Unraveling India’s Enduring Urban Drinking Water Indigence

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This paper presents some of the early findings from a study on the policy questions around India’s drinking water supply being undertaken at the Centre for Policy Research, New Delhi. It briefly documents the significant central government efforts inspite of which the situation today is far from satisfactory and focuses on the current policy framework for urban reform and its impact on the urban drinking water sector. Although currently there seems to be a realization of the challenges that face the sector, and some consensus on the key elements of reform at the policy level, much of this reform is yet to be implemented. The paper asks why implementation is lagging and poses that independent research on the subject to needs to be stepped up if the urban drinking water sector is to better serve citizens in the future.

Background: Central Government assistance to the urban drinking water sector in India

Since the first Plan the central government has consistently focused on funding the drinking water sector and has increased outlays significantly in every plan period. Also, among the water and sanitation sectors, the urban water sector has had the highest growth in the amount of resources targeted to it. This can be seen from chart 1 on the next page.

Inspite of the 74th Constitutional Amendment which delineated the role of local governments, the primary responsibility for providing drinking water and sanitation facilities in the country is still retained by the State Governments. The Centre provides and allocates funds and also ensures that funds are provided in State budgets. As

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mentioned above progressively larger allocations have been made for water supply and sanitation in the various Five Year Plans.

In the recent past the national policy guiding India’s approach to water supply and sanitation since the Eighth, Ninth, Tenth and now the Eleventh Plan broadly follow the guiding principles of the New Delhi declaration, adopted by the United Nations General Assembly in December 1990. These include (a) protection of the environment and safeguarding of health; (b) organisation of reforms, promoting an integrated approach; (c) community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes; and (d) sound financial practices, achieved by better management of existing assets.

The Tenth Plan envisaged 100 per cent coverage of rural and urban population with safe drinking water as per the stipulated norms and standards (40 lpcd of safe drinking water within a walking distance of 1.6 Kms or elevation difference of 100 metres in hilly areas, to be relaxed as per field conditions; at least one hand pump/spot source for every 250 persons). The Tenth Plan also clearly advocated management of water as an economic asset rather than a free commodity. Coverage was an important agenda, and the highest priority is being accorded to remaining ‘not covered’ and ‘partially covered’ habitations having a supply level of less than 19 litres per capita per day (lpcd) as also those affected severely with water quality problems.

As per the National Sample Survey, National Health Survey and census figures, ‘coverage’ of water and sanitation services in both rural and urban areas is improving steadily, and that the levels have improved significantly from the 30% and 70% coverage levels in the late 1970’s to 2001. As per Joint Monitoring Group projections by the end of the Tenth plan the coverage could be expected to go up to 94-5 percent and not really the 100 percent that the plan had targeted.

Urban water sector outcomes on the ground

Inspite of the proclaimed expansion of water supply over the years not one city or town in India provides 24 hour, 7 days a week water supply. Even some large cities such as Hyderabad and Chennai provide water for only 3 hours every two days. Delhi on an average provides water for only 6 hours a day that to at very low pressure.

Slum and squatter settlements often do not have connections to a piped water system and many depend solely on purchasing water from vendors at high prices, when at the same time, most middle class areas/neighborhoods connected to organized piped water systems pay extremely low user charges for water. Other than this, unaccounted for water is often over 50%, making water systems in cities and towns essentially, large ‘leaking buckets’. Along with this cost recovery of the water service itself is very low, at an average of around 20% of operation and maintenance expenditure. Capital expenditure is completely funded from general taxes. Lack of funds and incentives for O&M have lead to decaying infrastructure. Even where there is a network in place there is very little reinvestment undertaken which is essential to keep the system efficient. The poor outcomes in the sector presented above have set the sector into a vicious cycle, pushing service
quality down further and making the recovery path more tedious and difficult.

**Refocusing Central Assistance to the urban drinking water sector**

It is only recently during the implementation of the Tenth Plan and then in the Eleventh plan that the Government of India is better appreciating the need to improve governance and service levels in urban India with a special reference to the drinking water sector. This is manifested in terms of a) greater amounts of funds from the Planning Commission being targeted to urban areas and b) a deeper strategic engagement with urban sector reform as witnessed in the Tenth and Eleventh plans with the creation of reform incentive funds such as the Urban Reform Incentive Fund (URIF), the City Challenge Fund (CCF) and now most recently the Jawaharlal Nehru Urban Renewal Mission (JNNURM).

