A systematic approach to desludging in Karunguzhi
Scheduled Desludging Tool

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Karunguzhi

Town profile

- Population: 12,485
- Households: 3,075
- Houses having OSS: 2,155
- Houses without toilet: 920. Toilets now constructed under SBM
- Community Toilets: 4 (30 seats)
Karunguzhi

FSTP

- First Town Panchayat with an FSTP
- FSTP designed to cater to the households in both in Karunguzhi and the adjacent Madhuranthgam Municipality
- A pilot project based on cluster approach
Karunguzhi De-sludging Tool

Need for a tool

● Septage collection process was virtually non-existent initially.
● High/inconsistent desludging charges by truckers.
● Regulate desludging of the household in a systematic manner.
● Seamless mechanism to track and capture the desludging activity.
● Karunguzhi desludging tool was designed as a web-based application.
Household Profile

Contains the following information:

- Householder's name, address, rental info, and ward number
- Containment type and measurements
- Number of users
- Last desludging date
# De-sludging Operator /Trucker Profile

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Name</td>
<td>Name of the owner</td>
</tr>
<tr>
<td>Door Num.</td>
<td>Door number</td>
</tr>
<tr>
<td>Street Name</td>
<td>Street name</td>
</tr>
<tr>
<td>City</td>
<td>City name</td>
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<tr>
<td>District</td>
<td>District name</td>
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<td>State</td>
<td>State name</td>
</tr>
<tr>
<td>Pincode</td>
<td>Pincode</td>
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<tr>
<td>Aadhar Num.</td>
<td>Aadhar number</td>
</tr>
<tr>
<td>Mobile Num.</td>
<td>Mobile number</td>
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<tr>
<td>Alternative Num.</td>
<td>Alternate mobile number</td>
</tr>
<tr>
<td>Ward Num.</td>
<td>Ward number</td>
</tr>
<tr>
<td>Vehicle Name</td>
<td>Vehicle name</td>
</tr>
<tr>
<td>Vehicle Num.</td>
<td>Vehicle number</td>
</tr>
<tr>
<td>Pollution Control Num.</td>
<td>Pollution control number</td>
</tr>
<tr>
<td>Pollution Validity Date</td>
<td>Pollution validity date</td>
</tr>
<tr>
<td>Insurance Validity Date</td>
<td>Insurance validity date</td>
</tr>
<tr>
<td>Fitness validity Date</td>
<td>Fitness validity date</td>
</tr>
<tr>
<td>Vehicle Volume (Cm)</td>
<td>Vehicle volume</td>
</tr>
</tbody>
</table>

Truck Owner name, address, organisation, vehicle license, pollution and insurance validity, septage license and capacity.
Scheduled De-sludging

The tool creates an automatic schedule based on the last desludging date which can be listed month on month

System generated notices are issued with a timeframe to desludge
De-sludging date

The households on receipt of notice, registers to desludge with the TP office on a specific date on paying a nominal fee.

Tool tracks issue of notice and response from the household.
Assigning Trucker

A registered vehicle is assigned online to carry out desludging for the household on specific date as requested.
Assigning Trips

A vehicle can be allotted to max of 5 households in a single trip.
Generating bill/record

The bill generated is handed over to the trucker.

The volume of sludge is noted in the bill by the trucker.
Tracking disposal

On assignment of date and trucker the record moves in to FSTP site page.

The site operator updates the volume and date of disposal against the bill and closes the desludging status.
De-sludging status - Updated

Tool automatically updates the last desludging date against the household on bill closure.
Demand based De-sludging

The tool also caters to a demand-based desludging request raised by the households.

Bills are raised by assigning a vehicle to households which has raised the demand for desludging with the TP office on a specific date on paying a nominal fee.
Other features of the tool

Bulk upload of consumer or Trucker Data

Edit options on for data updates
Other features of the tool

Data on unregistered vehicle disposing sludge at the FSTP

Downloadable excel reports
Challenges

- Households with common septic tank.
- Transitioning from manual records to a systematic process
Advantages of the tool

- Systematic desludging process for households.
  - Awareness on scheduled desludging among the public.
  - Affordable and standardised desludging fee.

- Tracking non-compliance and unsafe discharge practices
  - Avoiding manual scavenging
  - Source of continuous income for truckers

- Effective tool to monitor the systems progress as well as it’s management.