

From Outlays to Outcomes: Understanding the Status of Rural Sanitation Data

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Table of Contents

Overview	4
Methodology	18
India & State Sheets	20
India	21
Andhra Pradesh	22
Arunachal Pradesh	23
Assam	24
Bihar	25
Chhattisgarh	26
Goa	27
Gujarat	28
Haryana	29
Himachal Pradesh	30
Jammu and Kashmir	31
Jharkhand	32
Karnataka	33
Kerala	34
Madhya Pradesh	35
Maharashtra	36
Manipur	37
Meghalaya	38
Mizoram	39
Nagaland	40
Odisha	41
Punjab	42
Rajasthan	43
Sikkim	44
Tamil Nadu	45
Tripura	46
Uttar Pradesh	47
Uttarakhand	48
West Bengal	49
Annexure	50

Overview

The 12th Five Year plan has accorded a high priority to the sanitation sector. Allocations for rural sanitation increased by a significant 425 percent from Rs. 6,540 crores in the 11th Five Year Plan to Rs. 34,377 crores in the 12th plan¹. The increasing allocations have been accompanied by a transformation of the rural sanitation scheme - Total Sanitation Campaign (TSC) to the Nirmal Bharat Abhiyan (NBA). The NBA marks a shift from the TSC approach of motivating individual household toilet construction to “covering the entire community”, with an increased focus on outcomes at the local government level – or the Gram Panchayats (GPs). Scaling up the Nirmal Gram Puraskar (NGP) – a financial reward given to GPs for achieving Open Defecation Free (ODF) status - the NBA explicitly states the need to focus on sanitation outcomes rather than toilet construction. In essence, it aims to transform rural India into Nirmal Bharat by 2022 with all GPs in the country attaining Nirmal Status.

The move towards a more outcome focussed approach to sanitation delivery comes in the wake of Census 2011 findings that only 30.7 percent of rural households in India have access to any toilets. Further, a recently released UNICEF and WHO report² found that in 2008 a mere 21 percent of rural India uses improved sanitation facilities³.

This raises some important questions. How far is the current governance architecture designed to enable this shift towards outcomes? Can this shift be built through the current model of planning and financing? If not, what should the alternative system be? How do we align plans and finances?

The NBA has taken an important step in expanding the goal to one of achieving sanitation outcomes. In terms of implementation, this requires, a) regular access to data to monitor and measure outcomes and, b) flexibility to enable local challenges (such as initiating changes in household behaviours) to be met in a manner that is conducive to the local environment. However, in its current design – the planning and budgeting structures under the NBA have remained more or less the same as TSC.

The launch of the NBA provides an opportunity to reassess the current governance and financing structures to enable this shift. Through a detailed analysis of Government of India (GOI) planning and budgeting documents, and analysis of the online monitoring

¹ PIB Release, *Nirmal Bharat Abhiyan (NBA) in the XIIth Five Year Plan*. Available online at: <http://pib.nic.in/newsite/erelease.aspx?relid=96062> Accessed on 12.08.2013.

² UNICEF and WHO(2012), *Progress on Drinking Water and Sanitation*. Available online at: www.unicef.org/media/files/JMPreport2012.pdf Accessed on: 12.08.2013.

³The Joint Monitoring Programme defines “improved sanitation” as facilities that are used and ensure hygienic separation of human excreta from human contact. They include a flush or pour-flush toilet/latrine to piped sewer system, septic tank, pit latrine, ventilated improved pit (VIP) latrine; a pit latrine with slab; and a composting toilet.

system, this report focuses on the data from TSC in order to identify implementation challenges and lessons that can be learnt for the NBA.

Building an outcomes-focused planning system

The first step to building an outcomes based delivery system for rural sanitation is the need to develop a database on outcomes. In other words, it requires a process of assessing needs on the ground and setting targets for achievement of outcomes. Determining these needs enables targets to be set and plans to be made effectively. However, benchmarks of achievement under TSC and now NBA continue to be based on input-parameters - number of toilets constructed rather than on usage or outcome parameters such as water quality (bacterial contamination).

While the concept of ODF communities as an objective has been part of the guidelines since the start of TSC in 1999, the closest definition of usage came with the introduction of the Nirmal Gram Puraskar (NGP) and other similar state level reward programmes.⁴ The NGP guidelines adopted a comprehensive definition of ODF - the complete elimination of open defecation within the jurisdiction of a GP. In other words - all members of a GP have access to and are using a sanitation facility.

The launch of the NGP was the first step in building a database on sanitation usage. The NGP portal⁵ provides year-wise details on the number of NGP awardees from the start of the programme till 2012 at all levels – gram panchayat, block panchayat and even the zilla panchayat level. However, a closer look at the NGP database points towards issues of data quality.

First, the process of determining the accuracy of the ODF status requires multiple checks at different levels of government. In 2009, when the NGP tightened its verification process to include checks by different agencies⁶, there was a year on year decrease in the number of NGP awardees. For instance, while in 2008 as high as 12038 GPs had won the NGP, the number dropped to 4556 in 2009, 2808 in 2010 and 2857 in 2011.⁷

Second, an effective database requires regular, real time monitoring. To take the example of the NGP, even in GP's which have won the NGP, in the absence of efforts to build capacity at the local level and ensure regular monitoring and assessment, the sustainability of the ODF status remains a question. For instance, a recent report of the

⁴ State level reward programmes include the Sant Gadge Baba Gram Swachata Abhiyan in Maharashtra, the Clean Village Campaign in Tamil Nadu, Nirmalaya in Karnataka, amongst others.

⁵ <http://nirmalgrampuraskar.nic.in/>

⁶ Applications are to be scrutinised by verification agencies nominated by GOI, District Water and Sanitation Mission, State Level Scrutiny committee and a peer to peer review system.

⁷ NGP Portal. Available online at: <http://nirmalgrampuraskar.nic.in/> Accessed on 18.07.2013.

Planning Commission⁸ found that 13.8 percent households of GPs awarded with the NGP had some of their family members still resorting to Open Defecation (OD). As a result, the NGP database does not provide an accurate measure of outcomes.

Defining Project Objectives

In the absence of reliable data on usage, the TSC determines project objectives on the basis of Annual Implementation Plans (APIPs) which reflect the current status of input driven parameters such as construction of toilets. According to the TSC guidelines, these APIP's are meant to "provide a definitive direction to the programme and also to ensure monthly and quarterly monitoring of financial and physical progress during the course of the financial year vis-a-vis planned activities".⁹

In theory, these APIPs are meant to be an aggregation of demand for total sanitation based on a needs assessment conducted by the GPs on the number of households demanding sanitation facilities. However, in essence they reflect annual targets for construction of toilet facilities. Achievement is thus measured on the basis of these project objectives which vary year by year. The result is the creation of different databases on sanitation coverage. It is for this reason that whilst the Census 2011 reported that only close to 31 percent of rural households had access to sanitation facilities, TSC's own achievement stood close to 80 percent.¹⁰

In order to understand this anomaly, we analysed the progress reports by the states available through the online monitoring system maintained by the Ministry. Our findings point towards inefficiencies in the planning structure of the scheme.

a) Project Objectives delinked from assessment on the number of households without access to sanitation

There is variation between the cumulative project objectives set by different state governments and the number of rural households without access to sanitation as per the baseline. (See Table 1). While it is true that TSC is a demand drive scheme and project targets may vary year by year, if the goal of TSC was to achieve rural sanitation for all by 2015, there should be a means of measuring success or "achievement" against benchmarks with relation to the number of households without access to sanitation. In the current planning structure however, project objectives are not linked with the status of the district/state with respect to number of households without access to sanitation. In fact, the TSC data comes with a disclaimer that: *Percentage (%) shown on*

⁸Planning Evaluation Organisation(2013) - *Evaluation Study on Total Sanitation Campaign*.

⁹ Nirmal Bharat Abhiyan Guidelines (2012). Available online at: [http://ddws.gov.in/sites/upload_files/ddws/files/pdfs/Final%20Guidelines%20\(English\).pdf](http://ddws.gov.in/sites/upload_files/ddws/files/pdfs/Final%20Guidelines%20(English).pdf) Accessed on: 31.07.2013.

¹⁰The annual report of the Ministry of Drinking water and sanitation (MoDWS) in 2011 reported, "only 22 percent of the rural families had access to toilets in 2001. With the efforts put into the Total Sanitation Campaign, this has gone up to 75.28 percent as of December 2011."

the basis of Target fixed by the TSC programme". To give an example, while the Project Objectives for Kerala were 10.7 lakhs Individual Household Latrines (IHHLs), the project achievement is 11.3 lakh IHHLs. In contrast, census figures for 2011 show that 2.8 lakh households still do not have access to toilets.

Table 1 Project Objectives vs. Number of Households without IHHL in 2001

State Name	Project objectives (in lakhs)	TSC 2001 households without IHHLs (in lakhs)
ANDHRA PRADESH	102.7	103.8
ARUNACHAL PRADESH	1.3	0.9
ASSAM	33.8	17.1
BIHAR	111.7	109.0
CHHATTISGARH	33.9	31.9
GOA	0.5	0.7
GUJARAT	53.8	46.1
HARYANA	21.0	17.5
HIMACHAL PRADESH	8.5	7.9
JAMMU & KASHMIR	14.7	6.8
JHARKHAND	37.3	35.5
KARNATAKA	58.7	55.1
KERALA	10.7	9.2
MADHYA PRADESH	84.7	74.0
MAHARASHTRA	97.3	89.9
MANIPUR	2.6	0.7
MEGHALAYA	3.0	2.0
MIZORAM	1.1	0.2
NAGALAND	2.1	0.9
ODISHA	70.6	62.6
PUNJAB	11.7	16.4
RAJASTHAN	69.8	61.1
SIKKIM	0.9	0.4
TAMIL NADU	86.7	70.9
TRIPURA	6.2	1.2
UTTAR PRADESH	206.8	166.3
UTTARAKHAND	8.9	8.2
WEST BENGAL	116.2	81.6
TOTAL	1257.3	1078.5

Source: Calculated from TSC Portal, *State-wise Physical Progress*, available online at: <http://tsc.gov.in/tsc/Report/Physical/RptPhysicalProgressStateWiseDistrictwise.aspx?id=PHY> and, *State-wise Basic Information*, available online at: <http://tsc.gov.in/tsc/Report/otherreports/RptStateWiseBasicInfo.aspx?id=PHY>
Note: Union Territories have been excluded.

b) Targets not revised regularly

The second measure of achievement under the TSC programme is the number of households without access to toilets according to Census 2001. However, even these targets have not been revised to take into account changing rural populations or the possibility of slip-back habitations or toilets no longer in existence or defunct. As noted by the Standing Committee itself, "*the TSC has failed to take into account the increased population of 2.96 crores as compared to household levels in Census 2001*".¹¹

Analysis of the total number of households without toilet facilities between Census 2011 and TSC (up to 2011) highlights significant variations between the two data sources. Recognising that increasing population between Census 2001 and Census 2011 could be a factor driving these differences, the TSC achievement rate was normalised for rural household numbers for 2011.

The results suggest that when the new household numbers are used, the achievement rate drops significantly, however, there continues to be a difference between the two rates of achievement. (See Table 2 for more details)

Given that there remains considerable discrepancy between the TSC and Census numbers, we tried to seek answers and possible explanations as to why the figures do not match. Double counting of IHHLs built is one possible explanation. To elucidate, it is possible that since the inception of TSC (1999) a toilet built under the scheme may have become dysfunctional (these numbers are provided in the new baseline). However if a new toilet was built for the same household to replace the old one then it was counted as a new toilet built rather than a repair of the old one. In other words – it is possible that toilet construction is double counted. We tried to assess double counting in IHHLs built for each beneficiary, by looking at the GP level data provided on the TSC website online. However the inconsistency of BPL card numbers makes this process extremely difficult. Anecdotal evidence however suggests that given the small subsidy given towards toilet construction in the early 2000s (only Rs. 900 was given including beneficiary share), these toilets may not be in existence today and may have thus been rebuilt. These toilets however, are not accounted for separately.

¹¹ Lok Sabha Secretariat (2013), *Fortieth Report of the Standing Committee on Rural Development (2012-13), Demands for Grants (2013-2014)*, Ministry of Rural Development (Department of Rural Development). Available online at: http://164.100.47.134/lsscommittee/Rural%20Development/15_Rural%20Development_41.pdf Accessed on 15.06.2013.

Table 2: Differences in coverage of toilets Census 2011 and TSC portal data

State Name	Census 2001 (toilet coverage)	Census 2011 (toilet coverage)	TSC reported physical achievement (Based on Census 2001 households)	TSC with new population denominator (TSC Actual)	Increase/ Decrease in population between 2001 and 2011 (in %)
	%	%			
ANDHRA PRADESH	18.1	32.2	75.9	67.6	12%
ARUNACHAL PRADESH	47.3	52.7	82.3	69.2	19%
ASSAM	59.6	59.6	93	73	27%
BIHAR	13.9	17.6	38.7	28.9	34%
CHHATTISGARH	5.2	14.5	60.2	46.1	31%
GOA	48.2	70.9	72.8	82.1	-11%
GUJARAT	21.7	33	95.4	83	15%
HARYANA	28.7	56.1	100	82.8	21%
HIMACHAL PRADESH	27.7	66.6	100	83.7	19%
JAMMU & KASHMIR	41.8	38.6	72.3	56.1	29%
JHARKHAND	6.6	7.6	47.4	38.5	23%
KARNATAKA	17.4	28.4	73.9	62.7	18%
KERALA	81.3	93.2	100	120.7	-17%
MADHYA PRADESH	8.9	13.1	85.1	62.1	37%
MAHARASHTRA	18.2	38	78	65.9	18%
MANIPUR	77.5	86	100	88.3	13%
MEGHALAYA	40.1	53.9	90.7	70.8	28%
MIZORAM	79.7	84.6	100	75.7	32%
NAGALAND	64.6	69.2	95.4	88.9	7%
ORISSA	7.7	14.1	58.9	49.1	20%
PUNJAB	40.9	70.4	77.5	64.9	19%
RAJASTHAN	14.6	19.6	63.6	48	33%
SIKKIM	59.4	84.1	100	99.3	1%
TAMIL NADU	14.4	23.2	96.7	83.6	16%
TRIPURA	77.9	81.5	100	88.8	13%
UTTAR PRADESH	19.2	21.8	96.7	78.1	24%
UTTARAKHAND	31.6	54.1	81.4	69.3	17%
WEST BENGAL	26.9	46.7	100	81.4	23%
TOTAL	21.8	30.7	79.9	65.7	21%

Source: Census(2011), *Availability and Type of Latrine Facility: 2001-2011*, available online at: [http://www.censusindia.gov.in/2011census/hlo/Data sheet/India/Latrine.pdf](http://www.censusindia.gov.in/2011census/hlo/Data%20sheet/India/Latrine.pdf); and calculated from TSC Portal, *Physical Report, Year-wise percentage achievement (including census)*, available online at: http://tsc.gov.in/tsc/Report/Physical/RptPerwiseAchCensus_net.aspx?id=PHY Accessed on 12.07.2013. Note: Union Territories have been excluded.

