

FSSM in Wai

E-Visit of students from Global Sanitation Graduate School, Nepal

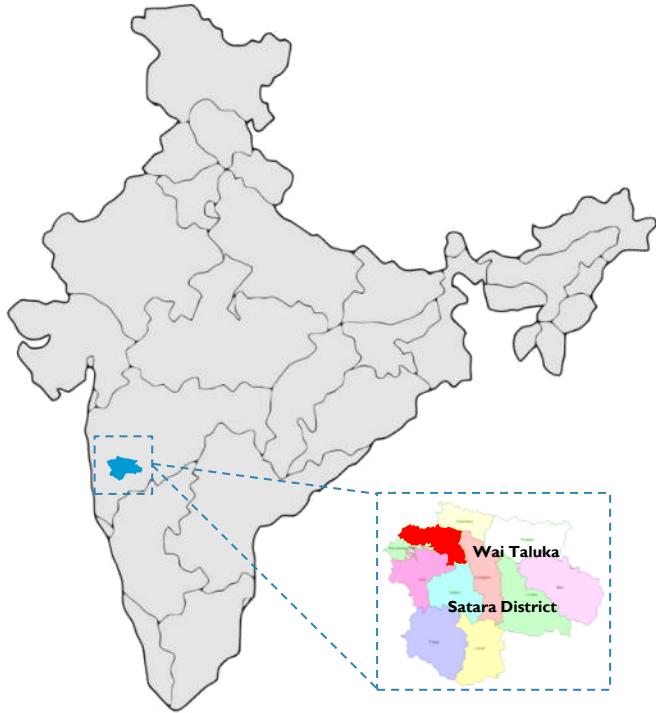
Center for Water and Sanitation
CRDF, CEPT University

Tide Technocrats

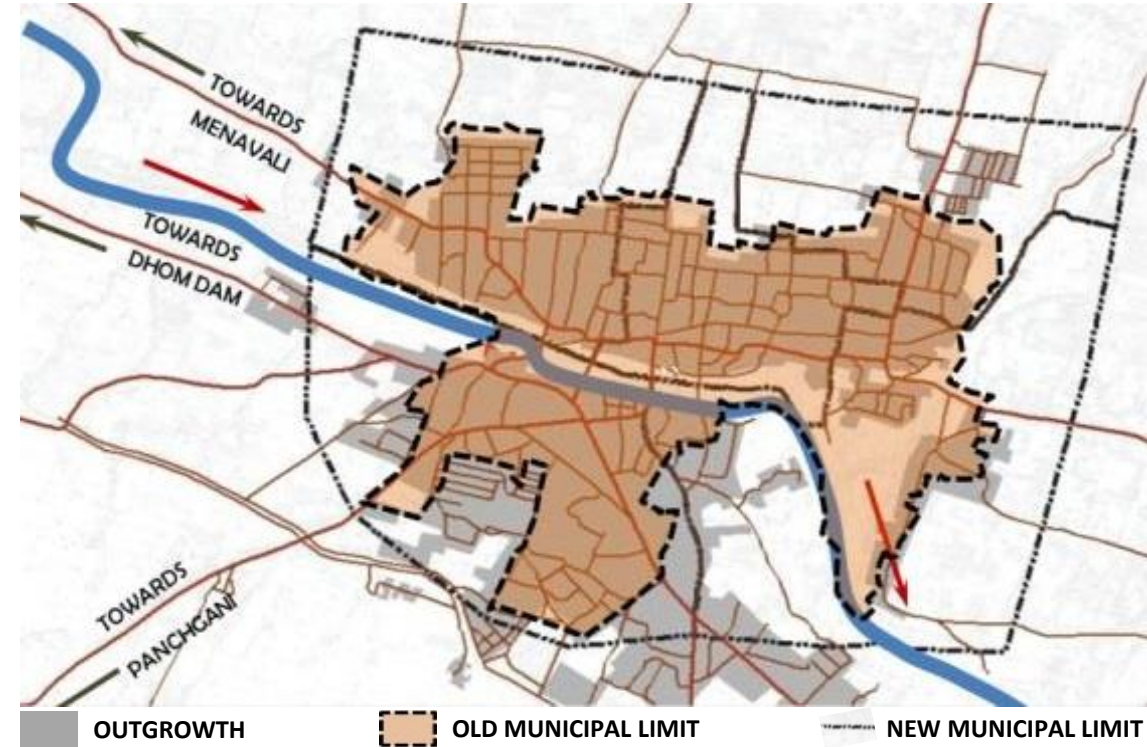


WAI CITY....

