

## *International Journal of Scientific Research and Reviews*

### **Progression of Urbanization In Jammu and Kashmir- India, An Inter District Analysis**

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#### **ABSTRACT**

The present study examines the level and degree of urbanization, comparative trend of the urban growth, rank fluctuation in different towns, and growth and pattern characteristics of towns by class size among the districts of Jammu and Kashmir. The present study focuses on some important determinants of urbanization like Literacy rate, percentage of non-agricultural workers, Sex ratio, and population distribution with their impact on urbanization process using statistical technique for measuring the dispersion of the determinants like standard deviation and coefficient of variation. The correlation and regression have been used to find out the association and rate of change respectively by taking urban population as dependent variable and the determinants as independent variable. The level of urbanization in the state of Jammu and Kashmir has increased continuously but it has always remained lower in the state as compared to the country as a whole. At the district level extent of urbanization in 2011 varied from less than 10 per cent in six districts and more than 50 per cent in district Srinagar only. Maximum share of urban population is present in class 1 towns followed by class 1V, CLASS 11, CLASS 111, CLASS V, and CLASS VI Towns respectively. The highest variation in distribution is found in urban population in the state. The correlation indicates positive correlation with all determinants except the sex ratio. The regression analysis shows that one unit change in the non-agricultural workers leads to the change of 1.4 unit change in urban population which is highest as compared to other determinants.

**KEY WORDS:** Towns, Urban population, Sex ratio, Literacy, Urbanization

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## **INTRODUCTION**

Urbanization refers to the process by which the rural population gets transformed into an urban population.<sup>1</sup>Urbanisation is a finite process of a cycle through which a nation passes as they evolve from agrarian to industrial society.<sup>2</sup>Historical evidence suggests that urbanization process is inevitable and universal.<sup>3</sup>Urbanization is a specific process of reorganization of space, which is operationalized through spatial redistribution of population among a hierarchical system of settlements of various sizes and having mixes of rural - urban attributes along a continuum in response to vertical shifts within the work force.<sup>4</sup> Urban growth is simply a concentration of differentiated but functionally integrated specialization and advanced technology.<sup>5</sup>Currently developed countries are characterized 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.<sup>6</sup> The onset of modern and universal process of urbanization is relatively a recent phenomenon and is closely related with industrial revolution and associated economic development.<sup>7</sup>

A majority of the developing countries, on the other hand started experiencing urbanization only since the middle of 20th century.<sup>8</sup>Government of India announced of the 121 crore Indians, 83.3 crore live in rural areas while 37.7 crore stay in urban areas or say 68.84 per cent and 31.16 per cent respectively. India hosts a total of 11976 towns as per 2011 Census. For the first time since independence, the absolute increase in population is more in urban areas than in rural areas. Urbanization and urban area a process and fact respectively, they are not confined to the city alone, though they tend to find their origin in the city.<sup>9</sup> Urbanization can be represented as a process leading to a spatial connections of activities in a relatively few areas where urban efficiency is the highest.<sup>10</sup>

The history of urbanization in Jammu and Kashmir State is quite as old as towns and urban places like Pandrethan, Naranag, Awantipora flourished during the ancient period.<sup>11</sup>During this period and medieval periods, urbanization was associated with the seats of administration, capitals and trading centers. During the period of Sikhs and subsequently, after the arrival of English people, the rate of urbanization accelerated. The subsistence nature of urbanization in Jammu and Kashmir forces the rural migration to urban areas (Srinagar and Jammu) for want of employment not for the urban environment.<sup>12</sup> In spite of some of the glaring evils of urbanization and industrialization we should not revert to the primitive methods of production. What is needed is the greater attention should be paid to human values and human welfare than the material gains.

## **LITERATURE REVIEW**

Numerous studies have been carried out on rapid growth of Urbanisation at international, national level, and state level from the evolution of humans. Davis <sup>2</sup>defined urbanisation as a finite process of a cycle through which nation passes as they evolve from an agrarian to the industrial

society. Brockerhoff<sup>6</sup> discussed that currently developed countries are characterized 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. United Nations (UN)<sup>7</sup> mentioned that onset of modern and universal process of urbanization is relatively a recent phenomenon and is closely related with industrial revolution and associated economic development.

