



# Financing Urban Sanitation: Development Impact Fund

## Discussion Note

April 15, 2014

# A Roundtable on Financing Urban Sanitation To meet the goal of open defecation free (ODF) cities through microfinance

National Housing Bank & CEPT University

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## Background

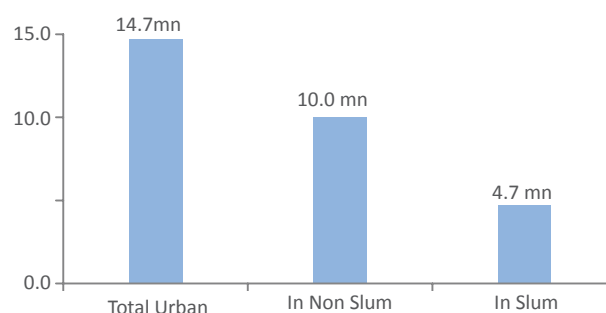
Despite significant public investment in urban sanitation over the past decade, over 46 million people in Indian cities resort to open defecation. Another 22 million people lack access to on-premise toilets. The situation is far worse in smaller cities (population less than 100,000) with Open Defecation (OD) rates of 22% and another 5 % use common public facilities.<sup>1</sup> Though significantly less prevalent than in rural India, OD in urban settings poses more serious challenges. With higher densities and a lack of safe spaces, OD affords little dignity and poses grave security risks for women. Moreover, recent literature suggests adverse health impact of OD leading to stunting among Indian children. This impact has been observed to be worse in more dense urban areas.<sup>2</sup> There is thus an urgent need to improve access to on-premise toilets in our cities.

In January 2014, a workshop on urban sanitation financing organised by Ministry of Urban Development with support from CEPT University and Centre for Policy Research (CPR) emphasized the need to explore the possibilities of using microfinance for financing urban sanitation. The workshop deliberations highlighted the need to address policy issues and particularly to improve access to debt funds for micro-finance lenders along with appropriate capacity building support. It also emphasized the need to tap new opportunities from corporate social responsibility (CSR) funds as well as

from the emerging breed of social impact investors.<sup>3</sup> **Meeting the demand for sanitation finance in urban India**

Over 15 million urban households that do not have on-premise toilets represent potential demand for toilets. The general notion is that it is largely the slum dwellers that do not have an on-premise toilet. However, in fact of those households that do not have on-premise toilet, two-thirds of them do not live in slums.<sup>4</sup>

Figure 1: Potential (latent) demand for household sanitation in urban India, Census of India 2011



This is also supported by data from the field that suggests wide-spread latent demand for private on-premise toilets in urban India. CEPT University's Performance Assessment Project (PAS) carried out a major household survey in Gujarat and Maharashtra in 2010. It suggests that there is significant latent demand for toilets from those who lack on-premise toilets. The two main reasons cited by households for not having their own toilets are lack of space and affordability.<sup>5</sup> Access to finance for households along with local solutions to overcome space constraints can convert this to effective demand. This will result in increased sanitation access and help Indian cities to move towards an ODF-free status.

<sup>1</sup>This is based on analysis using data from Census of India 2011.

<sup>2</sup>See for example Ghosh et al. 2014, , "Are Children in West Bengal Shorter Than Children in Bangladesh?",

