Implementing Faecal Sludge Management Services Learning from emerging and established success

Isabel Blackett Peter Hawkins Based on FSM case studies funded by Bill & Melinda Gates Foundation



FSM Innovation:

Case studies on the business, policy and technology of FSM

20+ FSM case studies:

- Well established and emerging successful FSM systems
- Countries and individual cities
- East Asia, South Asia, East Africa, Southern Africa and West Africa

Analysis and up-to-date cross-country learning on:

- What to do
- What should be seriously considered
- What to avoid

http://www.susana.org/en/resources/library/details/2760



Outline

- Getting started
- Advocacy: building partnerships
- Developing FSM policy and regulation
- Building an effective institutional basis for FSM
- Developing and financing FSM services
- Practical technical solutions
- Making effective use of infrastructure
- Some conclusions



Getting started *Building up from the existing situation*



- Establish partnerships with local government
- Collaborate with others in the same city/country
- Use and adapt existing tools, reports, lessons learned
- Collect and analyse diagnostic information
- Advocate from evidence
- ✓ Work with what exists: service providers, infrastructure etc.

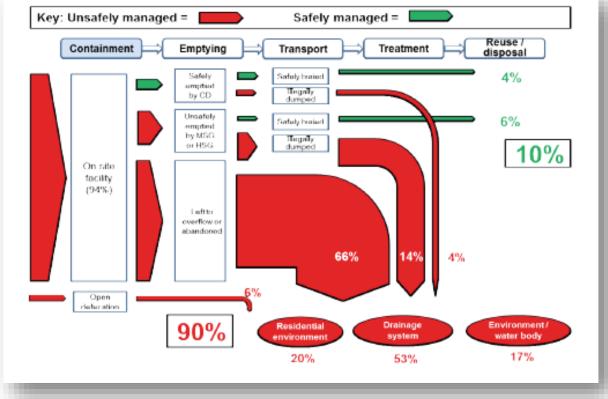


Advocacy: building partnerships Many stakeholders, often poorly informed

Inform and motivate FSM stakeholders with:

- Evidence and learning opportunities
 SEDs faceal wasta flow diagrams
- SFDs faecal waste flow diagrams





- High quality communications and media
- Sustain advocacy efforts decision-makers change



Developing FSM policy *Recognise and incorporate FSM in planning*



- Integrate FSM into national sanitation policy
- Use evidence, piloting and local practice to inform policy development
- Involve stakeholders: all levels of government, city officials, utilities, private operators, CSOs, etc.
- Plan with a mix of sanitation types, to include all neighbourhoods
- Adopt an incremental approach to planning, for maximum impact



Establishing FSM regulation

Setting standards within an inclusive framework

- Set regulations, standards and guidelines for the whole sanitation chain
- Base development on stakeholder dialogue and practical experience
- License and monitor FSM operators
- Systematically enforce and possibly revise – relevant public health regulations

File No.HLTH-GEN/20/2016-SR AST1 HLT HOF PROCEEDINGS OF THE COMMISSIONER (FAC) :: GREATER WARANGAL MUNICIPAL CORPORATION Present: Sri Shahid Masood, B.Com Roc.No.HLTH-GEN/20/2016/Permit-01/2016 Dated:27-10-2016. Sub: Greater Warangal Municipal Corporation - Public Health Branch - License for collection, Transportation and disposal of septage - Orders - Issued. Ref: Your application dated 02/09/2016 -000 ORDER: In accordance with all the terms and conditions of the By-laws / Regulations, Municipal Corporation Act/Rules, the special license conditions accompanying this license and applicable rules and laws of Government of Telangana, permission is hereby granted to. Shri. Ch.Ajay Singh S/o. Satveer Singh is hereby authorised to undertake desludging of the septic tanks and pits from the individual households, institutions, commercials entities and to transport for disposal at a designated site as notified by GWMC duly following the "Operative Guidelines on Septage Management (Collection, Transportation Treatment and Disposal) in Greater Warangal Municipal Corporation (GWMC) - 2016". Municipal Health Officer Greater Warangal Municipal Corporation Copy to the Deputy Commissioner-II (Sanitation), GWMC Copy submitted to the Commissioner, GWMC for favour of kind information. Copy submitted to the Hon ble Mayor, GWMC for favour of kind information. Signature valid

Building an effective institutional basis for FSM

Clear mandates and strong leadership at national and local levels



- Build national commitment and accountability for city-wide inclusive sanitation – including FSM
- Develop leadership and ownership by local government, as an integral part of urban management
- Define clear mandates, roles and budgets for FSM
- Ensure adequate staffing levels, continuity and training
- Work with the private sector where appropriate



But maintain realistic expectations...

