Urbanization Process in Anantapur District, Andhra Pradesh - A Demographic Review

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Abstract

The activity of building smart cities in India is flourishing manifold in recent times which leads to facilitate the growth of urbanization. According to the Government of India Census report (2011), Anantapur district is the seventh urbanized district in Andhra Pradesh state of India. Out of 10 towns studied during the period 1981-2011, two towns namely Uravakonda, Kalyandurg were upgraded from Class IV to III, Gooty and Kadiri keep up their status as Class III and Class II respectively, Rayadurg raised from Class III to II, all Class II towns such as Hindupur, Guntakal, Dharmavaram, Tadpatri advanced to Class I and Anantapur continue its status then onwards as Class I. Overall the urban population of the towns in the study area were increased from 0.1 mi (1901) to 1 mi (2011). Development of small towns in any region requires proper planning and management because these play a significant role in the process of urbanization. The developmental plans of towns must cautiously be prepared according to the relevant government laws and administration, with considerations for compatibility with land use, sustainable environmental conservation etc. The town and urban planners and policy makers have to be focused on giving support to the leading enterprises as well as entrepreneurs not only in the industrial and also for the people of agricultural sector.

Key words: Urbanization, small towns, demographic analysis, Anantapur, Andhra Pradesh

Introduction

The universal process of urbanization is closely related with industrial revolution and associated economic development. Currently developing countries like India has started experiencing urbanization, whereas, some of developed countries are in the final stage of urbanization process and some are experiencing slowing down of urbanization due to host of factors. According to United Nations report (2014), nearly half of the world's 3.9 billion urban dwellers reside in relatively small settlements with less than 0.5 million inhabitants. Many of the fastest growing

cities in the world are relatively small urban settlements. The urban population of the world has grown rapidly from 13% (220 mi) in 1900, to 29% (746 mi) in 1950, to 54% (3.9 bi) in 2014 and is likely to rise to 66% (6.3 bi) by 2050. UNICEF (2012) identified that hundreds of millions of children live in urban slums, many without access to basic services although they are in close proximity to urban amenities. Poor housing conditions, overpopulation, insufficient safe water and sanitation, and a lack of secure tenure characterize the slums. The concentration of poverty in urban regions also constitutes an increased risk for violence. Improving

access and service quality are vital to reducing problems in urban areas. Special attention must be given for providing quality health to children that will helps to reduce child mortality and morbidity.

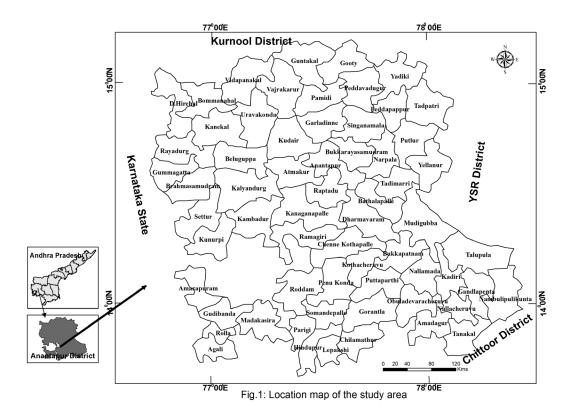
In India, number of urban agglomerations/towns has grown from 1827 with a population of 25 mi in 1901 to 7935 (37 mi) in 2011. A total of 7 megacities have been projected in the country by 2030, four of them are Ahmadabad, Bangalore, Chennai and Hyderabad now with 5 to 10 mi inhabitants (United Nations, 2014). Over the years, there has been continuous concentration of population in Class I towns. The gradual increase in the number of urban centers from lower population size categories to Class I cities has resulted into the top heavy structure of urban population in India. The process of urbanization in the country has not been improving rapidly and due to the failure to promote the needful planning and development. The size class distribution and their growth rates over the decades, and the interstate variation in the levels and growth in urban populations explained that the recent trend is a sharp departure from the past (Kundu, 1997). Small town can play an important role to its hinterland or rural markets. The trade of these market centers generally purchases many of their commodities and necessary items from the nearest town. Furthermore. these are known to be central points in the development of economic, cultural, administrative and other activities of society (Roy, 2001). Urban population is usually distributed among settlements of different sizes along a continuum from small towns to big cities with a population of tens of million (Philip and Leo, 1992). Small towns

lead to the most horrible life when the rapid urbanization is not properly being done in the particular place for longtime. The cause and consequence of growth of population in the cities and growth of small towns were discussed by various researchers in India (Bhagat, 2002; Narayana, 2009; Reddy and Balachandra, 2010).

