



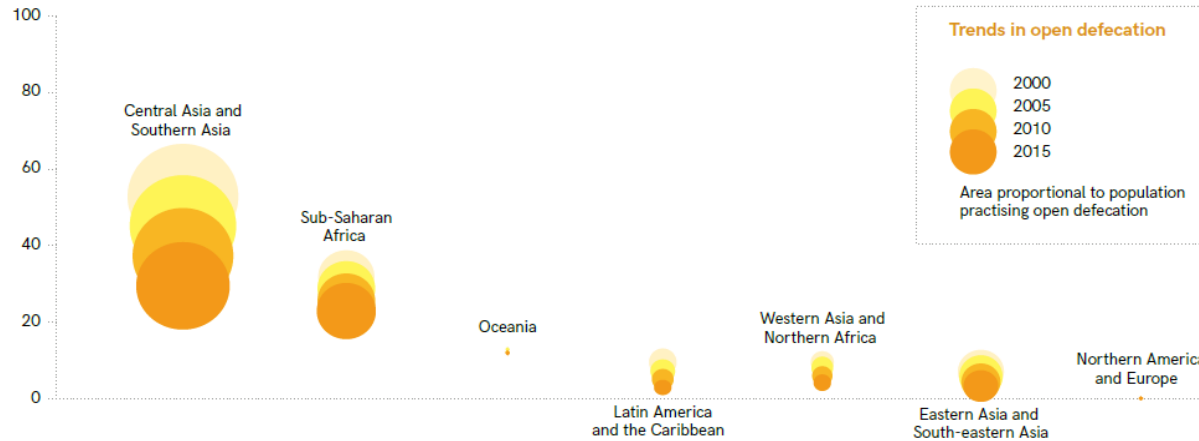
Beyond Toilets

Moving to ODF+ in Indian Cities

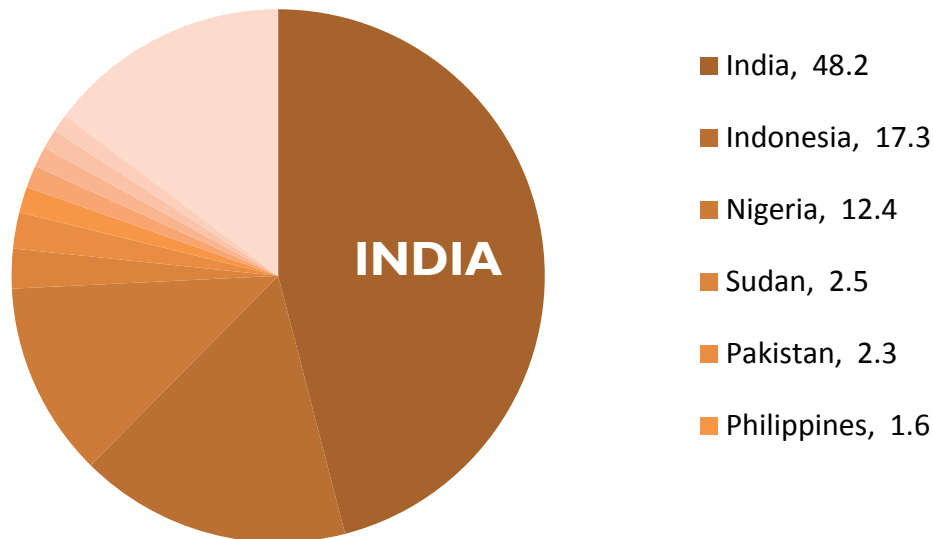
Meera Mehta and Dinesh Mehta
Center for Water and Sanitation
CEPT University, INDIA

Challenge of open defecation in cities - 2015

Proportion and number of people practising open defecation in 2015, by region



**Globally, 100 million people
in urban areas
resort to open defecation**



**Of these
48% were in India**

Source: Based on information from WHO / UNICEF Joint Monitoring Programme (JMP – 2013) for Water Supply and Sanitation; Retrieved on 20th Sep 2013 from <http://www.wssinfo.org/data-estimates/table1/>
<http://www.unwater.org/new-publication-whounicef-joint-monitoring-programme-2017-report>

Swachh Bharat Mission (SBM) Urban – Oct 2019

Mission Objectives by October 2019

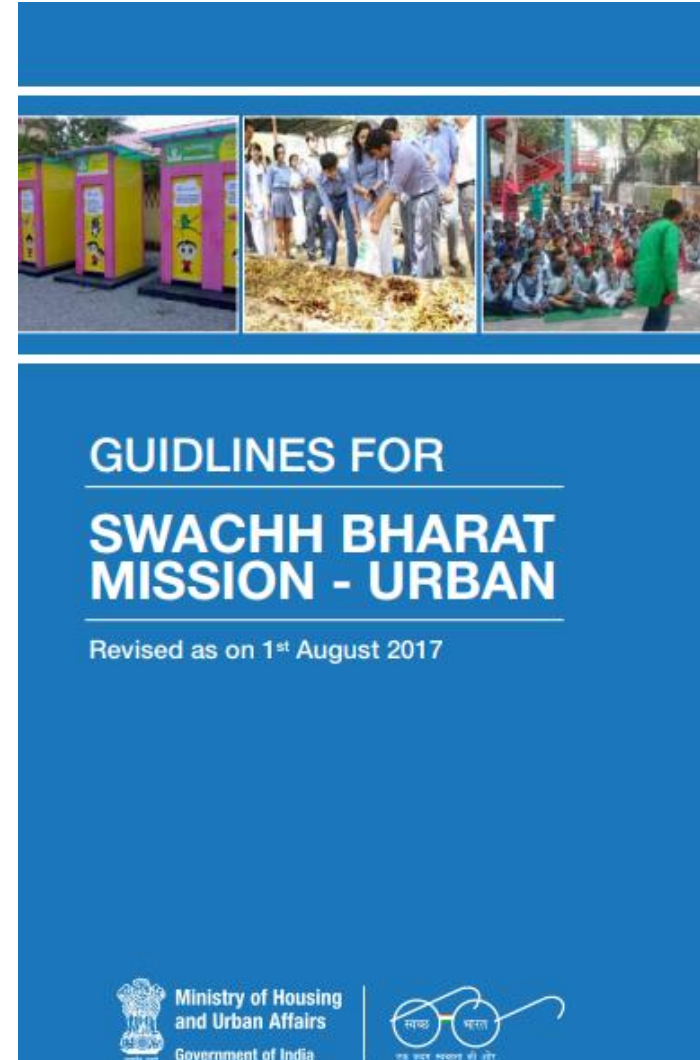
- **Elimination of open defecation**
- Eradication of Manual Scavenging

SBM (Urban) aims to ensure that

- No households engage in the practice of open defecation
- No new insanitary toilets are constructed during the mission period
- Pit latrines are converted to sanitary latrines

Mission Components

- Household toilets, including conversion of insanitary latrines into pour-flush latrines
- Community toilets
- Public toilets and urinals



Source: http://www.swachhbharaturban.in:8080/sbm/content/writereaddata/SBM_Guideline.pdf

CEPT MoU with Government of Maharashtra till 2019 ..

