

Access to Household Amenities and Assets in India: An Analysis of Census Data

(स्थापना/ Established in 1956) बेहतर भविष्य के लिए क्षमता निर्माण Capacity Building for a Better Future



Coordinators: R. B. Bhagat Sunil Sarode L. K. Dwivedi

Assisted by: Mausam Kumar Garg Sachin Lokhande

International Institute for Population Sciences Mumbai, 400088 (http://www.iipsindia.ac.in)

Citation: Bhagat, R.B., Sarode, Sunil and Dwivedi, L.K., Kumar, Mausam and Lokhande, Sachin (2018) *Access to Household Amenities and Assets in India: A Census Based Study*, Research Monograph, International Institute for Population Sciences, Mumbai.

Table of Contents

I.	Chapter-1: Introduction5	
1.	1 Nature of Census Data	6
	1.1.1 Household Amenities:	7
	1.1.2 Household Assets: Error! Bookmark no	ot defined.
1.2	2 Data Source and methodology	
	1.2.1 Data Source	
	1.2.2 Methodology	
II.	Chapter-2: Household Amenities in India11	
2.1	1 Household living condition by states	14
2.2	2 Household Amenities by administrative Status	
	2.2.1 Household Amenities by administrative status at state level	
2.3	3 Household living condition by class size city	
2.4	4 Household Amenities Index, 2011	
2.5	5 Relationship between Household Amenities: A correlation analysis	
III.	Chapter-3: Access to Amenities among SC and ST Households	
3.	1 Household living condition among SC households	
	3.1.1 SC households in rural area	
	3.1.2 SC households in urban area	
3.2	2 Household living condition among ST households	
	3.2.1 ST households in rural area	
	3.2.2 ST households in urban area	
3.3	3 Relationship between Amenities in SC and ST households: A correlation analysis	
IV.	Chapter-4: Household Assets and Banking Services 46	
4.	1 Condition of household assets at the state level	
4.3	3 Household Assets by class size city	555
4.4	4 Household Assets Index, 2011	
V.	Chapter-5: Access to Assets and Banking Services	
	among SC and STHouseholds	

5.1	1 Household Assets and Banking Services among SC households	
5.2	.2 Household Assets and Banking Services among ST households	
VI.	Chapter-6 Conclusion65	
VII.	References69	

List of Figures

Figure-2.1 Household amenities in India, 2001 and 2011	9
Figure-2.2 Household amenities in rural areas, 2001and 2011	10
Figure-2.3 Household amenities in urban areas, 2001and 2011	10
Figure-2.4 Concrete roof and electrified households in major states, India, 2011	11
Figure-2.5 Drinking Water and Toilet facility in major states, India, 2011	12
Figure-2.6 Bathroom and Drainage in major states, India, 2011	12
Figure-2.7 Kitchen and LPG/PNG in major states, India, 2011	13
Figure-3.1 Household Amenities among SCs, India, 2001and 2011	22
Figure-3.2 Household Amenities among STs, India, 2001and 2011	25
Figure-4.1 Household Assets and Banking Services, India, 2001and 2011	
Figure-4.2 Household Assets and Banking Services in rural area, India, 2001and 2011	
Figure-4.3 Household Assets and Banking Services in urban area, India, 2001and 2011	
Figure-4.4 Households availed banking facility in major states, India, 2001and 2011	
Figure-4.5 Households possess Telephone and Mobile in major states, India, 2001and 2011	40
Figure-4.6 Households possess Computer/laptop in major states, India, 2001and 2011	40
Figure-4.7 Households with vehicles in major states, India, 2001and 2011	41
Figure-5.1 Household Assets and Banking Servies among SCs, India,2001 and 2011	
Figure-5.2 Household Assets among STs, India , 2001 and 2011	

List of Maps

Map-2.1 Household amenities Index in India, 2011	.29
Map-4.1 Household Assets Index in India, 2011	59

Chapter 1

Introduction

The access to household amenities and assets has not been the prime concern of economic research vis-a- vis studies on poverty in India. In recent years, however, some efforts have been made to highlight its significance and efficacy to understand the changes in the economic status of households, but it has not emerged as an alternative paradigm to poverty research at the household level in spite of the fact that household amenities and assets are important attributes of socio-economic condition, standard of living, and the health status of people (Bhagat 2013; Mistry and Das 2013; Kumar 2014; Bhagat 2017). The reasons may be due to lack of data, appropriate indicators and methodology to mention few. This study demonstrates the utility of household data on amenities and assets as an alternative measure to study the level of economic status and wellbeing of people both at the household and aggregate levels.

Census and NSSO are two important sources of data on household amenities and assets. Although sample surveys provide data on many aspects of social and economic conditions, census being free from sampling error is the unique source of data on household amenities and assets. Since 1991, census provided huge information on household amenities such as source of drinking water, source of lighting, toilet facilities and source of fuel used in the household for both rural and urban areas and also up to the city and town levels. The 2001 census added information on waste water outlets such as household connected to closed drainage, open drainage or no drainage. Further, the 2001 census for the first time also provided data on household assets like radio/transistor, telephone, scooter and car and the household availing any banking services. The same information has been collected in 2011 census as well, but the list was expanded to include mobile phone and computer/laptop also. Data on household assets and amenities are also available for SC and ST households, but these are not available for religious groups. In the absence of income data at the household level, the household data on assets could be helpful to understand the distribution of wealth in the country. It is known that India expericed a high economic growth after liberalisation began in 1991 which accelarated during the decade 2001-2011. In this study, an attempt is made to examine the level of economic and living conditions of household for both rural and urban areas based on census data of basic amenties and assets and changes therein during 2001 to 2011. An attempt has been made to throw light on the conditions of marginalised groups like SCs and STs and also the extent of disparities at the state level. The access to basic amenties and assets is studied separately and their relationship with socioeconomic variables has also been explored. As studies show that access to amenties and household assests are good indicators of the quality of urbanisation (Bhagat 2011), this monograph also presents amenities and assests by size class of urban centres and their municipal stattus pertinent to planning and governance of urban areas.

Census data on Housing Tables have been used in this study. A composite index was calculated for the level of amenties and assests separately using Principal Component Analysis (PCA).

1.1 Nature of Census Data

Census is the main source of information on housing condition, basic amenities and household assets. Since 1961, population census in India is conducted in two phases, viz. 1. House listing and housing census; 2. Population enumeration. It is the house listing and housing census which provides the above-mentioned information. The data related to housing condition includes building materials, usage of houses, condition of houses, ownership status of houses, housing stock, number of dwelling rooms, size of households, and household by the number of married couples etc. Basic amenities of households related to source of drinking water, toilet, bathroom, drainage, cooking fuel, kitchen and source of lightening. While assets include households availing banking facility, radios, television, mobiles and telephones, computer/laptops with and without internet connections, and private modes of transport like bicycle, scooter/motorcycle/moped and car/jeep/van. Moreover, census provides this information for rural and urban areas at the state, town and city level. Further, the data are also available for administrative towns and cities by municipality and Municipal Corporation as well as for other non-municipal towns.

To understand the socio-economic conditions and degree of inclusiveness among marginalized groups like SCs and STs, national level dataset such as census plays a very vital role. Moreover, census also comprises an exclusive feature in the sense that the information is based on complete enumeration of all the households. Census is one the important source of demographic data, as house-listing exercise has become tremendously useful since past three decades because data on housing and their conditions collected six months prior to the population enumeration. This may be because India has entered in the new phase of globalization which have brought new economic policy (1991) into spotlight. However, census was expected to give more data on economic and living conditions of the Indian population. Besides, census conducted in 1991 provided huge information on household amenities, for instance, source of drinking water, source of lighting, toilet facilities and source of fuel used in the household. All this information has been made available for both, rural and urban sectors and right up to district as well as city levels and also for SC and ST households. Furthermore, in census data information related to closed drainage, open drainage or no drainage. It has also provided information on the availability of bathroom and kitchen. One of the most important features which has been added in 2001 census was to know about the assets possessed by each and every households of the country. This was an important indicator to understand the wealth distribution of the country

in absence of information on income. Additionally, 2001 census provided data on assets like radio, transistor, telephone, scooter, car, etc. and also on availing banking services.

Every census attempts to maintain the continuity to allow comparisons and give a time series data. However, every census also permits few changes. The changes made in census 2011 in different assets and amenities are discussed below:

1.1.1 Household Amenities:

In this section, we will discuss only those amenities which are included in this report.

- 1. Type of Roof: A roof is an important part of a building. The material of the roof is categoriesd in ten categories in 2011 cenus. This study has used the category of 'concrete' as it is comparatively more durable than others.
- 2. Main source of drinking water: Data on 'Main source of drinking water', and categorsed in ten categories. An attempt was also made to improve the categorization of the source of drinking water through separating the codes for "Tap water from treated sources" and "Tap water from untreated sources" in 2011 cenus. However, for comparasion purpose, this study has used source tap water irrespective its categorization from treated or untreated sources.
- **3. Source of lighting:** The main source of lighting was categoried in 6 categories. Only main source lighting from electricity is considered in this study.
- 4. **Bathing facility within premises:** The bathroom facility means any bath room facility available within the premises which includes a bath room and an enclosure but without roof. The latter was added in 2011 census.
- 5. Toilet: In 2001 census, information was collected only on the availability of toilet within the premises, but in census 2011 " No latrine within the premises" was also included. In this study in order to keep simple and comparable we have classified households based on any latrine available. However it is interesting to look at the codes used in census 2001 and 2011 as given below:

Census 2001	Code	Census 2011	Code
No Latrine	0	Flush/pour flush latrine connected to	
Service Latrine	1	Piped water system	1
Pit Latrine	2	Septic system	2
Water Closet	3	Other system	3
		Pit Latrine	
		With slab/ventilated improved pit	4
		Without slab/open pit	5

	Night soil disposed into open drain	6
	Service Latrine	
	Night soil removed by human	7
	Night soil serviced by animals	8
	No Latrine within premises	
	Public Latrine	9
	Open	0

Source: Census of India 2001 and 2011 (Metadata Census 2011.pdf (census india.gov.in).

- 6. Computer: A new item of computer with internet and without internet was added in the question of 'assets possessed by the household' in census 2011. In this study availability of computer irrespective of interenet facility is used.
- 7. **Telephone:** In addition to information on telephome, data on mobile possessed by the household also collected in 2011 census. Data on molibe was not collected in 2001 census. This study used both data on telephone and mobile separately.
- 8. **Type of Fuel used for Cooking:** Only LPG/PNG is considered as a source of fuel used for cooking in this study.
- 9. **Drainage System:** The drainage system pertains to waste water and other liquid wastes disposal from a household. In the census, it was ascertained whether it was a closed or an open drainage that connects the household. In this study we have considered any drainage facility available with the households.
- 10. **Kitchen:** If a household cooked meals in a separate room meant for it, it was condisered to have kitchen facility.

1.2 Data Source and methodology

1.2.1 Data Source

This study has utilized the data of census of 2001 and 2011. The data related to household amenities and assets are taken from Housing Tables of both censuses.

1.2.2 Methodology

In this report, the percentage distribution of each asset and amenity has been calculated for different states/UTs, by municipal status and urban size class. Further, these percentages are also classified by place of residence (rural,

urban) and social groups (SC, ST). In addition, the household amenities and assets index were calculated using Principal Component Analysis (PCA). The process to calculate the amenities and assets index using PCA is discussed below:

Computation of index using PCA:

The basic purpose of computing index is to know the condition of each state. Here, the index has been calculated for household amenities and assets. In case of household amenities we use the percentage of concrete roof, safe drinking water, electricity, drainage, bathroom, LPG and kitchen facility. Likewise, for household assets index the percentage of household availed banking facility, telephone, mobile, television, computer/laptop, scooter/motorcycle/moped and car/jeep/van were used. The weights in the computation of all these indices are determined by factor loadings for first principal component (PCA) with highest *Eigen values*. As all above mentioned indicators are positive indicator, we use following procedure for normalization:

The above procedure is used to convert the raw data into normalized from. First, we identify the minimum and maximum value from each indicator, then we use above formula to normalize it so that their value lies between 0 and 1.

Once the normalized value is obtained for all the indicators across state the next step is to assign factor loading and weights. PCA is used to compute the factor loading and weights for each indicator.

After the computation of factor loading which is considered as weights, we use following formula to create index:

$$Index = \frac{\sum_{i} (I_i * weight_i)}{\sum_{i} weight_i}$$

Where,

 I_i = Indicator of ith column (here '*i*' depends upon the number of indicators in a particular category e.g. in household amenities there are 7 indicators)

Weight = weight of the i^{th} column

Then, the index for each state has been shown on map using Arc-GIS and all the statistical works are performed in SPSS 20.



Chapter-2: Household Amenities in India

Household assets and amenities are the important indicator of a household's socio-economic condition. Household amenities include several indicators such as houses with concrete roof, bathroom and kitchen, access to safe drinking water, electricity, toilet and drainage facilities, and also LPG/PNG cooking fuel. In India, less than 30% of households have the concrete roofs which vary from 18.0% in rural area to 52.9% in urban area in 2011. The households with the concrete roofs were 21.2% in 2001, which increased by only 7% increase in 2011. In 2011, there were 67.2% electrified households compared to 56% in 2001. The percentage of households with access to electricity was 55.3% in rural area and 92.7% in urban area. There were less than half of the households in India which have the toilet facility in 2011 and the percentage increase was of 10% observed during 2001 to 2011. In the recent census, the percentage of households with toilet facility varies from 30.7% in rural areas to 81.4% in urban areas. There were only 28.5% households in 2011 which used LPG/PNG as the cooking fuel compared to 16.1% in 2001. In the rural areas, only 11.4% households uses the LPG/PNG compared to 65.0% urban areas. The percentage of households with access to drainage facility was 51.1% in 2011 up from 46.4% in 2001. In addition, only twofifth households have a bathroom and three-fifth have a kitchen within their households in 2011. The availablity of a kitchen has surpringly declined during 2001-2011. As is known that division of a house or landed property is a common pratice in rural areas as sons get married and live separately. Thus it reflects growing pressure on the housing space due to increasing number of households in the country (Fig 2.1).



Figure 2.1

Source: Drinking Water- Tap water and hand pump; Bathroom includes i) bathroom within premises and ii) an enclosure without roof as per 2011 Census, however the latter information was not collected in 2001 Census. In order to make comparable only bathroom within premises is presented in this graph. Source: Tables on Houses, Household Amenities and Assets, H series Table, Census of India 2001 and 2011



Figure 2.2

Source: Census of India 2001 and 2011; See note in Figure 2.1.





