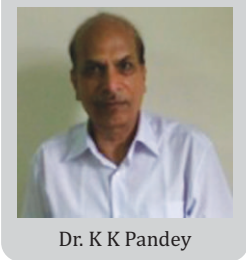


Financing the Sanitation in India

Practice & Prospects

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Financing the sanitation in recent one and half decade assumed special significance in line with global focus on adequate access to sanitation. Habitat Agenda (1996), United Nations Millennium Development Goals (UNMDG's) and UN sustainable development goals 2030 (UNSDG's) etc. have created global awareness and actions towards adequate access to sanitation.



Financing of sanitation has been largely confined to budgetary allocation. However, these allocations cannot undergo a quantum jump and therefore, non budgetary resources assume special significance .in this regard the government initiatives in India including local actions, in recent past, have shown special emphasis on 'liquidity' and 'outreach' of financing system .It is noted from the Indian experience that multiple sources of financing are emerging as a recognized policy instrument for the intergovernmental actions.

Recent initiatives under Clean India (Swachchh Bharat) mission duly recognize limitation of budgetary allocation and include multiple sources of funding. It is accepted that budgetary allocation alone cannot provide the requisite amount of funds for improved sanitation. At the same time it is also noted that earmarked funds in the past are not fully utilized by potential beneficiaries particularly the urban and rural local government. It is also noted that the gap in sanitation is largely frozen and not converted into effective demand. Accordingly, the flow of funds for investment and operation and maintenance (o&m) is considerably low than

requirements Therefore, enhanced availability of funds and larger access (outreach) associated with effective demand are the two most essential issues for financing sanitation in India.

ACCESS TO IMPROVED SANITATION IN INDIA

India, has given special emphasis on improved sanitation. Total Sanitation Campaign (TSC) was initiated in 1999 to address rural sanitation whereas urban sanitation was addressed by Integrated Low Cost Sanitation (ILCS). The progress in rural areas was reported to be improved from 9% in 1990 to 15% coverage in 1999 to and 39% in 2012, although 21% toilets were found de-functional (MDWS website). It is also noted that urban areas show a relatively better coverage of improved sanitation covering 82% HHs (58% HHs with Individual toilets and 24% with shared toilet) having access to safe sanitation, 7% unsafe access and 11% show open defecation (Table 1).



De functional toilets are also linked with perception and mindset. In this regard government of India is giving emphases on Community - led total Sanitation and School-led Total Sanitation. These instruments have facilitated Open Defecation Free status to as many as 35938 villages out of 611753 villages in India

(Website of MDWS, GOI). Therefore, Capacity building of local governments should specifically include funding to promote SLTS and CLTS approaches. At the same time development of appropriate cost effective, affordable, local and pro poor technology for toilet construction should also be duly covered under the financing system.

RECENT ESTIMATES

Recent estimates by government of India for rural and urban sanitation have placed a requirement of Rs.100447 crore and Rs.62009 crore (1 crore=10 million) respectively under the government of India's flagship programme of clean India mission (Swachh Bharat Abhiyan-SBM) to be accomplished by 2019.

Table:2 (2015-2019) (Rs. In Crore) Recent Estimates of Clean India Mission

Item	Requirement	Annual Requirement	Funds Allocated (2014-16)	Average Annual Flow (GOI)	Average Annual Flow from government of India as % of Annual Requirement
Rural Sanitation	100447	20894	6975	3488	17
Urban Sanitation	62009	12002	1700	850	7
All	162456	32896	8675	4338	13

Sources: (i) Guidelines Clean India Mission (SBM) , (ii)Ministry of Drinking water and sanitation and (iii) ministry of urban Development Government of India.(Urban does not include sewage system.)

Average annual flow from GOI is likely to have 40% additional contribution from provincial and local governments.

