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**Urbanisation in Gujarat**  
*Evidence from 2011 Population Census*

Aalok Ranjan Chaurasia

# URBANISATION IN GUJARAT

*Evidence from the provisional results of 2011 population census*

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## **Introduction**

Urbanisation is conceptualised as the growth of urban areas. It reflects the transition in human settlement patterns. The last major change in the human settle patterns was the accumulation of hunter-gatherers into villages many thousand years ago with the advent of agriculture. This pattern started changing after the industrial revolution in Europe which resulted in a shift in the social and economic production system from agriculture to manufacturing and services leading to the emergence of urban areas. The pace of urbanisation gained momentum with the pace of industrialisation and associated commerce, trade and other services. Latest estimates prepared by the United Nations now suggest that more than half of the world population is now living in the urban areas. United Nations has also projected that urban population growth will continue unabated in the next few decades leading to mushrooming of urban settlements to sizes incomprehensible to only a century ago (United Nations, 2012).

Transition in the human settlement patterns that the world is now witnessing has also resulted in the change in the living culture of the people. The village culture is characterised by common bloodlines of the village population, intimate relationships and communal behaviour. By contrast, because of its very nature, the urban living culture is characterised by distant bloodlines, unfamiliar relations and competitive behaviour. With the rapid growth of urban population, the transition from village to urban living culture will continue and intensify in the years to come.

Transition from predominant agrarian economy to an economy based on the manufacturing and service sector has been the primarily behind of urbanisation. Both push and pull factors have contributed to the process of urbanisation. Better economic opportunities characterised by proximity to the place of production, diversity of the production system and marketplace competition have served as strong factors to pull people from villages to urban centres of production, trade and commerce in search of better livelihood opportunities. Over time many services like health and education as well as wealth got concentrated in the emerging urban areas leading to hastening the pace of urbanisation. On the other hand, stagnation in the agriculture production system, coupled with loss or degradation of farmland leading to limited livelihood opportunities constituted major factors that pushed the rural folk to urban areas in search of at least certain minimum livelihood even under unfamiliar and trying conditions.

Using the information available from different population census, the present paper analyses patterns of urban population growth and urbanisation in Gujarat. In recent years, Gujarat has witnessed some very rapid urban population growth as revealed through the 2011 population census. Between 2001 and 2011, the urban population of the State increased from less than 19 million to more than 27 million whereas the total number of urban settlements increased from 242 to 278. These figures indicate that the tempo of urbanisation has been very high in the State in the recent past. If this tempo continues in the coming decades, there will definitely be a very significant change in the human settlement patterns in the State which will have implications to social and economic development processes as well to development planning and programming.

The present paper is divided in eight sections including this introduction. The next section of the paper presents a brief description of the concept 'urban' as adopted in different population census in India and the methods adopted for analysing the trends and patterns of urbanisation. The third section presents main findings of the analysis

while the fourth section presents projections of the urban population in the State in the coming decades. The last section of the paper discusses the policy and programme implications of the past trends and future prospects of urbanisation in the State.

### **The Concept Urban**

Prior to the 1961 population census, human settlements with a population of 5000 and more which have some urban characteristics were classified as urban areas. In the 1961 population census, however, a more rigorous definition of urban area was adopted. A human settlement at the 1961 population census was classified as urban area if it had the following characteristics:

1. a density of population not less than 1000 persons per square mile,
2. a population of at least 5000,
3. at least three-fourth of the working population not depending on agriculture, and
4. a few pronounced urban characteristics.

In the 1971 population census, on the other hand, the following definition was adopted to classify a human settlement as an urban area:

1. all places with a Municipality, Corporation or Cantonment or Notified Town Area,
2. all other human settlements which satisfied the following criteria:
  - (i) a minimum population of 5,000.
  - (ii) at least 75 per cent of the male working population engaged in non-agricultural pursuit, and
  - (iii) a density of population of at least 400 per square kilometre (i.e. 1000 per square mile).

The first category of urban areas are termed as statutory towns. The statutory towns are notified under law by the government of the concerned State/Union Territory irrespective of their demographic characteristics. The second category of urban areas (as in item 2 above) is termed as census town. These are identified on the basis of the criteria described above at each population census. A human settlement classified as an urban area in the previous population census may be declassified in the next population census if it does not meet the criteria described above. Similarly, a human settlement not classified as an urban area in the previous population census may be classified as an urban area if it meets the above criteria. In this sense classification of a human settlement as a census town is a dynamic concept which is not the case with statutory towns.

Another important concept that was introduced at the 1971 population census was that the Director of Census Operations in each State/Union Territory of the country was given some discretionary powers to notify/de-notify a human settlement as an urban area, in consultation with the government if it had/did not have distinct urban characteristics.

Another concept that was in vogue at the 1961 Census was the concept of town group. A town group was made up of independent urban units not necessarily contiguous to one another but were to some extent inter-dependent. The data for such town groups, however, became incomparable from census to census as the boundaries of the towns themselves changed and the intermediate areas were left out of account so that this concept was abandoned at the 1971 population census and, instead, the concept of

standard urban area was introduced. Essential elements of the concept of standard urban area included the following:

- (i) it should have a core town of a minimum population size of 50,000,
- (ii) the contiguous areas made up of other urban as well as rural administrative units should have close mutual social and economic links with the core town, and
- (iii) there are probability that this entire area will get fully urbanised in a period of two to three decades.

The argument with the concept of standard urban area was that with the persistence of this concept, it would be possible to provide comparable data for a definite area of urbanisation continuously for three decades which would give a meaningful picture of the size and temp of urbanisation.

Another concept that was introduced at the 2001 population census was the concept of an urban agglomeration. An urban agglomeration at the 2001 population census was defined as a continuous urban spread constituting a town and its adjoining outgrowths, or two or more physically contiguous towns together with or without outgrowth of such towns. An urban agglomeration must consist of at least a statutory town and its total population (i.e. all the constituents put together) should not be less than 20000 at the time of census enumeration. An outgrowth, on the other hand, was defined as a viable unit such as a village or a hamlet or an enumeration block made up of such village or hamlet and clearly identifiable in terms of its boundaries and location such as railway colony, university campus, port area, military camps, etc., which have come up near a statutory town outside its statutory limits but within the revenue limits of a village or villages contiguous to the town. An important condition to determine outgrowth of a town was that the human settlement possesses the urban features in terms of infrastructure and amenities such as pucca roads, electricity, taps, drainage system for disposal of waste water etc. educational institutions, post offices, medical facilities, banks, etc. and is physically contiguous with the core town of the urban agglomeration.

