



# Scaling up CWIS from city to state and national levels in India

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# CWAS SUPPORT TO TWO SMALL TOWNS WITH SANITATION IMPROVEMENTS

## Wai

- Known for its Ghats on the banks of River Krishna and around 250 temples.
- Holy river
- Also known as site for Bollywood shoots



## Sinnar

- Flourishing industrial districts
- Fast growing town

Wai – one of the 8 global cities showcasing the implementation of **CWIS** principles

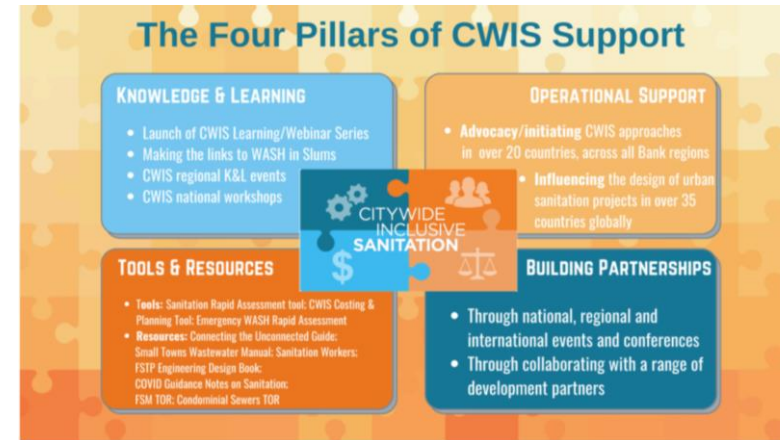


**Ideas demonstrated in these cities have become models for FSSM**

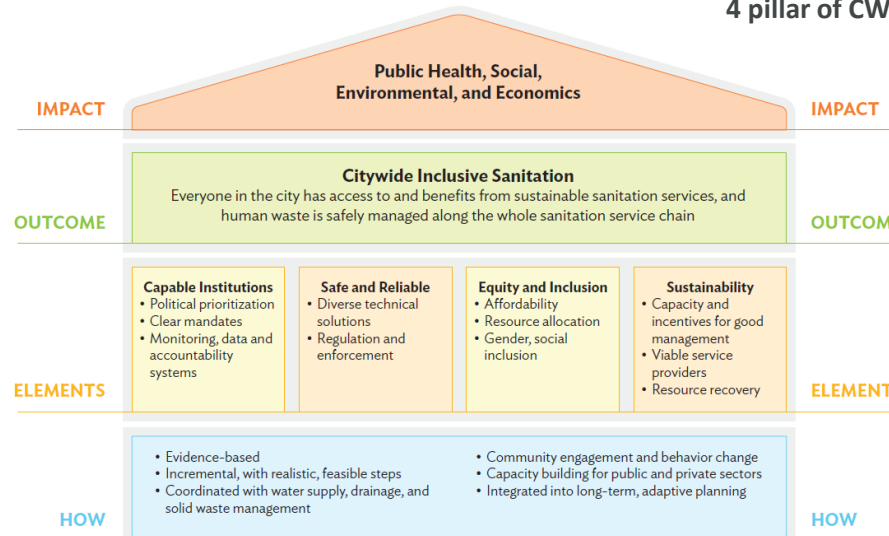
# CWIS FRAMEWORKS ADOPTED BY LEADING ORGANIZATIONS



CWIS framework by **BMGF**



4 pillar of CWIS support by **World Bank**



Citywide Inclusive Sanitation House by **ADB**

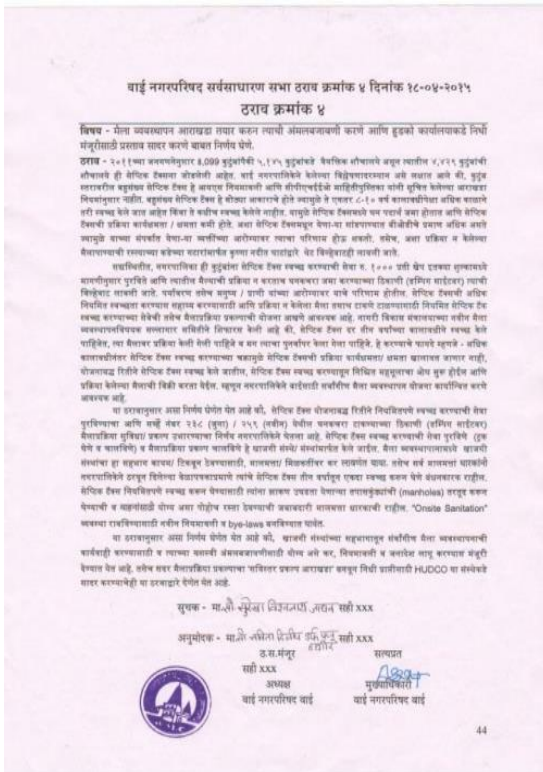
- ✓ Public services approach
- ✓ Safe and sustainable sanitation
- ✓ Equity and inclusive mandate
- ✓ Accountability and responsibility