- χ Major change won't occur overnight or even in the first few years
- **χ** Policy alone won't drive action
- χ Well-meaning but uninformed policy based on ideal scenarios may not work
- χ Regulations can't be established unilaterally, or quickly
- X Overly ambitious standards shouldn't be adopted at the start
- **χ** The private sector won't get involved without incentives





Delivering FSM services: the four P's *Competing with the status quo*

Effective, hygienic FSM must compete with existing manual latrine emptying and septic tanks discharging directly to open drainage – so it needs to be marketed



The four P's of marketing:

- Product: private sector dynamism; local research & development partnerships
 - Price: targeted subsidies; facilitated payment mechanisms (regular emptying)
 - Place: call centres for FSM services
- **Promotion:** sustained marketing effort; application of public health regulations

Financing FSM service delivery

A mix of public and private benefits – paid for by public funds and user fees

- \$ Improve technical efficiency to reduce costs
- \$ Use public funds to develop FSM service providers and infrastructure – as with sewerage systems
- \$ Consider cross-subsidies from water and sanitation services in better-off areas
- \$ Deliver improved value to customers before attempting cost recovery
- **Partly defray treatment costs** by sale of processed faecal sludge products



Building FSM service capacity

Partnerships for service provider development





- Build technical capacity and business skills of service providers
- Facilitate finance for service providers – grants, equipment leasing, loan guarantees etc.
- Strengthen cash flow by providing complementary services: e.g. solid waste collection, toilet upgrading
- Enter into partnerships for applied action research and learning



Practical technical FSM solutions may include...

- Co-location and partial co-treatment of faecal sludge at sewage treatment plants
- Dedicated faecal sludge treatment facilities
- Faecal sludge transfer stations fixed and/or mobile
- At-scale upgrading of latrines to improve hygiene and emptiability
- Vehicle tracking devices and other digital applications to increase efficiency
- Applied action research on pit emptying



Making effective use of infrastructure



- Incremental approach starting with robust low-cost, low-tech solutions
- Build faecal sludge treatment capacity to meet demand
- Use, upgrade or improve existing infrastructure
- Decentralize faecal sludge treatment facilities to reduce transport times
- Keep transfer and treatment facilities open early morning to late evening
- Consider leasing treatment facilities



But don't...

- X Overload sewage works with faecal sludge
- X Use old tankers or other equipment beyond its economic life
- X Abandon the FSM awareness raising and marketing campaign after an initial period



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✓ **Policy, legislation, regulations and guidelines** based on practice

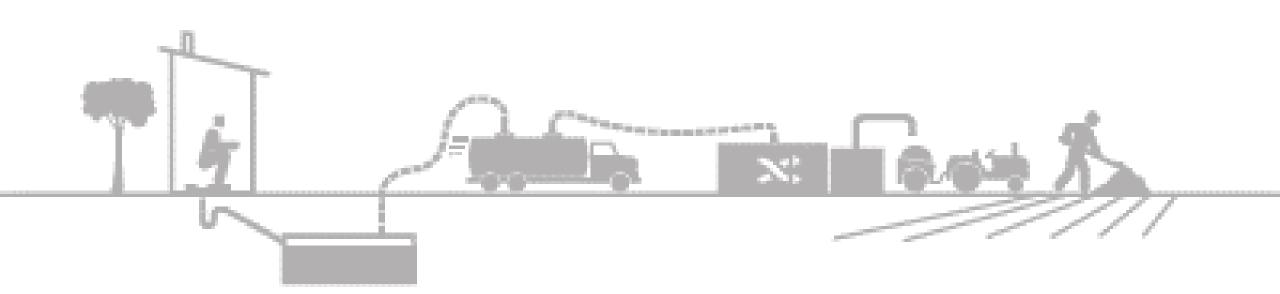
- Clear institutional mandates, local leadership and resources for sanitation management, even where services are delivered by the private sector
- Partnerships between stakeholders, to build community confidence and achieve sustainability
- ✓ Sustained community engagement, marketing and awareness raising to ensure continued take-up of improved FSM services
- Capacity-building for FSM service providers technical and business skills, equipment, capital – enabling them to meet all segments of demand

Where are we now? Next steps?

- Sanitation, including FSM, is a prerequisite for clean, healthy, liveable cities, and is a core city management function
- FSM at scale can achieve major sanitation improvements, especially for the poor, within a few years and at relatively low cost
- We know enough to start developing these services now, but...
- To maximise progress we need to undertake systematic learning where significant sanitation improvements are being achieved



Thank You



Isabel Blackett Peter Hawkins Inclusive Sanitation in Practice for healthy, equitable cities