Except from

State of Urban Water and Sanitation in India

TERI University

10, Institutional Area, Vasant Kunj, New Delhi - 110 070 / India
Tel. +91 11 71800222 (25 lines) | Fax +91 11 26122874
Website: http://www.teriuniversity.ac.in

Chapter - 10

Financing Options for Urban Sanitation in India

Access to toilets and other sanitation services required for privacy, healthy living conditions, and a clean environment – generally defined to encompass the safe collection of human excreta and the management, treatment, and disposal or drainage of solid waste – has multiple impacts on improving health, safety, and educational access (CEPT 2014). Over the past three years, the Swachh Bharat Mission has emphasized urban sanitation to a degree never seen before. Although the mission design focuses on constructing toilets and making cities free of open defecation, equal emphasis is needed on leveraging credit and other innovative sources of finance if the SBM is to deliver results on the ground. This chapter highlights the importance of finance for sanitation in achieving the goals of the SBM, outlines potential options for financing keeping in view the development of the financial sector in India, and suggests key measures to scale up such finance.

10.1. The urban sanitation gap

The last census, in 2011, showed some startling statistics. In urban India, 62 million people had no access to toilets, of which 42 million (12%) practised open defecation (OD), and 20 million (6%) used public or shared toilet facilities. The situation was far worse in smaller cities (population below 100 000), with approximately 22% of the population resorting to OD. The 69th round of the National Sample Survey (NSS), conducted in 2012, estimated a significantly higher number of people – 94 million (25%) – using shared toilet facilities. The joint monitoring programme (JMP) of WHO-UNICEF does not consider shared facilities as improved sanitation facilities. By this standard, the gap in sanitation services in India is huge.

'The notion of indoor sanitation is not new in India. One of the earliest records of indoor plumbing anywhere in the world, dating circa 2800 BC, comes from several sites of the so-called Indus Valley Civilisation . . . This prior fact of India's sanitary contribution to the world seems paradoxical given the countrywide dearth of individual and public toilets as well as the pervasive nature of open defecation today' (Jha 2010). In contemporary India, urban areas are considered engines of economic growth. Urban areas are prosperous and contribute over two-thirds of national income. Despite this, a large number of urban houses lack toilets and their members practise OD.

It is often assumed that those who practise OD in urban areas live in slums. India's slum population in 2017 is estimated at 104 million, or approximately 9% of the total projected national population of 1.28 billion (MoHUA 2010). Lack of space and tenure-related issues are cited as hindrances to building toilets in slum areas. In absence of individual household latrines (IHHLs), slum dwellers are forced to rely on community toilets (CTs).

CEPT University surveys carried out in Gujarat and Maharashtra suggest that whereas lack of space for constructing toilets is an important factor, lack of finance is also an important factor

However, building CTs in slum areas is no panacea. Although a few cities have well-functioning CTs, in many others they are in a perpetual state of disrepair and people are forced to resort to OD. Moreover, CTs entail large public expenditure because unit costs of these toilets tend to be high, and they require operation and maintenance support throughout their life cycle. In addition, CTs may also pose greater health hazards. For example, a systematic review by the Sanitation and Hygiene Applied Research for Equity (SHARE) Project of the London School of Hygiene and Tropical Medicine (LSHTM) (2014) stated, "a pattern of increased risk of adverse health outcomes

associated with shared sanitation compared to individual household latrines" (Heijnen at al. 2014).

The census of 2011 puts the number of households that did not have their own toilets at 14.7 million, which forms the latent demand for private (household) toilets in urban India. The actual number is possibly much higher, because the census counts toilets outside the premises but within a compound or a complex also as individual household toilets. When the data are disaggregated into slum households and non-slum households, nearly two-thirds of the demand is seen to come from the latter (Figure 10.1).

It does seem surprising that nearly 10 million non-slum households did not have a toilet. CEPT University surveys carried out in Gujarat and Maharashtra (Figure 10.2) suggest that although lack of space for constructing toilets is an important factor, so is lack of finance (Mehta and Mehta 2014).

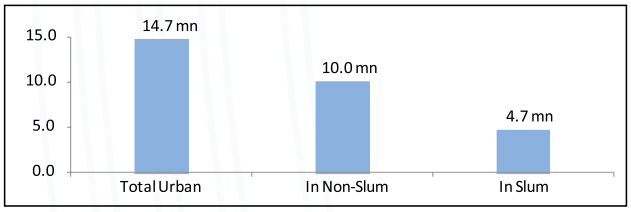

Figure 10.1: Households without individual toilets in urban India

(Source: Census 2011)

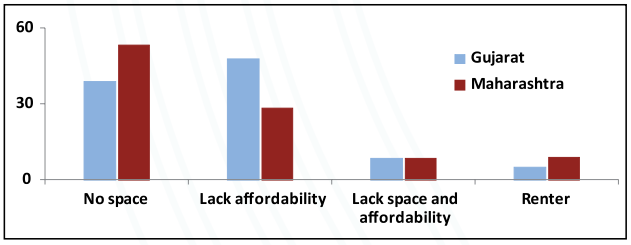

Figure 10.2: Reasons for lack of household toilets

(Source: household surveys in Gujarat and Maharashtra under the PAS Project at CEPT University in 2010)

10.2 Swachh Bharat Mission (Urban): a results-based initiative

The Government of India has introduced its ambitious programme of making India OD free (ODF) by 2019 under the SBM. Three specific targets have been set for the sanitation component of the SBM (U): (1) 10.4 million IHHLs, (2) 0.25 million seats in CTs, and (3) 0.26 million seats in PTs (Table 10.1). The focus is on IHHLs, but where it is difficult to construct them, CTs are proposed instead. Public toilets at such locations as tourist places, markets, bus stations, near railway stations, and places of public recreation are also planned, expected to be built through public–private partnerships (PPP). For both CTs and PTs, the revised guidelines provide for viability gap funding (VGF).