Source: Census of India 2001 and 2011; See note in Figure 2.1.

2.1 Household living condition by states

More than 70% of households have impoved drinking water facility in India and out of this 32% have treated, 11.6% have untreated and 33.5% depend upon hand pump. Impoved source of drinking water facility is highest in Himachal Pradesh (93.1%) and lowest in Kerala (29.9%). Kerala shows a very low percentage of households with impoved source of drinking water as people use well water for drinking purposes (Kundu 1999). Electricity is available in more than two third households in India, with Goa (96.9%) having highest and Bihar (16.4%) having the lowest. Less than half of the households are having latrine facility in India out of which 36.4% households use the flush toilets, 9.4% use the pit toilets and only 1% having other type of latrines. The percentage of latrine facility is highest in Kerala (95.2%) and lowest in Jharkhand (22%). The drainage facility is available in every second households in India, out of which 18.1% have the closed drainage and 33% have the open drainage facility. The state of Haryana is having the highest percentage of drainage facility while Odisha is at the lowest position. More than half of the households are using bathroom in India with Goa in top position and Odisha at the bottom. But in case of LPG the picture is much worse because only one fourth households are using LPG in India. Goa is the only state where LPG usage is more than 70%. However, the kitchen facility is available among more than three fifth of households and Manipur is the only state where all the households have kitchen facility (see Table 2.1).

Table 2.1. Household fiving condition by states, india, 2011									
State/UTs	Concrete Roof	Drinking Water	Electricity	Toilet	Drainage	Bathroom*	LPG/PNG	Kitchen	Index
India	29.6	77.1	67.2	46.9	51.1	58.4	28.5	61.3	0.4316
Andaman & Nicobar Islands	11.3	85.0	86.1	70.1	51.9	76.2	44.5	94.1	0.5991
Andhra Pradesh	48.8	83.6	92.2	49.6	56.9	67.1	35.8	54.2	0.5377
Arunachal Pradesh	3.9	76.2	65.7	62.0	33.1	42.6	29.2	89.2	0.4063
Assam	2.9	60.7	37.0	64.9	20.4	41.8	19.0	88.3	0.3054
Bihar	23.8	91.0	16.4	23.1	42.3	37.4	8.1	33.5	0.1807
Chandigarh#	83.1	98.5	98.4	87.6	96.0	89.7	71.6	73.6	0.8896
Chhattisgarh	16.7	79.1	75.3	24.6	24.2	20.1	11.2	56.1	0.2341
Dadar & Nagar Haveli#	26.0	71.0	95.2	54.7	37.9	66.1	39.8	84.4	0.5259
Daman & Diu#	38.7	80.7	99.1	78.2	65.2	82.5	53.0	65.9	0.6716
Goa	33.2	38.5	96.9	79.7	68.8	89.6	72.7	92.9	0.7157
Gujarat	43.9	80.6	90.4	57.3	46.7	67.4	38.3	72.3	0.5560
Haryana	32.5	80.8	90.5	68.6	86.3	82.5	44.0	66.5	0.6553
Himachal Pradesh	44.7	93.1	96.8	69.1	65.2	74.8	38.6	88.2	0.6767
Jammu & Kashmir	24.0	75.3	85.1	51.2	47.8	60.5	31.6	85.7	0.5024
Jharkhand	26.0	56.7	45.8	22.0	29.5	25.4	11.7	39.4	0.1637
Karnataka	27.6	71.6	90.6	51.2	60.7	86.3	32.5	89.3	0.5874
Kerala	48.0	29.9	94.4	95.2	46.4	85.8	35.8	96.7	0.6515
Lakshadweep#	44.9	22.7	99.7	97.8	24.4	97.1	16.6	95.5	0.5966
Madhya Pradesh	16.9	70.4	67.1	28.8	39.9	47.2	18.2	46.8	0.2893
Maharashtra	30.2	77.7	83.9	53.1	67.5	85.4	43.4	72.7	0.5909
Manipur	4.7	45.1	68.3	89.3	52.8	51.2	29.7	100.0	0.4971
Meghalaya	10.2	42.1	60.9	62.9	35.3	39.6	11.8	90.7	0.3456
Mizoram	13.6	59.5	84.2	91.9	59.6	75.1	52.5	86.2	0.6229
Nagaland	5.6	49.4	81.6	76.5	50.2	82.5	19.9	96.0	0.5255
NCT of Delhi#	63.8	86.6	99.1	89.5	95.8	91.1	89.9	79.1	0.8932
Odisha	23.5	55.3	43.0	22.0	19.3	19.7	9.8	62.9	0.1642
Puducherry#	62.4	96.4	97.7	68.4	68.1	83.5	70.5	77.5	0.7630
Punjab	49.1	75.7	96.6	79.3	84.8	88.9	54.5	72.0	0.7402
Rajasthan	11.1	65.8	67.0	35.0	41.5	55.5	22.8	50.8	0.3179
Sikkim	23.1	85.3	92.5	87.2	52.7	68.6	41.3	90.2	0.6351
Tamil Nadu	43.7	84.4	93.4	48.3	50.3	64.2	47.9	76.5	0.5729
Tripura	4.2	51.3	68.4	86.0	26.6	32.1	17.6	85.9	0.3724
Uttar Pradesh	17.6	92.2	36.8	35.6	68.9	55.2	18.9	40.7	0.3356
Uttarakhand	43.7	90.2	87.0	65.8	61.1	69.3	44.2	70.1	0.6115
West Bengal	25.6	75.5	54.5	58.8	31.6	35.9	18.0	60.9	0.3336

Table 2.1: Household living condition by states, India, 2011



Figure 2.5



Source: Census of India (2011)





Figure 2.7

Source: Census of India (2011)

Table 2.2 gives the percentage of each household amenities for rural area for the year 2011. In rural part of India there are only 18.3% of household having concrete roof with Himachal Pradesh is at the top and Assam at the bottom among major states of India. On the other hand, drinking water facility in rural India is having more than 70%, and it is highest in Uttar Pradesh and lowest in Kerala. More than half of household have the electricity facility in rural India, but in Himachal Pradesh more than 96% household have electricity facility. In case of latrine facility, Kerala (93.2%) come in first place while Jharkhand (7.6%), Madhya Pradesh (13.1%) and Odisha (14.1%) are in the bottom among major states in India. Similarly, the percentage of bathroom facility is highest in Punjab (85.2%) while lowest in Jharkhand (11.3%) and Odisha (11.4%). Similarly, only 11% household used the LPG gas in rural areas as 2011 Census.

State/UTs	Concrete Roof	Drinking Water	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen	Index
India	18.3	74.5	55.3	30.7	36.8	45.0	11.4	52.8	0.3371
Andaman & Nicobar Islands	4.2	77.5	79.4	60.2	32.0	65.9	31.5	93.8	0.4874
Andhra Pradesh	41.2	81.6	89.7	32.2	42.0	55.0	20.6	43.3	0.4703
Arunachal Pradesh	1.2	71.6	55.5	52.7	21.9	29.7	13.0	88.0	0.3164
Assam	0.6	60.2	28.4	59.6	13.8	33.9	9.9	87.8	0.2585
Bihar	20.4	91.8	10.4	17.6	38.9	33.7	3.4	31.2	0.2379
Chandigarh#	86.6	96.6	97.3	88.0	94.3	88.2	67.1	50.3	0.8807
Chhattisgarh	8.8	78.7	70.0	14.5	11.5	6.8	1.6	51.5	0.2066
Dadar & Nagar Haveli#	9.3	72.6	91.7	26.5	11.6	40.7	11.8	81.6	0.3402
Daman & Diu#	43.5	90.5	98.3	51.4	20.1	76.3	42.3	80.9	0.5930
Goa	20.0	77.9	95.6	70.9	54.2	81.1	59.5	90.5	0.6610
Gujarat	24.9	74.0	85.0	33.0	18.0	49.0	14.3	64.0	0.3832
Haryana	17.9	77.8	87.2	56.1	82.8	76.5	24.1	58.5	0.5724
Himachal Pradesh	42.2	92.6	96.6	66.6	61.6	72.5	32.7	87.9	0.6565
Jammu & Kashmir	18.8	68.7	80.7	38.6	35.7	49.8	16.3	19.0	0.3720
Jharkhand	17.1	52.8	32.3	7.6	16.3	11.3	1.9	32.7	0.1212
Karnataka	8.5	64.8	86.7	28.4	42.5	79.5	11.0	166.9	0.4840
Kerala	39.1	24.8	92.1	93.2	39.2	79.5	24.7	95.5	0.5529
Lakshadweep#	35.2	31.2	99.8	98.1	19.3	95.4	2.9	93.7	0.5269
Madhya Pradesh	7.3	68.2	58.3	13.1	25.3	34.0	3.5	38.7	0.2306
Maharashtra	12.0	65.9	73.8	38.0	47.8	77.1	17.9	65.1	0.4405
Manipur	1.5	37.1	61.2	86.0	43.9	43.7	16.0	108.0	0.3978
Meghalaya	4.1	32.2	51.6	53.9	22.9	28.5	2.6	89.6	0.2409
Mizoram	1.4	42.2	68.8	84.6	37.6	58.8	17.9	82.7	0.4166
Nagaland	1.5	53.2	75.2	69.2	39.5	77.7	6.7	96.1	0.4420
NCT of Delhi#	31.6	74.3	97.8	76.3	87.7	82.4	75.2	67.7	0.7610
Odisha	19.2	54.3	35.6	14.1	11.9	11.4	3.1	60.7	0.1590
Puducherry#	44.0	97.6	95.8	39.0	36.7	65.1	52.9	62.3	0.6200
Punjab	34.6	68.7	95.5	70.4	81.0	85.2	38.9	65.2	0.6720
Rajasthan	5.5	58.4	58.3	19.6	27.0	44.6	7.7	42.7	0.2660
Sikkim	10.8	82.7	90.2	84.1	37.5	59.5	24.3	90.3	0.5470

Table 2.2: Household living condition in rural area by states, India, 2011

Tamil Nadu	31.5	84.5	90.8	23.2	27.2	44.6	28.6	65.3	0.4570
Tripura	0.6	41.9	59.5	81.5	16.2	19.8	5.3	83.4	0.2720
Uttar Pradesh	13.8	93.3	23.8	21.8	61.8	46.6	6.4	32.6	0.3370
Uttarakhand	37.6	88.0	83.1	54.1	47.7	59.3	29.4	64.3	0.5590
West Bengal	15.0	74.3	40.3	46.7	15.3	19.8	4.0	57.8	0.2590

Table 2.3 gives the percentage of each household amenities for urban India for the year 2011. The condition of all the household amenities is much better and it is clearly identifiable from this table. More than half of the households have the concrete roof in urban India, whereas more than 80% households have the drinking water facility, electricity, latrine, drainage, and bathroom facility. Likewise, LPG usage and availability of kitchen is also good in urban area. In general with increaing urbanisation the acess to household amenties and assets also increases, but there exists a wide gap in all indicators of amenities between the rural and urban areas.

Table 2.3: Household living condition in urban area by states, India (2011)

State/UTs	Concrete Roof	Drinking Water	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen	Index
India	51.9	82.5	92.7	81.4	81.8	87.0	65.0	79.0	0.7086
Andaman & Nicobar Islands	23.6	98.0	97.7	87.1	86.0	93.9	66.9	95.0	0.7884
Andhra Pradesh	64.6	87.9	97.3	86.1	88.3	92.6	67.7	77.0	0.8057
Arunachal Pradesh	12.1	89.8	96.0	89.5	66.2	80.6	77.5	93.0	0.6826
Assam	15.1	63.1	84.1	93.7	56.3	84.5	68.0	91.0	0.5806
Bihar	51.9	84.3	66.7	69.0	71.4	68.6	47.4	53.0	0.4135
Chandigarh#	83.0	98.6	98.4	87.6	96.0	89.7	71.8	74.0	0.8675
Chhattisgarh	44.5	80.6	93.7	60.2	68.9	67.4	45.0	73.0	0.4901
Dadar & Nagar Haveli#	41.7	69.5	98.5	81.3	62.7	90.0	66.2	87.0	0.6805
Daman & Diu#	37.5	78.0	99.3	85.4	77.2	84.2	55.9	62.0	0.6574
Goa	41.5	90.2	97.7	85.3	78.0	94.9	81.1	94.0	0.8110
Gujarat	67.6	88.9	97.2	87.7	82.6	90.5	68.3	83.0	0.8048
Haryana	57.3	85.9	96.2	89.9	92.2	92.6	77.6	80.0	0.8283
Himachal Pradesh	64.6	96.9	98.1	89.1	93.6	92.8	85.1	91.0	0.8951
Jammu & Kashmir	39.2	94.4	98.0	87.5	83.1	91.4	75.7	94.0	0.8076
Jharkhand	54.0	68.7	88.0	67.2	70.8	69.8	42.1	60.0	0.4717
Karnataka	55.9	81.7	96.4	84.9	87.6	96.4	64.3	95.0	0.8052
Kerala	58.0	35.5	97.0	97.4	54.5	92.9	48.4	98.0	0.6589
Lakshadweep#	47.9	20.1	99.7	97.7	25.9	97.6	20.9	96.0	0.5353
Madhya Pradesh	44.5	76.8	92.7	74.2	82.3	85.3	60.5	70.0	0.6425
Maharashtra	52.0	92.0	96.2	71.3	91.2	95.4	74.1	82.0	0.7852
Manipur	10.8	60.5	82.4	95.8	70.4	65.7	56.4	6.0	0.3925
Meghalaya	32.8	78.0	94.9	95.7	80.3	79.9	45.6	95.0	0.6713
Mizoram	24.7	75.2	98.1	98.5	79.5	89.7	83.8	93.0	0.7843
Nagaland	15.7	39.7	97.4	94.6	76.5	94.4	52.7	96.0	0.6532
NCT of Delhi#	64.6	87.0	99.1	89.8	96.0	91.3	90.3	79.0	0.8779
Odisha	46.9	60.8	83.1	64.8	59.0	64.3	46.1	74.0	0.4016

Puducherry#	70.9	95.9	98.5	82.0	82.6	92.0	78.7	84.0	0.8387
Punjab	72.0	86.7	98.3	93.4	90.9	94.8	79.3	83.0	0.8825
Rajasthan	28.4	88.7	93.9	82.0	86.0	89.2	69.4	76.0	0.7128
Sikkim	55.0	92.1	98.7	95.2	92.1	92.0	85.1	90.0	0.8843
Tamil Nadu	56.7	84.3	96.1	75.1	74.9	85.2	68.7	89.0	0.7139
Tripura	13.5	75.4	91.6	97.9	53.4	64.0	49.7	92.0	0.5182
Uttar Pradesh	30.7	88.3	81.4	83.1	93.4	84.6	61.7	68.0	0.6402
Uttarakhand	58.0	95.6	96.5	93.6	92.9	93.1	79.4	84.0	0.8690
West Bengal	48.4	78.2	85.1	85.0	66.8	70.7	48.2	68.0	0.5341

2.2 Household Amenities by Municipal Status

Table 2.4 gives the percentage of each household availing different amenities by administrative status. From this table it can be easily seen that the variation in the percentage is more observed in drinking water, latrine, drainage, bathroom and LPG. The drinking water facility is more in Notified Area (NA) followed by Nagar Palika Parishad (NPP) while lowest in Town committee (TC). The percentage of toilet facility is highest in Municipal Board (MB) followed by Notified Town (NT) and lowest in Town Panchayat (TP). The drainage facility is highest in Nagar Palika Parishad (NPP) and it is lowest in Town committee (TC). City Municipal Council is having the highest percentage of bathroom facility while Notified Area Committee (NAC) is in the lowest position. The availability of LPG gas is highest in Municipal Committee (MC) followed by Notified Town (NT) and it is lowest in Nagar Panchayat (NP) and Town Municipal committee (TMC). It is obvious that Census Towns and Notified Area Committee show one of the lowest access to most of the amenities. However, it may also be noted that access to various amenities is also not reached to all the households in either of the municipal category.

