

# Why did City Water fail?

The rise and fall of private sector participation in Dar es Salaam's water supply



# Overview

From 1997 to 2003, the Government of Tanzania was involved in protracted negotiations with international water companies and donor agencies that culminated in an agreement to lease Dar es Salaam's water supply infrastructure from the state-owned Dar es Salaam Water and Sewerage Authority (DAWASA) to City Water Services Ltd. (CWS), a joint venture between British, German and Tanzanian companies. The lease contract was part of the \$164.6 million Dar es Salaam Water and Sanitation Services Project (DWSSP), financed mainly with loans from the World Bank (WB), the African Development Bank and the European Investment Bank.

Though CWS was awarded a ten year contract beginning in August 2003, its lease was abruptly terminated by the government less than two years later. It was replaced with the newly formed Dar es Salaam Water and Sewerage Corporation (DAWASCO), a publicly owned company holding an almost identical lease with DAWASA.

This report reviews the origins, performance and demise of this short-lived experiment in private sector participation (PSP) in Dar es Salaam's water supply services, and seeks to extract wider lessons for urban water supply reform.

**Chapter 1:** Looks into the background to the City Water contract, the history of the management of water supply services in Dar es Salaam and the process by which the decision to introduce private sector participation came about.

**Chapter 2:** Examines how parliament, the media, civil society and others failed to effectively articulate the interests of consumers, including the poor.

**Chapter 3:** Summarises the operations of CWS and explores the various factors that eventually led to its downfall.

**Chapters 4 and 5:** Conclude with important lessons from the case, and make recommendations for the future of water supply services in Dar es Salaam and other cities.

It is rare in any situation of this complexity to be able to apportion blame to any single entity, or to a particular decision or action. This case is no different, and the report finds that three major players – government, financiers and private actors – share responsibility for what went wrong. Furthermore, it argues that even if CWS had succeeded in avoiding regulatory, governance and political pitfalls, the financial viability of the lease contract would still have been in doubt.

DAWASCO is now facing the same contractual constraints that helped bring down CWS, which are likely to undermine further progress. The most likely 'solution' is that a form of official subsidy will be introduced in order to counter the problem. The report identifies several risks with this approach, but suggests that by the careful use of subsidies to create incentives for providing services for the poor, these risks can be avoided in a way that leads to a more pro-poor water supply system in Dar es Salaam.

Finally, the report cautions that twenty-five years of decline cannot be fixed by changing managers, and that the work required to do so will not happen overnight. Time and finance will both be required, along with further institutional reforms that go beyond the water sector.

## Acknowledgements

The original study was researched and written by Dominic de Waal and Brian Cooksey and was abridged by Matthew Owen. The original document includes extensive referencing and source notes which are omitted from this version for the sake of brevity.

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## Acronyms

CAS	- Country Assistance Strategy
CWS	- City Water Services Ltd
DAWASA	- Dar es Salaam Water and Sewerage Authority
DAWASCO	- Dar es Salaam Water and Sewerage Corporation
DfID	- Department for International Development
DWP	- Delegated Works Programme
DWSSP	- Dar es Salaam Water Supply and Sanitation Project
EWURA	- Energy and Water Utilities Regulatory Authority
GoT	- Government of Tanzania
ICSID	- International Centre for Settlement of Investment Disputes
IFI	- International Financial Institution
IMF	- International Monetary Fund
INGO	- International Non-Governmental Organisation
LC	- Lease Contract
MWLD	- Ministry of Water and Livestock Development
NDWP	- Non-Delegated Works Programme
NGO	- Non-Governmental Organisation
NUWA	- National Urban Water Authority
POG	- Procurement of Goods
PSP	- Private Sector Participation
PSRC	- Parastatal Sector Reform Commission
REPOA	- Research on Poverty Alleviation
SIPE	- Supply and Installation of Plant and Equipment
STM	- Superdoll Trailer Manufacturers Ltd.
TANESCO	- Tanzania Electricity Corporation
USRP	- Urban Sector Rehabilitation Project
WB	- World Bank

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# 1. The Origins of the Dar es Salaam Water System Lease

## 1.1 Post-independence Water Supply in Dar

Between 1950 and 2000, Dar es Salaam grew from a town of about 50,000 inhabitants to a sprawling metropolis of over three million. About one in ten Tanzanians now lives in Dar, the country's commercial and diplomatic capital.

Until the late 1970s, the city's water supply services more or less kept pace with the rate of population growth. But the availability and quality of water then began to deteriorate. Between 1967 and 1997, per capita consumption in households with piped connections dropped by a third in up-market Oyster Bay and by nearly three-quarters in low-income Temeke. By 1997, many households were no longer getting their water directly from the municipal supply and were instead dependent upon private vendors. The proportion of customers receiving mains water who enjoyed an uninterrupted supply fell from 100% to 27%. Meanwhile, the number of residents per connection increased from 17 in 1968 to between 33 and 50 by 2005.

The declining services resulted from poor maintenance and lack of new infrastructure investment, in the face of increasing demand from the burgeoning population.

The lack of new investment arose largely from the virtual collapse of the Tanzanian economy in the late 1970s. Although the National Urban Water Authority (NUWA), DAWASA's predecessor, introduced regular tariff revisions to keep income in step with inflation, this was not enough to cover operating costs and the cost of imported chemicals and spare parts. The value of NUWA staff wages also evaporated and workforce discipline, supervision and management practices disintegrated. Customers started receiving fake bills which went unpaid. Some began bypassing their meters. The compact between the utility and the customer eroded. Meanwhile, Dar kept on growing. Suburbs expanding along the arterial roads developed illegal pipe networks by tapping into the transmission mains while infill areas were left with almost no official supply.

Some point to a government policy of 'free water for all' as a further reason why the system began to fall apart. In fact, city residents with piped supply did pay for water, even under this policy, while the poor had access to free water via public standpipes. In 1991 the Government of Tanzania (GoT) formally abandoned the free water policy, proposing the elimination of subsidies to water utilities and requiring them to become self-financing.

This marked the beginning of water utility reform. However, by the time the \$105m WB Urban Sector Rehabilitation Project loan (USRP, 1996-2004) was negotiated, it was decided that it should focus mainly on utilities other than Dar, on the grounds that Dar's rehabilitation needs were so great that any serious attempt to overhaul the system would leave no money for other cities. In 2000, DAWASA estimated that \$620m was required to rehabilitate and upgrade the Dar system. The USRP nevertheless prompted the first serious discussions about how to tackle Dar's growing water problems.

## 1.2 Aid, Conditionality and the Parastatal Sector Reform Commission

Discussions about some form of Private Sector Participation (PSP) in Dar's water supply started in the early 1990s, first within the Ministry of Water, then at the Parastatal Sector Reform Commission (PSRC). Reaching agreement on the best approach to reforming the public utility was a protracted process, partly because the government, financiers and private investors could not agree on the most appropriate PSP model. The WB proposed a private operator lease agreement and, at the end of 1998, the parties agreed on this option.

Donors and lending agencies influenced the PSP process by promoting privatisation ideology, initiating the discussion of privatisation options, financing technical assistance personnel, advising the

PSRC on the different options and crafting a loan agreement that was acceptable to both the GoT and the lease holder. The PSRC was financed by the WB and bilateral donors. The WB was also the lead lending agency in the Dar es Salaam Water Supply and Sanitation Project (DWSSP), in which PSP was eventually launched.

This considerable influence of aid agencies raises two questions about their roles:

1. Does financing both the decision-making process leading to the preferred PSP option and the loans that will eventually finance that option constitute a conflict of interest? Since different PSP options imply different levels of lending, and since larger loans are generally preferred to smaller ones, is there potential for moral hazard?
2. Did the eventual shaping of the operator's incentives based on long-term, concessionary loans undermine the relationship between DAWASA and the private agent by drawing too much of their attention toward a third party concessionary financier? With no financial bottom line to hold aid agency staff accountable, there was latitude for overly pragmatic and contingent decision-making on issues that should have been driven by purely commercial considerations. The complex and unwieldy Lease Contract (LC) that constituted the key element of the DWSSP reflected the need to coax a private operator into the loan equation at almost any cost, including undermining the commercial rationale for PSP.

As chapter 2 will outline, there was no broad-based consultative process or political debate around PSP in water supply management during the protracted discussions leading to the Dar lease contract. The approach was conceived and developed by national and international technocrats and bureaucrats. So what reason did the GoT have to adopt PSP in Dar's water supply? Aid conditionality and its deployment in relation to privatisation were particularly relevant in securing the support of the executive and key government stakeholders.

One school of thought maintains that external conditionalities are implemented by reluctant poor-country governments under threat of aid withdrawal in the event of non-compliance. In fact, the history of structural adjustment in Tanzania suggests that, although the broad policy framework of International Financial Institutions (IFIs) strongly influences national economic and social policies, many formal loan conditions are not in fact implemented, while others are implemented partially or with a time lag, or implemented and subsequently reversed, without penalty. The case of PSP in the Dar water supply is an illustration of this.

