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How can SFDs provide tool for action in cities: Andhra Pradesh

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How can SFDs provide tool for action in cities: Andhra Pradesh

1. Current status
2. Drivers for change in FSSM – GO 134, FSTP procurement etc.
3. Challenges
4. Conclusion

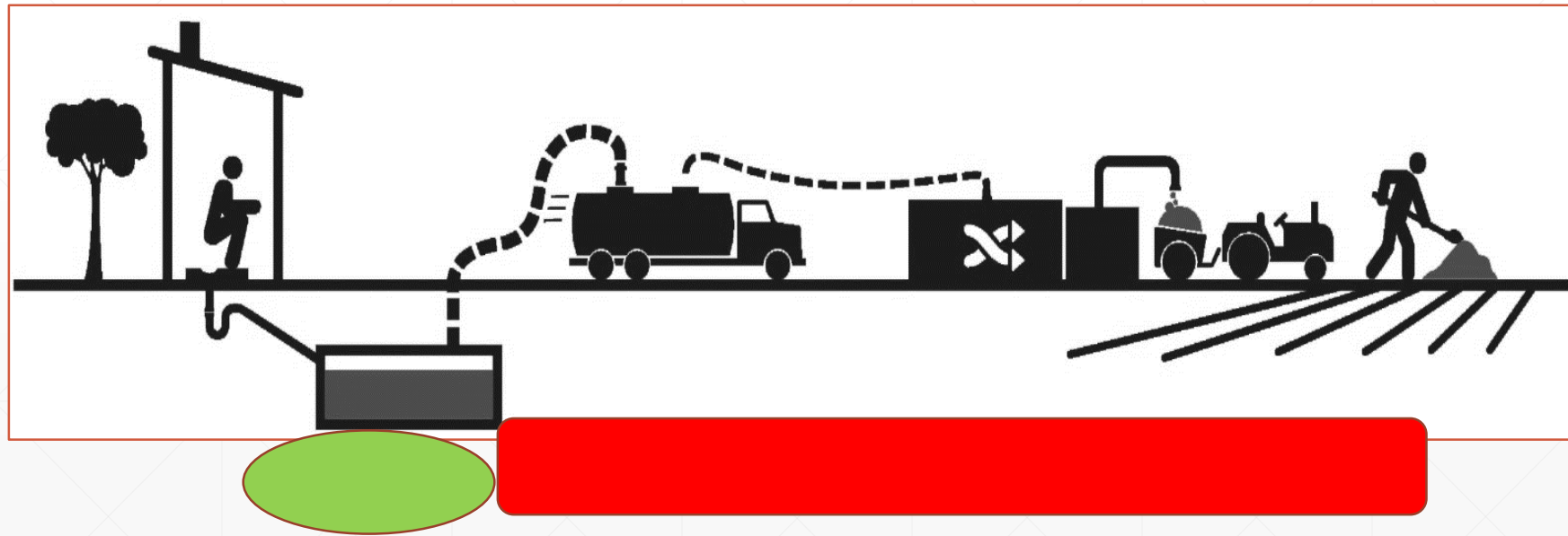


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Current Status

- Baseline survey carried out in all 110 ULBs
- SFDs for all 110 ULBs prepared in AP
- Most SFDs are green at containment
- Most of the other stages of the value chain are in red



