



Received: 09.03.2019
Accepted: 12.05.2019
Published: 20.05.2019

Citation: Ramanna G, Hanjagi AD. (2019). Urban trends: A case study of Karnataka. *Geo-Eye*. 8(1): 20-24. <https://doi.org/10.53989/bu.ge.v8i1.6>

Funding: None

Competing Interests: None

Copyright: © 2019 Ramanna & Hanjagi. This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Published By Bangalore University, Bengaluru, Karnataka

ISSN

Print: 2347-4246
 Electronic: XXXX-XXXX

Urban trends: A case study of Karnataka

G Ramanna¹, Ashok D Hanjagi²

¹ Research Scholar, Department of Geography, Bangalore University, Bangalore, Karnataka, India
² Professor & Chairman, Department of Geography, Bangalore University, Bangalore, Karnataka, India

Abstract

Towns and cities play a greater role in regional development of a state or country. A settlement with more than 75% of population other than agricultural activities can be termed as town. Karnataka has good number of towns and cities but lack in million cities. Bangalore is the only million city, it is located in the most southern part of Karnataka. Urban influence is of varying nature, it may have its influence of agriculture, on industry, on administration and also on certain services like medical, cultural including educational, recreational, etc. The secondary data are collected from various government organizations the trend in which the towns and cities of Karnataka expanded and the urban agglomeration in the 2011 is given emphasis in this paper.

Keywords: Urban agglomeration; urban primacy; urbanization

Introduction

Urbanization is a process by which towns and cities grow continuously in an area or region. Karnataka state has been experienced a good trend in urbanization during 1961-2011. The research paper address the trend of urbanization that has happened since 1961. Geographical information system has been used here to understand the trend of urbanization in the Karnataka state. The result reveals that the urbanization process is high in south Karnataka, low in North Karnataka and very low in western areas of Karnataka. Statistical techniques have been used have to come out with meaningful results. In India urban-rural population in 2011 census was 31.16 percent and

68.84 percent respectively. At the national level slowing down of population growth was due to sharp decline in the growth rate in rural areas, while the growth rate of urban areas remains almost same. The total population of the state, 61.1 million is distributed among the rural and urban areas of the state almost in the ratio of 2:1. In other words 61.43 percent of the population is living in rural areas whereas, the remaining 38.57 percent lives in the urban areas. Thus, 37.5 million population is in rural areas whereas, the urban population is about 23.6 million. The percentage of urban population of the state 38.57 percent is much higher than the percentage of urban population of India which is about 31.16 percent of the total population of India.

Study Area

Karnataka is the seventh largest urbanized state in India with 38.67% of urban population as of 2011. With one out of every seven people in Karnataka live in Bangalore, it addresses pertinent questions as to how much of this growth is contributed by various regional pockets. This paper aims to identify regional imbalances in urban growth in Karnataka 2011 at the regional, divisional and district level and to examine the distribution of urban population across cities during the same period. It uses secondary data from the Census of India to compute measures of percent urban population, urban rural growth differential (URGD), Results show that Karnataka exhibits a fluctuating trend of urbanization with a high regional variation and a high urban primacy.

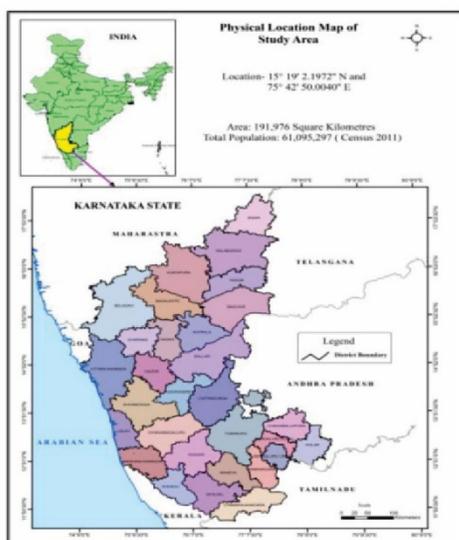


Fig. 1. Study area

Source of Data

The research study applied quantitative and statistical technique analysis for the data collected relating to urban trends and regional analysis in Karnataka state. In this research, data has been collected from both primary and secondary level. The secondary data has been collected from various government and non-government departments, such as Town Planning, Census Department. Relevant data has also been generated from newspapers, weekly and various websites. Data has been extracted from Census Data 2011, Urban Development Policy of Karnataka - 2009, Karnataka Economic Survey 2019-20, Urban Development Annual Report and National Remote Sensing Centre, ISRO.

Objectives

To assess the growth of the urban centres, to analyse the urbanization trends, during the study period.

