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

### Does increased toilet access equal increased toilet use?

Rates of Open Defecation (OD) in India have not come down in proportion to the significant increase in toilet coverage in recent years. National surveys have identified the following reasons for non-use amongst toilet-owning households: 'not clean/insufficient water', 'malfunctioning of the latrine', and 'personal preference'<sup>1</sup>. To some extent, this trend can also be observed internationally. A global review of open defecation behaviours found respondents from various countries describing OD as '*traditional, natural, and part of one's daily routine*'<sup>2</sup>. In India, the mismatch between increased ownership and toilet use is amplified because of behavioural and socio-cultural factors.

### What can be done to change this?

The Swachh Bharat Mission (SBM), in addition to providing monetary incentives to construct toilets, recognises the importance of changing attitudes and behaviours around hygiene and sanitation and includes Information, Education, and Communication (IEC) campaigns.

Given the window of opportunity that the SBM provides, Oxford Policy Management (OPM) India is leading a study that aims to design and test behavioural interventions to increase toilet use among households that already own a functional twin-pit toilet. OPM India has partnered with behavioural scientists at Ideas42 to design the intervention, and are implementing with help from World Vision India. The study is being funded by the International Initiative for Impact Evaluation (3ie).



The programme is being delivered to roughly 2,300 households across 44 communities in six districts of Bihar i.e. Nalanda, Khagaria, Madhepura, Saharsa, Nawada and Jamui, and is being evaluated using a robust Randomised Control Trial (RCT) design. The study is powered to reliably capture the impact of the intervention by comparing outcomes between households in treatment and control areas across time.

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<sup>1</sup> Swacchta Status Report; as sourced from [http://indiaenvironmentportal.org.in/files/file/Swachhta\\_%20Status\\_Report2016.pdf](http://indiaenvironmentportal.org.in/files/file/Swachhta_%20Status_Report2016.pdf)

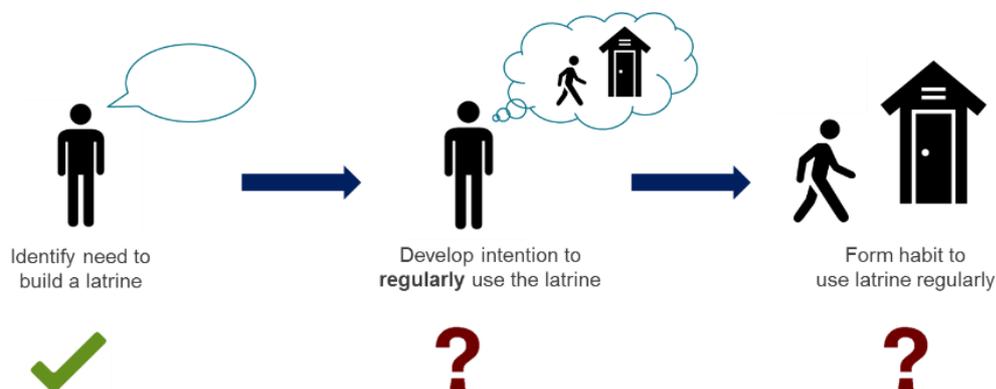
<sup>2</sup> O'Connell, K., 2014. What influences open defecation and latrine ownership in rural households?: findings from a global review. *World Bank Group: Water and Sanitation Program*.

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## What behavioural barriers to toilet use does the study address?

Between November 2016 and May 2017, our team conducted formative research in Nalanda district of Bihar to identify key behavioural barriers to toilet use. In terms of behavioural theory, we found that barriers to toilet use exist both at the stage of developing intention as well as habit formation.

**Figure 1: Necessary steps for toilet use**



Main reasons for non-use due to lack of intention formation include **fears around pit filling up quickly, aversion to pit emptying, and dissatisfaction with the toilet design**. Uncertainty around pit filling rates and subsequent emptying meant that many people refer to their toilet as an “emergency toilet”, to be used at night time, in cases of ill-health, or largely by female members. People also reported a **habitual preference for open defecation**. Recognition of the health benefits of toilet use was low amongst all respondents.

