POLICY BRIEF

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Swachh Bharat Mission (Urban) Towards Cleaning India: A Policy Perspective

The United Nations' Sustainable Development Goals have emphasized on the achievement of universal and equitable access to safe and affordable drinking water and adequate and equitable sanitation and hygiene for all[1] (Box 1). India has been able to achieve the Millennium Development Goals (MDGs) in the water sector, but it has been lagging in the sanitation sector. According to the recently launched Joint Monitoring Programme (JMP)[2] update (2015), about 564 million people practice open defecation in India out of 946 million open defecators of the world. As of 2015, about 10 percent of urban population of 419 million resort to open defecation (OD) in India.[3] As India becomes more urbanized, issues of discharge of sewage will increase. By the year 2050, the number of people living in Indian cities is expected to be about 840 million. In order to accommodate this ever increasing

BOX 1: SUSTAINABLE DEVELOPMENT GOAL–6

WATER AND SANITATION

- By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- Support and strengthen the participation of local communities in improving water and sanitation management

[1] United Nations SDGs (http://www.un.org/sustainabledevelopment/water-and-sanitation/)

[2] WHO-UNICEF Joint Monitoring Programme Update 2015

[3] www.wssinfo.org/fileadmin/user_upload/resources/India.xls last accessed on 4.8.15

urbanization, India needs to explore smarter and sustainable ways of improving the quality of life. In comparison to rural sanitation, fewer programmes have been enacted to tackle deficiencies in urban sanitation. This policy brief outlines various policies and programmes in the urban sanitation sector in India and the gaps which need to be addressed. This includes a discussion on the Swachh Bharat Mission (urban). As we decentralize services to the Urban Local Bodies, we need to create appropriate institutions at the local level that are responsible, accountable, and capable of providing quality services. A number of reform measures also need to be undertaken in this sector.

Introduction

The 2011 Indian census[4] shows that one in six Indians lives in an urban slum and the urban household toilet coverage stands at 87.4 per cent. The State wise urban household toilets coverage is shown in Figure 1. The problem of open defecation is bigger in smaller cities (population below 100,000), with open defecation rate around 22 per cent.

The Government of India has allocated ₹7060 Crore (USD 1.2 billion) for Smart Cities in the fiscal budget of 2014–15. As India plans Smart Cities, it is imperative to have a framework to deal with urbanization issues focussing on—Social equitability, Economic viability, and Environmental sustainability.[5]

The Prime Minister of India gave the wake-up call to the nation on August 15, 2014, by announcing the Swachh Bharat Abhiyan and by making a call to make India open defecation free by October 2, 2019, the 150th birth anniversary of Mahatma Gandhi, as a tribute to the 'Father of the Nation'. This strong political will has been able to garner support in favour of the Water and Sanitation sector from the Central and State Governments, the public sector, corporations, NGOs, academic institutes, Civil Society Organizations, and student communities. The mission aims at complete elimination of open defecation, constructing public and community toilets, maintenance of toilets, municipal solid waste management, cleaning of roads and pavements and most important of all, changing the mind-set of the people and encouraging them to be conscious of cleanliness. The objectives of SBM (Urban) are presented in Box 2.

An Overview of Urban Water & Sanitation status in India compared to other countries

According to the JMP Update 2015, India is categorized under 'moderate progress' (Figure 2) with regard to coverage of sanitation facilities as the progress from 1990 to 2015 is 25 % to 56 % of the population. In 1990, about 29 % of urban population in India defecated in open, and in 2015, 10 % still continue this practice (Figure 3). The proportion of population (both urban and rural

