### ASSESSMENT OF CHANGING GOVERNANCE ON URBAN WATER PROVISION

### IN UGANDA: A CASE FROM KAMPALA CITY

by

Geoffrey Odongo

B.Sc. Agric. (Management), Makerere University, 1984

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#### ABSTRACT

Rapid urbanization throughout the developing world has contributed to an alarming population growth in towns and cities. This, as consequence, has triggered off severe environmental crises. One most serious crisis is the inability of governments to provide essential basic urban services to cater for their growing urban population. The main reason for this inability is the poor economic situation in these countries. Governments lack financial resources to provide all the essential basic urban services to their urban residents.

In Uganda, the provision of clean and safe drinking water to Kampala city residents has always depended on the National Water and Sewerage Corporation (NWSC) administered by the government. Civil wars and financial mismanagement under this arrangement crippled the government's continued ability to reinvest in the service to ensure its sustainability. In the mid 1990's the government adopted a decentralization policy that opened the way for reform measures in the NWSC. Reform included the granting of more administrative and management powers (including financial) to the Corporation as a means of reducing fiscal deficits and capital losses by the government. Since gaining additional administrative and management responsibilities, the NWSC has undertaken a series of measures to transform and improve its services to Kampala residents.

This research project is a largely qualitative and partly quantitative analysis of the effect that this transformation of the NWSC has had on the Corporation as well as its water services. A case study analysis was conducted to determine the present state of

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management of the NWSC, the changes the Corporation has undergone and the effects of these changes on both the Corporation and Kampala residents. It is my hope that this review will serve as an indicator regarding the subsequent effects of the similar transfer of authority on other public institutions involved in urban service provision in Uganda.

The results of this analysis, for the most part, reflect a positive outcome of the transformation of the NWSC. Although public opinion still remains divided as to whether there has been improvement in performance by the NWSC in relation to this positive outcome, a large proportion believes the reform, given more time, could improve clean and safe water provision in the entire city.

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## LIST OF ACRONYMS

BoDs	Board of Directors				
CMS	Church Missionary Society				
DANIDA	Danish International Development Agency				
EA	East Africa				
GOU	Government of Uganda				
ICWE	International Conference on Water and Environment				
ILO	International Labor Organization				
IMF	International Monetary Fund				
IUIDP	Integrated Urban Infrastructure Development Program				
KRIP	Kampala Revenue Improvement Program				
NEMA	National Environment Management Authority				
NRM	National Resistance Movement				
NWSC	National Water and Sewerage Corporation				
PIP	Performance Improvement Program				
PPPs	Public-Private Partnerships				
PTAs	Parent Teacher's Associations				
SAP	Structural Adjustment Program				
SSA	sub-Saharan Africa				
TPP	Ten Point Program				
UDLE	Urban Development through Local Efforts				

UNDP	United Nations Development Program
UNHCS	United Nations Centre for Human Settlement
UFW	Unaccounted for Water
URA	Uganda Revenue Authority
USAID	United States Agency for International Development
VAT	Value Added Tax
WCED	World Commission on Environment and Development
WRI	World Resources Institute

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#### **CHAPTER 1**

# URBANIZATION AND THE ENVIRONMENT IN UGANDA INTRODUCTION

#### **1.0 Urbanization**

Urbanization is a complex process. It leads societies towards industrial and technological enrichment and therefore it epitomizes a society. As it is a complex process impacting changes with respect to socio-economic and socio-cultural parameters and thereby their relationships, there is no single definition of the concept of urbanization that can be applicable to all situations. A demographic approach to urbanization as defined by Khawas (2003, p. 1), shows urbanization as "a process that increases the proportion of the total population concentrated in urban settlements".

Rapid growth of population and its concentration in towns and cities around the world are affecting the long-term outlook for humanity. Despite four millennia as centres of civilization and economic activity, towns and cities never attracted more than a few percent of the global population until the last century. According to the United Nations Centre for Human Settlement (UNHCS) (2001), at the beginning of the 21<sup>st</sup> century systems of towns and cities have become a dominant factor in the world's social, economic, cultural and political matrix.

Although East Africa (EA) is the least urbanized region in sub-Saharan Africa (SSA), its projected urban population is expected to increase from 15 % in 1980 to 40 % of total population by 2015 (Figure 1) (Hope and Lekorwe, 1999, p. 2). While Uganda, among the EA countries, has the least urban population (Table 1, p. 3), the current trend of population dynamics is rapidly transforming the nature of human settlements in

Uganda and setting off a chain reaction of consequences from negative environmental impacts to the need to develop policy for the sustainability of towns and cities in Uganda.



**Figure 1.** Proportion of African population living in urban areas by region, 1975-2015. Source: Hope & Lekorwe (1999 p. 2).

Besides providing many economic opportunities, towns and cities also confront an array of environmental challenges. Human settlements, through urbanization, are the converging point for many human activities (residence, work, education, health, culture, leisure, production and consumption). Consequently, urbanization is accompanied by inadequate physical infrastructure and services, unhealthy crowding and increased exposure to concentrated wastes, unsustainable resource consumption, and greater settlement on environmentally fragile lands. This steadily deteriorating situation has had a disproportionate impact on the urban poor (World Bank, 1996). Indeed, rapid

urbanization in SSA has been a major contributor to urban poverty and environmental degradation, particularly in Uganda.

State	Year	1980	2000	Cities of over one million people (% of total population by 2015)
Kenya		2.7	10.0	10
Tanzania		2.7	9.4	18
Uganda		1.1	3.2	-

**Table 1.** Urban Population of East African states (in millions)

Source: United Nations Population Division: World Urbanization Prospects Report (1999).

#### **1.1 Decentralization and Water Sector Reform**

Decentralization, according to (World Resources Institute (WRI), 2002 p. 90), "is the process where the central government relinquishes some of its management responsibilities or powers to a local government, local leader, or community institution". According to Dupar and Badenoch (2002) and Ribot (2002b in WRI, 2002), under a decentralized system, institutions that get new decision-making powers or authority vary and can include elected or appointed user groups such as agents from government ministries of the environment, agricultural cooperatives or in this case the NWSC. In Uganda, decentralization provided a platform for conducting reforms in the governance of urban water provision. Devolving more administrative and management powers to the NWSC by the central government led to new reforms. These included formation of public-private partnerships (PPPs) and the privatization of public water kiosks by leasing them to private individuals.

Privatization, as defined by Brendan (2001, p. 2), "is the gradual process of disconnecting state owned enterprises or state provided services from government control and subsidies and replacing them with a conduit linked to market forces, non-state organizations or individuals". In the context of water provision in Uganda, privatization of water services is defined as a reduction in the NWSC's involvement in the provision of water services (UNHCS, 1998). The definition includes leases and commercialization.

#### **1.2 Sustainability and Sustainable Development**

Broadly, sustainability, as a concept, refers to "human progress that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development (WCED), 1987, p. 43). In other words, the emphasis is on managing present socio-economic activities to ensure that future generations have the required resources and appropriate environment necessary to prosper and flourish. With urban settlements, it means the ability to sustain future needs of urban residents. In addition, it means that urban settlements, as reflections of certain technology, social organization, and culture, must continue to meet current and future demands in a dynamic way. Lastly, (Stren, White and Whitney, 1992; Haughton and Hunter, 1994; and the United States Agency for International Development (USAID), 1994), sustainability is an important environmental

issue, since all settlements, whether urban or rural, are part of the biosphere and their sustenance must not prejudice other natural elements.

The rapid urbanization in Uganda and the whole of EA (Table 1, p. 3) in the last two decades of the 20<sup>th</sup> century has had a dramatic influence on socio-economic activities in the region. Urban municipalities in Uganda have become centres of population influx and human activities as a result of industrialization, infrastructure development, trade and commerce. Burdened with all the problems of growth, urban municipalities have witnessed several crises such as overcrowding, unsustainable resource consumption, and inadequate provision of most basic and essential social services. Of outmost and immediate concern is insufficient provision of essential services particularly, that of clean and safe drinking water.

Most literature on the urban environment in Uganda, for instance see National Environmental Management Authority (NEMA) publications (1997), has focused mainly on biophysical environmental change. Little or no attention has been put towards policies in connection with the governance and management of urban services affected by this change as municipalities continue to grow. One of the most serious concerns and a threat to the quality of life in Uganda is provision of and access to safe drinking water. The current policy of decentralization that has contributed to reforms in the governance of urban services including that of safe drinking water could be a major step towards the sustainability of cities and towns in Uganda. Through this policy, autonomous decisionmaking in day-to-day issues pertaining to municipal management is granted to institutions like the NWSC by the government. Decentralization offers the opportunity of

shifting responsibility to local authorities, not just as an attraction, but as a strategy for improving urban infrastructure construction cost recovery by bringing the decisionmaking closer to those receiving the benefits (WRI, 2002). Better cost recovery means the continuation of an infrastructure provision program and subsequently its sustainability.

