

Chapter Three

From Fiasco to DAWASCO:
Remunicipalising Water Systems
in Dar es Salaam, Tanzania

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Dar es Salaam's water and sewerage systems were in a terrible state when the government of Tanzania privatised them in 2003, signing a contract with City Water Services (CWS) – a joint-venture of Biwater (UK) and Gauff (Germany). This private consortium was later joined by a Tanzanian private firm, Superdoll. But private management did nothing to improve the situation, with the World Bank describing the private operator's performance as worse than its predecessor's. In 2005, a new public operator took over: Dar es Salaam Water and Sewerage Corporation (DAWASCO).

Since that time DAWASCO has managed to extend coverage and improve critical aspects of water service delivery in Dar es Salaam, proving that public water services can be managed well by the state, and can outperform the private sector in many ways. Nevertheless, overall results are mixed, as DAWASCO has also begun to operate increasingly like a private company, focusing on full cost recovery and failing to meet its obligations in the lowest income areas of the city. To be fair, the daunting challenges faced by DAWASCO since remunicipalisation are part of the problem: derelict infrastructure, unreliable customer data, degraded water resources, and strict but not necessarily relevant conditionalities imposed by international donors to access investment funds. Understanding these challenges requires a review of the general legacies of post-colonial Tanzania, as well as the impacts of the failed privatisation. It also requires an examination of the ideological assumptions that continue to inform policy and practice in Tanzania as a whole.

Historical background

Following its 1963 independence from Great Britain, and its 1964 partial merger with Zanzibar, Tanganyika became Tanzania, ruled by charismatic figure Julius Nyerere and his Revolutionary Party (*Chama cha Mapinduzi*, CCM). The first 25 years of independence were marked by an original socialist-inspired political regime that sought ideological independence from both capitalism and Soviet-style Marxism through 'African socialism' (*Ujamaa*), which was inspired by egalitarianism, self-reliance and cooperative agriculture. Most banks and industries were nationalised, literacy rates and access to health care and water supply were considerably improved, the state was successful at preventing ethnic clashes, and party leaders were legally kept from accumulating wealth and power.¹ The government, however, faced harsh difficulties. The collectivisation of agriculture was a disaster: production plummeted causing heavy reliance on food imports, and millions of resettled farmers went back to subsistence farming. The economic crisis of the late 1970s combined with the 1979 military intervention to oust Uganda's Idi Amin Dada had a severe impact on the national economy: by the early 1980s, industry was functioning at only 30% of its productive capacity.² The one-party system was also showing signs of exhaustion, with corruption spreading.³ Nyerere stepped down voluntarily in

1985, leaving Tanzania among the poorest and most aid-dependent African countries.⁴ Many Tanzanians still remember this mixed experience with centrally planned economies and large state bureaucracies. Since then, many social gains made in the 1970s such as literacy, public health care and water supply have been undermined.⁵ The country had to comply with tough international financial institutions lending conditions leading to the privatisation of most of its parastatal companies⁶ to access debt relief. We will see that this imposition played a key role in our case.

Dar es Salaam is the largest city in Tanzania, as well as its main industrial and commercial centre. The city has an official population of 2.5 million, projected to reach 3.5 million by 2015,⁷ but unofficial estimates put the figures at 3 million in 1999 and a current population of up to 5 million, with a 7-10% yearly increase.⁸ The city has a tropical climate with hot and humid weather most of the year, heavy rains falling between March and early May and between October and December to a lesser extent. This important rainfall seasonality is becoming more extreme with climate change and is reflected in more extreme river discharge variations, an important fact given that the city gets more than 90% of its water from rivers.

The water supplying Dar es Salaam comes from two main sources: the upper and lower plants on the Ruvu river (about 60 km north-west of the city) developed in 1959 and 1976; and an older small surface scheme in the southern part of the city completed under colonial rule in 1952. About 35 boreholes scattered throughout the city also supply the network, a legacy of those drilled in emergency during the severe droughts of 1984-1985 and 1997. The piped network was first developed in the city centre in the 1920s and 1930s, significant additions were made in the 1950s and the last major expansion occurred throughout the 1970s when the system's performance was at its best (most connected households were getting 24-hour supply at that time).

After independence, water supply in the city was directly managed by the Ministry of Water and Power. In 1977, the department in charge was turned into a parastatal company, the National Urban Water Authority (NUWA). Until 1991, those whose property was directly connected to the system had to pay for water while the water delivered at kiosks was free. A 1997 reform transformed NUWA into the Dar es Salaam Water and Sewerage Authority (DAWASA), a semi-independent entity aiming at financial autonomy, and combining for the first time both water supply and sanitation. But the last significant investments in the system dated back to the 1970s and had not been followed by proper maintenance, upgrades or expansions to cope with the city's rapidly increasing population. Thus, the system was in a terrible state by the early 1990s, with high levels of disrepair, unaccounted for water, major financial losses, demotivated workers and very low coverage.

This long-standing negligence also means that data related to water production, transfer, distribution and use in the city must be dealt with cautiously: metering has neither been consistent over time nor reliable, and the figures are politically sensitive, being crucial performance indicators for the utility managers and having played a pivotal role in the privatisation conflict. Data presented here must therefore be understood as an indication of scales and trends and not necessarily as an exact reflection of the state of water services in the city.

