

Demand for Grants 2018-19 Analysis

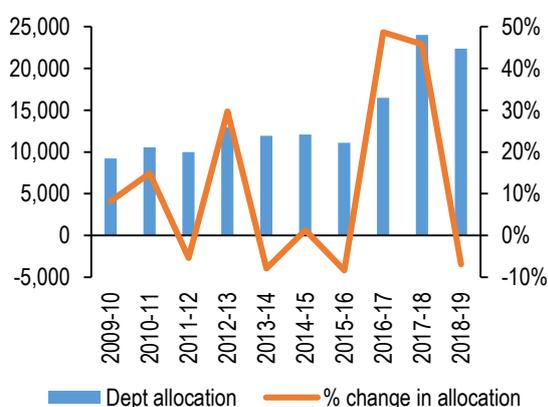
Drinking Water and Sanitation

The Ministry of Drinking Water and Sanitation is the nodal agency responsible for policy planning, funding and coordination of programs for safe drinking water and sanitation in rural areas. The Ministry was previously a department under the Ministry of Rural Development, and was made an independent Ministry in 2011.

Overview of finances

In Union Budget 2018-19, the Ministry has been allocated Rs 22,357 crore. This is a decrease of Rs 1,654 crore (7%) over the revised estimates of 2017-18.

Figure 1: Expenditure over the years (Rs crore)



Note: Values for 2017-18 are revised estimates and 2018-19 are budget estimates.
Sources: Union Budgets 2009-10 to 2018-19; PRS.

Over the past ten years, the allocation to the Ministry of Drinking Water and Sanitation has seen an annual average increase of 9%. The Ministry saw the highest increase of 49% in 2016-17, over the previous year. This year the estimated expenditure has seen a decrease of 7%, over the revised expenditure estimates of 2017-18. Figure 1 shows these trends.

Table 1 provides the budgetary allocation trends to the two major schemes, the National Rural Drinking Water Program (NRDWP), and the Swachh Bharat Mission-Gramin (SBM-G) of the Ministry of Drinking Water and Sanitation in the last three years.

SBM-G has seen a decrease 9.5% in its allocation in 2018-19, over the revised estimates of 2017-18. NRDWP has seen a decrease of 0.7% in its allocation in 2018-19, over the revised estimates of 2017-18. The total budget of the Ministry has seen a decrease of 7% this year.

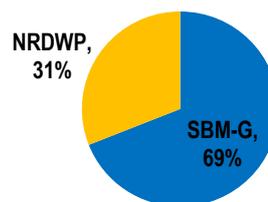
Table 1: Budgetary allocation to the Ministry of Drinking Water and Sanitation (Rs crore)

Major head	Actual 16-17	Revised 17-18	Budgeted 18-19	% change
SBM-G	10,484	16,948	15,343	-9.5%
NRDWP	5,980	7,050	7,000	-0.7%
Secretariat	12	13	14	7.7%
Total	16,476	24,011	22,357	-6.9%

Sources: Demands for Grants 2018-19, Ministry of Drinking Water and Sanitation; PRS.

Figure 2 represents the key expenditure heads of the Ministry. In 2018-19, 69% of the Ministry's expenditure is estimated to be spent on SBM-G and 31% on NRDWP.

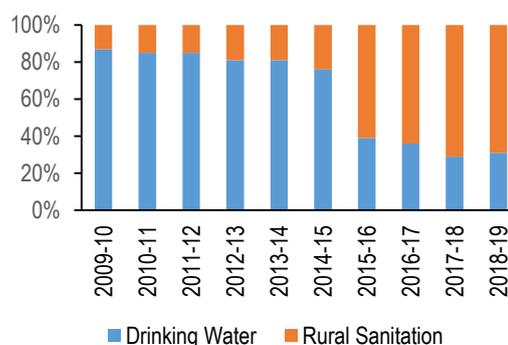
Figure 2: Top expenditure heads in 2018-19, as a percentage of total ministry allocation



Sources: Demands for Grants 2018-19, Ministry of Drinking Water and Sanitation; PRS.

In the last ten years, the allocation to rural sanitation and drinking water programs under the Ministry's budget has seen a shift. While the allocation to drinking water has reduced from 87% in 2009-10 to 31% in 2018-19, the allocation to rural sanitation has increased from 13% in 2009-10 to 69% in 2018-19.

Figure 3: Budget allocation over the years (Rs crore)



Note: Values for 2017-18 are revised estimates and 2018-19 are budget estimates.

Sources: Union Budgets 2009-10 to 2018-19; PRS.