Summary

It is clear from the above analysis that there are serious gaps in the current implementation structure of the NBA. First, there is no comprehensive database for measuring outcomes or usage of sanitation facilities. TSC's own assessment surveys or even the Census continue to only measure access to sanitation. While the NGP database provides one source of data on usage, implementation constraints with respect to verification and monitoring, poses challenges on the reliability of the database. In the absence of set benchmarks on outcomes, it is hard to determine the extent of the problem. As a result, goals are set and plans are made based on the existence of input parameters – construction of sanitation facilities. Finally, gaps exist even with input indicators like coverage of sanitation facilities., the lack of transparency in the preparation of APIP's, results in the creation of multiple databases – each with a different measure of coverage.

In recognition of these constraints, the NBA launched the Baseline Survey 2012 to assess the current status of sanitation facilities including parameters such as functional and defunct toilets. This survey is meant to provide revised (and hopefully more comprehensive) data on coverage. However, a comparison of states which have nearly 100 percent entries with Census 2011 still points to differences in assessment numbers. Further, Baseline 2012 still does not give any estimate on toilet usage. In the absence of usage data, it is unclear how Baseline 2012 will improve the planning process under NBA for it to achieve its goal.

Table 3: Comparison of Baseline and Census for select states

State Name	Percentage baseline entries completed	Percentage of households not having toilet according to the Baseline	Census without toilets in 2011
GUJARAT	92.99	45.51	45.33
HIMACHAL PRADESH	99.63	12.74	4.38
KARNATAKA	99.45	65.09	56.31
KERALA	100	5.32	2.79
MADHYA PRADESH	99.67	73.6	96.65
MAHARASHTRA	99.06	51.97	80.70
RAJASTHAN	94.83	72.99	76.30

Source: TSC Portal, *Baseline Survey 2012, -Complete Entry Status*. Available online at: http://tsc.nic.in/BLS2012/Report/Rpt_NBAS2012DataEntry.aspx Accessed on 17.07.2013, and Census (2011), *Availability and Type of Latrine Facility: 2001-2011*, available online at: http://www.censusindia.gov.in/2011census/hlo/Data_sheet/India/Latrine.pdf

From Planning to Budgeting: How do funds flow under TSC

The second most important step in building an outcomes focused system is the creation of a planning and budgeting structure which allows flexibility to adapt to local needs. While plans help identify needs and priorities, resource allocations and expenditures reflect the operationalisation of these plans. Will the current system of planning and budgeting enable this shift towards outcomes? This section will attempt to look into these questions through an analysis of the composition of TSC finances and their fund flow.

Unpacking TSC financing and allocations

Funds for TSC are finalised through a process of negotiation between GOI and the state governments. Under TSC, project proposals are developed at the district and are then consolidated at the state level to form the AIPs. This has been revised under the NBA with greater focus being given to the GPs. Project proposals are now expected to be made at the GP level and then consolidated upwards at the block, district and state level. Once finalised, the project proposals are sent for review to the Plan Approval Committee (PAC) of the Ministry of Drinking Water and Sanitation (MoDWS) before the commencement of the financial year (FY).

Implementation of the programme involves a number of activities for which funding is provided. These are: a) start-up activities, such as assessment of needs and preparation of plans; b) Information, Education and Communication (IEC); c) construction of Individual household latrines (IHHLs); d) construction of community sanitary complexes; e) construction of school toilets and hygiene education and finally, f) construction of anganwadi toilets.

Over 80 percent of funds for TSC are allocated towards the construction of toilets. Within this, IHHLs account for the largest share of total TSC allocations at 67 percent of total TSC funds, followed by school toilets at 15 percent. In contrast, funds for IEC constitute only 10 percent of the total TSC budget¹² (the revised guidelines have stipulated that 15 percent of the total TSC budget to be earmarked for IEC).

Expenditure under the TSC is shared between the GOI, state governments and beneficiaries (in the case of IHHL). For instance, while start-up activities are 100 percent centrally funded, IEC funds are shared between GOI and state governments in a 80:20 ratio, while school and anganwadi toilets are shared in a 70:30 ratio. For the construction of IHHLs, beneficiaries are expected to contribute a pre-determined percentage of costs incurred in the form of material or labour. With the aim to achieve sanitation outcomes, the NBA, in addition to Below Poverty Line (BPL) families previously covered under the TSC - has extended coverage to cover all Above Poverty

¹² TSC Portal. Available online at: tsc.gov.in/ Accessed on: 14.08.2013.

households who belong to Scheduled Castes (SCs), Scheduled Tribes (STs), small and marginal farmers, landless labourers with homesteads, physically challenged and women headed households along-with all BPL households, so as to attain community outcomes.

Under the NBA, financial incentives for construction of toilets have been raised for all eligible beneficiaries to Rs. 4600 from the earlier amount of Rs 3200. In addition up to Rs. 4500 can be spent under Mahatma Gandhi National Rural Employment Guarantee Scheme for construction of the toilet. Along-with beneficiary contribution of Rs. 900, the total amount of Rs. 10000 is now available for construction of toilets, which in the case of hilly and difficult areas is Rs. 10500.¹³ A significant proportion of the rise in allocation under the NBA is thus due to the rise in financial incentives for the cost of IHHL.

Release of Funds

As mentioned earlier, budgets for TSC have seen a massive increase in recent years, from Rs. 165 crores in 2002-03 to 1500 crores in 2011-12. In 2012-13, with the launch of the NBA, allocations for the scheme more than doubled at Rs. 3200 crores.¹⁴

In this section, we have tried to analyse the timing of release of funds by GOI. Due to the lack of data, this exercise has been confined to GOI releases.

On the basis of the approved demand of the states as decided in the PAC meetings and the availability of funds, allocations to all states are determined and funds are released. It is important to note that while plans are made based on the progress of states up to January or February, most of the activities and fund releases happen in the last two months of the financial year (February or March).

To elaborate - the guidelines stipulate that funds be released by GOI in two instalments. However, in practice, a significant portion of the GOI release is released in the last two months of the financial year. For instance, in Arunachal Pradesh as high as 93 percent of total GOI releases in FY 2010-11 were released in February and March 2011. The trend continued in FY 2011-12 with 50 percent of total releases released in the last two months of the financial year. Similarly, in Mizoram - the entire GOI release was released in the last two months of the financial year in FY 2010-11(See Table 4).

¹³ Nirmal Bharat Abhiyan Guidelines (2012). Available online at: [http://ddws.gov.in/sites/upload_files/ddws/files/pdfs/Final%20Guidelines%20\(English\).pdf](http://ddws.gov.in/sites/upload_files/ddws/files/pdfs/Final%20Guidelines%20(English).pdf) Accessed on: 31.07.2013.

¹⁴ Union Budget, Expenditure Budget, Volume 2. Available online at: www.indiabudget.nic.in. Accessed on 15.07.2013.

Table 4: Significant proportion of GOI funds released in the last two months of the Financial Year

State Name	Proportion of funds released in February/March	
	FY 2010-11	FY 2011-12
ANDHRA PRADESH	50%	0%
ARUNACHAL PRADESH	93%	50%
ASSAM	49%	50%
GUJARAT	50%	50%
HARYANA	74%	0%
HIMACHAL PRADESH	49%	0%
JAMMU & KASHMIR	48%	0%
JHARKHAND	50%	50%
KARNATAKA	50%	50%
KERALA	49%	0%
MAHARASHTRA	50%	0%
MANIPUR	0%	36%
MEGHALAYA	88%	50%
MIZORAM	100%	0%
NAGALAND	91%	0%
ODISHA	8%	50%
PUNJAB	74%	0%
RAJASTHAN	49%	37%
TAMIL NADU	49%	50%
TRIPURA	63%	0%
UTTARAKHAND	74%	50%

Source: TSC Portal, *Release, Month-wise funds released during the financial year*. Available online at: <http://tsc.gov.in/TSC/Report/Release/RptCentreReleaseMonthwise.aspx?id=REL>. Accessed on: 13.08.2013. Note: Union Territories have been excluded.

This trend seems to have continued even in FY 2012-13, the beginning of the NBA. In Chhattisgarh for instance, 100 percent of the funds were released in February 2013. Similarly, over 70 percent of the funds for Arunachal Pradesh, Assam and Tripura were released in the last two months of the financial year.

While delays may be due to non-submission of utilisation certificates (UCs) or other conditions specified in the GOI norms¹⁵, it is important to remember that these delays in the release of the GOI share can have a knock-on effect on the release to the districts or the GPs. Given the significant increase in budgets under the NBA, the result of this year-end bunching can create a serious expenditure management problem at all levels of

¹⁵Norms specify that the release of the second instalment will be conditional on release of the state share, utilisation of 60 percent of first instalment, submission of audited statement of accounts, annual performance report and receipt of a specific proposal from the state/UT with recommendations of the State government with district wise physical and financial progress reports, amongst others.

governments. This in turn has consequences on the ability to plan effectively resulting in a viscous cycle of planning and budgeting inefficiencies.

Expenditures: Do states spend their TSC funds?

As mentioned, the delay in releases can result in delays in expenditures. The standing committee for the MoDWS noted large amounts of unspent balances across financial years. For instance in FY 2010-11, unspent balances amounted to a total of Rs. 1176.70 crores; in FY 2012-13 till December 2012 the total unspent balance was as high as Rs. 1,835 crores. (See Table 5 for more details).

Table 5: State-wise unspent balances

Sl. No.	State Name	Unspent Balances under NBA		
		2010-11	2011-12	2012-13 till December 2012
1	ANDHRA PRADESH	169.25	174.30	282.25
2	ARUNACHAL PRADESH	6.90	3.84	5.31
3	ASSAM	94.49	94.73	60.18
4	BIHAR	82.12	86.69	250.70
5	CHHATTISGARH	40.84	35.00	24.23
6	GOA	0.22	0.22	0.22
7	GUJARAT	27.66	35.49	54.40
8	HARYANA	23.39	11.32	7.14
9	HIMACHAL PRADESH	17.36	9.30	18.02
10	JAMMU & KASHMIR	26.35	11.40	38.42
11	JHARKHAND	53.16	102.46	136.56
12	KARNATAKA	24.08	70.02	125.27
13	KERALA	20.60	12.31	4.97
14	MADHYA PRADESH	74.40	58.16	104.26
15	MAHARASHTRA	71.73	45.82	147.32
16	MANIPUR	4.37	8.24	6.16
17	MEGHALAYA	27.28	5.53	8.75
18	MIZORAM	8.67	2.06	0.57
19	NAGALAND	10.96	10.04	0.92
20	ODISHA	127.46	192.65	166.14
21	PUNJAB	14.89	16.64	12.76
22	RAJASTHAN	66.64	89.52	99.03
23	SIKKIM	1.12	1.12	1.82
24	TAMIL NADU	53.04	22.56	62.79
25	TRIPURA	11.04	4.85	4.06
26	UTTAR PRADESH	45.62	94.27	85.30
27	UTTARAKHAND	11.61	6.53	10.07
28	WEST BENGAL	61.29	87.39	117.60
	TOTAL	1,176.70	1,292.48	1,835.24

Source: Lok Sabha Secretariat (2013), *Fortieth Report of the Standing Committee on Rural Development (2012-13), Demands for Grants (2013-2014)*, Ministry of Rural Development (Department of Rural Development). Available online at: http://164.100.47.134/lssccommittee/Rural%20Development/15_Rural%20Development_41.pdf Accessed on 15.06.2013. Note: Union Territories have been excluded.

Component-wise Expenditures

When analysed from the perspective of budgetary components, we see a clear prioritization of expenditures. While hardware components such as construction of toilets at the school, anganwadi and household level are spent, software expenditure such as expenditure on IEC and administrative costs tend to be under-prioritised. For instance, at a cumulative, all-India level (TSC data is usually given cumulatively), 81.31 percent of approved allocations for school toilets, 76.63 percent for angawadi toilets and 67.81 percent for households toilets were spent¹⁶. In contrast, only 36.88 percent of approved allocations for IEC and 58.75 percent for administrative costs have been spent till date.

The non-utilisation of IEC funds can have serious consequences on ability to generate demand and initiate behaviour change. It is a widely recognised fact that a major bottleneck in the achievement of sanitation is that large sections of the population are not convinced of the need to stop open defecation because of lack of proper awareness about the problems associated with it. According to a recent estimation by the Planning Commission, as many as 72.65 percent of sampled rural households continue the practice OD¹⁷. While non-availability of toilets or lack of sufficient toilets was an important factor in OD, the study found that in many cases, people defecated in the open despite having toilets. The main reasons for this were identified as lack of awareness, established age old practice.