CEPT University signed MoU with Government of Maharashtra for providing support for implementing the Swachh Maharashtra Mission for Urban areas.



“Technical Partner to Govt. of Maharashtra”

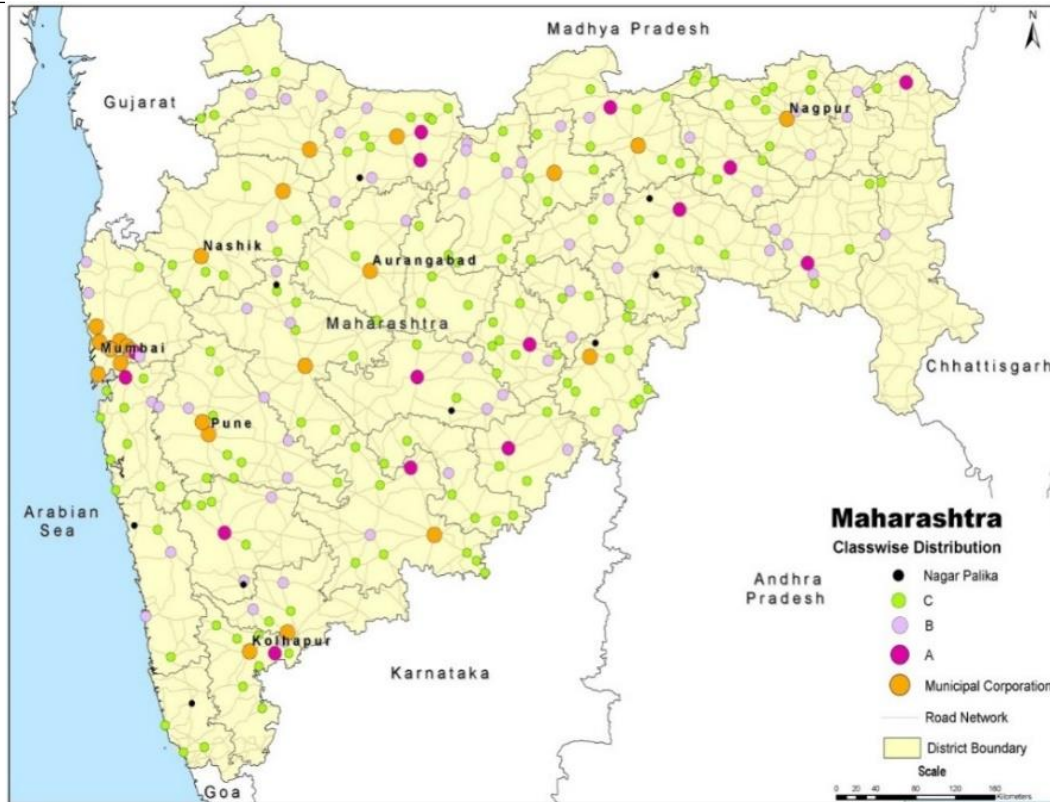
To achieve the goal of
sustainable sanitation services at scale

Wai – Sinnar and other cities are our laboratories for action

CEPT's long partnership with Government of Maharashtra

2008-09	Performance Assessment System (PAS) Project 242 cities ---- > 384 cities
2011-12	Performance Improvement Plans for making cities ODF 15 class A cities
2012	Documenting ODF Cities Mahad, Satara and Others
2012-13	City Sanitation Plans 4 small and medium towns (Wai, Sinnar, Ambejogai, Hingoli)
2013- on	Implementation support for Sanitation Improvement Support to Wai & Sinnar
2014-15	Demand Based Technical Support 12 interested cities
2015-on	Support to Swachh Maharashtra Mission State Government and all 384 Cities in Maharashtra
2016-on	Implementation of Septage Plans, Financing Models 6 pilot cities in State (Wai, Sinnar, Akot, Umred, Chiplun, Gevrai)

Maharashtra - one of the most urbanized states in India



50 million urban population

384 urban local governments

48% HAVE ACCESS TO **piped sewer** SYSTEM

52% USE **Onsite** systems

Maharashtra: First state to develop the concept of “ODF City”

A city is notified as ODF city only when

- At any point of time, not a single person is found defecating in the open
- All households have access to toilet (Individual or community toilet) and are using it
- All toilets have safe containment or are connected to safe disposal system
- Adequate public toilets are available for floating population at appropriate locations

Maharashtra Government Notification Dated 29.10.2015 on ODF Cities

स्वच्छ महाराष्ट्र अभियान (नागरी) अंतर्गत
हागंदारी मुक्त होणाऱ्या शहरांची तपासणी
करण्यासाठी समितीचे गठन करण्याबाबत.

महाराष्ट्र शासन
नगर विकास विभाग
शासन निर्णय क्रमांक: स्वभाअ २०१५/सं.क्र. १५४९/ नवि-३४
हुतात्मा राजगुरु चौक, मादाम कामा मार्ग
४ था मजला, मंत्रालय, मुंबई
दिनांक : २९ ऑक्टोबर, २०१५

वाचा:

१) शासन निर्णय, नगर विकास विभाग क्रमांक स्वभाअ २०१५/प्र.क्र.२३/नवि-३४,
दिनांक १५ मे, २०१५.

प्रस्तावना:

केंद्र शासनाच्या “स्वच्छ भारत अभियान (नागरी)” च्या धर्तीवर संदर्भाय शासन निर्णयान्वये राज्यामध्ये “स्वच्छ महाराष्ट्र अभियान (नागरी)” ची अंमलबजावणी सुरु झाली आहे. या अभियानांतर्गत शहरे हागंदारी मुक्त करणे व घनकचरा व्यवस्थापन या दोन प्रमुख बाबींचा समावेश आहे. शहरे हागंदारी मुक्त करण्यासाठी शहरांमध्ये ज्या कुटुंबांकडे शौचालयाची सुविधा उपलब्ध नसल्याने ते उघड्यावर शौचास जातात अशा कुटुंबांना वैयक्तीक घरगुती शौचालय अथवा सामुदायीक शौचालय उपलब्ध करून द्यावयाची आहेत.


२. सन २०११ च्या जनगणनेच्या आकडेवारी नुसार राज्यातील २६५ नागरी स्थानिक स्वराज्य संस्थांमध्ये एकूण ८.३१ लक्ष कुटुंबांना शौचालयाची सुविधा (वैयक्तीक घरगुती शौचालय अथवा सामुदायीक शौचालय) उपलब्ध करून द्यावयाची आहे.

३. स्वच्छ महाराष्ट्र अभियान (नागरी)” ची अंमलबजावणी राज्यातील २६५ नागरी स्थानिक स्वराज्य संस्थांमध्ये मिशन मोड पध्दतीने सुरु झाली असून राज्यातील १९ नागरी स्थानिक स्वराज्य संस्थांनी हागंदारी मुक्त झाल्याचे घोषित केले आहे. तर, राज्यातील इतरही नागरी स्थानिक स्वराज्य संस्था टप्पाटप्प्याने हागंदारी मुक्त होत आहेत.