Financial allocations to outcomes

In this section, we discuss issues regarding the implementation of the SBM-G and NRDWP.

Swachh Bharat Mission- Gramin

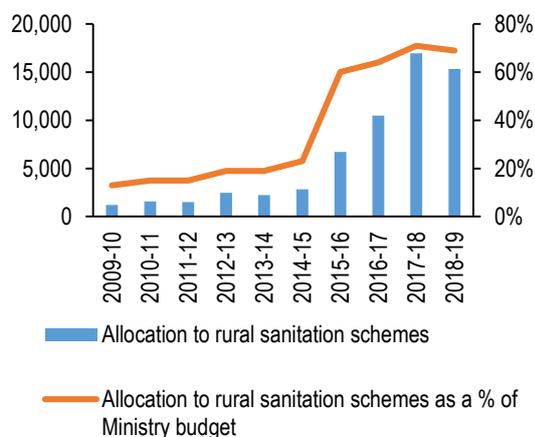
The Swachh Bharat Mission was launched on October 2, 2014 with an aim to achieve universal sanitation coverage, improve cleanliness and eliminate open defecation in the country by October 2, 2019. The Swachh Bharat Mission-Gramin (SBM-G) is the rural component of the program.

SBM-G was previously referred to as the Nirmal Bharat Abhiyan or the Total Sanitation Campaign.

In 2018-19, it has been allocated Rs 15,343 crore, which is a decrease of 9.5% from the revised estimates of 2017-18.

In 2017-18, the scheme was allocated Rs 13,948 crore, which was increased to Rs 16,948 crore at the revised estimates stage. This implies that the revised estimates overshoot the budget estimates. Figure 3 shows the expenditure on rural sanitation by the Ministry over the years.

Figure 4: Expenditure on rural sanitation scheme (Rs crore)



Note: Values for 2017-18 and 2018-19 are revised estimates and budget estimates respectively.

Sources: Union Budgets 2009-10 to 2018-19; PRS.

Allocation to SBM-G has seen an increase over the years. The rural and urban component of the scheme together got the seventh highest allocation among all the centrally sponsored schemes in Union Budget 2018-19. However, while the allocation to the rural component witnessed a decline of 9.5%, the urban component saw an increase of 9%.

Note that the total funds allocated to the scheme is low, when compared to other centrally sponsored schemes. Allocation to some other schemes in 2018-19 such as Mahatma Gandhi National Rural Employment Guarantee Scheme is Rs 55,000 crore,

National Health Mission is Rs 30,634 and Sarva Shiksha Abhiyan is Rs 26,129 crore.

The required central government allocation to SBM-G for the five year period from 2014-15 to 2018-19 is Rs 1,00,447 crore.¹ Of this, so far Rs 52,166 (52%) has been allocated to the scheme. This implies that 48% of the funds are still left to be released before October 2019.

Budget estimates versus actual expenditure:

Table 2 shows the trends in allocation and actual expenditure on rural sanitation over the past ten years.

Table 2: Budgeted versus actual expenditure on rural sanitation (Rs crore)

Year	Budgeted	Actuals	% of Budgeted
2007-08	954	954	100%
2008-09	1,080	1,080	100%
2009-10	1,080	1,200	111%
2010-11	1,580	1,580	100%
2011-12	1,650	1,500	91%
2012-13	3,500	2,474	71%
2013-14	3,834	2,244	59%
2014-15	4,260	2,841	67%
2015-16	3,625	6,703	185%
2016-17	9,000	10,484	116%
2017-18	13,948	16,948	122%

Note: The 'utilised' figure for 2017-18 is the revised estimate. Sources: Union Budgets 2007-08 to 2017-18; PRS.

Note that in the past three years, actual expenditure on SBM-G has overshoot the budget estimates significantly. In 2016-17, it was 116% and is expected to be 122% in 2017-18. This implies lack of adequate budgeting and planning in implementation of the scheme.

Construction of Individual Household Latrines (IHHLs):

For construction of IHHLs, the funds are shared between the centre and the state in the ratio of 60:40. Under SBM-G, the cost for constructing a household toilet has been increased from Rs 10,000 to Rs 12,000. Construction of IHHLs account for the largest share of total expenditure under the scheme. In 2014-15, it was 91%, and has been increased to 97% and 98% in 2015-16 and 2016-17, respectively. In 2017-18, 98% of total expenditure has been on construction of IHHLs.