#### 1.3 Significance of Study

Rapid urbanization in Uganda in the second half of the past century has resulted in the rise of a number of urban agglomerations, towns and cities. Consequently, due to the development of industries, infrastructure, trade and commerce, and increased consumption in these urban settlements, there has been tremendous strain on the natural systems to cope with these changes. For example, wetlands have been drained for agriculture to provide for more food to the expanding urban population; constant use of wood, as domestic fuel, has led to the depletion of urban woodlands (Muhereza, 2003); and worse still some urban municipalities have recorded declines in their fresh water reserves in recent years (World Bank, 1994) as a result of explosive population growth. In addition to these pressures on natural resources, the poor economic state of developing countries (Rakodi, 1996) including Uganda makes it difficult for them to provide an efficient infrastructure to serve their expanding urban populations. The result has been severe environmental degradation, accumulation of wastes, and inadequate or poor provision of clean and safe drinking water leading to poor health and disease (Hope and Lekorwe, 1999).

Over the past two decades, the UNHCS has openly advocated for solutions to the above problems. This has attracted the attention of some international donor communities and national governments (UNHCS, 1987; Sepällä, 2002). One such solution has been the involvement of local participation (through decentralization) in the decision making regarding municipal management programs. For example, attempts to enhance local government participation have been made in Indonesia through the Integrated Urban Infrastructure Development Program (IUIDP) with a view to improving urban infrastructure investment and construction (Steinberg, 1992; Suselo, Taylor and Wegelin, 1995; Van der Hoff and Steinberg, 1992; Crane, 1995).

The sustainable urban development approach has currently become a major strategy in not only combating urban environmental degradation but also ensuring that various urban services become easily accessible and more affordable to the local urban population (McCarney, 1995). The justification for this study is therefore the improvement of urban management through the effective and efficient provision of clean and safe drinking water services to the urban population of Kampala city in a broader framework of urban sustainable development.

#### **1.4 Study Objectives and Questions**

The effectiveness of any policy is measured against its goals. In Uganda, decentralization policy, in general, is aimed at ensuring good democratic governance, increasing people's participation in decision making, and making people accountable for their actions in relation to given responsibilities (Local Government Act, 1997).

However, in urban municipal service delivery and in the provision of clean and safe drinking water, one important goal is to ensure improved revenue collection for the services in order to save the central government from financial drain by the NWSC. Increases in revenue for the services rendered should subsequently result in further reinvestment in the city's water infrastructure in order to ensure its sustainability and improve on its quality. The intended services are: (i) extension of a clean piped water supply to cover all municipal residents and (ii) provision of affordable water prices for all residents.

This study examines the nature and extent of the progress achieved under the water sector reform (following decentralization) in meeting the intended objective of improving performance in providing water services in Kampala city and assuring sustainable development. Under this objective, the envisioned goals are: (i) improvement of revenue collection and (ii) improvement of delivery services in safe drinking water to Kampala urban residents. Further, this study identifies improvements, if any, in the provision and access to safe drinking water to the Kampala urban population since the introduction of decentralization and water sector reform in Uganda. The project limits itself to the period between the years 1998 and 2002, when the government became very active in implementing these reforms. Through a review of present experience, the research also seeks to assess the extent to which urban management has become more efficient and accountable following decentralization. Finally, following the findings, some suggestions and recommendations will be made to support changes that will lead to urban municipal sustainability in Uganda.

Specifically, this study answers the following questions. 1) Has the granting of administrative and management powers to the NWSC improved revenue collection for the water services rendered in Kampala municipality? 2) Has there been any improvement in coverage (such as in extension of piped water or increase in the number of people served) since the introduction of reforms in water service provision? 3) Have customers or residents been satisfied with the quality of service (e.g., in terms of reliability and consistency in water supply and affordable prices) since the gaining of more administrative and management independence by the NWSC?

#### **1.5 Methods**

Research into urban services decentralization, particularly in the provision of piped, clean, and safe drinking water, is not prevalent in comparison to that on other natural resource policy issues. Research in urban service delivery, particularly in Uganda and Kampala city for example, focuses mainly on the physical environmental implications and processes rather than on social, governance or management outcomes (NEMA, 1997). Moreover previous studies are mainly theoretical with little or no focus directed towards the practical application or results evaluation.

For the above reasons, a case study approach was chosen to provide some investigation into the effects of reforms on Kampala water provision as well as the NWSC after decentralization. This study also investigates these implications for other urban centres in Uganda. The National Water and Sewerage Corporation as indicated by the NWSC Statute (1995) had, since its establishment in 1972, operated solely as a

government-owned public parastatal corporation whose function had been confined to delivering water and sewerage services to urban centres and institutions in Uganda. The corporation, under the public parastatal status, had a centralized management system by which the state had full control over its management activities. It was the only agency involved in urban water provision with a management structure unique to itself, and it was thus important to use a single case study instead of multiple case studies to better asses or evaluate the outcome of the aforementioned reforms on its operations.

A qualitative case study has been employed in this investigation for the following reasons. First, I used a qualitative research approach because it is one way of addressing information needs that revolve around an understanding of a prescribed policy issue. A case study, according to Yin (1994, p. 2), "contributes uniquely to our understanding of individual, organizational, social, and political phenomena". Secondly, "case studies have a more diverse set of possible audiences including colleagues, policymakers and practitioners, and other special interest groups including management professionals than most other types of research" (Yin, 1994, p. 129). While this project is not likely to provide a panacea for any of the aforementioned audiences, there is hope that it will be an inspiration to some of these identified audiences and subsequently encourage further research and investigation into the policy arena of decentralized urban water service provision and management throughout Uganda.

As highlighted by Schramm (1971) and cited in Yin (1994), the basis of a case is to try to explain why a decision (in this case decentralization) has taken place and with what results (i.e., how the reforms have impacted NWSC as well as Kampala urban

residents). Over two decades ago, Coleman in Rist (1998, p. 400) asserted that "there is neither a body of methods nor comprehensive methodology for the study of the impact of public policy as an aid to future policy". According to Rist (1998), Coleman's assertion still holds elements of truth since policy research and analysis have often generated even more methodologies and conceptual frameworks, thereby reducing the clarity a research project was intended to provide. However, it is my contention and hope that this research conveys some clarity and understanding in respect to decentralized urban water service provision and management in Kampala municipality.

In many fields such as in public administration, organizational or management studies, and public policy where cases are studied and recorded in the form of research, different individuals have defined interests for studying cases and as such, a variety of methods of inquiry may be employed (Stake, 1998). Accordingly, Stake (1998) identified three groups, namely *collective, instrumental*, and *intrinsic* case studies. An intrinsic case study is done when a person wants to better understand a particular case, "because in all its particularity and ordinariness, the case itself is of interest" (Stake, 1998, p. 86). In this case NWSC provides an intrinsic case study due to its uniqueness as the only single corporation (i.e., having a uniform organizational and managerial structure) that is involved in water service provision in Kampala and all other urban centres in Uganda.

An instrumental case study, according to Stake (1998, p. 88) may also be important since, "it provides insight into a particular issue, performs a supportive role, and enhances our understanding of something else". Cases are studied by researchers to determine their common or unique issues and according to Stake (1998); this uniqueness

may include the nature of the case, its history, physical arrangement, and others such as organizational or managerial, politico-social, and legal contexts. In the case of NWSC, its commonality lies in the manner in which it abstracts, processes, and delivers water, sets water charges, and collects revenue for water delivery to its customers throughout the country. Being the only corporation involved in urban water service provision in Uganda, NWSC's organizational or managerial, politico-social, and legal structure is the same throughout the country. For this reason the results of this study can be generalized to portray the outcome that reforms in the water sector following decentralization could impart on the NWSC as well as the urban residents in other urban centres in Uganda.

Since this kind of study requires a variety of information, multiple sources of evidence were used in the investigation. However, information could not easily be obtained through primary sources such as using surveys or interviews, due to limited time and resources and poor contact facilities since Uganda lacks an adequate communication infrastructure. Consequently, secondary information from a variety of sources has been extensively used. These include archival documents from NWSC and data from Kampala municipality as well as existing research reports and published literature on the subject (i.e., journal articles, reports by international organizations, and non-governmental organizations (NGOs). In addition, some use is made of the author's personal observations since he has lived in Uganda most of his life.

#### **CHAPTER 2**

### URBAN GROWTH PROBLEMS AND MANAGEMENT: DECENTRALIZATION OF URBAN WATER PROVISION IN UGANDA

#### LITERATURE REVIEW

#### 2.1 Introduction

As indicated in the literature (Devas and Rakodi, 1993; Kasarda and Parnell, 1993; Stren, White and Whitney, 1989; and Dogan and Kasarda, 1988), rapid urbanization is causing stress to governments of developing countries attempting to deliver services to their urban residents (Table 2, p. 15). This stress is further complicated by the poor economic performance of these countries (Rakodi, 1996; Fuchs, Brennan, Chamie, Lo and Ulitto, 1994; and Simon, 1992). One of the critical services lacking adequate attention in developing countries is provision of safe drinking water. Although legislative and regulatory frameworks exist with regard to adequate safe drinking water provision, responsible authorities or institutions in these countries, as pointed out by Briscoe (1995), find themselves in situations of financial constraints where they are unable to provide adequate services to their expanding urban population.

