STANDARD OF LIVING



House Constructed Under Indira Awas Yojana

Standard of Living

Chapter 7

7.1 Introduction

There. is a long tradition of philosophical thought on the issues of what gives life its quality. The conventional approach followed by economists to measure human well-being focuses on people's command over resources, which are usually assessed in terms of income. There are, however, many dimensions of standard of living. Though income is clearly an important determinant of living standard, it alone cannot capture the various dimensions of quality of life. The quality of living is a broader concept than income and consumption. It includes the full range of both material and non-material factors which are basic and influence value in living. There is now a general consensus that living standards depend not only on incomes and consumption but also on access to basic amenities such as health, education, housing, water supply, sanitation, security and freedom. A good shelter is basic need for security as well as to raise families. Similarly, access to safe drinking water and sanitation is essential to lead a healthy and decent standard of living. In view of the critical importance of these basic amenities for quality life, this chapter focuses on these facets of human development in Udupi district.

7.2 Housing Status

Shelter is a basic human need. It is required to protect from adverse environmental elements and to raise families. The availability and quality of housing affects the physical and mental well-being of occupants. The National Housing and Habitat Policy, 1998 recognizes housing activity as a basic necessity for the well-being of people in the country and provides the framework for the implementation of shelter programs in the country. Under the growing population pressure, meeting the housing needs of all the families is a real challenge. This is more so particularly for the poor for whom housing could be beyond reach. They do not own land and the cost of housing materials and construction is beyond their affordability. Nearly 90 percent of the housing shortage relates to the poor and there is a need to increase the supply of affordable housing to low income groups. Housing for the poor and down-trodden assumes greater importance both in rural and urban areas in housing policy of the state.

According to the 2001 census data, Udupi district had 206222 households, of which 109718 (53 percent) had permanent good houses, 82357 (40 percent), livable semi-permanent houses, 10758 (5 percent), useable and the remaining 3389 (2 percent) had non-usable dilapidated houses. As against this, as per 2011 census, 184713 (75 percent) houses are permanent

The dilapidated houses constitute 4.2 percent in rural areas and 2 percent in urban areas. Only 3 percent of houses in rural areas and 4 percent in urban areas have no exclusive room.

good houses, 57989 houses (23.5 percent) are semi-permanent, 2560 (1 percent) usable and only 997 (0.4 percent) are non-useable. The data, thus, clearly shows significant improvement in housing status during the last decade. The rural –urban differences in the housing status is not significantly very high. In rural areas, 61.4 percent of families have good houses, whereas, in urban areas, 73 percent of the families have good houses. As against, 34 percent livable houses in rural areas, 25 percent are livable houses in urban areas. The dilapidated houses constitute 4.2 percent in rural areas and 2 percent in urban areas. Only 3 percent of houses in rural areas and 4 percent in urban areas have no exclusive room. Most of the houses have more than one room in both rural and urban areas. Those who have one room house constitute 13 percent of houses in rural areas and 9 percent in urban centres. As regards tenure status, in rural areas, more families live in their own houses (93 percent) than in urban areas (81 percent).

Table 7.1
Udupi District: Housing Status by Predominant Roof and Wall Materials (number)

Materials of Wall	Total Census Houses	Total Residence Houses	Materials of Roof		
			Grass/Thatch /Bamboo/ Wood etc	Pacca Roof Materials*	Others
All Materials	349921	245251	2290	242247	714
Grass/Bamboo etc	6154	2762	775	1791	190
Plastic Polythene	482	252	34	138	80
Mud/burn brick	68628	47626	1075	46364	187
Wood	1589	782	43	734	5
Stone not packed with mortar	33423	22776	91	22632	53
Stone packed with mortar	230603	165219	228	164831	160
GI/Metal/Asbestos sheet	510	167	10	146	11
Burnt brick	3124	2004	1	1993	10
Concrete	4581	3358	25	3329	4
Any other	827	305	8	283	14

*Pacca roof materials include Machine-made tiles, Burnt brick, Stone/slate, GI/metal/Asbestos sheets and concrete. Others include plastic/polythene, handmade tiles and others. Source Census 2011 (Provisional)

In 2011, houses are classified based on predominant materials of roof and wall. Table 7.1 presents the housing status data based on roof and wall materials.

Udupi district has, as per 2011 census, 349921 census houses, of which 245251 (70 percent) are residence houses[21]. Nearly 30 percent of census houses are non-residential. Out of 245251 houses of residential use, 242247 houses (98.8 percent) have pucca roof materials such as hand-made tiles, machine-made tiles, burn-brick, stone slate, GI/metal/asbestos sheets or concrete. 2290 houses (9 percent) have grass thatch, bamboo or wood roof materials. Even among 242247 houses with pucca roof materials, 71942 houses (30 percent) have grass/bamboo, mud-burn brick, plastic polythene or wood as wall materials. If pucca roof materials with pucca wall materials (stone packed with mortar, GI/metal/asbestos, burn-brick or concrete) are considered as pucca or permanent houses, the district has 170299 (69.4 percent) pucca or permanent houses. The remaining 30.6 percent households are only semi-permanent livable or katcha houses. Compared to the state level average of 38.4 percent pucca house status based on roof and wall materials used, the district has better housing status.

