

Trend and Pattern of Growth of Urban Population by Size Class of Towns and Cities in Belgaum District, Karnataka State, India; A Geographical Analysis

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Abstract: *Urbanization is the process which transforms rural areas into urban areas as agricultural pursuits common to villages change into non-agricultural and corresponding change of behavioural patterns also take place. This process is predominantly associated with industrialization and economic growth which is eventually allied with urban development. It creates several job opportunities in the urban area and plays a significant role in declining poverty and unemployment. Belgaum, one of the largely populated districts of northern Karnataka and having a slow growth rate of urban population has been selected as the study area. The present paper attempts to understand the process of urbanization, its volume, trend, pattern, cause and consequences based on census data during 1901-2011. The study shows both spatio-temporal variations in the decadal and spatial pattern of growth and distribution of total and urban population, outline of urbanization in light of growth of urban settlements by size class and its changes in Belgaum district, which are significant. Census data reveals that there is significant rise in percent of urban population since 1901 (7.44%) to 2011 (24.34%). Such change may be attributed to rapid industrialization, rural-urban migration and some well-established other factors. Pattern of Urbanization has been represented by categorizing the percent of urban population (2011) into highly, moderately, less and least urbanized talukas by comparing with range of percent of urban population in the talukas of the district. Data for the study has been collected from various sources like Census Publications, Town Directory, District Census Handbooks and other relevant literatures. Data from District Census Handbook of the District has been used to study the spatial pattern of urbanization in the study area.*

Keywords: Urbanization, Population Growth, Decadal & Temporal Change, Migration, Industrialization

1. Introduction

Urbanization is a global phenomenon and its dynamics plays an important role in economic and socio-cultural change of a region. According to Reddy (1970) the process of urbanization takes place when the proportion of urban population increases. Historical evidence suggests that urbanization process is inevitable and universal. Urbanization can be seen as one of the important processes which has influenced characteristics of demography in the twenty-first century all over the world. Presently developed nations are characterised by high level of urbanization and some of them are in final stage of urbanization process and experiencing slowing down of urbanization due to host of factors (Brockerhoff, 1999). But, majority of the developing nations, on the other hand started experiencing urbanization only since the middle of the 20th century.

Urbanization can be defined as a finite process through which a nation passes as they evolve from agrarian to industrial society (Davis and Golden, 1954). This process is often linked to industrialization and modernization, as large numbers of people leave agriculture work and live in cities and towns. It is also facilitated by improvements in surplus agriculture, as cities are always dependent upon external farming for food. The process of urbanization in a demographic perspective i.e. urbanization is an increase in the proportion of urban population to the total population over a period of time (Davis, 1965; Bose, 1974). It is involving change from agricultural to non-agricultural work

and being associated with organizational and behavioural change (Patil, 1993). Thus, it is an indicator of modernization, the growth and economic development of a region.

At present, the rate of urbanization is much more in developing nations than the developed nations. Urbanization in India is the product of the demographic explosion and poverty encouraged rural-urban migration. In India there is still very low level of urbanization which is often termed as pseudo-urbanization (Datta, 2006). The urban population of India has increased from 2.58 crore in 1901 to 37.71 crores in 2011 and number of towns/urban agglomerations has grown from 1827 in to 7933 in 2011. Although the percentage of urban population has increased from 10.84 percent in 1901 to 31.16 percent in 2011, it is still behind the developed nations. In addition to that, the absolute growth and rate of urban population and the share of urban population by size class of cities as well as towns in India are significantly varied among the states and districts over a period of time. Therefore, to study the trend and pattern of urbanization at regional, district state and national level has gained much importance in recent times.

2. Significance of Study

In recent decades, India is experiencing rapid growth of urban population with differentials in states and districts created imbalance in entire socio-economic and cultural development, which in-turn leads to several causes and

consequences. The classification of population by rural-urban areas at district level is essential for effective planning and formation of policies at micro-levels, because in India, district is considered as an administrative unit as well as apex body for implementing all welfare programmes. Hence, the present paper aims to analyse the trend and patterns of growth of urban population by the size class of towns and cities in Belgaum district of Karnataka state, India.

3. Objectives

The present study has three specific objectives as follows.

- To provide an overview of the volume and trend of urbanization in Belgaum district of Karnataka state from 1901 to 2011.
- To study the decadal and spatial pattern of growth of total and urban population in Belgaum district of Karnataka state from 1901 to 2011.
- To provide an outline of urbanization in light of growth of urban settlements by size class and its changes in Belgaum district of Karnataka state from 1901 to 2011.

4. Data Base and Methodology

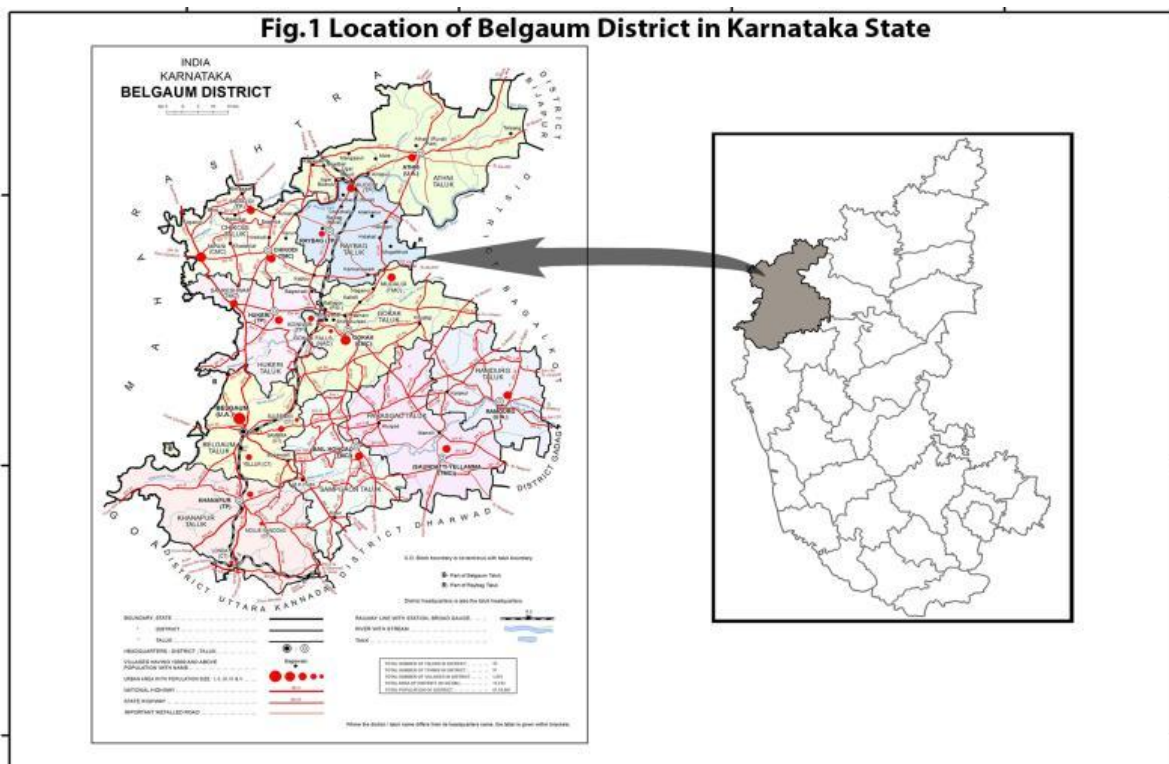
The present study is mainly based on secondary sources of data. The required data for the study has been collected from various sources like Census Publications, Town Directory, District Census Handbooks, District at a Glance, Reports and other relevant literatures. Data from District Census Handbook has been used to study the pattern of growth of urban population and trend urbanization in the study area (1901-2011). Some simple and relevant statistical and cartographic techniques like percentages, growth rate,

growth indexes and others have been used for the analysis over a period of time.

