

COMMERCIALISATION OF URBAN WATER IN ZAMBIA: ORIGIN, DYNAMICS AND CHALLENGES

ABSTRACT

Evidently the water supply and sanitation sub-sector in Zambia has undergone major reforms. Although water sector reforms have been on going since the early 1970s, it is in the early 1990s that the water sector started receiving adequate attention. Major reforms in the water sector in Zambia began in 1993 when the government started formulating the national water sector reforms which culminated into the National Water Policy (NWP) in 1994. These reforms were meant to address a number of challenges in the sector which among them were Inadequate institutional and legal framework, deterioration of water supply and sanitation services, limited developed human resource capacity, inadequate co-ordination among a multiplicity of actors in the water sector, low coverage in water supply and sanitation services, inadequate stakeholder and community participation, limited and ever decreasing capital investments and budgetary allocation to the sector, and the need to adapt to emerging international trends in water management. To address some of these challenges, a number of strategies and programmes have been formulated and implemented. One such strategy is the commercialisation of the water supply and sanitation services. The presence of the commercial utilities scene (CUs) on the water services has occasioned both positive outcomes and new challenges. Among the positive outcomes are improved service levels such as increased service hours, collection efficiency, improved CUs capacity and management skills, depoliticisation of water services and bringing in of professionalism in water service operations. Overall, though these positive results have been recorded in general, the situation looks very different for particular areas especially peri-urban areas. On the other hand, one of the major challenges that commercialization has occasioned is the conspicuous absence of the state from the actual process of delivering water services in urban areas. Similarly the absence of civil society organization that are addressing water issue in peri-urban and low income communities has been noticed.

Introduction

The water sector in Zambia has been undergoing major restructuring since the early 1990s.

Although there had been some reforms of one kind or another in the water sector prior to the mid 1990s reforms (Chola, 2003), it is only in the middle of the last decade that water supply and sanitation (WSS), and water resource management (WRM) received a recognisable attention not only in Zambia, but world over. According to the Zambia Water Resource Management Sector Report (WRMSR, 2004), water reforms in Zambia have been underway for over 30 years now, starting from the early 1970s. These reforms were preceded by a number of studies such as the 1977 study that assessed the need to establish a National Water Authority and Regional Water Authorities, and the 1988 report on the study to reorganise water and sanitation sector (WRMSR, 2004). However, major reforms in the water sector in Zambia began in 1993 when the government started formulating the national water sector reforms which culminated into the National Water Policy (NWP) in 1994 (WRMSR, 2004; NWASCO Sector Report, 2001.2). Reasons for initiating these reforms are many, but the major ones include the following:

- Inadequate institutional and legal framework;
- Deterioration of water supply and sanitation services

- Limited developed human resource capacity;

- Inadequate co-ordination among a multiplicity of actors in the water sector;

- Low coverage in water supply and sanitation services;

- Inadequate stakeholder and community participation;

- Limited and ever decreasing capital investments and budgetary allocation to the sector;

- Inadequate water resources, water supply and sanitation data and information systems

- Adapt to emerging international trends in water management

- Mainstream gender issues (Chola, 2003; NWASCO Sector Report, 2001/2).

To address some of these challenges, a number of strategies and programmes were formulated. One such strategy is the commercialisation of the water supply and sanitation services. And this paper tries to assess the impact of the commercialisation strategy on the water supply services especially in peri-urban and low income areas. Part

one gives a brief background of the water sector reforms. Part Two looks at the factors that prompted commercialisation. The outcome of commercialisation are discussed in parts three and four.

This assessment is based on the research that was conducted by the author in 2006 in Zambia. The research consisted of three study sites : Two in Lusaka and one on the Copperbelt (Kitwe). In addition to the study sites, indepth interviews with ministry officials from the Ministry of Finance and National Planning (MOFNP), Ministry of Local Government and Housing (MLGH), Ministry of Energy and Water Development (MEWD), Ministry of Tourism, Environment and Natural Resources (MTENR); and other stakeholders including service providers (specifically, Lusaka Water and Sewerage Company [LWSC] and Nkana Water and Sewerage Company [NWSC]), statutory bodies mainly the National Water Supply and Sanitation Council (NWASCO), the Devolution Trust Fund (DTF), and the Environmental Council of Zambia (ECZ), non-governmental organisation (international and local), and community leaders were conducted.

1.0 Commercialisation of Water Supply and Sanitation in Zambia

1.1 Background to Commercialisation

Since the establishment of colonial rule in Zambia, the provision of water and sanitation services had been largely a responsibility of government, mainly local government or sometimes the central government via a particular ministry. Despite lack of clarity on the allocation of functions and responsibilities among the sector players in the 1949 Water Act, the Ministry of Energy and Water Development (MEWD) assumed the overall responsibility for water resource management and development, while the Ministry of Works and Supply (MWS) had the responsibility of providing water and sanitation services to institutions. The provision of water and sanitation services to households, private commercial and industrial establishment was a responsibility of the Ministry of Local Government and (MLGH) via local government authorities or municipalities in particular (*Water Resource Action Program [WRAP], Report, 2003*). As can be seen from this institutional set up, the water sector was a fragmented sector due mainly to lack of coordination, which often resulted in overlapping and duplication of responsibilities among the various actors. For instance, the MLGH and the MWS both provided water to institutions which in some cases resulted in jurisdictional challenges. Similarly, in cases where the local authorities had no capacity to provide domestic water and sanitation services, the MEWD took over these functions on behalf of local authorities instead of MLGH. Thus, the 1993 Commission to study the reorganisation of the water sector was set up to address some of these challenges that the sector faced (WRM Report, 2003).

2.0 Commercialisation Triggers

Other than the need to reorganise the sector, there are many factors that prompted the water sector reforms and commercialisation in particular. Below are some of the major factors that influenced and have been driving the move towards a commercialised water

supply and sanitation in Zambia since 1994.