Since 1971, there has been no change in the criteria for classifying a human settlement as an urban area in the country.

It is well known that urban settlements vary widely by the size of the population. As such, urban areas have customarily been classified into the following six categories based on the population size in the population census:

Size class I	Urban areas with a population of at least 100000 population
Size class II	Urban areas with population ranging between 50000-99000
Size class III	Urban areas with population ranging between 20000-49000
Size class IV	Urban areas with population ranging between 10000-20000
Size class V	Urban areas with population ranging between 5000-10000
Size class VI	Urban areas with population less than 5000

Since the 1961 population census, the urban size class I has been further subdivided into: a) urban areas with a population of 1 million and above; b) urban areas with a population ranging between 500000-999999; and c) urban areas with a population between 100000-499999.

## **Measurement of Urbanisation**

Urbanisation can be analysed in two contexts - situation existing at a particular moment and the change in the situation over time. The situation existing at a particular moment can further be analysed in terms of overall levels as well as in terms of concentration of the urban population. Accordingly, urbanisation can be analysed in terms of level, tempo and concentration indicators. The most commonly used indicator to measure the level of urbanisation at a given point of time is the proportion of urban population to the total population. A more refined indicator of the level of urbanisation is the urban rural ratio (URR). There are more advanced indicators of the level of urbanisation (Arriaga, ) that we do not apply in the present analysis for the purpose of simplicity.

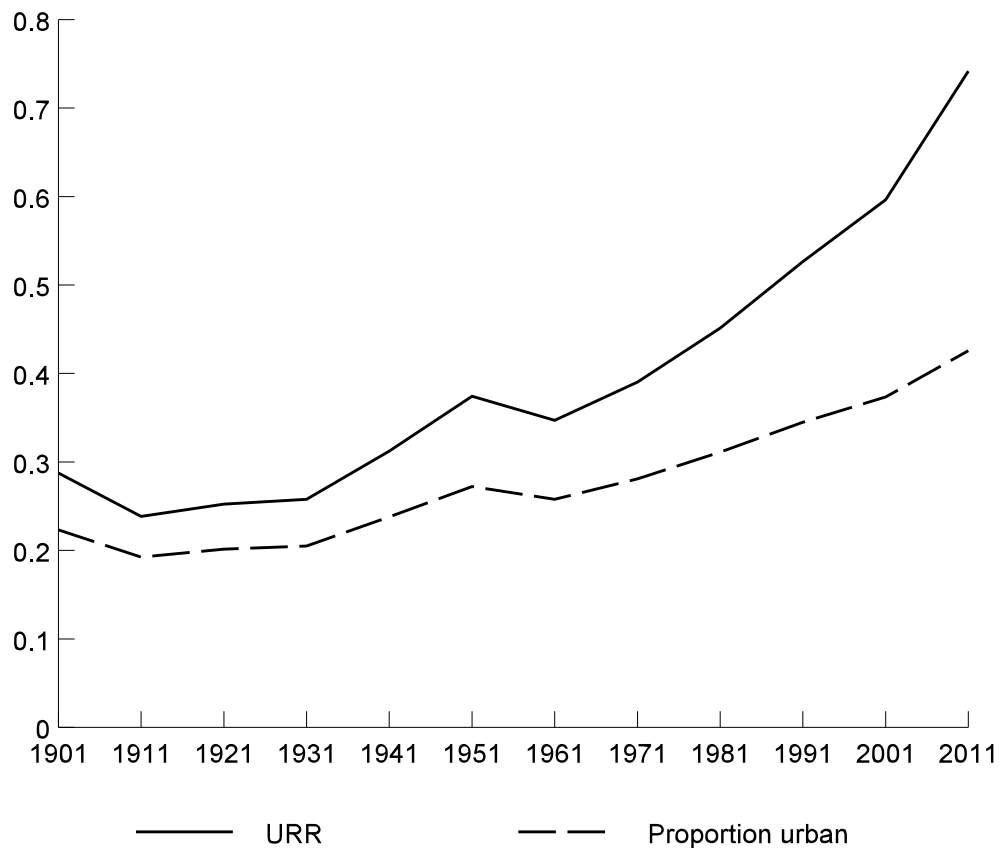
The tempo of urbanisation, on the other hand, is measured in terms of the growth rate of urban population, the annual amount by which proportion urban is increasing and the growth rate of the proportion of urban population. All the three indicators have their own merits and demerits. More importantly, the tempo of urbanisation reflected by the three indicators is not consistent. United Nations recommends use of urban-rural growth difference (URGD) for analysing the tempo of urbanisation (United Nations, 1974). It can be shown that URGD is nothing but the growth rate of URR.

Finally, concentration of the urban population is measured in terms of the distribution of the urban population by the number of urban areas by size class and the concentration of the urban population may be depicted through the well known Lorenz curve and associated concentration indexes such as the Gini index of concentration or the concentration index. Another approach of analysing the concentration of the urban population is the ratio of the population in the largest urban settlement to the population in the smallest urban settlement and the trend in this ratio over time or the ratio of population of size class I urban settlements to the population of size class V urban settlements.