5. Study Area

Belgaum district occupies a unique position in the map of Karnataka state as it is the leading districts in terms of area, population and location. Among the 30 districts of Karnataka, Belgaum district is situated in the Northwest part of the state. The district has an irregular shape and spanning a total geographical area of 13,433 sq.km. This district stands 1st in the total area among the 30 districts of the State which accounts for 7.03% area of the state's total (Fig-1). It lies between 15° 21' N to 16° 57' N latitudes and 74° 05' E to 75° 28' E longitudes. Belgaum district is bounded by Goa on southwest, on the west, northwest and north by the districts of Ratnagiri, Kolhapur and Sangli of Maharashtra State, on the east by Vijayapur and Bagalkot districts and on the south by the districts of Dharwad and Uttara Kannada. The district includes 10 talukas, 31 cities and towns, 485 Gram panchayats and 1270 inhabited villages.

The district is divided into four physiographical divisions namely, the western ghats, the northern plateau, central hills and sandstone ranges and southern mixed landscape. Krishna, Ghataprabha and Malaprabha are the principal rivers, which flow in the northern, central and southern tracts of the district respectively. The climate of district is usually quite healthy. The eastern zone of the district has a dry climate characterised by hot summer and the western zone i.e. Khanapur-Belgaum zone has a moister climate. The main economic activities of the district are sugar and jaggery cultivation and processing, milk production, automobile, weaving, leather and tanning industries and foundries.



The total population of the district as per 2011 Census is 47,79,661. Of the total population, 24,23,063 (50.70%) are

males and 23,56,598 (49.30%) are females. The district's share to total Karnataka's population is 7.82 percent and it

ranks at 2nd place among the districts while in terms of population density it ranks fourth with 356 persons/sq.km. The population of the district is further distributed as 35,68,466 living in rural areas and 12,11,195 in urban areas, constituting 74.66 and 25.34 percent of rural and urban population respectively. The level of urbanization in Belgaum district was only 7.44 percent in 1901, it increases to 25.34 percent by 2011. In 1901, Belgaum district had 7 towns only, rises 20 in 1951, 22 in 2001 and rose to 31 in 2011. Out of 31 urban size classes in 2011, Belgaum city registered highest population (490045) with Class-I status, while Londa stands a least town with population of 5956 holds Class-V status. Thus, different size class of urban settlements had been changed their class sizes during eleven decades i.e. 1901 to 2011. The greater share of urban population in habited in Class-I to Class-III towns than medium and small towns (Class-IV to Class-VI) in recent decades (i.e. 1971 to 2011) in Belgaum district.

6. Result and Discussions

a) Volume and Trends of Urbanization in Belgaum District; 1901 to 2011:

Urbanization is the process through which rural areas are transformed into urban areas as agricultural pursuits common to villages change into non-agricultural and

corresponding change of behavioural patterns also take place. This process is also a function of socio-economic and demographic changes that take place in a society through time. The magnitude of urbanisation is directly correlated with the rate of proliferation of urban functions, where in the role played by technology is undisputed. The number of functions operated by urban centres multiplies with the advancements in science and technology. As a result, urban cultures expand and diffuse to the nearby surrounding areas. Along with these concepts the analysis of trend of urbanization by decadal wise furnishes the evidence of which the population increase or decrease over a period of time and can be found the possible causes for the situations.

The process of urbanization in the Belgaum district has been very slow since the beginning of the century. The district has been primarily a rural part of state. Up to 1941 the level of urbanization was less than 15 percent. A low level of urbanization was associated with the subsistence nature of agricultural economy. Industries, commerce and service sector, which provide the major stimuli for urban growth, had not made a breakthrough in the district. Table-1 and Fig-2 provides the details of decadal growth of urban population and its growth rate, no of towns and share of rural population in Belgaum district from 1901 to 2011.

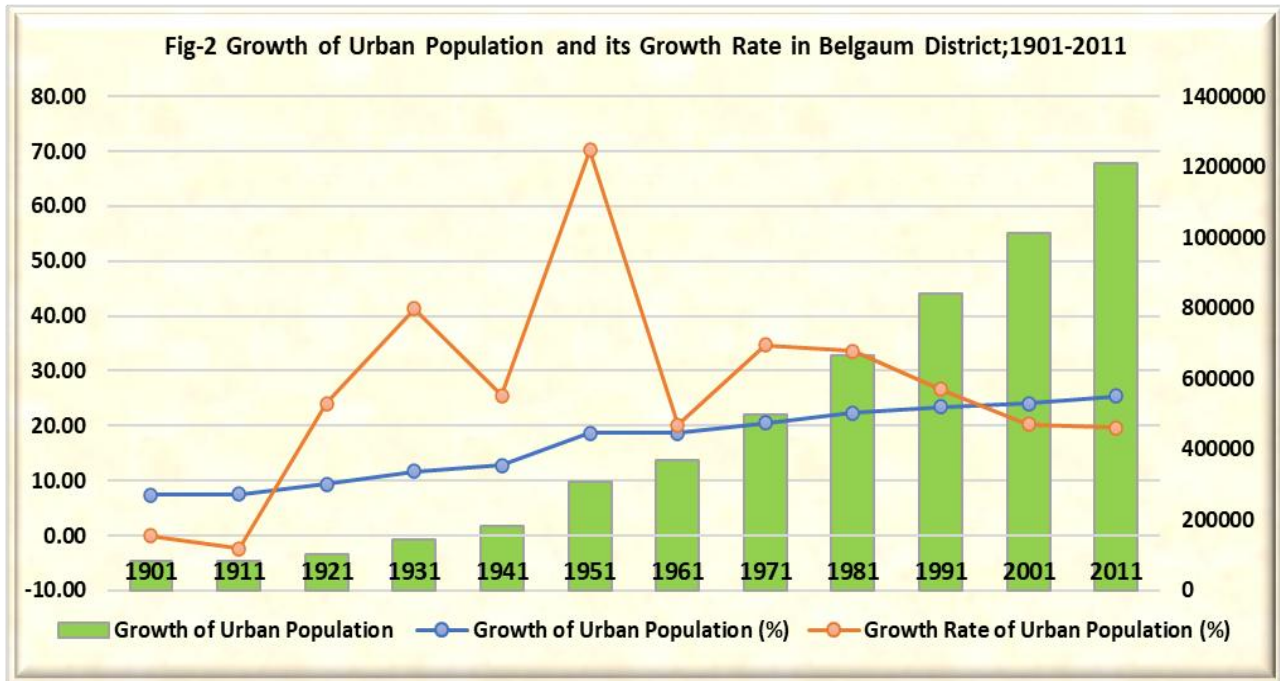
Table 1: Decadal Growth of Urban Population and its Growth Rate and No of Towns in Belgaum District; 1901 to 2011

