

### **BACKGROUND NOTE**

# Infrastructure and Investments in Water and Sanitation in India

#### About the Author



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## Infrastructure and Investments in Water and Sanitation in India

This paper dwells on the infrastructure and investments made in the WASH sector in India towards achieving SDG-6. This is especially important today, given the special focus being accorded to sanitation and water for all in the country in recent years, buoyed by leadership from the top and people's participation from the grassroots.

#### **1. SDGs: The Global Context**

Member States of the United Nations adopted the 2030 agenda for sustainable development comprising 17 goals and 169 targets aimed at inclusive and sustainable development. The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, have been



#### Box 1: Universe of SDGs

envisioned as "a bold, universal agreement to end poverty in all its dimensions and craft an equal, just and secure world – for people, planet and prosperity by 2030". The SDGs and targets are a part of transforming our world. The 2030 Agenda for Sustainable Development, which was adopted by 193 Member States at the historic UN General Assembly Summit in September 2015, and came into effect on January 1, 2016, was developed through an unprecedented consultative process that brought national governments and millions of citizens from across the globe together to negotiate and adopt the ambitious agenda.

As agreed by the Open Working Group proposal for Sustainable Development Goals, "People are at the center of sustainable development and, in this

regard, Rio+20 promised to strive for a world that is just, equitable and inclusive, and committed to work together to promote sustained and inclusive economic growth, social development and environmental protection and thereby to benefit all, in particular the children of the world, youth and future generations of the world without distinction of any kind such as age, sex, disability, culture, race, ethnicity, origin, migratory status, religion, economic or other status (See Box 1)."

#### 1.1 SDG 6: Water and Sanitation for All

Water and sanitation are basic necessity, and important for sustaining life. Clean drinking water, hygiene, and sanitation play an important part in maintaining survival, health, growth and human development. Lack of adequate drinking water and sanitation can also impact health, food security, livelihoods and general wellbeing of people. Every year millions of people, especially children die

from diseases associated with lack of safe drinking water and sanitation. As estimated in reports published around the world, over 800 children under age five die every day from preventable diarrhea-related diseases caused by lack of access to water, sanitation and hygiene.

Realising the importance of water and sanitation the global community, has led to a dedicated SDG on water and sanitation – the SDG 6, which aims "to ensure availability and sustainable management of water and sanitation for all."

SDG 6 is connected to the targets of five other SDGs. The first connection exists with Target 1.4, which calls for ensuring that all men and women have access to basic services, including water and sanitation. Target 3.3 is about combating water borne diseases and Target 3.9 concerns the reduction of the number of deaths and illnesses from hazardous chemicals, and air, water, and soil pollution (see also Target 11.5). Access to safe and affordable drinking water is a precondition of sufficient nutrition (6.1 and 6.2). Target 12.4 approaches water issues from the perspective of the environmentally sound management of water resources, which aligns with Target 15.1 on the conservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems and their services.

From the interlinkages it is clear that access to sustainable sanitation and potable drinking water are central to achieving the SDGs as a whole. The SDG 6 is, thus, central to achieving most of the other goals as water and sanitation have important bearings on various aspects of sustainable human development.

#### 1.2 SDGs in Indian Context<sup>1</sup>

Mahatma Gandhi had once said, "One must care about the world one will not see". This reflects India's deep commitment to sustainable development. India has played an important role in shaping the Sustainable Development Goals (SDGs). Therefore, it is no surprise that the country's national development goals are mirrored in the SDGs. The Prime Minister's statement at the UN summit for the adoption of Post-2015 development agenda clearly sets the context for SDGs in India. He said:

Today, much of India's development agenda is mirrored in the Sustainable Development Goals. Sustainable development of one-sixth of humanity will be of great consequence to the world and our beautiful planet. It will be a world of fewer challenges and greater hope; and, more confident of its success.

*We are focusing on the basics: housing, power, water and sanitation for all – important not just for welfare, but also human dignity. These are goals with a definite date, not just a mirage of hope.* 

The thoughts of the Mahatma and the Prime Minister of India provide the foundation for implementation of SDGs in India.

