Basic Amenities in Urban Uttarakhand

DEVENDRA KUMAR
Senior Research Fellow
CSRD, Jawaharlal Nehru University New Delhi (India)

ABSTRACT

The paper attempts to assess, distribution,status, and highlights the selected basic amenities in urban Uttarakhand. Also, it looks into regional differences in terms of basic urban amenities. Based on utmost needs and using the data from Census of 2001, 2011, Reports of Municipal Corporations of Dehradun, Haridwar, Nainital, and Udham Singh Nagar, the author has selected the four basic urban amenities (Drinking water, Latrine Facilities, Cooking Fuel, and Urban drainage). The author, after analysing the data of urban amenities has ranked the districts in terms of percentage of households having necessary urban facilities, and their progress from 2001 to 2011. The data analysis shows that there is clear variation across the districts and among the hilly and Terai districts of the state. It finds that state needs to more focus on the strategy and implementing plan of the schemes so that more percentage of households can be brought under the benefits of major schemes (Ujjwala, Open Defection) of central and state government and the same time special attention should be taken of fragile environment of hilly districts while implementing the schemes.

Key Words : Basic amenities, Drinking water, Latrine facilities, Cooking fuel

INTRODUCTION

Amenities are crucial to understanding the quality of life because they are precisely what make the places more attractive to live and work relative to other places (Allen, 2015). Urban amenities are specific urban facilities that contribute to the urban living experience of the residents, and they are associated with the daily needs of the urban people. Urban amenities play a more important role in the process of urbanization, migration, and one can say that it plays a direct role in demographic composition and growth of the areas (Mulligan and Carruthers, 2011). The nature of rural-urban migration and rapid unplanned growth of urban population puts an immense pressure on the demand and management of basic urban amenities, thus useful, time-bound supply of urban amenities like drinking water, urban drainage, latrine facility, and cooking fuel, housing, public health, etc. are precondition for ensuring the welfare of societies (Braga, 2011). The importance of urban amenities got highlights since it got mentions in the (Millennium Development Goals and Sustainable Development Goals 2015).

In India, rapid and unplanned urbanisation and growth of urban population pose severe challenges to the urban government to provide the basic urban amenities to urban dwellers. Ensuring the quality housing, health, education, drinking water, urban drainage, and sanitation facilities are some of the major challenging tasks to the governments. In India, only 70 per cent of people have access to electricity, which is low than China and even then Pakistan where it is 100 and 93 per cent, respectively, and it is also with access to safe drinking water (World Bank Report, 2015). Water supply in major urban centres is only a few hours a day, the pressure is low, and quantity is questionable. According to Census 2011, only 85.5 per cent of people have access to safe drinking water. As per Census 2011, in India still, 49 per cent of household use firewood for cooking followed by LPG/PNG occupying a share percentage of 28.5 per cent in the country. In 2011 even in urban India, only 65 per cent of households used LPG/PNG as cooking fuel followed by firewood. According to the census of 2011, in urban India,

only 82.3 per cent of households have improved drainage facility, and 18.6 per cent of urban households have no latrine facilities.

Uttarakhand a hilly state of north India, though the dominantly rural state is fast urbanizing state particularly in the Terai districts of Dehradun, Udham Singh Nagar, Hardwar, and Nainital which is putting tremendous pressure on the availability of basic urban amenities like drinking water facility, sanitation, electricity, and transportation. According to the 2011 census, 30.55 per cent of the population is living in urban areas, and almost 85 per cent of the total urban population is concentrated in the four-terai districts. Urbanization brings its set of problems like environmental, socioeconomic, and so on. In the present study, analyse the districts wise status of basic urban amenities and their temporal variation across the state.

Selection of indicators:

The choice of indicators on the urban amenities is one the arduous task; in the present modern and globalisation world, we need almost all amenities and facilities to live a healthy, qualitative, and comfortable life. But due to space, word limit, time, and analysis in the present paper, only four basic and utmost amenities have been selected.

    a. *Source of drinking water*: access to safe drinking water has been emphasised worldwide as a basic need for survival and freedom from a whole host of ailments. The Indian constitution under article 47 has the provision that the state should provide clean drinking water and improve public health.

    b. *Latrine facility*: it is one of the essential components of sanitation, and sanitation is an integral part of public hygiene and health in India. It contributes to a clean and improved environment, social development, and human dignity.

    c. *Cooking fuel*: cooking is an essential daily household activity; cooking fuel is one of the necessary components of socioeconomic development. It is not only to measure the progress but also helps in environmental development.

    d. *Drainage system*: drainage and sewerage system in urban areas is an essential priority in Uttarakhand setting because of rapid urbanisation and population growth. It is also a necessary component of sanitation and environmental development.