Recognising the importance of IEC, the NBA has given further emphasis to IEC by earmarking 15 percent of the total outlay of district projects for IEC activities. With a view to give thrust to a new approach towards IEC, the Ministry has also launched a Communication and Advocacy Strategy (2012-2017).

However, if states continue to underprioritise IEC funds (Statewise spending under IEC are given in Table 6), the increased allocations will not result in increased outcomes.

Moreover, even in terms of the use of IEC materials – while it has been noted that interpersonal communication is the most effective communication tool within the IEC framework, the Planning Commission study reported that only 46 percent GPs have appointed motivators.¹⁸ Even in cases where motivators had been appointed, the main role assigned to them was to persuade people to construct latrines rather than focus on behaviour change.

¹⁶Data is as on August 2013.

¹⁷ Planning Evaluation Organisation(2013) - *Evaluation Study on Total Sanitation Campaign*.

¹⁸ Ibid.

Table 6: State-wise spending under IEC as on August 2013

State Name	Percentage of IEC approved funds spent
NAGALAND	104%
ARUNACHAL PRADESH	88%
KERALA	84%
MEGHALAYA	81%
HARYANA	80%
HIMACHAL PRADESH	78%
TRIPURA	71%
MAHARASHTRA	67%
GUJARAT	67%
MIZORAM	62%
CHHATTISGARH	61%
UTTARAKHAND	51%
TAMIL NADU	43%
ASSAM	42%
ANDHRA PRADESH	41%
UTTAR PRADESH	40%
RAJASTHAN	39%
SIKKIM	39%
MANIPUR	39%
KARNATAKA	38%
MADHYA PRADESH	33%
WEST BENGAL	32%
JHARKHAND	26%
ODISHA	20%
JAMMU & KASHMIR	18%
BIHAR	15%
PUNJAB	2%
GOA	2%

Source: Calculated from TSC Portal, Financial Progress, Cumulative Software expenditure details, available online at: <http://tsc.gov.in/TSC/Report/Financial/RptFinCummSoftwareExpStatewiseDistrictwise.net.aspx?id=FIN> Accessed on 15.08.2013

Summary

Our analysis of the current planning and budgeting system points to a highly centralised system with set norms for implementation and little flexibility to meet needs on the ground. First, as previously mentioned, plans are made based on input parameters such as the construction of toilets. This has consequences on budget allocations with a significant portion of the budget being tied to construction activities. For instance, over 80 percent of the budget is tied to construction activities. Second, delay in release of funds by GOI results in substantial amount of unspent balances available with the states. Third, in the absence of discretion, there is a disconnect between the needs on the ground and actual expenditures. Thus, even when funds are spent, priority is usually

given to hardware activities such as the construction of toilets rather activities such as IEC.

Conclusion

This study was motivated with the question of whether the current model for planning and financing rural sanitation can enable a shift towards a delivery model focused on outcomes as envisaged under the NBA. Our analysis suggests serious constraints in the current system. First, there still exists no database for measuring usage or outcomes. As a result, planning is based on input parameters which themselves have serious gaps. Second, while the NGP has taken an important step by setting the GP's as the unit of planning, the current system of planning, decision-making and fund flows continues to be heavily centralised. Data on physical and financial progress continue to be only up to the district level, making it difficult to ascertain the flow of funds from GOI down to the implementation unit – i.e. the GP. Whilst the Baseline 2012 is the first attempt to give GP wise data on targets and achievements in construction of toilet facilities; it remains to be seen how this data will be integrated with the MIS portal. Budget prioritization continues to be on input driven parameters leaving little flexibility to focus on innovative mechanisms for meeting local challenges. This is further exacerbated by delays in the receipt of funds from GOI (the main source of funding for TSC). Third, in a system focused on compliance to government norms (submission of UC's etc), the delays in the receipt of funds results in prioritization of measurable outputs – such as construction activities. In contrast, IEC funds – defined as a corner stone of the programme continue to be under-spent. Against this backdrop, if we want to be any closer to achieving our goal of Nirmal Bharat by 2022, a serious reassessment of the current planning and implementation structure will be needed.

Methodology

The objective of the research was to undertake a comparison of the two main data sources on sanitation coverage – a) the data available on the online portal of the TSC and, b) Census 2011. TSC's online monitoring system is dynamic and updated frequently. However, we have restricted our analysis to 2001 and 2011 as Census data is only available for these years. Data for TSC is up to March 2011 while Census 2011 reflects the status as of February 2011. Moreover, since TSC is a rural sanitation scheme, we have restricted our analysis to Census rural figures on sanitation coverage. Unfortunately, since the TSC Baseline 2012 entries were incomplete during the course of this study, we were unable to use them in our analysis.

One of the biggest problems faced in the comparison was determining the definition of “achievement” in terms of sanitation coverage. While the Census gives figures on the proportion of people with access to “no latrine” (the converse is the availability of any form of latrine), there are four different data sources on the TSC portal each with a different figure for TSC coverage.

These include:

- 1) Project Objective vs. Project Achievement
- 2) State-wise Basic Information
- 3) Percentage Achievement including Census
- 4) Physical Achievement in a Time Period

In order to gauge the best source we did a number of data consistency checks and decided to use “*Percentage achievement including Census*”. Detailed discussions on how we finalized the source can be found in Annexure 1.

The first step in comparing TSC and Census data was identifying the number of households without toilets in 2001 and 2011 according to both sources. Interestingly, while the number of households without access to sanitation facilities was similar for most states in 2001, the difference had increased significantly by 2011.

Next, we tried to understand the reasons for this difference. One of the biggest factors was the fact that TSC achievement in 2011 continued to be measured against the number of rural households existing in 2001. In other words, TSC data has not accounted for the increase (or in some cases such as Kerala) decrease in the number of rural households between 2001 and 2011. In order to account for these changes to population, we normalized the TSC achievement rates by changing the base to the latest rural population numbers available in Census 2011. The result was a decrease in the achievement figures under TSC.

Finally, we wanted to develop estimates on the additional funds required to achieve complete coverage even for 2011 household levels. While the unit cost for an IHHL has increased over the years, for our analysis we have assumed the total incentive for constructing IHHLs to be Rs. 10,000 per unit (the current unit cost). Estimates were made for both number of households without toilets according to Census 2011 as well as according to our revised achievement figures for TSC.

**INDIA
&
STATE SHEETS**

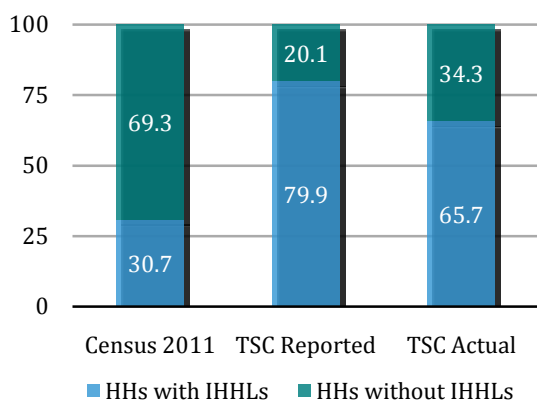
India

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.14** lakhs. In 2011, the difference had grown to **884.03** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	1,078.68	1,078.54	0.14
2011	1,162.79	278.06	884.03

Percentage of HHs with access to toilets in 2011



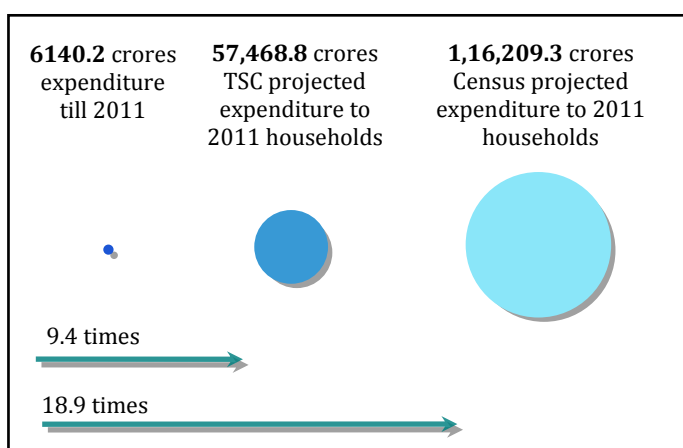
According to census data, only **30.7** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **79.9** percent.

The 2011 census indicates an increase in rural households by **21** percent, from **1,382.72** lakhs in 2001 to **1,678.27** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **65.7** percent.

How much more money needs to be spent to achieve total sanitation by 2011 household numbers?

According to the Census, the required expenditure is **18.9** times the amount spent from 1999 till 2011 (Rs **6140.2** crores). According to TSC Actual data, it is **9.4** times.

Assuming the same rate of population growth, by 2022 there will be **2,094.54** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

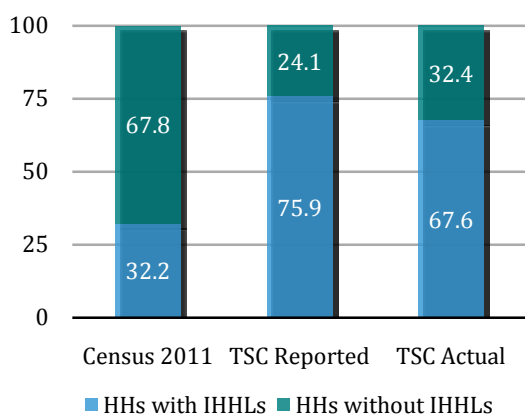
Andhra Pradesh

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.06** lakhs. In 2011, the difference had grown to **66.08** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	103.82	103.76	0.06
2011	96.59	30.51	66.08

Percentage of HHs with access to toilets in 2011



According to census data, only **32.2** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **75.9** percent.

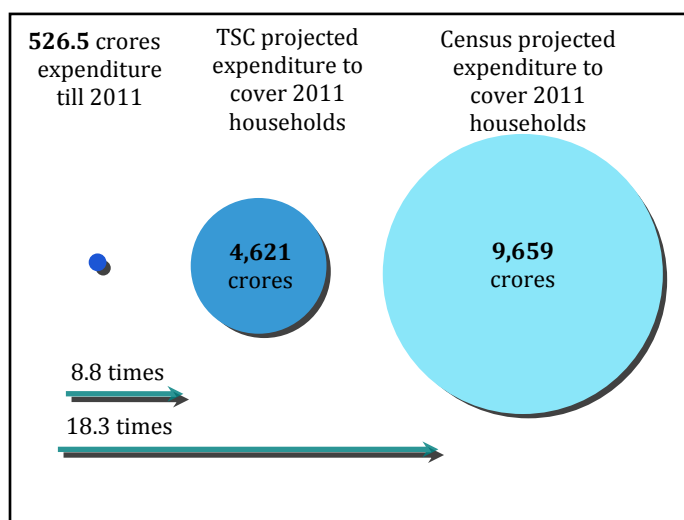
The 2011 census indicates an increase of **12** percent in rural households from **126.76** lakhs in 2001 to **142.46** lakhs in 2011.

However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **67.6** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **18.3** times the amount spent from 1999 till 2011 (Rs **526.5** crores). According to TSC Actual data, it is **8.8** times.

Assuming the same rate of population growth, by 2022 there will be **161.99** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

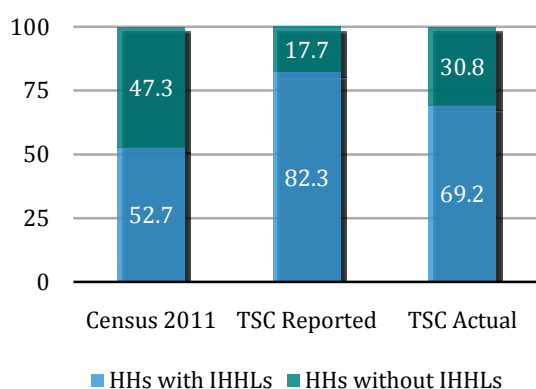
Arunachal Pradesh

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.0006** lakhs. In 2011, the difference has grown to **0.64** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	0.8669	0.8663	0.0006
2011	0.93	0.29	0.635

Percentage of HHs with toilets in 2011



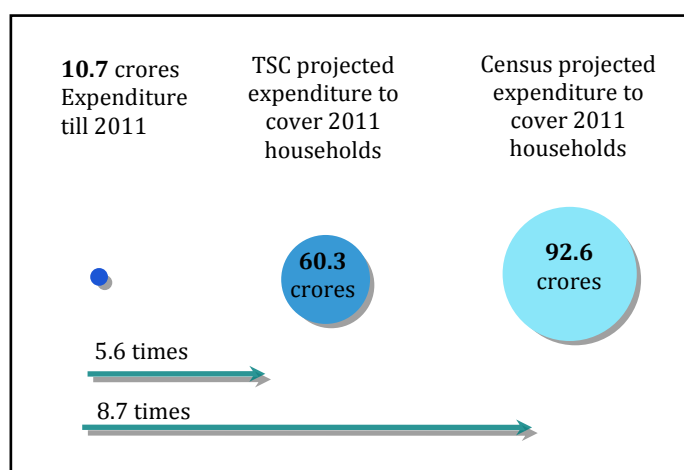
According to census data, only **52.7** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **82.3** percent.

The 2011 census indicates an increase of **19** percent in rural households from **1.65** lakhs in 2001 to **1.96** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **69.2** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **8.7** times the amount spent from 1999 till 2011 (Rs **10.7** crores). According to TSC Actual data, it is **5.6** times.

Assuming the same rate of population growth, by 2022 there will be **2.37** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right



NOTES:

1. Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
2. TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
3. TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
4. Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
5. Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
6. Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
7. The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
8. Expenditure includes centre, state and beneficiary contribution.

