Characteristics of Urban Centres and Urbanization in Uttarakhand

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Abstract The pace of urbanization in Uttarakhand, particularly after the 1980s, has been alarming, and thousands of people from rural areas are settling in nearby urban centres every year. Even after the creation of the state, the growth of the towns in the plain areas is many times higher than the growth of hilly towns, due to migration from rural hilly region to flat areas of Uttarakhand. About 80% of the urban population of the state is concentrated in the plain parts of Uttarakhand. It is interesting to see that the urban population of Uttarakhand had increased by 1,859.0% between 1901 and 2011, which is more than the national growth of urban population in India (1,358.5%). This paper attempts to analyse the growth and distribution levels and trends of urbanization, and towns by size class, from 1901 to 2011, in Uttarakhand. It also deals with the distribution, literacy, sex ratio, and occupational structure of the urban population. It is based on the data released by the Census of India in 2001 and 2011.

Key words demographic, urbanization, urban centres, size town, Uttarakhand, India

I. Introduction

Urbanization has become a common feature of Indian society. This process is a very significant factor that indicates the economic as well as the social development of any region (Koiri, 2014). There is a strong positive correlation between economic growth and urbanization (Kavitha and Gayathri, 2017). From a demographic point of view, urbanization represents an increase in the proportion of urban population-defined as urban growth-relative to the total population, in a specified time period (Bhagat, 2011). Urbanization also means an increasing number of urban centres and a conversion of villages into urban areas, with more participation of urban residents in secondary, tertiary and quaternary occupations, leading to an increased productivity and industrialization (Bhutia, 2012, 2015). An important characteristic of the urbanization process is that the growth of urban population is higher than the growth of the rural one.

As per Census of India, there are two types of urban places. First, there are the ones notified by the States/UTs, such as Municipality, Corporation, Cantonment, Notified Town Area Committee, Nagarpalika, Nagar Panchayat, City Municipal Council, Estate Office, Industrial Notified Area and Industrial Township, which are included under the category of urban areas. Second, besides these statutory towns, there are places considered as towns if they have a minimum population of 5,000 residents, more than 75% of the male working population engaged in non-agricultural activities, and a population density of more than

400 people per km². These places are recognized as census towns or non-municipal towns.

The purpose of this study is to analyse the growth, level and trend of urbanization in Uttarakhand, using distribution, density, and sex ratio as demographic characteristics. Thus, this paper's main objective is to analyse the growth and distribution of urban population and towns, from 1901 to 2011, in Uttarakhand. The second objective is to explain the distribution, density, and sex ratio of the urban population by size class of towns, as per 2011 Census. The data for the present analysis have been obtained from secondary sources like the Census of India 2001 and 2011. The suitable analytical tools and techniques are used for the purpose of analysis and interpretation of data.

II. Study Area

Uttarakhand has a total geographic area of about 53,483 km², extending from 28°44' to 31°25' latitude north and 77°45' to 81°1' longitude east. The State of Uttarakhand is constituted of 13 districts with 95 development blocks. The state is bounded to the north with Tibet (China), to the east with Nepal, to the west by Himachal Pradesh, and to the south with Uttar Pradesh, India (Figure 1). The total population according to the 2011 Census is 10,086,292. There are 115 urban centres consisting of small census towns to cities and urban agglomerations, where 30.6% of the state's total population lives. The majority (69.4%) of the population in the state belongs to rural areas and it is spread over 15,745 (15,501 revenue and 244 forests) vil-



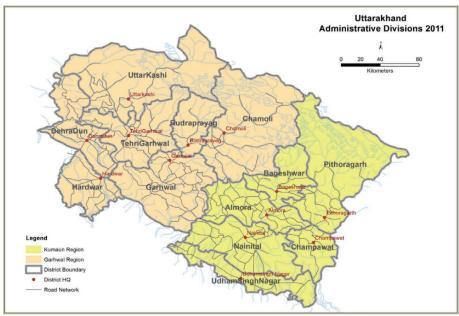


Figure 1. Location and administrative divisions of Uttarakhand, 2011

Note: Pauri district was known as Garhwal and Tehri district was known as Tehri Garhwal.

Source: Based on Census of India, 2011.

lages (Census of India 2011).

The Uttarakhand region presents very distinct demographic characteristics determined by the local relief and the harsh climate together with a host of other physical as well as cultural factors (Pant, 2012, 2013). There are areas with no population in the Trans Himalaya, but with densely populated areas along the foothills. The distribution pattern of population not only differs from rest of the country, but greatly varies within the states and districts from one part of the region to another. About two thirds of the population of the state is concentrated in 4 districts situated mainly in the plain areas, while the remaining 40% distributed among 9 hill districts (Pant and Chand, 2018; Pant et al. 2018).

III. Distribution of Urban Population

According to the 2011 Census, about 30.2% (3,026,203 people) of the total population (10,086,292 people) in Uttarakhand lived in 115 urban centres, which is slightly less than the national average (31.2%). Table 1 reveals that the percentage of urban population varies from a minimum of 3.5% in Bageshwar to the maximum of 55.5% in Dehradun. Dehradun is the most urbanized district of Uttarakhand in terms of percentage of people living in urban centres. Table 1 clearly shows that Bageshwar (3.5%), Rudraprayag (4.1%), and Uttarkashi (7.4%) districts have a low proportion of urban population. On the other hand, Dehradun, Nainital, Hardwar, and U.S. Nagar have more than 35% of the urban population because these districts fall in the plain region (Nainital district

Table 1. Distribution of urban population in Uttarakhand, 2011

Districts (Pagion	Total Population	Rural Popu	lation	Urban Popu	ulation
Districts/Region	persons	persons	%	persons	%
Uttarkashi	330,086	305,781	92.6	24,305	7.4
Chamoli	391,605	332,209	84.8	59,396	15.2
Rudraprayag	242,285	232,360	95.9	9,925	4.1
Tehri (Garhwal)	618,931	548,792	88.7	70,139	11.3
Dehradun	1,696,694	754,753	44.5	941,941	55.5
Pauri (Garhwal)	687,271	574,568	83.6	112,703	16.4
Pithoragarh	483,439	413,834	85.6	69,605	14.4
Bageshwar	259,898	250,819	96.5	9,079	3.5
Almora	622,506	560,192	90.0	62,314	10.0
Champawat	259,648	221,305	85.2	38,343	14.8
Nainital	954,605	582,871	61.1	371,734	38.9
U.S. Nagar	1,648,902	1,062,142	64.4	586,760	35.6
Hardwar	1,890,422	1,197,328	63.3	693,094	36.7
Uttarakhand	10,086,292	7,036,954	69.8	3,049,338	30.2

Source: Census of India, 2011.

is partially plain), having more opportunities for urban development. As a result, about 80% of the urban population live in the plain areas of the state (Figure 2).

The growth of urban population from 1991, 2001, and 2011 in all districts of Uttarakhand has been shown in Figure 3. It can be easily seen from this figure that a much higher growth in urban population has been registered in all four districts of plain areas, led by Dehradun, as compared to the remaining hill districts of the region. This has happened because of the heavy migration of the rural population from hilly districts to flat areas. However, in two of those districts Rudraprayag and Bageshwar-there is a very insignificant growth recorded in their urban centres. The situation at the sub-district level is much more alarming (Table 2). There are 34 tehsils, or sub districts, which are all hilly, registering no urban population at all in 2011. Tehsils below a 10% population are 11 in number, out of which only Laksar is from the plain district of Hardwar. On the other hand, there are 6 tehsils above 40% of urban population, and all are lying in plain areas.

IV. Characteristics of Urban Centres

The demographic behaviour of urban centres is a significant aspect of urban population. It brings into focus the real gap in the level of socio-economic status of urban and rural population. This section analyses the average

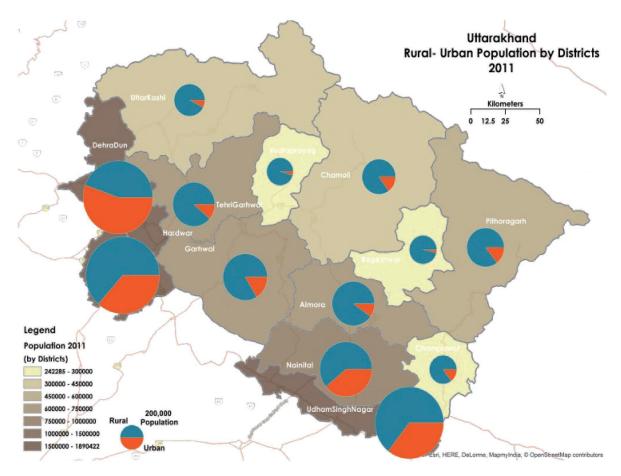


Figure 2. District wise rural–urban population in Uttarakhand, 2011 Source: Based on Census of India, 2011.

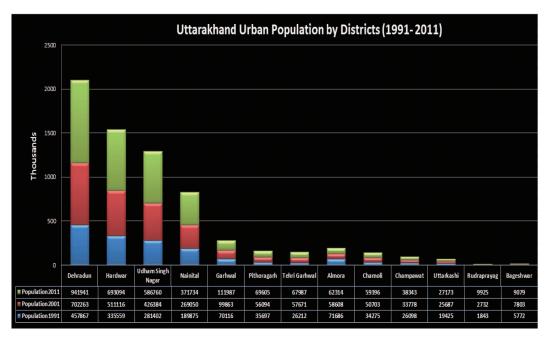


Figure 3. District wise urban population in Uttarakhand, 1991, 2001, and 2011 Source: Based on Census of India, 2011.