From the late 1990s, the IFIs began to increase pressure on the GoT to privatise public utilities. The WB's 1997 Country Assistance Strategy (CAS) contained a condition that 'speeding up' parastatal divestiture would allow Tanzania to achieve 'high case' lending status. In 2000, the WB and IMF made a private concession agreement for DAWASA a condition for debt relief worth \$3 billion, but the condition was waived when Tanzania failed to meet it and debt relief was granted anyway. The WB's 2001-2003 CAS merely proposed the preparation of a 'sector-wide programme' in water and 'privatisation' was no longer a trigger for moving to a High-Case lending scenario. The International Monetary Fund's (IMFs) Extended Structural Adjustment Facility (1996-99) included a condition on PSP in Dar water management, but the condition was not met. There were no conditions directly related to DAWASA PSP in the two IMF Poverty Reduction and Growth Facility loans (2000-03 and 2003-06). A final condition for the \$143.5 million DWSSP loans in 2003 was that a sub-component should include a lease contract with a private operator. This eventually happened.

What started as a relatively stringent condition for debt relief was softened to become a condition for loans to finance the DWSSP. Even this condition was effectively abandoned when the GoT sacked the private operator, City Water Services Ltd. two years later and the Dar water system reverted to state ownership and management under DAWASCO, a public company.

While conditionality may have influenced the GoT's decision to opt for DAWASA PSP, there is little evidence that conditionality had much practical relevance once the lease agreement had been signed.

The replacement of CWS by DAWASCO was a clear flouting of conditionality that called the donors' bluff. Subsequent events and donor inaction suggest that the financiers were more concerned about keeping water supply and project disbursements on track than about forcing the issue on PSP.

Critics argue that poor country governments have little option but to accept external conditions for loans because they lack their own investment funds. However, the \$270 million Lake Victoria-Shinyanga water pipeline demonstrates a high degree of executive control of Tanzanian water policy, being one of the GoT's biggest investments since independence and easily its most ambitious water project. 93% of the Ministry of Water's 2004/05 development budget went to fund the project's first phase. If solving Dar's water problems was the most pressing sector priority for the GoT, it could have invested the same money in a large urban rehabilitation and expansion project and avoided conditionality and incurring new debt. The political pay-off for the ruling party of being seen to care about the interests of citizens in the country's largest city would also have been considerable.

## 1.3 Conclusions

While putting a private operator in place was a central tenet of DWSSP, 70% of the project funds were in fact earmarked for rehabilitation and expansion works under the control of DAWASA, a public corporation. It seems probable that the GoT endorsed the PSP management solution because it triggered large, soft loans from external financial agencies that gave it full control over the future development of the city's water infrastructure. Had concern with consumers' interests been the government's prime motivating factor, it could have initiated its own investment programme with its own resources and, in doing so, would have avoided donor conditionality.

## 2. Articulation of Public Voice and Responses to PSP

### 2.1 Consumers' Opinions of Water and Sanitation Services

Domestic water supply is a major concern for Tanzanians. In a 2003 Policy and Satisfaction Survey, Research on Poverty Alleviation (REPOA) asked respondents to identify their most pressing household problems. In Dar, domestic water ranked fifth. More than two-fifths of households considered domestic water supply a 'major problem' and concerns with domestic water supply were more acute in Dar than in other towns. When asked how the government was performing in delivering household water, 54% of respondents in the 2005 Afrobarometer national survey replied 'very badly' or 'fairly badly' (compared with 26% for basic health services and 11% for education).

The REPOA survey found higher dissatisfaction with specific aspects of water services in Dar than in the rest of the country. Half of Dar respondents considered the breakdown of domestic water supply a 'major problem', followed by cost. Dar households considered the time taken to collect water more of a problem than those from both other urban and rural areas. All five of REPOA's chosen service indicators were significantly worse for Dar than for other towns.

### 2.2 The Situation of the Poor

REPOA found that only 62% of Dar households had piped water to their own house or that of a neighbour. These connections favoured the better-off. None of the poor (wealth quintiles 1-3) enjoyed a piped supply into their houses and only 4% into their compounds. The majority of the poor (three out of five households) obtained their water from community- and privately-managed kiosks.

REPOA's analysis suggests that supply breakdown, dirty and untreated water, distance and time to collect water were more significant problems for the poor than the non-poor. Cost, however, was more of a problem for the better-off (quintile 4) than the poor (quintiles 1-3). This suggests that many poor households are either not paying for water or are paying what they deem to be 'affordable' prices.

All the main participants in the PSP process raised the interests of poor consumers in accessing ‘affordable’ water. This analysis challenges the belief that the cost of water is the main concern of the urban poor. Clean water, water availability and distance to collection points appear to be more pressing concerns for the poor.

## 2.3 Views towards PSP in Water Supply

In a 2001 national survey on Attitudes to Democracy and Markets by REPOA and the Afrobarometer Network, 53% of respondents felt that ‘government should retain ownership of its factories, businesses and farms’ compared to 45% who agreed with the statement ‘it is better for the government to sell its businesses to private companies and individuals.’ But it is important to distinguish views towards forms of ‘privatisation’ other than full divestiture (sale of state assets). Opinions are then more divided.

REPOA’s 2003 survey found that 61% of Dar residents preferred some kind of PSP to a state-owned and managed water utility. A small majority of poor and quite poor Dar residents favoured public ownership and management of the city’s water supply. Fewer of the better-off and best-off residents preferred state ownership and management; more preferred private management, with private or public ownership. These findings challenge the view that Tanzanians are generally against water ‘privatisation’.

Those most in favour of PSP options are generally those most directly connected with the present water distribution system, while those against are the least connected. Seeing taps constantly running dry, being charged for water not received and having to buy water from kiosks and vendors, are experiences likely to predispose middle-class citizens towards the PSP option, on the grounds that anything would be preferable to the existing management. The poor, on the other hand, are less directly engaged with the official water distribution system. Many are already facing a secondary form of private sector provision such as buying from a neighbour, well, kiosk or water vendor.

There are no overpowering anti-PSP sentiments among the poor, any more than there are overpowering pro-PSP sentiments among the better off. To assess popular views on the privatisation issue empirically it is important to be clear on the reference population and the nature of ‘privatisation’ that is referred to. REPOA’s research indicates that water privatisation as change of ownership is not popular nationally and appeals to only a quarter of the Dar population. Privatisation as change of management is more popular nationally and substantially more popular in Dar.

## 2.4 Articulation of the Public Interest

Given the high priority accorded by Tanzanians, and especially by Dar residents, to domestic water and sanitation issues, and the degree of dissatisfaction with the quality of services, one would expect water to have been a major theme in political discourse during the build-up to the proposed ‘privatisation’ of the country’s largest water system. This was not the case. This is all the more surprising given that PSP in public utilities has been such a controversial issue worldwide. Documentary review yields little evidence of public discussion concerning the move from a ‘free water for all’ approach to defining water as a market commodity. The equity implications of PSP in the water sector only became a contentious topic after the signing of the CWS LC.

### 2.4.1 Community Organisations

REPOA’s 2003 survey assessed the degree of citizens’ participation in public affairs. Nationally, 6% of male and 4% of female household heads claimed that they or another household member had at some time been a member of a local water committee. For Dar, the figures were 4% and 2% respectively. Those with the greatest perceived water problems (Dar citizens) appeared to organise around them the least. Household heads were asked whether they thought their local water committee had any positive or negative effects on the water supply situation in their neighbourhood. An 80% ‘none’ or ‘don’t know’ response suggests that water committees are not considered significant players in most parts of Dar.

There is no evidence of major community-level mobilisation around water problems, despite their magnitude and impact on people's welfare and health status.

#### 2.4.2 Public Participation and Advocacy

The Adam Smith institute, a pro-market think tank funded by the UK Department for International Development (DfID), mounted a 'public information' campaign on behalf of the PSRC which included videos and pro-privatisation songs to convey the broad PSP message to the public and key stakeholders. There was no provision for dialogue with stakeholders on substantive issues where there might have been opposing views or risks attached to PSP worth addressing.

The WB and DAWASA were involved in 'stakeholder consultations' prior to the preparation of the DWSSP. However, real consultation was limited to the small Community Water Supply and Sanitation component of the project (\$3.9m), resettlement in project-affected areas and an environmental impact assessment, and did not influence the design of the PSP. If consultation is taken to mean open discussion with real opportunities for crafting a better product, then this did not take place.

#### 2.4.3 Media Commentary

There was little media commentary on the PSP approach and the decision to implement an LC in Dar, which might reasonably have been considered a controversial policy decision. A review of editorials and opinion pieces in the local media from December 2002 to the CWS take-over in August 2003 reveals much more pro- than anti-privatisation content.