1.2.1 Deterioration of Water Services:

As indicated above, prior to the 1994 water sector reforms, the provision of water and sanitation services have been a responsibility of local authorities or municipalities especially in both urban and rural areas. Now most of these municipalities towards the end of the 1980s and the beginning of 1990s were becoming increasingly incapable of delivering the service especially in urban areas due to increased population and inadequate funding for operation and maintenance of water service systems. This made it extremely difficult for most of the local authorities to cope with the growing demand for water and sanitation services among others. Councils' inability to provide quality and adequate water services was worsened by increase in population in most urban areas. In some cases the infrastructure installed in the 1940s which was meant to serve a population of 200 000 people is still being used to serve a population of close to two million people¹ (Fifth National Development Plan [FNDP] Draft, 2006, NWASCO Sector Report, 2004/05). Officials from the Lusaka Water and Sewerage Company identified the inadequacy of infrastructure as one of the major challenges that service providers face: "basically we are facing about four, five major challenges. Firstly, the **infrastructure is more than 40 years old**. The service delivery infrastructure for both water and sewerage is more than 40 years old which is dilapidated, and the network has not been adequate over the years. It actually needs replacement. And that demand is growing, and meanwhile our capacity to produce is static. We don't even have enough financial resources to even maintain the existing, dilapidated supply system" (Interviews with LWSC Official, August 2006).

Increase in population without a corresponding expansion or upgrading of infrastructure together with dwindling funding to the sector (NWASCO Sector Report, 2001/02), irregular payment of municipal workers, inability to attract skilled personnel from the labour market and low capacity resulted in the deterioration of water and sanitation services to the point that some of the municipalities could not even maintain basic level services (GTZ, 2004). According to NWASCO Sector Report (2001/02), this "rapid deterioration in the quality of service delivery in both the urban and rural areas especially during the decades of 1970s and 1980s, forced the government to embark on a comprehensive reform of the sector in early 1990s" (4). German Technical Aid (GTZ, 2004) working paper on the Water Sector in Sub-Saharan Africa also highlights the deterioration of services as one of the triggers for water supply and water resource management reforms: "Reforms in the water sector (WSS and water resource management) in our partner countries are often triggered by deteriorating WSS service provision for the consumer" (3). In Zambia the reform process has been implemented in two phases. Phase one focused on the formulation of National Water Policy which was

¹ In the case of Lusaka, the Lusaka Water and Sewerage Company official interviewed repeatedly cited the problem of inadequate and ageing infrastructure as one of the major challenges that the company faces. Similar complaints were raised by Nkana Water and Sewerage Company. The main problem has been that the population in urban cities have increased up to a factor of 10, yet the infrastructure has not been upgraded to cope with the increased demand due to increased population. To cope with this pressure, the utility companies have resorted to rationing there by reducing the services hours to as low as 8 hours in some cases (See NWASCO Sector Report 2004/2005).

accomplished in 1994, and the creation of appropriate legal framework to regulate the sector (the National Water Supply and Sanitation Act 28 of 1997). Phase two set of reforms concentrated on creating the sector's regulator (NWASCO) and the establishment of commercial utilities or water companies² (NWASCO, Sector Report, 2001/02; 3). Thus, the commercialization process was both a result of and a solution to the deteriorating water and sanitation services in the country.

1.2.2 Low Investments Levels

In many developing countries the water sector has been seen as an unprofitable and high risk sector and therefore the sector finds it difficult to attract private capita investment (Bayliss, 2003). Even countries that have made progress in bringing in the private sector, investment in the water sector both from the public and private sectors has been comparatively low (ibid, GTZ, 2004). This is despite the fact that the water business has become a lucrative venture in many parts of the world (Bond, McDonald and Ruiters, nd). However, for many Sub-Saharan countries, it has been difficult to either increase government funding to the sector or attract private sector funds into the water sector. For the Zambia government in particular, it has been observed that overall government funding to the sector has been dwindling (FNDP, 2006; WSP, 2004) making it difficult for the municipalities or local governments to cope with the growing demand for water supply services. The Zambian Government, under pressure to reduce the escalating budget deficit, chose to begin operating the water services on commercial basis. In a bid to salvage the situation, the government, with strong recommendations from the international Financial Institutions, embarked on a commercialization exercise which was meant not only to attract the much needed private investments, but also to bring professionalisms, efficiency and improved service levels (GTZ, 2004, NWASCO, 2002/03). The wholesale privatization venture embarked on by the Chiluba government from 1992, did not spare the water sector. However, current evidence indicate that the commercialization process has not brought the massive investments that the programme envisioned. In the case of th two service providers interviewed, the inability to attract private finance was noted as one of the major constraints. Most of the service providers are unable to either attract private capital nor generate the funds internally: "Internally, we don't have the capacity to generate the international resources fund to invest in service deliver system expansion" (Interviews with the LWSC Official, 2006). Most of the commercial utilities rely on external donor funding (Second PRSP, 2005). As the National Water policy (1994) acknowledges, up to 90% of the investment in the water sector comes from donors and cooperating partners, not essentially private finance. Nonetheless, the desperate situation of lack of capital investments, and in some instances operation costs or recurrent expenditure to run water services, triggered the move towards commercialization of water supply services.

1.2.3 Global Water Management Trends

² Currently, there are 9 commercial utilities that have taken over the provision of water and sanitation services in all urban and peri-urban areas except for Central and Eastern Provinces where plans are under way to establish commercial utilities accounting for more than 86% of the total water and sanitation services provided to the urban and peri-urban population (See NWASCO Sector Report 2004/05).

The other factor that triggered the commercialization process in Zambia, like in many parts of the world, was the emerging trends in global water management; the trend towards the “corporatisation” of water services (Bond, McDonald and Ruiters, nd). Starting from the early 1980s, a good number of governments started to look at the provision of water and other public services as a burden and the cause of the growing budget deficits. A leading example is the massive privatization of public service utilities such as water, electricity, gas, bus services, coal, oil in Britain during the Thatcher administration, which was seen as a way to rid government of the burden of a crippling public service. Privatisation of public services was seen as a way to enlarge personal responsibility and freedom, improve efficiency in the delivery system of social services, encourage innovation and creativity, and reduce politicization of public services (Harvey, 2005).

