

Provisions of Basic Household Amenities in India: A Progress Report

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Abstract

Over the years the world has reconciled to an entirely different phase of development discourse where progress in development is no more certified on the basis of overall income growth of the economy, but rather on the quantum reduction in the share of population deprived with 'basic human needs'. The 'basic human needs' approach to development emphasises on providing basic material needs to people. Though, it is well acknowledged that poverty manifests in numerous dimensions, its assessment in consideration of multiple dimensions is yet to attain consensus. It is also known that as each dimension of 'basic human needs' has its own characteristics, it thus requires different policy intervention. Therefore, it is much more rewarding to assess the individual dimension of deprivation rather than being in the quest of an aggregate measure which will be at the cost of adequacy and simplicity. In this background, this article makes an attempt to analyse India's progress in the three important 'basic human needs' essential for a human life: access to toilet facility, safe drinking water and electricity.

Keywords

Toilet, water, electricity, basic human amenities

Introduction

Poverty, conceptually associated with socially perceived deprivation with respect to basic human needs (Government of India [GoI], 2009), is considered to be one of the major evils of our society. For a welfare state like India, reduction in poverty

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is said to be one of its prime policy objectives. Over the years, the world has reconciled to an entirely different phase of development discourse where progress in development is no more certified on the basis of an overall income growth of the economy, but in terms of an improvement in the living standards of the socially and economically deprived sections of society. In other words, development of an economy ideally depends on the quantum reduction in the share of population deprived of basic human needs.

The basic human needs approach to development emphasises providing basic material needs to people (Goldstein, 1985; Hicks & Streeten, 1979; Zienkowski, 1971). However, there is no unanimity among scholars as to the number and type of items that constitute basic human needs. The basic human needs approach describes two distinct aspects of poverty—poverty line approach and multidimensional poverty approach. The poverty line is a monetary translation of a required bundle of goods and services. It is the most widely used concept of poverty to understand the proportion and number of people living below the poverty line. Like many other countries, this concept is adopted by the Planning Commission of India to estimate poverty and for policy formulation. On the other hand, multidimensional poverty (Alkire & Foster, 2011; Alkire & Santos, 2010; Alkire & Seth, 2013) is the weighted deprivation index (DI) of a list of ‘basic human needs’.

However, both these approaches deliver varying magnitudes of trends in poverty. Though it is universally agreed that poverty is a multifaceted phenomenon encompassing deprivations with multiple dimensions, their aggregation to offer a reasonable assessment is yet to attain a consensus. It is also known that each dimension of basic human needs has its own characteristics, thus requiring different policy interventions. Therefore, it is much more rewarding to assess the individual dimension of deprivation rather than searching for an aggregate measure, which will be at the cost of adequacy and simplicity.

The present article makes an attempt to analyse the progress of India with regard to three important basic human needs essential for a human life. These are access to toilet facility, safe drinking water and electricity. The second section of the article discusses the data source and methodology. The progress of India in these three stated indicators during 2001–11 will be analysed in detail in the third section of the article. The fourth section of the article analyses the group disparity in all these three indicators across income and social groups. The issue of multiple deprivations across states as well as socio-economic groups has been discussed in the fifth section of the article. Finally, the last section of the article concludes the findings.

Data Source and Methodology

There are two important sources of information which provide statistics on these dimensions. These are: the house listing and housing data of the population from Census of India; and the housing condition and amenities in India conducted by the National Sample Survey Organisation (NSSO). The latest information from the NSSO on the housing condition and amenities is available for 2008–09. It was

conducted under the 65th round survey from July 2008 to June 2009. The survey covered a sample of 153,518 households, of which 97,144 were from rural areas and 56,374 were from urban areas. The latest available census data is of 2011. For the present analysis, two census points (2001 and 2011) and one NSSO round (65th round) will be used.

In order to analyse the progress of India and its states in these three indicators, an index to measure the deprivation distance has been computed. The index is based on the principle followed by the Human Development Index (HDI).

$$DI = \frac{\text{Maximum Possible Achieved Value} - \text{Observed Value}}{\text{Maximum Possible Achieved Value} - \text{Minimum Achieved Value}}$$

DI refers to deprivation index; higher the value of index, higher the deprivation.

Progress during 2001–11

This section of the article is devoted to analysing the progress of India and its states in all three stated dimensions of basic amenities during 2001–11. An emphasis will be given to the rural–urban divide as well.

Toilet Facilities

Access to toilet facility is one of the very essential components of sanitation which is an integral component of public hygiene and health in India. It contributes to a clean and improved environment, social development and generates significant economic benefits. The issue does not only have economic implications but it is a question of human dignity as well. With this felt need of sanitation in general, and toilet facility in particular, the GoI launched a total sanitation campaign in 1999 as a demand-driven, community-led programme to make sanitation coverage universal. India's performance on this front continues to be poor and raises a serious concern for the country. According to the 2011 census, at the national level, only 47 per cent households have access to any toilet facility. A recent United Nations Children's Fund (UNICEF) report says that 638 million people (54 per cent) defecate in the open in India, as against just 7 per cent each in Brazil and Bangladesh (Kalkoti, 2013).

The lack of toilet facility has its own sectoral and regional divides. Rural Indians largely lack any toilet facility and defecate in the open. In 2011, only 31 per cent of rural households had a toilet facility, as against 81 per cent in urban India. Such a wide divide could very well be explained in terms of the lack of space because of population density in the urban areas on one hand, and the lack of concern for hygiene among the rural masses on the other. This divide needs to be narrowed in the attempt for attaining universal access to sanitation. Moreover, it is also observed from the 2011 census that more people have access to telephones (54.3 per cent) than toilets in rural India.