Hope and Lekorwe (1999) and the World Health *Global Water Supply and Sanitation Report (2000)* indicate that most urban residents and institutions resort to manual collection of water from open wells, springs or rivers that exist within and around the urban vicinity (see Figure 2, A - F, p. 17-19). Most often, these sources are unprotected from numerous sources of contamination, and rarely is the quality of water collected determined. The water collected is often very unsafe to drink and the consequences may be severe health problems.

Urban Population as a % of total population			Urban Population annual growth rate (%)		
Year	1970	1995	2015	1970-1995	1995-2015
Least Developed countries	12.7	22.9	34.9	5.1	4.6
All Developing countries	24.7	37.4	49.3	3.8	2.9
Industrialized countries	67.1	73.7	78.7	1.1	0.6

Table 2. World Urban Population, 1970-2015.

Source: United Nations Development Program: Human Development Report (2000).

#### 2.2 Urban Growth Problems and Management in Uganda

According to the United Nations (1980) and UNHCS (2001), the growth of the urban population in Uganda is the direct result of a shift in the balance between the urban and rural economies. Urban economic growth, changing patterns of employment and, ultimately, the urban bias in development strategies have resulted in the development of commerce and industry, and the growth of communication, transportation, education and other forms of infrastructure in the urban areas. Cities and towns in Uganda remain the point of convergence for both governmental and private sector activities, and as such, they are the rational settling places for the population. This rapid urbanization in Uganda has not been accompanied by sufficient economic development. Recent census figures (United Nations, 1999) indicate that the urban concentration trend in Uganda is growing, (Table 1, p. 3), although it remains low compared with the situation in Kenya and Tanzania.

The urban growth trend in Uganda poses a question about the absorptive capacity of cities which ultimately is related to resource use. As pointed out by Magoye (1997), over crowding in urban centres makes the question of resources and absorptive capacity more imperative in Uganda than it is elsewhere in Africa. The process of urban growth in Uganda has come to be associated with unemployment, low life expectancy levels, inadequate and poor nutrition status, and low levels of education. On the other hand, lowincome households, which form more than 70% of urban households, do not have adequate access to clean running water and are thus exposed to all kinds of water bornediseases (UNDP, 2000, p. 2).

Rapid urbanization is not only a negative phenomenon. Its advantages are those related to the growth of economic activity itself, namely agglomeration and external economies. A large population can provide the consumer and the tax base to support an efficient local administration with its own cluster of functions, including housing, water supply, street maintenance, sewerage and drainage, health care and to some extent primary education. At the same time an additional urban resident, besides contributing to the urban economy through spending, drives up the cost of provision of public services and adds to the avoidable damage of the urban environment (Hjerppie, 1998).

A major cause of concern is the way in which the urbanization process is taking place in Uganda. A range of interconnected forces work against the above economic argument, namely: (i) the large population constitutes an unskilled labor force; (ii) the municipal councils which started out as colonial institutions never became fundamentally transformed to cater to a growing African urban population; and (iii) the revenue

development and collection machinery has been ineffective and the very little revenue collected is mismanaged. Further, Magoye (1997) and Smoke (2000) assert that lack of revenue and absence of financial independence by municipalities make them rely heavily on the central government for assistance, which only increases the leverage of the latter over them, rendering local authorities both structurally and financially weak.

#### 2.3 Urban Water Service Provision in Uganda

The poor state of service delivery in Uganda, particularly clean and safe drinking water provision, lies in the traditional or colonial approaches where the central government alone had both operational and institutional responsibilities for the service. In Uganda, urban water provision has always depended on the NWSC whose control and management lay in the hands of the central government. This arrangement tended to exclude other equally important partners in the service of delivering safe drinking water to urban residents. These other key partners include the local (municipal) government and the private sector.

As discussed above, and indicated by Smoke (2000), municipal councils, which started as colonial institutions, were never fundamentally transformed to cater to a growing urban African population. This situation, according to Mohammed (1995), makes municipal councils weak institutions throughout the developing world with the exception of a few cases. In Uganda, municipal councils are departments in the Ministry of Local Government and therefore have built-in structural limitations virtually rendering them neither local nor government. Thus, the importance of involving key stakeholders in







**Figure 2.** Photographs A& B, gutters may form potential sources of water in poor neighborhoods; C – F, residents collect water from wells and springs, Kamwokya, Kampala City slum. Source: International Development Projects, Water Program Exchange (2001). At http://www.idpintl.org/GeoPublic/water/Nov-2001-exch\_gallery2.htm

the service of delivering safe drinking water cannot be overemphasized.

Overcrowding and a preponderance of economic activities in urban areas (ILO, 1996), make more problematic or difficult to provide a sufficient water infrastructure. As more and more urban areas emerge, effective safe drinking water provision can no longer be expected from the central government alone. Devolving powers to public institutions to form public-private partnerships and privatize or commercialize some delivery services are expected to improve revenue generation and water service delivery.

#### 2.4 Decentralization: Evolution and Approaches to Urban Service Provision

Decentralization, as indicated by Kasumba (1997) and WRI (2002), is the process wherein a central government relinquishes some of its management responsibilities or powers to a local government, local leader, or community institutions such as public corporations.

The new wave of decentralization swept developing countries in the late 1980s and early 1990s and was not specific to natural resources (World Bank, 1999). As pointed out by WRI (2002), transfer of some planning and service delivery functions to local governments by central governments, seeking to cut their budgets and find creative responses to economic crises, spread throughout most developing countries. Concerned about the grim fiscal problems of developing countries, lenders, particularly the World Bank (WRI, 2002), pressured central governments to improve their administrative and fiscal performance and boost efficiency as a path to achieving economic growth. According to the World Bank (1999), governments were also advised to find new ways to administer a wide range of costly programs, including municipal services such as that of providing safe drinking water. Decentralization in conjunction with market liberalization (through privatization) was recommended, both to enhance and accomplish the mentioned goals (World Bank, 1994).

Urban infrastructure in developing countries has depended on central government financing, largely due to the inabilities of local governments to raise and manage the funds required (Tambunan and Pereira, 1995). Therefore, major programs of urban infrastructure development, as shown by Wegelin (1993), such as the Municipal Development Project in Argentina, Urban Management and Development Project in Gambia and Urban Development through Local Efforts (UDLE) program in Nepal, all feature efforts to strengthen the capabilities of local governments or public institutions. Enhancing the capacity of local government or a public institution to provide adequate urban infrastructure is often seen by donor agencies, such as the World Bank, as the major aim of decentralization policy in a number of countries, according to (UNHCS, 1987; Suselo, Taylor and Wegelin, 1995; and Rukmana, Steinberg and Van der Hoff, 1993).

According to the 1988 World Bank report (Dillinger, 1988), four decades of planned interventions by governments and donors have done very little to improve the conditions of cities in most developing countries. Despite heavy subsidies, many urban services remain inadequate. Statistics indicate that 23% of the urban populations in developing countries have no potable water within 200 meters. Worse still, sub-Saharan Africa, including East Africa, has an even higher figure of up to 35% (UNDP, 2000 p. 2).

Both sides of the public finance equation (revenue and spending) seem to be a factor contributing to this under-provision. Under-financing, as indicated by Magoye (1997), is aggravated by the fact that spending in many municipalities is not directed towards the appropriate services, which end up serving a small percentage of the urban population. This situation, as noted by Dillinger (1988), places a considerable and continuous burden on the municipalities' financial resources and displaces improvements to urban services.

On improving municipal management when the capacity to deliver public services is weak, the prospects for sustainable urban development are poor due to: poor revenue collection and expenditure control; constant deficits; ineffective professional staff who lack the capacity to design and implement policies that generate an enabling situation for sustainable development; and the absence of a critical mass of core economic agents to address such systematic constraints. Consequently, fiscal deficits are promoted and there is a progressive erosion of the capacity of municipalities to provide economic and social services (WRI, 2002). More often, local governments or public institutions are strapped for cash and do not have the resources to provide even the most basic environmental services for residents. For instance, Espinosa and Lopez (1994, p. 3) show that in 1994 some 30% of African urban residents were not served by municipal water services in any form.

In theory, the people who depend on a particular service stand to be most affected by its provision and management. They share a material interest in managing the service sustainably — a reason why many central governments have taken steps to give regional, municipal, and local institutions responsibility for some public sector functions involving

a wide range of municipal services (WRI, 2002). Decentralized water services should, according to the World Bank (2000), improve central governments' ability to treat water as an economic good and assess user charges that would create incentives for efficient water use as well as finance improved service delivery. In addition, the World Bank (1994) indicates that lower (local) level governments, closer to the beneficiary (local) population, have an information advantage in identifying people's preferences as well as the flexibility to respond to local conditions.

