

URBAN ISSUES IN HUMAN DEVELOPMENT



Udupi-Manipal Double Road

Urban Issues In Human Development

Chapter 11

11.1 Introduction

Urbanization is considered a key indicator of economic development. As economy grows, the towns and cities expand in size both in terms of geographical area and population and the contribution of the urban sector to the GDP and employment continue to grow. That is why the urbanization is considered as driving force for economic development. Though the urbanization is integral to development, it presents difficult challenges in terms of civic infrastructure and delivery of basic services such as power supply, water supply, housing, sewerage and drainage, solid waste management, parks, open spaces and transport. The problems of traffic congestion, pollution, poverty, development of slums etc in alarming proportions are closely associated with the urbanization. All these have serious implications for human development. Though urban areas has potential to provide gainful employment in secondary and tertiary sectors and thereby contribute to human development, the sustainability of human development depend on better availability of basic civil services.

In 2001, India's urban population was about 285 million. It has increased to 377 million in 2011. Projections are that by 2030, over 600 million people may be living in urban areas. Karnataka state is one of the five highly urbanized states in the country. The state has 39 percent

of the population in urban areas, which is expected to go up to 50 percent in near future. This will create immense pressure on India's urban economies with their already massive deficits in infrastructure and civic amenities. In view of the critical importance of the urban development, the Government of India has launched number of urban development initiatives under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). The 74 Constitution Amendment mandated the setting up of Urban Local Bodies (ULBs) as the institutions of self-government and allocated inter alia responsibility of preparation of plans for integrated urban development and social justice. This chapter focuses on urban issues in Udupi district in the perspective of human development.

11.2 Service Delivery Issues

Udupi district is heading for a rapid urbanization. It witnessed increase in urban population from 206353 in 2001 to 334061 in 2011. The decadal increase of urban population in the district is 62 percent as against the state level urban population increase of 31.5 percent. The share of urban population in the total district population increased from 18.5 percent in 2001 to 28.4 percent. As shown in Table 11.1, the increase in urban population took place more in the smaller towns in rural and peri-

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Swarna Dam

Table 11.1
Urban Population in Udupi District

ULBs	2001 (number)	2011 (number)	Decadal Increase (percent)
Udupi City	127124	144960	14.03
Karkala Town Council	25116	25800	2.72
Kundapura Town Council	28591	30444	6.48
Saligrama Town Panchayat	14962	15123	1.08

Source: 2001 and 2011 Census

urban areas and not in the statutory four ULBs in the district. Among four ULBs, a significant increase in population took place in Udupi City, the district head quarter. It is the biggest urban centre in the district. The city has 33987 households with population of 144960; male, 71614 and female, 73346. It has 69.28 sq.km areas in its municipal limit. Udupi, as Town Municipal Council, came into existence in 1935. It was converted into City Municipal Council in the year 1995. Udupi city witnessed a rapid growth since it became head quarter of the district in 1998. The population increased from 33413 in 1981 to 127124 in 2001; almost fourfold increase. With the growing population pressure, there is tremendous strain on existing civic infrastructure systems, particularly water supply, sewerage and drainage, solid waste management, parks and open spaces and transports.

Kundapura town is the second biggest urban centre and head quarter of Kundapura taluk. It became Town Municipal Council in 1973. It has 6272

households with population of 30444; male, 14840 and female, 15604. It has jurisdiction of 14.01 sq.km. Karkala town is the head quarter of Karkala taluk. It was constituted as Town Municipal Council in 1972. It has 5807 households with 25800 population; male, 12627 and female, 13173. Its jurisdiction stretches to an area of 23.06 sq.km. Saligram is peri-urban town having 3222 households with a population of 15123; male, 7183 and female, 7940.

The basic civic services normally required in urban areas are mainly:

- ❖ Supply of safe drinking water,
- ❖ Sewerage collection and disposal
- ❖ Sanitation, Improved water management including recycling of waste water.
- ❖ Solid waste management,
- ❖ Preventive public healthcare and hygiene,
- ❖ Street lighting and
- ❖ Maintenance of city roads.