In Table 7.2, the taluk-wise classification of housing status based on roof and wall materials predominantly used is given. From the data in the table, it may be seen that in Udupi taluk , 72 percent of the census houses are used as residential houses In Karkala, the residential houses constitute 71 percent of the total census houses. Kundapura taluk, on the other hand, has only 66 percent of census houses as residential houses. As regards housing status based on the materials

Table 7.2
Taluk wise Housing Status: 2011
(number)

Taluk/District	Total Census Houses	Total Residence House	Pucca Houses	Grass/Thatch /Bamboo wood /Mud Houses	Others
Karkala	65089	46086	27352	372	18362
Kundapura	116122	77183	54689	842	21652
Udupi	168710	121982	88258	1076	32648
District	**349921**	**245251**	**170299**	**2290**	**72662**

Source Census 2011 (Provisional)

[21]Census 2011housing data are provisional. The total households in the district as per the Census final estimate are 253078. Since data available on the housing are provisional, analysis in this section is based on available provisional data.

predominantly used for walls and roofs, surprisingly, Karkala has the lowest percentage of pucca houses and Udupi taluk has the highest percentage of pucca houses. In Karaka taluk, out of 46087 residential houses, the pucca houses are 27352 houses (59 percent). Out of the balance 18734 residential houses, 18362 are temporary livable houses and 372 are dilapidated grass thatch/ bamboo mud houses. In Udupi taluk, on the other hand, out of 121982 houses used as residential, 88258 houses (72 percent) are considered as pucca houses based on materials used as roof and wall materials. Incidentally, in absolute numbers, Udupi taluk has the highest number of temporary livable or katcha houses. Out of 2290 grass/thatched/bamboo/mud houses in the district, 1076 are in Udupi taluk. In Kundapura taluk, on the other hand, out of 77183 residential houses, 54689 houses (71 percent) are pucca houses; 32648 (27 percent) houses, livable and 1076 (2 percent), dilapidated.

There are about 15340 families in the district, who do not have house sites for construction of houses. They constitute 6 percent of the total households in the district.

7.3 Siteless Households

The problem of housing ultimately centered around availability of land and ownership of sites for construction of houses particularly in the case of weaker sections of the community. Land in urban areas is not only scarce, but also beyond the reach of many. Absence of requisite houses results in formation of slums. Housing being a basic need for survival of human being, there is no justification for existence of home-less families in any modern society. The problem of site-less and home-less families, therefore, requires serious and priority consideration in any government policy. The position of houseless households and siteless households in different taluks is shown in Table 7.3.

Surprisingly, there are about 15340 families in the district, who do not have house sites for construction of houses. They constitute 6 percent of the total households in the district. The data in the table also shows that the district has

Table 7.3
Taluk-wise Houseless Households: 2011-12
(Percentage)

Taluk/ District	Site-less Households		Houseless Families		Houses Allotted	
	Number	Percent	Number	Percent	Number	Percent
Karkala	3686	7.73	5836	12.24	2217	37.99
Kundapura	8634	10.85	9566	12.02	4102	42.88
Udupi	3020	2.4	5984	4.76	3483	58.2
District	**15340**	**6.06**	**21386**	**8.45**	**9802**	**45.83**

Source: Udupi Zilla Panchayat.

21386 households without houses. Their percentage in the total households in the district works out to 8.5 percent. The majority of the siteless and houseless households belong to the weaker sections of SCs, STs and OBCs. Out of 15340 siteless households, 1221 belong to SCs and 590 to STs. The balance 13529 belong to OBCs and general category. Inter-taluk comparison shows that Kundapura taluk has the highest percentages of siteless households (11 percent), followed by Karkala (8 percent). Udupi taluk has the lowest percentage (2 percent) of siteless families. As regards houseless families, Karkala has the highest percentage (12.2 percent) followed by Kundapura (12 percent). Udupi taluk has the lowest percentage (4.8 percent)

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7.4 Schemes for Housing Facility

Housing being considered as the basic necessity for human existence, the State government has implemented various housing schemes. A total of 9802 houses were constructed and allotted to nearly 46 percent of the houseless families in the district. Inter-taluk comparison shows that while Udupi taluk has covered 58 percent of houseless families under the government housing schemes, Kundapura and Karkala have covered 42 percent and 38 percent respectively.

The various housing programs implemented by the Government for providing houses to the houseless poor and down-trodden families and the number of houses constructed for the benefit of various social groups are shown in Table 7.4. From the table, it may be seen that the focus of the government housing programs is to provide good houses to SCs and STs. Out of 35779 houses constructed under various schemes, 11560 are for SC families and 4586 for ST families. By taking into account the total SC and ST households in the district, the percentage of household-beneficiaries works out to 67 percent in the case of SCs and 40 percent in the case of STs.

Table 7.4
Houses Constructed under various programs: 20011-12
(number)

Programs	SC	ST	Others	Total
Ashraya Scheme	5081	1572	14585	21238
Dr. B.R, Ambedkar Scheme	3487	715	-	4202
Indira Awas Yojana	2967	2298	4598	9863
Special Fisheries Scheme	25	1	450	476
Total	11560	4586	19633	35779

Source: Udupi Zilla Panchayat

The balance 19633 houses are for weaker sections of the general category families including OBCs. The percentage of beneficiaries constitutes 9 percent of the total families.

Out of 35,779 houses constructed, 21,238 are under the state sponsored Ashraya scheme. 6,653 houses under this scheme are for SC and ST families. Under Ambedkar Housing scheme, 4,202 houses are constructed exclusively for SC and ST families. Out of 9,863 houses constructed under centrally sponsored Indira Awas Yojana, 5,265 are for SC and ST families. Thus, 16,146 houses out of 35,779 houses constructed under various housing programs are for the benefit of SC and ST families.

