Regulating Domestic Water Use: Institutions and Pricing

Nitin Bassi, Programme Lead (Water)
Vaibhav Chaturvedi, Fellow

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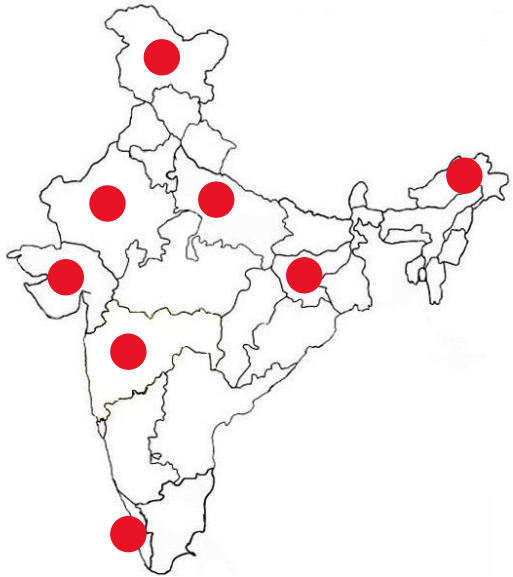
India's National Water Policy on Water Regulators and Pricing

- Independent statutory Water Regulatory Authority to be set up by each State to promote equitable access to water and its fair pricing.
- Water charges should preferably be determined on volumetric basis.
- Recycle and reuse of water to be incentivized through a properly planned tariff system.
- The principle of differential pricing may be retained for the pre-emptive uses of water for drinking and sanitation and high priority allocation for ensuring food security and supporting livelihood for the poor.

Water Regulatory Authorities (WRAs) in India

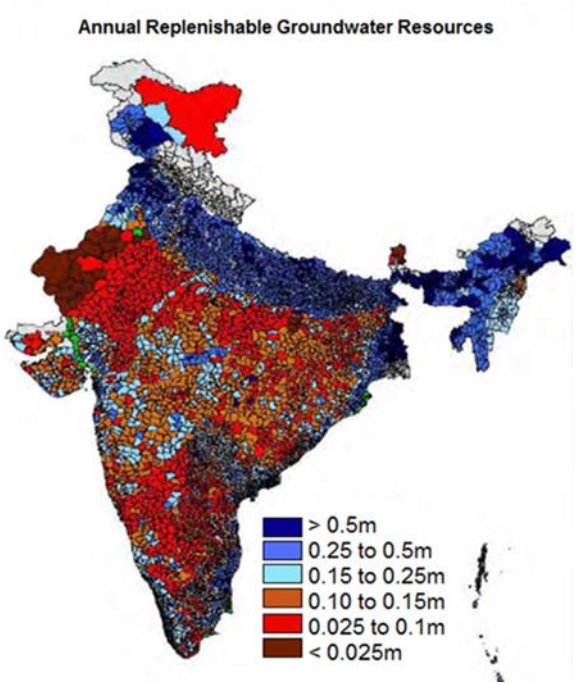
- Maharashtra--2005
- Arunachal Pradesh--2006
- Kerala--2012
- Jammu & Kashmir--2012
- Rajasthan--2012
- Jharkhand--2014
- Uttar Pradesh--2014
- Gujarat--2016



