

# Population, Growth Urban Expansion and Land-use of Jaipur City and Region

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## I. Introduction

Jaipur is known as one of the first planned cities of India. It is the only metropolitan city in Rajasthan. With a population of 2,324,319 in 2001, it accounts for only 30.75 percent of the population of Class I cities in Rajasthan. During the decade 1991-2001, Jaipur recorded the highest growth rate of 59.37 percent. The Jaipur Municipal Corporation area has increased from 200.4 sq km. in 1991 to 484.64 sq km. in 2001 with the inclusion of Amber and Sanganer municipalities and 93 revenue villages. The density of the Jaipur urban agglomeration now works out to 6,956 persons per square km.

The paper attempts to present a descriptive analysis of aspects of the city with regard to demographic, social and territorial trends. Population growth trends were discussed as part of the first part. A brief discussion on the primacy of the city was made in the second part. The third part describes in detail the migration characteristics of the city. Literacy and the gender ratio are discussed in the fourth and fifth sections. The caste profile of the city was attempted within the sixth section. Temporal changes in land use in Jaipur are discussed in the final section.

## 1. DEMOGRAPHIC TRENDS

The entire Jaipur city region has an extent of 1464 Sq.km. It comprises of following spatial units.

- The Jaipur Municipal Corporation (JMC) that includes the walled city and the rest of JMC;
- Rest of JDA area that includes the satellite towns and the villages.

**Table 1 Area and Population, Jaipur Region, 1991-2001**

S. No.	Area	Total Area (sq. km.)		Population (million)	
		1991	2001	1991	2001
1	JMC	218.30	288.40	1.52	2.32
1a	Walled City	6.70	6.70	0.50	0.40
1b	Rest of JMC	192.30	281.70	1.02	1.92
2	Rest of JDA	1220.00	1149.90	0.35	0.36
3	Total JDA	1464.00	1464.00	1.87	1.68

*Source: Census of India- 1991 & 2001, LEA Associates and Master Development Plan, 2011.*

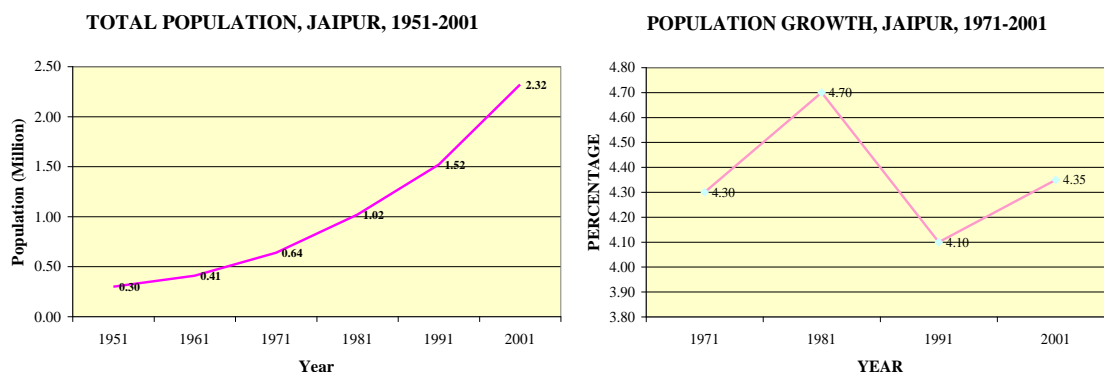
The population of Jaipur region is 2.7 million as per 2001 census and has shown a steady increase over the last 50 years (Figure 2.3). In fact, the population has increased by 8 million over the last decade (Table 2.1). The Jaipur Municipal Corporation area grew from 200 km<sup>2</sup> in 1981 to 218 km<sup>2</sup> in 1991 to 288 km<sup>2</sup> in 2001. The increase in area in 1991 was the result of the addition of Sangner and Amber tehsils and in 2001 to the addition of Bagru, Bassi and Chomu tehsils in urban areas. The area under the JDA's jurisdiction has remained the same since 1991.

In terms of share, 87% of the total population lives in the JMC area, of which 7% live in the walled city. While the proportion of residents living in the JMC has increased (primarily due to expansion in the area), the proportion of residents in the walled city has decreased. This can be considered a positive phenomenon, since the walled city is already very densely populated. The Walled City has a spatial area of only 6.7 square kilometers, but almost four million people live in it. The 2001 census shows that the population of the walled city has declined since 1991 (Figure 2.4). The reason is the departure of residents from the area to new residential colonies that are being created on the periphery for the purpose of a better environment. The population in the rest of the JDA area does not show a large increase from 0.347 million in 1991 to 0.355 million in 2001 (Figure 2.3). The rest of the JDA area also includes 495 villages with a population of nearly 0.2

million. The rest of the JDA territory constituted only 18% in 1991 and 13.2% of the total population in 2001. The decrease in population in the rest of the JDA area in 2001 is due to the renewal of city boundaries.