# HOW HAVE THESE CITIES DEMONSTRATED CWIS?

# RESPONSIBILITY - GOVERNMENT OWNERSHIP OF IMPROVEMENTS

## GOVERNMENT RESOLUTION FOR IMPLEMENTATION

## FINANCIAL COMMITMENTS



**Wai and Sinnar resolved to implement FSSM plan in the city through a council resolution**  
The resolution covers aspects like:

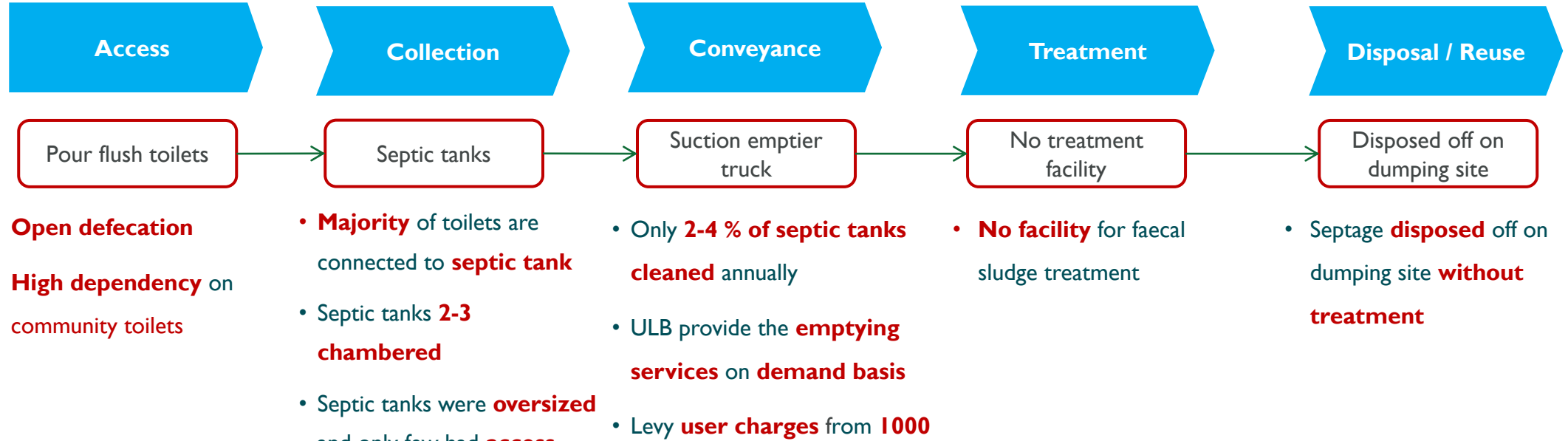
- Citywide FSSM
- Involving Private sector
- Scheduled cleaning
- Land for treatment facility
- Taxes to be levied

- ✓ Engaging private desludger through contracts
- ✓ Imposing sanitation tax and using property tax funds
- ✓ Using own funds to develop FSTPs

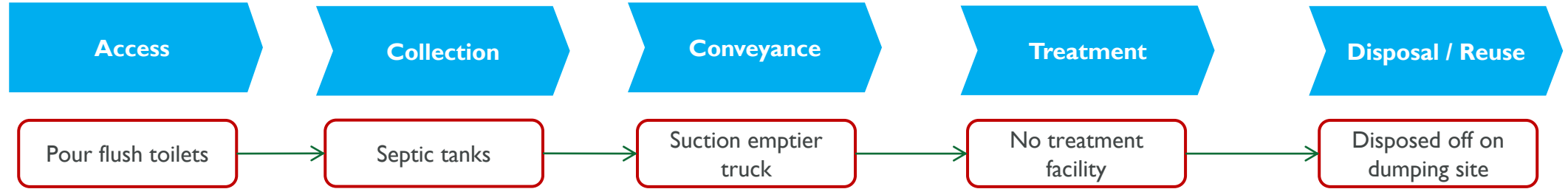
**1<sup>st</sup> Cities in INDIA to have passed such a resolution**