#### 2.4.1 Decentralized Urban Water Services: Motives and Evolution

Under the traditional centralized government approach, water has primarily been treated as a social good. Its positive health and environmental externalities, as stated by McCaffrey (1992 p. 2), justifies the view of both governments and communities that "free water was a fundamental right of the people". However, inadequate resources have constrained governments' ability to ensure access to clean and safe water. The result has been a remarkable deterioration in coverage and quality of services (World Bank, 2000).

Based on my observation in Uganda, under the centralized system, water services have been offered through a system that allowed the central government to transfer some functions and responsibilities to field staff while maintaining the hierarchal relation between central offices and the field branches. Field offices are established within intermediate and local jurisdictions and staffed with civil servants (usually engineers) from the central ministry responsible for water services. These staff are responsible for delivering water. Engineers devise schemes based mainly on technical considerations

such as viability of the water source and the area or population to be served rather than seeking advice from intended users. Officials manage water systems with very little effort to identify or address users' preferences. Not surprisingly, this system erodes incentives for users to assist governments in maintaining or financing water services.

The World Bank (1994) and WRI (2002) indicate that failures of centralized service delivery systems throughout the world, and particularly developing countries, exacerbated by a decreasing supply of water in some regions, have created considerable pressure for decentralization. The 1992 International Conference on Water and Environment (ICWE), held at Dublin stated three new principles in describing water as an economic good (Rogers, de Silva, and Bhatia, 2002). Since then, water has increasingly been managed as an economic as well as a social good, and decentralization (in many forms) has been a useful policy to support this new approach. Most governments in the developing world, according to the World Bank (2000), are now beginning to link service levels and costs, provide incentives that increase the efficiency of water resource allocation, reduce costs, and increase sustainability of water service systems. The new principles reached at the Dublin conference, dubbed the "Dublin Principles", involve three approaches to sustainable water management. These three approaches integrate ecological, institutional, and social elements in managing water as an economic resource. Approaches require, respectively, a holistic and participatory decision-making that involve devolution of responsibility to the lowest appropriate level (Rogers, de Silva, and Bhatia, 2002).

#### 2.4.2 Decentralization: Evolution and Policy Framework in Uganda

The policy of decentralization in Uganda, as stated by Kasumba (1997), was conceived during the 1980's when the present governing National Resistance Movement (NRM) was conducting its armed struggle for power. As highlighted by the Local Government Statute (1993, para. 5), the first objective of its Ten Point Program (TPP) was to create a local government system that would be democratic, participatory, efficient and development-oriented. The NRM also suggested that the new system would empower local communities to take charge of their destiny through local institutions of selfgovernance and resource mobilization. Following the change of government in 1986 (Kasumba, 1997), the system of local Resistance Councils (from village, parish, subcounty, county and district to the national level) was legalized through the Resistance Councils and Committees Statute (1987). This statute enabled local councils to be involved, to some extent, in local political issues. However, as key decisions on areas like finance and accountability were left to the central government, a debate continued on how a local government system with devolved powers and resources could be developed to replace the highly centralized Local Administrations Act of 1967.

The main weaknesses of this act were related to a lack of effective personnel systems that provided local governments with the power to appoint, deploy and control the officials; lack of clear lines of authority with respect to services provided by central line-ministries; failure to create a dynamic financial relationship between the central and local governments; and the existence of a dual system of administration by the local

authorities and the central government. The act, according to President Museveni "tended to preserve the sectoral approach to development and to promote the duplication of effort, operational inefficiencies, the wastage of resources and a strong sense of departmentalism"(*Local Government Statute 1993, para. 5 p. 2*).

Accordingly, as further indicated by Decentralization Secretariat (1993), through a number of commissions, hearings and draft papers (commented upon by the World Bank and the Danish International Development Agency (DANIDA), consensus was reached on the key features needed for local government reform. The Cabinet approved the decentralization policy in November 1991. In August 1992, it was endorsed by the National Resistance Council which also provided a budgetary provision (subsidized by DANIDA) to establish and operate a secretariat within the Ministry of Local Government. The decentralization policy was officially launched on 2 October 1992. The *Local Governments Resistance Councils Statute (1993)* (hereafter called "the Statute"), was passed by the Parliament in November, 1993, and became effective from December 31, 1993.

The objective of the Statute (1993 para. 2), was to create a process of decentralization in which functions, powers and responsibilities in governance are transferred from the central government to local governments and from higher local governments to lower local government councils. The aim was to ensure that governmental decisions are taken as close as possible to those involved. This devolution is, as a principle, total: "Every District,..., and Town Resistance Council shall, within its own area of jurisdiction, with the exceptions listed (i.e. matters reserved for the central

government), exercise all political and administrative authority and provide services as it deems fit" (*Local Government Act, 1997, para. 11 p. 5*).

The central government, according to the *Local Government Statute (1993)*, will take care of defence, fiscal and economic policies, migration, minerals, national monuments, foreign relations, national planning, justice, institutes of higher learning, hospitals, while the powers, functions and services performed by the district and urban councils included primary education and vocational schools, medical and health services, roads services (apart from national roads), and all field services and activities of every decentralized ministry (including agriculture, fisheries, forestry, and community services).

The Local Government Statute (1993), as a framework for institution building and administrative reform, applied to all local governments and major public institutions such as the NWSC. Financial decentralization was to be implemented in phases. As stated by the Decentralization Secretariat, the Local Government Statute (1993) provided ways in which decentralization policy would be implemented. Decentralization would be a flexible and a continuous process. The Statute was designed and passed as an enabling law that opens doors for a continuous process of decentralization and creates a framework for autonomous decision making.

#### 2.4.3 Rationale for Decentralization of Urban Water Provision in Uganda

The urban population of Uganda today is estimated at about 3 million people, made up of 1.6 million people living in seven urban centres and about a million people
living in 26 secondary towns (Kayaga, 2000). The complete picture of urban governance in Uganda projects a systemic crisis. Municipal systems are not only failing to meet the demands of rapid population growth within a context of poverty and marginalization, but their own basis of sustainability is in jeopardy. Amis (1998) has noted that decline in municipal service delivery is due to inequitable resource allocation, low revenue collection, low service coverage, mismanagement, corruption and lack of transparency and accountability.

Through decentralization, activities of the private sector would be encouraged by the NWSC. There was a belief that involvement of the private sector would lead to increased revenue for subsequent reinvestment in the water service to ensure its sustainability. The main reason behind the move towards reforms in the water sector, as stated by Campbell and Bhatia (1998), was the failure by the central government to provide adequately water services to Kampala residents.

A motivating force behind the move towards decentralization in Uganda comes from the donor agencies, particularly the World Bank and the IMF (which have been the major source of funding for SAP) and DANIDA. The World Bank and the IMF (1999) have focused on assisting Uganda in establishing well-functioning systems that will support the process through the formulation of sustainable policies, funding of activities, and advisory services to create a transparent environment in which people can make rational decisions.

The overall objective of decentralization of the NWSC is to promote the activities of the private sector, increase efficiency and consequently generate revenue (Orono,

2001). The NWSC, according to the UNHCS (1998), cited insufficient financial resource as the primary reason for its failure to provide adequate water services to Kampala residents. However, this failure could be attributed to poor management of revenue collection (Magoye, 1997).

#### 2.5 Summary

As suggested by Amis (1998), three discernable trends of urban municipal service delivery can be identified in Uganda. First, and simplest, has been the overall decline in quality and quantity of service provision. Secondly, some services have de facto become separated from the public sector due to insufficient support by the central government and are provided almost exclusively by the community. For instance, basic education and the role of parent teachers associations (PTAs) give the clearest examples, but evidence of community or private service also exists in public health care and more unusually in local government revenue collection. Thirdly, some services have effectively become projects funded by the central government and donors; an example is water service provided by the NWSC.

Based on my observation, decentralization is largely recent and continuing process of institutional change supported by proponents who perceive it as a mechanism for reducing the size of the central government and its control over power and those who see the arrangement as leveraging greater access for the people to government and for government to the people, stimulating national participation in development planning and management.

The National Water and Sewerage Corporation Statute of 1995 in conjunction with the Local Government Act 1997 on decentralization gives specific functions and powers to the NWSC. According to the National Water and Sewerage Corporation Statute (1995) and the Local Government Act (1997), it is now a function of NWSC to regulate, control, manage, administer, promote or license any of the services which the Corporation is required or empowered to do by the government.

The current feeling in Uganda is that decentralization should enable the private sector to operate and as a consequence, play an effective and efficient role in the provision of piped, clean, and safe drinking water to Kampala city residents. The private sector is expected to bring in good business practices such as competitiveness to ensure quality services which should satisfy consumer demands. Efficiency and effectiveness are anticipated to lower operating costs and ultimately guarantee cheaper services and subsequently their sustainability (Orono, 2001). The central government would still play a major role in the facilitation of the implementation process.