The urban sanitation component of the SBM (U) aims to make all cities ODF by increasing access to individual toilets: ensuring that they are used requires a demand-driven approach where households take the responsibility for managing the construction of their toilets and are free to supplement the subsidy with their own money if they want toilets of higher quality. Unlike most such programmes in the past that subsidized the entire cost of construction, the SBM (U) covers only 30%–50% of the cost. For example, in Maharashtra the prevailing cost of building a toilet is Rs 25 000 – 45 000 but the subsidy is fixed at Rs 12 000 (Rs 4000 from the Government of India and Rs 8000 from the Government of Maharashtra), which accounts for approximately 28%–48% of the total cost.

Table 10.1: Building toilets under the Swachh Bharat Mission (Urban): components and cost estimates

Component	Estimated cost, Rs (billions)	Funding
Individual household toilets	41.650	To cover 80% of families currently defecating in the open (based on data from 2011 census)
Community toilets	6.550	Unit cost of Rs 98 000 per seat with viability gap funding or grant up to 40%
Public toilets	-	To be done through public–private partnerships. The revised guidelines in 2016 provide for Rs 98 000 per seat with viability gap funding or grant up to 40%.
Solid waste management	73.660	90% in 2nd and 3rd year
Public awareness	18.280	-
Capacity building and administration	6.090	-
Total	146.230	

Source: Press Information Bureau (2014) and MoUD (2016)

Subsidies under the SBM (U) are tied to performance

or outputs. Initially, once an application is approved, only 50% of the subsidy is transferred to the bank account of the approved household; the balance is released only after the sanitation facility is built and verified on the ground by the urban local body or an independent verification agency appointed by the ULB. For this, a geo-tagged photo has to be uploaded on the SBM web portal, which adds transparency to the process. The scale of the SBM (U), makes it probably one of the largest such output-based aid (OBA) programmes for sanitation in the world: in most such initiatives elsewhere in the world, the average number of people served is about 142 000 (Castalia 2015).

10.3 Importance of credit for sanitation

The latent demand for sanitation in urban areas needs to be unlocked (Mehta and Mehta 2014a, 2014b; NHB 2015). The partial subsidy is expected to play a key role in this process. Under the SBM (U), the Government of India provides a subsidy of Rs 4000 for constructing an individual toilet, and most state governments have added another Rs 8000 from their own funds. The toilet costs in different states vary considerably, from about Rs 18 000 to Rs 40 000, depending on local costs and availability of a sewerage connection. Thus the subsidy covers only a part of the total cost; also, because it is output-based, households have to mobilize an additional amount of nearly Rs 12 000 to 34 000 upfront when they start the construction. Although some of the amount may take the form of credit by the supplier, the households need to leverage other resources including their own savings and credit from elsewhere. The study by CEPT of some cities in Maharashtra cited earlier also suggests that many households aspire to toilets of superior quality and some would also like to add a bathroom when building a new toilet. The cost of such toilets goes up to more than Rs 50 000. This suggests that the SBM will need to ensure that households have access to credit in order to take up and complete the construction of toilets.

Recent data from monitoring the SBM (U) suggests that demand articulation, in terms of applications received, is keeping pace with the proposed targets. However, the pace of construction of these toilets is slow, and only 24% of the applicants have completed the construction (Figure 10.3). Inquiries by CEPT University in a few cities suggest that in most cases households are reluctant to take up the construction of toilets or find it difficult to complete the construction after starting it either because they cannot afford it or have no access to funds. Other state-wide surveys also suggest that affordability is a major constraint to building toilets in urban areas. The state survey conducted by CEPT University in Maharashtra in 2010, which covered 7690 households across the state, estimated that 34% did not have access to toilets in their homes. A study conducted in 2015 and supported by the Bill and Melinda Gates Foundation across five states in India also suggests that financial and space-related barriers probably contribute to the slow pace of construction of toilets. Access to finance is a key constraint: 63% of the respondents across the five states, and 76% respondents in Maharashtra, mentioned financial constraint as a barrier to toilet construction (IMRB 2016).