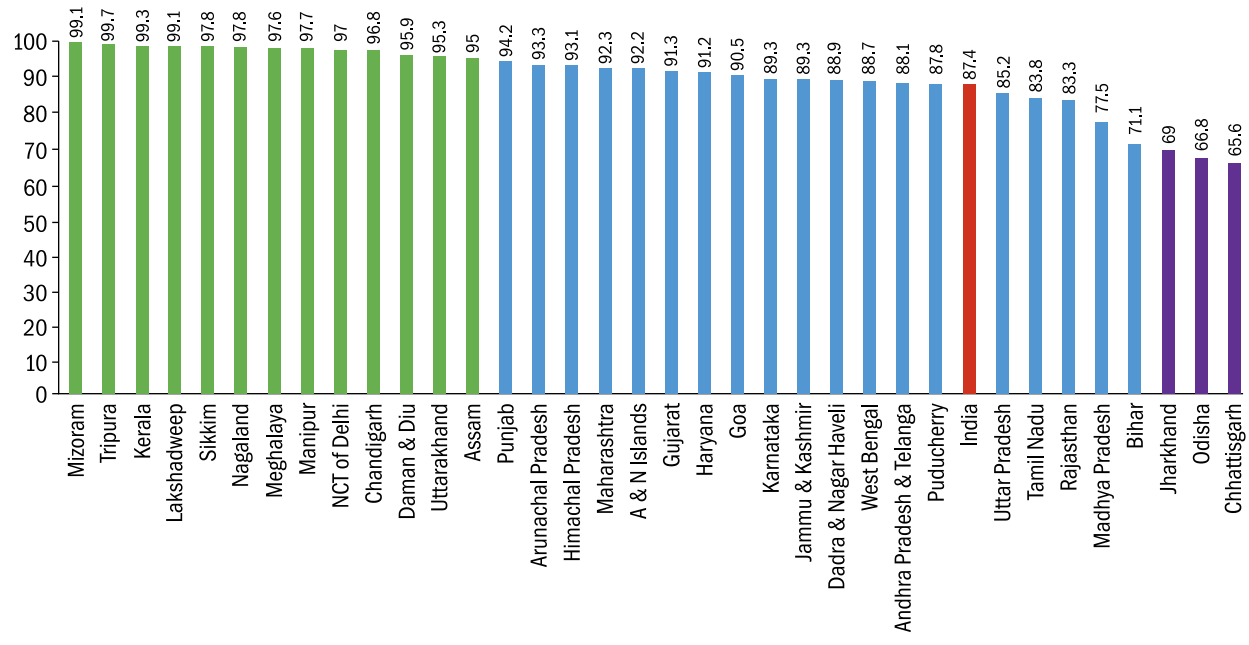

Figure 1: State-wise percentage of urban household toilet coverage[6]

[4] Census of India 2011
[5] PwC India: The Smart City Perspective, July 2014.
[6] Census of India 2011

BOX 2: OBJECTIVES OF SWACHH BHARAT MISSION (URBAN)[7]

WATER AND SANITATION

- Eliminate open defecation
- Eradication of manual scavenging
- Modern and Scientific Municipal Solid Waste Management
- To effect behavioral change regarding healthy sanitation practices
- Generate awareness about sanitation and its linkages with public health
- Capacity Augmentation for ULBs
- To create an enabling environment for private sector participation in Capex (capital expenditure) and Opex (operation and maintenance)

combined) that gained access to sanitation facilities, since 1990, has moderately improved to 28 per cent. In the drinking water sector, 97 per cent of urban households in India have access to 'improved' water supply facilities as compared to 89 per cent in 1990. India is one of the 147 countries in the world which has met the MDG target for the drinking water supply. A closer look at the Progress Report indicates that, as of 2015, only 54 per cent of the urban households have access to 'piped water supply in household premises' and the proportion of population (both urban and rural combined) by the year 2015 that gained access, since 1990, has significantly improved to 46 per cent (Figure 3).

An overview of Urban Water and Sanitation Sector in India

As per the Constitution of India, water supply is the responsibility of the State Governments. The States have generally delegated powers to the urban local bodies (ULBs) for provision of these services to people at the city level. The first central level efforts to provide drinking water in cities and towns were undertaken through Integrated Development for Small and Medium Towns (IDSMT) (1979) and Accelerated Urban Water Supply Programme (AUWSP, 1992). The Integrated Low-Cost Sanitation Scheme (1980) provided subsidies for households to purchase low-cost toilets. The National Slum Development Project and its replacement programme, the Valmiki Ambedkar Awas Yojana (VAMBAY) launched in 2001, aimed to construct community toilets for the slum population.