The provision of these basic services is essential for quality living conditions in

urban areas. It is also necessary to ensure that the urban poor have access to these facilities at affordable cost. Since urbanization is a dynamic process with migration of people from rural areas and growing expansion of secondary and tertiary sectors, expansion and improvement in the revision of these services on continuous basis is also important. Still recently, all ULBs in the district were deprived of modern quality basic civic services. There was also mismatch between the growing demand and supply. In recent years, the Government has taken number of initiatives to rectify some of the shortcomings. The challenge still remains not only of providing high standard basic urban infrastructural facilities for the growing population but also dealing with the backlog from the past.

11.3 Water Supply and Sanitation

Water is the basic requirement for human living. The problem of water

supply is in terms of availability, proximity, quantity and quality. Water is also required for domestic use, industry, and others in urban areas. As per the norms of water supply suggested by the Central Public Health and Environmental Engineering Organization (CPHEEO), the cities with a piped water supply and sewerage collection systems should have a maximum water supply per capita of 130 litres per day. Table 11.2 shows the coverage of households with tap drinking water and the per capita water supply per day. The safe drinking water source include tap water treated, hand pump and tube well/bore well. In Udupi CMC, 66.3 percent of households have safe drinking water, while Karkala and Kundaoura TMCs have 62 percent and 38 percent households respectively with safe drinking water supply facilities. In Saligrama TP, only 11.5 percent households enjoy safe drinking water supply. In Udupi city, the per

In Udupi city, the per capita water supply exceeds the stipulated 135 litre per day. Even in the case of Kundapura the water supply is as per the stipulated LPCD. It is only in the case of Karkala and Saligram, the water supply per capita per day is significantly lower than the recommended LPCD.

Table 11.2
Households with Tap Drinking Water and
Per Capita Water Supply (LPCD)

ULBs	Households with Tap Drinking Water		LPCD
	Number	Percent	
Udupi CMC	29235	66.26	172
Karkala TMC	5202	61.99	110
Kundapura TMC	3478	38.21	135
Saligrama TP	495	11.48	67

Source: Census 2011.

capita water supply exceeds the stipulated 135 litre per day. Even in the case of Kundapura the water supply is as per the stipulated LPCD. It is only in the case of Karkala and Saligram, the water supply per capita per day is significantly lower than the recommended LPCD.

With the increase of population density, the growing demand for portable treated water is inevitable. Water being lifeline for survival of people, quantity and quality of water has been a matter of concern. At present, the majority of the households in all ULBs depend for their drinking water supply on traditional open wells, where the water is not treated (Table 11.2). Udupi city gets drinking water supply from Swarna River. The treated tap water source for drinking water constitutes only 66 percent in Udupi city. This is in spite of the second phase-Swarna River Water Project funded by the ADB. Kundapura TMC gets drinking water from Jumboo River. In Kundapura, only 38 percent of the households are covered by the tap water treated supply. Karkala TMC gets drinking water supply from Yennehole Mundli Dam and Eight borewells. Only 62 percent of the households get tap water treated. In Saligram TP, only 11 percent of the households enjoy tap water facility. It is possible that most of the households who are deprived of the portable water supply belong to the weaker section of the community. With the increasing density of population

and sewerage and drainage system, whether the open well water without treated can be considered safe for drinking from health point of view is real issue.

Another area of concern is water supply duration and frequency. The water is not supplied 24 hours in required quantity. During the summer, when the water source (rivers) for portable water gets dry, the acute water shortage is a serious problem in all ULBs. Udupi city is also faced with the problem of water supply for unauthorized migrant settlements (slums). The provision of portable treated drinking water 24 hours in required quantity throughout the year for all sections of the communities in all four ULBs is the real challenge before the urban authorities in the district. The provision of portable treated drinking water 24 hours in required quantity throughout the year in all four ULBs is the real challenge before the urban authorities.

Sanitation services in Urban India is driven the goal of sanitation for all by 2012 under the Ministry of Urban Development's 'Total Sanitation Campaign'. Sanitation services are one of the basic civic and environmental services provided by the Government in urban areas. Udupi district has made remarkable progress in sanitation during the last decade. Udupi CMC has 99 percent of the households having toilets, followed by Saligram TP, 98 percent, and Karkala TMC, 97 percent.