Table 2. Proportion of urban population (% of total population) at sub-district level in Uttarakhand, 2011

Zana/Danian	O/daaa aaaalatiaa			Sub Districts
Zone/Region	% urban population	No	%	Name of sub districts
No urban population	Zero (no urban centres)	34	43.59	Puraula, Mori, Dunda, Chiniyalisaur, Pokhari, Tharali, Gairsain, Jakholi, Ghansali, Pratapnagar, Jakhnidhar, Dhanaulti, Tyuni, Kalsi, Thalisain, Dhoomakot, Satpuli, Chaubattakhal, Munsiari, Berinag, Gangolihat, Kapkot, Kanda, Garud, Bhikiyasain, Chaukhutiya, Sult, Someshwar, Jainti, Bhanoli, Pati, Kosya Kutauli, Betalghat, and Dhari.
Extremely Low	Below 10.0	11	14.10	Rajgarhi, Laksar, Lohaghat, Bageshwar, Champawat, Didihat, Lalkuan, Lansdowne, Dwarahat, Devprayag, and Ukhimath.
Very Low	10.01 – 20.0	10	12.82	Pauri, Ranikhet, Gadarpur, Sitarganj, Vikasnagar, Kaladhungi, Yamkeshwar, Dharchula, Chakrata, and Rudraprayag.
Moderate	20.01- 30.0	6	7.69	Tehri, Almora, Bajpur, Bhatwari, Chamoli, and Khatima.
Moderate High	30.01-40.0	11	14.11	Joshimath, Nainital, Srinagar, Ramnagar, Roorkee, Poornagiri, Jaspur, Pithoragarh, Narendranagar, Kotdwara, and Karnaprayag.
High	Above 40.01	6	7.69	Dehradun, Haldwani, Kichha, Kashipur, Hardwar, and Rishikesh.
	Total	78	100.00	

Source: Primary Census Abstract, PCA0500 to 0513_2011_MDDS Uttarakhand.

family size, age distribution, the proportion of Scheduled Castes and Scheduled Tribes population, the sex ratio, literacy, occupational structures, as well as the workforce participation.

Table 3 presents three demographic characteristics of the urban population, showing family size, population between 0 and 6 years old, and Scheduled Castes and Scheduled Tribes population in 2011. The table indicates that the average family size of the urban population in Uttarakhand is of 5 people per family, while it is 4 people in the districts situated in the hills, where the urban population is relatively smaller than the more urbanized districts, such as Dehradun, Nainital, Hardwar and U.S. Nagar. About 12.0% of the population is below the age of 6

in the urban centres of Uttarakhand. Due to the migration of the reproductive population from the hill districts, hilly towns have also fewer children between 0 and 6 years old. The smallest population under this age group (9.2%) is found in Almora district. Table 3 also reflects that the proportion of Scheduled Castes population in the urban areas is much lower (13.0%) than the total population (18.8%). A maximum of 24.4% of the urban Scheduled Castes population is found in the Bageshwar district, while Tehri and U.S. Nagar districts have only 10.7% and 10.8% Scheduled Castes population in urban centres. As per 2011 census, only 0.89% of the Scheduled Tribes population is resident of cities. Out of the total Scheduled Tribes urban population of the state, the Chamoli and Pithoragarh districts

Table 3. Distribution of urban population in Uttarakhand, 2011

District/Region	Total	Jrban Popu	llation	HH Size (p/HH)	0–6 Years		eduled Ca Population		Scheduled Castes		eduled Ti opulatio		Scheduled Tribes
	Person	Male	Female	(μ/ππ)	(% of total)	Person	Male	Female	(% of total)	Person	Male	Female	(% of total)
Uttarkashi	24,305	13,222	11,083	4	10.9	3,692	1,897	1,795	15.2	138	70	68	0.57
Chamoli	59,396	33,622	25,774	4	11.7	11,317	5,961	5,356	19.1	3,214	1,564	1,650	5.41
Rudraprayag	9,925	5,849	4,076	4	10.6	1,400	762	638	14.1	77	48	29	0.78
Tehri (Garhwal)	70,139	38,605	31,534	4	11.3	7,502	4,044	3,458	10.7	245	147	98	0.35
Dehradun	941,941	499,308	442,633	5	10.8	109,778	57,882	51,896	11.7	10,188	5,439	4,749	1.08
Pauri (Garhwal)	112,703	58,800	53,903	4	11.3	12,785	6,564	6,221	11.3	263	156	107	0.23
Pithoragarh	69,605	36,376	33,229	4	12.1	10,837	5,583	5,254	15.6	3,620	1,736	1,884	5.20
Bageshwar	9,079	4,711	4,368	4	11.2	2,219	1,134	1,085	24.4	108	55	53	1.19
Almora	62,314	33,722	28,592	4	9.2	10,064	5,076	4,988	16.2	531	269	262	0.85
Champawat	38,343	20,283	18,060	5	12.2	5,658	2,926	2,732	14.8	255	137	118	0.67
Nainital	371,734	194,409	177,325	5	12.1	53,300	27,687	25,613	14.3	1,715	867	848	0.46
U.S. Nagar	586,760	308,313	278,447	5	13.5	63,345	33,122	30,223	10.8	5,656	2,915	2,741	0.96
Hardwar	693,094	371,511	321,583	5	12.7	103,954	54,845	49,109	15.0	1,074	575	499	0.15
Uttarakhand	3,049,338	1,618,731	1,430,607	5	12.0	395,851	207,483	188,368	13.0	27,084	13,978	13,106	0.89

Source: Census of India, 2011.

have a maximum of 5.41% and 5.20% of urban tribal population, respectively (Table 3). This shows that an overwhelming proportion of the tribal society is still living in the rural remote areas. These trends are suggestive of the dominance of higher caste people in urban centres, which also have fewer children.

V. Sex Ratio in Urban Population

The sex ratio of the urban population is indicative of the nature and stages of the migrant population living in towns. According to the Census of 2011, the average sex ratio in the urban areas of Uttarakhand is of 884 females per 1,000 males, which is quite lower than the average sex ratio of the total population (963). The sex ratio in urban areas varies from minimum 697 females in Rudraprayag district to maximum 927 in Bageshwar district (Table 4). Only five districts (38%) have slightly more than 900 females/thousand males. These are Pauri (917), Pithoragarh (913), Bageshwar (927), Nainital (912), and U.S. Nagar (903).

The sex ratio among children (0-6 years) is lower (868) than the average sex ratio of urban population in Uttarakhand. It ranges from 724 females/1,000 males in Pithoragarh district to 894 in U.S. Nagar district. The sex ratio among urban Scheduled Castes population in 2011 is of 908 females/1,000 males, which is quite higher than the average sex ratio in urban areas. About 38% of districts-Chamoli, Tehri, Rudraprayag and Dehradun-have

Table 4. Sex ratio in the urban population of Uttarakhand, 2011

2011										
District/Region	Se	ex Ratio (Females	/1,000 Male	es)						
District/Region	Total	0–6 age	S.C.	S.T.						
Uttarkashi	838	794	946	971						
Chamoli	767	829	899	1,055						
Rudraprayag	697	803	837	604						
Tehri (Garhwal)	817	846	855	667						
Dehradun	886	864	897	873						
Pauri (Garhwal)	917	860	948	686						
Pithoragarh	913	724	941	1,085						
Bageshwar	927	845	957	964						
Almora	848	861	983	974						
Champawat	890	825	934	861						
Nainital	912	892	925	978						
U.S. Nagar	903	894	912	940						
Hardwar	866	865	895	868						
Uttarakhand	884	868	908	938						

Source: Census of India, 2011.

less than 900 females/1,000 males in Scheduled Castes population. The sex ratio among the urban tribal population is of 938 females/1,000 males (Table 4), which is higher than the average sex ratio of the general and the Scheduled Castes population. The urban areas of Chamoli (1,055) and Pithoragarh (1,085) districts have more tribal females than males. The main cause of a lower sex ratio in other districts—like Rudraprayag, Tehri, Pauri, Hardwar

and Dehradun-is the dominance of the male population in urban families.

VI. Literacy States in Urban Population

Overall, 84.5% of the urban population of Uttarakhand was literate in 2011 (Table 5). According to the corresponding Census, the level of literacy ranges from a minimum of 75.9% in U.S. Nagar to 94.3% in Almora district. Out of the total of 13 districts, 50% have 90 or more than 90% literacy rates. These are mostly hilly districts, like Chamoli, Rudraprayag, Pauri, Pithoragarh, Bageshwar and Almora at the upper end. The higher literacy rate in urban areas is due to the presence of educational institutions on one hand, and awareness among the people, on the other. Also, the gender gap in the literacy rate is not alarming in the urban population. The average literacy among males is 89.1% within the urban population of Uttarakhand, ranging from a minimum of 82.2% in U.S. Nagar to the maximum of 97.2% in Almora district (Table 5). The higher literacy in Almora in particular is the result of it being the cultural capital of Kumaun, and its rich historical past. Fifty per cent of the districts, which have more than 94.0% male literacy in towns, are also hilly-except Dehradun, which is also a known educational centre. Out of the total urban female population, 79.3% are literate in 2011, which is 9.8% lower than the male literacy. U.S. Nagar has only 68.9% of urban female literates at the lower end, in all

Table 5. Literacy rates (%) in urban population of Uttarakhand, 2011

District/Pagion	Li	teracy Rat	:es	Gap in Male- Female
District/Region	Person	Male	Female	Literacy
Uttarkashi	88.7	94.8	81.5	13.4
Chamoli	92.0	95.6	87.2	8.4
Rudraprayag	90.0	94.0	84.2	9.8
Tehri (Garhwal)	88.8	93.4	83.1	10.4
Dehradun	88.3	92.1	83.9	8.2
Pauri (Garhwal)	90.4	93.9	86.5	7.4
Pithoragarh	92.0	94.9	88.9	6.0
Bageshwar	90.7	95.1	86.1	9.1
Almora	94.3	97.2	91.0	6.1
Champawat	82.6	88.3	76.4	11.9
Nainital	85.3	88.8	81.4	7.4
U.S. Nagar	75.9	82.2	68.9	13.3
Hardwar	81.9	87.0	76.0	11.1
Uttarakhand	84.5	89.1	79.3	9.8

Source: Census of India, 2011.