The quality of housing can be judged based on number of dwelling rooms, availability of kitchen and bath room etc. As per 2011 Census data, only 3.3 percent of the Census houses in the district have no exclusive room. As per 2001 Census data, the majority of the houses (56.4 percent) have more than two rooms; only 28.2 percent have two rooms and 12.1 percent, one room. Importantly, 95 percent houses have separate kitchen and 67 percent, separate bath room facilities. There is no significant difference between the rural and urban houses in regard to number of dwelling rooms and availability of kitchen. Only in the case of availability of separate bath room, 87 percent of urban houses have separate bathrooms, while in rural areas, only 61 percent of houses have separate bath rooms.

7.5 Households and Asset Status

Shelter is a broad concept beyond dwelling unit. It also includes basic amenities required for enhancing the quality of life of people. In the present context, the modern household assets such as radio, television, telephone, bicycle or motor cycle etc have become essential for comfortable livelihood.

Table 7.5
Udupi District: Households having Modern Amenities (Percentage)

Household Assets	Rural	Urban	Total (2001 Census)	Total (2011 Census)
Radio/Transistor	68.97	67.93	68.78	31.90
Television	34.00	69.02	40.64	70.20
Telephone	14.71	41.38	21.76	89.70
Bicycle	25.08	34.91	27.52	33.20
Scooter, Motor Cycle &Moped	11.07	27.77	14.22	26.50
Car, Jeep and Van	3.12	9.35	4.29	4.29

Source: 2001 Census and 2011 Census

Table 7.5 shows the proportion of the households having some of these basic household assets in the district based on the Census data. In 2001, more than two-third of the families in the district were having radio or transistor both in rural and urban areas as it was then considered a basic necessity for news and entertainment. But now the scenario changed and radio was substituted by Television. As per Census 2011 data, there is a significant reduction in the households using radio or transistor. The percentage of households having radio/transistor was reduced from 68.8 percent to 31.9 percent. As against this, the percentage of households having Television has increased from 40.6 percent to 70 percent. In 2001, only 34 percent of rural households had television. In urban areas, most of the families then had television. The shift from radio to television took place significantly in rural areas. Earlier, it was a luxury and now it is a necessity even for rural households.

There is also revolutionary change took place in use of telephone. In 2001, only 22 percent of households had telephone in their houses. As per 2011 Census, the percentage of households having telephone increased to 89.7 percent. In the case of bicycles, scooters and motor cycles, no such significant change took place in the district. The households owning bicycles increased from 27.5 percent to 33 percent and for scooter/motor cycle, the increase is from 14.2 percent to 26.5 percent during this period. Surprisingly, there is no change in the percentage of households owning cars/Jeeps/Vans. The rural-urban differences in the case of these household assets are also very wide. The comparison of the state level

There is also revolutionary change took place in use of telephone. In 2001, only 22 percent of households had telephone in their houses. As per 2011 Census, the percentage of households having telephone increased to 89.7 percent.

Table 7.6
Taluk-wise Household Assets: 2001 (Percent of Households)

Household Assets	Karkala			Kundapura			Udupi		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Radio/Transistor	67.04	63.05	66.88	70.64	62.09	70	68.34	69.69	68.73
Television	26.97	61.61	31.08	23.64	60.62	26.41	46.13	71.06	53.47
Telephone	14.18	41.87	19.46	13.22	34.89	14.85	21.98	42.39	27.86
Bicycle	22.91	42.23	25.02	27.44	37.02	29.53	25.04	33.36	27.99
Scooter/ Motor Cycle, &Moped	9.73	27.07	11.79	10.55	23.04	11.49	12.14	28.67	16.09
Car, Jeep and Van	3.09	8.81	3.77	2.64	7.35	2.99	3.12	9.35	4.29

Source: 2001 Census

[22] 2011 Census data on taluk wise households having different households not yet published.



Water Tank

data and the district data reveals that the district has higher proportions of the households owning these household assets than those of the state average.

In Table 7.6, an attempt is made to compare taluk-wise data on the households having these basic household assets based on 2001 Census data[22]. The taluk-wise comparison of the data on proportion of the households owning various household assets shows that Udupi taluk has relatively higher percentage of households than other two taluks. In the case of television, Udupi taluk had 53.5 percent of the households owning it as against 26.4 percent in Kundapura and 31 percent in Karkala. Similarly, the telephone users in Udupi taluk were 28 percent in Udupi in 2001 as compared to 19 percent in Karkala and 15 percent in Kundapura. As regards bicycle, scooters, motor cycles and moped, the inter-taluk variations are only marginal. Kundapura has relatively highest percentage of bicycle-owners. In the case of Cars, jeeps and vans, Udupi has the highest percentage of households owning them (4.3), followed by Karakala (3.8). Kundapura, on the other hand, has the lowest percentage (3). Incidentally, it is important to note that compared to the state average, all taluks have higher percentage of householders having these household assets.

7.6 Drinking Water

Access to safe drinking water is another basic necessity for existence of human beings. It is indispensable for a healthy life. Several diseases like diarrhea, hepatitis, round-worm, hook-worm infection, trachoma and guinea worm are water related. In recent years, water quality has deteriorated due to rapid industrialization and resultant increasing quantities of industrial waste water, population growth and increasing domestic waste water and agricultural run-off. Water being life line for survival of mankind, the access to drinking water should be looked into in terms of availability throughout the year, proximity to water supply and the quality of water for safe drinking. The traditionally main sources of drinking water are open well, tube well, bore hole, spring, river and lakes. With the change in life style and increase in population, demand for potable water is on a steady increase. The National Policy for drinking water stipulates a norm for providing potable drinking water of 40 litres per capita per day (lpcd) within 500 metres of the place of residence[23].

