Sustainable Sanitation Systems: More than just a toilet!

FINISH SANITATION CHALLENGE CONTEST

Financial INclusion Improves Sanitation and Health

Organized by
WASTE (Netherlands) and FIN (India) under the aegis of the FINISH Programme

Challenge Deadlines
Registration: May 15, 2010
Submission of Entries: Oct 1, 2010
Announcement of Results: Oct 31, 2010

1. Why sanitation challenge? This contest is based on the premise that among other factors, the lack of sanitation coverage in India is due to lack of knowledge on possible toilet technology designs to fit diverse environmental conditions, water needs and local availabilities of materials. Therefore, in order to contribute to the generation of innovations in the form of new designs for toilets and waste recycling and complementary infrastructure to promote hygiene, we are organizing this innovation contest.

2. What are the challenges? A workshop is being held on April 8-9, 2010 in Ooty under the aegis of the FINISH Programme to discuss the drawbacks of present day sanitation systems and to identify the challenges that need to be tackled with greater precision. The workshop is open to the public provided they register by the 20th of March, 2010. The details of the identified challenges will be issued and posted on several websites by April 15, 2010.

3. What are we looking for? We are looking for ‘innovations’ in terms of one or more of the criteria indicated below that resolve the problems to be detailed in the ‘Sanitation Challenges’ following the workshop in April.

- Improvement in design to facilitate use of toilet.
- Improvement in design to facilitate maintenance of toilet.
- Improvement in design to facilitate management of waste (urine and faeces) in terms of recycling with minimum effort (time, money, physical effort) and minimum contamination to the environment.
- Improvement in design that reduces the cost of construction through use of local materials or alternative materials or improved design, without lowering the efficiency of functioning and maintenance costs.
• Additions that enhance the ‘functionality of a toilet’ such as installations for hand-
  washing or water harvesting or disposal of sanitary napkins.
• Improvement in design that cater to the needs of specific target groups such as women,
  the elderly and young children.

Please see note on present models available detailed on page 3.

4. Who can participate? Anyone can participate either as an individual or as part of an
organization (university, public agency, consultancy firm, firm, NGO, Trust).

5. What are the prizes? There are three levels of prizes:
• Third prize = 1000 Euros = 65,000 Rs approximately (which will be distributed to one
  winner or up to three winners)
• Second prize = 1500 Euros = 1 lakh Rs approximately  (which will be distributed to
  one winner or up to three winners)
• First prize = 3000 Euros = 2.2 lakh Rs approximately  (which will be distributed to
  one winner or up to three winners)

6. Who are the judges? What is the procedure of judging? The submissions will be
transferred without details of identity of contestants to all partners of the FINISH consortium,
which will first grade the entries according to a well defined set of criteria. The best 30 entries
will then be submitted to an international panel of 5 judges will make the final selection.

7. What is the procedure for participants?
⇒ Registration: May 15, 2010 Any prospective participant must signal their intention to
  participate by sending the registration form (see page 4) to Friend in Need Trust by
  email fintrust.india@gmail.com The sanitation challenges will be sent
  immediately by email with acknowledgement of registration.
⇒ Submission of Entries: Oct 1, 2010 at 6 PM IST All entries must be received by 6
  PM Indian Standard Time by October 1, 2010 by email at
  fintrust.india@gmail.com All entries will receive an acknowledgement of receipt.
⇒ Announcement of Results: Oct 31, 2010 Results will be announced by October 31,
  2010 and in the following week all participants will receive the grades and
  comments on their entries as given by the judges.

For any query – please write to Shyama V. Ramani of Friend in Need Trust at
shyama_ramani@yahoo.com

<table>
<thead>
<tr>
<th>Appropriate for</th>
<th>Single pit</th>
<th>Double pit</th>
<th>Septic tank</th>
<th>Ecosan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil type</td>
<td>Permeable soil</td>
<td>Permeable</td>
<td>Permeable</td>
<td>All types</td>
</tr>
<tr>
<td>Water level</td>
<td>Low water table</td>
<td>Low water table</td>
<td>Dry and low water table</td>
<td>All areas</td>
</tr>
<tr>
<td>Features</td>
<td>Single pit</td>
<td>Double pit</td>
<td>Septic tank</td>
<td>Ecosan</td>
</tr>
<tr>
<td>Approximate cost of construction in India</td>
<td>80 euros</td>
<td>100 euros</td>
<td>320 euros</td>
<td>120 euros</td>
</tr>
<tr>
<td>Additional costs for maintenance in India</td>
<td>0 if composted</td>
<td>20-30 euros per 2-3 years</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Minimum safe distance of toilet from water source</td>
<td>10 metres</td>
<td>10 metres</td>
<td>10 metres</td>
<td>No restriction</td>
</tr>
<tr>
<td>Water required per use</td>
<td>5-12 litres per use</td>
<td>5-12 litres per use</td>
<td>5-12 litres per use</td>
<td>3-4 litres per use</td>
</tr>
<tr>
<td>Effort by user for usage and maintenance</td>
<td>minimum</td>
<td>Some effort required</td>
<td>minimum</td>
<td>More effort required</td>
</tr>
<tr>
<td>Returns to user</td>
<td>none</td>
<td>compost</td>
<td>none</td>
<td>Compost and vegetable garden</td>
</tr>
<tr>
<td>Risk of environmental contamination</td>
<td>High if wet sludge is not disposed correctly</td>
<td>low</td>
<td>Very high</td>
<td>Negligible</td>
</tr>
<tr>
<td>Need for transport and treatment</td>
<td>Medium (in dry areas) and high (in high water table areas)</td>
<td>Minimum</td>
<td>High</td>
<td>Very minimal</td>
</tr>
</tbody>
</table>


9. Background of the FINISH programme: Programme FINISH stands for Financial INclusion Improves Sanitation and Health. Indian NGOs: BISWA (Orissa), IIRD (Rajasthan), ESAF (Maharashtra), SAMBHAV (Madhya Pradesh), Bharathi (Tamil Nadu), RDO Trust (Tamil Nadu) and Dutch NGO WASTE are joining hands with insurance organizations like TATA-AIG (India) and financial institutions like SNS-REAAL (Netherlands), NHB (India), NABARD (India) etc., to attempt to mobilize funds from end-user households to build 1 million sanitation systems. Since toilets do not generate income directly, there is a reluctance to invest in them. Therefore, innovative micro-credit and financial schemes that combine loans with micro-insurance packages are being tried out to mobilize household investment towards toilets. 

This effort is being followed and feedback is being provided by two academic teams. The first academic team is collecting data regularly during the intervention to measure its impact on health status using randomisation techniques (Britta Augsburg, IFS (UK) & UNU-MERIT, (Netherlands)). The purpose of the second academic team is to enhance the capabilities of the consortium members through undertaking an exploration of how the present sanitation technologies may be improved to fit environmental conditions and consumer needs better and how toilets may be effectively adopted by the targeted communities (Shyama V. Ramani, UNU-MERIT (Netherlands) and FIN (India)).
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Registration Form to be submitted by May 15 to fintrust.india@gmail.com

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Financial INclusion Improves Sanitation and Health

Name:

Telephone number (mobile preferred):

Email address:

Postal address:

Are you entering the contest as an individual or as an organization?

If you are entering the contest as an organization please give us details of your organization:
- Public laboratory (university or government research unit)
- NGO
- Firm
- Other

Postal Address & Website of Organization:

Upon receiving your registration form – the challenge details will be emailed to you immediately. Thank you for your participation.

The FINISH Sanitation contest organization committee.