The second National Annual Rural Sanitation Survey (NARSS 2018-19) was conducted by an independent verification agency (IVA) between November 2018 and February 2019, to establish the progress over the baseline established by NARSS 2017-18 with respect to the Disbursement Linked Indicators (DLI) for the World Bank project support to the Swachh Bharat Mission (Gramin), namely (1) Reduction in prevalence of Open Defecation, (2) Sustaining ODF Status in villages, and (3) Increase in population with Solid and Liquid Waste Management.

IPE Global, in Joint Venture with Hindustan Thompson Ltd represented by Kantar Public, was selected to undertake the NARSS after a competitive bidding process.

The NARSS 2018-19 surveyed 92040 households in 6136 villages across States and UTs of India. Schools, Anganwadis and public/community toilets were also surveyed in these villages. The entire survey process from the questionnaire design to fieldwork and quality check was supervised by an Expert Working Group (EWG) under the chairmanship of Prof Amitabh Kundu, former member, National Statistical Commission, and co-chairmanship of Dr NC Saxena, former Secretary to Government of India. The EWG included representatives of the World Bank, UNICEF, Water Aid, BMGF, NSSO, NITI Aayog, and India Sanitation Coalition, among others.

**Key findings of NARSS 2018-19 (November 2018 to February 2019)**

- **93.1%** of rural households had access to toilets (National Sanitation Coverage)
- **96.5%** of the people who had access to toilets, used them
- **90.7%** of verified Open Defecation Free (ODF) villages were confirmed as ODF
- **95.4%** of the villages found to have minimal litter and stagnant water

This is a summary and interim results of NARSS 2018-19, and all figures listed here are provisional. The final detailed results of SBMSO will be released upon completion of analysis of NARSS 2018-19 data.
Survey Approach & Sample Size NARSS 2018-19:

As per the survey protocol approved by the EWG, the NARSS covered 6136 sampled villages. All of these villages were studied for reduction in prevalence of open defection (sanitation coverage and usage) and increase in population with solid and liquid waste management.

Of these 6136 villages, 2891 villages were ODF-verified as on 6th June 2018 (the cut-off date to determine the proportion of rural population living in ODF areas for the purpose of the survey, as determined by the EWG). These 2891 villages were additionally studied for their ODF sustainability.

In each of the 6136 villages, the toilet coverage and usage survey included Households, Schools, Anganwadis and Public/Community toilets. In addition, the overall village surroundings were observed for the presence of litter, stagnant water and fecal matter.

- The sample for each State/UT is statistically significant, and is proportionate to the total rural households in that State/UT.

- Within each State/UT, the sample size is statistically significant for ODF Verified and other villages, and is proportionate to the total rural households in ODF verified and non-ODF villages in that State/UT.

- About 200 households were listed in each village (over 12 lakh households across the country). Of these, 20 households per village were randomly selected through CAPI (Computer Assisted Personalized Interview), of which the first 15 were surveyed. The remaining five households were kept in reserve as a buffer for situations where one of the original 15 households was locked or declined to respond.

- Additionally, a school, anganwadi, public/community toilets and open spaces in each village were also surveyed.

- The above sampling design yields results within a 95% confidence interval.

The sampling methodology used was PPS (Population Proportion to Size). The sample size used for each category of the survey is as follows:

<table>
<thead>
<tr>
<th>Survey Component</th>
<th>Sample Size per Villages (PSU)</th>
<th>All India</th>
<th>ODF verified villages</th>
<th>Other villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>15</td>
<td>92,040</td>
<td>43,365</td>
<td>48,675</td>
</tr>
<tr>
<td>Govt. School</td>
<td>1</td>
<td>6,136</td>
<td>2,891</td>
<td>3,245</td>
</tr>
<tr>
<td>Govt. Anganwadi Centre</td>
<td>1</td>
<td>6,136</td>
<td>2,891</td>
<td>3,245</td>
</tr>
<tr>
<td>Public/Community Toilet</td>
<td>1</td>
<td>6,136</td>
<td>2,891</td>
<td>3,245</td>
</tr>
<tr>
<td>Observation of Public Places</td>
<td></td>
<td>All Surveyed Villages</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NARSS measures the outcomes on the basis of World Bank's Disbursement Linked Indicators (DLI)

1. Reduction in prevalence of open defecation
2. Sustain ODF status in villages
3. Increase in population with solid and liquid waste management

Data Collection methodology
Data was collected using CAPI (Computer Assisted Personal Interviewing) and was stored in a secured cloud-based server

Survey Design NARSS 2018-19:

Cloud based Server

Obtain Village Profile
Settlement Mapping & Segmentation through CAPI
Household listing
CAPI driven Household selection & HH Survey
Village Survey
Quality Checks

Identification of the eligible households by listing exercise
Team visit and obtaining consent and assent
Respondent Interviews in CAPI
Final Data Upload
Provisional Findings NARSS 2018-19:

1. ODF survey

An ODF-verified village is confirmed to be ODF if, during the survey, it is found that:
- All households and all public institutions surveyed found to be using safe technology for disposal of faeces
- No visible faeces found in the village surroundings

2622 villages (90.7%) of all 2891 ODF-verified villages surveyed were confirmed to be ODF. The remaining 269 villages (9.3%) were not confirmed ODF due to any of the following reasons:

1. Lower than 100% access to toilets in the village
2. Presence of unhygienic/dysfunctional/unsafe toilet in any household in the village
3. Non-usage of a toilet by the household members
4. Non-access of a toilet in schools or anganwadis
5. Presence of visible fecal matter in the village.

It may be noted that the average access to toilets in these 269 villages was about 93%.

% of ODF verified villages confirmed to be ODF - 90.7%

2. Other Attributes

<table>
<thead>
<tr>
<th>ODF Villages:</th>
<th>Other villages:</th>
</tr>
</thead>
<tbody>
<tr>
<td>With no solid waste</td>
<td>97.1</td>
</tr>
<tr>
<td>With no liquid waste</td>
<td>97.6</td>
</tr>
<tr>
<td>School with access to Toilet</td>
<td>99.2</td>
</tr>
<tr>
<td>AWC with access to Toilet</td>
<td>98.1</td>
</tr>
</tbody>
</table>
Other Components – NARSS 2018-19

Trainings
- National ToT for all State Coordinators and central core team members
- State training for surveyors with participatory approach and emphasis on following the ethical considerations & confidentiality norms. Field practice during training along with central IVA
- Refresher TOT for State coordinator and field teams before the main survey

Quality Checks
Accompaniments by IVA
- In 16.3% of all household interviews, the surveyor was accompanied by an IVA Supervisor
Back-checks by IVA
- Survey Supervisors, State and National Coordinators performed back checks, or validation visits in 9.1% households interviewed
Back-checks by MDWS
- Approx 2% households back-checks were also conducted by representatives of MDWS through physical visits, and approx. 3% households were back-checked through phone calls

Role of EWG during Survey
- Approved the protocol for NARSS to ensure uniform and consistent approach to survey
- Provided guidance and approval on measurement protocol, survey methodology, structure of reports and operational protocol
- Periodically reviewed the progress and provided advice and suggestions as needed
- Approved the data collection instruments
- Participated as observers in training and in quality control & quality assurance through field visits