A city moving towards universal access to sanitation



C Class Municipal Council	
District	Satara
Location	95km south of Pune; 35km from Satara
Area	3.54 sqkm
Population (2019)	43000
Households	8991
Slum population	4%
Prabhags	10



Administrative Map, Wai

- The town is known in Maharashtra for its **Ghats** on the **banks of River Krishna** and around **250 temples**.
- It is a **holy pilgrimage town** and an **old Buddhist settlement**



Key features of Wai....



Bollywood shooting town



Dakshin Kashi



Famous in Maharashtra for the ghats on the banks of river Krishna



Around 250 temples

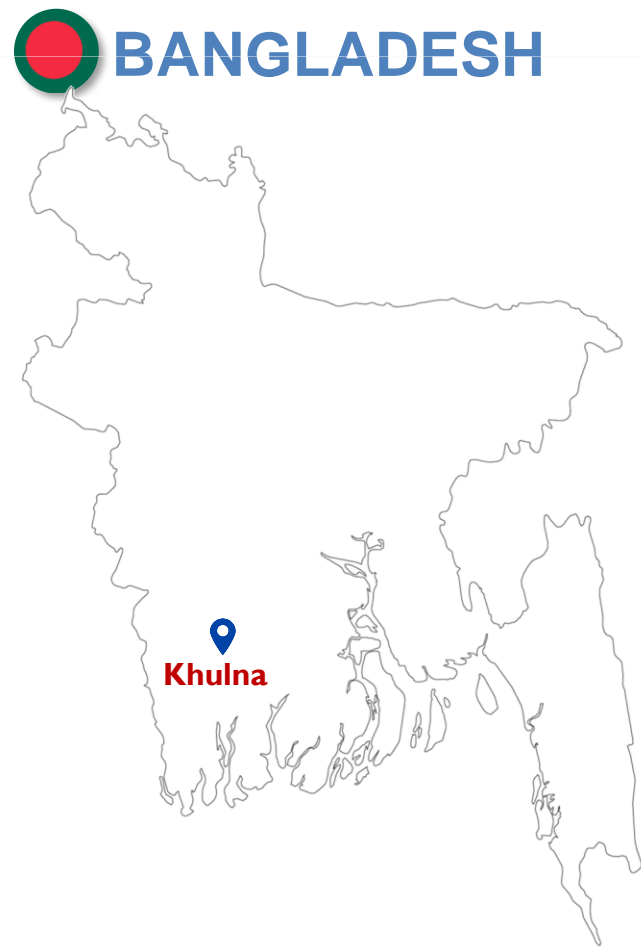


Holy Pilgrimage Town

Wai is one of the 8 global cities under CWIS programme of BMGF ...

ASIA

AFRICA



Sanitation Situation – in 2013, when we began work ...

When work started



Pour flush toilets

- **2% open defecation**
- **High dependency** on community toilets

Septic tanks

- **Majority** of toilets are connected to **septic tank**
- Septic tanks **2-3 chambered**
- Septic tanks were **oversized** and only few had **access covers**

Suction emptier truck

- Only **2-4 % of septic tanks cleaned** annually
- ULB provide the **emptying services** on **demand basis**
- Levy **user charges** from **1000 / trip** for emptying

No treatment facility

- **No facility** for fecal sludge treatment

Disposed off on dumping site

- Septage **disposed** off on dumping site **without treatment**



Activities undertaken by city council to become ODF

1 Toilet Subsidy scheme Awareness and inviting applications

Posters/banners/handouts/form distribution



Jingles/movies: rickshaw, TV, radio, festivals



Newspaper adverts



Community gatherings



School awareness



2 OD spot monitoring

Good morning Squad



3 Capacity building and enabling

Toilet vendor-lender fair



Training staff/masons



Finance options

- Self help groups
- Micro-finance institutions
- Credit societies
- Commercial banks
- Housing finance companies

4 Application Monitoring

Bulk SMS



Application process, site inspection

Wai amongst the first cities to be declared ODF at State and National level...



