Regulating Public and Private Partnerships for the Poor













MONITORING PUBLIC PROVIDER: Kampala

Uganda in East Africa has only about 15% of its population living in towns. Although Uganda is a low-income country, in recent years the Government and its providers of infrastructure services have proactively pursued new public management approaches such as public private partnerships, improved accountability, and transparency. In the urban water sector the National Water and Sewerage Corporation (NWSC) manages 15 of the largest towns and has achieved recent successes in its commercial performance. These include an increase in the number of active pipe connections in urban Uganda from 43,000 in 2000 to 70,000 in 2003. However, only 19% of households (8% by WHO survey) have their own pipe connections, and 6% of the poorest 40% of the urban population have their own connection (Uganda household survey, 2000). Much remains to be done and the Government of Uganda (GoU) are keen to continue with reforms such as more independent regulation.

"there have been only limited initiatives to serve the poor......probably due to a perception that a big commitment to serve the poor could threaten achieving commercial targets "

Uganda Case Study Report



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Case Study: UGANDA

KEY FACTS

Population 25 million

Urban population 8.3%

GDP per capita 2002 US\$ 1,390

HDI rank 146/177

Population living under the national poverty line 44%

Exchange rate \$1 = 1870 UShs.

Urban household water connections 8%

Urban improved sanitation 53%

Water Poverty Index 44

> Study city Kampala

RegulatorMinistry by
Performance Agreement

Service Provider
National Water and Sewerage
Corporation (NWSC)

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Research Summary

Incentive based, economic regulation of monopoly water and sanitation providers is a powerful tool for improving services. Regulators determine the maximum water price ('price cap') to finance a desired level of outputs. Prices in high-income countries have tended to increase faster than inflation as society demands higher standards. The total revenue requirement (from which the price cap is derived) is determined by adding anticipated operating expenditure to planned capital expenditure (for capital maintenance as well as for improvements in quality, security of supply, service standards and service extensions), plus an acceptable cost of capital. Both opex and capex plans include efficiency targets derived from comparisons between a number of providers. Water companies are allowed to retain any further efficiency savings achieved within the price cap for a period (five years for example), an incentive to achieve even higher efficiency, before the benefits are shared with customers in reduced prices for the future.

This model has been adapted around the world with varying degrees of success, usually in the context of a Public Private Partnership, but until recently it has tended to be reactive rather than proactive regarding early service to the poor. There is now a recognised need for adequate economic regulation of public providers, as well as private companies, in lower-income countries, to deliver similar mechanisms for financeability and efficiency and as a prerequisite for developing effective pro-poor urban services.

The purpose of this DFID research project is to give water regulators the necessary technical, social, financial, economic and legal tools to require the direct providers to work under a Universal Service Obligation, to ensure service to the poorest, even in informal, unplanned and illegal areas, acknowledging the techniques of service and pricing differentiation to meet demand.

Looking to achieve early universal service, the research also considers how the role of small scale, alternative providers can be recognised in the regulatory process. Customer involvement, at an appropriate level, is seen as the third key aspect. The research investigates mechanisms for poor customers, and most importantly potential poor customers, to achieve a valid input to regulatory decision-making to achieve better watsan services



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The Water Sector and Institutional Framework

As part of the reform of the urban water sector in Uganda it was envisaged that a substantial Public Private Partnership, some form of lease contract, would be introduced, following the initial two successive management contracts in Kampala. This would be accompanied by the creation of an independent regulator and an asset holding authority. Though these reforms have been delayed, perhaps due to changes in the international water market, the government is intent on progressing change within the sector, with the aim of supporting either public or private sector management.

In recent years the National Water and Sewerage Corporation (NWSC) has improved its commercial viability. For example, it has reduced the number of staff per thousand connections from 35 in 1998 to around 11 in 2003. Similarly, its operating ratio (revenues/operating costs) has decreased from 0.90 to 0.75 in the period 2000 to 2003. This has occurred due to NWSC improving the performance of its own staff, but also through engaging with the private sector. A three- year management contract for operational services in Kampala with Ondeo Services Uganda Ltd (OSUL) had been in operation for two years but was terminated in early 2004 when the revised contract terms were deemed to be too expensive. However, a key benefit has been the contract management experience gained by NWSC staff, which they have found useful in managing internal area performance contracts with each of the area offices.

Management of water services for the remaining smaller towns in Uganda is the responsibility of the town councils as part of the government's decentralisation programme. The municipal councils receive support from the Directorate of Water Development (DWD) which is part of the Ministry of Water Lands and Environment (MoWLE). DWD have co-ordinated the letting of management contracts by local municipal councils to local operators in 40 towns. The initial outcomes of these contracts are encouraging, but it is acknowledged that there is scope for improvements in investment planning and regulation of services.

