fourths of which falls in July, August and September. Heavy rainfall in the catchment area of the Yamuna can result in a dangerous flood situation for the city. During the summer months of April, May and June, temperatures can rise to 40-45 degrees Celsius. Winters are typically cold with minimum temperatures during December and January falling to 4 to 5 degree Celsius. February and March, October and November are climatically the best months.

The forest cover has increased from 0.76% of the total area in 1980-81 to 1.75% in 1994-95 and 5.93% in 2000-01. Delhi's mineral resources are primarily sand and stone, which are useful for construction activities. However, the stone quarries in the Ridge area have been shut down since 1984 on account of environmental considerations.

#### National Capital Region:

The NCR comprises of the entire NCT Delhi, eight districts of Haryana, one district of Rajasthan and five districts of Uttar Pradesh with a population of over 371 lakhs in 2001. The sub-regions of NCT-Delhi, Haryana, Rajasthan and Uttar Pradesh accommodated 37.33%, 23.42%, 8.07% and 31.19% of NCR's population respectively.

### 2.2 DEMOGRAPHIC TRENDS

Delhi has been one of the fastest growing cities in the country, clocking over 47% decadal growth from 1991-2001, more than double the national rate. A large part of this rapid growth has been due to the high level of migration. The subsequent sections take a closer look at the trends.

### 2.2.1 Area and Population

The annual average exponential growth rate of population of Delhi was the highest (6.42%) during 1941-1951 due to large-scale migration from Pakistan to India after partition in 1947. Since then the annual growth has been recorded at 4.22 % during 1951-1961; 4.25% during 1961-1971; 4.25% during 1971-1981 and 4.15% during 1981-1991. The annual growth rate of population of Delhi during 1991-2001 has been recorded as 3.85% and it is almost double the national average.

### 2.2.2 Population Growth, spatial distribution and Density

Delhi was considered as a single district for Population Census 1991. In 1996, Government of NCT of Delhi, through a Gazette Notification, created 9 districts and 27 sub-divisions. Population Census 2001 was conducted in Delhi in each of 9 districts and 27 Sub-divisions. Ranking of districts by population, in 1991 and 2001 is given in Table 2.1

**Table 2.1: District-wise population**

District	2001		1991		Decadal Growth
	Population	% to total	Population	% to total	
North-West	2,860,869	20.65	1,777,968	18.87	60.91%
South	2,267,023	16.37	1,501,881	15.94	50.95%
West	2,128,908	15.37	1,433,038	15.21	48.56%
North-East	1,768,061	12.77	1,085,250	11.52	62.92%
South-West	1,755,041	12.67	1,087,573	11.55	61.37%
East	1,463,583	10.57	1,023,078	10.86	43.06%
North	781,525	5.64	686,654	7.29	13.82%
Central	646,385	4.67	656,533	6.97	-1.55%
New Delhi	179,112	1.29	168,669	1.79	6.19%
<b>Total</b>	<b>13,850,507</b>	<b>100</b>	<b>9,420,644</b>	<b>100</b>	<b>47.02%</b>

Source: Economic Survey of Delhi 2003-04

Note: The population of nine districts for 1991 is derived by recasting the Census data of 1991 Census according to the present jurisdiction of the districts.

### Population Density

According to Census 2001, the density of population, in Delhi, averages 9,340 persons per sq. km. as against 6,352 persons in 1991. Density of population at All-India level has been worked out at 324 persons per sq. km. in 2001. The density of population in Delhi is the highest among all states / UT's in the country. The spatial distribution of the population density in Delhi is given in Table 2.2.

**Table 2.2: Density of Population (Per person Sq. kms)**

District	Population Density	
	1991	2001
North-East	18,088	29,468
Central	26,261	25,855
East	15,986	22,868

West	11,116	16,503
North	11,471	13,025
South	6,012	9,068
North-West	4,042	6,502
New Delhi	4,791	5,117
South-West	2,583	4,179
<b>All Delhi</b>	<b>6352</b>	<b>9340</b>

Source: Economic Survey of Delhi 2003-04

Note: The population of nine districts for 1991 is derived by recasting the Census data of 1991 Census according to the present jurisdiction of the districts.

### 2.2.3 Natural Increase

According to Civil Registration Records, birth and death rate (per'000 population) have been declining since 1991. The birth rate of 28.48 per 1000 recorded in 1991, further declined to 21.25 in 2001. The death rate also declined from 6.35 per 1000 in 1991 to 5.86 per 1000 in 2001. Infant mortality rate declined from 32.37 per thousand live births in 1991 to 24.49 in 2001. Table 2.3 provides the annual increase between 1991 and 2001.