Census Year	Urban Population		Growth Rate of Urban Population		No of Towns	Share of Rural Population %
	Absolute	%	Absolute	%		
1901	84211	7.44	--	--	7	92.56
1911	82210	7.58	-2001	-2.38	7	92.42
1921	101930	9.36	19720	23.99	8	90.64
1931	144026	11.64	42096	41.30	10	88.36
1941	180854	12.82	36828	25.57	11	87.18
1951	307668	18.69	126814	70.12	20	81.31
1961	369600	18.63	61932	20.13	19	81.37
1971	497793	20.54	128193	34.68	19	79.46
1981	665109	22.32	167316	33.61	19	77.68
1991	842019	23.50	176910	26.60	22	76.50
2001	1012691	24.03	170672	20.27	22	75.97
2011	1211195	25.34	198504	19.60	31	74.66

Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi.

From Table-1 and Fig-2, it can be seen that the growth of urban population and its growth rate in Belgaum district has been fluctuating from decade to decade. As per 2011 Census, 12,11,195 people of the district lived in urban centres, which just 25.34 percent of the district's total population. However, this percentage was only 7.44 percent at the beginning of the 20th century (Table-1), which is increased to 18.69 percent in 1951 and further to 23.50 percent in 1991 whereas 24.04 percent in 2001. The level of urbanization showed a decline in 1911 due to disturbing plague in that decade, mainly rooted in urban areas. From 1921 to 31 the growth of urban population increased consistently with slight variations. It reached up to 12.82 percent in 1941 and 18.69 percent in 1951 (Table-1). In

1951, the district's population suddenly increased in the decadal growth rate (70.12 percent), i.e. highest growth rate during the span of 100 years. In 1961, it experienced a sharp decline in growth of population i.e. 18.63 percent. It was a result of the change in the definition of the term urban in 1961 Census. After that, it reached up to 24.03 percent in 2001 and 25.34 per cent in 2011. It evidences the slow growth of district's urbanization in terms of growth of urban population and decadal growth rate. This trend reveals that the rural population migrated to urban areas. While, 1931 census onwards, the growth rate of urban population was increasing compare to growth rate of total population and growth rate of rural population in the district.



b) Pattern of Urban Population in Belgaum district, 2011:

With 25.34 percent of its population as urban, Belgaum was ranked 16th among all the districts of Karnataka state. The district had a total urban population of 12,11,195 persons as per 2011 Census of India, which lived in 31 urban centres of all classes. Thus, average population size of an urban centre was 39071 persons. If the towns were classified by talukas Belgaum taluka had the highest number of towns (13) with a total urban population of 6,43,862 persons, which made up 53.16 percent of the district's total urban population. In terms of number of towns, Belgaum was followed by Gokak taluka (4 towns). But it had an urban population of 1,35,715 persons which was 11.21 percent of the district's total urban population. On the other hand, expect Chikkodi (3 towns with 10.32 percent) and Khanapur (3 towns with 2.82 percent) and other talukas of district's had only one township each (Table-2 and Fig.3).

There are distinguished regional imbalances in the level of urbanization in the Belgaum District. Taluka level distribution of urban population has been discussed in following paragraphs. Table-2 shows pattern of urban population in talukas of Belgaum district. Out of a total of 10 talukas, there was only one taluka namely Belgaum with a level of urbanization higher than the district, state and national average. A relatively high degree of urbanization in the taluka may be associated with a high concentration of multi-functional character (administrative, educational, health, servicing and manufacturing), industries and major transport routes of all modes. The remaining 9 talukas displayed a lower degree of urbanization than the district and state average. These were characterized by a low level of industrial development and least urban amenities in small and medium towns.

Table 2

Taluka-wise Distribution of Urban Population and its Share in Belgaum District; 2011					
Talukas	Total Population	Urban Population		% to District's Total Urban Population	No of Towns
		Absolute	%		
Athani	525832	47842	9.10	3.95	1
Bailhongal	381189	49182	12.90	4.06	1
Belgaum	957373	643862	67.25	53.16	13
Chikkodi	628800	124962	19.87	10.32	3
Gokak	612163	135715	22.17	11.21	4
Hukkeri	399270	57625	14.43	4.76	2
Khanapur	258089	34102	13.21	2.82	3
Rayabag	405489	41890	10.33	3.46	2
Ramdurga	258527	34800	13.46	2.87	1
Saundatti	352929	41215	11.68	3.40	1
Total	4779661	1211195	25.34	100.00	31
State	61095297	23625962	38.67	7.82	347

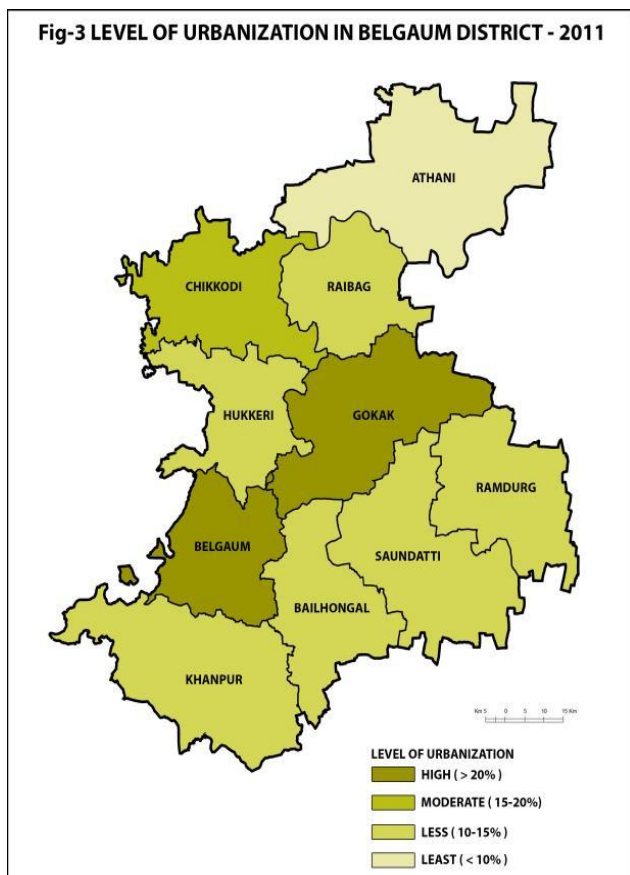
Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi

Further on the bases of percent of urbanization in taluka, categorized into four categories such as Highly Urbanized (talukas having more than 20 percent of urban population), Moderately Urbanized (talukas including in between 15-20 percent of urban population), Less Urbanized (talukas having in between 10-15 percent of urban population and Least Urbanized (talukas having less than 10 percent of urban population) (Table-3 and Fig.3). It is significant to note the regional variation in the pattern of Urban Population. Belgaum (67.25) and Gokak (22.17) talukas with 64.37 per cent of urban population is the highly urbanized, Chikkodi (19.87) taluka with 10.32 per cent, of urban population is the moderately urbanized, Hukkeri (14.43), Ramdurga (13.46), Khanapur (13.21), Bailhongal (12.90), Saundatti (11.68) and Rayabag (10.33) talukas with 21.37 per cent urban population is the less urbanized and Athani (9.10) taluka with 3.95 per cent of urban population is the least urbanized region of the district.

