

National - level Workshop on Appropriate Toilet Technology



**“Low-cost sanitation - Technological options
followed by Gramalaya”**

Hotel Breeze Residency, Trichy - 9th May 2012

HABITS DIE HARD

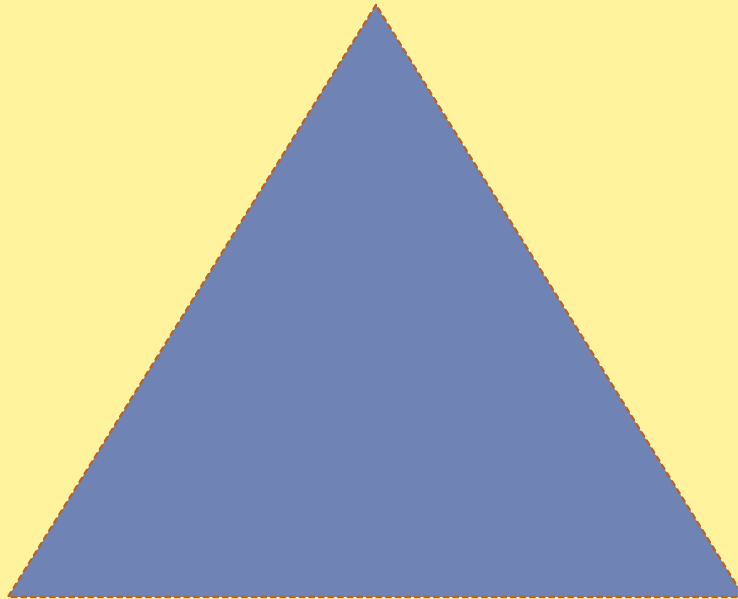
Changing the behavior is a tough task

- From time immemorial people in the rural areas are defecating in the open places.
- They are not aware of the dangers of open defecation
- Unaware of the importance of toilets
- Myths and misconceptions about toilets
- Educating the toilet habits among the mass is a continuous process



The Triad for IEC

**Access to
Information**



**Access to
Technology**

**Access to
Financial
Resources**



IEC for hardware and software

- **Hardware aspects**

1. Toilet design
2. Toilet pan
3. Superstructure
4. Technical standards
5. Support services
6. Linking local cement fabricators
7. Linking Masons



Key issues in toilet technology

- Absence of locale specific toilet type designs and including the cost estimate
- Inferior quality of construction materials produced by local cement fabricators
- Poor quality of construction by contractors without adequate knowledge on the type designs and cost estimates
- Toilet constructions by contractors with profit motive



Thandavampatti model toilet (INR 300)



Toilet only model using Brick superstructure



Toilet only model using Brick / hollow bricks superstructure with roof



Toilet only model using hollow bricks superstructure without roof



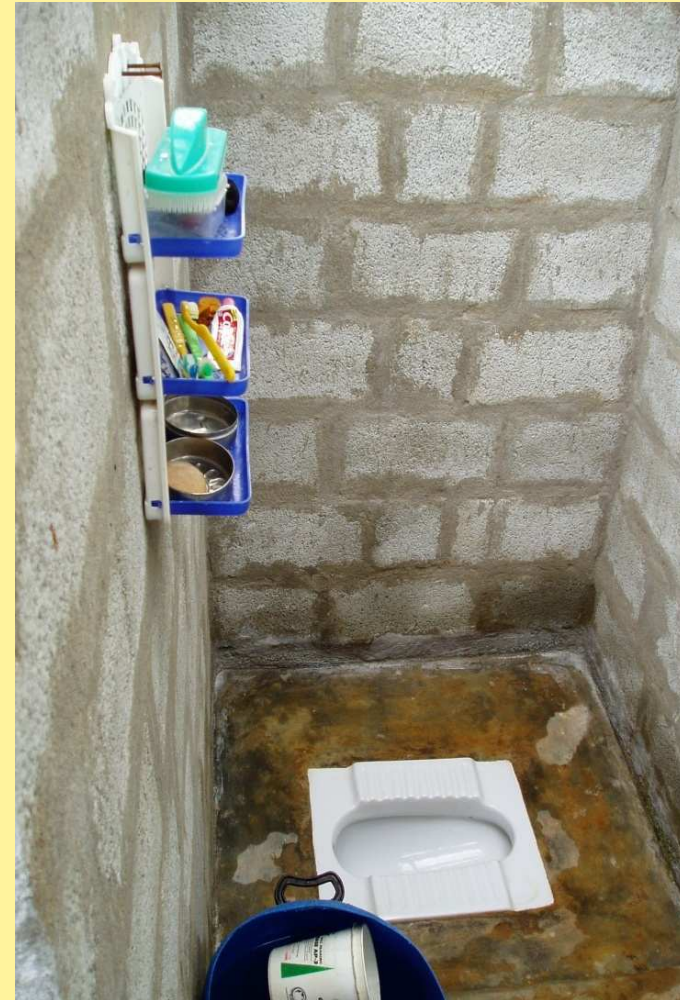
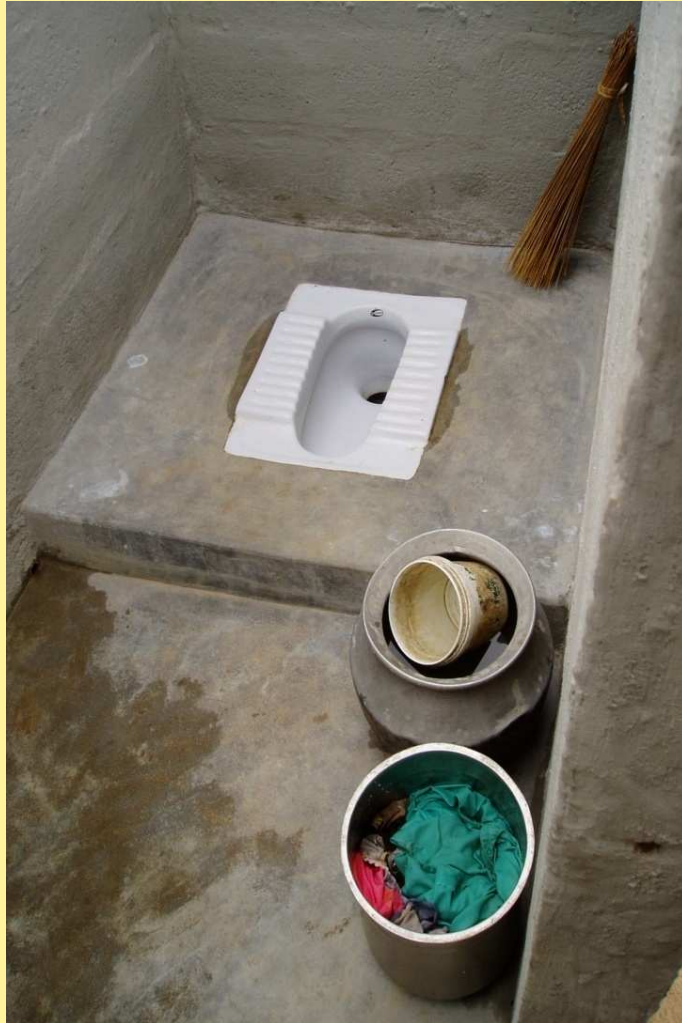
Toilet only model using hollow bricks/ bricks superstructure with roof