Table 2.3: Birth & Death Rate

(Figures in Lakhs)

Year	Population	Growth	Total Birth	Total Death	Natural Increase	Migration
1991	95.5	3.89	2.72	0.61	2.11	1.78
1992	99.37	3.87	2.74	0.62	2.12	1.75
1993	103.38	4.01	2.7	0.64	2.06	1.95
1994	107.5	4.12	2.62	0.68	1.94	2.18
1995	111.74	4.24	2.75	0.69	2.06	2.18
1996	116.1	4.36	2.83	0.76	2.07	2.29
1997	120.57	4.47	2.89	0.71	2.18	2.29
1998	125.14	4.57	2.84	0.8	2.04	2.52
1999	129.82	4.68	2.88	0.79	2.09	2.59
2000	134.6	4.78	3.17	0.8	2.37	2.41
2001(p)	139.5	4.9	2.96	0.81	2.15	2.75

Source: Economic Survey of Delhi 2003-04

## 2.3 MIGRATION PATTERN

As observed from the above table, migration has been a major driver in the population increase in the city. The key factors relating to this have been discussed below.

### 2.3.1 Origin and composition of Migrants

Table 2.4 shows the last estimate for migration origin. This is based on percentage of migration taking place from various States to Delhi during Census period 1981 to 1991.

Table 2.4: Origin of Migrants

State of Origin	% of total migration
Uttar Pradesh	49.61%
Haryana	11.82%

Bihar	10.99%
Rajasthan	6.17%
Punjab	5.43%
West Bengal	2.79%
Madhya Pradesh	2.71%
Other States	10.48%

Source: Economic Survey of Delhi 2003-04

#### NCR Settlement Pattern:

There are 17 Class I cities in the NCR, including Delhi Metropolis. These account for more than 90 % of the total urban population of the region (Delhi alone accounts for 62%)

The highest order settlements identified in Regional plan-2001 were six Central NCR towns and 11 priority towns/regional centers outside NCT-Delhi in NCR. The CNCR towns were envisaged to grow to 37 lakhs against which they actually grew to 28.11 lakhs as per the census 2001. Of these six towns, the towns of Ghaziabad and Faridabad reached their targeted population; the rest of the CNCR towns could not achieve their target. The planned vs actual population figures are given in the table below.

#### Urban & Rural Settlement in NCR-2001

Name of Area	Actual Population 2001	Assigned Popn. as per RP-01	Actual Popn. as % of Assigned Population
CNCR Towns	28,10,942	37,00,000	75.97
Regional Centers /Priority Towns	28,17,837	49,00,000	57.51
NCR (excl. NCT Delhi)	2,32,49,759	2,13,00,000	109.15
NCT-Delhi	1,38,50,507	1,12,00,000	123.67
<b>NCR</b>	<b>3,71,00,266</b>	<b>3,25,00,000</b>	<b>114.15</b>

#### DURATION OF MIGRATION AND EMPLOYMENT

As per a survey done by “The Institute of Economic Growth, Delhi”, a majority of the migrant workers were employed as petty traders or vendors in the service sector and manufacturing. Together these account for over 80% of the migrant population.

Table 2.5: Occupational Characteristics of Migrant population

Migration Category	Dominant Occupation					Total
	Petty Traders and Vendors	Transport Workers	Workers in Services	Manufacturing, Construction and Related Work	Casual Workers	
0-5 Years	5	3	2	3	1	14
6-9 Years	15	0	3	5	0	23
10-11 Years	3	2	8	12	2	27

Migration Category	Dominant Occupation					Total
	Petty Traders and Vendors	Transport Workers	Workers in Services	Manufacturing, Construction and Related Work	Casual Workers	
12-15 Years	26	11	27	14	8	86
Total	49 (32.7)	16 (10.7)	40 (26.7)	34 (22.7)	11 (7.3)	150 (100.0)

(NOTE: Figures in parenthesis are in percentage)

Source: The Institute of Economic Growth Delhi

### 2.3.2 Socio-economic characteristics

There is a clear class difference between the native residents of Delhi and the migrants. Among the natives, a larger number are either rich or belong to the middle class. On the other hand, among the migrants from Bihar and Jharkhand, a large number are poor, and only 7% are rich. Similarly, most migrants from UP and Uttaranchal are also poor. But those who migrated to this city at the time of independence have become very rich - 87% among them have become rich or belong to the middle class. A snapshot of the economic profile is given below.

**Table 2.6: Economic Status of Migrant population**

Place of origin	Rich	Middle	Poor
Delhi	20	53	27
Bihar and Jharkhand	7	31	61
UP and Uttaranchal	10	46	45
Pakistan	36	51	13
Other states	23	49	28

Source: HT-CSDS 2003 survey

### 2.4 LITERACY RATE

Literacy rate in Delhi was 81.67 in 2001. The rural and urban composition was 78.05 and 82.00, respectively. The following table gives the literacy rate in rural and urban areas of nine districts as recorded in 2001 Census.