In the Rayalaseema region, comprises of four districts namely Kurnool, Chittoor, YSR and Anantapur of A.P. state, the concentration of urban population in intermediate size settlements with a population of 50,000-100,000, containing 43% of urban population which are evenly distributed along the railway lines. This may eventually leads to a more balanced and decentralized urban and regional development in the region (Nagabhushnam and Krishnaiah, 1986). Although, Anantapur district of this region is usually experiencing famines like droughts but the urbanization process taking place as slow and steadily with increasing trend. Thus, the study of urban growth by size class of towns could help us to understand the stages of urban development in the area and also comprehend the extent of rural to urban migration. The present study will provide baseline information regarding the growth of small towns in the process of urbanization in Anantapur district of Andhra Pradesh.

Study area

Anantapur district is situated in the southwestern part of the Andhra Pradesh state and lies in between 13°41' to 15°14' N latitudes and 76°47' to 78°26' E longitudes occupying an area about 19,130 sq. km (Figure 1). It is bounded on the north by



Kurnool district, on the east by YSR district and on the southeast by Chittoor districts of A.P state, and west and southwest by Karnataka state. Relief of the study area ranges from 280 m to 670 m above mean sea level. The area has been divided into 3 Revenue Divisions namely Ananthapur, Dharmavaram and Penukonda consisting of 63 Revenue Mandals. The mean annual temperature ranges between 17 to 39 °C and rainfall is 553 mm. Penneru, Chitravati and Vedavati rivers are draining through this area. Geologically, the study area is comprised of Archean rocks which consist of gneiss, schist, granite, quartz veins and basic dykes. The study area is known for its mineral resources especially for gold and diamond deposits in addition to limestone, dolomite, barytes, iron-ore, clay, building material etc. The soils of the study are Ustalfs-Tropepts which are predominantly red followed by black colour soils that occur almost in equal proportion.

Methodology

The study is mainly conducted basing on the secondary data sources. The required data was obtained from various sources like Census Publications, Statistical Abstracts published by the Bureau of Economics and Statistics, and Field Survey records. A total of 10 towns were identified in the study area for analyzing the percentage decadal growth rate. Growth rate of the towns has been computed on the basis of population

figures obtained from the Census of India publications. This was calculated by using the following formula:

$$Y = (\rho 2 - \rho 1) / \rho 1 \times 100$$

where, Y is the rate of change, $\rho 1$ is the population size of a town in the initial period of time, $\rho 2$ is the population size of that town at a latter period of time.

The information about the location of towns was obtained from Survey of India published maps. Final maps and graphs were drawn using various statistical analysis techniques and software.

Results and Discussion

Population growth

According to Census (2011), the total population of Anantapur district is 40,81,148 comprising male and female in the order of 20,64,495 and 20,16,653, respectively. During the last one decade there has been an addition of 4,40,670 persons (total 36,40,478 persons in 2001). The density of population is 219. The percentage of urban population is about 28% of the total district population comprising 74.7% literates which is much above the national average. The district literacy rate is 63.6%. The district has recorded a decennial growth rate of 12.9%. Within the district, there is a large variation in the decadal growth returned by the different areas. A total of 921 villages were found inhabited, out of 949 villages of the area. The number of villages in the size group of 500 to 1999 population forms 36.71% of the total inhabited villages. The size group of 2000 to 4999 forms 38.64%, between 5000 to 9999 forms 12.81%, and less than 500 population consist of 9.04% (84 villages) of total inhabited villages. There are 26 villages with more than 10,000 population excluding the towns recorded in the study area.