**Population Growth Rate:**

The population of Jaipur city was only 0.3 millions in 1951 (Figure 2.5) but in 2001 it has reached 2.3 Million. The annual average growth rate from 1971 to 2001 is between 4.1 to 4.7 %



**Figure1: Population Growth in Jaipur City**

The population growth rate was the highest in the year 1981 but declined sharply by 0.6 % in 1991 and it grew again by 0.2 % in 2001. Within the JMC, the major growth has occurred outside the walled city area. The population growth within the walled city was nearly equal to that of the rest of the JMC area between 1981 and 1991. However, between 1991 and 2001 the walled city has witnessed a decline in population. On the contrary, the population growth rate in JMC area has increased partly due to migration and also due to expansion in the JMC area.

**Population Density**

The walled city has the highest population density in the city at 58207 persons/sq km. This is despite the fact that the density has declined from 1991 (74,000 persons per sq.km). The population density of JMC is higher in 2001 than 1991 and has increased by nearly 3000 persons per sq. km in spite of expansion of municipal boundary population density of the Walled City, the JMC area and the JDA areas. It is evident that the JDA Area has the lowest density with JMC Area at the second place and the walled city with maximum concentration of population.

The densities in the JMC area range from 100 persons to nearly 1000 persons per square km. However, the density is high only in the walled city. In the rest of JMC area, the densities range from 100 to 550 persons per square km.

**CITY PRIMACY WITHIN THE STATE**

Jaipur is the largest and the only million city of the state. Its share in the state’ s urban population was 15% in 1991, which grew to 17% in 2001. Jaipur ranks first in the state with the highest urban population. The second ranking city, Jodhpur, is nearly 3 times smaller than Jaipur and the third ranking city, Kota is 4 times smaller. Jaipur is the primate city of the state. The high rate of urbanisation is attributed to its administrative, trading, tourism based economic activities concentration in the state. Within the state, it is the center of education and provides one with better employment opportunities and living conditions. Its proximity to Delhi with strong transport linkages further facilitated its high growth in population.

**MIGRATION PATTERN**

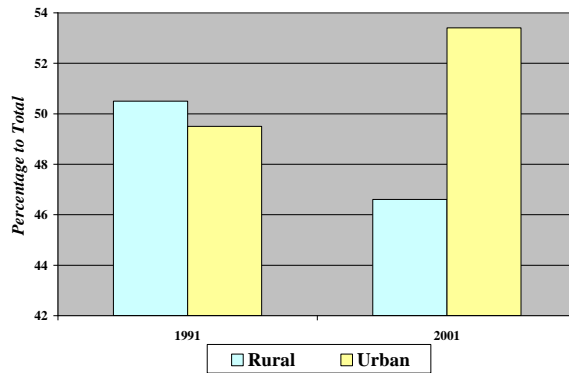
Being the only million city of the state, Jaipur attracts population from all parts of the state. The proportion of in-migrants to the total population of the city in 1991 was 29%, which decreased to 27% in 2001. However, the absolute number of migrants to the city has been increasing. From 1991 to 2001, nearly two lakh migrants were added to the city increasing the number of migrants from 4 lakhs to 6 lakhs. The characteristics of migration have been briefly assessed in the following sections.

**Origin of Immigrants**

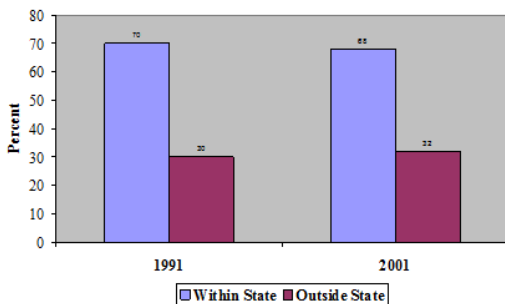
The rural– urban migration pattern shows that almost equal of number of people from both villages and different towns and cities came to Jaipur in the census year 1991. As per 2001 census, the in-migrants from urban area increased to 53.4 % and the share of rural immigrants decreased to 46.6 %.

This implies that population from lower order urban centers are migrating to Jaipur for better opportunities. 70% of the in-migrants to Jaipur were from Rajasthan in 1991 and 30% from other parts of the country (Figure 2.13). In 2001 the state share decreased by 2% and the national figure rose to 32%. Nearly 35% migrants in 1991 were from Jaipur district and nearly 65% from other districts of the state. In 2001 the in-district figures decreased by 10% and outside–district figure grew by 10%. The figures show that Jaipur is gaining importance as a favoured destination not only within the state but also at the national level.