The JNNURM is the flagship program of the government of India that is aiming to catalyze investment of close to 20 billion dollars into urban sector in India. The JNNURM aims to incentivise state and local governments to improve services and quality of life in cities by undertaking a set of mandatory and optional reforms. Based on the compliance to reform plans developed by the city in their City Development Plans (CDP), part funding for projects is made available to the cities and state government agencies.

On the reform front at the central, state and local level there seems to be a broad consensus of the key elements of reform which is now articulated clearly as a long list of reforms under JNNURM. This consensus is developed out of a better and more nuanced understanding of the pitfalls of service delivery in cities in India today. In an attempt to better monitor the progress made by cities and state governments in achieving the objectives of improved service delivery the Ministry has recently developed the Standard Service Benchmarks (SSB). These are essentially goals, which can be measured so that the changes in quality of services delivered can be monitored over a period of time. This is an important shift from the past when water service delivery was measured by a singular measure of ‘coverage’, where the definition of coverage did not incorporate a modern benchmark. The SSB have changed the definition of coverage of water supply from

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**Table 1: WHO UNICEF JMP Water and sanitation data (2002)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sector</th>
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<th>Year</th>
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<th>% Rural pop covered</th>
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<td>Water Supply</td>
<td>NSS 96</td>
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</table>

*Source: WHO/UNICEF, 2008*

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**Chart 2: Poor levels of service in Indian cities**

*Water production in liter per capita per day vs. ‘hours of supply per day’, selected cities*

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*Source: Water and Sanitation Program – South Asia analysis*
the earlier census based definition to now include direct household connections for each household. If the national surveys, census etc., were to apply the new definitions and standards of service delivery which better reflect the aspiration and user needs, the level of coverage as an example will come down significantly from 90 percent to 64 percent.

Is the new approach of the Central Government working?

While this is an important new development, a quick look at the JNNURM program reveals that as with other plan investments in the past, while the largest number of projects and investment have been flowing into the drinking water sector, with more than 200 projects, the incorporation of reforms by the State and Local bodies seem to be lagging.

An analysis of drinking water supply related reforms under JNNURM reveals that while more than seventy five percent of the project funding allocated to water supply had been sanctioned by the central government in 2009, only thirty two percent of the reforms had been undertaken by the states and local bodies. Please see chart 4 which places the expenditure and the reform achievements till 2009 and then projects the trajectory if the initial objectives of JNNURM are to be met.

What still needs to be well understood especially at the state and local level is that going from 15-16 hours of water a day to 24 hours, or increasing efficiency by 10% is a matter of money and technical solutions: it’s a managerial problem. However, improving services dramatically such as improving hours of supply from 3 hours every other day to 24 hours, or increasing efficiency by 40% is not a matter of money and technical solutions, it is, an institutional problem.

Inspite of the 74th Constitutional Amendment as well as the JNNURM no state so far has fully transferred the responsibility to local bodies for a mix of reasons ranging from limited technical and financial capacity of local bodies to jurisdictional and staffing concerns related

Chart 4: Urban water sector investment vs water related reform under JNNURM

W: % ACA

Reform

Source: Own calculations

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to restructuring state agencies. Solutions for each of these critical issues need to be addressed if the state and local agencies are to be able to provide improved demand oriented services especially in drinking water supply and achieve the goals of moving from 64 percent coverage to 100 percent; from 70-90 lpcd supply to 135 lpcd at the tap; from 20 percent metering to 100 percent; from two hours of supply to 24 hours and reduce non revenue water to 15 percent from current levels which are close to 50 percent.

The need for independent research on the subject.

As per the WHO and Unicef"No comprehensive studies, organised data sources, or even literature surveys exist on the economic value of the water and sanitation sector in India. As such, there was no readily usable data on values of existing infrastructure, generation of employment, exchange of goods and services, development of small industries, etc."

Other than this, given the variety of institutional histories of different states in this sector, policy makers need to understand the key issues affecting the choice of institutional reforms - ones that ensure that the institutional relationships between key players in service delivery chain are such that they empower poor people to monitor and discipline service providers as well as raise their voice in policymaking, strengthen incentives for service providers to serve the poor and also strengthen the compact in urban water networks.

As one can imagine, with limited research in the sector, policy making is plagued with amateurism, with a wide range of people who make contextless suggestions, without any rigorous determination of their effectiveness and feasibility. This leads to a cacophony of ideas, mostly bad, which drive out the well reasoned good ideas.

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