The lack of a toilet facility among rural households varies widely across states. The states with very poor accessibility to a toilet facility among rural

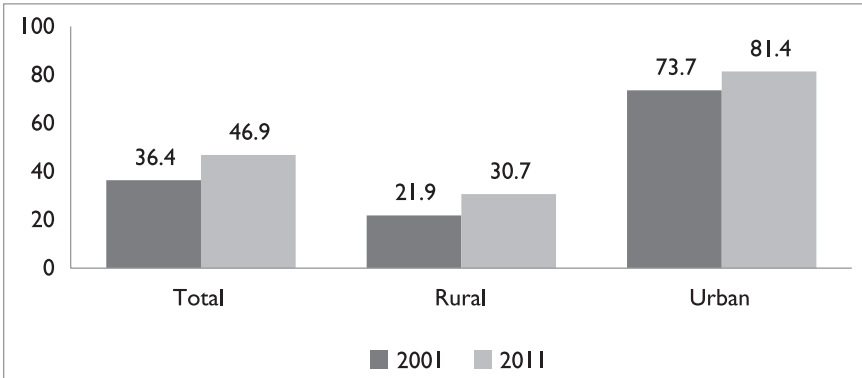


Figure 1. Proportion of Households with Access to Toilet Facility in India: 2001–11

Source: Census of India (2001, 2011).

households are: Jharkhand (7.6 per cent); Madhya Pradesh (13.1 per cent); Odisha (14.1 per cent); Chhattisgarh (14.5 per cent); Bihar (17.6 per cent); Rajasthan (19.6 per cent); Uttar Pradesh (21.8 per cent); Tamil Nadu (23.2 per cent); and Karnataka (28.4 per cent). All these states fall below the national average. Such a pattern is synonymous with the backwardness and underdevelopment prevalent in most of these states. In that regard, a lack of sanitation seems to reflect underdevelopment. Except for Tamil Nadu and Karnataka, all other states also have the highest incidence of rural poverty. In fact, the presence of Tamil Nadu and Karnataka is surprising as they are amongst the nation's high-income states. Kerala, the best performer among Indian states, is the only state where availability of toilet facilities is nearly evenly spread across its rural (93.2 per cent) and urban (97.4 per cent) populations. The other states with high accessibility to toilet facilities in rural area are: Punjab (70.4 per cent); Himachal Pradesh (66.6 per cent); Assam (59.6 per cent); Haryana (56.1 per cent); Uttarakhand (54.1 per cent); West Bengal (46.7 per cent); Jammu and Kashmir (J&K) (38.6 per cent); Maharashtra (38 per cent); Gujarat (33 per cent); and Andhra Pradesh (32.2 per cent) (Table 1). Though rural households in these states have better accessibility to toilet facility, they still remain far from satisfactory, given that universal access is the ultimate goal. It remains to be explored as to whether this lack of sanitation is merely because of an absence of awareness regarding hygiene or a mere convenience and an accepted practice that is being adhered to without adding any other meaning to it.

Rural households not only have poor accessibility to toilet facilities but also the progress of implementation is rather slow. During the decade 2001–11, there has been an increment of only 9 percentage points. Given this pace of 'progress', it is practically impossible to make India 'an open defecation-free' country by 2017, a target set up by Jairam Ramesh, former Union Minister for Rural Development, Government of India. For some states like Assam, Jharkhand, Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Odisha and Tamil Nadu, progress is either stagnant or very slow. It should be noted that except for Assam, all the other states

Table I. Progress of India and States in Access to 'Toilet Facility': 2001–11

State	Proportion of Households with Access to 'Toilet Facility'				Deprivation Distance (DI)			
	Rural		Urban		Rural		Urban	
	2011	2001	2011	2001	2011	2001	2011	2001
India	30.7	21.9	81.4	73.7	0.750	0.824	0.467	0.555
J&K	38.6	41.8	87.5	86.9	0.665	0.614	0.314	0.276
Himachal Pradesh	66.6	27.7	89.1	77.2	0.361	0.763	0.274	0.481
Punjab	70.4	40.9	93.4	86.5	0.320	0.623	0.166	0.285
Uttarakhand	54.1	31.6	93.6	86.9	0.497	0.722	0.161	0.276
Haryana	56.1	28.7	89.9	80.7	0.475	0.752	0.254	0.407
Rajasthan	19.6	14.6	82	76.1	0.870	0.901	0.452	0.504
Uttar Pradesh	21.8	19.2	83.1	80.0	0.846	0.852	0.425	0.422
Bihar	17.6	13.9	69	69.7	0.892	0.908	0.779	0.639
Assam	59.6	59.6	93.7	94.6	0.437	0.426	0.158	0.114
West Bengal	46.7	26.9	85	84.8	0.577	0.771	0.377	0.321
Jharkhand	7.6	6.6	67.2	66.7	1.000	0.985	0.824	0.703
Odisha	14.1	7.7	64.8	59.7	0.930	0.974	0.884	0.850
Chhattisgarh	14.5	5.2	60.2	52.6	0.925	1.000	1.000	1.000
Madhya Pradesh	13.1	8.9	74.2	67.7	0.940	0.961	0.648	0.681
Gujarat	33	21.7	87.7	80.5	0.725	0.826	0.309	0.411
Maharashtra	38	18.2	71.3	58.1	0.671	0.863	0.721	0.884
Andhra Pradesh	32.2	18.1	86.1	78.1	0.734	0.864	0.349	0.462
Karnataka	28.4	17.4	84.9	75.2	0.775	0.871	0.379	0.523
Kerala	93.2	81.3	97.4	92.0	0.074	0.197	0.065	0.169
Tamil Nadu	23.2	14.4	75.1	64.3	0.831	0.903	0.626	0.753

Source: Census of India (2001, 2011).

fall under the poorest category in terms of toilet facility. This abysmal poor performance of the poorest states is a big concern and challenge not only for the state but also for the central government.

Although urban households have a relatively better access to toilet facilities than rural households, it is still not universal. According to the 2011 census, nearly 19 per cent of urban households still lack this amenity. Though this proportion is far less when compared with rural areas, it is not easily admissible given the population density and scarcity of space in urban areas. Like rural areas, access to a toilet facility in urban areas also varies widely across states. In four states—Kerala (97.4 per cent), Assam (93.7 per cent), Uttarakhand (93.6 per cent) and Punjab (93.4 per cent)—it is more than 90 per cent and in four states—Bihar (69 per cent), Jharkhand (67.2 per cent), Odisha (64.8 per cent) and Chhattisgarh (60.2 per cent)—it is less than 70 per cent. Other states fall in between. Poor accessibility in these states is not surprising given the levels of poverty and deprivation. The case of Uttarakhand (93.6 per cent) and Maharashtra (71.3 per cent) needs to be specially mentioned. Both these states represent a contrast: though Maharashtra has a high per capita income and a low incidence of poverty, it has low access to toilet facility as compared to Uttarakhand which has a low per capita

income and a high incidence of poverty but maintains a greater access to toilet facilities.