The expression "Sabka Saath Sabka Vikas," which translates as "Collective Effort, Inclusive Growth" and has been popularized by Prime Minister, Shri Narendra Modi. This forms the cornerstone of India's national development agenda. To fast track this agenda, the NITI Aayog has just released a draft Three-Year Action Agenda covering years 2017-18 to 2019-20. In parallel, work is in advanced stages on a 15-year Vision, which will also include a 7-year Strategy. Reflecting the country's long-standing federal tradition, these documents are being prepared with active participation of the States (sub-national Governments).

Reflecting the country's commitment to the SDG agenda at the highest levels of Government, the Indian Parliament organized several fora, focusing on the elimination of poverty, gender equality, water and sanitation, climate change and resource mobilization for the SDGs.

For implementing the SDG agenda, the Government of India has launched several ambitious programmes which are considered the world's largest development initiatives towards attaining SDG goals. Further, special efforts have been made to invigorate the federal governance structure of the country through cooperative and competitive federalism. State Governments are playing a prominent role in advancing the national development agenda. The recommendations made by three sub-groups of Chief Ministers of States on various themes, including the Swachh Bharat Mission (Clean India Movement), have contributed towards shaping relevant policy decisions at the national-level.

The responsibility for overseeing SDG implementation has been assigned to the National Institution for Transforming India (NITI Aayog), which is the premier policy think tank of the Government and is chaired by the Prime Minister of India. NITI Aayog has mapped the goals and targets to various nodal ministries as well as flagship programmes. State Governments are also engaged in developing roadmaps for achieving the SDGs with several of them having already published their plans. Draft indicators for tracking the SDGs have been developed and placed in the public domain by the Ministry of Statistics and Programme Implementation for wider consultation.

While all the SDG Goals have been prioritized by Government of India, there is an unprecedented focus on SDG 6.

#### 2. India's March Towards SDG-6<sup>2</sup>

India, through the launch of Swachh Bharat Mission (SBM) and National Rural Drinking Water Program (NRDWP), has demonstrated its resolve to improve the quality of life for its 1.2 billion citizens and laid the foundation for a future that will impact its people for generations to come. India is moving steadily towards achieving the SDGs through its renewed focus on providing sustainable water and sanitation services to all with well-defined timelines.

#### 2.1 Swachh Bharat Mission: India's Sanitation Revolution

The Prime Minister, in his inaugural Independence Day address on 15 August 2014, underlined the need for a clean India. He gave the clarion call for a Swachh Bharat – a mass movement that seeks to engage everyone in the task of cleaning their own homes, work places, villages, cities and surroundings, as a *jan andolan* (a people's movement). The Swachh Bharat Mission has captured the imagination of the Indian populace. This is being pursued as a primary development goal. The Government of India formally launched the Swachh Bharat Mission (SBM) on 2<sup>nd</sup> October 2014, with an aim to build an Open Defecation Free (ODF) India by 2<sup>nd</sup> October 2019, as a befitting tribute to Mahatma Gandhi on his 150<sup>th</sup> birth anniversary.

With an overall objective of clean villages in terms of safe sanitation and hygiene, the Swachh Bharat Mission considers waste as a resource and promotes Solid and Liquid Resource Management. SBM(G) also takes a holistic approach towards sanitation, focusing also on Menstrual Hygiene Management, grey and black water management, and general cleanliness as major focus areas towards a "Swachh" society.

#### 2.1.1 Implementation of the Swachh Bharat Mission

Swachh Bharat Mission is being implemented in a mission mode and in close coordination with States. Swachh Bharat Mission focuses on supporting communities to achieve open defecation free (ODF) status. It aims to achieve this through inclusive, sustainable and high quality sanitation and hygiene behaviour change programmes at scale. States have been provided flexibility to ensure that have responsive strategies to support people realize access to sanitation services. The key objectives of the Mission include:

- Bring about an improvement in the general quality of life in the rural areas, by promoting cleanliness, hygiene and eliminating open defecation
- Accelerate sanitation coverage in rural areas to achieve the vision of Swachh Bharat by October 2019
- Motivate communities and Panchayati Raj Institutions to adopt sustainable sanitation practices and facilities through awareness creation and health education
- Encourage cost effective and appropriate technologies for ecologically safe and sustainable sanitation
- Develop, wherever required, community managed sanitation systems focusing on scientific Solid & Liquid Waste Management systems for overall cleanliness in the rural areas
- Create significant positive impact on gender and promote social inclusion by improving sanitation especially in marginalized communities

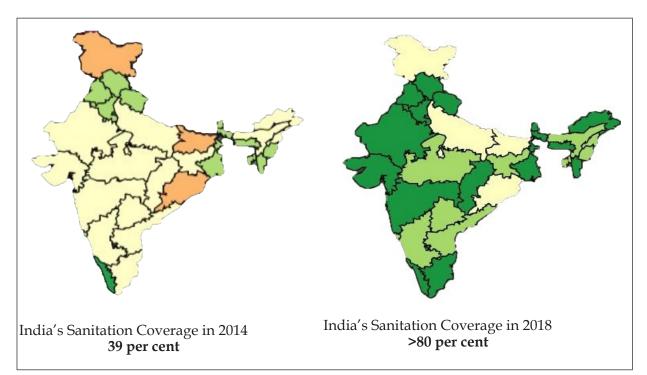
The Swachh Bharat Mission lays focus on providing flexibility to State governments to decide their own implementation policy, use of funds and mechanisms, taking into account State specific requirements. This is to enable States to develop an Implementation Framework that can utilize the provisions under the Mission effectively and maximize the impact of the interventions. The key elements of the Strategy include:

- Augmenting the institutional capacity of districts for undertaking intensive behaviour change activities at the grassroots level
- Strengthening the capacities of implementing agencies to roll out the programme in a timebound manner and to measure collective outcomes
- Incentivizing the performance of State-level institutions to implement behavioural change activities in communities

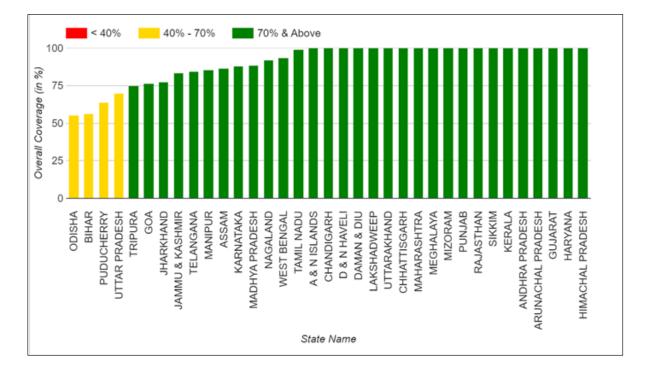
#### 2.1.2 Progress Made under the Swachh Bharat Mission

Under the Swachh Bharat Mission, historic changes are unfolding in the sanitation sector in India, unleashing a host of new opportunities to forge an open defecation free nation. A number of India's States are undertaking pioneering bold new initiatives to tackle the menace of open defecation, many of sector's long-standing challenges and are making great strides towards collective and inclusive sanitation and hygiene outcomes. Their successes are leading the country forward in the sector.

On a macro level, since the inception of the program, the rural sanitation coverage of India has more than doubled. On 2<sup>nd</sup> October 2014, the rural sanitation coverage stood at approximately 39 per cent while as of May 2018, it has increased to over 83 per cent (Figure 1 & 2). That is to say that the Mission has achieved more in three and a half years, as compared to the preceding 67 years since Independence!



#### Figure 1: Sanitation Coverage of India in 2014 and 2018

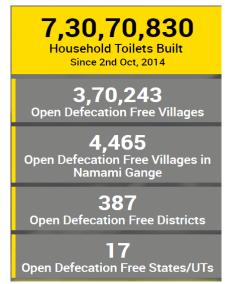


#### Figure 2: State's Coverage Status Individual Household Latrine (IHHL)

Over 72 million household toilets have been constructed under the Mission, and the number of people defecating in the open has reduced from 550 million in October 2014, to less than 200 million today. With 350 million people getting access to sanitation services in first three and half years alone, India's recent growth rate in sanitation and hygiene has been one of the most significant achievements of our times.