**Table 2.7: Literacy Rate**

State/District	Literacy Rate (%)		
	Total	Rural	Urban
State: NCT of Delhi	81.67	78.05	82.00
Districts			
North West	80.57	78.62	80.77
North	80.10	78.48	80.31
North East	77.53	75.58	77.70
East	84.91	81.94	84.94
New Delhi	83.24	-	83.24
Central	79.69	-	79.69
West	83.39	76.19	83.68
South West	83.61	79.61	84.20
South	81.96	78.05	82.25

## 2.5 GENDER RATIO

The gender ratio of Delhi has been showing an upward trend since 1971, though at 821, it is still much lower than the All India average of 933, in 2001. A comparative view of the two is given in Table 2.8.

**Table 2.8: Sex Ratio of population**

Census Year	Sex Ratio (Females per '000 Males)	
	Delhi	India
1901	862	972
1911	793	964
1921	733	955
1931	722	950
1941	715	945
1951	768	946
1961	785	941
1971	801	930
1981	808	934
1991	827	927
2001	821	933

Source: Delhi Statistical Handbook 2004

## 2.6 SOCIAL COMPOSITION

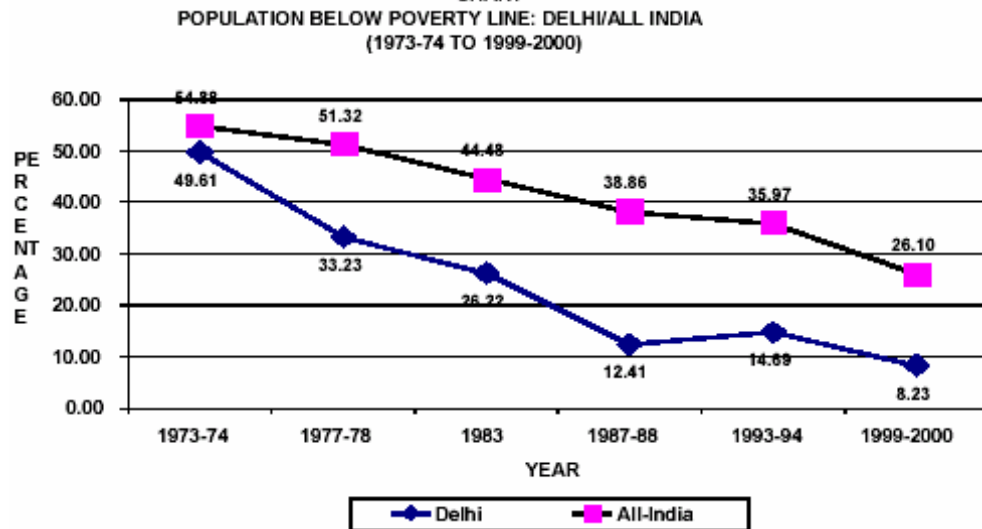
The Planning Commission estimates the proportion and number of poor separately for rural and urban India at the national and state levels based on the recommendations of the Task Force on 'Projections of Minimum Needs and Effective Consumption Demands' (1979). The Task Force had defined the poverty line (BPL) as the cost of an all India average consumption basket at which calorie norms were met. The norms were 2400 calories per capita per day for rural areas and 2100 calories for urban areas. These calories norms have been expressed in monetary terms for each individual year.

**Table 2.9: Monthly Per Capita Poverty Line Delhi- 1973-74/1999-2000**

YEAR	RURAL		URBAN		Total Number of People (in Lakh)
	Monthly Per Capita Poverty Line (in RS.)	Number of People (in Lakh)	Monthly Per Capita Poverty Line (in RS.)	Number of People (in Lakh)	
1973-74	49.95	1.06 (24.44)	67.95	21.78 (52.23)	22.84 (49.61)
1977-78	59.37	1.35 (30.19)	80.17	16.81 (33.51)	18.16 (33.23)
1983	88.57	0.44 (7.66)	123.29	17.95 (27.89)	18.39 (26.22)
1987-88	122.9	0.1 (1.29)	176.91	10.15 (13.56)	10.25 (12.41)
1993-94	233.79	0.19 (1.90)	309.48	15.32 (16.03)	15.51 (14.69)
1996-97	289.31	-	404.96	-	-
1999-2000	362.68	0.07 (0.40)	454.11	11.42 (9.42)	11.49 (8.23)

**Note:** Figures in Parentheses are Percentages of the total population.

**Source:** Planning Commission.



According to the Delhi Economic Survey 2004-2005, 6% of the people living in Delhi are very poor and another 28% poor. If clubbed together, 34% would be considered as poor. On the other hand, nearly 6% people in Delhi would be considered as very rich and another 12% as rich. As such, 18% people in Delhi are those who would be considered as belonging to the rich class. There is a big middle class, which constitutes 48% of the population. Among the middle class, 28% belong to the upper middle class, while 20% fall in the lower middle class.

