### Presentations from the Roundtable

"Development Impact Fund for Urban Sanitation"

By PAS Project – CEPT University, Ahmedabad

"NHB Experience on Financing Water and Sanitation"

By National Housing Bank, New Delhi







### Presentation

by

PAS Project – CEPT University, Ahmedabad

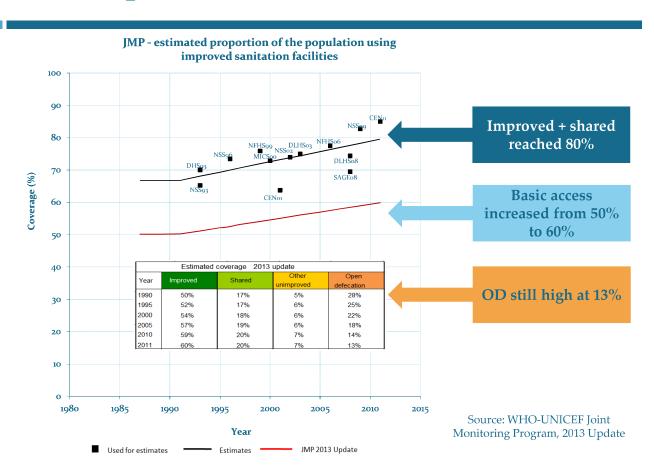
# Development Impact Fund for Urban Sanitation

Towards making urban India open defecation free



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### Slow improvement in urban sanitation



#### Recent results from the 2011 Census of India

18.6% urban hhs with NO latrine facility

This translates to 68 million people or 14.7 million households

6% OF HHS DEPEND ON PUBLIC TOILETS

12.6% of the resort to Open Defection

Situation is worse in smaller towns with OD rates of 22%

### Why is urban sanitation important?

- Much greater negative externality of poor sanitation in urban areas
- Significant public health impacts of open defecation
   stunting, outbreaks of diseases: higher in urban
  - due to density







### National Urban sanitation Policy (NUSP)

## □ The NUSP 2008 aims to provide universal sanitation services in urban India

#### **Key goals**

| Access                       | <ul> <li>Providing 100% access to improved sanitation in urban India by 2025 to<br/>make cities open defecation free</li> </ul>  |  |
|------------------------------|--|--|
| Collection and<br>Conveyance | <ul> <li>Extending coverage and ensuring proper functioning of sewerage systems</li> <li>Promoting proper disposal and treatment of sludge from on site installations</li> </ul>   |  |
| Treatment and reuse          | <ul> <li>Promoting recycle and reuse of waste for non potable applications</li> <li>Ensuring safe collection and disposal of waste</li> </ul>  |  |
| Awareness                    | <ul> <li>Generating awareness about sanitation and its linkages to public and<br/>environmental health</li> </ul>  |  |
| Institutional<br>changes     | <ul> <li>Strengthening ULBs to provide sustainable sanitation services delivery</li> <li>Mainstream planning and implementation related to sanitation</li> <li>Strengthening policy and regulatory framework particularly for onsite sanitation/FSM</li> </ul> |  |

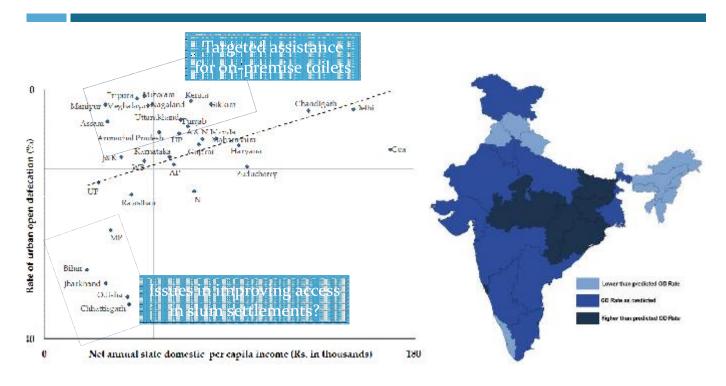
### Eliminating open defecation in cities

