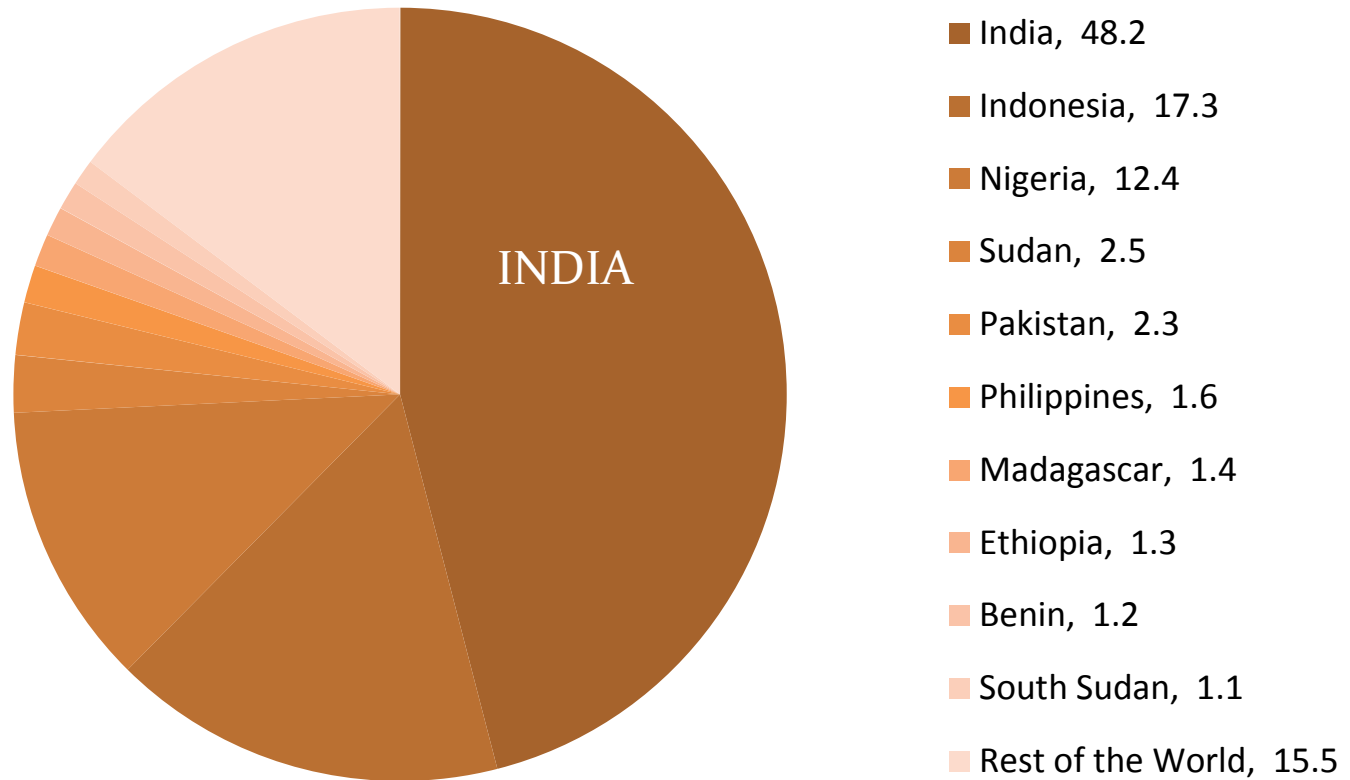


# Swachh Bharat Mission

## Making India ODF

# Challenge of Open Defecation

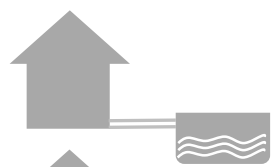
Globally, 100 million people in urban areas resort to open defecation  
Of these 48% are in India



Source: Based on information from WHO / UNICEF Joint Monitoring Programme (JMP – 2013) for Water Supply and Sanitation; Retrieved on 20<sup>th</sup> Sep 2013 from <http://www.wssinfo.org/data-estimates/table/>

# In Urban India

(Urban Population 380 million)



**62 million people** HAVE NO TOILET

**42 million people** PRACTICE OPEN DEFECATION

**20 million people** DEPEND ON COMMUNITY TOILETS

**25 million households** USE SEPTIC TANKS

**30 Billion litres daily** UNTREATED WASTEWATER

# Swachh Bharat Mission

JMP, 2015 revealed that nearly 600 million Indians lack access to safe and private toilets



In August 2014, the Prime Minister announced an ambitious programme, “Swachh Bharat Mission” (Clean India Campaign), with a goal of making India Open Defecation Free and making a toilet accessible to every Indian

# PAS @ CEPT University

- We have been tracking urban water and sanitation service delivery since 2009 in India.
- This is through a major action **research grant** from Bill and Melinda Gates Foundation for developing a **statewide Performance Assessment System (PAS)** for urban water supply and sanitation in Maharashtra and Gujarat, now extended to states of Chhattisgarh, Telangana, Assam, Jharkhand....
- CEPT University was invited by the Government of Maharashtra to support implementation of the **Swachh Maharashtra Mission in Urban areas** of the state
- This presentation describes our ongoing work in the state of Maharashtra for the past two years