## **Level of Urbanisation**

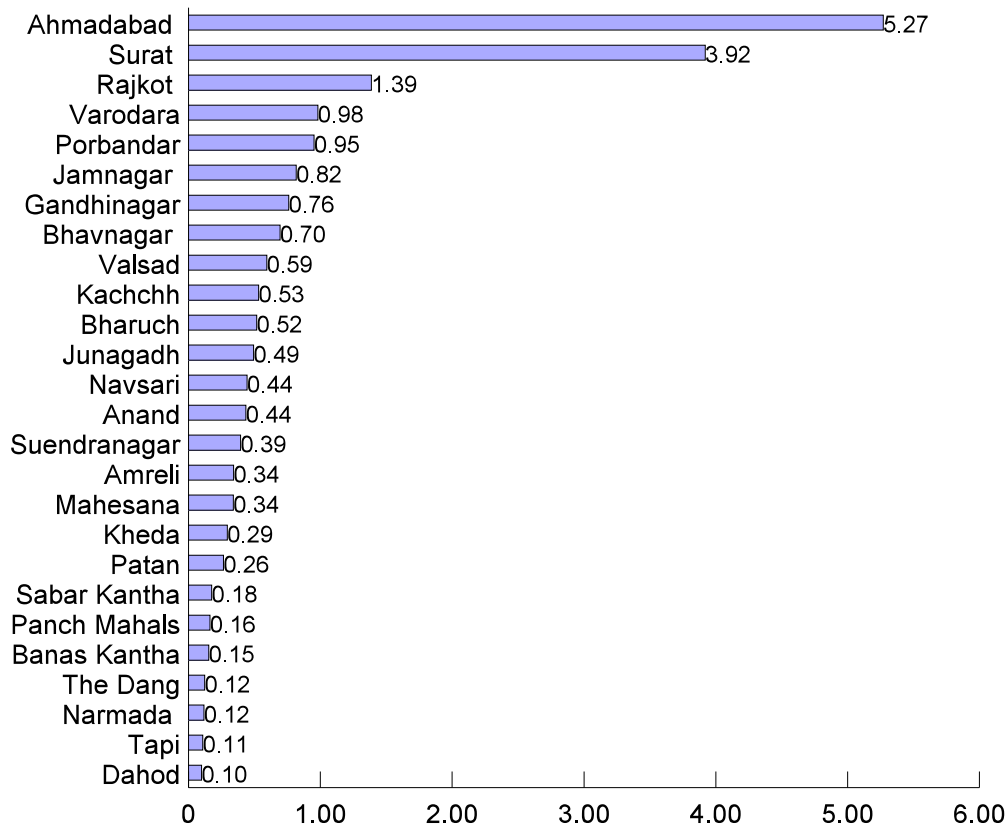
According to the preliminary results of the 2011 population census, more than 42 per cent of the State population was living in the human settlements classified as urban. Among the major States of India - States with at least 20 million population at the 2011 population census - this proportion was the second highest in the country, next only to Tamil Nadu and well above the national average. At the same time, the urban rural ratio (URR) in the state at the time of 2011 population census is estimated to be more than 74 per cent which means that for almost every four people living in the rural areas of the State, three people were living in the urban areas. It may also be seen from the figure 1 that right since its formation in 1960, there has been very substantial increase in level of urbanisation in the State. The URR in the State more than doubled - from less than 35 per cent at the 1961 population census to almost 75 per cent at the 2011 population census whereas the proportion of urban population to the total population increased from around 25 per cent to more than 42 per cent during these 50 years. Figure 1 also suggests that there has been an increase in the pace of urbanisation in the State during the period 2001 through 2011.

Figure 1  
Level of urbanisation in Gujarat



Among the constituent districts of the State, the level of urbanisation varies widely. The URR was more than 5 in district Ahmedabad which suggests that the urban population in the district was more than five times the rural population in the district. In terms of proportions, the proportion of urban population to the total population in the district was more than 84 per cent. In addition to district Ahmedabad, there are two other districts in the State - Surat and Rajkot - where the urban population was more than the rural population at the 2011 population census so that the URR was more than one while the proportion of urban population to the total population of the district was very close to 80 per cent in district Surat and more than 58 per cent in district Rajkot. In the remaining districts of the State, the URR was less than 1 while the proportion of urban population was less than 50 per cent at the time of 2011 population census. The URR is estimated to be the lowest in the State in district Dahod (9.87 per cent) while the proportion of population urban was less than 9 per cent. Other districts with very low urban-rural ratio at the 2011 population census included Tapi, Narmada, The Dangs, Panch Mahals, Banaskantha and Sabarkantha. In these districts, the proportion of the urban population to the total population was less than 20 per cent while the urban rural ratio was also less than 0.20 according to the provisional results of the 2011 population census.