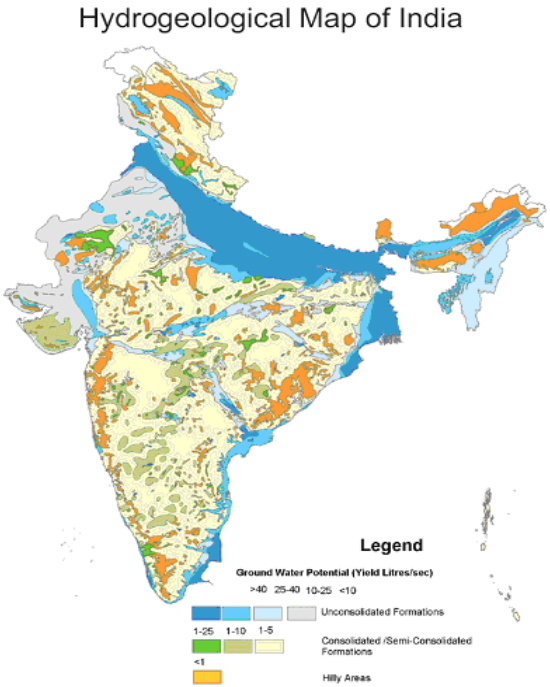
Till now, WRAs have played a little role in improving water management as they seldom engage for deciding on the inter-sectoral water allocation and set tariffs mainly for the irrigational use of water

Sustainability of Groundwater Supplies

- Willingness to pay for the public water supply in rural areas is low.
- More than 90% of the rural water schemes are based on groundwater, however 2/3rd of India has hard rock aquifers with limited groundwater potential.
- Thus, a big question mark over the sustainability of the groundwater based schemes in such areas.



Natural groundwater recharge outside Indus, and Ganga-Brahmaputra-Meghna river basins is low



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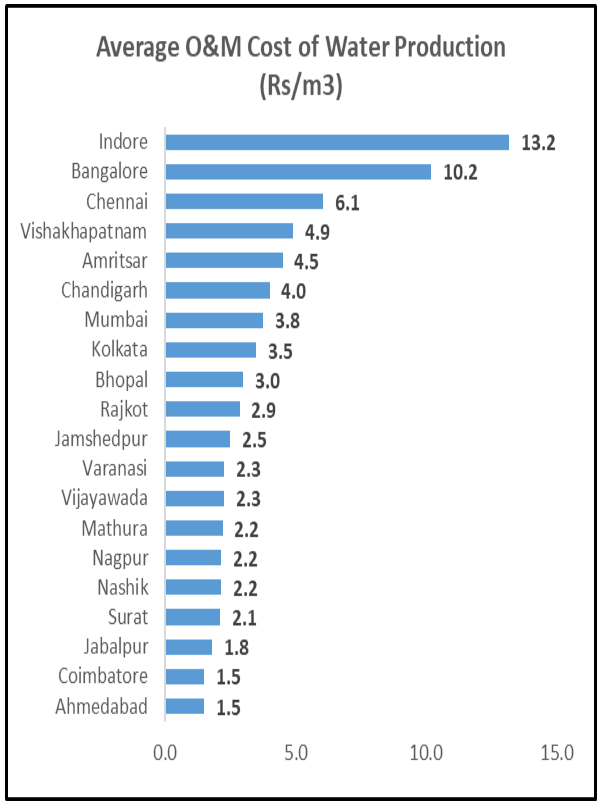
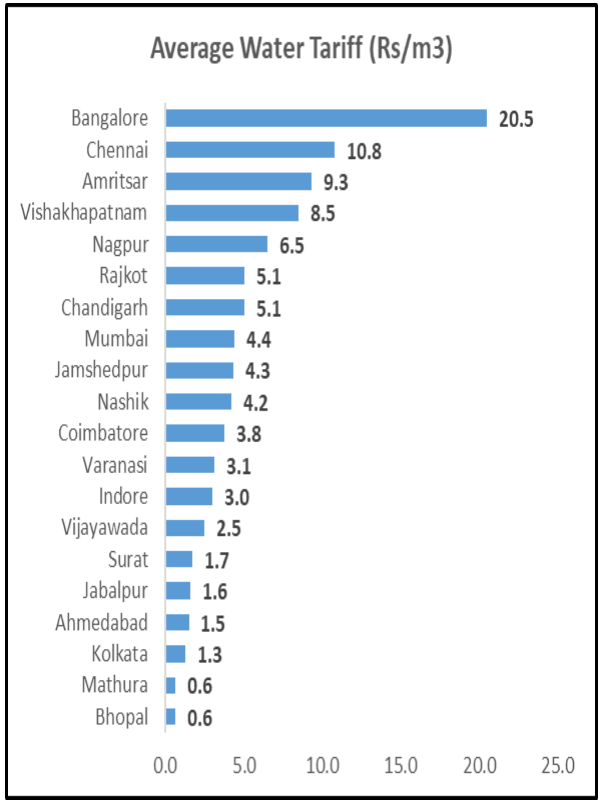
Cost of Water Production and Water Tariffs in Selected Cities