The country is also witnessing a landmark people's movement on cleaning India that is set to transform the nation into a cleaner, healthier, global powerhouse with a demographic dividend to power it forward on its developmental journey. As of May 2018, over half of the country, including 3.7 lakh villages, 387 districts and 17 States/ Union Territories of the country have declared themselves as free from open defecation. A recent survey conducted by an Independent Verification Agency across 90,000 households in over 6000 villages has found the rural toilet coverage to be 77 per cent (as of the survey period, December 2017-March

#### **Box 2: Achievements of Swachh Bharat Mission**



2018) and the usage of these toilets to be 93.4 per cent. Two independent surveys conducted in the past by the Quality Council of India in 2017, and National Sample Survey Organization in 2016, have pegged the usage of these toilets at 91 per cent and 95 per cent respectively.

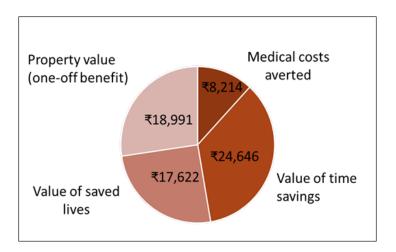
#### 2.1.3 Impact of SBM So Far

The Swachh Bharat Mission is not only bringing about improvements in the health and security of communities, but is also providing economic returns to households with access to a toilet.

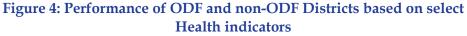
The World Bank had estimated in 2006 that inadequate access to sanitation cost India economic losses equivalent to 6.4 per cent of its GDP.<sup>3</sup> Nearly 40 per cent of India's children were estimated to be stunted, primarily because of lack of sanitation. Quantifying and articulating the economic benefits to households in ODF villages, UNICEF carried out a study covering over 18,000 respondents across 12 states. Their study estimated that in an ODF village, each family saves up to Rs.50,000 per year on account of avoided medical costs, time savings which can be used more productively, and lives saved. Additionally, they also estimated a one-time benefit of increase in property value of almost Rs. 19,000 per household (Figure 3). The study also concluded that the economic benefits of sanitation per household outweigh the cumulative investment (government spend plus other modes of financing including household contribution) by 4.3 times over a 10 year period.<sup>4</sup>

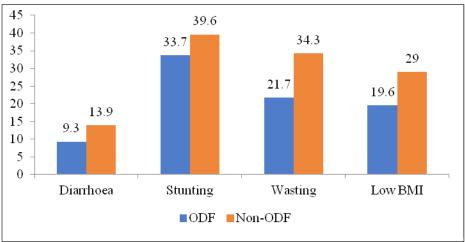
In a study titled, *Sanitation Health Impact* Assessment Study by Bill and Melinda Gates Foundation, significant improvements in diarrhea prevalence and stunting among children in ODF villages were observed, compared to otherwise similar non-ODF villages (Figure 4).

With the impressive progress made by the Mission, there are also direct employment opportunities being created for masons, laborer and industries involved in supplying sanitary ware, and indirect opportunities for several associated sectors. For construction of over 7 crore toilets in the last 3.5 years, it is estimated that 1.68 billion person hours of employment was generated.



#### **Figure 3: Economic Impact of Sanitation**



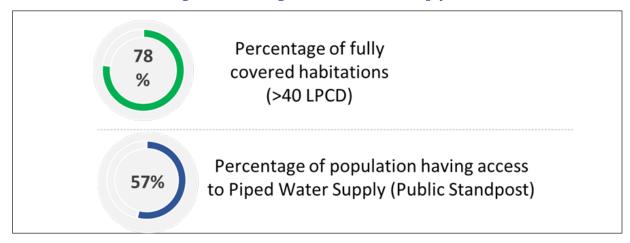


#### 2.2 National Rural Drinking Water Program (NRDWP)

Ministry of Drinking Water and Sanitation aims to provide every rural person with adequate safe water for drinking, cooking and other domestic basic needs on a sustainable basis. This basic requirement should meet minimum water quality standards and be readily and conveniently accessible at all times and in all situations.