The failure of privatisation

In August 2003, the World Bank spearheaded a US\$164.6 million fund to privatise Dar es Salaam's water services, under the banner of the Dar es Salaam Water Supply and Sanitation Project (DWSSP).⁹ This initiative was welcomed with relief by local authorities as well as the media, as it signalled the launch of a much-awaited and badly-needed infrastructure investment program.¹⁰ Assigning a lease contract to a private operator was a strict condition on the funding, and despite some progressive wording little consideration was given to public consultation, pro-poor focus or political debate.¹¹ The contract was kept secret even from Parliament. The experience did not last long: 21 months into the private concession, the government of Tanzania terminated the contract with the private water operator and police even briefly arrested its executives, who were soon expelled from the country.

In retrospect, the lead-up to the privatisation lasted much longer than the experiment itself. Already in 1997, the government of Tanzania consulted international private water companies about a concession contract but could not reach an agreement as none of the companies were willing to risk injecting money into a system that had been neglected for 20 years. There was also disagreement on the 'best' privatisation option. In the end, the World Bank insisted on redesigning a tender looking at a more limited investment from the private sector, and the government responded by proposing a 10-year "operating lease contract" in which a private company would take over responsibility for billing, tariff collection, general management and routine maintenance. In that scheme, DAWASA would retain ownership of the assets, rehabilitate and expand the network and monitor the performance of the operator. A first bid attracted proposals from three companies (Vivendi [now Veolia], Saur and Biwater) but was cancelled given the companies' proposed conditions. A revised bidding process ensued, but the two French companies, Vivendi and Saur, withdrew their bids before the financial application stage, apparently convinced their UK competitor would be chosen whatever they proposed.

When CWS won the contract, it was a newly created joint venture between Biwater and Gauff Tanzania. They later formed a consortium with Superdoll Trailer Manufacture

Company Ltd (STM), a Tanzanian investor with a minority shareholding of 49%. The consortium's risks were limited by a string of "sweetener" loans and construction contracts from the donors in order to get them to accept below full cost recovery water tariffs in the first five years of the lease (although STM did not benefit from these contracts). The initial concept of the lease contract was to put the capital risk on DAWASA and the operational risk on CWS, but these boundaries were blurred by the addition of construction contracts worth US\$40 million that were safer sources of profit for the European companies.

As soon as operations began problems accrued, to the point that CWS stopped paying its monthly lease fee to DAWASA in January 2004, only five months after the contract started. CWS injected only half the capital it should have (US\$8.5 million), and the company's revenue dropped by a third between August 2003 and March 2005. Billing efficiency collapsed, new customers sometimes did not enter the billing system, and existing customers seemed to benefit from increased leeway in making payments directly to the company's revenue collectors. Technical performance was no better, with large delays in implementing first-time connections and getting started on the construction contracts. On top of all this, a 2006 report by the Ministry of Water¹² found that no financial report had been provided by CWS to DAWASA during the contract period.

Several reports and interviews with employees, union representatives and senior managers point to three main explanations for the failure of CWS. First, there was a surprising ignorance of the terms of the lease contract among CWS top executives who seemed to assume key components of the contract were still negotiable. On the crucial issue of tariffs, for instance, CWS was refused two tariff increases because of its poor technical performance.

Second, employees and technicians were "poorly trained and equipped," "badly remunerated and inadequately supervised,"¹³ a situation that translated into widespread corruption and revenue collection embezzlement by employees. In its one and only substantial organisational reform, CWS attempted to retrench almost 40% of the workforce when it decided to sub-contract parts of the lease contract, despite promises made to the unions not to downsize. However, the contract was terminated before CWS could proceed.

Third, CWS's main objective was to improve revenue collection through a better billing system and customer database. It introduced new software to do so, but its implementation was very slow and was never completed. It also prioritised the metering of the network but did not consider that most meters spin on both air and water, a serious problem in a network characterised by rationing and low pressure. Many new metered customers were billed for large quantities of air passing in the pipes.

Technical performance improvements were also held back by external factors such as poor data reliability (CWS believed DAWASA had inflated connection and supply figures), unresolved legal doubts on interpretation of the lease contract, and considerable delays in other aspects of DWSSP's implementation. The non-payment of the lease fee as well as withholding of promised capital by CWS increased tension in its relationship with DAWASA, undermining potential collaborative work. The situation worsened among shareholders as well because Biwater and Gauff were reaping the biggest procurement contracts while the local investor, STM, barely had a say in the consortium's decision making. It got to the point that STM tried to sell its shares and refused to provide the second half of its required capital investment, prompting other shareholders to do the same and deepening CWS's financial crisis.