Figure 2  
URR in districts of Gujarat, 2011

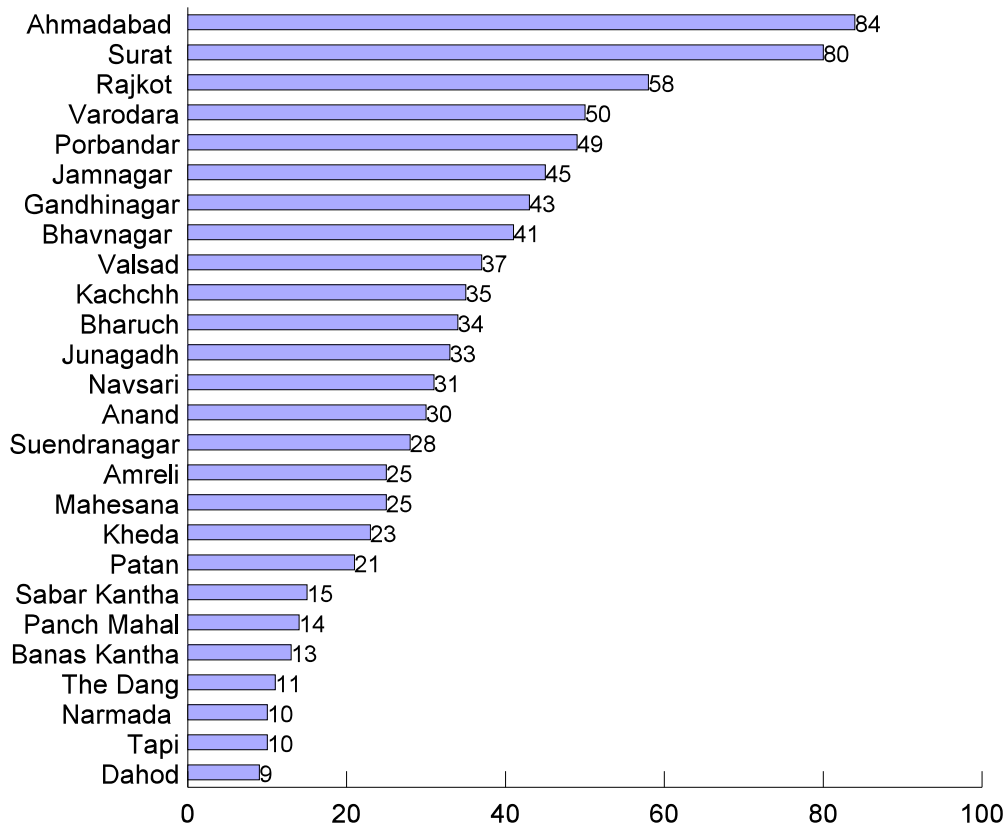


The highly unequal distribution of the urban population across the districts of Gujarat is also reflected from figure 3 which depicts the level of urbanisation in the districts in terms of percent urban. As reflected through URR, the percent urban across the districts varies from a high of more than 84 per cent in district Ahmadabad to low of only 9 per cent in district Dahod. There are only four districts in the State where the urban population exceeded the rural population at the 2011 population census - Ahmadabad, Surat, Rajkot and Vadodara - with nearly universal urbanisation in district Ahmadabad. On the other hand, there are seven districts where the urban population constituted less than 20 per cent of the total population enumerated at the 2011 population census. In these districts, momentum for urbanisation still appears to be missing.

The observed spatial inequality in the distribution of the urban population across the districts of the State is a reflection of the concentration of urban population in selected districts of the State largely because of the growth of industrialisation. More attention will be paid at later stage to the observed disparity or inequality in the distribution of urban population across the districts which has implications for development planning and programming.



Figure 3  
Percent urban in districts of Gujarat, 2011



### Tempo of Urbanisation

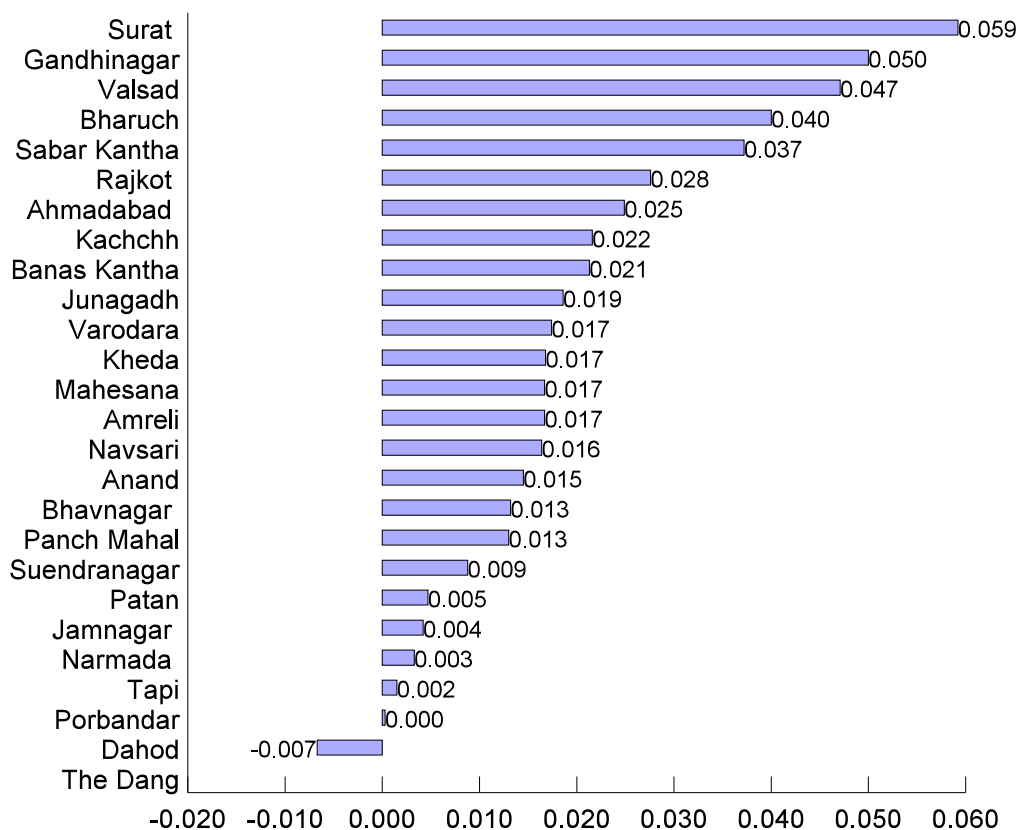
As recommended by the United Nations, the tempo of urbanisation has been measured and analysed in terms of urban-rural growth difference (URGD) which is also equal to the rate of change or the growth rate of urban-rural ratio (URR) of the population. The trend in URGD in Gujarat is depicted in figure 4 for the period 1901 through 2011. Perhaps the most important observation of the figure 4 is a very rapid increase in the tempo of urbanisation in the State during the recent decades. Compared to the period 1991-2001, the URGD almost doubled in the state during the period 2001-11 which indicates that the tendency of urbanisation in the State has increased very significantly in recent years. This increase in the tempo of urbanisation has been the result of both migration from rural to urban areas and reclassification of a number of human settlements classified as villages at the 2001 population census as urban areas at the 2011 population census. Between 2001 and 2011 population census, the total number of urban areas in the State increased very sharply from 242 to 348. This rapid increase in the number of human settlements classified as urban at the 2011 population census compared to 2001 population census has contributed substantially to the increase in the urban population.

Figure 4  
URGD in Gujarat, 1901-2011



The tempo of urbanisation has been found to vary across the districts of Gujarat during the period 2001-2011 (Figure 5). The tempo of urbanisation has been the most rapid in district Surat as the rural population growth rate in district Surat decreased at an average annual rate of around 1 per cent per year during the period 2001-11 whereas the urban population in the district increased at an average annual rate of more than 5 per cent per year during this period so that the URGD for the district was very close to 6 per cent classifying the district as the most rapidly urbanising district of the State. A similar situation appears to have prevailed in district Gandhinagar of the State where the urban-rural growth difference was around 5 per cent during the period 2001-11. The rural population has also decreased, albeit marginally, in district Ahmedabad but the growth of the urban population in the district has been of the order to 2.4 per cent year on average so that the tempo of urbanisation in the district has not been high. On the other hand, the tempo of urbanisation has been estimated to be very low in six districts of the State whereas district Dahod was the only district in the State where the growth of rural population was more rapid than the growth of urban population during the period 2001-11. As such, Dahod is the only district in the State where the tempo of urbanisation was negative between 2001 through 2011.

