COST RECOVERY AND PRICING POLICY FOR THE POOR

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Introduction

- Financing of Infrastructure Projects
  - Upfront, lumpy nature of investments
  - Traditional financing through budget or public debt
- Fiscal constraints and poor cost recovery have led to
  - Poor quality operation and maintenance
  - Limited expansion of networks
  - Demand outstripping supply
  - Constraining social and economic development
- Need for private participation
  - Leverage limited Government funding
  - Access private sector management efficiencies

Risks to private sector

- Macro issues
  - Stability of economy and growth prospects
  - Regulatory framework
  - Sector related reforms
- Micro Issues
  - Development risks
  - Construction risk – time and cost
  - Operation risk - tariffs

Addressing Operation Risks

- O & M Contracts
- Tariffs
  - Transparent tariff setting
  - Protecting Commercial interests
  - Safeguarding Consumers
    - Internal cross subsidy
    - Limited government subsidy
- Setting up of regulatory body

Tamil Nadu

- Policy and administrative environment conducive for investment
- Healthy Economic Growth
- Above average social indicators
- Highly urbanized state – 42%
- Front runner in urban reforms

Tamil Nadu: Institutional Arrangement

- Established dynamic State level Umbrella institutions in the private sector
  - TNRDC
  - TNUDP/TNUDF/TNUILFS
  - TWIC

PPP projects in Tamil Nadu

- **East Coast Road (TNRDC)**
  - **Improvement and maintenance of the East Coast Road (113 kms) connecting Chennai and Pondicherry, at a cost of Rs. 60 Crores**
  - **Government contribution of Rs 5 crores. (leverage ratio of 12 times)**
  - **Two wheelers, three wheelers, agricultural vehicles and local residents exempt from toll**
  - **Only Cars, LCVs, Buses and Trucks pay toll**
  - **Toll revisions notified by Government**

TNUDP

- **Alandur Sewage Project (BOT project)**
  - Total cost — Rs 34 crs
  - Means of finance
    - Grants — Rs 4.0 crs
    - Loans — Rs 20.0 crs
    - Consumer contribution — Rs 8.0 crs
    - Interest on deposits — Rs 2.0 crs
  - Leverage ratio of 8 times
  - Tariff fixation
    - Cross subsidy scheme for fixation of tariff
      - HHs : Commercial : Industrial - 1 : 3 : 5
    - Initial tariff fixed at Rs 150 per HH per month
    - Out of total cost of Rs 180 per HH, GOTN contributing balance of Rs 30 per month to meet costs

TWIC

- **Tirupur Water Supply and Sewerage Project**
  - Concession Model : Build-Own-Operate-Transfer (BOOT)
  - Concession Period : 30 years
  - Concessionaire : New Tirupur Area Development Co
  - Recovery mechanism : Composite water and sewerage charges
  - Tariff revision : Standard revisions linked to indexation every year; Unusual increases to be approved by Price Review Committee
  - Base Project Return : 20% pa on 185 Mld component
  - Total Cost of Project : Rs 1023 crores

Tirupur Water and Sanitation Project

- Project - To supply 185 MLD of water
- The water is allocated in the following manner
  - Industries 115 mld
  - TM domestic 33.7 mld
  - Way side villages 36.3 mld
- 192 Rural Habitations served - 450,000 (pop.'01 census)
- Tirupur Municipality - 450,000 (pop.'01 census)
- Industrial units covered - 900 units
- Households with Sewerage connection - **2005** 22300; **2014** 31000
- Cost of Project : $ 220 million
  - ✓ Equity & Sub debt : $ 87 million
  - ✓ Debt : $ 133 million
- Current Status : Scheduled for commissioning in April 2005

Tirupur Water – Cost Recovery - 1

- Cost of water – Rs 30 per KL
- Cost of water in the Tirupur Project is high due to:
  - High Capital Cost
  - High Operating Cost
  - Sewerage network investment (Rs 150 crores) being recovered through water charges

Tirupur Water – Cost Recovery - 2

- Recovery
  - Tariff Structure
    - Households in rural areas - Rs 3.50 / KL
    - Households in Tirupur town- Rs 5.00 / KL
    - Industries - Rs 45.00 /KL
  - Tariff setting
    - Formula
      - The various components of operating cost are linked to the appropriate indices like Consumer Price Index, Wholesale Price Index, etc.
      - The price of water is then adjusted annually based on the weighted average change in the operating cost
    - The Independent Auditor approves the calculations based on formula