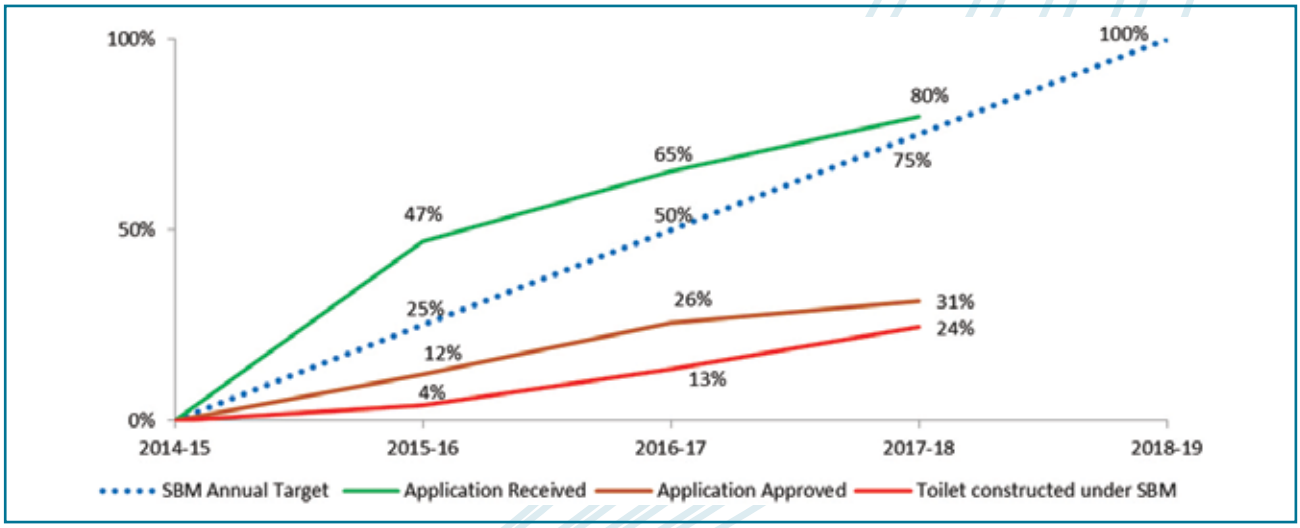

Figure 10.3: Process of Swachh Bharat Mission: targets, application, approval, and construction (Source: MoUD 2017)

Access to credit will also complement the demand-based approach adopted by the SBM. Surveys (PAS Project, 2011) in some cities suggest that for many households, with access to credit, the toilet, with a bathroom and better finishing, becomes an aspirational good (PAS 2011). This measure, namely additional credit, will also help to avoid the problem of poor-quality toilets, which are abandoned over time, as has been found with many programmes involving contractor-built toilets.

The demand for credit for sanitation in cities is likely to be significant (Box 10.1). A rapid assessment by CEPT University suggests that nearly 50% of the target households (about 5 million) are likely to access credit if enough of is made available easily and at affordable rates. The sum amounts to nearly 100 billion rupees, or about 1.5 billion dollars, assuming an average loan of Rs 20 000 to each such household.

10.4 Innovative financing options

Several options for innovative finance to supplement the grants from the SBM (U) are discussed below (Table 10.2). Historically, support for sanitation for low-income households in urban areas has come mainly through programmes related to slum development and in the form of grants linked to NGOs. However, the NGOs have not been able to scale up their operations because the grants available to them have been limited. At the same time, the growth of the microfinance sector has led to initiatives by a number of organizations such as Water.org and the Michael and Susan Dell Foundation to support microfinance institutions (MFIs) to enable them to provide sanitation loans to low-income households, particularly in rural areas (CEPT University 2016).

Box 10.1: Demand for sanitation credit: what women said about taking loans to build toilets

"My daughters have grown up and it is **not safe for them to go out in the open at night.** Therefore I took a loan from a credit cooperative society for constructing a toilet."

"I took a loan of Rs 5000 in 2009 through a self-help group for constructing a toilet because we had to **walk 20–25 minutes** to reach the community toilet."

"Everyone in our house resorts to OD. Our **relatives do not visit us** as we do not have a toilet attached to the house. We think it is very important to have a toilet and are keen to take a loan for the purpose."

"It was a long walk to the community toilets, and it is not possible to use them at night. **We left our home and rented a house with a toilet** because we cannot invest Rs 40 000 – 45 000 at once; we pay a rent of Rs 3000 instead."

Suvarna Lokhande runs a tailoring business. She is a member of Sumananjali Bachat Gat, a joint-liability group started with Spandana in 2008. The group has ten members like Suvarna, each involved in different economic activities such as making papads, making laddus, running a beauty parlour, and tailoring. The members have been taking loans from a microfinancing institution since 2008, amounting to Rs 10 000 – 50 000. In 2013, Suvarna took a **loan of Rs 45 000 as an income-generating loan but constructed a toilet instead**. Before constructing the toilet, the family had to walk for 20 minutes to reach the community toilet. Moreover, it was very inconvenient during the rainy season and at night. Heavy traffic was another major problem. Therefore, Suvarna decided to construct an individual toilet.

Source: CEPT University (2016)

Table 10.2: Assessing potential sources and financing mechanisms for urban sanitation

Source or financing mechanism	Reach to target urban households without on-premises toilets	Current or potential interest in urban sanitation	Favourability of loan terms and ease of collateral terms
Microfinance (microfinance institutions or self-help groups)	High reach	Emerged in recent years; however, efforts needed to focus on urban areas	Favourable collateral terms but very high rate of interest
Housing finance institutions	Limited to only a few HFIs	Specific sanitation products not used, but can be introduced as part of housing improvement products; marked focus on urban areas	Potentially low-cost loans but stringent requirements for collateral a deterrent
Commercial banks	High, especially with the new financial inclusion policies	No focus on sanitation so far, but possible with the enabling policy for priority-sector lending (PSL)	
Funds for corporate social responsibility and local benefactors	Potential is high but limited experience in urban areas	Interest in sanitation and sanitation included in CSR; however, efforts needed to focus on urban areas	Not applicable (funds available as grants)
Social impact bonds or mutual funds	Potential is high, but agencies are few; new compact with urban local governments needed	Potential interest high due to strong evidence of health impacts, concerns for dignity and security of women, improved education outcomes	Potentially favourable but stringent requirements for capability of service agency and verification of outcome
Crowdfunding		Special section for sanitation exists on current portals. However, efforts will be needed to focus on urban sanitation	Most funds are likely to be grants or donations; for debt, credible local partners necessary