Whether the above belief will turn out to be warranted for the set goals of improved revenue collection and sustained quality service in safe drinking water provision to all Kampala city residents remains an issue to be examined. Thus, a comprehensive study of the NWSC under a decentralized management system and its impacts is provided in the remaining chapters.

# **CHAPTER 3**

#### CASE STUDY: KAMPALA WATER PROVISION

#### **3.0 Introduction**

Kampala city, according to the city home page (2004), is the commercial and administrative capital of Uganda. It lies on a plateau spread over many rolling hills. It is a modern city but with many contrasts, ranging from modern, colonial, and Indian buildings in the down town (i.e., city centre), to the scenic, evergreen hills and wetlands in outlying areas, and Lake Victoria (popularly referred to as the Great Lake of Africa) to the south (see Figure 6, Appendix I, p. 72). At an altitude of 1180m above sea level, Kampala has a pleasant climate with annual average minimum and maximum temperatures of 17° C and 21° C respectively. The city has five major divisions, namely Kawempe, Nakawa, Makindye, Central division, and Rubaga (see examples Figure 7, Appendix I, p. 69). With an approximate area of 190 km<sup>2</sup> (NEMA, 1997), the current population of Kampala city stands at 1.5 million people.

# 3.1 History

Kampala was established as the capital of Buganda in the 1600's (NEMA, 1997). The establishment of religious missions on various hills in Kampala marked the beginnings of development of Kampala into a metropolis. In 1877, the first European mission established the Protestant Church Missionary Society (CMS) at Natete and later, in 1885 the French catholic fathers established a church at Rubaga. As indicated by NEMA (1997), in 1912, a planning scheme was recommended that called for a physical separation of Kampala into European, Indian and African quarters (allegedly for health reasons and household income levels). Later, in 1913 a town planning committee was established by the colonial government. This paved the way to the drawing of the physical plan of Kampala in 1930 separating residential, commercial, and swamps or drainage areas.

Upon attainment of independence in 1962, Kampala became the capital city of Uganda. It then had a population of 50,000 people and an area of approximately 21 km<sup>2</sup>. From 1967, the size of the city increased steadily with the inclusion of the divisions shown on the map (Figure 7, Appendix I, p. 69) thereby becoming a district of about 195 km<sup>2</sup> (designated as an urban municipality with its own administrative set up) in 1979.

#### 3.2 Types and Scope of Water Service Provision in Kampala City

As mentioned above, settlement in Kampala city initially was determined by race and household income levels. Consequently, European quarters had the best infrastructure, followed by Asian and lastly African quarters. That colonial legacy is still profound. African elites and the wealthy occupy neighborhoods that have well developed infrastructure and were once settled by the white colonialists. This settlement stratification along income lines reflects the type of water service rendered to residents. The 1996 WRI publication categorizes settlements into three patterns: The rich or affluent neighborhoods, middle or average income settlements, and poor or informal (unplanned) settlements. Results of the World Health Organization survey, contained in the *Global Water Supply and Sanitation Report (2000, p. 2)*, indicate that in Kampala city

about 43% of the population is covered by in-house water connections or a yard tap piped water supply and approximately 52% are connected to public taps or are served through boreholes or handpumps <sup>1</sup>. Piped water connections are mainly concentrated in the affluent and middle income neighborhoods. Lake Victoria provides the main source of water. A relatively large population living in informal settlements (slums) or shanty towns remains unserved and mainly relies on unimproved and unsafe water sources such as springs and open wells (refer to Figure 2, p. 17-19).

#### 3.3 The National Water and Sewerage Corporation

The NWSC was established as a government owned parastatal corporation under decree No. 34 of 1972 and its legislative framework was strengthened by the *National Water and Sewerage Corporation Statute, Statute No. 7 of 1995* (NWSC Statute, 1995). National Water and Sewerage Corporation's operations have expanded from 3 towns in 1972 to 13 towns at present (see map, Appendix I, p. 68). These include Kampala city and other major towns namely Jinja, Entebbe, Tororo, Mbale, Lira, Gulu, Masaka, Mbarara, Kabale, Kasese, Fort Portal, Bushenyi-Ishaka, and more recently, two other towns of Arua and Soroti (NWSC, 2002).

After its establishment in 1972, persistent instability (i.e., coup d'e tats and civil wars within the country in the early 1970's and mid 1980's reduced the effectiveness of

<sup>1</sup> Hand pumps or boreholes are manual or powered devices used to draw water from underground aquifers. Source: Water Sources: Boreholes, Springs and Wells Web page, at http://www.drinkingwater.co.uk/wells%20boreholes.htm the Corporation. According to Muhairwe (2002), the NWSC systems became dilapidated in later years of the 1970's and early 1980's

#### 3.3.1 Role and Mission of the National Water and Sewerage Corporation

The mandate of the Corporation, as defined in the NWSC Statute Section 5(1), is to operate and provide water and sewerage services in areas entrusted to it (in this case Kampala city) on a sound commercial and viable basis (NWSC Statute, 1995). Under the Statute, NWSC performs three principal functions: (1) management of water resources in ways which are most beneficial to the people of Uganda, (2) provision of water and sewerage services, and (3) development of water and sewerage systems in urban centres and big national institutions throughout the country. In addition to these roles, the Corporation's mission is twofold. First, it is to be a financially self-sustaining organization and provide water and sewerage services to customers at affordable price. Secondly, it should incorporate the private sector in at least half of its water supply distribution (NWSC, 2002).

# 3.4 Beginning of Decentralization of Water Provision

As mentioned, the period from the late 1970's to the early 1980's showed nearly a total collapse of water infrastructure in Kampala city. Through funding from the World Bank and donor agencies, particularly DANIDA, the mid 1980's and early 1990's were characterized by rehabilitation of the water and sewerage systems (NWSC, 2002). With the water infrastructure rectified, the later part of the 1990's was devoted to improved efficiency and performance in delivering water to the residents of Kampala city.

Subsequently, no substantial improvement was forthcoming upon significant investment in the water infrastructure described in the World Bank report (1998).

Over the last 10 years, the GOU in partnership with the World Bank and other donors have made significant investments (over US \$ 100 million) in the Urban Water and Sewerage sector. These investments have contributed immensely in rehabilitating the existing infrastructure under the NWSC management. Unfortunately, these investments have not been matched with the necessary efficient commercial and financial management capacity that can ensure the delivery of sustainable services in the medium to long-term (World Bank, 1998 cited in Muhairwe, 2002, p. 2).

Following the above report and pressure from the World Bank, the NWSC needed reform in order to strengthen the commercialization of its services to achieve real value of investment. Consequently, devolving management powers to the Corporation was essential (Muhairwe, 2002).

#### 3.4.1 Decentralization and Performance Improvement Initiatives

By 1998, the situation in the NWSC as described by World Bank, reflected total mismanagement. There were no indications of improvements of service such as in extending piped water connections nor was there a reduction in regular and rampant water supply failures. However, it was at this time that a new board of directors (BoDs) under a new decentralized management was contracted by the central government to replace the previous management whose contract had come to an end by end of 1998 (Muhairwe, 2002).

Enormous tasks and challenges faced the new management. To meet these challenges, several turn-around programs aimed at revitalizing performance of the NWSC were initiated. These involved a comprehensive analysis of the situation that existed within the Corporation in order to identify major performance gaps and lay out concrete improvement strategies. Major gaps hindering improved performance were identified through a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis framework (NWSC, 2002).

The main strengths that were identified by the NWSC under its new BODs, according to Muhairwe (2002), included the existence of a relatively sound water infrastructure, abundant raw water for abstraction, a good and enabling water legislative framework, a competent and relatively well qualified senior management team, and relatively good organizational autonomy. However, major weaknesses, as pointed out by NWSC (2002), included the poor financing, low operating efficiency (for instance, unaccounted for water <sup>2</sup> (UFW) and rampant leakages contributed to a 60% loss), poor staff organizational behavior, and lack of external research to identify client or customer needs. Of the utmost concern was poor financing and inefficient revenue collection. For example, due to poor billing and revenue collection, the monthly financial deficit stood at approximately Ushs 348 million, equivalent to US \$ 190,000 (Muhairwe, 2002, p. 3).

Besides these weaknesses, many threats loomed over the Corporation. These included low customer ability to pay for the service, a value added tax (VAT) that had put

<sup>2</sup> Water loss that cannot be easily explained, mainly due to losses in main supply lines, losses in the network, losses due to inaccuracy of water meters, and black losses (due to illegal connections). Source: World Bank: Urban Water and Sanitation Web Page, at http://lnweb18.worldbank.org/mna/mena.nsf/All/6C586003928975DE85256949006FC441?Open Document

NWSC on a collision course with the Uganda Revenue Authority (URA), stringent environmental protection regulations, large external service obligations extended to the NWSC by the central government and inability to manufacture most water operational inputs domestically (NWSC, 2002). Despite all these weaknesses and threats, there existed opportunities for improved performance in the NWSC. Among these opportunities were the central government's willingness to fund the implementation of reform measures and overall continual support for the water sector; donor confidence in the NWSC; a good image of the NWSC among the public; and a relatively stable economy (Muhairwe, 2002).