Administrative Status	No. of Towns	No. of Household	Drinking Water (%)	Electricity (%)	Toilet Facility (%)	Drainage Facility (%)	Bathroom Facility (%)	LPG (%)	Kitchen Facility (%)
M Corp.	218	31627561	87.5	96.6	86.4	92.1	93.6	74.4	83.1
СВ	58	316024	89.4	95.7	78.4	91.9	89.9	75.9	78.4
СМС	44	1084040	81.4	95.3	76.2	83.8	94.7	53.8	92.2
СТ	3865	11757031	65.4	89.9	79.3	62.1	79.7	51.2	77.5
INA	26	34952	87.4	86.7	83.4	79.6	85.7	70.0	76.5
ITS	10	80017	82.7	91.8	75.1	81.3	81.2	62.7	80.7
Μ	916	13658344	79.7	93.2	80.3	75.1	83.4	61.1	77.6
M Cl	415	5071166	86.9	95.0	80.9	87.5	92.7	71.9	81.8
MB	37	417088	72.1	88.4	95.4	64.4	87.7	70.3	91.0

Table 2.4: Level of access to household amenities by municipal status, India, 2011

МС	64	3494010	86.2	97.6	87.6	93.9	89.9	84.1	81.5
NA	7	81409	91.7	90.0	84.9	67.8	78.6	64.5	79.1
NAC	72	481709	70.7	82.7	64.3	62.8	63.9	46.3	72.7
NP	1099	3991043	83.4	69.5	61.2	72.8	67.2	37.5	54.0
NPP	223	2959657	90.6	81.4	85.5	94.1	84.6	59.9	67.6
NT	48	180539	80.4	97.4	95.4	74.7	86.6	81.7	89.4
ТС	75	240340	60.6	83.3	91.9	43.3	79.0	48.8	93.1
ТМС	94	704740	82.0	92.9	65.5	77.5	92.4	46.1	91.6
ТР	629	2616814	81.5	92.7	58.8	61.3	75.0	54.6	84.1
Total	7900	78796484	82.0	92.6	81.3	81.7	86.9	65.0	79.3

2.3 Household living condition by size class of urban centres

India's urban population is distributed across 8000 odd towns and cities with different size, economic base and ability to generate resources from tax and non-tax sources. Class I cities (100 thousand and more) have higher employment in organized sector compared to small urban centres. In many small urban centres, a sizeable proportion of workforce is also dependent on agriculture. Thus, size as a measure of urban centres not only reflects population concentration but their economic strength as well. It is expected that the level of basic amenities is directly related to the size of urban centres. Tables 2.5 shows the access to household amenities by class size of cities for major states of India. Results show that in India highest percentage of amenities are observed in class I city and lowest in smaller size class in almost all amenties. This shows that size matters due to the impact of agglomeration economies, larger municipal capacities to provide services and bigger market and threshold of clientele.

Classification	Drinking Water	Electricity	Toilet	Bathroom	Drainage	LPG
Class-I						
More than 5 million	91.3	98.3	84.2	95.3	97.0	79.5
1 million- 5 million	85.5	97.0	89.0	93.9	93.3	77.5
100 thousand-1 million	83.2	93.7	84.9	89.6	84.9	68.4
Class-II						
50-100 thousand	81.1	91.8	78.3	86.7	80.1	63.9
Class-III						
20-50 thousand	75.0	88.4	75.6	82.8	71.7	53.7
Class-IV						

Table 2.5: Households with selected basic amenitie	s by	v size	class (of urban	centers in	India.	2011

10-20 thousand	77.4	88.8	74.3	79.0	70.1	52.7
Class-V						
5-10 thousand	78.9	87.8	77.3	75.3	68.2	51.9
Class-VI						
Less than 5 thousand	80.3	88.6	75.8	74.2	64.2	51.1

At the state level, the situation remains unchanged with regard to Class I cities, which show higher provision of the basic services compared to smaller urban centres. But, the Class I cities of poorer states like Bihar, Orissa, Jharkhand and Uttar Pradesh show much lower provision of basic services compared to Class I cities of Punjab, Maharashtra, Gujarat and Karnataka. Thus, within same size class inter-state disparities continue to manifest (Bhagat 2011).

2.4 Household Amenities Index, 2011

The household amenities index is the composite index of all the selected amenities. It reflects the overall condition of each state in terms of combining effect of different amenities such as concrete roof, electricity, source of drinking water, toilet, drainage, bathroom, LPG and Kitchen. The result of this index shows that the Punjab, Goa, Himachal Pradesh, Haryana, and Uttarakhand are top five states, whereas Odisha, Jharkhand, Bihar, Chhatisgarh and Assam are the bottom five states (see Table 2.1). The state level variations in the index of amenities are shown in Map 2.1.

With the index of more than 0.692, Chandigarh, Delhi, Puducherry and Punjab come in higher rankings. However, the states where amenities index is very poor are Odisha, Jharkhand and Bihar.

The ranking of household amenities index is not much different for rural and urban area. For instance, in rural area Himachal Pradesh is in the top position while Jharkhand, Odisha and Chhattisgarh are in the bottom. Same is true for and rural and urban areas as well (see Table 2.2 and Table 2.3).



Map 2.1: Household amenities index, India, 2011

2.5 Relationship between Household Amenities: A correlation analysis

Table 2.6 gives the correlation matrix of different household amenities. It is clearly evident from the table that household with concrete roof is positively related with tap water, electricity, drainage, bathroom and LPG. Similarly, all other amenities such as tap water, electricity, toilet, drainage, bathroom and kitchen facility are positively correlated with each other. Moreover, by positive relationship it means that if one amenity is available in the household there will be possibility that other amenities will also be there. For instance, the availability of tap water is positively related with most other amenities, although some deviations are also observed from Table 2.6. It may be noted that the presence of house with concrete roof is not significantly related with either toilet facility or availability of kitchen in the household.

	House with Concrete roof	Tap Water	Electricity as a source of lighting	Toilet Facility within Premises	Connected to Drainage	With Bathroom	LPG/PNG	Kitchen Inside House	Kitchen Outside House
House with Concrete roof	1								
Tap Water	0.506**	1							
Electricity as a source of lighting	0.573**	0.724**	1						
Toilet Facility within Premises	0.258	0.404*	0.604**	1					
Connected to Drainage	0.620**	0.668**	0.528**	0.384*	1				
With Bathroom	0.584**	0.612**	0.788**	0.644*	0.724**	1			
LPG/PNG	0.664**	0.738**	0.710**	0.542**	0.809**	0.732**	1		
Kitchen Inside House	0.032	0.418*	0.611**	0.724**	0.212	0.515**	0.467**	1	
Kitchen Outside House	-0.248	-0.156	-0.149	0.219	-0.429**	-0.126	-0.371*	025	1

Table 2.6: Correlations matrix of Household Amenities (Total), India (2011)

Chapter-3: Access to Amenities among SC and ST Households

In India, social groups which are most vulnerable to poverty have been identified to be scheduled castes and scheduled tribes as these groups having above average level of poverty (Kumar, 2014; Sundaram & Tendulkar, 2003). Moreover, these social groups have long history of discrimination and social exclusion in accessing the basic public services and common public resources as well (Kumar, 2014). Therefore, it becomes very important to understand the condition of SC and ST households in terms of access to amenities. Thus, this chapter provides a brief picture of access to basic amenities such as condition of housing, drinking water, electricity, toilet, drainage and kitchen.

3.1 Household living condition among SC households

Figure 3.1 clearly shows that the percentage of households with access to amenities among SC households increased over time. The increase in percentage of households with concrete roof, tap water, electricity, toilet facility and LPG/PNG are very significant, while there was not much improvement observed in drainage and sanitation facility during 2001-2011.



Figure 3.1

Source: Census of India (2011); Bathroom includes i) bathroom within premises and ii) an enclosure without roof as per 2011 Census, however the latter information was not collected in 2001 Census. In order to make comparable only bathroom within premises is presented in this graph.

Amenities	S	С	S	Т
	2001	2011	2001	2011
Concrete roof	13.1	21.9	6.1	10.1
Tap water	32.1	41.2	20.0	24.4
Electricity	44.3	59.0	36.5	51.7
Toilet facility	23.6	33.8	17.0	22.6
drainage	42.8	46.6	21.8	22.7
Bathroom*	22.2	27.7	15.0	17.2
LPG/PNG	7.9	16.9	5.3	9.2

Table 3.1: Household living condition among SC and ST Households, India, 2001 and 2011

Source: Census of India 2001 and 2011;* Bathroom includes i) bathroom within premises and ii) an enclosure without roof as per 2011 Census, however the latter information was not collected in 2001 Census. In order to make comparable only bathroom within premises is presented in this table.

The percentage of each household amenities for SC household is given in Table 3.1. Only 21.8 percent have the concrete roof among SC households in India and it is highest in Jammu & Kashmir (48.5 percent) and lowest in Tripura (2.3 percent). Less than half of the SC households have the drinking water facility and out of them 29.4 percent use treated drinking water and 11.9 percent use the untreated drinking water. The drinking water facility among SC households is highest in Himachal Pradesh (87.9 percent) and lowest in Bihar (4.2 percent). The electricity is available in more than half of the households among SCs in India, and it is highest in Himachal Pradesh (95.6 percent) and lowest in Bihar (9.8 percent). Only 33.8 percent household have the toilet facility and out of them 23.9 percent use the flush, 9.2 use the pit and less than 1 percent household use other type of toilets. Toilet facility is highest in Mizoram (95.2 percent) and lowest in Bihar (10.4 percent). The drainage facility is available in less than half of SC households in India and 11.3 percent have closed drainage and 35.3 have the open drainage facility. The drainage facility is highest in Haryana (85.4 percent) and lowest in Odisha (15.1 percent). Similarly, less than half of the SC households have bathroom facility, but this is highest in Maharashtra (15.1 percent) and lowest in Odisha (12.2 percent). The LPG is available only in 16.9 percent SC households and it is highest in Mizoram (53 percent) and lowest in Bihar (2.7 percent). However, almost half of the SC households are having the kitchen facility in India and Kerala is the state where the percentage of kitchen facility is high while in Bihar it is low. Lastly, based on composite index of concrete roof, electricity, drinking water, toilet, drainage, bathroom, LPG/PNG and kitchen the ranking is given to each state which shows that Goa, Himachal Pradesh, Mizoram, Punjab and Gujarat are the top states with good household amenities while Bihar, Odisha, Jharkhand, West Bengal and Chhattisgarh ae the bottom states.

State/UTs	Concrete Roof	Drinking Water	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen
India	21.9	41.3	59.0	33.9	46.6	47.5	16.9	49.1
Andhra Pradesh	44.2	70.2	88.5	33.4	47.7	54.6	20.2	37.6
Assam	2.7	14.2	39.5	66.5	22.8	42.3	19.5	88.5
Bihar	20.2	4.2	9.8	10.4	37.4	24.1	2.7	21.3
Chandigarh#	71.6	95.1	97.1	77.1	92.5	81.9	55.4	63.0
Chhattisgarh	13.7	19.9	82.4	17.3	20.6	15.4	6.6	43.7
Dadar & Nagar Haveli	41.3	60.1	96.3	75.1	52.3	82.3	61.9	88.0
Daman & Diu	33.8	73.9	98.4	75.0	53.8	87.5	63.6	87.0
Goa	27.7	85.7	90.4	75.6	72.2	81.8	43.9	88.8
Gujarat	44.8	80.0	92.5	57.1	51.1	69.6	32.4	68.5
Haryana	20.2	72.5	84.0	55.2	85.4	72.5	25.0	46.1
Himachal Pradesh	38.8	87.9	95.6	62.7	60.0	67.2	27.8	85.6
Jammu & Kashmir	48.5	47.1	90.8	23.3	45.4	45.0	30.3	73.6
Jharkhand	23.3	13.3	38.8	12.5	25.5	17.3	4.8	27.7
Karnataka	14.7	64.9	85.1	31.5	53.2	75.5	14.9	82.8
Kerala	31.8	36.2	86.4	86.3	30.6	66.1	15.3	93.2
Madhya Pradesh	11.0	20.4	65.2	20.0	38.9	42.7	11.9	37.2
Maharashtra	22.8	68.0	79.8	44.7	68.2	81.9	35.1	65.8
Manipur	3.4	34.1	65.6	88.7	60.9	36.4	31.2	88.4
Meghalaya	15.0	48.6	68.7	70.3	46.9	47.0	26.5	89.1
Mizoram	24.5	59.9	81.5	95.2	64.1	70.0	53.0	88.3
NCT of Delhi	47.2	79.7	98.4	77.8	95.3	82.4	82.3	66.1
Odisha	19.9	12.8	34.8	13.2	15.1	12.2	4.4	56.4
Puducherry#	40.3	97.8	94.9	31.9	51.2	61.1	51.3	58.8
Punjab	33.2	48.6	94.1	65.7	82.0	81.3	35.6	52.1
Rajasthan	7.0	42.3	60.2	27.2	37.8	49.9	12.5	37.4
Sikkim	22.3	83.2	90.3	82.9	53.1	58.9	41.6	86.4
Tamil Nadu	36.7	83.3	90.2	26.3	36.4	48.2	27.2	63.6
Tripura	2.3	36.7	73.6	94.9	25.6	31.2	12.8	89.1
Uttar Pradesh	13.4	22.0	24.1	20.6	63.0	42.4	8.6	28.8
Uttarakhand	35.2	61.4	79.8	44.7	53.7	52.5	26.1	56.0
West Bengal	12.1	19.2	41.5	48.1	21.2	23.8	8.2	58.7

Table 3.2: Household living condition among SC households by states, India, 2011 (Total)

3.1.1 SC households in rural area

The access to each amenities among SC households of rural areas is given in Table 3.3. It may be noted that ecompared to electricity the condition of other amenities is very poor. Only 16.3% household have the concrete roof facility while less than 40% households have drinking water, toilet, drainage and bathroom facility. The availability of LPG is also very poor among rural SC households as only 6% household have this facility. However, kitchen facility is available among 43% SC households as per 2011 Census.