Source: Mehta and Mehta (2014)

10.4.1 Microfinance for sanitation Internationally, microfinance has played a role in leveraging household and community resources for constructing IHHLs and PTs and for latrine-cleaning services and suction truckers used for emptying pit latrines in countries such as Bangladesh, Burkina Faso, Lesotho, Pakistan, and Vietnam. In 2001, a revolving fund for sanitation was set up in Vietnam through support from the World Bank to provide loans to low-income households in Vietnam for sanitation facilities. To avail themselves of the loans, the households needed to join a savings and credit group of 12–20 people living close to one another. This revolving fund compares very favourably with other forms of public support for sanitation (Mehta 2008).

The microfinance industry has grown significantly in India. On the basis of updated data reported by lending institutions, the industry had a total loan portfolio (outstanding loans) of 1069.16 billion rupees ($17.8 billion) by the end of 2016/17 (Micrometer, March 2017, p. 8).

Loans amounting to least 7 billion rupees had been disbursed for toilets loans by September 2016. Although the number of financial institutions offering toilet loans has increased since 2005, only one MFI is driving 50% of the market (Dalberg 2017). For example, Water.org has been supporting MFI partners to develop products for loans for water and sanitation. In this context, MicroSave has initiated work on developing manuals to support product development. About 20 MFIs currently offer loans for toilets, and although the bulk of these loans are for rural households, some MFIs with reasonably sized portfolios have focused on urban households as well (Box 10.2).

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

the NBFC-MFI sector is likely to be transformed with increased competition amongst traditional NBFC-MFIs and the new SFB licensees: the latter will be able to collect deposits and offer other financial services to low-income groups, which may also help in lowering the lending rates for sanitation loans.

Box 10.2: Sanitation credit by microfinancing institutions

Gramalaya Urban and Rural Development Initiatives and Network (GUARDIAN) is a microfinance institution (MFI) promoted by Gramalaya, a pioneer NGO in the field of water and sanitation for more than two decades in Tamil Nadu. GUARDIAN was the first MFI in the world to lend to the communities who lack access to credit to build household toilets and to connect to piped water supply. By March 2016, GUARDIAN had 88 000 borrowers and lent 840 million rupees ($14 million) and had an outstanding-loan portfolio of 190 million rupees ($3 million) (GUARDIAN 2016).

Another MFI, Grameen Koota, with presence in Chhattisgarh, Madhya Pradesh, Maharashtra, Karnataka, and Tamil Nadu, has an active membership of over 1.5 million and had an outstanding-loan portfolio of 30 billion rupees ($500) by February 2017, of which nearly 2 billion ($33 million) was for urban water and sanitation loans in 2016 (Grameen Koota 2017). Evangelical Social Action Forum (ESAF) Microfinance, with its cumulative portfolio of 95 million rupees and nearly 14 000 loans, developed a water and sanitation loan product in 2008 with support from Water.org and has provided loans particularly in central India (Chhattisgarh, Madhya Pradesh, and Maharashtra): about a third of its clients in these states do not have household water connections and toilets (Paul 2014).

One of the reasons for the limited role that MFIs have played in urban sanitation space is that they have inadequate access to a credit line for lending to households or SHGs at reasonable rate of interest. The current policies require MFIs to devote at least 70% of their assets to income-generating loans, and sanitation loans do not fall under this category. However, sanitation lending is now a priority sector for lending for banks, which is likely to increase the access to credit for sanitation through MFIs. Although the demand for sanitation loans is sizeable, the cost of construction and availability of funds are major obstacles. Toilet loans are a new product for MFIs and require a shift from their existing product lines—such a shift is unlikely unless additional funds are available, preferably at a lower cost. With sanitation being considered as a part of priority-sector lending (PSL), more funds for sanitation loans can be made available to MFIs. In September 2015, eight non-banking finance companies (NBFC), including ESAF, were allowed to operate as small finance banks (SFBs).[3] Therefore,

10.4.2 Housing finance institutions The housing mortgage market has seen phenomenal growth in recent years. A large number of financial institutions – commercial banks, housing finance institutions (HFIs), cooperative societies, etc. – provide housing loans. By March 2015, housing loans in India that were outstanding amounted to Rs 10.6 trillion rupees ($177 billion). The share of HFIs was nearly 40%, with outstanding loans of Rs 5.6 trillion rupees ($93 billion) (NHB 2016).