13 districts. The highest (91.0%) urban female literacy is also found in Almora district. Urban females of three districts, namely, Hardwar, U.S. Nagar and Champawat, have less than 80.0% of urban literacy. The gap in male and female literacy rates varies from a minimum of 6.0% in Pithoragarh district to the maximum of 13.4% in Uttarkashi district. Next to Uttarkashi is U.S. Nagar, with a literacy gap of 13.3%, followed by Champawat and Hardwar. The lower proportion (7.4%) of urban population in general in Uttarakashi may be the reason behind the larger male-female gap in literacy. However, in spite of a very large urban population in Champawat and U.S. Nagar, the literacy gap is higher. Table 5 reveals that the districts that have higher literacy rates have a smaller gap between male and female literacy in general.

VII. Occupational Pattern in Urban Population

Out of the total urban population in Uttarakhand, 32.4% of people are registered as workers, while the remaining 67.6% of the population is considered as nonworkers (Table 6). The percentage of workers ranges between 28.8% in Pithoragarh district and 45.3% in Rudraprayag district. The smaller hilly towns have a larger working population, while in towns belonging to the plain areas of Uttarakhand; no such distinction could be seen. It is also striking to see that out of the total urban males, only 51.0% are registered as workers and only 11.3% of the workers are females. Table 6 reveals that Pithoragarh district has the minimum of 42.7% male urban workers, while Rudraprayag district stands at the top with 60.5%. All in all, five districts have less than 50% of male workers. The share of female participation in the working category is also shown in Table 6. The percentage of female workers fluctuates from a minimum of 9.1% each in Champawat and Hardwar districts, to the maximum of 23.4% in Rudraprayag district.

Table 6 reveals that the share of working women in the urban centres is much lower than that of their male counterpart. It is probably due to the scarcity of jobs in various governmental and nongovernmental institutions, shortage of small and environment friendly industries, and lack of awareness among women to resort to self-employment. As a result, 49.0% of males and 88.7% of females are registered as non-workers.

Out of the total working population (32.4%) in urban areas of Uttarakhand, only 88.5% of urban workers are considered as main workers in the 2011 Census. Table 6 shows that Bageshwar district has the minimum of 78.1%

Table 6. Occupational classification of urban population in Uttarakhand, 2011

District/Region		kers (% o		Main W	orkers (% workers	6 of total		orkers (% opulatio	6 of total n)
	Person	Male	Female	Person	Male	Female	Person	Male	Female
Uttarkashi	33.8	47.5	17.5	87.1	89.0	81.1	66.2	52.5	82.5
Chamoli	38.8	53.5	19.6	89.4	92.2	79.6	61.2	46.5	80.4
Rudraprayag	45.3	60.5	23.4	84.2	88.0	70.4	54.7	39.5	76.6
Tehri (Garhwal)	32.7	50.4	11.0	90.9	92.0	84.6	67.3	49.6	89.0
Dehradun	33.7	52.2	12.9	88.9	91.0	79.4	66.3	47.8	87.1
Pauri (Garhwal)	29.6	47.0	10.6	88.8	91.0	78.4	70.4	53.0	89.4
Pithoragarh	28.8	42.7	13.6	83.7	86.8	73.2	71.2	57.3	86.4
Bageshwar	30.5	47.5	12.2	78.1	77.9	78.9	69.5	52.5	87.8
Almora	34.2	52.6	12.4	93.6	94.7	88.0	65.8	47.4	87.6
Champawat	29.9	48.4	9.1	90.8	91.6	86.5	70.1	51.6	90.9
Nainital	31.6	51.0	10.4	89.3	90.8	81.3	68.4	49.0	89.6
U.S. Nagar	31.6	50.6	10.5	85.5	88.7	68.5	68.4	49.4	89.5
Hardwar	31.6 51.0 9		9.1	89.7	91.6	77.6	68.4	49.0	90.9
Uttarakhand	32.4	51.0	11.3	88.5	90.7	77.4	67.6	49.0	88.7

Source: Census of India, 2011.

Table 7. Occupational structure by category of urban population in Uttarakhand, 2011 (% of main workers)

District/Region	C	Cultivato	rs	Agricu	ıltural La	aborers		rs in Hoi ndustrie	usehold es	Other workers			
	Person	Male	Female	Person	Male	Female	Person	Male	Female	Person	Male	Female	
Uttarkashi	7.5	4.1	19.4	0.9	0.8	1.1	3.7	3.9	2.9	87.9	91.1	76.6	
Chamoli	12.4	5.6	40.5	1.0	1.0	0.8	5.6	5.6	5.9	81.0	87.8	52.7	
Rudraprayag	6.3	2.7	23.0	2.9	1.7	8.5	4.7	4.7	5.1	86.1	90.9	63.5	
Tehri (Garhwal)	0.6	0.5	1.0	0.4	0.4	0.4	1.4	1.2	2.3	97.7	97.9	96.3	
Dehradun	0.9	0.8	1.4	1.3	1.3	1.2	3.8	3.7	4.6	94.0	94.2	92.8	
Pauri (Garhwal)	0.9	0.5	2.8	0.8	0.8	0.8	2.6	2.6	2.5	95.7	96.0	93.8	
Pithoragarh	3.2	1.8	8.8	0.5	0.5	0.4	2.5	2.3	3.3	93.8	95.4	87.5	
Bageshwar	4.4	3.6	7.8	1.6	1.0	4.0	1.5	1.6	1.2	92.5	93.9	87.0	
Almora	0.4	0.4	0.7	0.2	0.2	0.4	0.8	0.8	0.9	98.6	98.7	98.0	
Champawat	6.4	4.0	21.9	2.1	2.0	2.8	1.9	2.0	1.0	89.6	92.0	74.3	
Nainital	1.4	1.2	2.8	1.0	0.9	2.0	2.6	2.5	2.7	95.0	95.4	92.5	
U.S. Nagar	3.5	3.5	3.2	7.1	6.8	9.2	3.8	3.2	8.3	85.6	86.6	79.3	
Hardwar	1.6	1.7	0.7	2.4	2.5	1.6	3.8	3.4	6.7	92.2	92.4	91.0	
Uttarakhand	2.0	1.7	3.8	2.5	2.5	2.6	3.5	3.2	5.1	92.0	92.6	88.5	

Source: Census of India, 2011.

of the main workers and the maximum of 93.6% are found in Almora district. About 90.7% of the total male workers are registered as main workers in Uttarakhand, while only 77.4% in this category are females. The share of female workers varies from minimum 68.5% in U.S. Nagar to maximum 88.0% in Almora district.

One of the main criteria to classify any settlement

belonging to the urban category is occupation, followed by the Census of India. Analysing the data of different occupational categories in the urban centres of Uttarakhand, on an average, 2.0%, 2.5% and 3.5% of the total main workers are registered in the categories of cultivators, agricultural labourers and workers in household industries, respectively (Table 7). As per census norms,

92.0% of the main workers are registered as other workers i.e. the tertiary sector (white collar jobs). The percentage of other workers ranges from a minimum of 81.0% in Chamoli district to a maximum of 98.6% in Almora district. About 61% of the districts of Uttarakhand have more than 90% of other workers. Similarly, this type of workers also amounts to 92.6% of the total main male workers. U.S. Nagar district has the minimum (86.6%) of male other workers, while Almora district records the maximum (98.7%). Out of the total female main workers, 88.5% are considered to be in the 'other' category. Chamoli district has a minimum of 52.7% of female other workers, while Almora district occupies the first rank with 98.0% (Table 7).

VIII. Urbanization

The stage of socio-economic development of any society is often measured by the degree of urbanization attained by that particular society at a specified time and in an identified space. Due to insufficient demographic records, it is difficult to trace a systematic trend of urbanization in Uttarakhand. Historically, the region was ruled by various dynasties over different periods of time. Some historical or princely places became urban centres and their state capitals during various regimes. These capital cities switched from one place to another with the shift of powers of various Kingdoms, depending on the choice of their Ruler. G. W. Traill estimated in his settlement report in 1824 that Uttarakhand (rather Kumaun and Garhwal) had, in 1821, a population of 6,444 in four urban centres-Almora, Srinagar, Champawat, and Joshimath. Among these four, at that time, Almora had the maximum of 3,515 people living in 712 houses, while only 338 people lived in Champawat. The remaining 2,942 souls were registered in Srinagar and Joshimath in 1821.

There were twelve towns-Dehradun, Raipur, Landour, Mussoorie, Chakrata, Kalsi, Kashipur, Jaspur, Almora, Hardwar, Manglaur, Roorkee registered in the 1872 Census. All of these had indigenous origins. In the 1881 Census, six new places were recognized as towns, increasing the total number to eighteen. These six new towns were Srinagar, Kotdwar, Ranikhet, Nainital, Haldwani-Cum-Kathgodam, and Ramnagar. It is worth mentioning that some of these towns were established in the early years of the 19th century or before, due to their role as capitals of regional/local kings, cantonments, business/supply centres, hill towns, halting places etc. In the 1891 Census, five new places were recognized as new towns in Uttarakhand-Jhabrera, Rishikesh, Lansdown,

Kaladhungi, and Ranibagh-increasing the total number from eighteen to twenty-three. But in the 1901 Census, three-Kalsi, Raipur, and Ranibagh-were declassified and the total number of urban centres remained twenty in Uttarakhand. According to the fourth Census of India, in 1901, 7.8% of the total population (1,979,866 people) was living in the total of 20 towns of the present Uttarakhand. Although Dehradun and Hardwar districts were parts of Meerut and Shaharanpur commissionaires/districts in different years, the Census of India 2011 provides data related to the population and towns of the existing thirteen districts since 1901, which is the basis of the present discussion.

IX. Growth Profile

Table 8 reveals the urban population growth from 1901 to 2011 in Uttarakhand. At the beginning of the 20th century, the urban population accounted for 7.80% of the total population of Uttarakhand. The share of urban population increased to 8.46% and 9.23% in 1911 and 1921, according to the corresponding censuses. The decadal growth rate of urban population of Uttarakhand increased by 14.77% between 1901 and 1911, but it decreased from this percentage to 7.19% from 1911 to 1921. At the same time though, during the same decade, the volume of urban population to the total population increased. Due to the atmosphere at that time that centred on the struggle for freedom, coupled with natural calamities mostly in urban places, only 8.51% of the population was urban in 1931 and the decadal growth in urban population decreased from 7.19% to 0.27% between 1921 and 1931. In the 1941 Census, the share of urban population increased from 8.51% in 1931 to 10.34%. But the overall decadal growth rate in urban population was 27.60% during from 1931 to 1941. The speed of urbanization and decade to decade growth in 1941 is more or less similar to the one in 2011 (Table 8). However, the highest growth (32.77%) was registered in the decade of 1981 to 1991, followed by 1961 to 1971 (32.59%) and 1971 to 1981 (30.85%). In the Census of 2011, the share of urban population has reached more than 30%, with a total number of 115 towns.