Assam

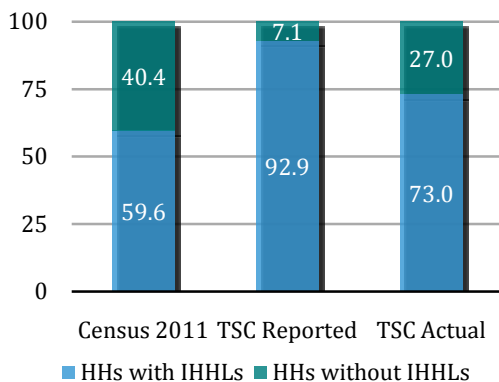
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.014)** lakhs with Census reporting less households without toilets than TSC. In 2011, the difference had grown to **18.74** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	17.05	17.06	(0.014)*
2011	21.71	2.98	18.74

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with access to toilets in 2011



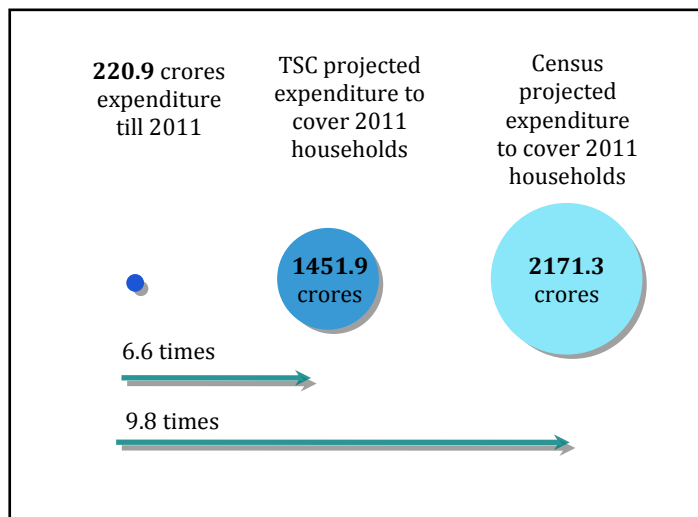
According to census data, only **59.6** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **92.9** percent.

The 2011 census indicates an increase by **27** percent in rural households from **42.2** lakhs in 2001 to **53.75** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **73** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **9.8** times the amount spent from 1999 till 2011 (Rs **220.9** crores). According to TSC Actual data, it is **6.6** times.

Assuming the same rate of population growth, by 2022 there will be **70.12** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

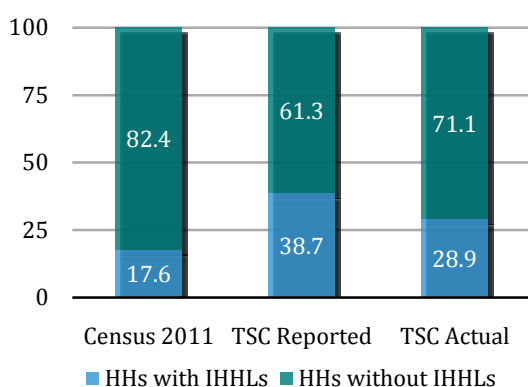
Bihar

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.018** lakhs. In 2011, the difference had grown to **61.82** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	109	108.98	0.018
2011	139.48	77.66	61.82

Percentage of HHs with access to toilets in 2011



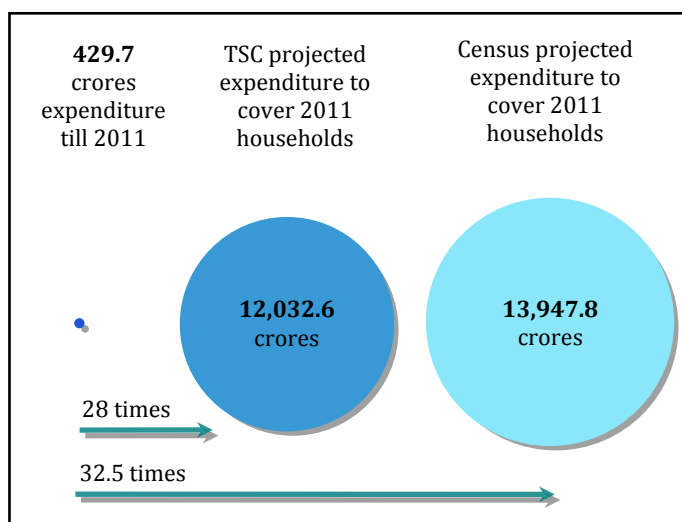
According to census data, only **17.6** percent of rural households had access to toilets in 2011. According to TSC the number is **38.7** percent.

The 2011 census indicates an increase by 34 percent in rural households from **126.60** lakhs in 2001 to **169.27** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **28.9** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **32.5** times the amount spent from 1999 till 2011 (Rs **429.7** crores). According to TSC Actual data, it is 28 times.

Assuming the same rate of population growth, by 2022 there will be **232.99** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

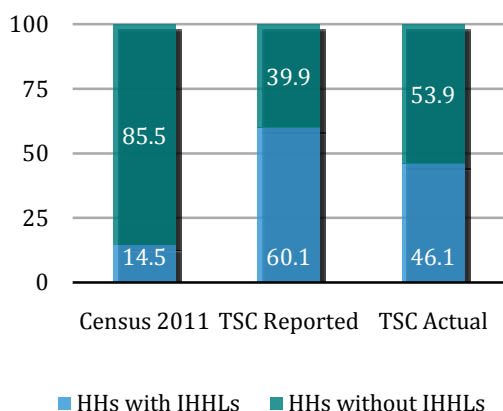
Chhattisgarh Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.006)** lakhs with Census reporting less households without toilets than TSC. In 2011, the difference had grown to **24.10** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	31.84	31.85	(0.006)*
2011	37.48	13.39	24.10

*TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with access to toilets in 2011



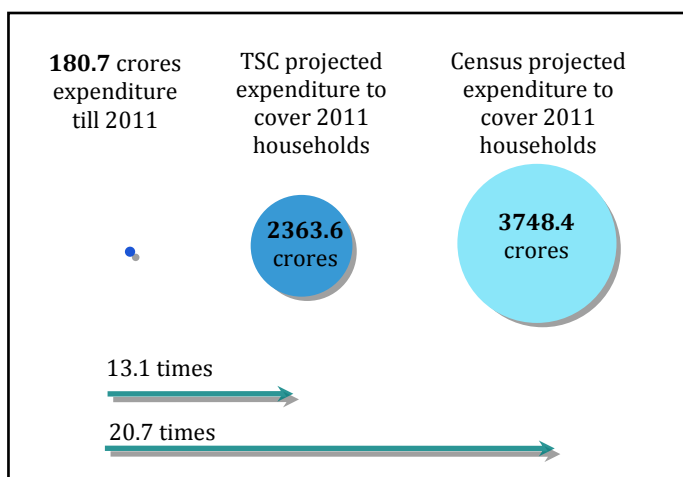
According to census data, only **14.5** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **60.1** percent.

The 2011 census indicates an increase of **31** percent in rural households from **33.59** lakhs in 2001 to **43.84** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **46.1** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **20.7** times the amount spent from 1999 till 2011 (Rs **180.7** crores). According to TSC Actual data, it is **13.1** times.

Assuming the same rate of population growth, by 2022 there will be **58.76** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Goa

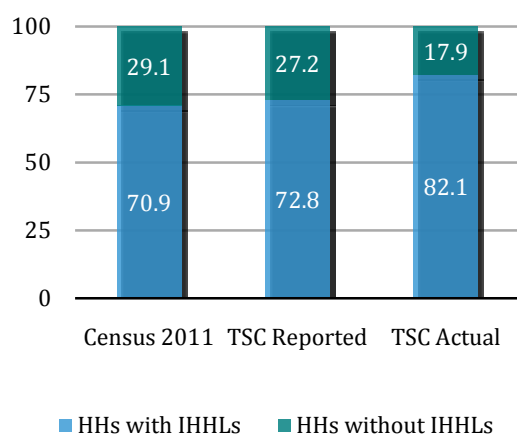
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.0002** lakhs. In 2011, TSC reported greater number of households without toilets than Census. The total difference was **0.021** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between TSC and Census (in lakhs)
2001	0.7291	0.7289	0.0002
2011	0.36	0.38	(0.021)*

* TSC reported greater households without toilets in 2011 than Census

Percentage of HHs with access to toilets in 2011



According to census data, only **70.9** percent of rural households had access to toilets in 2011. According to TSC the number is **72.8** percent.

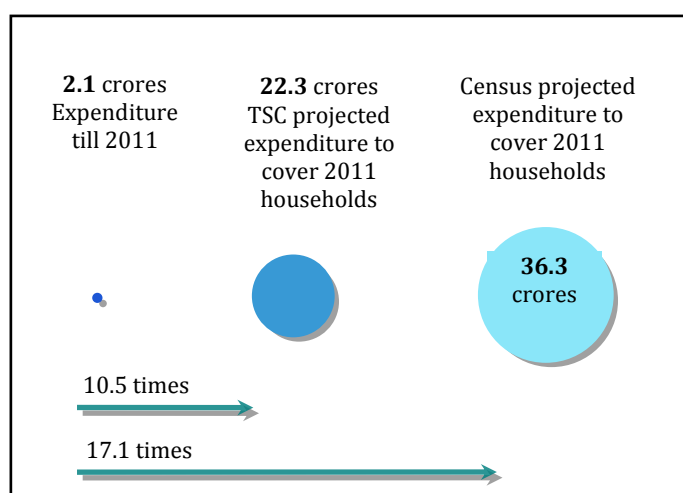
The 2011 census indicates a decrease of **11** percent in rural households from **1.41** lakhs in 2001 to **1.25** lakhs in 2011.

However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual) TSC's total achievement increases to **82.1** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **17.1** times the amount spent from 1999 till 2011 (Rs **2.1** crores). According to TSC Actual data, it is **10.5** times.

Assuming the same rate of population growth, by 2022 there will be **1.09** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Gujarat

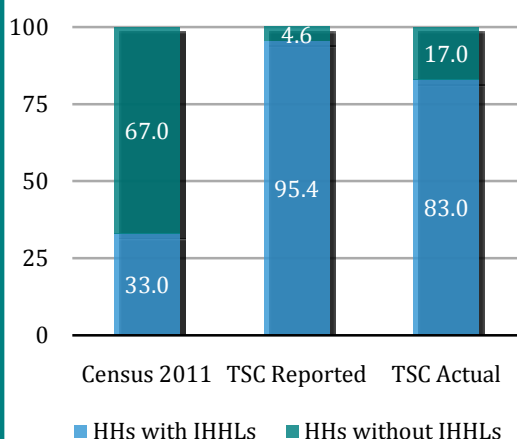
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.027)** lakhs, with Census reporting less households without toilets than TSC. In 2011, the Census number had grown significantly and it reported **42.61** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	46.09	46.11	(0.027)*
2011	45.33	2.71	42.61

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with access to toilets in 2011



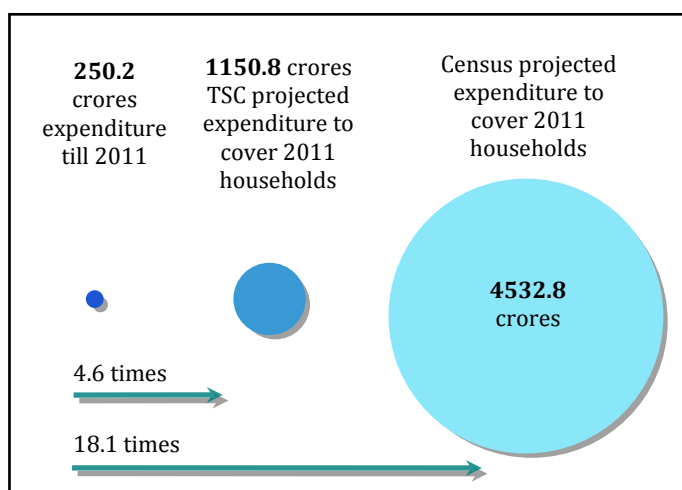
According to census data, only **33** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **95.4** percent.

The 2011 census indicates an increase in rural households by **15** percent from **58.86** lakhs in 2001 to **67.65** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers are used to calculate achievement (TSC Actual), TSC's total achievement falls to **83** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **18.1** times the amount spent from 1999 till 2011 (Rs **250.2** crores). According to TSC Actual data, it is **4.6** times.

Assuming the same rate of population growth, by 2022 there will be **78.85** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Haryana

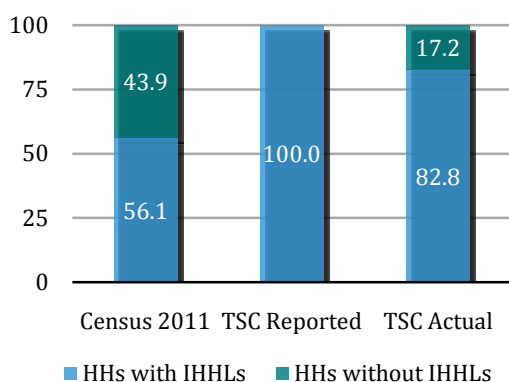
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.009)** lakhs, with Census reported marginally less households without toilets in 2001. In 2011, the Census numbers have grown significantly and it reported **13.02** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	17.50	17.51	(0.009)*
2011	13.02	0.00	13.02

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with access to toilets in 2011



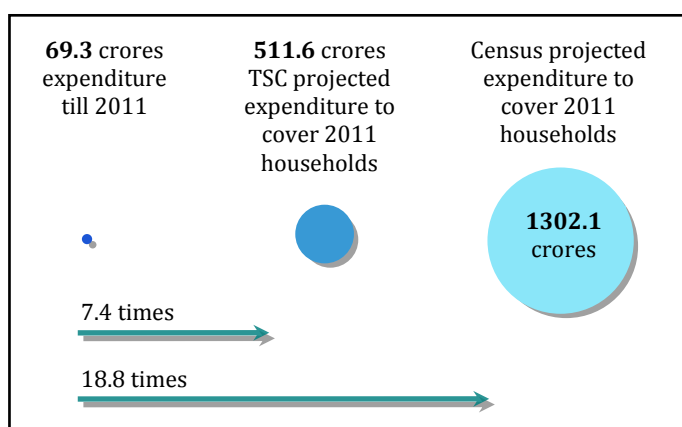
According to census data, **56.1** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

The 2011 census indicates an increase in rural households by 21 percent, from **24.54** lakhs in 2001 to **29.66** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **82.8** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **18.8** times the amount spent from 1999 till 2011 (Rs **69.3** crores). According to TSC Actual data, it is **7.4** times.

