NATIONAL ANNUAL RURAL SANITATION SURVEY (NARSS) 2017-18

UNDERTAKEN BY AN INDEPENDENT VERIFICATION AGENCY

Summary

The National Annual Rural Sanitation Survey (NARSS) 2017-18 was conducted between mid November 2017 and mid March 2018, to establish the baseline with respect to the Disbursement Linked Indicators (DLI) for the World Bank project support to the Swachh Bharat Mission (Gramin). IPE Global Limited, in Joint Venture with Hindustan Thompson Associates Private Limited represented by Kantar Public, was selected to undertake the NARSS after a competitive bidding process.

The NARSS 2017-18 surveyed 92040 households (HH) in 6156 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 the Expert Working Group (EWG), under the chairmanship of Prof. Amitabh Kundu and co-chairmanship of Dr. NC Saxena. The EWG included representatives of the World Bank, UNICEF, Water Aid, BMGF, NSSO, NITI Aayog, and international experts such as Dr. Bindeshwar Pathak, among others.

Key Findings of NARSS, 2017

- 77% Of households found to have access to toilets
- 93.4% Of the people who had access to toilets used them regularly
- 95.6% Of ODF verified villages confirmed ODF
- 70% Of the villages found to have minimal litter and stagnant water
The NARSS Sampling Methodology

As per the survey protocol approved by the EWG, the World Bank and the Ministry of Drinking Water and Sanitation, the NARSS survey covered 6136 randomly selected villages. In each village, the toilet coverage and usage survey included households, schools, anganwadis and public/community toilets. In addition, the overall village surroundings were surveyed for the presence of litter, stagnant water and fecal matter.

- Two kinds of sample villages – ODF (verified) and non-ODF (including ODF declared but not verified) – were covered in the survey.
- The sample size 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 non-ODF categories, and is proportionate to the total rural households in ODF verified and non-ODF villages in that state/UT.

- MIS data from MDWS (updated till the cut-off date of 6th June, 2017 as suggested by EWG) was used to determine the proportion of rural population living in ODF and non-ODF areas in each state/UT.
- About 200 households were listed in each village (over 12 lakh households across the country). Of these, 15 households per village were randomly selected, along with school, anganwadi, public/community toilets and open spaces in the same village for survey visits.
- The above sampling design yields results within a 95% confidence interval.

The sampling methodology used was PPS (Probability 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 Village (PSU*)</th>
<th>All India</th>
<th>ODF</th>
<th>Non-ODF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>15</td>
<td>92040</td>
<td>18885</td>
<td>73155</td>
</tr>
<tr>
<td>Govt. School</td>
<td>1</td>
<td>6136</td>
<td>1259</td>
<td>4877</td>
</tr>
<tr>
<td>Govt. Anganwadi Centre</td>
<td>1</td>
<td>6136</td>
<td>1259</td>
<td>4877</td>
</tr>
<tr>
<td>Public/Community Toilet</td>
<td>1</td>
<td>6136</td>
<td>1259</td>
<td>4877</td>
</tr>
</tbody>
</table>

*PSU: Primary Sampling Unit
The NARSS Survey Design

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

NARSS will annually measure the three World Bank Disbursement Linked Indicators

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

1. ODF survey
An ODF verified village is confirmed to be ODF if:
   a) No visible faeces was found in the environment /village
   b) Every household as well as public/community institution was found to be using safe technology option for disposal of faeces

1204 villages (95.6%) of all 1259 ODF-verified villages surveyed were confirmed to be ODF. The remaining 55 villages (4.4%) were not confirmed ODF due to any one of the following reasons:

It may be noted that the average access to toilets in these 55 villages was over 95%.

2. Other Attributes
ODF Villages

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Villages with minimal solid waste</th>
<th>Villages with minimal liquid waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Villages found ODF</td>
<td>99.5%</td>
<td>99.5%</td>
</tr>
<tr>
<td>Schools with toilets</td>
<td>99.3%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Non ODF villages

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Villages with minimal solid waste</th>
<th>Villages with minimal liquid waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Villages not found ODF</td>
<td>67.9%</td>
<td>69%</td>
</tr>
<tr>
<td>Schools with toilets</td>
<td>77.8%</td>
<td>96.6%</td>
</tr>
</tbody>
</table>

1. lower than 100% access to toilets in the village,
2. presence of an unhygienic/defunct/unsafe toilet in any household in the village,
3. non-usage of a toilet by the household members,
4. absence of a toilet in schools or anganwadis, or
5. presence of visible fecal matter in the village.
Other Components

Training
- National training of trainers (ToT) for all State Coordinators and central core team members.
- State training for surveyors with participatory approach and emphasis on following the ethical considerations and 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
- 15% accompaniments done by IVA Survey Supervisors for each household interview conducted
Back-checks by IVA
- 5% back checks, or validation visits, were done by Survey Supervisors, State and National Coordinators of IVA after completion of HH interviews
Back-checks by MDWS
- Approx 2% back-checks were conducted by representatives of MDWS through physical visits and approx 3% 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 in quality control & quality assurance through field visits, spot checks
- Reviewed the model proposed for linking NARSS outcomes to DLIs

This is a summary report of NARSS 2017-18, and the figures are provisional. The final detailed report will be released in due course of time.