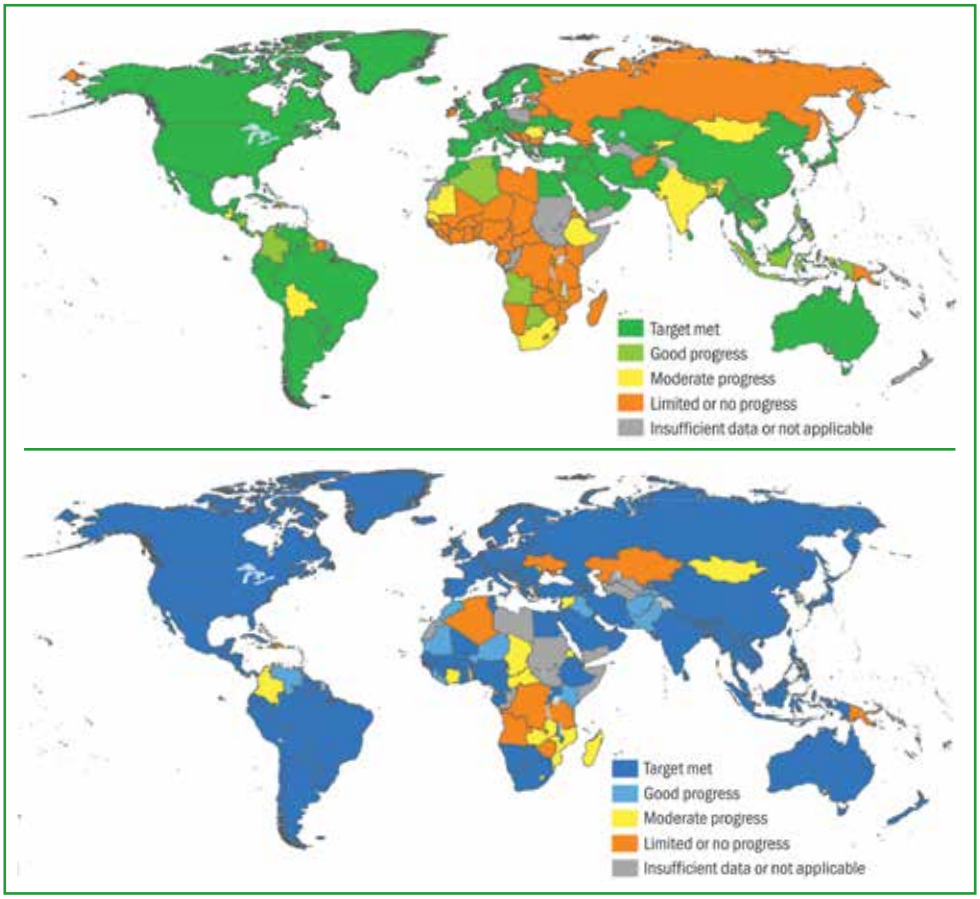

Figure 2: MDG target achievement for sanitation (a) and drinking water (b)
Source: JMP Update 2015

[7] Swachh Bharat Mission. Details available at http://moud.gov.in/swachchbharat, last accessed on Jan 20, 2016

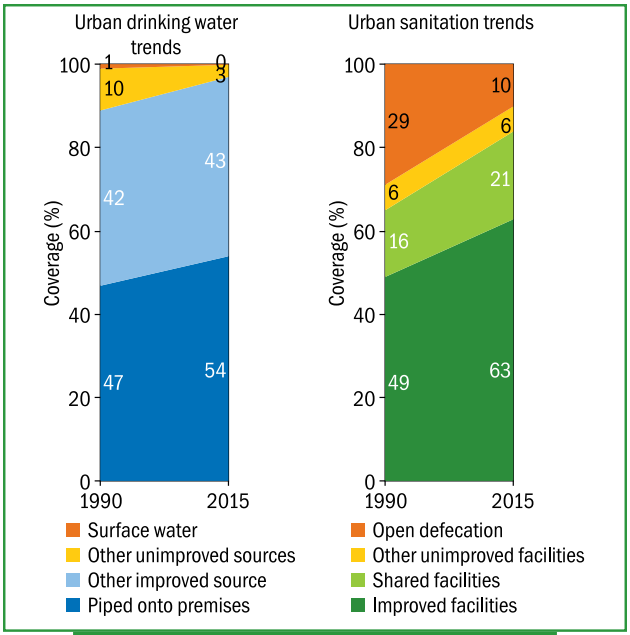

Figure 3: Trend of Urban Water and Sanitation in India
Source: JMP 2015

In 2005, an Inter-Ministerial Task Force on universal sanitation in urban areas was constituted to frame the national policy to mobilize governments and civil society to create community-driven *Nirmal Shahar (Clean Cities)*, or totally sanitized cities and towns. The landmark shift in urban sector reforms however, came with the Jawaharlal Nehru National Urban Renewal Mission (JnNURM)[8,9] (2005) and the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) (2005) which provided the much needed focus on urban areas particularly for infrastructure provision as well as targeting the neglected urban poor through the sub-mission 'Basic Services for Urban Poor' (BSUP). JnNURM and UIDSSMT started the urban reform process at a National level. Sewerage and sanitation was also covered under the JnNURM. The projects eligible for JnNURM assistance included water supply (including desalination plants), sewerage and solid waste management covering 63 identified cities.

Another significant step in urban sanitation was the launch of National Urban Sanitation Policy (NUSP). The NUSP called for a paradigm shift in its approach from infrastructure development to behavioural change. The policy put forward a framework for City Sanitation Plans (CSP) to address the core principles, viz. institutional roles and responsibilities; awareness generation for changing mindsets; city-wide approach; technology choices; reaching out to the unserved and poor; client focus and generation of demand; and sustained improvements.