# SAFE SANITATION ACROSS THE CHAIN

When work started



# SAFE SANITATION ACROSS THE CHAIN



When work started

Supporting SBM implementation and the city's own pioneer toilet subsidy programs

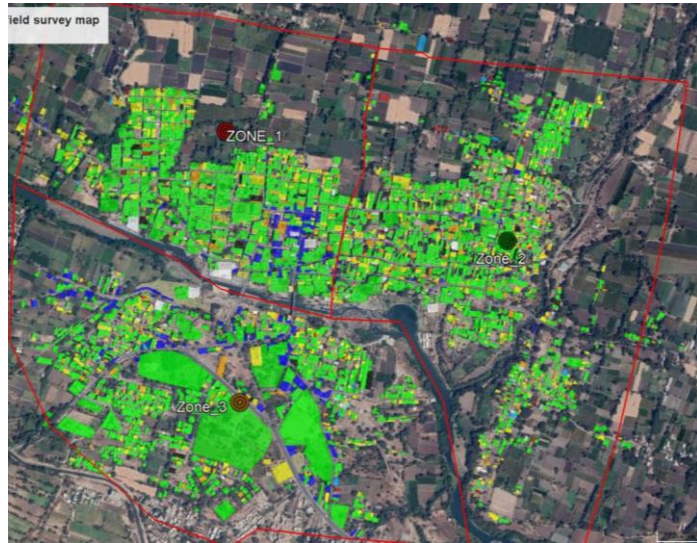
Scheduled desludging

Treatment plants

Reuse and resource recovery



## WAI SUCCESSFULLY COMPLETED ITS FIRST 3-YEAR CYCLE OF SCHEDULED DESLUDGING



**3600+** Septic tanks served  
**6800+** Properties covered  
**95%** Acceptance rate of services  
**19 million** Liters of septage treated

## FSTPS SET UP TO TREAT THE SEPTAGE



## REUSE OF TREATED WATER AND SEPTAGE





## IMPROVED PERFORMANCE OF SEPTIC TANKS AFTER DESLUDGING RESULTING IN IMPROVED DRAIN WATER QUALITY FLOWING INTO RIVER



- Reduction in Nitrogen, Total Suspended solids and Organic loads in septic tanks effluent after desludging them



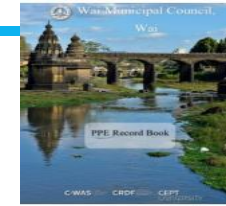
- Reduced concentration from septic tank effluent helped in reducing the discharge of nitrogen and TSS into the open drains
- 50-60% decrease in the value of TSS in desludged areas
- 50-60% decrease in BOD load in drains in desludged areas



- Regular desludging services will eventually improve the quality of river water and ground water as the quality of drain water and supernatants will improve

# SAFETY OF SANITATION WORKER

- Registers for PPE usage and replacement
- SaniTab / SaniTrack dashboard monitors the PPE usage of desludgers on daily basis.
- PPE flyer has been prepared for various sanitation activities and shared with stakeholders
- Training workshop along with a health camp was organized for all Sanitation workers. Also PPEs were distributed during this event.
- Council has introduced clauses related to provision, usage and monitoring of PPEs in all their upcoming contracts for Sanitation based on experience of this scheduled desludging contract



