

Private participation in infrastructure for the poor—what is the future?

Michael Hubbard
University of Birmingham

The argument which this presentation makes

- Private participation in the ownership, investment and delivery of infrastructure services (electricity, telecommunications, water & sewerage, roads) has increased greatly.
- It has the potential to benefit the poor but does not always do so.
- More effective government is essential for the potential to be realised in urban areas
- Sustainable technology approaches are becoming important, requiring new types of collaboration

Link between infrastructure & poverty reduction

- Link between infrastructure and growth
 - Infrastructure and living standards
 - Communications
 - Energy - power and gas
 - Transport - roads, rail, ports, airports
 - Water and waste

Traditional approaches have failed to deliver adequately

- “Developing Countries have invested **4%** of national output in infrastructure **BUT:**
 - **1.1 billion** lack adequate access to clean water
 - **2.4 billion** lack adequate sanitation
 - **4 billion** lack sound wastewater disposal
 - **2 billion** lack electric power”
- Source:<http://www.ppiaf.org/conference/docs/Presentations/Session%200-1.pdf>

“..and have failed the poor particularly”

- “Public monopolies have delivered limited access and poor quality of formal services to the poorest
- Subsidized services often consumed by higher-income households
- Poor face costly alternatives:
 - Price of water from informal vendors = **20 times** as much as piped water price
 - Paraffin = **10 times** as much as electricity”

Benefits it was hoped private sector involvement would provide:

- Access to management expertise and capital
- Competition leading to more innovation, & reduced costs
- Expanded access to service
- Increased labor productivity
- Introduction of new technologies

There has been much expansion of private participation in infrastructure

BUT benefits have often been less than expected

The problem

"In practice, the social impact of private participation in infrastructure has been mixed. While the poor have seen their access to services increase in most cases, they have generally benefited less than the rich. This has led to job cuts, tariff increases, the end of illegal connections, and high costs for new connections—all of which tend to hurt the poor disproportionately more than the better off.." Source: ADB 2004 **Infrastructure for Development: Private Solutions for the Poor with a focus on Asia**

[http://wbln0018.worldbank.org/ppiaf/activity.nsf/files/PPI+for+the+Poor.pdf/\\$FILE/PPI+for+the+Poor.pdf](http://wbln0018.worldbank.org/ppiaf/activity.nsf/files/PPI+for+the+Poor.pdf/$FILE/PPI+for+the+Poor.pdf)

The solution

The solution is to target poor households

1. through policies **to improve access to services** (subsidizing connection costs, spreading payments over time, selecting cheaper technologies) and
2. **to target price subsidies to specific regions and household income groups.**
3. Appropriate regulation that attracts and sustains competition and allows **innovative tariff structures** can also benefit the poor.

Electricity

Electricity. Pro-poor regulation in electricity is critical to managing demand as well as improving the quality of life.

Appropriate electricity regulation can:

- Lower tariffs and new connection charges by packaging subsidies.
- Increase the affordability of energy-efficient appliances by sharing the benefits of peak reduction and the cost savings achieved by large manufacturers leveraging their market power.
- Promote off-grid generation through innovative financing.

Telecommunications

Advances in telecommunications are reducing costs and extending access to previously isolated communities.

In rural Bangladesh early success by Grameen Telecom—a nonprofit supported by its parent, the highly successful, for-profit microcredit provider Grameen Bank—has benefited many women working as pay phone operators and entrepreneurs.

New role for government regulators

Principles and institutions of economic regulation of infrastructure services were originally transplanted from industrial to developing countries.

But regulators in developing countries face challenges that their counterparts in industrial countries do not—particularly serving large numbers of poor consumers.

To help the poor, infrastructure regulators need to...

- **Use competition** for service provision contracts, in order to reduce tariffs
- **Target tariff subsidies to the poor** and link payment of them to the performance of service providers in getting services to the poor
- **Regulators need to remain independent** and monitor government subsidy payments to service providers. If govts do not pay the subsidy, the provider is likely to put up the tariff, which hurts the poor
- **Service standards for the poor need to be flexible**, allowing differences in service levels among customer categories.

....and regulators need to:

Create poverty maps providing an accurate picture of who and where the poor are, to ensure that subsidies can be accurately targeted and delivered.

Have staff capable of doing the above

But staff capacity may be weak at local level. So a combination of local regulation with central supervision (“sunlight regulation”) may be necessary

What if there is no grid?

The above applies where poor people have access to a power grid or water & sewage connections

eg. most poor people in India have no access to a grid

Green energy for the poor?

“Renewable energy offers energy to people who live in places with no power grid, places that have no lights, that have to burn scarce wood supplies to cook food. It offers the chance for developing nations to leap frog past the “dirty” stage of development.”

Subsidies for solar?

- **“Inexpensive solar cells in conjunction with government subsidies** will make energy self sufficiency a more affordable prospect and will likely be used by off-grid people to charge essential appliances that don't use a lot of power including items such as radios, mobile phones, water purifiers and bright, efficient lamps called light emitting diodes (LEDs).
- This innovation has come about as the result of The World Bank last month announcing a private sector competition to devise the best-value, low carbon light source for poor households in developing countries, as a way to flag up what it estimates is a \$17 billion market in off-grid lighting in Africa alone”.

G24 solar to help world's poor by Charles Doherty @ 11 Nov 2007

At an early stage

Such cooperation between government subsidies, private providers and international promotion is at an early stage.

It has great potential as a new form of partnership to create sustainable for the poor.

MIT Solar Turbine Group