Toilets are an integral part of housing. A toilet loan can fit within the category of home improvement. Given the widespread reach of HFIs, with over 80 listed with the National Housing Bank (NHB) for refinance, the scope for introducing sanitation loans is considerable. However, HFIs have daunting mortgage requirements, and special lending terms will be needed for small toilet loans. Involvement of HFIs in lending for building toilets in urban areas is also constrained by the policy regime related to building regulations and

[3]In September 2015, Disha Microfin Private Ltd., Equitas Holdings Pvt. Limited, ESAF Microfinance and Investments Private Ltd., Janalakshmi Financial Services Private Limited, RGVN (North East) Microfinance Limited, Suryoday Micro Finance Private Ltd., Ujjivan Financial Services Private Ltd. and Utkarsh Micro Finance Private Ltd, were given permission to become small finance bank.

approvals. In many states, infrastructure services such as water supply and sanitation can be provided only in notified areas because providing such services may de facto grant tenure rights to non-notified slums. This constraint can be easily overcome by delinking service provision from tenure rights through special resolutions, as the state or local governments can generally override the provision (as is being done under the SBM in many states).

Commercial banks can include all their sanitation loans to households and to SHGs or MFIs, as priority-sector lending. Also, the new financial inclusion scheme, Pradhan Mantri Jan Dhan Yojana, which entitles every family to have a bank account, can make it easier to reach the right groups for sanitation loans

Even in non-slum areas, addition of toilets to existing houses often entails a long-drawn process of approval by the local authority. This is often expensive for many households because they are required to submit the drawings of existing houses approved earlier. Hence many such additions and toilet construction are 'informal' (i.e. without proper approvals). The process of approval for toilet construction needs to be made simpler, separating it from the usual process for approval of buildings.

10.4.3 Commercial banks Possibly, the largest source of funding for sanitation can be commercial banks, which can provide loans to households and SHGs. The revised guidelines for PSL released in July 2015 clearly recognize 'sanitation facilities including construction or refurbishment of household toilets' (RBI 2015). The guidelines also include 'bank credit to MFIs extended for on-lending to individuals and also to members of SHGs/JLGs for water and sanitation facilities as eligible' for categorization as priority sector under Social Infrastructure. Bank loans up 50 million rupees for each borrower are included for building social infrastructure for various activities, namely schools, health care facilities, drinking-water facilities, and sanitation facilities including construction or refurbishment of household toilets and household-level improvements related to water in habitations from Tier 2 (population 50 000 – 99 999) to Tier 6 (population less than 5000), thus effectively encompassing all habitations with population below 0.1 million in 2011 (RBI 2017).

Loans for toilets are likely to range from Rs 15 000 to Rs 35 000, and because SHGs are categorized as weaker sections, loans can also be included under that category for priority lending. This implies that it will be possible for banks to include all their sanitation loans to households and to SHGs or MFIs as PSL. Some of the new banks such as the IDFC Bank and Bandhan Bank are keen to have low-income portfolios, especially in new geographies.

With the inclusion of sanitation in the new PSL guidelines and given the very high priority placed on sanitation by the Government of India, it would be useful to encourage and support banks to provide loans for household sanitation. These loans are, however, new for most banks, and most banks are not inclined to advance such loans. The new financial inclusion scheme, namely Pradhan Mantri Jan Dhan Yojana, which entitles every family to have a bank account, can make it easier to reach the right groups for sanitation loans. It is in this context that it would be useful to explore facilitators such as banking correspondents and payment banks to support the other banks in extending such loans. The SHG–Bank Linkage Programme (SBLP) can also play an important role. In this context, facilitators such as Mahila Arthik Vikas Mahamandal (MAVIM, a corporation for economic development of women) in Mumbai (Maharashtra) or Kudumbashree in Thiruvananthapuram (Kerala) can be important players.

The guidelines by the Reserve Bank of India (RBI) for PSL do not stipulate a minimum requirement for sanitation as for agriculture and other sectors, which will encourage banks to provide loans for sanitation. For example, even if 1% of the PSL fund is earmarked annually for sanitation, it would bring in about 300 billion rupees every year, sufficient to meet the entire country's needs to finance sanitation (CEPT University 2016).

10.4.4 Urban credit cooperative societies and urban cooperative banks Urban cooperative banks (UCBs) had their genesis in urban credit cooperative societies (UCCS), which collect small amounts of money from individuals, thereby encouraging the habit to save, and use the collections for providing credit to small

businessmen and other individuals when required. In the nineteenth century, urban cooperative banking movement was launched in India after the success of the cooperative movement in Britain and in Germany. The Cooperative Credit Societies Act, 1906, gave a real push to the movement. Urban cooperative credit societies were initially organized on a community basis to meet consumption-oriented credit needs of their members. From their origin until today, such societies have mobilized savings from low-income urban groups and provided credit to their members. These societies are regulated by the Registrar of Societies at the state government level (NCUI 2012).

An urban cooperative bank is defined as a primary cooperative bank located in an urban and semi-urban area with a paid-up share capital of not less than 0.1 million rupees and which does admit any other cooperative society as a member. Such UCBs are primary credit providers in the sense that they perform the role of a primary lending unit in the credit hierarchy. The thrust of UCBs, historically, has been to mobilize savings from the middle- and low-income urban groups and offer credit to their members, many of which belong to the economically weaker sections. (More information on cooperative banks is available at the website of the RBI at https://www.rbi.org.in/scripts/fun_urban.aspx).