## **DATA BASE & METHODOLOGY**

The state of Jammu and Kashmir required several research priorities especially since the census enumeration was conducted in 2001-2011, after a gap of nearly two decades. Due to non-conduction of census enumeration in 1991 and as well as other field based research activities during the last two decades were not possible. The present research work has been taken to understand the demographic and geographic dimension of urbanization in the state and the level of urbanization in the areas and different indicators of urbanization will be analyzed in the Jammu and Kashmir for the period of 1981-2011. As far as the overall level of urbanization in Jammu Kashmir is concerned it is having the low level of urbanization as compared to the national level. Taking this aspect as the main theme of the present work different indicator has been considered in the study.

1. Percentage of urban population to total population- this shows the level of urbanization in the state.
2. Decadal growth rate- this shows the change in the urban population in percentage related to the base year.
3. Number of towns – this shows the extent to which rural areas are served by urban system.
4. Percentage of population in different class towns especially class I cities/towns – this indicates about the dominance of large towns in the process of urbanization compared to medium and small towns.
5. Socio-economic variables like literacy, nonagricultural workers, sex ratio, and population distribution will be taken to examine their impact on urbanization.

Mostly the data, used to study the urbanization in Jammu and Kashmir, was collected from census publication of different time periods (1981-2011). District and town level information for demographic and economic characteristics of urban population from general and economic tables of censuses. Different journals, published and unpublished thesis, articles and books have been consulted to get the required information on the topic.

Processing and analysis of data through Quantitative techniques, like average method percentage, mean, standard deviation, coefficient of variation, correlation, regression etc. Instead of describing or presenting a whole group of data, sometimes we use one value to represent a group of data. In this way, it is easier to compare data of the same type. Therefore the average percentage

values have been used. The statistical technique of measuring the dispersion of the determinants like standard deviation and coefficient of variation has been used successively. The standard deviation value cannot be used for comparing the variation of distribution between the determinants, so therefore coefficient of variation technique have been used to determine the comparative variation in the distribution of the urbanization and its determinants. The correlation analysis was carried out between the urban population and the determinants of the urbanization by taking urban population as a dependent variable. Regression analysis is a statistical tool for the investigation of relationships between variables and to ascertain the causal effect of one variable upon another. In its simplest form regression analysis involves finding the best straight line relationship to explain how the variation in an outcome (or dependent) variable, Y, (urban population) depends on the variation in an independent variables like literacy, population growth, nonagricultural workers, density of roads, density of towns etc. Once the relationship has been estimated we will be able to use the equation:  $Y = a + bX$

## **RESULTS AND DISCUSSION**

The present paper is an attempt to bring out the growth pattern, the comparative trend of the urban growth, spatial analysis of urban growth, degree of urbanization, trends of rank fluctuation in districts and growth characteristics of towns have been analyzed by class and size. As a demographic phenomenon, urbanization is interpreted as a process involving the absolute and relative growth of towns and cities within a defined area. This is often represented as taking place in two stages:

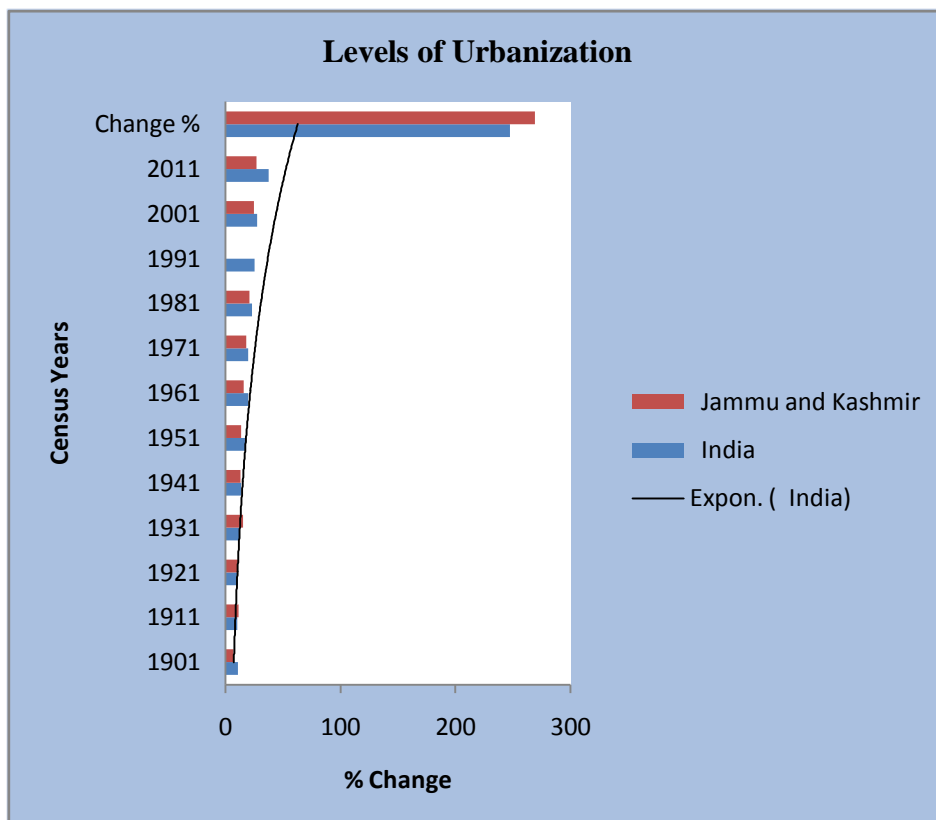
The urbanization of the state in the modern period and particularly in the 20th century had steadily increased after an initial decline between 1911-1921 and 1941. The level of urbanization in Jammu and Kashmir State cannot be considered high. By and large state continues to be predominated by rural population. Jammu And Kashmir State has 27.38 per cent urban population to total population and stands on 15th rank in the country (Table I). The low level of urbanization in Jammu and Kashmir may be due to the predominance of agriculture and industrial backwardness in the state. The urbanization, in its present form, has been closely associated with the economic development. The process of urbanization has varied a great deal both in its form and content at the regional and district level due to heterogeneity in the economic conditions, physiographic, climatic conditions and political turmoil prevails there in etc. Levels of urbanization from 1901-2011 at national as well as state level is shown in fig I.

Table I: Levels of Urbanization in J&K

Census Years	India	Jammu and Kashmir
1901	10.85	7.42
1911	10.29	11.71
1921	11.18	11.04
1931	11.99	15.39
1941	13.86	13.12
1951	17.29	14.05
1961	19.97	16.16
1971	19.91	18.59
1981	23.24	21.05
1991	25.71	0
2001	27.78	24.8
2011	37.7	27.38
<b>Change %</b>	<b>247.46</b>	<b>269</b>

Source: Census of India

Fig. No. 1



Source: Census of India

Level of urbanization in the state of Jammu and Kashmir has increased continuously but it is seen that it has always remained lower in the state as compared to the country as a whole. Increase in

the level of urbanization in the Jammu and Kashmir state has gained momentum since 1961 as revealed by faster growth of urban population. Amongst the districts of the state of Jammu and Kashmir the highest level of urban Population is in district Srinagar followed by Jammu and Kargil respectively. The percentage change in the growth of urbanization in J&K shows the positive change of +269 percent which is higher than national level growth of urbanization which shows a positive change of +247.46 from 1901-2011 respectively.

**Table II: Major Shifting of Districts According to Levels of Urbanization 1981-2011**

<b>%age of level</b>	<b>Districts (1981)</b>	<b>Districts (2011)</b>
0-10%	Kupwara, Udhampur, Pulwama, Kargil, Doda, Rajouri and Poonch	Kupwara, Poonch, Rajouri, Doda, Kargil, Shopian, Ramban, Reasi and Kishtwar
10-20%	Leh, Baramullah, Anantnag, Kathua, and Budgam	Pulwama, Budgam, Kathua, Anantnag, Udhampur, Baramullah, Kulgam, Bandipora, Ganderbal and Samba
20-30%	Jammu	Leh
Above 30%	Srinagar	Srinagar and Jammu

Sources: Census of India, J&K Series, 1981 and 2011

Table II shows the major shifting of urban population in the districts J&K from last three decades (1981-2011). With the formation of 8 new districts in the year 2007 including 4 of each of Kashmir and Jammu divisions. Major shifts in urban population from 1981 -2011 was seen in Pulwama and Udhampur from 0-10% in 1981 to 10-20 % in 2011. With the formation of 8 districts in each divisions, newly districts such as Shopian, Ramban, Reasi and Kishtwar shows a slow growth of urban population with 0-10 % of urban population while as other newly formed districts such as Kulgam, Bandipora, Ganderbal and Samba shows rapid growth of urban population with 20-30% growth. While as urban population of Jammu district also shifts from 29.64 % in 1981 to 50% of urban population in 2011. At the District level, extent of urbanization in 2011 varied from less than 10% in 9 districts out of 22 districts of Jammu and Kashmir and nearly 100 % of urban population in district Srinagar only.

