

Private Sector Participation in urban water supply

Background

This Briefing Note concerns Private Sector Participation (PSP) in water and sanitation. It assesses the evidence for the effectiveness of PSP in improving affordable access to water and sanitation for the poor in developing countries.

The context here is the involvement of the private sector in the operational activities of delivering water to consumers i.e. it does not include the private sector's involvement in one-off activities such as design and construction that are common place in engineering procurement practice. Full ownership of water infrastructure assets by the private sector is extremely rare and is not considered here.

Water is predominantly under the control of public sector utilities. The inability of the public sector to respond to service deficiencies has led to increased promotion of private sector involvement.

Analysis of PSP databases suggests that in 433 cities in the world with populations larger than 750,000, 20% are currently served by PSPs. In 40,000 smaller cities and towns, PSPs serve approximately 6% of the total. Over 600 PSP contracts were announced in developing countries between 1991 and 2001, some of which were in Africa.

It is worth noting that whilst many documents hypothesize about the effects of PSP on the poor, taking distinctly pro or anti- positions, there is little evidence-based reporting on what does, and does not, work.



Headline facts

- Private Sector Participation (PSP) in urban water supply may involve: International Companies; National Companies; and Small Water Enterprises that operate informally outside of the Utility.
- Public sector performance is poor in many cities in sub-Saharan Africa where less than 50% of the population is supplied. Small Water Enterprises often fill the gap.
- Service contracts and management contracts are simpler forms of PSP where the public sector transfers limited responsibility to the private sector; these are widespread in Africa.
- PSPs can lead to improved utility performance but there is little evidence to show the extent to which service coverage has been extended to the urban poor.
- Small Water Enterprises are likely to be essential to any strategy to increase access to better and affordable levels of water service for the urban poor.
- If PSP is to improve access and service delivery for the poor, then this has to be specified in the contract documents which will ultimately be the basis for engaging the private sector. Very few PSP contracts contain explicit pro-poor references.



The Private Sector in Water

Who are they?

There are three main categories of private sector organizations active in the water sector:

- International privately owned companies, including nationally registered subsidiaries of foreign-owned companies, sometimes with some local domestic shareholding;
- National (domestic) formal privately owned companies; and
- Local (domestic) informal private sector operators, known as Small Water Enterprises (SWE).

International and national consulting and construction companies have traditionally been active in the water sector in the design and construction phases, whereas the advent of international companies as water operators on a significant scale is relatively recent. International private operators are generally more risk averse than the national (domestic) private sector. The national private sector and SWEs continue to operate in areas of conflict where the international private sector would not usually venture.

How does the private sector participate?

There are a number of different contractual forms for private sector participation:

- Service contracts are the simplest form of PSP whereby the public authority retains overall responsibility. Examples include maintenance of specific system components (such as pumping stations) and meter-reading. Service contracts have least transfer of risk to the private sector and are to be found in practically every African country.
- Management contracts are more comprehensive arrangements that involve the transfer of responsibility for overall management of, for example, operation and maintenance of a supply network. Management contracts are also found in many African countries including Uganda, South Africa, Tanzania, Kenya and Ghana and are typically of 3-5 years duration.
- Lease contracts involve increased transfer of commercial risk to the private sector, for operation and management, including revenue collection, with capital financing from the public sector. Examples of lease contracts in Africa are found in Guinea, Cote d'Ivoire and Senegal, with a duration of 10 or more years.
- Concession contracts are substantial in scope, as the private sector takes full responsibility and covers operation and maintenance of the public utility's assets and investments. Concession contracts are designed to attract private investment in the sector and tend to be long duration contracts, often up to 25 years. Concession contracts are relatively rare, with examples in Buenos Aires and Manila. There are a few substantial concessions in Africa: including those in Senegal and the Dolphin Coast.

The most common forms of PSP are service and management contracts at the lower end of the spectrum of complexity and transfer of risk. Lease and concession contracts are rarer.

Serving the Urban Poor

Every day 160,000 people migrate from rural to urban locations in developing countries. Annual urban growth rates in Africa are the most rapid, at nearly 4%, which is twice the global average. Almost 1 billion people live in slums, making up 32% of the global urban population. In sub-Saharan Africa 72% of the urban population is estimated to live in informal settlements.