Assuming the same rate of population growth, by 2022 there will be **36.53** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

1. Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
2. TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
3. TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
4. Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
5. Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
6. Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
7. The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
8. Expenditure includes centre, state and beneficiary contribution.

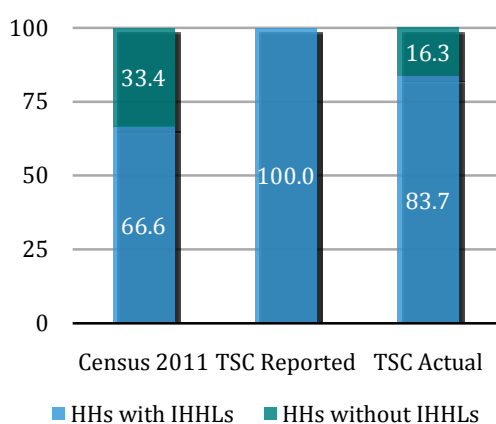
Himachal Pradesh

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households toilets between Census and rural sanitation scheme (TSC) was **0.0019** lakhs. In 2011, the difference had grown to **4.38** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	7.94	7.93	0.0019
2011	4.38	0.00	4.38

Percentage of HHs with access to toilets in 2011



According to census data, **66.6** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

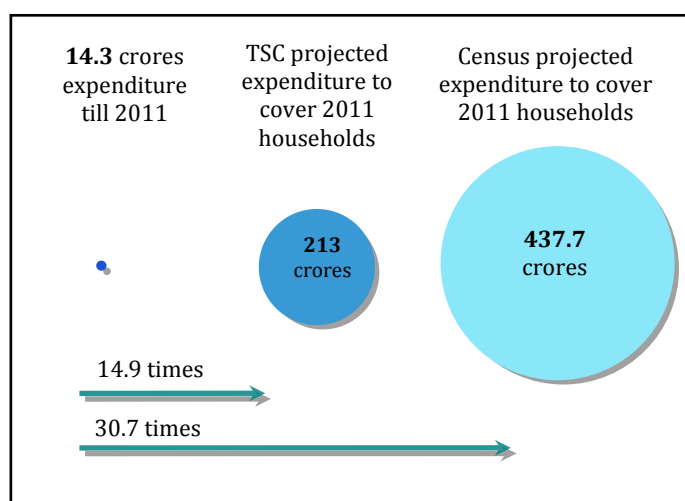
The 2011 census indicates an increase in rural households by 19 percent, from **10.98** lakhs in 2001 to **13.11** lakhs in 2011.

However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **83.7** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **30.7** times the amount spent from 1999 till 2011 (Rs **14.3** crores). According to TSC Actual data, it is **14.9** times.

Assuming the same rate of population growth, by 2022 there will be **15.93** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Jammu & Kashmir

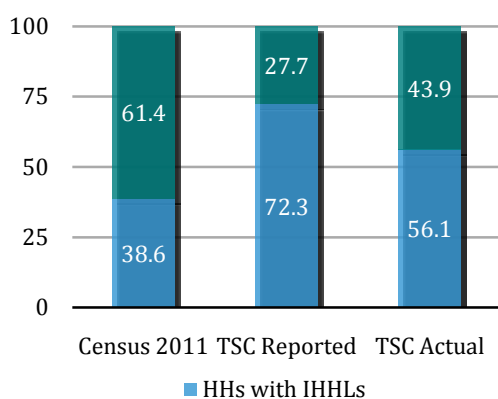
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.0001)** lakhs, with Census reporting marginally less households without toilets. In 2011, Census numbers had increased significantly and it reported **5.98** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	6.7591	6.7592	(0.0001)*
2011	9.20	3.22	5.98

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with access to toilets in 2011



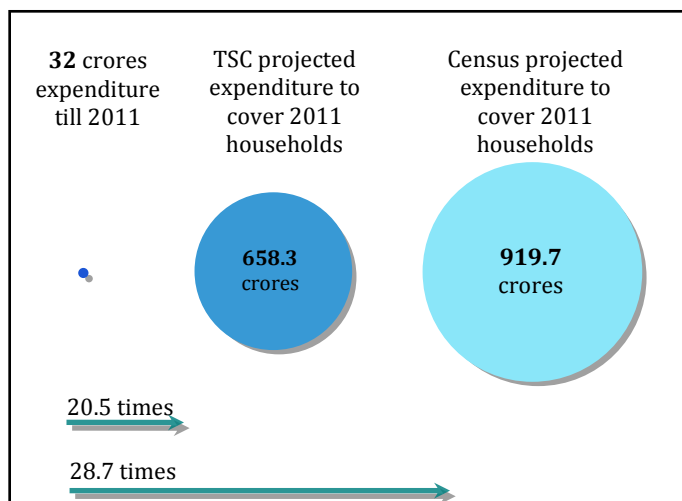
According to census data, only **38.6** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **72.3** percent.

The 2011 census indicates an increase in rural households by **29** percent, from **11.61** lakhs in 2001 to **14.98** lakhs in 2011.. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **56.1** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **28.7** times the amount spent from 1999 till 2011 (Rs **32** crores). According to TSC Actual data, it is **20.5** times.

Assuming the same rate of population growth, by 2022 there will be **19.82** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

1. Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
2. TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
3. TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
4. Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
5. Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
6. Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
7. The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
8. Expenditure includes centre, state and beneficiary contribution.

Jharkhand

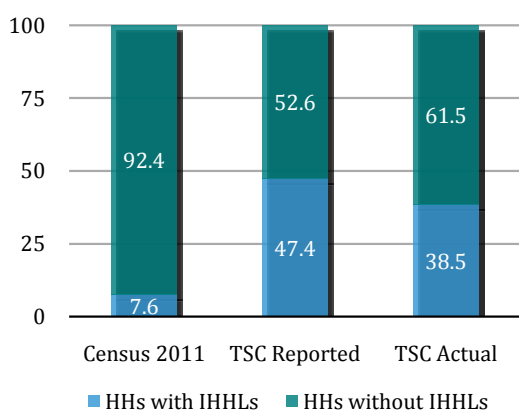
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.011)** lakhs, with Census reporting marginally less households without toilets. In 2011, Census numbers increased significantly and it reported **23.3** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	35.51	35.53	(0.011)*
2011	43.30	19.99	23.3

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with access to toilets in 2011



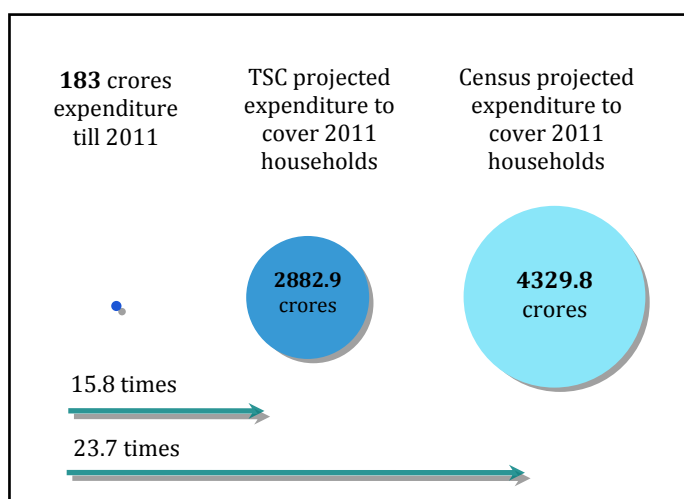
According to census data, only **7.6** percent of rural households had access to toilets in 2011. According to TSC achievement is **47.4** percent.

The 2011 census indicates an increase in rural households by **23** percent, from **38.02** lakhs in 2001 to **46.86** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **38.5** percent.

How much more money needs to be spent to achieve total sanitation by 2011 households numbers?

According to the Census, the required expenditure is **23.7** times the amount spent from 1999 till 2011 (Rs **183** crores). According to TSC Actual data, it is **15.8** times.

Assuming the same rate of population growth, by 2022 there will be **58.97** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Karnataka

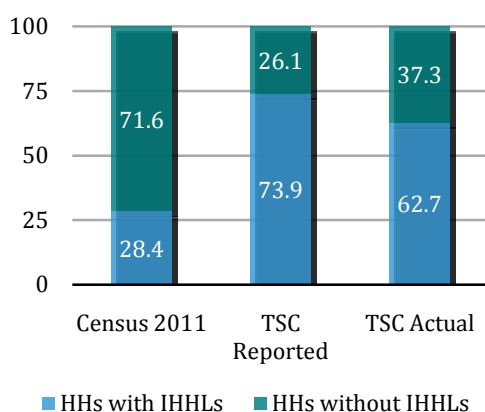
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.002)** lakhs, with Census having marginally less households without toilets. In 2011, Census numbers increased significantly and it reported **38.88** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	55.137	55.139	(0.002)*
2011	56.31	17.43	38.88

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with access to toilets in 2011



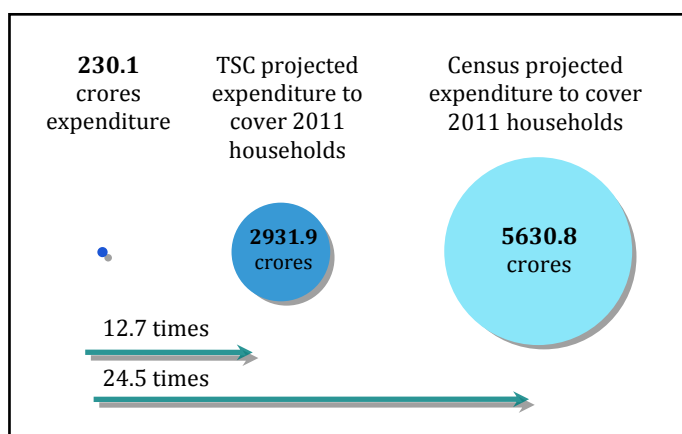
According to census data, only **28.4** percent of rural households had access to IHHLs in 2011. According to TSC the number is considerably larger: **73.9** percent.

The 2011 census indicates an increase in rural households by **18** percent from **66.75** lakhs in 2001 to **78.64** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **62.7** percent.

How much more money needs to be spent to achieve total sanitation by 2011 household numbers?

According to the Census, the required expenditure is **24.5** times the amount spent from 1999 till 2011 (Rs **230.1** crores). According to TSC Actual data, it is **12.7** times.

Assuming the same rate of population growth, by 2022 there will be **94.18** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

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- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
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- Expenditure includes Centre, State and Beneficiary contribution.

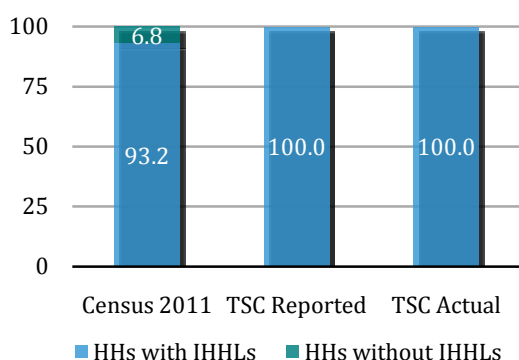
Kerala

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.017** lakhs. In 2011, the difference had grown to **2.79** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	9.24	9.23	0.017
2011	2.79	0.00	2.79

Percentage of HHs with access to toilets in 2011



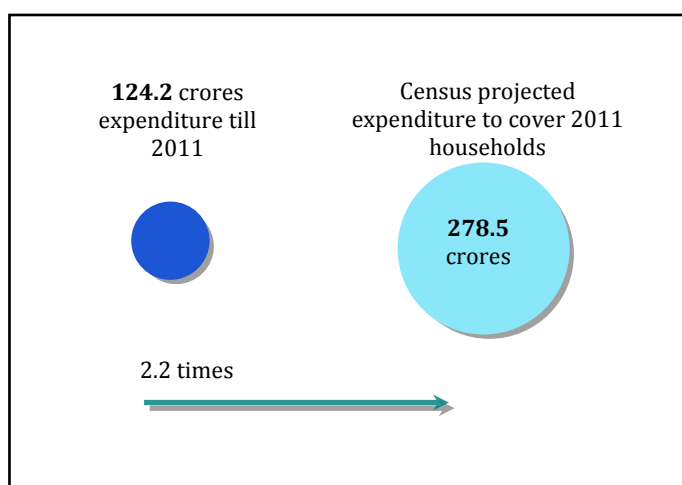
According to census data, **93.2** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

The number of rural households in Kerala fell by **17** percent, from **49.43** lakhs in 2001 to **40.96** lakhs in 2011. This is one reason why TSC's physical achievement exceeds the total number of households.

How much more money needs to be spent to achieve total sanitation by 2011 households numbers?

According to the Census, the required expenditure is **2.2** times the amount spent from 1999 till 2011 (Rs **124.2** crores). According to TSC data the target has been met.