In Jammu and Kashmir growth of urban population has increased in only few districts such as Srinagar, Jammu, Anantnag, Leh and Udhampur while as the district Budgam, Baramulla, Kupwara, Doda, Kargil, Kathua, Pulwama, Poonch and Rajouri shows a slow creeping growth in the levels of urbanization during the last three decades from 1981 to 2011, which adds a big concern to the urban planners as the rapid growth of urban population only in two districts i.e. Srinagar and Jammu both being the capital administration enjoying special attention in every aspect and simultaneously affecting the growth of other regions in terms of development. The rapid growth of urban population in two districts J&K i.e. Srinagar and Jammu can be seen that both the regions shows urban growth above then state average level of urbanization while other remaining 20 districts

shows growth rate below the average state level. Except Badgam districts all the other districts of state showing positive change in the growth of urban population, with highest in Kupwara, Anantnag, Leh, Kargil and Udhampur with positive growth change above 100 percent from 1981-2011. The negative change in Badgam district is high concern and prime contributing factor to this is migration of urban population to Srinagar and other as Badgam district becoming more commercial site and is highly polluted with almost over 200 illegal brick kilns in the area which results in the high pollution and impacts the human health. Urban population being economically sound tend to migrate to other parts of the region mostly to the proximity city center Srinagar which adds more anthropogenic pressure to already settled populous districts shown in the table III.

**Table III: District Wise Levels of Urbanization 1981-2011**

Districts	1981	2011	Change %
Anantnag	8.98	26.22	192
Badgam	14.13	12.99	-8.06
Bandipora	0	16.66	16.66
Baramullah	13.49	18.1	34.17
Doda	5.92	7.97	34.62
Ganderbal	0	15.81	15.81
Jammu	29.64	50	68.69
Kargil	5.34	11.6	117.22
Kathua	11.38	14.55	27.85
Kishtwar	0	6.44	6.44
Kulgam	0	18.99	18.99
Kupwara	2.95	12.03	307.79
Leh	12.75	34.21	168.31
Poonch	6.32	8.1	28.16
Pulwama	8.98	14.35	59.79
Rajouri	5.23	8.14	55.64
Ramban	0	4.16	4.16
Reasi	0	8.57	8.57
Samba	0	16.81	16.81
Shopian	0	6.14	6.14
Srinagar	80.5	98.6	22.48
Udhampur	9.53	19.49	104.51
Total	21.05	27.38	30.07
Grand Total	236.19	457.31	1336.82