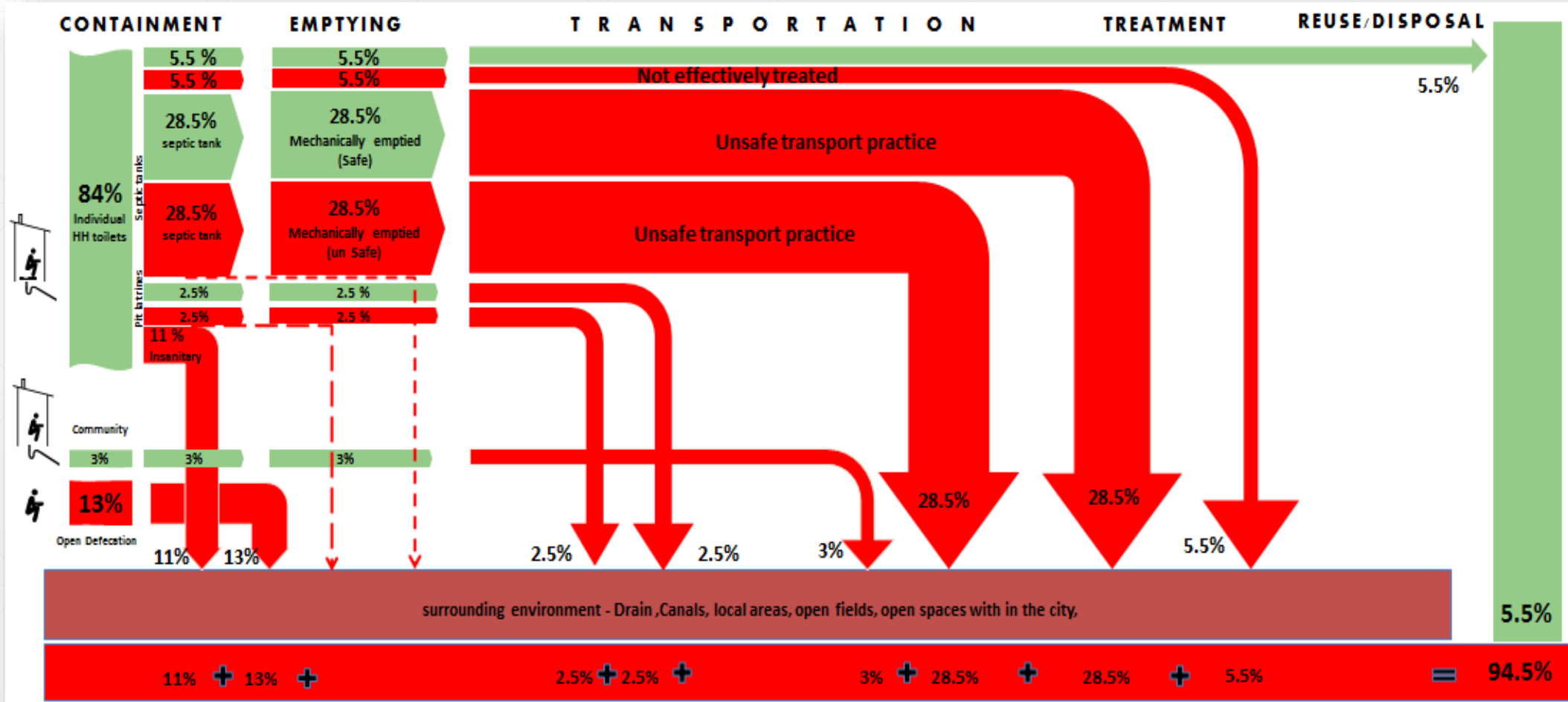
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SFD – Andhra Pradesh 2011