# PAS

Performance Assessment System

Annual service delivery profile for

**870<sup>+</sup>** cities in **5** States

Time-series data for **7** years for 400 cities

**National database for 1800 cities  
For 18 states for 3 years**

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

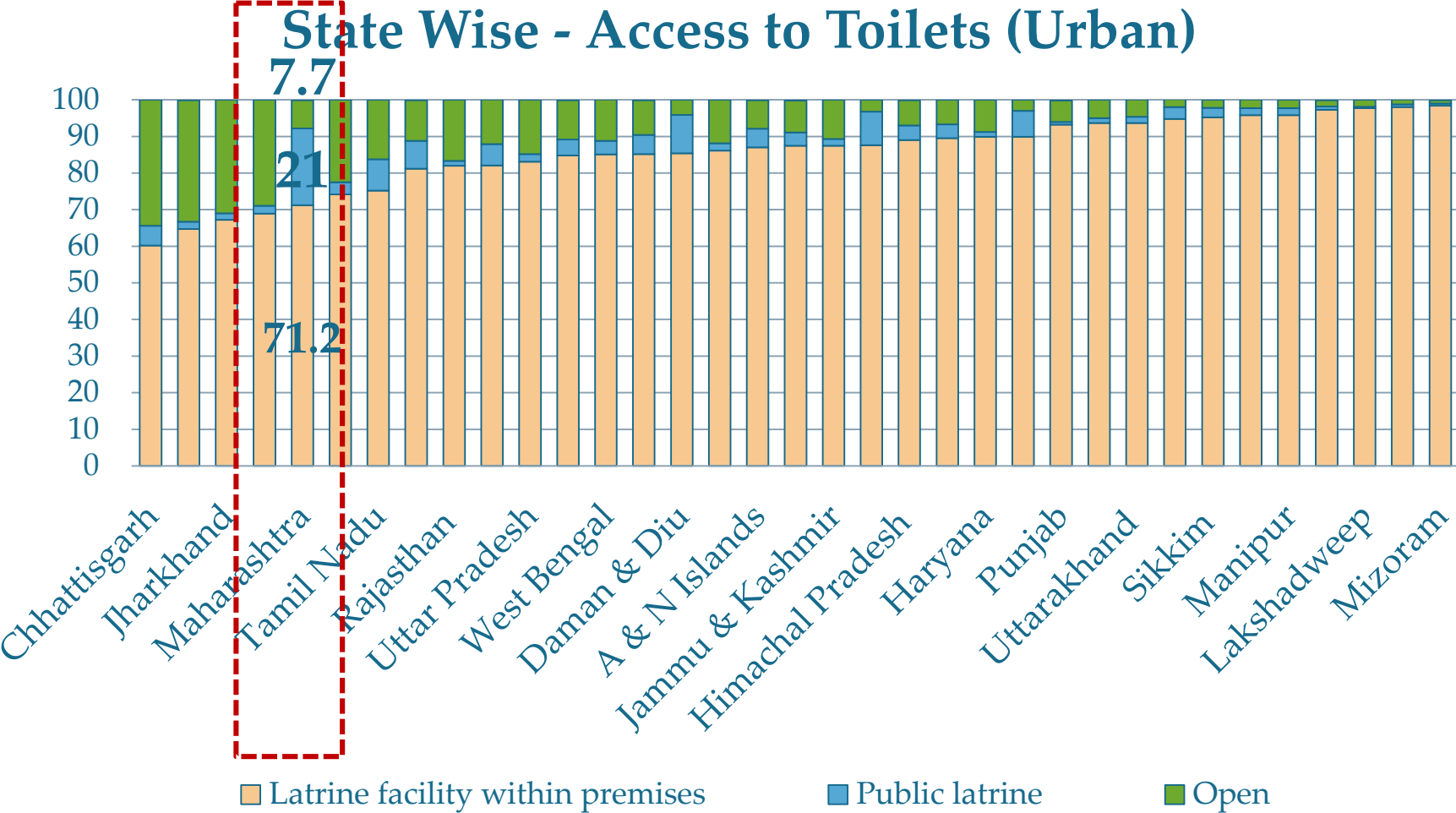
Water supply, Waste Water, Solid waste Management & Storm Water



# Sanitation in Maharashtra

# High Usage of Shared Toilets in Maharashtra

Urban India reports **18.6%** of households having no latrine facilities.





# Support to GoM for Swachh Maharashtra Mission

**CEPT University signed MoU with Government of Maharashtra for providing support for implementing Swachh Maharashtra Mission**

## Key areas for CEPT support

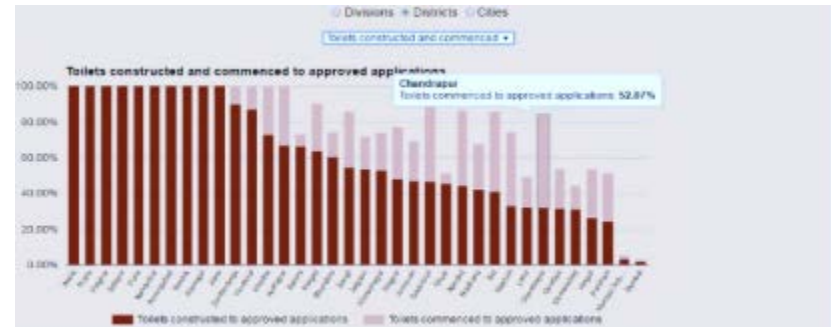


Development of various policy guidelines



CMO Maharashtra @CMOMaharashtra · Oct 2  
Some MoU's were signed for this cleanliness drive with CEPT university, Ahmedabad, All India Local Self Govt and Aquacraft.  
#SwachhBharat

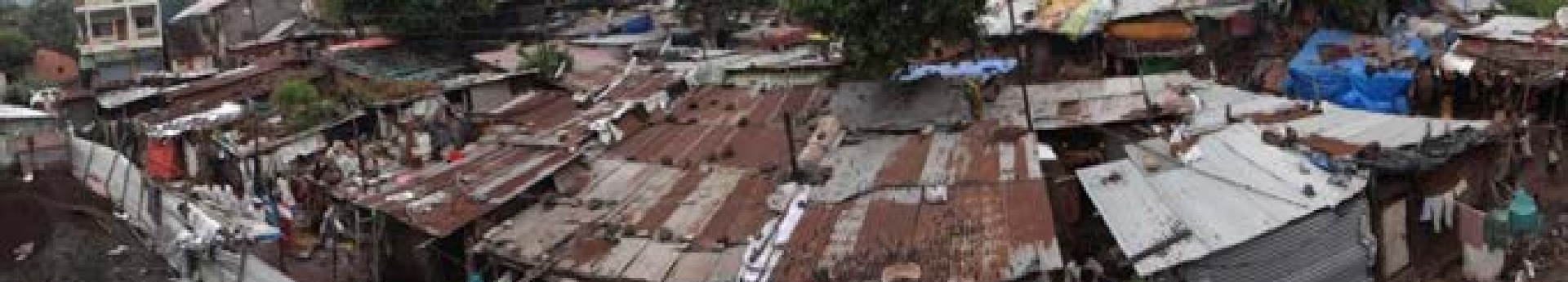
37 63



Review and monitoring of progress of SMMUA



Building capacity of local governments and technical support to cities for becoming ODF+



# Making Cities Open Defecation Free



# Open Defecation in Cities

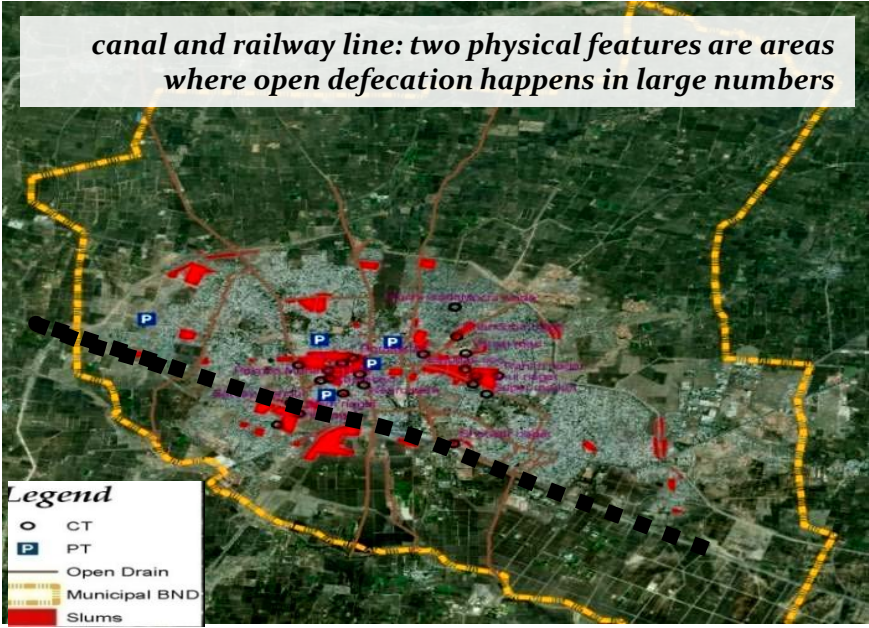


## Key Reasons

- No individual toilets- lack of funds and space
- Poor condition of community toilets



