Faecal Sludge & Septage Management in India: Journey towards SDG 6.2

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POPULATION:
• 1.3 Billion
• 2\textsuperscript{nd} Most populated
• Nearly 1/5\textsuperscript{th} of world population

STATES:
• 29 States, 7 Union Territories
• Each state is like a country by itself – 50 m to 200 m
• 122 Languages and numerous dialects
• Diverse cultures, beliefs, practices
• States at different levels of economic progress and maturity
• Diverse political and socio-economic contexts
• Sanitation is a state subject
• Seamless implementation of an agenda is not easy
Over 19% of urban population lacks access to household latrine

About 67% of urban HHs were based on Onsite Sanitation Systems (OSS)

Diarrheal diseases cause an estimation of 365,000-500,000 deaths per year among children under the age of 5

81% of Urban India’s human excreta/sewage generated is untreated

Lack of proper sanitation causes an estimated loss of USD 53.8 billion in India
The urban poor were the most disadvantaged with respect to access to safe sanitation facilities.
India had a National Urban Sanitation Policy but did not consider FSSM

Two states (Tamil Nadu, Maharashtra) had released state level Septage Management policies to ensure proper FSSM

One town in India, Devanahalli in Karnataka, had an FSTP

1,846 (42%) of cities across India had been declared Open Defecation Free (ODF)
One Pilot Project - Devanahalli, Bangalore

<table>
<thead>
<tr>
<th>Scale</th>
<th>8 Cum/day</th>
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<tbody>
<tr>
<td>Foot print</td>
<td>500 - 600 sqmt</td>
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<tr>
<td>Valuable end products</td>
<td>Soil conditioner, treated wastewater, biogas</td>
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<tr>
<td>Economics</td>
<td>CAPEX – INR 5.5M</td>
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<tr>
<td></td>
<td>OPEX – INR 0.4 M</td>
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<td>Other cost – INR 2.5M</td>
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Current Situation
- 5.1 million individual HH toilets constructed
- 0.4 million public/ community toilets
- ~3062 municipalities : ODF
During the 700 eventful days since FSM4

**Launch of India’s First National Policy on FSSM**

19 out of 36 States and Union Territories Publish Policies or Operative Guidelines on FSSM

442 towns in India have announced or tendered FSTPs

The national government has identified treatment as the next big challenge, post ODF, as evidenced by key sub-missions under flagship government schemes.
Eight States have been certified as 100% ODF

Maharashtra: FSSM Planned in 100 Towns

Odisha: FSSM Planned in 114 Towns

Telangana: FSSM Planned in 74 Towns

Tamil Nadu: FSSM Planned in 49 Towns

Andhra Pradesh: FSSM Planned in 110 Towns

Uttar Pradesh: FSSM Planned in 31 Towns

These states have a total population of over half a billion
Challenges that needed to be addressed

- Shifting the policy needle across states
- Increase in public finance for FSSM
- Building capacities of cities and states
How we got there – approach taken

- COLLECTIVE VOICE
- COLLABORATIVE ACTION
- GOVERNMENT ALLIES
- DESIGN FOR SCALE

Enabling Environment
How did we get there?

1. Collective voice

National Faecal Sludge and Septage Management (NFSSM) Alliance, as a Community of Practice, to be able to present a powerful collective voice to the government.
The NFSSM Alliance was convened in January 2016 with the support of the Bill and Melinda Gates Foundation. The Alliance was convened to build consensus around FSSM.

The Alliance comprises of numerous national and international organizations across the country working towards sanitation solutions for India.

The NFSSM Alliance works in close collaboration with the Ministry of Housing and Urban Affairs and helped design a National policy on FSSM.
How did we get there?

2. Collaborative Action

- Allowing experts in the field to learn from each other, avoid duplication of effort and act as a single unit, as a Community of Practice.
How did we get there?

3. Government Allies

- The NFSSM Alliance is composed of trusted members, with a track record of work in diverse states and cities helped move policy and created an integrated platform for national and state government to interact with and validate each other’s recommendations.

- This allowed states to allocate funding to FSSM solutions, put FSSM at the center stage of urban sanitation and amplified the NFSSM Alliance’s reach.
How did we get there?

4. Design for Scale

• Working with the National and State governments
• Public Private Partnerships
• Using multiple methods such as co-treatment
• Evidence building and pilot projects
• Capacity building and exposure visits
• Video case studies and best practice dissemination
• Behavior change communication across stakeholders
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వెలికి మాచారులు యోద్ధాడు మన ప్రపంచం సమాధానం చేయండి సాధనం ఇచ్చివేయండి
Outcome and Response

- About 3000 million USD investment in WWT and Septage
- New FSM Mission (cities above 0.1 m) – 700 million USD
- Many States Govts have earmarked public funds for FSM (~100 m USD)
- Combined treatment promoted (>900 STPs)
- New FSM mission planned for small towns (600 cities)
- FSSM is an integral component of city rating exercise (4000 cities participate to gain national recognition)
Making biochar from human waste

Narsapuram municipality in West Godavari district holds the distinction of starting a Faecal Sludge Treatment Plant (FSTP) for the first time in the country to convert human excreta to biochar which could be used as manure in the fields.
Where we want to go from here?

FSM 6
Where we want to go from here?

Our target is Sustainable Development Goal of safely managed sanitation.

Target SDG 6.2 states that by 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation.
Where we want to go from here?

National Urban Sanitation Policy – 2030 (Draft)

NUSP 2.0
## Where we want to go from here?

<table>
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<tr>
<th>Goals and Targets</th>
<th>Timeframe</th>
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<tbody>
<tr>
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<td>2019 - 2024</td>
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<tr>
<td>All urban populations, especially women, girls, transgender persons, poor and</td>
<td>100%</td>
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<tr>
<td>vulnerable have equitable and adequate access to and use safe sanitation and</td>
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<td>hygiene facilities, at all times</td>
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<td>All wastewater and faecal sludge is safely managed across the entire sanitation</td>
<td>50%</td>
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<tr>
<td>value chain</td>
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<tr>
<td>Wastewater is recycled and reused</td>
<td>20%</td>
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<tr>
<td>All urban population adopt safe sanitation and hygiene practice including hand</td>
<td>100%</td>
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<td>washing with soap before meals and after toilet use</td>
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<tr>
<td>All institutions related to sanitation at local, state and national level</td>
<td>50%</td>
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<td>have adequate representation of women in decision making</td>
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<td>Water bodies within urban areas show sustained improvement (free from faecal</td>
<td>40%</td>
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<td>contamination) in water quality</td>
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<tr>
<td>Urban Local Bodies (ULBs) sustain operation &amp; maintenance costs of sanitation</td>
<td>100%</td>
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<td>systems/ infrastructure from their own financial resources (through user charges,</td>
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<tr>
<td>fees, and taxes, etc.</td>
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How do we plan to get there?
1. Institutional Arrangements for Implementation (*fixing institutions*)
2. Technological innovation
3. An Apex body/Association for FSSM (IFA)
4. Financing and Private Sector Participation
5. Inclusion of Gender, Poverty and Social Lens including Community Engagement
6. Capacity Building, Awareness Generation and Behavior Change
7. Monitoring Systems or equity dashboards
8. Quality Assurance
Transformative pathway

Enabling Environment

Innovative/disruptive technologies and processes
Journey continues