

FSM in Freetown, Sierra Leone



Findings from Phase 1

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January 2015



Significant FSM Needs



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- Freetown, the capital of Sierra Leone, has a population of 1.2 million people.
- Over 60% live in extremely densely populated areas with limited Water, Sanitation, and Hygiene (WASH) services and inadequate Faecal Sludge Management (FSM) systems.
- An estimated 80,000m³ of raw faecal sludge is produced in Freetown each year.
- Approximately 17% is disposed of inside the King Tom dumpsite; It is not known what happens to the remaining 83% but it is likely that much of it is dumped locally either through on-site burial or by being discharged into local waterways.
- Indiscriminate sludge disposal contaminates the Freetown environment, including the shallow water aquifers that are used by 24% of the population for drinking water and contributed to the 2012 cholera outbreak in Sierra Leone.

Phase 1 Programme Objectives

- **Ultimate development of city sanitation strategy**
- **Development of commercially viable management models**
- **Investigate pre-treatment, treatment**

and re-use options

- Development of a monitoring and regulation system
- Capacity building plan for FCC developed



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Key Phase 1 Activities

- Stakeholder Interaction/Coordination
- Willingness/Ability to Pay Survey
- Assessment of Viable Technology Options
- Urban Planning Survey
- Key Stakeholder Interviews
- Financial Analysis
- Reporting/Proposal Development

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WTP For Improvements

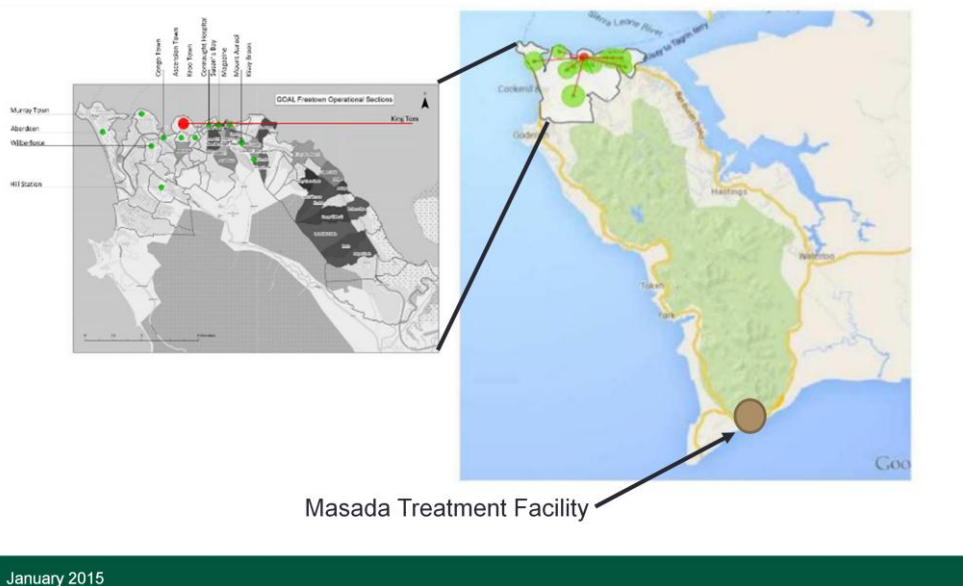
<p>A - The pit emptier can be contacted more easily and will come to do the job more promptly</p> <p>1</p> 	<p>B - The pit emptier comes to do the job at the time of day that I would like and completes the job faster</p> <p>2</p> 	<p>C - The pit emptier leaves my compound cleaner and leaves less dirt behind in my compound</p> <p>4</p> 
<p>D - The pit emptier definitely takes the shit out of my compound</p> <p>3</p> 	<p>E - The pit emptier definitely takes the shit out of my neighbourhood</p> <p>5</p> 	<p>F - The shit is disposed of more safely once they have taken it out of my compound</p> <p>6</p> 

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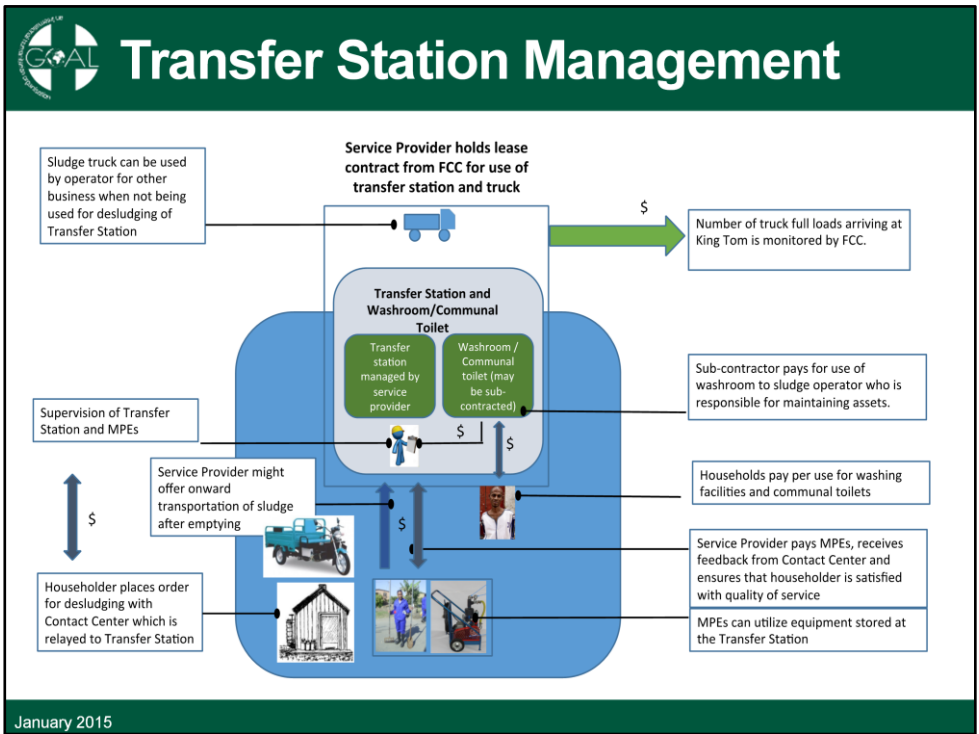
- The results were more or less in that order, with items 3 and 4