Lastly, but importantly, CWS was operating even though the independent regulator EWURA was not yet in place. This meant that regulation and performance monitoring were done by DAWASA and the Ministry of Water even though they were party to the contract. Once the government of Tanzania secured the DWSSP loan, it had few incentives to help CWS beyond its contractual obligations – although it did so in the early phase by giving CWS extra time to make payments. The conflict between DAWASA and CWS escalated. An independent facilitator was appointed, immediately drawing up a list of key issues to be addressed, but the government announced the termination of the lease contract before the conciliation procedure was finalised. It seems it had gathered sufficient proof of CWS's failure to win ensuing litigations and make sure that funders would not stop paying. This is why some argue that the failure of CWS was politically convenient for the government, who could then put the general blame on the company for the city's water problems and show action to remedy the CWS crisis a few months before the presidential elections.¹⁴

Court cases between the government of Tanzania and Biwater-Gauff at the United Nations Commission on International Trade Law (UNCITRAL) and at the World Bank's International Centre for Settlement of Investment Disputes (ICSID) were not won by the company. Although the government of Tanzania was deemed guilty of illegally terminating the contract, it was not forced to offer any financial compensation. The UNCITRAL tribunal analysed the situation differently and sentenced CWS to a £3 million fine,¹⁵ which was never paid because CWS had gone bankrupt, leaving the government furious at what it now describes as a "malicious deal."

Back to public

Immediately following the termination of the contract with CWS in 2005, the government of Tanzania took control of the entire company structure – assets and employees –

and appointed a senior Ministry of Water and Irrigation official as CEO of the company renamed Dar es Salaam Water and Sewerage Corporation (DAWASCO). DAWASCO is a public parastatal company owned and financed by the Tanzanian state with a board appointed by the ministry. At creation, its most pressing tasks were to increase the systems' coverage, reliability and revenue.

Improving coverage and access

Perhaps the most immediate challenge for DAWASCO was addressing the extremely high level of leaks and unaccounted for water in the systems, estimated to be as high as 76% of the water leaving the treatment plants.¹⁶ The situation has improved since DAWASCO came into being, bringing the leaks rate down to roughly 56.5% in 2009, but this figure is still unacceptably high and recent donor-funded works on leakage reduction are hoped to make a more significant difference.¹⁷

Extending coverage is also a priority. Current estimates show that between 62% and 68% of city dwellers use tap water but only 8% have piped water in their homes. This figure nevertheless represents a 12.7% increase in connections between 2006 and 2009, with coverage continuing to increase according to interviews with DAWASCO officials. Connected users received an average eight hours of service a day in 2008, a figure that represents a slight improvement from 2006, but this has not progressed since.¹⁸ Overall, however, DAWASCO has managed to improve coverage and is better positioned to meet rising demand for water in a growing city. DAWASCO also reports steady advances in metering, from 45% of connected users in 2006 to 67% in 2009. For billed customers, official water tariffs were increased in 30% in July 2006 to reach US\$0.46/m³ and remained unchanged until August 2009 when they were raised again to US\$0.56/m³ (a point we will return to). In terms of responsiveness to users, DAWASCO has made substantial efforts to improve its performance, open communication channels and monitor efficiency in handling complaints.

Daily water production capacity is roughly 273,000 m³, in addition to an average of 5,800 m³ raw water from boreholes. This is still far below total water demand, which was evaluated at 450,000 m³ a day in 2007. Moreover, production figures are a theoretical maxima: the volumes of water reaching the city's distribution network are in fact much lower, with some 43% of the water leaking or being illegally diverted (mainly for agriculture) along the transmission mains between the Ruvu River and the city reservoirs.¹⁹ One must also account for the leaks within the city's distribution system, as noted above. All this means that the actual volume of water reaching city users is closer to 100,000 m³ a day. As a consequence, storage capacity is hardly used and several neighbourhoods have scarce supply, or none.

The average income in the poorest areas of the city is roughly US\$30 a month, making the official cost of water expensive but not unaffordable for most households in the city. But given the systems' poor reliability and limited coverage, Dar es Salaam inhabitants must use other sources to complement or replace the conventional network, which is less convenient and more expensive, as follows:

- Thirty-eight per cent of households buy water from re-sellers who get water through their domestic connection and sell it to their neighbours, often at inflated prices.
- Some households use illegal connections or share private connections, creating further inefficiencies and reliability problems in the network.²⁰
- Kiosks that are in part supplied by the network but are most often privately managed charge higher tariffs than the official EWURA rates.²¹
- Private boreholes service many affluent neighbourhoods.
- Private tankers serve to 'buffer' erratic supply.
- Many households use bottled water.

This de facto privatisation of substantial parts of the network generates high levels of inequality, with prices varying depending on the supply chain's length. Analysis suggests that the poorest city dwellers spend the largest share of their revenue and make the greatest physical effort to get water.²²

Economic inequality goes hand in hand with the spatial inequality inherited from the city's past: the piped network was first built for European colonisers and was later extended to middle and high-income elite areas after independence. The development of the network has since been driven by specific economic interests (e.g. industries, hotels). The Lower Ruvu treatment plant (70% of the systems' production capacity) mostly serves connected users who are located in the affluent low areas (coastal zones), the city centre and some southern neighbourhoods. The remaining 30% of water comes from the Upper Ruvu plant, the Mtoni plant and operational boreholes, serving the poorer areas of the city (the industrialised southern zone and the upper and west zones).