“हागंदारी मुक्त शहराची व्याख्या: ज्या शहरामधील सर्व कुटुंबांना शौचालयाची सुविधा (वैयक्तीक अथवा सामुदायीक) उपलब्ध असून सर्व कुटुंबे त्याचा वापर करीत आहेत. तसेच, शहरामध्ये दररोज येणाऱ्या त्रंगत्या लोकसंख्येसाठी पुरेशा प्रमाणात व योग्य ठिकाणी सार्वजनिक शौचालये उपलब्ध असून ती वापरायोग्य आहेत व त्याचा वापर होत आहे. शहरातील सर्व शौचालये ही सुरक्षित मैला व्यवस्थापन प्रणालीस जोडली आहेत व शहराच्या परिसरात कुठेही उघड्यावर शौचविधी होत नसल्याचे अथवा कुठेही उघड्यावर मानवी विष्टेचे पुरावे दिसून न आल्याचे व त्याचा प्रसार होत नसल्याचे आढळून येईल, अशा शहरास हागंदारी मुक्त शहर म्हणता येईल.”

Maharashtra's approach for making cities ODF and ODF+

A Mission led by “Local Governments” and facilitated by the “State Government”

- 
- A group of people, including officials and community members, are gathered for an award ceremony. Several individuals are holding framed certificates and awards. In the background, a banner features a portrait of a man and text in Marathi. The scene is set indoors with a dark background.
- ❖ Focus on **outcomes** – and not only toilet construction - **Make and sustain cities to be ODF**
 - ❖ Move towards universal access to **individual toilets** and ensure usage, Equal focus on awareness generation, ‘**good morning pathaks**’
 - ❖ Ensure **quality of construction** of toilets as a strategy for sustainability, using **demand based** and not contractor model, ensure **safe containment**

Demand Led Approach – Construction of Toilets



Insistence on
**household led
construction**
leads to good
quality toilet
construction

Activities undertaken by cities 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

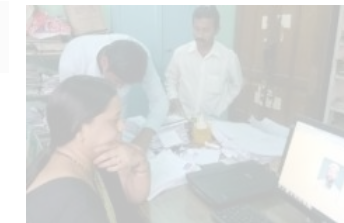
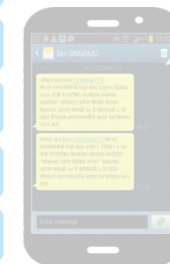
Credit societies

Commercial banks

Housing finance companies

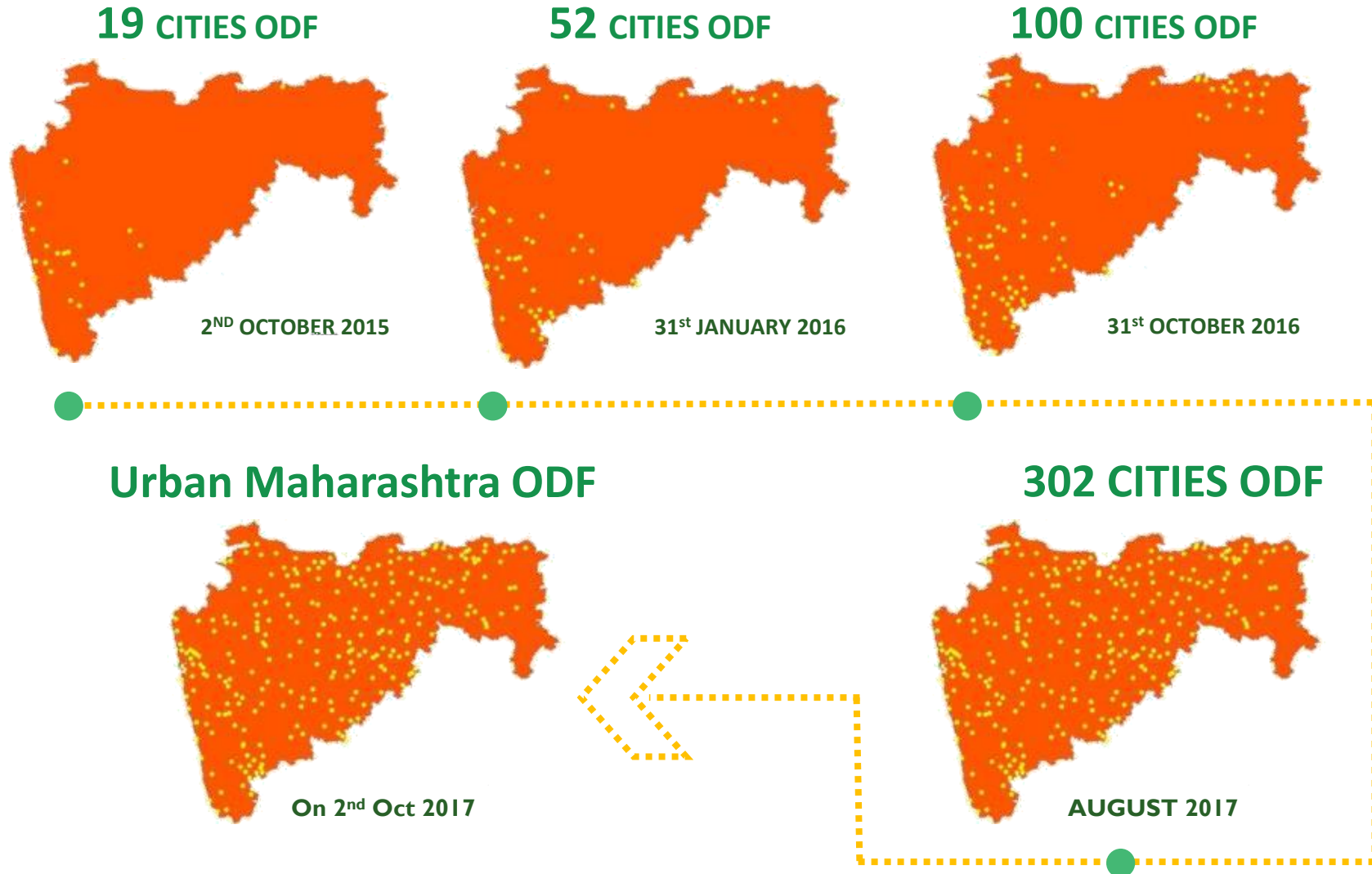
4 Application Monitoring

Bulk SMS



Application process, site inspection

Milestones in the State's ODF Journey...