Table 3

Level of Urbanization in Belgaum district, 2011		
Level of Urbanization	Talukas	No. of Talukas
Highly Urbanized More than 20 %	Belgaum and Gokak	2
Moderately Urbanized Between 15-20 %	Chikkodi	1
Less Urbanized Between 10-15%	Hukkeri, Ramdurga, Khanapur, Bailhongal, Saundatti, Rayabag	6
Least Urbanized Less than 10%	Athani	1

Source: District Census Handbook 2011.



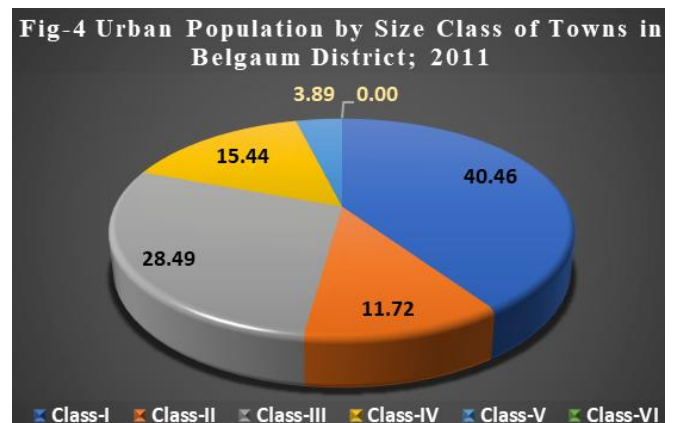
c) Urbanisation by Urban Size Class in Belgaum District; 2011:

Classified by size class, out of a total of 31 towns, there was only one Class-I city which is accounted for 40.46 percent of the total urban population of the district. There were two Class-II towns carrying 11.72 percent of total urban population. Thus Class-I and Class-II towns together accounted for 52.18 percent of total urban population in the district (Table-4 and Fig-4). The remaining 28 towns of Class-III to Class-V type together contained only 47.82 percent of total urban population. The highest number of towns (12) was of Class-IV category, which together shared of 15.44 percent of total urban population. There were 10 Class-III towns which accounted for 28.49 percent of total urban population. Thus, Class-V towns were 6 and had the lowest concentration i.e. 4.89 percent of total urban population in the district. Thus, it is indicated that Class-I city accounted for the largest proportion of the district's total urban population due to concentration of administrative, commercial, manufacturing, service, educational, health and transportation activities in the urban center. This city continued to grow at a faster rate than other towns due to urban to urban migration from small and medium towns. Contrary to this, small towns declined in number as well as their share in total urban population due to lack of infrastructural facilities and their shifting from lower size class category to the upper size class category.

Table 4

Urban Population by Size Class of Towns in Belgaum District; 2011			
Town Class	No. of Towns	Population	% to total Urban Population
Class-I	1	490045	40.46
Class-II	2	141986	11.72
Class-III	10	345043	28.49
Class-IV	12	186980	15.44
Class-V	6	47141	3.89
Class-VI	0	0	0.00
Total	31	1211195	100.00

Source: District Census Handbook 2011.



d) Growth of Total and Urban Population in Belgaum District: A Temporal Overview

This section of the study examines the growth patterns of total and urban population in the Belgaum district during the period of eleven decades, i.e. from 1901 to 2011. Table-5 and Fig-5 explains that, as per 1901 Census, Belgaum district had total population of 11,31,418 peoples comprising

10,47,207 peoples resides in rural and 84,211 peoples in urban areas. The corresponding figures for 2011 Census were 47,79,661 and it distributed as 35,68,466 living in rural areas and 12,11,195 in urban areas, constituting 74.66 and 25.34 percent of rural and urban population respectively. Consequently, the total as well as rural population increased to 4.22 times and 3.41 times respectively.

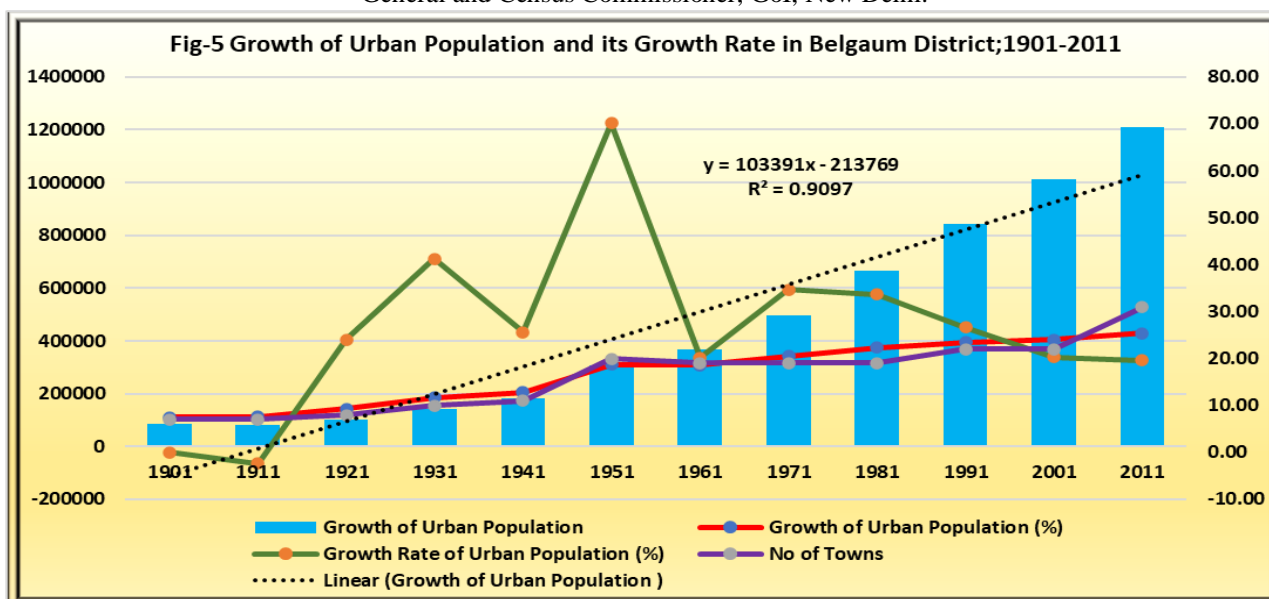
On the other hand, urban population increased to 14.38 times in eleven decades (1901 to 2011). Moreover, in the beginning of the 20th century i.e. 1901 only 7.44 percent of population lived in urban areas of Belgaum district,

increased to 12.82 percent in 1941, increased to 22.32 percent in 1981 and further rose to 25.34 percent by 2011. Therefore, the growth of urban population in the district has been higher after independence especially during 1971 to 2011. This can be attributed to developmental programmes introduced by the government with the series of five year plans created better amenities and more employment facilities apart from rural push factors like poverty, droughts, unemployment and inadequate facilities, causes to high rate of migration of rural peoples to urban areas in search of gainful employments.