Infrastructure funding

In 1995, it was estimated that at least US\$600 million was needed to repair and extend Dar es Salaam's water network to match current and projected demand,²³ a figure that kept growing until DWSSP-funded construction works first started in 2003. More recently, the government pledged an additional US\$436 million over three years to further improve the city's water system. Considering that the 2010 Tanzanian state budget was US\$4.66 billion, with \$300 million earmarked for the Ministry of Water and Irrigation, the scale of the effort is massive.

The national government has been the primary source of infrastructure funding, mostly drawn from international donor monies. This is because although DAWASCO's revenue collection rose by 7.8% annually between 2007 and 2009, and by 24.3% annually between 2008 and 2010, it has not covered operational expenses and is far from covering the required capital expenditures. For instance, in 2009 DAWASCO collected roughly US\$10.5 million but faced operational expenses of US\$19 million. The goal remains to make sufficient revenue to cover both operational and capital expenditure, but it is clear that national government will continue to form the bulk of infrastructure funding for many years.

Revenue and costs

DAWASCO explains its difficulty in raising revenue by the fact that some public institutions are not paying their water bills (notably the army) and that, in general, many unsatisfied customers feel they should not pay for a poor quality service, they do not trust the metering, or simply cannot afford the service. Revenue collection has grown since DAWASCO started operations, but it has not kept pace with peak operational expenses, particularly those related to rising energy costs that make up as much as 25% of the utility's operational costs. Poor maintenance of the network and long distance transfers force DAWASCO to use considerable quantities of energy to pump the water into the city. Import of chemicals (e.g. algaefloc) also represents a substantial cost.

On the whole, the ratio of costs to revenue decreased steadily between 2006 and 2008,²⁴ suggesting progress in DAWASCO's organisational economic efficiency, but these efforts are cancelled out by surges in energy prices, with accumulated losses now amounting to more than 230% of DAWASCO's asset value. As a result, it is unrealistic to expect revenue generation within DAWASCO to address full operating and capital cost needs. Major central government investments will be an unavoidable necessity.

Water quality

Water quality at catchments along the Ruvu River continues to worsen, with higher turbidity every year as a consequence of more concentrated rainfall and environmental destruction in the river basin. Since completion of the construction works linked to the privatisation contract, the water produced at Ruvu plants has generally met World Health Organisation standards when leaving the plants and in the bulk water mains (with the exception of higher chlorine residues than permitted), but it degrades in the final sections of the city's network due to leaks and illegal connections, and is not safe for drinking without additional treatment. The sewer network's poor condition further adds to the problem by contaminating groundwater and at times the piped drinking water

supply. New investments in the endpoints of the network would be needed to solve this problem, but as yet investments have focused only on the production side.

Working conditions

Staff working conditions are crucial to DAWASCO's performance. The CWS experiment was described by most interviewees as a major organisational disaster: leadership was largely perceived as illegitimate, low-ranking workers felt neglected, and the collective ethos of the organisation was badly damaged. This situation does not appear to have improved significantly since remunicipalisation: one third of employees were retrenched in 2007, following recommendations by business consultancy Ernst & Young, while new, young executives were hired and appointed in management positions, which caused resentment among older staff who felt they deserved these positions given their experience. Salary levels are also a problem as wages have been frozen since 2007 while inflation has been 10% annually on average.²⁵ Keeping competent staff on board is therefore a challenge and there have been numerous cases of engineers leaving the company after (expensive) training.

This inability, or unwillingness, of the organisation to offer adequate salaries and/or more motivating working conditions fuels another major problem: employee corruption. Indeed, most illegal connections appear to be performed by DAWASCO employees and many of those retrenched in 2007 are thought to be earning money this way today. Water bill embezzlement and excessive charging also continue to be reported.²⁶

The implementation of individualised performance assessments is an attempt to increase employee oversight. The experiment began with area managers who saw part of their remuneration indexed on their fulfilment of performance indicators, including revenue collection. The scheme is now being extended to all DAWASCO employees, but with limited success considering that the paperwork it creates outweighs many of the possible benefits.

Tackling these issues is all the more difficult in an organisation whose top managers are typically engineers and tend to frame problems in technical terms, allegedly not favouring a flexible approach to human resources or good relations with non-specialist stakeholders.

Acknowledging outside help?

In the early phase of remunicipalisation DAWASCO received considerable assistance from the public operator of Kampala's National Water and Sewerage Corporation (NWSC) in Uganda. NSWSC's External Services Unit was instrumental in advising DAWASCO on how to improve financial performance, leakage control and customer relations, notably

by helping designing the initial plans launched by DAWASCO's management. The first was the 100-day Operational Rescue Plan prepared in 2005 to reverse the poor performance trend. DAWASCO claims this plan led to a 36% increase in revenue collection and improved the number of metered connections and leakage control effectiveness.²⁷ It was followed by a "win-win" plan tackling the preceding issues on a longer term basis. Strangely, NWS's role is now downplayed by many DAWASCO managers who point to the different hydrological and socio-economic contexts of the two cities.

Looking ahead

Public ownership, corporate decision making

In some ways, the only substantial differences between DAWASCO and its private predecessor CWS are the result of the transition to public ownership and top management replacement. The institutional architecture designed for the private operator remains largely in place, with DAWASA (the semi-independent public entity) owning the infrastructure and DAWASCO (the parastatal company) acting as the 'asset-light' company operating on the basis of a performance contract. In fact, the terms of reference of the contract between DAWASA and DAWASCO are almost identical to the one that existed between DAWASA and CWS.