Kundapura TMC has safe sanitation for 95 percent of its urban population. Even among BPL, SC and ST households, 98 percent have toilet facilities. In Udupi CMC, 25 percent underground drainage and 74 percent septic tanks. Kundapura TMC has 94 percent septic tank, whereas Karkala TMC has 10 percent underground drainage and 88 percent septic tank. Saligram TP has 88 percent Septic tank. At present, Kundapura and Saligram have no underground drainage system. E-Governance Foundation and Survey of India awarded Udupi CMC 'Nirmala Nagar' in 2009-10.

In spite of remarkable achievement in safe sanitation, Udupi CMC is now faced with the emerging problem of slums of migrant population, who live in make-shift temporary houses without toilet facilities and water supply and defecate in the open. The challenge is to provide infrastructure for sanitation to this population.

11.4 Solid and Liquid Waste Management

It is estimated that the urban area generates per capita waste of 500gm per day. With increasing population in urban areas, the coping with the collection and disposal of the huge quantity of waste generated pose a real problem to urban authorities. If the waste generated is not collected and disposed in time, uncollected waste littered all over garbage bins and in

open areas make the streets unhygienic. Open dumping and garbage burning traditionally adopted leads to air pollution and hygienic problems besides demanding more and more the land required for dumping in urban areas. Many alternative methods are now used for disposal of solid waste collected. They include: aerobic composting, anaerobic composting, bio-methanation and waste-to-energy. However, the success of these methods depends on segregation of waste at source. The Government of India has come up with Municipal Solid Waste (Handling and Management) Rules, 2000, which require all ULBs to handle their solid waste as per the guidelines issued by the Ministry of Environment and Forestry.

In the past, Udupi CMC adopted dumping method and dumped collected waste at Beedingudde. With the expansion of the city, Beedingudde now become a centre of the city. The huge collected waste and landfills catching fire caused pollution and hygienic problems to the surrounding areas. Udupi CMC has set up scientific solid waste disposal plant at Alevoor in 2007. KUDCEM invested Rs.19 crore for solid waste and sewerage drainage program in Udupi city during the Eleventh Plan. KUDCEM also invested RS.15 crore to set up solid waste disposal plant at Kandavar for Kundapura TMC. Karkala TMC is in the

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Alevoor Dumping Yard

process of setting up solid waste disposal plant at Kariakallu. Saligram TP has, at present, no solid waste collection system. Some of the achievements in solid waste management in urban Udupi are highlighted in Box 11.1.

The following proposals for improving solid waste management are under the pipeline for implementation:

- ❖ To set up a two-tons per day Biomethanation plant in Udupi CMC.
- ❖ To set up electricity from waste plant under PPP-DBOT model in Udupi CMC.
- ❖ To establish Vermi compost plant in Udupi CMC.
- ❖ Vermi compost plant in Kundapura TMC under operation since Nov. 2013.

The Udupi CMC also succeeded in achieving 100 percent plastic free. The plastic waste management in Udupi district ULB's envisages:

- ❖ In all the ULBs council has made resolution to ban plastic below 40 microns as per Plastic usage Rule 2011.
- ❖ IEC activities are carried out and awareness programmes are conducted in all ULBs.
- ❖ All commercial establishments, businessmen, NGOs are involved in awareness programmes.
- ❖ In all ULB's raids are carried out on commercial establishments and seized the below 40 micron carry bags.

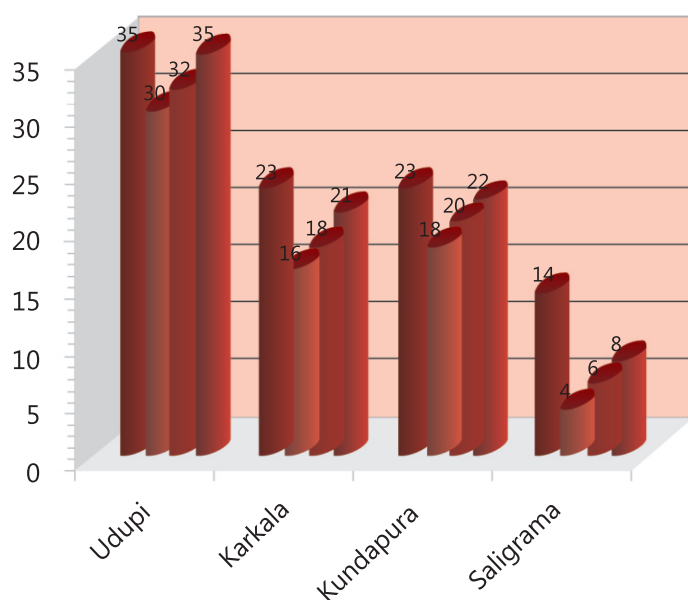
Box 11.1: Achievement in Solid Waste Management