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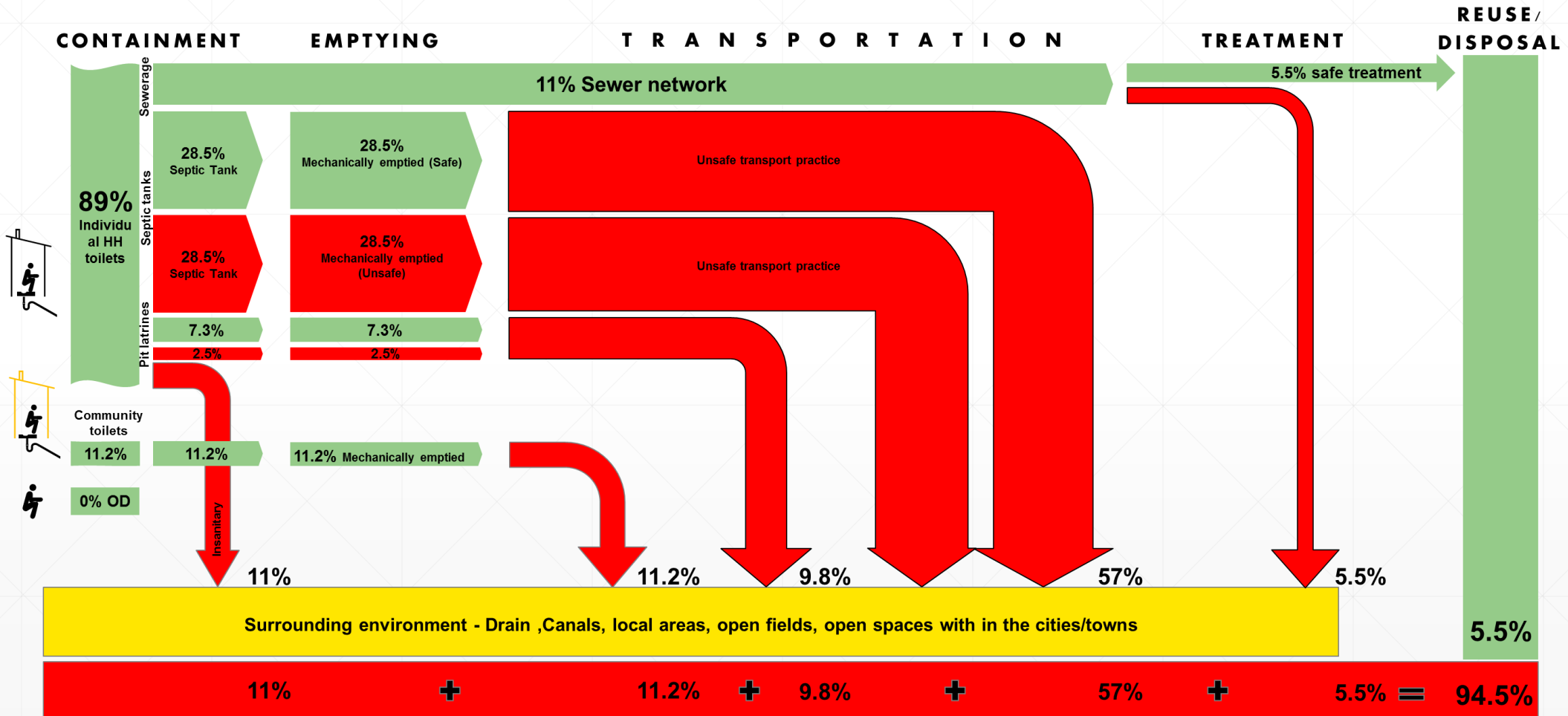


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SFD – Andhra Pradesh 2017



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SFDs – Andhra Pradesh 2011 Vs. 2017

SFD	2011 (%)	2017 (%)
Open defecation	13	0
Community Toilets	3	11.2
IHHL	84	89
Safely Managed	5.5	5.5
Unsafely Managed	94.5	94.5



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Impact of SFDs & Drivers for change

- Underlined the importance of FSSM for administrators - Government at state and ULB level
- SFDs are easy to interpret FSSM status in a city
- Changed the pace at which reforms were developed & being introduced across AP in the sector



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Key Drivers - to turn SFDs from red to green



- Development of G.O. 134 –Comprehensively covers all stages of FSSM Value Chain
- Three model cities identified for GO 134 Launch – Narsapur, Kovvur, Palacole
- Plan for 76 FSTPs – PPP
- Co-treatment –at 32 AMRUT ULBs
- NSS unit established at the State level to operationalize FSSM Policy – Technical support of ASCI



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Key Drivers - GO 134

- On March 31, 2017, the GoAP passed **G.O. 134**.
- G.O. 134 takes the next step towards Total Sanitation: ODF+ by instituting **Faecal Sludge and Septage Management**
- **Focus areas**
 - Collection and Storage
 - Transportation
 - Treatment, Disposal, and Reuse
 - Awareness Generation and Capacity Building
 - Record-Keeping, Monitoring, and MIS
 - Private Sector Participation



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Awareness Generation and Capacity Building

- Citizens should be **sensitized** to the importance of safe FSSM to creating clean and sanitary towns.
- Homeowners must be educated on the importance of **regular (every three years) household de-sludging – work initiated in model town**
- Masons must be taught both how to construct proper septic tanks and pit latrines and **why they should be built that way**.
- Private operators need to be educated on the **importance of PPE**, the dangers of open dumping, and their role in creating clean towns.



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Record-Keeping, Monitoring and MIS

- Record-keeping, monitoring, and MIS systems are crucial for implementing and sustaining FSSM.
- These aspects of FSSM ensure that every step of the “FSSM Value Chain” operates smoothly.
- A “**Containment Census**” of septic tanks and pit latrines should be conducted and inputted into a GIS system, for operators to use.
- Private operators’ trucks will report every emptying and disposal via a combined **MIS and GIS system** using the “**FSM Tracker**” app.
- All records should be available in **an online database** for inspection by any members of the public.