Figure 5  
URGD in districts of Gujarat, 2001-11



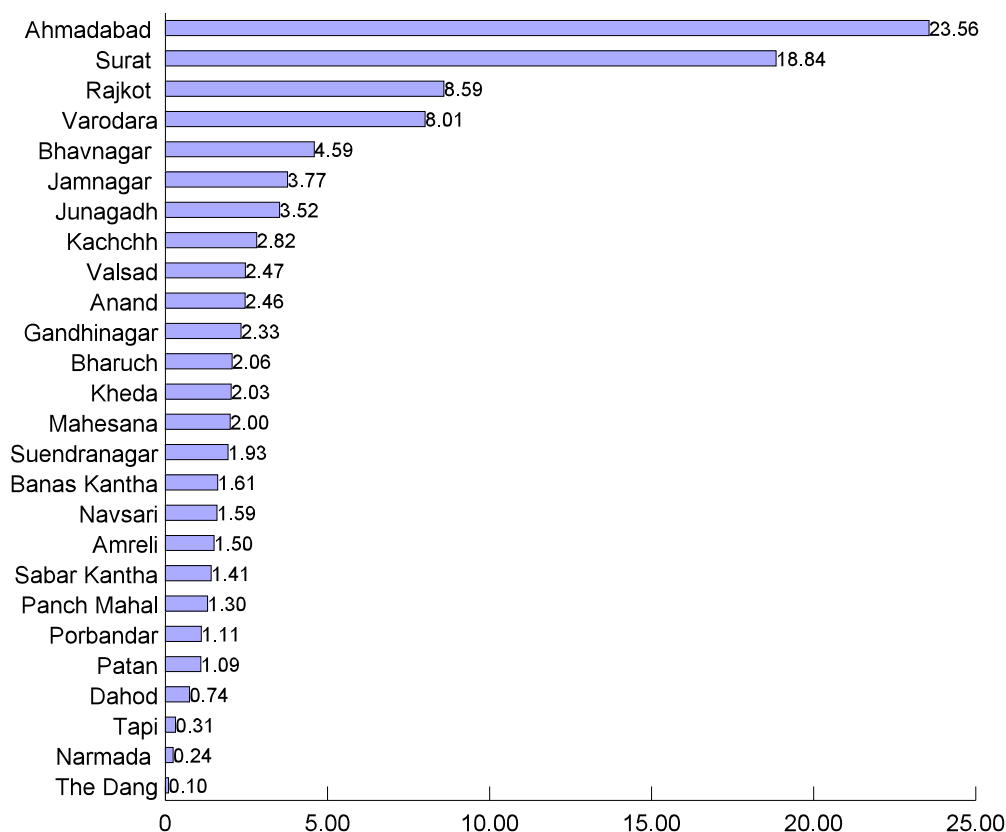
## Concentration of Urban Population

The concentration of the urban population can be analysed in two contexts - the concentration of urban population across the districts and the concentration of the urban population across different size class of urban settlements. The two aspects of the concentration of the urban population reflect two dimensions of urbanisation in the context of development planing and programming.

As regards concentration of the urban population across the districts, only two districts of the State - Ahmadabad and Surat - accounted for more than 42 per cent of the urban population at the 2011 population census. On the other hand, ten districts of the State - The Dang, Narmada, Tapi, Dahod, Patan, Porbandar, Panch Mahal, Sabarkantha and Amreli - accounted for less than 10 per cent of the urban population of the State enumerated at the 2011 population census.

The observed inter-district distribution of the urban population in the State reflects a very high degree of concentration inequality in the inter-district distribution of the urban population. Moreover, this concentration inequality appears to have increased over time. At the 2001 population, the Gini index of inter-district inequality

Figure 6  
Urban population in the district as proportion to urban population in the State

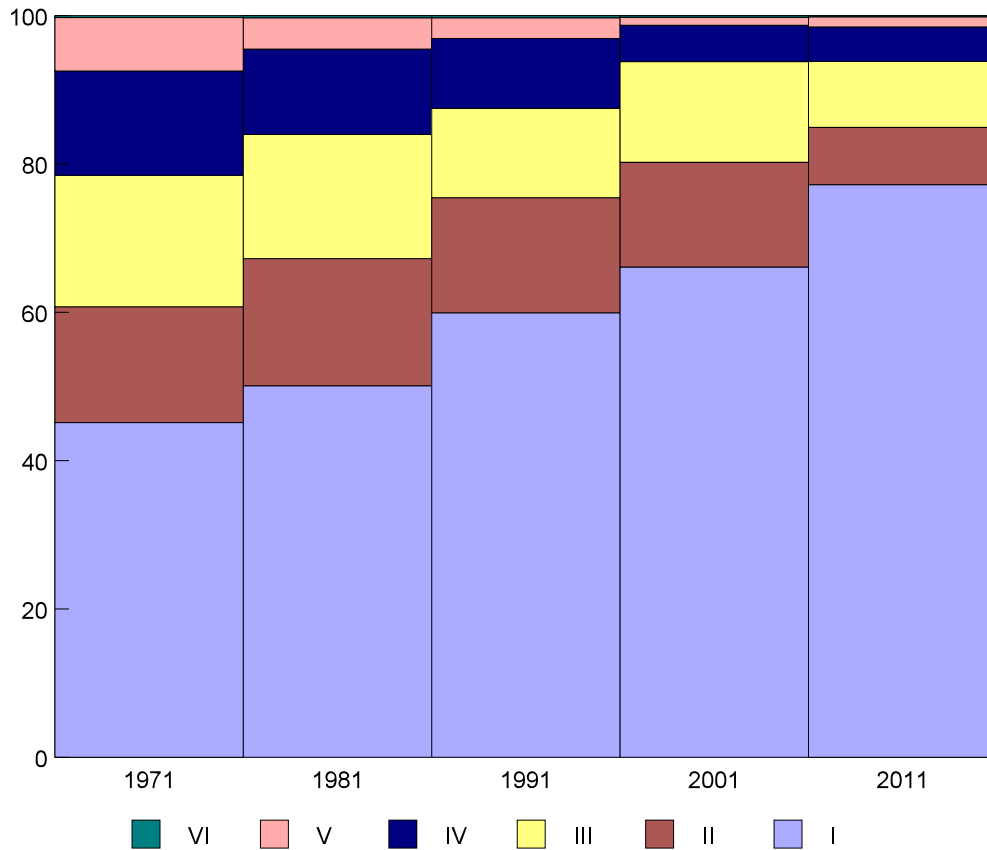


in the distribution of urban population was 0.565 which increased to 0.573 at the 2011 population census. This suggests that the urban population in the State is increasingly getting concentrated in a few districts.