In low income countries like Zambia, access to loans from the IFIs was conditioned on the implementation of the privatization programme. In Tanzania, for instance, “privatisation of the poorly performing Dar es Salaam Water Supply and Sewerage Authority (DAWASA) was one of the preconditions given for Tanzania to qualify for the Highly Indebted Poor Countries (HIPC) initiative of the World Bank and the IMF” (Bayliss, 2003: 512). Though the Zambian government did not embark on a full fledged privatization³ of the water supply services, it was not spared from the pressure to adopt the neoliberal principles that saw privatization as a the only possible way to overcome fiscal deficits, encourage competition, efficiency and individual initiative and sustainability.

Apart from the neoliberal wind being blown over the heads of the developing countries, there were other emerging trends in global water management mainly the trend towards integrated water resource management (IWRM), which recognized the multiple values, uses and users of water with the complexity that this brings (Bindraban, vanKeulen & Warner, 2006). Other trends in global water management includes the multi-stakeholder platforms (MSP) approach, which emphasizes the participatory aspects in water resource management, and the river basin or catchment and sub-catchment management (Warener, 2006). In addition to these, from the early 1980s, there has been a global trend towards decentralization of political and economic power which initially was meant to transfer power from the central government to regional and local levels. This trend has not spared the water sector. In Zambia the *Seven Sector Principles* highlight the devolution of central authority to local government structures as the key guiding principle

³ The difference between privatisation and commercialisation is often not clear. In most cases commercialisation differs from privatisation mainly on grounds of asset ownership. Often privatisation implies a complete divestiture of assets from public to private ownership while commercialisation takes different forms of contract arrangement which include lease, service, management and BOT contracts (See Bond, McDonalds & Ruiters, Bayliss, 2003 for a detailed discussion). In the Zambia case, the commercialisation exercise has meant that the Local Authorities still remain the owners of the local government (council or municipality). The local Authorities are shareholder (holding company) with the private investor in the commercial utilities that have formed the operating company. In particular, the Water Supply and Sanitation Act 28 of 1997, has provided for powers for the local authorities to establish water and sanitation utilities as a company, public or private, or as a joint venture with an individual or private enterprise, or as a joint venture with other local authorities (see Section 9 (1)(a)- (c)

in the current water sector reforms (FNDDP, 2006). With all these emerging global trends in water management, the Zambian water sector could not remain an island, but sought to adapt to and adopt the new ways of managing water affairs, hence the reforms which largely meant commercializing.

1.2.4 Role of Water in National Development

In the last decade and half, water has been increasingly seen as an important element in social, economic and cultural development. The 1994 National Water Policy clearly recognizes the important role water plays in national development, hence the need to manage the resource in the way that would enable it contribute to national development. With the increasing need to achieve the national developmental goals, it was realised that both policy and legislation had to be developed in order to harness water resource towards national development. Particular ways that water resource can be used to promote national development include:

- Domestic use with emphasis on access to clean water as a way to prevent disease outbreaks and reduce expenditure on combating diseases
- Industrial water supply which is critical in the production process of various goods and services
- Hydro power, which plays an important role in every production process especially in the mines, depends on water resource
- Agricultural use which enables the country to produce sufficient food relies on efficient use of water
- Tourism which is one of the major foreign earners largely depends on managing water resources well
- Cultural Use enables people to perform functions that enhance their well-being and human dignity
- Environment in which the resource is found has to be taken care of if the resource is to serve the current as well as future water needs

Realising these different roles that water plays in the development process made it expediently necessary to reconstitute the institutional and legal framework in order to tap the water resource potential.

Now, a number of reforms have been made including the separation and allocation of function to different institutions and actors. Under the current set up, the Ministry of Energy and Water Development is responsible for the overall water policy and water resource management, while the Ministry of Local Government and Housing is entrusted with water supply and sanitation sub-sector and the mobilization of funds to improve infrastructure and service provision as table 1 below illustrates. Other actors include the Ministry of Agriculture and Cooperatives (MACO), Local Authorities (LA), Environmental Council of Zambia (ECZ), academic institutions, the private sector and NGOs.

Table 1: Players in the Water

Sector and their roles

Actor	Roles
MEWD, Water Board	a) National Water Policy b) IWRM policy and international water c) Management, use and development of water resources d) Regulating Water Resources
MLGH, DISS	a) WSS sub-sector policy and strategy elaboration, oversee service provision to urban and rural areas by Local Authorities and the Commercial Water Utilities b) Resource mobilisation
MACO, MTENR, MoH,	Sub-sector policy elaboration (i.e. irrigation policy), sanitation and hygiene promotion,
Statutory Bodies: NWASCO Water Development Board ECZ,	a) Advisory and regulatory roles b) Regulatory role c) Pollution Control (ECZ)
CUs	Service provision
Local Authorities	Service provision in rural and urban areas; in urban areas service provision delegated in most urban areas to CUs
Training and Research Institutions	a) Human Resource training b) Research
Co-operating Partners NGOs	a) Provision of capital funds b) Execution WSS programmes & projects by NGOs
Private Sector	a) Low participation in financing and management of WSS, b) Consulting services c) Construction of WSS facilities
Community and CBOs	a) Beneficiary of WSS services b) Maintenance of sources

Source: *Fifth National Development Plan*

(FNDP) Draft, (2006)

Critical to the commercialization process is the creation of a regulator (NWASCO), the commercial utilities. Since the 1994 water sector reforms, the commercialization of the water service sub-sector has been one of the key objectives of the water sector reforms (NWP, 1994). Below I discuss the status of commercialization of water services sub-sector with reference to peri-urban and low income areas.

3.0 Outcomes of the Commercialisation of Water Supply Services

Commercialisation of the water services sub-sector in Zambia has been under way for quite some time now. Different commercial utilities were set up at different times. The oldest is the Lusaka Water and Sewerage Company (LWSC) which was established in 1988, though it started operating in the early 1990s. The most recent is the Chambeshi Water and Sewerage Company (CHWSC) which has only been in operation as a commercial utility for less than three years. Majority of the CUs have only been in operation for about six years. Thus, it may be observed that the commercialization process is still in its initial stages and still taking shape (WSP, 2004).

Table 2: An Overview of Commercial Utilities⁴ in Zambia

⁴ From 2006 January, AHC-MMS Ltd has been taken over by Nkana Water and Sewerage Company, and the two have become one commercial utility under NWSC.

