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**Urbanisation in Gujarat**  
Past Trends, Future Prospects

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# URBANISATION IN GUJARAT

## Past Trends, Future Prospects

### INTRODUCTION

Urbanisation is conceptualised as the growth of urban areas. It reflects the transition in human settlement patterns for a number of reasons. They have gone through the process of evolution since times immemorial. The last major change in human settle patterns was the accumulation of hunter-gatherers into villages many thousand years ago. This change was associated 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 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 used to be characterised by common bloodliness of the village population, intimate relationships and a typical communal behaviour. The urban living culture, because of its very nature, is contrastingly different from the rural living culture. It is characterised by distant bloodliness, 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 primarily been behind 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 attracted people from villages to urban areas in search of better livelihood opportunities. Over time, many services like health and education as well as wealth got concentrated in 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 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 into eight sections in addition to 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

In India, the concept urban has evolved over time. 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 is 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.

The second 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.

The third 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) contiguous areas made up of other urban and 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 at least three decades which would give a meaningful picture of the size and temp of urbanisation.

The fourth 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.

It is well known that urban settlements vary widely by the size of the population of the settlement and rate of growth of the population of different size of urban settlements is different. As such, urban areas in the country have customarily been classified by the Registrar General and Census Commissioner of India into the following six categories on the basis of the size of the population of the urban settlement to facilitate analysis of the urbanisation pattern:

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 size class I urban habitations 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 in the Indian population census.

## MEASUREMENT OF URBANISATION

Urbanisation can be analysed in two contexts: 1) the situation existing at a particular moment; and 2) the change in the situation over time. The situation existing at a particular moment can further be analysed in terms of the level or the degree of urbanisation as well as in terms of the distribution or the concentration of the urban population across spatial units. The two contexts imply that urbanisation should be analysed in terms of level, tempo and concentration indicators. The most commonly used indicator to measure the level or the degree of urbanisation at a given point of time which is defined as the proportion of urban population to the total population. A more refined indicator of the level or the degree of urbanisation, however, is the urban-rural ratio (URR). There are other, more advanced, indicators of the level of urbanisation also (Arriaga, ) that we do not use in the present analysis.

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 of urban areas. The concentration of the urban population is most commonly depicted through the well known Lorenz curve and is measured in terms of the 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 results of the 2011 population census, more than 42 per cent of the population of Gujarat was living in the settlements classified as urban at the time of 2011 population census. 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 was well above the national average. At the same time, the urban-rural ratio (URR) in the State is estimated to be more than 74 per cent on the basis of the 2011 population census

which means that for every four people living in the rural areas of the State, almost three people were living in the urban areas of the State (Figure 1). It may also be seen from the figure 1 that since its formation in 1960, the increase in the level of urbanisation in Gujarat has quite substantial. Between 1961 and 2011, the URR in the State more than doubled from less than 35 per cent in 1961 to almost 75 per cent in 2011 whereas the proportion of urban population to the total population increased from around 25 per cent to more than 42 per cent during this period. Figure 1 also suggests that the process of urbanisation in the State has accelerated during the period 2001 through 2011.

Among the constituent districts of the State, the level of urbanisation varies widely. The URR was more than 5 in district Ahmadabad which suggests that the urban population was more than five times more than the rural population. 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 Ahmadabad, there are two other districts in the State - Surat and Rajkot - where the urban population was more than the rural population 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 and the proportion of the urban population was less than 50 per cent at the time of 2011 population census. The URR was 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 Dang, Panch Mahals, and Sabakantha.

The highly unequal distribution of the urban population across the districts is also reflected in figure 3 which depicts the level of urbanisation in terms of per cent urban. This ratio 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 largely 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. More attention will be paid to this aspect of urbanisation in the State in the following pages. which has implications for development planning and programming.

