

Discrepancies in Sanitation Statistics of Rural India

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The inadequate availability of drinking water and proper sanitation, especially in rural India, leads to innumerable deadly diseases, harms the environment, and also affects vulnerable populations, such as persons with disabilities and women, exposing them to sexual violence. Providing access to sanitation facilities in rural areas of India has been on the agenda of the Government of India for the past three decades. However, a reinigorated thrust to provide adequate sanitation facilities in rural India is the need of the hour, which must be accompanied by constant scrutiny and monitoring, so as to arrive at apt decisions and policies for further action.

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The health and hygiene of an individual is fundamentally dependent upon the adequate availability of drinking water and proper sanitation. United Nations (UN) reports reveal that over 1 billion people worldwide practise open defecation, one of the clearest manifestations of extreme poverty. It also impacts vulnerable populations, such as persons with disabilities and women, exposing them to sexual violence. Lack of private toilets in schools has long been a major reason for girls discontinuing their education once they enter puberty. “Target 7c” of the UN Millennium Development Goals (MDGs) exhorted the nation states to commit to “Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation”, and end the practice of open defecation by 2025.

1 Schemes for Rural Sanitation

Providing access to sanitation facilities in rural areas of India has been on the agenda of the Government of India for around the past three decades. Schemes like the Central Rural Sanitation Programme (CRSP) in 1986 and the Total Sanitation Campaign (TSC) in 1999 aimed to attain personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal, and waste water disposal. In 2003, the Nirmal Gram Puraskar (NGP) sought to reward the achievements and efforts made to ensure full sanitation coverage, and give incentives for fully sanitised and open defecation-free gram panchayats (GPs), blocks, districts and states.

Subsequent initiatives, like the Provision of Urban Amenities in Rural Areas (PURA), Bharat Nirman and Nirmal Bharat Abhiyan (NBA) in 2012, aimed to improve the quality of life in rural areas and accelerate the pace of sanitation coverage, so as to comprehensively

cover the rural community through renewed strategies and attain the vision of Nirmal Bharat by 2022.

One major strategy to achieve the above objectives was the provision of individual household latrine (IHHL),¹ which comprises a cash incentive to households that construct a toilet unit² by itself to all below the poverty line (BPL) households and above the poverty line (APL) households restricted to scheduled castes/scheduled tribes (SCs/STs), small and marginal farmers, landless labourers with homesteads, the physically handicapped, and women-headed households. Later in 2011, the Ministry of Rural Development (MoRD) initiated the convergence of TSC/NBA and the Mahatma Gandhi National Rural Employment Guarantee Scheme, with employment generated in the process of construction of IHHL as unskilled labour (up to six person days) and skilled labour (up to two person days under material component), by providing additional financial assistance.

2 Trends in Household Latrine Facility

2.1 Census: 2001 and 2011

The indicator used to assess the deprivation in access to sanitation is households not having latrine facility within the premise,³ sourced from the Census of India (house listing and housing census). It must be noted that this indicator was also used to fix the target of 108 million toilets needed under TSC in 2001.

Table 1 (p 14) illustrates that access to latrine facility within the premises in rural areas saw an improvement from 2001 to 2011, with the percentage of households not having latrine facility within their premises falling from 78.1% to 69.3% (an improvement of 9 percentage points). In 2011, of the 30.7% of households with latrine facility within the premises, 19.4% had water closets and 11.3% had pit and other latrine facilities. Of the 69.3% of households without latrine facility within the premises in 2011, 1.9% used public latrines and 67.3% used open defecation (Figures at Glance, Census of India 2011).

The absolute number of households that have latrine facility within the premises rose by 21.2 million (from 30.3 million in 2001 to 51.6 million in 2011, that is, a decadal growth of 70.1%). However, the absolute number of households without latrine facility within the premises rose by 8.3 million (from 108 million in 2001 to 116.3 million in 2011, that is, a decadal growth of 7.7%). This indicates that the rate of decline of the percentage of households without latrine facility within the premises clearly

provide comprehensive information related to the formulation, implementation and outcome of NBA. This data, together with any other relevant data on social indicators, can be utilised for social audit (MODWS 2012). Real time data is periodically reported, which helps in the assessment of the achievements of IHHL. Table 2 shows that there has been a rapid increase in the physical achievement of IHHL during 2001-02 to 2010-11, followed by a declining trend thereafter during 2011-12 to 2013-14.

socio-economic impact of tsc, particularly on individual health and the environment with regard to the improvement of sanitary services for different user groups, especially the rural poor. One of the significant findings of the study was that 72.63% of households in rural India in the sample states practice open defecation, irrespective of whether they have or do not have, toilet facilities (Planning Commission 2013).