There have been expectations that PSP would help to address this issue; governments often expect PSP contracts to result in extension of services to the poor, given the apparent inability of the public sector to deliver. This could happen as follows:

- PSP improves efficiency and effectiveness of utility operations, with benefits which therefore "trickle down" to the poor. For instance, reduced levels of unaccounted for water can result in more water being available, and this can be used to extend coverage to the poor through new connections and/or kiosks.
- PSP contracts make specific reference to improving access and levels of service for the poor. i.e. it is a condition of contract. Put simply, if such a requirement is not in the PSP contract then there is no obligation on the contractor to address this specific problem, and it is not reasonable to expect a pro-poor outcome.

Public Sector Performance

In general public sector performance in developing countries has been poor – see Table 1. Keeping pace with the rapid rates of urban growth is in itself a major challenge, let alone expanding service coverage.

- Both the poor and the not-so-poor receive inadequate services - or no service at all - from water utilities, with less than half the population served by fully public utilities.
- Public utilities have been unable to expand service delivery to keep up with the colossal growth in urban population.

Table 1. Service coverage

City	Population supplied by public utility
Mombasa, Kenya	25% including 4% of those living in informal settlements
Dar es Salaam, Tanzania	46%
Nairobi, Kenya	50%
Accra, Ghana	59%
Khartoum, Sudan	33%

In sub-Saharan Africa, the number of urban people having household water connections actually fell from 47% to 39% between 1990 and 2002. However, there is little data that disaggregates service provision, whether public or private, for the poor in informal settlements.

Private Sector Performance

The evidence shows that the success of PSP is mixed, with different PSP models having potential to deliver different benefits. Also, there is no agreement on basic definitions of key performance indicators for use in comparative performance monitoring of PSP contracts.

International private sector

There have been a number of high profile failures and also some successes in respect of improved utility performance. However, failures make the news and this has no doubt contributed to the perception that PSP as a whole concept has failed.

- Table 2 indicates the changes to utility performance as a result of PSP

contracts for a number of key performance indicators. These show many significant improvements; however, it cannot be assumed that the improved performance necessarily results in better access for poor people.

Table 2. Changes to utility performance under PSP

Location	Status	People served	Unaccounted for water	Supply availability	Bill collection rate
Burkina Faso 36 urban centres (over 2 years)	Service	Total connection up 14%	14% to 15% (increase)	n.a.	69% to 72%
Mali 16 urban centres (over 2 years)	Concession	Connections up 33% Standposts up 82%	38% to 32% (decrease)	'Typical' continuity up from 18 to 20 Hours	Constant 94%
Senegal 56 urban centres (over 3 years)	Lease	Total connections up 10% (overall coverage is 94-100%)	22% to 20% (decrease)	Constant 24 hour supply	97% to 98%
Tanzania (Dar es Salaam only) 3 years	Lease cancelled	Connections up 15%	No change at 55%	No change 3-24 hours	No change 60%
Philippines Manila East (over 7 years)	Concession	64,000 extra connections to poor communities, (400,000 people)	67% to 43% (decrease)	Proportion of population with 24 hr supply 26% to 89%	n.a.
South Africa	BOTT	Improved service to 4 million rural poor in 4 states	n.a.	n.a.	n.a.
South Africa Dolphin Coast	Concession	170,000 additional poor people served	n.a.	n.a.	n.a.
South Africa Queenstown		170,000 additional poor people served	n.a.	n.a.	n.a.
Cote d'Ivoire Treichville, (2 years)	Concession	36% to 39%	6% to 16% (reported by WUP)	22 to 23 hrs	n.a.

(Time denotes the period over which performance was measured)

- There is little evidence to show the extent to which service coverage has been extended to the urban poor as a result of the intervention of larger scale formal private sector companies in utility management.
- An important finding of an analysis of PSP contracts is that there are very few that contain explicit pro-poor references; that is, there are no contractual requirements to extend service coverage into informal settlements where the urban poor live. Contract preparation with governments simply does not disaggregate on the basis of poverty.
- There has been high profile re-negotiation or failure of concession contracts in Manila and Argentina by one or two leading international water operators. Similarly the Tanzanian Government has recently decided to terminate the lease contract in Dar es Salaam. Nevertheless, it should be noted that two 25-year concession contracts for Manila were awarded in 1997 to two water companies: the contract for the western area of Manila resulted in contractual problems and was terminated in 2003, while the contract for the eastern area of Manila continues.
- Overall, there has been a decline in investment flows into infrastructure projects with private sector participation from the peak levels in 1997. In general, increased levels of private investment are only achieved through concession contracts.
- Nevertheless there are examples where adjustments have been made to existing contracts during operation in order to improve services for the urban poor. In the