Results and Discussion

The total population of the state, 61.1 million is distributed among the rural and urban areas of the state almost in the ratio of 2:1. In other words 61.43 percent of the population is living in rural areas whereas, the remaining 38.57 percent lives in the urban areas. Thus, 37.5 million population is in rural areas whereas, the urban population is about 23.6 million. The percentage of urban population of the state 38.57 percent is much higher than the percentage of urban population of India which is about 31.16 percent of the total population of India.

Patterns of Urbanization: Karnataka accounts for almost 6.25 percent of national urban population. It is one of the seventh highly urbanized states of India. There are two peaks of urban population growth in Karnataka one in 1951 and the other in 1981. The main reasons for high urban population growth during 1941-1951 is the strong initiations of industrialization. This is the period in which both government of India and government of Karnataka have encouraged industrialization. Large industrial units in the public sector like Hindustan Machine Tolls, Indian Telephone Industries, Bharat Electronics Limited, Hindustan Aeronautics Limited, and Government Electric Factory, Radio Manufacturing Company were established in the state. The second peak of urbanization between 1971-81 is also attributed to industrialization and commercialization which has continued even in the Census of later period. The state has 23.6 million urban population which constitutes about 38.57 percent of the total population of 61.1 million 2011. During the decade of 2001-11 the absolute increase of population has been more in urban areas than in rural areas. For the first time since independence. The rapid urbanization is attributed to concentration of economic activity and urban focused employment opportunities. The decadal growth of urban population is highest in Bengaluru district, which has recorded 51.39 percent of growth rate followed by Udupi with 41.90 percent.

Analysis of the patterns of urbanization reveals that urbanization process is highly concentrated at Bengaluru which is the largest urban agglomeration of the state with 8.42 million population. It is the primate city of the state. It alone accounts for nearly 36 percent of the total urban Population of the state. At the same time the growth rate of Bengaluru is also highest with 51.39 percent. The only other district which has high decadal of growth rate is Udupi.

There are 11 corporations in the state. These are Bengaluru, Mysore, Mangaluru, Hubballi-Dharawada, Davanagere, Ballary, Kalburgi, Belagavi, Tumkur, Shivamogga and Vijayapura.

Table 1. Karnataka Urban Population division & district wise percentage

Sl. No.	District Name	percentage					
		1961	1971	1981	1991	2001	2011
I	Bengaluru Division	29.4	31.4	38	42.1	46.9	54.1
1	Bengaluru Urban	81.5	76.5	84.1	86.2	87.9	90.7
2	Bengaluru Rural	14.9	16.5	18	19.5	21.9	26.1
3	Ramanagara	11.7	14.3	16.9	17.1	20.9	23
4	Kolar	30.1	25.7	27.5	28.2	29.2	31.2
5	Chikaballapura	12.6	13.9	15.7	16.7	19.2	22.4
6	Tumakuru	9.8	11.3	13.4	16.2	19.6	22.4
7	Chitradurga	9.8	11.9	14.2	16.6	18.1	19.9
8	Davangere	18.9	20.9	24.4	27.4	30.3	32.3
9	Shivamogga	24.4	28.1	31	31.9	34.8	35.6
II	Mysuru Division	15.8	17.7	19.2	21.1	22.9	25
10	Mysuru	28.4	30.8	33.3	35.7	37.2	40.9
11	Mandya	9.9	12.7	14	15.1	15.5	17.1
12	Chamarajanagara	11.9	12.9	13.4	13.4	15.3	17.1
13	Hassan	11	12.7	13.2	16.2	17.7	21.2
14	Chikamagalur	14	14.7	16.7	16	19.5	21
15	Kodagu	10.3	11.4	12.1	13.2	13.7	14.6
III	Kalaburgi Division	16.6	18.8	23.4	23.7	26.5	27.8
16	Ballari	24	29.1	34.5	31.8	34.9	37.5
17	Koppal	11.2	12.6	16.2	15.5	16.6	16.8
18	Raichur	17.1	17.5	21.5	24.6	25.2	25.4
19	Bidar	12.2	14.5	17	19.6	23	25
20	Kalaburgi	16.8	19.1	26.3	26.9	31.7	32.6
21	Yadgir	14.9	14.8	15	15	17.1	17.7
IV	Belagavi Division	21.1	24.5	27.5	27.3	29.2	30.7
22	Belagavi	18	20.5	22.5	23.2	24	25.3
23	Bagalkote	24.2	27.3	30	27.7	29	31.6
24	Vijayapura	12.9	15.8	18.6	19.5	21.8	23.1
25	Gadag	28.5	29.5	34.8	34.7	35.2	35.6
26	Dharwad	40.7	48.8	52.2	52.5	55	56.8
27	Haveri	12.8	15	17.1	16.1	20.8	22.3
V	Coastal Region / Division	16.5	18.5	23.6	25.8	30.3	37
28	Uttara Kannada	15.3	17.7	24.9	23.6	28.7	29.2
29	Udupi	10.5	13.9	12.9	18.3	18.6	27.9
30	Dakshina Kannada	21.7	22.2	29.8	32.2	38.4	47.5
	State	21.5	23.9	28.5	30.5	33.9	38.5