The MoWLE in Uganda has wide discretionary powers for economic regulation under the Water Statute (1995), and these are subject to fairly flexible interpretation.



Right: regulation by performance contracts - current Ugandan urban water framework

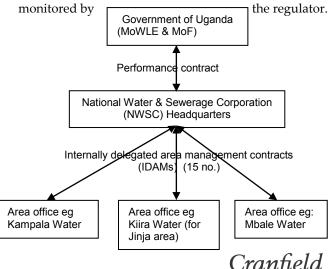
Left: NWSC HQ

DWD is responsible for technical standards. These agencies are to some extent limited by capacity.

The Ministry of Finance (MoF) through their privatisation unit have substantial informal powers on matters such as reform and tariff policy. Some level of economic regulation has evolved through performance contracts between the Government of Uganda and the National Water and Sewerage Corporation (NWSC). This is a form of 'regulation by contract' that is commonly used as the 'French model' of regulation, but in this case the contract is between government and a public utility. The diagram below shows the accountability framework for the regulation of large towns in the urban water sector, using performance contracts in 2004. Performance is meant to be monitored by a quarterly committee comprising senior civil servants from MoWLE and MoF and the Chair and Managing Director of NWSC, without any external involvement.

A Multi-Sector Regulator (MSR) has been proposed for the water, power and possibly communications sectors. This would reduce the financial burden on the water sector, and allow for the most effective allocation of scarce resources. Given the establishment of a regulator for the power sector and the uncertainty about the structure and time for establishment of a MSR, it will be advisable to maintain the regulatory functions of the DWD until such an independent regulator is in place.

An Asset Holding Authority (AHA) is envisaged to hold the water and wastewater assets of the large towns grouping on behalf of government. The AHA will be 100% government owned, set up as a limited liability company governed by a board of directors. DWD, acting on behalf of government, will enter into a concession contract with the AHA, which will be fully responsible for all infrastructure investment planning and execution. The AHA will also monitor the performance of the Private Operator. The performance of the AHA will be monitored by



Service to the Poor and USO

While there is no definitive Universal Service Obligation (USO) for urban water services in Uganda, it is worthwhile examining both the ministry's water sector targets and the service level assumptions made for future investment calculations.

The target that most resembles a USO is: 'the percentage of people within 0.2 km of an improved source'. The problem with such an indicator is that people may be within 0.2 km of an improved water source, but may still not use the source for a variety of reasons such as cost or functionality. Also, the 'improved sources' referred to by the indicator include non-utility sources such as protected springs. None of the present indicators relate specifically to serving the poor, but the new 2004-2006 performance contract with NWSC includes some propoor provisions: the introduction of a new social connection policy, a new connection fund, new measures for social inclusion, and new proposals for a government subsidy programme. Indicators or targets have yet to be set.

The sector goal as defined in the MoWLE's Urban Water and Sanitation Strategy Report (2003) is:

"Sustainable, adequate and safe water supply and sanitation facilities within easy reach of 80% of the urban population by 2005 and 100% by 2015."

While this may sound like a USO, terms like 'adequate', 'safe' and 'within easy reach' are too vague for this to be an appropriate USO.

The water service level assumptions for the future investment requirements in the same MoWLE urban water strategy report are:

"A basic service to provide piped water to 80% of the urban population with the remaining 20% being served by point sources (40% private connections and 40% standposts)"

It is useful that the precise service levels are stated in this assumption statement which could correlate with a



Above: Waiting for water, Kampala

Service options in Uganda

- Individual in-house pipe connections: currently only 7% of urban population and 1.2% of the poorest 20%
- Public Standposts or water kiosks: high charges to consumers to cover wage of water attendant. Many disconnected for payment failure.
- Yard connections: only 9.5% of urban population and 3.0% of the poorest 20%. This is a promising option for improved services in informal settlements because it allows on-selling of water to neighbours at a cheaper rate than water kiosks.
- Springs and wells: A popular source of water in Kampala, but they are prone to contamination.
- Pre-paid meters: expensive to install, piloted in Uganda ona number of occasions with mixed results. Managing and paying for the O&M is a key constraint.

potential USO. However, the reliance on standposts or water kiosks is surprising when, for example, many are disconnected in Kampala, essentially because the water vendors cannot earn sufficient income because of the easy availability of alternative sources. When the government considers agreeing a USO, it will need to assess current service levels in specific areas and how to overcome the common barriers to serving informal settlements (refer to box below). Investment plans to achieve an agreed USO should also be based on assessments of consumer demand.