Transfer Station Requirements



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This is essentially where the SLAs come into play. Private providers will manage these with a sweetener.



Institutional Arrangements

FCC (Sanitation Unit and Contact Center) to provide information to customers, promote improved quality of service and ensure accountability of service providers

FCC to provide licences for sludge truck operators and contracts for leasing of transfer stations

FCC to manage contract with Masada

Licensed and regulated operators with incentives to serve more customers via improved contractual benefits according to increasing volumes deposited at King Tom

Institutional and commercial properties Middle/high income residential areas Accessible low \ income areas

Various private sector operators

Inaccessible low-income areas

Manual emptiers employed by transfer station operators

Transfer stations

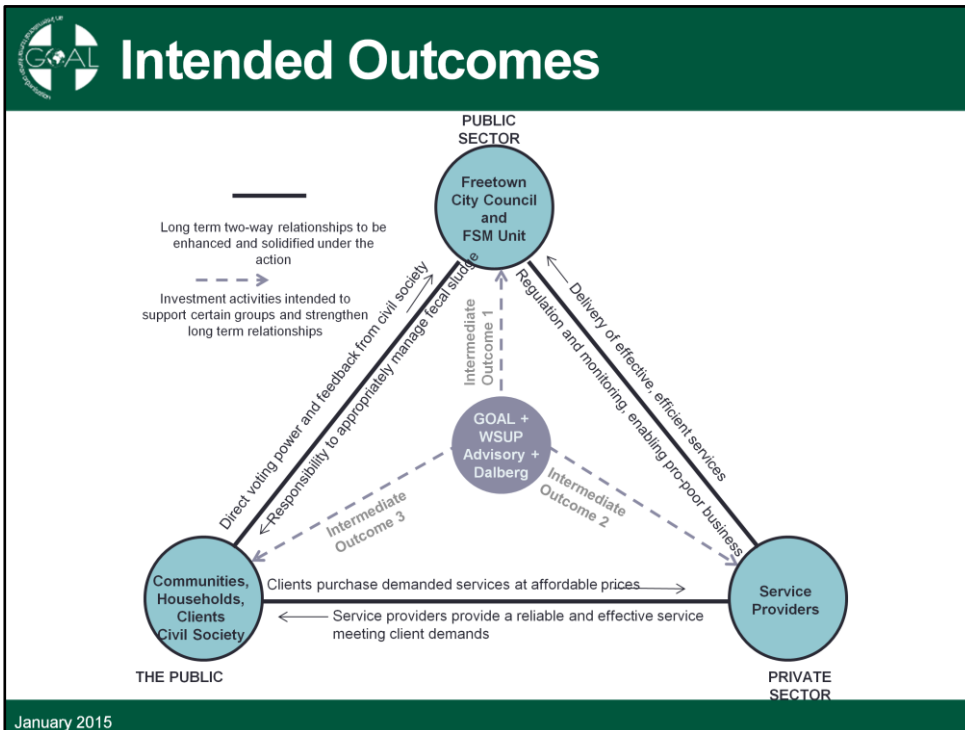
Performance based lease contracts for operation and maintenance of transfer stations

Masada to hold contractual responsibility for sludge processing/treatment and bulk transportation

Sludge thickening at King Tom (Phase II) prior to bulk collection and transportation to Kerry Town

Final treatment and resource recovery

Sludge thickening to reduce costs of transport to Kerry Town and improve treatability of sludge



- Strengthened Regulatory Environment and Improved Public Infrastructure for FSM
- Strengthened Private Sector Entities at all Stages along the FSM Chain
- Increased community awareness, acceptance and use of appropriate FSM



Lessons/Way Forward

- Accurate financial flows difficult
- Civil Society reporting mechanisms to be developed
- City-wide solution is a challenge (multi-phase)

- Small scale FSM work continues under other funding
- Continue to seek funding for the phase 2 proposal
- FCC support particular priority
- Ebola response has affected FSM work in recent months

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Thank You!

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