Another important area of concern is financing of O & M of the assets at the disposal of local governments. Successive studies have indicated a huge gap and fiscal stress at ULG/RLG (Urban /Rural Local Governments) level leading to the occurrence of emergency and break down maintenance and failure to take up repair and replacement of machinery and equipment's as per requirements (Pandey:2014-15a). This is reflected in a constant decline in the normative base of sanitation services. It is also noted that rural areas do not have adequate system of solid waste management whereas urban areas have wide gap in collection (25-50%), down time (3-5), scientific disposal (10-20%).

STRATEGIC FISCAL GAP IN SANITATION

Difference between financial requirements to meet mandatory commitments on sanitation and investible (available) funds is called strategic fiscal gap in sanitation. The gap is fairly high by any standard. The budgetary allocations as compared to requirements remain significantly low. As seen from Table 2, annual flow of funds through budgetary allocation from govt. of India is only 17% and 7% of annual requirements of funds for rural and urban sanitation confirming that budgetary allocation alone cannot deliver the desired results, although, it will

Table:1 Access to Improved sanitation in India

Access(%HHs)	1990	2001	2012
Rural India	9	15	39
Urban India	55	59	82

Sources: (I) Ministry of Drinking water and Sanitation and, (ii) Progress on DW&S, UNICEF, 2014., (iii) National Sample Survey-65th round.

have additional one fourth contribution from provincial /local governments. Therefore, it is realized by the Govt. of India that its budgetary allocation should be used as a seed capital to multiply flow of investments into sanitation sector.

INDIAN FUNDING STRATEGY

It was, therefore, realized that the entire amount of Rs.100000+ crores needed for SBM-rural and Rs.62000+ crore for SBM Urban cannot come from government alone although nearly 1/3 requirements were earmarked for budget allocation from central

and provincial government to achieve the objectives of the two missions by 2019. This pattern of allocation indicates that funds for sanitation have to come from multiple sources of financing. Accordingly nearly two third funds for clean India Mission (SBM rural) are expected to come from private sector (including CSR, NGO's/CBO's, community) and multilateral/ bilateral support (Guidelines: SBM-Rural, GOI).

At the same time, it is also realized that actual disbursement remains further low as compared to allocation. Govt. of India's pioneering programme JNNURM (Jawaharlal Nehru National Urban Renewal Mission) with a budget of Rs. 50000 crores to be spent during 2005-2012 could actually release nearly 40% of earmarked amount. This was caused by inability of local bodies to prepare and implement projects accordingly (Pandey 2016).

This magnitude of support is a difficult task to deliver/mobilize funds from respective sources. Therefore, liquidity in the financing is a major issue and stakeholder participation has to be used through a well-designed strategy. In this regard local governments can play decisive role to carry out stakeholder mapping and involvement along with community contribution.

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Second important issue is 'outreach' of financial system caused by frozen demand for necessary investment in the sector. The requirements of funds are twofold: (i) individual households for construction of toilets and (ii) local governments for putting in place a detailed network of waste collection, disposal and treatment. The local government conventionally does not have effective demand to seek and absorb funds for respective task due to their historical weakness on technical ability and creditworthiness. UNICEF/Water Aid India have in their report indicated the need to ensure

financing for equitable access to poor, special focus on bottom up assessment, rural sanitation, and waste management by urban local bodies. (Water Aid 2005)



EMERGING INNOVATIONS IN INDIA

India is witnessing several innovations at different levels of governance to improve liquidity and outreach to mobilize potential resources for sanitation in urban and rural areas. This is twofold funds are mobilized directly to improve liquidity and funds are 'de-facto' mobilized through 'divestiture' and savings from management contracts. These are mobilized in a typology of instruments as follows:

- Revenue instruments
- Institutional options /Special purpose vehicle (SPV)
- Resources from private sector
- CSR (Corporate Social Responsibility) funds
- Community resources
- Convergence and synergy
- Multilateral/Bilateral Support