The vast majority of households in informal settlements who do not have access to the piped network pay high unit costs for depending on public stand posts and on vended water. The subsidies inherent in the tariff mechanisms as shown in the table (opposite page), do not reach users who are not direct NWSC customers. Hence the NWSC water tariff subsidies do not really

Barriers to serving the Poor

- Land tenure issues and the related social and legal issues
- Long distance to water mains
- High connection costs & difficult procedures
- Water connections are too expensive for some of the poor
- Restricted space in some informal settlements
- Water kiosks or standpipes are often not viable where there are alternative sources such as springs.

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USO and Tariff Issues

benefit the residents in informal settlements.

The prices paid by standpost or water kiosk customers are often ten times the amount paid by the consumers with private connections for a given volume. By way of coping, so therefore water quantities consumed by kiosk users are much lower than in the case of consumers with direct access to piped services. The current tariffs shown in the table below have a rising block tariff structure with the first 500m³ being subsidised and customers paying more for water when they consume more than 500m³ per month. This disadvantages the poor in cases where residents in low income areas sell water to their neighbours and exceed the 500m³ per month limit and

	CHARGES UShs (US\$)			
Category	Per m ³	Per 20 Litres		
Public Standpipe	400 (0.21)	8 (0.004)		
Residential	693 (0.37)	14 (0.007)		
Government/Institutional	805 (0.43)	15 (0.008)		
Commercial/Industrial 1-500 m³	1056 (0.56)	21 (0.011)		
All consumers 500-1,500 m ³	1264 (0.68)	25 (0.013)		
All consumers >1,500 m ³	1424 (0.76)	28 (0.015)		

incur the higher rate.

Rather than seeking to subsidise the consumption of water, it would be better to subsidise access to the piped network by reducing connection costs and to subsidise less convenient service options. This could be done by having a flat domestic tariff and providing a lower tariff rate to registered customers with yard connections or water kiosks in low income areas. This should encourage more on-selling of water to neighbours.

Connection charges have been lowered recently by NWSC to encourage more connections . But all the costs need to be considered (see box top right). Although

Costs for connecting

- · Cost before approval of application
- · On-site surveying expenses
- · Official connection fee
- · Extra payment before approval
- · Road cutting costs
- · Costs of all materials
- · Transport costs
- · Trenching and plumbing
- · Costs on facilitation
- · Opportunity cost of participation
- · Charge for a meter
- · Costs at time of connection

Average cost for connection: 626,400 Shs (US\$334), equivalent to 150.6 months of average billing for a household ('Charging to Enter the Shop', 2004).

NWSC has been working on a new policy of providing up to 50 metres of service pipelines to new applicants, this is not particularly pro-poor because the poor are often much further from the water mains.

The following information is derived from focus groups undertaken in a number of Ugandan towns for this study.

The key problems and coping strategies of the urban poor related to water service provision include:

- Low service levels
- Long average distance to safe water (ca. 0.5 km) (Greater than 0.1km means high health risk)
- High cost of water from standposts or kiosks
 (5+ times more than houses with their own tap)
- High average time to collect water
- Alternative sources may be contaminated

All of these problems can be addressed through appropriate sector reform and utility improvements. A regulator has a key role to play in setting up appropriate incentives for this to happen.

Quintile/	1	2	3	4	5	Average
Water source						
Piped in Dwelling	1.15	2.94	5.59	9.34	22.15	6.81
Public Tap	21.74	29.62	30.53	34.34	28.41	28.03
Piped outside Dwelling	3.04	8.19	12.25	15.10	13.92	9.42
Bore-hole	33.18	22.05	18.06	14.01	11.93	21.77
Protected Well/ Spring	23.47	20.58	18.06	12.63	8.52	17.89
Vendor/ Tanker Truck	2.02	5.04	7.95	9.34	10.79	6.26
Other sources	15.30	11.55	7.52	5.21	4.26	9.79
Total	100	100	100	100	100	100

Urban households: Sources of Drinking Water by Quintile, 1999/2000 (%) Uganda National Household Survey, 1999/2000

- 1: Consumption expenditures are used for ranking households into welfare quintiles. The quintiles are based on the urban sample of 2374 households. Ranking of the welfare quintiles is restricted to the urban sample only (n=2374)
- 2: Other sources of drinking water include unprotected springs/wells, rain, rivers or lakes.
- **3:** Legend; Quintiles 1 represents the poorest 20 % and quintile 5 represents the richest 20%.

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Alternative Service Providers

In urban areas alternative providers have a substantial share of the water market. In Kampala the most commonly used alternative modes of water supply include water kiosks, water carriers and springs.