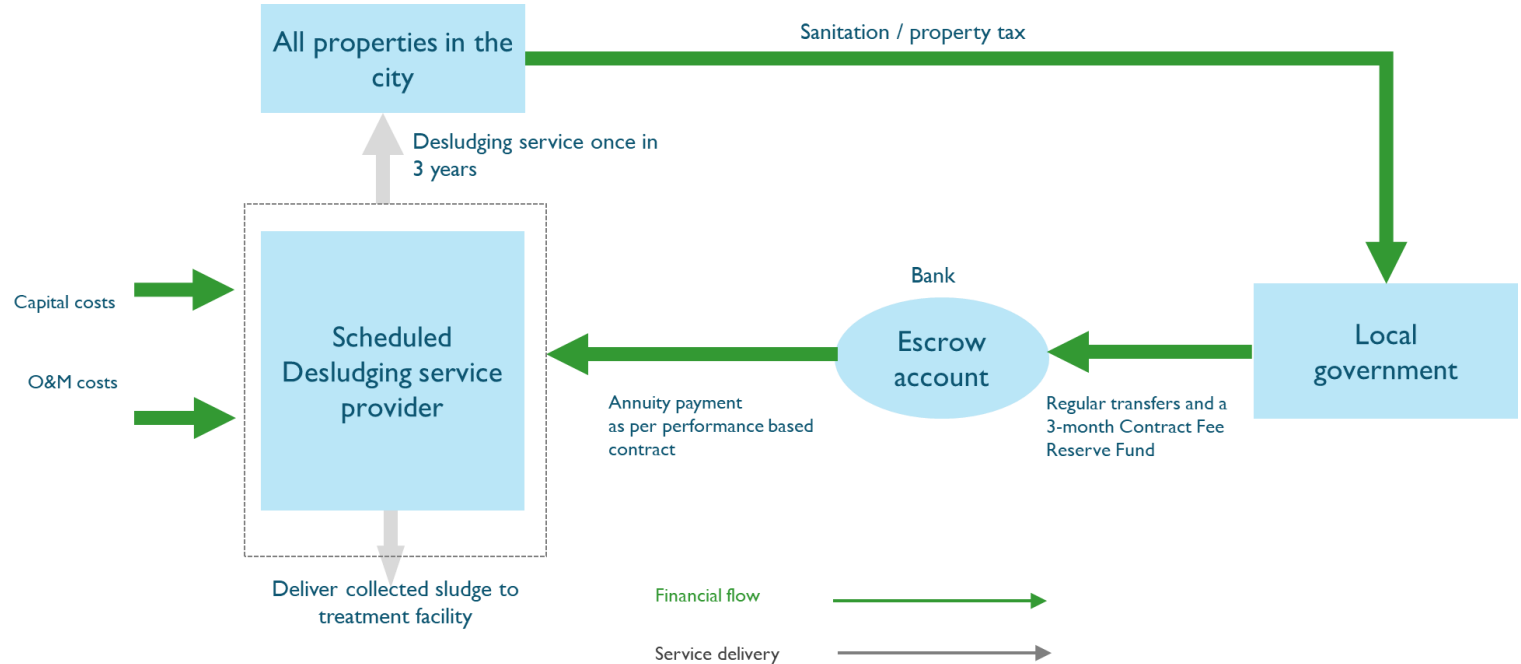
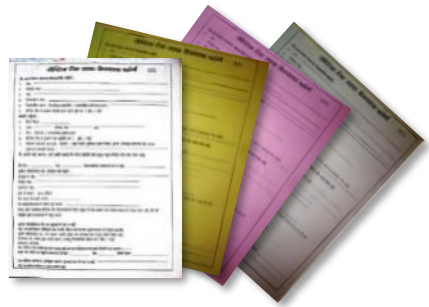
Name of the worker: _____								Remark	Sign
Helmet	Safety goggles	Nose Mask	Hand Gloves	Jacket	Safety Shoes	Gum-boots			
Date	Date	Date	Date	Date	Date	Date		PPE set given	Sign
			Date					Hand gloves are torn.	Sign

*Sample of formats prepared for capturing replacement and distribution of PPE in the PPE record book.*