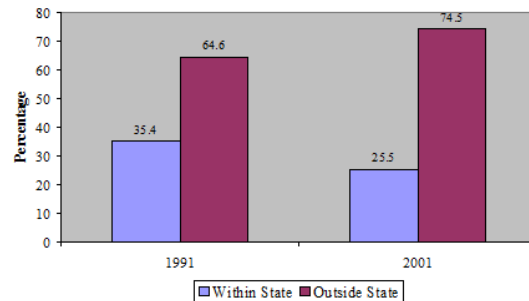
**STREAMS OF MIGRATION**



**Origin Of Migrants, Jaipur, 1991-2001**



**National Migrants, Jaipur, 1991-2001**



**Composition of Immigrants**

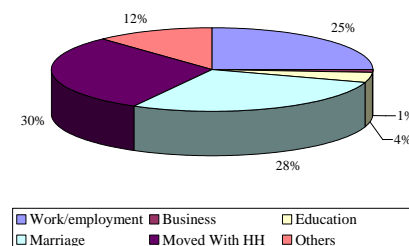
The male-female composition of the migrants in 1991 showed an equal divide. The number of male migrants grew to 52% in 2001 and that of females reduced to 48% in 2001

**Reasons for Immigration**

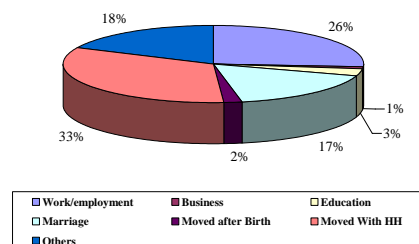
The main reasons for migration to the city have been employment, marriage and members moving along with the households which include mostly the old, the females, children and domestic helps. Employment brings nearly one-fourth of the total migrants to Jaipur. The second important reason for migration is marriage. However, the number of in-migrants in this category has decreased from 28% in 1991 to 17% in 2001. Business and education bring only small number of people to Jaipur.

The increase in number of immigrants is due to increase in number of jobs especially in commerce and services and in industries to a lesser extent. As per the Master Plan 2011 nearly 36% of the migrants work in the informal sector.

**Reason For Migration, 1991**



**Reason for Migration, 2001**



**LITERACY RATE**

The literacy rates and sex ratio of Jaipur city and its constituent parts have been given in Table below. The figures have also been studied in comparison to the state and national level data to understand the position of Jaipur at the national

level. The number of literates in the city has grown from 58.5% in 1991 to 66.2% in 2001, which is above the national average of 65.4%. The city level figures are higher than the corresponding state level data, which in 1991 was only 38.5% and 49% in 2001.

**Table 2: Literacy Rate and Sex Ratio, Jaipur, 1991-2001**

S. No.	Region	Literacy Rate(Percent)						Sex Ratio	
		1991			2001			1991	2001
		Total	Male	Female	Total	Male	Female		
1	JMC	58	66.8	47.4	66.2	73.4	58	877	889
1a	Walled City	51.65	NA	NA	40.2	43.5	36.5	887	899
1b	Rest of JMC	55.3	NA	NA	75.5	84.3	65.7	868	880
2	Rest of JDA	38.55	54.99	20.44	49	65.2	34.8	910	920
3	Total JDA	52.21	64.13	64.13	65.38	75.85	54.16	927	933

Source: Census of India 1991 and 2001

The walled city has a lower rate of literacy than the rest of the JMC area. The literacy rate was only 51.65 in 1991 in the walled city whereas for rest of the city it was 55.3 %. The gap widened in 2001 when the literacy rate of walled city dipped to only 40% and in the rest of the city it rose to 75%. Comparison of literacy among males and females show that more percent of male are literate than females and this holds true also for the state and the country as a whole. 2001 figures show that only 36.5% of females were literates in the walled city. Jaipur has higher female literacy than the state and the national average.

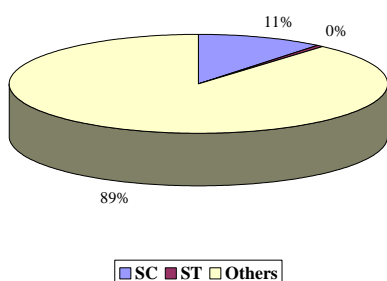
**SEX RATIO**

The sex ratio in Jaipur has been below 900 in the history of the city. The sex ratio in the walled city in 1991 and 2001 has been higher than the rest of the JMC area. In the JMC area the sex ratio shows an improvement from 868 females in 1991 to 876 females per 1000 men in 2001. The sex ratio of the city is lower than both the state and national average.