Table 3. National Private Sector

Location	Status	People served	Unaccounted for water	Supply availability	Bill collection rate
Uganda 51 small towns	8 firms and 5 individuals - management contracts	1200 new connections (2004-05)	n.a.	n.a.	10 towns meet O&M costs

Manila East zone PSP there have been 64,000 additional house connections serving 400,000 people in designated poor communities. In Queenstown, South Africa, a much smaller PSP covering a population of 22,000 was amended to include an extra 170,000 inhabitants of predominantly low-income areas.

- Where services for the urban poor have improved, this has often been an outcome of agreeing adjustments to existing contracts during operation.

National private sector

There is little documented evidence about the role of national private firms other than those set up as local partners in the context of international PSPs. Table 3 illustrates the effect of national (domestic) companies managing a number of small towns' water services in Uganda through management contracts.

Small Water Enterprises

Recent research has revealed that Small Water Enterprises are very active in the sector and play a significant role at the service delivery end of water and sanitation services. They fill the gap left by the inadequacy of the utility providers – whether from the public or formal private sectors. Operating informally, SWEs are often considered illegal and are not recognized.

The extent to which Small Water Enterprises fill this service gap has not been accurately assessed. In 1985 it was estimated that between 20-30% of the urban population in developing countries were served by water vendors. A more recent study of 10 cities in Africa and Latin America found that between 15% and 60% of the urban populations were served by SWEs. Table 4 shows the latest information available from a detailed analysis of 5 African cities.

Thus involvement of SWEs is essential to any strategy to improve access to water for the urban poor whether under public or private sector management. Other significant findings include:

- the cost of water from SWEs is typically 5-10 times higher than from a utility; this is in part because of the reluctance of many utilities to charge the economic cost for water;
- on the limited evidence available it does not appear that SWEs are profiteering from the poor; they are small enterprises trying to survive in a competitive market.

Table 4. Who supplies urban water?

City	Population supplied by public utility	Population supplied by SWEs
Mombasa, Kenya	25% including 4% of those living in informal settlements	n.a.
Dar es Salaam, Tanzania	46%	39% including 35% through resale of water from utility
Nairobi, Kenya	50%	50% of population, including 60% of urban poor
Accra, Ghana	59%	
Khartoum, Sudan	33%	95% of poor residing in informal areas (4 million people)

Lessons Learned

If you are poor and already connected to the network then implementation of PSP arrangements often results in an increase in the levels of service although any accompanying increase in tariffs may lead to consumer dissatisfaction.

If you are poor and not connected to the network things may improve because the number of active connections does increase (while new ones are added). However, the extent to which this benefits the poor is largely unknown due to lack of baseline information at the beginning of contracts. This makes it difficult to assess what proportion of the new connections serve the poor. Also, a private connection is the ultimate water supply and will remain out of reach for many poor people.

If you are poor it matters where you live: an added complexity is that the poor do not exist as 'geographical islands'. In many cities in developing countries, the poor live amongst and alongside the not-so-poor. It may therefore not be practical and may not make business sense to have a dedicated infrastructure service for the poor to the exclusion of the not-so-poor. Many PSP contracts do not take into account those living in informal settlements, in part because the city authorities regard these as illegal and/or temporary settlements.

Pro-poor contracts: if an objective is to improve access and service delivery for the poor, then this has to be specified in the contract documents which will ultimately be the basis for engaging the private sector. For PSP to improve coverage, the contracts need to specify the requirement to extend services to low-income areas, including informal settlements.

The financing gap remains: the issue of finding capital for expansion of infrastructure, and using it efficiently, needs to be resolved urgently, particularly where PSP arrangements that do not attract capital investment are being considered.

Do not force-fit standard models: there is evidence of a need to re-engineer PSPs to avoid forcing quite specific and often complex forms of contract into situations where they do not fit – lack of local capacity is a key issue here.

This Briefing Note assesses the evidence for the effectiveness of PSP in improving affordable access to water and sanitation for the poor in developing countries.

Key references

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