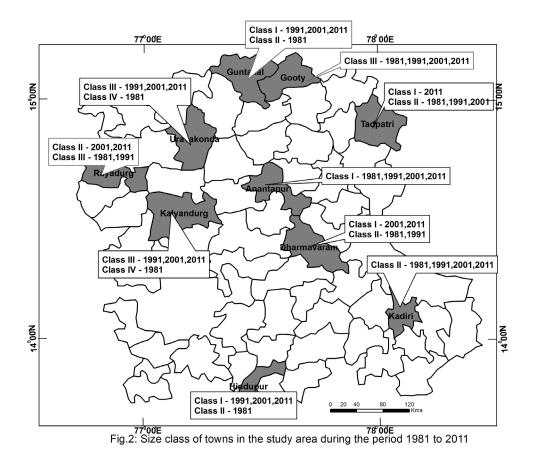
During the decade 1981-91, the district registered a decadal growth rate of 40.9% and in 1991-2001 it was 22.92% and in 2001-11 the growth rate was 12.9%. Sex ratio has been favorable and the district has maintained almost same sex ratio per thousand males i.e. 946 in 1981, 946 in 1991, 958 in 2001 and 977 in 2011. According to 2011 Census, 5,83,135 persons have been returned as scheduled caste (SC) and in 2001 Census, it was 5,14,896 persons, and 4,51,810 persons were recorded in 1991. Scheduled tribe (ST) population is mainly concentrated in five mandal regions of the district. The percentage of ST population to the total population was 3.92 (2011), 3.49 (2001), 3.49 (1991) and 3.22 (1981) and out of 567 villages covering ST population, eight villages have recorded more than 50%.

Classification of towns

Classification of towns in the study area has been computed by considering the Census town's classification as a base. A total number of ten towns namely Anantapur, Hindupur, Guntakal, Dharmavaram, Kadiri, Rayadurg, Tadpatri, Gooty, Uravakonda, and Kalyandurg are selected for the study purpose. It was observed from the Table 1 that the size class of towns were increased gradually during the last four decades i.e. 1981, 1991, 2001, 2011 (Figure 2). From the year 1981 onwards, the Anantapur town has been maintaining above 1,00,000 population and retains its status as Class-I town. Guntakal has maintained the status as

Table 1: Classification of towns during the period from 1981-2011 in the study area

S.	Name of the	Year									
No	town	1981		1991		2001		2011			
		Population	Class	Population	Class	Population	Class	Population	Class		
1	Anantapur	119531	I	174924	I	252298	I	305550	I		
2	Hindupur	55901	II	104651	I	125074	I	151835	I		
3	Guntakal	84599	II	107592	I	117103	I	126479	I		
4	Dharmavaram	50969	II	78961	II	103357	I	121992	I		
5	Kadiri	52774	II	63078	II	76252	II	89240	II		
6	Rayadurg	32745	III	40845	III	54125	II	61717	II		
7	Tadpatri	53939	II	71068	II	86843	II	108249	I		
8	Gooty	29302	III	37814	III	43389	III	48362	III		
9	Uravakonda	21754	IV	27679	III	31856	III	35416	III		
10	Kalyandurg	17049	IV	23106	III	29266	III	32335	III		



Class-II town in 1981, and as Class-I town afterwards. Hindupur and Dharmavaram towns have also shown the same trend as like that of Guntakal town, except in the year 1991. However, some towns have recorded slight increase and maintaining the status as it is where as some towns registered upgradation in their class to the next position.

Growth rate of towns

The growth of urban population of individual towns in the study gives a correct picture of the trend of growth of different towns influenced by their locational and regional setting. The growth of urban population of

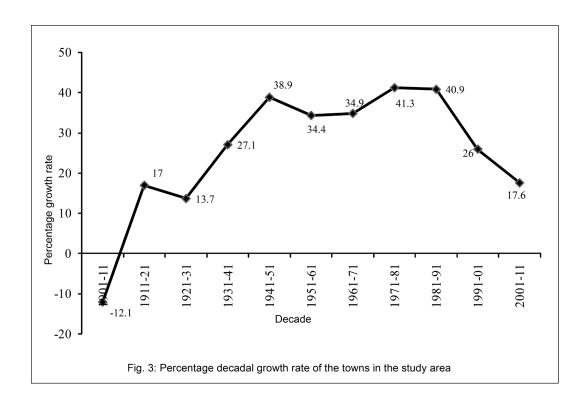
the selected towns during the period from 1901 to 2011 is presented in Table 2. It was found that in the initial period (1901-1921) of twenty years, most of the towns have shown a declining trend in their population. Coming to the next twenty years i.e. from 1931 to 1951, all the towns show the rising trend. From 1961 onwards, there is a significant increase in urban population of the towns and at present there are five towns that fall under Class-I category. Among the five towns, Anantapur stood in first place with an urban population of 3,05,550 and the remaining towns following the sequence are Hindupur, Guntakal, Dharmvaram, and Tadipatri (Table 2).