Table 3 shows the construction of IHHLs since the inception of the scheme. Although the number of toilets constructed each year has increased, a yearly % change indicates that the pace of construction of toilets has come down. The increase in constructed toilets was 156% in 2015-16 over the previous year. However, this reduced to 4% in 2017-18.

Table 3: Toilets constructed since the inception of the scheme

Year	Toilets Constructed	Yearly % change
2014-15	49,00,425	-
2015-16	1,25,64,312	156%
2016-17	2,18,27,531	74%
2017-18	2,26,92,777	4%

Note: Data for 2017-18 is updated till February 19, 2018.
Sources: Management Information System Reports of SBM; PRS.

As on February 2018, 78.8% of households in India have a toilet.² This implies that in the next 20 months (till October 2019), 21.2% of houses will have to be provided with toilets.

Open Defecation Free (ODF) villages: Under SBM-G, a village is ODF when: (i) there are no visible faeces in the village, and (ii) every household as well as public/community institution uses safe technology options for faecal disposal.³

After a village declares itself ODF, states are required to carry out verification of the ODF status of such a village. Since sanitation is a state subject, the Ministry has set some broad guidelines for ODF verification. This includes indicators that are in accordance with the ODF verification definition, such as access to a toilet facility and its usage, and safe disposal of faecal matter through septic tanks.³ Note that according to the National Family Health Survey-4, only 37% of households in rural areas are using improved sanitation facility.⁴ Such a facility implies that toilets have a faecal disposal system that could include flush to piped sewer system, or flush to septic tank, or flush to pit latrine, and is not shared with any other household.

Table 4 presents data on the differences between villages that have declared themselves ODF free and that are verified ODF.

Table 4: ODF villages in the country

Year	Declared ODF	Verified ODF	Verified ODF (%)
2015-16	47,101	44,767	95%
2016-17	1,84,082	1,65,303	90%
2017-18	3,22,546	2,19,979	68%
Total	5,53,729	4,30,049	78%
Total villages (2011)	-	Verified ODF villages	Verified ODF villages (%)
5,93,731	-	4,30,049	72%

Note: Data for 2017-18 is updated till February 19, 2018. Total villages is from Census 2011.
Sources: Management Information System Reports of SBM; PRS.

Note that in 2017-18, number of villages verified as ODF has substantially come down.

Information, Education and Communication (IEC) Activities: 8% of funds earmarked for

SBM-G in a year are to be utilised for IEC activities.⁵ These activities primarily aim to mobilise behavioural change towards the use of toilets among people. However, this has not been met. In 2014-15, Rs 157 crore was spent on such activities, accounting for 4% of the total scheme expenditure. This decreased to 1% in 2015-16 and 2016-17. In 2017-18, Rs 229 crore has been spent, amounting to 2% of total expenditure. Table 5 highlights these trends.

Table 5: SBM-G funds spent on (IEC) Activities (Rs crore)

Year	SBM-G funds spent on IEC activities	SBM-G funds spent on IEC activities (%)
2014-15	157 (4%)	4%
2015-16	147 (1%)	1%
2016-17	124 (1%)	1%
2017-18	229 (2%)	2%

Note: Data for 2017-18 is updated till February 19, 2018.
Sources: Management Information System Reports of SBM; PRS.

National Rural Drinking Water Programme

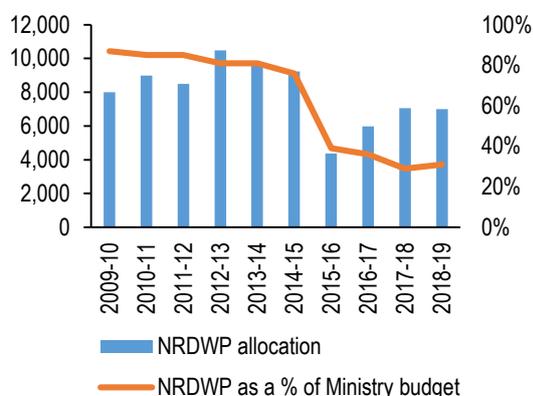
The National Rural Drinking Water Programme (NRDWP) aims at assisting states in providing adequate and safe drinking water to the rural population in the country.⁶ Rural drinking water programs have existed in various forms since 1972-73, starting with the Accelerated Rural Water Supply Programme, followed by a Technology Mission in 1986. Subsequently, the Sector Reform Project was initiated in 1999-2000, with an aim to involve the rural community in planning, implementation and management of drinking water schemes. From 2009, it has been renamed as the National Rural Drinking Water Programme.