When Biwater and its partners finally won the LC tender, one of the few critical commentaries came from the London-based Public Service International Research Unit, which posted unflattering information on Biwater's record which was published in the Tanzanian press and on local websites. A CWS manager dismissed the adverse press commentary as a matter of opinion and a diplomat from the British High Commission in Dar defended Biwater's reputation, as did Tanzania's deputy Minister of Water.

#### 2.4.4 Local and International NGOs

There were few concerted efforts by Tanzanian or international NGOs to articulate consumer opinions or to debate PSP issues in the build-up to the City Water lease. Most NGOs in the water sector are involved in service provision rather than advocacy.

In early 2005, two INGOs - ActionAid and the World Development Movement - initiated an anti-PSP/ Biwater campaign, which was picked up by Tanzanian media and advocacy groups. The campaign focused on aid conditionality, reported that tariffs had gone up and claimed that water services had deteriorated during CWS' tenure. The campaign raised the profile of the case internationally and was followed by a local NGO anti-PSP campaign - though ironically this took place after the LC with CWS had been cancelled.

#### 2.4.5 Parliament and the Executive

Parliament in Tanzania has limited influence on sector policies and the executive can push through new policies relatively free of checks and balances. In a situation where the ruling party holds a large majority, there is limited incentive to seek consensus. In July 2003, the Minister of Water and Livestock Development briefed parliament on the LC with CWS. The Chairman of the Committee for Agriculture and Land Development, that oversees DAWASA's parent Ministry of Water and Livestock Development (MWLD), responded only by recommending that the government should allay the fears of DAWASA workers about potential redundancies.

Water service improvement, the CWS lease and water PSP more generally remained low-key political issues during the following two years. Prior to the 2005 presidential and parliamentary elections, only one of the leading seven political parties mentioned water as a policy priority. Though water problems

continued unabated in Dar, few candidates raised water as a political issue.

One might expect the growing tensions between CWS and DAWASA to be reflected in parliamentary debate between 2003 and 2005. But discussions about CWS and the LC were muted and limited in scope. On 28th April 2005, the Committee for Agriculture and Land Development briefed parliament on a recent DAWASA tour but gave no hints that CWS was in serious trouble or that its lease might be cancelled within weeks.

During the 2004/05 budget session, three MPs used the National Assembly to air constituents' grievances about water supply problems. No questions were asked about the operation of Dar's water supply in the next three parliamentary sessions and CWS was only mentioned during the last of these (April 2005). The official parliamentary record (Hansard) shows that MPs largely failed to pose critical questions over the lease that might have challenged the GoT.

#### 2.4.6 DAWASA

Since the LC meant the transfer of most of DAWASA's staff and assets to a private operator, DAWASA management had no obvious reason to embrace PSP. However, there was a large carrot to compensate for the transfer of staff and revenue control in the form of \$100m in loans from DWSSP for the rehabilitation and expansion of the water and sewerage system, which was to be controlled by DAWASA management.

From the late 1990s, there was regular talk of downsizing DAWASA's workforce of 1,350 and it was expected that a private operator would retrench many workers. These concerns were allayed when CWS declared it would take over DAWASA's entire workforce under the same employment conditions.

It seems that neither DAWASA management nor its employees had any reason to obstruct the completion of the PSP process.

### 2.5 "Pro-Poor" Voices

Different groups of stakeholders have different ways of conceptualising poor water consumers and their interests. The various 'pro-poor' discourses employed by the key stakeholders can be summarised as follows:

- **Government of Tanzania.** During the 2003 Budget session of parliament, the Minister of Water and Livestock Development announced that the 'poorest urban consumers' would receive 5 cu.m. of water monthly, free of charge. It was not made clear how those not connected to utilities (most of the 'poorest') would benefit from this subsidy or how they would be identified. None of his separate statements on Dar water PSP emphasised the poverty issue.
- **The World Bank** stated that one of the main benefits of the DWSSP would be increased affordability of water and sanitation services by lower income groups who would be able to switch from 'current expensive private supplies ... to public piped water'. There was in fact no reason to expect that lower income groups would be among the first to enjoy new connections or that this would constitute one of the 'main benefits' of the project. Some lower income groups would benefit from the community water component, but this was a very small proportion of the total loan.
- **CWS** promoted a 'lifeline tariff', allowing poor consumers to be subsidised by the less poor. A first-time domestic connection fund was to provide a free connection to households with fewer than three taps. It is questionable whether a lifeline tariff in fact serves the poor, because the poor tend not to buy water directly from DAWASA.
- **INGOs.** WaterAid and Tear Fund accused the World Bank, GoT and CWS of failing to pay much attention to the needs poor men and women. The World Development Movement said that 'Dar es Salaam's urban poor, who make up 80% of the population, are not served by the water system.' 'This is

yet another example of water privatisation failing to deliver clean water to poor communities.’

- **Tanzanian NGOs** followed (rather than led) civil society reactions to the advent of CWS. The Tanzania Gender Networking Programme (TGNP), premised its criticism of water PSP on the assumption that poor people were against it. In December 2005, TGNP launched a campaign against water privatisation. DAWASCO, a public corporation, had been running the Dar water supply for five months at the time of the launch meeting, during which participants demonstrated against privatisation, albeit within TGNP’s compound.
- **The media.** Editorial commentary on water privatisation prior to PSP was largely positive; a content analysis reveals few references to the interests of the poor. The general message was poverty-neutral and focused more on improving utility management than it did on pro-poor service delivery.

The articulation of the interests of the poor reflects the strategic positioning of the actors involved, based on their interests and ideologies, not on an attempt to arrive at an empirical synthesis based on research and analysis. This is surprising, given the preoccupation with participation and empowerment by most stakeholders.

Given that the poor and very poor depend much more on community- or privately-managed water kiosks than on piped systems into the household, the best way to serve their interests is by increasing the number of public water kiosks. The LC required CWS to build 250 kiosks and to provide them with water at the ‘lifeline’ tariff. Only a small proportion were actually built.

The smallest component of the DWSSP was the \$3.2m for community water supply and sanitation facilities, under which Care International, WaterAid and Plan International are increasing the number of kiosks off-network in poor residential areas of Dar. The relatively small budget will limit the extent of this initiative.

However, more kiosks are not welcomed by all. In some parts of the city, citizens have been actively undermining kiosk construction. Vendors oppose privatisation because improved water service would cost them their means of survival. There have been cases of violence breaking out over the construction of water kiosks in which water vendors attacked water utility staff, over attempts to restore the piped water system!

CWS’ strategy of reducing leakages and disconnecting illegal connections would arguably reduce the opportunity of some poor people to scavenge for water along the distribution system. But the extent to which the dilapidated water supply infrastructure is preyed upon by opportunistic free-riders should not be underestimated. Perhaps some poor people’s relative lack of concern with the price of water is in part a reflection of the perverse incentives that they face. In such circumstances, finding collective ways of establishing a more productive relationship between supplier and customers should have been a high priority for CWS.

## 2.6 Conclusions

This chapter has suggested that mechanisms for articulating public interest in efficient and affordable domestic water supply did not function effectively either before or during the CWS interlude. Although domestic water supply and sanitation were major concerns of Dar citizens, political parties did not consider water a priority policy issue and it was rarely debated in parliament. Self-mobilisation, civil society advocacy and media coverage also seem to have had little impact. Neither civil society organisations nor the media effectively articulated the real interests of consumers, including the poor.

The cost of water is a major concern of better-off households, less so the poor. The poor are more concerned with availability, cleanliness and distance to water points.

There was little public articulation of policy issues affecting water consumers prior to the CWS

experiment. Unlike other controversial water privatisation initiatives throughout the world, there were no public demonstrations over water PSP in Dar. Popular resistance to CWS initiatives to legalise or cut off illegal connections, and in some cases to build new water kiosks, were motivated more by threats to the perceived commercial interests of the resisters than by deeply-felt ideological opposition to private management of water supplies.

### 3. The City Water Experience

The GoT terminated the LC with CWS in May 2005 for alleged breach of contract and poor performance. CWS' performance was certainly far from satisfactory, but opinions on why it ultimately failed are divided. This chapter summarises the operations of CWS and explores the various factors that eventually led to its downfall.

#### 3.1 DAWASA before PSP: The Extent of State Failure

By 2003 DAWASA's operations were in a very bad state of repair. The utility had suffered from years of chronic under-investment leading to losses through leakages, the development of an unofficial tertiary distribution system, inadequate revenue collection and widespread customer disaffection and free-riding. Only 25% of the water being sourced was reaching legally-connected consumers due to leakages and illegal connections. Not more than 16% of the water produced was being paid for. Analysis of NUWA/DAWASA accounts from 1995-2000 reveals that average expenditure on system maintenance was less than 4% of turnover. Though the accounts post modest 'profits' from 1997 to 2000, these reflect significant government subsidies and 'borrowing' from the Tanzania Electricity Corporation (TANESCO). Expenditure on electricity averaged a staggering 98% of operational income. By not paying its power bills, DAWASA was using TANESCO as a source of interest-free credit for \$4-10 million year on year, thus masking its poor performance.