Among the individual districts, district Ahmadabad alone accounted for almost 24 per cent of the urban population of the State enumerated at the 2011 population census whereas district Surat accounted for another about 19 per cent. On the other hand, the district The Dang accounted for just 0.1 per cent of the urban population of the State at the 2011 population census. Other districts which accounted for less than 1 per cent of the urban population of the State are Narmada (0.24 per cent), Tapi (0.31 per cent) and Dahod (0.74 per cent). Moreover, the contribution of urban population in the district to the urban population of the State ranged between 1-2 per cent in 8 districts; 2-3 per cent in 7 districts; 3-5 per cent in 3 districts; and 8-9 per cent in 2 districts. This shows that urbanisation is not a state wide phenomena in the State. Rather, it appears to be restricted in a few districts of the State.

Another evidence of increased concentration of the urban population in a few districts of the State is observation that the proportion of the urban population to the total urban population of the State decreased between 2001 and 2011 in 19 districts of

Figure 7  
Distribution of urban population by size class of urban areas



the State, remained unchanged in one districts and increased in only 7 districts. Districts where the proportion of urban population to the urban population of the State decreased between 2001 and 2011 include both highly urbanised districts such as Ahmadabad and lowly urbanised districts like Narmada, Tapi and Dahod. In fact, district Surat is the only district in the State where there has been a substantial increase in the proportion of urban population to the urban population of the State in recent years. Between 2001 and 2001, the proportion of the urban population in district Surat to the State urban population increased from 15.46 per cent to 18.84 per cent.

The second aspects of the concentration of urban population is the distribution of the urban population by size class of urban areas. It is well known that with the advancement of urbanization, an increasing proportion of the urban population gets concentrated in large urban settlements and not in small settlement. This has also been the case in Gujarat as the information available from different population census reveals. At the 1971 population census, less than half of the urban population of the State was living in size class I urban settlements - settlements with a population of at least 100 thousand. Provisional results of the 2011 population census, on the other hand, suggest that more than three-fourth of the urban population of the State is now living in size

class I urban settlements (Figure 7). On the other hand, the proportion of urban population living in urban settlements of other size classes has decreased, quite substantially, since 1971. This indicates that the urban population of the State is increasingly getting concentrated in size class I urban settlements while the population contribution of medium and small size urban settlements to the total urban population of the State has decreased in recent years.

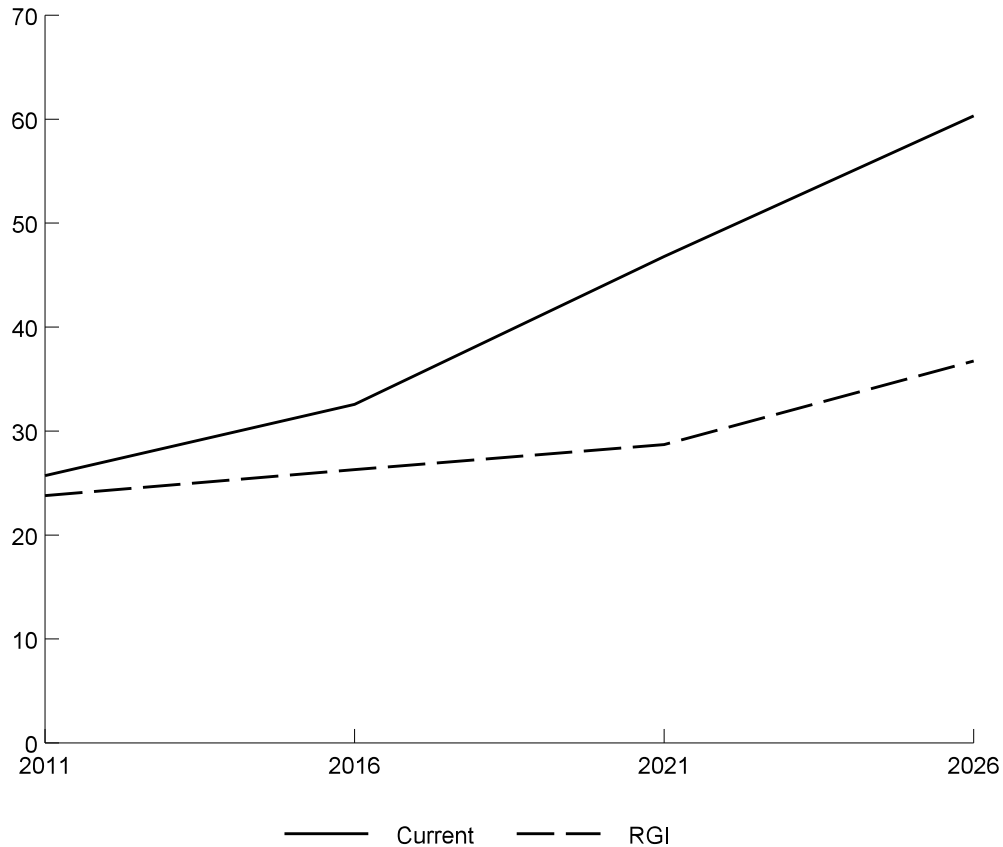
At the 1961 population census, the first census after the formation of the State, Ahmadabad was the only million plus urban settlement in the State. At the 2011 population census, the million plus urban settlements in the State increased to four - Ahmadabad urban agglomeration encompassing Gandhinagar - the State capital - Surat, Vadodara and Rajkot. Total population of these four million plus urban settlements was more than 14.75 million at the 2011 population census which is more than half of the total urban population of the State. Between 2001 and 2011, the urban population of the State increased by around 6.8 million out of which more than 5.3 million (78.6 per cent) of the increase was confined to these four million plus urban settlements suggesting that most of the urbanisation in the State has been confined to the four million plus cities. The districts in which these million plus urban settlements are located are also the most urbanised districts of the State. This shows that urban population growth in the State has been highly unequal across both the districts as well as across size class of urban settlements and most of the urban population is concentrated in the million plus urban areas.

