

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

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POPULATION :

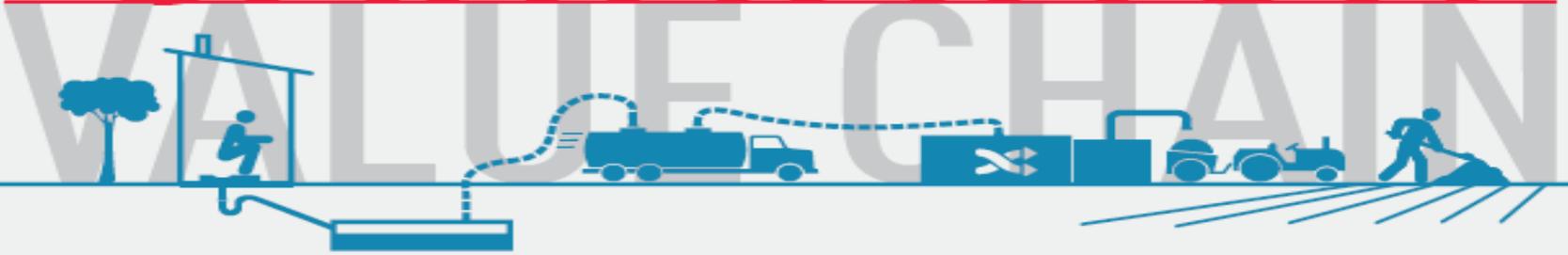
- 1.3 Billion
- 2nd Most populated
- Nearly 1/5th of world population



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**

SANITATION



CAPTURE >

STORAGE >

TRANSPORT >

TREATMENT >

REUSE

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

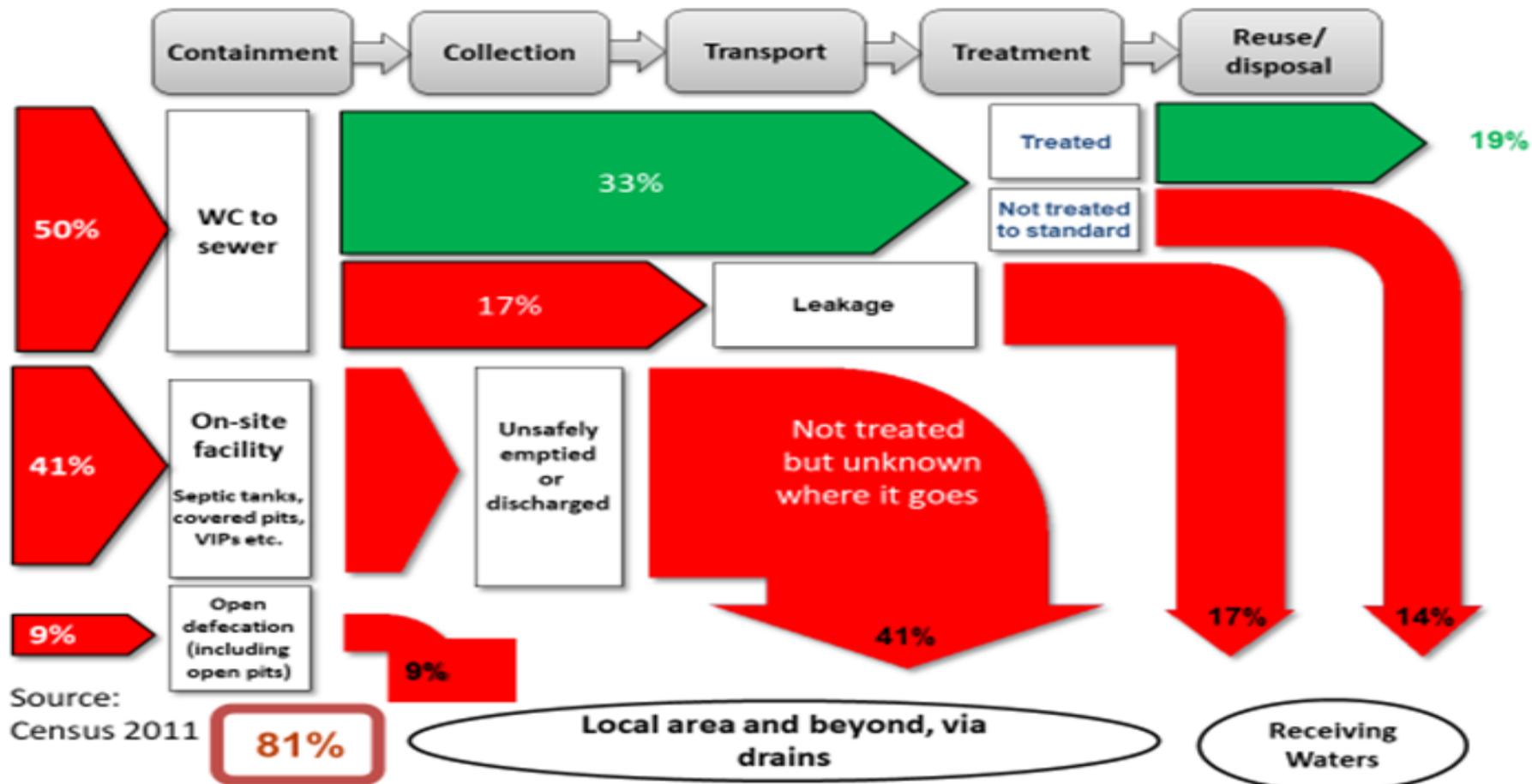
81% of Urban India's human excreta /sewage generated is untreated