Financing Options & PPP

The sale of fertilizer and soil conditioner from FSTPs can be a profitable revenue stream to assist with operating costs. ULBs should examine the market for such products.

ULBs can seek funds from the following sources for FSSM financing:

- Designated property tax to support FSM efforts
- Public Private Partnerships
- Funds from the 14th Finance Commission?
- National schemes including SBM, Smart City, and AMRUT?



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Key Drivers – Model Cities

- Narasapur, Kovvur and Palacole first towns to pass council resolution adopting GO 134
- CSPs prepared for these three towns
- Currently over 28 councils have passed similar resolutions
- GPS tracking of licensed operators in Narasapur

Key Drivers – Model Cities – activities being undertaken

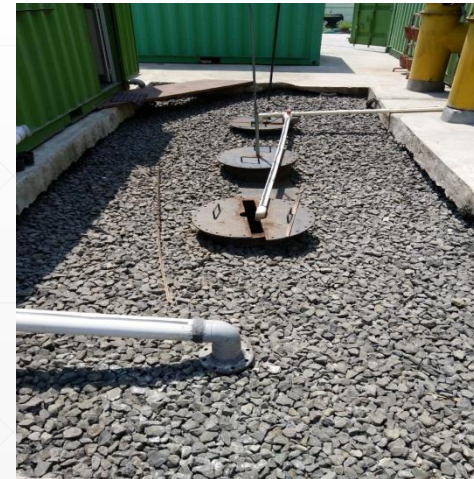
- Diagnostic Assessment
- City Sanitation Task Force – Composition, effectiveness, incentive?
- City Sanitation Plan (CSP) – Must sync with state level plans and SFDs to be incorporated in CSPs
- Operationalization of FSSM Guidelines
- Capacity Building
- Budget Allocation for FSSM
- Community Engagement
- Information, Education and Behavior Change Communication (IEBC)



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Pilot 1 – Narasapur

- Model FSTP built on 0.4 acre and a resource park(1ac) developed with BMGF's support
- Plant capacity 15KLD
- Remote monitoring capability, quick set up and all weather systems
- End product produced is - Biochar, can be used as a soil additive
- Three licensed operators with GPSs installed trucks are operating





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Pilot 2 - Rajam

- Total area- 0.5ac
- Plant capacity – 15 KLD
- Operators – 3 (Private not yet licensed)
- Geo Tube technology has been successfully demonstrated
- End product of high N, P, K value can be used a soil manure



Key Drivers – FSTP procurement

- Selection of developers for 76 ULBs completed
- 76 ULBs grouped in to seven packages PPP model - DBOT – Hybrid Annuity Model
- Total project period 10 years – construction 6 months + 9.5 yrs maintenance

Why DBOT was used in this procurement

- FSTP development and operations are highly technical and requires know-how and skill set
- To bridge short term financing gaps
- Improving accountability of plant operations and quality assurance (payment linked to performance)



