WASH situation under Swachh Bharat Mission
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Key Highlights

33%  One-third of the surveyed households had access to functional toilet facilities.

72%  72 per cent of the respondents reported washing their hands with soap or ash while 28 per cent washed them only with water.

64%  64 per cent of the households surveyed had at least one member defecating in the open. 14 per cent of households with functional toilets also had at least one member defecating in the open.

20%  20 per cent of households treat water for drinking.
44% reported throwing children’s faeces in the garbage, 29% left them in the open, 13% put them in the toilet and 10% into a drain or ditch.

36% of the respondents with functional toilets stated that they have constructed them after the launch of the Swachh Bharat Mission (SBM).

6% reported that in the last one year they had heard of harassment and sexual violence against women stepping out to defecate in the open.
On 2 October 2014, marking the 150th birth anniversary of Mahatma Gandhi, the Prime Minister of India launched the Swachh Bharat Mission (SBM) with the aim of accelerating efforts towards achieving a Swachh Bharat (Clean India) in rural and urban India by 2019.

With support from the Centre for Operations Research and Training (CORT) in Vadodara, WaterAid India (WAI) undertook a concurrent assessment of rural SBM implementation across nine states in January to April 2016, to assess the status of WASH, and propose necessary policy implementation changes.

Objectives of the study:

1. To conduct a process and effectiveness assessment of the SBM (Gramin) in select states and districts where WAI and UNICEF have their interventions.

2. Situational assessment of behaviour change, assistance received and capacity building.

3. Effectiveness evaluation (short-term and intermediate), involving assessment of the extent to which objectives of the SBM are being achieved in terms of planning, implementation, institutional arrangements and sustainability.

4. Provide concrete recommendations for the SBM.

Methodology:

The study was conducted in nine states and 34 districts of India (see Table 1). The states were Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Odisha, Telangana, and Uttar Pradesh. 18 gram panchayats (GP) per state were selected randomly from within the WAI and UNICEF intervention districts. From each GP, 24 households were randomly surveyed. In all, 162 GPs and 3,904 households were interviewed. Primary data collection through the survey was complemented with secondary data analysis using the Ministry of Drinking Water and Sanitation’s (MDWS) Management Information System (MIS) and primary information collected from the development partners.

The study used representative sampling methods at the GP and household level, catering to the aim of providing useful insights about the districts in which WAI and UNICEF are intervening. This affects any state level aggregated figures, as there is a bias related to the fact that these intervention areas are comparatively less developed than the average. This is illustrated by the resulting composition of the sample, covered around one-third of the households from remote and difficult-to-access villages, and near to a quarter from interior but accessible villages. 86 per cent of the surveyed households belonged to either scheduled tribes (17 per cent), scheduled castes (28 per cent) or other backward castes (41 per cent). In 44 per cent of the households, no family member had pursued their studies beyond the Ninth standard. 83 per cent resided in mud or semi-pucca houses, and around 68 per cent of the respondents were female.
<table>
<thead>
<tr>
<th>States</th>
<th>Districts covered</th>
<th>Number of gram panchayats (GP) covered</th>
<th>Number of households surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>Chittoor, Nellore</td>
<td>18</td>
<td>430</td>
</tr>
<tr>
<td>Bihar</td>
<td>Madhubani, Muzaffarpur, Aurangabad, Khagaria, Bhagalpur</td>
<td>18</td>
<td>432</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>Kanker, Rajnandgaon, Korba, Raigarh, Dantewada</td>
<td>18</td>
<td>435</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>Sahibganj, Pakur, Ramgarh</td>
<td>18</td>
<td>433</td>
</tr>
<tr>
<td>Karnataka</td>
<td>Raichur, Yadgir</td>
<td>18</td>
<td>434</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>Chhatarpur, Datia, Panna, Sehore, Chhindwara, Harda, Indore, Narsinghpur</td>
<td>18</td>
<td>432</td>
</tr>
<tr>
<td>Odisha</td>
<td>Debagarh, Bhadrak</td>
<td>18</td>
<td>432</td>
</tr>
<tr>
<td>Telangana</td>
<td>Medak, Warangal</td>
<td>18</td>
<td>432</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>Chitrakoot, Fatehpur, Mahoba, Balrampur, Mirzapur</td>
<td>18</td>
<td>442</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>162</td>
<td>3904</td>
</tr>
</tbody>
</table>
Key Findings

Drinking water facilities and their management:

Overall, 92 per cent households surveyed had an improved drinking water source. Through the study, it was found that the main sources of water for 27 per cent households were public taps or standpipes, 26 per cent used hand pumps and 15 per cent homes had access to tube wells or borewells and piped water within their premises or plots. Around 72 per cent respondents mentioned that water was supplied everyday throughout the year, including in the summer.