Table 5

Growth of Total Population and Urban Population in Belgaum District; 1901 to 2011										
Census Year	Total Population		Urban Population		Growth of Total Population		Growth of Urban Population		Share of Rural	
	Absolute	%	Absolute	%	Absolute	%	Absolute	%	Absolute	%
1901	1131418	100.00	84211	7.44	--	--	--	--	--	92.56
1911	1084011	100.00	82210	7.58	-47407	-4.19	-2001	-2.38	--	92.42
1921	1088964	100.00	101930	9.36	4953	0.46	19720	23.99	--	90.64
1931	1237436	100.00	144026	11.64	148472	13.63	42096	41.30	--	88.36
1941	1410285	100.00	180854	12.82	172849	13.97	36828	25.57	--	87.18
1951	1645902	100.00	307668	18.69	235617	16.71	126814	70.12	--	81.31
1961	1983811	100.00	369600	18.63	337909	20.53	61932	20.13	--	81.37
1971	2423342	100.00	497793	20.54	439531	22.16	128193	34.68	--	79.46
1981	2980440	100.00	665109	22.32	557098	22.99	167316	33.61	--	77.68
1991	3583680	100.00	842019	23.50	603240	20.24	176910	26.60	--	76.50
2001	4214505	100.00	1012691	24.03	630825	17.60	170672	20.27	--	75.97
2011	4779661	100.00	1211195	25.34	565156	13.41	198504	19.60	--	74.66

Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi.



e) Growth of Urban Settlements in Belgaum District: Growth of urban settlements mainly depend on level of socio-economic deployment of the regions. Moreover, the concentration of population in urban areas (urbanization) occurs with operations of both pull as well as push factors prevailing in both areas. Industrialized regions pull the population from other areas especially rural, whereas less industrialized regions with adverse economic conditions in agrarian sectors push the population from rural areas to urban areas in search of livelihood as well as better employment opportunities. The growth of urban settlements

in Belgaum district from 1901 to 2011 are represented in the Table-6 and Fig-6.

It can be observed from the Table-3 that, in 1901, Belgaum district had 7 towns only, increases 10 in 1931, 19 in 1971, 22 in 1991 and 2001 and rose to 31 by 2011. It is significant to note that from 1901 to 1921, the district had only Class-III to Class-V towns. Along with existed towns another one town class i.e. Class-VI came into existence in 1931. In 1941, Class-II town and same is promoted as Class-I city in the District during 1951. From 1951 to 1981 onwards the district had five types of towns excluding Class-II town in

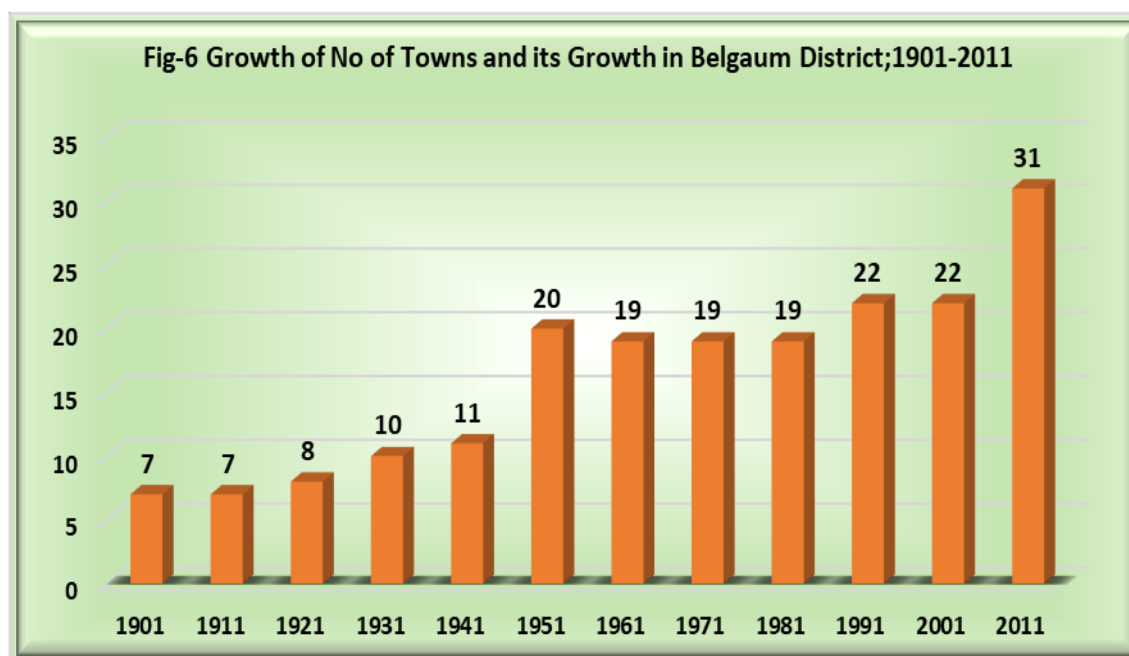
the district. After that excluding Class-VI all other types' class towns and city are came into existence in the district. The study conclude that Belgaum district is predominantly

with the growth of medium and small towns with Class-III, Class-IV and Class-V urban settlements during 1901 to 2011.

Table 6

Census Year	No of Class Size of Urban Settlements						Total Towns
	Class-I	Class-II	Class-III	Class-IV	Class-V	Class-VI	
1901	--	--	1	3	3	--	7
1911	--	--	1	3	3	--	7
1921	--	--	1	3	4	--	8
1931	--	--	1	4	4	1	10
1941	--	1	--	7	2	1	11
1951	1	--	1	10	4	4	20
1961	1	--	3	10	1	4	19
1971	1	--	4	12	1	1	19
1981	1	--	10	6	2	--	19
1991	1	2	9	6	4	--	22
2001	1	2	9	7	3	--	22
2011	1	2	10	12	6	--	31
	7	7	50	83	37	11	195

Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi.



f) Growth of Towns by Size Class in Belgaum District:

In India, the urban area comprises two types of towns viz; Statutory towns and Census towns. In the Census of India, the definition of statutory and census towns adopted is as follows:

(a) Statutory Towns: All places with a Municipality, Corporation, Cantonment Board or Notified Town Area Committee, etc., are known as Statutory Towns.

(b) Census Towns: All other places satisfying the following three criteria simultaneously are treated as Census Towns.

(i) A minimum population of 5,000; (ii) At least 75 per cent of male working population engaged in non-agricultural pursuits; and (iii) A density of population of at least 400 per sq. km (1,000 per sq. mile). After defining the criteria for acknowledging an urban center, further classification has been made on the basis of size of population. Indian towns

are classified into six-fold categories ranging from less than 5000 population (Class-VI) to more than 100000 (Class I), they are as follows; Class-I with population of 100000 and above, Class-II with population of 50000 to 99999, Class-III consist of 20000 to 49999, Class-IV with 10000 to 19999, Class-V holds 5000 to 9999 and Class-VI with population of less than 5000 (Census of India, 1991 p.21).

