International Journal of Social Science and Economic Research

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

DOES HIGHER URBANISATION LEVEL REFLECTS BETTER PROVISION OF BASIC AMENITIES: A STUDY EXPLORING DIFFERENT CLASS SIZE OF TOWNS IN JAMMU AND KASHMIR

[1]Kacho Amir Khan, *[2]Nasim Ahamed Mondal

[1]Doctoral Fellow, International Institute for Population Sciences, Mumbai, Maharashtra, India

[2]Project Officer, International Institute for Population Sciences, Mumbai, Maharashtra, India

*Corresponding Author

ABSTRACT

Introduction: There is a great variation in urbanisation level and basic amenities available among the different regions and districts in Jammu and Kashmir. For a sustainable urban future, immediate attention should be given to the small and medium towns of the state where the growth has been significant in the recent census of India 2011. **Objectives:** To examine the relationship between the growth of towns by class size to some selected basic amenities and to explore the growth of population in the different class size of towns and cities in Jammu and Kashmir from 1961 to 2011. **Data Source and Methodology:** The present study is based on the Census of India data from 1961 to 2011. Different urbanisation indicators were used in the present study and the required proportional maps for town size at different period were prepared using GIS to show the growth of cities and towns among the different districts of the state. **Findings:** The results show that the growth of population in small and medium towns is increasing over the period and these towns are moving towards the size class of large towns and cities. The results also show the access to basic amenities varies by level of urbanization and the size class of cities and towns. Cities show better availability of basic amenities compared to small urban centres. So the development of these small and medium towns is decisive to sustainable urbanization, and it can be augmented by the development of better provisions of basic amenities in these small and medium towns.

Keywords: Basic Amenities, Class Size of Towns, Geographic Information System (GIS), Small and Medium Towns, Urban Growth

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

INTRODUCTION

The access to primary amenities like drinking water, electricity, toilet facility, wastewater outlet and clean fuel are critical determinants of quality of urbanization. A lack of essential amenities has important implications for the quality of life, and increasingly, it is being realized that key dependencies exist between water supply and sanitation and improvements in health, education, population stabilization and overall human development (Dreze and Murthi, 2001; Gupta and Mitra, 2002; UNDP, 2006). Access to basic amenities is the constituent which constitutes the quality of urbanization. The amenities, i.e. electricity, water, sanitation and clean fuel are the critical determinants of living conditions and health of the urban people (Clegg and Garlick 1979; Ali et al., 2004). However, it is not always clear whether more urbanized states have better access to basic amenities or vice versa.

Similarly, it is also not clear whether the bigger cities are better off than small cities and towns. Although bigger cities are known for air pollution, slum and crowding, it would be interesting to understand how cities and towns differ regarding the provision of different basic amenities. A National Institute of Urban Affairs (NIUA) study by Raghupathi (2005) on the sanitation, status of water supply, and solid waste management in urban areas confirms that the coverage of basic services in metropolitan cities is higher than other medium and small cities. This paper attempts to show how basic amenities like access to electricity, safe drinking water, health, educational, and drainage system vary across the different class size of towns and cities in Jammu and Kashmir. Both the source of drinking water and the location of drinking water are explored in this paper. The paper further studies the relationship between various selected basic amenities with some population parameters like total households, total population, density and area in 122 towns of Jammu and Kashmir.

The size of the urban area primarily influences population growth. The study related to urban growth by size class of towns helps us to understand the phases of urban development in a country or state. Although natural increase continues to share considerably in urban extension of India, and rural to urban migration is likely to play the more prominent role in the urbanisation of the country. Differential growth rates indicate the extent of rural to urban migration and the changes in the structure of city sizes. In the increased role of large cities in a region or a state, it is expected further that the cities will grow faster than the small, medium and large towns, but this has also been not found true in the last decade. In the early phase, the small towns are expected to grow slowly compared to large cities whereas in the latter phase small towns are expected to grow because of crowding in the large and intermediate towns (Bhagat, 2004). As a consequence of population increase, not only in small and medium towns, but also in mega cities in India, the urban amenities and service delivery system are under severe pressure (Chada,