1. **Primary collection of solid waste:** Udupi CMC, Karkala TMC and Kundapura TMC covered 90 to 100 percent of their area; Saligram 50 percent. Primary collection is outsourced through women SHGs.
2. **Segregation of solid waste:**
 - ❖ Udupi CMC, Karkala TMC and Kundapura TMC succeeded segregation of waste collected to the extent of 25 to 35 percent and at disposal site.
 - ❖ Information, Education and communication (IEC) through workshop, Jathas, seminars, awareness campaign, display of hoardings, audio announcement carried out in Udupi CMC, Karkala TMC and Kundapura TMC areas.
3. **Secondary storage of solid waste:** 100 percent achieved. For this, metal container is used in Udupi CMC, Karkala TMC and Kundapura TMC.
4. **Secondary transportation:** 100 percent in three ULBs (excluding Saligram). Maintained hydrolically operated dumper pacer/tractors used.
5. **Street Sweeping:** 100 percent in all ULBs achieved through outsourcing.
6. **Treatment of solid waste:** Biodegradable waste is inertised by spraying microbial culture. Recyclable waste is sent for recyclers.

Source: Project Director, UDUDC.

11.1 DOOR TO DOOR PRIMARY COLLECTION

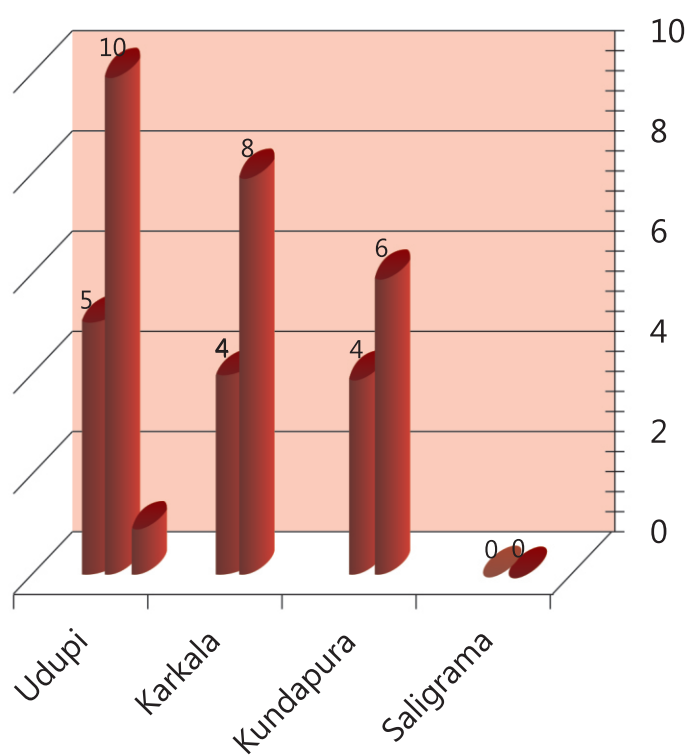
WARDS COVERED



Area Covered	Udupi	Karkala	Kundapura	Saligrama
Total No of Wards	35	23	23	14
2010-11	30	16	18	4
2011-12	32	18	20	6
2012-13	35	21	22	8