Towns which gain population upgraded to higher size class, whereas urban settlements which loses population are degraded thereby comedown from higher size class to lower size classes. The details of distribution of urban settlements as per changes in size class in Belgaum district, 1901 to 2011 are given in Table-7.

Table 7

Distribution of Urban Settlements by Change in Size Class in Belgaum District; 1901-2011													
S. No	Name of the Urban Centre	Census Years											
		1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011
1	Nippani	IV	IV	IV	IV	IV	III	III	III	III	II	II	II
2	Sadalgi	--	--	--	--	--	IV	IV	IV	IV	IV	III	III
3	Chikkodi	--	--	--	V	IV	IV	IV	IV	III	III	III	III
4	Athani	IV	IV	IV	IV	IV	IV	IV	III	III	III	III	III
5	Kudachi	--	--	--	--	--	V	IV	IV	IV	III	IV	III
6	Rayabag	--	--	--	--	--	V		IV	V	IV	IV	IV
7	Mudalgi	--	--	--	--	--	--	--	IV	IV	III	III	III
8	Konnur	--	--	--	--	--	IV	III	IV	III	IV	IV	IV
9	Gokak Falls	--	--	--	--	VI	--	--	V	IV	IV	IV	V
10	Gokak	V	V	V	V	V	IV	III	III	III	II	II	II
11	Sankeshwar	--	--	--	--	--	IV	IV	IV	III	III	III	III
12	Hukkeri	--	--	--	--	--	V	IV	IV	IV	IV	IV	III
13	Belgaum	III	III	III	III	II	I	I	I	I	I	I	I
14	Belgaum Cantonment	IV	IV	IV	IV	IV	IV	IV	III	III	III	III	IV
15	Kakati	--	--	--	--	--	--	--	--	--	--	--	IV
16	Hindalagi	--	--	--	--	--	VI	VI	--	--	V	IV	IV
17	Kangarali (KH)	--	--	--	--	--	VI	VI	--	--	V	V	V
18	Kangarali (BK)	--	--	--	--	--	VI	VI	--	--	V	V	IV
19	Sulebhavi	--	--	--	--	--	--	--	--	--	--	--	V
20	Sambra	--	--	--	--	--	--	--	--	--	--	--	IV
21	Mutaga	--	--	--	--	--	--	--	--	--	--	--	V
22	Benakanhalli	--	--	--	--	--	--	--	--	--	--	--	IV
23	Peeranawadi	--	--	--	--	--	--	--	--	--	--	--	IV
24	Machhe	--	--	--	--	--	--	--	--	--	--	--	IV
25	Yellur	--	--	--	--	--	--	--	--	--	--	--	IV
26	Khanapur	--	--	--	VI	V	V	V	IV	IV	IV	IV	IV
27	Munje Nandagad	--	--	--	--	--	--	--	--	--	--	--	V
28	Londa	--	--	--	--	--	VI	VI	VI	V	V	V	V
29	Bailhongal	--	--	V	V	IV	IV	IV	IV	III	III	III	III
30	Saundatti	V	V	V	V	V	IV	IV	IV	III	III	III	III
31	Ramdurga	V	V	V	V	IV	IV	IV	IV	III	III	III	III
		7	7	8	10	11	20	19	19	19	22	22	31

Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi.

Table-7 depicts that in 1901, Belgaum district had only seven towns namely Belgaum, Nippani, Athani, Belgaum Cantonment, Gokak, Saundatti and Ramdurga. They were in different size class in 1901 and changed their class sizes during eleven decades i.e. 1901 to 2011. Belgaum had Class-III status during 1901 to 1931, expanded Class-II position in 1941 and finally attained Class-I city status in 1951, thereafter maintained same status till 2011. Nippani had Class-IV status during 1901 to 1941, attained Class-III status in 1951, maintained same status up to 1981 and finally reached Class-II in 1991, and further maintained same status by 2011 also. Gokak had Class-V status during 1901 to 1941, it attained Class-IV position in 1951, further upgraded to Class-III in 1961 and same status maintained up to 1981 after that reached Class-II status in 1991 subsequently maintained same status till 2011. Ramdurga had Class-V position during 1901 to 1931 and Saundatti had Class-V position during 1901 to 1941, achieved Class-IV status in 1941 by Ramdurga while Saundatti reached the status of same class in 1951, further maintained same position up to 1971 by both towns and finally positioned as a Class-III in 1981 afterward maintained same status till 2011. Belgaum Cantonment had a status of Class-IV during 1901 to 1961, reached Class-III position in 1971, attained same status up to 2001 after that it degraded to Class-IV status in 2011.

g) Urban Settlements by Population Size in Belgaum District:

The pattern of urban population in India is characterized by continuous concentration of population and activities in large cities (Kundu, Amitabh, 1983). This is due to fact that towns and cities with better infrastructural facilities and employment opportunities attracts more population from others areas thereby increase in population causes upgrade class status, while towns with low socio-economic development losses population thereby degraded their status to lower class of towns. Table-8 provides the details of distribution of urban settlements as per changes in population size in Belgaum District from 1901 to 2011.

It can be perceived from Table-8 that among seven urban settlements of Belgaum district in 1901, Belgaum recorded highest population with 22,434 holding Class-III position followed by Nippani with 11,394, Athani with 11,107 and Belgaum Cantonment with 10,641 holding Class-IV status, and other towns namely Gokak with 9860, Ramdurga with 9452 and Saundatti with 9323 holding Class-V status. While in 2011, among the towns that were emerged in 1901, only one town gained Class-I status, two towns expanded Class-II position, three towns upgraded as a Class-III status and only one town degraded to Class-IV status. However, in 2011, again Belgaum recorded highest population with 4,90,045

holding Class-I position followed by Gokak 79121; and Nippani 62865; holding Class-II position, others like Bailhongal 49182; Athani 47842; Saundatti 41215; Chikkodi 38307; Ramdurga 34800; Sankeshwar 34637; Mudalgi

29128; Sadalgi 23790; Kudachi 23154; and Hukkeri 22988; holding Class-III status and remaining twelve and six towns are holding Class-IV and Class-V status respectively in the district.