Sources: Census of India, J&K Series, and 2011

Fig. No. 2

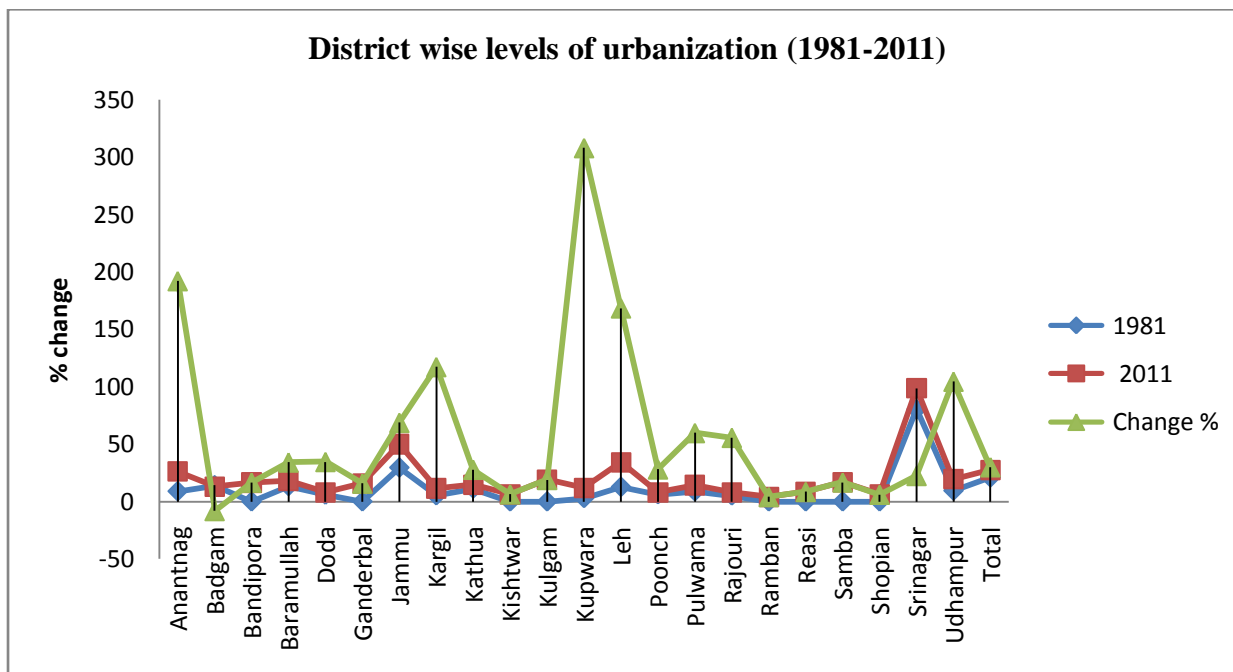


Table IV shows that only two towns of Jammu and Kashmir fall in the category of class I towns contributing 49.72 per cent of the total urban population in 2011 which was 64.22% in 1981 showing a negative change of -22.57 per cent from 1981-2011 mainly due to creation of 8 new districts in 2007 which were linked to these major urban centers as well as the large migration took place from Srinagar to other cities of the India due to political turmoil from the last two decades. In 1981 there was not even a single town in class II category but in 2011 there are 6 class II towns in Jammu and Kashmir state because the major hinterland of Srinagar and Jammu city develops economically due to the direct trade links with the two capital cities of Srinagar and Jammu. However the growth of the towns falling under the other categories showing a stunted growth constituting 11.9 per cent of the total urban population. However class III towns are showing the decreasing number of towns because all the III class towns in 1981 were shifted to class II towns in 2011. The highest number of towns in Jammu and Kashmir in 1981 and 2011 are in class IV with gain of 26 in 2011 witnessed a total of 33 towns with the creation of new districts in 2007. Class VI also shows highest number of towns in 1981 but with the progressive growth in urban population show a negative change -50.09 per cent in 2011, these towns are scattered in the different parts of the state as large number of these class VI towns are tourist based towns.

