Water Tariffs and Subsidies in Latin America: Impact on Expansion of Water Services and Sustainability of Utilities

Capacity Building Workshop on Partnerships for Improving the Performance of Water Utilities in the Latin America and Caribbean Region

Recife, Brazil 11-13 June, 2007

David le Blanc,
UN-DESA

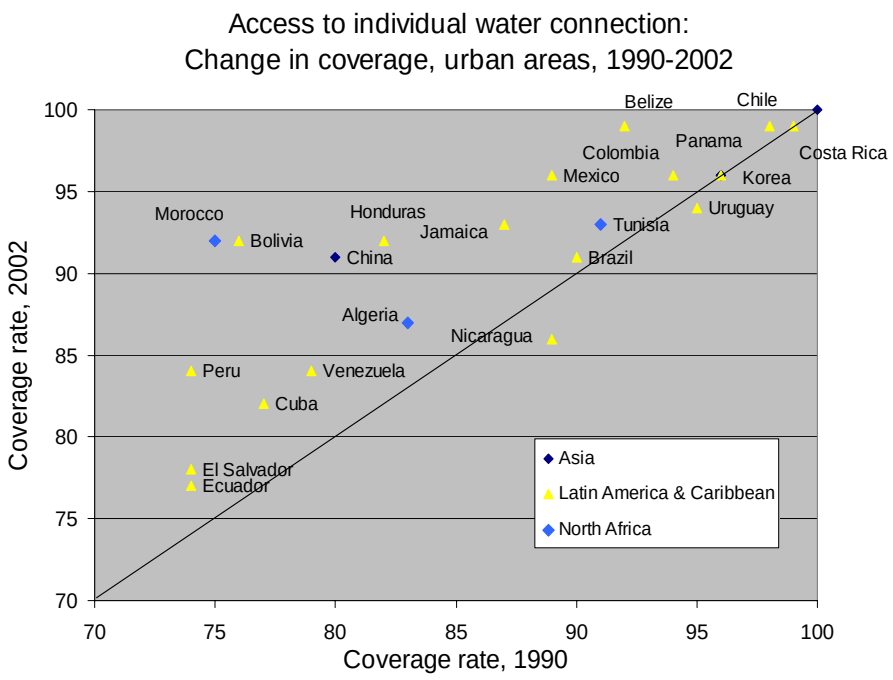
Talk Outline

- Urban access to water : Regional Panorama
- Delivering subsidies to consumers: some difficulties
- Impact of utility subsidies on sustainability of utilities
- Impact of utility subsidies on expansion of water services
- Some Recent Trends

Latin America offers a contrasted picture in terms of access to water

Great variety among countries in:

- access rates
- water availability / quality, given network connection
- institutional frameworks
  - Responsibility for providing access to water and sanitation
  - Ownership / management combinations
  - Number of providers
  - Regulatory framework, including pricing and subsidies
- business models
- Moreover, the water sector has been undergoing reforms in many countries of the region

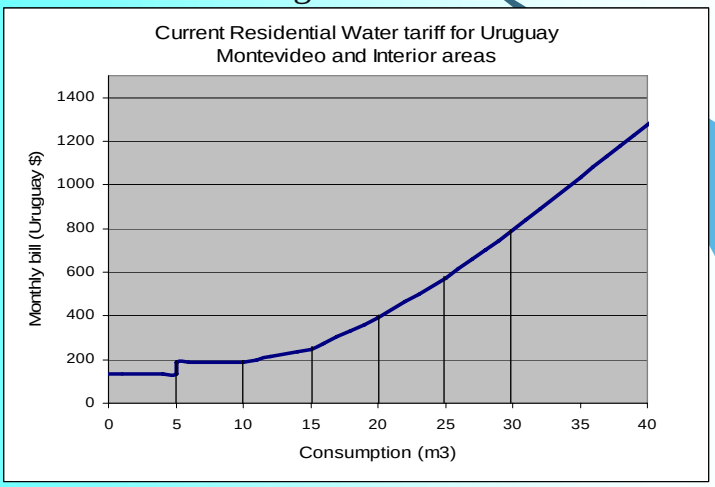


Tariffs and subsidies

- Due to the variety of institutional arrangements, water tariffs are set differently across countries
  - Uruguay : annual presidential decree
  - Colombia, Chile : the law gives a formula
  - In some countries tariffs are determined at the municipal level
- The Law sometimes requires full cost recovery by utilities (Colombia). However, implementation takes time
- Social tariffs, combined or not with cost recovery principle
  - Consumption subsidies through tariffs (IBT)
  - Cross-subsidies between rich and poor neighborhoods (Colombia)
  - Direct subsidies to poor households (Chile)

Tariff structures

- Varies a lot, but IBT predominant tariff structure
- Often IBT + fixed charge.