In a 2002/03 comparison of water supply systems with PSP components in seven African countries, DAWASA was found to be at or near the bottom of the list on all performance indicators, with the largest number of citizens per connection, the largest number of employees per 1,000 connections, the lowest collection rate and the highest level of unaccounted for water. DAWASA pre-City Water was suffering from serious overstaffing and was running at a substantial loss.

There was going to be no short-term solution to Dar's water problems and Biwater's belief that CWS could turn around the city's water services in ten years and in the process make a 20% annual return on its investment was clearly highly over-optimistic.

#### 3.2 The Bidding Process

The bidding process leading to the LC was long and complicated, largely because it proved difficult to attract a private investor willing to take a significant stake in Dar's water system. This reflected the high degree of uncertainty over DAWASA's financial status, customer base and revenue generation potential, the number of possible PSP options and the number of stakeholders. The polarisation of opinion around the issue of privatising public utilities and the frequent failure of loan-funded PSP projects in urban water supply added to the complexity.

PSRC's initial strategy was to invite six international water companies to indicate what they considered the most viable PSP option. Four responded with very different proposals. PSRC then hired Severn Trent Water International as transaction consultants and the options were narrowed down to a LC. The LC option has been challenged on the grounds that it was relatively 'high risk' compared to the more modest management contract (MC). But the LC was the option preferred by the WB's water sector advisers.

Three companies pre-qualified - Vivendi, Saur and Biwater - but the bidding process broke down when Biwater withdrew and the two other companies raised so many qualifications that their bids were deemed 'non-responsive'. PSRC then revised the bid documents by reducing the investment requirements of the private operating company, with an equivalent increase from the lending agencies, and adding two project components (procurement of meters, and a delegated programme of works with a sub-loan to the private operator).

In December 2002, the Minister of Water announced the culmination of the bidding process, claiming that, even though Biwater-Gauff was eventually the only remaining bidder, 'the bidding process was transparent and competitive'. The decision to proceed was perhaps informed by two other factors. First, the PSP process had taken an inordinate amount of time and effort to bring to closure. Second, the fate of the entire \$143m DWSSP loan package depended on the successful tendering of the lease agreement.

The WB held a 'safe-house' review to consider the result of the bidding process and this review did not lead to an objection to PSRC's decision to accept an uncompetitive bid from a relatively inexperienced operator.

### 3.3 The Lease Contract

External loans totalling \$143.5m financed the DWSSP. CWS was to contribute \$8.5m in equity and DAWASA a further \$12.6m, giving a total injection of \$164.6m. Most of the DWSSP investment targeted system repairs and expansion while the LC focused on the management of the utility. The DWSSP thus aimed to put the capital risk on the GoT and financiers and the operational risk on the private operating company.

However, this conceptual clarity was blurred by a substantial overlap between the hardware and software roles in the form of three sub-contracts with CWS that were embedded in the LC. These were:

1. **Supply and Installation of Plant and Equipment** (SIPE, \$8.4m) for rehabilitation of treatment works, reservoirs and transmission mains
2. **Procurement of Goods** (POG, \$4.2m) for the purchase of water meters
3. **Delegated Works Programme** (DWP, \$39.75m) for the rehabilitation and extension of the secondary water distribution system

CWS was to implement the DWP for a fee equal to 10% of the value of each contract. An additional component of the rehabilitation and extension works was the Non-Delegated Works Programme (NDWP: \$40.4m), through which CWS was able to access a sub-loan from DAWASA of \$5.5m.

These 'sweeteners' not only helped to attract bidders, but also distorted the incentives for the private operator. The sub-loan plus the profits from the SIPE, POG and DWP would have been enough to cover a large part of CWS' equity risk and all of Biwater/Gauff's risk.

DAWASA's commercial non-viability led the GoT and external financiers to look for ways to cushion the demands from the private operator to reduce the risk of investing in DAWASA's operations. This underscores the huge challenge that GoT and financiers foresaw in turning the utility around. In stark contrast is the optimism of the winning consortium. Biwater-Gauff voluntarily agreed to retain all of DAWASA's staff and committed to remitting 30% of revenue to DAWASA for repayment of DAWASA's loan and for future investment in infrastructure. In spite of these commitments it also expected a 20% annual return on equity over the ten year lease period.

The blurring of roles is highlighted because it was pivotal in shifting the private operator's incentives away from addressing core governance issues that had been at the heart of DAWASA's steady demise. It greatly reduced the private operator's exposure and thereby the urgency and realism it brought to turning the utility around. Proper consideration of institutional culture and staff performance incentives were clearly of fundamental importance if the utility was to be put back onto a sound financial footing, but these issues were hardly addressed.

Many DAWASA staff were badly trained and equipped, poorly remunerated and inadequately supervised and disciplined. Deal-making between revenue collectors and customers was widespread and monies collected did not appear in the accounts. DAWASA technicians helped free-riding consumers make illegal connections and disconnections were often perfunctory. Low revenue collection rates were in part a function of the perverse incentives facing employees.

Attempting to break this institutional culture through improvements in the governance of the enterprise should have been one of CWS' first priorities. However, CWS' early decision to take over DAWASA staff without reviewing staffing needs, salaries and performance immediately limited its leverage in personnel issues.

All sides underestimated the extent to which under-investment and constraints on effective management had perverted stakeholders' incentives. CWS did not take up the massive task of undoing existing incentive structures and changing institutional behaviour. Arguably, it should have been the GoT's responsibility to collaborate with CWS on the enforcement aspects of this process, but it showed no willingness to do so. Failure to address these issues was clearly one of the causes of CWS' downfall.

## 3.4 City Water Services, 2003-05

### 3.4.1 CWS' Strategy: Revenues and Rehabilitation

CWS made it clear that increasing revenues and rehabilitating infrastructure were to be its two main priorities. As the GoT and WB did not consider significant increases in tariffs an option, increasing revenue would come from reducing the amount of unaccounted for water, rehabilitating existing connections and making new connections to first-time customers.

To improve billing and payment performance, CWS began to introduce an updated consumer database and new billing software. Matching existing customer reference numbers with water connections proved difficult and DAWASCO subsequently rejected the (partially completed) database. The slow process of introducing the new software may have partly explained CWS' poor financial performance.

To deal with non-paying customers, CWS announced an amnesty for those who came forward to regularise their status. About half of all customers (40-50,000 people) were thought to be non-payers but only 2,500 took advantage of the amnesty and its impact was therefore limited.

The POG contract required CWS to purchase 170,000 water meters. During its first year it imported 19,270 meters from Bewater South Africa but only installed 2,458. The procurement was not opened to competitive bidding as required by the Procurement Act. By maintaining a large and costly inventory, the utility forewent the possible benefits from the improved technology and lost any recourse to the 12-month warranty for defective units. More seriously, meters cannot work if there is low pressure or poor quality water; all but the latest generation of water meters spin equally well on air. DAWASCO are now left with thousands of virtually useless meters that are drying out and their seals deteriorating. The meter saga highlights the gap between normal commercial practice and a procurement approach more typical of aid-financed projects.

As a key part of its system rehabilitation strategy, CWS began to design and supervise the implementation of the \$40m DWP. This was a key initiative since it aimed to do away with the 'spaghetti' system that had developed as a result of DAWASA's inability to provide piped water to houses in newly developing parts of the city. Planning went ahead on the understanding that the 1,000 km of replacement pipes were to be exclusively for Dar customers. Over a year into the contract, however, DAWASA decided to prioritise network rehabilitation in Bagamoyo and Mlandizi rather than Dar, causing substantial delays in the implementation of these vital works.

### 3.4.2 CWS' Performance: Failure to Meet Contractual Obligations

During CWS' first year, income from water consumption dropped by 37%. Eight months into the LC, CWS was already TSH 530m behind in payments to DAWASA. From January to March 2004, collections were one third of bills issued, half the proportion DAWASA claimed to have achieved in 2003. A review of CWS' billing and collection suggests lack of supervision in detecting fraudulent activities being perpetuated by staff.

A technical audit for the period August 2003 to June 2004 revealed many examples of CWS failing to meet other contractual targets. The audit could not measure CWS' performance in water services delivery because 'targets cannot be enforced until achievable standards are agreed with DAWASA.' Of the 16,500 water meters to be installed during Y1 only 15% had been installed. Delays in procurement held up improvements to the reliability and output of pumping systems. The Y1 target for new connections was 1,000, none had been made. CWS had signed no construction contracts for Delegated Capital Works. No water quality assurance system was in operation. Priority Works contracts were delayed by six months. Delays in SIPE had affected the operator's ability to increase the reliability of the system. CWS had tabled 47 change orders to the SIPE worth \$448,000 but none were approved.