The tempo of urbanisation has been found to vary across the districts of Gujarat during the period 2001-2011 (Figure 5). The growth of the urban population has been the most rapid in district Surat. The rural population growth rate in district



Surat decreased at a rate of around 1 per cent per year during the period 2001-11 whereas the urban population in the district increased at a 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 also where the URGD was around 5 per cent during the period 2001-11. The rural population decreased, albeit marginally, in district Ahmadabad also but the growth of the urban population in the district has been about 2.4 per cent year only so that the tempo of urbanisation has not been high. By contrast, the tempo of urbanisation has been estimated to be very low in six districts whereas in district Dahod, the growth of rural population was more rapid than the growth of urban population during the period 2001-11 so that the tempo of urbanisation was negative.

## 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 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 individual districts, district Ahmadabad alone accounts for almost 24 per cent of the urban population of the State enumerated at the 2011 population census whereas district Surat accounts for another about 19 per cent. This means that more than 40 per cent of the urban population of the state is concentrated in only two districts. By contrast, district The Dangs accounts for just 0.1 per cent of the urban population of the State. Other districts which account 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, urban population of the State is concentrated in only a few districts.

Another evidence of the increase in the concentration of the urban population in selected districts of the State is the 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 the State; remained unchanged in one district; and increased in only 7 districts. Districts where the proportion of urban population to the total urban population of the State decreased between 2001 and 2011 include both highly urbanised districts such as Ahmadabad as well as lowly urbanised districts like Narmada, Tapi and Dahod. District Surat is the only district in the State where there has been a substantial increase in the proportion of urban population of the district to the total urban population of the State in recent years. Between 2001 and 2011, the proportion of the urban population in district Surat to the total urban population of the State increased from 15.46 per cent to 18.84 per cent. This increase is the highest among all districts of the State.

The second aspects of the concentration of urban population in selected districts of the state is the distribution of the urban population by size class of urban areas. It is well known that with the advancement of urbanisation, an increasing proportion of the urban population gets concentrated in large urban settlements rather than in small urban settlements. This has also been the case in Gujarat as is evident from the data available through different population census. 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. Results of the 2011 population census, on the other hand, suggest that more than three-fourth of the urban population of the State was living in size class I urban settlements in 2011 (Figure 7). On the other hand, the proportion of urban population living in urban settlements of other size classes in the State has decreased, quite substantially, since 1971. This shows that the urban population of the State is getting increasingly concentrated in size class I urban settlements at the cost of other size class urban settlements. As a result, the contribution of the population 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, number of 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) increase was confined to these

four million-plus urban settlements. This observation also suggests that most of the urbanisation in the State has been confined primarily to the four million-plus cities of the State. Districts in which these million-plus urban settlements are located are also the most urbanised and the most industrialised districts of the State. This shows that the urban population growth in the State has been highly unequal across both districts and size class of urban settlements. Most of the urban population growth has been confined to large metropolitan cities and towns of the State whereas growth of small and medium towns of the State has not been very rapid. As a result of this unequal growth of the population of different size class urban settlements, more and more urban population of the State is getting concentrated in metropolitan cities and large towns, particularly, the million-plus urban settlements of the state.

## 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 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 the projection methodology developed and adopted by the United Nations 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 may 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. As a result, 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 a clear evidence that the 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, enumerated at the 2011 population census, 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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Figure 1  
Level of urbanisation in Gujarat