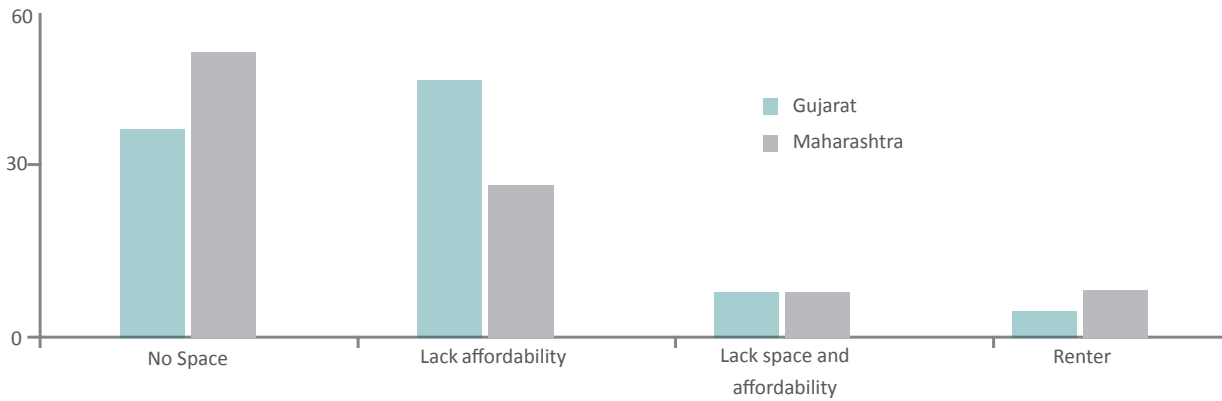
Economic and Political Weekly, February 22, vol XLIX no 8, pp. 21-24. Also see Rheingans R, O Cumming, J Anderson and J Showalter (n.d.), "Estimating inequities in sanitation-related disease burden and estimating the potential impacts of pro-poor targeting", unpublished research report for SHARE Project, London School of Hygiene and Tropical Medicine.

<sup>3</sup>.Report of MOUD meeting on "Financing urban sanitation" held in January 2014 is available at <http://www.pas.org.in/web/ceptpas/home>

<sup>4</sup>.The potential demand for toilet is probably higher. The definition used for 'on-premise' toilet by census includes common latrines. In its instruction manual it says, "It may be noted that several households may be sharing a common latrine. All such common latrines cannot be treated as public latrines... In such case the latrine will be treated as available within the premises and Code 1 should be given." (p.49).

<sup>5</sup>.Mehta and Mehta (2014, forthcoming), "Eliminating open defecation in Indian cities: Assessing priorities and options", column for Ideas for India. The two state-wide surveys with a total sample size of 15,000 households were done in 2010 under the Performance Assessment (PAS) Project to assess access and quality of urban water supply and sanitation services.

**Figure 2: Reasons for not having on-premise toilets in Gujarat and Maharashtra**



Source: Based on data from household surveys undertaken in 2010 under the PAS Project, CEPT University.

### Recent efforts to meet the household finance requirements for sanitation

Over the past few years, there is some emerging experience of a few micro-finance institutions (MFIs) in India in financing urban sanitation. In some cases these efforts were supported by donor institutions to meet initial promotion costs, develop products and build internal capacity. For example, Water.org has been supporting over 20 MFI partners to develop water and sanitation loan products. In this context, Microsave has initiated work on developing manuals to support product development.

Guardian, supported by donor institutions for its initial efforts, has focused on water and sanitation loans in Tamil Nadu. It has successfully facilitated households to combine its loan products with available public subsidies. By September 2013 Guardian had reached over 27000 households with toilet loans. Its current total loan disbursement for water and sanitation loans is Rs 42.8 crore with a cumulative portfolio of 52,600 loans.<sup>6</sup>

Grameen Koota, another MFI, had disbursed over 25000 sanitation loans with a loan portfolio of over Rs, 16.8 crore by March 2013.<sup>7</sup> Evangelical Social Action Forum (ESAF) Microfinance has also provided water and sanitation loans, particularly in Central India covering states of Maharashtra, Madhya Pradesh and Chhatisgarh. About a third of their clients in these states do not have access own water connections and toilets. To address this, ESAF developed a water and sanitation loan product in 2008 with support from Water.org. Its cumulative portfolio today is Rs 9.5 crore with nearly 14,000 loans.<sup>8</sup> NHB has also provided credit to some NGO-MFIs for providing sanitation loans.

<sup>6</sup>.Based on reports on their website at [www.guardianmfi.org](http://www.guardianmfi.org) – downloaded on March 31 2014.

<sup>7</sup>.Based on Prasad, Alok (2014), “Loan capital for WASH lending: Linking MFI network”, presentation made at the India Water Credit Summit, Mumbai, February 26, 2014.