# ACCOUNTABILITY IN SERVICES

## PERFORMANCE LINKED MONITORING MECHANISM



- ✓ 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 to reduce payment risk

# MUNICIPAL STRENGTHENING

## BILLING- PAYMENTS TRACKING



## TRANSPARENCY IN ADMINISTRATION – ADHAVA DASHBOARD

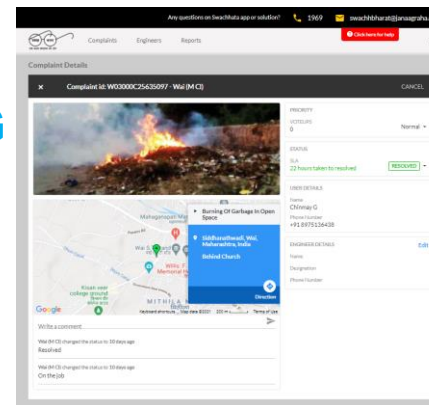
Sl. No.	Indicator	Unit	Target	Actual	Remarks
1	Number of bills generated	No.	100	100	100% of bills generated
2	Number of bills collected	No.	80	80	80% of bills collected
3	Number of bills pending	No.	20	20	20% of bills pending
4	Number of bills overdue	No.	10	10	10% of bills overdue
5	Number of bills not collected	No.	20	20	20% of bills not collected
6	Number of bills not pending	No.	80	80	80% of bills not pending
7	Number of bills not overdue	No.	90	90	90% of bills not overdue
8	Number of bills not not collected	No.	80	80	80% of bills not not collected
9	Number of bills not not pending	No.	90	90	90% of bills not not pending
10	Number of bills not not overdue	No.	90	90	90% of bills not not overdue
11	Number of bills not not not collected	No.	80	80	80% of bills not not not collected
12	Number of bills not not not pending	No.	90	90	90% of bills not not not pending
13	Number of bills not not not overdue	No.	90	90	90% of bills not not not overdue
14	Number of bills not not not not collected	No.	80	80	80% of bills not not not not collected
15	Number of bills not not not not pending	No.	90	90	90% of bills not not not not pending
16	Number of bills not not not not overdue	No.	90	90	90% of bills not not not not overdue
17	Number of bills not not not not not collected	No.	80	80	80% of bills not not not not not collected
18	Number of bills not not not not not pending	No.	90	90	90% of bills not not not not not pending
19	Number of bills not not not not not overdue	No.	90	90	90% of bills not not not not not overdue
20	Number of bills not not not not not not collected	No.	80	80	80% of bills not not not not not not collected
21	Number of bills not not not not not not pending	No.	90	90	90% of bills not not not not not not pending
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23	Number of bills not not not not not not not collected	No.	80	80	80% of bills not not not not not not not collected
24	Number of bills not not not not not not not pending	No.	90	90	90% of bills not not not not not not not pending
25	Number of bills not not not not not not not overdue	No.	90	90	90% of bills not not not not not not not overdue
26	Number of bills not not not not not not not not collected	No.	80	80	80% of bills not not not not not not not not collected
27	Number of bills not not not not not not not not pending	No.	90	90	90% of bills not not not not not not not not pending
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30	Number of bills not not not not not not not not not pending	No.	90	90	90% of bills not not not not not not not not not pending
31	Number of bills not not not not not not not not not overdue	No.	90	90	90% of bills not not not not not not not not not overdue
32	Number of bills not not not not not not not not not not collected	No.	80	80	80% of bills not not not not not not not not not not collected
33	Number of bills not not not not not not not not not not pending	No.	90	90	90% of bills not not not not not not not not not not pending
34	Number of bills not not not not not not not not not not overdue	No.	90	90	90% of bills not not not not not not not not not not overdue
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36	Number of bills not not not not not not not not not not not pending	No.	90	90	90% of bills not not not not not not not not not not not pending
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42	Number of bills not not not not not not not not not not not not not pending	No.	90	90	90% of bills not not not not not not not not not not not not not pending
43	Number of bills not not not not not not not not not not not not not overdue	No.	90	90	90% of bills not not not not not not not not not not not not not overdue
44	Number of bills not not not not not not not not not not not not not not collected	No.	80	80	80% of bills not not not not not not not not not not not not not not collected
45	Number of bills not not not not not not not not not not not not not not pending	No.	90	90	90% of bills not not not not not not not not not not not not not not pending
46	Number of bills not not not not not not not not not not not not not not overdue	No.	90	90	90% of bills not not not not not not not not not not not not not not overdue
47	Number of bills not not not not not not not not not not not not not not not collected	No.	80	80	80% of bills not not not not not not not not not not not not not not not collected
48	Number of bills not not not not not not not not not not not not not not not pending	No.	90	90	90% of bills not not not not not not not not not not not not not not not pending
49	Number of bills not not not not not not not not not not not not not not not overdue	No.	90	90	90% of bills not not not not not not not not not not not not not not not overdue
50	Number of bills not not not not not not not not not not not not not not not not collected	No.	80	80	80% of bills not not not not not not not not not not not not not not not not collected

## STRENGTHENING MUNICIPAL BUDGETING

- ✓ Budget analysis
- ✓ Suggestions on use of Women and child development funds
- ✓ Increasing collection efficiency of property tax, WSS user charges
- ✓ Budget briefs