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

1988; Gilbert, 1993; Singh and Jena, 2005; Mohanty et al., 2007). Chada (1988), explored the linkages of urbanization and provision of amenities in Punjab where discussed the growth of urban population, land use pattern and urban amenities and the impact of municipal expenditure on urban amenities. The urban population of Jammu and Kashmir has increased from 181 thousand in 1901 to 3.43 million in 2011. As per the findings of the census of India, 2011 there is considerable variation in the level of urbanization among different districts in Jammu and Kashmir. Among all districts, Srinagar district ranks first with 98.6 per cent urban population followed by Jammu district with 50 per cent urban population (Khan and Mondal, 2018). The state of Jammu and Kashmir has seen the dominance of two cities, i.e. Srinagar city and Jammu city over the decades. These two cities were the only Class I towns in the state of Jammu and Kashmir till 2001. In 2011 Anantnag city also joined the Class I towns, now as per 2011, there are three cities or Class I towns in Jammu and Kashmir.

OBJECTIVES

- To examine the relationship between the growths of towns by class size to some selected basic amenities.
- To study the growth of cities and towns by class size from 1961 to 2011 in Jammu and Kashmir.

RESULTS

Table 1 shows the percentage of households with the main source of drinking water in each class size of the town in the state in 2011. The results significantly show the percentage of household access to treated water is increasing with the increasing size of class towns, i.e. class I towns have better access to tap water from the treated source (83.16%) while the class VI have least access to tap water from the treated source of just 40 per cent. It is also interesting to note that abundant source of drinking water in Class IV, V, VI towns comes from Hand pumps where it is 17.14%, 15.94% and 40.32% respectively.

Table 2 shows the percentage of household in 2011 (excluding institutional households) not having domestic electricity connection in six different class sizes of towns in Jammu and Kashmir. The result shows the total percentage of households not having electricity in the state is 11.35 %. The highest percentage of the household not having electricity is in class III (11.09%) followed by class VI (11.35%).

Table 3 shows the percentage of towns having open, closed, both drainage and no drainage system in each class size of towns in the state. The results show the overall drainage system is very poor in the towns of Jammu and Kashmir where out of 122 towns 52 % towns have an open

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

drainage system and 10 % of towns do not have any drainage system at all. The situation is even worse in class IV towns where open drainage system accounts 66%. Almost 16 % of the towns in class VI do not have any drainage system.

Table 4 shows the number of towns in each class size and the percentage distribution of hospitals and government educational institutions, i.e. schools and colleges in each town. The results show the said amenities are unequally distribution in different class size of towns. Three towns of class I towns have 17% and 42% of hospitals and Degree college of the state total hospitals and colleges.

Table 5 shows the location of the source of drinking water and the total number of households in each class size of towns along with the percentage of the main source of drinking water in three categories, i.e. within the premises, near the premises and away. The results significantly show the percentage of the household where the location of the source of drinking water is within the premises is increasing with the increasing size of class towns, i.e. class I towns have better access to water is maximum within the premises while the class VI have least access to water within the premises. The results find that majority (92.54%) of the households in class I have the location of the source of drinking water within the premises while the class VI have least (75%) of the households in class I have the location of the source of drinking water within the premises.

Table 6: shows a linear correlation between some population parameters and some selected amenities. The results find that almost every selected amenity like electricity, hospitals and educational institutes show a significant positive relationship with the growth of population, area and number of household. However, interesting to note that only density shows a slightly negative relationship with all the amenities as it founds true that unavailability of land in the dense area and the same particular amenity covers a larger section of the population in the high-density area.

Figure 3 shows the percentage share of the population in six different classes of the towns in Jammu and Kashmir from the year 1961 to 2011. The results show the share of urban population in Class I towns is decreasing and the share is significantly increasing in the lower size of towns in Class III, Class IV and Class V towns over the period. Map 1 shows the growth of the number of towns and their size from 1971 to 2011 in Jammu and Kashmir through proportional circles.

Table 7 shows the adjusted decadal urban growth by size class of towns in Jammu and Kashmir from the year 1961-2011. The finding shows the significant increasing growth rates in the medium and small towns over the period while showing the decreasing nature of urban growth rate in cities and large towns. The growth rates were calculated as 133.13 per cent in the medium cities, 67.33 in small towns and 28% in cities in 2011. Figure 4 shows the total population in six

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

different classes of the towns in Jammu and Kashmir from the year 1961 to 2011. The bar diagram shows the concentration of population in class I towns from the very beginning of the 20th century. In the year 2011, there is also a significant share of the urban population in other classes of towns rather than Class I towns only.