X. Level of Urbanization

The distribution of urban population at district level also varies considerably within Uttarakhand from 1901 to 2011. There is a simple calculation to find out the degree of urbanization: the percentage of population living in towns to total population in any geographical unit

Table 8. Growth of urban population and towns in Uttarakhand, since 1901

Years	Total Population	Urban Population	Decadal of in Urb	oan	Urban Population to total Population	Towns		wns
			No.	%	%	No.	No.	%
1901	1,979,866	154,473	0	0.00	7.80	20	0	0.0
1911	2,142,258	181,241	26,768	14.77	8.46	20	0	0.0
1921	2,115,984	195,277	14,036	7.19	9.23	23	3	15.0
1931	2,301,019	195,797	520	0.27	8.51	25	2	8.7
1941	2,614,540	270,423	74,626	27.60	10.34	25	0	0.0
1951	2,945,929	398,296	127,873	32.11	13.52	34	9	36.0
1961	3,610,938	494,966	96,670	19.53	13.71	32	-2	-5.9
1971	4,492,724	734,276	239,310	32.59	16.34	40	8	25.0
1981	5,725,972	1,061,821	327,545	30.85	18.54	65	25	62.5
1991	7,050,634	1,579,295	517,474	32.77	22.40	76	11	16.9
2001	8,489,349	2,184,849	605,554	27.72	25.74	86	10	13.2
2011	10,086,292	3,026,203	841,354	27.80	30.00	115*	29	33.7

Note: *-Parts of Devprayag (NP) is considered as one town and included in Tehri district. Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

Table 9. District wise urban population of Uttarakhand, since 1901 (% of total population)

Year	Uttarkashi	Chamoli	Rudraprayag	Tehri (Garhwal)	Dehradun	Pauri (Garhwal)	Pithoragarh	Bageshwar	Almora	Champawat	Nainital	U.S. Nagar	Hardwar	Uttarakhand
1901	@	@	@	@@	22.66	2.57	@	@	5.46	@	10.89	14.04	17.28	7.80
1911	@	@	@	@@	26.81	3.08	@	@	6.50	@	11.98	14.73	19.08	8.46
1921	@	@	@	@@	30.89	3.06	@	@	4.73	@	17.66	15.33	21.46	9.23
1931	@	@	@	@@	28.01	1.99	@	@	4.82	@	19.32	15.35	19.30	8.51
1941	@	@	@	@@	35.26	2.84	0.74	@	4.83	@	21.51	26.51	21.86	10.34
1951	1.14	@	@	2.15	46.80	4.38	0.80	@	5.87	@	26.30	17.85	24.89	13.52
1961	2.18	@	@	2.43	46.11	5.77	0.00	@	6.48	@	26.22	14.45	23.97	13.71
1971	4.07	5.71	@	2.94	47.08	6.40	3.81	2.62	7.19	4.98	30.36	15.90	25.87	16.34
1981	6.34	10.95	0.85	4.60	48.21	8.11	6.24	2.22	7.71	8.64	32.11	24.20	21.82	18.54
1991	7.20	11.90	0.92	6.32	46.00	10.45	8.57	2.55	7.82	13.67	33.23	31.60	30.96	22.40
2001	7.77	13.69	1.20	9.99	53.80	12.89	12.13	3.16	8.61	15.04	35.27	32.62	30.69	25.74
2011	7.36	15.17	4.10	11.33	55.52	16.40	14.40	3.49	10.01	14.77	38.94	35.58	36.66	30.23

Note: @@Tehri was a Princely State up to 1949. @Did not exist as a separate district and its population included in their parental district. #U.S. Nagar was a part of Nainital district up to 29 December 1995.

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

registered as urban population. Table 9 reveals the urban population at district level, since 1901. As per Census of 2011, there were only six districts with available data for the analysis in 1901, when only 7.80% of the population was registered as urban in the whole of Uttarakhand. In 1901, Dehradun was at the top with 22.66% of urban population out of the entire population of the district, followed by Hardwar with 17.28%, U.S. Nagar with 14.04% and Nainital with 10.89% of urban population. In hilly districts, Almora had the maximum of 5.46% followed by Pauri with 2.57% of urban population.

If we look at the concentration of urban population in any district out of the total urban population of the state, district Hardwar ranked at the top with the maximum of 36.89%. It means that Hardwar was a bigger town than Dehradun, concentrating the maximum of urban population of the state in 1901, followed by Nainital with 26.04% of urban population. The remaining share of less than one third urban population was in Nainital, U.S. Nagar, Almora and Pauri.

In the 1911 Census, the share of urban population to total population was slightly increased. It is worthwhile

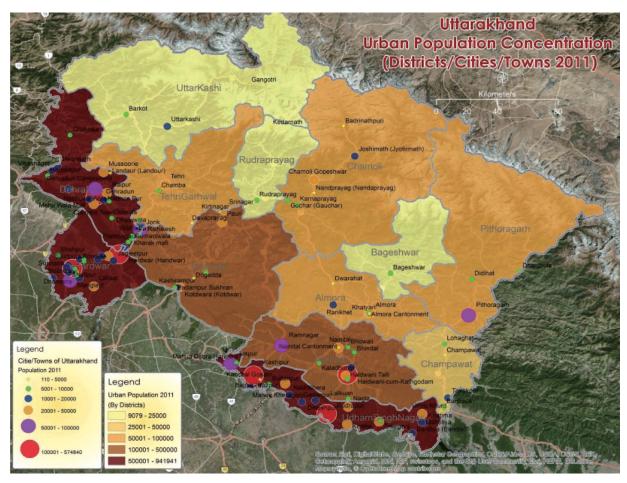


Figure 4. Concentration of population in districts and cities, 2011 Source: Based on Census of India, 2011.

to note that, from 1921 to 1931, the urban population in Almora and Pauri districts decreased to the extent that the overall share of urban population in the state was recorded with 8.51% less than the previous decade. The following decades of registered 10.34% in 1941, while in 1951 and 1961, the urban population remained stagnant, around 13%. After 1971, the urban population grew rapidly reaching the maximum of 30% in 2011. More than 55% of the total population is living in towns in the Dehradun district in 2011. Nainital district stood in second place with 38.94% urban population, while Hardwar and U.S. Nagar occupy the third and the fourth place, respectively, with 36.66% and 35.58% of urban population. If we look at the growth in the number of towns, the maximum of 29 towns are added after the creation of the state between 2001 and 2011 followed by 25 towns between 1971 and 1981. It is clear from the Table 9 that in mountainous districts, urban population grew slowly due to topographical barriers as well as low economic development. As a result, Uttarkashi, Rudraprayag, Bageshwar, Tehri, and even Almora and Pauri have a low percentage of urban population. The study shows that of the total of 115 towns in Uttarakhand,

only 38 towns are situated in the hills, with only 440,946 (14.56%) urban population while the remaining 77 towns are located in the plains, with 2,587,409 (85.44%) urban population (Figure 4).

XI. Growth of Urban Population

In the beginning of the twentieth century, the urban population in the Uttarakhand was only 17.3% (26,768 persons) in 1901, lower than the national average of 10.29% (Pant et al., 2018). There was only 20 urban centres in 1901 census. It is interesting to see that out of 20 towns; maximum 5 towns were in Dehradun, followed by Nainital and Hardwar with 4 and 10 centres each. Remaining seven urban locations were Pauri, Almora and U.S. Nagar districts. The urban population of the Uttarakhand had increased by 17.3% during 1901 to 1911 which is more than the national growth during the same period. The growth of urban population in the Uttarakhand and country has been fluctuating from decade to decade due to changes in the definition of standards of urban population. Only six districts had urban population in 1901. These were Almora, Dehradun, Pauri, Hardwar, U.S.

Nagar and Nainital.

During 1911 to 1921 decade, it registered 7.7% urban growth in the Uttarakhand while it was only 0.36% at the national level. Among Uttarakhand districts Nainital had 26.2% growth followed by Dehradun with 19.4%, while Almora and U.S. Nagar registered negative growth of 26.6% and 10.9% respectively. The growth in urban population decreased considerably from 7.7% to 0.3% in the next decade of 1921 to 1931 as against the growth which was recorded by the country in same decade. During this decade Dehradun and Pauri districts had 28.3% and 1.6% negative growth respectively and remaining districts showed positive but lower growth rate than previous decade. The pace of urban growth in the districts of Uttarakhand during 1901 to 1921 was very slow. The year 1941 marks a significant demographic divide in the history of urban growth both in the country (Table 10). Average urban growth rate in the Utarakhand and the country slowed down further in 1931. About 10.34% of the total population was urban in the Utarakhand in 1941 census which was lower than the country average of 13.86%. But a higher urban growth of 38.1% was recorded between 1931 to 1941 in the Utarakhand which was higher than country's growth (31.98%). It is thus implied that the pace of urban development in the Utarakhand was high than that of the country average. The rate of urban growth since 1931 has been increasing except during 1951 to 1961. It was due to new towns were included in the category of urban centres. It may be worth to mention here that the fall in average growth rate of urban population during 1951 to 1961 was due to a conceptual change in the definition of urban centres. The definition of an urban centre in India was rationalised and made stricter at the time of 1961 census. As a result, a large number of towns were de-classified. The growth of urban population in the Utarakhand as well as in the country as a whole again picked up in the subsequent decades reaching over 48.3% during 1961 to 1971 and 44.6% during 1971 to 1981 respectively. Table 10 reveals same trend in the all districts of Utarakhand during same specified decades.

