

# Sanitation Project - Indri Village, Haryana, India

## Sanitation Conditions

One of the developing worlds biggest problems is lack of clean water, safe sanitation and proper hygiene. Problems that Rotary has addressed for several years.

A troubling aspect of sanitation is the sorry fact that much of the world practices open defecation (OD).

World 1990 25% practiced OD 2008 - 17%

Asia 1990 66% 2008 - 44%

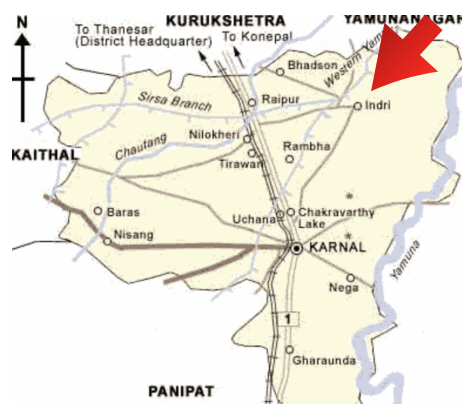
India 638 million people practice OD

WHO statistics show these horrid conditions cause:

24% of the disease burden (healthy years lost)

23% of all deaths (premature mortality)

36% of all childhood (0-14) deaths



Indri, Haryana, India

Some facts:

- Diarrhea is a major contributor to that disease burden. 94% of the diarrhea disease burden are attributable to unsafe water, poor sanitation or improper hygiene practices.
- Water, Sanitation and Hygiene has been designated one of Rotary's Areas of Focus.
- Rotary has done many WASH projects over the years to help reduce the problem
- No country in the world has more open defecation than India, where one in two people defecate outside. Every year, 200,000 children in India die from diseases caused by fecal contamination.
- Its common knowledge: it's both humiliating and dangerous for women.

## Rotary Project

The project is to build 65 toilets to begin to reduce the open defecation problem, train the public on safe hygiene practices and raise awareness. The location of the project is the village of Indri in the Haryana District - use than 25 miles from Delhi

People in the region are living in most deprived conditions of ignorance and poverty, completely unaware of their potential. In spite of being very near to the capital of country, it lags behind in almost every stream of development. Most of the people are still living below poverty line and their education level is very low.

It was found that the rate of open defecation is very high and overall sanitation condition of the area is poor. Toilets are seldom found in the houses. Though in close proximity to the capitol, the rural society is highly stressed and on the verge of extinction, a stark contrast with the "sanitary facilitated" urban areas.

This village is deprived of basic amenities to survive with male literacy rate at less than 50 per cent and female literacy at only 25 per cent approx. There is urgent need for hygiene promotion. Health and hygiene promotion are required to enhance the health standards of the Women and female children.

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## Technology

There are two most commonly known technologies for safe disposal of human waste - one is sewerage and the other septic tanks with proper disposal of effluent. There are close to 5000 cities and towns in this country, only about 300 have sewerage and most of them have no sewage treatment plants. Septic tanks can be expensive, use excessive water, and need to be cleaned out every 2-3 years. The concept that sewerage and septic tanks are the only suitable technologies for safe disposal of human waste has led to the continuance of large number of bucket or dry privies and practice of open air defecation in the country.

## SULABH SHAUCHALAYA (TWIN PIT POUR-FLUSH TOILET)

Sulabh Shauchalaya, developed by Sulabh International is the most appropriate technological option to serve as an alternative to bucket privies and to stop open air defecation.

They can be constructed in the most congested areas of cities and towns. Sustainability and reliability are two important issues which should be considered while choosing an appropriate technology.

It comprises of two pits which can vary in size and capacity depending on the number of household users. A pit can be used for 3 years at a time, once fully utilized, the pipe may be diverted to the second pit. Digestion takes place in the fully utilized pit making the contents dry, odorless and pathogen-free.

The dried remains are easily extracted and can be used for a variety of agricultural purposes such as a fertilizer or soil-conditioner. The value of fertilizer produced approximately cancels out the cost of removing the contents of the pit.

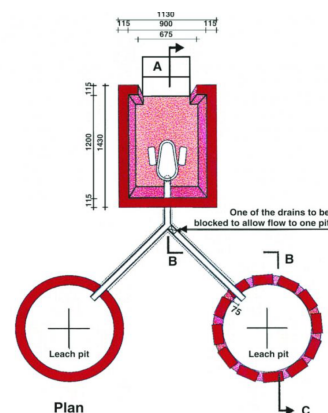
Sulabh Shauchalaya toilets are sustainability and reliability. It is socio-culturally acceptable, affordable, and easily available and users are able to operate and maintain it easily.

It is an indigenous technology and the toilet can easily be constructed by local labour and materials. It provides all the health benefits by safe disposal of human excreta on-site.

They are used in India, Bangladesh and other countries. There are over 1 million of these toilets have been successfully installed.

A Global Grant for \$35,000 being submitted in June, 2016.

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Sulabh Twin Pit , Pour Flush Compost Toilet Technology