### **Urban sanitation financing is top heavy**

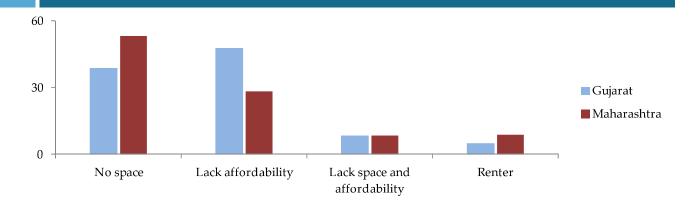
- □ Large public investments in sewer networks (JnNURM 30,000 crores)
- □ Large indirect subsidies to those who have toilets connected to sewer system (PAS data O & M cost recovery of sanitation in Maharashtra around 15%)
- □ Household facilities receive very less public funds as compared to other segments of the "sanitation chain" (ILCS annual outlay 300 cr (of which 200 cr is for UP)



### What explains OD rates across states?



### Space and affordability constraints



- □ Latent demand?
- □ There are two main reasons for not having "own toilets" in our cities"
  - Lack of space to build an own toilet
  - 2. Lack of affordability to meet the toilet costs

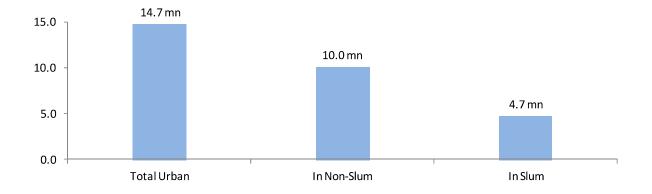
Source: Based on household surveys in Gujarat and Maharashtra done under he PAS Project at CEPT University in 2010.

### 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)

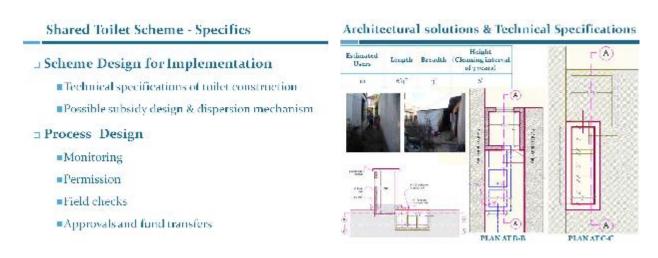
Two-thirds of this demand is in "non-slum" areas.



### Resolving space constraints by group toilets?

A group toilet is **shared by 2 to 4 families** residing in close proximity, is collectively owned, used and maintained by these families

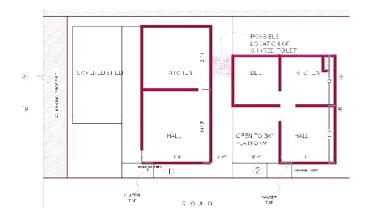
#### It is accepted under the WHO-UNICEF 2015 sanitation targets

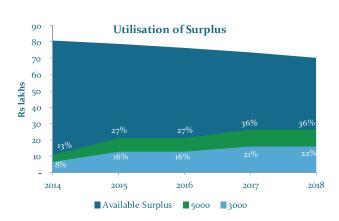


### Provision of own (indiv/group) toilets in Wai

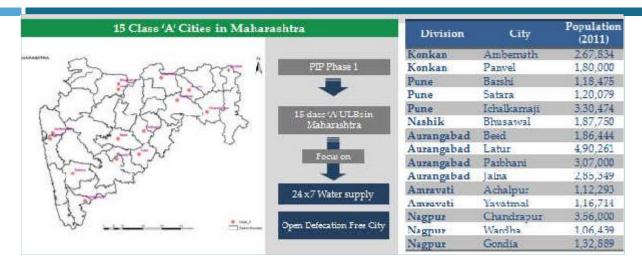
### A small city willing to commit its own funds to achieve ODF status with own /on-premise or group toilets

- A demand based scheme to cover all 2100 HHs without a toilet in 5 years
- Subsidy per household instead of per toilet as an incentive to have a 'group facility', possible higher subsidy for Below Poverty Line (BPL) households
- ULB own funds to provide partial subsidy to households