The Utarakhand has recorded 38.3% urban growth during 1991 to 2001 decade which is much higher than the urban growth of the nation (32.6%). In 2011, the percentage of urban population has gone up to 30.23% in the Utarakhand and 31.14% in India. The number of urban dwellers in the Utarakhand increased from 2001 to 2011. Thus, there was an increase of 30.23% and 31.8% urban population respectively in the Utarakhand and country just in a decade. In 2001 there were 86 towns in the Utarakhand, and with the addition of 29 towns it reached to 115 in 2011. Thus, there was an increase of 33.72% in the number of towns in the Utarakhand during the same decade. It reflects that a significant number of large villages earned the urban status for the first time in 2011 as census towns. The largest increase in the number of towns was in the category of 41 census towns which sharing 35.65% of the total 115 towns. These are those large villages which are generally situated almost in the plain areas of Tarai, Bhabar and Duns which grew into a small town.

Table 10. Districts wise growth of urban population in the Uttarakhand since 1901–2011(%)

SI. No.	District Name	1901– 1911	1911– 1921	1921- 1931	1931– 1941	1941- 1951	1951– 1961	1961– 1971.	1971- 1981	1981– 1991.	1991– 2001	2001– 2011.
1	Uttarkashi	@					122.2	124.9	101.2	42.5	32.8	6.1
2	Chamoli	@							138.0	33.2	31.0	17.1
3	Rudraprayag	@	@							27.0	48.2	263.3
4	Tehri (Garhwal)	@					27.8	38.5	95.2	60.1	83.8	16.0
5	Dehradun	36.3	19.4	-1.6	45.6	80.6	16.9	37.4	35.1	28.5	46.2	35.8
6	Pauri (Garhwal)	33.9	0.5	-28.3	60.5	64.0	50.3	27.1	46.2	39.9	28.2	20.8
7	Pithoragarh	@				21.4	-100.0	0.0	90.8	56.7	57.1	24.1
8	Bageshwar	@							1.3	32.1	35.2	16.4
9	Almora	38.0	-26.6	12.3	18.0	36.5	25.6	27.7	24.2	10.4	14.2	14.3
10	Champawat	@							117.4	100.0	29.4	13.5
11	Nainital	9.8	26.2	9.6	17.2	40.5	37.1	42.6	46.0	34.7	40.9	38.2
12	U.S. Nagar	4.8	-10.9	0.3	81.8	-22.6	79.0	64.7	125.4	80.6	37.9	42.2
13	Hardwar	4.3	6.9	0.2	28.1	30.5	13.7	43.5	11.9	79.2	27.6	56.1
	Uttarakhand	17.3	7.7	0.3	38.1	47.3	24.3	48.3	44.6	48.7	38.3	38.5

Note: @Did not exist as a separate district.

XII. Growth of Towns

The settlements that were given urban status in the first Census of 1881 were capitals of princely states, administrative headquarters of districts, cantonments, hill stations, education centres, religious centres, and business and supply centres. The British influence was more effective in creating the infrastructure for urbanization in most of Himalayan towns. There were no such records available about the urban centres before the first three censuses of 1872, 1881 and 1891. There were 20 towns in the Uttarakhand state in the first census of the century-1901 (Table 11). These 20 towns were Dehradun, Hardwar, Roorkee, Kashipur, Manglaur, Almora, Haldwani-Cum-Kathgodam, Nainital, Jaspur, Mussoorie, Ramnagar, Lansdowne Cantonment, Jhabrera, Ranikhet Cantt., Srinagar, Landour Cantt., Rishikesh, Kaladhungi, Chakrata Cantonment, and Kotdwara. Among them, Dehradun district held the maximum number of townsfive and four were in Hardwar and Nainital districts, each. In the 1911 Census, there were again 20 towns in Uttarakhand, but one town-Kaladhungi from Nainital district-was declassified, and one town-the Roorkee cantonment-was recognized as a town of the Hardwar district. In 1921, three towns (15%) were added, reaching to a total of 23 towns. Bhimtal and Bhawali were included as towns in Nainital district and Pauri was recognized as a town in the district with the same name. The remaining districts suffered no change in this decade. In the Census of 1931, only one town-Kotdwar-was declassified and three cantonments-Almora, Nainital and Dehradun were included on the list of towns in Uttarakhand. During the period from 1931 to 1941, Bhimtal town in Nainital district was declassified and Pithoragarh got urban status for the first time. This way, the total number of towns remained the same. In the first census of the independent Republic of India in 1951, nine new towns were introduced in Uttarakhand and the total number reached 34 towns. It is worth mentioning that Kotdwar regained its urban status and Dogadda was recognized for the first time in Pauri district. Five new towns in Tehri District (Princely state Tehri Garhwal was included in U.P. in 1949)-Narendranagar, Tehri, Devprayag, Muni Ki Reti, and Kirtinagar-were recognized as urban centres for the first time. Uttarakash and Clement Town also got urban status in 1951. According to their population size, towns changed their urban class in various decades. In the 1961 Census, four towns-Jhabrera, Muni Ki Reti, Kirtinagar, and Pithoragarh-were excluded from the urban list, but Rudrapur and Raipur gained town status for the first time. From 1971 onwards, the number of towns increased decade to decade, reaching to 115 in 2011. In the whole of Uttarakhand, Hardwar district holds the maximum number of 24 urban centres followed by 22 in Dehradun and 19 towns in U.S. Nagar. The capitals of native principalities, centres of commercial activities located at the entrance of various hill routes, pilgrimage centres and administrative headquarters have provided the initial base

Table 11. District wise towns in Uttarakhand since 1901

SI. No.	District Name	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011
1	Uttarkashi@						1	1	1	2	3	3	3
2	Chamoli@								2	6	6	6	6
3	Rudraprayag@									2	2	2	2
4	Tehri@@						5	3	4	5	5	7	7
5	Dehradun	5	5	5	6	6	7	8	9	10	12	15	22
6	Pauri (Garhwal)	3	3	4	3	3	5	5	5	5	5	6	8
7	Pithoragarh@					1	1		1	3	3	3	3
8	Bageshwar@								1	1	1	1	1
9	Almora	2	2	2	3	3	3	3	3	4	4	4	5
10	Champawat@								1	3	4	4	4
11	Nainital	4	3	5	6	5	5	5	5	8	8	8	11
12	U.S. Nagar#	2	2	2	2	2	2	3	3	9	15	17	19
13	Hardwar	4	5	5	5	5	5	4	5	7	8	10	24
	Total	20	20	23	25	25	34	32	40	65	76	86	115

Note: @@Tehri Garhwal was a Princely State up to 1949. @Did not exist as a separate district and its population included in their parental district. #U.S. Nagar was a part of Nainital district up to 29 December 1995. Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

of urbanization in the Uttarakhand. The army stations, cantonments, hill and health resorts (sanatoria), as well as educational centres created by the British rulers also contributed to the growth of urbanization. In general, the level of urbanization in the Uttarakhand region has been considerably high even after the inhospitable physical conditions, although most of the towns are small in size.

XIII. Towns by Size Class

The study of size class distribution and growth in number of towns is a dominant indicator of urbanization. However, the size class of each town represents both the qualitative and quantitative changes of the urban population. The census of India classified the urban places into six categories from class I to class VI.

Class I towns are those with a population of 100,000 or more; class II towns have between 50,000 and 99,999 people; class III towns are those having a population between 20,000 and 49,999; class IV towns are those with a population between 10,000 and 19,999; class V towns are those containing between 5,000 and 9,999 residents; and class VI towns are those with a population of less than 5,000. Out of the 115 urban centres in 2011, 6 are in the class I category, 6 in class II, 19 in class III, 33 in class IV, 37 in

class V and 14 in class VI category. Table 12 portrays the size class distribution of towns from Census 1901 to 2011.

In 1901, there were 20 towns registered. From among them, 55% (11), having 18.4% of the total urban population, were classified as class VI towns. Only 20% (4) of the towns were class V, with more population than that of the ones belonging to class VI (19.1%) (Table 13). Only two towns (10%)—Dehradun and Hardwar had the maximum of 36.6% urban population. There was no class I and class II towns in 1901. Roorkee, Kashipur and Manglaur had about one fourth (25.9%) urban population in 1901.

In the 1911 census, there was no change in the total number of towns, but some of them had changed their status according to population size. Table 14 reveals the changing status and volume of population in different size class towns. Almora and Nainital improved their status from V to IV, while the status of Manglaur was reduced with one class, gaining a lower than previously held status. Kaladhungi was declassified and Roorkee Cantonment was included for the first time in 1911, as a class VI town.

The Census from 1921 included three more towns—Bhimtal, Bhowali and Pauri—and the total number of towns reached 23 in Uttarakhand. Dehradun upgraded to one class higher, from class III to class II holding the maximum of 26.1% of the total urban population. Almora

	Iab	ie iz.	Null	וטפו טו	towns	b by SIZ	e Class	, 1901	-2011			
SIZE CLASS TOWN	1901	1911	1921	1931	1941	1951	1961	1971	1981	1991	2001	2011
I CLASS TOWN	0	0	0	0	0	1	1	1	1	3	3	6
II CLASS TOWN	0	0	1	0	1	1	1	2	3	3	5	6
III CLASS TOWN	2	2	1	2	2	3	4	5	10	15	16	19
IV CLASS TOWN	3	4	3	4	7	4	7	12	13	16	16	33
V CLASS TOWN	4	6	7	5	5	8	8	11	12	14	29	37
VI CLASS TOWN	11	8	11	14	10	17	11	9	26	25	17	14
Total	20	20	23	25	25	34	32	40	65	76	86	115

Table 12. Number of towns by size class, 1901–2011

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

Table 13. Population according to class of towns, 1901

Class of		Town	Рорі	ulation	Name of Towns
Towns	No.	% of total	No.	% of total	Name of fowns
1	0	0.0	0	0.0	
Ш	0	0.0	0	0.0	
III	2	10.0	56,592	36.6	Dehradun and Hardwar.
IV	3	15.0	39,934	25.9	Roorkee, Kashipur, and Manglaur.
V	4	20.0	29,477	19.1	Almora, Haldwani-Cum-Kathgodam, Nainital, and Jaspur.
VI	11	55.0	28,470	18.4	Mussoorie, Ramnagar, Lansdowne, Jhabrera, Ranikhet, Srinagar, Landour, Rishikesh, Kaladhungi, Chakrata, and Kotdwara.
Total	20	100.0	154,473	100.0	

Table 14. Population according to class of towns, 1911

Class of	Town		Population		Name of Towns
Towns	No.	% of total	No.	% of total	
I	0	0	0	0.0	
II	0	0	0	0.0	
III	2	10	71,250	39.3	Dehradun and Hardwar.
IV	4	20	50,187	27.7	Roorkee, Kashipur, Almora, and Nainital.
V	6	30	42,111	23.2	Manglaur, Haldwani-Cum-Kathgodam, Jaspur, Mussoorie, Lansdowne, and Ranikhet.
VI	8	40	17,693	9.8	Ramnagar, Roorkee (CB). Srinagar, Rishikesh, Jhabrera, Chakrata, Landour, and Kotdwara.
Total	20	100.0	281,241	100.0	

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand. CB- Cantonment Board.