KEY FINDINGS

- There is a positive correlation between the sizes of the population and the number of basic amenities in different classes of town, i.e. larger cities enjoy better access to amenities than smaller towns.
- Density shows a negative relationship with all the amenities as it is true in the sense that unavailability of land in a dense area and a particular amenity covers a larger section of the population in the high-density area.
- The small and medium towns have fewer amenities as compared to the large cities through the population growth has considerably taken place in these towns in the recent decade.
- The percentage share of the urban population in Class I towns is decreasing, and the share is significantly increasing in the lower size of towns in Class III, Class IV and Class V towns over the period.
- Among the class I cities only Anantnag showed a significant increase in its population.
- The adjusted decadal urban growth by size class of towns in Jammu and Kashmir from the year 1961-2011 also indicates the significant increasing growth in the medium and small towns over the period.

SUMMARY AND CONCLUSIONS

The variations in the availability of basic amenities like electricity, hospitals, educational institutions and drinking water show a direct relationship with the size of cities and towns. This is better well understood by the positive correlation of the size of the population to the number of basic amenities in the different size class of towns. However, interesting to note that only density shows a slightly negative relationship with all the amenities, it is true in the sense that unavailability of land and a particular amenity covers a larger section of the population in the high-density area. In general, the increasing numbers in the distribution of basic amenities at the state level by size class of urban centres is found true as the larger towns enjoy better access to basic amenities. However, in the recent decade, the urban growth rate has shown an increase in the small and medium towns as such these smaller towns are already sprawled by problems of poor economic prospects and low levels of infrastructure provision of providing basic amenities to its population.

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

The adjusted decadal urban growth by size class of towns in Jammu and Kashmir from the year 1961-2011 also shows the significant growth in the medium and small towns over the period while showing the decreasing nature of population growth in cities and large towns. Among the class I cities only Anantnag showed a significant increase in its population rest many of the growth had taken place in the medium and small towns like Ganderbal, Kulgam, Doda, Akhnoor, Achabal, Awantipora, Mehboob Pora, Qazigund, Uri and many smaller towns. So these growing towns are the future cities in transition where the towns are moving from small and medium class size of towns to larger class size and cities. Hence without urgent and sustained efforts to develop small and medium towns regarding providing basic infrastructure amenities like housing, drinking water, electricity, health facilities, institutions etc., it will be impossible to develop a meaningful, effective and long-term urbanization strategy for Jammu and Kashmir.

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Table 1: Total number of households (excluding institutional households) and the main source of drinking water in each class size of the town, 2011(in %).

Towns	Total Number of Households	Main Source of Drinking Water (%)									
		Tapwater from treated source	Tapwater from un-treated source	Covered well	Un-covered well	Handpump	Tubewell/ Borehole	Spring	River/ Canal	Tank/ Pond/ Lake	Other sources
CLASS I	294947	83.16	12.63	0.18	0.03	1.61	1.38	0.07	0.33	0.18	0.44
CLASS II	45713	72.51	11.05	3.52	1.14	7.06	1.35	0.93	0.22	0.94	1.28
CLASS III	52273	61.48	30.48	0.29	0.21	2.91	1.40	0.46	1.33	0.13	1.31
CLASS IV	58379	46.37	24.24	0.90	0.67	17.14	3.28	0.41	3.38	0.83	2.78
CLASS V	52030	42.65	29.53	1.09	2.68	15.94	2.47	1.26	2.85	0.16	1.37
CLASS VI	13826	40.07	10.66	1.28	1.40	40.32	1.74	2.48	0.59	0.18	1.29
TOTAL	517168	70.65	17.25	0.69	0.52	6.45	1.71	0.41	1.03	0.32	0.98

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Table 2: Household having electricity connection among town class size in 2011 (excluding institutional households).

Towns	Total Households	Electricity-Domestic Connection (Numbers)	
		Not Having connection (in numbers)	Not Having connection (%)
CLASS I	294947	34939	11.85
CLASS II	45713	5597	12.24
CLASS III	52273	11801	22.58
CLASS IV	58379	6163	10.56
CLASS V	52030	4055	7.79
CLASS VI	13826	1744	12.61
Total	**517168**	**64299**	**12.43**

Source: Compiled and calculated by Author from the Census of India 2011.