Reasons cited for CWS' poor technical performance included slow procurement, slow 'no objection' responses from funding agencies, a dispute over pipe specifications, delays in obtaining letters of credit, the knock-on effect of delays in DWSSP components not under CWS control and lack of strong leadership in CWS.

### 3.4.3 Consumer Relations

CWS was slow to make its presence felt through public relations and customer outreach initiatives. Only after six weeks did it make its first public statement, in which its CEO announced a new tariff structure and a list of priorities.

CWS' experience demonstrated that it is not easy to reduce leakages and illegal connections without prior investments to improve water distribution. People will have an incentive to pay once they see that water is regularly available. The conclusion some drew from this is that there is reduced risk attached to a management contract accompanied by infrastructural improvements, as a first step towards a LC.

### 3.4.4 Labour Relations

An area where CWS exhibited little understanding of the context in which it was operating concerns its relations with workers. The possibility of worker retrenchment was allayed when CWS proposed taking over all DAWASA employees without redundancies. However, CWS came to reconsider this strategy because of its decision to sub-contract various components of the LC, leaving it with surplus staff. CWS therefore proposed to retrench 450 staff, over 40% of its employees. This did not happen before CWS' closure, although DAWASCO has since been trying to do the same. It seems apparent that CWS did not consider labour relations very important as a means of addressing some of the staff incentive problems described above.

### 3.4.5 Shareholder Relations

The PSRC bidding document required a 20% local investor, to be identified after the LC was awarded to one of the international bidders. When Superdoll Trailer Manufacturers Ltd. (STM), the chosen local investor, joined the consortium it requested a larger shareholding than required, agreeing to bring 49% of the \$8m equity stipulated in the LC. Biwater and Gauff set up a joint company (Biwater-Gauff Tanzania Ltd.) to run CWS, in which they held 51% of the shares and STM owned the remainder.

The big procurement contracts were pre-awarded to the international consortium and were not up for discussion with the local investor. So while Biwater picked up the POG and SIPE procurement contracts (worth around \$9m) and Gauff the design and supervision fees of the DWP (around \$4m), STM only got a fuel supply contract for CWS.

A difficult relationship developed between Biwater/Gauff and STM, leading first to management and operational problems and later to outright non-cooperation between board members. STM had no say in CWS decision-making and became disenchanted, both through failure to land any major contracts and through the other partners' insistence that it should not expect any short-term returns on its investment. STM's refusal to invest its second instalment of capital into CWS prompted Biwater and Gauff to do the same, contributing to the financial crisis that helped bring CWS down.

### 3.4.6 DAWASA Relations

CWS and DAWASA interpreted the LC in different ways. The contract was a large and complex document, reflecting the desire of the WB and other investors to avoid the problems that might arise in the absence of an independent regulatory body. DAWASA took the contract as a project implementation blueprint, while CWS apparently saw it as a starting point for further negotiations on certain key issues. For example, both Biwater and CWS expressed concerns over the financial viability of the lease contract and requested an Interim Tariff Review - as provided for in the LC. The technical auditors endorsed DAWASA's refusal of this request.

CWS' poor revenue performance and failure to remit income to DAWASA meant continued friction between the two sides, leading eventually (early 2005) to DAWASA hiring a mediator to broker an agreement on a growing number of unresolved issues. The mediator drew up a list of 18 key issues that needed to be addressed. While mediation was underway, the GoT announced the end of the LC.

### 3.4.7 CWS' Ouster

In a press conference on 13th May 2005, the Minister of Water announced the termination of CWS' LC. On 22nd May the CWS CEO announced that the company did not recognise the termination and accused DAWASA of breach of contract and of providing false information on its customer base and fictitious revenue projections at the bidding stage.

On 1st June 2005, police raided the firm's offices and the CEO and two colleagues were declared 'prohibited immigrants' and deported. On 2nd August, Biwater-Gauff filed a request for arbitration against the GoT with the International Centre for Settlement of Investment Disputes (ICSID), a WB affiliate. The hearing is still ongoing (Feb 2008).

The Minister announced the creation of DAWASCO to take over the management of the Dar water and sewerage system. The main features of the lease contract remained unchanged and DAWASCO picked up where CWS left off in what the DWSSP financiers called a 'seamless transition.' DAWASCO's

management nevertheless acknowledged that chronic problems remained, including the quality and size of the workforce and the continued involvement of DAWASA staff in facilitating illegal connections. On International Water Day in March 2006, DAWASCO's CEO claimed that 90% of water theft involved DAWASCO staff. He also estimated that half the domestic water consumed in Dar was through illegal connections or consumers not paying bills.

By January 2006, DAWASCO's revenue had reached TSH 1.46 billion, a 94% increase in the nine months since it replaced CWS. But despite this improved revenue collection performance, DAWASCO's monthly income was entirely absorbed by transfers to DAWASA (TSH 420m), electricity (TSH 400m), salaries (TSH 350m), and chemicals (TSH 250m). DAWASCO wants to retrench 500 employees, nearly 50% of its workforce. The fundamental commercial conditions under which DAWASCO must operate remain unchanged from those in which CWS tried, and failed, to turn the utility around.

## 3.5 Regulation

Establishing independent regulatory bodies is a vital component of PSP in public utilities. Since Tanzania's Energy and Water Utilities Regulatory Authority (EWURA) did not exist in an operational sense during the CWS operating period, responsibility for regulation defaulted to DAWASA and the

MWLD. Vesting responsibility for regulation and performance monitoring in the organisation also responsible for service delivery and investment financing created a potential conflict of interest. The rapid accumulation of unresolved issues between CWS and DAWASA is unlikely to have been simply a reflection of CWS' systematic flouting of the LC.

Having secured the DWSSP on the strength of PSP as one of its components, the GoT was arguably not overly concerned with making sure that CWS did a good job through effective regulation. The GoT's closure of CWS in 2005 triggered no penalties by the financing agencies and project disbursements continued. After less than two years of PSP, the GoT thus had complete control of the DWSSP in the pre-privatisation mode of direct lending to government.

Ultimately, DAWASA's strategy and CWS' regulation were under the control of the Minister of Water. As a policy-maker, the Minister's role was to find the best solution to Dar's water problems. As a politician, he derived kudos by securing large external loans. This offset the continued unease with privatisation policy, which he was obliged to endorse in order to obtain the loans. The Minister resolved the CWS crisis by politicising and criminalising it. The benefits of this strategy were twofold: he was seen to have stood up to CWS and won, and the latter could now be blamed for the poor state of Dar's water supply. Some argue that it was politically expedient for the Minister to find a quick solution to the CWS mess in the build-up to the 2005 elections. Either way, the Minister's actions again demonstrate the unhindered power of the executive.

### 3.6 Conclusions

The advantages often claimed for PSP in service delivery are that it brings: (1) private capital and entrepreneurship; (2) customer-orientation and management efficiency; and (3) independence from political pressures and patronage.

1. **Private capital:** In the CWS case, the operator's investment risks were mitigated by the lending agencies and the GoT taking responsibility for the loans, leaving the operator to bear only the commercial risks involved in managing the water and sewerage system. Even those risks were mitigated by sweeteners in the LC in the form of profits from procurement, capital works and supervision components which could offset initial losses in water system management. This diverted attention from the profound commercial non-viability of the water utility and undermined the operator's incentives to adopt a more commercially-sound approach.
2. **Management efficiency:** Addressing the perverse incentives at the interface between staff and customers was a major governance challenge that CWS failed to address adequately. CWS had little leverage over customers because it could not sanction them through legal action or effectively incentivise or discipline its own workforce. Contingent factors (drought, burst pipes) made it difficult for CWS to strengthen its customer relations initiatives, including amnesties, with the carrot of improved water supplies.
3. **Political independence:** Short-term measures to improve supply in underserved areas through the introduction of rationing were reversed due to political interference, as were attempts to curb irrigation on large farms along the transmission main (which a local MP opposed on behalf of 'his constituents'). CWS proved unable to resist this interference.

CWS failed to deliver the benefits that had been expected of PSP due to an overwhelming combination of commercial, institutional and political factors.

## 4. Lessons Learned

This chapter reviews the main conclusions of the CWS case study with the objective of proposing institutional and commercial relations that may work in the longer term to reform water supply management in urban environments such as Dar es Salaam. With hindsight, a combination of

commercial, governance and political factors can be shown to have contributed to the failure of CWS. It follows that all three have to be addressed if a lasting solution is to be found to Dar's water problems.