Thus, achieving the target of universal access to toilet facility seems very challenging in the urban sector as well. The analysis of progress during 2001–11 presents a more disappointing picture for the poor states. In 2001, there were seven states with a toilet facility less than 70 per cent. Among them, only three states were in the category of more than 70 per cent in 2011, the remaining four still remained in the below 70 per cent category. Among the remaining four states, Bihar and Jharkhand do not show any progress, while Odisha and Chhattisgarh register an improvement of less than 10 percentage points.

Apart from improvement in this amenity across the states, over time, the DI values indicate the positional performance of the states in rural and urban areas. In the decade being examined, the deprivation gap has widened between the best and the worst states in rural as well as urban areas. These values are also indicative of the positional improvement achieved by individual states in relation to this amenity on the one hand, and the comparative improvement made by them in relation to other states. To mention a few, states like Himachal Pradesh, Punjab and Uttarakhand have achieved a remarkable improvement in this particular amenity in their rural areas. At the same time, some other states have recorded marginal changes. In some cases, inter-state differences have widened as some states have experienced deterioration as well.

Safe Drinking Water

Access to safe drinking water has been emphasised the world over as a basic need for survival and freedom from a whole host of ailments. The Indian Constitution, through the provision of Article 47, has guaranteed that the states would provide clean drinking water and improve public health. Two types of information related to access to safe drinking water have been collected from both the census and the NSSO. These are the accessibility components, based on the distance travelled to collect water, and the source of water. The source of water provides an insight to the safety and quality of water.

On the basis of distance travelled to collect water, the Census of India classified households into three categories. These are households that have ‘water within the premises’, ‘near the premises’ and ‘away from the premises’. ‘Within the premises’ refers to the availability of water within the premises where households live. If the source is located within a range of 100 metres from the premises, in urban areas, and within a distance of 500 metres, in the case of rural areas, the category becomes ‘near the premises’. If the drinking water source is located beyond 100 metres from the premises in urban areas and beyond 500 metres in rural areas, the category becomes ‘away from the premises’.

India presents a grim picture in terms of availability of drinking water as well. According to the 2011 census, only 46.6 per cent of households have access to drinking water ‘within the premises’; 35.8 per cent have access to water ‘near the premises’; and for 17.6 per cent, it is ‘away from the premises’ (Figure 2). Like access to toilet facility, access to drinking water too depicts a rural–urban

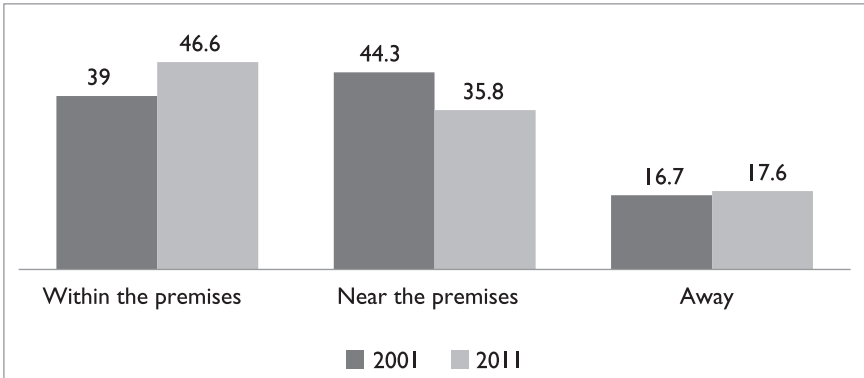


Figure 2. Proportion of Households with Access to Drinking Water in India: 2001–11

Source: Census of India (2001, 2011).

disparity. In 2011, 35 per cent of rural households had access to drinking water within the premise, while it was 71.2 per cent for urban households (Figures 3 and 4). Greater and better accessibility of drinking water in urban areas is expected given the share of households having access to tap water supplied by the water authority. What is worrying about the rural areas is the availability of drinking water, since the ‘away from premises’ category accounts for a large proportion of rural households (22.1 per cent).

The proportion of households having drinking water availability ‘within the premises’ increased during 2001–11 from 39 per cent to 46.6 per cent. In terms of a percentage point increment, both rural and urban areas register a similar performance showing a nearly 6 percentage point increase during 2001–11. But in real terms, both cannot be equated given the improvements being made from varying base levels. In rural areas, it increased from 28.7 per cent to 35 per cent

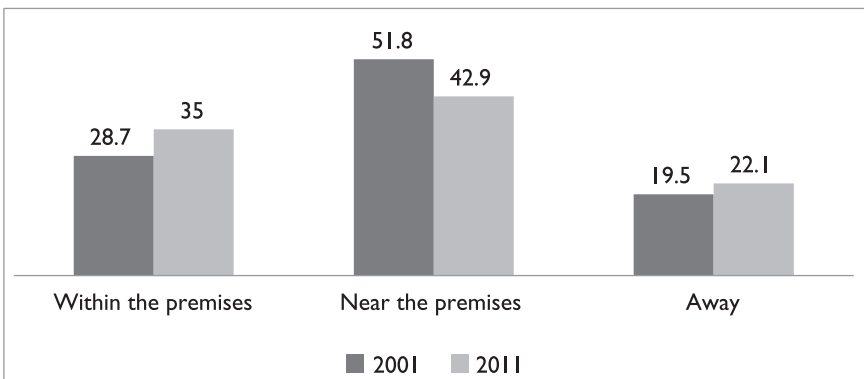


Figure 3. Proportion of Households with Access to Drinking Water in Rural India: 2001–11

Source: Census of India (2001, 2011).