Fiscal incentives for ODF Cities by Govt of Maharashtra

Funds equal to nearly **30 % of capital budget of local govt**
To be used for **Sustainability** and moving to **ODF+ & ODF++**

Population	Incentive fund (USD)	Disbursal linked to sustainability
100,000 to 300,000	330,000	30% released on first validation , if positive 70% released on 2 nd validation after a six months , if positive
50,000 to 100,000	250,000	
Less than 50,000	170,000	

Sustainability Charter Launched by the Chief Minister



सप्तपदी
सातत्याची

Sustainability Charter

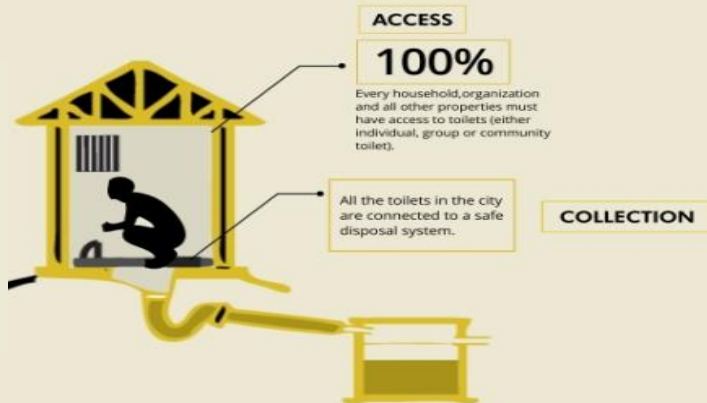
We are committed towards the vision of Swachh Bharat. We shall ensure ODF sustainability in Maharashtra by:

- #1. Achieving universal access to Individual Household Level Latrines (IHHL), which is a leading development priority.
- #2. Ensuring adequate, clean and reliable access to public/ community toilets across urban Maharashtra, wherever IHHL are not possible.
- #3. Ensuring ODF sustainability through effective participation of government, elected representatives, schools, donors, implementers, NGOs, SHGs, CBOs and the communities.
- #4. Continuing and institutionalizing rigorous ODF validation and monitoring process through "OD Watch" and "ODF sustainability tracker"
- #5. Auditing the performance of community/ public toilet and encouraging development of OD spots into usable public spaces.
- #6. Recognizing and awarding sustained performance
- #7. Moving towards ODF+/++ by ensuring effective collection and adequate treatment of human fecal waste

Mr. Devendra Fadnavis
Chief Minister, Maharashtra



ODF

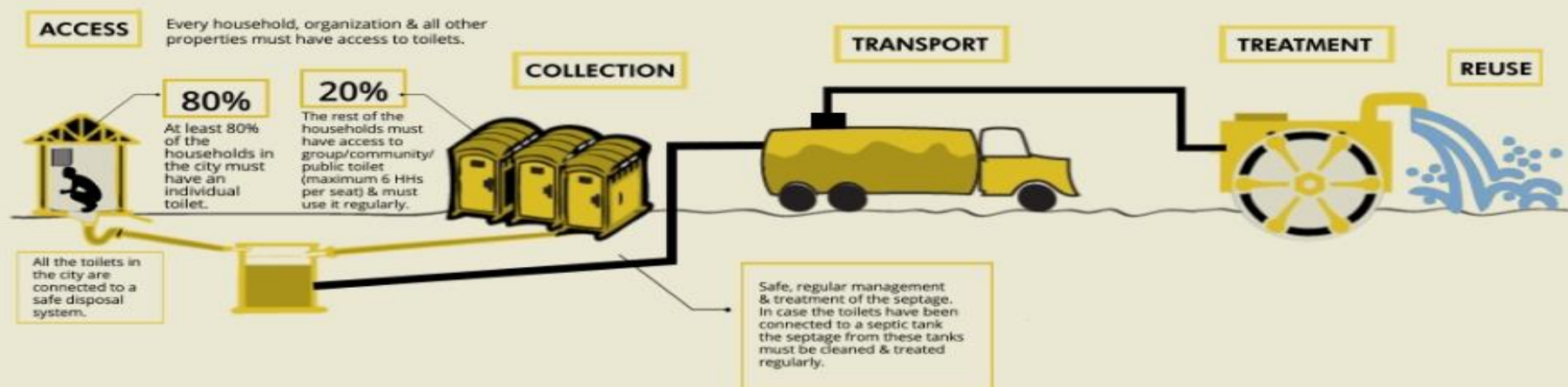


Beyond toilets and ODF

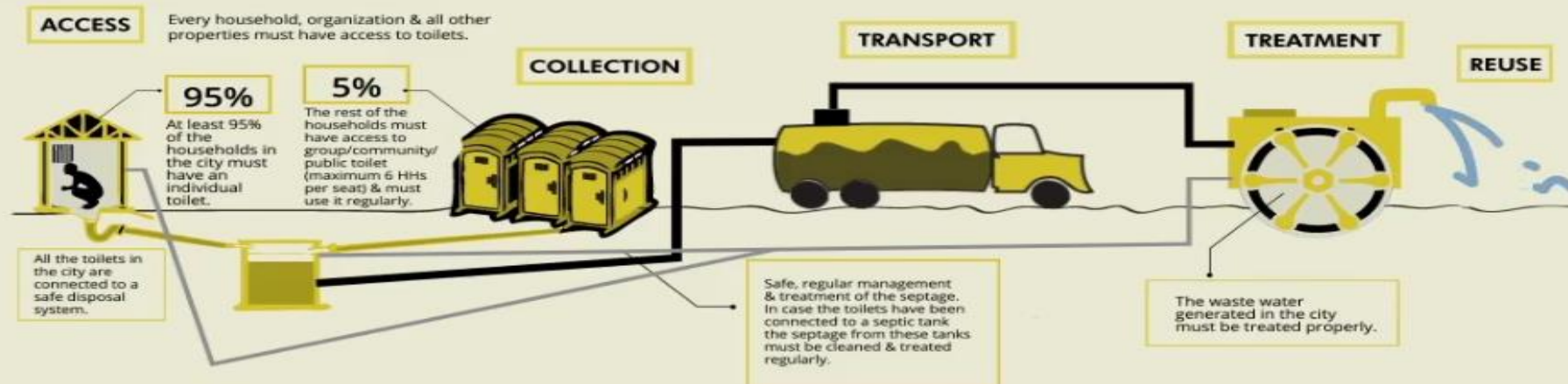
ODF + and ODF ++ cities

Government of Maharashtra

ODF +



ODF ++



Focus on Fecal Sludge and Septage Management (FSSM) by Government of Maharashtra

- **Increased focus on moving ODF cities towards ODF+ after declaring Urban Maharashtra ODF on 2nd Oct. 2017**
- **Maharashtra Government has passed two resolutions, directing to move towards ODF+ and to utilize Incentive grant and 14th FC funds for ODF+ activities**



Chief Minister Speech on occasion of declaring Urban Maharashtra ODF on 2nd October 2017

[illegible]

१४ या केविल विल अयोग्याया विकारनिगुनास राज्यानी नगरी स्थाकिन सरराय सन्ध्याना याया होण्यामुळे मुमुक्षु अमुनायना सरराय महराष्ट्र अपिनायनास कारकायाया सन्ध्याया कारकायनासिवास्त.