## 4.1 A Case of Shared Responsibility

This case study has presented the PSP process as a collaboration between Tanzanian and IFI/donor technocrats that ultimately served the interests of both sides in transacting soft loans worth over \$140m. Although after only 22 months there was no longer a private operator in place, the fundamental confluence of interests remained. In fact, the unsanctioned ouster of CWS strengthens the basic argument that the process was more about the loans than about leveraging utility 'privatisation'.

In describing the rapid rise and fall of CWS, it is concluded that the three major players - government, financiers and private actors - share responsibility for what went wrong. Even if CWS had managed to avoid regulatory, governance and political pitfalls, the financial viability of the LC would still have been in doubt.

Water consumers, their political representatives and civil society played minor roles: there was no political debate or sustained attempt at interest articulation over PSP.

In the aftermath of the PSP debacle, the main protagonists gave a number of explanations for CWS' failure and essentially blamed each other for what went wrong:

- **GoT/DAWASA** put the blame on CWS, arguing that it failed to honour major components of the LC and that the management had 'colonial attitudes' towards Tanzanian employees.
- **The WB** remained diplomatically silent but implied that the failure of CWS largely reflected lack of political will and technical competence on the part of the GoT.
- **Biwater and CWS** accused DAWASA of refusing to renegotiate the LC on the basis of information not available beforehand, and the GoT of illegally and unjustifiably terminating the LC.
- **Local and international NGOs** saw the failure in terms of the imposed nature of the PSP as part of IFI privatisation conditionality, which proved to be politically unacceptable.

These discourses reflect each stakeholder's self-interest and ideological position and fail to present an empirically grounded or persuasive explanation of the CWS debacle. Polarisation of the various discourses poses major challenges in developing recommendations on the way forward. Rather than argue for or against, CWS' failure can be interpreted from the perspectives of commerce, governance and politics, which may be a more helpful approach to achieving affordable water for all in Dar and similar locations.

## 4.2 Commercial and Financial Issues

It is clear that CWS took over a financially troubled operation. Yet CWS proposed to turn DAWASA into a profitable enterprise within ten years without dramatically increasing prices or restructuring its work-force, while remitting 30% of its revenue to DAWASA. The obvious question is: Why were Biwater and its partners so confident they could turn DAWASA around?

The evidence suggests that private investors would never have been able to reverse the commercial vulnerability of DAWASA under the range of capitalisation put forward in the bidding process. Errors committed by Biwater and others merely served to precipitate the financial crisis that CWS would eventually have had to face under any realistic scenario. Perhaps the preoccupation with a 'PSP solution' to Dar's water problems blinded some of the protagonists to the obvious fact that Dar's water supply would require both major investment and operating subsidies for an extended period.

CWS cited a lack of reliable data on DAWASA's customer base and financial performance as a reason for its failure. Yet a relatively casual perusal of DAWASA's accounts in the years prior to the signing of the LC shows that the LC represented an unacceptably high level of commercial risk for any potential investor. At the very least, there was a failure of due diligence on the part of Biwater and its partners in not scrutinising the available figures. It is possible that CWS and its backers had non-commercial motives. For example, Biwater could perhaps have viewed CWS as a strategic 'loss leader'; a means of getting a foothold in Tanzania's water sector at no great cost, hoping to obtain more profitable, less risky contracts down the line. If this was the intention, it certainly backfired.

## 4.3 Governance Issues

Public and private sector governance issues were not addressed adequately during the PSP process.

### 4.3.1 Public Sector Governance

- **Corruption Control**

Research by Transparency International suggests that companies routinely pay bribes to obtain contracts in emerging economies. If the 'wrong' company won the LC tender through bribery, the relevant question is: would one of the other bidding companies have performed any better, with or without bribery? Given the market and state failures described in this report, the answer is 'no'. In other words, the presence or absence of bribery in competing for the market would not make much difference to the overall conclusions on why CWS failed.

- **Regulation**

The role of the regulator is to separate policy-maker from service provider and preserve its own independence. This case study demonstrates that the regulatory function was not clearly separated from policymaking or politics.

A key regulatory role is establishing tariff levels. When bidding, the Biwater/Gauff consortium opted for the lowest tariff allowed. The tariff was then to be regulated by the LC, with adjustments allowed for inflation of inputs and currency fluctuations. In addition, numerous other technical issues were addressed in the LC contract to avert the risks arising from the absence of an independent regulator.

The strategy did not work. Many of the contentious issues that emerged after the signing of the LC, including CWS' request for a tariff review, were handled but not resolved by DAWASA, which eventually resorted to an independent mediator.

The mediator identified 18 'key issues'. This growing list of outstanding issues was not so much proof of DAWASA's lack of negotiating capacity as of a more fundamental governance problem affecting the entire venture. In a sense, an overpowering governance deficit characterised the entire PSP process. This deficit includes poor regulation, an ineffective rule of law, the almost total absence of public voice and inadequate executive and lending agency accountability. Had there been a minimum of trust, transparency and information-sharing among the parties involved, tendering and negotiating the LC might have taken a very different form and the turmoil described in this report might have been avoided. In fact, had DAWASA's true technical and financial situation been known, there may well have been no takers for the LC.

- **Rule of Law**

CWS claimed that at least half its customers were not paying their water bills. While the state has the power to force citizens to pay bills by taking them to court, for practical purposes this is the last resort. Bringing free-riding back under control requires confronting the vast unofficial networks of complicity between utility staff and consumers that have built up over time. This requires a combination of improved customer relations with clear and demonstrated state backing where dialogue fails. This did not even begin to happen during the CWS period, a fact that seriously undermined CWS' efforts to address the problem of free-riding. In allocating responsibilities between operator and government, the

ultimate role of sanctioning customers can only fall to government. The operator must know that the state will enforce the utility's contract with customers. The GoT proved unwilling to fulfil this role.

- **Accountability**

There was little or no evidence that DAWASA or the GoT more generally was particularly concerned with public accountability. Concern with water consumers' interests never appeared to be a major factor motivating GoT actors, despite domestic water supply being a major concern for Dar residents. Nothing was stopping the GoT putting up its own funds to address the water supply crisis in the country's largest city, particularly when it began to reap the benefits of debt relief. The Lake Victoria-Shinyanga water pipeline exemplifies the high degree of autonomy enjoyed by the executive in initiating major projects. Such projects can be implemented without meaningful public discussion on the one hand, nor any need to negotiate with donors on the other.

- **Funding Agency Governance**

Critics have identified a number of governance weaknesses on the part of the lending agencies. These agencies carry no investor risks when loans such as those financing the DWSSP fail to perform. This constitutes an inherent moral hazard for development banks and other non-commercial lenders. Although the borrowing government accepts responsibility for the debts incurred, repayments are over such a long period that nobody can be held accountable in the event that things go wrong. There is no effective financial risk on either side of the loan equation. This highlights the fundamental difference between incentive structures in aid-related lending and those in business.

The WB financed part of the water privatisation reform process as well as the loan to introduce PSP in the Dar water sector. The PSRC has been financed with two loans, totalling \$88 million. These were used to set upstream policy for the utilities sector, including the setting up of the regulator (which failed to happen) and for procurement of transaction advice to set up the LC. This represents a clear conflict of interest. In effect one loan leads to another loan; put more strongly, one loan is used to sell the next.

An accountability failure occurs when agency staff continue to promote lending strategies, policy options or technical solutions in the face of growing evidence that those strategies, options and solutions are failing to deliver on economic or developmental criteria. Examples are utility privatisation policies and the lease contract strategy. At the very least, the high risk involved in such ventures would lead one to expect a cautious approach to lending and, at the time of the DWSSP loan, at least some water sector specialists were advocating a management contract rather than a lease. A number of specialists have questioned whether a LC was the optimal form of PSP for DAWASA, given the poor state of the infrastructure and the inadequacies of the billing and payment mechanisms in place.

Did the WB and the other DWSSP lending agencies (the African Development Bank and European Investment Bank) exercise due diligence when they signed off on \$144m of loans to the GoT/DAWASA? The baseline information that informed the financial projections of the DWSSP was incomplete and unreliable. The anticipated revenue flows and break-even point were arguably over-optimistic. Were the lending agencies satisfied with the tendering process and the track record of the eventual winner?

Though the DWSSP was on paper conditional on PSP in DAWASA's management, the abrupt termination of the LC did not prompt the WB to question the rationale for the DWSSP loan. On the contrary, the WB immediately authorised the disbursement of funds to improve DAWASCO's short-term liquidity, and praised the GoT for the 'seamless transition' from CWS to DAWASCO. The WB country director said "This is a very key sector and a very key client of ours so we're very keen to try and repair the damage."

While many man-years of aid-financed technical assistance went into crafting the DWSSP, there is still the possibility that non-commercial imperatives - such as the need to begin disbursing loans - helped drive the programme and the LC component.