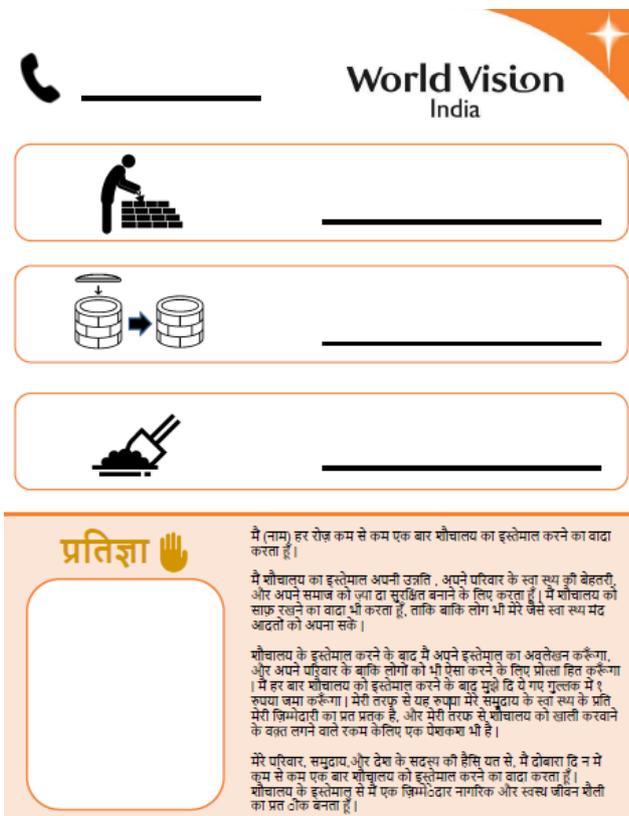
Based on these findings and using insights from secondary literature, we iteratively designed, tested and refined several prototype interventions to arrive at a final set of feasible interventions. These are delivered at household level as well as community level (given the importance of social norms in influencing use) through simple behavioural ‘nudges’ (especially to male members) that will develop intention and habit around toilet use by addressing barriers as follows:

Barrier	Intervention	What it does
<b>Fears around pit filling up quickly</b>	<p>Card game showing family size, size of pit, and asking people to guess the time taken for the pit to fill up; after which the correct answer is provided.</p> <p>Demonstration of the pit-filling process creating through a ‘french drain model’ (using a transparent plastic bucket: one-third filled with sand, mud and stones with holes at the bottom; and showing how water poured in seeps out and reduces in volume)</p>	Corrects mental models about pit filling rates
<b>Anxiety about pit emptying</b>	<p>Demonstrating and handling decomposed faecal matter and showing it to be dry, without smell and non-pathogenic—possibility of use as manure (“soan khaad”)</p> <p>Putting up a poster with information on potential date of filling and emptying and contacting a responsible community member to contact when the pit fills up for advice on emptying</p>	Corrects mental models on nature of faecal matter when emptied and provides access to information to allay anxiety

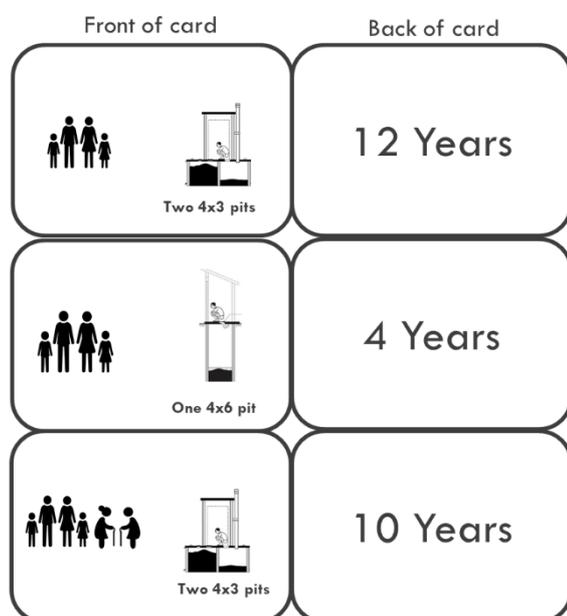
<b>Aversion to use due to mosquitoes and smell</b>	Suggestions on the use of mosquito coil and agarbatti	Brings to the forefront existing solutions
<b>Despite having the intention, habituated to open defecation</b>	Pledge to stop OD and start regular use of the toilet  Create a household 'toilet champion': usually a child who manages a 'calendar' tracking toilet usage by members; and puts in the household's weekly contribution in a lock-box as contingency for toilet repairs or improvement	Creates a commitment and daily reminders to develop the habit

Examples of some of these interventions are given below:

**Figure 2: Poster**



**Figure 3: Card game**



## Potential contributions

This study will produce robust evidence around the kinds of behavioural interventions that can increase toilet use amongst households owning functional twin-pit latrines in rural Bihar. Learnings could be considered for inclusion into the behaviour change communication activities of phase II of the SBM. The intervention is ongoing. Results are expected in early 2019.

For further information, please contact:

Shruti Viswanathan

Tel: (011) 4808 1111

Email: shruti.viswanathan@opml.co.uk