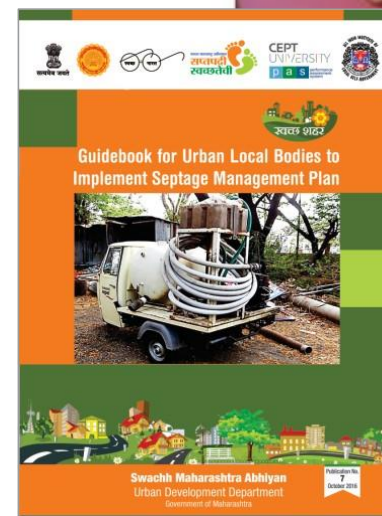
महराष्ट्र शासन
नगर विकास विभाग
शासन परिपत्रक क्रमांक: २०१६-२०१७/प्र.अ. ५४/मि.३५,
हृतात्म राजगुरु भवन, नगर शासन नगरी
५४ या महरास, महराष्ट्र, मुमुक्षु
दिनांक : २१ एप्रिल, २०१६

प्रश्न:-
(१) शासन निगरी, नगर विकास विभाग, तामासक सन्ध्या २०१६/ प्र.अ. ५४/मि.३५,
दिनांक २१.४.२०१६,
(२) शासन निगरी, नगर विकास विभाग, तामासक दिनांक: २०१६/ प्र.अ. ५४/मि.३५,
दिनांक ३ ऑक्टोबर, २०१६.

शासन परिपत्रक :-
१४ या विल अयोग्याया विकारनिगुनास राज्यानी नगरी स्थाकिन सरराय सन्ध्याना प्राल होण्यामुळे मुमुक्षु अमुनायनास किमान ०८ एकरे एप्रिल २०१६ साल महराष्ट्र अपिनायनास कारकीर्त वली होण्याये सन्ध्याना प्रवाल ३ एकरे एप्रिल ३ ऑक्टोबर, २०१६ या शासन निगरीयास कृषमन्तरास कारयाया असे अनुभव, शासन निगरीयास निरिच्छे ११ (१) (१) मुमुक्षु नगरीयास अलेकी जाये या निमिम्भून कारयाया मुमा देवाया अलेकी जाये.

२. या सन्ध्यानी शासन यास निरिच्छा असे जाये की, काही शहरांमळे धनकययाये संकलन व वाडुक्क कलन यास प्रालि न करला तो यीनिंग प्रालिचय २२ कलयाये कायन कळयिच्छिना (Compulsory) कलयायिनी १४ या विल अपिनायनास कारकीर्त जाये, तरतू, काही शहरांमळे धनकययाये संकलन व वाडुक्क कलयायिनी वाडने सन्ध्या कारयायिनी विल शरारयायन जाये.

३. किंश शासनयाया सन्ध्या सन्ध्या अपिनायनाया कारकीर्त शरारयायन सरराय महराष्ट्र अपिनायनास अमनकरयानी मुमुक्षु असे, या अपिनायनास धनकययाय वाडयाना सन्ध्या, २०१६ अपिनास कारयायिनी शासन शहरे "मुमुक्षु" कलने हा महराष्ट्रा घडक जाये. वाडुक्काना प्रालेकी नगरी स्थाकिन सरराय सन्ध्याना याया शहरास निगरीया होण्या १००% कलन निगरीयाया जायिनी घडयानेकी (जोस कलन, मुमुक्षु कलन) घडयिनी घडयिनी कलन घडुय शरारयायन कलन जाये, या सन्ध्यानी कळयिनी (जोस कलन, मुमुक्षु कलन) घडयिनी घडयिनी कलन जाये. १००% कळयिनी शहडुक्क कलने, जोस कळयिनी कळीय जाये वाडुक्क कळयिनी जायिनी कळीय जाये.



GR on ODF,ODF+ and ODF++ framework

GR on use of 14th FC & Incentive Funds

Septage Management Step by Step Guide Guidelines for ODF+

Wai and Sinnar in Maharashtra

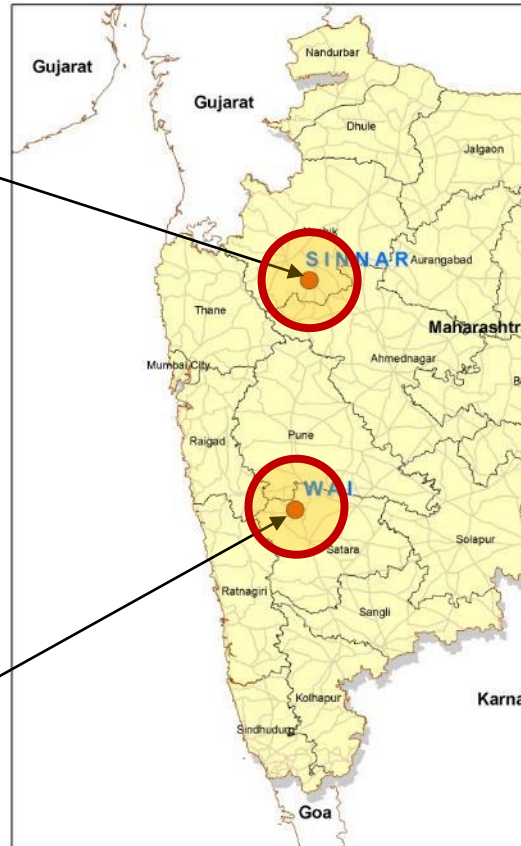
Development of City Sanitation plans were accompanied by ~18 months of stakeholder engagement with the WSSD, MJP and local governments

Sinnar

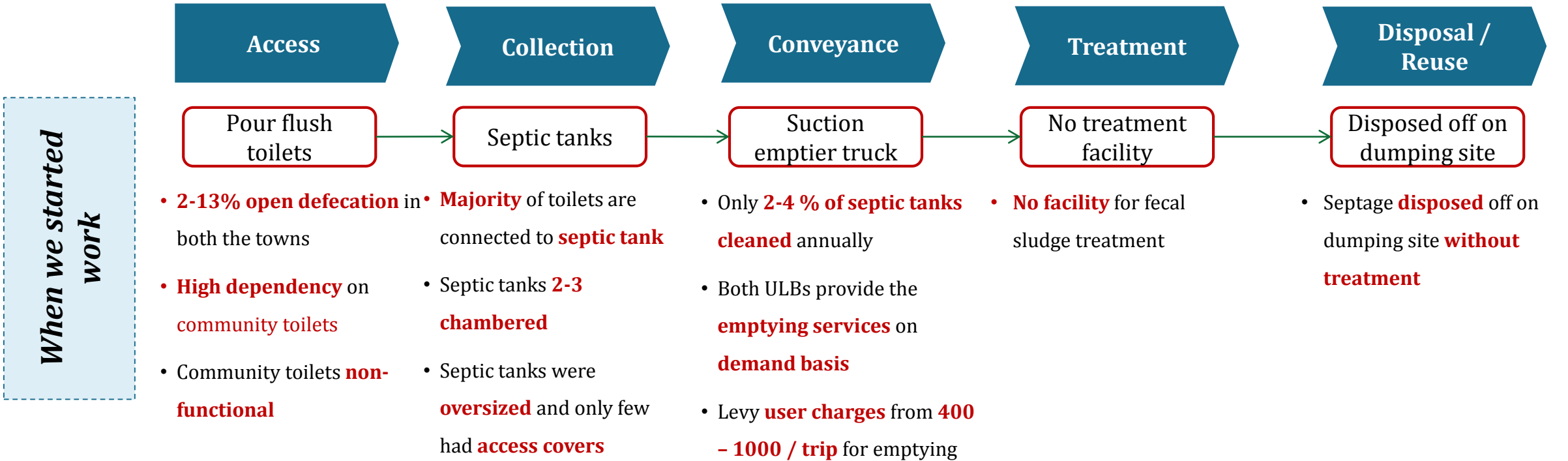
Located in the Nashik district, with a population of ~72,000 that has more than doubled in size since 2001 mainly due to expansion of city boundaries and an industrial and manufacturing boom in nearby Nashik.