With regard to the regulation of the use of springs, a water quality study of this type of source in Kampala found that only 46% of samples complied with standards, the remainder were contaminated with E-Coli (GoU, Water & Sanitation Sector Performance Report, 2004). While it may be tempting to close the contaminated springs, many poor people in urban areas often use a combination of sources, such as spring water for cleaning and kiosk water for drinking. If alternative supplies to springs are very expensive or not available nearby, closures would not be acceptable. Public health campaigns could, however, be organised to raise awareness about the use of water from contaminated springs and the need to find other sources for drinking purposes.

Proposals have been developed to regulate the high price of water sold at kiosks. This is difficult to enforce because a water market will operate either formally or informally and water prices will vary with changing water availability and demand. A better solution is to encourage more competition as a means of reducing water prices. There is increasing use of yard connections with on-selling of water to neighbours in many urban areas. This service option offers a promising way of improving services in informal settlements, because it is a more affordable and viable means for supplying water closer to peoples' homes compared with water kiosks.

In the future it would be beneficial to explore options for utility support to alternative providers in order to improve services to consumers in areas where the utility cannot provide adequate service at present.

Addressing alternative service providers through regulation

- The first step in effective support and regulation of non-formal service providers (NSPs) is through some form of government recognition of the legitimacy of their activities.
- Water quality is a valid aspect for regulation, either in terms of regulating ground water extraction, or water quality checks at water collection points, although enforcement of non-use of sources where contamination is found can be very difficult if good alternative supplies are not available.
- Water vendors often charge high water prices, so it is tempting to try and regulate their prices. However it would be impractical for a regulator to study and take into account all the varying costs of a wide range of water vendors in a city and then regulate them on a fair basis. A more promising option is for a utility/regulator to publicise the price of water that the vendors pay at the location where they collect their water, so that their customers know the vendors' price mark up.
- The best long-term solution to high water vendor prices is to encourage competition. The utility can either compete with the vendors themselves by improving services to those areas, or encouraging other NSPs to operate. The utility has a clear comparative advantage over most NSPs because of the economies of scale associated with having large piped networks. Encouraging fair competition, such as ensuring that NSPs and potential NSPs are not unfairly excluded from the market is an important role for those responsible for regulation.
- Regulators and utilities should have 'serving the poor' as part of their remit. But it is not feasible to



Informal water vending from standpost



Selling storage tanks for household coping strategies



Small scale enterprise, Kampala

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Customer Involvement

NWSC have implemented a number of measures to improve services for customers in recent years, including reducing the average time to deal with complaints, using GIS-based customer records and introducing and publicizing a Customer Charter. In terms of initiatives to capture the voice of the poor, NWSC have appointed a community development officer in their commercial and customer services department. There are currently no other staff or committees for capturing the voice of the poor.

A regulatory focus group discussion (FGD) methodology was piloted by the research team (K.Sansom, A. Nuwagaba and J.Kiguli) in 2004 in low income areas of Kampala. Emerging key findings include:

- It is best to have separate focus groups for direct utility customers (such as kiosk operators) and for those people who are indirect customers, because their experiences are quite different.
- If demand assessment is not to be part of the process, the FGDs can be relatively brief and straightforward.

Key steps in the regulatory FGD methodology include:

- Thorough preparations in inviting participants and selecting a suitable location for the discussions,
- Explaining the purpose of the focus groups,
- Asking all participants to mention their main water services problems/concerns, listing those on flip charts,
- Facilitating discussions to enable participants to prioritise their problems - this can be done by a simple show of hands.
- For the top 4 or 5 five priority problems, undertake further probing to find out why the problems are priorities, how and when they emerge and who is involved. A good facilitator and a knowledgeable engineer can facilitate this process.
- The next steps concerning how the focus group discussion information will be used need to be clearly explained to the participants.

Some of the results of regulatory focus group discussions conducted in a number of areas in Kampala with direct and indirect customers are captured below. Note that the problem ranking varies significantly between direct and indirect customers.

Where are the poor people located?

"Our whole zone is comprised of poor people. Our expenditure is high but with low incomes leading to poverty. We suffer a full brunt of social problems in this community."

Women FGD in Lufula zone LCI, Bwaise II Parish Kampala "The poor normally prefer living in wetlands e.g. Kasanvu in Wabigalo. This is a wetland in which plots of land are



cheap as 30,000/= (\$16) for 1/20 acre. People have put up housing units in these plots and the area is very crowded that one wonders how life goes on".

Consumer, Wabigalo makindye

What are the current issues/problems of poor consumers in the selected informal settlement?

