Septage Management: An option for improved sanitation in Tripura

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Outline

Context

Septage management strategy

Progress
Demographic profile

- Urban population – 0.77 million in 20 towns
- Accounts for 21% of the state’s population

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Population class</th>
<th>No. of towns</th>
<th>Share of urban population (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>5,000 – 9,999</td>
<td>1</td>
<td>1</td>
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<tr>
<td>2.</td>
<td>10,000 – 19,999</td>
<td>13</td>
<td>24</td>
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<td>3.</td>
<td>20,000 – 49,999</td>
<td>5</td>
<td>18</td>
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<td>4.</td>
<td>&gt; 100,000</td>
<td>1</td>
<td>57</td>
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Rationale for septage management - 1

a. Individual household toilets in 98% of the households

b. 93% of urban latrines are on-site sanitation systems

c. No safe septage emptying and disposal arrangement

d. Pollution risks and public health concern, esp. lowlands

e. Mission of Urban Sanitation Strategy

f. Small towns and investments in sewer technology a scale issue
Rationale for septage management - 2

- MoUD advisory on septage management
- Cost effective

<table>
<thead>
<tr>
<th>Details</th>
<th>Network*</th>
<th>On-site</th>
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</thead>
<tbody>
<tr>
<td>Capex (US $/HH)</td>
<td>420 - 670</td>
<td>100 - 135</td>
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<tr>
<td>Opex (US $/HH/year)</td>
<td>27</td>
<td>20</td>
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</tbody>
</table>

- 10% lumpsum scheme provides for septage management and pilot demonstration – Govt. of India program
- Note: *Average of HPEC Estimates and actual cost incurred for several Sewer systems implemented in Tamil Nadu under World Bank Project
Onsite sanitation arrangements - Urban Tripura
Septage Management Strategy

SECTION 2
The Tripura Septage Management Strategy - Vision

- Time frame: 2017

- Create “an effective septage management system, managed by urban local bodies, supported by septage carriers/haulers and wastewater and septage treatment facility operators with adequate regulatory and oversight systems”

- Eliminate the practice of discharging night soil into storm water drains, land or water bodies

- Protection of human and environmental health
Key elements and principles of strategy

**Technical and service delivery options**
- Septage management as a necessary service for households and establishments
- Move from “on-demand” to “regular desludging”
- Clustered approach for septage management

**Institutional roles and responsibilities**
- A trajectory for deepening devolution
- Sustainability of arrangements
- Septage as a resource
- Improved information systems for planning, learning and management
Clustered approach for septage treatment

1. Proximity of towns and economies of scale
2. 4 clusters, each serving 3 – 5 towns
3. 3 stand alone facilities
Key Elements – Institutional Structure

State Sanitation Committee

- Strategic Direction, Oversight and Approvals

State Urban Sanitation Cell

- Program Management headed by Dedicated Officer
- Professional Staff – engineering, training/communication, IS
- Supported by Admin./a/cs
- In-sources consultant support

ULB

- Implementing Agency
- Decision-making and procurement follow Municipal rules
- Core group-SMU- with Chairperson, EO, engineer, Standing Comm. Member and 2 councillors. Can co-opt others

Professional Staff

- Directions, Training, Finance

Support Staff

- Reports

General Body

Standing Committee

Septage Management Unit

- Directions, Approvals
- Reports
Key Elements – Cost and Phasing

Capital cost – US $ 725,000

O&M – to be recovered from users

<table>
<thead>
<tr>
<th>Year</th>
<th>FY 13</th>
<th>FY 14</th>
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<tr>
<td>Quarter</td>
<td>Q4</td>
<td>Q1</td>
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<td>Preparatory Phase</td>
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<td>Instituting Management Arrangements</td>
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<td>Monitoring Arrangements</td>
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<td>Support Activities</td>
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Progress update

April 2014 – Septage strategy approved by the state government
April – June 2014– Detailed project report submitted to MoUD
June 2014 – Beneficiaries (2) for pilot Ecosan toilet
August 2014 – Initiation of the Ecosan project
December 2014 – Project approved by MoUD, GoI
Thank you –
Questions please!