#### **3.4.2 Implications of the SWOT Analysis**

The key problem within the NWSC, as indicated by the SWOT analysis was more of an internal institutional or organizational problem, not an external factor. Moreover, a greater potential for improvement existed if, for example, the staff performed their duties as effectively as expected of them. Poor financial and operational performance, among other problems that were inherent within the Corporation by then, were due to ineffective performance by the Corporation's own personnel (NWSC, 2002). External factors, particularly those perceived as opportunities and threats to the Corporation, played a very limited role in reducing performance efficiency. Overall, the situation as analyzed indicated the need for internal reorganization of the NWSC since the Corporation had most of the required resources but only lacked proper management plans and strategies to improve its operational effectiveness and performance.

#### 3.4.3 Strategic Planning and Programs to Improve Performance

As provided by the NWSC (2002), a short-term action targeted program aimed at gradual realization of the desired corporate performance projections in the long run was the strategic approach adopted by the NWSC under its new management. In order to achieve the desired goals of improved water delivery service, thereby leading to increased revenue generation and reduction of deficits, the NWSC developed a management framework (Figure 3, p. 39) for Kampala city and all other towns under its jurisdiction.

Accordingly, following the framework (Figure 3), plans and strategies to improve service performance in Kampala city were aimed at integrating the private sector into the public water service delivery system. Public-private partnerships (PPPs), for example, the Kampala Revenue Improvement Program (KRIP), were encouraged as a means of improving revenue collection in Kampala city (Muhairwe, 2002). A large revenue base was seen as a perquisite towards improved operational and management efficiency by enabling increased reinvestment in the water services.

#### 3.4.4 Public-Private Partnerships in Kampala City

Change Management Programs (Figure 3) were initiated, with the intention of strengthening commercialization of water delivery in other major towns by the NWSC. In

Kampala city PPPs partnerships were established. The new management believed PPPs were fundamental to transforming and improving the service of water delivery in Kampala city. This city, being the biggest, involves 70% of water production, the customer base, and revenue generation (NWSC, 2002, p. 2).





Following the expiry of the KRIP in 2001, an internal team (a creation of the

Corporation's own staff) was formed to run water delivery operations in Kampala city.

This new arrangement of water service delivery operated until the beginning of 2002

when another contract was signed by the Corporation and a private firm, ONDEO Services Limited, took over most water delivery services (NWSC, 2002).

# 3.5 Summary

This chapter has provided a description of the study area (Kampala city) including a brief review of the city's water delivery systems. Further, it has provided a review of the NWSC (Kampala city's water service provider), giving its historical background, organizational problems, and current arrangements, and discussed restructuring the Corporation in order to generate enough revenue so as to improve its capability to deliver water effectively to Kampala residents (in terms of extended coverage, reduced supply failures, and render affordable water prices to its consumers).

# **CHAPTER 4**

# THE EFFECT OF DECENTRALIZATION ON KAMPALA WATER PROVISION

# 4.0 Introduction

Of the many strategies initiated by the NWSC to improve water service delivery in major urban centres in Uganda, the one that involves private sector participation, according to Muhairwe (2002), is that in Kampala city. As noted, a new private operator, ONDEO Services, was assigned the task of providing water in the Kampala area at the beginning of 2002 (NWSC, 2002). In this particular case study, interest is limited to identifying issues related to the improvement of water service delivery in terms of improved revenue generation by the NWSC, expansion of the service coverage, increased overall water production and reduction in leakages. On the other hand, NWSC aims to review consumer satisfaction in relation to the reliability and affordability of the service.

# 4.1 Decentralization from a National Water and Sewerage Corporation Perspective

From the Corporation's perspective, the overall outcome of decentralization of water provision in Kampala city has been a positive one. Devolving control and management powers to the NWSC shifted control and management responsibilities away from the central government and opened up opportunities to privatize or commercialize (NWSC, 2002).

Prior to devolution of management and control powers to the NWSC, the Corporation, was overstaffed (total labor force of 1800 personnel equivalent to approximately 40 personnel per 1000 connections) and maintained an expensive and inefficient labor force, with exceedingly high staff maintenance costs comprising nearly 64% of total operating costs (Muhairwe, 2002, p. 3). Further, poor organizational behavior, late coming, corruption, dereliction of duty etc., contributed overall to poor performance by the Corporation. As serious as the above issues, were operational deficits that played a more significant role (Muhairwe, 2002).

Decentralization enabled the Corporation involve to the private sector in service delivery, and conduct tariff indexation<sup>3</sup>, restructuring and downsizing the number of personnel. Following these changes, the NWSC realized some remarkable improvement in its overall performance in Kampala city. Revenue collection and billing efficiencies rose from 74% and 40% respectively, in 1998 to 86% and 61% by 2001. Water production increased from a monthly 2.8 million m<sup>3</sup> to about 2.92 m<sup>3</sup> while water utilization climbed from 74% to 77% (Muhairwe, 2002, p. 9).

Although the public consensus on decentralization remains positive and both decentralization and privatization have become buzzwords in Uganda, there is no guarantee that customer satisfaction will be met by the private sector as service providers since the desire to make a profit often takes precedence over the need to deliver quality service. Consequently, in absence of an effective monitoring system, private service

<sup>&</sup>lt;sup>3</sup> Tariff is a tax assessed by government on goods as they enter or leave a country. It may be imposed to protect the domestic industries from imported goods and/or to generate revenue (Capela and Hartman, 1996, p. 430). In the case of the NWSC, a 6% indexation or hold was imposed to protect tariff from erosion against factors such as inflation while giving a 7% discount to domestic water consumers using over 1,500 m<sup>3</sup> of water per month (Muhairwe, 2002 p. 11).

providers may exploit their consumers by rendering substandard service.

#### **4.2 Revenue Improvement Strategies**

#### Service Privatization

By contracting out water delivery services to private operator and leasing out public water kiosks to private individuals, the Corporation made some remarkable progress towards improving revenue collection and ultimately, revenue within the city. For example, by the middle of 1999, as shown by the NWSC (1999, p. 29), a record high of Ushs 2, 478 million (US \$ 1.4 million) worth of revenue was collected from the entire city water supply area. Monthly collections increased from an average of Ushs 1,939 (US \$ 1.07 million) to a new average of Ushs 2,187 million (US \$ 1.2 million) representing an increase of 12% exceeding the target of 10% (NWSC, 1999, p. 29). Further, in 2001, according to Muhairwe (2002 p. 9), billing efficiency had risen to 61% from 40% before 1998. The increases in revenue were mainly attributed to two factors: i) improvement in the steady supply of water to consumers by private contractors and ii) leasing out public water kiosks to private individuals ensured advanced payment to the Corporation.

Improvement in revenue collection in Kampala city triggered improvement of revenue collection in all other major urban centres in Uganda served by the NWSC (Figure 4, p. 44). Revenue figures do not take inflation into consideration.



**Figure 4.** Revenue Trend <sup>\*</sup>: The National Water and Sewerage Corporation 1997-2001. Source: *National Water and Sewerage Corporation Annual Report (2000, p. 15).* 

\* Revenue figures do not take inflation into account.

#### Cost Reduction Initiatives

Following the steady improvement in revenue generation and collection, the

Corporation's ability to improve and expand its service was greatly enhanced but

operational costs in terms of employees, machinery and equipment maintenance, and

administrative expenses remained high (NWSC, 2002). Of utmost concern to the Corporation was the high cost of maintaining a large number of employees. As a remedy, management undertook and implemented a policy of staff rationalization aimed at downsizing its labor force by devising acceptable personnel per thousand-connections ratios.

The Corporation reduced its personnel from 40 employees per thousandconnections in 1998 to 13 employees per thousand-connections by 2001 (Muhairwe, 2002, p. 10). Other measures undertaken by the Corporation to reduce operational costs included outsourcing of non-core activities such as lawn mowing, guard services, management and construction of water kiosks and management of cesspool emptier services. Further, introduction of a new transport policy reduced the number of drivers and as a result vehicle operation costs were greatly reduced (NWSC, 2000).

# 4.3 Sectoral Performance under Decentralized Management

As mentioned earlier, one key aim of devolving management powers and control to the NWSC was to reduce or limit its reliance on the central government for financial support. With devolved management powers, the Corporation had the mandate to devise best strategies and plans to generate its own revenue in order to run and sustain water delivery services. Accordingly, the NWSC has made remarkable improvements in revenue generation and collection. An improved revenue base coupled with reduced operational and maintenance costs have, in addition, provided the Corporation with a better environment to further reinvest in the city's water infrastructure and to improve its delivery capacity. Renewed reinvestments in the water infrastructure have contributed to remarkable achievements by the Corporation. Some of these achievements are discussed below.

