

Tariff Hikes with Low Investment: by Hulya Dagdeviren, University of Hertfordshire and Degol Hailu, International Poverty Centre

The Story of the Urban Water Sector in Zambia

According to current estimates, the Millennium Development Goal (MDG) of halving the 1.1 billion people without access to safe drinking water by 2015 will only be achieved by 2040, especially in Sub-Saharan Africa (SSA). Why will it take this long? Because tariffs are unaffordable and investments in infrastructure are extremely low.

The privatisation of water services has not helped reverse these trends. In many developing countries, privatisation has resulted in “spectacular failures”, according to the UNDP’s *Human Development Report 2006*. The failures spring from the absence of competitive market structures, ineffective regulation, and weak capacity to enforce and negotiate contracts.

The corporatisation of public companies and the commercialisation of water services are now common. These measures are often seen as intermediate steps towards “cost recovery” before full privatisation. An improvement in the performance of public utilities is welcome. But the current reforms are problematic in their excessive reliance on tariff rationalisation and their neglect of investment needs. The commercialisation of urban water services in Zambia is a good example.

Until the 1990s, Zambia’s central government was responsible for the delivery of urban water services, except in the Copperbelt. Water tariffs were subsidised. Because of economic decline in the 1970s and 1980s, however, the government could not sustain the necessary investments and maintenance. The commercialisation of water started in the early 1990s, and by 2006 there were 10 commercial water companies in Zambia’s urban centres.

Commercialisation led to tariff increases of up to seven-fold in real terms. Can the poor afford water tariffs in Zambia? The ratio of household spending on water to household income is the yardstick commonly used to assess affordability. The 5 per cent and 3 per cent benchmarks are often used. Our estimates indicate that, by both measures, low-cost water is unaffordable for about 40–60 per cent of urban dwellers in Lusaka and the Copperbelt, where most of the urban population lives. Using the 5 per cent benchmark, moreover, we found that water is unaffordable for all urban households in extreme and moderate poverty, except for those in the Southern Region.

It is unsurprising, therefore, that the proportion of the population with access to safe water declined from 72 per cent in 1992 to 57 per cent in 2002. The quality of access has also deteriorated: about 25 per cent of users lost their piped supply and became dependent on public taps, wells, boreholes, rivers, ponds and lakes (Table 1).

Because levels of access to water are low, utilities have to raise tariffs even higher to recover costs. Average cost recovery, however, was only 67 per cent. One reason is low revenue collection: 25 per cent of

Table 1
The Population’s Access to Water in Zambia (% of population)

	1992	2002
Total national access	72	57
Total urban access	93	90
Piped into residence	55	42
Public taps	34	38
Wells and boreholes	9	16
Rivers, ponds, lakes etc.	2	4

Table 2
Investment in the Water and Sanitation Sector, 1998–2002

	Actual government capital expenditure as a percentage of budgeted capital expenditure	Actual expenditure* as a percentage of required capital expenditure to maintain existing access rates
1998	3.1	2.4
1999	2.4	2.9
2000	3.0	1.8
2001	12.3	2.0
2002	8.8	2.2

* Including donor funds in the sector.

the billed amounts are never collected. The other is the high level of “unaccounted for water rate”, which is the difference between the volume of water produced and the amount billed. This rate averaged about 50 per cent throughout the commercialisation period, largely because of poor infrastructure, lack of maintenance and wastage.

Are market-based solutions the answer to a lack of investment? The evidence indicates that investment did not increase after liberalisation. Not only has the government underinvested in the sector, but it has also failed to maintain its plans for capital expenditure. Total capital expenditure, including donor funds, has remained a minor fraction of the spending needed to maintain existing rates of access to water (Table 2).

The policy dilemma is how to fund capital investment without high tariffs restricting access. So far, Zambia’s liberalisation strategy has emphasised tariff rationalisation. This has failed to ensure full cost recovery and has further constrained affordability and accessibility. The correct policy prescription is up-front public investment to renew and extend infrastructure. This approach would reduce unit costs in the sector, make tariffs affordable and improve the sustainability of cost-recovery efforts. Otherwise, Zambia is unlikely to meet the MDG on water for a very long time.

Further Reading:

Dagdeviren, Hulya (2008). “Waiting for Miracles: The Commercialisation of Urban Water Services in Zambia”, *Development and Change* 39(1): 101–121.