- Design supply for urban areas is much higher than rural areas.
- Except for a few cities, the O&M cost is covered through the water tariffs.
- However, the water tariffs for domestic users are much lower, cross subsidized by higher charges to industrial and institutional users.

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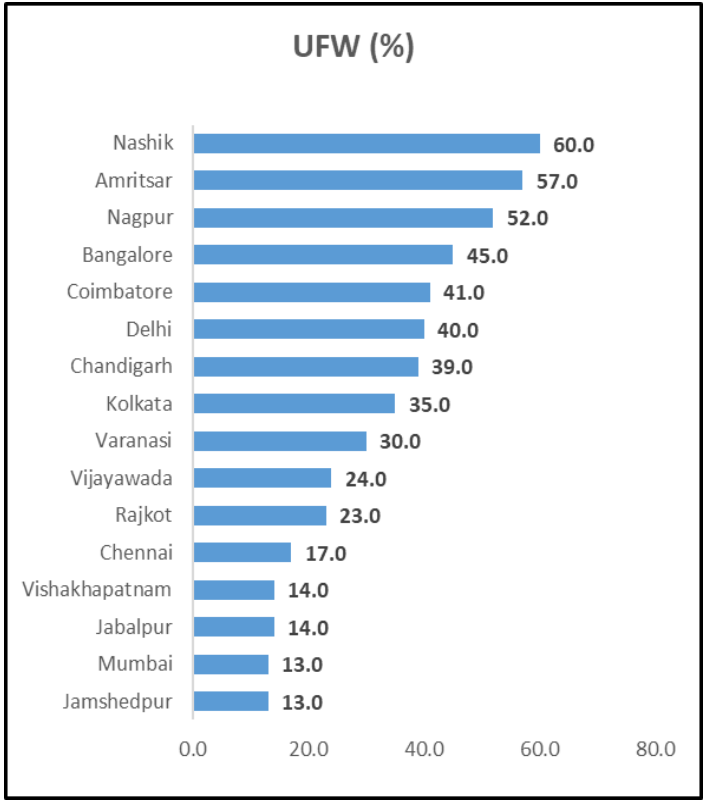
Water Supply Metering in Urban Areas

- In cities, there is a progress with household level metering, but metering for flow measurement in the water supply system is yet to be scaled up.
- Even Delhi-the national capital-could initiate installation of the bulk water flow meters in 2018, 302 already installed.
- Such meters help in proper water auditing, crucial to determine the extent and type of water losses, i.e. whether a leakage or a theft (referred to as Unaccounted for Water-UFW).
- In different cities, the UFW varies from 13% to 60% of the total water production.



Key Takeaways

- Ensuring sustainable domestic water supply within the house or the dwelling premises is crucial for the well being of society at large.
- Proper water auditing and water pricing can ensure equitable distribution and efficient use of water. Both requiring strong institutional support (such as of WRAs) and infrastructure.
- From the long-term perspective, water tariffs should be able to cover O&M costs, debt servicing, and provide a contribution to capital development.
- Subsidies can be provided if they generate societal benefit, mainly to households below poverty line or in economically weaker category.
- People will be willing to pay if the water supply is sustainable.
- Groundwater supplies are unable to provide year round access to water in hard rock areas. Water supply based on surface water sources needs to be promoted in such areas.

Thank you

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