- Total No of Wards
- 2010-11
- 2011-12
- 2012-13

11.2 SEGREGATION OF WASTE AT LANDFILL SITE

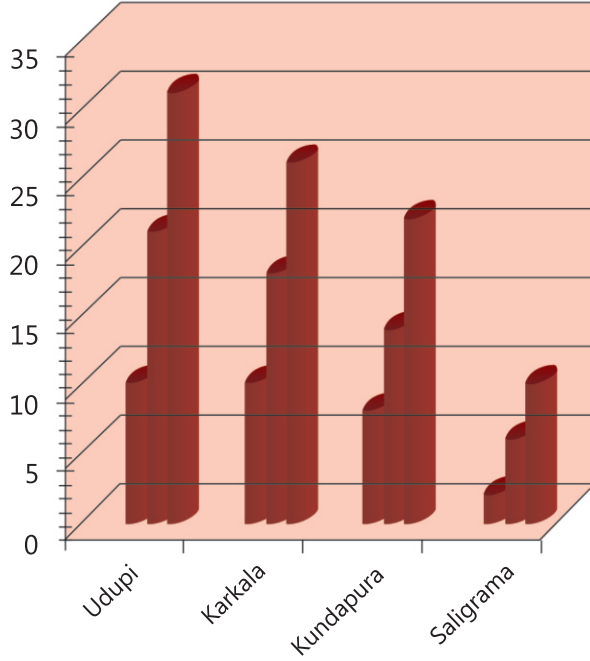


Column1	Udupi	Karkala	Kundapura	Saligrama
Segregation in percentage by volume				
2010-11	5	4	4	0
2011-12	10	8	6	0
2012-13	15	12	10	0

- Segregation in percentage by volume
- 2010-11
- 2011-12
- 2012-13

11.3 TOTAL % SEGREGATION OF WASTE

(Source + Landfill site)



Column1	Udipi	Karkala	Kundapura	Saligrama
Total Segregation by volume				
2010-11	10	10	8	2
2011-12	21	18	14	6
2012-13	31	26	22	10

■ Total Segregation by volume

■ 2010-11

■ 2011-12

■ 2012-13

BANNERS/HORDINGS

ಉಡುಪಿ ನಗರಸಭೆ ಪ್ರಕಟಣೆ

ಉಡುಪಿ ನಗರಸಭೆ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ವಿಲ್ಲಾ ರೀತಿಯ ಪ್ಲಾಸ್ಟಿಕ್ ಕ್ಯಾಲಿಬ್ರೇಗ್, ಪ್ಲಾಸ್ಟಿಕ್ ಟೋಟಗಲು, ಪ್ಲಾಸ್ಟಿಕ್ ಸೂಪ್ ಬೌಲ್‌ಗಳು, ಪ್ಲಾಸ್ಟಿಕ್ ಐಸ್‌ಕ್ರಿಮ್ ಕಪ್‌ಗಳು, ಪ್ಲಾಸ್ಟಿಕ್ ಟೇಬಲ್ ಹಾಸುಗಳ ಮಾರಾಟ, ಬಳಕೆಯನ್ನು 15-09-2012 ರಿಂದ ಕಡ್ಡಾಯವಾಗಿ ನಿರ್ಬಂಧಿಸಿದೆ.

ಪ್ಲಾಸ್ಟಿಕ್ ಐಸ್ ಕ್ರೀಮ್ ಕಪ್ **ಪ್ಲಾಸ್ಟಿಕ್ ಐಸ್ ಕ್ರೀಮ್ ಕಪ್** **ಪ್ಲಾಸ್ಟಿಕ್ ಸೂಪ್ ಬೌಲ್** **ಪ್ಲಾಸ್ಟಿಕ್ ಸೂಪ್ ಬೌಲ್** **ಪ್ಲಾಸ್ಟಿಕ್ ಕ್ಯಾಲಿಬ್ರೇಗ್** **ಪ್ಲಾಸ್ಟಿಕ್ ಕ್ಯಾಲಿಬ್ರೇಗ್** **ಪ್ಲಾಸ್ಟಿಕ್ ಕ್ಯಾಲಿಬ್ರೇಗ್**

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ಅಧ್ಯಕ್ಷರು ಉಡುಪಿ ನಗರಸಭೆ **ಪರಿಸರ ಅಭಿಯಂತರ ಉಡುಪಿ ನಗರಸಭೆ** **ಪೌರಾಯುಕ್ತರು ಉಡುಪಿ ನಗರಸಭೆ**