Wai

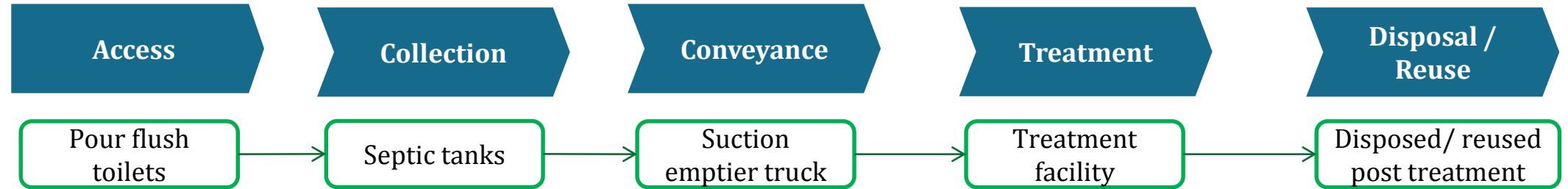
Located in the Satara district, 90 km away from Pune, with a population of ~43,000. Wai has grown slowly at 1% per year since 2001.



Sanitation situation – When we started

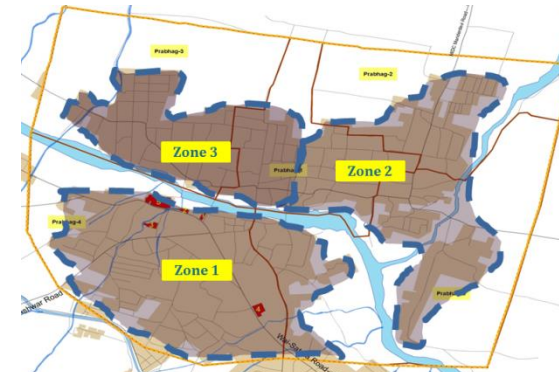
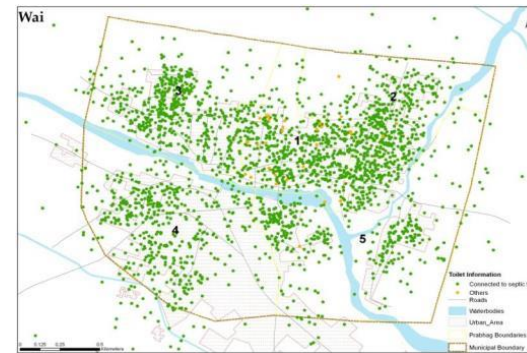


Emerging sanitation situation after interventions...

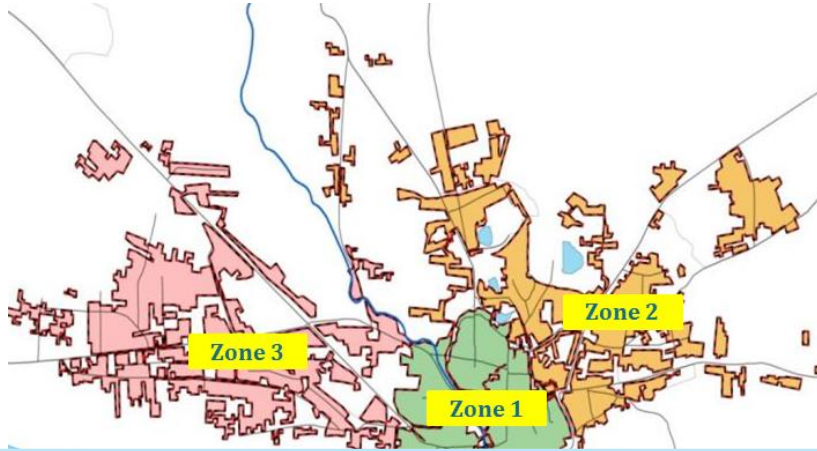


Existing Situation

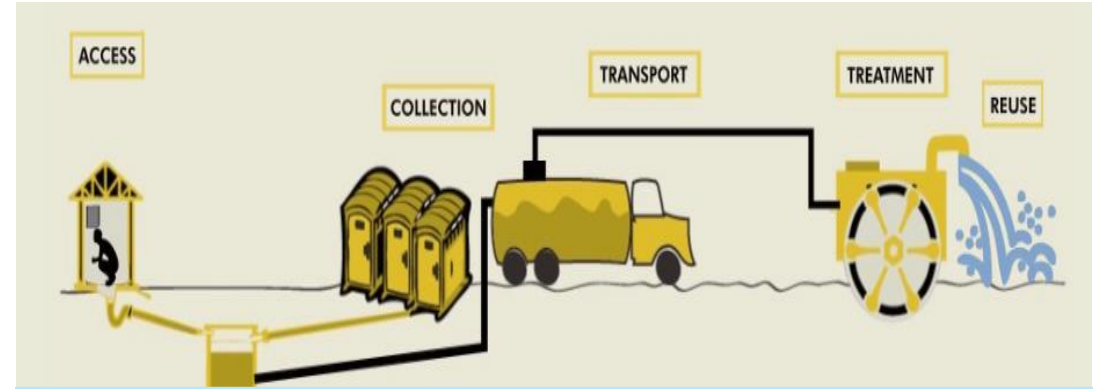
- Cities have **attained ODF status** and **sustained** the same
- **Improved access** to **Individual toilet** and **toilet credit** has been explored
- All **Community toilet seats** have been made **functional**, **O&M assigned** to **private sector**
- **Toilet** and **septic tank database** has been generated
- **Scheduled emptying** of septic tanks at an **interval of 3 years through private sector**
- **Sanitation tax** levied for **financing O&M** of emptying services
- **Payment** to contractor through local taxes using **escrow mechanisms**
- Septage **treatment plant** are **being set** up in both the cities
- **Wai FSTP – funded by BMGF**
- **Sinnar FSTP – 14h FC funds**
- Reuse of treated water in agriculture/urban forestry. **sale of compost mixed with bio-char; energy generation from biogas**