Geographically, Udupi and Kundapur taluks are in the coast and Karkala in the hilly region. Traditionally, households in the district, both in urban and rural areas, were dependent on open well water for drinking. Most of the houses had their own well within their premises for supply of drinking water. As per

[23]Based on provision of 3 litres for drinking water, 5 litres for cooking, 15 litres for bathig, 7 litres for washing utensils and domestic appliances and 10 litres for ablution

2011 census data, 74.5 percent of the households in the district still depend on open well for drinking water, only 11.67 percent on treated taps, 1.2 percent on hand pump, 4 percent on tube wells/borewells and 2.6 percent on other sources such as springs, river/canals and tank/ponds/lakes (Table 7.7). As per Census definition, the safe drinking water covers only treated tap water, covered well, handpump and tube/borewell sources only. It excludes uncovered open wells. As per this definition, the safe drinking water in the district is enjoyed by only 65027 households out of total 246313 households. The percentage of households having safe drinking water works out to 26.40 percent. About 73.6 percent households do not have safe drinking water. Out of those who have safe dinking water, 18.03percent have safe drinking water facility within their premises. As regards the proximity of access, 75.3 percent of households have drinking water facility within the premises and only 13.7 percent have outside but near the premises. Only 11 percent have to fetch water from far away sources; but mostly within one km distance. Thus access to drinking water is not a serious problem but the quality of the water is serious worrisome issue.

Among the social groups, as per 2011 Census data, SCs and STs have higher percentages of households using safe drinking water sources such as tap

Table 7.7
Udupi District: Households by Main source of Drinking water and Location

Source of water	Within Premises		Near premises		Away		Total	
	No.	%	No.	%	No.	%	No.	%
Tap Water treated	22250	9.03	4036	1.64	2465	1.00	28751	11.67
Tap water Untreated	7450	3.02	3181	1.29	2355	0.96	12986	5.27
Covered Well	14411	5.85	2240	0.90	1159	0.47	17810	7.23
Uncovered Well	132888	53.95	17667	7.17	15145	6.15	165700	67.28
Hand pump	1767	0.72	603	0.24	529	0.21	2899	1.18
Tube well/Bore well	6638	2.69	2997	1.22	1912	0.78	11547	4.69
Spring	-	-	261	0.11	201	0.08	462	0.19
River/Canal	-	-	444	0.18	628	0.25	1072	0.43
Tank/Pond/Lake	-	-	1103	0.45	920	0.37	2023	0.82
Other sources	-	-	1183	0.48	1880	0.76	3063	1.24
Total	**185404**	**75.27**	**33715**	**13.69**	**27194**	**11.04**	**246313**	**100.0**

Source: 2011 Census. Note: Percentage based on total households (246313)

waters, hand pumps and tube well/bore well. In the case of SC households, 29.6 percent use tap water, 3 percent hand pumps, and 7 percent tube wells. The percentage of households using open wells is 56 percent. Only 4 percent depend on other sources. In the case of STs, 17 percent use tap water, 1 percent hand pumps, 4 percent tube wells/bore wells and 69 percent open wells. Those who uses other sources constitute 8 percent of the total ST households. Implementation of various schemes by the state government for providing safe drinking water to these communities has made this difference.

In Table 7.8, the use of safe drinking water sources by rural and urban households as per proximity of access is analyzed. From the table, it may be noted that out of 174548 rural households only 18.4 percent (32151) have safe drinking water supply. In the case of urban area, out of 71765 households, 32876 have safe dinking water. The percentage share works out to 45.8 percent. As against this, at the state level, 64 percent of the families have safe drinking water supply and only 36 percent of the households are faced with the problem of unsafe drinking water supply sources. Thus, in

Table 7.8
Udupi District: Rural-Urban Sources of Safe Drinking Water by Location

Rural/ Urban	Location	Safe Drinking Sources		Unsafe Drinking Sources		Total	
		Number	Percent	Number	Percent	Number	Percent
Rural	Within Premises	21223	66.01	103729	72.84	124952	71.59
	Near Premises	6803	21.16	20011	14.06	26814	15.36
	Away	4125	12.83	18657	13.10	22782	13.05
	Total	32151	100.00	142397	100.00	174548	100.00
Urban	Within Premises	28286	86.04	32166	82.71	60452	84.24
	Near Premises	2650	8.06	4251	10.93	6901	9.62
	Away	1940	5.90	2472	6.36	4412	6.15
	Total	32876	100.00	38889	100.00	71765	100.00
District	Within Premises	45086	69.33	140318	77.40	185404	75.27
	Near Premises	9876	15.19	23839	13.15	33715	13.69
	Away	10065	15.48	17129	9.45	27194	11.04
	Total	65027	100.00	181286	100.00	246313	100.00

Source: 2011 Census. Note: Safe drinking water sources include tap-water treated, covered well, hand pump, and Tube well/Bore well. Percentages represent sources of drinking water used by households.

terms of safe drinking water supply, Udupi district is in a worse position compared to most of other districts in the state.

It is really matter of concern that in spite of KUDCEMP project of lifting water from Swarna river (II stage) for providing safe drinking water to Udupi and water project for Kundapur Town, the beneficiaries of treated tap water supply in urban areas remained as low as 24 percent when the state has as high as 68 percent urban household coverage for treated tap drinking water supply. Even in the case of rural areas, the State Government has been giving priority to rural drinking water supply over the last three decades. In 1980s, the emphasis was on bore-wells with hand pumps as main source of water supply in rural areas. With the depletion of groundwater level, most of the bore-wells installed then have dried up. Currently, the emphasis is on tap water schemes in rural areas. But impact seems to be only marginal.