# Open Defecation in Cities



# Stage Wise Implementation

## Formation of Scheme Implementation Cell at ULB

Possible implementation mechanism for the scheme

I Form a Scheme Implementation Cell / "Own Toilet Scheme Cell"		
A	Administrative Staff Clerk and Computer Operator	<ol style="list-style-type: none"> <li>Dissemination of scheme</li> <li>Give out applications</li> <li>Collect applications</li> <li>Sort applications</li> <li>Publish approved applications</li> <li>Maintain all records in the given formats</li> </ol>
B	Technical Staff Engineer and PWD staff	<ol style="list-style-type: none"> <li>Assess applications</li> <li>Shortlist applications</li> <li>On ground inspection of shortlisted applications</li> <li>Approve applications</li> <li>Monitor implementation</li> <li>Approve implementation</li> </ol>
C	Finance Staff Accountant	<ol style="list-style-type: none"> <li>Disbursement of funds</li> <li>Maintain records in the given format</li> </ol>

PAS is providing support at all stages of the scheme

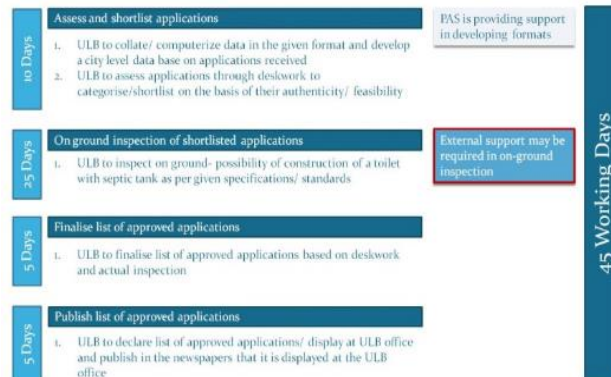
## Stage 1. Dissemination of scheme

Implementation Stage 1- Creating awareness and advertising the scheme



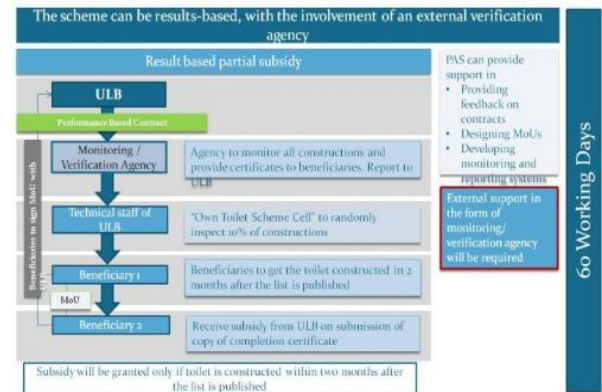
## Stage 2. Application Process

Implementation Stage 2- Application process



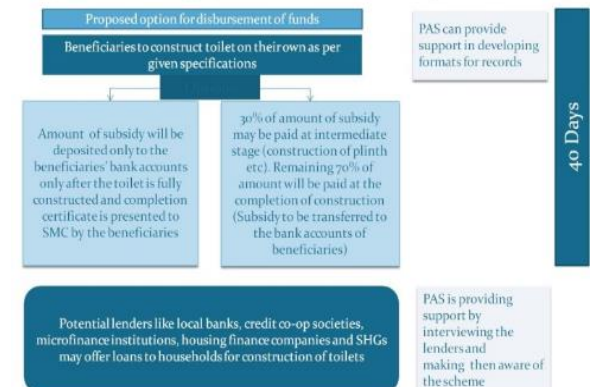
## Stage 3. On-ground Implementation

Implementation Stage 3- Construction of toilets



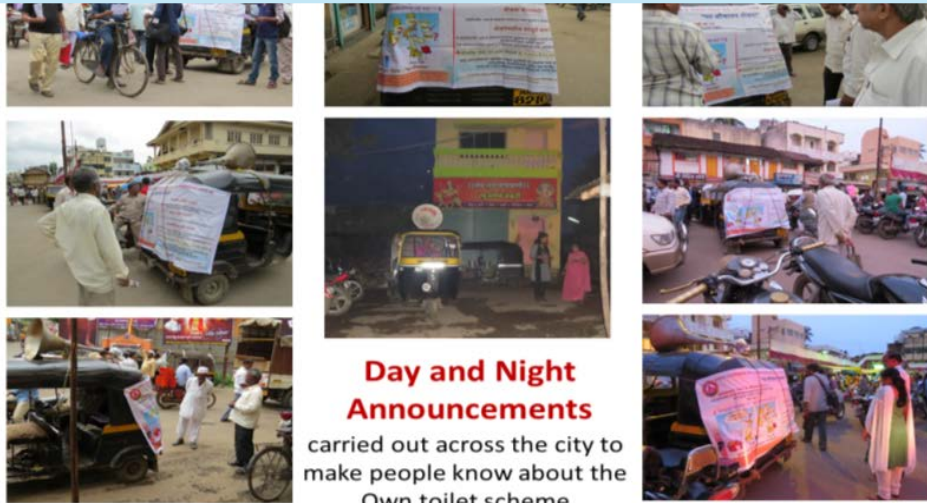
## Stage 4. Disbursement of Subsidy

Implementation Stage 3 - Disbursement of subsidy



# Activities for Awareness and Scheme Promotion. . (1/2)

## Announcements . . .



**Day and Night Announcements**  
carried out across the city to make people know about the Own toilet scheme

## Banners displayed . . .



**20 Banners and more than 100 posters** on benefits of sanitation placed at CTs, near temple, residential areas, at crossing, market places, OD spots, etc.

## Forms distributed at meetings . . .



Elected representatives to lead the meetings and encourage households

Organizing **Community Level Meetings** and presentations to raise discussions  
PAS Project

## Videos played at large gatherings

...