TPI for ODF, Wai Municipality



Third Party Inspection (TPI) report for Re-Certification of ODF: Wai Municipality

Date of TPI Inspection	18 th December 2018
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Name of the ULB: Wai

City Profile

State	Maharashtra
District	Satara
Total Population (current year)	36,030
IHHL & CT/PT details on SBM Urban Portal (Yes/No)	Yes

TPI Summary

Sr. No.	Locations Visited in the ULB	Location Type	Protocol	Status
1	GUREBAAZAR	Slum	Complete	ODF
2	KASHIKAPADI	Slum	Complete	ODF
3	DHARMAPURI	Residential Area	Complete	ODF
4	RAVIWAR PETH	Residential Area	Complete	ODF
5	BHAJI MNADI	Commercial Area	Complete	ODF
6	DAANEB BAAZAR	Commercial Area	Complete	ODF
7	MUNICIPAL SCHOOL NO.6	school	Complete	ODF
8	KANYASHALA	School	Complete	ODF
9	OLD KRUSHANA BRIDGE PARISAR	Special Location	Complete	ODF

As on September 6th 2017, Wai Municipality can be Re-Certified as Open

As on December 18th Wai Municipality can be Re-Certified as Open Defecation Free

As on June 16th Wai Municipality can be Re-Certified as Open Defecation Free

Wai was 1st declared ODF by the State Govt. followed by ODF declaration at National level by QCI in September 2016 & Revalidated ODF in **September 2017, April 2018, December 2018 and June 2019**