Taluk-wise position regarding supply of safe drinking water is given in Table 7.9.

The analysis of the data in the table shows that Udupi taluk has the highest percentage of households (34.07percent) covered under safe drinking water, followed by Karkala (22.58 percent) Kundapura taluk has the lowest percentage of 16.66. As regards sources of drinking water is concerned, in Kundapura, 83 percent of households depend on open well for supply of drinking water. In Karkala and Udupi taluks, the households depending on open well are 78 percent and 75 percent respectively. Only small proportion of the households use treated tap water. In Karkala only 2451 out of 46144 households (5.3 percent) have benefitted from it. In Kundapura, the households benefitted from the treated tap water are 6123 out of 78068 (7.8 percent). As ageist this, in Udupi taluk, the treated tap water supply has benefitted 20177 out of 122101 households (16.5 percent).

According to the Drinking Water Status Survey conducted during 2011, Udupi district has 19 water quality affected habitations[24]. As regards coverage of population based on the norm of 40



Open Well

Table 7.9
Taluk-wise Households by Safe Drinking Water and Location

Taluk	Safe Drinking Water Source				Unsafe Drinking Water Source				Total
	Within Premise	Near premise	Away	Total	Within Premise	Near premise	Away	Total	
Karkala	5128	3106	2185	10419	27072	4672	3981	35725	46144
Kundapura	6878	3205	2923	13006	49878	9236	5948	65062	78068
Udupi	30503	4729	7437	41600	65122	7179	8200	80501	122101

Source: 2011 Census.

LPCD within 1.6 km distance, there are 165 habitations with 0-25 percent population coverage, 1399 habitations with 25 – 50 percent population coverage, 948 habitations with 50 – 75 percent population coverage, 270 habitations with 75 –below 100 percent population coverage and 696 habitations with 100 percent coverage. Thus, out of 3497 habitations, only .696 habitations (20 percent) in the district have drinking water as per the norms with 100 percent population coverage. At the state level, 100 percent coverage of habitations was 40 percent. While at the state level, nearly 83 percent of habitations have above 50 percent population coverage, in Udupi district, such coverage was only 55 percent.

Besides the quality problem, another important problem in the district is the availability of adequate drinking water during summer. Though the district receives an annual precipitation of around 3500 mm on an average, 75 percent of it runs as surface water and reaches the sea through streams, rivers, rivulets etc. Water holding capacity of the soil (laterite) is poor. With the overexploitation of ground water for irrigation in recent years through bore wells, the ground water table in the district is depleting resulting drying up of open wells, which creates acute water scarcity during summer months. The other major problem faced by the district with regard to drinking water supply is contamination of water and salinity in coastal areas. In most of the coastal belt, the well water becomes saline during summer. This poses a serious problem for safe drinking water in coastal areas.

7.7 Electricity

Table 7.10 shows coverage of rural electrification. Udupi district receives power supply from Varahi and Sharavati power stations. It also now

Table 7.10
Udupi District: Electrification of Villages and Hamlets
(As on 31st March 2012)

Taluks/District	Electrified				Total	
	Village		Hamlet		Village	Hamlet
	Number	Percent	Number	Percent	(Number)	(Number)
Karkala	50	100	858	100	50	858
Kundapura	101	100	1603	98.4	101	1629
Udupi	106	100	1361	100	106	1361
District	**257**	**100**	**3822**	**99.32**	**257**	**3848**

Source: Udupi Zilla Panchayat/ MESCOM.

[24] A habitation is a locality in a village where a cluster of 20 families totaling 100 persons reside.

receives power from Udupi Power Corporation Limited (UPCL) and Suzlon projects. Mangaluru Electricity Supply Company (MESCOM) distributes electricity through 12 electric sub-stations spread out through-out the district. The National Electricity Policy (NEP) stipulated energization of all villages, hamlets, Harijan bastis and thandas. As shown in the table, in Udupi district, all inhabited villages have been electrified. As regards Hamlets, out of 3848 inhabited hamlets, 3822 (99 percent) are electrified. 26 hamlets in Kundapura taluk are not yet electrified due to extreme difficulties in extending the grid to these hamlets. These hamlets are located near Western Ghats.

Table 7.11 shows the number of households using electricity and other sources for lighting in rural and urban areas. In the district as a whole, out of 246313 households, 224814 households (91.3 percent) use electricity for lighting and only 8.7 percent of the households without electricity. The comparative data at the state level is 90.6 percent electrified and 9.4 percent non-electrified households. Most of the houses without electricity are located in remote Western Ghat areas. While in the rural areas, 89.2 percent of the households are electrified, in the urban areas, the proportion of households electrified is 96.2 percent. In urban areas, most of the not-electrified houses belong to floating migrant families living in temporary houses. Other important source of lighting in the district is kerosene. In rural areas, nearly 10 percent of families and in urban areas, 3 percent of families use kerosene for lighting. In spite of efforts by solar companies and banks, solar energy is used by only 0.4 percent of the households. It is important to note

While in the rural areas, 89.2 percent of the households are electrified, in the urban areas, the proportion of households electrified is 96.2 percent.