DATA BASE

The data on selected indicators have been taken from H series of Census of 2001 and 2011. Moreover, data on drainage, latrine facility, also taken from the government reports on Swachh Bharat Abhiyan, Smart City project, and reports of Nagar Nigam Dehradun, Haridwar, Nainital, and Udham Singh Nagar.

DATA ANALYSIS AND RESULTS

Uttarakhand is one of the fast urbanizing among the Himalayan states, which is putting tremendous pressure on the available resources. The Terai districts are facing the highest immigration from the hilly districts, which has further degraded the quality and efficiency of urban amenities in the Terai districts. In Uttarakhand, almost 66 per cent of total household uses tap water while in urban areas it is 82 per cent. In urban areas, the tap water is mainly supplied by Municipal Corporation or Nagar Palika Parishad. The most important achievement in the drinking water supply is that water from other sources decreases remarkably. The other sources include the rivers, canal, springs, etc.

The district wise percentage of households with the primary source of drinking water presented in Table 1 indicates that Tap water is the primary source of drinking water in urban Uttarakhand, while well and tube wells have a low percentage in supplying water. A major achievement of the state is in reducing the percentage of households depended on another source of water, and this is recorded highest in the Bageshware where the households are diverted to Hand pump supplied water. The other source of water in Uttarakhand is generally not treated (Tripti and Chauniyal, 2015). District Haridwar and Rudraprayag registered the highest growth in the hand pump as the primary source of drinking water, whereas hilly districts like Tehri, Haridwar and Bageshware have a high percentage of households using Well/Tube Well as the primary source of drinking water.

The increasing percentage of households using hand pump as the source of water in hilly districts clearly shows that these districts are facing water crisis or other sources of water are degraded (Chopra, 2014).

Cooking fuel is one of the most critical components

Table 1 : District wise percentage of urban households with a source of drinking water in Uttarakhand 2001-2011								
State/ District	Tap water		Hand pump		Well/ Tube Well		Other*	
	2001	2011	2001	2011	2001	2011	2001	2011
Uttarakhand Total	66	68.2	20	22	2	3.1	12.09	6.7
Uttarakhand Urban	82	78.4	15	17.1	1	3.2	1.99	1.2
Uttarakashi	97	97.6	0	0.8	0	0.2	2.37	1.4
Chamoli	92	93.8	0	0.8	1	0	7.26	5.4
Rudraprayag	99	71.4	0	27.1	0	0.8	0.72	0.7
Tehri Garhwal	81	89.4	16	7.6	0	2.3	2.87	0.7
Dehradun	93	95.3	5	0.4	1	0.6	0.88	3.6
Garhwal	93	88.2	1	6.7	2	1.7	4.42	3.4
Pithoragarh	83	95.9	9	1.1	2	0.7	4.99	2.3
Bageshwar	69	71.2	3	21.5	0	6.3	27.11	0.8
Almora	93	95.6	0	0.8	1	2	5.22	1.7
Champawat	73	86	25	10.9	1	1	0.56	2.1
Nainital	96	98	1	0.7	0	0	2.95	1.2
Udham Singh Nagar	45	84.9	52	14.4	1	0.3	1.46	0.5
Hardwar	84	44.1	15	50.1	0	4.8	0.71	0.9
Other * Spring, River, Canal, Pond, Tank etc.								

Source: Census of India 2001-11 H-series

of socioeconomic development. Cooking is an important task, and domestic cooking fuels are one of the crucial causes of indoor pollution, particularly in developing countries. There are three major types of' fuels used for cooking in Uttarakhand. The LPG is a major source of cooking fuel in Urban Uttarakhand, but if we look at the percentage of total households in 2001 and 2011, firewood still is the major source of cooking fuels.