Wai has moved Beyond toilets and now become **ODF ++ city**

Wai resolved to implement FSSM plan in their cities through a council resolution

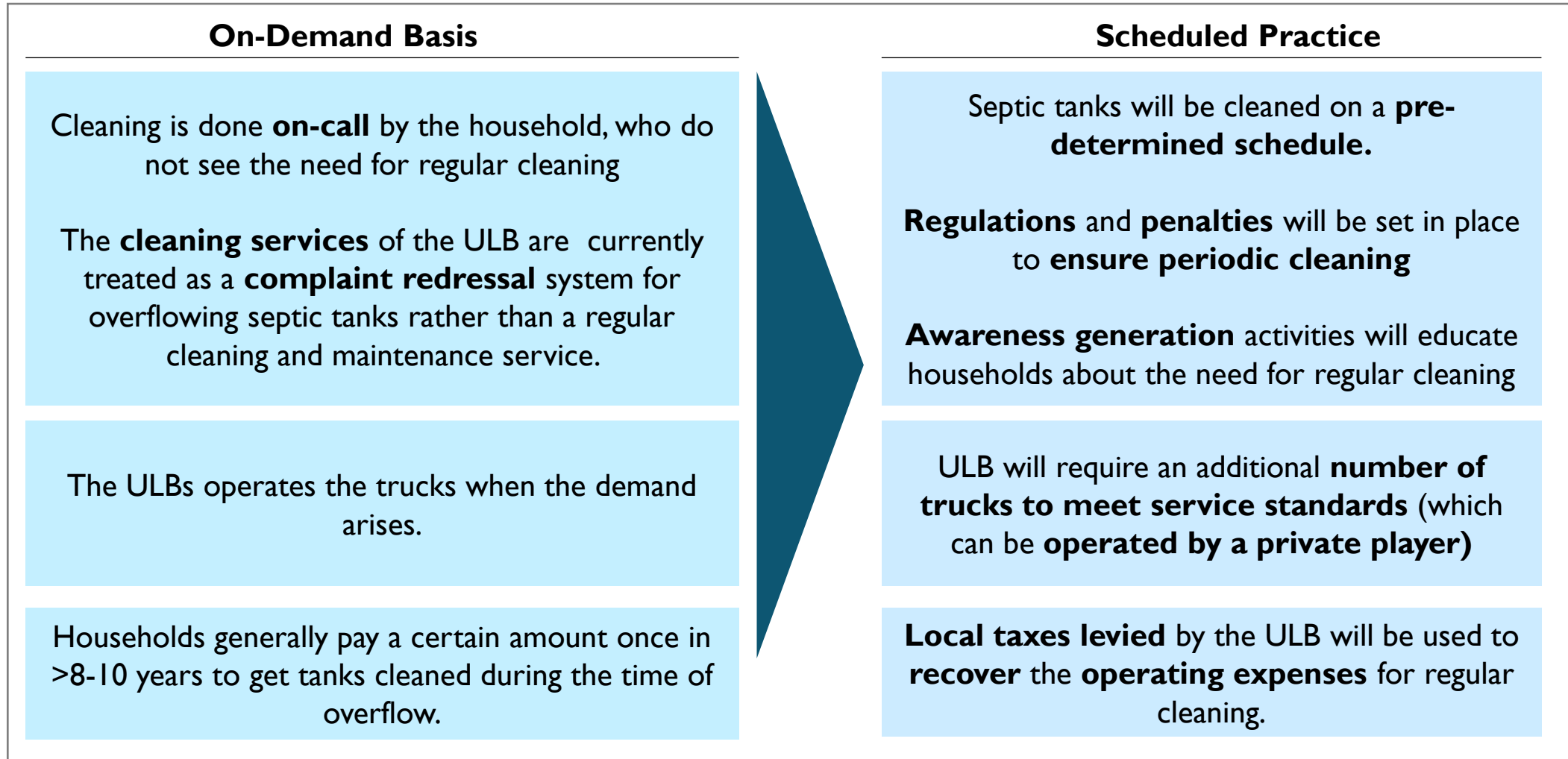


The resolution covers aspects like:

- Citywide FSSM
- Involving Private sector
- Scheduled cleaning
- Land for treatment facility
- Taxes to be levied

1st Cities in INDIA
to have passed such a resolution ...

The idea was to move from a consumer complaint redressal system to a scheduled service ...



Benefits of Scheduled Emptying



Equitable and inclusive services - all households / properties are covered by services. The payment is linked to property tax.



No manual labour - Removal of need for manual labour due to regular emptying



Pricing – Services are offered at lower prices, due to efficiency gains and the pricing is much less than the distress fee that households had to pay previously



Infrastructure optimization – Planned schedule and frequency for all. Clustered service visits. More predictable loads for treatment facility and route optimization of trucks



Behavior change - Contribution to ODF sustainability as toilet usage can increase



Environmental benefits - Likely reduction in BOD in septic tank effluent, as well as lower likelihood of septic tank overflows