## 2.7 POPULATION PROJECTION

The population projection for Delhi has been provided below. This is as per the projections given by the Census of India. The breakup has been provided by sex, dependency and age. The estimates project a growing trend in the population density and median age, whereas the sex ratio shows a worryingly downward trend.

### 2.7.1 Annual Average Growth Rate

The demographic indicators project a marginal downturn in the population growth rate from 2.9 per thousand to 2.7.

**Table 2.10: Demographic Indicators: 2001-2025**

Indicator	2001-05	2006-10	2011-15	2016-20	2021-25
1	2	3	4	5	6
Population growth rate	2.9	2.8	2.9	2.8	2.7
Crude Birth Rate (CBR)	16.0	15.4	15.9	15.5	14.3
Crude Death Rate (CDR)	4.1	4.4	4.5	4.7	4.9
Infant Mortality Rate (IMR)	25.1	23.1	21.1	19.2	17.8
Under-5 mortality rate ( $q_5$ )	30.1	27.8	25.4	23.2	21.6
Total Fertility Rate (TFR)	2.0	1.8	1.8	1.8	1.8
Life expectancy of males	70.6	71.4	72.2	73.0	73.5
Life expectancy of females	73.8	74.8	75.8	76.6	77.4

PROJECTED POPULATION CHARACTERISTICS AS ON 1<sup>ST</sup> MARCH: 2001-2026

## DELHI

Indicator	2001	2006	2011	2016	2021	2026
1	2	3	4	5	6	7
<b>Population (000')</b>						
Total	13851	16021	18451	21285	24485	27982
Male	7607	8835	10215	11827	13650	15645
Female	6243	7186	8235	9458	10835	12337
Sex ratio	821	813	806	800	794	789
Population density (Sq. km.)	9340	10803	12441	14353	16511	18868
<b>Population by broad age-groups (000')</b>						
18 years and above	8466	10551	12876	15346	17891	20530
0-14	4500	4450	4514	4848	5548	6248
15-59	8651	10662	12744	14847	16807	18929
60+	700	909	1193	1589	2131	2805
<b>Proportion (percent)</b>						
0-14	32.5	27.8	24.5	22.8	22.7	22.3
15-59	62.5	66.5	69.1	69.8	68.6	67.6
15-49 (Female population)	55.6	59.2	61.1	61.1	59.3	58.0
60+	5.1	5.7	6.5	7.5	8.7	10.0
Median age (years)	23.41	25.23	27.13	28.72	30.14	31.37
<b>Dependency Ratio</b>						
Young (0-14)	520	417	354	327	330	330
Old (60+)	81	85	94	107	127	148
Total (Young and old)	601	503	448	434	457	478

### 2.7.2 Projected Population

As per the projections of Census of India, the population of Delhi is expected to be over 24 million by 2021 and touch 28 million by 2026.

#### Population Projections for NCR:

The population projection for NCR for the year 2011 and 2021 is given in the table below. The population of NCR is projected to be 641.4 lakhs by 2021. The percentage share of NCT-Delhi is expected to decrease from 37.3% in 2001 to 37% in 2011 and thereafter to 36.6% in 2021. In Haryana Sub-region, the percentage share is projected to consistently increase from 23.4% in 2001 to 24.9% in 2021, whereas in case of UP, it may decline marginally from 31.2% in 2001 to 30.9% in 2021.

#### Population Growth in National Capital Region

Sub-Region	Population in Lakh					Decadal Growth Rate 61-01	Population Projection	
	1961	1971	1981	1991	2001		2011	2021
NCT-Delhi	26.6	40.6	62.2	94.2	138.5	51.1	179.9	234.8
Haryana	28.9	37.9	49.4	66.4	86.8	31.6	117.5	160.2
Rajasthan	11.0	14.0	17.7	22.9	29.9	28.4	37.9	48.1
Uttar Pradesh	44.5	54.4	69.6	90.0	115.7	27.0	150.8	198.3
<b>NCR</b>	<b>2072</b>	<b>2117.9</b>	<b>2189.9</b>	<b>2274.5</b>	<b>2371.9</b>	<b>35.2</b>	<b>2497.1</b>	<b>2662.4</b>