Across all states, it was largely the women (94 per cent) who fetched water for their households.

Toilet facilities and utilisation:

Toilet usage is a continued concern in the SBM (G) programme. In all, one-third (33 per cent) of surveyed households had access to functional toilets within the household, the least being in the states of Jharkhand, Odisha, and Karnataka (Figure 1). Among those who have functional toilets, 36 per cent are stated to have constructed toilets after the launch of SBM (Figure 2). This shows an accelerated movement towards sanitation under the SBM. Poverty emerged as the major reason for not having a toilet (Figure 6). Open defecation was still found to be a big problem. Overall, 64 per cent of the respondents reported that at least one member of their family defecates in the open (Figure 3). 14 per cent of households

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1 Note: Open defecation behavior (64 per cent) reported above is lower than the proportion of households without functional toilets (66 per cent). This can be attributed to the usage of shared or community toilets and being based upon the perception of the respondent about the defecating behavior of other family members, which may not be absolutely accurate.
having functional toilets also have at least one member defecating in the open (Figure 4). This figure, likely to be much higher in reality as households typically underreport open defecation, highlights the need to promote behaviour change and create ownership among people towards safe sanitation practices.

FIGURE 2:  
Proportion of households with toilets constructed in the past one year

FIGURE 3:  
Proportion of Households with at least one member defecating in the open
FIGURE 4:
Proportion of households with members defecating in the open despite having functional toilets

n=1286
figures in percentages

FIGURE 5:
Proportion of respondents who reported having heard of incidents of sexual assault or violence on women venturing out for open defecation in the past year.

n=3904
figures in percentages

FIGURE 6:
Reasons for having no toilet built in household till date

figures in percentages
Hygiene practices:

Most respondents mentioned that they usually wash their hands before eating (84 per cent), after defecation (84 per cent), after eating (67 per cent), and if they are dirty (55 per cent). **72 per cent of the respondents shared that they wash their hands with soap or ash, while 28 per cent wash their hands only with water** (Figure 12). This represents a considerable proportion of people following unsafe hygiene practices. Around 63 per cent of respondents reported having received messages on handwashing, mainly from television (45 per cent), anganwadi workers, newspapers, school teachers, radio, accredited social health activists (ASHA) and panchayat members (Figure 14). This shows the importance of media in the dissemination of messages. 20 per cent of the households reported that they treat their water before drinking (Figure 8). Regarding cleanliness of toilets, again only 20 per cent households reported washing them on a daily basis (Figure 9). These findings show that there is a case for greater emphasis on hygiene awareness and education.
FIGURE 9: Frequency at which the toilet is cleaned in the household

- Everyday: 20%
- Twice a week: 37%
- Weekly: 34%
- Fortnightly: 6%
- Less frequent: 3%

n=1286

FIGURE 10: Material used to clean toilets

- Soap, disinfectants: 31%
- Phenyl: 34%
- Acid: 36%
- Washing powder: 27%
- Only water: 19%
- Others: 10%

n=1286

FIGURE 11: Instances when soap/cleaning agent is used to wash hands

- Always: 22%
- Before preparing food: 2%
- Before eating: 27%
- After defecation: 49%
- Others: 1%

n=3904

FIGURE 12: Ways in which respondents wash their hands

- With soap/ash: 72%
- With water only: 28%
- Always: 22%

n=3904
When asked how they dispose of their children’s faeces, 44 per cent reported that they throw it with the garbage, 29 per cent disposed of faeces in the open, 13 per cent in toilets and 10 per cent in drains or ditches (Figure 15). 85 per cent reported they always cleaned their hands after handling children’s faeces. After disposal of the faeces, 75 per cent washed their hands with soap or ash, while 15 per cent washed only with water. These findings emphasise a need for better hygiene education on disposal of children’s faeces.

Respondents were also asked what they do to prevent children from getting diarrhoea. Key responses were (1) boiling of drinking water (31
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Respondents were also asked what they do to prevent children from getting diarrhoea. Key responses were (1) boiling of drinking water (31 per cent), (2) eating well cooked food (15 per cent), and (3) washing of hands and vegetables with clean water before cooking (17 per cent).