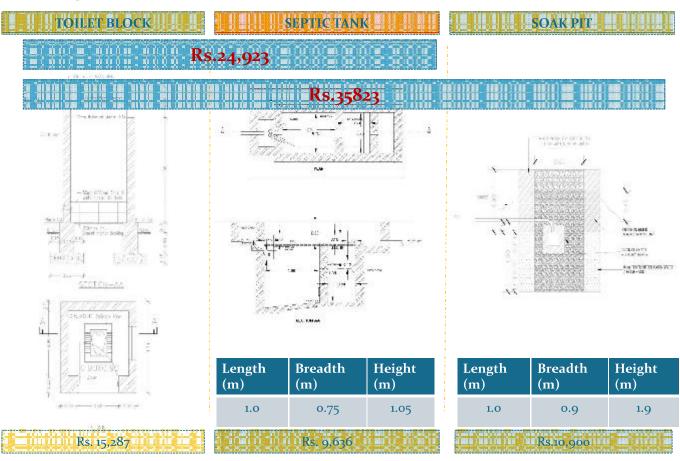
### City Sanitation Plan-Support to small cities



In partnership with WSSD, GoM, Maharashtra Jeevan Pradhikaran (MJP) and Municipalities:

- Support to 15 Class A cities in Maharashtra. Focus on making these cities open defecation free (ODF)
- More Detailed work in 3 cities for city sanitation plan
- 20 cities have requested support for ODF Plan

### High costs of urban household sanitation



### Addressing affordability constraint

- Partial subsidy through a demand based scheme at city level can address affordability concerns to some extent
- Household surveys suggest that most households that lack own toilets will require access to credit to build a toilet. There is some willingness to take a loan to build a toilet
- □ How do we get potential lenders to lend in a city that develops a local city level program?

### Financing household sanitation

# A few opportunities for household finance for sanitation – with good record

# Most MFI and HFI records show 99%+ repayment record

A number of MFIs have provided toilet loans

- Guardian has supported over 27000 households with toilet loans
- Water.org support to 20 MFI partners
- ESAF, SKSRDP,
   Grameen Koota have also provided sanitation loans

Besides MFIs, there are other institutions

- Cooperative sector
  - Coop banks, and Coop credit societies
- Scheduled commercial Banks
  - housing improvement loans SBI, HDFC Bank, etc.
- □ HFIs
  - housing improvement loans e.g. GRUH, others

### But, additional funds are needed

- □ High total potential demand in the country for household level sanitation finance (credit) Rs 10,000
   − 15,000 crore to achieve full coverage of own toilets
- Current availability from public funds (GoI's ILCS, state government programme e.g. Nirmal Gujarat, MSNA etc) is very less and fail to leverage additional funds
- MFI lending is limited and faces many constraints: high costs, need to consider sanitation as part of 'productive assets', difficulty in meeting mobilisation costs, added costs of new product and monitoring

### Funds are needed for three purposes

- Debt funds for on-lending by lenders MFIs, HFIs, AHFIs, - at affordable and competitive rates
- Support grants for lenders
  - > For meeting the costs of mobilization, technical assessment etc which cannot be easily covered through capped margins
  - > For internal capacity building for product development, monitoring
- Support grants for cities
  - > For partial subsidies
  - > For technical support

### Potential sources of funds

### □ Government/ donors

- ✓ Government of India, state government, donors through increased allocation to household sanitation
- Local governments from their own funds to meet partial subsidy costs

#### □ New sources

- CSR as per the provision in the new Companies Act
- ✓ Social impact investors emerging as a potential new source..
- ✓ Crowd funding for defined social causes

### CSR – a potential new source

- □ The Companies Act, 2013 allows new models of social engagement by mandating that large companies spend 2% of their three-year average annual profit towards corporate social responsibility (CSR)
  - ✓ potential estimated annual flows from CSR of **Rs 17,000 Crores**
- Challenge to direct CSR funds to urban sanitation
- Many companies already active in sanitation space but largely in rural areas – HUL, Ambuja Cement, ACC, Amul, GAIL, NTPC



### **Social impact investors**

- Social impact investors emerging as a potential new source.. High net worth individuals (HNI), Institutional social investors, Foundations
  - ✓ For example, a recent 3-year Debt Funds for Cancer Cure by HDFC Mutual Fund mobilized about Rs 77 + Rs 180 crore. The dividend from this was provided to Indian Cancer Society. The first HDFC-CC Debt Fund provided Rs 11 crore to ICS in two years.