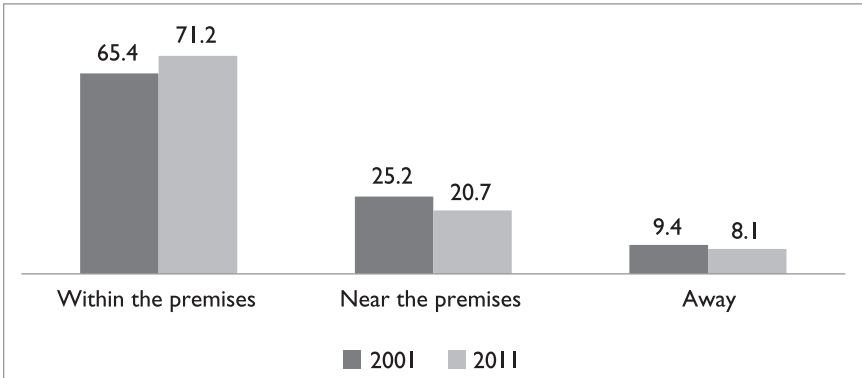


Figure 4. Proportion of Households with Access to Drinking Water in Rural India: 2001–11

Source: Census of India (2001, 2011).

and in urban areas, it increased from 65.4 per cent to 71.2 per cent. The proportion of households having access to drinking water in the ‘near the premises’ category declined in both rural and in urban areas, while the proportion of households having access to drinking water ‘away from premises’ does not register any significant change during the period. For rural areas, it registered a small increase and for urban areas, a small decline.

Table 2 presents the proportion of households with access to drinking water ‘within the premises’ for 20 major states. It is presented for the rural as well as urban areas. It reflects a wide regional disparity in access to drinking water for both the rural and urban areas. In all the states, the urban population has higher access to drinking water as compared to the rural population. The rural–urban gap also varies widely across the various states of the country. Out of the 20 states presented in Table 2, 13 registered more than a 70 per cent access to drinking water for urban households, according to the 2011 census. In the case of rural areas, only two states reported more than 70 per cent households having access to drinking water in the same year. These are Punjab (81.7 per cent) and Kerala (72.9 per cent). The situation in rural areas becomes more worrying when we see that seven states have less than 30 per cent rural households with access to a drinking water facility in 2011.

The analysis of the progress in access to drinking water in rural areas presents a very grim picture among the poor states. Out of 12 states where the proportion of rural households having access to drinking water ‘within the premises’ was less than 30 per cent in 2001, two states (Chhattisgarh and Madhya Pradesh) registered negative progress; three states (Rajasthan, Jharkhand and Odisha) registered very small increase (1.2, 2 and 2.3 percentage points respectively); four states (Tamil Nadu, West Bengal, Karnataka and Andhra Pradesh) registered a 5–10 percentage point increase; and only three states (Himachal Pradesh—24.6 percentage points, Gujarat—19 percentage points and J&K—18.4 percentage points) registered fast progress. Due to the slow progress in this regard among

Table 2. Progress of India and its States in Access to Drinking Water 'Within the Premises': 2001–11

State	Proportion of Households with Access to Drinking Water				Deprivation Distance (DI)			
	Rural		Urban		Rural		Urban	
	2011	2001	2011	2001	2011	2001	2011	2001
India	35	28.7	71.2	65.4	0.725	0.790	0.573	0.669
J&K	35.5	17.1	84.8	74.7	0.719	0.918	0.302	0.489
Himachal Pradesh	51.9	27.3	84.7	73.3	0.536	0.805	0.304	0.516
Punjab	81.7	82	92.7	92.1	0.204	0.199	0.145	0.153
Uttarakhand	45.4	32.7	88.7	82.1	0.609	0.745	0.225	0.346
Haryana	56.3	30.7	83.9	76	0.487	0.767	0.320	0.464
Rajasthan	21	19.8	78.2	75.8	0.881	0.888	0.433	0.468
Uttar Pradesh	44.1	38.2	78.8	77	0.623	0.684	0.421	0.445
Bihar	47.1	36.3	75.5	70.5	0.590	0.705	0.487	0.571
Assam	50.4	33.6	78.8	63.2	0.553	0.735	0.421	0.712
West Bengal	30.5	23.4	56.2	53.4	0.775	0.848	0.871	0.901
Jharkhand	11.7	9.7	59.1	57.2	0.984	1.000	0.813	0.828
Odisha	16	13.7	56.9	52.1	0.936	0.956	0.857	0.926
Chhattisgarh	10.3	11.9	49.7	49.3	1.000	0.976	1.000	0.981
Madhya Pradesh	13	14	55.4	55.2	0.970	0.952	0.887	0.867
Gujarat	48.3	29.3	83.7	73.5	0.576	0.783	0.324	0.513
Maharashtra	42.9	38.9	79.3	73.3	0.637	0.677	0.412	0.516
Andhra Pradesh	31.5	22.8	67.9	57.2	0.764	0.855	0.638	0.828
Karnataka	26.6	18.5	70.9	56.6	0.818	0.903	0.579	0.839
Kerala	72.9	69.1	83.3	78.9	0.302	0.342	0.332	0.408
Tamil Nadu	17	12	54	48.3	0.925	0.975	0.915	1.000

Source: Census of India (2001, 2011).

many poor states, during 2001–11, seven states continued to have less than 30 per cent accessibility to drinking water in 2011. However, the states having access to drinking water between 30–40 per cent registered relatively better progress than the states with less than 30 per cent accessibility during 2001–11. Out of the six states falling under the category of 30–40 per cent accessibility, four states (Haryana, Uttarakhand, Assam and Bihar) registered more than a 10 percentage point increase, while two states (Uttar Pradesh and Maharashtra) registered an increase of less than 10 percentage points.

Although, in most states, urban areas have an advantage regarding accessibility to drinking water, the overall picture of states having poor accessibility to drinking water does not seem to improve. During 2001–11, out of the eight states with drinking water accessibility of less than 60 per cent in 2001, four (Madhya Pradesh, Chhattisgarh, Jharkhand and West Bengal) registered less than a 3 percentage point increase; two (Tamil Nadu and Odisha) registered between 4–6 percentage point increase; and two (Karnataka and Andhra Pradesh) registered more than a 10 percentage point increase.

In this domain of access to drinking water, the disparity indicated by DI values does not show any divergence in rural/urban areas of the states over time.

However, individual states have performed with differential intensity and their mutual gaps are a testimony to that effect. More than the percentage figures, these figures inform on the positional betterment or deterioration that a specific state has made over time.