Planning for Scheduled desludging in WAI

1. Zones of Emptying cycle

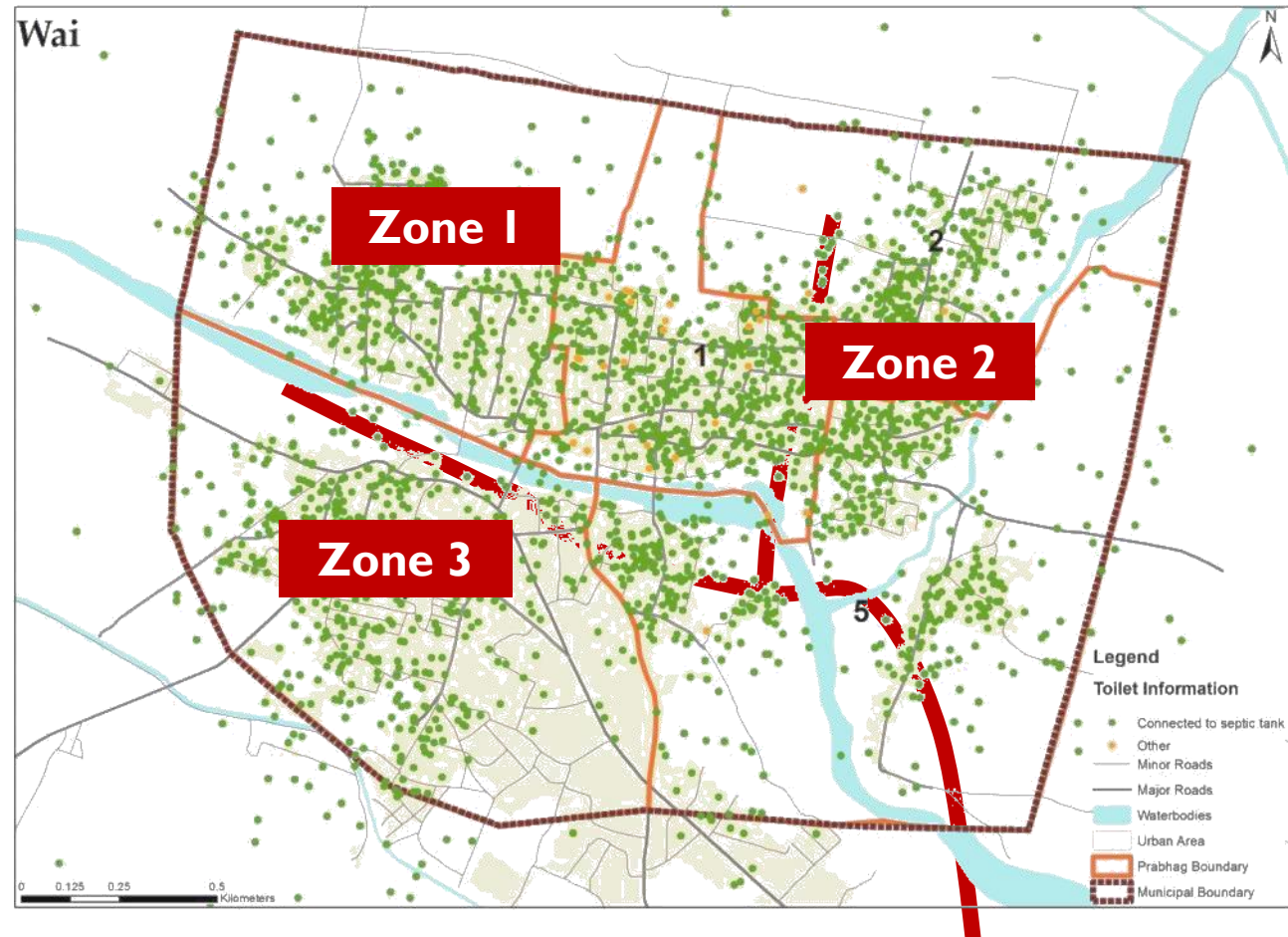
- The city was divided into 3 zones as per the citywide database on toilets and septic tanks.

2. Emptying Truck: Number and capacity

- Number and capacity of vehicles required for desludging operations.

3. Route planning

- Deciding the truck movement within the zone



Wai council decided to involve private sector for Scheduled desludging

Preliminary discussions with potential private providers to assess interest, concerns

Ownership of assets

The private party brings their own trucks for emptying and operate them for 3 years.

Performance linked payments

Payments based on achieving agreed targets of septic tanks emptied

Clauses to ensure safety standards - use of PPE and vigilance against manual scavenging