Table 2. Urban Trends in Karnataka

Year	Karnataka's total population (lakhs)	% of Urban population in Karnataka	% of Urban population in India
1951	194	22.95	17.29
1961	236	22.33	17.96
1971	293	24.31	19.91
1981	371	28.29	23.33
1991	448	30.91	25.71
2001	527	33.98	27.78
2011	611	38.67	31.15

Source: Census of India. 2011

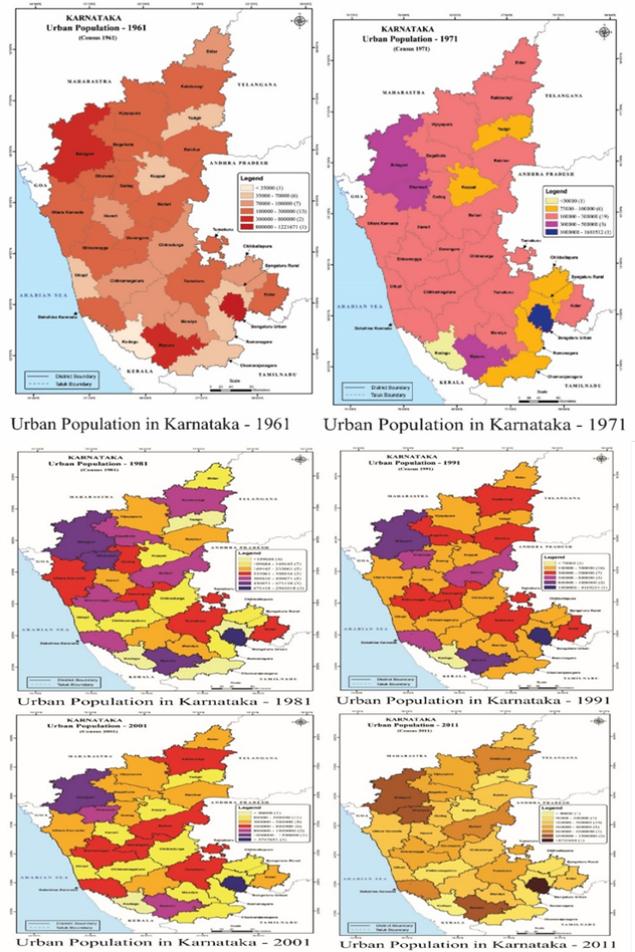


Fig. 2. Urban Population in Karnataka



Analysis of The Urbanization pattern In Karnataka

Urbanization and economic growth are strongly associated, and hence, urban areas, in general, and cities, in particular, have been identified as the 'Engines of Economic Growth' and 'Agents of Change' (Mohan and Dasgupta; 2005). Karnataka, one of the frontline states of India, ranks 6th by per capita net state domestic product, per cent share of urban population, life expectancy, infant mortality and maternal mortality rates, 7th by literacy and 9th by population size (Heitman, 2001 and Govt. of India, 2001). Karnataka accounts for almost 63 per cent of national urban population and 5.4 per cent of the total number of towns in the country. By share of urban population, Karnataka (33.98 per cent) stood much above the national average (27.78 per cent) in 2001. With its conducive location characteristics for industrial and commercial development, the two engines of economic growth and urbanization, Karnataka's urbanization has been consistently progressive with gradual increase in urban population from 12.59 per cent to 33.98 per cent during 1901 and 2001. In addition, during 1901-2001, the State's, favorable climate and primitive policies of the State Government attracted the people within the country and outside alike leading to higher growth of urban population and the urban areas (cities). Hence Karnataka with its urban population at 34 per cent of total population is at present ranked 5th most urbanized among the Indian states

The main reason for such high urban population growth peak during 1941-51 in Karnataka was the state's initiative towards industrialization. This process has obviously led to rapid increase in city and town sizes in the state. Similarly, to begin with, the distribution of towns in Karnataka by size class reveals a well balanced typical pyramidal shape with strong base, with highest concentration of class VI (less than 5,006 population) and least share of class I towns (more than 100,000 population) at the top. Subsequent urban development policies which encouraged higher size towns have led to redistribution in concentration of towns by eroding the pyramidal base. A similar growth pattern is evident at the national level as well. While the concentration of urban population by size class is concerned, the issue has been more serious as the population distribution has assumed a perfect inverted pyramid with highest and least concentration of population in class I and VI towns respectively in Karnataka as well at the national level during 1901-2001. This implies that both state and national urban development policies have consistently reinforced each other to encourage highest concentration of population in class I cities (Karnataka: 67 per cent; India: 70 per cent) thus highlighting the 'top heavy' character of Indian urbanization.