The overall percentage of SC households in rural area with concrete roof among states and UT varies from 70.9% in Chandigarh to 0.5% in Tripura. Among the bigger states the percentage is highest in Jammu & Kashmir (42.0%) and lowest in Rajasthan (4.0%). Here it is important to note that in northeastern states less than 10 percent of household have the concrete roof which varies from 9.5% in Sikkim to 0.5% in Tripura. The access of impoved source of drinking water facility in rural area varies from 97.6% in Puducherry to only 3% in Bihar. Among bigger states this percentage is highest in Himachal Pradesh (87.4%) and lowest in Bihar (3%). On the other hand, in northeastern states Sikkim has the highest percentage of drinking water facility and lowest in Assam (10.1%).

Among the states and UT, the Daman and Diu (99.2%) has the highest percentage of household with electricity followed by Dadar and Nagar Haveli (97.3%) and lowest in Bihar (6.6%) as well as Uttar Pradesh (16.1%). In bigger states the percentage is highest in Himachal Pradesh (95.5%) followed by Punjab (92.9%). In Tripura, there are highest percentage of households with toilet facility (94%) followed by Mizoram (88.8%) and Kerala (83.3%). On the other hand, Jharkhand, Bihar, Madhya Pradesh and Odisha are those states which have less than 10% households with toilet facility.

More than 75 percent of the SC households with drainage facility are found in Delhi (88.6%), Chandigarh (88.1%), Haryana (84.1%) and Punjab (79.2%), whereas in Odisha and Chhattisgarh there are only 10 percent households with this facility. In Daman and Diu, Chandigarh and Dadar and Nagar Haveli there are more than 80% households with bathroom facility, whereas among bigger states it varies from 77.8% in Punjab to 5.4% in Chhattisgarh.

Only 6 % of rural SC households use LPG gas as the cooking fuel at all India level. This percentage varies from 37.2% in Goa to 0.7% in Jharkhand.

State/UTsConcrete RoofWater WaterIndia16.332.1Andhra Pradesh41.066.2Assam0.710.1Bihar19.03.0Chandigarh#70.993.8Chhattisgarh9.68.8Dadar & Nagar Haveli46.775.7Daman & Diu25.980.5Goa16.379.0Gujarat30.472.3Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7Tripura0.531.3	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen
Andhra Pradesh41.066.2Assam0.710.1Bihar19.03.0Chandigarh#70.993.8Chhattisgarh9.68.8Dadar & Nagar Haveli46.775.7Daman & Diu25.980.5Goa16.379.0Gujarat30.472.3Haryana12.871.6Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Mainipur0.922.0Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Kaisi Mana4.032.7Sikkim9.579.9						
Assam0.710.1Bihar19.03.0Chandigarh#70.993.8Chhattisgarh9.68.8Dadar & Nagar Haveli46.775.7Daman & Diu25.980.5Goa16.379.0Gujarat30.472.3Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra6.534.9Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Kajasthan4.032.7Sikkim9.579.9	49.5	22.8	36.9	37.5	6.2	43.0
Bihar19.03.0Chandigarh#70.993.8Chhattisgarh9.68.8Dadar & Nagar Haveli46.775.7Daman & Diu25.980.5Goa16.379.0Gujarat30.472.3Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	86.5	21.4	37.4	45.3	10.7	29.5
Chandigarh#70.993.8Chhattisgarh9.68.8Dadar & Nagar Haveli46.775.7Daman & Diu25.980.5Goa16.379.0Gujarat30.472.3Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	29.8	60.5	15.7	33.5	10.0	88.5
Chhattisgarh 9.6 8.8 Dadar & Nagar Haveli 46.7 75.7 Daman & Diu 25.9 80.5 Goa 16.3 79.0 Gujarat 30.4 72.3 Haryana 12.8 71.6 Himachal Pradesh 37.0 87.4 Jammu & Kashmir 42.0 40.3 Jharkhand 18.9 4.2 Karnataka 4.6 58.5 Kerala 24.3 32.8 Madhya Pradesh 4.9 8.4 Maharashtra 8.4 51.6 Manipur 0.9 22.0 Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9	6.6	7.7	35.6	22.1	0.9	20.4
Dadar & Nagar Haveli46.775.7Daman & Diu25.980.5Goa16.379.0Gujarat30.472.3Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	93.7	79.2	88.1	83.9	51.0	38.4
Daman & Diu 25.9 80.5 Goa 16.3 79.0 Gujarat 30.4 72.3 Haryana 12.8 71.6 Himachal Pradesh 37.0 87.4 Jammu & Kashmir 42.0 40.3 Jharkhand 18.9 4.2 Karnataka 4.6 58.5 Kerala 24.3 32.8 Madhya Pradesh 4.9 8.4 Maharashtra 8.4 51.6 Manipur 0.9 22.0 Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	80.2	10.8	9.7	5.4	1.0	39.5
Goa16.379.0Gujarat30.472.3Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9NtZr of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	97.3	75.1	46.5	82.1	60.8	92.2
Gujarat30.472.3Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	99.2	66.9	25.7	84.6	63.8	90.5
Haryana12.871.6Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	88.0	67.0	52.9	69.7	37.2	84.1
Himachal Pradesh37.087.4Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	88.2	30.1	19.8	49.4	7.7	58.6
Jammu & Kashmir42.040.3Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	80.7	45.4	84.1	67.4	11.5	39.1
Jharkhand18.94.2Karnataka4.658.5Kerala24.332.8Madhya Pradesh4.98.4Maharashtra8.451.6Manipur0.922.0Meghalaya6.534.9Mizoram2.835.2NCT of Delhi21.458.6Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	95.5	61.2	57.4	65.5	23.5	85.6
Karnataka 4.6 58.5 Kerala 24.3 32.8 Madhya Pradesh 4.9 8.4 Maharashtra 8.4 51.6 Manipur 0.9 22.0 Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	89.0	13.3	36.4	37.0	21.7	72.5
Kerala 24.3 32.8 Madhya Pradesh 4.9 8.4 Maharashtra 8.4 51.6 Manipur 0.9 22.0 Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	26.8	4.3	15.7	8.3	0.7	24.2
Madhya Pradesh 4.9 8.4 Maharashtra 8.4 51.6 Manipur 0.9 22.0 Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	82.4	16.4	41.0	69.3	4.1	80.4
Maharashtra 8.4 51.6 Manipur 0.9 22.0 Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	83.8	83.3	26.6	57.9	8.9	92.0
Manipur 0.9 22.0 Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	57.6	8.6	26.5	31.7	1.7	31.3
Meghalaya 6.5 34.9 Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	67.7	32.6	50.4	72.7	10.9	57.4
Mizoram 2.8 35.2 NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	65.6	83.1	38.5	26.5	16.7	68.5
NCT of Delhi 21.4 58.6 Odisha 18.2 7.7 Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	53.7	56.1	27.5	29.3	10.5	88.0
Odisha18.27.7Puducherry#29.497.6Punjab22.838.5Rajasthan4.032.7Sikkim9.579.9Tamil Nadu34.384.7	53.0	88.8	26.2	40.5	16.8	85.7
Puducherry# 29.4 97.6 Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	96.8	59.9	88.6	72.5	62.7	53.5
Punjab 22.8 38.5 Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	29.1	8.7	10.2	7.3	1.2	55.8
Rajasthan 4.0 32.7 Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	93.5	12.0	31.0	45.7	39.8	48.8
Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	92.9	57.2	79.2	77.8	23.4	44.7
Sikkim 9.5 79.9 Tamil Nadu 34.3 84.7	52.7	17.3	26.2	42.0	3.1	32.4
Tamil Nadu 34.3 84.7	86.3	78.7	36.0	45.4	21.3	85.4
	89.8	12.8	21.8	34.8	16.2	55.9
	66.6	94.0	16.8	21.9	4.0	88.7
Uttar Pradesh 11.3 18.0	16.1	13.3	58.4	37.2	2.2	24.7
Uttarakhand 30.9 56.9	76.0	33.5	43.2	43.3	14.3	51.3
West Bengal 7.4 11.5	31.8	40.1	12.7	14.9	2.1	59.1

Table 3.3: Household living condition among SC households in rural areas by states, India, 2011

3.1.2 SC households in urban area

Table 3.4 shows the condition of household amenities among SC households for urban areas. It may be seen that more than 50 percent of SC households have the facility viz. drinking water, electricity, toilet, drainage, bathroom, and kitchen while in case of LPG and concrete roof only less than half of SC households have these facilities.

The percentage of concrete roof in urban SC households of all the states and UT varies from 74.3% in Jammu & Kashmir to 5.8% in Manipur. Among the bigger states the percentage is lowest in Rajasthan (17.6%) followed by Uttar Pradesh (25.7%). The highest percentage of urban SC households with access to drinking is found in Puducherry (98.1%) followed by Chandigarh (95.1%) and Himachal Pradesh (93.4%), whereas Bihar is only state where only 18.9% SC households have the access of drinking water facility and only 48.1% have the electricity in urban areas which is lowest among all the states and UT.

Almost all the northeastern states have more than 90% of SC households with toilet facility in urban areas. Among the major states the percentage is highest in Kerala (91.0%) followed by Punjab (85.1%) and Gujarat (83.4%), while it is lowest in Odisha (40.7%) and Chhattisgarh (40.8%). In case of drainage facility, the percentage varies from 95.5% in Delhi to 36.8% in Kerala.

The percentage of LPG use among SC households in urban area is highest in Delhi (82.9%) followed by Sikkim (82.2%) and Himachal Pradesh (75.1%). On the other hand, Odisha, Bihar and Jharkhand have less than 30 percent of households use the LPG gas as cooking fuel. Moreover, the kitchen facility is highest in Manipur (97.0%) and lowest in Bihar (32.2%).

State/UTs	Concrete Roof	Drinking Water	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen
India	38.3	68.0	86.9	65.9	75.1	76.5	48.3	67.1
Andhra Pradesh	54.6	83.3	94.8	72.9	81.7	85.1	51.3	64.3
Assam	10.9	30.7	78.6	90.6	51.5	77.7	57.7	88.5
Bihar	35.4	18.9	48.1	42.8	59.1	47.6	24.1	32.2
Chandigarh#	71.7	95.1	97.2	77.0	92.6	81.8	55.5	63.6
Chhattisgarh	28.9	60.8	90.4	40.8	60.7	52.2	27.2	59.2
Dadar & Nagar Haveli	39.2	54.1	95.9	75.1	54.5	82.4	62.3	86.4
Daman & Diu	36.9	71.3	98.1	78.2	64.7	88.6	63.5	85.6
Goa	33.3	89.0	91.5	79.8	81.7	87.8	47.1	91.1
Gujarat	58.9	87.6	96.7	83.4	81.7	89.2	56.5	78.2
Haryana	36.5	74.6	91.1	77.0	88.4	83.9	54.9	61.7
Himachal Pradesh	58.7	93.4	96.4	79.9	88.8	86.1	75.1	86.1
Jammu & Kashmir	74.3	73.7	98.0	62.7	80.8	76.5	64.3	77.9
Jharkhand	38.7	45.5	81.2	41.5	59.9	48.8	19.0	40.3
Karnataka	38.9	80.4	91.4	67.7	82.5	90.4	40.7	88.7
Kerala	43.3	41.3	90.4	91.0	36.8	78.5	25.0	95.0
Madhya Pradesh	29.3	56.0	87.9	54.2	75.8	75.5	42.5	54.7
Maharashtra	39.4	87.1	93.7	58.7	88.8	92.7	63.2	75.5
Manipur	5.8	45.4	65.5	94.0	81.8	45.5	44.7	97.0
Meghalaya	29.7	72.4	94.6	94.8	80.5	77.8	54.3	91.0
Mizoram	32.7	69.4	92.4	97.6	78.6	81.2	66.8	83.9
NCT of Delhi	48.0	80.3	98.5	78.3	95.5	82.7	82.9	66.4
Odisha	30.1	43.8	70.1	40.7	44.9	42.3	24.2	60.4
Puducherry#	52.9	98.1	96.5	54.9	74.5	78.8	64.7	70.3
Punjab	57.2	71.7	96.6	85.1	88.3	89.5	63.6	69.1
Rajasthan	17.6	76.9	87.3	62.9	79.5	78.4	46.0	55.4
Sikkim	47.7	89.8	98.2	91.4	87.3	85.9	82.2	88.5
Tamil Nadu	41.0	80.9	91.0	50.5	62.5	72.4	46.8	77.4
Tripura	5.9	47.2	87.4	96.7	42.9	49.3	30.0	89.8
Uttar Pradesh	25.7	45.5	71.1	63.9	89.9	72.9	46.3	52.4
Uttarakhand	50.0	76.6	92.7	83.0	90.1	84.3	66.9	72.2
West Bengal	28.3	45.2	74.3	75.1	49.8	53.9	28.9	57.3

Table 3.4: Household living condition among SC households in urban area by states, India, 2011

3.2 Household living condition among ST households

Figure 3.2 shows changes in household amenities among ST households from 2001 to 2011. Result shows that there has been an increase in all the amenities over two time periods. However, this increase is not much in concrete roof, tap water, drainage and bathroom facility. But, in case of electricity the ST households have shown a tremendous improvement as it increases from 36.5% in 2001 to 51.7% in 2011. Similarly, some improvement is also observed in toilet facility, but is far from satisfactory.