3 Summary of Findings

Official estimates demonstrate very high levels of deprivation of sanitation facilities among rural households. For instance, the 2011 Census reports that the proportion of households that do not have latrine facility within the premises (this

Table 1: Levels and Changes in Rural Household Latrine Facilities (2001 and 2011)

	2011		2001		2001-11 (Changes)			
	Number (in million)	As Proportion of Total HHs (in %)	Number (in million)	As Proportion of Total HHs (in %)	Number (in million)	Decadal Growth (in %)	Annual Exponential (in %)	Compounded Annual (in %)
Total households	167.8		138.3		29.6	21.4	1.9	
Households not having latrine facility within the premise	116.3	69.3	108.0	78.1	8.3	7.7	0.7	-1.2
Households having latrine facilities within the premise	51.6	30.7	30.3	21.9	21.2	70.1	5.3	3.4

The annual compounded growth rate is calculated based upon the proportion of HHs in 2011 over the proportion of HHs in 2001 of levels of deprivation/attainment.

Source: Author's calculation using tables on houses, household amenities and assets, house listing and housing data, Census of India, 2001 and 2011.

fell short of the desired rate to contain the absolute number of deprived households from increasing.

2.2 NSS Rounds

In order to assess the deprivation in access to sanitation, the indicator used is no latrine facility in the house,⁴ sourced from the National Sample Survey (NSS) housing condition rounds. It reveals that there has been an improvement in access to latrine facility by rural households from 1993 to 2008-09, with an accelerated trend particularly from 2002 to 2008-09 (Kumar 2014a). The proportion of households with no latrine facility in the house were 87.3%, 78.3%, 66.4%, and 59.4% during 1993, 2002, 2008-09, and 2012, respectively (Kumar 2014b; Ministry of Statistics and Programme Implementation 2013). The compounded annual rate of decline in the proportion of households with no latrine facility in the house were found to be 1.1%, 2.6% and 3.0% between 1993-2002, 2002-08-09 and 2008-09-12, respectively.

2.3 Other Official Estimates

The various websites (www.ddws.nic.in; <http://tsc.gov.in/>) of the Ministry of Drinking Water and Sanitation (MODWS)

The total progress of the physical achievement of IHHL between 2001-02 and 2010-11 was 78.27 million (an achievement of 72.5% of the total target of 108 million households as fixed by tsc), and between 2001-02 and 2013-14 was 96.61 million. Based on the new targets fixed under NBA (125.7 million households), it claims that around 77% of the targets has been achieved till 2013-14.

2.4 Baseline Survey, 2012-13

A Baseline Survey, as reported by 2,40,516 out of 2,49,907 GPs (96.24%) from 29 states, conducted by the MODWS in 2012-13 based on entries by GPs, reported that 59.6% of households are without toilets in the house (total households 171.22 million, and total households without toilets 102.12 million).

2.5 Planning Commission

The Programme Evaluation Organisation (PEO) was entrusted by the Planning Commission to conduct an independent evaluation of the tsc. It covered 122 districts, 206 blocks, 1,207 GPs, 127 rural sanitary marts/production centres, and 11,519 beneficiary households spread over 27 sample states of the country. The aim was to assess the

Table 2: Individual Household Latrines Constructed under Nirmal Bharat Abhiyan (in millions)

Sl No	Finance Year	Total IHHL (APL+BPL)
1	2001-02	0.64
2	2002-03	0.60
3	2003-04	6.14
4	2004-05	4.58
5	2005-06	9.17
6	2006-07	9.70
7	2007-08	11.53
8	2008-09	11.27
9	2009-10	12.41
10	2010-11	12.24
Total 2001-11		78.27
11	2011-12	8.80
12	2012-13	4.56
13	2013-14	4.98
Total 2001-14		96.61

IHHL: Individual household latrine; BPL: below poverty line; APL: above poverty line.

Source: Ministry of Drinking Water and Sanitation, <http://tsc.gov.in/tsc/NBA/NBAHome.aspx>

includes public latrines and open defecation) were 69.3% (116.3 million households are without latrine facility within the premises, out of a total 167.8 million households). Also, the PEO estimated that a total of 72.63% households in rural India practice open defecation, irrespective of whether they possess, or do not possess, toilet facilities. Further, according to the NSS, the proportion of households with no latrine facility in the house was 59.4% during 2012. The Baseline Survey conducted by MODWS reported along similar lines, that is, 59.6% of the households were without toilets in their house in 2012-13.