Informative audio visuals were showcased during these meetings

Utilizing **Large Gathering Events** like *Ganpati* for conducting Area meetings and presentations

# Activities for Awareness and Scheme Promotion. . (2/2)

## Movies and Jingles on scheme . . .

The movies and jingles were played at various location in the city to make people aware of ill effects of OD and the Own Toilet Scheme

## School Activities. . .

Organizing Drawing Competitions in schools and Presentations were made to teachers, students and parents to bring awareness about constructing individual/ group toilets

## Do's and don'ts for construction of toilet

समाधान	ग्राहकाने करावे	ग्राहकाने न करे
✓ नगरपालिकेच्या मानकांनुसारच टाचीचे बांधकाम करावे		
✓ मॅट्रिक टाची ही नेहमी इमारतीपासून दूर अंतरावर असावी ✓ टाचीच्या मधे कच्च्यावर टाकणे असावी		
✓ चिरा, घरी, बाटू, पदर, कोडीट यांचा वापर करणान टाचीचे बांधकाम करावे		
✓ टाचीचा तळ हा मिनेट कोरिडोर मध्येच असावे आकरकण आहे तसेच टाचीच्या निर्मात्या बाजूकडून आलेल्या बाजूने उतर असावे आकरकण आहे		
✓ टाचीच्या आतील बाजू हा मिनेट प्लाइवूड वरून गुळगुळीत केलेल्या असावा		
✓ टाचीत मैदा मोटण्याचा मार्ग व निर्मात्याचा मार्ग हे वेगवेगळ्या वाळोटीवर असावे		
✓ टाचीत मैदा मोटण्याचा मार्ग व निर्मात्याचा मार्ग हे मातीच्या थरापेक्षा माती व मैदापेक्षा वर असावे		
✓ दोरही मातीच्या गोळाही टी अंकरून अथवा बॅरन देण्यात जावे		
✓ बाजूचीजनांच्या पादुकी ३फी २० मीटर च्या परिघातील सर्वोत ३'० इमारतीच्या उंचीपेक्षा किमान २ मीटरचे वर असावा		

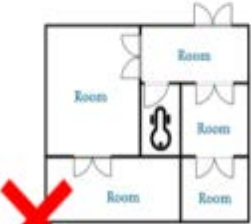
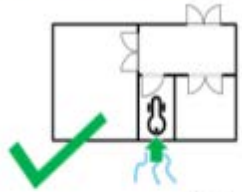
## Target households / areas . . .

Target households / areas . . .

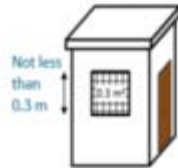
# Training of local contractors in cities ...

## For **PROPER** construction of **TOILETs** and **SEPTIC TANKs**

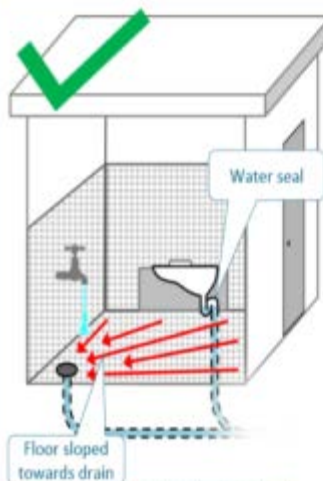
At least one wall open to fresh air



Window / ventilator

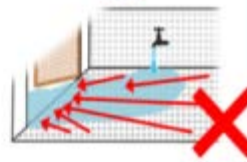


Should not open into kitchen



Source: CPHEEO's Manual on Sanitary and Sewage Treatment Systems Part A Engineering

Do not slope floor into adjoining room



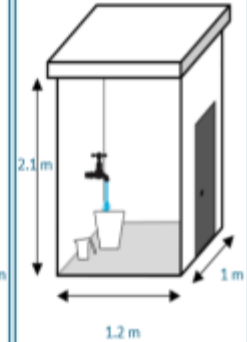
Problems without water seal



Toilet



Bathroom





# Support to ULBs for **OD Spot Monitoring** & ODF Sustainability plan



To discourage the HH practicing OD and encourage behavioral change, WMC declared a **fine of Rs. 500 per person.**



## **Visits conducted**

across the city at early mornings and late nights to identify people resorting to OD and imposing Fine. This led to reduction in number of people resorting to OD



# Support to ULBs for OD Spot Monitoring & ODF Sustainability plan



## Wai declared as an ODF City

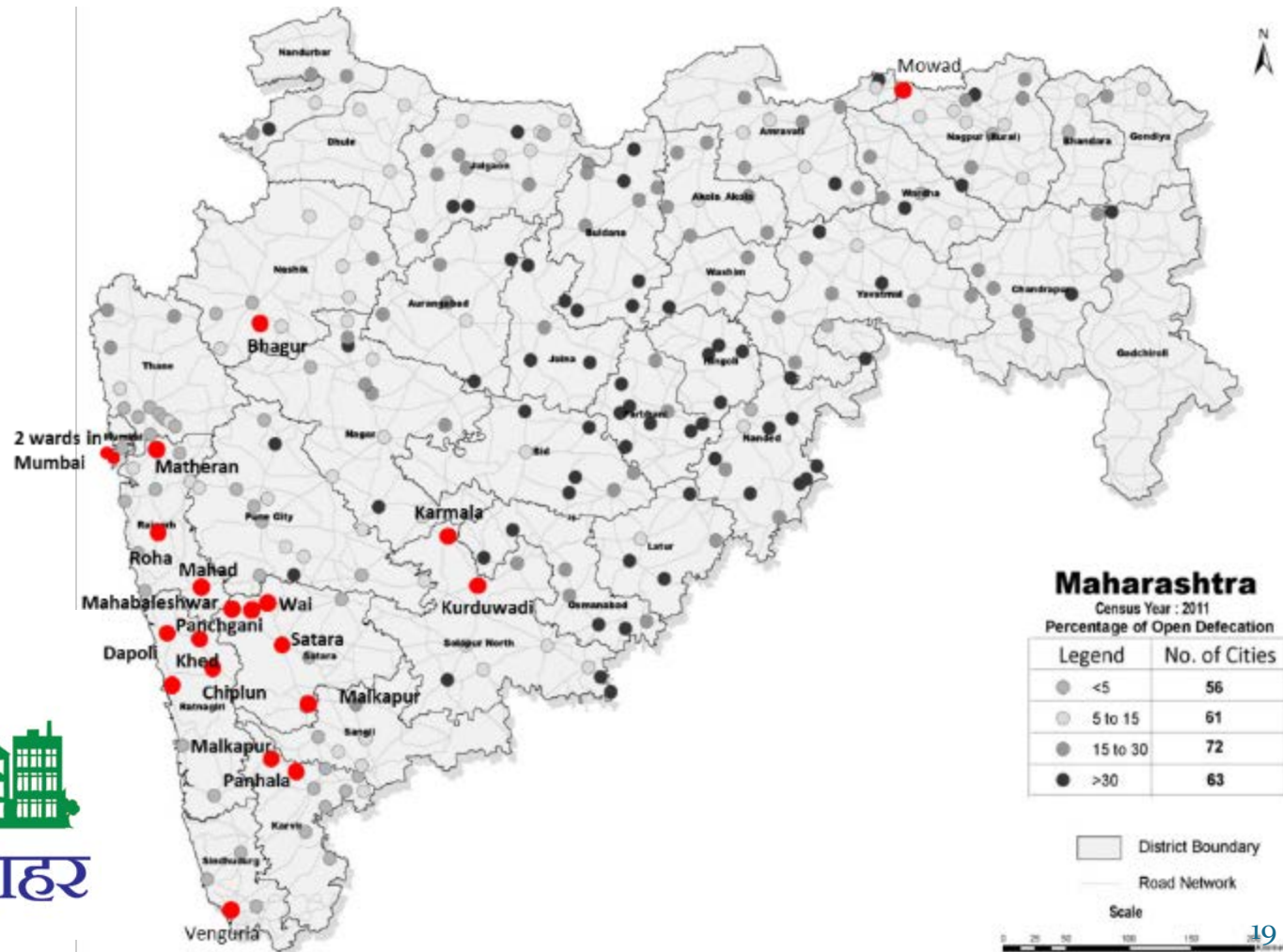
person.