Source: Census of India 2001 and 2011; Bathroom includes i) bathroom within premises and ii) an enclosure without roof as per 2011 Census, however the latter information was not collected in 2001 Census. In order to make comparable only bathroom within premises is presented in this graph.

Table 3.5 gives the percentage of each amenities for all ST households. There are only 10 percent ST households in India which have concrete roofs, and this percentage is highest in Andhra Pradesh, and lowest in Assam. Less than 30 percent of ST households have drinking water facility, and out of them 14.6 percent use water from treated sources and 9.8 percent use water from untreated sources. The drinking water facility is highest in Himachal Pradesh (91.2 percent) and is lowest in Jharkhand (5.7 percent). The electricity is available in more than half of ST households in India, and the state having highest percentage of electricity is Himachal Pradesh (94.5 percent) while Bihar is having the lowest with 11 percent. More than half of ST households have kitchen facility in India but still only less than 10 percent household use the LPG. The top five states where ST households are performing better in terms of household amenities are Uttarakhand, Tripura, Arunachal Pradesh, Kerala and Rajasthan and the bottom five states are Chhattisgarh, Odisha, Uttar Pradesh, Madhya Pradesh and Gujarat.

State/UTs	Concrete Roof	Drinking Water	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen
India	10.1	24.4	51.7	22.6	22.7	31.4	9.3	53.7
Andaman & Nicobar#	3.4	77.7	94.0	88.2	29.6	90.5	35.0	97.9
Andhra Pradesh	36.2	45.5	80.0	19.5	28.9	36.7	12.0	37.8
Arunachal Pradesh	2.9	70.5	66.2	58.4	31.1	38.5	23.7	89.4
Assam	1.3	5.9	28.0	43.3	12.5	24.8	10.9	89.4
Bihar	14.5	5.9	11.5	13.7	35.1	30.1	4.5	34.4
Chhattisgarh	4.1	8.7	56.8	14.8	12.1	7.4	2.9	54.9
Dadar & Nagar Haveli#	6.0	40.0	90.8	16.9	8.3	37.5	12.5	84.8
Daman & Diu#	12.1	71.2	96.6	36.9	31.7	75.9	40.1	83.0
Goa	13.2	76.7	93.8	59.9	49.4	73.5	41.9	90.2
Gujarat	12.7	29.9	80.0	24.3	16.1	44.4	10.9	65.0
Himachal Pradesh	32.3	91.2	94.5	62.0	62.8	64.4	34.4	85.4
Jammu & Kashmir	8.5	43.5	59.7	26.7	16.2	27.5	10.9	73.6
Jharkhand	7.3	5.7	29.3	8.3	12.6	9.6	3.7	34.5
Karnataka	13.5	62.1	83.6	28.7	48.4	75.6	13.8	82.8
Kerala	28.8	24.7	62.8	71.4	23.2	48.0	10.2	89.6
Lakshadweep#	45.1	19.5	99.7	98.3	23.5	97.4	16.5	96.6
Madhya Pradesh	3.8	8.8	54.0	8.5	13.8	21.3	3.5	36.6
Maharashtra	12.2	48.4	59.8	30.1	41.4	67.1	18.9	60.4
Manipur	1.8	40.5	57.8	82.3	41.5	56.8	14.4	88.3
Meghalaya	8.8	38.1	59.2	61.0	32.5	36.9	7.5	91.2
Mizoram	13.1	58.7	84.3	91.9	59.4	75.3	52.5	83.7
Nagaland	4.4	50.1	81.2	74.8	48.2	82.4	16.5	96.8
Odisha	4.7	6.3	15.6	7.1	10.0	6.2	1.6	59.6
Rajasthan	5.6	11.2	39.7	7.9	13.7	18.7	4.8	22.1
Sikkim	18.7	83.8	91.5	85.9	49.6	65.4	36.6	91.7
Tamil Nadu	35.3	71.1	84.4	34.7	39.0	50.3	30.3	64.3
Tripura	1.6	15.7	46.9	63.7	15.5	14.6	5.9	75.9
Uttar Pradesh	17.2	30.5	36.7	35.5	60.3	49.9	20.3	43.0
Uttarakhand	32.8	58.6	83.7	46.1	50.8	52.1	30.4	74.3
West Bengal	6.7	18.1	31.7	24.4	16.4	14.6	6.0	48.2

Table 3.5: Household living condition among ST households by states, India, 2011 (Total)

3.2.1 ST households in rural area

Table 3.6 gives household living conditions among ST households in rural areas for the year 2011. It may be observed from table that the level of household amenities is very poor among ST households in rural areas. Except kitchen facility, all other amenities are accessed by less than half of households. For instance, the percentage of households availing drinking water, toilet and drainage facilities are 18.1%, 15.8% and 15.4% respectively. Moreover, only 6.2% of ST households have houses with concrete roofs.

Although percentage of household with concrete roofs among ST households in rural area is quite low i.e. 6.2%, however some of the states like Andhra Pradesh and Uninion Territory of Lakshadweep have more than 30 percent households having this amenity. The percentage of drinking water facility among ST households in rural areas varied from 90.9% in Himachal Pradesh to only 3% in Jharkhand. Moreover, in northeastern states this percentage is highest in Sikkim (81.3%) and lowest in Assam (3.9%).

Among the bigger states the percentage of households having electricity among ST households in rural areas is highest in Himachal Pradesh (94.3%) followed by Karnataka (81.0%) and Uttarakhand (80.9%) and it is lowest in Bihar (7.0%) and Odisha (12.6%). The states/UTs in which percentage of households with toilet facility more than 80% are Lakshadweep (98.0%), Andaman and Nicobar Islands (87.7%), Mizoram (84.6%), Sikkim (83.1%) and Manipur (80.3%). On the other hand, Bihar, Madhya Pradesh, Odisha, Jharkhand and Rajasthan are those states where less 10 percent of ST households have toilet facility.

The percentage of ST households with drainage facility in rural areas varies from 60.1% in Himachal Pradesh to 4.1% in Dadar and Nagar Haveli. In addition states/UTs with less than 10% households have drainage facility are viz. Assam (9.2%), Rajasthan (9.2%), Chhattisgarh (9.0%), Daman and Diu (8.9%), Jharkhand (8.6%), Odisha (8.1%) and Gujarat (5.6%).

More than 80% of ST households have bathroom facility in Lakshadweep and Andaman and Nicobar Islands followed by 78.4% in Nagaland and 70.7% in Daman and Diu. Among the bigger states the percentage of bathroom facility is highest in Karnataka (70.2%) and Himachal Pradesh (62.0%). The lowest percentage of bathroom facility can be seen in Jharkhand (4.5%), Odisha (4.1%) and Chhattisgarh (3.8%) among the ST households in rural areas.

More than 30 percent of ST households use LPG as a cooking fuel in Andaman and Nicobar Islands (32.8%), Daman and Diu (30.3%) and Himachal Pradesh (30.3%). On the other hand, Jharkhand, Madhya Pradesh, Chhattisgarh and Odisha are those states where less than 1% ST households use LPG. Moreover, in most of states in rural India have more than 50% ST households with kitchen facility and it varies from 97.9% in Andaman and Nicobar Islands to only 19.2% in Rajasthan.

State/UTs	Concrete Roof	Drinking Water	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen
India	6.2	18.1	46.2	15.8	15.4	24.2	2.9	50.6
Andaman & Nicobar#	0.9	76.3	93.7	87.7	25.6	89.9	32.8	97.9
Andhra Pradesh	33.3	39.7	78.0	10.3	20.5	28.9	5.4	33.4
Arunachal Pradesh	1.0	66.6	58.9	51.2	22.1	28.4	10.1	88.0
Assam	0.4	3.9	23.0	38.8	9.2	19.9	6.0	89.2
Bihar	12.3	4.2	7.0	9.3	32.0	26.9	1.3	32.9
Chhattisgarh	2.2	5.1	54.3	12.5	9.0	3.8	0.6	53.8
Dadar & Nagar Haveli#	2.8	40.3	89.7	10.3	4.1	29.4	5.7	82.9
Daman & Diu#	6.0	65.4	96.4	20.0	8.9	70.7	30.3	86.7
Goa	9.0	71.7	92.7	53.4	39.1	65.2	29.9	88.3
Gujarat	6.3	20.2	77.7	14.9	5.6	36.9	3.5	62.7
Himachal Pradesh	29.7	90.9	94.3	59.6	60.1	62.0	30.3	84.9
Jammu & Kashmir	6.5	41.8	56.9	23.0	13.3	24.1	6.7	72.6
Jharkhand	4.7	3.0	23.8	3.7	8.6	4.5	0.8	32.7
Karnataka	4.7	56.2	81.0	15.6	37.4	70.2	3.7	80.6
Kerala	24.9	21.7	57.8	67.4	18.2	41.4	5.0	88.4
Lakshadweep#	35.1	31.4	99.8	98.0	19.6	95.3	2.8	94.2
Madhya Pradesh	1.7	5.3	51.8	5.3	10.0	17.7	0.6	34.9
Maharashtra	3.9	37.2	50.2	21.1	28.1	59.7	5.4	55.1
Manipur	1.0	39.9	53.8	80.3	37.9	53.5	9.3	87.4
Meghalaya	4.1	30.1	51.8	53.7	23.4	28.5	1.7	90.1
Mizoram	1.4	41.6	69.2	84.6	37.8	59.4	18.0	79.8
Nagaland	1.4	53.4	76.1	68.7	39.8	78.4	6.4	96.4
Odisha	3.6	4.3	12.6	5.3	8.1	4.1	0.4	59.4
Rajasthan	3.7	7.0	36.1	3.5	9.2	14.3	1.3	19.2
Sikkim	8.9	81.3	89.4	83.1	37.3	57.6	21.8	91.5
Tamil Nadu	26.0	68.4	80.1	13.7	19.6	32.1	13.8	52.2
Tripura	0.4	13.6	44.7	62.0	13.2	11.7	3.1	75.0
Uttar Pradesh	12.5	21.1	17.8	16.3	47.6	35.8	3.5	33.9
Uttarakhand	27.3	54.6	80.9	35.7	41.9	43.2	19.8	72.4
West Bengal	3.1	13.0	25.7	18.3	10.6	8.4	1.6	46.6

Table 3.6: Household living condition in rural area among ST households by states, India, 2011
3.2.2 ST households in urban area

The percentage of household amenities among ST households in urban area is shown in Table 3.7. In urban areas there are 34.9 percent ST households which have houses with concrete roofs. More than 60 percent ST households have access to basic amenities such as drinking water, electricity, toilet, drainage, bathroom and kitchen. However, still only 49.2% ST households use the LPG/PNG as a cooking fuel.

The percentage of concrete roofs among ST households in urban area varies from 60.2% in Himachal Pradesh to only 7.5% in Manipur. Moreover, among the bigger states Odisha (19.3%) and Chhattisgarh (26.9%) are in the lowest position. But in case of drinking water facility Andaman and Nicobar Islands (99.4%) is in the top position and Himachal Pradesh (94.6%) comes next, whereas Bihar (24.9%) and Lakshadweep (15.8%) are having the lowest ST households with drinking water facility.

In most of the urban areas of states and UTs have more than 70% ST households having electricity with notable exceptions of Odisha (58.1%) and Bihar (60.2%). Similarly, except Odisha (32.0%), Chhattisgarh (42.0%), Dadar and Nagar Haveli (46.7%), Madhya Pradesh (47.7%) and Jharkhand (48.0%), all other states have more than 50% of ST households have toilet facility.

The percentage of households in urban areas with drainage facility among ST households is highest in Sikkim (92.5%) followed by Andaman & Nicobar Islands (91.6%) and Himachal Pradesh (91.4%). On the other hand, Dadar & Nagar Haveli and Lakshadweep having less than 30% households with drainage facility. Moreover, almost all states and UTs have more than 50% of ST households with bathroom facility but Odisha is the only state where it is only 36%.

Among all the states and UTs, there are more than half of the ST households have Kitchen facility. However, the percentage of ST households using LPG as cooking fuel varies from 88.4% in Sikkim to only 18.9% in Odisha.

State/UTs	Concrete	Drinking	Electricity	Toilet	Drainage	Bathroom	LPG/PNG	Kitchen
	Roof	Water			<i>(</i>) -		10.0	
India	34.9	64.8	86.5	66.0	69.5	76.7	49.2	73.3
Andaman & Nicobar#	41.5	99.4	98.7	96.3	91.6	98.7	70.5	98.3
Andhra Pradesh	52.6	78.4	91.5	71.4	75.8	81.2	49.1	62.8
Arunachal Pradesh	11.0	87.5	97.8	89.6	70.4	81.9	82.3	95.4
Assam	11.2	27.7	83.4	92.8	50.0	79.5	65.9	92.3
Bihar	38.3	24.9	60.2	60.9	68.6	64.4	38.7	50.9
Chhattisgarh	26.9	51.3	86.6	42.0	49.0	50.4	30.3	67.9
Dadar & Nagar Haveli#	20.6	38.3	95.7	46.7	27.0	73.7	43.0	93.3
Daman & Diu#	17.3	76.2	96.8	51.7	51.6	80.4	48.7	79.8
Goa	19.1	83.5	95.3	68.9	63.7	84.9	58.4	92.9
Gujarat	43.8	77.5	91.0	70.3	67.4	80.8	47.5	76.4
Himachal Pradesh	60.2	94.6	97.5	88.1	91.4	90.5	78.6	90.3
Jammu & Kashmir	34.1	65.6	96.0	75.0	53.6	71.6	65.6	86.5
Jharkhand	30.0	28.8	77.7	48.0	47.2	54.2	29.2	50.6
Karnataka	41.1	80.4	91.8	69.8	82.8	92.6	45.6	89.8
Kerala	50.9	41.1	90.9	94.0	52.0	85.6	39.8	96.0
Lakshadweep#	48.3	15.8	99.7	98.4	24.8	98.1	20.9	97.3
Madhya Pradesh	29.2	50.8	80.5	47.7	59.3	65.1	37.6	57.0
Maharashtra	39.4	84.7	91.2	59.4	84.6	91.2	63.1	77.8
Manipur	7.5	44.5	87.0	97.0	67.8	80.7	51.8	95.3
Meghalaya	31.1	76.1	93.9	95.6	75.6	76.9	35.1	96.1
Mizoram	24.0	74.6	98.4	98.6	79.6	90.2	84.8	87.4
Nagaland	14.2	39.4	97.8	94.8	75.5	95.5	49.3	98.1
Odisha	19.3	33.6	58.1	32.0	36.4	36.0	18.9	62.5
Rajasthan	30.5	65.7	85.9	63.7	71.9	76.1	50.4	60.1
Sikkim	52.9	92.3	98.9	95.7	92.5	92.9	88.4	92.3
Tamil Nadu	50.7	75.7	91.5	69.5	71.2	80.5	57.6	84.5
Tripura	23.3	56.5	88.4	95.3	58.3	68.7	58.5	92.0
Uttar Pradesh	28.3	52.6	80.9	80.4	90.2	83.0	59.8	64.6
Uttarakhand	54.7	74.6	94.6	88.0	86.2	87.8	73.0	81.8
West Bengal	32.0	54.7	73.7	67.7	58.0	58.1	36.9	59.5

Table 3.7: Scheduled Tribe Household living condition in urban area by states, India, 2011

Source: Census of India 2011; The information for bathroom includes both bathroom within premises as well as an enclosure without roof.