Fines on non-achievement of targets

Escrow mechanism – reducing late payment risk

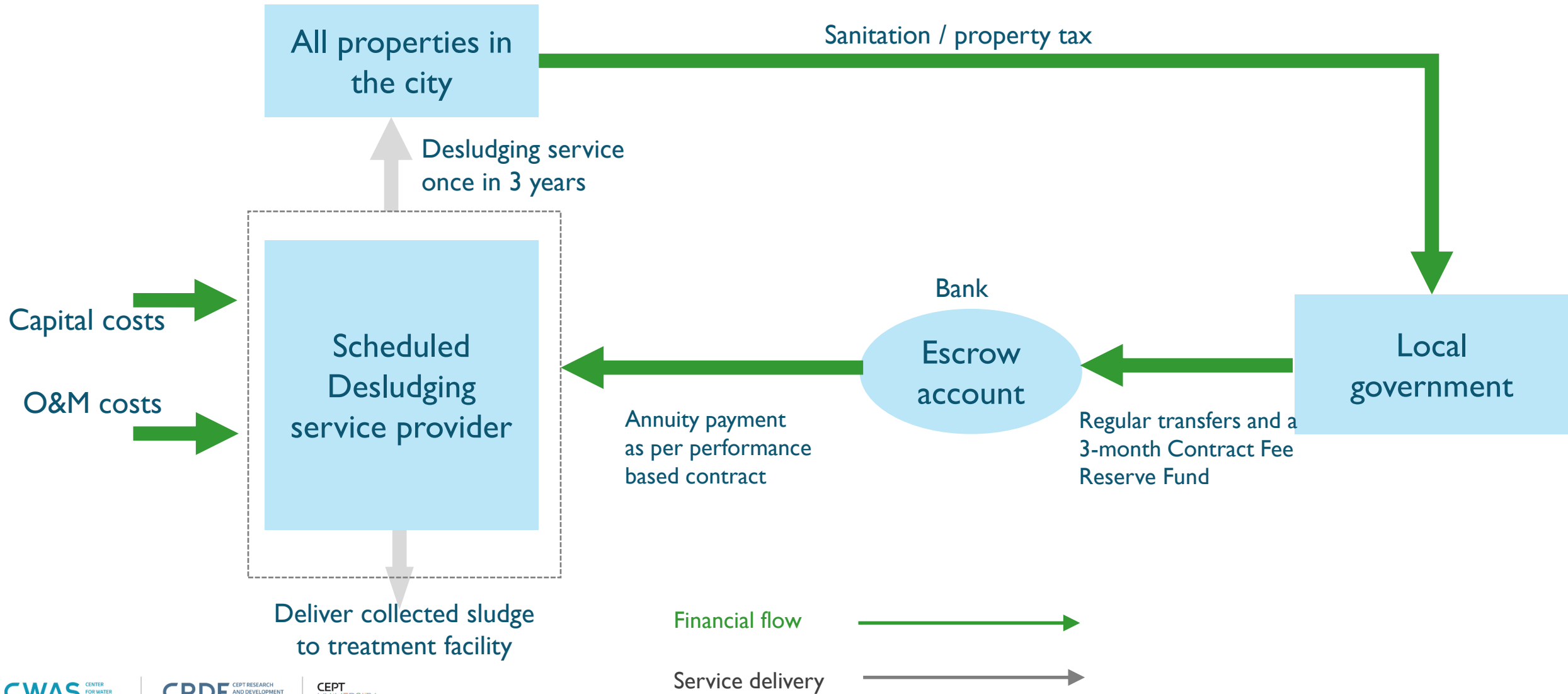
An Escrow account is held by a third party bank.
ULB needs to maintain a fixed balance in it = 3 months of payment

Transparent bidding process through government approved process and websites

Awareness activities to be done by private contractor

Emergency emptying also included in contract

Performance Linked Annuity Model (PLAM) for scheduled desludging



FSTP setup in the city to treat the septage and treated WW reused for urban forest and landscaping ...



Wai, Maharashtra



Capacity: 70 KLD
Land: 1200 sq mt
Funded : BMGF

Capital cost: Rs 2 Cr
O&M: Rs 24 lakh/year
Commissioned - 2018

Awareness generation a key feature for success of high uptake of FSSM services ...