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



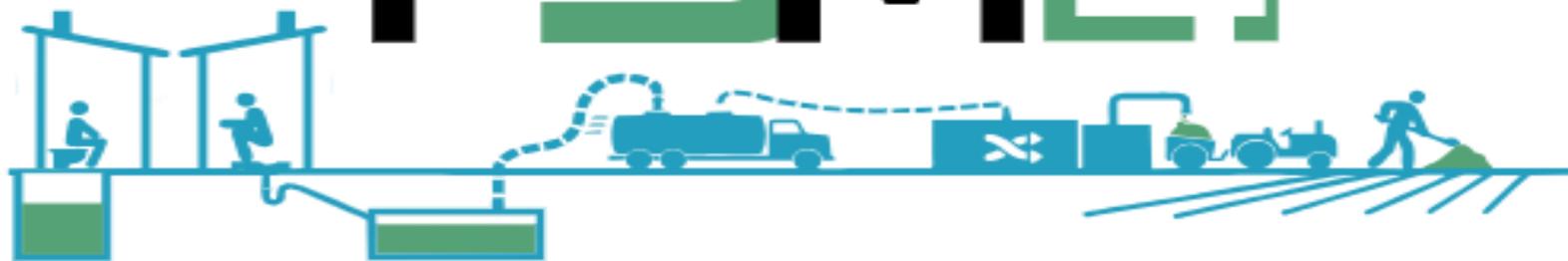
Urban Sanitation in India



Unsafe disposal practices



FSM4



FSM4: 700 days ago



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)

Scale	8 Cum/ day
Foot print	500 - 600 sqmt
Valuable end products	Soil conditioner, treated wastewater, biogas
Economics	•CAPEX – INR 5.5M
	•OPEX –INR 0.4 M
	•Other cost – INR 2.5M



One Pilot Project - Devanahalli, Bangalore



Current Situation

FSM The logo for FSM consists of the letters 'F', 'S', and 'M' in a dark grey, bold, sans-serif font. To the right of these letters is a stylized orange square containing a white graphic element that resembles a lowercase 'b' or a similar shape.