3.3 Relationship between Amenities among SC and ST households: A correlation analysis

A correlation analysis among the household amenities among SC and ST households in rural and urban areas shows the availability of tap water is positively related with all other amenities except kitchen facility among all SC and ST households in both rural and uban areas.

Electricity is positively significant with almost all the amenities, but in urban areas it is found to be not significant with concrete roof and drainage facility. In other words, we can say that the electricity is available even if the drainage facility is not available.

Toilet facility is positively significant with drainage facility, bathroom, LPG/PNG and kitchen facility. Very clearly it is found in both rural and urban areas, the toilet facility is not significantly related with concrete roof. On the other hand, drainage facility is positively significant with concrete roof, bathroom and LPG, while it is not significant with kitchen inside house. Bathroom facility is positively related with all other amenities like concrete roof, tap water, electricity, toilet facility, drainage facility, LPG and kitchen facility among the SC and ST households in both rural and urban areas. LPG is also positively related with all other amenities viz. tap water, electricity, toilet facility, concrete roof and kitchen facility.

Chapter 4: Household Assets and Banking Services

This chapter deals with the level of household assets in different states\UTs and towns of India for the year 2001 and 2011. This chapter presents the acess to different assets such as, television, telephone, mobile, computer/laptop, two-wheelers and four-wheeler vehicles, and households availing banking services.

	То	tal	Ru	ral	Urb	an
Assets in %	2001	2011	2001	2011	2001	2011
Banking Services	35.5	58.7	30.1	54.4	49.5	67.8
Television	31.6	47.2	18.9	33.4	64.3	76.7
Mobile	NA	53.2	NA	47.9	NA	64.3
Telephone	9.1	4.0	3.8	3.1	23	5.9
Computer/Laptop	NA	9.4	NA	5.1	NA	18.7
Scooter/Motorcycle/moped	11.7	21.0	6.7	14.3	24.7	35.2
Car/Van/Jeep	2.5	4.7	1.3	2.3	5.6	9.7

Table 4.1: Households with selected assets and access to banking services in rural and urban areas, India,2001 and 2011

Source: Tables on Houses, Household Amenities and Assets, H series Table, Census of India 2001 and 2011

Table 4.1 and Fig 4.1 show the percentage of households with access to banking services has increased from 35.5% in 2001 to 58.7% in 2011. The percentage of households with television was 31.6% in 2001 which increased to 47.2% in 2011. An increase of 9.3% was observed in scooter/motorcycle/moped during 200-2011 from 11.7% in 2001. Similarly, in car/jeep/van the percentage increase was from 2.5% in 2001 to 4.7% in 2011. It is worwhile to note that there was a decline in the possession of landline telephones from 2001 to 2011 as mobile phone sevices expanded in the country. In 2011 more than half of the households were using mobile phones. Similar increasing trend was also seen in household assets over the period for both rural and urban areas.

Although the rural household have very less access to different assets, the percentage increase over two cenuses was higher in rural compared to urban areas. The changes in rural and urban areas are also presented in Fig 4.2 and Fig 4.3 respectively.





Source: Census of India 2001 and 2011

Note: Information of Mobile and Computer/Laptop was not available in census 2001





Source: Census of India 2001 and 2011 Note: Information on Mobile and Computer/Laptop was not available in census 2001

Figure	4.3
--------	-----



Source: Census of India 2001 and 2011

Note: Information on Mobile and Computer/Laptop was not available in census 2001

4.1 Condition of household assets at the state level

Table 4.2 provides the percentage of household assets like availability of banking services, television, telephone, mobile, computer/laptop, scooter/motorcycle and car/van/jeep for the year 2011. It is observed that more than half of households have banking facility in India, and it is highest in Himachal Pradesh (89.1%) and lowest in Manipur (29.4%). The television is available in less than half of the household, and it is highest in Tamil Nadu (87.0%) and lowest in Bihar (14.5%).

Less than 10 percent of households have the availability of a computer or laptop, while more than half of households have a mobile facility. In 2011, Sikkim (76.0%) and Haryana (72.1%) have the highest percentage of mobile users in India. In case of UTs, Daman and Diu (76.0%), Andaman & Nicobar Island (72.1%) and Delhi (68.2%) have the highest users of mobile. However, in case of computer/laptop only few states/UTs have more than 20 percent of households having users i.e., Chandigarh, Delhi and Goa. It is also clear from the table that Chhattisgarh and Madhya Pradesh are only those states where households with computer/laptop and mobile service are one of the lowest among all states.

Goa (56.9%) and Punjab (47.4%) hold the highest percentage of households with two wheelers such as scooter, motorcycle and moped while three northeastern states viz. Sikkim (2.8%), Meghalaya (5.4%) and Nagaland (6.3%) hold the least propotions. But in case of four-wheelers only Chandigarh (25.7%), Goa (24.6%) and Delhi (20.7%) are the states/UTs where more than 20 percent of households have this asset. The above results are by and large also true for rural and urban areas also.



Figure 4.4

Figure 4.5



Source: Census of India (2011)



Figure 4.7



Source: Census of India 2011

					Comment				
State/UTs	Availing banking services	Television	Telephone	Mobile	With Internet	er/laptop Without Internet	Scooter/ Motorcycle/moped	Car/van/jeep	Index
India	58.7	47.2	4.0	53.2	3.1	6.3	21.0	4.7	0.3024
Andaman & Nicobar Islands	89.3	68.5	3.0	72.1	3.5	5.3	24.7	6.9	0.4461
Andhra Pradesh	53.1	58.8	4.1	54.9	2.6	5.8	18.6	2.7	0.2930
Arunachal Pradesh	53.0	41.1	2.9	39.8	2.0	6.2	14.0	7.9	0.2325
Assam	44.1	27.5	2.2	43.4	1.6	7.7	10.2	3.8	0.1677
Bihar	44.4	14.5	2.2	51.6	0.9	6.2	8.1	1.7	0.1264
Chandigarh#	80.1	82.5	6.0	63.1	18.8	14.4	46.7	25.7	0.8202
Chhattisgarh	48.8	31.3	1.5	27.2	1.2	3.4	15.6	2.2	0.1051
Dadar & Nagar Haveli#	56.7	47.2	2.3	57.3	2.8	5.5	25.5	5.7	0.2954
Daman & Diu#	65.4	61.0	4.1	76.0	2.8	6.5	31.4	5.9	0.4206
Goa	86.8	81.1	12.1	53.8	12.7	18.4	56.9	24.6	0.8823
Gujarat	57.9	53.8	3.3	58.6	3.1	5.7	34.1	6.1	0.3496
Haryana	68.1	67.9	4.5	66.9	5.3	7.9	33.3	10.5	0.4854
Himachal Pradesh	89.1	74.4	7.4	61.5	2.8	5.6	15.5	8.3	0.4666
Jammu & Kashmir	70.0	51.0	3.6	59.3	2.9	5.5	12.9	7.5	0.3291
Jharkhand	53.9	26.8	2.0	44.1	1.5	5.4	16.1	2.8	0.1719

Table 4.2: Availing Banking Services and Household Assets by states, India, 2011

				1	1	1			
Karnataka	61.1	60.0	7.0	56.5	4.8	8.0	25.6	6.3	0.4180
Kerala	74.2	76.8	11.6	46.8	6.3	9.5	24.1	10.2	0.5476
Lakshadweep#	85.3	64.0	8.1	46.5	3.1	11.0	38.4	2.3	0.4825
Madhya Pradesh	46.6	32.1	2.4	40.6	1.4	4.5	18.8	2.7	0.1617
Maharashtra	68.9	56.8	6.3	53.7	5.8	7.5	24.9	5.9	0.4130
Manipur	29.6	47.4	3.0	52.3	2.1	6.9	19.8	6.0	0.2357
Meghalaya	37.5	33.7	1.5	39.1	1.5	6.1	5.4	5.4	0.1334
Mizoram	54.9	55.1	1.7	63.9	2.5	12.7	13.8	7.3	0.3562
Nagaland	34.9	37.9	1.3	48.6	1.7	7.2	6.3	7.8	0.1808
NCT of Delhi#	77.7	88.0	5.1	68.2	17.6	11.5	38.9	20.7	0.7466
Odisha	45.0	26.7	1.8	35.6	1.4	3.7	14.5	1.8	0.1096
Puducherry#	64.0	81.8	5.1	62.7	6.0	7.6	46.6	5.6	0.5063
Punjab	65.2	82.6	6.7	62.3	5.4	7.4	47.4	13.1	0.5648
Rajasthan	68.0	37.6	2.5	62.5	1.8	5.1	24.1	4.7	0.2926
Sikkim	67.5	54.7	1.8	67.7	3.3	8.2	2.8	8.3	0.3371
Tamil Nadu	52.5	87.0	5.7	62.1	4.2	6.4	32.3	4.3	0.4350
Tripura	79.2	44.9	2.1	42.7	1.0	6.3	8.2	2.2	0.2355
Uttar Pradesh	72.0	33.2	3.3	61.2	1.9	6.2	19.6	3.8	0.2930
Uttarakhand	80.7	62.0	3.2	64.8	3.2	7.8	22.9	6.2	0.4151
West Bengal	48.8	35.3	2.3	42.9	2.2	6.1	8.5	2.2	0.1693

Source: Census of India 2011

	Availing				Comput	er/laptop			
State/UTs	banking	Television	Telephone	Mobile	With	Without	Scooter/ Motorcycle/moped	Car/van/jeep	Index
	services			45.0	Internet	Internet			0.0050
India	54.4	33.4	3.1	47.9	0.7	4.4	14.3	2.3	0.2373
Andaman & Nicobar Islands	90.0	58.2	3.2	66.7	1.4	3.4	18.4	4.0	0.4046
Andhra Pradesh	50.4	49.3	3.4	49.3	0.5	4.0	11.2	0.9	0.2384
Arunachal Pradesh	43.1	29.0	2.3	30.8	0.8	4.5	11.3	5.3	0.1913
Assam	38.3	20.1	1.7	38.7	0.7	6.5	7.6	2.1	0.1557
Bihar	42.3	10.2	2.0	50.1	0.5	5.8	6.6	1.4	0.1501
Chandigarh#	66.6	71.6	1.8	81.9	3.6	7.8	34.5	7.6	0.5538
Chhattisgarh	46.1	21.1	1.0	19.5	0.2	1.9	9.3	0.8	0.0747
Dadar & Nagar Haveli#	39.3	28.2	1.3	36.5	0.7	3.1	15.8	2.0	0.1556
Daman & Diu#	67.7	68.7	4.7	72.9	1.5	5.1	40.1	5.5	0.4953
Goa	84.9	74.6	13.3	51.0	7.1	17.2	51.8	17.9	0.9211
Gujarat	51.3	36.4	2.4	52.7	0.5	2.9	23.0	2.8	0.2487
Haryana	65.9	59.4	3.4	67.7	1.2	5.2	27.9	5.8	0.4199
Himachal Pradesh	89.1	73.2	7.7	60.9	1.8	4.4	14.4	6.7	0.4915
Jammu & Kashmir	65.4	39.4	2.6	56.4	1.0	3.8	7.9	3.6	0.2717
Jharkhand	47.4	13.7	1.3	36.6	0.3	3.8	9.5	1.1	0.1179
Karnataka	58.9	46.3	6.4	51.0	0.7	4.9	16.9	2.5	0.3181
Kerala	73.9	72.1	11.7	46.2	3.9	7.7	19.7	8.0	0.5712
Lakshadweep#	86.6	54.0	6.9	55.3	1.2	6.4	29.0	2.1	0.4400
Madhya Pradesh	40.7	18.6	1.7	33.5	0.2	3.0	12.0	1.1	0.1117
Maharashtra	62.9	37.9	5.2	45.0	0.8	3.9	18.5	2.4	0.2841
Manipur	23.5	36.7	2.4	44.7	1.1	5.6	12.9	3.6	0.2046
Meghalaya	28.2	22.9	1.2	29.9	0.5	4.0	3.9	2.8	0.0948
Mizoram	35.9	34.4	1.4	48.4	0.4	4.3	7.2	2.5	0.1696
Nagaland	23.1	25.8	1.0	38.0	0.7	4.9	5.0	5.0	0.1359
NCT of Delhi#	73.5	83.0	4.3	73.0	4.4	9.0	38.5	10.8	0.6557
Odisha	41.0	19.4	1.5	30.9	0.5	2.8	9.8	0.9	0.1043
Puducherry#	61.8	75.0	3.9	61.6	1.3	4.3	34.5	2.5	0.4201
Punjab	62.8	79.4	6.6	61.7	2.2	4.7	44.8	10.0	0.5632
Rajasthan	68.2	25.6	1.8	61.3	0.4	3.6	17.3	2.9	0.2569
Sikkim	63.5	44.9	1.3	62.4	1.2	5.5	2.4	5.3	0.2941
Tamil Nadu	45.2	85.3	4.9	57.3	1.0	3.7	25.5	1.8	0.3741
Tripura	78.2	33.8	1.6	35.2	0.4	5.3	4.7	1.3	0.2088
Uttar Pradesh	73.6	23.5	2.7	59.4	0.6	5.3	15.3	2.3	0.2758
Uttarakhand	80.3	53.3	2.5	62.4	1.2	5.1	15.1	3.3	0.3614
West Bengal	39.8	20.2	1.4	34.4	0.4	4.7	5.7	1.2	0.1148

Table 4.3: Availaing Banking Services and Household Assets in rural area by states, India (2011)