<sup>8</sup>.Based on presentation by Thomas Paul, CMD ESAF Microfinance, at the the India Water Credit Summit, Mumbai, February 26, 2014.

<sup>9</sup>.From Prasad, Alok (2014), “Loan capital for WASH lending: Linking MFI network”, presentation made at the India Water Credit Summit, Mumbai, February 26, 2014

### Lessons from emerging experience

The limited, but very useful experience of a few MFIs that have supported urban sanitation loans suggest that it is possible to develop products that meet household demand for toilet credit. However, as compared to the potential demand for toilet credit, the current efforts are limited and need to be scaled up.

One possible route is to treat loans for toilets as a part of home improvement loan. The recent 2013 India Housing Microfinance survey provides some useful facts: a) “75% of the MFI respondents concurred that ‘up to 25% clients use the average MFI loan (which includes housing and non-housing loans) for home improvement”, and b) 66% believed that “home improvement loans are ‘productive’ in nature”.<sup>9</sup> Funds from banks under priority sector lending that are used by most MFIs can be used for sanitation purposes only if these are classified as housing loans. It is important to recognize that an on-premise toilet is part of a house, and thus can legitimately be classified as housing improvement.

A number of MFIs (such as Grameen Koota, Ujjivan, Janalakshmi, SKDRDP, Growing opportunity and ESAF) have been involved in housing microfinance. For these MFIs it would be quite easy to include toilet/sanitation loans as a part of their housing improvement loan portfolio.

### Constraints in Scaling Up

Based on the experience of these MFIs and other apex institutions involved with them, it is possible to identify the key constraints that have inhibited scaling-up of these initiatives in urban areas.



The first constraint relates to restriction places on NBFC-MFIs “to have not less than 85% of its net assets are in the nature of “qualifying assets.” And further “aggregate amount of loans, given for income generation, is not less than 75 per cent of the total loans given by the MFIs;” This severely limits the capacity of MFIs to have sanitation loans in their portfolio. It would also be necessary to have sanitation loans classified as ‘productive loans’ and be included in the qualifying assets. This can be justified on the ground that access to sanitation improves health, (and thereby productivity and income) as well as saves time that can be productively used. There are studies to show that significant economic loss occur due to inadequate sanitation. One such study for India estimated that, “The total economic impacts of inadequate sanitation in India amounts to a loss of \$ 53.8 billion in 2006... equivalent of about 6.4% of India’s gross domestic product (GDP) in 2006”.<sup>10</sup>

The second constraint that MFIs face is that while there is a sizable demand for sanitation loans, the cost and availability of funds is a major hindrance. Toilet loans are a new product for MFIs and it will require a shift from their existing product lines. This is unlikely to happen, unless additional funds are available, preferably at a lower cost. If urban sanitation is considered a national priority, funds for sanitation loans can be made available at cheaper than market rates to MFIs.

The third constraint relates to meeting the costs of mobilization to convert the latent demand to effective demand for which the household is ready to take credit and build a toilet. It may be difficult to always meet these costs from the margins that are permitted under the RBI regulation. Therefore, it is necessary to find appropriate ways to meet these costs separately and not be included in the margins. Similarly, these loans require separate product design and monitoring costs. The MFIs will need to invest in and build capacity for these loan products. To scale up credit for urban sanitation, it will be necessary to provide adequate funding to MFIs to meet these costs.

Scaling-up of toilet credit in urban areas is also constrained by the policy regime related to building regulations and approvals. In many states, infrastructure services like water supply and sanitation can be provided only in notified areas. The logic behind such policies is that provision of services will grant tenure rights to non-notified

areas. This constraint can be easily overcome by de-linking service provision from tenure rights through special resolutions of the state or local governments can generally override this provision (as being done in Ahmedabad under the slum improvement programme).