Toilet attached bathroom bricks superstructure without roof



Toilet attached bathroom model using hollow bricks superstructure without roof (inside view)



Toilet attached bathroom model with kitchen garden from bathroom waste water



Toilet only model attached with wall



Space is not the constraint -toilet constructed in a limited space in front of the house



Leach pits using soling stone lining



Leach pits using concrete rings & top layer soling stone lining



Toilets using tiles for wall and flooring by affordable



Rural pan with high degree slope for water saving



A toilet constructed above the pit using cement rings as pit lining



Toilet pan fixing without technical standards



Toilet pan fixing without technical standards



Toilet pan fixing with technical standards



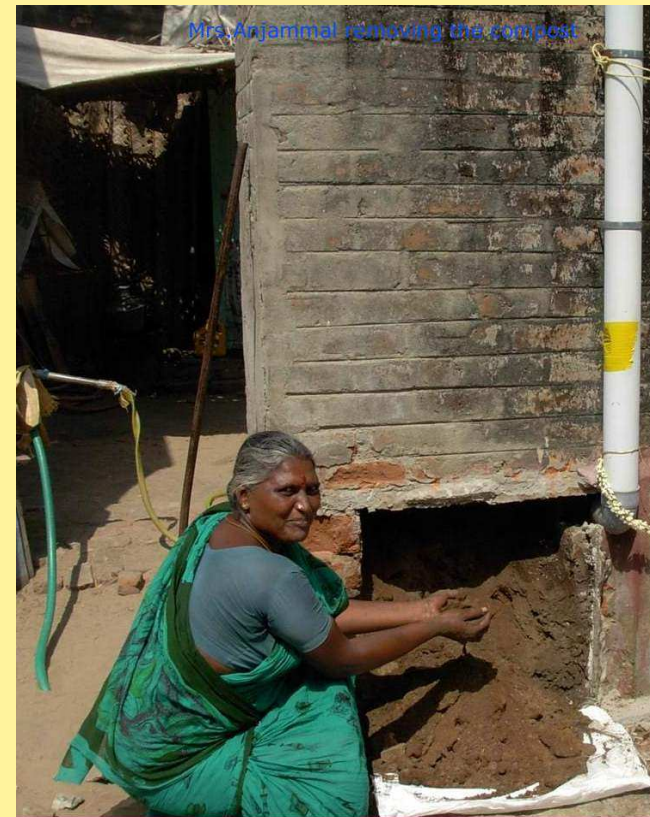
Toilet pit without technical standards



Toilet attached bathroom with water tub facility outside



Eco-san toilet for water-logging areas



A bathroom attached Eco-san toilet



**A goose-neck attached polypropylene toilet as – Easy Flush –
designed by Gramalaya for direct pit toilets and emergency sanitation**



Toilets with temporary structures using mud-wall and thatched structures



Training to Masons and WATSAN committees



Toilet only model with temporary roof



Bio-gas linked toilets



Toilet , water tub and water heater



Thank you !