- 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

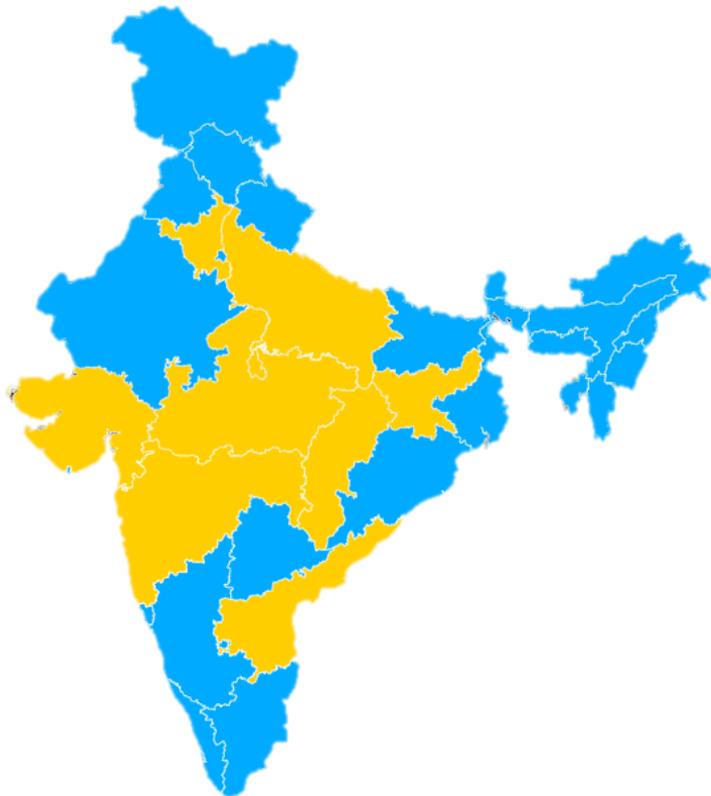


442 towns in India have announced or tendered FSTPs



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



● Basis States certified as 100% ODF

**These states have a total population of
over half a billion**



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

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**



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.

NFSSM Alliance currently comprises 28 organizations across the country working towards solutions for India States and Cities



- 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



మలాసురుడిని వదిల
బ్రిగేడ్



ఫోన్ చెయ్యండి, మలాసురుడ్ని బంధించండి
(S-Line)

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కనీసం మూడు సంవత్సరాలకు ఒకసారి సెప్టిక్ ట్యాంక్ ను తప్పక శుభ్రం చేయించండి

Outcome and Response

- About 3000 million USD investment in WWWT 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)

**SWACHH
SURVEKSHAN**

Making biochar from human waste

THE HANS INDIA | © Dec 29, 2018, 12:41 AM IST

A A A



Pasupuleti Ratnamala holding the jar of biochar

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 ?

FSM6

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?

Goals and Targets	Timeframe	
	2019 - 2024	2025 - 2030
All urban populations, especially women, girls, transgender persons, poor and vulnerable have equitable and adequate access to and use safe sanitation and hygiene facilities, at all times	100%	100%
All wastewater and faecal sludge is safely managed across the entire sanitation value chain	50%	80%
Wastewater is recycled and reused	20%	30%
All urban population adopt safe sanitation and hygiene practice including hand washing with soap before meals and after toilet use	100%	100%
All institutions related to sanitation at local, state and national level have adequate representation of women in decision making	50%	50%
Water bodies within urban areas show sustained improvement (free from faecal contamination) in water quality	40%	70%
Urban Local Bodies (ULBs) sustain operation & maintenance costs of sanitation systems/ infrastructure from their own financial resources (through user charges, fees, and taxes, etc.)	100%	100%



How do we plan to get there?

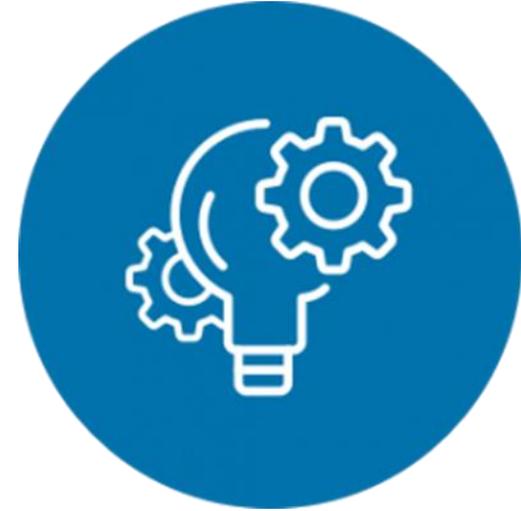
FSM6: 700 days ahead

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

