

Ecological Sanitation Facility Meets Gender-Specific Hygiene Needs in School

Project name:	Demonstration of integration water, sanitation and hygiene facility in a school (under the framework project Enhanced Sustainable Sanitation Provision in Flooded Areas of India)
Location:	Prakash Elementary School, Patna, Bihar, India
Partner:	Water, Sanitation and Hygiene Institute (WASHi), India
Funder:	Swedish International Development Cooperation Agency (Sida)

Key features:

- A demonstration project introducing sustainable sanitation and good hygiene practices in a school
- Integrated sanitation solutions that respond to gender-specific needs, particularly around menstruation hygiene management, helping girls to stay in school
- Highlights need for sensitization on agricultural reuse of human excreta, and for long-term support, training and follow-up to build ownership and ensure that sanitation facilities are used and maintained

Background

Schools can be particularly good places to promote new sanitation, water use and hygiene practices. They offer ideal settings for education and sensitization. Children can be excellent “agents of change”, disseminating new ideas and practices to parents, friends and neighbours. Another reason for working in schools is that lack of private, lockable sanitation spaces, and challenges around menstrual hygiene management (MHM), can put girl students at a severe disadvantage, and even stop them from going to school.

The pilot project was initially funded (2012-14) under a Sida-financed action-research collaboration between SEI and the Water, Sanitation and Hygiene Institute (WASHi), India. This collaboration seeks to promote and demonstrate locally appropriate sanitation solutions in water-scare and flood-prone parts of Bihar, with the ultimate aim of influencing state policy.

Two non-governmental organizations were partners in implementing the project. The Society for Community Organization and People’s Education (SCOPE), from Tamil Nadu, was in charge of construction of the facilities. New Opportunities for Women (NOW) led the sensitization and capacity building in the school. Experts from a local environmental education centre, the Tarumitra Bio-reserve and Ecology Centre, have helped with capacity building, education and sensitization, especially in follow-up work.

Prakash School

Prakash School is located in the town of Maner, about 35 kilometres from Patna. Its students – 637 girls and 348 boys – are aged between 5 and 18. Most of them are from poor rural households.



The yard at Prakash School

Prakash School was chosen as a pilot site because the staff showed great interest in ecological sanitation (ecosan) and a willingness to work on implementing it at the school. They also saw the project as an opportunity to teach the children about good hygiene and its importance for human health. At the time, the school had a waterborne toilet system, but it was inadequate for the number of students.

Project activities

The pilot project supplemented the school’s existing toilet system with four two-chambered urine-diverting dry toilets, two each for girls and boys, and 11 waterless urinals, three for girls and eight for boys (the existing toilets at the school were mostly for girls). A system was also built to channel rainwater from the roof of the new facilities to a storage tank for later use on the school’s kitchen garden.

The pilot has also included thorough education on hygiene and sanitation at the school, provided by NOW and supported by experts from Tarumitra. Special emphasis was given to menstruation hygiene management. A survey conducted at the outset of the project showed menstruation hygiene to be one of the most critical issues confronting adolescent girls and women of reproductive age in Bihar. Without access to enclosed, private facilities, around 87% of the girls and women surveyed only had the option of washing at a public pump. Many felt unable to change their sanitary padding regularly, often waiting until

night and risking their safety by seeking secluded places to do it. Around three-quarters reported problems related to menstrual health. The project provided an incinerator for sanitary napkins in the sanitation facilities. This allows girls to dispose of sanitary padding privately and hygienically.

Along with input from Tarumitra personnel, an expert in water, sanitation and hygiene issues was engaged in follow-up for six months after the new facilities were installed to ensure they were used properly and to reinforce good hygiene practices.

Challenges

Two major challenges were encountered during the implementation: maintenance of the sanitation facilities and gaining acceptance for the safe reuse of treated excreta, a central element of the ecosan approach.

The school management agreed at the outset of the project to ensure the facilities were maintained, but maintenance has in fact been a problem. This may be linked to the fact that school staff have their own separate waterborne toilets, making them less engaged and creating a sense that the dry toilets are inferior. However, in India the maintenance of any toilet or sanitation facility can be complicated by the fact that this is traditionally a job for people of low caste. To address this, the school has now engaged a cleaner for the sanitation facilities.

Also, even though at the beginning of the project the school management showed interest in the ecosan approach, the school is still not taking advantage of the full benefits of ecosan. Currently, urine from the sanitation facilities is directly infiltrated in small sections of the school's kitchen garden. The chambers for faecal matter in the toilets have not yet filled up, but the intention is to reuse the material, after proper treatment to render it safe, in the kitchen garden. Experts from Tarumitra are currently involved in trying to encourage reuse as part of follow-up activities.

Achievements and lessons

Students at the school now understand the value of ecosan for environmental protection, especially in regard to saving water. Interviews with students, carried out after the new facilities were installed revealed that girls tended to have a better understanding of the value of humanure in agricultural use and of the environmental and health risks of open defecation. Consequently, follow-up education and sensitization work has focused on the school staff and management and the male students.

The pilot has highlighted the fact that while the idea of ecosan may be accepted early on, this does not always lead to full engagement and ownership. Monitoring and follow-up to ensure that any teething problems are quickly spotted and addressed.

For the purposes of the SEI-WASHi collaboration, the pilot at Prakash School is an opportunity to demonstrate that good



Waterless urinal with sanitary padding incinerator

hygiene practices and concern for the environment go hand in hand with education. Furthermore, it is hoped that the school children will help to disseminate new attitudes, practices and knowledge in their communities.

Finally, the provision of the sanitation facility, incinerator and capacity building on MHM have made it easier, more convenient and safer for girls to attend school during their menstruation period, thus reducing a significant obstacle to girls's education.

For further information

To learn more about the SEI-WASHi collaboration visit <http://www.sei-international.org/projects?prid=2070> or contact:

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