It is important to note that Kerala's IHHL coverage in 2001 was already up to **81.3** percent. Assuming the same rate of population growth, by 2022 there will be **33.31** lakh rural households. The scheme will need to acknowledge population trends and revise project objectives accordingly.



NOTES:

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- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

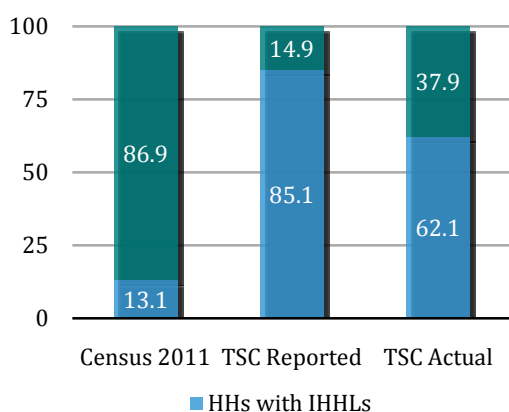
Madhya Pradesh

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.031** lakhs. In 2011, the difference had grown to **84.52** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	74.02	73.99	0.031
2011	96.65	12.13	84.52

Percentage of HHs with access to toilets in 2011



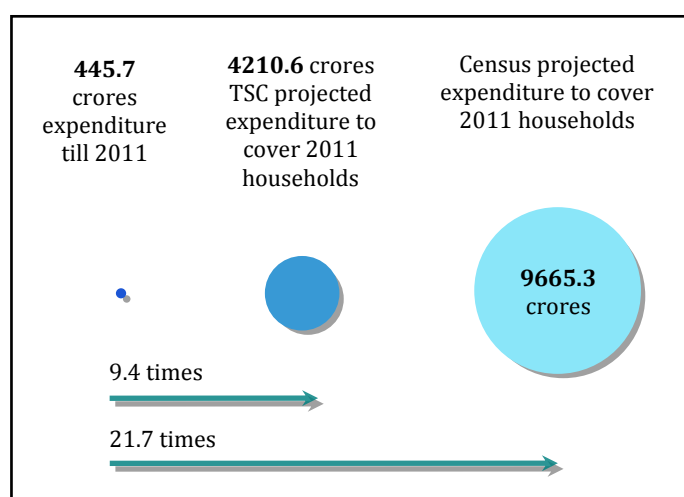
According to census data, only **13.1** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **85.1** percent.

The 2011 census indicates an increase in rural households by **37** percent, from **81.25** lakhs in 2001 to **111.22** lakhs in 2011.. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **62.1** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **21.7** times the amount spent from 1999 till 2011 (Rs **445.7** crores). According to TSC Actual data, it is **9.4** times.

Assuming the same rate of population growth, by 2022 there will be **157.12** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

1. Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
2. TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
3. TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
4. Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
5. Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
6. Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
7. The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
8. Expenditure includes centre, state and beneficiary contribution.

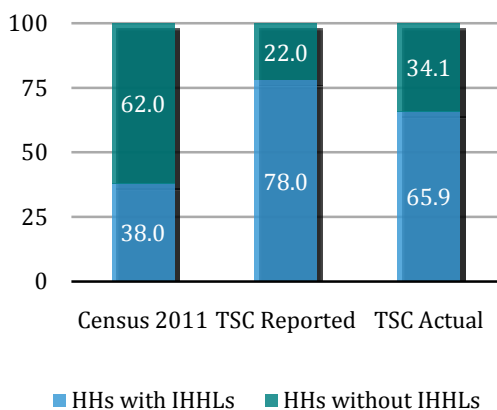
Maharashtra

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.011** lakhs. In 2011, the difference had grown to **56.51** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	89.93	89.92	0.011
2011	80.70	24.19	56.51

Percentage of HHs with access to toilets in 2011



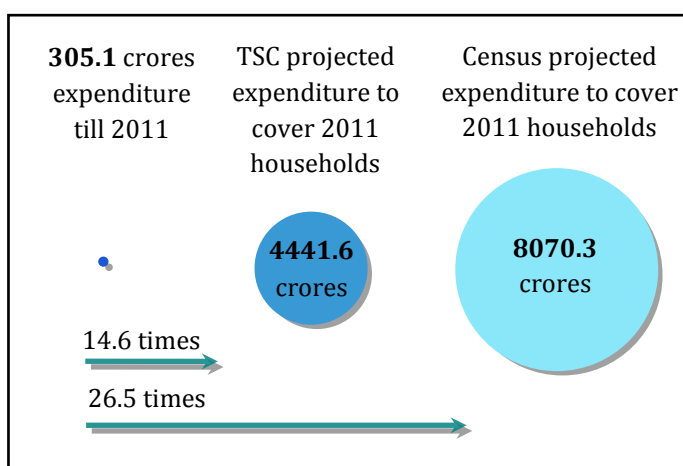
According to census data, only **38** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **78** percent.

The 2011 census indicates an increase in rural households by **18** percent, from **109.94** lakhs in 2001 to **130.17** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **65.9** percent.

How much more money needs to be spent to achieve total sanitation by 2011 household numbers?

According to the Census, the required expenditure is **26.5** times the amount spent from 1999 till 2011 (Rs **305.1** crores). According to TSC Actual data, it is **14.6** times.

Assuming the same rate of population growth, by 2022 there will be **156.74** lakh rural households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

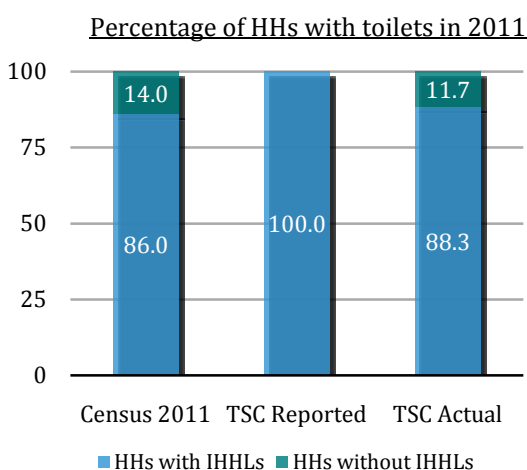
Manipur

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.0001)** lakhs, with Census reporting marginally less number of households without toilets. In 2011, the difference between Census and TSC had grown significantly with Census reporting **0.470** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	0.6668	0.6669	(0.0001)*
2011	0.47	0.0	0.470

* TSC reported greater households without toilets in 2001 than Census



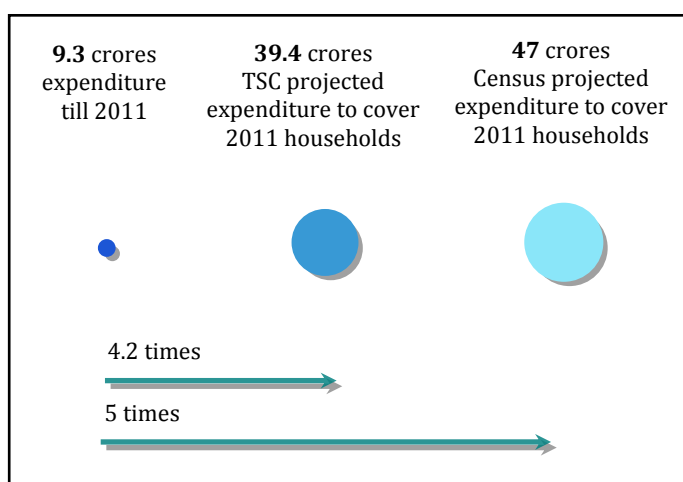
According to census data, only **86** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

The 2011 census indicates an increase of **13** percent in rural households from **2.96** lakhs in 2001 to **3.36** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **88.3** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **5** times the amount spent from 1999 till 2011 (Rs **9.3** crores). According to TSC Actual data, it is **4.2** times.

Assuming the same rate of population growth, by 2022 there will be **3.85** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

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- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Meghalaya

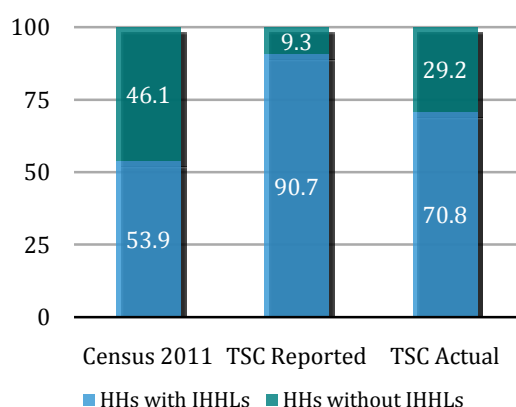
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.00002)** lakhs, with Census reporting marginally less households without toilets. In 2011, Census reported **1.638** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	1.97477	1.97479	(0.00002)*
2011	1.95	0.31	1.638

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with toilets in 2011



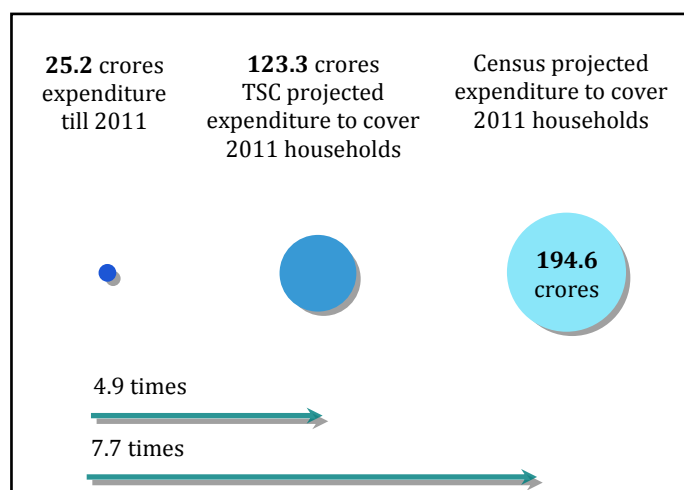
According to census data, only **53.9** percent of rural households had access to toilets in 2011. According to TSC achievement is **90.7** percent.

The 2011 census indicates an increase of **28** percent in rural households from **3.30** lakhs in 2001 to **4.22** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **70.8** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **7.7** times the amount spent from 1999 till 2011 (Rs **25.2** crores). According to TSC Actual data, it is **4.9** times.

Assuming the same rate of population growth, by 2022 there will be **5.54** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

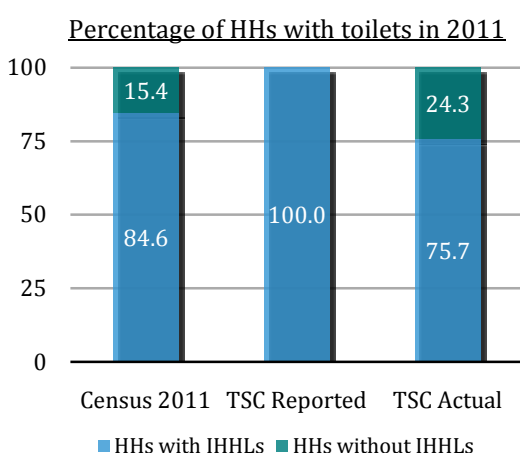
- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Mizoram

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.0003** lakhs. In 2011, the difference had grown to **0.16** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	0.1611	0.1607	0.0003
2011	0.16	0.00	0.16



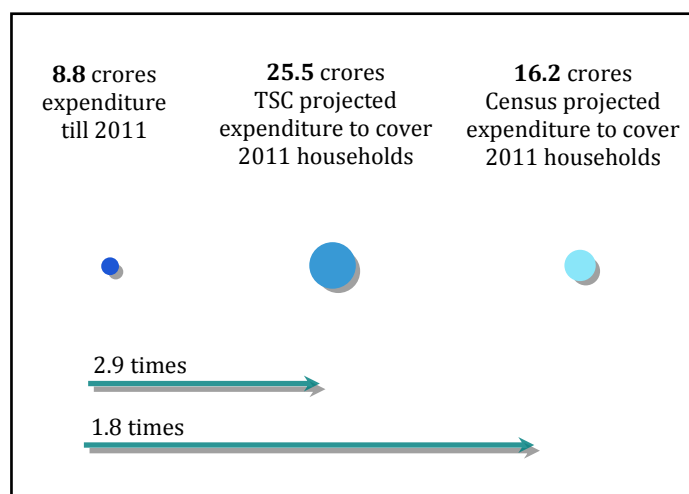
According to census data, only **84.6** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

The 2011 census indicates an increase of **32** percent in rural households from **0.79** lakhs in 2001 to **1.05** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **75.7** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **1.8** times the amount spent from 1999 till 2011 (Rs **8.8** crores). According to TSC Actual data, it is **2.9** times.

Assuming the same rate of population growth, by 2022 there will be **1.43** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

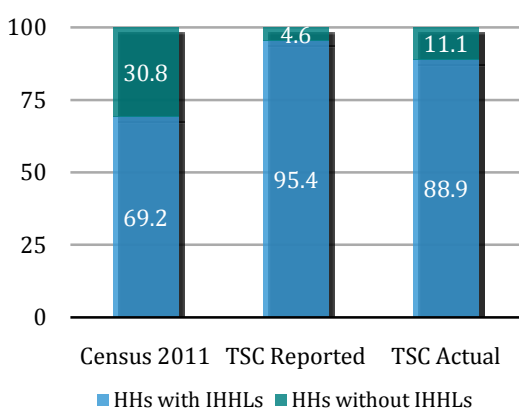
Nagaland

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.001** lakhs. In 2011, the difference had grown to **0.76** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	0.939	0.938	0.001
2011	0.88	0.12	0.76

Percentage of HHs with toilets in 2011



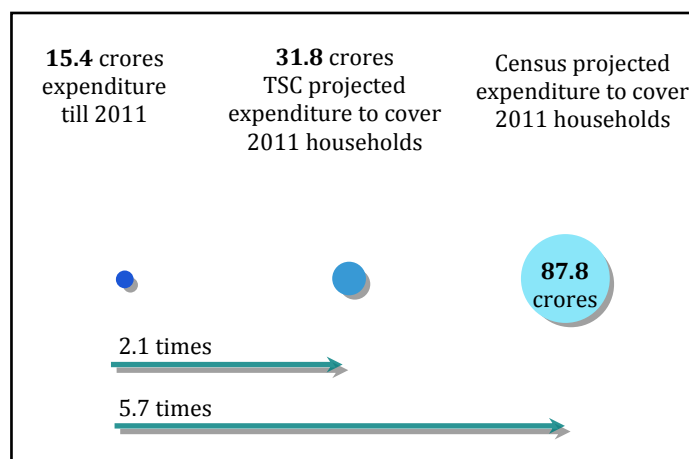
According to census data, only **69.2** percent of rural households had access to toilets in 2011. According to TSC achievement is considerably larger: **95.4** percent.

