

# Informing interventions to improve WASH behaviours in Odisha, India

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## Highlights

### Evidence impact

- Formative and impact evaluation findings from the Emory University–led Sundara Grama project informed the theory of change and intervention design process for a new water, sanitation and hygiene (WASH) project of [another Odisha-based NGO, Gram Vikas](#).

### Factors that contributed to impact

- The Sundara Grama evaluation findings were timely and relevant, as they came at a time when Gram Vikas was planning to focus on safe child faeces management (CFM) in its sanitation projects.
- Between 2015 and 2017, Emory University researchers engaged closely with Gram Vikas on the Sundara Grama project and evaluated Gram Vikas' household-level water and sanitation intervention. The new Gram Vikas project, which the researchers from Emory University will evaluate, leverages this partnership and the implementer's culture of evaluation.

## Impact evaluation details

Title: [Impacts of low-cost interventions to improve latrine use and safe disposal of ...](#)

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## Context

Under [Swachh Bharat Abhiyan](#) (Clean India Mission), launched by the Indian government in 2014, India has made rapid progress towards ending open defecation, with improvements in water, sanitation and hygiene (WASH) outcomes. However, some states still lag behind in providing access to latrines for all. India's National Statistical Organisation's data shows that in 2018, approximately 28.7 per cent of rural households still lacked access to any form of latrines. In Odisha alone, 50 per cent of rural households had [no access to latrines](#). Further, as previous studies have shown, access to latrines [does not automatically lead to latrine use](#) and safe sanitation.

In 2017, researchers from Emory University collaborated with Rural Welfare Institute with support from 3ie to conduct a formative evaluation examining the challenges to latrine use in rural Odisha. The team identified six behavioural barriers responsible for non-use of latrines for defecation or disposal: non-functional latrines, lack of practical knowledge regarding latrine use, preference for open defecation, latrine use not prioritised and/or valued, unsuitable latrine design, and inaccessible water.

Using formative phase findings, the partners designed the Sundara Grama (beautiful village) intervention, which included community- and household-level activities in Puri district in Odisha. The community-level activities involved folk performances, transect walks, meetings and

village map painting. At the household level, the implementers also conducted targeted visits and minor repairs. Another intervention component was the mothers' group meeting, where implementers introduced mothers and caregivers to activities and CFM hardware, such as plastic potties and scoops, that can enable safe disposal of child faeces. This component was designed for qualitative analysis.

The evaluation used cluster randomisation with 33 intervention villages and 33 control villages and included mixed methods process evaluation. Additionally, qualitative research was conducted in six villages (three of which received the intervention).

## Evidence

The intervention led to a moderate 6.4 per cent increase in latrine use amongst individuals aged 5 years and older, in comparison to the control group. This increase was detected even after controlling for increased government efforts in both intervention and control villages as part of the push to declare India 'open defecation free'. Analysis revealed larger treatment effects of latrine use amongst females as compared to males.

The evaluation found the intervention was associated with a 20.4 per cent increase in the reported safe disposal of child faeces. Enabling caregivers to understand the importance of disposing of child faeces was highlighted as the reason for the improvement of reported safe disposal.

In addition, the process evaluation showed that intervention aspects such as recruitment, reach, fidelity and satisfaction of each of the community activities could be improved to potentially achieve greater impact. For instance, the mothers' group meetings were often attended by other caregivers, who might not have conveyed the importance of safe child faeces disposal to the mothers.

## Evidence impacts

### **Strengthening interventions on WASH behaviours**

The evaluation findings – particularly qualitative findings that related to the caregivers' management of child faeces and their participation in Sundara Grama mothers' group meetings – informed the intervention design process and theory of change for a new project led by the Odisha-based NGO, Gram Vikas. For instance, according to the project partners, the Sundara Grama evaluation's findings helped them decide the hardware selection approach – user-centred design – to pilot test.

The [new project focuses on safe CFM](#), and researchers from Emory University are working with Gram Vikas to design, implement and evaluate the intervention in 80 villages in Ganjam and Gajapati districts of Odisha. The project includes 4 phases over a 24-month period, during which the study team and implementing agency will develop and test novel CFM hardware; design and test behaviour change strategies for CFM; deliver the finalised intervention; and evaluate the effect of the intervention on CFM practices, faecal exposure pathways and gender.

## Suggested citation

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