#### Water Production, Capacity Delivery and Utilization, and Unaccounted for Water

The increase in water production was also accompanied by a substantial rise in water utilization by consumers. Water consumption rose from 74% to 77% by the end of 2001 and up to 86% by the turn of 2002 (NWSC, 2002, p. 7&8). While water production steadily increased over the years from 1998 to 2002 (Table 3), UFW showed a downward trend (Table 3, p. 47 and Figure 5, p. 50) although fluctuations and levels of UFW remained high in Kampala (i.e., 44%) compared to 30 % in other urban centres by 2002 (Table 3).

#### Water Distribution, Coverage and Sales

Internally generated funds enabled the Corporation to expand its water distribution network and coverage in the city and other peri-urban areas. For example, a total of 83,289 new connections had been accomplished by the end of 2002 in Uganda as a whole, while new connections within Kampala city stood at 46,246 (Table 4, p. 49) constituting more than 50% of all connections (NWSC, 2001 p. 10). Expanded coverage and distribution was however not matched by increased daily water sales per connection. Instead the daily average sales per connection plummeted to 1.35 m<sup>3</sup> by the end of 2002 from the average daily sales of 2.13 m<sup>3</sup> in 1998. However, by the end of 2002, a population of 749,297 out of the total targeted population of 1,208,544, constituting 62% of the city population, had been served with water (NWSC, 2002, p. 12).

Year		1998	1999	2000	2001	2002
Production	(million m <sup>3</sup> /year)	31.0	31.4	31.7	33.9	34.0
Delivery Capacity	(million m <sup>3</sup> /year)	45	45	45	45	45
Unaccounted for water (UFW) (%)		55	51	44	47	44
		44 <sup>*</sup>	36*	37*	32*	30*

 Table 3. Water Production, Delivery Capacity and Unaccounted for Water:

 Kampala City 1998-2002.

<sup>\*</sup>(%) Average unaccounted for water (UFW) for other urban centres. Sources: *The National Water and Sewerage Corporation Annual report (2000, p. 11)*; Muhairwe, 2002, p. 9.

#### 4.4 Customer Care

#### **Customer Surveys**

Prior to becoming nearly an autonomous corporation in 1998, the NWSC did not conduct any survey among its customers to identify their needs or any other performance gaps that needed improvement or change. However, under the decentralized management, customer care received greater attention (NWSC, 2002). From 2001, the NWSC conducted regular surveys among its customers and maintained records of customer complaints. In addition, response time to customer complaints was reduced from more than 48 hours to less than 24 hours (Muhairwe, 2002, p. 9).



**Figure 5.** Unaccounted for Water Trend 1997-2001. Source: *The National Water and Sewerage Corporation Annual Report (2000, p. 12).* 

#### Pricing Improvement Initiatives

Many elements play key roles in sustaining any urban service delivery to the people, in this case water delivery, but sufficient pricing that recovers full cost of the service is a particularly important issue. Privatizing or commercializing water services by leasing out public water kiosks to private individuals and formation of partnerships by contracting out water delivery to private firms by NSWC aimed at maximum

Year		1998	1999	2000	2001	2002
Total Water Connections	Kampala	28,985	31,627	35,416	39,736	46,246
	Other Areas	21,841	22,740	23,378	26,498	33,789
Average Sales per Connection (m <sup>3</sup> /day)	Kampala	2.13	2.09	1.97	1.64	1.35
	Other Areas	1.52	1.35	1.24	1.25	0.92
Total Sales of Water (10 <sup>6</sup> m <sup>3</sup> /year)	Kampala	-	-	17.8	19.0	20.3
	Other Areas	-	-	8.7	9.0	10.9

 Table 4. Piped Water Connections, Daily and Total Water Sales in Kampala City compared to other Areas 1998-2002.

Sources: Muhairwe, 2002, p. 9&10; The National Water and Sewerage Corporation Annual Report (2001, p. 10).

cost recovery and increased revenue generation. However, taking into consideration great differences in income that exist among its consumers as indicated by the NWSC (2000), (i.e., income differences among the low, middle, and the high-income households) within Kampala city, the Corporation held its obligation towards equitable rendering of this essential and basic service by eliminating cost recovery prices from most of its utilities.

According to Muhairwe (2002), exempting customers from paying prices that cover costs could have led to an increase in water rates, thereby rendering many customers devoid of water. To meet this, the central government (as a financial donor to the NWSC) decided to maintain tariff on water inputs and prevent further erosion by imposing a 6% indexation against factors such as inflation with effect from the first quarter of 2002 (Muhairwe, 2002, p. 11). Initially, the NWSC had undertaken other indexation initiatives such as reducing new and reconnection fees by over 100% and introducing minimum charges to render affordable service to more customers (Muhairwe, 2002, p. 11).

The intended outcomes, actual effects, and consequences of decentralization policy on both the Corporation and the city's population by the end of 2002 have been summarized in Tables 5 and 6. Achievements were recorded in terms of improved revenue, increased water production, distribution and coverage, high water utilization and improved customer care services such as a reduction in customer complaint response time and minimal supply outages.

# 4.5 Downside of Decentralization and Privatization of Water Service Provision Peri-Urban Areas

As is common in most cities across the developing world, provision of basic urban services such as in-house piped water connections remains concentrated in affluent areas (WRI, 1996). Peri-urban areas or city suburbs with the majority of the low income population or poor households often are devoid of such amenities. The NWSC (Muhairwe, 2002), acknowledges that service to the poor is mainly a social mission. Thus, its task is to provide: (1) affordable water services within walking distance, (2) superior water services demonstrating clear advantages over spring water, and (3) service coverage in risk areas to curb water borne diseases. Service provision in Kampala suburbs (especially slums) still remains inadequate. **Table 5.** The Intended Outcomes, Evaluation and Actual Effects of Decentralization policy on the National Water and Sewerage Corporation and Kampala Water Provision.

Policy	Intended Outcomes	Evaluation	Actual Effects			
			The National water and Sewerage Corporation	Kampala Water Provision		
Decentralization	Complete autonomy of the National Water and Sewerage Corporation without any central government involvement.	Partial devolution of powers to manage and control to the National Water and Sewerage Corporation. Central government retained limited administrative responsibilities	Restructuring the Corporation by: 1) Formation of partnership with private operators by contracting out water delivery service. 2) Leasing of public water kiosks to private individuals in peri-urban areas of the city. Overall progressive increases in revenue generation and collection efficiency Successful cost reduction initiatives that involved personnel retrenchment and outsourcing of some jobs. Timely and improved revenue collection as a result of leasing* out kiosks to private individuals in peri- urban areas. Improvement of water	Improvement of water production Progressive reduction in unaccounted for water (UFW). Expanded water coverage Reliability of water supply Improved customer care services		

\* Besides positive consequences, leasing out kiosks to private individuals had some negative impacts on the consumers. For example, kiosks overcharged their customers (Muhairwe, 2002).

		Year				
		1998	1999	2000	2001	2002
Action	Performance Exhibit					
Contracting out water delivery services and	Total Revenue* (Billion UShs)	21,931	24,727	25,838	29,279	34,050
Cost reduction Initiatives	Collection efficiency (%)	40	-	-	61	-
Reduction of UFW	Water Production (million m <sup>3</sup> /year)	31.0	31.4	31.7	33.9	34.0
Increased reinvestment into the water infrastructure, affordable price and customer care services	Water Distribution (total number of connections	28,985	31,627	35,416	39,736	49,500
	Utilization (%)	74	-	-	77	-
	Water supply reliability (hrs of supply)	18-21	-	-	22-24	-
	Response to customer complaints (hrs)	>48	-	-	<24	-

 Table 6. Key Performance Exhibits resulting from Decentralizing and Privatizing

 Kampala Water Service Provision

\* Includes revenue from all areas served by the National Water and Sewerage Corporation. Sources: Muhairwe (2002, p. 9 &10); *The National Water and Sewerage Corporation Annual Report (2000, p. 12&15)* 

Over the past years, the Corporation has opened up public water kiosks that are leased to and managed by private operators under the Corporation's supervision. Despite regulatory measures by the NWSC, these private operators have in most cases tended to retail water at exorbitant prices; nearly 10 times the regulated price (of UShs 50 per 20 litres of water) by the NWSC (Muhairwe, 2002, p. 10). Consequently, based on the survey conducted by the UNHCS (1998), there has been growing public dissatisfaction with this type of water provision arrangement in poor neighborhoods of the city.

#### Effect of Cost Reduction Initiatives

As discussed earlier in the chapter, the NWSC undertook numerous measures to cut its operational costs. One such measure undertaken by the Corporation was the downsizing of its workforce. However noble the exercise appeared to be in the eyes of the new management of the Corporation, it resulted in some undesirable consequences, according to my personal observations. Massive employee retrenchment created additional urban poor households that moved to live in slums thereby creating additional costs of expanding water coverage to these areas at subsidized rates.