late nights to identify people resorting to OD and imposing Fine. This led to reduction in number of people resorting to OD

# The Milestones of Swachh Maharashtra...

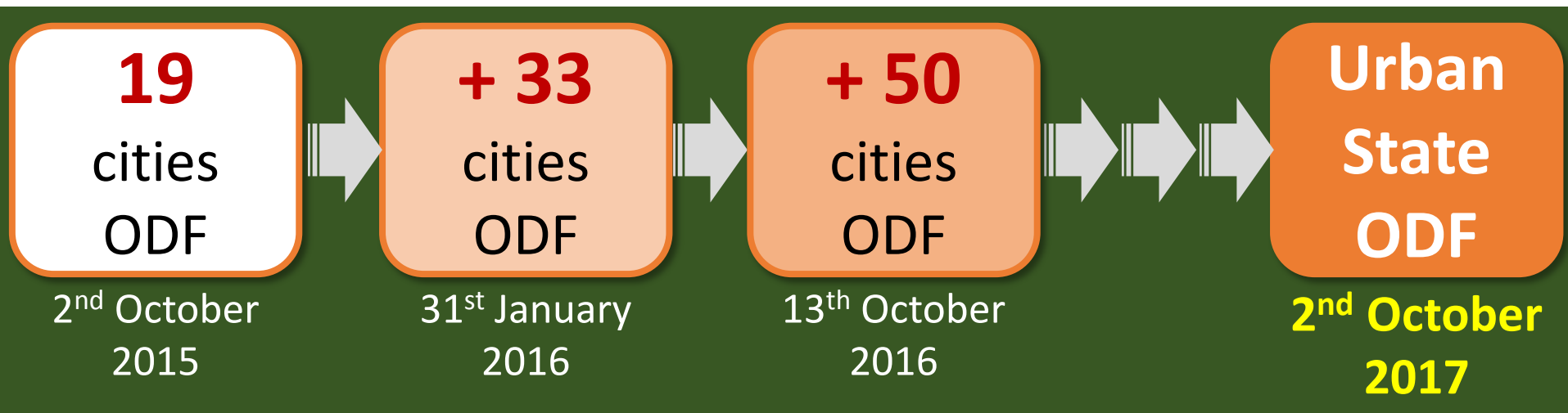
**19 cities** laid the foundation of ODF Maharashtra on **2<sup>nd</sup> Oct. 2015**



हगणदारीमुक्त शहर

# The Milestones of Swachh Maharashtra...

**19** cities laid the foundation of ODF Maharashtra on **2<sup>nd</sup> Oct. 2015**



*50 out of 100 ODF cities declared at national level are from Maharashtra*



PAS Project



● 5 to 15	61
● 15 to 30	72
● >30	63

□ District Boundary

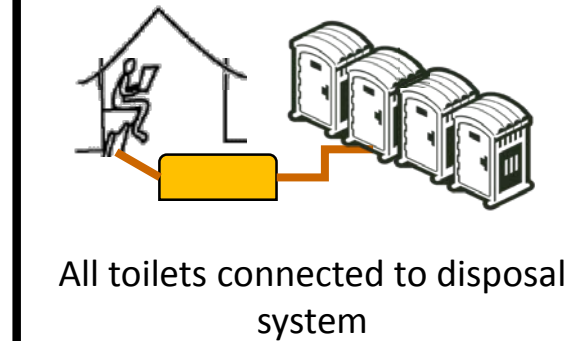
— Road Network

Scale

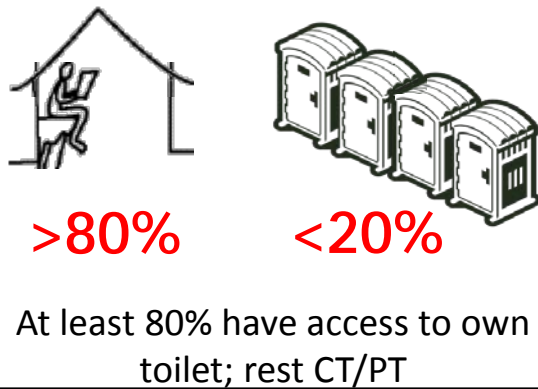


# Framework for ODF + and ODF ++ cities

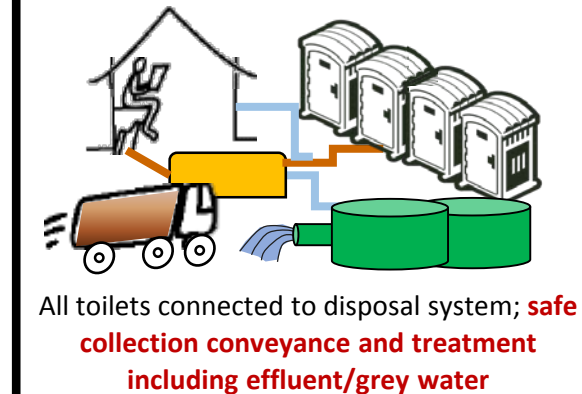
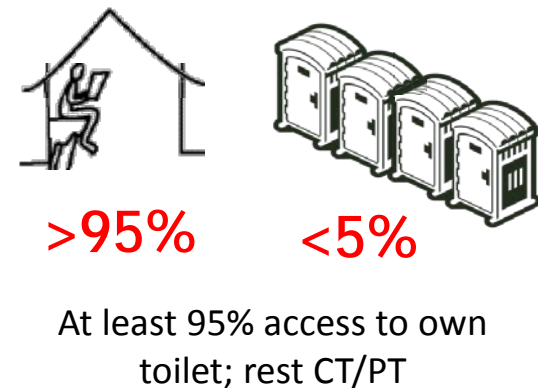
ODF



ODF+



ODF++



# Sustaining ODF – Financial Incentives

	ODF Cities (Rs.)	Swachh Cities (Rs.)	Linked to Sustainability
A Class	20 million	20 million	<b>30%</b> released on first validation, if positive  <b>70%</b> released on 2 <sup>nd</sup> validation after a year, if positive
B Class	15 million	15 million	
C Class	10 million	10 million	