Table 15. Population according to class of towns, 1921

Class of	Town		Population		Name of Towns
Towns	No.	% of total	No.	% of total	ivallie of fowns
I	0	0.0	0	0.0	
II	1	4.3	50,858	26.1	Dehradun
III	1	4.3	30,764	15.8	Hardwar.
IV	3	13.0	38,522	19.7	Roorkee, Nainital, and Kashipur.
V	7	30.5	50,853	26.0	Manglaur, Haldwani-Cum-Kathgodam, Almora, Mussoorie, Jaspur, Lansdowne, and Ramnagar.
VI	11	47.9	24,280	12.4	Roorkee (CB), Ranikhet, Rishikesh, Jhabrera, Srinagar, Pauri, Bhimtal, Chakrata, Landour, Bhowali, and Kotdwara.
Total	23	100.0	195,277	100.0	

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

slipped one class, falling from IV to V. Table 15 shows that a total of 11 towns (47.9%) had below 5,000 population i.e. class VI town, while 7 (30.5%) were classified as class V town.

During the 10-year period between 1921 and 1931, Kotdwar was declassified and three cantonments – Almora, Dehradun, and Nainital – were included in the list of urban places. Due to the creation of Dehradun cantonment, Dehradun (old) could not sustain its old status and was included in class III towns in 1931. However, Hardwar and Dehradun (39.0%) contributed to the maximum share of urban population of the state. It is interesting to see that 56.0% of the towns had merely 16.8% of urban population in 1931 Census (Table 16).

In 1941, Pithoragarh was for the first time included in the category of towns, while Bhimtal was declassified due to not fulfilling the norms of a town. The total number of towns was the same as in 1931. Dehradun jumped one class higher, with 22.0% of the total urban population. Dehradun Cantonment was promoted from class V to class III town category. Table 17 shows that 40.0% of the towns had only 6.6% of the total urban population.

It is clear from the table that the population size of towns in Uttarakhand is very small, apart from some big cities. Nine towns grew during the decade of 1941 to 1951, reaching the total number of 34 towns. In this decade, all new towns were developed in the mountainous region, except Muni Ki Reti and Kotdwara, which simply regained their old town status. For the first time, Dehradun and Hardwar were upgraded to class I and II town status, respectively. Some other towns also got higher status in 1951 (Table 18).

In 1961 Census, four towns–Jhabrera, Kirtinagar, Muni Ki Reti and Pithoragarh–were declassified, while two–Rudrapur and Raipur–were included in the town category. Dehradun alone had 28.5% of the total urban population of the state and maintained the class I urban status. In this census year, 34.4% (11) of the towns had only 5.0% population. About 26.9% of the urban population was living in 12.5% (4) of towns. These were Haldwani-Cum-Kathgodam, Roorkee, Dehradun (CB) and Kashipur. Table 19 portrays the population and number of towns in 1961.

In the 1971 Census, Haldwani-Cum-Kathgodam was upgraded from III to a class II town. Also, eight new towns were added in the urban category. These were Bageshwar, Bharat Heavy Electricals Limited Ranipur, Chamoli-Gopeshwar, Joshimath, Muni Ki Reti, Pithoragarh, Vikasnagar and Tanakpur. Pithoragarh and Muni Ki

Table 16. Population according to class of towns, 1931

Class of	Town		Population		Name of Towns
Towns	No.	% of total	No.	% of total	ivanie oi rowns
I	0	0.0	0	0.0	
II	0	0.0	0	0.0	
III	2	8.0	76,493	39.0	Dehradun and Hardwar.
IV	4	16.0	46,552	23.8	Roorkee, Haldwani-Cum-Kathgodam, Kashipur, and Manglaur.
V	5	20.0	39,863	20.4	Nainital, Dehradun (CB), Almora, Jaspur, and Ramnagar.
VI	14	56.0	32,889	16.8	Mussoorie, Lansdowne, Rishikesh, Ranikhet, Roorkee (CB), Jhabrera, Bhimtal, Srinagar, Chakrata, Landour, Almora (CB), Nainital (CB), Pauri and Bhowali.
Total	25	100.0	195,797	100.0	

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

Table 17. Population according to class of towns, 1941

Class of		Town	Рори	ulation	Name of Towns
Towns	No.	% of total	No.	% of total	
I	0	0.0	0	0.0	
II	1	4.0	59,535	22.0	Dehradun.
III	2	8.0	61,868	22.9	Hardwar and Dehradun (CB).
IV	7	28.0	98,135	36.3	Jaspur, Haldwani-Cum-Kathgodam, Roorkee (CB), Kashipur, Manglaur, Almora, and Roorkee.
V	5	20.0	32,915	12.2	Nainital, Ramnagar, Lansdowne, Mussoorie, and Rishikesh.
VI	10	40.0	17,970	6.6	Ranikhet, Pauri, Jhabrera, Srinagar, Pithoragarh, Landour, Bhowali, Chakrata, Almora (CB), and Nainital (CB).
Total	25	100.0	270,423	100.0	

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

Table 18. Population according to class of towns, 1951

Class of Town Population Name of Towns	Name of Towns				
Towns	No.	% of total	No.	% of total	INGITIC OF TOWITS
I	1	2.9	116,404	29.2	Dehradun.
II	1	2.9	57,338	14.4	Hardwar.
III	3	8.8	76,116	19.1	Dehradun (CB), Haldwani-Cum-Kathgodam, and Roorkee.
IV	4	11.8	54,814	13.8	Kashipur, Manglaur, Nainital, and Almora.
V	8	23.5	63,737	16.0	Roorkee (CB), Ramnagar, Ranikhet, Jaspur, Clement Town, Rishikesh, Mussoorie, and Pauri.
VI	17	50.0	39,887	7.5	Kotdwara, Lansdowne, Tehri, Srinagar, Jhabrera, Bhowali, Pithoragarh, Landour, Narendranagar, Chakrata, Dogadda, Uttarkashi. Devprayag, Nainital (CB), Almora (CB), Muni Ki Reti, and Kirtinagar.
Total	34	100.0	398,296	100.0	

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

Table 19. Population according to class of towns, 1961

Class of	Town		Population		Name of Towns
Towns	No.	% of total	No.	% of total	Name of Towns
I	1	3.1	129,764	28.5	Dehradun.
II	1	3.1	59,960	13.2	Hardwar.
III	4	12.5	122,524	26.9	Haldwani-Cum-Kathgodam, Roorkee, Dehradun (CB), and Kashipur.
IV	7	21.9	52,436	11.6	Almora, Manglaur, Nainital, Ramnagar, Roorkee (CB), Rishikesh, and Ranikhet.
V	8	25.0	67,336	14.8	Mussoorie, Jaspur, Rudrapur, Raipur, Kotdwara, Clement Town, Pauri, and Lansdowne.
VI	11	34.4	22,946	5.0	Tehri, Chakrata, Srinagar, Uttarkashi, Dogadda, Narendranagar, Bhowali, Devprayag, Landour, Nainital (CB), and Almora (CB).
Total	32	100.0	454,966	100.0	

Reti again, got their urban status. Dehradun, the single class I town kept 23.1% of the total urban population. The maximum number of 12 (30.0%) towns held the maximum percentage of 24.8% of the urban population. These were Manglaur, Almora, Mussoorie, Rishikesh, Ramnagar, Roorkee (CB), Ranikhet, Jaspur, Bharat Heavy Electricals Limited Ranipur, Pithoragarh, Clement Town and Kotdwara. Table 20 shows that 22.5% of the towns had only 2.5% population, while 5.0% (2) towns contributed with 17.9% to the urban population. Until 1971, the population size of most towns in Uttarakhand was very small.

The number of towns drastically increased from 40 to 65 in Uttarakhand from the 1971 to the 1981 Census (Table 21). These were Badrinathpuri, Bajpur, Barkot, Bhimtal, Champawat, Dharchula, Didihat, Dwarahat, Gadarpur, Gochar, Jhabrera, Kaladhungi, Karnaprayag, Kedarnath, Khatima, Kichha, Kirtinagar, Lalkuan, Landhaura, Lohaghat, Nandprayag, Rudraprayag,

Sitarganj, Sultanpur, Virbhadra IDPL. There were 40.0% (26) of the towns in class VI category, with only 5.9% of the total population. These were Sultanpur, Bageshwar, Karnaprayag, Narendranagar, Gochar, Bhowali, Lalkuan, Kaladhungi, Dharchula, Bhimtal, Badrinathpuri, Lohaghat, Dwarahat, Muni Ki Reti, Dogadda, Barkot, Didihat, Almora (CB), Landour, Champawat, Devprayag, Rudraprayag, Nainital (CB), Nandprayag, Kirtinagar, and Kedarnath. Most of the urban population (28.4%) was in class III towns, which were 10 in number. Table 21 reflects the size class distribution in 1981. It shows that 38.8% population was in only four (6.1%) towns-Dehradun, Haldwani-Cum-Kathgodam, Roorkee and Kashipur.