Table 8

Distribution of Urban Settlements by Changes in Population Size in Belgaum District; 1901 to 2011													
Sl. No	Name of the Urban Center	Census Years											
		1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011
1	Nippani	11394	10476	11272	17857	16387	24325	29374	35116	41783	51624	58081	62865
2	Sadalgi	--	--	--	--	--	11887	13479	12508	13911	15614	20202	23790
3	Chikkodi	--	--	--	9199	10070	13713	15745	18338	22789	27279	32823	38307
4	Athani	11107	11157	10549	12868	13783	17089	19479	24378	27549	32041	40950	47842
5	Kudachi	--	--	--	--	--	8608	11690	14085	18491	21197	19843	23154
6	Rayabag	--	--	--	--	--	5926	--	12241	9635	12408	15929	18736
7	Mudalgi	--	--	--	--	--	--	--	10557	17812	26575	29893	29128
8	Konnur	--	--	--	--	--	15282	20795	15817	20252	14937	17980	19386
9	Gokak Falls	--	--	--	--	3978	--	--	9661	11587	11121	10043	8080
10	Gokak	9860	5607	9759	11478	13826	17694	21854	29960	42496	52080	67170	79121
11	Sankeshwar	--	--	--	--	--	13186	15045	18950	24018	27244	32511	34637
12	Hukkeri	--	--	--	--	--	9455	10751	12463	15545	17398	19917	22988
13	Belgaum	22434	29636	36354	49873	71831	101110	127885	192427	274430	369177	454999	490045
14	Belgaum Cantonment	10641	11172	10014	11430	14431	16717	18905	21445	25942	23953	23779	19411
15	Kakati	--	--	--	--	--	--	--	--	--	--	--	13946
16	Hindalagi	--	--	--	--	--	3717	4427	--	--	9282	10862	13741
17	Kangarali (KH)	--	--	--	--	--	1342	1660	--	--	6145	8425	8204
18	Kangarali (BK)	--	--	--	--	--	1611	2041	--	--	5922	8415	10496
19	Sulebhavi	--	--	--	--	--	--	--	--	--	--	--	8503
20	Sambra	--	--	--	--	--	--	--	--	--	--	--	13159
21	Mutaga	--	--	--	--	--	--	--	--	--	--	--	7561
22	Benakanhalli	--	--	--	--	--	--	--	--	--	--	--	10999
23	Peeranawadi	--	--	--	--	--	--	--	--	--	--	--	17874
24	Machhe	--	--	--	--	--	--	--	--	--	--	--	18073
25	Yellur	--	--	--	--	--	--	--	--	--	--	--	11850
26	Khanapur	--	--	--	4881	5409	6175	8127	10193	12513	14728	16567	19309
27	Munje Nandagad	--	--	--	--	--	--	--	--	--	--	--	8837
28	Londa	--	--	--	--	--	2408	4003	4506	5932	6589	6273	5956
29	Bailhongal	--	--	8676	9572	10913	14166	16055	19440	26465	33916	43225	49182
30	Saundatti	9323	5319	7189	7175	8730	10030	12299	16011	26404	33138	38155	41215
31	Ramdurga	9452	8843	8117	9693	11496	13227	15986	19697	27555	29651	36649	34800
	Total Urban Population	84211	82210	101930	144026	180854	307668	369600	497793	665109	842019	1012691	1211195
	No of Towns	7	7	8	10	11	20	19	19	19	22	22	31

Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi.

h) Growth Index of Population in Urban Settlements in Belgaum District; 1901 to 2011:

Population growth index shows the magnitude of growth in population in a settlement over a period of time. Table-9 depicts that there were only seven urban areas in 1901, rose to 31 urban settlements in 2011 in Belgaum district. It is significant to note the regional variation in the pattern of

growth index of population in urban settlements in Belgaum district. Among the urban settlements that were existed in between 1901 to 2011 in district the growth index rates are varied in nature and ranges as low as 87 percent in Gokak Falls and as high as 462 percent in Belgaum followed by 369 percent in Gokak and 302 percent Nippani towns.

Table 9

Growth Index of Population in Urban Settlements in Belgaum District; 1901 to 2011														
Sl. No	Name of the Urban Centre	Census Years												
		1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011	
1	Nippani	100	92	100	158	150	198	219	238	257	281	294	302	
2	Sadalgi	--	--	--	--	--	100	113	106	117	130	159	177	
3	Chikkodi	--	--	--	100	109	146	160	177	201	221	241	258	
4	Athani	100	100	95	117	124	148	162	187	200	217	244	261	
5	Kudachi	--	--	--	--	--	100	136	156	188	202	196	213	
6	Rayabag	--	--	--	--	--	100	100	100	79	107	136	153	
7	Mudalgi	--	--	--	--	--	--	--	100	169	218	230	228	
8	Konnur	--	--	--	--	--	100	136	112	140	114	134	142	
9	Gokak Falls	--	--	--	--	--	100	100	100	100	120	116	106	87

10	Gokak	100	57	131	149	169	197	220	258	299	322	351	369
11	Sankeshwar	--	--	--	--	--	100	114	140	167	180	200	206
12	Hukkeri	--	--	--	--	--	100	114	130	154	166	181	196
13	Belgaum	100	132	155	192	236	277	303	354	396	431	454	462
14	Belgaum Cantonment	100	105	95	109	135	151	164	177	198	191	190	172
15	Kakati	--	--	--	--	--	--	--	--	--	--	--	100
16	Hindalagi	--	--	--	--	--	100	119	119	119	119	136	163
17	Kangarali (KH)	--	--	--	--	--	100	124	124	124	124	161	158
18	Kangarali (BK)	--	--	--	--	--	100	127	127	127	127	169	194
19	Sulebhavi	--	--	--	--	--	--	--	--	--	--	--	100
20	Sambra	--	--	--	--	--	--	--	--	--	--	--	100
21	Mutaga	--	--	--	--	--	--	--	--	--	--	--	100
22	Benakanhalli	--	--	--	--	--	--	--	--	--	--	--	100
23	Peeranawadi	--	--	--	--	--	--	--	--	--	--	--	100
24	Machhe	--	--	--	--	--	--	--	--	--	--	--	100
25	Yellur	--	--	--	--	--	--	--	--	--	--	--	100
26	Khanapur	--	--	--	100	111	125	157	182	205	222	235	252
27	Munje Nandagad	--	--	--	--	--	--	--	--	--	--	--	100
28	Londa	--	--	--	--	--	100	166	179	210	222	217	212
29	Bailhongal	--	--	100	110	124	154	167	189	225	253	280	294
30	Saundatti	100	57	92	92	114	129	151	181	246	272	287	295
31	Ramdurga	100	94	85	105	123	138	159	182	222	230	254	249
		700	637	852	1231	1495	2763	3212	3618	4165	4464	4854	5940
	No of Towns	7	7	8	10	11	20	19	19	19	22	22	31

Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi.

Table-9 shows pattern of Growth Index of Population in Urban Settlements in Belgaum district from 1901 to 2011 and further on the bases of growth index standards, categorized under four categories such as High percent growth towns, Moderate percent growth towns, Less percent growth towns and Least percent growth towns. High (more than 450) percent of growth index of population is registered in Belgaum city (462) only, because it is having offices of divisional and district head quarter, most industrial, business and commercial, health, educational institutions and others regularly attracts migrate peoples from rural and neighboring areas. The Gokak (369) and Nippani (302) towns are coming under the category of Moderate (300 to 450) percent of growth index of population, Less (150 to 300) percent of growth index of population is noticed in 17 towns and Least (less than 150) percent of growth index of population is recorded in 11 towns of Belgaum district during the study period.

i) Share of Urban Population by Size Class in Belgaum District 1901 to 2011:

Balanced distribution of urban population in any region or district or state or nation is most important for overall regional development. Contrary to this, in most of the developing nations of the world, particularly nations like, India, most of the urban population has been concentrated in big towns and cities, because of both industrial as well as infrastructural development and amenities are made available for the survival of life. It causes heavy in-migration population to major towns and cities from rural areas and medium as well as small towns thereby decline its number. Moreover, in India metropolitan cities have revealed a kind of urbanization, where population growth has been continually taking place in biggest of urban centers with rising population concentrations. Whereas the small and medium urban centers have acquired complete dependence on the large towns, which causes imbalanced pace of urbanization. Table-10 and Fig-7 furnishes the details of share of urban population in towns and cities by size class in Belgaum district of Karnataka state during 1901 to 2011.