Since the inception of the National Rural Drinking Water Program in 2011, the coverage of habitations with over 40 LPCD rural water supply has increased to 78 per cent, in line with supplying all habitations with sustainable and sufficient drinking water by 2030 as a part of the Sustainable Development Goals. Of these, 57 per cent of the population is also covered by Piped Water Supply through public standposts (Figure 5).

#### Figure 5: Coverage of Rural Water Suuply



NRDWP provides grants for construction of rural water supply schemes with special focus on water-stressed and water quality affected areas, rainwater harvesting and groundwater recharge measures, and for operation and maintenance including minor repairs. It promotes conjunctive use of surface, groundwater and roof water rainwater harvesting and actively supports convergence with other development programmes such as the MNREGS and Watershed Development Programmes. Support activities include setting up of State Water and Sanitation Missions and Water and Sanitation Support Organisations at State level, District Water and Sanitation Missions, Block Resource Centres and Village Water and Sanitation Committees, provision of District and Sub-divisional water quality testing laboratories, on-line MIS, and community involvement in water quality monitoring.

The NRDWP was restructured in November 2017 wherein the funding pattern from the Central government was moved to a challenge fund to make the program more efficient and performance oriented. NRDWP funds now can be used only for projects which are in an advanced stage of completion from the current year or from previous years. The NRDWP also stipulates that funding be accessible for initiation of Pipe Water Supply Schemes (PWSS) only. As per the restructured program, the first installment of funds comprising 50 per cent of the allocated budget will be released to the states at the beginning of the fiscal year. For second installment, the funds have been split into two equal halves. States are eligible to claim the first half of the second installment after spending matching funds from their state budgets as reimbursement. For accessing the second half of the second installment, states are required to submit to third party verifications on the assets for ascertaining sustainability of pipe water supply schemes under NRDWP.

If some states are unable to claim the funds from the central pool, the funds are moved to separate pool and is distributed to the other states, thereby creating a system of rewards for completion of water supply schemes. This system makes the water supply schemes of states more efficient and performance oriented as states now compete among themselves for completion of schemes.

#### 2.2.1 National Water Quality Sub Mission (NWQSM)

Ensuring good quality drinking water to people in rural areas is a national priority. Accordingly, in year 2015, the Government of India launched the *National Water Quality Sub Mission (NWQSM)* 

to tackle the contamination of drinking water sources in the country. The aim of the Water Quality sub Mission is to manage quality issues and provide good quality drinking water in approximately 28,000 habitations impacted by groundwater contamination by arsenic, fluoride and other elements.

The program has a special focus on the poor and marginalized. As per agreed norms 22 per cent of NRDWP funds are earmarked for scheduled caste (SC) and 10 per cent for scheduled tribe (ST). This helps Government of India provide drinking water supply to SC/ST concentrated habitations where more than 40 per cent of the population belongs to these vulnerable groups.<sup>5</sup>

Government of India has taken initiatives to reform and reorganize the sector institutions, financing arrangements and service delivery arrangements. New institutional arrangement provide opportunities to promote and support demand driven and community-centred approaches, hitherto absent in WASH sector. Increased funding and new guidelines also create vistas for long term strategic planning and funding of WASH interventions in the States. To enable the community to plan, implement and manage their own water supply and sanitation systems, it calls on States to transfer the program to the Panchayati Raj Institutions, particularly to the Gram Panchayats for management within the village. This provides huge opportunity to States to reorganize the sector functions and institutions in light of the new guidelines and creates scope for communities and civil society organizations to participate in planning, implementation and management of drinking water and sanitation services

#### 2.2.2 The Swajal Project

This World Water Day, March 22, 2018, the Government of India launched 'Swajal' - communityled drinking water projects aimed at providing sustainable and adequate drinking water in an integrated manner to the rural masses. Swajal primarily aims at the empowerment of the village community, while focusing on the inclusion of women, socially disadvantaged and poor sections of the society. NGOs and CBOs play prominent catalytic role to provide capacity support to the people, community and local Governments. The programme is based on the Subsidiarity Principle, i.e. it recognizes that services should be delivered by the lowest appropriate level. The responsibility for the delivery of water and sanitation services vests with the local Governments. The central principles of the programmes are:

- Community and Local Government to plan, implement, operate and manage Water Supply Schemes;
- Shift State Government from the role of services Provider to Facilitator;
- Empowering of the Gram Panchayats and User Groups;
- The participation of communities in their own Water Supply and Sanitation systems;
- Design systems based on the willingness of consumers to pay for particular levels of service: a portion of the capital cost and all future recurrent costs

Launched by the Prime Minister in January, 2018, the 'Transformation of Aspirational Districts' programme aims to quickly and effectively transform 115 districts of India that have been identified for this programme. In order to effectively implement Swajal projects in these districts, a review of guidelines was undertaken in the months of April and May 2018 as part of review of NRDWP. During the reviews, the general consensus was to redesign the programme and the future programme rollout is to be firmed up for a large scope for expansion of Piped Water Supply under in these districts. Swajal would be a Community managed single village solar based mini Piped Water Supply (PWS) scheme with low capital and operational cost.

An extensive IEC campaign to create awareness on project principles, objectives, scope, implementation approach, roles and responsibilities of project partners etc. will be undertaken through workshops at State/District/Block levels, roadshows, wall writings, slogans and pamphlets. The time line for completion of a scheme has been decided to be six months to one year depending on the scheme location.

#### 3. India's Investment in Water and Sanitation

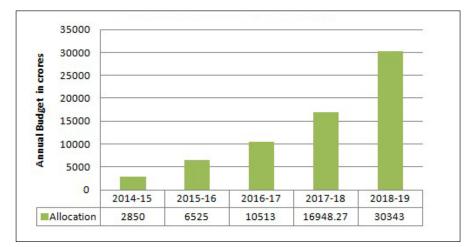
India has made substantial investment and efforts in ensuring safe drinking water and sanitation to all since independence. Since the beginning of the Sixth Five-Year Plan (1980-85) and the launch of the International Drinking Water Supply and Sanitation Decade, India has substantially increased sector investments and water and sanitation is being accorded high priority in the Indian national budget.

#### 3.1 Financing by Central and State Governments

The Union Cabinet, has approved a total investment of over \$20 billion, or Rs.1,34,000 crores for the Swachh Bharat Mission (Grameen), which includes incentives for household toilets, community toilets, solid and liquid waste management (SLWM) infrastructure, and other administrative expenses.

As of May 2018, of these, funds worth over Rs. 44,325 crore have been allocated and utilized by the Government of India for SBM-G. Corresponding funds have been put in by the state governments (Centre:State share is in the ration of 60:40, except certain special category States where it is 90:10). The allocation for 2018-19 alone is in excess of Rs. 30,000 crores (Figure 5).

The last few years have also seen a noticeable rise in the investment made on drinking water through NRDWP, with a total of Rs. 17,184 crore invested in the last three years alone. Additionally, States have been investing their own funds in the sector as well. Of these, some States have made significantly high investments, including Gujarat (Rs. 8835 crore), Bihar (Rs. 7661 crore) and Jharkhand (Rs. 4022 crore). The State of Telangana has invested over Rs. 40,000 crores for providing piped water supply to every household (Figure 6).



#### Figure 6: Central Share for SBM (G)

#### 3.2 Financing by Local Administrations

**14<sup>th</sup> and 15<sup>th</sup> Finance Commissions:** The Finance Commission is a body set up under Article 280 of the Constitution of India. Every five years, a Finance Commission is set up and recommends distribution of revenues between the Centre and States. The WASH sector has been given priority by the 14<sup>th</sup> Finance Commission of India, which emphasized delivery of basic services such as water supply and sanitation in the utilization of basic (90 per cent) and performance (10 per cent) grants provided to Gram Panchayats. The Ministry of Panchayati Raj further focused the use of the grants by issuing advisories towards using the 14<sup>th</sup> Finance Commission grants for WASH in school and anganwadis and for safe drinking water. The 14<sup>th</sup> Finance Commission had awarded over Rs. 2 lakh crore to Gram Panchayats for 2015-20.