Uttarakhand a Himalayan state where providing and supplying the basic amenities is a challenging task due to its hilly terrain, transport connectivity, landslides, and climatic hurdles the supply of public goods mainly depends on the government. The supply of cooking fuel is one of the major challenges to the agencies, especially remote areas of the hilly districts (Braga, 2011). The launching of Ujjwala Yojana has drastically changed the statistics of households depending on other sources of cooking fuel (Samir Kumar, Sobhesh Agrawal, 2018).

The LPG is the major source of cooking fuel in urban areas of all districts whereas firewood still plays a major

Table 2 : District wise percentages of urban households with the main source of cooking fuel in Uttarakhand 2001-2011								
State/ District	LPG		Firewood		Kerosene		Other*	
	2001	2011	2001	2011	2001	2011	2001	2011
Uttarakhand Total	33	44.2	55	48.7	4	1.8	7.56	2.2
Uttarakhand Urban	71	79.4	15	14	11	3.8	3.82	2.8
Uttarakashi	83	88.6	5	3.9	10	6	1.35	1.5
Chamoli	77	83.6	10	9.8	10	5	2.33	1.6
Rudraprayag	71	71.9	8	23.2	12	2.3	9.76	2.6
Tehri Garhwal	75	86.9	3	6.5	18	5.5	3.98	1.1
Dehradun	77	91.3	6	4	15	3.9	1.79	0.7
Garhwal	82	84.6	9	7	7	7.7	2.19	0.9
Pithoragarh	88	88.1	3	8.1	8	2.9	0.99	0.9
Bageshwar	75	74.6	9	16.5	14	1.8	2.81	7.1
Almora	85	80.3	3	13.8	11	4.6	1.26	1.3
Champawat	71	92.2	22	1.4	4	5.7	2.93	2.1
Nainital	72	78.3	16	6.8	10	13.3	2.16	1.4
Udham Singh Nagar	52	87.6	32	3.3	9	7.1	6.82	1.9
Hardwar	66	64.2	20	31.4	6	1.7	7.37	2.7
Other* Coal, Electricity, Biogas, Lignite, Charcoal etc.								

Source: Census of India 2001-2011 H- series

role in cooking, especially in hilly districts like Almora, Rudraprayag, and Bageshware. The data covers only urban areas in all districts, and it was still a remarkable percentage of households using firewood, Kerosene, and another source for cooking fuel than result may be more depressing when we cover total rural and urban households (Kavya Bajaj TERI, 2018).

Latrine facility is one the essential component of sanitation, which is an integral part of public hygiene and health. It contributes to a clean and improved environment, social development, and human dignity. The importance of latrine facility recognized worldwide when U.N., Unilever, and charity Water Aid issued a report in 2001 and declared November 19 as the World Toilet Day with hopes to increase awareness about the need for basic sanitation and to teach about better practices. Uttarakhand government recently passed a resolution in the state assembly, which makes a toilet compulsory for the candidate contesting in Panchayat election. The central government of India schemes like Swach Bharat Abhiyan and Smart City Project have a direct impact on increasing the number of toilets both in public and personal sphere (Pankaj Bhardwaj, Mithilesh Burra, 2019).

District level data of urban households related to basic urban amenities confirms that the state has achieved remarkable improvement in the latrine facilities across the urban Uttarakhand. Highest gain is recorded in terms of Flush/Pour latrine, which is a good sign of a hygienic environment. The state has still districts like

Rudraprayag, Chamoli that have more than ten per cent of urban households having no latrine facility. There are drastic changes in the nature and behaviour of people especially in the hilly districts after the launching of Swachh Bharat Abhiyan by the central government, most of the households both in rural and urban Uttarakhand got monetary benefit under the scheme under Direct Benefit Transfer (Prasad Rao and Srinivas Rao, 2019). The total percentage of households in Uttarakhand having no latrine facility also decreased from 34.2 to 21 percentage from 2011 to 2019 (Annual Plan Report of Uttarakhand Urban Development, 2019). Overall, it shows a good sign but ever increasing urban population and its effects on available resources and providing an efficient supply of services and quality of services will be challenging for the urban government shortly.