At the very least, it can be argued that there was too much focus on setting up a complex contract aimed at recreating market-like incentives for the private operator and not enough time spent on

understanding the state of the utility and its customer base. The technical focus of the project and the LC was overly concerned with the failure of public provision stemming from the underlying belief that the only role of the state is to rectify market failures. More attention should have been given to the government's role in getting markets to work, and particularly on the government's role in enforcing the contract between operator and customer; currently a very real failure of the market.

It is difficult to estimate the full costs of legal and other transaction advice procured by GoT in the preparation of the contract. \$1.4 million was paid to Severn Trent Water International for designing the lease contract, yet seemingly nothing was spent on generating a baseline on water use in Dar or on improvements to the customer database. The puzzle of recreating market-like incentives was seen as more important than understanding the reality on the ground. Ideology was substituted for empirics.

The WB is, of course, concerned with the high failure rate of its PSP loans to African utilities and infrastructure. The GoT is often criticised for the lack of accountability of the executive, but the accountability of financiers also needs to be called into question. Effectively, lenders and borrowers are laws unto themselves; neither is accountable to a political constituency, independent oversight or market forces.

### 4.3.2 Corporate Governance

In the relationships with its shareholders, staff and customers, CWS could arguably have performed much better. A lack of understanding of the strength of the perverse incentives faced by DAWASA employees and customers undermined CWS' attempts to increase revenue and improve customer relations. CWS' attitude to labour relations seemed to demonstrate a lack of understanding of the importance of involving workers and their representatives in a dialogue about utility reform. Basic disagreements resulted from the artificial manner in which the local shareholders were brought together after the signing of the LC and shareholder infighting complicated attempts at conflict resolution between the leaseholder and the GoT.

However, improved corporate governance alone would probably not have made much difference to the CWS story. The corporate governance failures simply compounded the public governance failures. Improved public and worker relations under DAWASCO have yet to resolve the incentives issue, though great efforts are being made to do so and such things take time.

## 4.4 Politics and Ideology

By politicising the CWS issue, the GoT undermined one of the objectives of PSP, namely, separating politicians from policy-making and utility management. Politics is in charge when a minister becomes the de facto regulator and is actively involved in the process of terminating a contract between a utility under his ministry and a foreign investor, in the process authorising the arrest and deportation of the investor's senior managers and seizing its assets. In justifying the closure of CWS, the main state actors played heavily on the motives and strategies of foreign investors and expatriate managers. Arguably, the GoT gained more political capital by thumbing its nose at CWS and blaming it for what went wrong than it lost because of the failure of the PSP initiative to improve water supply.

This case study helps explain the apparent contradiction between key stakeholders' formal endorsement of the ideological underpinnings of PSP and their role in undermining them in practice. By strategically adopting the pro-PSP discourse, the GoT obtained large loans to upgrade the water infrastructure and improve the efficiency and reliability of Dar's water supply. The key players employed the PSP ideological discourse because it served their own strategic interests to do so. On the lending agencies' side, there was a stronger ideological commitment to the PSP option, but when the lease option collapsed, the lending agencies' perceived interests, both of reputational risk and in keeping the loans on track, prevailed over their ideological commitment to PSP as the means to achieve the ends of water reform.

## 5. Recommendations

### 5.1 Introduction

The failure of both state and (partial) market solutions to resolve the problem of domestic water supply in Dar es Salaam leads to the obvious question: Where do we go from here? There are useful roles for private companies to play in urban water supply, although there is no simple formula that can be applied to demonstrate how this should be done in a particular set of circumstances.

There was widespread failure of attempts during the 1970s and 1980s to ‘commercialise’ the operations of state-owned utilities in Africa as a means of addressing service delivery problems. There has been a subsequent failure of PSP to address the same problems. But the solution is not necessarily to jettison PSP in the search for non-market solutions. For the private sector to perform well, public sector capacity must be enhanced. Proposed tactics of reform need to fit more closely with the expectations and sentiments of the affected government and population. This implies a need to reduce both the scope and especially the planned speed of operations.

According to the opponents of PSP, markets are the problem, not the solution. The radical anti-PSP discourse contrasts rights-based and market-based approaches to water, arguing that treating domestic water as a commodity automatically excludes the poor from accessing an adequate supply.

Opinion surveys suggest that privatisation, and public utility privatisation in particular, are increasingly unpopular across a range of countries. ‘Large and growing percentages of citizens view privatisation as a harmful policy, often imposed by external agencies without due consideration for the economic and social context’ (World Bank Research Observer, vol. 19, no. 1, 2004).

If we reject PSP we are left with state ownership and parastatal management solutions to the problems of domestic water supply.

In an attempt to look beyond this polemic in Tanzania, the need should be stressed for public debate about all the factors that constrain Dar es Salaam’s water sector: financial, commercial, governance, political and ideological. Water utility reform in big cities is complex, outcomes difficult to predict and unintended consequences commonplace. Those affected by reform need the space to feed back and to criticise. Those making policy need to revise, listen and then revise again.

The lack of meaningful public debate both leading up to and during the CWS episode suppressed this pivotal feedback mechanism. Future debate will be coloured by past events. The public and civil society organisations now understand water utility reform to be a debate about PSP. Selecting PSP as the key outcome pre-empted the option of having a less loaded debate about utility reform more broadly. Going down the PSP route also resulted in the key instrument of the reform – the contract between DAWASA and CWS – being confidential and so not open to public debate or scrutiny. Furthermore, making a contract the key instrument of reform precludes a more piecemeal approach. The 400-page contract covering a ten year period left little space for anything other than a blueprint approach to reform.

A basic tenet for deciding how to organise public services is an assessment of the nature and complexity of the transaction. All eventualities cannot be provided for. Governance cannot be substituted by a contract. Even where good knowledge about a utility’s situation is available to all parties, there will be practicalities that have to be negotiated and unforeseen consequences that need to be resolved during contract implementation.

With the utility now back in public hands there is no longer a need for confidentiality and a more piecemeal approach to reform can be pursued. The public debate to establish what went wrong and how to proceed in the light of lessons learned can be opened up.

Yet if debate is to be meaningful, the unknowns and uncertainties about water services in Dar need to be quantified. How can a reform path be chosen without a clear understanding of a utility’s operations?

More needs to be invested in high quality baseline data about service provision: who are the customers, where are the pipes, who is served and who is not? Much of this information is still missing. This is a public good, a precursor to reform and a requirement for choosing future reform paths.

## 5.2 Government of Tanzania

The interests of Dar residents in enjoying an adequate supply of clean and affordable domestic water have played little or no role in determining the nature and impact of the reforms that have been attempted to date. Throughout the period under review, faced with declining services, water consumers have adopted individual rather than collective survival strategies. Barring a major crisis such as a sustained drought, the GoT can probably count on the continued acquiescence of the mass of the population in the face of continued poor services.

DAWASCO is currently facing the same contractual constraints that helped bring down CWS and are likely to undermine further progress. The probable 'solution' to be applied by donors and government will be official subsidies. Projected increases in aid transfers will increase the GoT's liquidity, making water subsidies an unproblematic expenditure item. Donors are unlikely to object as the subsidies will be comparatively modest and the slippage in the formally-agreed policy of no subsidies for parastatals will be no worse than in other sectors, and can be justified as 'pro-poor'.

The principle sticking points concern targeting of subsidy and the risk that subsidies will allow DAWASA and DAWASCO and their political bosses to put off indefinitely the difficult institutional reforms that are required to turn the situation around.

First, subsidies will mask the need for the operator to respond to the commercial imperative, the whole point of setting up the lease contract in the first place.

Second, subsidy will cloud the division of responsibilities between DAWASA and DAWASCO. Because there are two parastatals involved it is not obvious how or where to inject subsidy. One possibility is to merge the two back into one for greater efficiency and to outsource services from a single entity. But this proposal neglects the original reason for separating the asset holding authority from the operator, namely that it splits long-term from short-term interests. Indeed a legitimate and potentially beneficial source of tension between CWS and DAWASA (and now between DAWASCO and DAWASA) has been these juxtaposed long- and short-term interests.

Third, relying on subsidies will restrict the two-part utility (asset holder and operator) in its ability to make autonomous decisions over the way that the revenue stream from customers is used to expand the reach of Dar's water supply system.

Finally, subsidies are notoriously difficult to target. The logical place to direct subsidy is to the poorest consumers, but rising block tariff structures such as the one applied in Dar have proven extremely inefficient in achieving this aim. The tariff structure in Dar has a lower band for bulk water supply to public kiosks and for the first five cu.m. per month to domestic connections, and a higher band for consumption above this level. While in principle this seems a good idea, all kiosks add a management charge which makes water from kiosks more expensive than the higher tariff band. Moreover, households able to benefit from the lower rate are mainly in higher wealth categories.