Source: Census of India, 2011

					Comput	er/laptop			
State/UTs	Availing banking	Television	Telephone	Mobile			Scooter/	Car/van/jeep	Index
State/015	services	I CICVISION	reiephone	WIDDIE	With Internet	Without Internet	Motorcycle/moped	Car/van/jeep	Inuex
India	67.8	76.7	5.9	64.3	8.3	10.4	35.2	9.7	0.2360
Andaman & Nicobar Islands	88.0	86.3	2.7	81.2	7.0	8.5	35.6	11.8	0.4019
Andhra Pradesh	58.7	78.6	5.6	66.7	7.1	9.6	34.1	6.4	0.2362
Arunachal Pradesh	82.4	77.2	4.7	66.6	5.3	11.0	22.1	15.7	0.1902
Assam	75.2	67.8	4.5	69.3	6.4	14.6	24.1	12.6	0.1552
Bihar	62.4	50.9	4.0	64.4	3.8	9.1	20.8	4.7	0.1501
Chandigarh#	80.5	82.8	6.1	62.6	19.3	14.6	47.0	26.3	0.5504
Chhattisgarh	58.2	67.4	3.4	54.5	4.6	9.0	38.1	7.5	0.0741
Dadar & Nagar Haveli#	73.1	65.0	3.3	76.8	4.7	7.7	34.6	9.1	0.1546
Daman & Diu#	64.8	59.0	4.0	76.8	3.1	6.9	29.1	6.0	0.4921
Goa	88.1	85.2	11.3	55.5	16.3	19.2	60.2	28.8	0.9176
Gujarat	66.1	75.5	4.4	65.9	6.4	9.2	48.0	10.3	0.2472
Haryana	71.9	82.2	6.2	65.6	12.1	12.7	42.5	18.5	0.4172
Himachal Pradesh	89.2	84.2	5.4	65.7	10.9	14.4	24.1	21.2	0.4880
Jammu & Kashmir	83.3	84.7	6.4	67.8	8.3	10.2	27.6	18.6	0.2701
Jharkhand	74.5	67.8	4.0	67.7	5.2	10.4	36.7	8.0	0.1177
Karnataka	64.4	80.4	7.8	64.8	11.0	12.6	38.5	11.9	0.3161
Kerala	74.7	82.2	11.4	47.4	8.9	11.5	29.0	12.7	0.5679
Lakshadweep#	84.9	67.2	8.5	43.8	3.6	12.4	41.3	2.3	0.4376
Madhya Pradesh	63.5	71.3	4.5	61.0	4.9	8.9	38.6	7.3	0.1112
Maharashtra	76.0	79.4	7.5	64.2	11.7	11.9	32.6	10.1	0.2825
Manipur	41.5	68.4	4.2	67.2	4.2	9.4	33.4	10.7	0.2032
Meghalaya	71.3	72.7	2.6	72.7	5.2	13.8	10.8	14.5	0.0941
Mizoram	71.9	73.7	1.9	77.9	4.4	20.3	19.8	11.6	0.1683
Nagaland	64.1	67.9	2.2	74.8	4.4	12.8	9.6	14.6	0.1350
NCT of Delhi#	77.8	88.1	5.1	68.1	18.0	11.6	38.9	21.0	0.6517
Odisha	66.6	66.2	3.4	61.0	6.4	8.4	39.7	6.4	0.1038
Puducherry#	65.0	85.0	5.7	63.2	8.2	9.1	52.1	7.0	0.4166
Punjab	69.0	87.7	6.8	63.2	10.5	11.6	51.7	18.1	0.5594
Rajasthan	67.4	74.5	4.5	66.2	6.1	9.7	44.9	10.1	0.2560
Sikkim Tamil Nada	77.6	80.0	2.9	81.2	9.0	15.2	3.9	15.9	0.2922
Tamil Nadu	60.4	88.7	6.5	67.3	7.6	9.3	39.7	6.9	0.3700
Tripura Litton Brodoch	81.9	73.3	3.2	62.2	2.6	9.1	17.5	4.5	0.2075
Uttar Pradesh	66.7	66.3	5.5	67.2 70.4	6.0	9.5	34.5	8.8	0.2751
Uttarakhand West Bengal	81.8	82.5	4.7	70.4	7.7	14.1	41.5	13.1	0.3591
West Bengal Source: Census of I	68.2	68.1	4.1	61.3	6.0	9.1	14.5	4.4	0.1142

Table 4.4: Availing Banking Services and Household Assets in urban area by states, India (2011)

Source: Census of India, 2011

4.2 Household assets by size class of urban centres

As mentioned earlier the size as a measure of urban centres reflects both population concentration and the economic strength as well. It is expected that the level of assets is directly related to the size of urban centres. Table 4.6 presents some selected assets by size class of urban centres. It is evident from the table that bigger cities have higher access to banking services, television, computer, car aned scootors compared to smaller urban centres. On the other hand, cycle as a mode of transportation and a household possession is higher among small urban centres. The findings related to assets are very similar to amenities and indicates the fact that bigger is better in a market driven economy. It also shows how urbanization shapes inequality and deepens rural-urban divide.

		Total						Av	Availability of assets						
		num ber			Com	puter/L op	apt		hone/N Phone					Househol ds with	Non e of
Classificati on of Town	No of To wn	of house holds availi ng banki ng servi ces	Radi o/ Tran sistor	Tele visio n	Wit h Inte rnet	Wit hou t Inte rnet	B ot h	Lan dlin e only	Mo bile onl y	B ot h	Bic ycl e	Scooter/ Motorcyc le/Moped	Car/ Jeep /Van	TV, Compute r/Laptop, Telephon e/mobile phone and Scooter/ Car	the asse ts spec ified in col. 4 to 14
Class-I															
More than 5 Million	5	75.4	36.9	86.2	18.7	13.5	32 .2	7.9	65. 1	18 .8	23. 8	38.0	17.3	22.3	2.8
1 Million -5 million	41	73.1	33.6	83.2	11.8	12.3	24 .1	6.9	66. 9	13 .0	41. 6	43.6	12.7	17.3	4.2
100 thousand-1 million	45 9	64.7	21.7	73.1	8.2	10.2	18 .4	5.6	60. 6	11 .7	45. 3	35.1	9.0	11.5	6.4
Class-II															
50-100 Thousand	60 5	60.1	18.3	69.3	5.1	8.3	13 .4	4.6	61. 4	9. 4	42. 0	30.8	6.5	7.6	8.6
Class-III															

 Table 4.6 Percentage of Households Availing Banking Services and Each of the Specified Assets by Classified Town or Urban Centre in India 2011.

20-50 Thousand	19 02	61.0	20.3	65.8	4.7	7.9	12 .7	5.4	58. 1	11 .0	38. 0	28.2	6.4	6.7	9.3
Class-IV															
10-20 Thousand	22 32	58.0	20.7	62.3	4.2	6.6	10 .8	4.8	55. 3	9. 1	40. 2	26.2	5.6	5.2	9.6
Class-V															
5-10 Thousand	21 83	54.2	19.8	54.0	4.3	5.8	10 .1	4.1	49. 1	8. 2	39. 3	23.1	4.9	4.3	10.7
Class-VI															
Less than 5 Thousand	49 5	56.4	19.5	52.7	5.6	6.1	11 .6	4.0	46. 1	9. 8	35. 2	24.0	6.5	5.4	10.0

4.4 Household Assets Index, 2011

In northern part of India, the household assets Index is highest in Punjab, Haryana and Himachal Pradesh while it is lowest in Odisha, Bihar and Chhattisgarh. In case of south India, the highest level of household assets was found in Goa, Kerala, Tamil Nadu and Karnataka and lowest in Andhra Pradesh. The overall picture depicts that the condition of household assets is much higher in southern states than northern and north-eastern states.

A composite index of assets based on indicators of television, mobile,telephone, computor/laptop, scootor/motor cycle/ moped and car/van/jeep was created based on PCA. The household assets index was highest in Goa, follwed by Kerala, Punjab, Haryana and Himachal Pradesh while the Odisha, Bihar, Chattisgarh, Meghalaya and Madhya Pradesh are the five bottom states (see Map 2).

Relationship between Assests, Amenities and Socio-economic and Demographic Conditions

The relationship between the indices of household amenities and assets are positively correlated (see Fig 3). It means that higher amenties co-exists with higher assests. It also reflects that those states which have lower household amenities index tend to have lower household assets index. This is expected as most of the amenities included in this study are also private goods barring drainage and suppy of drinking water through tap and hand pumps. Thus, a strong relationship between the two indices shows the income/prosperity effects. Further, both the indices are positivly correlated with male and female literacy rates. However, they have negative correlation with child sex ratio, % of ST population (not with SCs), % of the workforce in agriculture and % of marginal workers (see Table 4.7). It may also be noted that there exists a netative relationship between female work participation and amenities and assests because a large

proportion of women are either working in agriculture or participating as daily wage workers. Further, the significant negative correlation between child sex-ratio and indices of amenties and assets provides srtong evidence that rising prosperity has deleterious effects on gender preferences in reproductive behaviour and the life chances of females.



Figure 3 : Relationship between Assets and Amenities, State Level, 2011

 Table 4.7: Correlation matrix of household amenities, assets and socio-economic and demographic indicators, State Level, India, 2011

Indicators	Index of Amenities	Index of Assets
Child Sex Ratio	-0.346**	-0.402**
Male literacy rate	0.613***	0.644***

Female literacy rate	0.585***	0.617***
% of SC population	0.066	0.128
% of ST population	-0.336**	-0.291
Male work participation rate	0.041	0.168
Female work participation rate	-0.476**	-0.318*
% of workforce in agriculture	-0.846***	-0.737***
% of marginal workers	-0.321*	-0.195

*significat at 10 %, ** 5 % and *** 1 % level respectively.



Map 4.1: Household asset index, India, 2011

Chapter-5: Access to Household Assets among SC and ST Households

5.1 Household Assets among SC households

Figure 5.1 shows the changes in household assets among SCs from 2001 to 2011. It is may be observed that there has been an increase in most of the assets. For example banking services increased from 25.2 to 50.9% whereas percentage of households with television increased from 21.3% to 39.1% during 2001-2011, and scooter/motorcycle/moped from 5.4% to 12% during the same period. However, some assets like telephone and car/jeep/van have not shown much increase over the same period. The computer/laptop and mobile are newly included in 2011 census and their percentages are 47.6% and 6.5% respectively.



Figure 5.1

Source: Census of India 2001 and 2011

Note: Information on Mobile and Computer/Laptop was not available in census 2001

Household assets among SC households at state level is presented in Table 5.1. It may be seen that among the states banking services is highest among SC households in Himachal Pradesh (85.6%) followed by Tripura (81.3%), Uttarakhand (74.6%), whereas Manipur (23.8%), Bihar (33.5%) and Madhya Pradesh (36.2%) are at the lowest. For television the highest is found in Delhi followed by Tamil Nadu, Chandigarh and Daman and Diu whereas Bihar, Odisha, Jharkhand and Uttar Pradesh stand for the lowest. The overall availability of computer among SC

households is around 6.5 percent. The largest contributors were Goa, Mizoram and Meghalaya with percentage of 44.8, 18.5 and 14.2 respectively. The lowest percentage was found in Chhattisgarh (3.2 %), Odisha (3.9%) and Madhya Pradesh (4.4%). Nearly 12% of the SC households are having scooter. The highest percentage was accounted by Daman & Diu, Goa, Dadra & Nagar Haveli i.e., 45.8%, 40.3% and 39.2% respectively. The lowest figures were found to be 2%, 3.1% and 4.6% for Sikkim, Bihar and West Bengal respectively. Nearly, 1.8% of the SC household are having car, out of which the top position is held by Goa (26.5%) and the bottom is held by Bihar (0.8%).

	Availing				-	er/laptop	Scooter/	
State/UTs	banking services	Television	Telephone	Mobile	With Internet	Without Internet	Motorcycle/moped	Car/van/jeep
India	50.9	39.1	3.0	47.6	1.3	5.2	12.0	1.8
Andhra Pradesh	45.3	48.9	2.8	49.1	1.1	4.9	10.1	1.1
Assam	46.9	29.0	2.6	43.3	2.0	9.2	9.6	3.6
Bihar	33.5	7.2	1.8	37.8	0.5	6.2	3.1	0.8
Chandigarh#	71.1	78.8	4.6	68.6	6.1	9.7	33.0	8.8
Chhattisgarh	39.8	28.8	1.2	23.5	0.5	2.7	10.6	1.0
Dadar & Nagar Haveli#	69.1	62.1	3.9	73.8	4.1	7.9	39.2	8.8
Daman & Diu#	73.4	72.9	3.2	75.0	2.7	8.9	45.8	8.4
Goa	70.3	63.5	12.1	48.9	27.4	17.4	40.3	26.5
Gujarat	58.4	58.2	3.1	60.3	2.0	4.8	25.9	3.2
Haryana	57.1	54.8	4.0	57.4	1.7	6.2	15.1	3.7
Himachal Pradesh	85.6	68.6	6.1	61.9	1.4	4.8	10.5	4.9
Jammu & Kashmir	72.4	56.3	3.4	56.9	1.5	4.7	15.3	3.3
Jharkhand	43.5	20.5	1.5	37.0	0.6	4.7	8.7	1.2
Karnataka	47.0	46.2	4.8	49.4	1.7	6.6	13.6	2.1
Kerala	60.2	61.7	6.3	59.9	1.9	6.0	10.7	2.3
Madhya Pradesh	36.2	26.1	1.9	37.3	0.6	3.8	10.6	0.9
Maharashtra	59.6	50.9	5.0	50.1	3.0	6.4	16.7	2.9
Manipur	23.8	51.4	5.7	50.8	2.6	8.9	15.5	6.0
Meghalaya	47.7	47.0	3.2	49.7	3.0	11.2	7.1	5.2
Mizoram	52.8	47.4	2.9	66.2	4.2	14.3	8.5	6.3
NCT of Delhi#	68.2	84.8	3.5	74.9	4.6	7.2	27.2	5.3
Odisha	37.2	19.2	1.5	29.2	0.7	3.2	8.4	0.9
Puducherry#	51.5	71.6	3.3	56.9	2.0	3.9	30.3	2.0
Punjab	48.3	72.9	5.5	59.0	1.9	4.2	27.6	3.7
Rajasthan	60.4	28.6	1.9	60.1	0.6	3.9	13.3	1.5
Sikkim	60.6	51.9	1.6	64.5	2.6	7.6	2.0	5.9
Tamil Nadu	39.3	84.7	4.5	55.3	1.6	4.6	19.9	1.5
Tripura	81.3	46.0	1.9	43.5	0.7	6.0	6.4	1.7
Uttar Pradesh	69.8	22.4	2.6	51.3	0.8	5.6	9.6	1.5
Uttarakhand	74.6	50.6	2.2	56.5	1.2	5.0	12.1	2.1
West Bengal	42.2	24.9	1.6	34.8	0.9	5.2	4.6	1.4

Table 5.1: Household assets among SCs, India and States, 2011

Source: Census of India, 2011

5.2 Household Assets among ST households

It may be observed from Fgure 5.2 that ST households also have witnessed an increase in the percentage of household assets during 2001 to 2011. A very significant increase can be seen in household availing banking services rising from 19.2% in 2001 to 45.0% in 2011. Similarly, in other assets like television and scooter/motorcycle/moped also an increase of 9.8% and 4.9% are observed respectively. Only in the case of car/jeep/van the increase is very low. The percentage of ST households having mobile phone and computer/laptop is 31.1% and 5.2% respectively.