A number of UCBs of different sizes are spread across many states, although only five states account for approximately 79% of them: Andhra Pradesh, Gujarat, Karnataka, Maharashtra, and Tamil Nadu. Urban cooperative banks were originally regulated by state governments but subsequently, in 1966, cooperative banks with paid-up share capital and reserves of 0.1 million rupees or more were brought under the Banking Regulation Act, 1949. However, regulation and supervision by the RBI was restricted to mobilization of deposits, provision of loans, investments required to maintain the statutory liquidity, and other banking functions. The remaining functions of the UCBs were governed by the Multi-State Cooperative Societies Act, 2002 (for UCBs operating across states) or the cooperative societies act of the state in which the UCB was registered. The multiplicity in regulation led to problems in performance, and the RBI has since encouraged consolidation of the sector. By the end 2015/16, India's cooperative banking sector comprised 1574 UCBs.

From the perspective of providing sanitation credit, UCBs and UCCSs can play an important role in financial inclusion. A large number of their borrowers are people of small means, such as traders, artisans, street vendors, and self-employed technicians such as carpenters and mechanics, and may also constitute the target segment for sanitation credit. **Box 10.3** provides an example of sanitation loans by a UCB and a UCCS in small towns in Maharashtra.

10.4.5 Corporate social responsibility The Companies Act, 2013 (CA, 2013), and with it the Companies Social Responsibility Policy Rules, 2014, were approved by

Box 10. 3: Sanitation loans by an urban cooperative bank and a society in Maharashtra

In Wai, about 75 km from Pune, self-help groups were encouraged to identify potential applicants for a programme to build toilets. As a result of this effort, three women applied to the Wai Municipal Council for a subsidy under the Swachh Maharashtra Mission. All the three applications were approved, and the first instalment (Rs 6000) of the subsidy released. To raise the remaining amount required for construction, the women were supported in approaching the Wai Urban Cooperative Bank. Each of the three borrowed Rs 20 000 from the bank at an interest rate of 11% for 1 year. They served as guarantors of one another, and the bank asked for no other collateral. The toilets were built and are being used. One applicant has already repaid the entire loan amount and the other two are paying the instalments regularly.

In Pathri, a town with a population of 45 000, in Parbhani district, over 100 members of a women's credit society, namely Kranti Jyoti Savitribai Fule Mahila Nagri Sahakari Credit Society, obtained loans to build toilets. The members of the society played a major role in creating awareness about toilets and provided loans to interested members. The loan were for Rs 15 000 – 25 000 for 18–24 months.

Source: CEPT University 2016

the parliament and were effective from 1 April 2014. Most important, the act included sanitation as a mandatory CSR activity by the Ministry of Corporate Affairs (notification dated 24 February 2014 by the Government of India). The Companies Act makes it mandatory for large companies to spend 2% of their three-year average annual profit on discharging their CSR. This landmark step makes India one of the first nations to make spending on social welfare a part of company law.

The act makes new models of social engagement possible and is expected to improve the pool and quality of funding received from the corporate sector. For example, CSR funds can be used not only to support NGOs but also to also set up or assist business ventures involving social sanitation. Furthermore, CSR funds do not have to be in the form of the traditional grant; to improve their impact and potential efficiency, CSR funds can also be disseminated in the form of results-based grants or social impact bonds.

About 8000 companies, including the top 100 companies, across several sectors, fall under the act's ambit, generating an estimated 120–150 billion rupees (up to $2 billion) in CSR spending annually. However, the current spending on sanitation through CSR is very low, estimated at a median value of 45 million rupees by the large corporate sector, or no more than 4–5 billion annually (Samhita 2016).

In 2014, the Government of India set up the Swachh Bharat Kosh (SWK), a fund that would be used for building toilets in schools in rural and urban areas. The fund was set up to attract CSR funds and contributions from individuals and philanthropists to achieve the objective of the SBM. However, total contributions to the fund so far are only about 1 billion rupees. The major contributors to the fund are public-sector companies; the private sector has mainly stayed away.

10.4.6 Social impact investment Investors in social impact have emerged globally, who accept lower returns on capital and look to maximize the impact of their philanthropic engagements. The Global Impact Investing Network (GIIN) estimated that 'potential investment by impact investors over the next ten years could be between $400 billion and $1 trillion' (Koh, Karamchandani, and Katz 2012). A survey by JP Morgan Social Finance and GIIN found that $8 billion was committed in 2012 and that impact investors had planned to commit another $9 billion in 2013 (Saltuk et al. 2013).

Although social impact investment is at a nascent stage in India, the signs are promising: a three-year debt fund by the HDFC Mutual Fund recently mobilized more than 2.5 billion rupees (about $40 million) for cancer cure in a joint initiative with the Indian Cancer Society. Also, the first development impact bond (DIB) in India was launched in Rajasthan for girls' education (Perakis 2014). Such funds are yet to be tried out for the sanitation sector in India. A framework for a development impact fund for sanitation in India was proposed by CEPT University, which was discussed at a round table organized by the National Housing Bank (CEPT University 2014). The proposal needs to be reconsidered by, and can be explored with, such agencies as Small Industries Development Bank of India (SIDBI) and the National Bank for Agriculture and Rural Development (NABARD).

10.4.7 Crowdfunding Crowdfunding is soliciting small amounts of fund from various investors through a web-based platform or social networking sites for a specific project, business, or social cause. Such funding is typically divided into categories, namely donations, rewards, peer-to-peer lending, and equity-based. Donation crowdfunding involves funding for social, artistic, or philanthropic purpose without any reward or return on funds. Reward crowdfunding offers the investors some existing or future tangible rewards such as consumer products and membership benefits as a consideration. In peer-to-peer lending, an online platform matches lenders with borrowers to provide unsecured loans at such interest rates as determined by the platform, and equity-based crowdfunding seeks funds from investors for early-stage companies in lieu of equity stakes through an online platform (PSA Legal Counsellors).

