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11.479J / 1.851J Water and Sanitation Infrastructure in Developing Countries  
Spring 2007

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# Understanding the Potential for Pro-Poor Utility Reform in the Water Sector

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MIT “W&S Infrastructure in Developing  
Countries”

Feb 20<sup>th</sup> 2007

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The World Bank

*Note: Photos to illustrate this lecture are appended at the end*



# The Puzzle of Slums

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*If the world's slums dwellers are willing to pay for improved W&S services...*

*why aren't utilities willing to supply such services to them?*



# Why do Utilities Fail Poor People?

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Some common arguments:

- Government inefficiency
- Political expediency
- Low affordability
- Competition for scarce resources
- Inherent nature of slums

# 1. Government Inefficiency

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- Most water utilities are public SOEs
- Public supply has resulted in gross under provision and inefficient performance
- Civil service in need of reform, currently with bad incentives and weak capacity
- Financial bail-outs create a dependency and low-level equilibrium trap
- Solution seen as private sector participation in one form or another

But...



# Reflections on Argument 1

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- Water is essential to life, a human right, a commodity with public goods aspects... so government must supply
- Piped water as a service lends itself to monopoly provision which precludes market competition... so government must supply
- Any monopoly will be plagued by similar problems regardless of asset ownership... so solution has nothing to do with private versus public

## 2. Political Expediency

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- Politicians are unwilling to serve poor
- They focus on that which is expedient to their political careers—new, visible, short-term, ribbon-cutting projects
- Result is a “build-neglect-rebuild” cycle
- Vote bank politics exacerbates this—the poor vote in greater numbers than the rich, so a perverse incentive to keep them poor
- The record is clear that political commitment to raising water tariffs has been slim

But...



# Reflections on Argument 2

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- Stereotypical view of politicians
- Too much blame apportioned to them
- Elected leaders trapped by their environments (e.g. few in India who campaign on public services platform ever win)
- Utility staff are rent-seeking and may even be more to blame for exclusion of the poor
- Venal behavior is far-reaching anyway, not just in politics

# 3. Low Affordability

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- Given low wages, the poor simply cannot afford to pay for piped water
- Connection fees are impossibly steep
- Tariffs are generally affordable but minimum consumption requirements push up the unit costs for the poor
- Standards are high and no possibility for cost recovery of investments

But...

# Reflections on Argument 3

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- Poor pay more per unit (liter/cubic meter) of water from vendors than utility customers pay the water company
- In addition, poor incur high coping costs for low levels of service (storage, health, time, etc...)
- Connection fees can be spread over time
- Low-cost technologies more appropriate for the poor are an option (e.g. condominial sewers, shared taps, etc...)
- Historically, middle class rarely ever paid full cost recovery so why should the poor?

# 4. Competition for Scarce Resources

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- Resources like water and money are scarce, especially in developing countries
- Increasing incidence of water conflicts is a good indicator of the scale of problem
- In India, water demand expected to exceed all supplies by 2050
- Network infrastructure expensive and poor cannot finance own construction
- Utilities and local governments are cash-starved, and poor have no influence on budget expenditure

But...



# Reflections on Argument 4

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- Water scarcity never invoked as a reason to halt connections for middle class
- Poor consume far less water anyway
- Absolute value of subsidies going into the water sector is huge and badly targeted. For example, 95% of water subsidy resources in South Asian cities go to existing utility customers
- Elite capture is real problem since middle classes now feel entitled to cheap water

# 5. The Nature of Slums

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- Legal, economic, political and physical conditions which define slum areas make them difficult to serve
- Slums are often: illegal, informal, dense, badly planned, narrow, deeply political etc...
- Land tenure is absent or ambiguous preventing utilities from connecting people at all
- Slums reverse the common order of urban development from “planning, servicing, construction, occupation” to opposite pattern

But...



# Reflections on Argument 5

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- Despite tenuous claims to land titles, slums have been there for decades anyway
- Reverse development cycle just means utility must be ready to step in post facto
- Utility “just” needs to change its delivery style, organizational structure, fee structure, and technical products on offer so that it is capable of serving slums....

# Snapshot of the BWSSB

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- Parastatal created in 1964 to supply W&S to Bangalore
- Serves city corporation area of 4.3 million people;
- Circa 100 lpcd available in theory
- Primary source Cauvery River 100 km away
- One of leanest utilities in India, circa 2,000 staff
- Large segments of city area and population not connected
- High connection fees but highly subsidized tariff
- Public taps for the poor



# Pro-Poor Reform

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- AusAID pilot project in 3 slums
- Establishment of Social Development Unit
- 46 slums targeted, circa 10% of slums
- Half of these slums successful, circa 5% of slums
- On average, 66% of households per slum connect
- 15 NGOs/CBOs brought in to mobilize communities
- Bold policy changes at the utility

# Slum Program Beneficiaries

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**Beneficiaries of BWSSB Slum Program 2000-2005**