The availability of drinking water on its own is not sufficient: availability does not guarantee 'safe drinking water'. Water is defined as safe if it is free from biological contamination (guinea worm, cholera, typhoid and so on) and chemical contamination (excess fluoride, brackishness, iron, arsenic, nitrate, etc.). According to the census, if a household has access to drinking water supplied from a tap, hand pump or a tube well, within or outside the premises, it is considered as having access to safe drinking water. Table 3 presents the data on the percentage of households with access to safe drinking water for India and its states, for both the rural and urban areas, for 2001 and 2011.

According to the 2011 census, 82.7 per cent households in rural areas and 91.4 per cent households in urban areas have access to safe drinking water. Going by this definition, it would appear as if there has been a considerable improvement in access to safe drinking water across most states. In all states, except Kerala (39.5 per cent), more than 90 per cent urban households have access to safe drinking water. In rural areas, this is true only for seven states. But all the states except

Table 3. Percentage of Households with Access to Safe Drinking Water: 2001–11

State	Proportion of Households Access to Drinking Water				Deprivation Distance (DI)			
	Rural		Urban		Rural		Urban	
	2011	2001	2011	2001	2011	2001	2011	2001
India	82.7	73.2	91.4	90.1	0.242	0.323	0.142	0.173
Jammu and Kashmir	70.1	54.9	96.1	95.7	0.418	0.543	0.064	0.075
Himachal Pradesh	93.2	87.5	97.8	97.1	0.095	0.150	0.036	0.051
Punjab	96.7	96.9	98.9	98.9	0.046	0.037	0.018	0.019
Uttarakhand	89.5	83	98.6	97.8	0.147	0.205	0.023	0.039
Haryana	92	81.1	96.7	97.3	0.112	0.227	0.055	0.047
Rajasthan	72.8	60.5	94.3	93.5	0.380	0.475	0.094	0.114
Uttar Pradesh	94.4	85.5	97.8	97.1	0.078	0.174	0.036	0.051
Bihar	94	86.1	94.7	91.3	0.084	0.167	0.088	0.152
Assam	68.3	56.8	78.2	70.3	0.443	0.520	0.360	0.520
West Bengal	91.4	87	93.9	92.3	0.120	0.156	0.101	0.135
Jharkhand	54.3	35.5	78.5	68.2	0.638	0.776	0.355	0.557
Odisha	74.4	62.9	79.7	72.3	0.358	0.446	0.336	0.485
Chhattisgarh	84.1	66.1	93.9	88.8	0.222	0.408	0.101	0.196
Madhya Pradesh	73.1	61.6	92.1	88.5	0.376	0.462	0.131	0.201
Gujarat	84.9	76.9	97	95.4	0.211	0.278	0.050	0.081
Maharashtra	73.1	68.4	95.7	95.4	0.376	0.380	0.071	0.081
Andhra Pradesh	88.6	76.9	94.5	90.1	0.159	0.278	0.091	0.173
Karnataka	84.4	80.5	92.2	92.1	0.218	0.235	0.129	0.138
Kerala	28.4	16.9	39.5	42.9	1.000	1.000	1.000	1.000
Tamil Nadu	92.2	85.3	92.9	85.9	0.109	0.177	0.117	0.247

Source: Census of India (2001, 2011).

three (Kerala, Jharkhand and Assam) are included in the category of more than 70 per cent accessibility. Like in the urban areas, in the case of rural areas as well, Kerala (28.4 per cent) becomes an outlier.

The definition given earlier for 'safe drinking water', is somewhat problematic. For instance, drinking water in Kerala, mostly from wells, is generally not very unsafe, and in any event, not more unsafe than water in other states. More importantly, there is a long tradition of drinking boiled water in Kerala. Yet, going by the census definition, Kerala becomes an outlier having the lowest proportion of population with access to 'safe drinking water'. This is because the principal source of drinking water in Kerala is the open well, which, by the census definition, is not considered as a source of safe drinking water. Needless to say, this definition is likely to be misleading.

The computation of deprivation distance in this case makes a positional comparison of different states in relation to the best performing one. Such distance conveys the relative progress of each of the states and they are better comparable across states as well as over time. Such positional improvements reveal a better progress in rural areas compared with the urban areas during the last one decade.

Electricity

Electricity is considered as a necessary household infrastructure and has a bearing on the quality of life of individuals in the household. The availability of electricity facility among Indian households, both in rural and urban areas, for the years 2001 and 2011 will be discussed here. According to the 2011 census, at the national level, two-thirds (67.2 per cent) of households have access to an electricity facility with a reasonable rural–urban (55.3 per cent and 92.7 per cent) divide. However, a state-wise analysis indicates a wide variation in terms of access to electricity. This disparity is largely borne by rural residents. In all the states, except Bihar (66.7 per cent), the proportion of urban households having access to electricity facility exceeds 80 per cent. In 14 states, the proportion of urban households having access to electricity facility was more than 90 per cent (Table 4).

Going by Table 4, it would appear that there has been a considerable improvement in access to electricity in rural India also during 2001–11. For rural areas, it increased from 43.5 per cent to 55.3 per cent, and for urban areas, from 87.6 per cent to 92.7 per cent. With regard to the differences across the states, it appears that the progress is not uniform across India. The states of Uttarakhand, Andhra Pradesh, Kerala, Tamil Nadu, Karnataka and Gujarat registered better progress during 2001–11 to accomplish a coverage of 80 per cent. At the same time, the states of Himachal Pradesh, Punjab, Haryana and J&K, with more than 80 per cent coverage, do not register significant progress during 2001–11, which could be due to their already better coverage levels. In terms of a percentage point increment, the states of Chhattisgarh, Jharkhand, West Bengal, Rajasthan and Assam also have registered considerable improvements during the decade, but are yet to attain comparable levels of coverage with other states. All these states, except Chhattisgarh (70 per cent) and Rajasthan (58.3 per cent), have less than 40 per cent accessibility to electricity. It is the two most populous states of Uttar Pradesh