Even in non-slum areas, addition of toilets in existing house often requires a long-drawn process of approval by local authority. This is often expensive for many households as they would have to submit drawings of the approval of existing houses. Hence much of the additions and toilet construction happens informally (i.e. without proper approvals). There is a need to develop a simpler process of approval for toilet construction, making it distinct from the usual building approval process.

### **Development Impact Fund for Urban Sanitation**

Recognising that there is a significant demand for ‘toilet credit’ and that the conventional approaches have not been able to meet this demand, it is imperative that some innovative financing mechanism be explored. One such mechanism is that of Development Impact Fund. Development Impact Funds (DIFs) are designed to accelerate the expansion of credit market for socially useful purposes. The DIF enables governments, public agencies and socially motivated investors to invest in innovating and promising new solutions in urban sanitation<sup>11</sup>. Initiated in 2010 in the U.K, the application of DIFs (also referred to as Social Impact Bonds (SIBs)) has now expanded to cover a range of social impact projects in both developing and developed countries. A Development Impact Fund for urban sanitation envisaged here draws upon this emerging experience.

A schematic representation of a DIF for urban sanitation is depicted in Figure 3a. In Figure 3b, a state/city level fund is shown. Essentially implementation mechanism around such an urban sanitation fund will need the following components:

- Debt fund: is needed to meet the fund requirement of micro lenders for on-lending as toilet loans for household customers. While a number of lenders have indicated potential demand among their customer base as well as their readiness to explore new markets, a key constraint has been access to funds at affordable costs. The debt fund can be capitalized through a development impact bond (DIB) that can target social impact investors.

<sup>10</sup>.Water and Sanitation Programme (2011), Economic Impacts of Inadequate Sanitation in India, WSP, New Delhi

<sup>11</sup>.Social Finance Inc (2012), Social Impact Bonds An Overview, Rockefeller Foundation, New York. Also see Centre for Global Development (2013), Investing in Social Outcomes: Development Impact Bonds, The Report of the Development Impact Bond Working Group



- Technical support for local mobilization and implementation support: The fund will also provide grant funds for a variety of support activities such as: a) technical support to lenders to meet promotional costs, especially when they have to take up lending in completely new locales, b) capacity building of lenders to build up internal systems for housing improvement loan products, and c) to meet the costs of Independent third party verification to enable an output-based funding mechanism
- Enabling framework at state and city level: at the city level, a framework needs to be developed to support toilet construction, and associated infrastructure (e.g. water supply, and connection to networks and in non-sewered areas, on-site treatment facilities and faecal sludge management plans). Policy regime for provision of services in non-notified slums needs to be in place at the state level. At the local level, building permission process will need to be simplified for toilet construction. Many cities in India have prepared a city sanitation plan, and some of these are often included as a part of the plan.