*Utilisation of funds for*

*Sustainability and moving towards ODF+ and ODF++*

# Sanitation Financing

# Urban Sanitation Financing is “end” heavy

- Typically, national governments consider toilets as “private good”, while sewerage is treated as “public good”.
- Large public investments in sewer networks, usually in metro cities, provide high subsidies
- But of the 4500 cities, only 400 cities have sewerage network
- In other cities, where only on-site sanitation prevails , households have to bear the full cost of sanitation service chain

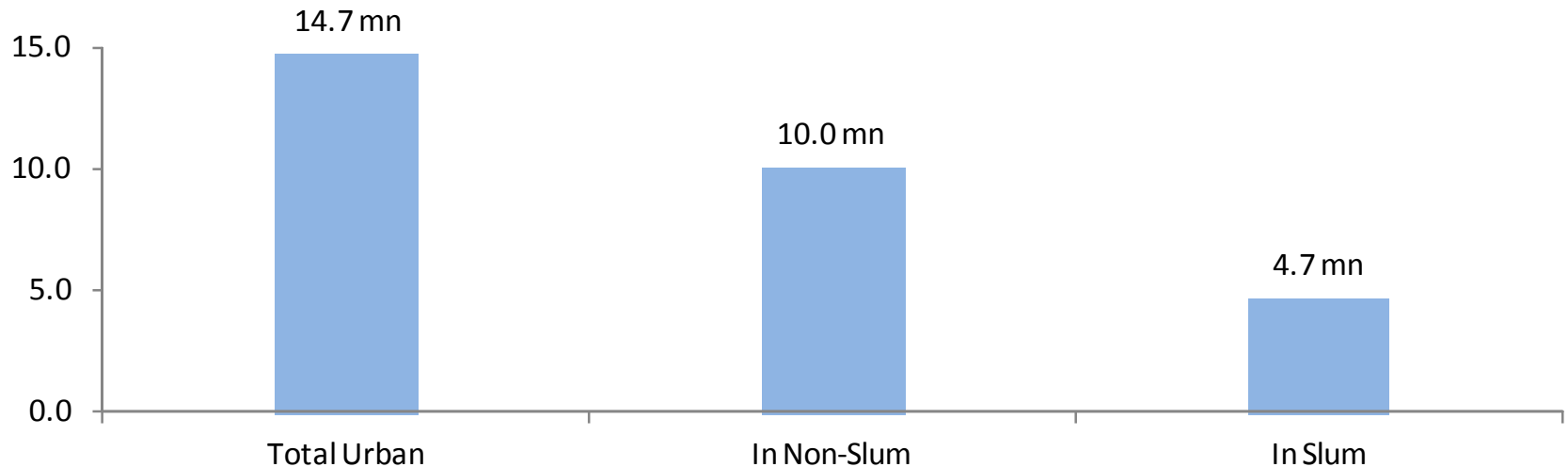


# Latent Demand for “Own toilets”

Based on the 2011 Census of India, there is high latent demand for ‘own toilets’ in urban India at **14.7 million households**.

*(This could be much higher given the definition used in Census)*

**Two-thirds of this demand is in “non-slum” areas.**

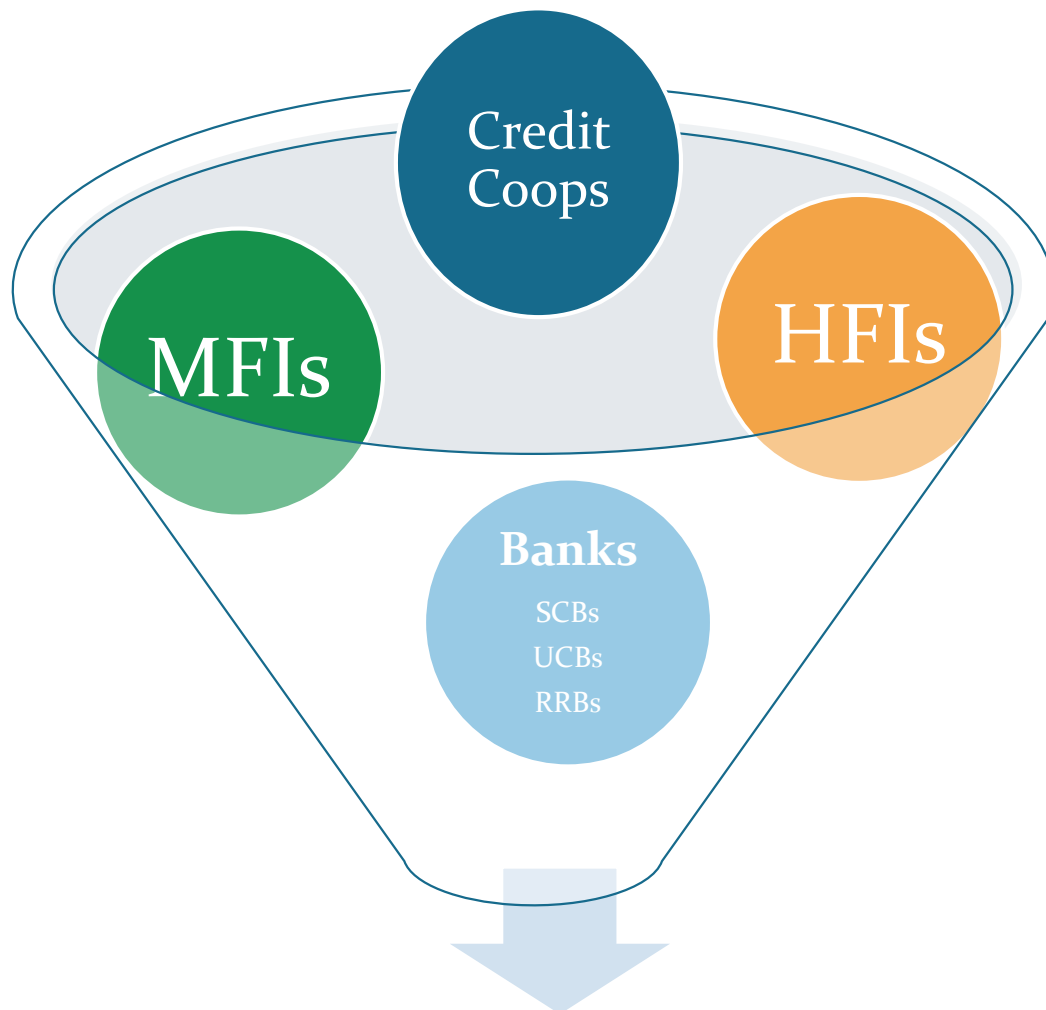


# Need for Sanitation Finance

- Swachh Bharat Program for urban areas envisages a partial subsidy of ~ Rs 12,000 (€ 160)
- but toilet costs are Rs. 30-40,000 (€ 400 -500) so need to leverage additional funds
- High potential demand for household level sanitation finance (credit) – estimated Loan fund requirement of ~Rs 20,000 crore (€ 20 billion) to achieve full coverage of own toilets
- Conventional approach is to consider MFI lending. But it is **limited and faces constraints**: high costs of funds and hence lending, high mobilization costs, added costs of new product and monitoring