In 2010, the *Nirmal Shahar Puraskar* (Clean City Award), designed along the lines of the *Nirmal Gram Puraskar* (Clean Village Award), was launched to honour cities that achieve total sanitation, including Open Defecation-Free (ODF) status and 100 per cent safe waste disposal. Around 423 cities were rated in terms of their achievements[10] and processes, concerning sanitation, in an effort by the Ministry of Urban Development with the assistance of several multilateral and bilateral donors. About 40 per cent of the cities were in the 'red category' (in need of immediate remedial action), more than 50 per cent were in the 'black category' (needing considerable improvement), and only a handful of cities were in the 'blue category' (recovering). The rating served as a baseline to prioritize actions.

By 2012, 29 out of 35 states and the Union Territories were preparing state sanitation plans, and 158 cities were developing city sanitation plans.[11] Service level benchmarking of urban services has been piloted and scaled up to more than 1,756 cities. A shift in focus from infrastructure centred to service delivery centred approach has also been seen.[12] Despite these positive plans, many stakeholders noted that the NUSP has fallen short of driving investment into municipal-level plans to enable their execution. More guidance and funding are needed to ensure consistency and quality of state- and city-level sanitation reform.[13]

The Swachh Bharat Mission is one of the biggest ever drives to accelerate efforts towards eliminating open defecation, achieving universal sanitation coverage and improving cleanliness by October 2, 2019. It has two Sub-Missions, the Swachh Bharat Mission (Gramin) and the Swachh Bharat Mission (Urban), with an investment of ₹62,010 Crore (appx. USD 10 billion) for the SBM (Urban). Figure 4 represents these initiatives chronologically. The SBM (Urban) Guidelines[14] are a good initiative and an improvement on the earlier initiatives. The priority

[8] Annual Report 2011, Ministry of Urban Development, Government of India, http://jnnurm.nic.in/, last accessed on March 29, 2015.
[9] Ministry of Urban Development (MoUD), Government of India and World Bank. 2012.
[10] Strategic Plan of MoUD for 2011-2016 (Details available at www.performance.gov.in/sites/default/files/document/strategy/UD.pdf, last accessed on Dec 20, 2016)
[11] Squatting Rights: Access to Toilets in India, September 2012
[12] Enhanced Quality of Life, India Country Paper, SACOSAN –IV, 2011
[13] India Urban Sanitation and Toilet Challenge, Elledge & McClatchey , September 2013, Research Brief, RTI Press
[14] SBM Guidelines. Details available at https://swachhbharaturban.gov.in/writereaddata/SBM_Guideline.pdf, last accessed on Dec 20, 2015.

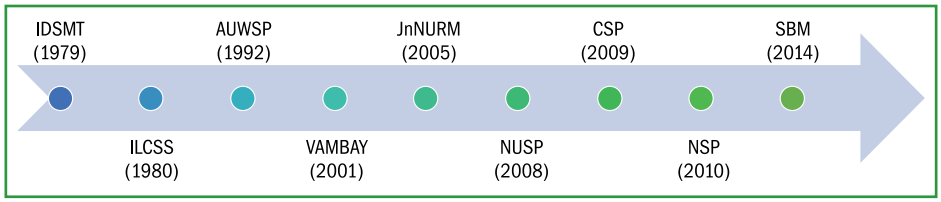

Figure 4: Central government sponsored schemes in water and sanitation (Urban)

accorded in SBM to get the States to try new toilet technologies, behavioural change campaigns and greater public awareness are major initiatives taken up by Ministry of Urban Development (MoUD).

The MoUD has recently published the Swachh Bharat rankings of 476[15] Class I cities on the basis of the survey conducted during 2014–15. The cities with a population of above 1 lakh were surveyed for assessing total sanitation practices covering a set of parameters including the extent of open defecation, solid waste management, septage management, waste water treatment, drinking water quality, surface water quality of water bodies, and mortality due to water-borne diseases, etc., and they have been ranked on the basis of scores against each of these parameters.

The other important initiatives in urban sanitation are Atal Mission for Rejuvenation and Urban Transformation (AMRUT)[16] and Smart City which are intricately linked with SBM. The AMRUT makes States equal partners in planning and implementation of projects, thus actualizing the spirit of cooperative federalism.

One of the latest initiatives of MoUD has been the Swachh Survekshan-2016, wherein 73 cities with population over 10 lakh have been ranked on cleanliness and sanitation. This included 22 state capitals. The objective of the survey was to measure the sanitation scenario in the selected cities and efforts made to improve sanitation through necessary strategies and to promote a spirit of healthy competition among cities. This is meant to help the cities know where they stand in absolute terms and in relation to others besides what more needs to be done by each city to ensure sanitation.