ಪ್ಲಾಸ್ಟಿಕ್ ತೊಲಗಿಸಿ, ಉಡುಪಿ ನಗರವನ್ನು ಉಳಿಸಿ

11.5 Concluding Remarks

The ULBs in Udupi district have achieved significant improvement in the development of urban infrastructure and in the provision of basic civic services during the last decade. With the outsourcing of water bill collection water supply service has improved. Similarly, by outsourcing, the primary collection of solid waste improved significantly. It is gratifying to note that the three main ULBs have earned many awards for their best performance in delivery of basic services. Udupi CMC and Kundapura TMC were awarded Green Leaf Award for the year 2011 and 2009. Kundapura TMC got Best Practices Award - 2010 for safe drinking water supply. Udupi CMC, Kundapura TMC and Karkala TMC have got Best ULB award for solid waste management for the year 2010. Notwithstanding the progress already achieved in development of urban infrastructure, there are many areas where the scaling-up delivery of civic amenities and provision of utilities with emphasis on universal access to the urban poor. The following are the priority areas in urban infrastructure development which need immediate attention:

- ❖ At present the majority of the households depend on open well for drinking water. In Udupi CMC only 66 percent of the households have tap water treated supply within their premises. The proportions of the households with tap water supply in Karkala and Kundapura TMCs are 61 percent and 38 percent

respectively. There is a need to ensure that all households in the municipal areas have access to portable treated water supply within their premises.

- ❖ Underground drainage system: At present in Udupi CMC only 25 percent of the municipal area has UGD. In Karkala TMC only, 10 of its jurisdiction has UGD. Kundapura has no UGD. The need to cover all households by UGD cannot be overemphasized.
- ❖ Though primary collection of solid waste is 100 percent, the segregation of the solid waste at source is 25 – 35 percent in all ULBs. In order to ensure scientific solid waste management and facilitate proper treatment of solid waste, there is a need to ensure scaling up segregation of solid waste at primary source. This requires aggressive awareness campaign.
- ❖ There is a need to address the basic needs of migrant population who are largely employed in the informal sector and suffer from multiple deprivations that include lack of access to basic amenities such as water supply, sanitation and decent housing.

It is important to strengthen urban governance. A unified and effective administrative set up is necessary in all ULBs with clear accountability to citizens. This requires empowering the ULBs in planning, management and monitoring. The 'whole city' approach

to planning and improvement must be adopted to address systemic issues taking into account all necessary and inter-connected parameters. It is also important to give adequate emphasis on long term strategic urban planning to ensure that the present agenda is not limited to 'renewal' mission of ULBs. It must anticipate and plan for outgrowth

and expansion. The administrative focus should be shifted towards an outcome-based approach that is based on effective and efficient service level delivery rather than an approach aimed at management of investment and asset creation.

Box11.2: Swarna Jayanti Shahari Rozgar Yojane: Urban Self-employment and Poverty alleviation initiatives

Swarna Jayanti Shahari Rozgar Yojane (SJSRY) aimed at promoting self-employment of unemployed urban youth as a part of urban poverty initiative. The program envisages development of vocational skills through training, provision of financial support and promotion of self-help groups of poor women for their social and economic empowerment. Udupi CMC has so far financed 61 unemployed to the extent of Rs.29.50 lakh for tailoring, tempo-riksha, laundry shop, beauty parlour and other income generating activities. Kundapura TMC has financed 37 unemployed youths to the extent of Rs.14.75 lakh and Karkala TMC financed 44 unemployed youths to the extent of Rs.17.18 lakh. Saligrama TP has supported 13 unemployed youths to the extent of Rs.6.50 lakh. For the promotion of Women SHGs, ULBs have so far provided financial support to 87 SHGs to the extent of Rs.36 lakh. Under Stepup Skill development Training programme, 1087 unemployed youths are trained in various vocations. For the benefit of these rainees, 'Udyoga Mela' was organized in Udupi, wherein many companies have participated and short-listed most of the candidates for employment..

Source: Project Director, UDUDC.

Sewerage Treatment Plant