Fund sharing pattern: Rural water supply is a state subject. The centre-state fund sharing pattern within the scheme for the components of coverage of habitations, quality of water and operation and maintenance of projects is: (i) 50:50 for all states, and (ii) 90:10 for north-east and Himalayan states. For the components of monitoring and surveillance of water quality, sustainability of water sources, and support activities like awareness generation, the centre-state fund sharing pattern within the scheme is: (i) 60:40 for all states, and (ii) 90:10 for north-east and Himalayan states. The centre funds the scheme entirely for union territories.

NRDWP accounts for 31% of the Ministry's finances this year. In 2018-19 it has been allocated Rs 7,000 crore, which is a decrease of 0.7% from the revised estimates of 2017-18. In 2017-18, the scheme was allocated Rs 6,050 crore, which was increased to Rs 7,050 crore at the revised estimates

stage. This implies that the revised estimates overshoot the budget estimates. Figure 4 shows the expenditure on NRDWP by the Ministry over the years.

Figure 5: Expenditure on NRDWP (Rs crore)



Values for 2017-18 and 2018-19 are revised estimates and budget estimates respectively.

Sources: Union Budgets 2009-10 to 2018-19; PRS.

As can be noted from the figure above, from 2009-10 to 2013-14, the expenditure on NRDWP accounted for about 80%-90% of the Ministry's budget. However, from 2015-16 onwards, the allocation to the scheme has been reduced significantly.

Budgeted versus actual expenditure: Table 6 shows the trends in allocation and actual expenditure on NRDWP over the past ten years. The actual expenditure saw a decline in 2014-15, which could be a reason for the reduction of funds at the budget estimates stage in 2015-16. However, the actual expenditure in 2015-16 was 167% more than the budget estimates. Note that in the past three years, actual expenditure on NRDWP has overshoot the budget estimates significantly.

Table 6: Budgeted versus actual expenditure on NRDWP (Rs crore)

Year	Budgeted	Actuals	% of Budgeted
2007-08	6,606	6,506	98%
2008-09	7,420	7,420	100%
2009-10	8,120	7,996	98%
2010-11	9,000	8,985	100%
2011-12	9,350	8,493	91%
2012-13	10,500	10,489	100%
2013-14	11,426	9,691	85%
2014-15	11,000	9,243	84%
2015-16	2,611	4,369	167%
2016-17	5,000	5,980	120%
2017-18	6,050	7,050	117%

Note: The 'utilised' figure for 2017-18 is the revised estimate. Sources: Union Budgets 2007-08 to 2017-18; PRS.

The Standing Committee examining the scheme had observed that reduction in budget for NRDWP

will affect the coverage and tackling of water quality problems in rural areas.^{7,8}

Target versus achievements: In 2011, the Ministry came out with a strategic plan for the period from 2011-22.⁹ It set out a goal that by 2022, every person in rural areas in the country will have access to 70 Litres Per Capita Per Day (LPCD) of water within their household premises or at a distance of not more than 50 metres. It identified three standards of service:

- Piped water supply with all metered, household connections (designed for 70 LPCD);
- Basic piped water supply with a mix of household connections, public taps and handpumps (designed for 55 LPCD); and
- Handpumps, protected open wells, protected ponds, etc. (designed for 40 LPCD).

The revised guidelines of the NRDWP in 2015 raised the drinking water supply norms from 40 LPCD to 55 LPCD.¹⁰

Table 7 and Table 8 highlights the targets and achievements under the scheme for the past five years. As of August 2017, 96% of rural habitations have access to safe drinking water¹¹. However, in term of coverage, 74% habitations are fully covered, and 22% habitations are partially covered.¹²

The Ministry aims to cover 90% rural households with piped water supply and 80% of rural households with household tap connections by 2022. However, the Estimates Committee in its report in 2015 observed that piped water supply was available to only 47% of rural habitations, out of which only 15% had household tap connections.¹³

Table 7: Target versus achievements of habitations partially covered under NRDWP

Year	Number of partially covered habitations	
	Target	Achievement
2009-10	1,10,721	99,312 (90%)
2010-11	1,10,231	90,116 (82%)
2011-12	94,257	83,713 (89%)
2012-13	91,750	77,388 (84%)
2013-14	83,805	91,496 (109%)
2014-15	89,581	94,020 (105%)
2015-16	52,061	64,487 (124%)
2016-17	40,391	43,813 (108%)
2017-18	27,414	24,417 (89%)

Note: Habitations where water supply systems provide less than 55 LPCD to the population are treated as partially covered. Data pertain to habitations getting less than 55 LPCD of basic piped water supply with a mix of household connections, public taps and handpumps. Data for 2017-18 is updated till February 19, 2018.