Table 3: Percentage of towns having different types of drainage system, 2011.

Towns	No of Towns	Drainage System (in %)			
		Open	Closed	Both	No Drainage System
CLASS I	3	33.33	33.33	33.33	0
CLASS II	4	25	25	50	0
CLASS III	15	46.67	0	33.33	13.33
CLASS IV	30	66.67	0	26.67	6.67
CLASS V	46	52.17	4.35	32.61	10.87
CLASS VI	24	45.83	0	37.50	16.67
Total	**122**	**52.46**	**3.28**	**32.79**	**10.66**

Source: Compiled and calculated by Author from the Census of India 2011.

ISSN: 2455-8834

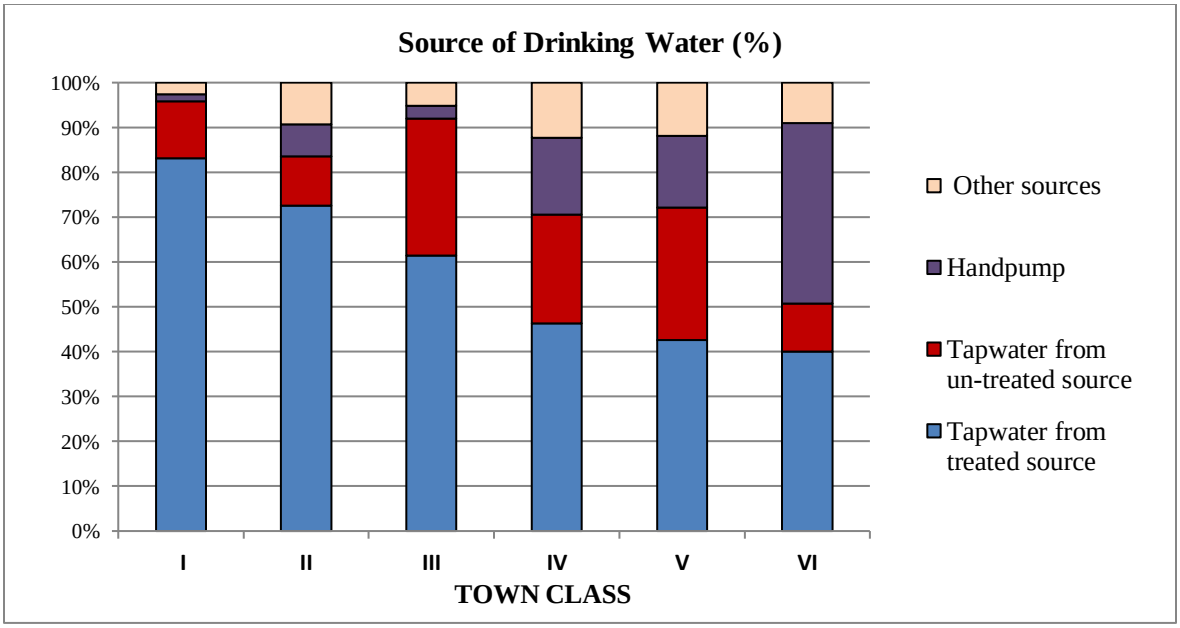
Volume:03, Issue:11 "November 2018"

Table 4: Number of hospitals and govt. educational institutions in different town class size, 2011.

Towns	Number of Towns	Hospital (%)	Government Educational Institution	
			Govt. Degree College (%)	Govt. School (%)
CLASS I	3	17.55	42.77	26.62
CLASS II	4	6.38	13.86	11.33
CLASS III	15	14.01	9.04	11.73
CLASS IV	30	29.61	24.10	26.44
CLASS V	46	21.63	6.63	18.78
CLASS VI	24	10.82	3.61	5.10
Total	122	100	100	100

Source: Compiled and calculated by Author from the Census of India 2011.