Swachh Survekshan[17]-2016 is more holistic, participatory, evidence based, purposeful and meaningful for future guidance and evolving course of action. Based on the survey, Mysuru has topped the list of cleanest cities this year, followed by Chandigarh and Tiruchiraplli. Dhanbad has been ranked the worst among the surveyed cities. This has been a very progressive step towards impact assessment of SBM in terms of enhanced efforts to improve sanitation, reorientation of attitudes of urban local bodies and citizens and improvement on ground.

Corporate Social Responsibility: A boon to the WASH sector in India

Private sectors play a major role in community development in India. The Corporate Social Responsibility (CSR) Act[18] mandates industries to spend 2 per cent of their annual average net profits of the preceding three years on community development. The Government has set up the *Swachh Bharat Kosh* (SBK) so that big and small corporations provide help to the mission by donating funds in the form of their CSR and also to attract funds from individual volunteers. Many private and public companies have supported the Swachh Bharat Mission and have already started implementing it. Some of the leading organizations that have supported and contributed to this great cleanliness drive are:[19] Oil and Natural Gas Commission (ONGC), Coal India Limited (CIL), Steel Authority of India Limited (SAIL), Indian Oil Corporation Limited (IOCL), Coca Cola, Larsen & Toubro (L&T), Hindustan Unilever Limited (HUL), Lifebuoy, Nestle, Dabur, Britannia, etc. Many more are committed to operate and grow its business in a socially responsible way. Their vision is to reduce negative impacts of their operation on the environment and increasing positive social impacts along with business growth. Some of the interventions undertaken by these corporate organizations are:

[15] Ranking of Class I cities. Details available at http://pib.nic.in/newsite/PrintRelease.aspx?relid=124639, last accessed on December 20, 2015.

[16] AMRUT Mission Statement and Guidelines, June, 2015

[17] Swachh Survekshan-2016 (Details available at http://pib.nic.in/newsite/PrintRelease.aspx?relid=136425, last accessed on Feb 16, 2016)

[18] CSR Act. Details available at http://www.mca.gov.in/Ministry/pdf/General_Circular_8-2015.pdf, last accessed on November 10, 2015.

[19] CSR Intiatives of Corporate. Details available at http://www.mapsofindia.com/my-india/society/swachh-bharat-abhiyan-corporates-and-csr-play-a-decisive-role,last accessed on November 10, 2015.

TABLE 1: CORPORATE ENGAGEMENT IN WASH INITIATIVES IN INDIA: AN ILLUSTRATIVE LIST

Brands	Description
ONGC	Construction of toilets in 2,500 Government schools in 26 districts spread over 13 States, along with other sanitation related initiatives, during the current financial year.
Infosys	Sanitation awareness programmes, toilet construction in Karnataka and Maharashtra.
Coal India Ltd	The company has pledged of ₹100 crore for toilet construction in schools and communities/villages, behavioural change, etc.
L&T	Larsen & Toubro announced that it will build 5,000 toilets in various parts of the country and will also invest in other initiatives like water supply, healthcare, and skill training institutes, providing toilets in schools, and inculcating hygiene practices.
Reliance Industries	Reliance Industries has joined hands with Sulabh International in taking measures to curb open defecation, building infrastructure, and taking up other sanitation initiatives.
CII	The Confederation of Indian Industry (CII) is actively participating in Clean India campaign and has promised to provide sanitation facilities in schools. It has started construction of 10,000 toilets by 2015–16.
Coca-Cola India	The company through its 'Support My School' programme emphasizes on sanitation for girls in schools and access to clean drinking water.

- Provision of Safe Drinking Water to urban and peri-urban locations,
- Construction of individual improved household toilets
- Construction of community toilets
- Solid-liquid waste management
- IEC and awareness generation activities in the urban WASH sector
- Other interventions in the WASH sector

Many of the corporations are primarily focussed on WASH interventions in the rural areas, while some (as mentioned in Table 1) are working in both urban as well as rural areas.

Gap Analysis of Sanitation Policies and Programmes

Public policy on basic urban services in India has traditionally focused more on water supply. While some progress has been made in terms of sanitation coverage, services are generally of poor quality and are unsustainable to the extent that it relies heavily on government subsidies for both operation and maintenance costs, and for capital costs. Poor managerial and financial autonomy, limited accountability, weak cost recovery, perverse incentives, and limited capacity have led to poor services across the country.[20] As we decentralize services to the ULBs, we need to create appropriate institutions at the local level that are responsible, efficient, and accountable, and are capable of providing quality services. A number of reform measures are needed to be undertaken in this sector.