Commercial Utility	Start of operation	No.of connections	No. of towns serviced	External Support*
AHC-MMS Ltd (management contract)	2000	50,142	5	Worldbank
Chambeshi (CHWSC)	2003	7,353	10	Ireland
Chipata (CWSC)	1992	5,279	1	Germany
Katubu (KWSC)	2000	36,844	3	
Lusaka (LWSC)	1989	37,252	1	ADB
Mulonga (MWSC)	2000	20,635	3	
Nkana (NWSC)	2000	31,191	3	ADB
North Western (NWWSC)	2000	3,992	7	Germany
Southern (SWSC)	2000	20,041	11	Germany
Western (WWSC)	2000	6,607	6	

*during the past five years to varying degrees

Source: *NWASCO Sector*

Report, 2003/04

However, even if the process of commercialization has been in progress for a short time, it is probably more helpful to make a number of observations on what is happening to the sector since the commencement of commercial utilities. The first point to note when looking at the impact of commercialization is that there have been both positive outcomes as well as areas that require serious attention and improvement.

3.1 Positive Outcomes

3.1.1 Reorganisation of the Water Supply Services

This has mainly been in the form of putting order in the sub-sector. As noted above, prior to the 1994 reforms and the subsequent commercialization, water services were provided by a number of institutions, a situation that resulted into duplication of responsibilities and sometimes confusion and tension between these institutions. Lack of clear definition of responsibilities and functions made it difficult to coordinate efforts aimed at improving the sector performance. At times it was difficult even to allocate and track funds to the sector due to multiplicity of actors (WSP, 2004; Second PRSP, 2004)). The establishment of commercial utilities has facilitated the clarification of roles and functions among the many actors in the water sector. For instance, at the moment it is clear who is responsible for what: commercial utilities are responsible for the provision of water services, the regulator (NWASCO) is responsible for ensuring that the service providers met the stipulated standards and regulations, while the ministry of local government is responsible for the policy issues and resource mobilization for the sector(

refer to table 1 above). Creation of commercial utilities helped to clarify the situation of roles and functions since without such clarity commercial utilities would not function effectively. As one of the GTZ officials interviewed noted, it is important at the beginning to make the basic rules and guidelines clear and simple so that everyone knows what they are expected to do. And the commercialization process has initiated and driven the process of reorganizing the sub-sector.

3.1.2 Improved Capacity and Service Levels.

When compared to the time water services were provided by local authorities, it is apparent that most of the commercial utilities are making some commendable progress at increasing the capacity to provide water services as well as improving service levels. One area where most commercial utilities have made considerable progress is in the area of collection efficiency. Even if most of the CUs have not yet reached the set benchmark⁵ of 85%, there has been noticeable progress in the collection efficiency. Other areas related to capacity and management that have recorded positive results include Unaccounted for Water (UfW) which stood at 50% on average, service hours which has averaged at 16 hours per day and operation and maintenance coverage which averaged at 65% as table 3 below indicates.

⁵ NWASCO has set 85% collection efficiency as the benchmark for all the CUs. The average collection efficiency is about 75% which is still below the benchmark, but records a commendable improvement on the the earlier performance and when compared to the areas still under Local Authorities.

Table 3: Summary of CU performance for the year 2003/4 and trends in the last three Plus Key Sector Performance Indicators

	UFW [%]	Trend	Water Service Coverage [%]	Trend	Sanitation Coverage * [%]	Trend	Hours of supply	Trend	Staff per 1,000 connections	Trend	Cost per connection
AHC-MMS	40	↑	92	↓	84	↑	17	→	7	→	6
LWSC	52	↑	80	↑	11	↓	16	↑	14	↑	6
KWSC	58	↑	90	↑	78	↑	16	↑	7	↑	6
NWSC	50	→	79	↓	59	↑	18	↑	10	↑	6
SWSC	51	↓	41	↓	24	↓	16	↑	13	→	6
MWSC	59	↓	90	↓	89	↑	17	↑	8	→	6
WWSC	57	↓	29	↓	23	↑	19	→	15	↑	6
NWWSC	40	↑	27	↓	2	→	12	→	14	→	6
CHWSC	60	***	46	***	12	***	8	***	19	***	6
CWSC	32	↓	57	↓	23	↑	24	→	11	↑	6
Average	50 (w)	↑	72 (w)	↓	37 (w)	↑	16 (s)	↑	**	↑	6



Worse than the relevant average and benchmark not achieved

Better than the relevant average but benchmark not achieved

At least acceptable benchmark achieved

(w) weighted average

(s) simple average

* no benchmark defined

** different benchmarks depending on size of company, therefore no comparison to average

*** new CU therefore no comparison to previous year



positive trend

same as last year

negative trend

Source: *NWASCO SECTOR REPORT 2003/04*

3.1.3 Increased Awareness

The other important achievement that commercialization has brought about is the increase in the level of awareness within the community that it costs money to bring water from the river to the homes or communal taps or kiosks. Most of the focus groups participants in both Kitwe and Lusaka communities noted that since water is provided by a commercial utility and not the government (council/municipality), they have to contribute towards the cost of providing the service. Most of them did not see anything

wrong with paying for water though they would like the price to be lower and the services improved. One of the participants clearly noted that, “We need to pay because it costs money to bring water from Kafue River.” Another one said, “if we don’t pay the services will be bad like they used to be during the time that the Council provided free water.” Now this realization is critical in making people realize that water as a resource needs to be conserved. However, the service providers have not provided adequate information to the communities about the cost of bringing water to their homes. For instance a number of participants wondered why they pay for water when it is given by God, they don’t seem to know where the money they pay goes. In addition, when asked if they have been provided with information about the cost of producing water, about 98% of those interviewed reported that they had not been given such information. This indicates low sensitization levels within the communities which might work against conservation efforts.