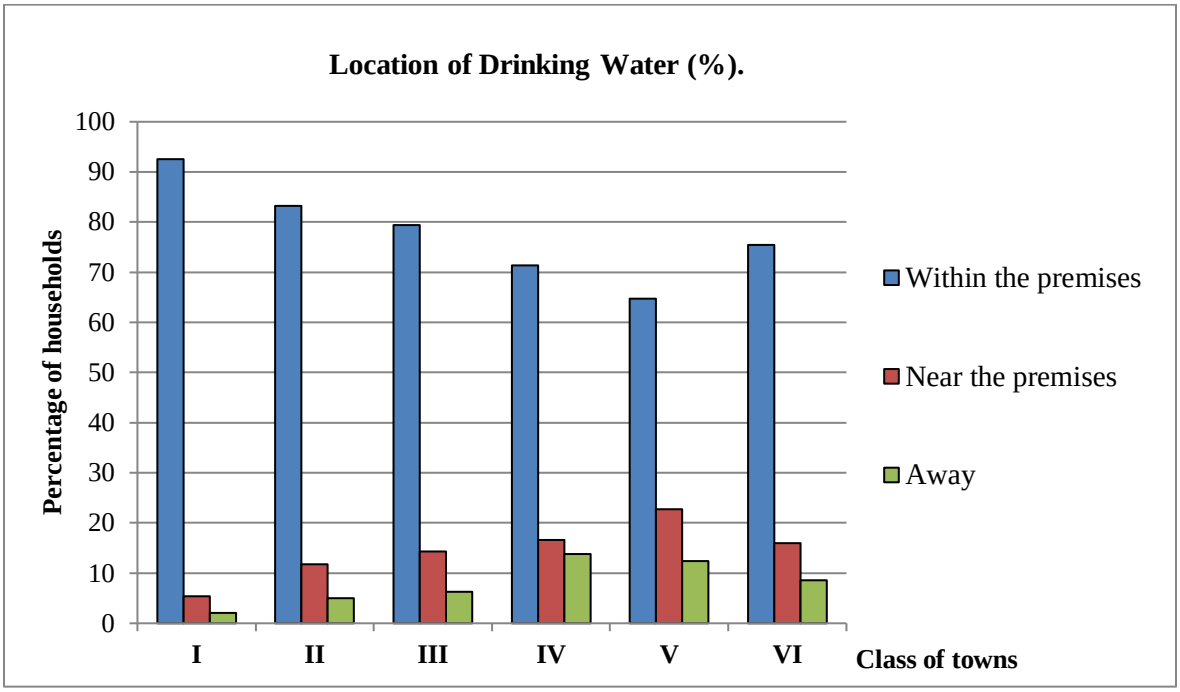
Figure 1: Total number of households (excluding institutional households) and the main source of drinking water in each class size of town, 2011(in %).



ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Figure 2: Location of source of drinking water and the total number of households in each class size of towns (excluding institutional households), 2011.



Source: Census of India, 2011.

Table 5: Location of source of drinking water and the total number of households in each class size of towns (excluding institutional households), 2011.

Towns	Location of source of drinking water	Total Number of Households	Households location of source of Drinking Water (%)
CLASS I	Within the premises	272962	92.55
	Near the premises	15847	5.37
	Away	6138	2.08
	Total	294947	100.00
CLASS II	Within the premises	38057	83.25

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

	Near the premises	5367	11.74
	Away	2289	5.01
	Total	45713	
CLASS III	Within the premises	41491	79.37
	Near the premises	7513	14.37
	Away	3269	6.25
	Total	52273	
CLASS IV	Within the premises	41673	71.38
	Near the premises	9696	16.61
	Away	8032	13.76
	Total	58379	
CLASS V	Within the premises	33679	64.73
	Near the premises	11864	22.80
	Away	6487	12.47
	Total	52030	
CLASS VI	Within the premises	10435	75.47
	Near the premises	2209	15.98
	Away	1182	8.55
	Total	13826	

Note: Drinking water source 'Near the Premises' indicates that the source availed is within a radius of 100 meters in urban areas.

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Table 6: Correlation between some population parameters and some selected amenities.