It was also found that mostly women (94 per cent) fetched water, and 87 per cent were satisfied with water quality in terms of freshness, safety, taste, etc., but had reservations about its appearance and odour.

Solid and Liquid Waste Management:

Most households reported that they discarded their garbage by throwing it in farmland (51 per cent), while others reported throwing it on the road, burying or burning it. Only 12 per cent of the households surveyed were found to throw it in garbage bins, while the garbage of 16 per cent was collected by sweepers or used for biogas and animals (Figure 16).

Liquid waste was reported to be mostly flowing into open drains (47 per cent) while 35 per cent reported disposing it in open grounds (Figure 17). This implies that Solid and Liquid Waste Management is another area which needs adequate attention from the government.
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**FIGURE 17:**
Liquid waste disposal in households

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open drain</td>
<td>47</td>
</tr>
<tr>
<td>Thrown on open ground</td>
<td>35</td>
</tr>
<tr>
<td>Thrown in ponds</td>
<td>7</td>
</tr>
<tr>
<td>Discarded in farms</td>
<td>7</td>
</tr>
<tr>
<td>Discarded in kitchen garden</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
</tr>
</tbody>
</table>

n=3904
figures in percentages
Conclusion

The study shows that open defecation is still a prevalent practice in many districts of the country. This is related to both; a lack of behaviour change and poor access to functional facilities. The study also confirms a large gap in terms of hygiene awareness and education. We are far behind the universal standards of hygiene in terms of hand washing with soap. Even in solid and liquid waste management and proper disposal of children’s faeces, we are trailing behind acceptable levels.

Although the Swachh Bharat Mission addresses most of these aspects to varying degrees, the evidence emerging from the research suggests that its ambitious vision requires further measures in order to be successful. **A new social norm needs to be created, in which open defecation becomes an unacceptable practice, and environmental cleanliness becomes as important as cleanliness inside the house.** According to the research and WAI’S experience, this will only be possible when the following four areas are strengthened:

1. **Increasing boots on the ground –** Interpersonal communication is critical for changing behaviour and making open defecation unacceptable. Lack of human resources and capacity to work on this ‘soft’ side of the campaign is still a bottleneck for progress. Mechanisms to find, train and (temporarily) engage committed individuals to motivate communities is critical. With adequate incentives based on outcome, coordination and support, they have already proven that they are able to drive change at a dramatic speed. Resources from the Information, Education and Communication budget can be made available for this, but clear guidance and political drive are necessary to overcome practical and bureaucratic obstacles. These people should be geared and trained to address not just defecation behaviour, but also other hygienic practices including hand washing, handling of children’s faeces and solid and liquid waste management. While focusing on behaviour change communication, it should also ensure that the measures and tools used for change should not be coercive and punitive, as being observed in several cases. This is more important for including the marginalised sections.

2. **Monitoring usage through independent verification –** What gets measured gets done, so having the right verification systems can have a big impact. In addition to being independent, a verification system would have to first, measure toilet use and open defecation-free communities reliably, without simply using the presence of toilets as a proxy indicator. This would discourage construction-driven implementation of SBM. It would also need to be disaggregated by districts, or at least divisions, to act as an incentive for districts to deliver, by creating inter-district competition.

3. **Adaptive learning –** Timely feedback on what works and what does not at the implementation level is critical to learn and adapt the direction of the mission. Although there have been improvements through informal mechanisms, more institutionalised efforts are important, such as the Rapid Action Learning Units or similar mechanisms that could be set up at state and national levels, to contribute to the review of progress and course correction. These efforts will be critical as SBM starts to focus more intensively on hygiene behaviour and solid and liquid waste management.

4. **Cross-sectoral effort – Sanitation needs to be an integral element of all environmental health programmes, especially in child health and nutrition.** If the National and State Governments get...
their own houses in order as a matter of priority, by ensuring that health centres, schools and anganwadis have adequate water, sanitation and hygiene facilities that are properly maintained, it could lead to transformative change. It would not just demonstrate the government’s leadership in practice, but also inculcate healthy habits in future generations. However, this will require high levels of cross-ministerial/department convergence and collaboration, that unfortunately, do not yet exist.

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WaterAid’s mission is to transform the lives of the poorest and most marginalised people by improving access to safe water, sanitation and hygiene.