INSTITUTIONAL OPTIONS/SPECIAL PURPOSE VEHICLE

Special purpose vehicle (SPV) for sanitation related activities is gradually emerging as a tool to organize activities towards improved access to sanitation. Ahmedabad Municipal Corporation in Gujarat has created a fully municipal owned (100% equity) SPV to revive the Sabarmati River from a hazardous drain to a city life line. SPV is known as Sabarmati River Front Development Corporations (SRFDC). It has included a range of activities such as (a) resettlement of low income HHs living on the river band, (b)

Recreation and commercial development of river band area (c) local treatment of sewage coming to river at respective places(bio-digesters) (d) organization of cultural event and (e)turning river into a tourist attraction. The river now has a continuous flow of water drawn from Narmada Canal System and has provided a regular source for city water supply. It has also brought up the water table in the adjoining areas and has also contributed towards plantation and green areas in the city. (Pandey: 2016)

These types of SPV's can also be created in a regional context covering rural and urban local governments on the basis of inter local body cooperation for improved sanitation. This manner can include rural areas in the process.

Further nearly 4000 census towns which are still governed by RLG too deserve special attention on a different type of support than SBM-G. These are the towns that have undergone structural readjustment in their economic profile to become urban from rural status. Their requirements for sanitation need similar attention as for urban.

CONTRACTING OUT

Some important case studies on contracting out include: Rajkot, Hyderabad and Bengaluru. Substantial savings (in a range of 25% to 50% of municipal expenditure) in expenditure are achieved through contacting out of solid waste.

Box 1: CONTRACTING OUT FOR SANITATION

Rajkot

Street sweeping and transportation is contracted out for PSP. The city of Rajkot was one of the initial cities to apply PSP in early 90's with nearly 30% savings in the expenditure in municipal kitty. PSP was deployed on collection and transportation. Subsequently, several cities have followed the Rajkot experience.

Hyderabad

A recent case includes city of Hyderabad which out sourced three fourth of the city area for street sweeping in 2004-5 and the expenditure on this area was similar to the expenditure on 25% area served by GHMC(Greater Hyderabad Municipal Corporation) directly (HSMI-2006). This approach provided 50% saving in expenditure and enabled GHMC to start innovative projects, systematic campaign on public awareness on sanitation, night sweeping and developmental litter free areas.

Bengaluru

Another important area is the practice of Bulk Service Providers (BSP) in Bengaluru. The city of Bengaluru has empanelled BSPs to collect waste from domestic bulk generators (>50 dwelling units, commercial establishments, hotels, cinema halls, eateries, shopping malls and academic institution colleges etc.). They are bound to either process the waste or use BSP's. These BSP's collect and segregate solid waste and recover cost from fee paid by bulk producers. (Pandey: 2016)

Divestiture / BOOT / BOO Projects

Divestiture is used as another tool to involve private sector to deliver SWM as per specific standards. It brings investments as resources are mobilized by private sector. Some important cases from Bangaluru, Anand and Hyderabad are given in box-2

Box 2: Divestiture for Sanitation

(1) Bruhat Bengaluru Mahanagara Palike (BBMP): BBMP has involved private sector to process kitchen waste through bio-methanisation plant (5 tons capacity). The plant is operated by IKOs Environment Private Limited (IEPL) on management contract basis covering OT (Operate and Transfer) system of PSP. The plant is given on a 5 years contract @ Rs. 2.3 million per annum. The capital cost of Rs. 7 million is born by BBMP.

BBMP is getting power for 25 street Lights in the city and manure generated from the plant. (There are 3 other bio-methanisation units operating on similar pattern). It was told that BBMP is saving 50% potential costs in this O & M contract (involving private sector).

(2) Anand Municipal body: Anand Municipal Body in Gujarat has identified a private operator to collect kitchen waste from bulk generators who are paid by contractor @ Rs. 0.90 per kg of kitchen waste. Nearly 300 academic institutions and 100 commercial establishments in the city are using this facility. City Government is benefitting from service without spending any money.