Lack of adequate capacity, especially at the municipal levels, has reduced the pace of projects and adversely affected the implementation of the programme in many ways. Apart from this, JNNURM had a conditional funding policy, based on reforms, due to which the new projects funded under JNNURM could not be designed to improve service levels (Table 2) rapidly and hence, not enough benefit could be passed on to the final consumers or beneficiaries of the services. This could have been avoided if rigorous city development plans were made and the shelf life of the projects identified.[21]

TABLE 2: BENCHMARKS AT A GLANCE [22]

Sl. No.	Proposed Indictor	Benchmark
I. Water Supply Sector		
1	Coverage of water supply connections	100 %
2	Per capita supply of water	135 lpcd
3	Extent of metering of water connections	100%
4	Extent of non-revenue water (NRW)	20%
5	Continuity of water supply	24 hours
6	Quality of water supplied	100%
7	Efficiency of redressal of customer complaints	80%
8	Cost recovery in water supply services	100%
9	Efficiency in collection of water supply-related charges	90%
II. Sewerage Management (Sewerage and Sanitation)		
1	Coverage of toilets	100%
2	Coverage of sewage network services	100%
3	Collection efficiency of the sewage network	100%
4	Adequate sewage treatment capacity	100%
5	Quality of sewage treatment	100%
6	Extent of reuse and recycle of sewage	20%
7	Efficiency of redressal of customer complaints	80%
8	Extent of cost recovery in sewage management	100%
9	Efficiency in collection of sewage charges	90%
III. Solid Waste Management		
1	Household level coverage of solid waste management services	100%
2	Efficiency of collection of municipal solid waste	100%
3	Efficiency of segregation of municipal solid waste	100%
4	Extent of municipal solid waste recovered	80 %
5	Extent of scientific disposal of municipal solid waste	100%
6	Efficiency of redressal of customer complaints	80%
7	Extent of cost recovery in SWM services	100%
8	Efficiency in collection of SWM charges	90%

[20] Ministry of Urban Development (MoUD), Government of India and World Bank. 2012.

[21] Impact of JnNURM and Road Ahead, Abhay Kantak, CRISIL Risk and Infrastructure Solutions, November 30, 2010.

[22] Handbook of Service Level Benchmarks, MoUD, GOI

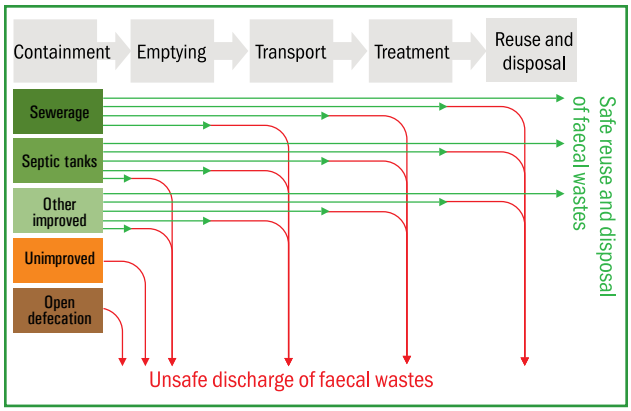

Figure 5: Faecal waste management framework
Source: JMP Update 2015

Various field studies on poor toilet usage have pointed towards lack of awareness of the importance of sanitation and hygiene and their impacts on health. Lack of water access in sanitation facilities, poor construction standard of government-built toilets are also important reasons for non-usage of toilets. Triggering behavioural change to ensure usage as well as proper operation and maintenance of facilities is critical. The sectoral mind-set needs to change from a singular focus on asset creation towards issues of equity, quality of service delivery, and sustainability. Besides all the constrains mentioned above, the issue of effective sanitation coverage for slum population in urban India is particularly difficult as it is often linked to the tenure status of settlements (authorized vs. unauthorized; legal vs. illegal) and a large floating population. The investments in sanitation infrastructure are often problematic with the poor and marginalized population being side-lined in the planning and decision-making process.

Another important aspect is safe management of faecal waste. This comprises several stages along the 'faecal waste management chain', from containment through emptying, transport, treatment, and reuse or disposal. A new Global Integrated Monitoring Initiative is being developed to monitor elements of sustainable water and sanitation management that were not previously covered under MDG monitoring. In the example shown in Figure 5, green arrows represent safe flows, while red arrows indicate unsafe discharges to the environment. Reliable data are scarce, but it is estimated that the majority of faecal wastes in India are currently discharged unsafely into the environment as shown in Figure 6. The urban infrastructure requirement for the period 2012-31 for sewerage is estimated at ₹242688 Crores.[23]

Solid Waste Management

As per CPCB report of 2012-13, about 1,33,760 metric tonnes of municipal solid waste (MSW) is generated daily. Out of this, only 91,152 tonnes per day (TPD) waste is collected and 25,884 TPD treated. The CPCB Annual Report 2013 reveals that only 68% of the MSW generated in the country is collected of which, 28% is treated by the

