

THE REAL PRICE OF WATER
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"Water, water everywhere but not a drop to drink."

One area of major concern amongst multi-lateral/bi-lateral agencies, local governments, tourists visiting India and the local residents is the abysmal state of water supply in the country.

World population projections indicate that during the third decade of the next century, India will become the most populous country in the world and the total population is expected to double during the next six decades. Even though the urban population is doubling itself every twenty years nearly 70% of the population still lives in rural areas. The urban infrastructure especially in the areas of water management and solid waste management is unable to keep pace with the development resulting in perpetual scarcity and shortage.

The city governments are unable to garner sufficient funds to meet basic needs like water supply and sanitation and have begun to tap alternative sources of funding including debt and investments from the private sector. A prime and successful example is the Maharashtra Jeevan Pradhikaran (the State Sewerage and Water Disposal Board of Maharashtra), which has successfully risen over Rs.1000 crores through bonds in the last two years for the implementation of its various schemes.

However, studies on water supply conducted by various agencies have come out with some interesting findings:-

- Unlike some other infrastructure sectors, full service water supply is a commercially viable proposition, which if properly planned and monitored will be self-sustainable.
- The available water is adequate if water is treated as a scarce commodity and conserved. At present much water is simply wasted since there is no incentive to conserve it.
- The poor who use public taps currently pay higher real costs for water than those who are connected.
- Potable water @ 35 to 40 litre per capita per day (PLCD) i.e. one kilo litre per month is required to meet the basic minimum needs.
- The real costs of water supply must include investment in equipment (tanks, pumps, filters, storage), collection and distribution.

The issue of whether the water supply should be treated as social responsibility or an economic good could resolve itself since studies have shown that given the proper service and hygiene the beneficiaries are willing to pay. In the water supply sector, there are three categories, which need to be studied while determining the pricing of these services making the pricing of water supply quite complex:

1. Where the beneficiaries are identifiable and the quantum can be judged. - in this category the concept of direct service charges is workable.
2. The beneficiaries are identifiable but the benefits accrued to each beneficiary are not quantifiable directly-under this category sewer system and waste water discharge by

each house holds are covered making it essential to include the cost of these installations in overall costing.

3. Where it is difficult to identify the benefits accrued. Examples here are drainage, environmental improvements, etc. These community services need to be recovered through community/property taxation.

To make the water supply system self-sustainable, pricing of water and other means of revenue collections include connection charges, betterment charges, water benefit tax, enhancement of water tariff, advance registration charges, charges from water kiosks, etc.

Two models are successfully being used for calculating the recovery against water. The first model is based on pricing the water supply through tariff on actual usage basis with a fixed minimum rate. The second model is based on water tariff being linked to property tax. Although the first model is more realistic based on actual usage, the collection in the second model is higher being linked to property tax.

However, one fact clearly emerging through various models and studies is that water supply is considered much less risky than other infrastructure projects. Promoters and financiers are now increasingly willing to undertake urban water supply projects since the return offered is reasonable with the risks being minimal. Further in water projects there are no license fees or fuel linkage cost. Variable cost components, which reduce a substantial part of the return in most infrastructure projects, is the lowest in water projects. This assures promoters a steady rate of return.

To summarize, tariff should be determined on the basis of fixed cost to cover capital investment and variable cost to cover maintenance. Depreciation of water grids should also be treated as costs. Public welfare and subsidies should not substitute wastages and leakages by the municipalities. Public Private partnerships should also be explored in this sector like in the other infrastructure projects. Such projects should also resort to project financing by seeking direct loans from Financial Institutions and State Governments and through bonds. However, care must be taken that this borrowing does not lead to a classical catch 22 situation of a debt trap. It is necessary that the maximum thrust is laid first on cost minimisation through various cost effective measures and then recovery of the full cost through appropriate pricing mechanism for attaining sustainability of water supply and sanitation systems.