		Electricity-Domestic Connection	Hospital	Govt. Degree College	Govt. School
Area (sq. km.)	Pearson Correlation	.732**	.693**	.790**	.730**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	122	122	122	122
Total Households	Pearson Correlation	.996**	.771**	.858**	.871**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	122	122	122	122
Total Population of Town	Pearson Correlation	.981**	.807**	.895**	.899**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	122	122	122	122
Density (Census 2011)	Pearson Correlation	-.005	-.023	-.019	-.005
	Sig. (2-tailed)	.958	.799	.837	.953
	N	122	122	122	122

**. Correlation is significant at the 0.01 level (2-tailed).

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Table 7: Adjusted Decadal Urban Growth Rates by Size Class of Towns/Cities, Jammu and Kashmir 1961-2011

Size Class	1961-1971 (%)	1971-1981 (%)	1981-1991 (%)	1991-2001 (%)	2001-2011 (%)
Cities (>100000)	47.68	45.28	40.23	28.69	28.70
Large Towns (50000-100000)	-	-		111.89	-18.86
Medium Towns (20000-50000)	284.68	82.48	1.30	8.23	133.13
Small Towns (< 20000)	35.57	35.06	43.26	29.34	67.33

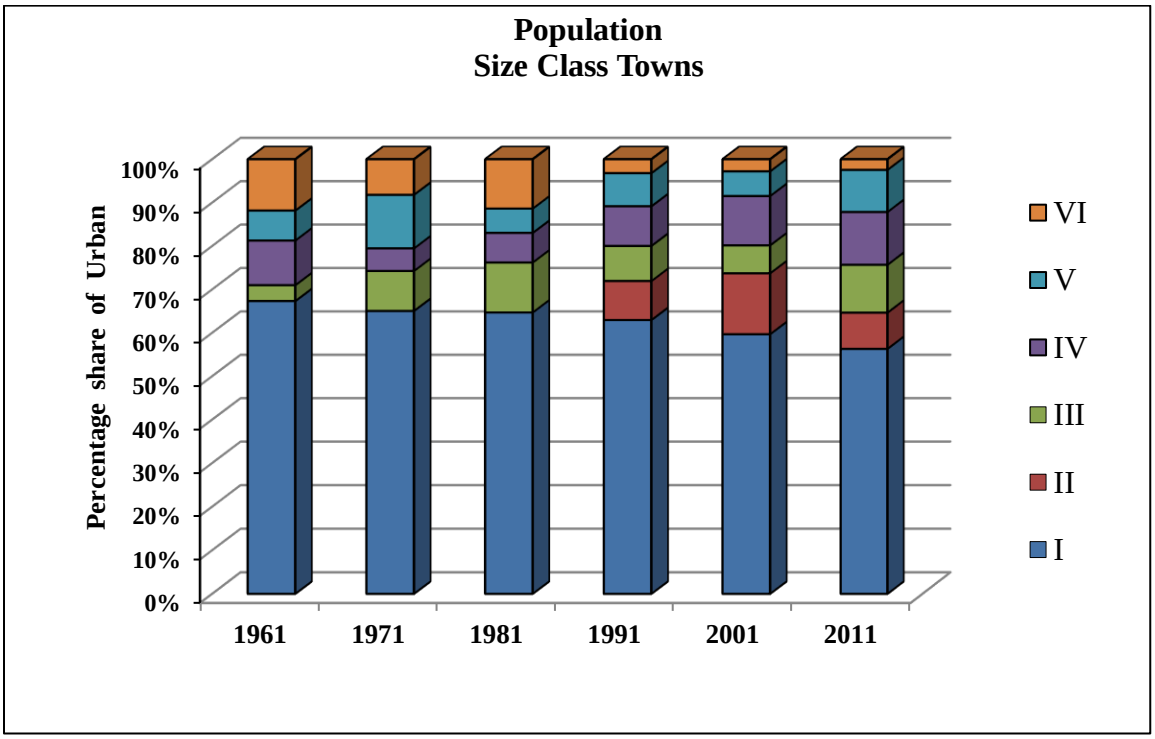
Source: Compiled and calculated by Author from the Census of India 1961-2011.

Note: Adjusted rates exclude the new towns as well declassified towns and are based on common towns during the decade.
1991:- No census was conducted in Jammu and Kashmir. The 1991 figures are interpolated by the author.

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Figure 3: Percentage share of population in six different classes of the towns in Jammu and Kashmir from the year 1961 to 2011.