Table 7.11
Udupi District: Households by Main Source of Lighting: 2011

Main Source of Lighting	Rural		Urban		Total	
	Number	Percent	Number	Percent	Number	Percent
Electricity	155753	89.23	69061	96.23	224814	91.27
Kerosene	17322	9.92	2321	3.23	19643	7.98
Solar Energy	843	0.48	90	0.13	933	0.38
Other oil	226	0.14	167	0.23	393	0.16
Others	84	0.05	29	0.04	113	0.05
No lighting	320	0.18	97	0.14	417	0.17
Total	174548	100	71765	100	246313	100

Source: Census-2011

that the district has still 417 families living in darkness without any source of lighting and most of these families are in rural areas.

The district has made significant progress in extending electricity at household level during the last decade. In 2001, only 69.7 percent of households were electrified, which now increased to 91.3 percent. The number of households using kerosene for lighting declined from 30 percent in 2001 to 8 percent in 2011. As per 2001 Census, 48 percent of SC and 56 percent of ST families were using kerosene. This clearly demonstrates that most of the houses electrified during the last decade belong to weaker section particularly SCs and STs[25].

Taluk-wise distribution of houses by sources of lighting is given in Table 7.12. Inter-taluk variation in electrification of households is only marginal. In Udupi taluk, 94 percent of households are electrified. In Karkala and Kundapura taluks, the percentage of households electrified are 89 and 88 respectively. While kerosene is used by 5.5 percent of households in Udupi taluk, in other two districts, it is around 10 percent. Karkala has the lowest number of households without any source of lighting (46), Udupi has the highest number of such houses (417). In Kundapura taluk, families without any source of lighting are 157.

7.8 Cooking Fuel

Traditional fuel used for cooking includes fire-wood, crop residuals, cow-dung cake, charcoal, and kerosene. In Udupi district, the most common fuel traditionally used for cooking was fire-wood. In urban areas, besides fire-wood, cow-dung cake, charcoal and kerosene were also used

Table 7.12
Taluk-wise Households by Main source of Lighting – 2011

Taluk/ District	Karkala		Kundapura		Udupi		District	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Electricity	41165	89.21	68867	88.21	114782	94.01	224814	91.27
Kerosene	4732	10.26	8235	10.55	6676	5.47	19643	7.98
Solar Energy	116	0.25	650	0.84	167	0.14	933	0.38
Other oil	71	0.15	118	0.15	204	0.17	393	0.16
Others	14	0.03	41	0.05	58	0.04	113	0.05
No lighting	46	0.1	157	0.2	214	0.17	417	0.17
Total	46144	100	78068	100	122101	100	246313	100

Source: Census-2011

[25] 2011 Census data on distribution of households electrified among social groups are not yet published.

sparingly. In recent years, with the increasing income, change in life style and more urbanization, there is a growing demand for modern sources of energy like LPG and it is gradually replacing the use of firewood as cooking fuel. In fact, the transition from the use of traditional biofuels like fire wood to modern fuels is an inevitable process with the increase in income and urbanization. The LPG is the fuel of choice for cooking because it is easy to use, clean and efficient. Firewood is difficult to use and it emits smoke, which is health hazard, requires storing space, human labor for cutting, transportation etc. and not environment friendly.

Table 7.13 contains data on distribution of households according to the place of cooking and type of fuel used for cooking in the district as per the 2011 Census. At the outset, it is important to note that in Udupi district, 97 percent of the houses have kitchen inside the house as against the state average of 88 percent. Thus cooking is mostly done inside the house. As per 2001 Census data, 72.4 percent of households were using firewood as fuel for cooking. Only 23 percent were depending on LPG. The

Table 7.13
Udupi District: Place of Cooking and Type of Fuel used for Cooking (2011)

Type of Fuel used	Cooking inside House (Number)		Cooking outside House (Number)		No Cooking (Number)	Total HHs	
	Has Kitchen	No kitchen	Has Kitchen	No Kitchen		Number	Percent
Fire-wood	150457	1589	No.	3320	-	156350	63.48
Crop Residue	1017	58	984	116	-	1196	0.48
Cow dung Cake	82	5	5	4	-	95	0.04
Charcoal etc.	264	3	4	10	-	278	0.11
Kerosene	1083	48	1	20	-	1157	0.47
LPG/PNG	82503	200	6	998	-	83810	34.02
Electricity	470	3	109	9	-	483	0.2
Biogas	2209	7	1	50	-	2268	0.92
Any other	111	3	2	5	-	119	0.05
No Cooking	-	-	-	-	557	557	0.23
Total	238196	1916	-	4532	557	246313	100

Source: Census-2011

In rural areas, slightly more than three-fourth of the households still depend on traditional biofuels particularly fire-wood for cooking, whereas in urban areas, 61 percent of the families use modern fuel type mainly LPG/PNG.

proportion of households using fire-wood for cooking is now reduced to 63.5 percent, whereas the share of households using LPG has one up to 34 percent. Compared to the state level average of 32 percent, the district has slightly higher percentage of households using LPG/PNG. In rural areas, with the government subsidy and concessional bank loan, the biogas was replacing the fire wood as fuel for cooking. Surprisingly the data shows that the proportion of households using bio-gas has declined from 1.60 percent in 2001 to 0.92 percent. Even in the case of kerosene, there is a significant decline from 1.40 percent in 2001 to 0.47 percent. Kerosene is mainly used in the urban areas.