Table 10

Share of Urban Population by Size Class in Belgaum District;1901 to 2011

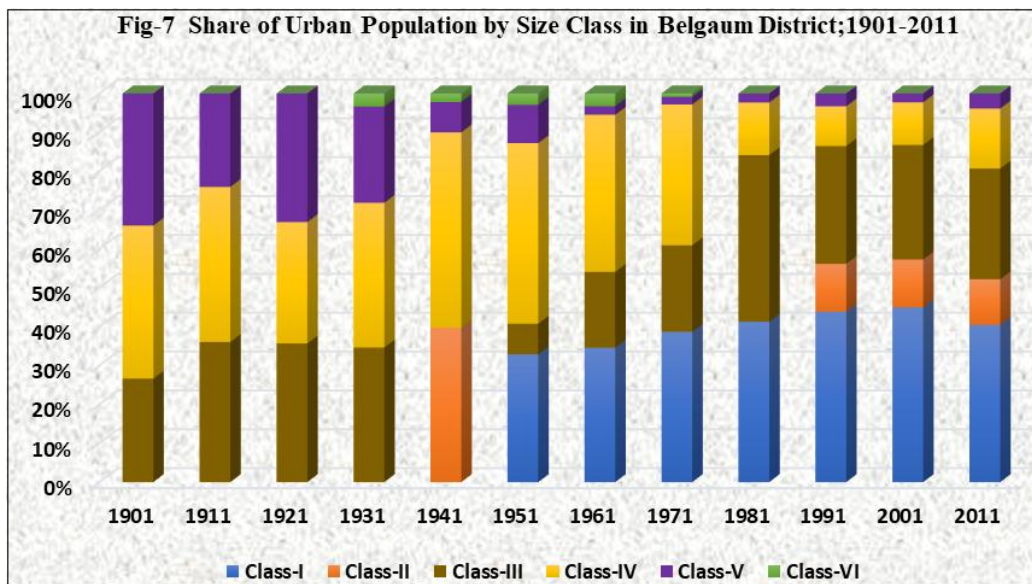
Census Year	Population %	No of Size Class of Urban Settlements						Total Towns
		Class-I	Class-II	Class-III	Class-IV	Class-V	Class-VI	
1901	Population	--	--	22434	33142	28635	--	84211
	%	--	--	26.64	39.36	34.00	--	100.00
1911	Population	--	--	29636	32805	19769	--	82210
	%	--	--	36.05	39.90	24.05	--	100.00
1921	Population	--	--	36354	31835	33741	--	101930
	%	--	--	35.67	31.23	33.10	--	100.00
1931	Population	--	--	49873	53633	35639	4881	144026
	%	--	--	34.63	37.24	24.74	3.39	100.00
1941	Population	--	71831	--	90906	14139	3978	180854
	%	--	39.72	--	50.26	7.82	2.20	100.00
1951	Population	101110	--	24325	142991	30164	9078	307668

	%	32.86	--	7.91	46.48	9.80	2.95	100.00
1961	Population	127885	--	72023	149434	8127	12131	369600
	%	34.60	--	19.49	40.43	2.20	3.28	100.00
1971	Population	192427	--	110899	180300	9661	4506	497793
	%	38.66	--	22.28	36.22	1.94	0.91	100.00
1981	Population	274430	--	285253	89859	15567	--	665109
	%	41.26	--	42.89	13.51	2.34	--	100.00
1991	Population	369177	103704	254994	86206	27938	--	842019
	%	43.84	12.32	30.28	10.24	3.32	--	100.00
2001	Population	454999	125251	298187	111141	23113	--	1012691
	%	44.93	12.37	29.45	10.97	2.28	--	100.00
2011	Population	490045	141986	345043	186980	47141	--	1211195
	%	40.46	11.72	28.49	15.44	3.89	--	100.00

Source: District Census Handbook, Belgaum, Karnataka Part-XII-A and Part-XII-B, 1901 to 2011 published by Registrar General and Census Commissioner, GoI, New Delhi

Table-10 and Fig-7 shows that from 1901 to 1961, most of the urban population concerted in Class-III to Class-V towns in Belgaum district. In contrast, from 1971 to 2011, major share of urban population had been inhabited in Class-I to Class-III towns. This clearly shows in recent decades, large number of populations in-migrated to big towns/cities i.e. Class-I to Class-III towns. This is due to fact that in bigger towns/cities, the level of industrial, commercial, educational and other sectors activities is higher as compared to medium and small towns. Therefore, employment opportunities in

both organized and unorganized sectors as well as amenities are grater thereby attracting population from other areas in Belgaum district as like Indian situation with concentration of population in major towns and cities. Based on the findings it can be concluded that in recent decades, higher size classes such as Class-I to Class-III growing rapidly than other size classes like Class-IV to Class-IV mainly due to high volume of in-migration of population along with natural growth some extent in Belgaum district also.



3. Conclusions

The process of urbanization is predominantly associated with industrialization and economic growth which eventually is allied with urban development. It creates several job opportunities in the urban area and plays a significant role in declining poverty and unemployment. The growth of urban population in Belgaum district was only 7.44 percent in 1901, it increased to 25.34 percent by 2011. In recent decades, higher growth of urban population was registered leads to faster growth of urbanization level in the district. In 1901, Belgaum district had 7 towns only, roses 20 in 1951, 22 in 2001 and rose to 31 in 2011. Among the seven urban size class in 1901, Belgaum town had highest population (22,434) with Class-III status, while Saundatti town noticed least population (9323) with Class-V status. On the other hand, out of 31 urban size classes in 2011,

Belgaum city registered highest population (4,90,045) with Class-I status, whereas Londa stands a least town with population of 5,956 holds Class-V status. Therefore, different size class of urban settlements had been changed their class sizes during eleven decades i.e. 1901 to 2011. Among urban settlements that emerged in 1901, Belgaum registered highest growth index (462%), whereas Gokak Falls had lowest growth index (87%) of urban population. The greater share of urban population in habited in Class-I to Class-III towns than medium and small towns (Class-IV to Class-VI) in recent decades (i.e. 1971 to 2011) in Belgaum district.

Based on findings of the study, it is suggested that providing urban amenities in rural areas and development of satellite towns in between rural and prime towns/cities are needed to reduce both heavily concentrated in prime towns/cities and

the rapid growth of urban population, which encourages commutation of population rather than migration. Further, higher allocation of resources in central and state budgets should be made for encouraging the agro-based industries in rural areas through giving more subsidy, which provides better gainful employment opportunities to large rural mass there increases in productivity leads growth in Indian economy.

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