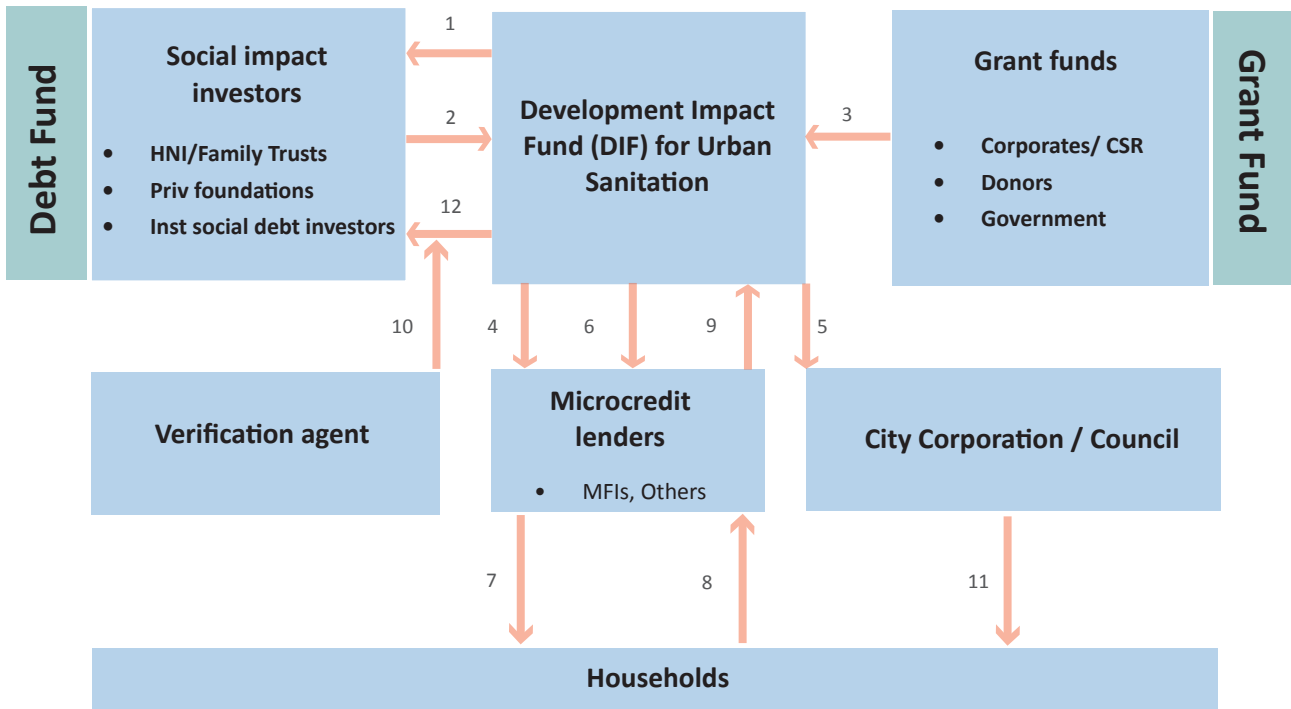
#### **Issues for Discussions at the Roundtable**

This roundtable is organised to explore innovative ways to finance household level sanitation. There is some small but growing experience of micro-finance institutions lending for toilets. Experience of these MFIs suggests that despite huge demand for 'toilet credit', there are many constraints in scaling up these experiences. The roundtable will review some of these constraints and explore possibility of setting up a Development Impact Fund for Urban Sanitation.

More specifically the roundtable will review and recommend

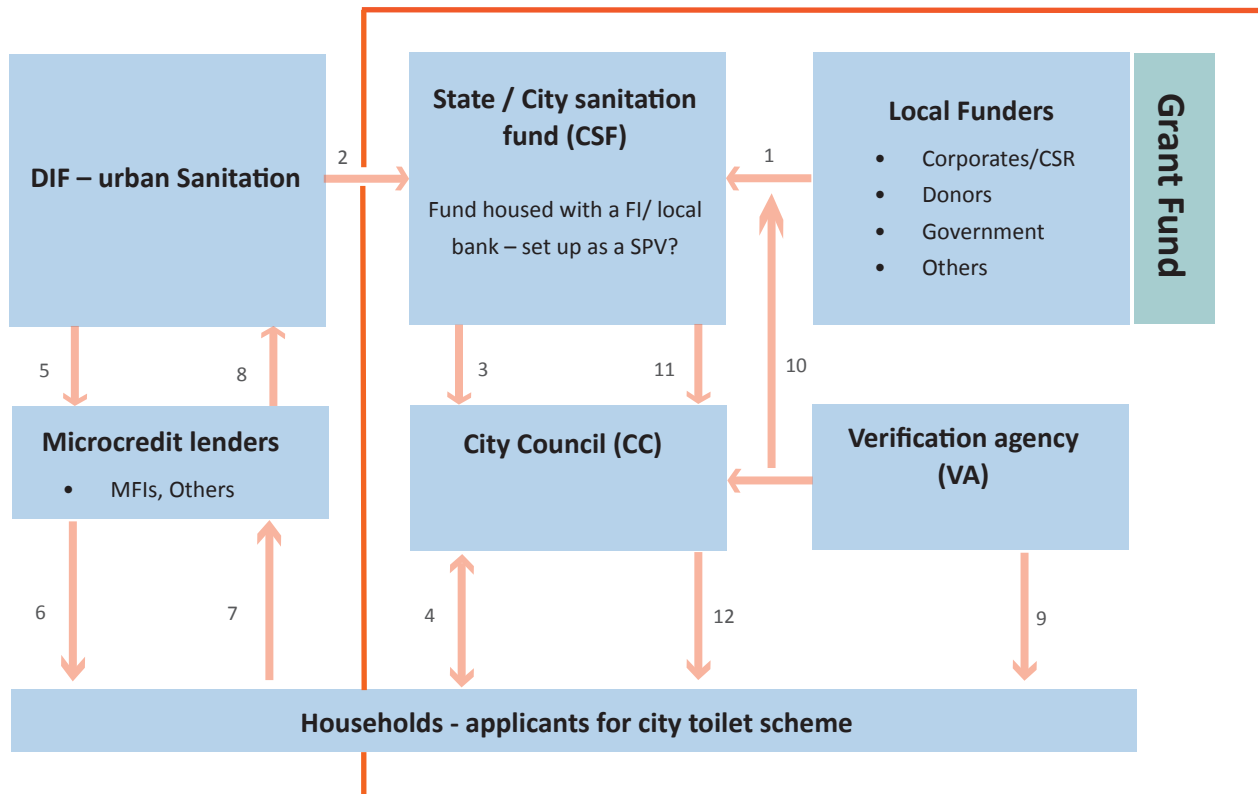
1. Constraints in scaling-up MFI lending for urban sanitation
2. Specific recommendations related to changes in operational guidelines of RBI to enhance MFI lending for urban sanitation
3. Explore Development Impact Fund for urban sanitation – and way forward to make this a