	<b>Individual Connections</b>	<b>Shared Connections</b>	<b>Households</b>	<b>People</b>
3 Pilots	600	9	690	4,000
26 Post-Pilots	4,330	12	4,378	25,500
<b>Total</b>	<b>4,930</b>	<b>21</b>	<b>5,068</b>	<b>29,500</b>

# Reform Pressures

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- “INDIA SHINING”:
  - S.M. Krishna Government
  - New Global IT City
  - Infrastructure Problem
- PRECEDENTS:
  - AusAID Master Plan Pilot Projects
  - Experiments with changes in policy
- THIRD FORCE:
  - New breed of NGOs
  - New captains of industry
- NEW PROBLEMS:
  - No more funding for public taps
  - Network expansion program

# Policy Reform

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- Executive Board adopts a resolution to consider documents other than land title as proof of occupation and amends Act (election cards, ration cards, ID card)
- Board agrees to experiment with service levels and offer shared connections for groups of poor households
- Board approves a new connection fee structure for poor households (from \$40 to \$12) based on plot size > income/means testing
- Board introduces new tariff structure which lowers monthly bill (lowers minimum consumption)



# Organizational Reform

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- Creation of an in-house slum unit in 2002 charged with “scaling up” the pilot project
- Had civil service rank which gave her seniority, had mastered the engineering vernacular and utility specifics, was a social development specialist
- But... one woman show, no engineering staff, no social development staff, no resources
- And... limited powers to enforce change and enforce program roll-out across the city



# Rolling Out a Slum Program

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- Geographic targeting of slums
- Community mobilization
- Community meetings
- Application forms in bulk
- Piped infrastructure provision
- Meters distributed
- Plumbers hired
- Trial runs of water
- Service (supply, billing, collection, complaints)

*See Slide Show*

# What motivates frontline staff?

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## Professional Environment

- High share of domestic customers in service station
- Worker discretion and freedom to experiment

## Area Resources & Slum Traits

- Sufficient water in local service station
- Few illegal connections or bad public taps

## Personal Dispositions & Preferences

- Public service motivation
- Belief in technical solution

## Non-Preference Characteristics

- Long tenure in service station



# Getting Engineer Buy-In

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Role of the SDU in addition to mobilizing communities is to channel information to engineers:

1. Communicating
2. Marketing
3. Simplifying

Without this, engineers will not “spontaneously” supply slums on their own.

Innovative ideas need to be funneled down through organizations from management to frontline.

# A Private Sector Comparison: The Buenos Aires Concession

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- Aguas Argentinas SA concession in the capital; 40% owned by Suez, which has a global “Water for All” program
- In 1993, expansion target of 3.5 million people, of which 2.3 in poor neighborhoods
- Redistributive tax to finance network expansion
- Social tariff based on income and living conditions criteria on bi-monthly basis, supported by the Regulator
- Community development program started in 1999 (*Desarrollo de la Comunidad*) tasked with forging community alliances, studying new technical/financial solutions, training utility staff



# Output-Based Aid (OBA)

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- OBA is a strategy for using explicit performance-based subsidies to support the delivery of basic services
- Payment of funds is tied to the delivery of actual services (outputs) rather than cost of materials or labor (inputs)
- Outputs in water sector are usually measured as working connections
- Significant pre-financing required and time-consuming project preparation

For more information:  
<http://www.gpoba.org>

# Sample OBA Payment System

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## 1. In-Fill Connections

- Simple house connections to existing tertiary network
- Utility reimbursed a fixed payment per connection

## 2. Expansion Connections

- Extension of tertiary network to new areas
- Utility reimbursed fixed payment per connection plus an “expansion payment” per connection

## 3. Master Meter Connections

- Provision of bulk meter for community supply
- Utility reimbursed for meter and community materials supplied by utility



# Discussion Topics

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- What are the main financial, institutional, legal, and political constraints associated with service delivery to slums?
- How can utilities overcome these barriers?
- What are the implications for a public *versus* private water utility?
- What about sanitation? Different issues?

# Slum House - Tent



# Slum House - Basic Brick



# Slum House – Formal Brick



# Narrow Lane



# Narrow Lane in Momimpura



# Narrow Lane in G. Byapan



# Hard Rock in Slum Ground



# Handpump in Anekal



# Bike Vendor in P.J. Halli



# Public Tap in P.J.Halli



# Puddle Collection in P.J. Halli



# Waiting for Public Tap to Flow



# Slum Development Unit (SDU) Knocking on Door, K.R. Temple



# Meeting with Plumber, K. R. Temple



# Contractor with SDU, D.J. Halli



# Men Discuss in Ganjendranagar



# Engineer Contractor & SDU Discusses in Chetiappa Garden



# SDU and BWSSB staff discuss in Mominpura





# Women's Group 1, Anandapuram



# Application Collection in G. Byapanhalli



# AEE talks with his staff at Meter Mela Machalibetta



# SS Staff Applications at Meter Mela Machalibetta



# Slumdwellers outside of AEE office at Meter Mela Machalibetta



# Meter Distribution



# Installed Meter



# Locked Tap



# WatSan Committee, Chandranagar