The information from various official sources reveals marked inconsistencies in the data provided. To elaborate further, it must be pointed out here that whereas the physical achievement of IHHL between 2001-02 and 2010-11 reported an addition of 78.27 million households with latrine facility within the premises, the census reported an addition of only 21.2 million households with latrine facility within the premises during 2001 and 2011 (the census reported 30.3 million households with latrine facility within the premises in 2001, which rose to 51.6 million households in 2011). NSS figures also support a similar addition of households with latrine facility within the premises, and marginally more than that of the census, as discussed earlier.

The gap of 57 million households in the addition of households with latrine facility within the premises during 2001 and 2011 between the physical performance of IHHL (78.27 million) and the census (21.2 million) is highly unlikely, and also contrary. Other statistics from Baseline Survey 2012, MODWS, and the Evaluation Study on TSC by PEO, Planning Commission, also suggest their divergence and dissimilarity with the figures provided by the physical performance of IHHL, MODWS. Therefore, this raises serious questions on the credibility of the rural sanitation statistics and information on the physical performances of the IHHL.

Furthermore, the differences between the estimates of households without latrine facility by the census (69.3%) for 2011, and the NSS (59.4%) for 2012 and the Baseline Survey, MODWS (59.6%), for 2012 raises serious questions on the improvement that occurred within one single year (2011-12). The census reports an improvement of 9 percentage points (over 10 years) in the proportion of households without latrine facility within the premises, which fell from 78.1% to 69.3% from 2001 to 2011. However, data from the NSS and Baseline Survey, MODWS, for 2012 suggest an improvement of 10 percentage points (over one year) in the proportion of households without latrine facility within the premises, as compared to the Census 2011 data.

For this to happen over one year (between 2011 and 2012), the compounded annual rate of decline in the proportion of households with no latrine facility in the house has to be approximately 14%, and the number of households with latrine facility in the house has to be approximately 15 million. The NSS data does suggest acceleration in the rate of decline of the proportion of households with no latrine facility in the house over time, and the compounded annual rate of decline was 3% during 2008-09 and 2012. The data for progress on the physical achievement of IHHL under the NBA reports an addition of only 8.8 million households during 2011-12. This suggests that the improvement in one year (2011-12), as reported from various data sources, may be spurious, and requires serious and responsible attention for efficient research and future planning.

Although there has been improvement in the proportion of rural households with latrine facility within the premises over time, as suggested by the census and NSS data, the existing level of deprivation of households with latrine facility (116.3 million households, that is, 69.3% of total households in 2011) is very high and alarming. The other cause of concern is the increase in the absolute number of such deprived households (8.3 million from 2001 to 2011), as suggested by the census data. It calls for immediate attention towards sanitation in rural India for an enhancement of the quality of life of the people, and for ensuring sustainable development and protection of the environment.

Successive governments have invested heavily in providing total sanitation for all, through several programmes like the CRSP, TSC, PURA, NGP, NBA, and others. However, it is a matter of great disappointment that the above objective has not been achieved till date, which becomes further worrisome as it remains a distant reality. While open defecation is a harbinger of innumerable deadly diseases, the lack of latrines in households has given way to crimes against women and children. Hence, a reinvigorated thrust to provide adequate sanitation facilities in rural India is the need of the hour, which must be accompanied by

constant scrutiny and monitoring, so as to arrive at apt decisions and policies for further action. This would further consolidate India's determination to achieve the MDGs effectively and efficiently.

NOTES

- 1 A duly completed household sanitary latrine, that is, IHHL, shall comprise of a toilet unit, including a superstructure. The construction of household toilets should be undertaken by the household itself, and on completion and use of the toilet, the cash incentive can be given to the household in recognition of its achievement.
- 2 The incentive amount to BPL households/identified APL households for the construction of one unit of IHHL shall be Rs 4,600 (Rs 5,100 for difficult and hilly areas). Also, all houses constructed by the beneficiaries under the Indra Awaas Yojana (IAY) or any other state rural housing scheme which did not have toilets will also be eligible for the incentive for creation of sanitation facilities for the targeted groups under NBA.
- 3 It refers to households that have public and open latrine use, meaning no latrine facility within the premises. It excludes all households that have latrine facility within the premises, including water closet, pit, and other latrine.
- 4 It refers to public/community use and no facility in the house. Both exclusive use of facility and that shared with other households are excluded here.

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