Table 4. Progress of India and its States in Access to Electricity: 2001–11

States	Proportion of Households Access to Electricity				Deprivation Distance			
	Rural		Urban		Rural		Urban	
	2011	2001	2011	2001	2011	2001	2011	2001
India	55.3	43.5	92.7	87.6	0.499	0.595	0.219	0.305
Jammu and Kashmir	80.7	74.8	98.0	97.9	0.215	0.266	0.060	0.052
Himachal Pradesh	96.6	94.5	98.1	97.4	0.038	0.058	0.057	0.064
Punjab	95.5	89.5	98.3	96.5	0.050	0.111	0.051	0.086
Uttarakhand	83.1	50.3	96.5	90.9	0.189	0.524	0.105	0.224
Haryana	87.2	78.5	96.2	92.9	0.143	0.227	0.114	0.174
Rajasthan	58.3	44.0	93.9	89.6	0.465	0.590	0.183	0.256
Uttar Pradesh	23.8	19.8	81.4	79.9	0.850	0.845	0.559	0.494
Bihar	10.4	5.1	66.7	59.3	1.000	1.000	1.000	1.000
Assam	28.4	16.5	84.1	74.3	0.799	0.880	0.477	0.631
West Bengal	40.3	20.3	85.1	79.6	0.666	0.840	0.447	0.501
Jharkhand	32.3	10.0	88.0	75.6	0.756	0.948	0.360	0.600
Odisha	35.6	19.4	83.1	74.1	0.719	0.849	0.508	0.636
Chhattisgarh	70.0	46.1	93.7	82.9	0.335	0.568	0.189	0.420
Madhya Pradesh	58.3	62.3	92.7	92.3	0.465	0.397	0.219	0.189
Gujarat	85.0	72.1	97.2	93.4	0.167	0.294	0.084	0.162
Maharashtra	73.8	65.2	96.2	94.3	0.292	0.367	0.114	0.140
Andhra Pradesh	89.7	59.7	97.3	90.0	0.115	0.425	0.081	0.246
Karnataka	86.7	72.2	96.4	90.5	0.148	0.293	0.108	0.233
Kerala	92.1	65.5	97.0	84.3	0.088	0.364	0.090	0.386
Tamil Nadu	90.8	71.2	96.1	88.0	0.103	0.303	0.117	0.295

Source: Census of India (2001, 2011).

and Bihar which present a very disappointing picture. Both have registered only a marginal improvement in access to electricity facility and remain at the lowest level of accessibility: 23.8 per cent (Uttar Pradesh) and 10.4 per cent (Bihar) in 2011. In addition to this misery, Madhya Pradesh, another populous state, registered a decline during the 2001–11 decade, by 4 percentage points. The observations of these populous states, with their gross disadvantage in electricity, indicate the disparity of deprivation across regions.

The comparison of a state's performance over time could very well be made in terms of the deprivation distance that informs on convergence, on the one hand, and mutual progress, on the other. It is clear that rural convergence is faster compared to the urban areas as the overall deprivation distance has narrowed by 0.020 points in rural areas as against the same being 0.008 points in urban areas. While these distances represent progress across the board, the extent of progress varies across states in both rural and urban regions. In this regard too, rural progress in individual states is reasonably faster than urban progress. Mutual comparison indicates that inter-state differences have narrowed substantially over time.

As regards drinking water, the DI values present a contrasting difference between the rural and the urban scene across states. The urban scene seems to have made significant progress towards universal access in almost all the states.

On the contrary, the progress in rural areas is far from satisfactory. DI values representing relative progress divide the Indian states in terms of better and lesser progress, which is mainly conditioned by the baseline advantage. Some states already having a better scene in 2001 have progressed reasonably well compared with a few others who have made scanty progress despite the baseline being worse.

Disparity across Income and Social Groups

Given the modest improvement, along with regional differences, in the three basic amenities at the aggregate level, there always remains an apprehension with regard to its characteristic distribution, namely, in relation to social groups and between economic classes. It is often observed that households belonging to the better socio-economic strata have an advantage in terms of these amenities against ones from the lower socio-economic strata. Evidently, in rural areas, nearly 15 per cent of households in the bottom of the monthly per capita expenditure (MPCE) quintile class have access to toilet facility, which gradually increases to 58.4 per cent for households in the top MPCE quintile class. On the other hand, in urban areas, a similar comparison depicts a difference of 66.7 per cent in the bottom MPCE quintile class as against nearly 100 per cent of the households in the top quintile class (Table 5). Such disparities with regard to basic amenities between economic classes of households are a matter of concern. Obviously, the aggregate levels of access to basic amenities are pretty illusive in the sense that the worse prevails among a certain group of households, having its own implications for an individual's well-being. Therefore, there is a need for an inequity adjustment of these aggregates prior to their evaluation of progress.

Access to drinking water and electricity facilities also presents similar patterns. With regard to both the indicators, the pattern of accessibility across MPCE quintiles in rural as well as urban areas remains the same (Table 5). These quintile-based differences are wider among rural households as against their urban counterparts and it is the least in electricity, followed by access to water and toilet facility.

Table 5. Proportion of Households having three Basic Facilities for Each MPCE Quintile Class

MPCE Quintile Class	Toilet Facility		Water within Premises		Electricity	
	Rural	Urban	Rural	Urban	Rural	Urban
0–20	15.1	66.7	26.8	52.2	46.8	86.3
20–40	22.6	80.2	33.5	59.4	54.0	94.4
40–60	28.8	90.2	37.3	72.0	63.1	97.4
60–80	36.9	96.4	41.7	81.4	71.7	98.9
80–100	58.4	99.4	55.5	92.9	84.0	99.8
All	34.8	88.7	40.5	74.5	66.0	96.1

Source: NSS Report No. 535: Housing Conditions and Amenities in India.

Table 6. Proportion of Households having three Basic Facilities for Each Social Groups

Social Groups	Toilet Facility		Water within Premises		Electricity	
	Rural	Urban	Rural	Urban	Rural	Urban
ST	25.0	78.9	18.7	67.5	57.3	91.5
SC	23.7	77.3	30.6	57.3	59.5	92.5
OBC	30.7	85.4	44.1	71.6	67.6	95.6
Others	56.9	95.9	53.7	83.1	73.6	98.1
All	34.8	88.7	40.6	74.5	66.0	96.1

Source: NSS Report No. 535: Housing Condition and Amenities in India.

Note: SC = Scheduled Caste; ST = Scheduled Tribe; OBC = Other Backward Classes.