Paintings / banners in the city by WMC



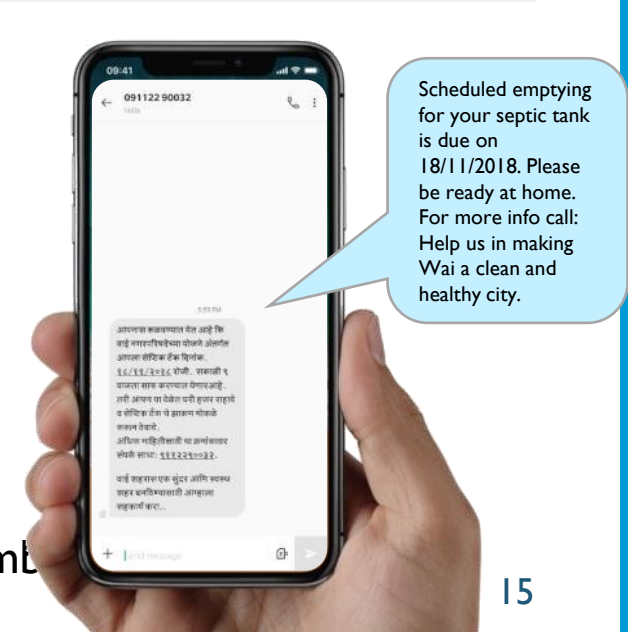
Household visits by desludger with info. leaflets



Cities circulated small videos



Intimation through SMS



IT enabled monitoring systems for FSSM and real-time database creation of onsite systems for 1st time in India ...

“Real time” monitoring
No need to process data
for results



Easy to Operate,
Reduce paper work,
Minimize human error



Can view progress easily
and process payments



Photo stamping,
Geo stamping,
Signatures



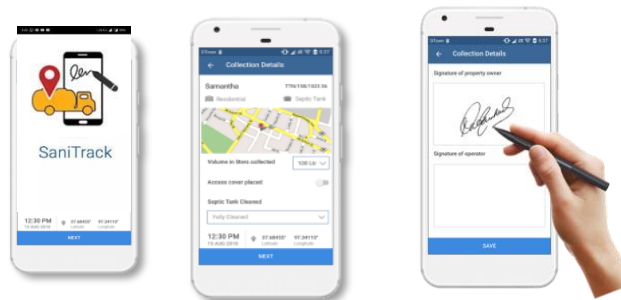
Unique database



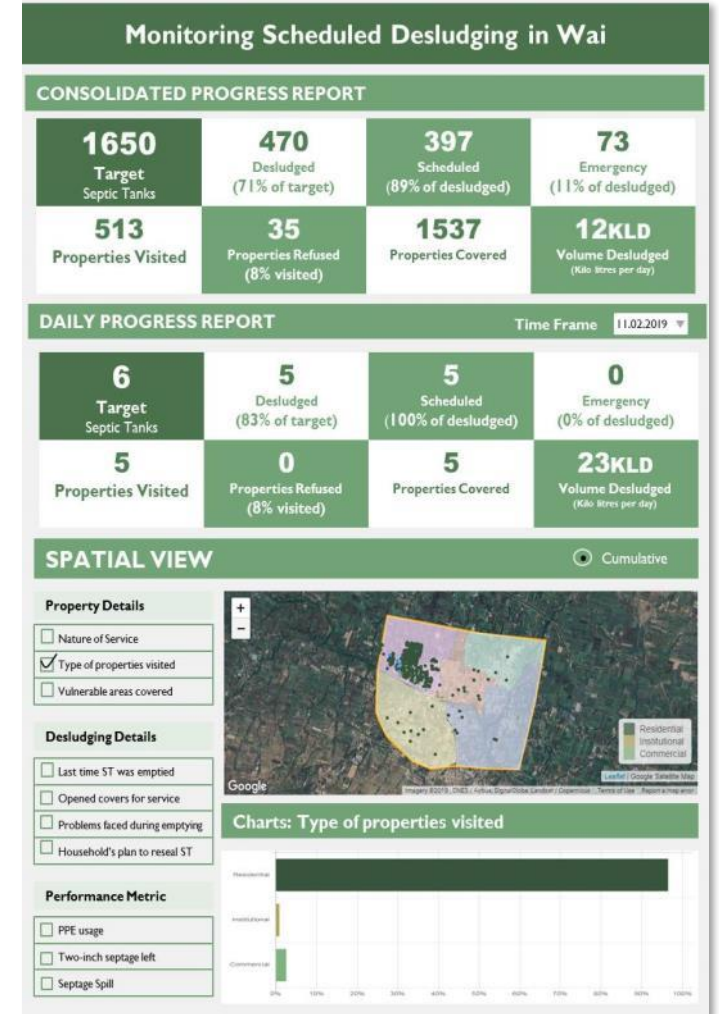
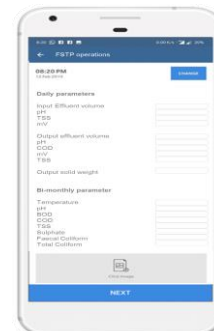
SaniTab