This unusual institutional setup was created for two reasons: it was the easiest solution at hand in the short term to guarantee the operations' continuation; and the World Bank (and some officials at the Ministry of Water) wanted to keep the new operator under competitive pressure to be in line with their market-oriented way of thinking. The government also explored options for replacing the failed private contract with another one in 2005 and 2006, but no international water company was interested and so the status quo prevailed.

This led to an absurd and costly situation. Both DAWASCO and DAWASA are controlled by the Ministry of Water, but the former refused to recognise the latter's oversight authority and reported directly to the ministry. This mutual mistrust resulted in DAWASA having to pay an annual US\$120,000 (almost 1% of DAWASCO's yearly revenue) for the services of an external auditing company to monitor DAWASCO's performance because it refused to report directly. The unsatisfactory performance of the latter led DAWASA to impose significant financial sanctions (US\$50,000-100,000 per year), but these remained symbolic since DAWASA had agreed in December 2005 to wait five years before asking DAWASCO to pay the lease fee and associated performance-based bonuses or sanctions. The situation has begun to change with the appointment of a new CEO at DAWASCO, whose conciliatory approach has enabled a more collaborative

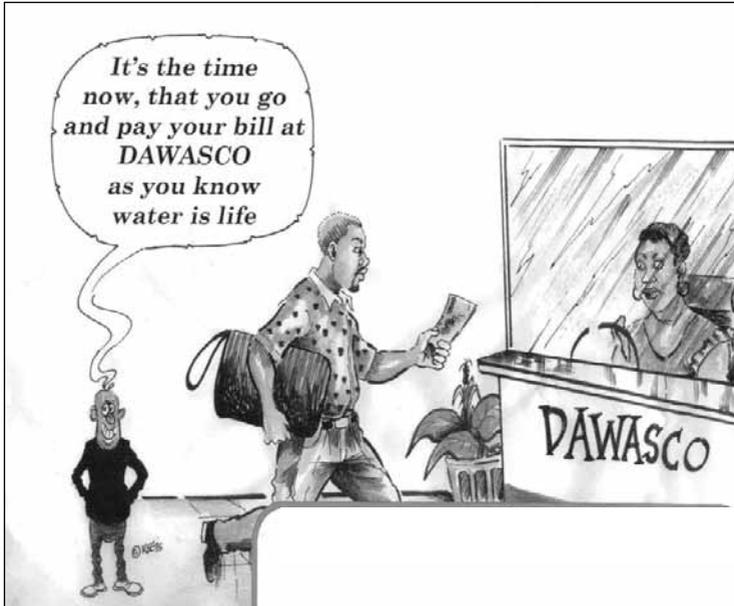
relationship, and their respective boards are now in regular contact. Although many managers in both entities now speak in favour of a merger between DAWASA and DAWASCO, the World Bank remains opposed to the idea and the option is not yet on the table at the ministry. Instead, the lease contract is still being renegotiated between the two parties.

A commercial management culture

This institutional setup of DAWASCO as an independent corporation also meant that its absolute priority was, and remains, that of increasing the revenue it receives from the water and sewerage services it provides. This translated into important efforts to clean customers' data, upgrade the billing system with the purchase of new and costly specialised software (US\$978,000) and diversify payment options (through mobiles phones, supermarkets, internet, etc). This modernisation drive is hindered by the low reliability of the whole system, irregular water supply and dubious metering, which all undermine the legitimacy of bills. The use of large-scale communication, media alerts and even scare tactics (e.g. temporary disconnections of entire neighbourhoods) to convince water users to pay for water managed to increase revenue by 37% between 2007-2008 and 2009-2010,²⁸ but DAWASCO also saw a surge in operational expenses over the same period. As a result, it has been piling up losses. The situation is now so dire that some senior managers at DAWASCO are considering opening up new businesses to generate revenue on the side for their company.

A striking fact emerging from interviews with most DAWASCO senior executives is indeed their desire to perform "as well as the private sector," a statement heard again and again, particularly when discussing DAWASCO's economic difficulties. This definition of 'performance' was also framed in private sector terms: financial efficiency and profitability were seen as preconditions to improvements in other service areas such as reliability, quality, safety and affordability. Whether this marketised attitude is a result of increasing neoliberal influence in the country, or the anti-public sector stigma associated with state bureaucracy of the past, or both, is difficult to say, but revenue obsession is also a product of the fact that the company's only legitimate revenue comes from water billing. The (crucial) financial contributions from central government and DAWASA that enable DAWASCO's operational survival are ad hoc and associated with a repeated and humiliating 'failure' message.

Another sign of the growing prevalence of a corporate culture is the systematic use of private business consultancies²⁹ to back major management decisions (layoffs, performance monitoring, etc) and the use of mainstream business management tools such as individualised performance assessments for employees.