## HUMAN RESOURCE ADEQUACY

## STREAMLINING COMPLAINT REDRESSAL



## INCLUSIVE AND EQUITABLE SERVICES



Includes those not connected to sewer networks



Mandatory desludging service but not linked to “user charges” – service to ALL



Special care to service vulnerable areas – long pipes for narrow lanes



Equitable - no charges at time of desludging - benefiting low income areas - sustainably financed through equitable “sanitation tax”



# EMPOWERING WOMEN FOR INCLUSIVE FSSM SERVICE DELIVERY

- **Building capacities of Elected Women Representatives (EVRs)** for effective functioning and participation in local governance focusing on FSSM.
- **Sensitizing women** at household level regarding the process of desludging
- **SHG involvement** for maintenance of garden and urban forest - Community empowerment and livelihood development

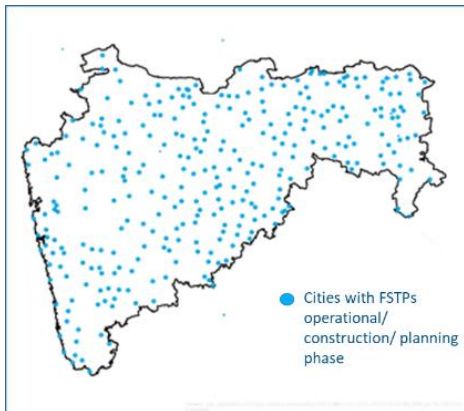


**NOT JUST ONE-OFF PILOTS!**

**SCALING UP TO OTHER CITIES....**

# ZOOMING OUT TO MAHARASHTRA – CWIS COMMITMENT

CWAS - Partner to the state government for implementing the SWACHH MAHARASHTRA MISSION URBAN – 400 cities



Government of Maharashtra has taken up FSSM in a big way!


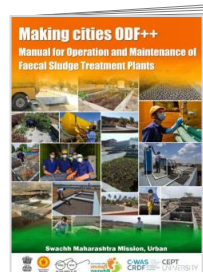
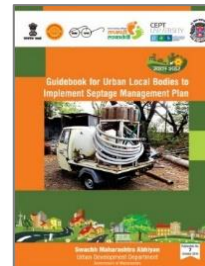
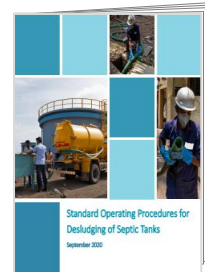
Thinking “beyond toilets” right from beginning



**संकल्प स्वच्छतेचा**

- सहभागाचा ठाग निर्धार
- व्यापक लोकसहभाग निळवणार
- १०० टक्के शींचालनाचाच वापर करण्यारसाठी प्रवृत्त करणार
- कचऱ्याचे संकलन, वर्गीकरण, वाहनूक करणार
- कचऱ्यावर शारत्रोवत प्रक्रिया करणार
- सांडपाण्यावर प्रक्रिया करणार
- स्वच्छ व हरित महाराष्ट्र सावरणार

Increased focus on moving cities towards ODF+ / ++ (FSSM) after declaring Urban Maharashtra ODF

Infrastructural efforts for treatment

Independent FSTP  
**311 cities**

Functional/proposed STPs  
**35 cities**

Co-treat at nearby STPs  
**35 cities**

**Scheduled desludging** mandated by state govt for all cities

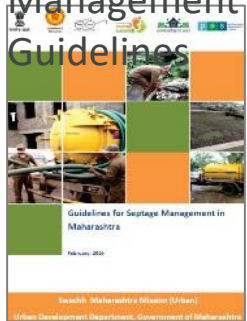
**Commitment on citywide inclusive sanitation from leadership on launch of Swachh Maharashtra Mission 2.0**