(3) Greater Hyderabad Municipal Corporation (GHMC): GHMC has assigned scientific treatment to Ramkey Infrastructure on BOT basis to process the solid waste of entire city. The plant is generating manure and fuel. It is developed on DBOT (Design Build and Operate) basis. The project cost (Rs. 770 crore or Rs 7.7 billion) is mobilized by the concessionaire who is paid a sum of Rs. 58 crore per annum towards O & M.

(4) BBMP: BBMP has assigned construction and processing of coconut waste through briquetting plant to CIPL Resurge Pvt Ltd. The plant is operating since November 2015 and generating solid/carbon neutral fuel being used by farma industry. The plant is given on BOT basis for 5 years. CIPL has made investment of Rs. 7 million in the plant and is expected to recover capital cost and o& m through sale of products.

CONVERGENCE AND SYNERGY

Other government programmes and schemes also cover financing of sanitation in some way or other. It is noted that:

(1) Flagship programme of MNAREGA included roads/drainage, revival of tanks/lakes as part of activity under the scheme in rural areas.

(2) Pradhan mantri Awas Yojana (PMAY) aims to provide housing for all including on-plot sanitation (toilet) to low income households.

(3) Smart city mission, Atal Mission for Rejuvenation and Urban transformation etc. also aims to improve solid and liquid waste management at pan city level.

These types of initiatives need to be understood and incorporated in the overall plan for financing the

sanitation.

ROADMAP FOR FINANCING SANITATION IN INDIA

Intergovernmental focus in India has a common commitment to ensure availability and sustainable management of sanitation for all. We are also committed to address open defecation and adequate & equitable sanitations and hygiene for all. In this regard, governmental resources need to be used to stimulate non-budgetary resources to have optimum synergy and convergence. Following actions seem inevitable to improve financing the sanitation in India:

1. National economy has potential to finance improved

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sanitation.

2. Liquidity of Govt funds is critical and needs to be maintained through Cess, Fund and innovative budgeting (Benchmarking and P-budget)

3. At the same time, self-financing potential of individual components of sanitation projects should also be fully utilized across the country. As applied in the frontline cities such as Pune, Bangaluru, Ahmedabad, Bhubaneswar, Hyderabad etc. this may include (a) cash from the trash (waste to energy, carbon credit), (b) differential pricing, (c) advance connection charges and (d) community contribution (labour and management responsibility).

4. Local government funding requirements should also be viewed in the local and regional context to maintain economies of scale for administrative, physical and functional identity of settlements. Institutions like NCR Planning Board should pool together projects for inter local body cooperation and may remise funds through bonds or involve private sector on DBO, BOO, BOOT basis. Institutional options for Financing such as SPV as applied in Ahmedabad should be used to expand outreach and provide liquidity as well as to have economies of scale in a regional context.

5. External assistance is decisive and should be used sparingly for Technology Transfer, demonstration and pilot projects. Public finance should be used to stimulate external funding and help local bodies or SPVs to provide partial contribution.

6. Special focus needs to be given on non-budgetary domestic resources. These include Private Sector Partnerships PSP covering Divestiture and Contracting out, Community resources and Corporate Social Responsibility (CSR)

7. Capacity building should also be covered in the financing and may include research, training, system development and handholding of stakeholders including NGOs and CBOs involved in triggering for change of mindset and perception.

8. Financing should be taken up in a mission mode giving priority to ODF (Open Defecation Free) status and appropriate low cost, environment friendly, pro-poor technology for waste disposal.

9. Mutual sharing of experience and learning should be included through periodic seminars, conferences, meets, study visits and exhibitions. These events could be self financing with the use of contribution from various stakeholders.

10. As ODF status is being achieved by local bodies, financing for second generation agenda of waste disposal should be taken up in a phased manner.

Finally, it appears that India need to give special attention on non budgetary sources of financing to improve sanitation. Multiple sources of funds need to be identified and used to meet colossal requirements of funds to promote improved sanitation in urban and rural area. At the same time the huge requirements of funds should be converted into effective demand. Accordingly outreach of financing should also be expanded to facilitate demand at the level of individual beneficiaries and respective local governments.

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