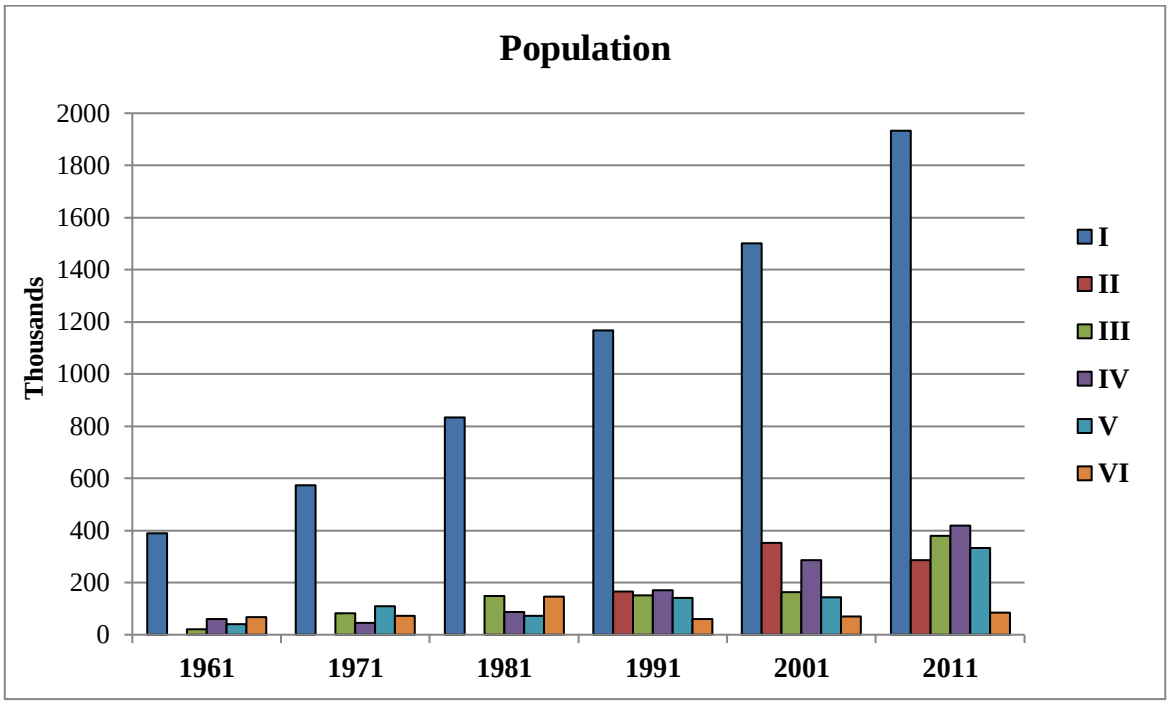


Note: 1991: - No census was conducted in Jammu and Kashmir. The figures are interpolated by the author.

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Figure 4: Total population in six different classes of the towns in Jammu and Kashmir from the year 1961 to 2011.