The drainage system is an essential part of urban planning. A drainage system is very important, mainly in a developing country like India, because of rapid urbanisation, industrialisation, and population growth. Uttarakhand a newly formed state, which is fast urbanizing, needs special attention. The major urban centres in Uttarakhand like Dehradun, Hardwar, Udham Singh Nagar, and Nainital have major drainage problems. The out of total and urban households having drainage facility 50.6 % of urban and 42.1 % of total households have an open drainage system. The percentage of households having closed drainage has increased from 10 to 19 % and 28 to 42.3 % in total and urban households,

Table 3 : District wise percentage of urban households with latrine facility in Uttarakhand 2001-2011								
State/ District	Pit latrine		Flush/pour latrine		Other System		No Latrine	
	2001	2011	2001	2011	2001	2011	2001	2011
Uttarakhand Total	19	11.9	15	51.8	11	1.4	55	34.2
Uttarakhand Urban	27	6.6	41	84.8	19	1.2	13	6.4
Uttarakashi	44	4	31	86.7	10	0.5	15	8.5
Chamoli	45	18.9	24	67.9	8	0.3	23	12.5
Rudraprayag	20	2.4	43	75.7	24	1.5	12	20.1
Tehri Garhwal	27	5.4	47	87.6	16	1.2	11	4.8
Dehradun	31	5.9	38	85.1	18	0.5	12	8.1
Garhwal	53	4.4	23	85.5	12	0.1	13	10
Pithoragarh	39	9.7	29	83.5	22	1	11	5.3
Bageshwar	59	9.9	2	80.6	22	1.1	17	7.4
Almora	19	2.1	60	89.1	5	0.9	15	5.2
Champawat	22	16.3	46	79.3	10	0.8	23	3.5
Nainital	20	18.1	53	73.3	16	0.1	10	8.4
Udham Singh Nagar	19	4.6	42	90.8	22	0.5	18	4.1
Hardwar	19	4.4	42	84.7	29	2	10	8

Source: Census of India 2001-11 H-series

Table 4 : District wise percentage of urban households with drainage facility in Uttarakhand 2001-2011					
State/ Districts	Closed Drainage		Open Drainage		No Drainage	
	2001	2011	2001	2011	2001	2011
Uttarakhand Total	10	19	38	42.1	51.94	38.9
Uttarakhand Urban	28	42.3	60	50.6	11.76	7.1
Uttarakashi	14	47.1	75	46.6	11.47	6.2
Chamoli	7	24.3	70	56.3	23.35	19.4
Rudraprayag	16	46.4	68	40.2	15.91	13.4
Tehri Garhwal	39	76.2	54	20.8	6.51	3
Dehradun	35	53.6	51	36.8	14.30	9.6
Garhwal	15	40.3	72	53	12.29	6.7
Pithoragarh	32	54.9	45	38.4	23.07	6.7
Bageshwar	32	65	43	30.5	25.58	4.5
Almora	10	60.6	82	36.3	8.17	3.2
Champawat	8	18.4	69	71.8	22.70	9.8
Nainital	36	48.6	54	45.5	10.79	6
Udham Singh Nagar	12	15.6	77	78.1	10.91	6.3
Hardwar	37	39.3	58	56.5	5.10	4.3

Source: Census of India 2001-11 H-Series

respectively. Still, the percentage of households having a closed drainage system is meagre.

District wise percentage of urban households shows a complex picture of the urban drainage system in Uttarakhand. Although the growth of urban households registered in all districts having closed drainage system still there is a very high percentage of households having open and no drainage system. The urban areas, especially in Dehradun, Haridwar, and Haldwani, face more drainage problems during the monsoon season. City area of Dehradun face severe problems related to urban drainage due encroachment of land areas, unplanned and mismanaged system of household drainage networks (Smart City Project SPV Report, 2019).

Most of the districts have a high percentage of households having an open drainage system. The highest percentage of households are in Udham Singh Nagar, Champawat, Chamoli etc. Percentage of households having closed drainage is recorded in the hilly districts this is due to very less number of households are living in the urban areas if we compare the drainage system with the percentage of the urban population than it becomes clear that districts with a high percentage of urban population registered with less percentage of households having closed drainage system and vice versa.