The 14<sup>th</sup> FC also included Open Defecation Free (ODF) status for Gram Panchayats as 30 per cent weightage in the evaluation criteria for disbursement of the 10 per cent performance grant.

The 15<sup>th</sup> Finance Commission, which will submit its final recommendations in October 2019, has been requested to further prioritize the rural drinking water, sanitation and hygiene sector in the new grant matrix.

Some of the areas for which these local funds are being used are:

- Capex and opex for water supply schemes, with provision of maintenance
- Creation and maintenance of rainwater harvesting and ground-water recharge infrastructure
- Localized Water Quality treatment solutions
- O&M, repair and retrofitting of community toilet complexes, schools and anganwadi centers
- · Retrofitting dysfunctional household toilets and incentivizing new households to build toilets
- ODF sustainability practices like retrofitting and de-slinging services for IHHLs
- SLWM infrastructure
- Other initiatives to promote and sustain provision of safe drinking water and sanitation

#### 3.3 Private Financing and the Swachh Bharat Kosh

The Government of India has set up an arrangement of pooled funds called the Swachh Bharat Kosh (SBK) in order to enable companies to contribute towards the programme. Public Sector Units (PSUs), private organizations, other organizations as well as individuals have contributed approximately Rs 1000<sup>6</sup> crores towards the Swachh Bharat Kosh since October 2014. The funds from the Kosh have been used for promotion of sanitation infrastructure in the country. Of the total funds contributed towards Swachh Bharat Kosh, the Government has released Rs 420 crores towards conversion of dysfunctional toilets to enable a large number of families gain access to improved sanitation facilities. A significant share of this release has been concentrated in the north eastern States of Tripura, Mizoram and Assam, given the difficult terrain and topographical challenges of the States.

The Government of India has also advocated Private and Public Sector Enterprises to contribute towards the Swachh Bharat Mission in terms of construction of toilets and other sanitary complexes in public spaces and schools. Corporate entities, in addition to contributing to the sanitation campaign by way of donations to the Swachh Bharat Kosh, have also been spending their CSR funds directly making an impact on the ground through, awareness generation programs and construction of toilets in schools and households.

#### 3.4 Credit Linkages

There is a significant need for credit to facilitate investments in the water and sanitation sector, both at the household level and at the enterprises level. In order to facilitate consistent lending in this sector, two regulatory changes were made by the Reserve Bank of India with the support of Ministry of Finance and Ministry of Drinking Water and Sanitation.

- Inclusion of WASH as a priority sector towards which banks and regional rural banks should direct their credit.<sup>7</sup>
- Inclusion of toilet construction as a category for which Self Help Groups (SHGs) linked to the National Rural Livelihoods Mission (NRLM)/State Rural Livelihood Mission (SRLMs) can avail loans.<sup>8</sup>

According to Reserve Bank of India data, directing 1 per cent of the priority sector limits of commercial banks towards water and sanitation sector can release approximately Rs. 28,000 crores of credit annually.

#### 4. Way Forward

#### 4.1 Water<sup>9</sup>

India is committed to achieving the goals of the Swachh Bharat Mission by 2019 and ensuring drinking water for all in the coming years. India has achieved considerable success in providing safe drinking water to about 78 per cent of the rural population by tapping sound and surface water through millions of handpumps and lakhs of water supply schemes. The Government of India is committed to provide safe drinking water facilities to partially covered and uncovered habitations on priority. This will be achieved through involvement of people in planning, implementation and management of schemes by people.