# Landscape of Financial Institutions in India

Many opportunities for HHs to mobilize credit



**Household Sanitation Credit**

A key aspect is to **facilitate households to make their own possible choices** from potential lenders

**Inter-departmental coordination** in Government agencies and **Nodal Agencies** involved in empowering SHGs can play an important role in Demand Generation & Awareness Creation

# Explored different types of credit providers for financing toilets

Self help groups (SHGs)	Micro-finance institutions (MFIs)	Credit societies	Commercial banks	Housing finance companies (HFCs)
		<p>Chaitanya Credit Cooperative Society</p> <p>Jalaram Co-Op Credit Society Limited</p>		
<ul style="list-style-type: none"> <li>• Groups of 5-10 women of similar socio-economic background, that make loans to members at low interest rates</li> <li>• Loans are financed through member contributions supplemented with borrowing from banks</li> </ul>	<ul style="list-style-type: none"> <li>• Provide loans to economically weaker sections who do not have access to traditional banking</li> <li>• Loans are usually given for income generating activities but could also be given for consumption. A periodic repayment needs to be made which is usually enforced through a peer liability model</li> </ul>	<ul style="list-style-type: none"> <li>• Autonomous association of people united voluntarily to meet their common economic needs through a jointly-owned and controlled enterprise</li> <li>• The members make deposits and in turn loans are given out to those in need at reasonable rates of return</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial banks accept deposits and make loans to individuals and business enterprises</li> <li>• The lending is usually secured thorough a collateral but can also be unsecured</li> <li>• Repayment follows an EMI model with a defined rate of interest</li> </ul>	<ul style="list-style-type: none"> <li>• Housing finance companies (HFCs) are financial institutions one of whose primary businesses is housing loans</li> <li>• HFCs vary in the stringency of collateral requirements, but several players cater to low income populations</li> </ul>

# Landscape of Financial Institutions in India

## MFI



- Minimum Documentation
- No Collateral
- High Rate of Interest
- Better Outreach
- Presence focused in Rural Areas
- Cost of funds to MFIs is generally higher

## HFI



- Property papers & Past Debt Details
- Collateral Required
- Lower Rate of Interest
- Better Outreach
- Presence focused in Urban Areas
- Can access low-cost funds from apex bodies like NHB

## BANKS



- Income Proof Required
- No Collateral for loans up to 1,00,000
- Low Rate of Interest
- Widespread presence, but low outreach to customers
- Presence across Rural & Urban Areas
- Mandated to lend for Sanitation

## CO-OPs



- Income Proof Required
- No Collateral
- Low Interest Rate
- Better Outreach
- Limited Presence
- lends to members only

# Aggregators support to MFIs-HFIs

	MFIs	HFIs	Banks (SCBs)	Credit Cooperative Society	NHB
Amount	25,000 – 30,000	up to 50,000	50,000	up to 50,000	
Interest Rate	20-27%	15-21%	10-15%	low Rate of Interest, margin not exceeding 5%	<u>Re-financing to HFIs at 8.4%</u>
Tenor	1-2 years	2-7 years	1-5 years	4-5 years	
Documents	ID & address proof	Credit History, ID, income, property ownership & address proof	ID, income & address proof, toilet construction estimate	KYC	Outcome of the pilots under 'Low Income Housing Finance' project yet to be published
Collateral	Not required	Insurance Policy or Mortgage	Not required for loans up to 1,00,000	Guarantor required; borrower needs to be member of the society	

## Broad Outcomes of Meetings

- Most of the MFIs & HFIs willing to pilot
- Most of the FIs met requested Technical Support
- A few requested Intimation on Subsidy Release by ULB
- Most of them stated difficulty towards aggregation/ loan origination and requested support

# Aggregators support to MFIs-HFIs

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Collateral	Not required	Insurance Policy or Mortgage	Not required for loans up to 1,00,000	Guarantor required; borrower needs to be member of the society	

**Pilots to demonstrate household sanitation credit being explored with a few Financial Institutions in Mumbai, Nagpur, Nashik, Sinnar and a few other challenging cities**

# Demand Assessment Survey

What inhibits  
Toilet  
Construction  
in Urban  
Areas

What  
inhibits  
Application  
under SBM  
by eligible  
HHs

To what  
extent Lack of  
Funds is an  
important  
constraint

## HOUSE- HOLD SURVEY

### SURVEY OBJECTIVES

- To discern various reasons which impact the construction of IHHT under SBM
- To assess demand among HHs for Sanitation Credit

Awareness  
among HHs  
on various  
Credit  
Options

Understand  
use of credit  
from HH  
that have  
successfully  
built toilets



# Conducted Toilet and Lender fair in cities to mobilize more applications

Fair was an attempt to create a platform for interaction of all the sanitation technology providers, sanitary ware suppliers, financial lending institutions and the applicants of Swacch Bharat Mission toilet scheme.



# Mobilizing SHGs for toilet construction in Wai

## SHGs mobilization support by CHF India Foundation (CHFIF) in Wai

- **Assessment of Self Help Groups in Wai**  
(Completed 150 SHGs (1500+ families) assessment)
- **Awareness generation towards need of individual toilets**  
(Mobilize 400+ toilet applications)
- **Assess and establish links with potential lenders**
- **Facilitate access to loans for toilets and linkage with financial institution**



- **With capacity building support, SHGs can play an important role to expedite SBM progress**
- **Mobilizing SHGs would bear results quickly**