Finding and Discussion:

The data analysis of selected indicators on urban amenities shows a marginal improvement across the state, but it also finds out the variation in terms of basic urban amenities in the urban Uttarakhand. The Terai district like Dehradun, Haridwar, Nainital, and Udham Singh Nagar, which have a very high concentration of urban population, will have to face the challenge of providing efficient and qualitative urban facilities in near future. The government schemes like Ujjwala, Swachh Bharat Abhiyan, and Smart City Project have a direct positive impact on some of the basic urban amenities. The hilly districts face a supply-side challenge due to connectivity, infrastructural, and transportation dependent on government. In the city areas of Dehradun, Haridwar, Haldwani Municipal Corporation plays a crucial role in supplying tap water and drainage management of the urban areas. While in hilly districts where Nagar Palika Parishads have the responsibility of looking after these services are facing the issues related to finance and infrastructure.

The households having no latrine facility reduced drastically, especially after the implementation of Swachh Bharat Abhiyan, but still, the state needs special focus on the hilly areas where public awareness is crucial. The state needs more constructive strategy and planning for the hilly districts where push factors are playing a major role in emigration, which consequently putting more pressure on the Terai districts where pull factors are dominant. Therefore a balance needs to be made between these two geographical divisions of the districts by reducing the gap in basic urban amenities as well as push and pull factors.

Urban drainage management is one of a major

challenge, especially in developing countries. In Uttarakhand, the cities like Dehradun, Haridwar, Haldwani, and Udham Singh Nagar are facing the issues of urban drainage, and the primary reason for the problem is land encroachment and unplanned development of urban areas. Thus the amenities in urban Uttarakhand have improved over some time, but its inter districts and intra districts variation needs to be checked.

REFERENCES

Allen Natalie (2015). Understanding the importance of urban amenities: A case study of from Auckland" Buuildings Journal.

Barua, S.K. and Agrawal, Shobhesh Kumar (2018). Lighting ups life through cooking gas and transforming Society, WP No 5, 20, 2018.

Braga, R.B. (2011). Urbanisation and access to basic amenities in urban India, **31**(1):1-15.

Bhagat, R.B. (2011). "Emerging Pattern of Urbanisation in India" EPW, August.

Kala, S. and Kumar, S. (2013). India's Urban Environment: air and water Pollution and pollution abatement, MPRA Paper No 43810.

Kundu, Amitabh and Gupta, S. (1996). Mirgration, Urbanisation and Regional Ineqality EPW vol. **31**, No 52

Kundu, Amitabh (2004). Trends and Patterns of urbanisation and their economic implications. *Economic & Political Weekly*, Vol. **3** .

Mangain, R. and Mehta, B. (2006). Employment and Income in Uttaranchal-trends and policy issues. *Indian J. Labor Economics*, **49** (3).

Merajuddin A. (2012). Water and Sanitation series: Uttarakhand an uphill task. Health of urban poor programme Population Foundation of India New Delhi.

Mittal, Surabhi, Tripathi, Gaurav and Deepti, Sethi (2008). Development Strategy for the hill Districts of Uttarakhand, Indian Council for Researh On International Economic Relations July.

Mohan, R. and Dasguta, S. (2004). Urban Development In India In 21st century: Policies for accelerating Urban growth, Oct., paper no. 231.

Mulligan, G. and Carruthers, J. (2011). Amenities, Quality of life, and regional development, Springer, pp. 107-134

Narayana, M.R. "Impact of Economic Globalization on Urbanisation: A comparative Analysis of Indian and Selected Global Experiences" Sage Publication New Delhi vol. **66** (20).

Prasad, V. and Srinivasan Rao (2019). Impact Assessment of India Swachh Bharat Abhiyan, **8** (3) : 1202-1208.

Rakesh, M. (1985). Urbanisation in India's Future" *Population Development Review,* **11** (4) : 619- 64.

Sati, V.P. (2013). Trends of Urbanisation and its Implications on environment and Economy in Uttarakhand" Himalaya case study of Dehradun ENVIS Bulletin on Himalayan Ecology.

Singh, S.K.(2012). Urban Transport in India: issue challenges and way foreword. *European Transport Issue,* **52** : 5.

Tripti, Jayal and Chauniyal, D. (2015). Changing Pattern of Population Growth of Pauri District Uttarakhand (learning community), **6** (1),

Wankhade, K. (2015). Urban Sanitation in India: Key Shift in the National Policy Frame. International Institutes for Environment and Development Vol. **27**(2).

****