Source: *Dawasco news*, Issue No. 2, July-September 2007

'Development partners' as decision-makers

The water situation in Dar es Salaam is a recurring topic on the national political agenda, and it featured prominently in the 2010 presidential elections.³⁰ Re-elected President Jakaya Kikwete vowed to end the city's water problems in a major speech in July 2010 when he promised to expand water production capacity to 710 million litres a day by 2013-2014 with US funds from the Millennium Challenge Corporation (MCC) and to inject extra government money to develop the city's water treatment plants and exploit deep coastal aquifers south of the city.³¹ But these promises are still very recent and history calls for caution in this regard: Kikwete made similar electoral pledges in his 2005 presidential campaign,³² but the only large-scale public investment made was in a water transfer project from Lake Victoria to the Shinyanga region where there is a boom in gold mining.³³ Nonetheless, the government seems committed this time around and Parliament has supported a 15% increase in the Ministry of Water's budget for 2011,³⁴ as well as the launch of a US\$436 million program to upgrade Dar es Salaam's water infrastructure.³⁵

But one must look beyond political rhetoric and go to the source of this funding. Monies come largely from development agencies and are attached to very specific conditions. International 'development partners' have controlled key decisions related to the

development of Dar es Salaam's water systems since the late 1990s. The US\$164 million DWSSP loan offered by the World Bank in 2003 that imposed privatisation only expired in November 2010 and is now being replaced by a US\$951 million Water Sector Support Project (WSSP) in which the Bank is teaming up with other international donors (MCC, African Development Bank, a German bank and the Netherlands' development agency, among others).³⁶

This powerful, but locally unaccountable, political influence infuriates many water managers in DAWASCO, at least those who feel confident enough to speak openly about the problem. The general feeling is that international donors jump ship when there are problems but claim any success for themselves. Foreign water specialists are seen by many as self-interested and taking what they need from the country before leaving. A more specific reproach made to international financial institutions is that loans allow them to get the country under their thumb and force Tanzanians to develop as they are told. One DAWASCO executive summarised this rather bluntly: "If you want to get rid of them, you have to pay them their money back! But in the meantime they own you."³⁷ Another interviewee complained about having to lose time in meetings in which his only role was to sip coffee, munch biscuits, nod here and there and be used as proof that "the local stakeholders have participated in the project."³⁸

Political and financial dependency undermines ownership and managers' commitment. A good example of this is found in the work program of a currently very active donor, the MCC. The MCC is a US foreign aid agency created in 2004 by former president George W. Bush. Its primary objective is to foster economic growth in developing countries through "good" economic policies.³⁹ Contributing a US\$207 million grant to the WSSP, the MCC funds two projects in Dar es Salaam: the expansion of the Lower Ruvu treatment plant and a non-revenue water reduction program. The expansion aims to increase the plant's capacity by 50%, up to 270,000 m³ a day.⁴⁰ The problem is that the Ruvu river's dry season discharge is sometimes already too low to produce at full capacity, and the phenomenon has worsened over the past decades, climate change and deforestation factoring in. This means that the projected added capacity will be useless until completion of the construction of a large dam upstream (Kidunda) scheduled to start in 2011-2012 and last three years. However, this dam is already an old project that started with the Japanese cooperation agency that wanted to support its construction in the 1990s but backtracked after realising the potential socio-ecological damage and other shortcomings of the project.⁴¹ The World Bank is now funding the initiative despite some water managers pointing at other possible and more sustainable sources. The government of Tanzania asked for a smaller dam downstream,⁴² but works are underway and another reversal is unlikely.

Conditions to access MCC funding cause a second set of problems. Although the funds are a grant and not a loan, they come with a string of strict policy requirements. The 2008 compact states that “the water and sewerage authorities will be required to submit rate cases aimed at achieving operational and maintenance financial sustainability within the Compact Term and a sustainable trend for recovery of asset depreciation.”⁴³ One can read between the lines that this refers to full cost recovery. This is confirmed by the compact’s Monitoring and Evaluation Document, which mentions as a first risk for the project the inability of the government to implement “tariffs reforms falling short of recovery costs.”⁴⁴ Another source at DAWASA was more specific, talking about a full cost recovery objective for tariffs to be implemented by the last year of the project, that is, by 2013-2014.⁴⁵ With current tariff levels that are far below full cost recovery and new planned investments, this means that the water tariffs in Dar es Salaam are meant to increase by 250-300%.

The catch-22 is that tariffs are regulated by the independent EWURA, which refused tariff increases twice in 2010. How can the government of Tanzania guarantee that the tariffs will increase as required by MCC without impinging upon the regulator’s independence? This promises to be a contentious issue in the near future. On the one hand President Kikwete has insisted that he wants to keep water tariffs low,⁴⁶ on the other hand section 3.4(c) of the Compact states that “the Government shall not invoke any of the provisions of its internal law to justify or excuse a failure to perform its duties or responsibilities under this Compact.”⁴⁷

This brief overview of DAWASCO’s inner workings and institutional and political environment only suggests that although formally owned by the government and formally a ‘public’ company, DAWASCO is far from being a public entity politically accountable to, and directed by, users of the city’s water systems. But this is mostly out of DAWASCO’s control: the Tanzanian government is legally required to implement international donors’ policy recommendations and conditions, even if this means unaccountability to the population affected by these decisions.

