

URBAN WATER PRICING
AN ASIAN PERSPECTIVE

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THEME

Pricing of urban water has, in recent years, emerged as a priority agenda for many developing Asian economies. Underpricing of urban water on the grounds that water is a basic right and that underpriced or subsidized water helps the poor - the developing countries are beginning to recognize - has, in fact, reduced investment in the water sector, slowed down the spatial coverage of water especially of poor settlements, and jeopardized the financial viability of water-supplying entities. Taking the position that appropriate pricing is necessary for accelerating investment in the water sector and extending coverage, this presentation discusses the objectives that may govern pricing of urban water, looks at the existing water pricing practices in Asian cities, identifies the deficiencies therein, and attempts to lay out alternative routes to what might euphemistically be called **appropriate pricing**.

COVERAGE

This is a four part presentation comprising -

Importance of urban water pricing: why is urban water pricing important to the developing countries? What if we ignore it, and allow urban water to be priced as it is being currently done?

Objectives of urban water pricing: what objectives are possible to be achieved by appropriate pricing of water? Is revenue generation or covering the cost that is incurred on water provision the only objective that appropriate water pricing hopes to achieve?

Existing urban water pricing practices and the associated problems: In what different ways is water charged in Asian cities? What do the water utilities charge the water users for? What are the instruments of charging? To what extent do Asian cities use consumption-based charging? What if water is unmetered and water consumption can not be measured? What proxies are used? What price - related problems are faced by Asian cities?

Options for water pricing reforms: What is possible to be done to address the pricing-related problems? Where do the priorities be?

IMPORTANCE OF URBAN WATER PRICING

- Appropriate pricing helps to improve water services and provides incentives to expand the spatial coverage of services. Improving water service levels is crucial to accelerating economic growth and productivity and to reducing urban poverty.
- Appropriate pricing generates revenues and helps to accelerate to flow of investments into the urban water sector.

- Appropriate prices help to maintain the water supply systems and not to resort to deferment of maintaining the system as is common in many countries.

- Low water prices (or prices that are below the marginal costs) have negative macroeconomic consequences. A rough estimate from India shows that neutralizing the losses of water-supplying entities (or subsidizing them) could be as high as 0.7 percent to 1 percent of the country's GDP.

OBJECTIVES OF URBAN WATER PRICING

□ Setting appropriate water tariffs is not only about recovering costs that are incurred on water provision. Tariffs are an important management tool that can be used to promote several objectives. Tariffs can be designed to regulate water demand. It is possible to design tariffs to send signals that water is a scarce commodity, and that it should be so considered. Specifically, tariffs can be used to serve at least the following objectives -

- *Revenue generation* - from the point of view of water-supplying entities, cost recovery is the principal objective in water tariff setting. Other objectives are secondary.
- *Water conservation* - it is an important objective particularly in water deficit countries who attempt to use tariffs for containing the levels of water demand.
- *Equity and fairness* - an important objective in tariff fixation is to treat similar customers **equally**. It means that the consumers should pay water charges that are proportionate to the costs they impose on water supplying entities by their water use and consumption.

EXISTING URBAN WATER PRICING PRACTICES

Three features of urban water pricing are commonly observed in many Asian cities.

- *Low coverage:* only a part of the city's population is served by potable water supply. In several cities, coverage could be as low as 33 percent of the total population.
- *High proportion of unaccounted water:* it is as high as 30 percent in Siddarthnagar, and 35 percent in Bandar Lampung and over 40 percent in Delhi.

- Large variation in per capita availability of water.

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|-----------------|----------------------|-----------------------|-----------------------|----------------|------------------|
| | Siddarthnagar | Bandar Lampung | Hochi Min City | Karachi | Kathmandu |
| Coverage | 33% | 30% | 21-70% | 70% | 53-65% |
| Lpcd | 128 | 140 | 110 | 90 | 113 |
| | San Jose | San Fernando | Yokohama | Mumbai | Bangalore |
| Coverage | 19.22% | 32.31% | 100% | - | 84% |
| Lpcd | 134 | 145 | 231 | 155 | 74 |

A. Charging for what? What do water users pay for?

- For connection or access charge - a one-time charge.
- For consumption - may vary.
- For meter rent and maintenance - usually an annual charge.
- For system expansion - different time frames and modes.

B. Methods of estimating the charges

- For meter-based supplies
 - A uniform volumetric charge, although it may differ between different users.
 - Increasing block tariff - a series of prices which increase in steps as consumption rises. An important feature of block tariff is that it contributes to equity by allowing low-income households to pay lower rates for water than other households. A recent ADB survey shows that 20 out of 32 countries use IBT for charging urban water.

- A linear charge which rises with consumption.

 - A two-part tariff under which a minimum charge is prescribed for a fixed quantity of water and is payable irrespective of the use of the fixed quantity of water, and another part of tariff that is related to water consumption.
- For unmetered supplies
 - Price structures most commonly used are either fixed charges or charges that vary with the size of water connection. Separate pricing structures are applied to standpoint connections where such charges are provided for. Also, a water tax in place of a fixed charge is applied for charging unmetered supplies.

Thus, there are different ways in which tariffs are determined, and it is not always evident as to which objectives are being achieved by what tariff structure. In many countries, in particular, India, most pricing systems are historically-driven and are adjusted periodically to reflect the increased cost of water provision.

C. Limitations of the Current Pricing Practices and Tariff Structures

- Low tariffs in relation to the cost incurred on water provision
- Unbalanced revenue base in that the non-domestic sector which uses 15-20% of water contributes 70-75% of the total water revenues. It creates distortions and results in productivity losses.
- Significant inefficiencies in collecting tariffs from domestic users.
- No incentives for conserving water consumption and use.

OPTIONS FOR IMPROVED URBAN WATER PRICING

- Broadbased recognition that water is an economic and social good. Any assumption that water is a basic right and be provided free to the poorer sections only means that someone else other than the poorer sections is paying for water services, be it the government, or industry, or other groups. It is NOT a sustainable proposition.
- General consensus that water tariff must be cost-based, and jettisoning of flat, uniform tariffs in favour of a tariff structure that provides incentives for water provision.
- Phasing out of unmetered supplies, with tariff so designed as to make it costlier for households to continue to use unmeterd connections.

- Lower connection charge as an incentive for poor households to opt for a connection.
- Increasing block tariff or a two part tariff in order to both protect the poor as also make it costlier for high water users to use water.

A Menu of Steps taken to improve urban water tariffs

- Socialization on water.
- Step-up in the level of investments in the water sector.
- Regulates tariff revision.
- Involvement of the private sector in the operation and maintenance of system and outsourcing of activities.
- Improving water quality.
- Involving stakeholders in setting water tariff structures.

- Motivating communities to take part in the development of urban water services.
- Using cost-based tariff structures.
- Bringing in competition in the water sector.
- Incorporating social welfare component in water pricing.
- Establishing leak detection program

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