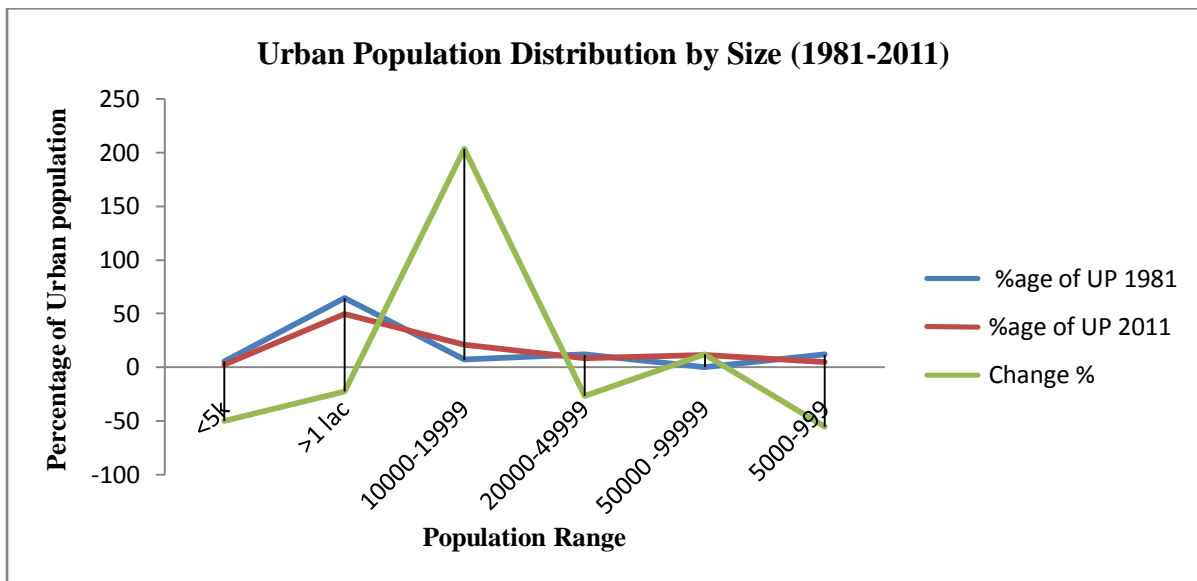


Table IV: Distribution of Urban Population by Size / Class of Towns in 1981 and 2011

Class	Population range	No. of Towns 1981	No. of Towns 2011	Increase/Decrease in the no. of towns 1981-2011	%age Share of Urban Population 1981	%age Share of Urban Population 2011	%age change urban population 1981-2011
I	1,00,000 & above	02	2	0	64.22	49.72	-22.57
II	50,000 to 99,999	0	06	5	0	11.9	11.9
III	20,000 to 49,999	05	07	2	11.75	8.63	-26.55
IV	10,000 to 19,999	07	33	26	6.96	21.10	203.16
V	5,000 to 9999	20	24	1	11.60	5.2	-55.17
VI	Less than 5,000	24	28	1	5.47	2.73	-50.09
	All Classes	58	100	35	100	100	+5.42

Sources: Census of India, J&K Series, 2011

Fig. No. 3



- UP= Urban Population

Table IV shows lot of migration from small towns to the bigger cities as a result of which their growth is retarded. Since the role of small towns in the field of industrialization and agricultural and rural development is enormous their growth is imperative for the balanced urbanization in the state. It is because of this fact that small towns are often called as “Bridge” between the rural and the urban universe or between the big cities and the rural settlements.

In general it may be summarized that the state of Jammu and Kashmir has only two class I cities (Srinagar and Jammu) and rest of the towns are small towns, falling mainly in class IV, V, and VI categories. Many of the small towns are still not having social amenities which they should have. In fact, several of the small towns have the characteristics of Indian village. With the addition of 8 new districts in 2007 major urban centers of class I and II shows a negative change and class IV shows a progressive change as almost all newly created districts urban population fall in this zone. In order to determine the impact of determinants (socio-economic) on urbanization different indicators have been used like literacy, nonagricultural workers, sex ratio etc. The variation in distribution

shown by the Coefficient of variation (CV) method shows that 104.65 per cent variation in the distribution of urban population followed by 37.20 per cent in nonagricultural workers and 14.63 per cent by sex ratio while as literacy rate shows 13.63 per cent of variation of the distribution (table V).

**Table V: Coefficient of variation of different determinants of urbanization**

S.no.	District	Percent Urban population 2011	Per cent Literacy 2011	Sex Ratio 2011	Percent of Non agriculture workers in 2011
1.	Anantnag	26.22	59.97	902	98.14
2.	Baramula	18.1	66.82	783	54
3.	Budgam	12.99	58.60	791	55
4.	Doda	7.97	75.04	795	31
5.	Jammu	50	80.03	856	68
6.	Kargil	11.6	75.52	621	49
7.	Kupwara	12.03	62.0	685	37
8.	Kathua	14.55	73.09	890	43
9.	Leh	34.21	80.97	494	58
10.	Pulwama	14.35	60.23	789	44
11.	Poonch	8.1	78.13	745	30
12.	Rajouri	8.14	82.0	511	29
13.	Srinagar	98.60	60.73	899	99.4
14.	Udhampur	19.5	88	695	36
15.	Bandipora	16.66	57.82	845	39.45
16.	Shopian	6.14	68.72	756	37.84
17.	Kulgam	18.99	57.02	917	39.85
18.	Ganderbal	15.81	54.83	881	43.4
19.	Kishtwar	6.44	76.64	817	46.2
20.	Reasi	8.58	71.17	802	48.8
21.	Samba	16.81	79.06	802	43.25
22.	Ramban	4.16	75.10	733	45.8
	Mean	19.54	70.06	773.13	48.94
	Standard deviation	20.45	9.55	113.12	18.21
	Coefficient of variation	104.65 %	13.63 %	14.63 %	37.20 %