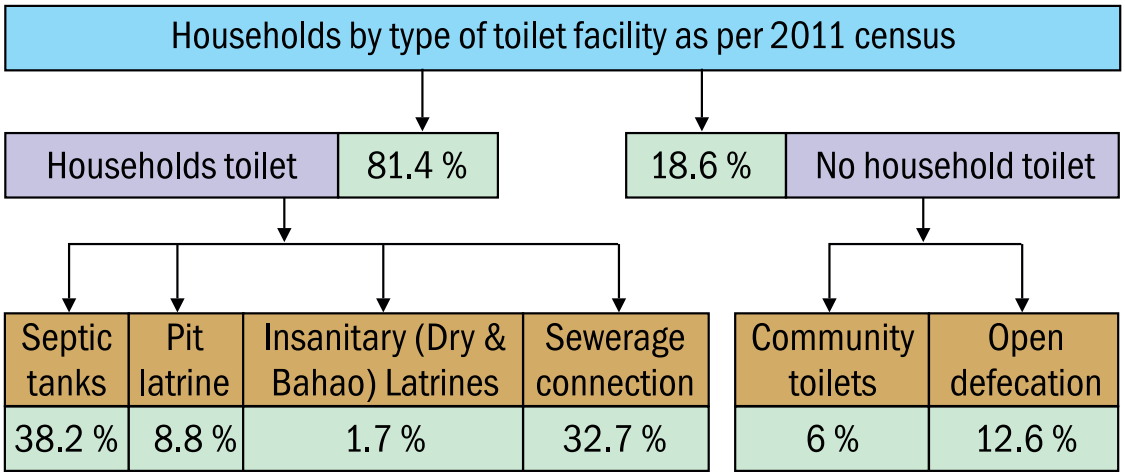

Figure 6: Status of toilets in Urban households in India[24]
Source: MoUD-CPHEEO Manual of Sewerage and Sewage Treatment Systems – Part A

[23] High Powered Expert Committee (HPEC) Report on Indian Urban Infrastructure and Services, 2011.
[24] MoUD-CPHEEO Manual of Sewerage and Sewage Treatment Systems-Part A, 2012

BOX 3: 24X7 WATER SUPPLY IN KARNATAKA

Pilot projects by Karnataka Urban Water Sector Improvement Project (KUWASIP) in three Municipal Corporations of Hubli-Dharwad, Belgaum, and Gulbarga in northern Karnataka, with a total population of around 2 million people have shown that a well-operated water supply system can deliver water supply 24 hours a day, seven days a week, in Indian cities, bringing an affordable, reliable service to urban households. This pilot study has also given interesting insights to the question: "To what extent is it possible for 24x7 water supply to be scaled up to the majority of Indian cities and towns?"

This project has also proved that it does not require additional water resources to keep the pipes full, and that households, even poor households, are willing to pay a fair tariff for a consistently acceptable service. This has been achieved with a 10 percent reduction in overall water consumed, whilst increasing the revenue billed by a factor of five, and increasing the revenue collected by a factor of almost seven.

An intense social interaction and communications campaign provided continuous information as well as established an enabling environment by addressing stakeholders concerns relating to metering, volumetric tariffs, and clarifying the role of a private operator.

An additional element of the KUWASIP project relates to sector reform and the establishment of a State Urban Water Council with responsibility for performance monitoring and economic regulation of prices. In response to the success of the demonstration projects, Government of Karnataka has committed ₹735 crore (US$163 million) to achieve full 24x7supply for the three cities in the demonstration project.

This project has also shown that in the context of long-term capital investment, it is affordable. Based on the savings in operational expenditure, increase in revenues, and improved health benefits, the payback period on the capital maintenance investments is just two and-a-half years. So 24x7 water is possible but it requires commitment at all levels and over the long term. An indirect economic value gained by the consumers is the increase in the property value ranging between 40–60 percent for the properties located in the demonstration zones when compared to the value in the adjacent localities.

municipal authorities. Thus, merely 19% of the total waste generated is currently treated. The remaining waste is disposed at dump sites / landfill sites untreated.

The High Powered Expert Committee (HPEC) for Estimating the Investment Requirements for Urban Infrastructure Services, 2011 noted that although the generation of solid waste is at much lower rates than that in most countries, the management and disposal of solid waste generated in Indian cities leave a great deal to be desired. The distribution of the expenditure is heavily loaded in favour of collection and transportation, and little attention is paid to processing and scientific disposal of the waste. The committee estimated ₹48,000 crore of investment for solid waste management over a period of twenty years (2012-2031).