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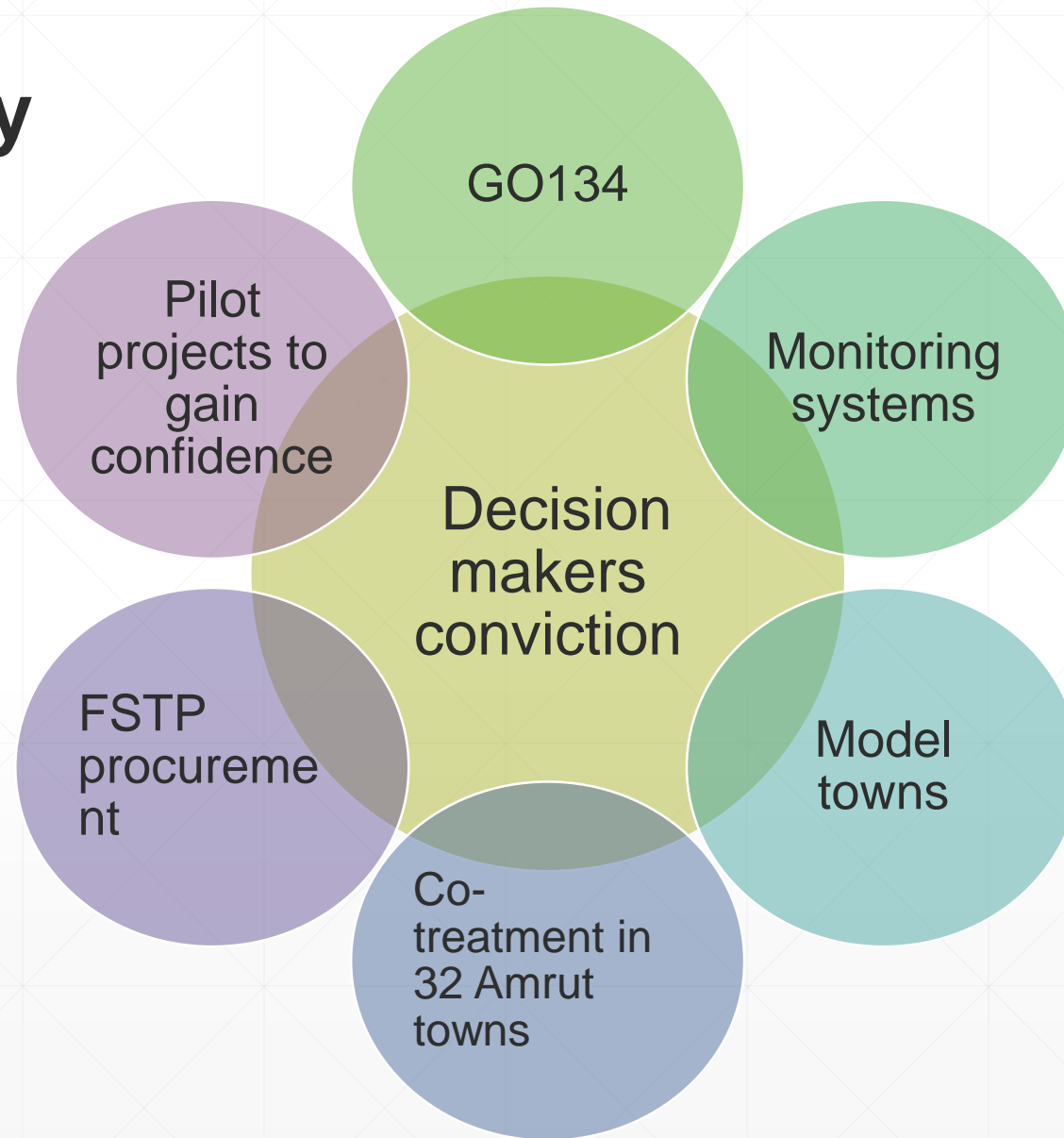
Key steps in this procurement

- **TA support** – ASCI consortium provided end to end TA support
- Preparation of **Detailed Project Reports** for each ULB – to assess the FSM situation, analyze FSTP capacity and prepare benchmark line estimates
- Consultation with key stakeholders at ULB level – ownership and **council resolution**
- Identification of **land** and utilities for establishing FSTPs (major pain point)
- Establishing **FSM cell** at ULB level and building capacities
- Creating demand, organizing desludging operators, BCC and **safety training** for sanitation workforce
- 76 ULBs **clustered** under 7 packages – based on geographic proximity and other operational criteria; each consisting of 11 ULBs except Package 2 with 10 ULBs.

Challenges

1. Quality of data is important for correct SFD generation
2. Land allocation by the ULBs for the establishment of FSTPs plants
3. Licensing and monitoring desludging operators
4. FSTP plant getting optimum plant load daily – If there is no monitoring, desludging operators will off load at farmers fields for a price
5. Sustaining the FSTPs beyond the DBOT period – If no bi product to sell?

Summary



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Next steps

- All councils to pass Council Resolutions accepting GO 134
- All councils to allocate land for FSTP establishment
- License all desludging operators in all ULBs, Install GPS in the vehicles
- All residents must be made aware of the importance of regular/scheduled desludging



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Conclusion

- SFDs gave FSSM perspective to the Government
- Focussed approach to turn SFD red areas of FSSM value chain to green
- GO 134 a timely intervention
- Develop SFDs after a period of time when all FSTPs are grounded for comparative analysis
- Automated data collection and quality of data is important for accurate SFDs



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Thank you



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Key Drivers – FSTP procurement

- Procurement of developers for 76 ULBs completed
- 76 ULBs grouped in to seven packages PPP model - DBOT – Hybrid Annuity Model
- Total project period 10 years – construction 6 months + 9.5 yrs maintenance
- Pilot projects in operation at Narasapur (West Godavari District) and Rajam (Srikakulam)