The idea of crowdfunding is not new to India: many social and religious functions at the community level are celebrated through crowdfunding. The concept of online crowdfunding, however, is new to the country. Crowdfunding is a relatively new financing mechanism that mobilizes funds from large number of people through Internet-based platforms and has transformed fundraising in many positive ways. With increasing access to the Internet, social media,

and awareness amongst people, the popularity of crowdfunding has soared and it has emerged as a multibillion-dollar global industry (World Bank 2013).

By the end of 2016, there were more than 1250 crowdfunding platforms across the globe. The amount raised through various crowdfunding platforms increased from $1.5 billion in 2011 to $16.2 billion in 2014, and within a span of one year, that is by 2015, this figure jumped to an astounding sum of $34.44 billion. Asian market is the fastest growing geography with a growth rate of 210%. Many global platforms such as Indiegogo, Spacehive, Akvo, and Kiva as well as a few platforms from India such as Milaap and BitGiving mobilize loans and donations for local projects such as civic projects and social causes such as health, education, water, and sanitation.

Crowdfunding is a new and upcoming way to finance sanitation projects, but the concept is at a nascent stage in India. At present, only four crowdfunding platforms in India have mobilized funds for sanitation. The track record and reputation of the agencies in implementing similar projects and ensuring accountability in project delivery are crucial.

Milaap, a social enterprise based in Bangalore, launched an online micro-lending platform in June 2010 and is India's leading crowdfunding platform for personal and social causes. Up to April 2017, Milaap had successfully disbursed 820 million rupees with a repayment rate of 98.97%. The total number of loans was 74 125, impacting more than 0.3 million lives. Milaap enables people to give household loans for getting water connections or construction of toilets or renovation of toilets for individual households in rural and semi-urban areas. Milaap also funds schools catering to low-income communities to build additional and separate restrooms for boys and girls, and more than 6000 sanitation loans have been raised so far through the platform.

However, crowdfunding industry is at a nascent stage in India. The amount raised through crowdfunding in India in 2015 was only $5.1 million, which is less than 0.02% of the entire funds raised through crowdfunding worldwide. At present, only four crowdfunding platforms in India have mobilized funds for sanitation. Most of these funds were mobilized for MFIs or target beneficiaries. Donors (or investors as the case may be) look for credibility of the proposer. The track record and reputation of the agencies in implementing similar projects and ensuring accountability in project delivery are crucial. Donors also look for the potential impact of the investment on larger populations. An organization, the National Crowd Funding Association (NCFA) of India, has already been established to promote crowdfunding in the country; NCFA's mission is to support, educate, and establish the Indian crowdfunding market.

10.5 Policy support and the way forward

Given the ambitious target to make India ODF by 2019, it is clear that greater access to sanitation finance is crucial if the target is to be achieved. This chapter has highlighted a range of potential financial institutions that can provide sanitation finance. Discussions with financial intermediaries suggest that availability of funds for sanitation credit is not a major constraint—the major concerns relate to demand creation, reduction in the costs incurred by lenders, and perceptions of credit risk.

Demand for sanitation finance can be mobilized through support for awareness creation and aggregation of customers. For example, Grameen Koota (GK), a non-banking MFI, has used its own NGO, the Navya Disha Trust, for creating awareness amongst target customers to promote demand for sanitation credit, which is then met by loans from GK or other sources. GK and a few other MFIs have used technical assistance from Water.org to build awareness and create demand for sanitation credit. State government institutions such MAVIM in Maharashtra, Tamil Nadu Corporation for Development of women (TNCDW) in Tamil Nadu, Kudumbashree in Kerala, Mission for Elimination of Poverty in Municipal Areas (MPEMA) in Telangana, and Society for Elimination of Rural Poverty (SERP) in Andhra Pradesh can also play an important role in creating awareness among SHGs and facilitating aggregation of customers. If some incentive if offered to banking correspondents and payment banks for bringing the debtors and the creditors together and thus being 'loan originators', as in the case of the Pradhan Mantri Awas Yojana (PMAY), more sanitation

loans can be disbursed.

More action is also needed on the policy front. Under the RBI regulations, banks need to lend 40% of their adjusted net bank credit (ANBC) to the priority sector, and the RBI guidelines for PSL in the agriculture sector stipulate 18% of the ANBC or credit equivalent of off-balance sheet exposure, whichever is higher, 7.5% of which is reserved for micro enterprises and 10% for advances to weaker sections. Water and sanitation loans come under another category. Reserving at least 1% of the ANBC for water and sanitation credit under PSL may give a fillip to this market and encourage banks to focus on sanitation.

At local level, suitable policies are needed related to building permissions. Often, approved plans for old buildings where toilets are needed are not available. Also, for some properties, land titles may not be clear. Toilet construction needs to be delinked from the normal process of approval for building plans. For example, in both Gujarat and Maharashtra, no building approval is necessary for constructing toilets, and government funding for toilets is provided to all households regardless of tenure and without any special building permission, as stipulated in the SBM guidelines.