3.1.4 Depoliticisation of Water Sector

For commercialization to succeed, there has to be an independent regulator of the sector to promote independent operation of CUs. So from the beginning, embarking on a commercialization programme entailed that there had to be a regulator that will be able to ensure that the rules of the game are followed by both the service providers and the policy maker and implementers. To be able to do this the regulator has to have a certain level of independence and freedom from political interference which was rampant during the time water services were provided by the local authorities (GTZ, 2004). Since under commercialization “the rules of the game” are different, the regulator has to be independent enough to ensure that the new rules are followed and yield intended fruits. If the regulator is not independent, experience reveals that implementation of reforms will be hindered if not derailed. For instance, an independent regulator should be able to access freely the proposal by service providers to have the tariff reviewed whether that is election year or not. If the regulator is not independent, political interference in the licensing, tariff review procedures, settlement of disputes between providers and customers or among providers, implementation of standards, monitoring compliance of service providers, enforcement of rules and regulation etc will be compromised.

How independent the regulator is depends on many factors. But the major important one is whether it gets funds for its operation from government or not. Experience has shown that if operational finances for a regulator are sourced from government, the likelihood of political interference is higher than if the funds are sourced outside government circles (GTZ, 2004). From a study of a number regulatory styles and situations in different countries, the GTZ (2004) working paper on Sub-Saharan water sector notes that “in order to curb the risk of political influence, a regulatory body should not be funded through government institutions. An appropriate alternative is the funding by fees collected from the providers through a tariff surcharge” or license fees (24). In the Zambian case, NWASCO gets its operation funding from license fees collected from all service providers. All service providers are required to remit 2% of its total annual tariff charges to the regulator (NWASCO Sector Report, 2003/04). In this way NWASCO manages to cover 75% of its annual operation cost and it does only receive “small grant from government” and cooperating partners (ibid). And according to some observers, this

has enabled NWASCO to maintain high levels of autonomy which was evident in 2001, when NWASCO approved tariff increase a few months before general election (GTZ, 2004: 25). NWASCO's level of autonomy is contrasted with the Ghanaian case where the regulator (PURC) gets its funding from government with the result that funding is irregular, making planning and operation difficult and also the decision of the regulator is often influenced by political instructions to which the release of funds is linked (ibid). Not only does commercialization necessitate an autonomous regulator, but it also helps to create a sense of respect for the independent operation of commercial utilities since they are not directly controlled by politicians but professional managers. In this way, then commercialization has created a situation where water services are likely to be depoliticized.

Overall, though these positive results have been recorded in general, the situation looks very different for particular areas especially peri-urban areas. From the interviews conducted in some of these areas it is clear that the service providers focus on the conventional or urban areas neglecting services in the low income areas. Peri-urban areas are often neglected or given less attention on the ground that these areas started as unplanned settlement and as such it is difficult to bring services to these areas. It is also observed that investing in these areas is less profitable since people use less water per capita compared to urban areas. Although the Devolution Trust Fund (DTF) has been set up to encourage service providers to extend their services to peri-urban areas, peri-urban areas are still perceived as unprofitable investment destinations and therefore receive little attention.

One of the commonest complaint that people interviewed in peri-urban areas raised is that they are not treated the same as people in the urban or conventional areas. In three of the focus groups held in Kanyama, the participants complained that they (Kanyama residents) are not informed about interruption of water supply unlike low density areas such as Woodlands, Kabulonga, Kalundu, Ibex Hill etc. Participants observed that in low density suburbs water supply interruptions are announced on national TV while interruption for peri-urban areas are not announced in advance, not even by a mobile megaphone vehicle (Kanyama Focus Group Discussions, August 2006). Similar concerns were raised by Race Course residents in Kitwe on the Copperbelt serviced by Nkana Water and Sewerage company.

Thus, in as much as we talk about the positive outcome of commercialization, these outcomes have to be decomposed geographically to present a clear picture of what is happening to the sector. One important note that emerged from the research is that people in peri-urban communities rarely reach a high level of organization to articulate and challenge bad or resist unfair practices. Further, in both the Kitwe and the Lusaka cases residents in peri-urban areas observed that the response time to complaints in peri-urban is much longer than that in low density areas. According to one of the residents in Mtendere (a peri-urban settlement in Lusaka), "workers from LWSC always say that Mtendere is a difficult place because there are always problems there." As a result, the attitude of the LWSC workers makes it difficult for them to respond promptly to any customer complaints coming from these areas. It was also reported that the water company workers are less lenient when it comes to disconnection in peri-urban as

compared to the low density areas. Thus, the successes of commercialization has to factor the geographical differences that exist in the water supply services.

4.0 Challenges From Commercialisation

4.1 Abrogation of State Responsibilities

One of the shortcomings of commercialization is the subtle disappearance of the state from being the guarantor and protector of people's right of access to water. Public services such as water, electricity which were previously a responsibility of the state through its various intermediate structures have become almost a sole responsibility of commercial utilities. While there might not essentially be a problem with this scenario, the problem arises when the state disappears from the scene under the understanding the new set up will take care of the situation. Even in the event of public services being privatized, the state still remain with the ultimate responsibility of ensuring that the new players do not interfere with access to basic services such as water, electricity and sanitation. In the case of water services, the UN Committee on Economic and Social Council's General Comment on the Right to Water (*General Comment 15*), clearly outlines the responsibilities of the state even in the event of water services being privatized.

According to *General Comment 15*, state parties are required to,

refrain from interfering directly or indirectly with the enjoyment of the right to water. The obligation includes, inter alia, refraining from engaging in any practice or activity that denies or limit equal access to adequate water.... [State Parties have the obligation to] prevent third parties from interfering in any way with the enjoyment of the right to water. Third parties include individuals, groups, corporations and other entities as well as agents acting under their authority. The obligation includes, inter alia, adopting the necessary and effective legislative and other measures to restrain, for example, third parties from denying equal access to adequate water.... Where services (such as piped water networks, water tankers, access to rivers and wells) are operated or controlled by third parties, States parties must prevent them from compromising equal, affordable and effective access to sufficient safe and acceptable water(Parag.,21-24).