### **Future Growth of Urban Population**

Projections of urban population growth have been prepared by the Registrar General of India on the basis of 2001 population census (Government of India, 2006). According to these projections, the urban population of Gujarat was projected to increase to more than 59 million by the year 2011 with a URR of around 0.68. It was also projected that by the year 2011 more than 40 per cent of the population of the State would be living in the urban areas. Against this projected population growth, the urban population enumerated at the 2011 population census was 60.38 million with a URR of more than 0.74 and a proportion urban of almost 43 per cent. This shows that the tempo of urbanisation in the State was more rapid than the projected one during the period 2001-11.

In view of the difference in the projected and actual growth of urban population in the State during the period 2001-11, the urban population projection prepared by the Registrar General and Census Commissioner of India may not be valid for the year beyond 2011. On the other hand, no attempt has so far been carried out to project the urban population after incorporating results of the 2011 population census. As such we have projected the urban population of the State using the United Nations method of urban population projection which was first used in the 1970s (United Nations, 1974 and 1980). Although the method has since undergone some revisions, yet the general estimation approach has remained unchanged. The method projects the most recent urban-rural growth difference observed by assuming that the proportion urban follows a logistic path that attains a maximum growth rate when the proportion urban reaches 50 per cent and whose asymptotic value is 100 per cent. Normally, an extrapolation based on a simple logistic curve would imply that the urban-rural growth difference

Figure 8  
 Future urban population growth (million) in Gujarat, 2011-2026



remains constant over the projection period. However, the empirical evidence shows that the urban-rural growth difference declines as the proportion urban increases because the pool of potential rural-urban migrants decreases as a fraction of the urban population, while it increases as a fraction of the rural population. Consequently, the United Nations evolved a model for the evolution of the urban-rural growth difference over the projection period, passing from the last observed value to a universal norm consistent with general worldwide experience. The norm is expressed in terms of a hypothetical urban-rural growth difference which has been obtained by regressing the initial observed percentage urban on the urban-rural growth difference for the 148 countries or areas with 2 million or more inhabitants in 2011. The projection of the proportion urban is then carried out under the assumed that the most recent observed urban-rural growth difference for the most recent period available in a given country, instead of remaining constant, is linearly converging to the hypothetical urban rural growth difference over a period of 25 years. Details of United Nations projection methodology is given elsewhere and is not repeated here (United Nations, 2012). We apply the United Nations methodology to project the urban population of the State using the urban rural growth difference estimated from the preliminary data from 2011 population census.

Application of the United Nations methodology to Gujarat suggests that the rapid urban population growth situation in Gujarat is likely to continue during the current decade. It is projected that the URR will increase to 1.026 by the year 2016; 2.243 by the year 2021 and 5.718 by the year 2026 suggesting that by the year 2016, more than 50 per cent of the population of the State will be living in areas classified as urban according to the definition adopted at the 2011 population census. This proportion is projected to increase to almost 70 per cent by the year 2021 and to more than 85 per cent by the year 2026. This is in quite contrast to the projection of the urban population prepared by the Registrar General and Census Commissioner of India on the basis of the results of the 2001 population census which has projected that the urban population of the State will increase to about 36.74 million by the year 2026. The reason is that the projection exercise carried out by the Registrar General and Census Commissioner of India was based on the results of the 2001 population census and did not take into account the actual growth of the urban population of the State during the decade 2001-11 which has been significantly faster than that projected on the basis of the results of the 2001 population census.

## **Conclusions**

Main conclusions of the present analysis of the levels and trends of urbanisation in Gujarat can be summarised as under:

1. Compared to the period 1960 through 2001, there has been a very rapid increase in the tempo of urbanisation in Gujarat during the period 2001-11 according to the provisional results of the 2011 population census. The urban population growth in the State has been more rapid during the ten years between 2001 and 2011 than the urban population growth projected by the Registrar General and Census Commissioner of India on the basis of 2001 population census.
2. There is clear evidence that urban population of the State is increasingly getting concentrated in a few districts where large cosmopolitan and metropolitan urban areas are located. Although, more than 42 per cent of the population of Gujarat enumerated at the 2011 population census was living in the urban areas, more than 42 per cent of the total urban population of the State was located in just two districts - Ahmadabad and Surat.
3. More and more urban population of the State is getting concentrated in large urban settlements - urban settlements of size class I having a minimum population of 100 thousand at the 2011 population census.
4. More than 57 per cent of the total urban population of the State is concentrated in the four million plus urban settlements - Ahmadabad, Surat, Vadodara and Rajkot. More than 78 per cent of the urban population growth in the State during 2001-2011 was confined to these four million plus cities only.
5. Application of the urban population projection methodology developed and adopted by the United Nations suggests that rapid urbanisation of the State witnessed during the period 2001-2011 is likely to continue in the present decade as well as in the next coming decade so that by the year 2021, more than 70 per cent of the population of the State is projected to be living in areas classified as urban as per the classification adopted at the 2011 population census.



There are three determinants of urban population growth - natural growth of urban population determined by the difference between urban birth rate and urban death rate; rural to urban migration; and reclassification of rural areas as urban areas. The analysis of provisional data available through the 2011 population census indicates that rural to urban migration appears to be primarily responsible for the rapid urbanisation that Gujarat has witnessed in the recent past. There are indications that there had been some significant migration from smaller urban settlements to million plus urban settlements of the State. In order to check the influx of population to million plus cities of the State, there is a need to evolve a strategy of developing small and medium urban settlements as well as developing livelihood opportunities in the rural areas to check the heavy rural to urban migration.

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Table 1: Urban population growth in Gujarat, 1901-2011.