- **Improved service delivery through PWS**: The Government of India has taken an informed decision to finance only Piped Water Supply schemes to ensure people have improved service levels and meet their aspirations. The NRDWP is considering prioritizing schemes that involve people in planning, implementation and management of schemes. The Government is also working towards a 100 per cent coverage of rural communities with PWS before 2030.
- **Improving the functioning and sustainability of schemes**: In view of the need for investment, efficiency, and transfer of ownership to institutions responsible for operations and maintenance, the Government of India has decided to increase the scope for people's participation. It intends to allow Gram Panchayats and communities to decide the service levels, technology choice and become co-financers of the scheme, moving towards involving people in protecting both the sustainable yield and quality of groundwater to meet future requirements of drinking water.
- **Decentralization**: According to the recent 73rd and 74th constitutional amendments, the States are devolving activities and responsibilities for development to the Panchayati Raj Institutions. The constitutional amendments envisaged that the rural water sector works better in a decentralized structure. Decentralization is also expected to facilitate integration of sanitation and water supply services, to ease the transfer of schemes to panchayats for operation and maintenance, and to engage user communities in sectoral decision making.
- Focus on water quality: Safeguarding the availability and quality of rural drinking water in India is a priority and the Government, through the NWQSM, prioritises water quality-affected habitations. Schemes based on surface water sources will be prioritized and efforts to protect groundwater sources from excessive abstraction and contamination will be ensured.

• **Changing role of Government**: The Government is increasingly moving towards the role of a facilitator and co-financer of water supply schemes, to allow decentralization and build capacities of PRIs to assume responsibility for managing water and sanitation services. The Government will take steps to establish an enabling environment to support strengthening of local institutions.

#### 4.2 Sanitation

- Focus on sustainability of interventions: As villages and districts across the country become free from open defecation and move towards safe sanitation practices before 2<sup>nd</sup> October 2019, the focus will be on sustaining the progress and quality of the Swachh Bharat Mission and ensuring that people realize sustainable health and hygiene benefits. The Government has initiated a series of sustainability measures including a dedicated work force (one Swachhagrahi in each village) to work with communities on sustaining ODF outcomes, financing behavior change post-ODF declaration, initiating decentralized operation and maintenance, and retrofitting of assets to make the them sustainable. These interventions are expected to ensure continued functioning and usage of sanitation services.
- **Investment in solid and liquid waste management**: Government of India has well laid out norms to support villages to undertake solid and liquid waste management interventions. This is being prioritized and so far more than 70 per cent of villages have reported investments in solid and liquid waste management. Additionally, the Ministry has recently launched the Galvanising Organic Bio-Agro Resource Dhan (GOBARDhan) initiative to support the implementation of self-sustaining waste management models in over 700 districts. This will not only help keep the villages clean, but also generate additional income for the farmer.
- **Capacity at local level for operation and maintenance**: The Government is heavily invested in building capacities at local levels for operation and maintenance of services. Masons and Swachhagrahis have been trained to support communities in undertaking retrofitting, upgradation of toilets and fecal sludge management at the grassroots. Specialized capacity building institutions have been empaneled to undertake this task at speed and scale so that requisite capacity is created for decentralized operation and maintenance.
- **Incentivizing States for sustaining services:** The Government has created a performancebased incentive scheme for sustainability of ODF outcomes. The sustainability of ODF outcomes would be monitored and measured through an annual survey conducted by an independent verification agency and would incentivize States based on their performance on key sustainability indicators.

#### Endnotes

- 1. Sources: <u>www.pmindia.gov.in</u>, <u>www.meaindia.nic.in</u>, <u>https://oceanconference.un.org</u>, <u>www.niti.gov.in</u>, <u>https://sustainabledevelopment.un.org/memberstates/india</u>
- 2. Sources: <u>www.mdws.gov.in</u> , <u>www.sbm.gov.in</u> , <u>www.indiawater.gov.in</u> , <u>www.hdr.undp.org</u> , <u>www.documents.</u> <u>worldbank.org</u>
- 3. The Economic Impacts of Inadequate Sanitation in India, Water and Sanitation Program, 2006
- 4. The Financial and Economic Impact of Swachh Bharat Mission in India, UNICEF
- 5. Ministry of Drinking Water and Sanitation, 2013
- 6. Department of Expenditure, Ministry of Finance
- 7. 7 Reserve Bank of India circular FIDD.CO.Plan.BC.4/04.09.02/2015-16 dated July 1, 2015
- 8. 8 Reserve Bank of India circular FIDD.GSSD.CO.BC.No.04/09.01.01/2017-18 dated July 1, 2017
- 9. 9 Water Roadmap 2022, Ministry of Drinking Water and Sanitation

