

Revisiting Discrepancies in Sanitation Statistics of Rural India

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This response to Arjun Kumar's "Discrepancies in Sanitation Statistics of Rural India" (EPW, 10 January 2015) points out that the article does not mention another gap in official data: omission of households that reside in settlements that are categorised as census towns. This response shows that taking this category into account can alter Kumar's observations.

Arjun Kumar's "Discrepancies in Sanitation Statistics of Rural India" (EPW, 10 January 2015) highlights the mismatch between the different official sources that estimate number of rural households that do not have access to on-premise latrines in India. One major discrepancy the article points out is that the addition in the number of households with latrines between 2001 and 2011 as reported by the census is surprisingly far less than the number of household latrines that the Government of India's programme on sanitation alone helped construct. Kumar estimates this gap to be a whopping 57 million households. The issue is not exactly new and has been reported in the media (Munshi 2012; Mohanty 2012) and discussed by different commentators (Natarajan 2012; White and Jacob 2014; Pande 2014; Vyas 2014). This article, however, is by far the most organised and well written on the topic. Apart from including other sources of rural sanitation data in the analysis, it points out that the absolute number of households in rural India that do not have access to a latrine within premises has gone up during the last inter-census period.

Gap in Data

We would like to draw attention to another gap in data, which the article does not mention: the households that reside in settlements that the census categorise as census towns (CT) are not

included in these estimates.¹ In this article, we revise the numbers presented in the article by including households located in CTs and briefly discuss how these revisions change the observations made in the article.

Table 1 illustrates how Kumar has arrived at the gap "e." All figures are the same as presented in the article.

The Government of India-sponsored programme on rural sanitation, the physical progress of which is presented as "d" in Table 1, covered almost all rural areas across India. Some of the rural settlements which were originally covered by the programme in 2001 would have become towns or merged with larger urban settlements by 2011 and consequently stopped being covered under the programme. It would be a difficult task to identify these settlements and subtract the number of household latrines constructed under the programme from the value represented here as "d." This is likely to bring a relatively small change, but if corrected would bring down the value in "e."

We also have settlement units that are administered as rural, but classified as urban by the census; namely CTs. The programme on rural sanitation covered these settlements and therefore the figures in "a" and "b" should be changed to include households with latrines from CTs. Pradhan (2013) notes that the decadal increase in the number of CT settlements between 2001 and 2011 from 1,362 to 3,894 accounts for 29.5% of urban growth in the same period. This suggests that when CTs are factored in, the gap "e" estimated by the article is likely to come down noticeably. Table 2 (p 97) presents figures for rural households including CTs with and without access to latrines within premises. Note that when 9.32 million CT households are included, the count of rural households with access to latrines goes up to 60.89 million.

Table 1: Government of India Programme on Rural Sanitation

Rural households having latrine facility within premises	Rural households having latrine facility within premises	Difference (c) = (b - a)	Physical achievement for total individual household latrines constructed under the TSC (March 2001 - March 2011) (d)	Gap (e) = (d) - (c)
Census 2001 (a)	Census 2011 (b)			
30.3 million	51.6 million	21.2 million	78.27 million	57 million

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Table 2: Rural Households with and without Latrines in Premises

	2001		2011	
	Numbers (in millions)	As a Proportion of Total Households (in %)	Numbers (in millions)	As a Proportion of Total Households (in %)
Total rural households (including census towns)	142.47		179.54	
Rural households (including census towns) not having access to latrine facilities within the premises	109.28	76.70	118.65	66.08
Rural households (including census towns) having access to latrine facilities within the premises	33.20	23.30	60.89	33.92

Table 3: Toilets Constructed under Programme and Change in Census

Rural households having latrine facility within premises Census 2001 (including CTs) (a)	Rural households having latrine facility within premises Census (including CTs) 2011 (b)	Change (c) = (b – a)	Physical achievement for total individual household latrines constructed under the TSC (March 2001–March 2011) (d)	Gap (e) = (d) – (c)
33.2 million	60.9 million	27.7 million	78.27 million	50.57 million

Table 4: Proportion of Rural Households without Latrines

Data collection period	Census 2011 April–September 2010	NSS 69th Round July 2012–December 2012	Baseline survey (as reported by 2,48,670 out of 2,50,491 GPs (99.27%) from 31 states, conducted by the MoDWS) February 2013–January 2015
Proportion of total rural households not having access to latrine facilities within the premise (in %)	66.1	59.4	61.1

Table 3 presents the revised numbers presented in Table 1.