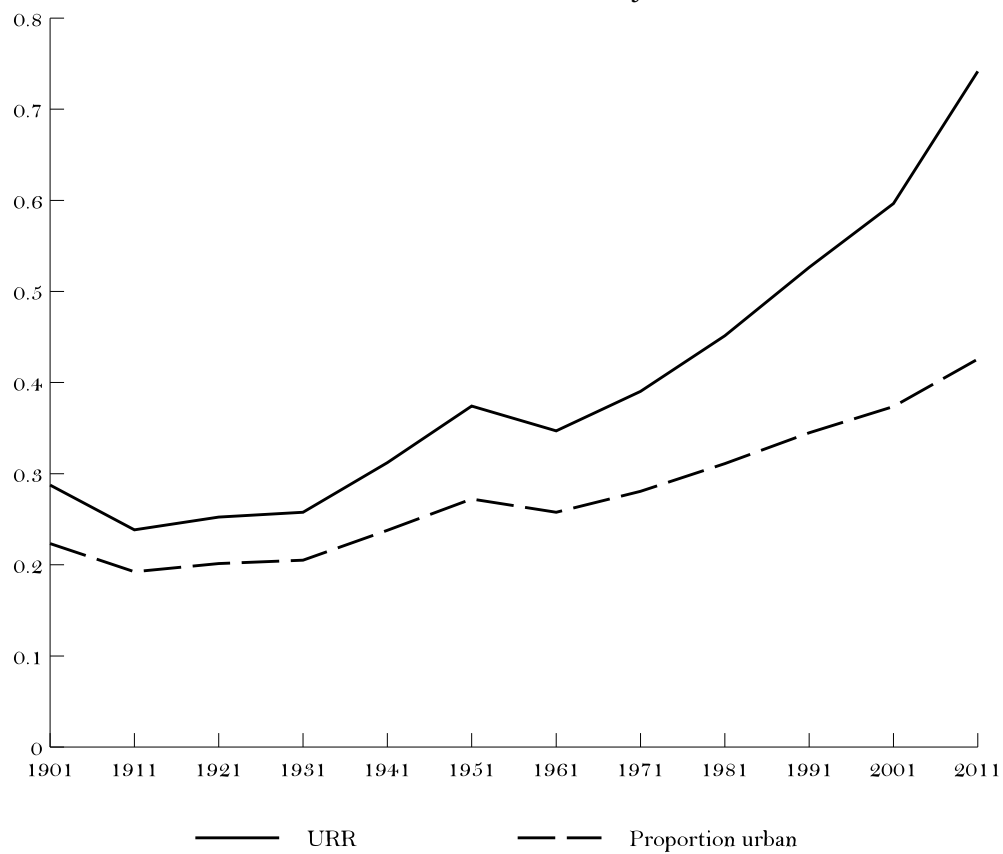


Figure 2  
URR in districts of Gujarat, 2011

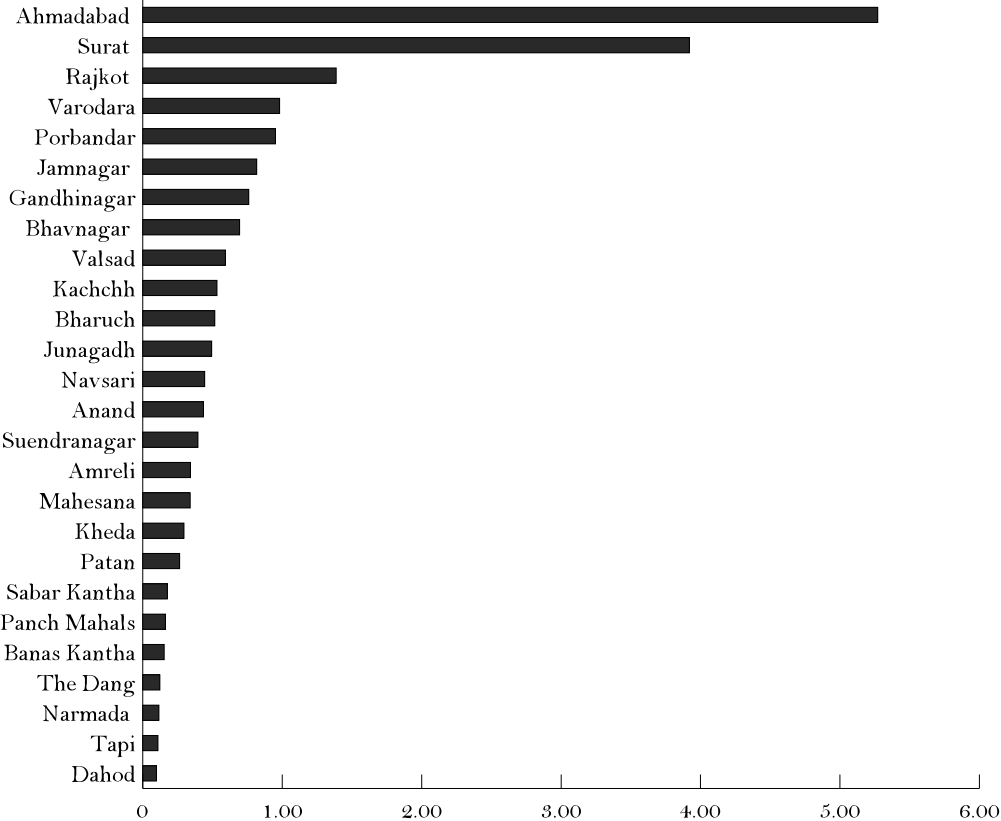