Table 2: Growth rate of urban population of the towns during 1901-2011

S. No	Name of the town		Urban population (Year)											
		1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011	
1	Anantapur	7938	8457	11452	15099	21482	31952	52280	80069	119531	174924	252298	305550	
2	Hindupur	19575	11035	12456	14211	19049	24438	32445	42959	55091	104651	125074	151835	
3	Guntakal	NA	NA	12519	15620	20414	31341	48083	66320	84599	107592	117103	126479	
4	Dharma- varam	10658	7386	8117	9346	12087	14703	20405	30876	50969	78961	103357	121992	
5	Kadiri	10493	10456	11619	9352	11885	20354	24307	33810	52774	63078	76252	89240	
6	Rayadurg	10488	8827	9565	12007	16033	19738	23779	26154	32745	40845	54125	61717	
7	Tadpatri	10859	12593	11293	12620	15184	19369	23129	31618	53939	71068	86843	108249	
8	Gooty	9682	9597	8780	9712	12333	15437	19057	21706	29302	37814	43389	48362	
9	Urava- konda	9385	11026	10274	12079	11125	16662	17926	19753	21754	27679	31856	35416	
10	Kalyan- durg	8815	6659	4596	4449	5984	8163	10256	13260	17049	23106	29266	32335	
	Total	97893	86036	100671	114495	145576	202157	271667	366525	517753	729718	919563	1081175	

Percentage decadal growth rate of the towns from 1901 to 2011 is given in Table 3. The growth rate of towns marked variations from decade to decade and are showing fluctuating trend. Under Class–I towns category, Anantapur has showed steadily positive decadal growth rate up to 1961-71 and further from 1971-2011 it was showing declining trend. More or less same type of decadal growth rate was observed among the other Class-I towns of Guntakal and Dharmavaram. In case of Hindupur town a rapid growth rate was observed in 1981-91decade with 89.96%. Other towns show the trend of rapid increase followed by

sudden decreasing trend during the period from 1901 to 2011. Most of the towns have showed the decreasing trend in the period 1991-2001, except Rayadurg and Kadiri. In 2001-11 decade, the town Tadpatri has recorded highest percentage decadal growth rate of 24.65 among the other towns of the study area. The other towns following this sequence are Hindupur, Anantapur, Dharmavaram, Kadiri, Rayadurg, Gooty, Uravakonda, Kalyandurg and Guntakal. Overall, the decadal growth rate of the towns in the study area is showing decreasing trend (Figure 3).



Scheduled Caste (SC) and Scheduled Tribe (ST) Population

SC and ST population collectively in majority of towns of the study area is showing positive increasing trend (Table 4). In case of SC population, Guntakal town recorded an increasing trend from 1981 to 1991 while in 2001, it reveals decrease in number. Overall, it was found that SC and ST population have recorded remarkable increase in the number of Class-I and -III towns according to 2011 data.

Table 4: Scheduled caste and scheduled tribe population of the towns during 1981-2011

S. No	Name of the town		SC Po	pulation		ST Population				
		1981	1991	2001	2011	1981	1991	2001	2011	
1	Anantapur	8649	9938	15098	35321	1603	3696	5447	12540	
2	Hindupur	5264	10042	11923	23304	458	645	1089	2343	
3	Guntakal	13427	16830	16798	18482	1258	1853	2046	2836	
4	Dharmavaram	2795	3731	4240	11761	388	595	1233	6009	
5	Kadiri	2420	3200	3782	7732	1058	1577	1923	9492	
6	Rayadurg	1858	2719	3596	4127	236	433	735	1219	
7	Tadpatri	5097	7218	9758	13633	990	966	997	1817	
8	Gooty	4700	6632	7831	9154	311	576	902	1115	
9	Uravakonda	2234	2929	3319	4805	180	2929	628	809	
10	Kalyandurg	951	1588	2062	2654	209	550	557	778	