# CEPT-DASRA-ISC Association

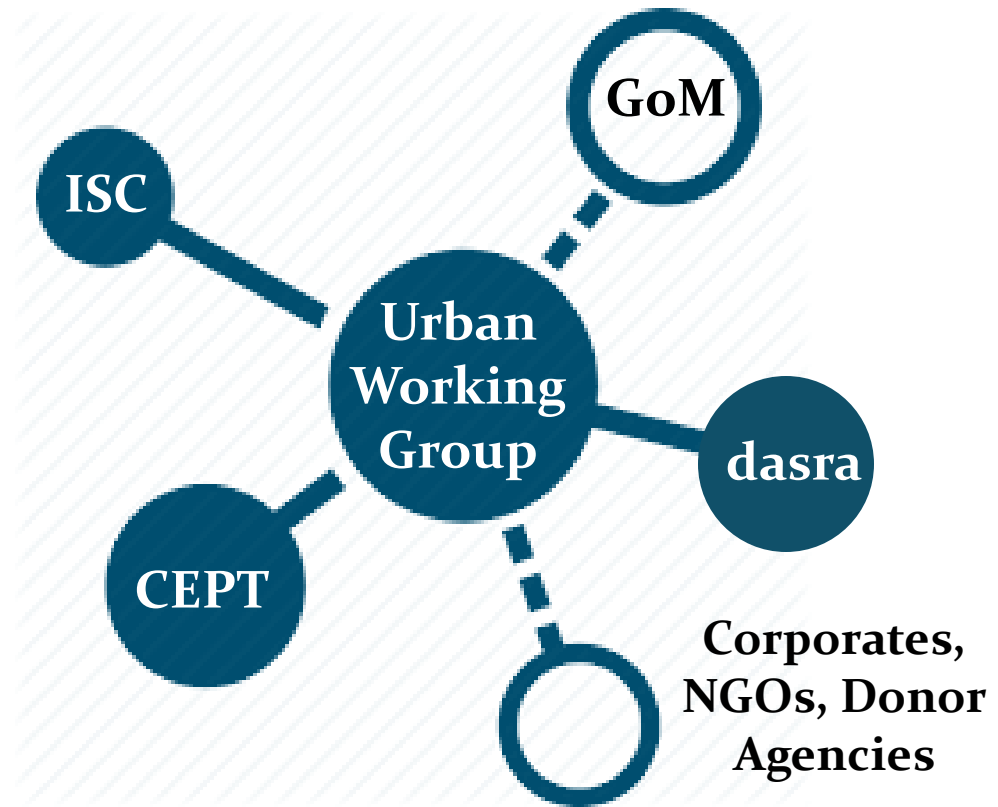
Exploring CSR for Swachh Maharashtra under the aegis of Secretary, UDD, GoM

- Stakeholder mapping carried out by CEPT
- Dasra to find corporates, donor agencies and development partners pointedly working in the field of Sanitation
- Association with ISC through Dasra to assess the baseline of what the mission entails and further exploring their CSR interest



**Corporate Roundtable Event**

PAS Project



- Formation of **Urban Working Group** including 8-10 corporates with specific interest in Sanitation CSR
- Leading to stakeholder engagement and finally culminating into a '**Corporate Roundtable**' event

# Crowdfunding is fast emerging as an important source

## Approaches & Experiences with CFPs

### Spacehive

Crowdfunding- Civic Projects

- First funding platform for **Civic Projects**
- Fee charged from Project conceptualizer only when targeted goal is achieved

### Milaap

Indian Micro-lending Platform

- Crowd provide interest-free loan to Milaap, no interest charged to lenders, Milaap charges 5% fee from Field Partners
- **Funds construction & renovation of toilets for individual households in rural & semi-urban areas**
- Till June 11, 2014; **1733 sanitation loans** and have overall raised US\$ 1,506,655 with 9,785 loans

## Crowd funding under the purview of SEBI

- Equity and debt based Crowd funding under SEBI purview
- SEBI has invited suggestions from industry and markets regarding different possible structures for crowd funding within existing legal framework

# In conclusion: Maharashtra will become ODF due to.....



## Partnership

- State, local governments, other stakeholders and institutions (CEPT and AILSG- Technical Partners)



Political commitments at State level and continuous monitoring



Local Leadership and autonomy in implementation



Demand based approach for toilet and consultations with people has worked



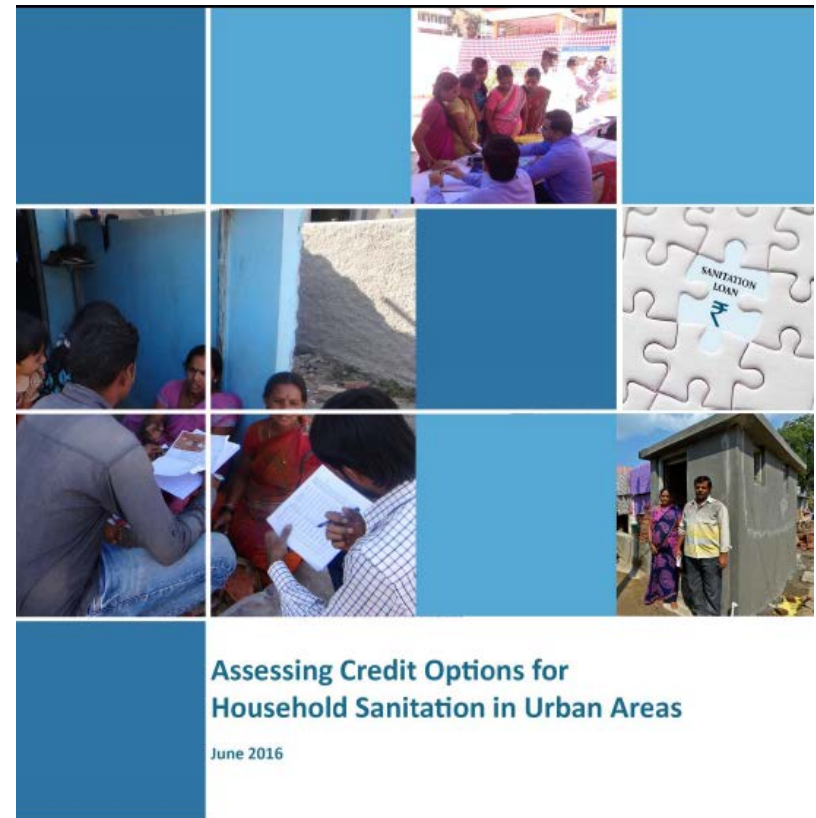
Building toilets is not enough...ODF sustainability and ODF+ essential

# Various Research Outputs from our work

Our action research on sanitation planning, policy and financing has been disseminated through a series of reports and papers

These are available  
online

[http://pas.org.in/urban sanitation](http://pas.org.in/urban_sanitation)



# Sanitation Activities under PAS Project

Worked at city levels – From planning to implementation support



**PIP**  
Performance improvement plans



**CSP**  
City Sanitation Plans

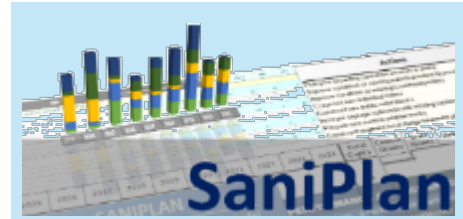


**ODF**  
Open Defecation Free Plans



**FSM**  
Fecal Sludge Management Plans

Sanitation Planning tools



Supporting Statewide Program - Maharashtra



Monitoring SBM



ODF framework



State level guidelines for ODF, IFSM



Capacity building programmes



Documentation support

Onsite sanitation



FSM guidelines



SanBenchmarks



Capacity building of cities and local contractors

Sanitation Finance



Sanitation Credit



City Sanitation Fund



Demand assessment



Crowdfunding

# Thank you

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<http://fb.com/pas.cept>