"Sometimes big boys or men harass girls or ask for sexual favours and in return making sure they filled their jerrycans for them". *Kasubi focus group about the Kiwunya well)* "The cost of water is so high and varies from vendor to vendor but usually ranges between UShs 25-33/= (\$0.013-0.018) which limits the amount of water the poor can purchase".

Wabigalo Focus group discussion

"Meter readers connive with some customers and we do not know how but they end up paying low prices to them. Consequently they charge very low prices to the customers at our expensive hence we lose customers." Men focus group discussion, Nakulabye Rubaga Parish

What are the barriers and constraints to improving water services to the poor?

"The main water pipe is far from reach. It is across the road yet KCC is hesitant to allow digging up the road when one wants to access water (be connected)"

Women focus group discussion, Bwaise II Parish

"Most of these people in this area are tenants and they find it hard to install water in the premises. There is a case where Jane Sembatya's landlord refused her to have water in the premises of Mr. Kaye Stephen".

Women FGD in Nakulabye, Rubaga division

How could utilities support local small-scale providers

Suggestion: introduce pre-paid water services

"They can give us cards. You pay for the water amount, which is equivalent to the money you have. Just like air time cards when your air credit is over, you pay again. This will minimise corruption in the water sector, promote fairness and ease".

Men focus group discussion, Wabigalo Parish

What are the common coping mechanisms

"It is easier to store water in tanks such that when it is scarce, then people can buy and I make profit to be able to afford the NWSC bill",

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Vendor in Bwaise II

Conclusions

NWSC, the national water utility, have achieved significant improvements in their commercial performance, but there have been only limited initiatives to serve the poor. This is probably due to a perception that a big commitment to serve the poor could threaten achieving the commercial targets and staff incentive payments that are specified in the performance contracts. If the government is to substantially improve services to the poor, future reforms will need to clearly set out targets, funding and incentive payments for improving services in specified low income areas.

To agree and achieve a Universal Service Obligation (USO), clear allocation of roles between sector institutions will be necessary, as well as holding those institutions accountable for services to poor areas. The Ugandan government are considering regulatory options for public and private service providers in the urban water sector in 2004/05.

Conclusions from the research on the suitability of a range of **regulatory options** in the context of serving the poor in Uganda are:

- 1. Regulation by performance contracts with public utilities. Such contracts have been in operation between the GoU and NWSC since 2000. More recently the NWSC headquarters have agreed and operated performance contracts between themselves and each of their town offices. These contracts with their incentive payments for staff have improved the utility finances with better accountability and transparency in the sector. But using such contracts as the sole regulatory mechanism does not provide sufficient flexibility and attention to detail in order to target interventions in defined low income areas.
- 2. Regulation with split roles between an asset holding authority (AHA) and a regulator. This form of regulation has been in operation in the Ugandan electricity sector. It has led to a duplication and diffusion of roles for investment and tariff matters, which is not conducive to tackling the difficult issues associated with improving water services in informal settlements.
- **3.** An independent economic regulator with no AHA. This arrangement empowers the regulator to set tariffs independently of government (similar to the UK where the private utilities own the water assets). In Uganda the Government intends to establish an AHA that will own the assets and plan future investments, so the UK

model has not been considered.

- 4. An independent regulator who delegates responsibilities to an AHA. By making the AHA accountable to the independent regulator, and the utility accountable to the AHA, the duplication of responsibilities that is inherent in option 2 above can be reduced. This option is considered to be the most favourable for regulating water services in large towns in Uganda. The utility and AHA can produce investment and tariff proposals, that would be approved by a regulator. All parties would need clearly defined responsibilities and targets for serving the poor.
- 5. A regulator with only an advisory role. This approach has been used in Scotland and Jakarta. It can enable a more transparent exchange of key information, but there is a clear risk of the regulator's advice being ignored. However, in the case of the management of water services in small towns in Uganda, if the Government wants to continue with the decentralised management of water services in these towns, then it would be better for an independent regulator to have an advisory role so as not to have a duplication of responsibilities with the municipal councils.
- **6.** A multi-sector regulator. While having a single regulator for electricity, telecom and water services can reduce the cost of regulation, staff regulating non water utilities are unlikely to deliver the required flexibility, expertise and attention to detail that is needed to deal with the many constraints to improving water services in informal settlements.

Potential **priorities for a new independent water regulator in Uganda** would include:

- agreeing a USO based on differentiated service levels,
- a performance monitoring system that captures service levels, coping strategies and consumer preferences in specified low income areas,
- establishing a consumer consultative committee, and
- ensuring agreed targets are adequately funded.

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