



World Sustainable Development Summit 2018

Kolkata Regional Dialogue | February 28, 2017

Session: 'Urban Water Management'

India has 13 cities with over 2 million population, 33 cities with over one million, and 298 cities with population of over hundred thousand which is expected to double in by 2050. With a growing urban population and changing lifestyles, the pressure is mounting on urban water resources which are already in a stressed condition.

Most cities in India are water-stressed. As per ADB 2010 report, the urban centres had only 4.3 hours of water supply on an average per day with 30% of the water being lost in transmission. The Non-Revenue Water (NRW: due to leakages, unauthorised connections, billing and collection inefficiencies, etc.) is huge, estimated to be between 40-70% (The World Bank, 2011). Operations and maintenance cost recovery through user charges is hardly 30-40%. Most urban operations survive on large operating subsidies and capital grants. Moreover, in cities with more than one million people, the official water supply after accounting 35% loss in leakages is just 125 LPCD which is considerably lower than the demand (210 LPCD). Infrastructure development and regulations have not kept pace with the population growth and urbanisation and as a result urban water management has become a major challenge. According to the Ministry of Urban Development (MoUD), 182 Indian cities require immediate attention in regards to proper water and wastewater management.

There have been limited efforts at the creation of new surface water sources at the same time groundwater levels are steadily declining. The government has made significant efforts to reduce surface water pollution but they remain jeopardised by the lack of wastewater treatment facilities. It is estimated that 160 million latrines and septic tanks contribute to 80% of the pollution to surface water resources in India.

All the cities in India face issues related to urban water crisis. But cities in the eastern region of India have to struggle a lot for urban water management. The north-east region is seriously lagging behind in urban water supply infrastructure development and proper operations and maintenance of existing infrastructure. For instance because of erratic electricity availability, water treatment plants do not function to their full capacity and cannot provide an adequate quantity of treated water. Also bad weather and frequent landslides in monsoon damage water supply pipes.

In urban centres like Guwahati, one of the major problems plaguing is water logging. Poor urban storm management leads to flooded streets during monsoons and water crisis in most of the city pocket during the dry season are recurrent problems. The water supply is deteriorating by inefficient water treatment capacity and also due to poor maintenance of water supply networks. Illegal boring for ground water to meet the demands of potable water for new buildings is also depleting the water table.

While in another city of Eastern region that is Kolkata where presently, more than 90% of the urban population is covered by piped water supply. But the existing water supply network is inefficient and gets contaminated by leaking sewerage pipes. The infrastructure is in a dilapidated state though the coverage is better compared to other cities of the region.

There is a strong need to develop climate resilient water infrastructure in the cities and with the onset of smart – cities programme by the Government it becomes imperative to focus on smart-water infrastructure as well. It requires joint efforts by all the stakeholders including government, urban local bodies and users. There are some successful international case studies of public-private partnership which could be explored for sustainable urban water management.

Another important aspect of urban water management includes demand management strategies that should be adopted at the users end to save and conserve water. This can only be done if the users are sensitized enough on the importance of judicious water use. Government should equally focus on infrastructure as well as on generating awareness of various stakeholders in the urban water sector.

The session would aim to answer the following questions

- What institutional arrangement should be adopted to implement strategies of sustainable urban water management?
- How sustainable water urban management strategies can help to achieve SDGs related to water and sanitation?
- Can urban water management be one of the solutions for climate resilient cities? What are some of the most effective strategies for building resilience for sustainable water management in the cities?
- What are the ways to enable the substantial private investment for developing water distribution infrastructure while ensuring equitable access or accounting for the water needs of vulnerable populations?