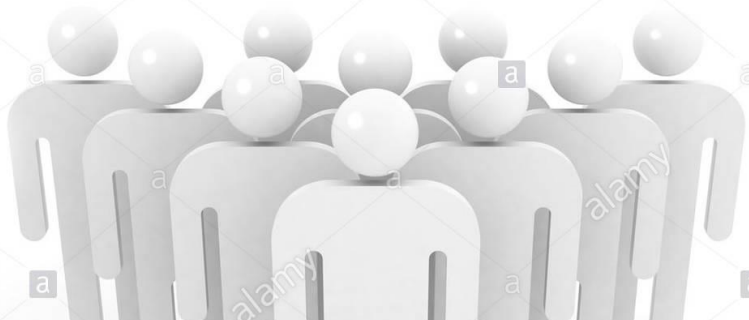
Key aspects of our work...(1 / 2)



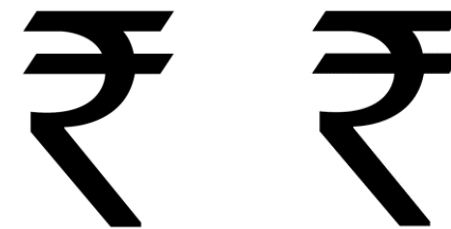
Scheduled Emptying Services Citywide Sanitation Services



Assessment and Planning across the **Sanitation service chain** Outcome based approach



Institutional **City Ownership** of all interventions- Formalised by **Council Resolutions**



Financing **Capital Financed** through **ULB own funds** **O&M Financed** through **Sanitation Tax**

Key aspects of our work...(2 / 2)



Inclusive
Equitable services to all including Slums



Behavior change
for ODF sustainability & ODF+



Social aspects
Removed need for manual scavenging

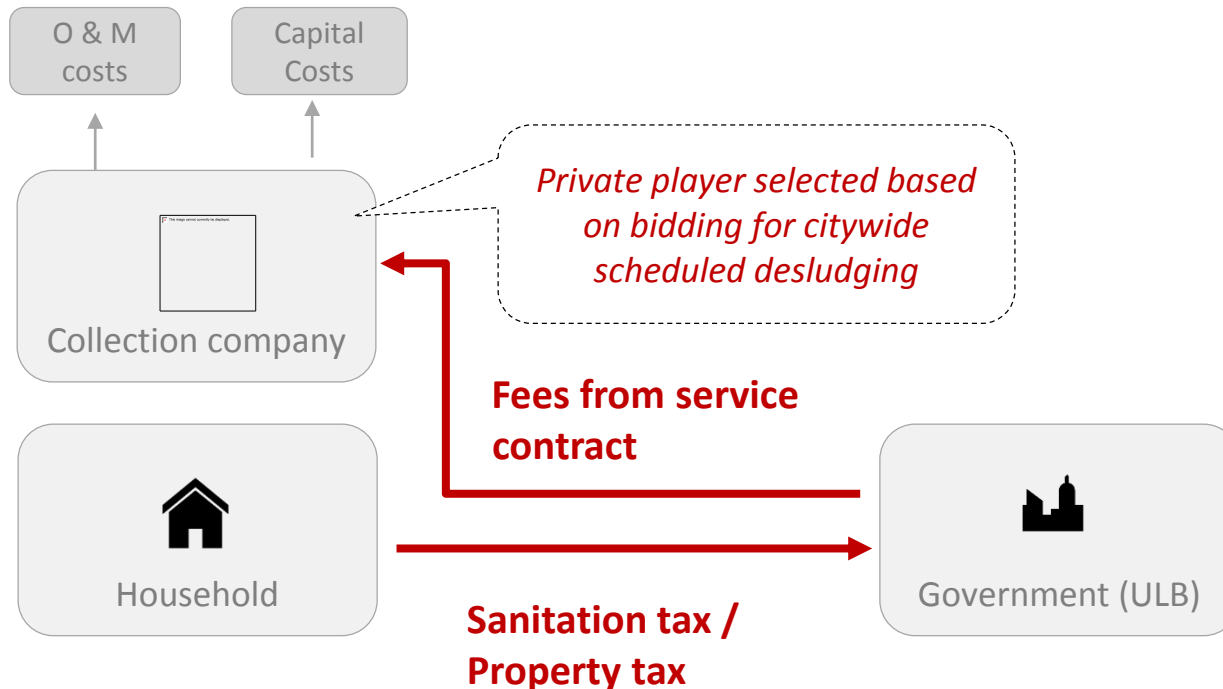


Environmental aspects
Treatment of septage

Innovative Financing: Performance linked annuity models for conveyance

I. Scheduled emptying

- Private company selected through bidding process
- All septic tanks in the city to be emptied once in 3 years – 1/36 each month



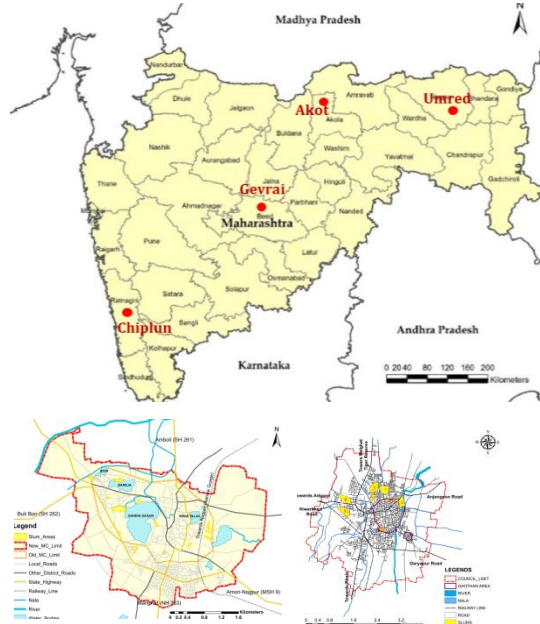
2. Performance based fixed monthly payments

- Penalties deducted for non-compliance
- Payment linked to number of tanks emptied – Receipts signed by households
- Ensuring safe emptying – receipts signed by FSTP official
- No spillage
- Use of safe methods – e.g. PPE for workers

3. Sanitation Tax

- Each household pays a small fixed amount as sanitation tax, and Sanitation tax + property tax used to pay private company
- Emptying provided without “per-emptying” fee
- Sanitation tax much less than the cost incurred per household previously for emergency emptying

Scalability and sustainability ...



Scaling up initiated in 130+ towns of Maharashtra

Influenced National Policies and guidelines

Lessons scaled up at State level through Policies and guidelines

Tools for training ULBs across India

CaPex— Grant Funds
Opex — Sanitation tax

What has worked ...

- Focus on **outcomes (ODF City)** and not only outputs (Toilets), ODF **sustainability, ODF+ approach**
- **Demand based model**, slow initially but better toilets and use
- Urban local **government led initiatives**, fiscal **incentives, sharing of ideas, good practices**
- **Awareness activities** by ULBs, schools, SHGs, Good morning pathaks
- **Rigorous monitoring, systematic approach** – starting with low hanging fruits, and planned expansion, support to challenging cities
- **Partners:** Academic: CEPT, AIILSG, Development agencies: GIZ, Corporates: R&B, HSBC

CEPT team felicitated by the President of India for Swachh Maharashtra on Oct 1, 2017



Partnerships and Collaboration to attain Scale ...