### Need a structure to capture new sources

- Need a framework to capture additional funds that are potentially available from - CSR (grants) and social investors ('affordable' debt)
- Need a framework at local level to capture additional funds from "local benefactors" (industrialist, HNIs from the area, etc.) or crowd-funding for small areas/neighbourhoods

# A new version of a social/development impact fund?

### Social impact bonds (SIBs) involve a commitment from donors to support a successful social outcome

• A contract with donors to pay for an improved social outcome leading to long term savings for the donor

#### **Process of Social impact bonds**

Commitments of funds by donors

A coalition of donors commits to pay a specified amount to a trust if the proposed project achieves targets

Mobilizing capital from social investors Social investors make upfront payment to the trust to execute the proposed project

Project execution

 The resources are forwarded to an executing company which carries out the proposed activities intended to benefit the end stakeholders

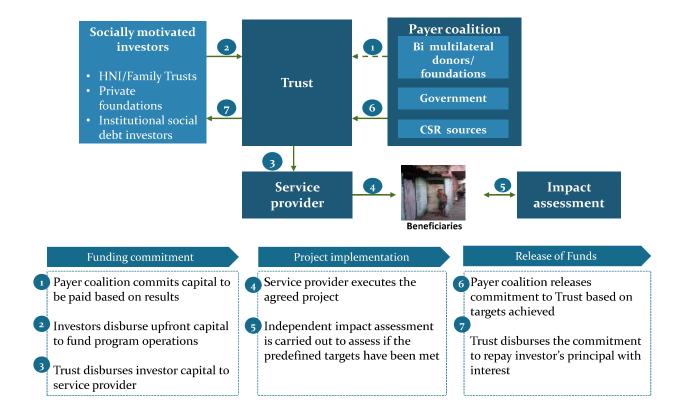
Independent assessment

 An independent assessment of the project is carried out to measure the outcomes against time bound targets to inform the stakeholders about the status and impact of the project

Disbursal of funds

• If the project meets its targets, the donor coalition releases the funds to the trust which pays back the social investors along with promised returns. If the targets are not met then investors only receive part payment hence suffering a loss on investments

### Financial Flow in a Potential Sanitation Social Impact Investment programme



### To make this work, however...

- Need effective and credible local service delivery providers – to fund/build toilets, to make cities open defecation free
- Need effective and sustainable lenders for household sanitation to convert latent demand to effective demand
- Need independent third party verification
- Need to get state and city governments interested
- Need enabling policy frameworks

### A new version of a development impact fund?

### Possible structures at different levels

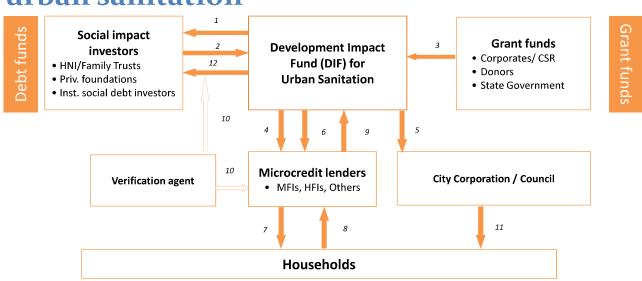
### National /state - Development Impact Fund (DIF)

- ✓ to mobilize debt funds for on-lending at affordable costs
- ✓ to meet the support costs of potential lenders

### State / City sanitation fund (CSF)

- ✓ to meet support costs for city governments
- ✓ to provide partial subsidy to households