What this position taken by the UN Committee on Economic and Social Council makes clear is that even when services are privatized, the State still has the overall responsibility to make sure that the right to water is effectively realized. Thus, the apparent "disappearance" of government from the water supply scene is in no way justified. Even in the current set up in Zambia where the government through Parliament has created a statutory body (NWASCO) to regulate and monitor the operations of the water supply services, this does not absolve government's obligation. Both the regulator and the service providers still have to complement and not supplant government measures to ensure equal and adequate access to water. Oftentimes, in neoliberal circles the move for the state to "scale down from the commanding heights" is justified on fiscal and budgetary grounds. But this cannot be used as an excuse for abrogating state responsibilities. In the area of public services, retreating of the state (especially in low income or developing countries like Zambia) only creates a vacuum in social services since the private actors operate on commercial or market principles which may not necessary take care of the social responsibilities that the state is supposed to take care of

(Ba, 2006). Unfortunately, in most instances where public services have been privatized or commercialized, design and implementation of social policy is often left at the mercy of what David Harvey (2005) calls “Wall Street bondholders” with obvious results (51).

In the case of Zambia, what emerged from the study is that the Zambia government has apparently withdrawn behind the curtains acting as a spectator, watching and peeping once in a while to see how the CUs are managing the crisis. Interviews with some government officials reveal that the government has actually taken a hands-off stance towards service provision especially water services in the belief that commercial utilities and the regulator will handle all eventualities. For instance when one of the officials from the lead ministry in the water sector was asked what the role of government in the current set is, his answer was, “We provide guidance and technical support to the water supply and sanitation sector. Our role is to plan and provide a facilitatory role to the sector by way of mobilizing resources, financial and otherwise.” Certainly a facilitator is often not an active participant in an event. And if governments role is only to facilitate the mobilization of funds, then who is to ensure that access to water especially for the majority poor is respected, protected, promoted and fulfilled (*General Comment 15*)? As Ba (2006) has observed, the creation of commercial utilities with all the advantages it has, leads to a vacuum left by the retreating state. This is even so pronounced in the early stages of commercialization like the current situation in Zambia.

With regard to the local government authorities (municipalities) when asked about what their role in the new water sector set up was, the instinctive response was, “You know very well that we have nothing to do with water services any more; we have created the commercial utilities and they have taken over the provision of water. One of us sits on the board, we appoint members of the board and we review the annual reports. That is all we do and we leave the rest to the water company.” Apart from the indirect presence of NWASCO which is not a government body, but an independent statutory body, the absence of government on the water supply scene is really conspicuous. Though NWASCO does ensure that service providers comply with the various rules and guidelines, its mandate is limited and therefore its activity should not substitute government’s responsibility. For example, it is not the responsibility of NWASCO to put in place a programme that ensures that the elderly, the orphans, child headed households and other vulnerable people who may find it difficult to pay for water have access to water.

When people in the communities were asked what role government plays in the current water supply arrangement, all the respondents failed to say exactly what role government plays. “Government should ensure that everyone has water, but it doesn’t do that. Government is supposed to control Nkana Water and Sewerage, but I don’t think they are doing that,” were some of the responses from the people in the communities. A number of people made reference to old days when government took care of them by ensuring that water was made available to them, “but now we are left on our own, with Nkana Water and Sewerage who are only interested in making profits.” From this perspective, commercialization has resulted into government’s abrogation of its responsibilities in very subtle way.

4.1 Increased Vulnerability of the Poor

The introduction of commercial utilities has led to some poor people being exploited by unscrupulous tap owners. In all the peri-urban areas where interviews were conducted, most participants complained of the exploitation by neighbours who have household taps. This is a huge problem in Mtendere where most of the residents have their house connections disconnected and they rely on water from their neighbours. Those who have taps in their homes charge those who don't have taps on the pretext that they take the money to the water company even though they are charged a fixed rate. If there are many people who come to get water, the tap owner may end up making more money than he or she needs to pay the water company. In communities where they have communal taps, this is not so much of a problem. However, even in communities with communal taps the problem does exist given that the tap attendants only sale water up to 18:00 hours after which the taps are closed and those coming from work are forced to buy water from a neighbour resulting in paying higher prices for water. Some neighbours charge K200 (US\$0.05) for a 20 litre container when the actual price at the communal tap is K100 (US\$0.025) and in some cases K50 per 20 litre container. In other cases, the communal taps are quite far from some households, so those who stay close to a neighbour with a house tap choose to pay the neighbour for water, and the payments are usually higher than what it costs to draw water from the communal tap or kiosk.

In this respect then, commercialization has contributed to exploitation of the poor in that the introduction of tap attendants at communal taps or water vendors at kiosks has made access to water difficult for people who come home late after 18:00hours since the kiosks and communal taps are closed by that time. So those who come from work have no choice but to buy water at any price that those with house taps charge. One of the respondents complained that, "those with taps make us pay K5 000 (US\$1.2) per month when they only pay K35 000 per month." So if a tap owner has ten people fetching water from his home, it means he will collect K50 000 at the end of the month and pay K35 000 to the water company and make a profit of K15 000. If there are more people the profit is even higher.

Related to this is the unfortunate fact that in many countries the poor people pay more per unit of water than the rich people. In Uganda for instance, it was discovered that the poor pay 4 to 8 times higher than consumers with an individual connection, while in Kenya, the poor pay as high as 16 times what the connected consumer pays. Similarly, in Zambia and Ivory Coast, poor people in peri-urban pay 5 times what people in high income areas pay(GTZ, 2004: 6)! As noted above, because poor people are unable to mobilize themselves and articulate such issues, they continue to cross-subsidize the rich! When one of the service providers' official was asked why the poor should cross-subsidize the rich, his answer was: "that is a mistake, and we are rectifying it. So yes per cubic metre there was that distortions, but when you look at the real money that they are paying, you can't compare it with what the person in the peri-urban is paying because most of them will consume maybe less than 5 cubic metres per month per family, which is almost negligible when you look at the tariff levels in Zambia. But you have to understand that the amount used in peri-urban is so small that is why they pay more compared to those

who live in houses where more water is used”(Interviews with LWSC Official, August, 2006). But if people were to benefit from the economies of scale as it seems to be the case here, why shouldn't there be a deliberate policy to ensure that the poor are not disadvantaged in the process? Why should the poor be punished for using less water? These are questions that commercialization has not adequately taken on board.