Conclusion

The CWS privatisation experience imposed by international donor conditions was a massive failure that resulted from the private operator’s poor preparation, difficult relationships with staff, and shareholder in-fighting. The fact that the Tanzanian government precipitated the termination of the contract in an abrupt manner and used this termination to score political points before a presidential campaign was not enough for the private company to win its two legal claims against Tanzania at UNCITRAL and ICSID, two arbitration courts normally friendly to private investors’ interests.

Given this record, it is a remarkable achievement that its public successor DAWASCO was able to rise from CWS's ashes and reverse the performance trend to increase coverage and revenue, if only partially. However, its strong focus on cost recovery without radical improvements to the system has led to the use of problematic tactics. Performance remains fragile and irregular, direct access to the network remains with a small minority located in the most affluent areas of the city, and the majority of the population has to rely on indirect access at much higher prices. The real improvements come from capital works that are paid for by the central government, itself relying heavily on international development institutions. These institutions impose conditions that shape the system's structural evolution, both technically and ideologically, without being accountable to the users of the systems. In this sense, the remunicipalisation of water in Dar es Salaam is a default situation created by the collapse of a private contract, not a strategic move planned by sovereign political institutions. If political sovereignty is a condition for sustainability, then the limited choices imposed by donor conditionality must be seen as one of the biggest obstacles to solving Dar es Salaam's water woes in the long run.

Endnotes

- 1 Podesta, J.J. (2006) *Julius Nyerere*. Farmington Hills (MI): Gale Contemporary Black Biography, Gale.
- 2 World Bank (2000) *Report and recommendations on the programmatic structural adjustment credit for Tanzania (P-7376-TA)*. Washington, DC: World Bank.
- 3 *The Guardian* (1999) Julius Nyerere, 15 October. <http://www.guardian.co.uk/news/1999/oct/15/guardianobituaries> (accessed 12 December 2011).
- 4 Skinner, A. (2005) *Tanzania & Zanzibar*. London: Cadogan Guides, p. 19.
- 5 Munyaga, M. (2000) *Participatory approach revives adult education in Tanzania*. Presentation at the World Education Forum, International Consultative Forum on Education for All convened by UNDP, UNESCO, UNFPA, UNICEF and the World Bank, Dakar, Senegal. <http://www.unesco.org/education/wef/en-news/tanzania.shtml> (accessed 12 December 2011).
- 6 Harrison, G. (2004) *The World Bank and Africa: The construction of governance states*. London and New York: Routledge.
- 7 National Bureau of Statistics, Republic of Tanzania (2002) *Population and Housing Census*. Dar es Salaam: NBS.
- 8 Dongus, S. (2000) *Vegetable production on open spaces in Dar es Salaam – Spatial changes from 1992 to 1999*. Freiburg: Albert-Ludwigs-University of Freiburg/Germany, Institute of Physical Geography. <http://www.cityfarmer.org/daressalaam.html> (accessed 12 December 2011).
- 9 The figure breaks down as follows: \$61.5 million from IDA, \$48 million from AfDB, \$34 million from EIB, \$12.6 million from DAWASA and \$8.5 million from the private operator CWS.

- 10 Kjellén, M. (2006) *From public pipes to private hands: Water access and distribution in Dar es Salaam, Tanzania*. Stockholm: Department of Human Geography, Stockholm University.
- 11 Action Aid UK (2004) *Turning off the taps: Donor conditionality and water privatisation in Dar es Salaam, Tanzania*. London: ActionAid UK.
- 12 United Republic of Tanzania, Ministry of Water and DAWASCO Review and Restructuring Committee (2006) *Options for public-private partnerships in DAWASCO – Draft final report*. Dar es Salaam: Republic of Tanzania.
- 13 WaterAid Tanzania (2008) *Why did City Water fail? The rise and fall of private sector participation in Dar es Salaam's water supply*. Dar es Salaam: WaterAid. p. 10
- 14 *Ibid.*, p. 13
- 15 *The Guardian* (2008) Tanzania wins £3m damages from Biwater subsidiary, 11 January. <http://www.guardian.co.uk/business/2008/jan/11/worldbank.tanzania> (accessed 12 December 2011).
- 16 WaterAid Tanzania (2003) *Prospects for the poor: Water reforms and private sector participation in Dar es Salaam, Tanzania*. Dar es Salaam: WaterAid Tanzania. http://www.wateraid.org/documents/prospects_for_the_poor_1.pdf (accessed 12 December 2011).
- 17 Mwakalebela, L. (2011) 600bn/- to end Dar es Salaam water woes. *Daily News*, 15 March. <http://dailynews.co.tz/home/?n=18111> (accessed 12 December 2011).
- 18 EWURA (2010) *Annual report of Urban Water Supply and Sewerage Authorities (UWSAs) for the period of 2008/09*. Dar es Salaam: EWURA. <http://ewura.go.tz/annualreports/waterreg.html> (accessed 12 December 2011).
- 19 WaterAid Tanzania (2003) *Prospects for the poor: Water reforms and private sector participation in Dar es Salaam, Tanzania*. Dar es Salaam: WaterAid Tanzania. http://www.wateraid.org/documents/prospects_for_the_poor_1.pdf (accessed 12 December 2011).
- 20 Kjellén (2006), *op.cit.*
- 21 Uwazi (2010) *Water prices in Dar es Salaam: Do water kiosks comply with official tariffs?* Policy brief TZ09/2010E, September. Dar es Salaam: Uwazi. <http://www.uwazi.org/uploads/files/Water%20kiosks%20in%20DSM%20Englsh.pdf> (accessed 12 December 2011).
- 22 Kjellén, M. (2006) *Generalization of price and effort in water acquisition, by service mode and household wealth*, p. 243
- 23 Boyd, G. (2001) *An overview of private sector participation in the Dar es Salaam Water and Sanitation Authority: A report for WaterAid-Tanzania*. Dar es Salaam: WaterAid Tanzania, pp. 19-20, citing Howard Humphreys Tanzania Ltd (1995) *Feasibility report on the rehabilitation of the Dar es Salaam Water Supply System*. Dar es Salaam: WaterAid Tanzania.
- 24 EWURA (2010), *op.cit.*
- 25 Index Mundi (2011) Tanzania inflation rate (consumer prices). http://www.indexmundi.com/tanzania/inflation_rate_%28consumer_prices%29.html (accessed 12 December 2011).
- 26 *Business Times* (2011) Dawasco accused of swindling millions via inflated water bills, 11 February. http://www.businesstimes.co.tz/index.php?option=com_content&view=article&id=717:dawasco-accused-of-swindling-millions-via-inflated-water-bills&catid=1:latest-news&Itemid=57 (accessed 12 December 2011).
- 27 DAWASCO (2006) *Annual plan for 2006-2007*. Dar es Salaam: DAWASCO, p. 7.
- 28 DAWASCO (2010) *Technical report 2009-2010*. Dar es Salaam: DAWASCO.
- 29 In general one of the “big four”: KPMG, Ernst & Young, PriceWaterhouseCoopers and Deloitte.