Gap Analysis of Urban Water Supply Policies and Programmes

A number of national and state programmes have been launched in India to increase 'access' to water supply services (WSS) 'infrastructure', including the centrally supported Accelerated Urban WSS Program and JnNURM, the UIDSSMT, and the Service Level Benchmarks (SLBs). These programmes are still work-in-progress with initiatives yet to be taken up by the states for improving reliability, sustainability, and affordability of service delivery. The urban infrastructure investment requirement for the period 2012-31 for water supply projects is ₹320908 Crores.[25]

While these programmes have helped in increasing access to improved water sources for more than 90 per cent of the urban population, and increasing access to basic sanitation for more than 60 per cent of the population, the sector now has to address the twin challenges of universal coverage and improved quality, reliability and sustainability of services. Not only piped water coverage has to increase, but also specific programmes are required to address the sector challenges for improving services from 3–4 hours of water supply to 24×7 sustainable and safe water supply, reducing non-revenue water (NRW) estimated between 40–70 per cent on account of leakages, unauthorized connections, billing and collection inefficiencies, as well as addressing issues related to inadequate operations and maintenance. A case study of Karnataka Urban Water Sector Improvement Project is depicted in Box 3.[26]

The main challenge is to motivate states to move away from the typical 'infrastructure targeted programmes', to 'developing and implementing programmes' dedicated for improving water and sanitation services. Simply focusing on increasing 'access' and creating infrastructure, without addressing management of service may not lead to sustainable services.

The JnNURM which subsumed AUWSP has been focusing upon basic services. UIDSSMT which was a reform linked programme for small and medium towns gave a lot of emphasis on water supply and sanitation projects. However, there have been several shortcomings in the JnNURM which also affected water supply projects.

As popular expectations increase across India over the coming years, the water sector will be hit by two forces, both of which will make the current situation untenable;

a) Demand for improved WSS service quality – which will need investments in new institutions, human capacity, and assets, and

[25] High Powered Expert Committee (HPEC) Report on Indian Urban Infrastructure and Services, 2011.

[26] Field Note: 24 X 7 Water Supply is Achievable, Water and Sanitation Programme, The World Bank, 2010

b) Increasing demand on limited public funds for a wide range of social and economic development activities, which will only serve to reduce the funds available for financing the water sector.

Concluding Remarks

The Central government has been assisting the respective State governments for improving the coverage of water and sanitation facilities. These policies and programmes need to be analysed and appropriately adjusted to accommodate the needs of the poor. The intergovernmental transfer of funds between the Centre and the State and then from State to the ULBs should be made performance-based, which could be a strong driver for reforms of the sector. This would bring in accountability into the sector. At the same time, the ULBs should be encouraged to raise funds through tariffs in order to sustain infrastructure and assume greater responsibilities for service delivery.

The current focus of the Central government is on service delivery and sustainability of services. There is an urgent need to develop institutional and regulatory capacity of the sector by clearly defining the role of various actors at the State and local level in line with the decentralization mandate of the 74th Amendment of the Constitution of India. The State's Public Health Engineering Departments should be supported towards greater autonomy, accountability, and financial sustainability. Autonomy of ULBs and ring-fencing them for better understanding of cost, revenue, and subsidy.Strengthening their human resource capacity would bring about improved service delivery in the sector. There is a need to move away from the traditional engineering driven approach, to a participative approach with an amalgamation of social and environmental, professional, and technical skills. Urban sanitation improvement is dependent to a large extent on government intervention and investment in city-wide infrastructure and involvement of slum-dwellers in large infrastructure projects in all stages from planning to implementation. Meeting the sanitation goals requires a wide range of measures, including consolidation of policy reforms, capacity building of the sector, participatory and demand–responsive approaches. The government on its part, should ensure that public funds are allocated principally to the promotion and stimulation of demand generation for sanitation. The overall recommendations for consideration of the Central Government are mentioned in Box 4.

BOX 4: RECOMMENDATIONS

- Investments in sewerage systems must match investments in water supply. In order to reduce net water demand, recycling and reuse of the waste water must be part of the water-sewage system planning.
- As of now, treatment of liquid waste is not covered under the SBM (Urban). Bringing sewage and septage management under the urban component of the Mission with pilot studies is recommended.
- Review all laws and rules on waste management for strict enforcement and waste management should be based on the polluter-pays principle. The charges for waste management may be collected along with property tax, water supply bills or electricity bills, as felt appropriate by the State governments/ULBs.
- Public-private partnership to be strengthened for managing the supply requirements as the supply-demand gap in production of sanitary ware and production materials is unmet and there exists a huge backlog.
- Appropriate institutional arrangements at State and local level to ensure community and civil society participation for planning and management of sanitation sector.
- Capacity building of communities, Self-Help Groups (SHGs), ULBs, CSOs, NGOs, in scaling up sanitation in the urban slums and peri-urban areas.
- Separate measures for operation and maintenance of community and public toilets.

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