There were 19.7%, the equivalent of 11 new towns (about 17% of the total towns) added from 1981 to 1991. These were Banbasa, Dineshpur, Doiwala, Gangotri, Herbertpur, Kela Khera, Laksar, Mahua Dabra Haripura, Mahua Kheraganj, Nagla, and Shaktigarh. Table 22 reveals that 25 (32.9%) towns were in class VI category, with only

Table 20. Population according to class of towns, 1971

Class of	Т	own	Population		Name of Towns
Towns	No.	% of total	No.	% of total	Name of Towns
I	1	2.5	169,827	23.1	Dehradun.
II	2	5.0	131,482	17.9	Hardwar and Haldwani-Cum-Kathgodam.
III	5	12.5	163,814	22.3	Roorkee, Dehradun (CB), Kashipur, Rudrapur, and Nainital.
IV	12	30.0	181,962	24.8	Manglaur, Almora, Mussoorie, Rishikesh, Ramnagar, Roorkee (CB), Ranikhet, Jaspur, Bharat Heavy Electricals Limited Ranipur, Pithoragarh, Clement Town, and Kotdwara.
V	11	27.5	69,203	9.4	Pauri, Vikasnagar, Lansdowne, Chamoli Gopeshwar, Chakrata, Uttarkashi, Tanakpur, Joshimath, Srinagar, Tehri, and Raipur.
VI	9	22.5	17,988	2.5	Bageshwar, Narendranagar, Landour, Bhowali, Dogadda, Devprayag, Almora (CB), Nainital (CB), and Muni Ki Reti.
Total	40	100.0	734,276	100.0	

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

Table 21. Population according to class of towns, 1981

Class of		Town	Popul	lation	Name of Towns
Towns	No.	% of total	No.	% of total	Name of Towns
I	1	1.5	220,530	20.8	Dehradun.
II	3	4.6	190,924	18.0	Haldwani-Cum-Kathgodam, Roorkee, and Kashipur.
III	10	15.4	301,887	28.4	Hardwar, Dehradun (CB), Rudrapur, Bharat Heavy Electricals Limited Ranipur, Rishikesh, Ramnagar, Manglaur, Nainital, Jaspur, and Almora.
IV	13	20.0	188,835	17.8	Ranikhet, Pithoragarh, Roorkee (CB), Kotdwara, Mussoorie, Clement Town, Pauri, Kichha, Raipur, Virbhadra IDPL, Tehri, Bajpur, and Uttarkashi.
V	12	18.5	96,617	9.1	Chamoli Gopeshwar, Sitarganj, Srinagar, Vikasnagar, Tanakpur, Joshimath, Khatima, Lansdowne, Landhaura, Gadarpur, Jhabrera, and Chakrata.
VI	26	40.0	63,028	5.9	Sultanpur, Bageshwar, Karnaprayag, Narendranagar, Gochar, Bhowali, Lalkuan, Kaladhungi, Dharchula, Bhimtal, Badrinathpuri, Lohaghat, Dwarahat, Muni Ki Reti, Dogadda, Barkot, Didihat, Almora (CB), Landour, Champawat, Devprayag, Rudraprayag, Nainital (CB), Nandprayag, Kirtinagar, and Kedarnath.
Total	65	100.0	1,061,821	100.0	

4.6% of the total urban population. In the 1991 Census, about one third (33.1%) of the urban population was concentrated in class I towns. These were Dehradun, Hardwar and Haldwani-Cum-Kathgodam. Out of the total urban population, 28.1% was located in 15 towns. These were Rishikesh, Dehradun (CB), Bharat Heavy Electricals Limited Ranipur, Ramnagar, Manglaur, Jaspur, Nainital, Pithoragarh, Mussoorie, Almora, Nagla, Kotdwara, Kichha, Pauri and Tehri. The number of towns shifted from lower class to upper size class towns every decade. In 1991, three towns were in class I category and three towns in class II.

The total number of towns reached 86 in 2001. Ten new towns (about a 13.2% increase in total) got their urban status between 1991 and 2001. These were Bandiya, Central Hope Town, Chamba, Dhaluwala, Dhandera, Jiwangarh, Kanchal Gosain, Kashirampur, Maohanpur

Mohammadpur, Pratitnagar, and Devprayag (II-Part). In the present study, the population of Devprayag (II-Part) is included in Devprayag part I, which was a separate town. Devprayag Nagar Palika is spread over two districts, divided by the Alaknanda River: Devprayag part I is in Tehri and its population is larger than that of Devprayag part II, which is in Pauri district. Table 23 reveals that 53.5% of the towns (46) were categorized in class V and VI, with only 12.0% of the total urban population, while 34.8% of the urban population was residing in the class I towns of Dehradun, Hardwar, and Haldwani-Cum-Kathgodam. In 2001 Dehradun Cantonment and Rishikesh upgraded from class III in 1991 to class II in 2001. About 23.2% of the urban population was in class III towns. These were Ramnagar, Pithoragarh, Bharat Heavy Electricals Limited Ranipur, Manglaur, Jaspur, Nainital, Kichha, Almora, Mussoorie, Tehri, Kotdwara, Raipur,

Table 22. Population according to class of towns, 1991

Class of		Town	Popu	lation	Name of Towns
Towns No. % of total No. % of total	Name of Towns				
I	3	3.9	523,365	33.1	Dehradun, Hardwar, and Haldwani-Cum-Kathgodam.
II	3	3.9	211,412	13.4	Roorkee, Kashipur, and Rudrapur.
III	15	19.7	443,644	28.1	Rishikesh, Dehradun (CB), Bharat Heavy Electricals Limited Ranipur, Ramnagar, Manglaur, Jaspur, Nainital, Pithoragarh, Mussoorie, Almora, Nagla, Kotdwara, Kichha, Pauri, and Tehri.
IV	16	21.1	236,802	15.0	Srinagar, Raipur, Clement Town, Ranikhet, Bajpur, Sitarganj, Virbhadra IDPL, Laksar, Chamoli Gopeshwar, Uttarkashi, Tanakpur, Landhaura, Joshimath, Khatima, Vikasnagar, and Roorkee (CB).
V	14	18.4	92,067	5.8	Gadarpur, Herbertpur, Jhabrera, Doiwala, Lansdowne, Mahua Kheraganj, Banbasa, Dineshpur, Sultanpur, Bageshwar, Mahua Dabra Haripura, Lalkuan, Karnaprayag, and Kela Khera.
VI	25	32.9	72,005	4.6	Narendranagar, Chakrata, Kaladhungi, Muni Ki Reti, Dharchula, Gochar, Bhowali, Bhimtal, Lohaghat, Shaktigarh, Didihat, Barkot, Landour, Dwarahat, Champawat, Dogadda, Devprayag, Almora (CB), Rudraprayag, Nandprayag, Nainital (CB), Kirtinagar, Badrinathpuri, Kedarnath, and Gangotri.
Total	76	100.0	1,579,295	100.0	

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

Table 23. Population according to class of towns, 2001

Class of	Class of Town	Town	Population		Name of Towns
Towns	No.	% of total	No.		Mattle Of TOWER
- 1	3	3.5	760,910	34.8	Dehradun, Hardwar, and Haldwani-Cum-Kathgodam.
II	5	5.8	399,023	18.3	Roorkee, Kashipur, Rudrapur, Rishikesh, and Dehradun (CB).
III	16	18.6	508,110	23.2	Ramnagar, Pithoragarh, Bharat Heavy Electricals Limited Ranipur, Manglaur, Jaspur, Nainital, Kichha, Almora, Mussoorie, Tehri, Kotdwara, Raipur, Pauri, Nagla, Sitarganj, and Bajpur.
IV	16	18.6	255,202	11.7	Chamoli Gopeshwar, Srinagar, Clement Town, Ranikhet, Laksar, Roorkee (CB), Uttarkashi, Landhaura, Tanakpur, Dhandera, Khatima, Gadarpur, Joshimath, Virbhadra IDPL, Vikasnagar, and Dhaluwala.
V	29	33.7	216,412	9.9	Jhabrera, Herbertpur, Kashirampur, Bandiya, Mahua Kheraganj, Dineshpur, Jiwangarh, Maohanpur Mohammadpur, Banbasa, Doiwala, Lansdowne, Muni Ki Reti, Bageshwar, Kela Khera, Central Hope Town, Sultanpur, Gochar, Pratitnagar, Karnaprayag, Chamba, Lalkuan, Dharchula, Kaladhungi, Mahua Dabra Haripura, Barkot, Bhimtal, Lohaghat, Bhowali, and Narendranagar.
VI	17	19.8	45,192	2.1	Didihat, Shaktigarh, Kanchal Gosain, Champawat, Chakrata, Landour, Dwarahat, Dogadda, Devprayag, Rudraprayag, Almora(CB), Nandprayag, Badrinathpuri, Nainital (CB), Kirtinagar, Gangotri, and Kedarnath.
Total	86	100.0	2,184,849	100.0	

Pauri, Nagla, Sitarganj and Bajpur. Class II category of towns, namely Roorkee, Kashipur, Rudrapur, Rishikesh and Dehradun (CB) had 18.3% of the urban population of the state. The number of towns that had changed their urban status during the decade of 1991 to 2001 did so due to the rapid growth in urban population and continued migration from rural areas to the newly emerging towns of the state.

In the 2011 Census, a maximum of 29 towns were added to the total number in Uttarakhand, growing from 86 in 2001 to 115. These are Bahadarabad, Bangherimahabatpur (Must), Bhagwanpur, Fatehpur Range (Dhamua Dunga Area), Gumaniwala, Haldwani Talli, Haripur Kalan, Jagjeetpur, Jonk, Khanjarpur, Kharak mafi, Khatyari, Maholiya, Mehu Wala Mafi, Mukhani, Nagala Imarti, Natthan Pur, Natthuwa Wala, Padali Gujar, Padampur Sukhran, Piran Kaliyar, Rawali Mahdood, Rishikesh, Saidpura, Salempur Rajputan, Shafipur, Shahpur, Sunhaira, and Umru Khurd. Most of these towns are recognized as census towns. It is clear from the Table 24 that 1.1% of the urban population of Uttarakhand is in 12.5% of the class VI towns, while 45.7% of the population is within the 6 (5.2%) class I towns. These six towns are Dehradun, Hardwar, Haldwani-Cum-Kathgodam, Rudrapur, Kashipur and Roorkee, recently notified as

Municipal Corporation. In the 2011 Census, Rudrapur, Kashpur, and Roorkee upgraded their urban status from class II to class I towns. Nineteen class III towns had 17.7% of the total urban population. These are Bharat Heavy Electricals Limited Ranipur (ITS), Kichha, Nainital (MB), Almora (MB), Raipur, Mussoorie, Sitarganj, Kotdwara, Bajpur, Pauri, Tehri, Dhandera, Clement Town (CB), Mukhani, Nagla, Laksar, Chamoli–Gopeshwar, Umru Khurd and Srinagar. Table 24 shows class and status wise towns in 2011.

