DEWATS linked Biogas

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Slide 1

BORDA’s Approach

Decentralised Wastewater Treatment Systems – (DEWATS)

+ Biogas recovery

= Community and Environmental Sanitation

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Slide 2
DEWATS at Friends of Camphill

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Slide 3
DEWATS at Friends of Camphill

- Re-use for Agriculture and Energy
- Planted Gravel Filter
- Baffled Reactor
- Fixed Dome Biogas Plant
- Collection Register

Ecological Sanitation

DEWATS at Ullalu

Owner: Kodigehalli Panchayath/Ullalu Upanagara
Implementing Agency: Grama Swaraj Samithi - GSS
Consultant: Foundation for Educational Innovation in Asia - FEDINA
Architects: Leutinger, Berry and Stettler - LBS
Supported by: Bremen Overseas Research and Development Association - BORDA
Benefits

- Increasing public health through usage of sanitary facilities that supply the BIOGAS system with human waste
- Reducing the ecological footprint of the community through reducing the level of pollution discharged to water bodies and the atmosphere
- Raising the social acceptance for the treatment approach, through increased resource provision and to a certain extent, economic incentives

Biogas recovery from DEWATS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biogas generation</td>
<td>2-8 m³/day = 1000-3000 m³/annum</td>
</tr>
<tr>
<td>CH₄ generation</td>
<td>650-2000 m³/annum</td>
</tr>
<tr>
<td>Diesel equivalent</td>
<td>500-1600 l/annum</td>
</tr>
<tr>
<td>CO₂ equivalent of CH₄</td>
<td>10-40 T/annum</td>
</tr>
<tr>
<td>CO₂ generated / substituted</td>
<td>2 –8 T/annum</td>
</tr>
</tbody>
</table>
Future steps-DEWATS linked BIOGAS

- Biogas settlers a standard component of DEWATS for CBS and Institutions
- DEWATS to become priority option for better sanitation
- Increase efficiency of biogas digesters

Thank you for your attention!

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