SaniTrack



SanQ



What has been achieved after implementing FSSM in Wai

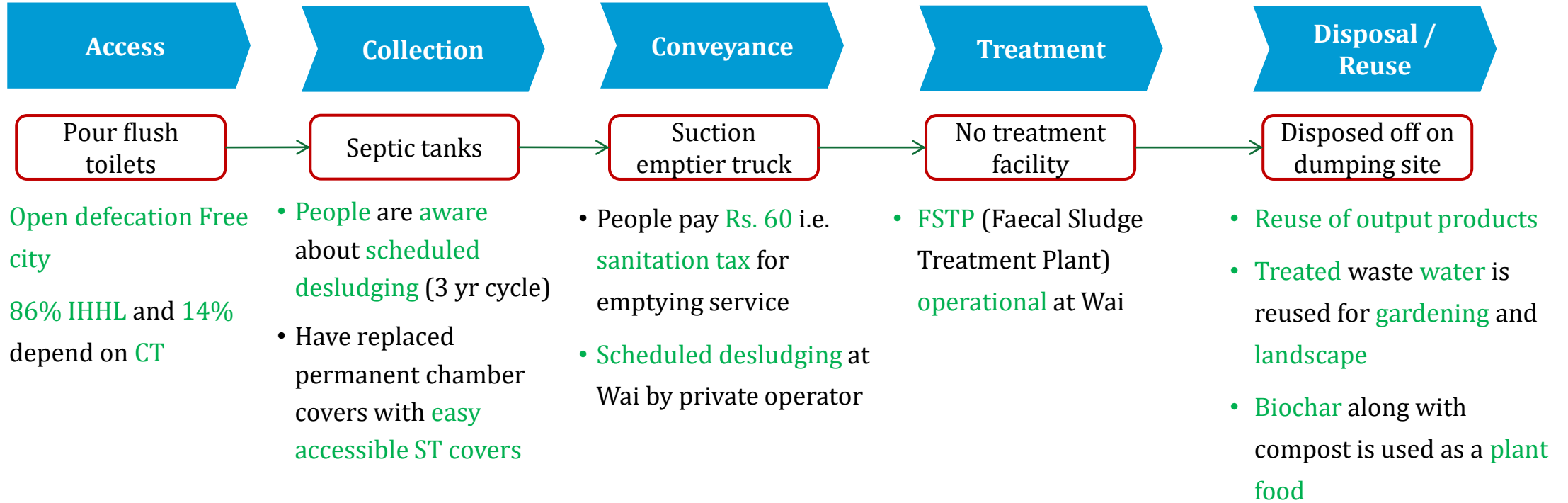
- **2100+ septic tanks** covered by scheduled desludging covering **4300+ properties**
- **7-8 septic tanks desludged per day** as compared to 7-8 per month in 2017 with demand desludging
- **15+ million liter septage delivered** to the treatment facility
- **90%+ acceptance rate** from HHs for **scheduled service**
- **Sanitation workers** now **wear safety gear** regularly
- **Households pay sanitation tax** instead of high user charges for desludging



Sanitation Situation in 2021

The city has now been declared ODF++ by MoHUA

After implementation of FSSM



Thank you

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pas.org.in

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.