Figure 3a: Promoting a Development Impact Fund (DIF) for urban sanitation



1	DIF issues a tax-free social impact bond for urban sanitation	7	ML lends to households
2	Social impact investors subscribe	8	Households repay loan
3	Funders (CSR, donors) provide grant funds to DIF for sanitation	9	Microfinance Lender (ML) repays to DIF
4	FI provides a credit line to microcredit lenders (ML), and a technical support grant	10	Verification agent reviews (VA) lender and reports to investors
5	Demand based grants to city for technical services for city plan, local monitoring	11	City council provides output-based subsidy to households
6	DIF provides grant funding to ML for mobilization and capacity building	12	FI repays to investors based on VA report

Figure 3b: Promoting a state/citywide sanitation fund to implement ODF strategy



1	A state or city sanitation fund (CSF) receives grant funds (CSR) for a specific city	7	Households repay loan
2	DIF provides demand based grants to CSF (or city council) to meet technical service costs for city plan, local monitoring	8	MLs repay to DIF
3	CSF provides funds to city council to appoint a technical service provider (TSP)	9	VA reviews the implementation
4	Households apply and receive approval for a city toilet scheme	10	VA reports to city council and CSF
5	DIF provides a credit line to micro credit lenders (MLs)	11	CSF transfers funds for subsidy to CC
6	MLs lend to households in a given city	12	CC transfers subsidy to households



## The Performance Assessment System (PAS) Project

The 'Performance Assessment System – PAS' is a five-year action research project, initiated by the CEPT University, Ahmedabad, with funding from the Bill and Melinda Gates Foundation. It supports development of appropriate tools and methods to measure, monitor and improve delivery of urban water and sanitation services in the states of Gujarat and Maharashtra. The PAS Project comprises three components of performance measurement, monitoring and improvement.

The PAS Project is supporting the development of City Sanitation Plans (CSP) to achieve open defecation free status for four small cities in Maharashtra, which are Wai, Hingoli, Ambajogai and Sinnar. These cities were selected by the Water Supply and Sanitation Department, Government of Maharashtra, and Maharashtra Jeevan Pradhikaran (MJP). A framework for city-wide assessment using the full value chain for urban sanitation has been developed, which is being used in developing these CSPs. Initial workshops were organised by the MJP with officials of these cities to discuss the CSP approach. Draft plans for these cities are ready and will be discussed with city officials.