Target subsidy at the poor and at the business model. Investing in public kiosks for the mass of poor water users without access to a direct piped supply was not implemented by CWS and remains a low priority. If water supply has to be subsidised and if subsidies are to be channelled to the poor, this trend needs to be reversed. One of the most effective means of directing subsidy is by channelling it to lower service levels: to kiosks rather than household connections. This is particularly appropriate in Dar, where the city has expanded rapidly since the 1980s with no parallel expansion of the official piped network and where the poorest 60% of households have almost no direct access to the piped network.

Recognising that concessionary lending for water supply infrastructure is a subsidy funded out of international public finance, there is a clear rationale for a greater focus on building public water kiosks. Furthermore, if recurrent subsidies to the operator are needed they should be channelled to water sold through public kiosks. Options include using the subsidy to ensure that water sold through public kiosks is cheaper, or at least no more expensive, than the lower tariff band. Either way the operator would receive the subsidy based on the volume of water sold through public kiosks: a form of output-based aid. This is not only a strong incentive to deliver water through public kiosks, but also a guaranteed matching revenue stream for the operator to use for improving operation, maintenance and revenue collection in other parts of the network.

Uphold the contract between customer and utility. A carefully targeted subsidy, such as that described above (through public kiosks) would bolster the operator's business model, but the government also needs to prevent non-compliance from eroding the operation's commercial viability. DAWASCO claims that about half its customers are not paying their bills. Some customers are not receiving water or are being billed for air. Others, meanwhile, are cashing in on the chaos, often with the help of DAWASCO staff. There is no doubt that the operator can and should be taking steps of its own, not least improving the accuracy of its customer database. But in addition to this the government needs to support efforts to improve customer compliance while safeguarding the rights of its citizens. Court cases for illegal connection and non-payment need to be fast-tracked and the nascent regulator urgently needs strengthening.

Privatising natural monopolies like water supply requires the development of regulatory frameworks and institutions that are independent, accountable and resistant to capture by the private provider or the state. This will protect consumers against abuses of monopoly power, assure investors that they will be fairly treated and address broad equity concerns. Good regulatory institutions require independence, transparency, accountability, expertise and credibility, all of which take time to create.

The regulatory body EWURA has finally been established, its Board selected, staff hired, technical assistance recruited and a consumer council set up.

Clearly, the GoT still needs to improve its regulatory capacity. But unless executive power and political patronage can be reined in through parliament, the judiciary, the market and civil society, donor-driven 'capacity building' efforts will have little impact.

## 5.3 Lending Agencies

The main project funding agencies are also the major promoters of liberalisation policies, including privatisation. Lending agencies also fund projects to promote governance, on social development grounds. Yet governance and privatisation projects tend to run in parallel, since they are concerned with separate 'sectors', and donors rarely make the connection between loans and grants for PSP and those promoting governance, even though governance deficits are often behind project failures.

In future lending agencies thinking about water sector reform in countries with poor regulatory capacity and limited accountability need to put far greater emphasis on the governance dimensions of economic and institutional reform. The need and purpose of public debate on reform options has already been raised. Upstream of utility reform projects, lending agencies should adapt their procedures to encourage greater domestic accountability by promoting debate of options in parliament, by the media and the general public. Downstream there are opportunities for better integration of utility reform with judicial reform projects, reinforcing government's role in getting markets to work and ensuring that courts uphold the contract between utility and customer.

In addition to these broad governance issues there are two specific lessons that should be learned from this case study:

Clarify roles in the procurement of operators. The market for water supply operators is thin, collusion

and corruption are commonplace. One interpretation of the process in the case of Dar es Salaam is that the procurement of the operator was carried out by PSRC but was on WB procurement terms. So who was ultimately responsible for the procurement of the operator? Was the GoT responsible for the choice of operator and the WB for process? Did the WB's safe-house review consider both operator and process? Both PSRC and DWSSP were part-financed by the WB. Who is accountable for what? What roles did the task managers in PSRC and DWSSP play in scrutinising the procurement process? What potential was there for conflicts of interest? These questions are hard to answer conclusively. The lack of clarity over roles and responsibilities leads to speculation about who pressured whom and for what reasons. Roles and responsibilities for the procurement of operators need to be revisited and clarified. This applies both to the roles and responsibilities between government and lending institution, and roles and responsibilities within the lending institution.

Keep operator incentives focused. Loading construction contracts onto a private operator splits the operator's incentives between making a profit from the construction contracts and making a profit from operating the water and sewerage services. The designers of lease contracts should not meddle with operator incentives but should make sure that the operator focuses on its key role; that is, operating the utility.

## 5.4 Water Companies and Private Investors

Due diligence. It is unlikely that international water companies will be willing to risk investing in Dar es Salaam for the foreseeable future. Nevertheless, these companies should take up the challenge of transparency and accountability in their dealings, which might pay off in improved public perceptions of their motives and greater trust among customers. Although there has recently been a boom in private investment in the water sector in Latin America and Asia, all major water PSP investments in Africa still involve loans from development banks. The future role of international water companies in Africa is likely to remain limited to management contracts and leases under soft-loan financed projects like the DWSSP. To those water companies still interested in investing in Africa, the lesson from the CWS case is simple: ensure due diligence, due diligence and more due diligence.

Local investors need to get involved pre-bid. The falling out of the local and international shareholders compounded broader public governance failures in the CWS case. Involving a local shareholder was a condition of effectiveness, but why was the partnership formed only after the international consortium won the bid? Partnerships are much more likely to work out if they start on an even footing, take equal risk and expect equal return. The big procurement contracts were pre-awarded to the winning international consortium. Encouraging local investors to take part in joint ventures has great potential and is politically appealing, but local investors should be part of the bidding consortia rather than being introduced after bidding has been completed.

## 5.5 CSOs

During the events described in this report, civil society organisations tended to prioritise ideology over interests, treating water consumers primarily as ideologically constructed (anti-privatisation) entities rather than self-interested actors or agents. While claiming to speak on behalf of the poor, they did not articulate the empirically researched context and vocalised interests of the poor, or at least large numbers of poor people.

The anti-market solutions position offers no alternative policy prescriptions to address the problem of urban water supply in Dar es Salaam. Civil society activists might argue that from poor people's perspectives the solution lies in greater popular participation and consultation with local communities. But participation and consultation are not alternatives to a well-planned and managed water utility that serves the interests of all citizens, rather a necessary part of the process of developing appropriate solutions.

Advocacy groups should continue to make the case for pro-poor policies so that the practical issues of providing adequate clean water to the poor are addressed by policy-makers and implementers. Campaigning against PSP does not serve any useful purpose, unless a narrative is produced providing an alternative development vision to what is currently on offer that better serves the interests of the poor in accessing plentiful, cheap, clean water.

Rather than trying to mobilise the poor against PSP, CSOs should be doing more to understand the constraints on both the supply and demand sides, and on state capacity to deliver good services.

Engage in regulation. CSOs should negotiate for and engage in utility regulation, whether in a public or private utility context, through a formal regulator or external scrutiny of utility performance. What is sorely lacking is a critical mass of attention on, and independent analysis of, the way in which utility management practice relates to performance. CSOs are well placed to articulate citizens' views, to document what works and to promote creative management solutions.

Identify needs of poor and vulnerable. Information about service delivery in Dar is scant. CSOs can do a great deal to assist utilities in understanding the situation of the un-served and under-served, including: mapping poor and underserved areas; conducting water price surveys to find out what poor and vulnerable people are paying for their water; proposing new and better ways of targeting subsidy; and proposing and improving exemption systems.

## 5.6 Conclusion

This report set out to understand why the CWS experiment failed. The fact that DAWASCO took on an almost identical lease to CWS makes the Dar case an unusual natural experiment. They both face the same business model and operational context. Even the staff were unchanged. The only thing that did change were the directors running the utility, their interests and the influence that they brought to bear on the utility's operations.

One rather obvious conclusion is that managerialism is no match for systemic failure. Twenty-five years of decline cannot be fixed by changing managers. The deteriorating infrastructure has to be upgraded and expanded; free-riding kept in check; legal cases processed; the workforce re-skilled; utility-customer relations restored; and bills paid. None of this will happen overnight.

The infrastructure will take time to rebuild and expand. There will need to be transitional subsidies. The splitting of the asset-holding authority and the operator is a positive step in separating the interests of the two entities. The operator's business model will need to be subsidised in the medium-term while the asset holder rehabilitates and expands the infrastructure, and the asset holder will need more money to expand both source and network. The existing loans are only enough to rehabilitate the core of the city's network.

The reforms required are complex and multi-sectoral. Reform needs to be in iterative steps, needs to be coordinated and sequenced with complementary governance reforms, reviewed continuously and steered by public feedback.





WaterAid's mission is to overcome poverty by enabling the world's poorest people to gain access to safe water, sanitation and hygiene education.

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