Tirupur Water – Cost Recovery - 3

- Price Review Committee
  - Consists of one nominee each of NTADCL and GOTN (& TM) and one Chairperson (a retired judge of High court)
  - Responsible for confirmation of calculations of routine revisions and approval of revisions due to unexpected changes in operating costs
- Frequency of tariff settings
  - The Concession agreement lays down a transparent formula for tariff setting
  - Industry tariff revisions to be done annually
  - Tariff revisions for Households in rural areas would be implemented every two years in consultation with the Government
  - Tariff revisions calculated on annual basis for water supplied for Households in Tirupur town

Tirupur Water – Cost Recovery - 4

- Subsidy
  - Incidence of subsidy
    - For rural Households, subsidy is Rs 26.5 per KL
    - For Tirupur town Households, subsidy is Rs 25 per KL
    - Annual subsidy burden is Rs 65 crores (base year) borne by the industry
  - Industry affordability
    - Industry is able to cross subsidise Households as their current opportunity cost of water is much higher (about Rs 75 to 80 per KL)
    - Comparable industry tariff in other locations is Rs 60 per KL
    - The quality of water will be much better giving them a better Right First Time quality benefit

Tirupur Water – Cost Recovery - 5

- Role of subsidy
  - Meeting social objectives
  - Demonstrating that commercial orientation can be viable with internal cross subsidy
  - Establish a minimum threshold of willingness to pay
  - If successful, it will improve acceptance of such projects in other communities
- Implications for users
  - Households
    - Water at affordable costs
    - Improved living conditions and quality of life – particularly, for women
    - Results in improvement in health
    - Releases valuable time for households for leisure, employment

Tirupur Water – Cost Recovery - 6

- Government Support
  - Regulatory – Support for obtaining regulatory approvals, land acquisition, etc.
  - Fiscal
    - High leveraging of GoTN resources - 20 times
    - Government of Tamil Nadu's (GOTN) contribution limited to Rs 30 crores as equity and Rs 25 crores as sub debt to project holding company
    - This amounts to only about 5% of the total project cost of Rs 1023 crores
    - GOTN also provided additional contingent support as Debt Service Reserve Fund (Rs 50 crores) and Water Shortage Period Fund (Rs 75 crores)

Delay in project implementation, key factors

- The road to financial close is lengthy due to the following critical steps :
  - Decision to implement as PPP involves buying in various constituents
  - Sectoral and other laws need to be aligned to the public private partnership model
  - Political environment needs to be amenable
  - Detailed studies by engineering experts and financial advisers needed for effective risk mitigation
  - Negotiation of various agreements such as the concession and bulk water supply agreements
  - Complex financial and security documentation

Reforms in improving general environment for cost recovery

- Currently, water is a state subject, with management under the control of local bodies
- Willingness to pay will increase with demonstrated improvement in supply efficiency
- Governments should recognise this link between willingness to pay and efficiency, thus improving Government's own willingness to charge
- Constitution of a State Water Regulatory Authority
  - To regulate the pricing and operations of water projects

Complimentarity with Brazil Case Study

- Both cases underline need for macro economic stability
- In both cases, there is recognition of the challenges of the water sector for cost recovery within the framework of universalizing coverage while adding value to shareholders.
- Recognition of the need for private sector participation and the PPP model.
- Recognise the need to leverage Government funding.
- In both cases, there is acknowledged need for a regulatory framework.

Contrasts with Brazil Case Study

- While the Brazilian Company is listed on the Stock Exchange, it is essentially a PSU while NTADCL is a private company, which is expected to list on the Stock Exchange after construction is over.
- The Brazilian Company has high Government presence whereas in the NTADCL, there are only three nominees of the Government out of 15 Directors.
- In the Brazilian case, tariffs have been set by legislation whereas in Tirupur, the same is incorporated in the Concession Agreement.
- While both have internal cross subsidy, in Tirupur case, there is a uniform rate for urban and rural households whereas in Brazil, there is a differential cost structure between households also.

Contrasts with Brazil Case Study

Particulars	Tirupur	Brazil
Volume of water supplied		
Residential	38%	67%
Non residential	62%	33%
Revenue Water		
Residential	6%	57%
Non residential	94%	43%