Figure 3  
Percent urban in districts of Gujarat, 2011

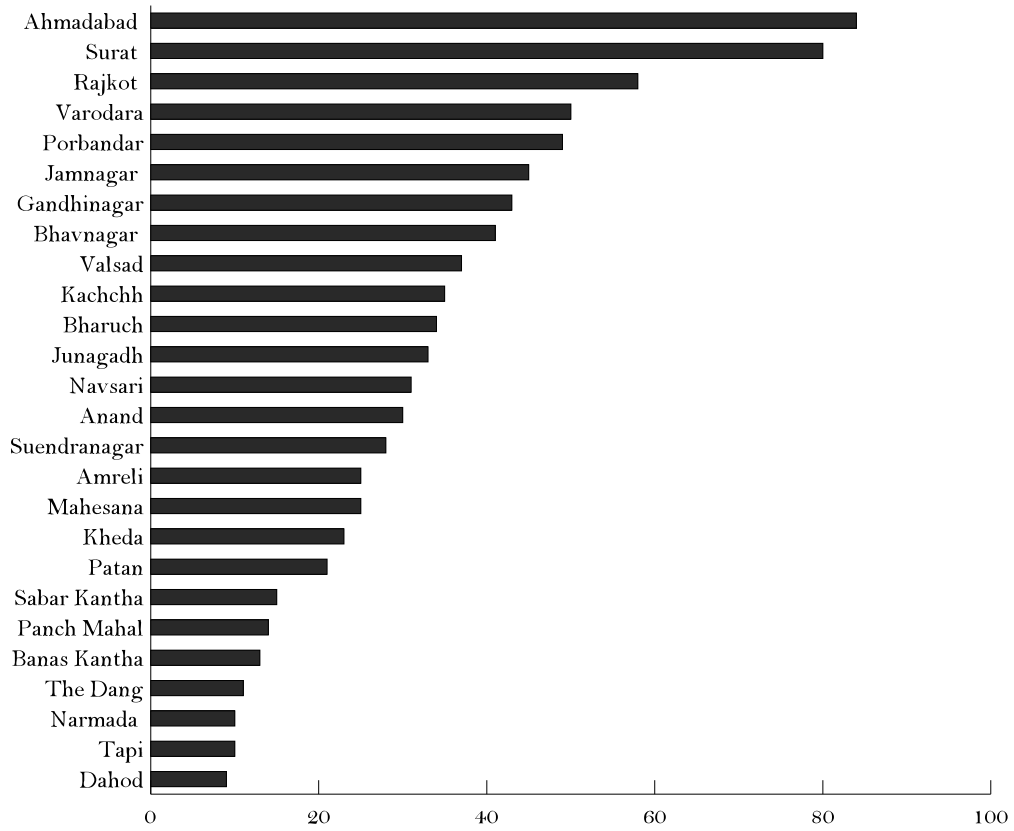


Figure 4  
URGD in Gujarat, 1901-2011