Unfortunately, civil society organizations are not present in the communities to agitate around these issues. Most of the civil society organization are involved in water service provision either infrastructure provider (eg, Care International, JICA, Oxfam, Action Aid, and Water Aid) or as donor/cooperating partners with government (eg, DFID, DANIDA, ADB, JICA, GTZ, etc). As for most local civil society or NGOs, they are present when policies are being discussed. For instance the advisory committee on water supply and sanitation had many NGOs when they were discussion water services in ther Fifth National Development Plan, But when you go into the communities, especially peri-urban, most of these NGOs are not there. Interviews with community leaders revealed that civil society or NGOs are not active in communities around issues of water. When asked what the role of NGOs and civil society, one civil society organization replied, “In Kitwe no, there is no NGO that I know that has done anything serious in water services” (interviews with ZCCM-IH Official , September 2006). Similarly, officials from the two service providers interviewed did not know of any civil society organisation that was involved water issues in peri-urban apart from Care International that provide infrastructure support to poor communities.

4.3 Hangovers: Infrastructure, Funding and Secondment

At the time of creating commercial utilities, most of the local authorities that were providing water services had many operational and sustainability problems. When commercial utilities took over the provision of water services, it unfortunately inherited some of the problems that had accumulated during the reign of local authorities. One of the biggest problems has been the state of the infrastructure. In most cases the infrastructure handed over to CUs by LA is on average 50 years old with little or no renovation not to talk of upgrading. According to the MLGH official, “the infrastructure is old—on average 50 years old, and we haven't made much progress in investing in infrastructure—we are mainly concentrating on renovating the old infrastructure.” A senior service provider official also aired the same sentiment: “the biggest challenge that we face is that of the ageing infrastructure—most of the installation were done before independence and we are still using the same pipes, machines and pumps. Now, these facilities were meant to serve a small population at that time, but we have not expanded on the facilities to cope with ever growing population. So we find it very hard to operate in such condition, and we don't have enough money to expand these facilities so that they can match the current demands for water services. We don't even have enough to cover the operation and maintenance cost. Our O&M coverage from our collection is only 72%!” (Interviews with LWSC Official, August, 2006)

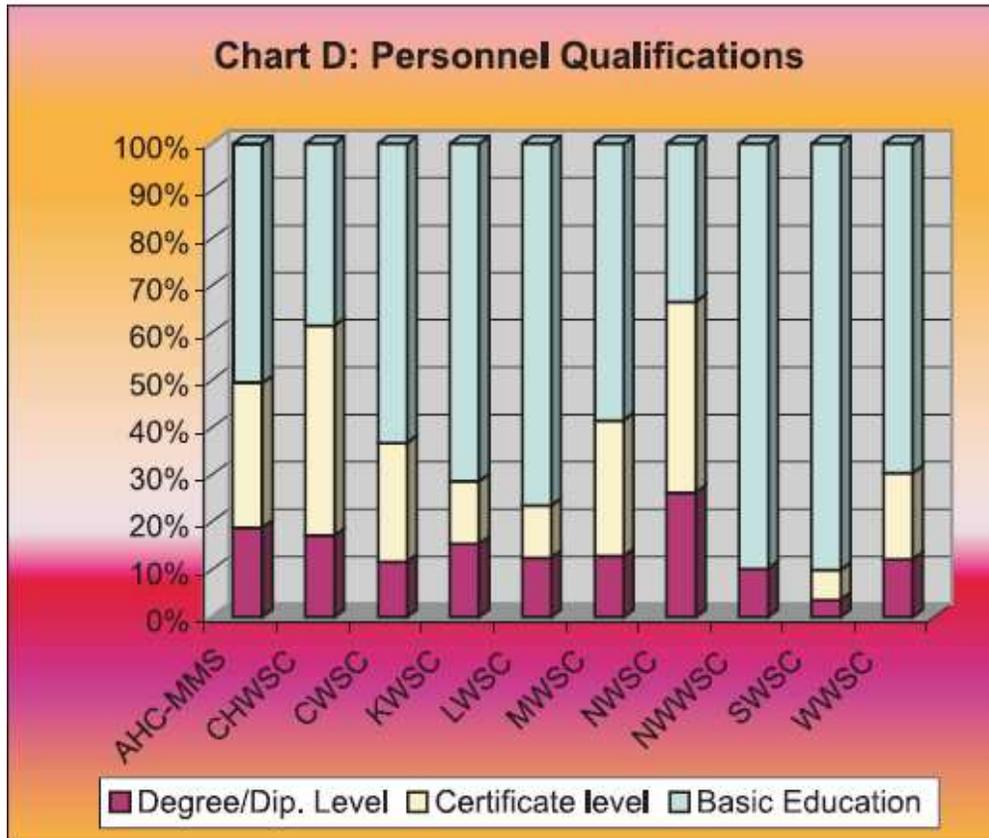
Further, both the regulator and the service providers interviewed expressed concern at the level of government funding to the sector. In terms of government funding to the sector, there has not been much change since 1994 when 90% of the sector funding came from

donors and cooperating partners (National Water Policy, 1994). In fact the proportion of the sector funding from government has dropped to about 2% with the 98% coming from donors and cooperating partners. For example in 2003, the Government of the Republic of Zambia (GRZ) grant to the sector was K6,931 million while the donor contributed K357,084 million representing a mere 2% from government and 98% of the total sector allocation from donors (Second PRSP, 2004:46). In 2004, “K689 billion was allocated to [to the water sector], out of which K689 billion was from the cooperating partners and K8.4 billion from government” (ibid).

As a percentage of the total government expenditure, the water sector as whole received only 0.4 % on average compared to 6.3% for health and 7.4 for education (WSP, 2004: 33). Inadequate funding from government has made it difficult for commercial utilities to deal with a number of challenges that they inherited from the former service providers—the local authorities. Even in cases where money has been allocated by government to the sector, it is not always the case that money is released, and if it is released, it is often delayed (ibid).