- 30 Mgamba, R. (2010) Judgment Day. *Guardian on Sunday*, 31 October. <http://www.ippmedia.com/frontend/index.php/oi.poc/6live/?l=22614> (accessed 12 December 2011).
- 31 *Daily News* (2010) End of Dar es Salaam water blues in sight, 20 July.
- 32 *The Guardian* (2005) Kikwete promises to end Dar water woes, 25 November.
- 33 See map on the Tanzanian Chamber of Mines website: <http://www.chamberofmines-tz.com/>.
- 34 Alvar Mwakyusa, K. (2011) Solve Dar water woes, MPs urge. *Daily News*, 30 March. <http://dailynews.co.tz/home/?n=18551>; Mwakalebela (2011), *op.cit.*
- 35 Semberya, D. (2011) \$436m approved to end Dar water woes. *East African Business Week*, 20 March. <http://www.busiweek.com/11/news/tanzania/684-436m-approved-to-end-dar-water-woes> (accessed 12 December 2011).
- 36 World Bank (2011) Water Sector Support Project, Tanzania. <http://web.worldbank.org/external/projects/main?Projectid=P087154&theSitePK=40941&piPK=64302772&pagePK=64330670&menuPK=64282135&Type=Financial> (accessed 12 December 2011).
- 37 DAWASCO executive, author interview, 12 November 2010.
- 38 DAWASCO executive, author interview, 4 November 2010.
- 39 Millennium Challenge Corporation (n.d.) About MCC. <http://www.mcc.gov/pages/about> (accessed 12 December 2011).
- 40 Millenium Challenge Account – Tanzania (2009) *Capacity of Lower Ruvu water treatment plant to be expanded*. Press release, Dar es Salaam, 12 May.
- 41 Rustagi, D. (2005) *What the Kidunda dam will destroy: Ecological and socio-economic value of Gonabis, Selous Game Reserve, Tanzania*. Tanzania Wildlife Discussion Paper no. 45. Dar es Salaam: GTZ Wildlife Programme in Tanzania, Wildlife Division.
- 42 United Republic of Tanzania, Ministry of Water and Irrigation (2008) *Terms of reference for consultancy services for preparation of feasibility study, detailed design and environmental and social assessment for Kidunda dam*. Dar es Salaam: MoWI. http://www.wildlife-baldus.com/download/KIDUNDA_WB_COMMENTS_REVISIED_NOV_2008.pdf (accessed 12 December 2011).
- 43 Annex I, D, 6 – Sustainability Section of the Millennium Challenge Compact between the United States of America acting through the Millennium Challenge Corporation and the Government of the United Republic of Tanzania acting through the Ministry of Finance, 17 February 2008.
- 44 United Republic of Tanzania, Ministry of Finance and Economic Affairs – Millenium Challenge Account – Tanzania, *Monitoring and Evaluation Plan*, March 2010, p.23
- 45 DAWASA financial manager, author interview, November 2010.
- 46 Mwakyusa, A. (2011) Kikwete pledges more funds to water sector. *Daily News*, 24 March. <http://dailynews.co.tz/home/?n=18376&cat=home> (accessed 12 December 2011).
- 47 Millennium Challenge Compact (2008), *op.cit.*