Year	Number of urban settlements	Population			URR	Proportion urban	URGD
		Total	Rural	Urban			
1901	166	9094748	7064010	2030738	0.287	0.223	
1911	155	9803587	7916812	1886775	0.238	0.192	-0.019
1921	166	10174989	8124650	2050339	0.252	0.202	0.006
1931	172	11489828	9134819	2355009	0.258	0.205	0.002
1941	191	13701551	10441596	3259955	0.312	0.238	0.019
1951	243	16262657	11834761	4427896	0.374	0.272	0.018
1961	181	20633350	15316726	5316624	0.347	0.258	-0.008
1971	216	26697475	19200975	7496500	0.390	0.281	0.012
1981	255	34085799	23484146	10601653	0.451	0.311	0.015
1991	264	41309582	27063521	14246061	0.526	0.345	0.015
2001	242	50671017	31740767	18930250	0.596	0.374	0.012
2011	278	60383628	34670817	25712811	0.742	0.426	0.022

Source: Registrar General and Census Commissioner of India

Table 2: Urban population growth in districts of Gujarat, 2001-2011.

SN	District	Urban population		URGD	URR	Proportion urban
		2001	2011			
1	Kachchh	474892	725841	0.022	0.532	0.347
2	Banas Kantha	275501	413377	0.021	0.153	0.133
3	Patan	238428	281033	0.005	0.265	0.209
4	Mahesana	411717	514071	0.017	0.340	0.254
5	Sabar Kantha	225129	363028	0.037	0.176	0.150
6	Gandhinagar	390615	599529	0.050	0.761	0.432
7	Ahmadabad	4740178	6058764	0.025	5.271	0.841
8	Suendranagar	402448	496993	0.009	0.395	0.283
9	Rajkot	1625862	2208582	0.028	1.388	0.581
10	Jamnagar	836256	970645	0.004	0.817	0.450
11	Porbandar	261375	285826	0.000	0.952	0.488
12	Junagadh	711528	906242	0.019	0.494	0.331
13	Amreli	312958	385806	0.017	0.342	0.255
14	Bhavnagar	935038	1180153	0.013	0.695	0.410
15	Anand	507971	633793	0.015	0.435	0.303
16	Kheda	406450	523218	0.017	0.295	0.228
17	Panch Mahal	253362	334435	0.013	0.163	0.140
18	Dahod	156323	191095	-0.007	0.099	0.090
19	Vadodara	1646222	2059777	0.017	0.982	0.495
20	Narmada	52106	61614	0.003	0.117	0.104
21	Bharuch	352560	528409	0.040	0.517	0.341
22	The Dang	0	24695		0.122	0.109
23	Navsari	336353	409112	0.016	0.444	0.307
24	Valsad	381161	634075	0.047	0.593	0.372
25	Surat	2926302	4843722	0.059	3.920	0.797
26	Tapi	69515	78976	0.002	0.109	0.098

Source: Registrar General and Census Commissioner

Table 3: Urban settlements and urban population in Gujarat by size class, 1971-2011

Size class	1971		1981		1991		2000		2011						
	Number	Population		Number	Population		Number	Population		Number	Population				
		Million	%		Million	%		Million	%		Million	%			
I	7	3.38	45.13	11	5.32	50.09	19	8.54	59.93	25	11.75	66.12	30	19.85	77.20
II	18	1.17	15.62	27	1.82	17.14	33	2.21	15.51	38	2.51	14.12	29	1.99	7.73
III	42	1.33	17.76	57	1.78	16.76	58	1.72	12.07	81	2.41	13.56	74	2.29	8.89
IV	73	1.05	14.02	86	1.22	11.49	92	1.34	9.40	57	0.87	4.90	78	1.19	4.64
V	71	0.54	7.21	61	0.45	4.24	51	0.40	2.81	23	0.19	1.07	49	.36	1.38
VI	5	0.02	0.27	13	0.03	0.28	11	0.04	0.28	18	0.04	0.23	18	.04	0.15
All	216	7.49	100.00	255	10.62	100.00	264	14.25	100.00	242	17.77	100.00	278	25.71	100.00

Source: Registrar General and Census Commissioner

Table 4: Population of million plus urban settlements in Gujarat.

Year	Ahmadabad	Surat	Vadodara	Rajkot
1901	185,889	129,500	103,790	36,151
1911	216,777	125,220	99,345	34,194
1921	274,007	127,356	94,712	45,845
1931	310,000	110,739	112,860	59,112
1941	591,267	185,955	153,301	66,353
1951	863,590	237,394	211,407	132,069
1961	,193,875	317,519	309,716	194,145
1971	1,731,116	493,001	467,487	300,612
1981	2,396,171	923,865	734,473	445,076
1991	2,925,344	1,505,872	1,061,598	654,490
2001	3,694,974	2,702,304	1,411,228	1,003,015
2011	6,352,254	4,585,367	1,817,191	1,390,633

Source: Registrar General and Census Commissioner

Table5: Projected urban population growth in Gujarat, 2011-2026

Year	Projections prepared by Registrar General and Census Commissioner of India based on 2001 population census			Projections prepared by the author based on provisional figures of 2011 population census		
	Population (000)	Proportion urban	URR	Population (000)	Proportion urban	URR
2011	23803	0.403	0.676	25713	0.426	0.742
2012	24298	0.406	0.684	26379	0.431	0.758
2013	24794	0.409	0.693	27383	0.442	0.792
2014	25291	0.412	0.702	28740	0.458	0.845
2015	25790	0.415	0.711	30464	0.480	0.922
2016	26290	0.418	0.720	32555	0.506	1.026
2017	26779	0.422	0.729	34980	0.538	1.165
2018	27266	0.425	0.738	37702	0.574	1.346
2019	27749	0.428	0.747	40647	0.612	1.579
2020	28225	0.431	0.757	43719	0.652	1.874
2021	28690	0.434	0.766	46804	0.692	2.243
2022	29756	0.446	0.804	49851	0.730	2.700
2023	30956	0.459	0.850	52757	0.765	3.257
2024	32427	0.477	0.911	55477	0.797	3.932
2025	34308	0.500	1.000	57993	0.826	4.744
2026	36737	0.530	1.130	60311	0.851	5.718

Source: Government of India (2006)