Figure 5.2

Source: Census of India 2001 and 2011

Table 5.5 depicts, around 45% of the total ST households are having banking facility at the national level. At the state level, a high percentage of banking services can be seen in the states of Himachal Pradesh (89.1 %), Goa (81.2%), Punjab (80.4%) and Tripura (70.7). However, low percentage can be seen among Manipur, Nagaland, Meghalaya and Odisha i.e., 24.8%, 33.8%, 34.7% and 35% respectively. In India, approximately 21.9% of the ST households are having television. At state level nearly 81% of the ST households in Tamil Nadu are having television, followed by Himachal Pradesh (68.2%), Goa (65.1%) and Punjab (58.5%). On the other hand Odisha (7.6%), Madhya Pradesh (9.7%), Bihar (9.7%) and Jharkhand (11.3%) lies at the bottom position. Approximately, 31.1% of the ST households have the access of mobile phones at India level with highest in Sikkim (64.2%) and lowest in Chhattisgarh (14.2%). Around 5.2% of ST households have the access to a computer at India level. The highest is found in Goa, Mizoram, Uttar Pradesh and Tamil Nadu while lowest is found in Chhattisgarh followed

Note: Information on Mobile and Computer/Laptop was not available in census 2001

by Odisha, Madhya Pradesh and Gujarat. In India, 9% of the household have a scooter and it can be found highest in Goa i.e., 44.8% while lowest in Jammu & Kashmir i.e., 2.8%. Approximately, 1.6% of ST households have a car at a India level with highest in Arunachal Pradesh (9.8%) and lowest in Madhya Pradesh (0.4%).

	Availing				Computer/laptop		Scooter/	
State/UTs	banking	Television	Telephone	Mobile	With	Without	Motorcycle/moped	Car/van/jeep
	services				Internet	Internet	wiotoreycie/inopeu	
India	45.0	21.9	1.9	31.1	0.8	4.4	9.0	1.6
Andaman & Nicobar Islands	92.3	45.1	2.8	56.5	0.7	1.9	23.2	2.9
Andhra Pradesh	42.6	35.2	2.2	40.7	0.9	5.3	8.9	1.1
Arunachal Pradesh	55.5	37.7	2.9	36.6	1.9	6.2	16.6	9.8
Assam	40.6	24.2	2.2	40.8	1.1	7.0	8.8	2.7
Bihar	35.5	9.7	2.4	40.8	0.9	7.5	5.2	1.2
Chhattisgarh	46.2	13.6	0.8	14.2	0.2	2.1	6.7	0.5
Dadar & Nagar Haveli#	38.5	31.7	1.7	34.1	0.5	2.9	19.6	2.7
Daman & Diu#	66.9	66.9	3.3	68.9	1.0	3.0	33.8	3.1
Goa	81.2	65.1	10.3	56.0	5.7	16.1	44.8	9.7
Gujarat	38.6	24.8	1.6	38.9	0.6	3.1	16.1	1.7
Himachal Pradesh	89.1	68.2	4.7	63.4	1.8	5.7	11.4	8.3
Jammu & Kashmir	54.6	17.4	2.8	33.6	0.8	3.9	2.8	3.5
Jharkhand	41.9	11.3	1.2	23.8	0.4	3.9	7.5	0.9
Karnataka	47.4	44.2	4.8	49.2	1.6	6.4	13.9	2.3
Kerala	54.7	39.6	5.5	46.3	2.0	5.7	7.7	3.0
Lakshadweep#	85.3	64.9	8.5	44.6	3.0	11.0	39.9	2.3
Madhya Pradesh	41.5	9.7	0.9	17.9	0.2	3.0	5.6	0.4
Maharashtra	47.9	30.2	3.9	32.8	1.7	4.9	10.5	1.6
Manipur	24.8	30.0	1.8	37.5	1.3	6.6	9.3	3.7
Meghalaya	34.7	30.4	1.3	36.3	1.1	5.4	5.0	5.1
Mizoram	54.9	55.4	1.6	63.7	2.4	12.6	14.1	7.3
Nagaland	33.8	35.9	1.2	46.7	1.6	7.0	6.3	8.3
Odisha	35.0	7.6	0.9	16.1	0.3	2.6	4.6	0.5
Rajasthan	66.0	14.0	1.1	41.1	0.4	3.5	12.6	1.4
Sikkim	68.0	52.3	1.6	64.2	2.9	7.3	3.0	9.2
Tamil Nadu	38.0	81.0	6.6	52.8	3.2	7.3	21.9	2.6
Tripura	70.7	27.6	1.3	28.1	0.5	5.8	4.6	1.1
Uttar Pradesh	67.6	31.2	4.5	53.3	2.5	8.9	15.5	3.5
Uttarakhand	80.4	58.5	3.6	63.5	2.0	7.6	20.6	4.2
West Bengal	38.2	16.3	1.1	23.8	0.7	5.2	3.5	0.9
Source: Consus of India 2011								

Table 5.5: Household assets among ST households, India and States, 2011

Source: Census of India 2011

Chapter 6

Conclusion

The access to basic amenities and assets are crucial for well-being as they contribute to physical comfort and quality of life. This report assessed the changes in the household amenities and assets in India including SC and ST households in rural and urban areas, and also at the city and town levels using data from 2001 and 2011 censuses. The findings show that there has been a significant increase in household amenities and assets in India at the state, city and town levels from 2001 to 2011. This is also true for the SC and ST households as well. However, there exists a wide gap between rural and urban area as well as among SCs and STs and other households. Further, the gap in the access to amenities and assets among SCs and STs compared to non-Scheduled groups has widened during 2001-2011. It is also observed that SCs have performed better than ST households in terms of increase in access to amenities and assets during 2001-2011. A composite index of household amenities shows that Punjab, Goa, Himachal Pradesh, Haryana and Uttarkhand are the five top states in the access to amenities, while Odisha, Jharkhand, Bihar, Chhattisgarh and Assam are the five bottom states. In terms of assets, Goa tops followed by Kerala, Punjab, Haryana and Himachal Pradesh, while Odisha, Bihar, Chhattisgarh, Meghalaya and Madhya Pradesh are the five bottom states in the level of access to assets. At state level, there is a strong positive correlation observed between household amenities and assets index which is expected. However, the negative relationship between the indices of amenities and assets, female work participation rate and child sex-ratio upholds the view that the development story of India is not gender inclusive.

Some of the specific findings of this report are briefly presented below:

1. Drinking Water and Sanitation: Until 2011 Census about half of households have access to toilet facility at all India level. The same was also true for bathroom facility. The gap between rural and urban areas in terms of access to a toilet and a bathroom is easily observable. In urban areas more than 80% households have toilet and bathroom facilities compared to less than 50% in rural areas as per 2011 Census. Similarly, the condition of SC and ST households is also observed to be very poor, as less than 50% have access of these amenities. However, the condition SC households is somewhat better than ST households.

The Lakshadweep, Kerala and Mizoram are the states/UTs where higher percentage of households have access of toilet and bathroom facilities. On the other hand, Odisha, Bihar, Jharkhand and Chhattisgarh are the states where most of households do not have such amenities. The percentage of toilet and bathroom

facilities in rural part of Odisha, Bihar, Jharkhand and Chhattisgarh remained very poor. Moreover, same is true for SC and ST households as well.

Although the condition of sanitation facility is not quite good and have a long way to achieve its satisfactory level, the access of improved sources (tap water and hand pump) of drinking water has made a significant stride even among SC and ST households.

2. Housing Condition: housing condition refers to different aspects of households like type of roof, availability of electricity and drainage facility in the household. In India, only 29.6% household have the concrete roof, and it varies from 18.3% in rural and 51.9% in urban area reflecting the wide gap as per 2011 Census. The percentage of household with concrete roof is very low among ST households compared to SC and all the households. Among the major states, Punjab and Andhra Pradesh have the highest proportion of households with concrete roof while in UTs of Chandigarh and NCT are in the top category. On the other hand, Assam and Tripura are those states which have the lowest proportion of households with a concrete roof. Same is true for SC and ST households.

Electricity is highly related to better quality of household life. In India, nearly 67% households have the electricity, which shows an increase of 12% increase in 2011 from 56% in 2001. A wide gap of 37% between rural and urban areas could be observed. Goa, Himachal Pradesh and Punjab are highly electrified states while Bihar is the only state where only less than third of households have the electricity. The result of correlation matrix suggests that electricity is strongly and positively related with improved source of water suppy, toilet, drainage, bathroom and kitchen facilities.

In India, almost of half of households are connected with drainage facility, and it varies from 36.8% in rural areas to 81.4% in urban areas. ST households have the lowest percentage of households having drainage facility compared to SC and all the households. The result of the correlation matrix shows that the drainage facility is strongly and positively related with improved source of drinking water and bathroom facility. In other words, those households which have good drainage facility there is more possibility that they may have access to tap water and bathroom facility.

3. Cooking Fuel: Cooking fuel is one of the most important parts of quality of household life. LPG/PNG is considered safest and good quality of cooking fuel. In India, where most of the population live in rural areas largely rely on traditional cooking fuel such as cow dunk, coal, wood and kerosene oil. Some of these cooking fuels are very harmful for health. Mishra and Retherford (1997) shows that biomass fuels for cooking substantially increases the risk of tuberculosis in India. The result of 2011 census shows that only 28.5% of the households in India use LPG/PNG as the cooking fuels compared to 16.1% in 2001.

Only Punjab, Goa and Himachal Pradesh are the states where this percentage is relatively high, while Bihar, Odisha, Jharkhand and Chhattisgarh are those states where the percentage of households using LPG/PNG is very low. Moreover, this picture is even worse among SC and ST households.

4. Banking Services: Provision of banking facility for citizens is the most important public service. To tackle the discrepancy and corruption for transferring payments of programmes like Mahatma Gandhi National Rural Employment Guarantee act (MGNREGA) payments, pensions, Janani Surksha Yojana (JSY) payments, wages paid to Accredited Social Health Activists (ASHAs) and Indira Gandhi Awas Yojana (IAY) payments the government is trying to expand the banking correspondent (BC model) where each and every beneficiary will have a 'UID Bank Account' (Das and Mistri, 2013); Planning Commission, GoI, 2011).

In India, almost half of the household avail any banking facility, even in urban area it is far from satisfactory. However, it has drastically increased to 59% from 36% in last decade. Only Himachal Pradesh and Goa are those states where most of the households avail the banking facility. Even in these states more than 80% SC and ST households have the banking facility. Further, the banking facilities in north-western and southern states are very good. It is important to note that most of North-East states have very a smaller number of households availing any banking facility.

5. Household Assets: Assets are the stock of resources that can be gathered and held over time. It provides for future consumption and source of security against contingencies (Nam et al., 2018). Some assets like computer/laptop and mobile are newly included in 2011 census. There has been observed a tremendous increase in most of the assets during 2001-2011, especially in percentage of television and two-wheeler vehicles. To assess the condition of household assets in India for each state, the index has been constructed including banking facility and household assets indicators. Overall, four states namely, Kerala, Punjab, Haryana and Himachal Pradesh are in the top category with higher household assets index while Odisha, Bihar, Chhattisgarh and Meghalaya are in the bottom category.

6. Amenities and Assets Among SC and ST Households:

Although SCs and STs have progressed very well during 2001 to 2011, the gap between them and all households (average level) has widened in almost all indicators of living conditions except electricity among ST households, and electricity and concrete roofs among SC households.

Similarly, in assets like car, jeep and van, scooter/motorcycle/moped and television, there has been a widening gap between SC and STs on the one hand and all households on other. This shows that SCs and STs have been benefitted, but the benefits have extended faster among non-SC and ST communities during the decade of rapid economic growth during 2001-20011. Further SC and ST households of better performing states show better conditions compared to poor performing states. This shows that regional disparities exists among the communities as well, and the spatiality of development matters in policy and planning in future.

This study also vindicates the use of census data on household amenities and assets in examining the economic status and changes in the absence of income data at the household level.

References

Bhagat, R. B. (2011). Urbanisation and access to basic amenities in India. Urban India, 31(1), 1-13.

Bhagat, R. B. (2013). Conditions of SC/ST Households. Economic & Political Weekly, 48(41), 63-66.

Bhagat, R.B. (2017) "Knowing the Social World through Census: Reflections on the Conditions of Scheduled Castes and Scheduled Tribes" In N. Jayaram (ed) *Knowing the Social World: Perspectives and Possibilities*, Orient Black Swan, 2017, pp. 23-38.

Das, B., & Mistri, A. (2013). Household quality of living in Indian states: analysis of 2011 Census. *Environment and Urbanization Asia*, 4(1), 151-171.

Kumar, A. (2014). Access to basic amenities: Aspects of caste, ethnicity and poverty in rural and urban India— 1993 to 2008–2009. *Journal of Land and Rural Studies*, *2*(1), 127-148.

Kundu, A. S. Bagchi, and D. Kundu (1999) "Regional Distribution of Infrastructure and Basic Amenities in Urban India" *Economic and Political Weekly*, Vol. 34, No. 28. pp.1893-1906.

Mishra, V. K., Retherford, R. D., & Smith, K. R. (1999). Biomass cooking fuels and prevalence of tuberculosis in India. *International Journal of infectious diseases*, *3*(3), 119-129.

Nam, Y., Huang, J., & Sherraden, M. (2008). Assets, poverty, and public policy: Challenges in definition and measurement. *Center for Social Development, Washington University. Washington: Saint Louis.*

Sundaram, K., & Tendulkar, S. D. (2003). Poverty among social and economic groups in India in 1990s. *Economic and Political Weekly*, 5263-5276.