With regard to the social group divide in accessing these basic amenities, the rural divide is wider when compared with urban areas. Similar to many other social and economic indicators, a disparity among social groups exists in these three indicators as well. The trend was observed for both rural and urban areas. Yet, the problem of social group disparity is relatively smaller in urban areas than it is in rural areas. In the case of electricity, the group disparity in urban areas is nearly absent as all the four social groups have more than 90 per cent access to electricity. But for the rural areas, there exists a wide disparity across social groups. Access to electricity in rural areas was the lowest for Scheduled Tribes (ST) at 57.3 per cent and highest for 'others' at 73.6 per cent (Table 6).

In case of access to toilet facility and drinking water, there exists a wide social group disparity both in the urban and rural areas. However, it has a rural predominance. In rural areas, access to a toilet facility is lowest for Scheduled Caste (SC) (23.7 per cent) and highest for 'others' (56.9 per cent). In urban areas, all the social groups have more than 75 per cent accessibility to toilet amenities. The case is similar for access to drinking water as well. The higher prevalence of group disparity in rural areas than urban areas is not a surprising result. It is expected that due to a much higher level of accessibility in urban areas than rural areas, these observations regarding social group disparity in basic amenities offer some clues to the prioritisation of provisioning among the disadvantaged group towards ensuring equity on the one hand and progress on the other. Further, such disparities reveal the kind of association that exists between housing conditions and basic amenities. Hence, the presence/absence of basic amenities could be used to rate housing as good/bad/worse.

Analysis of the Fully Privileged and Completely Deprived

An independent reading of progress in each of these individual dimensions often hides the kind of interdependence that may exist between them. While there is progress in all dimensions in varying degrees, the prospect of universality is largely dependent on prioritising that dimension which bears greater conditionality with others. The independent assessment of all these indicators is meant for social observers and policymakers to infer well-being on each of these attributes.

Based on this observation, a summary of the well-being assessment, involving all these three indicators, poses a challenge—there could be numerous combinations of deprivations involving the three dimensions under discussion. One clear way of assessing the well-being of households in this context is to identify those that accessed, or were deprived of, the corresponding thresholds levels of all attributes.

In the present situation, there will be households with access to all three basic facilities—water, electricity and toilet—and there also will be the households deprived of all the three basic facilities. This will entail a comparison of the well-being according to the all privileged and all deprived. However, such extremes may well offer a hint of inequality in terms of households deprived per privileged one, but miss out on those with varying combinations of deprivation.

Attempting a comparison of the extremes of full privilege and full deprivation, it can be seen that there is an improvement in the share of households with all privileges and a decline in the share of households with full deprivation (Table 7). In fact, the extent of improvement in full privilege is more or less equal with that of the decline in the share of full deprivation. Such an observation may be satisfying, but it only involves half of Indian households, while the remaining half witnesses varying combinations of this deprivation. Further, such comparisons, among rural and urban households, depict a scene quite different in the sense that a major share (almost two-thirds) of urban households belongs to these two extremes as against around 40 per cent of households in the rural areas. Using this information to infer on inequality, one observes that for every all-privileged household in the urban area, there is an insignificant number of all-deprived ones. But in rural areas, this ratio has been more or less equal in recent years, which is an improvement compared to the period of 2002. The details indicate that in both the rural and urban areas, the proportion of households with all three facilities have increased considerably. In rural areas, in 2002, only 10.6 per cent of households had access to all three facilities which increased to 18.4 per cent in 2008–09. In the urban areas, the proportion of households which enjoyed all these facilities increased from 58 per cent of the households in 2002 to cover 68 per cent households in 2008–09. On the other hand, the proportion of households deprived of all these facilities in both the rural and urban areas has shown a decreasing trend over this time. In 2002, nearly 30 per cent of households in rural areas had none of these facilities against 4.7 per cent of the urban households, while in 2008–09, nearly 20 per cent of rural households had none of these facilities as against a meagre 2 per cent of urban households.

While making an inter-state comparison, a wide variation is observed in achievement or deprivation of all these facilities (Table 7). The rural areas of Kerala enjoy 71 per cent access to all these facilities, while only 2 per cent of households are deprived of all these facilities. On the other extreme, the rural areas of Jharkhand and Odisha have the lowest achievement (4.7 per cent and 5.9 per cent respectively) in these facilities and highest deprivation (51 per cent each). Overall, access to these facilities in rural areas presents a very grim situation of India's development story: in 13 states, less than 30 per cent of households have access to all these facilities and only two states, Kerala and Punjab,

Table 7. Access and Deprivation of Indian Households in three Basic Facilities: Water, Electricity and Toilet

States	Rural						Urban						All					
	2008-09		2002		2008-09		2002		2008-09		2002		2008-09		2002			
	All Three	None of These	All Three	None of These	All Three	None of These	All Three	None of These	All Three	None of These	All Three	None of These	All Three	None of These	All Three	None of These		
Andhra Pradesh	19.7	6.1	12.4	19.1	66.8	2	51.4	5.2	34.2	4.9	24	15.1						
Assam	30.3	8.1	14.1	22.6	87.5	0.6	73.8	1.4	37.0	7.5	20	20.6						
Bihar	10.3	34.3	3.3	41.0	64.1	8.5	48.7	13.2	16.1	31.8	8.5	37.8						
Chhattisgarh	7.5	16.5	5.9	42.9	44.4	2.3	43.6	9.8	14.4	14.2	13	37.0						
Gujarat	25.6	7.8	16.8	13.5	82.7	0.3	79.4	1.5	48.2	4.9	41	8.9						
Haryana	40.7	3.1	11.5	10.8	81.2	1.1	75.6	1.2	53.4	2.5	30	8.0						
Himachal Pradesh	38.2	1.2	14.7	1.6	69.3	0.3	73.0	0.1	41.7	1.2	22	1.4						
J&K	40.2	1.3	21.1	2.3	82	0.3	75.2	0.3	49.6	1.0	34	1.8						
Jharkhand	4.7	50.8	6.7	63.1	60.4	4.3	47.3	10.2	13.5	43.8	15	52.4						
Karnataka	15.5	4.8	10.4	14.1	67.4	1.4	58.0	3.9	34.8	3.7	26	10.8						
Kerala	70.9	2	54.1	5.7	79.8	0.2	72.0	0.0	73.3	1.6	59	4.7						
Madhya Pradesh	5.9	16.4	3.2	28.6	54.5	2.5	48.9	6.4	17.9	13.1	16	22.5						
Maharashtra	21.1	14	8.1	20.2	61.8	0.7	53.2	3.2	39.2	8.7	27	13.0						
Odisha	5.9	50.9	3.6	62.5	52.1	9.1	45.2	11.4	13.3	44.4	10	54.7						
Punjab	56	1.6	43.5	1.4	90.6	0.3	85.0	0.9	69.5	1.1	58	1.3						
Rajasthan	10.3	30.3	6.3	44.1	80.3	1.3	59.8	8.0	29.0	22.5	21	34.3						
Tamil Nadu	11.3	6.3	6.3	18.1	58.5	1.7	49.7	5.5	33.4	4.4	22	13.6						
Uttarakhand	32.7	11.1	22.8	30.1	82.8	0	74.1	0.4	43.7	8.8	34	23.7						
Uttar Pradesh	11.9	29.8	6	37.5	71.3	2.5	63.4	4.8	24.9	24.0	19	30.3						
West Bengal	15.5	25.2	7.3	47.0	50.6	2.4	43.1	7.0	24.5	20.1	17	36.2						
India	18.4	19.73	10.6	29.7	67.5	1.8	58.0	4.7	32.9	14.5	24	22.6						