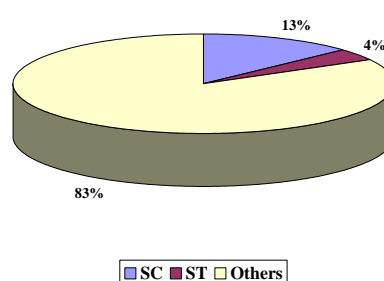
**SOCIAL COMPOSITION**

The share of Schedule Caste population in 1991 was only 11% of the total population of the JMC area and the Schedule Tribe population was only 0.4% of the total. The SC and the ST population both recorded a rise in 2001 and the figure was 12.6% and 4% respectively. Migration is also one of the reasons for increase in the proportion of scheduled castes.

Social Composition, Jaipur, 1991



Social Composition, Jaipur, 2001



The study of ethnicity of Jaipur reveals that the Rajputs are main caste groups to have existed in the area. In the city both Hindus and Muslims are Rajputs. Today, the various clans of Meenas and Kachawas exist.

**CITY EXPANSION AND LAND USE:**

In 1728 A.D., When the walled city of Jaipur was founded its total area was about 4.81 sq. km. By 1930-31 the total area reached to 9.6 sq. km. In 1951 due to rapid increase in population the city area has been further expanded to 40 sq. km. During 1964, with the increasing demand of population problems associated with urbanisation like living accommodation, traffic congestion, lack of sanitation and other amenities etc. there was a felt need of preparing a Master Plan of keeping the needs of the Jaipur city up to 1991. In 1965 a Master Plan of Jaipur city was prepared in 125 revenue village of surrounding areas of Jaipur city were brought in the urban boundary.

**Table 3: Temporal Changes in Land Use of Jaipur**

	1975		1986		1991	
	Area in sq. km.	%	Area in sq. km.	%	Area in sq. km.	%
<b>Built-up Land</b>						
High Density Area	9.78	2.53	17.58	4.56	24.90	6.50
Medium Density Area	10.86	2.82	32.76	8.49	30.36	7.87
Low Density Area	20.16	5.23	23.64	6.13	24.12	6.25
Total	40.80	10.58	73.98	19.18	79.38	20.62
<b>Forest Land</b>						
Degraded Forest	27.90	7.23	34.56	8.96	43.26	11.21
Dense Forest	0.30	0.08	8.28	2.15	2.64	0.68
Total	28.20	7.31	42.84	11.11	45.80	11.89
<b>Agricultural Land</b>						
Cropped Area	129.90	33.68	141.54	36.70	129.48	33.55
Fallow land	121.68	31.53	28.68	7.43	21.30	5.52
Total	251.58	65.22	169.22	44.13	150.78	39.07
<b>Wasteland</b>						
Gullied land	2.52	0.66	4.14	1.07	3.78	0.98
Sandy Land	14.52	3.76	7.74	2.00	3.78	0.98
Saline Land	0.66	0.17	1.44	0.37	2.52	0.65
Rocky land	-	-	-	-	0.12	0.03
Mining spoiled land	0.36	0.09	5.52	1.43	5.64	1.46
Total	18.06	4.68	18.84	4.87	15.84	4.10
<b>Industrial area</b>	34.98	9.07	42.24	10.95	44.34	11.49
<b>Land under construction Activities</b>	11.88	3.08	36.36	9.43	47.70	12.36
<b>Parks &amp; Play ground</b>	0.24	0.06	1.26	0.33	1.80	0.47
<b>Grand Total</b>	385.74	100.00	385.74	100.00	385.74	100.00

Source: Master Development Plan-2011: Jaipur Region (1995), Jaipur Development Authority, Jaipur.

The inclusion of surrounding areas has led to an increase in forest area, but at the same time, it is noted that due to the increase in population, the high density area has also increased. In the recent past in 1995, the master plan was revised to focus on the needs of 2011. Another 6 towns and 342 revenue villages were identified and included in urban areas for town planning purposes. Now the total geographical area of Jaipur urban area is spread over 1464 sq km.

## II. CONCLUSION:

The city's population is growing at a staggering 2.3 million. It is also growing in terms of its area. The city is also a center for attracting immigrants from different parts of the world. All these factors together create different kinds of socio-environmental problems. Immigrants to Jaipur are mostly of rural origin. The density inside the walled city had grown to completely unsustainable proportions. The sex ratio worsened due to male dominant immigration. They are mostly men looking for employment. Despite being a metropolitan city, the literacy rate is quite low. The built-up area of land use is increasing, leading to a permanent decrease in forest land, arable land and unused land. Existing data indicate that if proper attention is not given, there will be housing shortages and the imminent expansion of slums.

**Reference:**

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