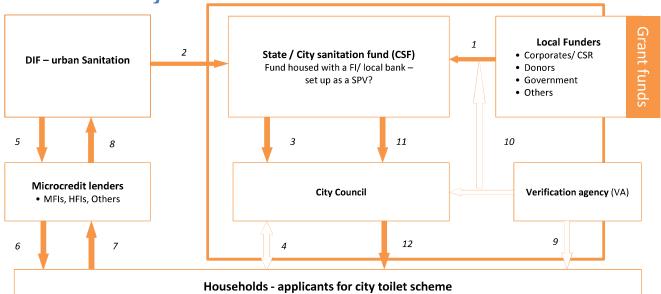
## Potential structure of a proposed DIF for urban sanitation



- 1 DIF issues a tax-free social impact bond for urban sanitation
- 2 Social impact investors subscribe
- 3 Funders (CSR) provide grant funds to DIF for urban sanitation
- FI provides a credit line to microfinance lenders (ML), and a technical support grant
- 5 Demand based grants to city for technical services for city plan, local monitoring
- 6 DIF provides grant funding to ML for mobilization and capacity building

- 7 ML lends to households
- 8 Households repay loan
- 9 Microfinance Lender (ML) repays to DIF
- 10 Verification agent reviews (VA)lender and reports to investors
- 11 City council provides output-based subsidy to households
- 12 FI repays to investors based on VA report

Potential structure for a proposed state/city level sanitation fund



- 1 A state or city sanitation fund (CSF) receives grant funds (CSR) for a specific city
- DIF provides demand based grants to CSF (or city council) to meet technical service costs for city plan, local monitoring
- 3 CSF provides funds to city council to appoint a technical service provider (TSP)
- 4 Households apply and receive approval for a city toilet scheme
- 5 DIF provides a credit line to micro credit lenders (MLs)
- 6 MLs lend to households in a given city

- 7 Households repay loan
- 8 MLs repay to DIF
- 9 VA reviews the implementation
- O VA reports to city council and CSF
- 11 CSF transfers funds for subsidy to city council
- 12 City council transfers subsidy to households

# **Summary and Issues for discussion**

### Summary recap

#### Policy level

- ✓ Include sanitation loans as a part of loans for income generation for MFIs to meet RBI requirements
- ✓ CSR funds for sanitation acceptable to be put in a Sanitation Development Impact Fund
- Ensure demand based schemes
- ✓ Public or CSR grants need to leverage additional funding from households and social impact investors

#### Operational

- ✓ Make more debt funds available for urban sanitation to potential lenders (HFIs/MFIs) at 'affordable costs'
- ✓ Support costs of household mobilization to convert the latent demand to effective demand for toilet credit
- ✓ Loans for toilets as a part of home improvement loan encourage more HFIs to lend for sanitation

### Summary recap – 2

### Development Impact Fund for Urban Sanitation

- ✓ Is this a workable idea? What should be the structure of this fund? (SPV, trust, section 25 company?)
- ✓ Where can it be housed?
- ✓ Fund mobilization for DIF
  - Grant funds to meet support costs (CSR, donors, government)
  - Debt fund for on-lending by lenders (FIs, social investors)

#### State / City Sanitation Fund

- ✓ What would be the structure of a fund at state/ city level to support local programs to make cities ODF?
- ✓ Part of an existing institution (e.g. Muni dev fund)?
- ✓ Fund mobilization (CSR, local benefactors, crowd funding)



**Thank You** 

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### Presentation

by

National Housing Bank, New Delhi

# NHB experience of financing Water and Sanitation



### Objective and aims of the programme

- Explore financial sector intervention
- Conceive and implement the pilot
- Provide access to formal financing for the informal segment
- Use the pilot for scaling up
- Sensitization and capacity building
- Develop partnership mode
- Include local and decentralized entities