Source: NSS 58th and 65th round survey of Housing Condition and Amenities in India.

have more than 50 per cent accessibility. On the deprivation front, the situation becomes even more worrying for the poor states: in six states, more than 25 per cent of households are deprived of all these facilities. The achievements in urban areas also vary widely across states. It varies from 44.4 per cent in Chhattisgarh to 90.6 per cent in Punjab. Although there has been a significant progress in the achievement of all the three indicators from 2002 to 2008–09, across the states, they still remain far from universal. But the analysis of deprivation aspect in urban areas reveals an encouraging observation as in most of the states, the proportion of households deprived of these facilities is found to be very small. Except two states (Bihar and Odisha), in all other states, only less than 5 per cent of urban households are deprived of all these facilities.

This particular contrast of absolute privilege (having all the facilities) vis-à-vis absolute deprivation (absence of all the facilities) seems responsive across levels of living of the households (Table 8). In rural areas, a meagre 4.5 per cent of the households in the bottom MPCE quintile class enjoyed all these facilities, which rises to 39 per cent of households in the top MPCE quintile class. In urban areas, on the other hand, the proportion of households with all three facilities increased from 39 per cent of the households in the bottom MPCE quintile class to 90 per cent of the households in the top quintile. While the privilege or deprivation has systematic inverse response to the MPCE quintile classes for both rural and urban areas, the intensity of this response varies. As expected, the privilege share rises with increasing MPCE levels and the deprivation share comes down with rising MPCE levels. However, this pattern differs between rural and urban areas. Such a difference is in terms of the quantum difference in the proportion of households being privileged in all three facilities across the levels of MPCE. For rural households, this range of difference between the bottom MPCE quintile and the uppermost quintile is about 34 percentage units, as against the same being 51 percentage units in urban areas. Alternatively, this distribution is somewhat more unequal in rural scene with its overall prevalence being low. Similarly, when it comes to deprivation or adversity in terms of absence of all these amenities, the urban households are least deprived, with a concentration among the lowest MPCE quintile. The rural deprivation is substantial, along with a greater variability across MPCE classes as well.

Table 8. Proportion of Households Having Three Basic Facilities across MPCE Quintiles

MPCE Quintile Class	Rural		Urban	
	All Three Facilities	None of These	All Three Facilities	None of These
0–20	4.5	35.2	39.2	6.7
20–40	7.8	27	49.4	2.6
40–60	12.7	20.9	64.4	1.0
60–80	18.1	14	75.7	0.3
80–100	38.8	7.8	90.2	0.0
All	18.4	19.5	67.5	1.8

Source: NSS Report No. 535: Housing Condition and Amenities in India.

Table 9. Proportion of Households Having Three Basic Facilities across Social Groups

Social Groups	Rural		Urban	
	All Three Facilities	None of These	All Three Facilities	None of These
ST	8.5	33.2	61.4	5.8
SC	10.0	26.5	47.0	4.3
OBC	17.3	17.2	63.8	1.8
Others	32.6	10.5	77.7	0.6
All	18.4	19.5	67.5	1.8

Source: NSS Report No. 535: Housing Condition and Amenities in India.

Note: SC = Scheduled Caste; ST = Scheduled Tribe; OBC = Other Backward Classes.

Like income groups, such privilege and deprivation is shaped in accordance with social group identity as well (Table 9). The unequal nature of such privilege/deprivation is stark even when the overall scene is far from desirable. Considering the rural scene where the aggregate privilege of all these amenities stands at about 18.5 per cent, the differential between SC households and households belonging to 'other' category is to the tune of 20 percentage points. Similar is the pattern observed with regard to deprivation. Such a social group divide is moderated out substantially among urban households, except for the SC households who still remain excluded in terms of privilege/deprivation.

Conclusions

The article has presented a detailed analysis of progress in three basic facilities, namely, access to toilet facilities, safe drinking water and electricity. The analysis focuses on the temporal change, regional differences as well as a rural–urban divide. The analysis considers the deprivation across different socio-economic class as well. Following a detailed exposition of trends in all these three indicators separately, this article also makes an attempt at gauging multiple deprivations for India and the states.

The analysis of progress in all these indicators during 2001–11 presents a very grim picture of India's development story. A large segment of Indian households still lacks these facilities that are needed to ensure a good quality of life. Moreover, the situation is much worse in rural areas. Among the three indicators, access to toilet facilities is the worst in rural areas. An inter-state inspection confirms a wide variation in progress of these indicators. It is also observed that during the 2001–11, most of the poorest states have not made any significant progress, while some of the rich states have shown quite significant progress. The disparity among the social and economic classes too remains a concern, apart from inadequate progress in coverage of these three basic amenities.

The overall performance seems to be much poorer when we take into account all these indicators together. In rural areas, only 18 per cent of the households have access to all these facilities. For some states, it is even less than 10 per cent. Access to these facilities may be relatively better in urban spaces but it is far from

universal access, which is the ideal. This exercise not only serves as a reminder towards focusing on what and where but also warns against complacency on the aggregate achievement, if any. The observed disparities cutting across economic classes and social groups need to be accounted for before celebrating any progress in the achievement of provisioning basic amenities.

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