Outlays to Outcomes

The change recorded by the census, “c,” in Table 1 has been increased to 27.7 million in Table 3. Consequently the gap (shown as “e” in Tables 1 and 3) between the number of households where toilets were constructed under the rural sanitation programme “d” and the change recorded by the census “c” comes down to 50.57 million households. We have already discussed how this gap is a higher estimate, as rural–urban reclassification and expansion of city boundaries have not been taken into consideration. Nevertheless the gap is significant and we agree with the article in questioning the credibility of the data maintained by the government to track physical progress of the rural sanitation programme.

Table 2 illustrates how the addition of CTs reduces the proportion of households without a latrine facility on premise by 3.19 percentage points to 66.08% and how this has come down by more than 10 percentage points between the two censuses. Kumar casts doubt on the validity of the numbers presented by the baseline survey 2012 conducted by

the Ministry of Drinking Water Supply and Sanitation (MoDWS). The baseline survey at 96.24% completion showed 59.6% households as not having toilets. Kumar asks how a drop of 10 percentage points was achieved in a single year 2011–12, while the National Sample Survey (NSS) estimates point to a compounded annual decline at 3% in rural household toilets between its rounds in 2008–09 and 2012.

This question was probably raised due to a misunderstanding of how the baseline survey is being conducted. The survey requires all gram panchayats (GP) in

India to fill different details for rural sanitation planning, including the number of households without latrines. The first entries of the 2012 survey have been recorded in February 2013. Since we can query the survey’s online database for day-wise entry status, the data presented at 96.24% completion of the survey should correspond to the first week of September 2014. At the time of writing, the survey is ongoing and has covered 99.27% of India’s GPs. So when Kumar questions a 10 percentage point drop in the proportion of rural households without toilets over 2011–12 from 69.3% to 59.4%, the drop actually is from 66.08% (census including CTs) to 59.4%. The house-listing census was completed in 2010 and the survey data used in the article is from September 2014, indicating that the drop happened over four years and not over 2011–12. This corresponds to a compounded annual decline by 2.63%, broadly consistent with the 3% between NSS rounds of 2008–09 and 2012.

Table 4 presents the proportion of rural households without latrines as per the three latest data sources. After including data from CTs and adjusting the time period, we think there is sufficient consistency among these three sources of data. Although we have revised the gap downward (from 57 million in Kumar’s article to less than 50.57 million) between the new household latrines reportedly constructed under the rural sanitation programme between 2001 and 2011 and that indicated by the two

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The Economic and Political Weekly Research Foundation has added a module on Insurance to its online database EPWRF India Time Series (EPWRFITS).

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censuses, it is still very large. More worryingly, there are no signs of this mismatch coming down. Between the 2011 Census and March 2014, the rural sanitation programme database claims to have built 26.7 million household latrines. But the baseline survey points out that in December 2014 the number of households with latrines was at 70.5 million (up from 60.89 million at the time of the census), an increase of less than 10 million households. The continuing mismatch between figures for households with latrines and the number of latrines claimed to have been constructed under the rural sanitation programme brings us to ask the same question that Kapur and Ibrahim asked in their 2013 study: does the planning and financing architecture of the rural sanitation programme sufficiently incentivise the state governments to strive to achieve the desired objective of the programme? With increased subsidy amounts and the Prime Minister's special interest, one can only hope that the Swachh Bharat Mission (Gramin) will

make the transition from focusing on "outlays to outcomes."

NOTE

- 1 CTs are complete settlement units, classified as urban areas based on certain characteristics—namely, size (minimum population of 5,000), density (at least 400 persons per square kilometre), and proportion of non-farm male workforce (at least 75%)—but continue to be administered under the rural framework. The situation where several settlements have been identified as to have achieved urban characteristics by the census of India but continued to be administered under the rural framework has been described as unacknowledged urbanisation in Pradhan (2013). It has also been discussed by Dennis, Mukhopadhyay and Zerah (2012).

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