Sources: Census of India, J&K Series, 2011

The tableVI shows the correlation values between the urban population and the determinants of the urbanization. The correlation value (r) of the determinants of the urbanization shows that the urbanization is positively associated with all the determinants except the Sex Ratio with which the urbanization is negatively associated. The highest correlation of urbanization was found with nonagricultural workers. So we can say that out of these determinants Nonagricultural workers is an important determinant of urban population in the Jammu and Kashmir.

**Table VI: Correlation Analyses of the Determinants of Urban Population**

S/NO.	DETERMINANTS	CORRELATION .r. value
1	Literacy	+0.48
2	Non-Agricultural Workers	+0.88
3	Sex Ratio	-0.24
4	Density of Towns	+0.15
5	Population distribution	+0.58

**Table VII: Regression Analysis of the Determinants of the Urban Population**

Independent variables	Intercept (a )	Slope (b)
Literacy	-31.02	0.93
Non-agricultural workers	-33.56	1.09
Sex Ratio	132.36	-0.12
Population Distribution	-0.77	2.74

Table VII shows the regression analysis, taking urban population as dependent variable and the determinants as independent variables. The regression results analysis shows that 1unit change in nonagricultural workers, literacy, sex ratio, population distribution, leads to the change of 1.09 units,0.93 units,-0.12 units, units, 2.74 units, units in urban population respectively.

## **CONCLUSION**

The share of urban population to state's total population is 27.38 per cent which was 21 per cent in 1981 indicating a marginal increase in the urbanization rate during the last two decades with a positive change of 269 per cent. 58 per cent of urban population was concentrated in Kashmir division while only 1.5 per cent of urban population were found in Ladakh division and the rest 40 per cent urban population was concentrated in Jammu division.75 settlements were classified as towns in 2011 while as in 1981 there were only 58 towns. As per 2011 census 47 towns were located in Kashmir division while as in 1981 the total towns located in Kashmir division were 24 towns.In Jammu division the number of towns in 1981 was 32 and the number increased to 46 in 2011, however in Ladakh division there were only two towns in 1981 as well as in 2011.In the case of Kashmir division major urban centers were concentrated only in few pockets of Jehlum valley floor. Low level of inter-sectorial diversification, weak trade linkages, rudimentary stages of development of agro-pastoral and horticulture resources and low level of technology for harnessing natural resources have contributed to the low level of urbanization in the state of Jammu and Kashmir.

The Srinagar urban agglomeration recorded a concentration of 98.6 per cent of urban population and Jammu urban agglomeration recorded 50 percent of urban population to total urban population in the state. Thus these two urban agglomerations in the state contribute 58.90 per cent of total urban population in the state and the remaining 42 per cent of the urban population is distributed in the remaining 20 districts of the state. It indicates that these two cities occupy primate city position having concentration of economic and service activities. Thus the engines of economic development are conspicuous by their absence in the rest of the districts in the state. The size of population for towns in the state shows that only Srinagar and Jammu were the class I towns having population more than one lakh. The state recorded only 5 class II, these towns were Baramulla, Anantnag, Sopore, Udampur and Kathua as these towns have some growth generating activities.

They have some economic influence in their adjacent hinterlands and mostly have developed due to service and trade activities while the other towns of the valley lack the required social, economic and credit infrastructure to develop their own areas. The advancement in science and technology results in the multiplication of functions of urban centers, which leads to further diffusion of urban culture. Thus urbanization is the function of socio-economic changes that took place through time.

Government must take initiative to uplift the developmental infrastructure to other urban areas in order to reduce the population pressure on two big urban centers. The other urban centers lacking basic facilities of education, health infrastructure and other basic amenities forces them to migrate to two major urban areas of the J&K state i. e. Srinagar and Jammu Urban center.

## **ACKNOWLEDGEMENTS**

The authors are highly thankful to university of Kashmir –Srinagar for providing favorable environment while completing this work. Authors would also like to thank Census department-J&K for providing necessary data.

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