Another inherited challenge that most CUs face is the problem of seconded personnel from the former employers, the LA. Most of the former council workers have been seconded to or passed on to the CUs. Now this secondment has posed a number of challenges for CUs. First, the seconded workers had poor staff efficiency making it difficult for the CUs to make headways in improving on service levels. Secondly, the workers due to poor and irregular salary and wages from their former employer, developed a work culture with very low motivation (NWASCO Sector Report, 2003/04). Thirdly, most of the workers had little professional qualification and received no training or skill development from their previous employer. Table 3 below gives a rough idea of the qualification status of the workers in most of the CUs. As the table below shows, majority of the workers (90% of workers in the case of Nkana Water and Sewerage Company, and Southern Water and Sewerage Company, and 80% for Lusaka Water and Sewerage Company) in the commercial utilities have only had basic education. Now with this level of training, efficiency and professionalism in service delivery are likely to be negatively affected. To retrain these workers require a lot of resource which most of the CUs are unable to raise (NWASCO, Sector Report 2003/04).

Table 4



Source: *NWASCO Sector Report,*

2003/04

Part of the challenge that CUs face lies in the fact that they cannot hire professional workers from the labour market because that would mean laying off most of the former council /municipal workers which is not feasible since government has no money to pay retrenchment packages (ibid). More over, the issue is not about the infamous “downsizing”, rightsizing or lean management common in the neoliberal circles, but it is about re-equipping people to be more able to accomplish their duties so that they have a sense of self fulfillment and self realization. As one of the managers of the service provider put it, “our aim is not to lay off worker. We actually don’t regard workers as “excess personnel”, but as valuable assets for the company who should be empowered and motivated to put in the best they can. Moreover, some of these workers have been working in the council for a long time, and their experience is very valuable to the company” (Interviews with Nkana Water and Sewerage Company Official, September, 2006). An official from the MLGH made this observation, “Secondment /retrenchment is an issue that we have to resolve—but it is not about making people loose jobs; we don’t have resources to deal with retrenchments issues. We have to face these practicalities.” Nevertheless, the challenge of re-training, re-skilling, empowering these former council employees needs to be addressed in all CUs.

4.4 Indigence Policy: The Missing Link

Creation of CUs in the water supply sub-sector has resulted in the disappearance of programmes that took care of the needs of the vulnerable in communities. Both commercial utilities that were included in this study have no programme to cater for the vulnerable such as the elderly, the physically challenged, orphans, widows, child-headed families who may not have money always to buy water even at K50 (US\$0.05) per 20 liter container. Previously, such cases were taken care of by the social welfare programmes under the Ministry of Community Development and Social Services. But the creation of CUs has been seen to have subsumed these welfare functions of the ministry. Most of the community members interviewed about the existence of programme that caters for the elderly, child headed family or widow either by the service provider or government, all said that they have not heard of anything like that. When asked about such a programme, service providers reported that this is a responsibility of the Ministry of Community Development and Social Services. It is only community run water schemes such as the Chibolya Water Trust that have in place a programme to help the vulnerable access water.

The Chibolya Water Trust run by the Resident Development Committee (RDC) allow all the elderly people above 65 years to draw 6 x 20 litre containers per day free. Through the RDCs, the community has identified members of the community who cannot afford to pay for water, and the water trust gives free water to these people. But in communities that are supplied by the water companies, no such programmes exist. Indigent members of the community rely on the mercy of the tap attendant to allow them to draw water. And this is likely to come to an end when the communal taps are metered and tap attendants will be required to remit money to the water utility companies according to the readings on the meter. Vendors at water kiosks on the Copper-belt where the kiosks are metered do not even give a single drop of water for drinking out of the fear that every drop of water is counted by the meter and the vendor has to pay for it. One of the kiosk vendors interviewed said, “initially the water company used to leave us with an allowance to offer people drinking water in a cup, but now, when they come to take the meter readings they don’t take that into account, and they want us to pay for every drop recorded on the meter. This has made it difficult for us to give even drinking water to people; they all have to pay for every drop of water whether they are old, lame or orphans.”

4.5 Servicing of Low Income Areas

A number of CUs have not been keen on servicing the peri-urban and low income areas giving the reason that these areas are unprofitable due to low collections and payment levels. So it has been difficult to convince service providers that it is their responsibility to ensure that these areas are supplied with clean water and adequate sanitation (DTF, 2005). Although the DTF has been making progress in attracting service providers to bring services to peri-urban areas, the challenge still remains. When councils provided water, they provided water services to these areas not on the basis of the profitability of such an exercise, but as a responsibility of local authority. For CUs, the profit aspect has to be factored into the decision to provide service to low income areas. Thus there is need to provide service providers with incentives to enable them to become interested in bringing water services to these areas.

5.0 Conclusion

Evidently the water supply sub-sector in Zambia has undergone major reforms. One such reform is the creation of commercial utilities. The coming on the water services scene of the CUs has brought a number of changes to the water supply service. Some of the changes have resulted in improved service levels such as increased service hours, collection efficiency, improved CUs capacity and management skills, depoliticisation of water services and bringing in of professionalism in water service operations. While these positive outcomes are recorded in the sector in general, they have not permeated every section of society. To a large extent peri-urban areas have not benefited much from these improvements. In most peri-urban areas, service coverage still remains below 50% (DTF, Baseline Study [DVD version], 2006), compared to 86% for urban areas (NWASCO, Sector Report, 2003/04). Issues such as abrupt service interruption, response time to customer complaints, wrong billing, faulty house connections and negative attitude of workers to peri-urban areas still need to be addressed. Added to these concerns is the issue concerning the conspicuous absence of the state from the process of delivery water services in urban areas. Here the issue is not that state should actually provide the service to the people (the CUs can do that) but that the state should play a more active role to ensure that all the actors respect, protect, promote and fulfill people's access to water. Much work is also needed to provide incentives to service providers so that they can begin to providing adequate and quality water service to peri-urban areas. Further, commercialization has led to the slow death of an indigence policy in the water supply sector, which leaves the poor and vulnerable in society more exposed to a precarious access to water and exploitation. What has emerged from this study is that given the short time that most of the CUs have been in operation, it is apparent that if some of the concerns raised above are addressed in time, commercialization holds the potential to improve both access and the quality of services. For peri-urban areas, this may be achieved via the kiosk system which has great potential to increase access to water for people in low income areas. It has also been noted that while civil society organization are present at the policy level (roundtable civil society), their absence in the communities is not only noticeable but worrying.

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