The 2011 census indicates an increase of **7** percent in rural households from **2.65** lakhs in 2001 to **2.85** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **88.9** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **5.7** times the amount spent from 1999 till 2011 (Rs **15.4** crores). According to TSC Actual data, it is **2.1** times.

Assuming the same rate of population growth, by 2022 there will be **3.08** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

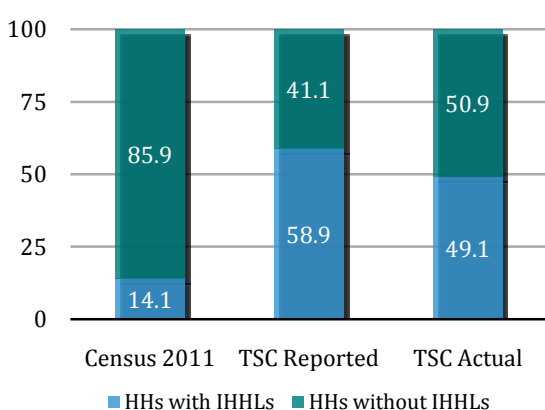
Odisha

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.009** lakhs. In 2011, the difference had grown to **42.09** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	62.61	62.60	0.009
2011	69.96	27.87	42.09

Percentage of HHs with toilets in 2011



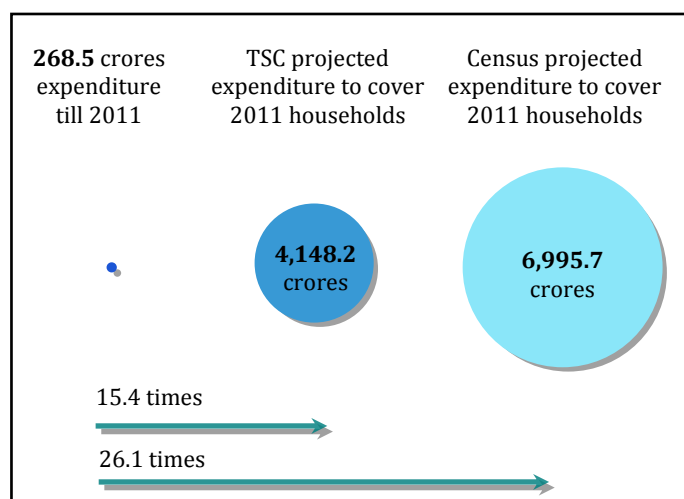
According to census data, only **14.1** percent of rural households had access to toilets in 2011. According to TSC achievement is considerably larger: **58.9** percent.

The 2011 census indicates an increase of **20** percent in rural households from **67.83** lakhs in 2001 to **81.44** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **49.1** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **26.1** times the amount spent from 1999 till 2011 (Rs **268.5** crores). According to TSC Actual data, it is **15.4** times.

Assuming the same rate of population growth, by 2022 there will be **99.59** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

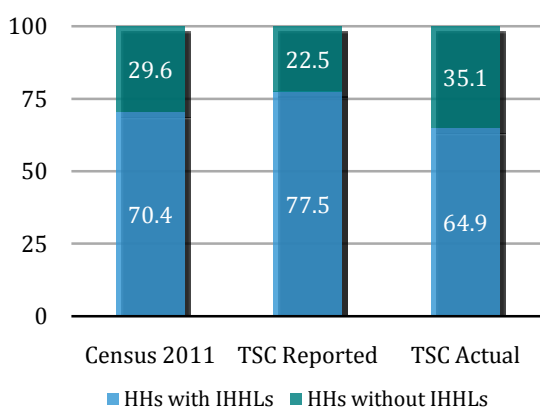
Punjab

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.0036** lakhs. In 2011, the difference had grown to **3.57** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	16.403	16.399	0.0036
2011	9.81	6.24	3.57

Percentage of HHs with toilets in 2011



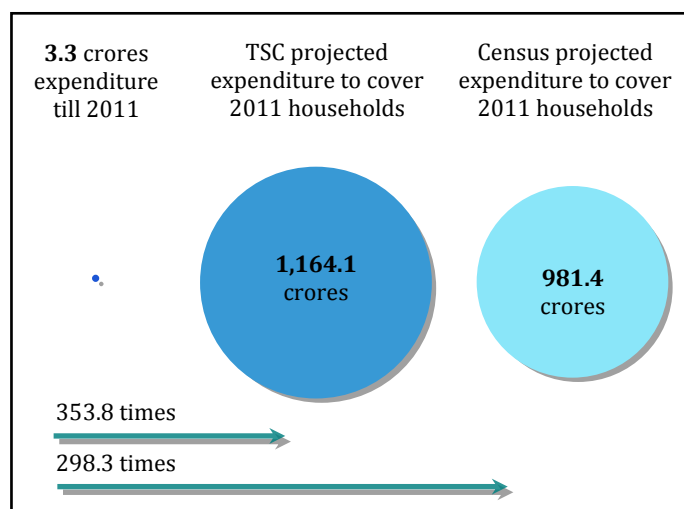
According to census data, only **70.4** percent of rural households had access to toilets in 2011. According to TSC achievement is **77.5** percent.

The 2011 census indicates an increase of **19** percent in rural households from **27.75** lakhs in 2001 to **33.16** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **64.9** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **298.3** times the amount spent from 1999 till 2011 (Rs **3.3** crores). According to TSC Actual data, it is **353.8** times.

Assuming the same rate of population growth, by 2022 there will be **40.32** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

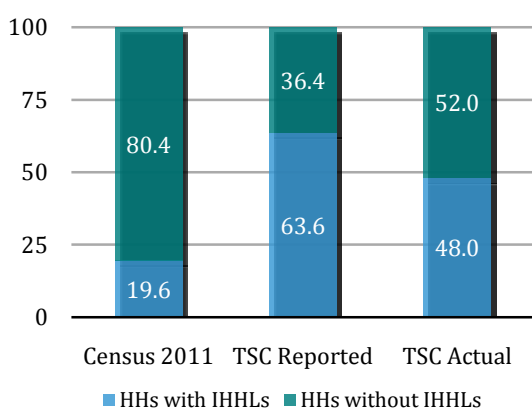
Rajasthan

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.005** lakhs. In 2011, the difference had grown to **50.27** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	61.12	61.11	0.005
2011	76.30	26.03	50.27

Percentage of HHs with toilets in 2011



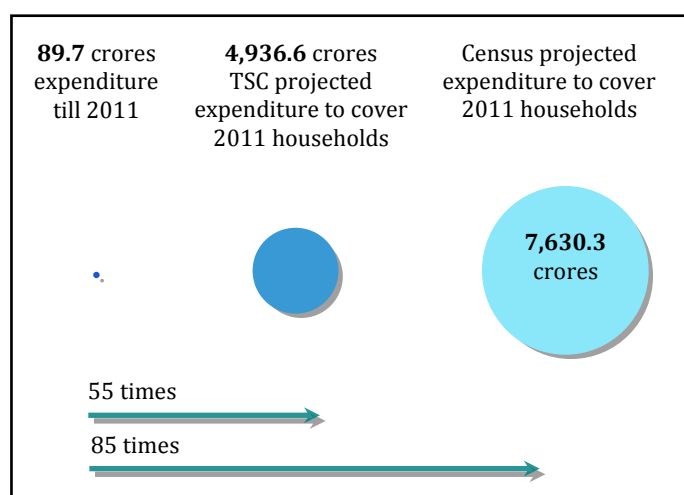
According to census data, only **19.6** percent of rural households had access to toilets in 2011. According to TSC achievement is considerably larger: **63.6** percent.

The 2011 census indicates an increase of **33** percent in rural households from **71.57** lakhs in 2001 to **94.90** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **48** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **85** times the amount spent from 1999 till 2011 (Rs **89.7** crores). According to TSC Actual data, it is 55 times.

Assuming the same rate of population growth, by 2022 there will be **129.45** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Sikkim

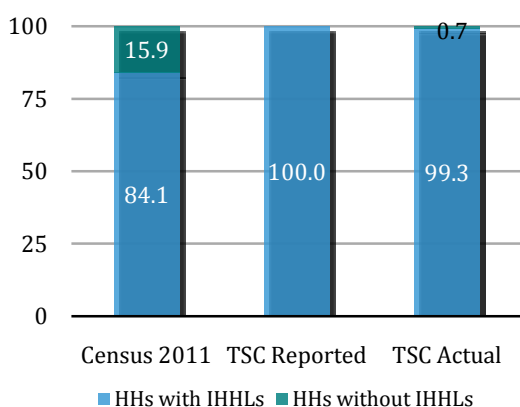
Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.0005)** lakhs, with Census reporting marginally less household without toilets. In 2011, Census reported **0.15** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	0.3724	0.3729	(0.0005)*
2011	0.15	0.00	0.15

* TSC reported greater households without toilets in 2001 than Census

Percentage of HHs with toilets in 2011



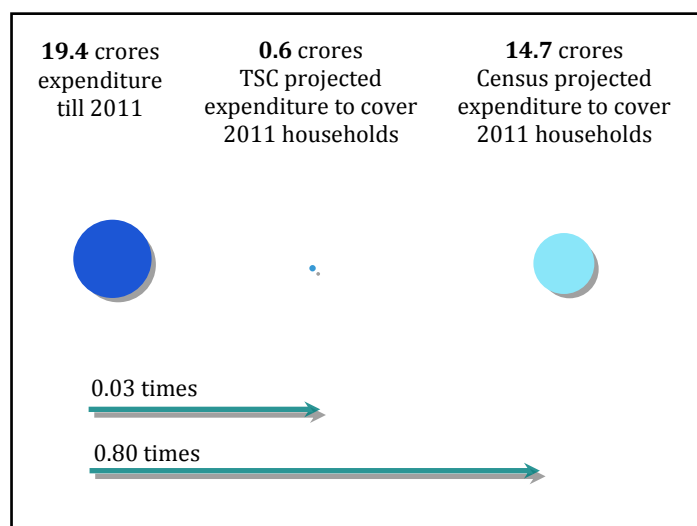
According to census data, only **84.1** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

The 2011 census indicates an increase of **1** percent in rural households from **0.917** lakhs in 2001 to **0.924** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **99.3** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **0.8** times the amount spent from 1999 till 2011 (Rs **19.4** crores). According to TSC Actual data, it is **0.03** times.

Assuming the same rate of population growth, by 2022 there will be **0.93** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

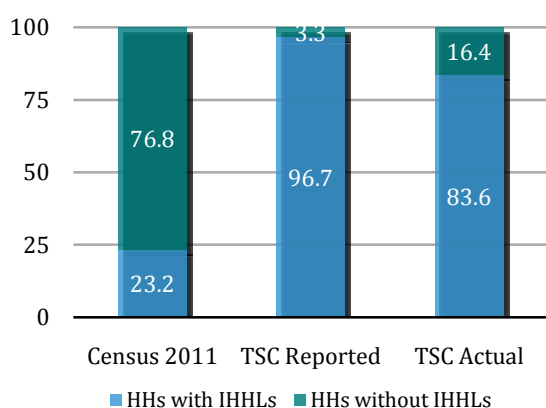
Tamil Nadu

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **(0.03)** lakhs, with Census reporting marginally less households without toilets. In 2011, Census reported **70.69** lakhs more households without toilets than TSC.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	70.83	70.87	(0.03)*
2011	73.45	2.76	70.69

Percentage of HHs with access to sanitation in 2011



* TSC reported greater households without toilets in 2001 than Census

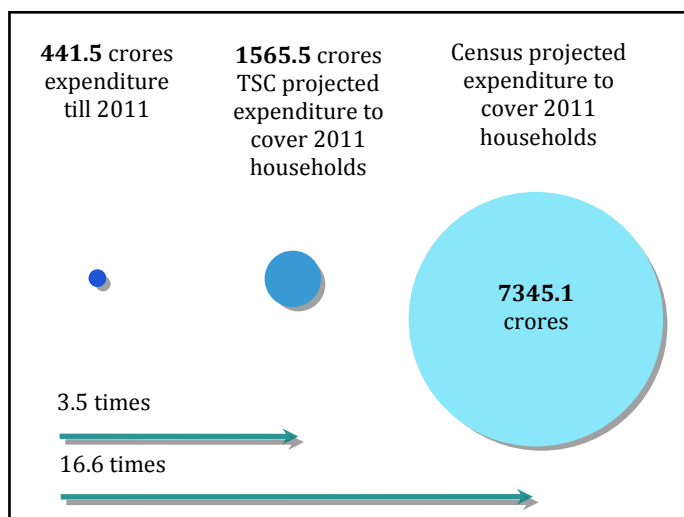
According to census data, only **23.2** percent of rural households had access to toilets in 2011. According to TSC the number is considerably larger: **96.7** percent.

The 2011 census indicates an increase of **16** percent in rural households from **82.75** lakhs in 2001 to **95.64** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **83.6** percent.

