



# Improving H.A.B.I.T. Households' Attitudes and Behaviours to Increase Toilet use

## Policy Brief

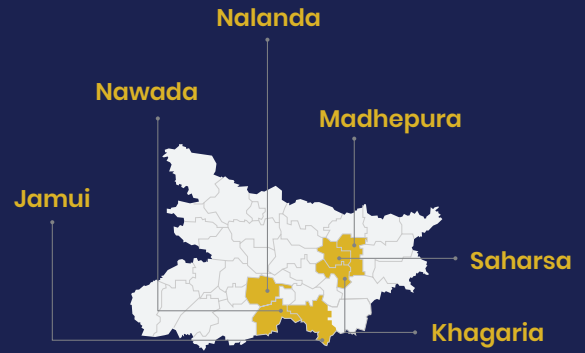
Oxford Policy Management (OPM) India, along with World Vision India and ideas42, recently conducted a study evaluating behavioural interventions to increase toilet use in rural Bihar in the context of Swachh Bharat Mission's (SBM's) success at increasing toilet coverage as well as use. The study also provides insights on some areas that the Phase 2 of the SBM could focus on, to ensure the public health gains of the SBM are sustainably realised.

### Context

The Government of India launched the SBM programme in 2014 to eliminate open defecation. The SBM provides monetary incentives to construct twin-pit toilets. It also includes Information, Education, and Communication (IEC) campaigns, aimed at changing attitudes and behaviours around hygiene and sanitation.

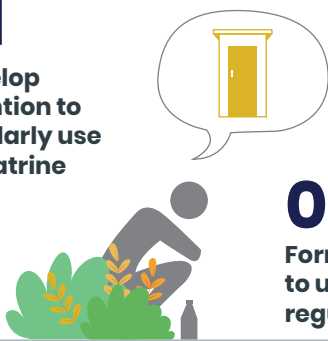
## About the study

Given the window of opportunity that the SBM provided, OPM India led a study to design and test behavioural interventions to increase toilet use among households that already owned a functional twin-pit toilet in rural Bihar. OPM India partnered with Ideas42 to design, and World Vision India to implement the intervention. The study was funded by the International Initiative for Impact Evaluation (3ie). The programme was delivered to selected eligible households across 44 wards (i.e administrative units within villages) in six districts of Bihar.



### 01

Develop intention to regularly use the latrine



### 02







Form habit to use latrine regularly



## About the intervention

The intervention aimed to overcome barriers, both with regard to deciding to or developing an intention to use the toilet as well as developing the habit, amongst households that own a functional twin-pit toilet, but continue to have members who defecate in the open.

### Overview of the intervention

Toilet use barrier	Intervention	What it does
<b>Pit filling up quickly affecting the intention/decision to use the toilet</b>	<p><b>Card game:</b> people are asked to guess the time taken for the pit to fill up for different household sizes</p>  <p><b>French drain model:</b> transparent plastic bucket with holes; filled with mud, sand and water to demonstrate seepage</p> 	Corrects mental models about pit filling rates
<b>Pit emptying affecting the intention/decision to use the toilet</b>	<p><b>Soan khaad:</b> demonstrate and handle decomposed faecal matter</p>  <p><b>Poster:</b> with information on potential date of filling and emptying the pit</p> 	Corrects mental models on nature of faecal matter when emptied and provides access to information to allay anxiety
<b>Despite having the intention, habituated to open defecation (OD)</b>	<p><b>Pledge</b> to stop OD and start regular use of the toilet</p>  <p><b>Create a household 'toilet champion':</b> usually a child who manages a 'calendar' tracking toilet usage by members and puts in Rs 5/week in a lockbox towards cleaning and maintenance</p> 	Creates a commitment and daily reminders to develop the habit

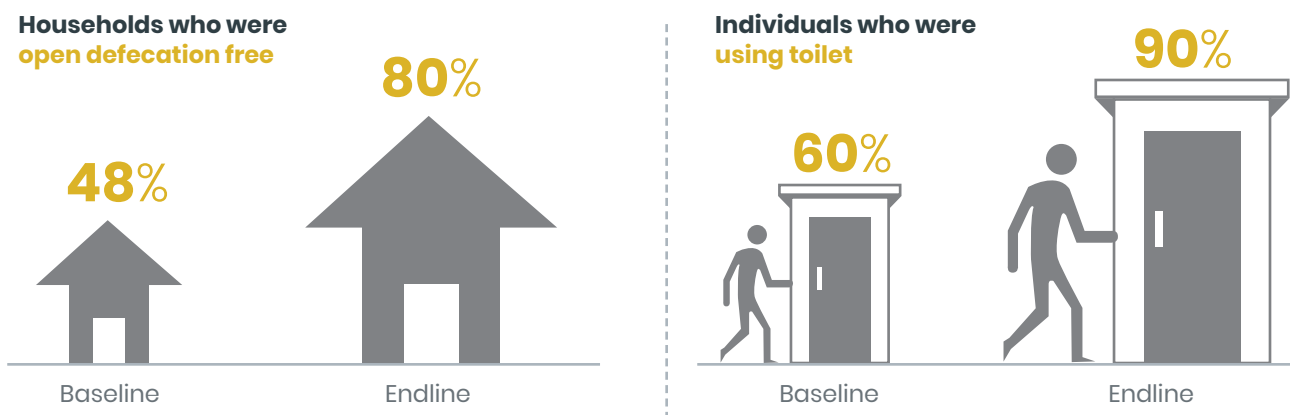
This intervention operated in addition to the government's ongoing activities under SBM