Source : Government of Uruguay, 2007

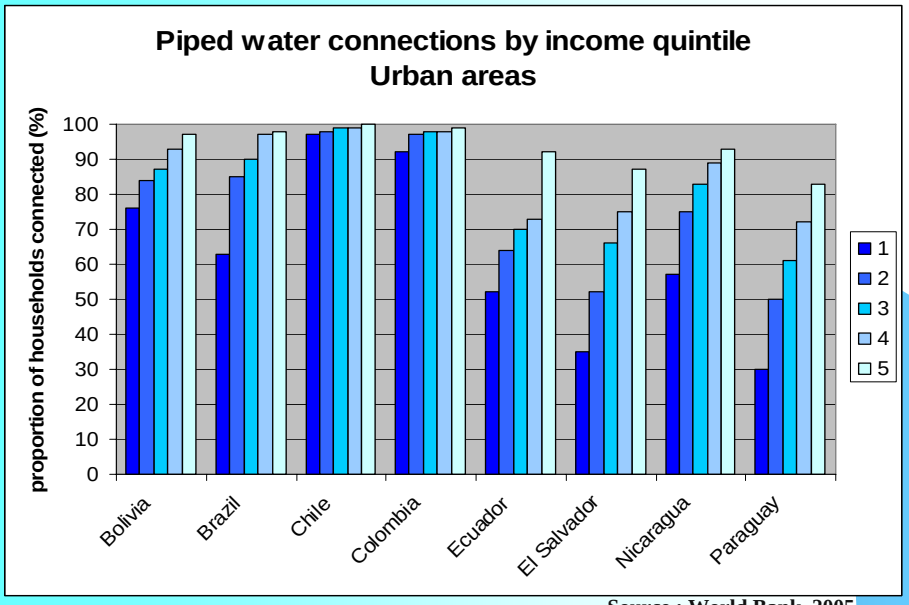
Connection to the network: the main obstacle to subsidy outreach

- Expenditures for W&S : on average, 3 – 5 % of total expenditures of poor households
- not "too high", BUT …
  - highly variable
  - can be very high for those with no access to public connections
  - Guayaquil, Ecuador
    - US$3.50 / m3 for water provided by roving *tanquero* trucks
    - US$.35 / m3 for piped water
  - Loma Fresca, Cartagena, Colombia:
    - US$ 40 / month buying the *burroducto* water,"
    - US$8 / month for potable water that flows 24 hours a day.
- Need for targeted subsidies for poorest households
- Households not connected to the network do not get water subsidies!

Connection to the network: the main obstacle to subsidy outreach (2)

- Overall, goodness of targeting and coverage of poor populations of consumption subsidies critically depend on network access rates
- Network access rates vary across countries, within countries
- The poor are less covered, due to :
  - General low cost recovery of water utilities often precluded expansion of networks to new areas (where the poor are overrepresented)
  - No incentives for utilities to extend network (more connections => more losses)
    - Regulation may impose uniform tariff which make marginal areas unprofitable
    - Legal dimension: companies' intervention perimeter, impossibility to provide services to illegal neighborhoods
    - Affordability (poverty) : households living in recent suburbs are typically poorer than average: they fall into subsidized parts of tariffs

Access to piped water increases with income



Source : World Bank, 2005

Further difficulties with IBTs (1)

A series of bottlenecks constrain the delivery of services and associated consumption subsidies to the poor.

<u>Practical problems:</u>

Beyond having lower access rates, poor households usually fare worse on:

- Connection given access
- Metering rates
- Quantity of water consumed (the more you consume, the higher the subsidy)

<u>Design problems:</u>

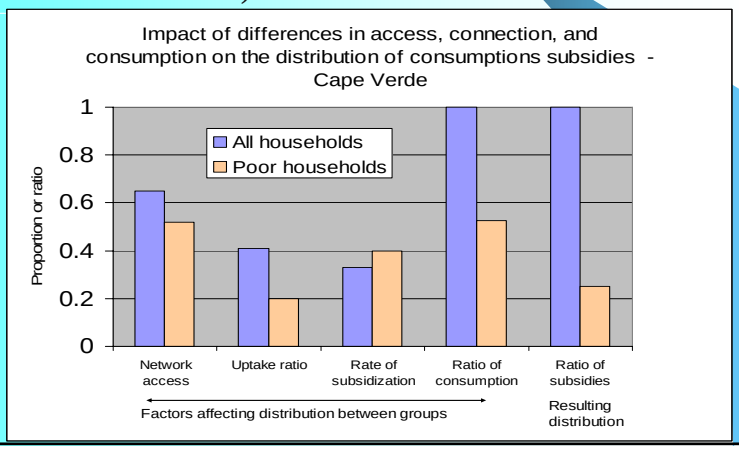
In many countries analyzed in the World Bank review paper (2005)