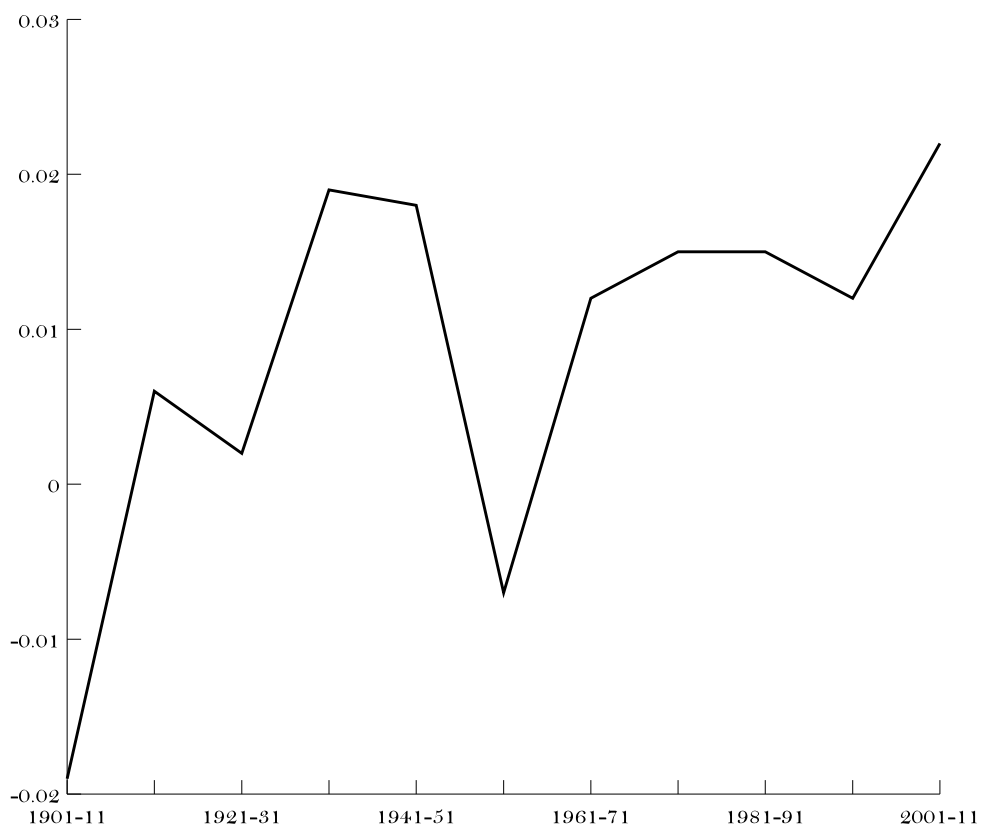


Figure 6  
 Urban population in the district as proportion to urban population in the State