Campaigns for behavioural change are often considered essential to achieve the ambitious sanitation targets sustainably. However, it is equally important to pair such campaigns with a local ecosystem backed by demand-led schemes. Funding, although only one part of such an ecosystem, can play a major role in mobilizing communities and unlocking demand. If used well, some of the innovative mechanisms such as social impact investing and crowdfunding can also help to improve outcomes and to ensure greater accountability. Appropriate national and local mechanisms for city sanitation funds can help to capture different sources of funds and to support the development of the ecosystem.

References

CEPT University (2014). **Workshop on financing urban sanitation: Meeting report.** Available at *https://sites. google.com/a/cept.ac.in/di/readings/opendefecationinindiancities*

CEPT university. (2014, November 2014). **State Profile**. Retrieved December 4, 2014. Available at *Performance Assessment System: http://pas.org.in/web/ceptpas/performance?p_p_id=SLBPerformanceAssessment_WAR_Portal&p_p_lifecycle=1&p_p_state=normal&p_p_mode=view&p_p_col_id=column-1&p_p_col_*

Heijnen, M., Cumming, O., Peletz, R., Chan, G. K. S., Brown, J., Baker, K., & Clasen, T. (2014). **Shared sanitation versus individual household latrines: a systematic review of health outcomes**. *PLoS One*, ***9***(4), e93300.

Meera Mehta, D. M. (2014, November 11). **Financing Sanitation**. Retrieved January 9, 2015. Available at *Ideas for India: http://ideasforindia.in/article.aspx?article_id=370*

MoUD. (2014, November 26). **JNNURM RAY Progress Report**. Retrieved December 4, 2014. Available at *JNNURM-MIS: http://jnnurmmis.nic.in/jnnurm_hupa/jnnurm/Jnnurm_Ray_AHP_Progress_Report/City-wise_BSUP.pdf*

MoUD. (2017). **Swachh Survekshan 2017 Dashboard**. Retrieved October 15, 2017. Available at *Swachh Survekshan: http://swachh-survekshan.in*

Ministry of Urban Development. (2014). **Guidelines for Swachh Bharat Mission (Urban)**. *Minsitry of Urban Development*.

Ministry of Urban Development. (2016). **Primer on Fecal Sludge and Septage Management**.

MoHUA. (2017). **ODF Data**. Retrieved October 2017. Available at *Swachh Bharat Mission: http://sbmodf.in*

MoHUA. (n.d.). **Swachh Bharat Mission**. Retrieved October 14, 2017. Available at *Swachh Bharat Urban: http://www.swachhbharaturban.in/sbm/home/#/Dashboard*

PAS Program, CEPT University. (2011). **Financing and Monitoring Urban Water Supply and Sanitation in Gujarat**. Ahmedabad: CEPT University.

PAS Project. (2011). **Performance Assessment System for Water Supply and Sanitation**. ORG Centre for Social Research, AC Nielsen ORG. Gujarat and Maharashtra: *CEPT University*.

Samhita. (2016). **CSR in Water, Sanitation and Hygiene (WASH).** *India Sanitation Coalition.*

SBM. (n.d.). **RFD For the Swachh Bharat Mission: Annual Targets under Swachh Bharat Mission**. Retrieved October 15, 2017. Available at *Swachh Bharat Urban: http://swachhbharaturban.gov.in/writereaddata/Mission_Yearwise_Targets.pdf*

Spears, D. (2013, March 14). **The long and short of Open defecation**. *The Hindu* .

Spears, D. (2013**). How Much International Variation in Child Height Can Sanitation Explain?** Sustainable Development Network, *The World Bank.*

About this Report

The *State of Urban Water and Sanitation in India* report emerges from a three-year (2014–2017) collaborative project funded by the USAID and undertaken by TERI University, Coca-Cola, and TERI, titled 'Strengthening Water and Sanitation in Urban Settings of India'. The report traces India's journey in the urban water and sanitation sector, aims to be a comprehensive collection and analysis of past and current policies and programmes, and provides insights into the reasons for several gaps that become apparent when the sector is viewed holistically.

The project has initiated dialogues on many fronts across disciplines and stakeholder groups. A series of stakeholders' consultation workshops were held at the regional level and at the national level as part of the study, with participation from diverse groups, which helped to shape this report.

The report is divided into three broad sections: the section on policies attempts not only to highlight supply–demand gaps, challenges, and factors that contributed to success but also to understand performance through the lens of policy and governance at national and state levels; that on progress traces India's progress in the sector, especially under the Swachh Bharat Mission (Urban), which is assessed at the national, state, and city levels; and the concluding section offers solutions.

The progress India is making under the Swachh Bharat Mission would extend far beyond achieving Sustainable Development Goal (SDG) 6, 'Clean water and sanitation', by contributing to many other SDGs as well: 'No poverty' (SDG 1), 'No hunger' (SDG 2), 'Good health and well-being' (SDG 3), 'Quality education' (SDG 4), 'Gender equality' (SDG 5), and 'Sustainable cities and communities' (SDG 11). This publication is a modest but important step in recording India's journey and strengthening water and sanitation services in its cities.

teri university

10, Institutional Area, Vasant Kunj, New Delhi - 110 070 / India
Tel. +91 11 71800222 (25 lines) | Fax +91 11 26122874
Website: http://www.teriuniversity.ac.in