In Table 7.14, an attempt is made to categorize the type of fuels used for cooking as traditional type, which include fire wood, crop residuals, cow-dung cake, charcoal and others used historically and modern type, which include LPG/PNG, electricity and bio-gas. The data in the table clearly demonstrates wide rural and urban gap in the types of fuel used for cooking. In rural areas, slightly more than three-fourth of the households still depend on traditional biofuels particularly fire-wood for cooking, whereas in urban areas, 61 percent of the families use modern fuel type mainly LPG/PNG. It is, however, gratifying to note that in Udupi district, 25 percent of rural households use modern type cooking fuels like LPG as against the state average of 12 percent. Taluk-wise also the overall pattern in the type of fuel used for cooking in rural and urban areas is more or less the same. In Udupi taluk, the higher proportion of the households using modern type cooking fuels is mainly because of Udupi city where more than 60 percent use LPG for cooking.

Most of the households who use traditional fuel for cooking both in rural and urban areas belong to weaker

Table 7.14
Taluk-wise Type of Fuel used for Cooking: 2011

Taluks	Rural		Urban		Total	
	Traditional	Modern	Traditional	Modern	Traditional	Modern
Karkala	32411 -82.33	6956 -17.67	2803 -41.36	3974 -58.64	35214 -76.31	10930 -23.69
Kundapura	53534 -76.33	16604 -23.67	2845 -36.13	5085 -63.87	56379 -72.22	21689 -27.78
Udupi	45620 -70.14	19423 -29.86	22539 -39.5	34519 -60.5	68159 -55.82	53942 -44.18
District	**131565 -75.37**	**42983 -24.63**	**28187 -39.28**	**43578 -60.72**	**159752 -64.86**	**86561 -35.14**

Source: Census-2011

section of the community. The main reasons for this are inaccessibility and unaffordability of modern fuel supply/services particularly in rural areas. Without access to modern energy sources for cooking, it is impossible to achieve the Millennium Development Goals. The goal of ensuring easy and affordable energy access for the unreached and the vulnerable sections of the society is imperative from both gender development and human development perspective

7.9 Sanitation

Sanitation broadly means safe disposal of waste. Cleanliness and sanitation of an area hold key for the good health and hygienic conditions and well-being of the community living in a particular area. Access to toilet facilities within the home premises provides privacy, dignity, and a sense of security to family members especially female members. With the increase in population and urbanization, human waste is the main source of waste posing a big menace and nuisance leading to health hazard.



Sanitation

Table 7.15
Udupi District: Households by Type of Latrine Facilities (2011)

Location/Type of Facilities	Rural		Urban		All	
	Number	Percent	Number	Percent	Number	Percent
Within Premises:	145909	83.59	68899	96.01	214808	87.21
Flush latrine -Piped sewer system	2556	1.46	5815	8.1	8371	3.4
Flush latrine -Septic tank	120301	68.93	54580	76.05	174881	71
Flush latrine –Other system	1098	0.63	577	0.8	1675	0.68
Pit latrine -Slab/ventilated pit	21683	12.43	7857	10.95	29540	11.99
Pit latrine-Open pit	74	0.03	20	0.03	94	0.03
Night soil disposed into open drain	76	0.04	23	0.03	99	0.04
Service latrine –removed by human	-	-	-	-	-	-
Service latrine- serviced by animal	121	0.07	27	0.04	148	0.06
No latrine within Premises:	28639	16.41	2866	3.99	31505	12.79
Public latrine	739	0.43	561	0.78	1300	0.53
Open	27900	15.98	2305	3.21	30205	12.26
Total	**174548**	**100**	**71765**	**100**	**246313**	**100**

Source: 2011 Census

Nearly 87.2 percent of the households in the district have now latrine facilities within the premises.

75 percent of the households in the district have flush latrine as against the state average of 37 percent.

Faecal contamination is the prime cause for diarrhea, cholera, typhoid, and other infectious diseases. Provision of sanitation facility has been recognized as one of the basic needs for well-being of people The Millennium Development Goal (7) aims at halving by 2015 the proportion of people without improved sanitation facilities from 1990 levels. The Government of India has launched "Total Sanitation Campaign" (TSC) in the year 2005 with the goal of sanitation for all. The specific objective of TSC is to provide access to toilets for every household in rural areas, schools and anganwadis to render the villages clean and manage solid and liquid waste efficiently. The scheme also aims to create awareness among public about disadvantages of unhygienic habits to motivate them to construct and use toilets and keep their environment clean.

Till 1990s, no concerted efforts were made to improve sanitation in the district. According to 2001 census data, only 56.29 percent of households had access to toilets within the premises. In urban areas, it was 83.89 percent and in rural areas, 49.88 percent. In other words, nearly half of the rural households did not have toilet facilities. With the commissioning of the TSC, a lot of importance was given to improving the sanitary conditions in the rural areas. The State Government has launched Nirmala Grama and Swatchata Grama schemes to be implemented through GPs. BPL families were given Rs.3700 as incentive amount for construction of toilets. Awareness campaigns were organized by the ZP in all taluks with regard to sanitation and cleanliness. As a result of various initiatives implemented by the government, the district has made reasonably good progress in sanitation as shown in Table 7.15. The analysis of the data in the table shows that nearly 87.2 percent of the households in the district have now latrine facilities within the premises. Out of 246313 households, only 31505 (12.8 percent) depend on latrine facilities outside their premises. Importantly, 75 percent of the households in the district have flush latrine as against the state average of 37 percent. Only 12.3 percent of the total households depend on open defecation. Even in rural areas, the progress achieved during the last decade is remarkable. As against 49.9 percent households in 2001, the district has now 83.6 percent of the households having latrine facility within premises. Even among them 71 percent of the total rural households have flush latrine facility within their premises. At the state level, the proportion of rural households having flush latrine facility is only 13 percent. In urban areas, 96 percent of the households have latrine facility within premises and 85 percent have flush latrine facility in their premises. Notwithstanding the remarkable progress achieved in sanitation, the district has 27900 rural households and 2305 urban

households still defecating in open, creating problems of health and cleanliness, apart from experiencing shame and loss of dignity.