BILL & MELINDA
GATES *foundation*

CEPT
UNIVERSITY

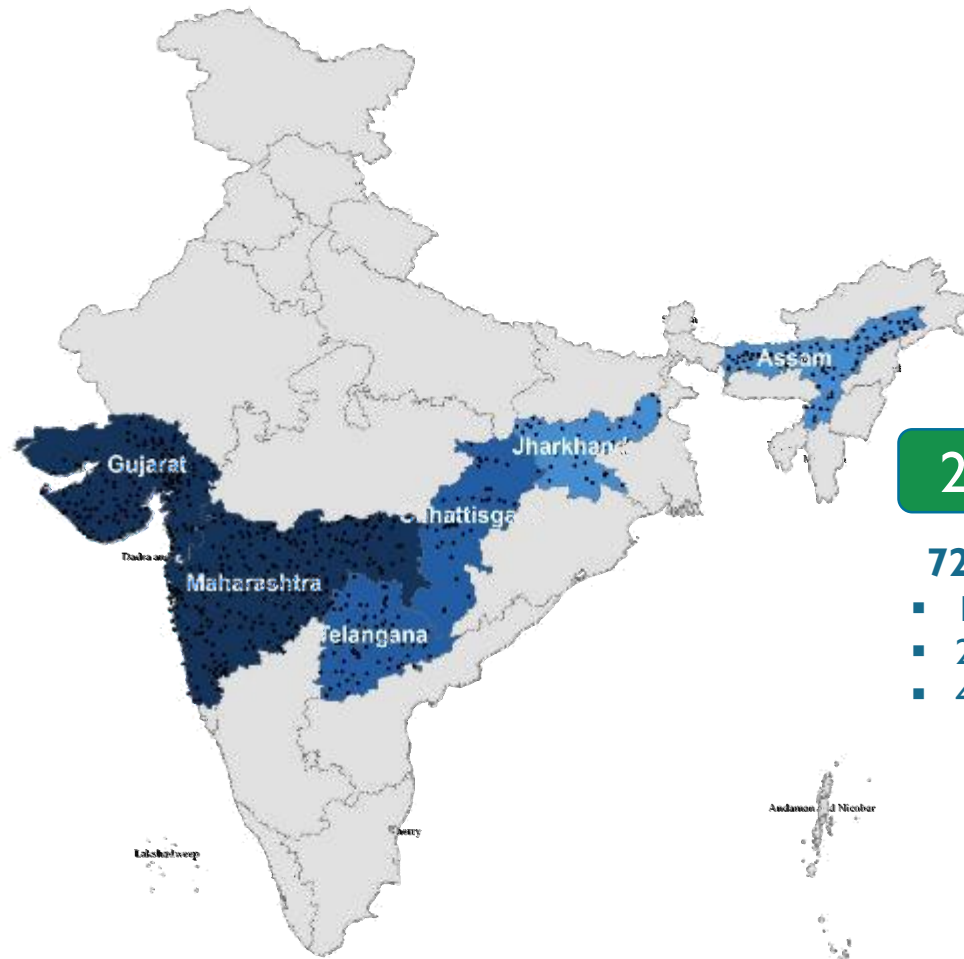


Government of
Maharashtra



HSBC 

CEPT work with cities : PAS... Performance Assessment System . . . the Largest Database on 900+ cities



2009-416 Cities

68 Million population

- 167 Cities of Gujarat
- 249 Cities of Maharashtra

.....continued for 8 years

2015- 463 Cities

72.8 Million population

- 168 Cities of Gujarat
- 259 Cities of Maharashtra
- 43 Cities of Chhattisgarh

2016- 908 Cities

96.5 Million population

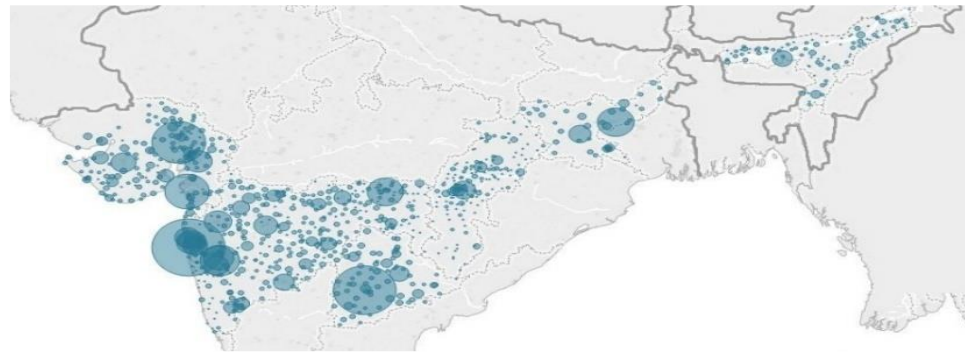
- 168 Cities of Gujarat
- 364 Cities of Maharashtra
- 168 Cities of Chhattisgarh
- 69 Cities of Telangana
- 96 Cities of Assam
- 43 Cities of Jharkhand

PAS web portal: Repository of service level indicators of more than 1800 cities covering 18 states over a period of 3 years.

Information available at www.pas.org.in

Performance Assessment System for urban water supply and sanitation

Annual service delivery profile for
900+ cities in India across **6 states**



Supporting Swachh Bharat Mission in Maharashtra state

Financing Water and Sanitation

Sanitation
Planning tools

Onsite sanitation
Action research

Equity in Municipal Services

City level
support for
citywide
sustainable
sanitation

Capacity
Building
activities

Urban Water Security

CEPT
UNIVERSITY

C-WAS Center for water
and Sanitation

p a s performance
assessment
system

pas.org.in



pas@cept.ac.in



[pas_project](https://twitter.com/pas_project)



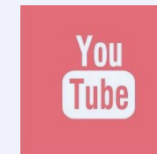
[pas.cept](https://www.facebook.com/pas.cept)



[pascept](https://www.linkedin.com/company/pascept)



[PASproject](https://www.youtube.com/channel/UCv8v8v8v8v8v8v8v8v8v8v8)



E- newsletter
tiny.cc/pasenews



Thank you

[Link to Video](#)

meeramehta@cept.ac.in
dineshmehta@cept.ac.in

[**www.pas.org.in**](http://www.pas.org.in)

Citation Suggestion for this presentation:

CWAS – CEPT University, (2018) Beyond Toilets: Moving to ODF+ in Indian Cities; Presentation at Stockholm Water Week, 29 August 2018

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.



pas.org.in
cwas.org.in



pas@cept.ac.in



[pas_project](#)



[pas.cept](#)



pas.org.in/web/ceptpas/pase-news
Sign up: tiny.cc/pasenews