

# THE SUNIDHI TOILET

## Background

In India, using rest rooms in public places is always a challenge for women as there are no proper or adequate toilets which can address the menstrual hygiene needs of adolescent girls and women. Most public places do not have facilities for addressing such needs of women.

Many public toilets in India have just toilets seats and urinals. The needs of girls and women to change menstrual pads are largely missed out. Due to lack of facilities for proper disposal of sanitary napkins, these are disposed in an unhygienic manner - sometimes left on the floor in the absence of dustbins, or flushed into the toilets causing pipe blockages. Due to this, the users are at risk of diseases like Urinary Tract Infection, which is why most women hesitate or avoid using public toilets. The soiled napkins are collected by cleaners and disposed in municipal bins posing a health risk to cleaners and the public.

This concern triggered Water, Sanitation and Hygiene Institute (WASH Institute) come up with the women friendly "Sunidhi Toilet". This modular toilet can be easily installed in public places.

## The Innovation

Sunidhi toilets are specially meant for women and girls who have attained menarche. The facility is equipped with incinerators, vending machines and other facilities required in a toilet for women. The toilet is self-cleansing. Used napkins are dropped into the incinerator that burns and collects 5 gm ashes from each napkin in a tray

which can be flushed in the toilet.



Sunidhi Toilet

The toilet has been constructed using Ferro cement technology by masons who have technical skills and expertise of this technology. The average installation time is one day. The design can be improved as per requirement. The idea was conceived by WASH Institute, a national level NGO that designed, constructed and installed it.

## Design of Moulds -SunidhiToilet



1. Steel rods base for slab making



2. Applying cement and sand mixture



3. Base Mould for fabricating circular slabs side view



4. Base Mould for fabricating circular slabs

This was done in consultation with the stakeholders from urban and rural communities. Representatives from the institute interacted with several women from SHG groups, Government organizations, adolescent girls, laborers, etc. for feedback. Some of the village women who were first time users were not confident and were hence taught how to use the vending machines.

### Innovation Geography

Till date, about ten model toilets have been constructed in Dindigul and Madurai Municipal Corporation area of Tamil Nadu. These urban local bodies provided the land, electricity and water supply and also agreed to take on the responsibility of Operation and Maintenance of the facility. The toilets have created enough demand generation to set them in different public places.

These toilets are located in busy public places like bus stands, parks, temples and market areas that have a high floating population of women. The toilet locations were chosen keeping in mind the areas visited frequently by large number of women that are deprived of adequate sanitation facilities. The other considerations were availability of space, water and possibility of underground drainage connection.

The project was approved by the Ministry of Housing and Urban Affairs (MoHUA)





5. Slab curing for doors



6. Joining slab mould and doors at platform

## Business Model and Financial aspects

The approximate cost of construction of one unit includes the costs of the following: fabrication material (INR 20,000); fabrication and installation charges (INR 20,000); charges for incinerator, vending machine and plumbing materials (INR 45,000), amounting to a total capital cost of about INR 85,000

The operation cost includes the cost borne for employing a caretaker, water used for flushing and cleaning and cost of power. The facility needs about 500 liter of water per day. The electricity charges are minimum. The cost of connection to underground drainage system is based on distance.

The user fees is generally INR 5 per user. This was decided in consultation with the contractor. Each toilet facility has a caretaker, who is paid about INR 5000 per month. The charges are INR 5 for usage and INR 5 for using sanitary napkins.

## Challenges

Even though the toilet is easy to assemble handling the weight of the pre casted toilet during installation was a challenge. Initially some women from the rural areas were finding it difficult to use the vending machine and incinerator. This was sorted through pictorial user instruction and educating the users by the caretakers.

## Way Forward

The concept and the model have been appreciated by the Government officials and women users. The District Administration of Dindigul and Madurai has not only expressed the desire to install more such toilets, but also expressed interest in providing similar facilities available in Sunidhi Toilet to the existing toilets. The present toilet design can be further modified for square structure so that it can be installed in small spaces. Since Sunidhi Toilets are easy to install and dismantle, they can be used during festivals and events.

To know more about Sunidhi Toilets, please contact:

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