## Evaluation methodology

Eligible households, i.e. households with a functional twin pit latrine, in 44 treatment wards were targeted to receive the intervention. All households in treatment wards were invited for the community meetings. Data was collected from both treatment and control wards. The changes in outcomes related to toilet use, knowledge and attitudes around pit-filling and pit-emptying in the two groups were compared. Additionally, we undertook a process assessment midway through the intervention and a qualitative study at the endline. Together, these provide information on the quality of the intervention, its effect and an understanding of which parts of the intervention worked and why.

## Main findings

**Our study finds significantly high improvements in toilet use in both intervention and control areas**

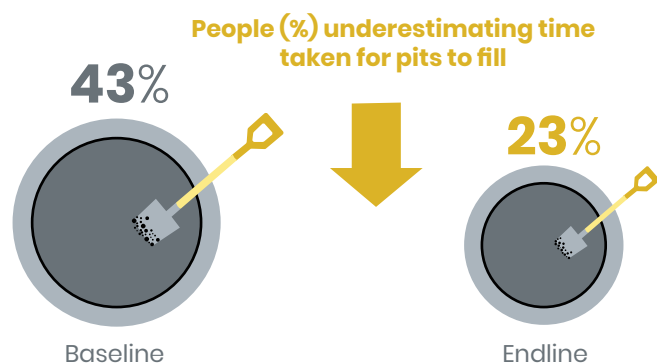


**Combination of positive and negative reinforcements seem to have improved toilet use behaviour (not attributable to our intervention)**



**A significant, though limited, change in attitudes around pit-filling and pit emptying attributable to our intervention**

We found, however, that households in our intervention areas are six percentage points more likely to correctly estimate the pit-filling rate than their control counterparts. Also, the number of people underestimating amount of time taken for pits to fill has fallen substantially in our intervention areas from 43% to 23%. This is a development in the right direction in intervention areas.



## Attitudes of disgust around pit emptying persist across control and treatment areas



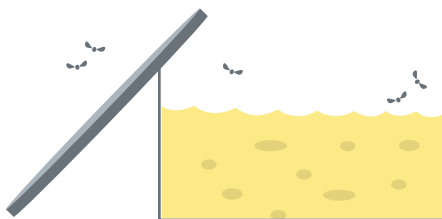
Only around

**3-4%**

of households responded that a family member would clean the household pit if the need arose indicating a lack of understanding of the self-emptying design of twin pit toilets and that notions of purity and pollution still persist. Qualitative data also confirmed that **caste-based pit-emptying practices persist.**

Can be attributed to a limited understanding of the need to allow faecal matter to decompose before emptying

In many instances, **pits with undecomposed matter are emptied** and the pathogenic faecal matter is disposed in an open field. **Undecomposed faecal matter poses public health risks; and is akin to the risks posed by practising open defecation.**



## Conclusion and policy implications

- Our study findings suggest that the SBM and a range of other non-government interventions related to behaviour change in Bihar have significantly increased the use of twin-pit toilets, constructed under the SBM.
- Despite this, sustainability of toilet use is a concern, given the persisting underlying misconceptions around pit filling, and a lack of awareness about the process of decomposition – outcomes which our intervention was able to influence to a certain extent.
- The study serves to focus attention on: a) loss of public health gains of ODF due to deeper non-standard pit sizes (with the risk of water contamination), early emptying of pits and improper disposal; and b) increase in the caste based cleaning of pits given the increase in toilet use.
- For the second phase of SBM, we recommend:
  - a) An increased focus on knowledge and attitudes related to pit filling, time taken for decomposition, and self-emptying. This can contribute to sustainability of toilet use and enhance public health gains without unintentionally increasing caste based emptying.
  - b) Programme implementers and government to increase emphasis on standardised type and size of pits within locations, while ensuring suitability to both geological and weather conditions of a place. The variations in size and quality of pits makes it difficult to tailor standardised message around pit filling, resulting in conflicting and potentially incorrect messages.

## Acknowledgement

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