Table 5 : Sex ratio of the towns during the period 1981-2011

S.	Name of the	Sex Ratio						
No	town	1981	1991	2001	2011			
1	Anantapur	912	942	965	995			
2	Hindupur	929	940	950	982			
3	Guntakal	945	969	978	1062			
4	Dharmavaram	945	939	958	962			
5	Kadiri	936	970	982	1015			
6	Rayadurg	960	972	975	998			
7	Tadpatri	914	962	972	1004			
8	Gooty	939	948	973	939			
9	Uravakonda	923	957	942	999			
10	Kalyandurg	968	932	973	910			

Sex ratio

It can be observed from Table 5 that the sex ratio among the towns in the study area has been showing variable trends during the period 1981-2011. As per 2011 data, Guntakal town has recorded highest sex ratio in comparison with other Class-I towns whereas Class-II town, Kadiri has recorded the highest number of females (982) against 1000 males.

Conclusions

The present research paper has attempted to analyze the growth of towns in the process of urbanization in selected towns of Anantapur district, Andhra Pradesh. The results reveals that many of the small towns have improved their Class size. It was found that there is a growing concentration of urban population in all the towns. The cause for significant growth in population may be due to various factors such as natural growth, rural to urban migration, expansion of town boundaries and reclassification of rural areas as urban. Further, the momentum in developing small towns has been creating attractive options for developers and planners across the country in recent times, because this concept helps to boost the urban development and also industry.

The concept of developing small towns may help to resolve certain type of social problems in rural areas, and is likely to improve rural economic structure as well as farmer's income. The development of small towns requires overall planning and reasonable layout. The towns with good conditions must be given a priority in the development process. In construction of small towns, care must be taken towards its planning according to relevant laws, with considerations for compatibility with land use, transportation and communication network, environmental sustainability, social development and so on. Road map should be prepared on giving support to leading enterprises in industry as well as agriculture, and to build the towns into bases for vielding, processing and trading of agricultural produces in particular. The collective population of employees, farmers involved in trade, business and allied services certainly play a key role in pushing demand in the housing sector, as there is a direct relation between demand and one's purchase power which leads to settle the population in small towns. Needless to say, the development of small towns may turn beneficial particularly for housing sector and will raise income levels of inhabitants, once the central and state governments strictly implement their laws towards planning the process of urbanization. In the development of newly proposed towns, the sustainable and green construction is the need of the hour to reduce costs and becoming environment friendly that helps to battle air pollution and water scarcity.

References

- Bhagat, R.B. (2002): Challenges of Rural-Urban Classification for Decentralized Governance. Economic and Political Weekly. Vol. 37(25): 2413-2416.
- Census (2011): District Census Handbook, Census of India. Govt. of India, MoHA, New Delhi. (data 1901-2011).
- Kundu, A. (1997): Trends and Structure of Employment in the 1990s: Implication for Urban Growth. Economic and Political Weekly, Vol. 32: 1399-1405.
- Nagabhushanum, N. and Krishnaiah, M. (1986): Functional Classification of Towns in Rayalaseema, Andhra Pradesh. Geogra. Rev. India, Vol. 50: 52-68.
- Narayana, M.R. (2009): Size Distribution of Metropolitan Areas: Evidence and Implications for India. The Journal of Applied Economic Research. Vol. 3:243-264.
- Philip, M. and Leo, F. (1992): The Study of Urbanization. New York: John Wiley and Sons Inc.
- Reddy, B.S. and Balachandra, P. (2010): Dynamics of Urban Mobility: A Comparative Analysis of Mega Cities of India. IGIDR Working Paper 23 Mumbai: Indira Gandhi Institute of Development Research.

- Roy, B. (2001): Towards a Devised Distribution of Urban Population-Reality versus Theory. Indian Jour. Regional Sci., Vol. XXXIV: 72-80.
- UNICEF (2012): The State of the World's Children: Children in an Urban World. New York: United Nations.
- United Nations (2014): World Urbanization Prospects. Department of Economic and Social Affairs, Population Division, New York: United Nations.

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