Faecal Sludge Management
Devanahalli, Bangalore
First-of-its-kind town-scale Faecal Sludge Treatment Plant in India
In coordination with Devanahalli’s Town Municipal Cooperation (TMC), CDD Society built a faecal sludge treatment plant (FSTP). The plant is successfully handling 100% of the sludge collected in Devanahalli today.

The success of the FSTP motivated the TMC to pass resolutions in order to ensure the plant faces no operational or financial hurdles. The FSTP forms the heart of an end-to-end FSM solution for Devanahalli.

### Features-Benefits of the FSTP

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>No direct contact with faecal sludge</td>
<td>Allows for safe operations</td>
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<tr>
<td>Co-composting with Municipal solid waste</td>
<td>Allows for safe reuse</td>
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<td>No odour; aesthetically-pleasing facility</td>
<td>Plant can be set up close to the city; reducing distance trucks need to travel</td>
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<td>Gravity-based system; low electromechanical equipment</td>
<td>Keeps cost low making FSM affordable for the ULB</td>
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<td>Biological treatment; no chemicals used</td>
<td>Low operation and maintenance; no skilled labour required</td>
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**Background**

In coordination with Devanahalli’s Town Municipal Cooperation (TMC), CDD Society built a faecal sludge treatment plant (FSTP). The plant is successfully handling 100% of the sludge collected in Devanahalli today.

The FSTP at Devanahalli is spread over 615sqm and can treat up to 6,000 litres of faecal sludge a day.

**About Devanahalli**

- **Location**: 12 kms from Bangalore Airport
- **Population**: 30,000
- **Households**: 6,400
- **Access to toilets**: 94%
- **UGD coverage**: 0%
- **Septic tanks/pits coverage**: 90%

**Features**

- Desludging Vehicle
- Feeding Tank
- Biogas Digester
- Integrated Settler with Anaerobic Baffle Reactor
FSM Business Plan

Costs to be incurred:
1. FSTP operations
2. Cesspool vehicle operations
3. Co-composting plant operations
4. Overheads

Possible sources of revenue:
1. Increase in property tax
2. Advertisement hoardings
3. Revenue from truck operations
4. Sale of compost (from treated sludge)

*These sources of revenue do cover costs.*

Devanahalli’s Municipal Corporation has passed 4 resolutions

- Regulating faecal sludge disposal
- Outsourcing of O&M of plant and truck
- Monitoring construction of pits & septic tanks
- Property tax inclusion

Achievements

- One-of-its-kind town-scale FSTP
- First town in India to implement end-to-end FSM
- Utilisation of cesspool vehicles increased 4x
- IEC campaigns on FSM and sanitation on-going
- A fully-replicable model for towns of this size