The UAs/Towns which have at least 1,00,000 persons as population are categorized as Class I UA/Town. At

the Census 2011, there are 468 such UAs/Towns. The corresponding number in Census 2001 was 394. Around 70% of the total urban population lives in these Class I UAs/Towns. UAs/Towns which have a population of one million (10 Lakh) or above each are known as Million Plus UAs/Cities. Out of 468 UAs/Towns belonging to Class I category, 53 UAs/Towns are Million Plus UAs/Cities in the country. 160.7 million persons (or 42.6% of the urban population) live in these Million Plus UAs/Cities as per Census 2011.

UAs/Towns which have a population of four million (40 Lakh) or above each are known as Metro Cities. 74th Constitutional Amendment Act, 1992 has inserted a definition of "Metropolitan area" as an area having a population of ten lakhs or more, comprised in one or more districts and consisting of two or more Municipalities or Panchayats or other contiguous areas, specified by the Governor by public notification to be a Metropolitan area;

UAs with more than 10 million (100 lakh or 1 crore) persons are known as Mega Cities. Among the Million Plus UAs/Cities, there are three very large UAs with more than 10 million persons in the country, known as Mega Cities. These are Greater Mumbai UA (18.4 million), Delhi UA (16.3 million) and Kolkata UA (14.1 million).

Conclusion

The concentration is increasing in Class I, Class II and Class V towns, while all other classes record a reduction in share of population. This is reflected in the Gini Coefficient Index which was 0.68 in 1991 and declined slightly to 0.66 in 2001 but further increased to 0.72 in 2011. According to the study of urbanisation in 10 UAs (Urban Agglomerations) in Karnataka. As of 2011, Bangalore is the only metropolitan city in Karnataka. The other populous urban regions being Mysore UA, followed by Hubli-Dharwad, Mangalore UA, and Belgaum UA. There is no change in the position of the first 8 UAs from 1991 to 2011, while there are slight changes in the rest of the cities. In 1991-2001, three UA/Towns (Bangalore, Gulbarga, Shimoga) had more than 3% exponential growth rate. In 2001-2011 only Bangalore UA had a much higher rate (4.02%). In 2001-2011, except for Bangalore, Mysore and Bellary most of the towns especially Shimoga (-1.89%) experienced a slower pace of urbanisation when compared to the previous decade.

Disparity exists in the distribution of urban population across cities as well. The increasing polarised growth of Bangalore over the years, is reflected in the four-city primacy index increased from 2.39 in 1991, 3.33 in 2011 (i.e. in 2011 the population of Bangalore UA was more than three times that of the combined population of the next three large cities). Similar is the case with the eleven-city primacy index, which increased from 2.33 in 1991 to 3.09 in 2011.



References

- 1) Benfield. National Resources Defence Council. 1999.
- 2) Bhattacharya B. Urbanisation and Human Development in West Bengal: A District Level. 1998.
- 3) Government of India. 2001., Census of India, General Population tables, States and Union Territories. Government of India. 2001.
- 4) Bhagat RB, Mohanty S. Emerging Pattern of Urbanization and The Contribution of Migration. *Asian Population Studies*. 2009;5(1):5-20. Available from: <https://dx.doi.org/10.1080/17441730902790024>.
- 5) K A. Trends and Patterns of Urbanisation and their economic implications. India Infrastructure. 2006.
- 6) Brody S. Measuring the adoption of local sprawl reduction planning policies in Florida. *Journal of Planning and Education Research*. 2006;p. 294-310.
- 7) Brueckner J. Urban Sprawl: Diagnosis and Remedies. *International Regional Science Review*. 2000;23(2):160-171.
- 8) Government of Karnataka., 1971., Census of India, General Population tables. Mysore: Government of Karnataka.. 1971.
- 9) Brody SD. Ecosystem Planning in Florida: Solving Regional Problems through Local Decision Making. UK. Ashgate Press. 2008.
- 10) Garnier CB. Urban Geography. New York. John Wiley. 1967.
- 11) GRAAM., 2014., Performance Evaluation Study of NRHM in Karnataka. Mysore: Grass Root Research Advocacy Movement.. 2014.
- 12) Burchell RW. The costs of sprawl revisited. Washington DC. National Academy Press. 1998.
- 13) Hirschhorn JS. Environment, Quality of Life, and Urban Growth in the New Economy. *Environmental Quality Management*. 2001;10(3):1-8. Available from: <https://dx.doi.org/10.1002/tqem.1000>.
- 14) Government of Karnataka., 2005., Human Development Report. Government of Karnataka. 2005.
- 15) R BM. Urban Geography - A Text Book. New Delhi. Concept Publishing Company. 2002.