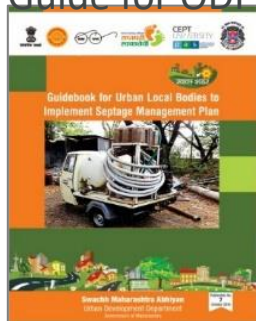
# SHARING LESSONS FROM WAI AND SINNAR WITH OTHER CITIES IN STATE

## POLICY GUIDELINES AND TOOLS

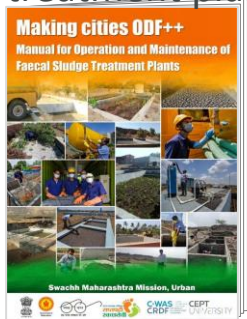
Septage Management Guidelines



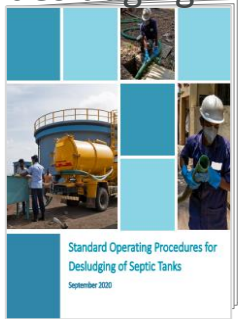
Step by Step Guide for ODF+



O&M of treatment plants



SOP for scheduled desludging



## CHAMPIONING, EXPOSURE VISITS AND CAPACITY BUILDING



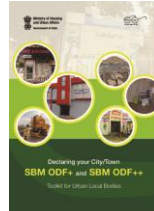
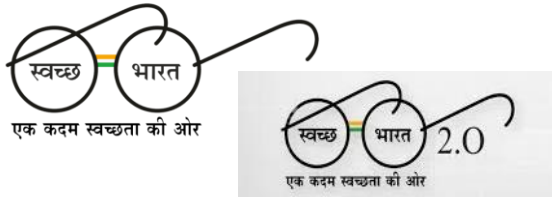
# LEVERAGING GOVERNMENT PRIORITIES FOR CWIS

1

Universal Access of individual household toilet (IHHT)

Scheduled desludging for septic tanks

Safe Treatment and Reuse



2

Gender Inclusivity



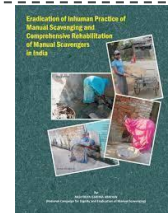
National Urban Livelihoods Mission

NULM –SBM Convergence

Funds for Women and Child Welfare

3

Sanitation Worker Safety



4

Municipal Strengthening



# SCALE UP IMPLEMENTATION

## SAFE SANITATION ACROSS THE CHAIN

- ✓ Treatment - 212 FSTPs functional across the state, 70 cities practicing co-treatment
- ✓ Desludging – State government directives to all cities to implement scheduled desludging
- ✓ Universal access to individual household toilets – mobilizing under SBM 2.0

## CAPACITY BUILDING PARTNERSHIPS FOR STRENGTHENING STAKEHOLDERS

Technical training to cities



Sanitation workers



SHGs and women decision makers



## STATE LEVEL TOOLS

citybudgets₹in

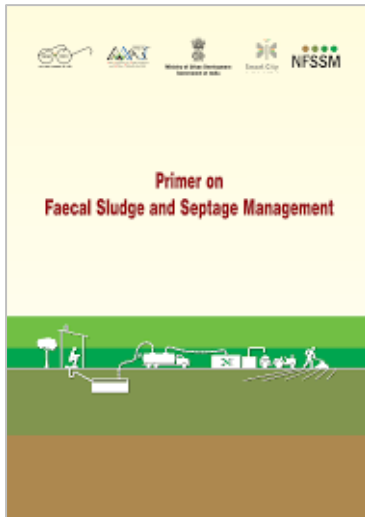


# BEYOND MAHARASHTRA

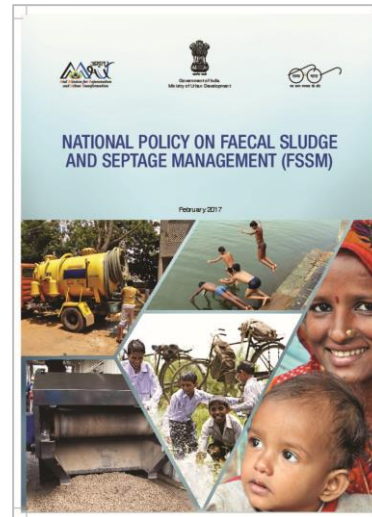
CWAS exchanging knowledge with other states as a partner in



Wai Sinnar experiences in



NFSSM instrumental in



Scheduled desludging mandated as a condition of ODF++ under new SBM 2.0



Support for using tools to other states -



# Thank you

**CWAS** CENTER  
FOR WATER  
AND SANITATION

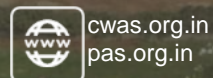
**CRDF** CEPT RESEARCH  
AND DEVELOPMENT  
FOUNDATION

**CEPT**  
UNIVERSITY



## About us

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



[cwas.org.in](http://cwas.org.in)  
[pas.org.in](http://pas.org.in)



[cwas@cept.ac.in](mailto:cwas@cept.ac.in)  
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