#### Response to Customer Complaints

While the Corporation prides itself to have reduced response time to its customer complaints, skepticism still remains regarding this claim (refer to customer complaint letter, Appendix II, p. 71). Based on my observations in Kampala city, there is a bias in response to customer complaints by the NWSC officials. Response seems to be based on income levels. Affluent neighborhoods are accorded greater priority and consequently get rapid response compared to low-income or poor neighborhoods. Quite often customers in low-income or poor neighborhoods have complained of neglect or inadequate response by the Corporation's officials — an example of such neglect complaint can be read in a letter by one of the Corporation's clients (Appendix II, p. 71).

# 4.6 Summary

Devolving powers (under the on-going policy of decentralization in Uganda) to local governments, urban municipal councils and/or public corporations and in this case, the NWSC, has aimed in part at promoting financial independence by the NWSC in order to relieve the central government of fiscal deficits. As such, a major goal of the NWSC has been to increase its revenue by improving revenue generation and collection capability. Strategic to the Corporation's initiatives to increase revenue, have been measures to: (1) reduce its workforce, and (2) contract-out water delivery services to private operators in order to get real value for its investments and improve revenue collection (Muhairwe, 2002).

Considering the above initiatives undertaken by the NWSC since 1998, there are indications that substantial progress has been made towards expanding the Corporation's revenue base. With an expanded revenue base, financial self-sufficiency by the Corporation is expected to allow more room for further reinvestment in the water infrastructure and as a consequence, improve the Corporation's efficiency to equitably deliver quality services to all its customers in Kampala city irrespective of jurisdictions.

# **CHAPTER 5**

#### CONCLUSIONS

This study has given a general overview of urbanization and its growth trend in the developing world and the associated environment problems connected with this growth. However, the focus of the study has been Kampala, Uganda's capital city, where growth in recent years has caused several environment crises. The most severe of these crises are connected with inadequate provision of essential and basic urban services, particularly, piped, clean and safe drinking water for Kampala's expanding urban population. Inadequate provision of this most basic and essential urban necessity has been attributed to lack of revenue generation under the central government administration due to mismanagement of funds in public institutions. In most cases mismanagement was characterized by poor revenue collection, overspending and overstaffing.

To combat the above problems and reduce deficits by the central government, the World Bank, the IMF, and other donor agencies over the last decade have pressured the Uganda government to adopt and implement a decentralization policy in several arenas including the devolution of powers to local governments, urban municipal councils, and other big government corporations like the National Water and Sewerage Corporation.

This study has reviewed decentralization as a policy instrument with respect to the National Water and Sewerage Corporation. Motives, implementation and impacts on both the Corporation and Kampala city residents have been examined. Viewed in respect of decentralization policy goals towards revenue improvement by the Corporation, positive progress has been made by the Corporation since the inception of the policy in the mid 1990's. Other achievements, as a result of increased revenue, have been the improvement in water production, reduction in UFW, and extended service coverage to peri-urban poor areas. In addition, other measures such as shorter response times to customer complaints, affordable prices (by subsidizing water rates in poor neighborhoods) and regular customer surveys to identify problems and needs have also been achieved, contributing towards improved quality services to customers.

Despite some progress, a lot of obstacles remain to be overcome in order to adequately serve the entire population of Kampala city. First and foremost, a large section of Kampala city's population comprises middle income and poor households in suburbs or slum areas of the city. Since the inception of the decentralization policy, the NWSC has contracted private operators to conduct water delivery services to residents. Private operators have often tended to overcharge their customers resulting in negative sentiments towards the NWSC and, subsequently, dissatisfaction with this policy, particularly in poor areas of the city.

Based on my personal observation, another issue is the inadequate effort by NWSC to extend its water services to the peri-urban poor areas of the city. Most quality services such as regular checks on pipe leaks, pipe refurbishments, and shorter response time to customer complaints have been concentrated in the affluent areas of the city, while very limited attention is paid to the suburbs with the majority of the city's population.

# **5.1 Implications of the Results**

Although these results are restricted to a single case study based only on Kampala city, Uganda, the results can be generalized to portray impacts that a decentralized urban water service provision would exhibit in other urban centres in Uganda. Almost all urban centres in Uganda share a similar trend of development (i.e., same mode of urbanization that results from rural-urban migration, same population stratification, and similar settlement patterns). Further, the NWSC is the only agency entrusted with the task of urban water provision in Uganda. It has a common organizational, managerial, political, and legal structure throughout the country.

#### **5.2 Recommendations**

While decentralization has become a buzzword in Uganda, there still remain some limitations and constraints to be overcome in order for this policy to realize its goals. Based on the above analysis, the following recommendations are suggested:

- Decentralization is an important framework for privatization. It entails devolving decision-making power with corresponding financial resources to the local government, community or corporate level. Greater devolution of decision-making authority and responsibilities should be encouraged and implemented in practice as a means of dealing with the expansion of piped, clean, and safe water development in Kampala city and elsewhere.
- Mechanisms and guidelines should be devised and put in place to ensure that privatization of urban water provision does not exclude or impose a undue burden

on the urban poor. These mechanisms may include some safety nets and subsidization. In addition, the NWSC may find it necessary to provide water services in low-income areas at affordable price. Subsidizing such water provision to the low income poor neighborhoods of the city would seem to be more feasible through the "contracting-out" system of privatization but not through pure privatization wherein a single private contractor retains and monopolizes the service provision.

- There is a need for greater public education and awareness on decentralization.
   The public, as well as stakeholders including the NWSC officers and staff, urban communities, and city councilors, need to be sensitized and informed on the rationale and benefits of decentralization, as a system of providing water services. In situations where decentralization results in reduction of employees, innovative approaches such as retraining programs should be instituted as an initiative to reduce operational costs.
- Privatizing water services seems to have worked better in areas where consumers
  can pay the costs of services (particularly the affluent and middle- income parts of
  the city) and may leave unserved a large proportion of the poor and low- income
  areas that cannot pay for the privatized water services. Privatization of water
  services should be encouraged to cover the whole city, including poor and low
  income neighborhoods. As suggested above, appropriately designed subsidization
  could help take care of those who are unable to pay market prices for water
  services.

- Initiatives by informal sector entrepreneurs should be encouraged and supported by the NWSC through an enabling environment such as by-laws or other administrative incentives. The latter should take advantage of the former in order to increase access to clean and safe water services. This, for instance, could begin by recognition of the many present operators in the water delivery services. Recognition and encouragement of other self-help initiatives, partnerships, community organizations, and other associations that have proved capable of providing clean and safe drinking water particularly in low-income poor neighborhoods should be given priority.
- A decentralization process requires great capacity building; hence training for the NWSC officials is essential. Collaboration with training institutions for collaborative needs assessment, development; and the execution of training would greatly enhance this process.
- The NWSC is the only agency in Uganda entrusted with the service of urban water provision. Numerous branch offices exist within the city and the entire country. Because of this, it is essential for the Corporation to establish data banks and information systems, not only in Kampala city, but throughout urban municipalities within the country to facilitate effective monitoring and management of water service delivery by all actors involved in the process. In this way, sustainability of urban clean and safe drinking water can be guaranteed.

# Summary

While the results from this project may not deal with all the implications of decentralization and privatization policies on public corporations, it is hoped the research is of importance to colleagues in the area of decentralized urban service provision, particularly those involved in providing clean and safe drinking water, to policy makers, and to practitioners. The research is expected to be of particular interest to the National Water and Sewerage Corporation since it contributes to the understanding of the Corporation's unique managerial initiatives that has made it partially successful in implementing reforms in urban water service provision in Uganda.

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## **APPENDIX I**

### MAPS



**Figure 6.** Kampala City and other major towns of Uganda. Source: At http://www.africamission-mafr.org/.../ uganda-map.jpg



#### Figure 7. Kampala City Divisions.

Source: The World Conservation Union (1998, p. 5). At http://biodiversityeconomics.org/pdf/topics-604-00.pdf

### **APPENDIX II**

#### COMPLAINT LETTER TO THE NATIONAL WATER AND SEWERAGE CORPORATION



Friday May 14, 2004. Discussion

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# National Water should be serious about service delivery

SIR— The National Water and Sewerage Corporation (NWSC) should come out clearly and tell applicants what exactly they require in order to connect clients. Is the lowered connection fee a way of tormenting clients? For instance, I applied and duly paid for connection in early March and fulfilled all the requirements. But up to now, no connection has been done except to be given one bogus excuse after another.

I would rather pay a higher charge and save time by being connected promptly instead of being fooled. Examples of excuses given are numerous: no trench was dug, whereas it is there; you have to pay for a meter, whereas enquiries reveal payment is not necessary; we want this type of fitting instead of what you have; fittings were taken to Sixth Street and passed.

All the people I applied with have been connected. One client did not even have some of the fittings, but NWSC officers were falling over themselves to serve him because of his colour! NWSC should do the public a favour by giving correct information on the criteria they use to connect clients so that those of us who do not fall in the category of dignitaries or foreigners do not waste time applying.

(Name withheld on request)

Published on: Tuesday, 11th May, 2004