Taluk-wise status of sanitation is examined in Table 7.16. There exists Inter-taluk differences and rural urban gaps in types of latrine facility used, In Karkala taluk, surprisingly, in rural areas, 85.6 percent of the households have flush latrine within their premises while in urban areas, it is only 74.7 percent. As against this, Kundapura taluk has the lowest percentage of households having flush latrine facility within their premises both in rural and urban areas. Udupi taluk has the highest proportion of households having flush latrine facility in urban areas, but it has lower percentage of houses with such facility in rural areas compared to Karkala taluk. It is a matter of concern that Kundapura is lagging behind other two taluks in improving sanitation in rural areas. Out of 70138 rural households, 31136 (44.4 percent) still depend on open area for defecating.

Under Rural Development and Panchayat Raj programs, the toilets constructed were 43887 for rural households, 13 community toilets, 458 school toilets and 393 anganawadi toilets. However, the district has still 7 lower primary schools and 42 upper primary schools with no separate toilets for girl students. The highest numbers are in Udupi taluk followed by Kundapura. Since houses in the district are spread out, the drainage is not a serious problem in the rural areas. At present, the villages covered under

Table 7.16
Taluk-wise Households by Type of Latrine Facility (2011)

Taluk	Rural		Urban		Total	
	Flush latrine within premises	Others	Flush latrine within premises	Others	Flush latrine within premises	Others
Karkala	33704 -85.61	5663 -14.39	5065 -74.74	1712 -25.26	38769 -84.02	7375 -15.98
Kundapura	39002 -55.61	31136 -44.39	5879 -74.14	1758 -25.86	44881 -57.49	33187 -42.51
Udupi	51249 -78.79	13794 -21.21	50028 -87.68	7030 -12.32	101277 -82.94	20824 -17.06
District	**123955 -71.01**	**50593 -28.99**	**60972 -84.96**	**10793 -15.04**	**184927 -75.08**	**61386 -24.92**

Source: 2011 Census. Figures in bracket are percentages

drainage are 20.2 percent in Kundapura, 28.4 percent in Karkala and 30.7 percent in Udupi taluk. The district as a whole, 27 percent of the villages have drainage facility. Under KUDCEMP scheme, lavatories for the BPL families have been constructed in Udupi and Kundapur towns of the district. Though Udupi district ranks first in the state in sanitation, in recent years, with the increasing number of migrant labor families and resultant emergence of slums in and around Udupi and other towns, the sanitation is going to become a serious problem in the near future. These slums will lack all sanitary facilities and act as breeding places of various diseases.

In order to encourage 100 percent coverage of total sanitation, the Government of India has instituted the Nirmal Grama Puraskar at Grama Panchayat, Taluk Panchayat and Zilla Panchayat levels. The criterion for such puraskar is 100 percent toilet construction and their use by households, schools, and anganawadis and efficient management of solid and liquid wastes. The State Government instituted Nirmalya Award to encourage Grama Panchayats, Taluk Panchayats and Zilla Panchayats for acceleration and sustainability of TSC. The awards ranges from Rs.1 lakh to Rs. 19 lakh for GPs, Rs.10 lakh to Rs.20 lakh for Taluk Panchayats and Rs.30 lakh for the ZPs. During 2006 – 11, out of 146 GPs, 107 were awarded Nirmal Gram Puraskar by the Central Government.

7.10 Concluding Remarks

Udupi district has made remarkable progress as regards housing status, electrification of households and sanitation. The housing status in terms of materials used for roofing and walls and quality in terms of availability of dwelling rooms, kitchen and bathroom in the district is relatively better than most of the districts in the state. The district has also made good progress in ensuring provision of housing facilities to the weaker section under the various government housing schemes. The district is on the way to become free from houseless households in all sections of the community. The government pro-active and pro-poor housing policy significantly contributed in this direction.

As regards safe drinking water, tap water is used mainly in urban areas. Three-fourths of rural households still depend on open wells, water quality of which is questionable. Besides the quality problem, the district is also faced with the problem of availability of adequate drinking water during summer. With the overexploitation of ground water for irrigation through bore wells, the ground water table is depleted and open wells dry up during summer months, which creates acute shortage of water for drinking during

summer. Another major problem faced by the district is contamination of water and salinity in coastal areas. In most of the coastal belt, the well water becomes saline during summer. This poses a serious problem for safe drinking water in coastal areas.

In similar vein, there exists wide rural and urban gap in the types of fuel used for cooking. In rural areas, slightly more than three-fourths of the households still depend on traditional bio-fuels particularly fire-wood for cooking, whereas in urban areas, nearly two-thirds of the families use modern fuel type mainly LPG/PNG. The main reasons for this are inaccessibility and unaffordability of modern fuel supply/services in rural areas. Without easy and affordable access to modern energy sources for cooking, it is impossible to achieve the MDGs in this regard. As against this, in the area of sanitation, the district has made a remarkable progress in both rural and urban areas. The majority of households including weaker sections have flush latrine in their own premises. The Government's enabling policy and programs facilitated this achievement. However, the menace of emerging slums with the increasing number of migrant labor families in and around Udupi and other towns has potential to pose serious threat to the sanitation in the district unless the corrective steps are taken now.





Solar Street Lights, Kollur