How much more money needs to be spent to achieve total sanitation for 2011 households?

According to the Census, the required expenditure is 16.6 times the amount spent from 1999 till 2011 (Rs 441.5 crores). According to TSC Actual data, it is 3.5 times.

Assuming the same rate of population growth, by 2022 there will be **112.15** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

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- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
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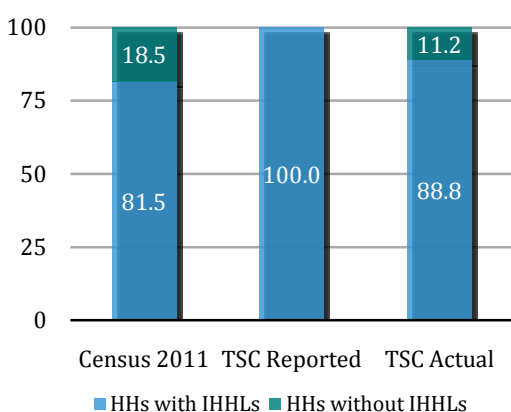
Tripura

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.001** lakhs. In 2011, the difference had grown to **1.12** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	1.193	1.192	0.001
2011	1.12	0.00	1.12

Percentage of HHs with toilets in 2011



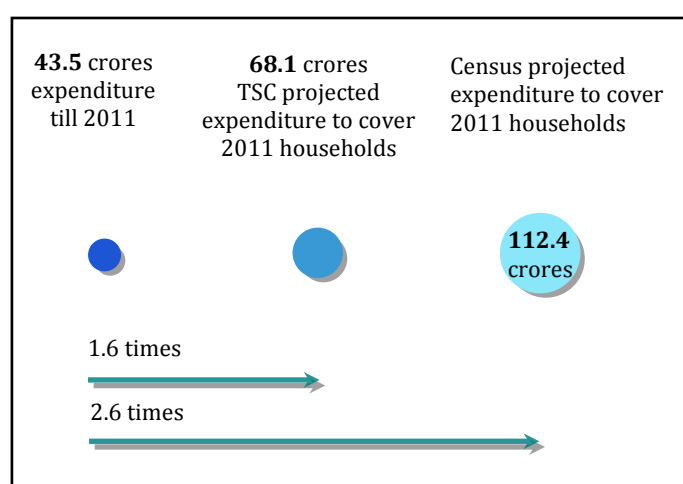
According to census data, only **81.5** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

The 2011 census indicates an increase of **13** percent in rural households from **5.40** lakhs in 2001 to **6.08** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **88.8** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **2.6** times the amount spent from 1999 till 2011 (Rs **43.5** crores). According to TSC Actual data, it is **1.6** times.

Assuming the same rate of population growth, by 2022 there will be **6.93** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

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- Expenditure includes centre, state and beneficiary contribution.

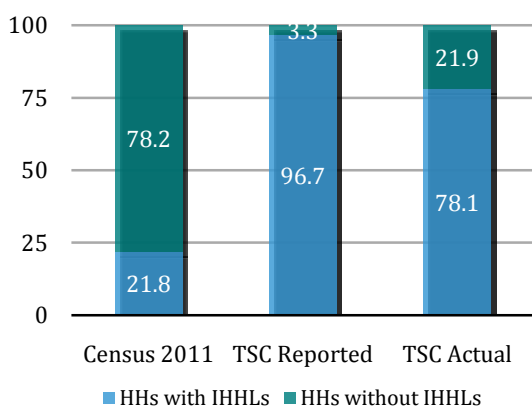
Uttar Pradesh

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.05** lakhs. In 2011, the difference had grown to **192.4** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	166.37	166.32	0.05
2011	199.22	6.82	192.40

Percentage of HHs with toilets in 2011



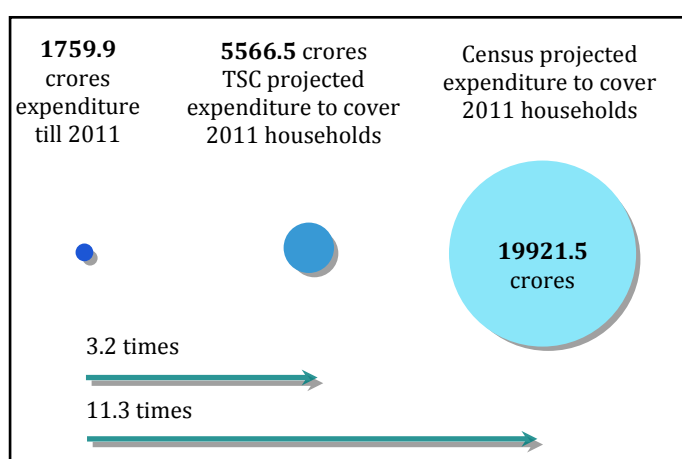
According to census data, only **21.8** percent of rural households had access to toilets in 2011. According to TSC achievement is considerably larger: **96.7** percent.

The 2011 census indicates an increase of **24** percent in rural households from **205.90** lakhs in 2001 to **254.75** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **78.1** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **11.3** times the amount spent from 1999 till 2011 (Rs **1759.9** crores). According to TSC Actual data, it is **3.2** times.

Assuming the same rate of population growth, by 2022 there will be **321.97** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
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- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

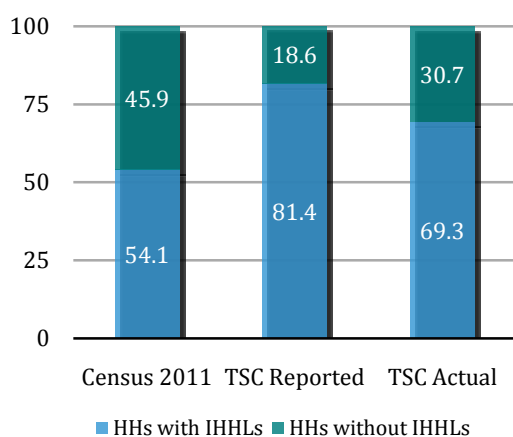
Uttarakhand

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.0001** lakhs. In 2011, the difference had grown to **4.22** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	8.1817	8.1816	0.0001
2011	6.45	2.22	4.22

Percentage of HHs with toilets in 2011



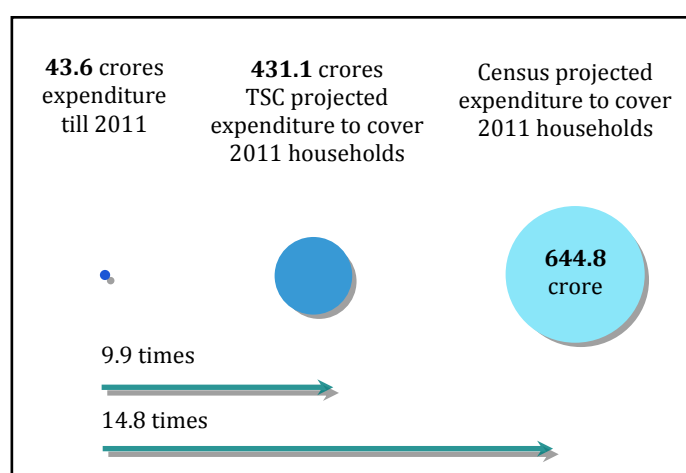
According to census data, only **54.1** percent of rural households had access to toilets in 2011. According to TSC achievement is **81.4** percent.

The 2011 census indicates an increase of **17** percent in rural households from **11.96** lakhs in 2001 to **14.05** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers are used to calculate achievement (TSC Actual), TSC's total achievement falls to **69.3** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **14.8** times the amount spent from 1999 till 2011 (Rs **43.6** crores). According to TSC Actual data, it is **9.9** times.

Assuming the same rate of population growth, by 2022 there will be **16.77** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

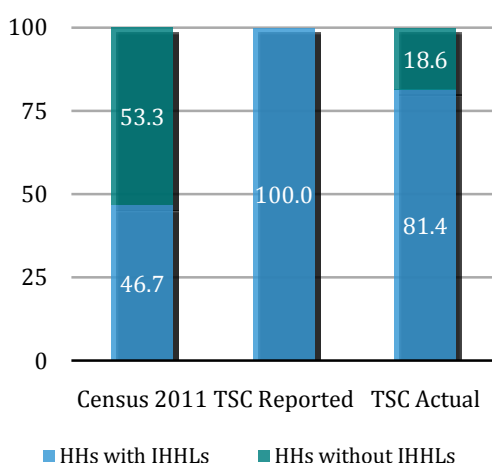
West Bengal

Comparing Census and rural sanitation scheme (TSC) data

In 2001, the difference in the number of households without toilets between Census and rural sanitation scheme (TSC) was **0.03** lakhs. In 2011, the difference had grown to **73.11** lakhs.

Total Households without toilets			
Year	Census (in lakhs)	TSC (in lakhs)	Difference between Census and TSC (in lakhs)
2001	81.59	81.56	0.03
2011	73.11	0.00	73.11

Percentage of HHs with toilets in 2011



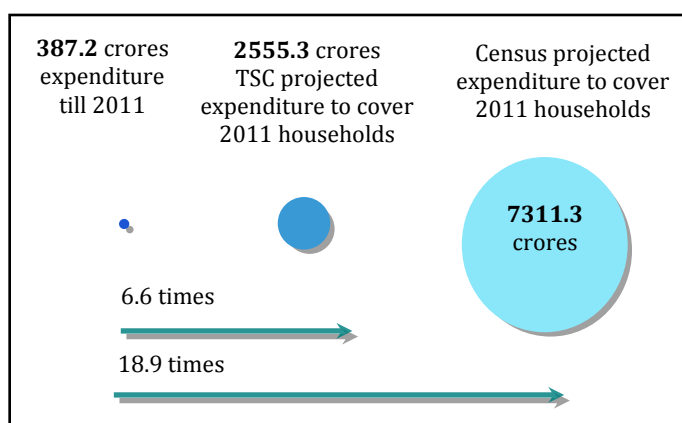
According to census data, only **46.7** percent of rural households had access to toilets in 2011. According to TSC achievement is a **100** percent.

The 2011 census indicates an increase of **23** percent in rural households from **111.62** lakhs in 2001 to **137.17** lakhs in 2011. However, TSC has kept this figure constant at 2001 numbers. Thus, when census rural population numbers for 2011 are used to calculate achievement (TSC Actual), TSC's total achievement falls to **81.4** percent.

How much more money needs to be spent to achieve total sanitation for 2011 household numbers?

According to the Census, the required expenditure is **18.9** times the amount spent from 1999 till 2011 (Rs **387.2** crores). According to TSC Actual data, it is **6.6** times.

Assuming the same rate of population growth, by 2022 there will be **172.09** lakh households. The scheme needs to acknowledge population trends and revise project objectives to receive the right amount of incentives.



NOTES:

- Census data is from the Government of India (GOI) census website. <http://www.censusindia.gov.in>
- TSC data is calculated based on datasets available on the GOI NBA website. <http://tsc.gov.in>
- TSC Actual is calculated using TSC Total Physical Achievement numbers till 2011 and the total number of Census households for 2011.
- Interestingly, our figures for TSC Actual closely match with individual states official reports for total sanitation coverage till 2011.
- Total Physical Achievement till 2011 figures for TSC also include IHHLs that already existed in 2001 which inflates achievement levels.
- Sanitation coverage is measured as total IHHLs built between 1999-2011 (including Census), divided by total households in 2001.
- The current unit cost of constructing an IHHL is Rs. 10,000/-. The unit cost has increased considerably between 1999-2011.
- Expenditure includes centre, state and beneficiary contribution.

Annexure

There are five main data sources available on the TSC portal, each with a different figure for sanitation coverage/achievement. The consistency checks done on each of the sources are outlined below:-

a) Project Objective vs Project Achievement ([Link](#))

The TSC website measures achievement based on the number of toilets constructed as a proportion of the project objectives set by the programme. However, there were two problems with this data set.

- First, the numbers are all cumulative and we wanted numbers till 2011 in order to be able to compare it with Census 2011.
- Second, project objectives are based on the APIPs prepared by the state every year. These targets or plans can thus vary every year. For the purpose of this analysis we wanted to compare the proportion of the total rural population with access to sanitation facilities.

As a result, we could not use this number for the purpose of the comparison.

b) State-wise Basic Information ([Link](#))

The first mention of Census in the TSC portal is available in this sheet. In fact, the state-wise basic information sheet has done also calculations of achievement using a projection for rural households in 2011. However, we couldn't use these number directly as they are cumulative and not till 2011. We thus needed to find a number comparable to the figures of achievement given in this sheet.

c) Physical achievement in a time period ([Link](#))

The datasheet has state-wise figures for toilets constructed in different time periods. However, comparison of household toilets constructed from 1999-2011 did not match those calculated from the *State-wise Basic Information sheet*. One of the main reasons for this was the sheet does not account for the number of household already having toilets as per Census 2001. In order to test this hypothesis we compared the sum of households having toilets in Census 2001 with the number of toilets built by TSC between 1999-2001 with TSC's achievement rate as given in the *State-wise Basic Information*. The numbers were very similar with an overall difference of only 2 percent. One problem with adding Census 2001 numbers could be a double counting of toilets built between 1999-2001. In order to check for this, we looked at the data for both time periods: from 1999-2011 as well as from 2001-2011. We found that the numbers were exactly the same indicating that TSC did not build any toilets during

the first two years of the programme.

d) Percentage physical achievement including Census ([Link](#))

The sheet gives year-wise achievement including the number of toilets existing as per Census 2001. The proportions of physical achievement mentioned in this sheet exactly matched those available in the *State-wise basic information sheet*. We have thus used the achievement proportions mentioned in this sheet, to calculate the number of toilets actually constructed. As mentioned earlier, we have restricted the achievement to that in financial year 2010-11 to make it comparable with Census 2011.