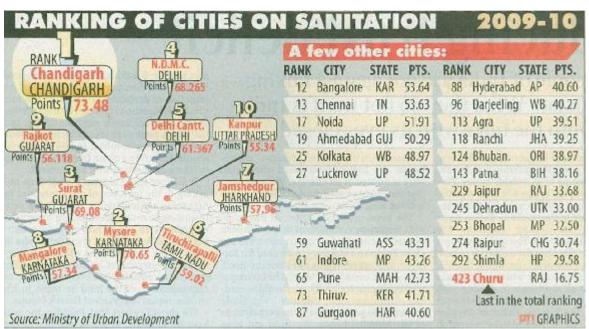




### Water & Sanitation



### Sanitation in India - At a Glance



An Issue across all States

# Water & Sanitation (WATSAN) Program

To provide financial assistance for Water and Sanitation Programmes being undertaken by Micro Finance Institutions (MFIs)/Non Government Organizations (NGOs)/Urban Local Bodies (ULBs)

### Sanitation Program – a critical Need

- Funding under this programme will help catalyse flow of funds to the most needy and eligible segments and specially to take care of the basic water and sanitation requirements as an essential component of housing projects.
- Water and sanitation are basic determinants of the quality of life and habitation and form critical infrastructural components in housing projects.

### Scope of Water Sanitation Projects

- Water and sanitation projects may comprise construction of toilets, extension of water pipelines (within the house premises, provision of taps, overhead water tanks, septic tanks for sewerage wastes, etc. These may constitute about 10% to 20% of the cost of a low income house (which may cost upto Rs. 2.00 lakhs).
- Such projects would be undertaken under the aegis of suitable and reputed MFIs/NGOs for their low income member households.



## Partnership between National Housing Bank and UN-Habitat UN@HABITAT

- The Bank had entered into a Memorandum of Agreement with United Nations Habitat in 2008 for implementing water and sanitation programme through MFIs and other agencies.
- UN Habitat had agreed to provide funds to NHB up to a maximum of \$375,000 for undertaking various project activities.
- The focus of the Agreement with the UN Habitat is on the provision of water and sanitation facilities in the housing projects financed by NHB for low income households either as part of the housing and habitat project or stand alone projects for the provision of water and sanitation facilities.

#### **Project Components**

- Establishing a Revolving Fund for micro-financing the water and sanitation (WATSAN) facilities for the poor.
- Review of research studies on sustainable financing systems and related issues including sustainable human settlements, land security and tenure, appropriate technology, building etc.
- Organize workshops/ seminars and other capacity building activities at city/ state/ national levels in India to popularize revolving fund for WATSAN.
- Demonstrate the approach of revolving fund for micro-financing the water and sanitation services through pilot demonstration projects for the poor communities in India.

#### Achievements under the Partnership

- As of now, more than 16,000 Toilets have been constructed in states of Tamil Nadu, Maharashtra, Odisha, Karnataka, Gujarat, and Madhya Pradesh. Excluding, 404 water tap connection provided by the agency to their members.
- Organized three workshops on sanitation at Nagpur, Anand and Bhubaneswar to sensitize MFIs.

# Outcomes NHB's PRESENT ASSISTANCE – WATSAN Programme



| SI.<br>No. | State          | No. of toilets constructed/to be constructed |
|------------|----------------|--|
| 1          | Maharashtra    | 400  |
| 2          | Madhya Pradesh | 200  |
| 3          | Orissa         | 234  |
| 4          | Tamil Nadu     | 312  |
| 5          | Karnataka      | 335  |
| 6          | Gujarat        | 15000  |
|            | Total          | 16481  |



### **WAY FORWARD**

- While the UN-Habitat funds can serve for financing such projects on a pilot scale, it is considered necessary for the Bank to scale up this activity to ensure adequate geographic coverage to include all sections of low income households in different parts of the country.
- The Bank will coordinate with other stake holders at the central, state and local levels including financing and catalysing agents.

Sanitation Units Constructed in Nagpur and Bhubaneswar under NHB – UNHABITAT Water & Sanitation Programme





### AMUL Sanitation Project in Anand and Kheda District, Gujarat











### Sanitation Programme in Odisha







NHB & UN-Habitat Workshop on Sanitation held at Nagpur



NHB & UN-Habitat Workshop on Sanitation held at Anand



### NHB & UN-Habitat Workshop on Sanitation held at Bhubaneswar