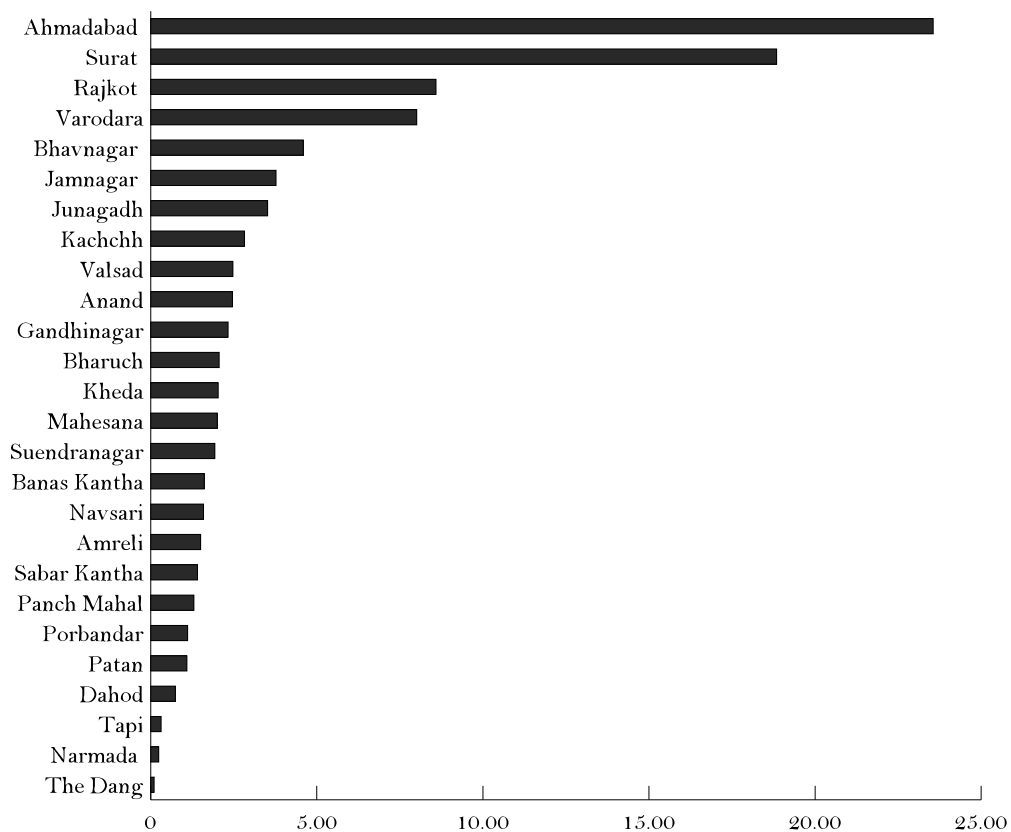


Figure 7  
Distribution of urban population by size class of urban areas

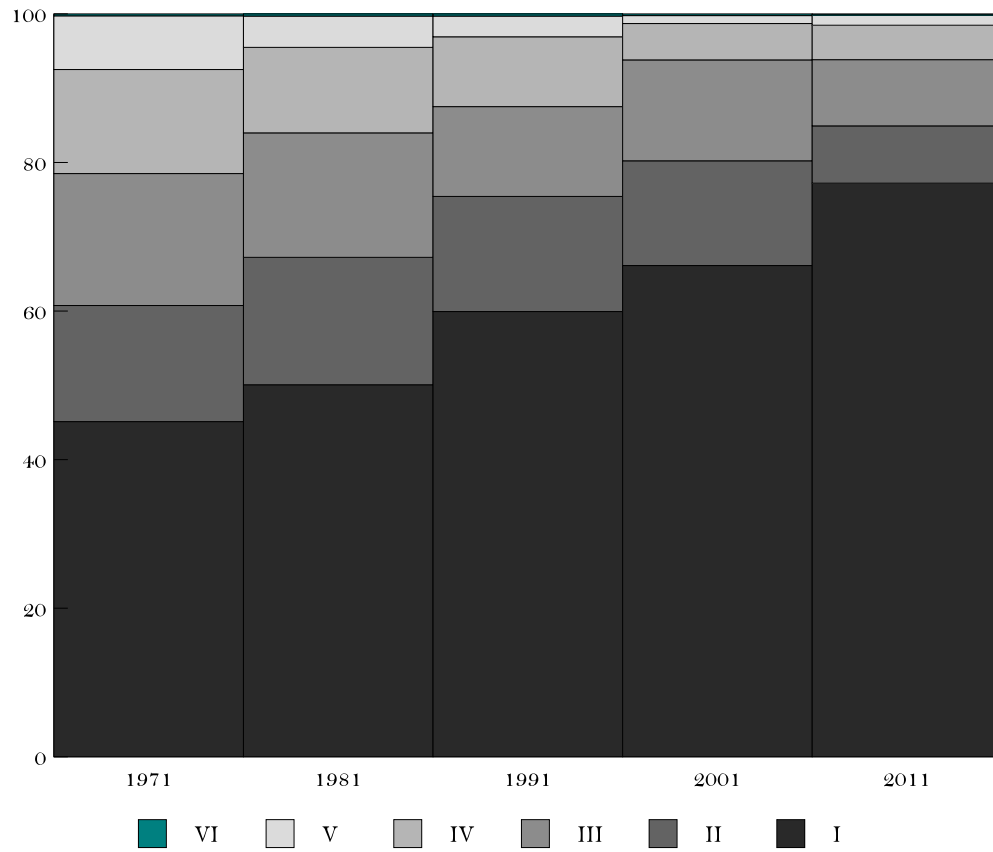


Figure 8  
Future urban population growth (million) in Gujarat, 2011-2026

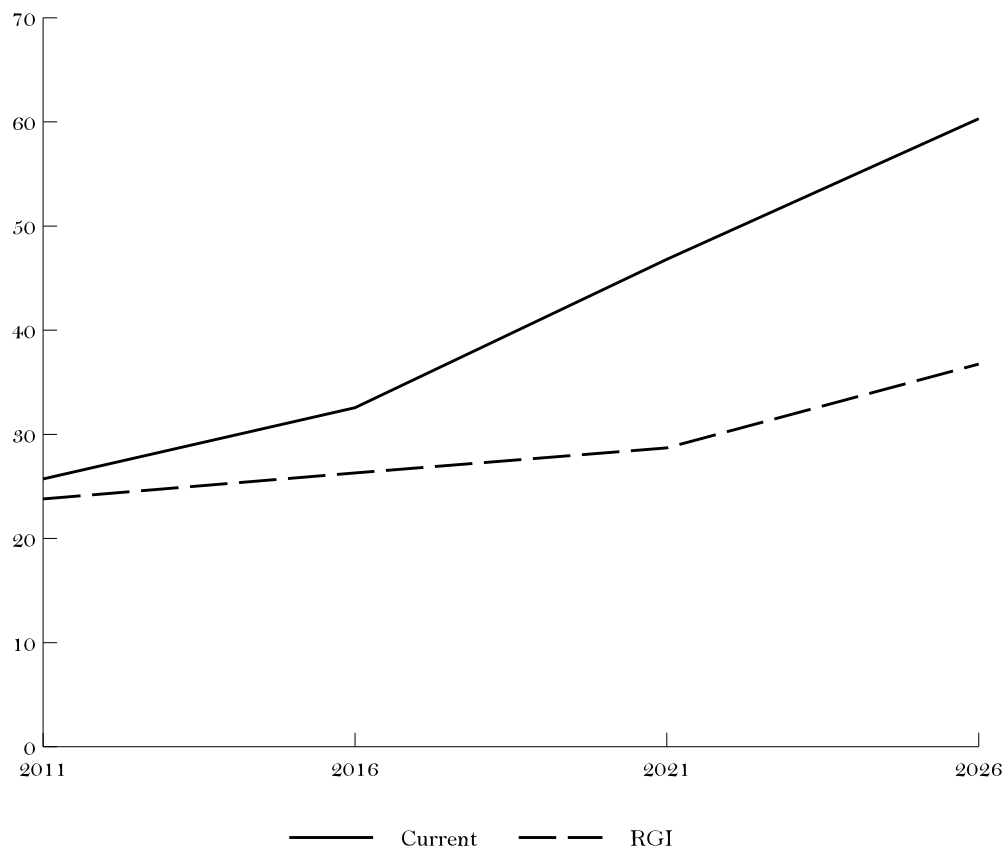


Table 1  
Urban population growth in Gujarat, 1901-2011

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	Number	Population
		Million %		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 77.2
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 9.4	57	0.87 4.9	78	1.19 4.64
V	71	0.54 7.21	61	0.45 4.24	51	0.4 2.81	23	0.19 1.07	49	0.36 1.38
VI	5	0.02 0.27	13	0.03 0.28	11	0.04 0.28	18	0.04 0.23	18	0.04 0.15
All	216	7.49 100	255	10.62 100	264	14.25 100	242	17.77 100	278	25.71 100

Source: Registrar General and Census Commissioner



Table 4  
Population of million plus urban settlements in Gujarat

Year	Ahmadabad	Surat	Vadodara	Rajkot
1901	185889	129500	103790	36151
1911	216777	125220	99345	34194
1921	274007	127356	94712	45845
1931	310000	110739	112860	59112
1941	591267	185955	153301	66353
1951	863590	237394	211407	132069
1961	193875	317519	309716	194145
1971	1731116	493001	467487	300612
1981	2396171	923865	734473	445076
1991	2925344	1505872	1061598	654490
2001	3694974	2702304	1411228	1003015
2011	6352254	4585367	1817191	1390633

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)