Water Tariffs and Subsidies in Africa: Impact on Poverty, Expansion of Water Services and Sustainability of Utilities

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An oft repeated story…

- Access to drinking water is a basic need.
- Access to safe water has tremendous direct and indirect impacts on poverty-related outcomes
- Thus, access should be provided to everyone at affordable tariffs.
- Basic starting point:
  - Drinking water is provided by utilities.
  - Thus, subsidies should be given to utilities so that they could pass it on to consumers.
- What is wrong with this line of argument?
Talk Outline

• Delivering subsidies to consumers: some difficulties
• Impact of utility subsidies on poverty, expansion of water services and sustainability of utilities
• Reforming subsidies to utilities
• Beyond utility subsidies

Difficulties: Delivery (1)

A series of bottlenecks constrain the delivery of services (and associated subsidies) to the poor

Case of consumption subsidies

Theoretical problems:
• Access to network
• Connected / not connected (given access) : relatively high (Figures WB report)
• Undifferentiated consumption level between poor and non-poor households (Figures WB report)

Practical problems
• Initial Block of tariff set too high : everybody is subsidized
• Shared connections mean paying the highest unit price (individual connection but also kiosks/ standpipes)
Impact of differences in access, connection, and consumption on the distribution of consumptions subsidies - Cape Verde

<table>
<thead>
<tr>
<th>Factors affecting distribution between groups</th>
<th>All households</th>
<th>Poor households</th>
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<td>Network access</td>
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<td>Uptake ratio</td>
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<td>Rate of subsidization</td>
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<td>Ratio of consumption</td>
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<td>Ratio of subsidies</td>
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As a result,
- Coverage of the poor population is often weak (high proportion of poor do not get subsidies)
- Targeting is also deficient (A large portion of subsidies go to high income households)

Alternative strategies:
- Differentiated services (standpipes)
  - Poor “self-select” into lower-quality service
  - Highly (totally) subsidized. Does it work? (India, Nepal)
- Administrative targeting (geographic; means testing)
- Combination of administrative, tariff and quality targeting
Difficulties: Financing Problems (1)

Financial support to utilities from government

Risks:
- Government liquidity constrained
- Incentive problems
  - Utility: not to improve performances (subsidies are not passed on to consumers)
  - Government: delay maintenance (long-lived assets) and let service quality deteriorate

Cross-subsidies, e.g. industry pays for households

Risks:
- Few net contributors
- Shrinking base of net contributors if possibility of alternative provision (Cote d’Ivoire)

Impact of Utility Subsidies: Poverty (1)

- Expenditures for W&S represent between 3 – 5 % of total expenditures of poor households: not “too high”

BUT ....
- Expenditures on water are highly variable
- Can be very high for those with no access to public connections
- Even households with private connections often rely on other water sources
Distribution of Water Tariffs for Alternative Providers
Based on 47 countries and 93 locations

Affordability As a Function of Water Tariffs

Source: Foster and Yepes 2006.
Note: LAC = Latin America and the Caribbean.
Impact of Utility Subsidies: Poverty (2)

In conclusion:
- Due to limited coverage of public networks (especially in Africa), water subsidies through utilities are not a good way to redistribute income.
- However, potential need for targeted consumption subsidies, stronger in Africa.
- In practice, due to limited coverage of public networks, subsidies concentrated on utilities leave most of the poor aside.
- Connection subsidies are rare, although their social return would often be very high.
- Alternative service quality: problem of the middleman (e.g. Kenya, standposts).

Impact of Utility Subsidies: Sustainability of Utilities

Structural tendency to underfinancing by governments, combined with reluctance to make people pay “too much” for water, results in:

- Declining quality of service
  - people / industries have to secure consumption from other providers
  - higher rates for industrial customers may lead industries to opt out
  - further undermines the financing base of the utility
  - more rapid degradation of the assets

- Low incentives to efficiency improvement for utilities
  - higher efficiency => less transfers?
  - for regulator / government: difficult to sort out efficiency issues from subsidy issues
Impact of Utility Subsidies: Expansion of Water Services

- General low cost recovery of water utilities precludes expansion of networks (structural deficit does not allow for new investment)
- No incentives to extend network
  - more connections => more losses
- Regulation may impose uniform tariff (e.g. Universal Service obligations (USO)).
  - May make marginal areas unprofitable (sub urban and peri-urban land: where urban expansion is concentrated!)
- Connection subsidies more recent, less frequent than consumption subsidies
### Reforming Utility Subsidies

#### 1) Know your (potential) customers!
- 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?
  - How can current subsidies be reformed to decrease leakage and increase coverage (simulations)?

#### 2) Separate subsidies from finance
Social concerns are highly legitimate, but
- Responsibility to assist poor customers belongs to government, not utility
- Sustainable tariffs are the best guarantee to sustained services and investment by utilities
  - Better management of existing assets
  - Attracts additional investment
- Make subsidies more transparent (consumer versus utility) and efficient (targeted versus across-the board)
- Provides better incentives for utilities and governments
  - Utilities: improve efficiency and sustainability
  - Government: financially assume subsidies
  - Links with output-based aid
- Overall recommendation in other fields (e.g. housing)
Beyond Utility Subsidies

Crucial benefits provided by access to safe water; yet only a fraction of population covered by public networks.

● Policies should be focused on increasing access.
  – How to finance network extension?
  – How to incorporate alternative providers in the global picture?
● Shift the bulk of subsidies from utility subsidies to subsidies encompassing other forms of provision
  – Connection subsidies
  – Differentiated services
  – Alternative providers

THANK YOU!