- The size of the first block (the most subsidized) is too high, and/or
- Too many blocks are priced below costs

Difficulties with IBTs (2)

As a result of design and practical problems

- Coverage of the poor population can be weak (high proportion of poor do not get subsidies)
- Targeting is often deficient (A large portion of subsidies go to high income households)



Difficulties: Administrative targeting

Alternative strategies :Administrative targeting

- Geographic
- Means testing (Chile)
- Combination of administrative, tariff and quality targeting
- Colombia :
  - all neighborhoods in country divided into 6 strata based on housing quality. Bottom 3 strata receive subsidies, top 2 strata pay surcharge.
  - Combined with IBT

	Advantages	Drawbacks
Administrative targeting	Tracks income and poverty more closely Flexible over time	Costly administrative system Coverage issues Management capacity issues for municipalities
Geographic targeting	Easier to implement, less costly Targeting improves on simple tariff subsidy	Less precise than means testing for poverty targeting Careful balancing of strata needed to ensure cost recovery

Impact of Utility Subsidies : Sustainability of Utilities

Structural tendency to underfinancing by governments, reluctance to make people pay "too much" for water, used to result in :

- Declining quality of service
- Low incentives to efficiency improvement for utilities
- Structural utility deficit does not allow for new investment
- No incentives to extend network

New context : reform of the water sector

- Restore / improve quality of service
  - Explicit output and quality targets
  - Management contracts based on delivery targets
  - Better management of existing assets
- Improve coverage of water access, attracting additional investment
- Provide better incentives for utilities and governments
  - Separate subsidies from finance
  - Make subsidies more transparent (consumer versus utility) and efficient (targeted versus across-the board)

Expansion of Water Services

- Most utilities are not able to finance network extension and related production capacity through cost recovery alone
- Connection costs, if charged to new customers alone, is often far too high for poor households
- In European countries, network expansion has typically been cross-subsidized (expenses for network extensions shared between all consumers)
- Need to find incentives for utilities to expand network
  - Output-based subsidies : companies bid on lowest subsidy given government contribution per connection (or vice-versa)
  - Used in Paraguay for water
  - Results seem encouraging
- Need of strong and sustained government commitment to provide funds for investment

Expansion of Water Services : Colombia

Colombia : Ley de Servicios Publicos, 1989, and further legislation

- Colombia's water regulation authority established a system for setting rates throughout the country, plus system of cross-subsidies.
- Fixed percentage of federal government budget transferred to local governments for financing water and sanitation projects
- Local governments take care of capital investments,
- Operational management : municipalities can hire private companies to operate the services on a contract basis

- Some municipalities have strengthened their public operators (Bogota, Medellin)
- Others adopted "mixed capital" companies (Baranquilla and Cartagena): city owns controlling stake in water utility and secures financing for infrastructure projects.
  - Barranquilla AAA:
    - 1996: 66 % of bills collected
    - 2006: 99% water coverage, 87 % of bills collected
  - Catagena ACUACAR:
    - 1996: 73 % water coverage, 45% functional metering ; 40-45% of bills collected;
    - 2006: 98% water coverage, generalized metering, 92% bill collection

Providing water to the poor in Latin America: some trends

<u>Governments:</u>

Better target subsidies

- Who needs subsidies ?
  - WTP estimates show that proportion of households needing subsidies may be lower than what current tariffs imply
- Collect data and information:
  - Who are the recipients of current subsidies ?
  - What factors are limiting take-up in connected areas ?
  - How do households not connected to the network cope ? How much do they spend on water ?

Policies should be focused on increasing access to safe drinking water (and sanitation).

- How to finance network extension ?
- How to incorporate alternative providers in the global picture?

Providing water to the poor in Latin America: some trends (2)

Providers:

Know customers and adopt flexible business models

- Work close to the customer.
  - "on-site" (mobile) payment facilities ;
  - partnerships with existing networks (grocery stores, shops, banks, etc.)
  - weekly or by-weekly bills instead of monthly bills
  - Payment of upfront connection fee by installments (Paraguay)
  - Prevention of non-payment
    - mobile "payment stations where utility's agents can negotiate for payment schedules with clients (convenios de pago)
    - bill collection contractors
- Communication and awareness campaigns (how much does it cost to provide the service ? how are bills calculated ?) on a permanent basis
- Intensive use of IT to manage client relations (customized billing software), handle repairs and maintenance quickly

THANK YOU !