

## **Development impact bond** for safe sanitation



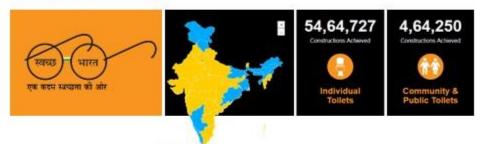




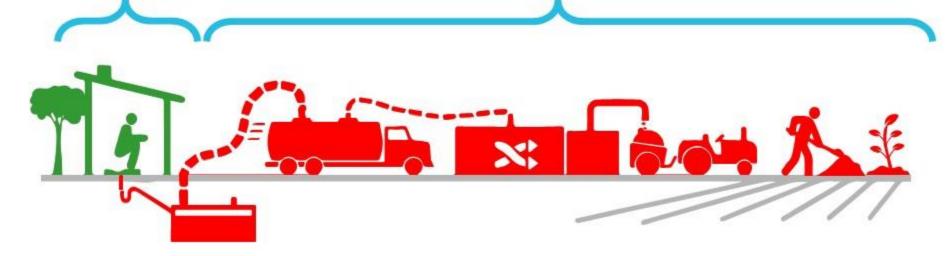


#### It is critical to address urban FSSM in India to achieve SDG 6.2!

The Swachh Bharat Mission, is addressing toilet access successfully...



Need to focus now to sustain the SBM momentum and fully achieve SDG 6.2





## Successful models Cities of Wai and Sinnar in Maharashtra, India

Scheduled desludging: PLAM model



Faecal Sludge treatment Plant



Smart Monitoring systems



PPE usage for Sanworkers



Progress in the last one year of intervention

7-8 septic tanks per day

Number of septic tanks desludged per day as compared to 7-8 per month when demand desludging was happening

1500+

Properties served with scheduled desludging services over one year duration

93%

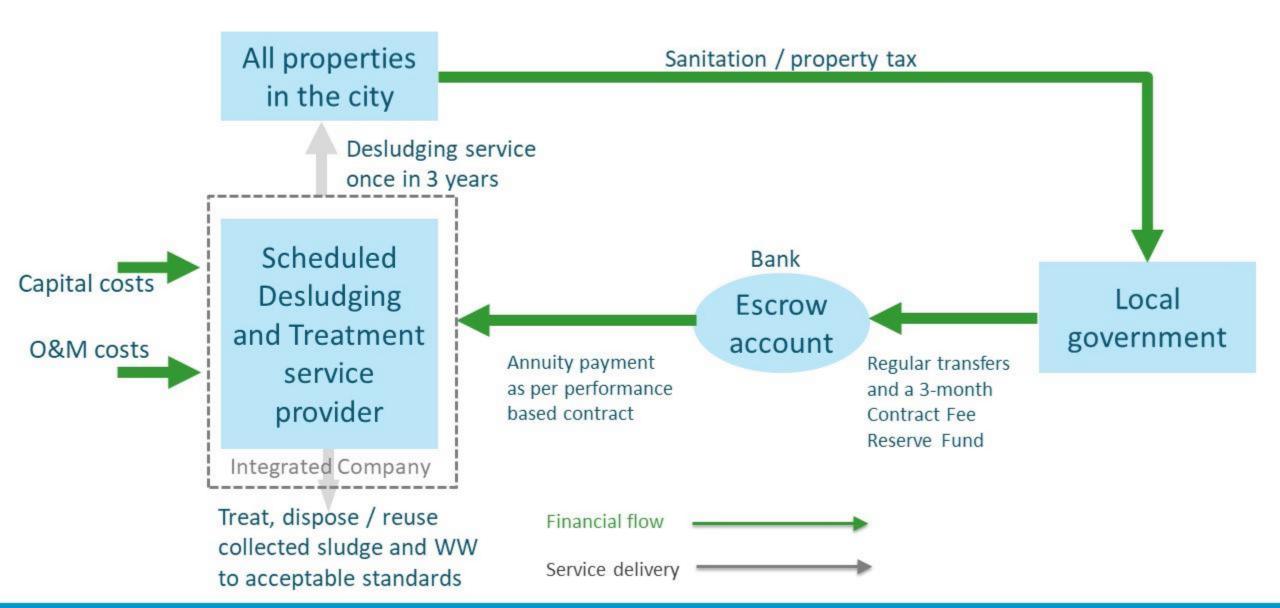
Household acceptance rate for scheduled service

5 ML

Amount of Faecal sludge delivered to treatment plant over one year duration

# Performance Linked Annuity Model (PLAM) for scheduled desludging and treatment plant





## Demonstrate a pilot for impact investment in FSSM



#### Town of 100 thousand population

#### Project-Integrated scheduled emptying and treatment



Need funds for



**Procuring** trucks



Construction of treatment plant



Operations and maintenance for 5 years

Measurable outcomes

Households served through scheduled emptying service esp. vulnerable ones

Volume of sludge treated to acceptable standards

#### Investment model

Investment required

Return to investors

1 Million USD

10% IRR

Outcomes achieved	IRR	Amount returned to investors (Million USD)
100%	12%	1.40
90%	10%	1.35
60%	8%	1.28

Payment by household Payment by government

10 USD per year 10 USD per household per year

**Potential** Long term **Impacts** 



Improved health and environment through reductions in pollution



Efficient and financially sustainable FSSM services in the city



Business opportunities for entrepreneurs



### Market potential after a successful pilot

CEPT University is a technical support partner to Govt. of Maharashtra to achieve the goal of 'Sustainable sanitation services at scale' through a BMGF project grant





~50 million urban population



300+ cities with onsite sanitation systems



5.7 Million Households dependent on onsite sanitation systems



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#### About us

The Center for Water and Sanitation (C-WAS) at CEPT University carries out various activities - action research, training, advocacy to enable state and local governments to improve delivery of services.

CWAS CRDF CEPT CENTER FOR WATER AND SANITATION

CEPT RESEARCH AND DEVELOPMENT FOUNDATION

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Suggested citation: Mehta, M., Mehta, D., Yadav, U. (2019). Exploring Development Impact Bond for Faecal Sludge and Septage Management (FSSM) Urban Sanitation. Presented at Stockholm World Water Week 2019, Stockholm, Sweden.