Sources: Integrated Management Information System Reports 2009-10 to 2017-18, National Rural Drinking Water Programme; PRS.

Table 8: Target versus achievements of habitations fully covered under NRDWP

	Number of fully covered habitations	
	Target	Achievement
2009-10	51,106	49,567 (97%)
2010-11	33,247	29,267 (88%)
2011-12	36,837	32,533 (88%)
2012-13	38,403	58,916 (153%)
2013-14	38,454	45,277 (118%)
2014-15	25,112	26,507 (106%)
2015-16	12,081	13,276 (110%)
2016-17	10,002	12,102 (121%)
2017-18	5,275	7,853 (149%)

Note: Data pertain to habitations getting 55 LPCD of basic piped water supply with a mix of household connections, public taps and handpumps. Data for 2017-18 is updated till February 19, 2018.

Sources: Integrated Management Information System Reports 2009-10 to 2017-18, National Rural Drinking Water Programme; PRS.

Contamination of drinking water: It has been noted that NRDWP is over-dependant on ground

water.¹³ However, ground water is affected by high arsenic contamination in 68 districts in 10 states.¹³ These states are Haryana, Punjab, Uttar Pradesh, Bihar, Jharkhand, Chhattisgarh, West Bengal, Assam, Manipur and Karnataka. Table 9 shows the number of states and districts where ground water is affected by various contaminants.

Table 9: States and districts affected by contamination in groundwater

Contaminants	Number of affected states	Number of affected districts
Arsenic	10	68
Fluoride	20	276
Nitrate	21	387
Iron	24	297

Sources: Central Ground Water Board; PRS.

Chemical contamination of ground water has also been reported due to deeper drilling for drinking water sources. It has been recommended that out of the total funds for NRDWP, allocation for water quality monitoring and surveillance should not be less than 5%.¹³ Presently, it is 3% of the total funds.¹⁰ It has also been suggested that water quality laboratories for water testing should be set up throughout the country.¹³

¹ Review of Sanitation Programme in Rural Areas, Committee on Estimates 2014-15, Lok Sabha, http://164.100.47.193/lsscommittee/Estimates/16_Estimates_8.pdf.

² Swachh Bharat Mission- Gramin, <http://sbm.gov.in/sbmdashboard/IHHL.aspx>.

³ Guidelines for ODF Verification, Ministry of Drinking Water and Sanitation, http://www.mdws.gov.in/sites/default/files/R_274_1441280478_318.pdf.

⁴ India Fact Sheet, National Family Health Survey – 4, 2015-16, Ministry of Health and Family Welfare, <http://rchiips.org/NFHS/pdf/NFHS4/India.pdf>.

⁵ Swachh Bharat Mission- Gramin Guidelines <http://www.mdws.gov.in/sites/default/files/SwachBharatGuidlines.pdf>.

⁶ National Rural Drinking Water Programme, Ministry of Drinking Water and Sanitation, <http://indiawater.gov.in/IMISReports/MenuItems/AboutSite.aspx>.

⁷ Demand for Grants 2016-17, Ministry of Drinking Water and Sanitation, Standing Committee on Rural Development 2015-16, http://164.100.47.193/lsscommittee/Rural%20Development/16_Rural_Development_23.pdf.

⁸ Demand for Grants 2017-18, Ministry of Drinking Water and Sanitation, Standing Committee on Rural Development 2016-17, http://164.100.47.193/lsscommittee/Rural%20Development/16_Rural_Development_35.pdf.

⁹ “Ensuring Drinking Water Security in Rural India”, Strategic Plan 2011-12, Department of Drinking Water and Sanitation, Ministry of Rural Development, http://mdws.gov.in/sites/default/files/StrategicPlan_2011_22_Water.pdf.

¹⁰ National Rural Drinking Water Programme Guidelines 2013, http://www.mdws.gov.in/sites/default/files/NRDWP_Guidelines_2013_0.pdf.

¹¹ Lok Sabha Unstarred Question No. 3016, Ministry of Drinking Water and Sanitation, Answered on August 3, 2017, <http://164.100.47.190/loksabhaquestions/annex/12/AU3016.pdf>.

¹² Rajya Sabha Unstarred Question No. 1477, Ministry of Drinking Water and Sanitation, Answered on January 1, 2018.

¹³ Evaluation of Rural Drinking Water Programmes, Committee on Estimates 2014-15, Lok Sabha, http://164.100.47.193/lsscommittee/Estimates/16_Estimates_2.pdf.

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