XIV. Population by Urban Status

The Census of India has classified the towns, giving them various statuses, but in Uttarakhand there are six types of towns. Table 25 shows the population, number of towns, sex ratio and percentage of their status-wise total population. The maximum of 51.57% of the total urban population was registered in 32 Municipal Boards, while 18.85% belonged to only one Municipal corporation in 2011. The average sex ratio of census town is 912, while the lowest sex ratio is in the Cantonment Board. The population of a hundred thousand plus cities, which are all class I cities in Uttarakhand, is presented in Figure 5.

Table 24. Population according to class and status of towns, 2011

Class of Town	Town	Popu	lation	Name of Towns	
Towns	No.	% of total	No.	% of total	Marrie OLIOWIIS
1	6	5.2	1,383,057	45.7	Dehradun (M. Corp + OG), Hardwar (MB + OG), Haldwani-Cum-Kathgodam (MB + OG), Rudrapur (MB + OG), Kashipur (MB), and Roorkee (MB).
II	6	5.2	337,540	11.2	Rishikesh (MB), Pithoragarh (MB), Ramnagar (MB), Manglaur (MB), Dehradun (CB), and Jaspur (MB).
III	19	16.5	535,713	17.7	Bharat Heavy Electricals Limited Ranipur (ITS), Kichha (MB), Nainital (MB), Almora (MB), Raipur (CT), Mussoorie (MB), Sitarganj (MB), Kotdwara (MB + OG), Bajpur (MB), Pauri (MB), Tehri (MB), Dhandera (CT), Clement Town (CB), Mukhani (CT), Nagla (CT), Laksar (NP), Chamoli - Gopeshwar (MB), Umru Khurd (CT), and Srinagar (MB).
IV	33	28.7	453,903	15.0	Gadarpur (MB), Ranikhet (CB), Landhaura (NP), Dhaluwala (CT), Tanakpur (MB), Uttarkashi (MB), Rawali Mahdood (CT), Central Hope Town (CT), Joshimath (MB), Khatima (MB), Jagjeetpur (CT), Roorkee (CB), Maohanpur Mohammadpur (CT), Vikasnagar (MB), Natthan Pur (CT), Mehu Wala Mafi (CT), Sunhaira (CT), Padali Gujar (CT), Fatehpur Range (Dhamua Dunga Area) (CT), Mahua Kheraganj (NP), Jiwangarh (CT), Bandiya (CT), Dineshpur (NP), Jhabrera (NP), Shafipur (CT), Maholiya (CT), Kela Khera (NP), Kashirampur (CT), Muni Ki Reti (NP), Haripur Kalan (CT), Salempur Rajputan (CT), Bahadarabad (CT), and Piran Kaliyar (CT).
V	37	32.2	281,203	9.3	Sultanpur (NP), Padampur Sukhran (CT), Herbertpur (NP), Pratitnagar (CT), Rudraprayag (MB), Natthuwa Wala (CT), Bageshwar (MB), Gochar (NP), Doiwala (NP), Bangherimahabatpur (Must) (CT), Virbhadra IDPL (ITS), Kharak mafi (CT), Karnaprayag (NP), Haldwani Talli (CT), Rishikesh (CT), Banbasa (CT), Lohaghat (NP), Chamba (NP), Bhimtal (NP), Lalkuan (NP), Kaladhungi (NP), Bhagwanpur (CT), Mahua Dabra Haripura (NP), Dharchula (NP), Gumaniwala (CT), Barkot (NP), Didihat (NP), Khanjarpur (CT), Bhowali (MB), Shaktigarh (NP), Narendranagar (MB), Nagala Imarti (CT), Shahpur (CT), Lansdowne (CB), Saidpura (CT), Khatyari (CT), and Chakrata (CB).
VI	14	12.5	34,787	1.1	Champawat (NP), Jonk (CT), Kanchal Gosain (CT), Landour (CB), Dwarahat (NP), Badrinathpuri (NP), Dogadda (MB), Devprayag (NP), Nandprayag (NP), Kirtinagar (NP), Nainital (CB), Almora (CB), Kedarnath (NP), and Gangotri (NP).
Total	115	100.0	3,026,203	100.0	

Table 25. Number and population by status of towns in Uttarakhand, 2011

Status of Town	Total Population of Town	Total Male Population of Town	Total Female Population of Town	Number of Towns	Sex Ratio	% of total population
Cantonment Board/Cantonment (CB)	125,960	75,562	50,398	9	667	4.13
Census Town (C.T.)	488,934	255,741	233,193	41	912	16.03
Industrial Township (ITS)	55,528	29,446	26,082	2	886	1.82
Municipal Corporation/Corporation (M. Corp.)	574,840	301,207	273,633	1	908	18.85
Nagar Panchayat (N.P.)	231,651	123,452	105,331	30	853	7.60
Municipal Board (M.B.)	1,572,425	831,834	740,591	32	890	51.57
U.K.	3,049,338	1,617,242	1,429,228	115	884	100.00

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

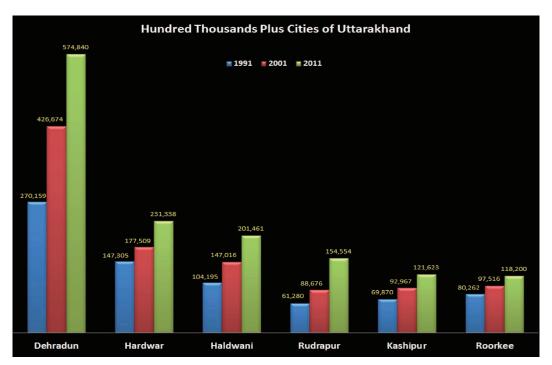


Figure 5. Population of hundred thousand plus cities in Uttarakhand, 1991, 2001, 2011 Source: Based on Census of India, 2011.

XV. Conclusion

One of the outstanding features of urbanization in Uttarakhand is that the urban population of the state had increased by 1,859.0% from 1901 to 2011, which is more than the national (1,358.5%) urban growth. However, most of this growth is retained by few urban centres. The present distribution of the urban population varies from a minimum of 3.5% in district Bageshwar to the maximum of 55.5% in Dehradun, as per 2011 census. Out of the total urban area of 901.93 km² in the state, 38 hill towns covered 43.46% and the remaining 77 towns, located in the plains, cover 66.64% of the total urban area of the state (Table 26). If we go by the population coverage, out of the total urban population of the state, only 14.56% is found in the hilly towns, while the overwhelming proportion of 84.44% of urban population is concentrated in the towns

situated in the plains.

The concentration of urban population is thus mostly found in Dun, Bhabar, Tarai, and the plain region of the state. Uttarakhand had six types of towns, such as the Cantonment Board, Industrial Township, Census Town, Municipal Corporation, Nagar Panchayat and Municipal Board, in 2011. In 2011, the maximum of the total urban population, represented by 51.57%, is concentrated in 32 Municipal boards, while 18.85% of the population is in only one–the Municipal Corporation of Dehradun.

The final analysis reveals that the urban centres in Uttarakhand are facing a lot of environmental problems such as the problem of sanitation, congestion, garbage, disposal, wastewater, sewage wastage, defecation, ventilation, etc., as they have already exceeded their carrying capacity. The problem of rock fills and subsidence of land due to heavy loads of construction activities, along with

Table 26. Area, towns, population and density in Uttarakhand hill and plain/flat, 2011

SI. No.	District	Hill			Plain/Flat			Average					
		Area (sq. km.)	No. of Town	Population	Density (P/Sq.)	Area (sq. km.)	No. of Town	Population	Density (P/Sq.)	Area (sq. km.)	No. of Town	Population	Density (P/Sq.)
1	Uttarkashi	27.02	3	24,305	900					27.02	3	24,305	900
2	Chamoli	39.53	6	59,396	1,503					39.53	6	59,396	1,503
3	Rudraprayag	12.75	2	9,925	778					12.75	2	9,925	778
4	Tehri (Garhwal)	63.66	5	44,371	697	3.45	2	28,636	8,300	67.11	7	73,007	1,088
5	Dehradun	83.36	3	38,774	465	188.94	19	897,905	4,752	272.3	22	936,679	3,440
6	Pauri (Garhwal)	59.08	4	53,644	908	12.09	4	54,167	4,480	71.17	8	107,811	1,515
7	Pithoragarh	16.50	3	69,605	4,218					16.50	3	69,605	4,218
8	Bageshwar	5.50	1	9,079	1,651					5.50	1	9,079	1,651
9	Almora	35.68	5	62,314	1,746					35.68	5	62,314	1,746
10	Champawat	9.50	2	12,727	1,340	3.54	2	25,616	7,236	13.04	4	38,343	2,940
11	Nainital	39.43	4	56,806	1,441	58.45	7	314,928	5,388	97.88	11	371,734	3,798
12	U.S. Nagar					122.21	19	573,063	4,689	122.21	19	573,063	4,689
13	Hardwar					121.24	24	693,094	5,717	121.24	24	693,094	5,717
	Uttarakhand	392.01	38	440,946	1,125	509.92	77	2,587,409	5,074	901.93	115	3,028,355	3,358

Source: Primary Census Abstract, 2011, DCHB_Town_Release_500_Uttarakhand.

the water shortage caused by the encroachment in the urban bioregion, is creating health hazards in the cities. To overcome these environmental issues, sustainable urban development schemes should be formulated and launched without any further delay, with proper investigation and research inputs.

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