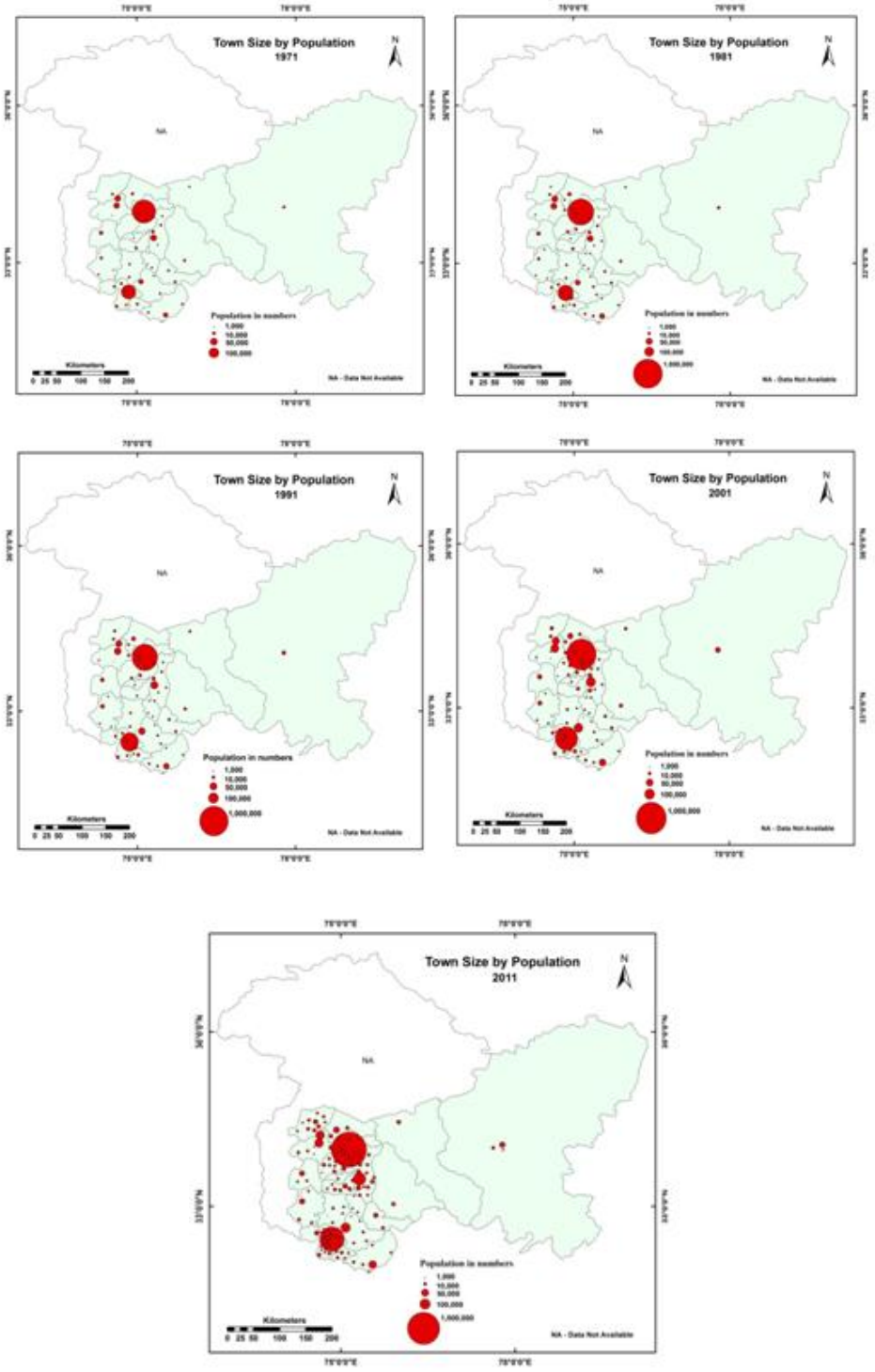


Source: Census of India 1961-2011.

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

Map 1: Growth of number of towns in Jammu and Kashmir from the year 1971-2011.



Source: Census of India 1971-2011

ISSN: 2455-8834

Volume:03, Issue:11 "November 2018"

REFERENCES

Ali, O., Isa, Z. M., & Rahman, M. R. A. (2004). The effect of urbanisation on the health of urban residents. Akademika, 65(1).

Bhagat, R. B. (2004). Dynamics of urban population growth by size class of towns and cities in India. Demography India, 33(1), 47.

Chada V (1988). A study in urbanization and provision of amenities in Punjab, Quarterly Journal of All-India Institute of Local Self-Government, Bombay pp.118-121.

Clegg, E. J., & Garlick, J. P. (1979). The Ecology of Disease in Urban Societies. Current Anthropology, 20(4), 798-799.

Drèze, J., & Murthi, M. (2001). Fertility, education, and development: evidence from India. Population and development Review, 27(1), 33-63.

Gilbert A (1993). Third world cities: Housing, infrastructure and housing, Ronau Paddison. In Lever B and Money J (eds.), In International Perspectives in Urban Studies, Jessica Kingsley Publishers, Philadelphia and London pp.108-135.

Gupta, I., & Mitra, A. (2002). Basic amenities and health in urban India. The National medical journal of India, 15, 26-31.

Khan K.A. and Mondal N.A. (2018). Urbanisation Level and Pattern in Jammu and Kashmir: A Regional and District level Analysis. *International Journal of Research and Analytical Reviews*, Vol-5 (3).

Mohanty, P. K., Misra, B. M., Goyal, R., & Jeromi, P. D. (2007). Municipal finance in India: An assessment. DRG Study, 26.

Raghupathi, U. P. (2005). Status of water supply, sanitation, and solid waste management in urban areas.

Singh JP, Jena SN (2005). The pressure on urban Infrastructure: Need to revamp the planning philosophy1. Vision RJ- research links. pp 1-5.

UNDP. (2006). Human Development Report 2006-Beyond Scarcity: Power, Poverty and the Global Water Crisis.

