# « IMPLEMENTATION OF A COMMERCIALIZATION POLICY WITH SOCIAL INCLUSION AND SERVICE IMPROVEMENT GOALS »

Eldoret, Kenya

Period of implementation: 1997 - 1999 | Study case written in 2010

aced with Inadequate maintenance of the water infrastructures and corruption in the sector, as well as the implementation of Structural Adjustment Programs during the 1980s and 1990s, the Kenyan Government privatized public water services. The results proved unacceptable, especially with regard to expanding provision for lower-income groups. With the completion of the Water Act of 2002, which provided for the decentralization of powers from the national to the regional and local level, individual municipalities, such as Eldoret, took the initiative to form companies to undertake water supply. The Eldoret Water and Sanitation Company (ELDOWAS) was incorporated as a wholly owned subsidiary of Eldoret Municipal Council in 1997. The Water Act requests consultation on a number of provisions and regulations, and a culture of public consultation and active stakeholder engagement is gradually being built.



The **Inclusive Cities Observatory** was launched in 2008 by the UCLG Committee on Social Inclusion, Participatory Democracy and Human Rights with the aim of creating a space for analysis and reflection on local social inclusion policies. The initiative was developed with the scientific support of Professor Yves Cabannes (University College of London) and the Centre for Social Studies (CES) from the University of Coimbra. At present, the Observatory contains more than sixty study cases mostly developed between 2008 and 2010. Even though many of these cases refer to policies that have already come to an end, they still have much to offer: from capitalizing on the learning acquired by other local authorities to discovering suggestive and alternative means to address social inclusion challenges from a local perspective.







## Context

# City context

The city of Eldoret, located in western Kenya, is the administrative centre of Uasin Gishu District of Rift Valley Province and has a population of about 194,000. Founded in 1910, the town grew quickly as the number of white farmers and Asians settling in the area increased. It became a Municipal Board in 1929 and a Municipality by 1958. Since then, the town has grown in leaps and bounds into a truly cosmopolitan area. Eldoret is currently the fastest growing town in Kenya, with multiple industries present, an international airport, and a large public university (Moi University). In Kenya, Eldoret is known for being at the center of the country's breadbasket, where most of the grains (maize and wheat) that feed the country are grown.

Since the 1970s, with the impulse of intensified infrastructure development projects, the importance of Eldoret grew. With the largest cities experiencing a population boom due to high rural-urban migration, the government sought, through the Growth Centre Policy, to redirect the urban population away from the principal urban centers of Nairobi and Mombasa. The complex of infrastructure that was installed attracted many industries and institutions to locate in Eldoret. The period 1969-1979 has been hailed as the industrial decade in Eldoret, including high water-demanding industries such as agro-processing firms and textiles.

Access to water is a critical issue. Over the last decade, the Rift Valley province has known serious ethno-political tensions, many of which were triggered by land and water conflicts.

In 2008, it experienced violent ethnical clashes, many of which resulted in significant casualties and political instability.

## Institutional level where this policy developed: Municipal

#### Decentralization context

Located in East Africa, Kenya is a country of great social, ethnic, and political complexity. A former colony of the United Kingdom, Kenya ascended to independence in 1963. Since 2009, the political system has been semi-presidential, with a President as the chief of state and a Prime Minister as head of government. In the political system of Kenya, the judiciary is independent of the executive and the legislature. The new Constitution, promulgated in August 2010, delegates more power to local governments and gives Kenyans a bill of rights.

According to the National Census of 2009<sup>2</sup>, Kenya has 38.9 million habitants, of which 32.3% live in urban contexts. The urban population is concentrated in 8 major cities: Nairobi<sup>3</sup>, Mombasa, Nakuru, Kisumu, Eldoret, Nyeri, Machakos, and Meru. Kenya has 8 administrative regions consisting of 7 provinces and Nairobi, the capital city. The 7 provinces of Kenya are Central, Coast, Eastern, North Eastern, Nyanza, Rift Valley, and Western (see Figure 1). The government supervises the administration of districts and provinces.

<sup>&</sup>lt;sup>1</sup> By 2006, the total student population was of 14,885 and had a combined teaching and auxiliary staff of almost 4,000.In 1986, Eldoret Polytechnic was opened, being one of the four actually active in the country.

<sup>&</sup>lt;sup>2</sup> See http://www.knbs.or.ke/Census%20Results/KNBS%20Brochure.pdf.

<sup>&</sup>lt;sup>3</sup> The administrative, commercial, and industrial center in Kenya.

Local governance in Kenya is practiced through *local authorities*. Many urban centres host city, municipal, or town councils. In local areas, the local authorities are known as *county councils*. Local councillors are elected through civic elections, held alongside general elections. Eldoret, the subject of this case, is governed by a *municipal council*.

#### Social context

Much of Kenya's environment is considered arid or semi-arid and subject to frequent droughts (every 3-4 years). Hence, the country is classified as a chronically water-scarce country, and access to water remains a crucial problem and a source of conflicts. Water supply and sanitation in Kenya are characterized by low levels of access, in urban slums and in rural areas in particular, and by poor service quality in the form of intermittent water supply. Only 9 out of 55 water service providers in Kenya provide continuous water supply. Seasonal and regional water scarcity exacerbates the difficulty to improve water supply.

According to available statistics, while 83% of Kenya's urban population has access to potable water, only 52% of the urban population has household connections.<sup>4</sup> Paying 30 cents for water per day when supplies are scarce is not feasible for many Kenyans. The 2007/2008 *Human Development Report*, issued by the United Nations, put the proportion of Kenyans living on less than a dollar a day at almost 23%, while just over 58% survive on less than two dollars daily. Urban informal settlements and the rural poor are the most affected: while the urban poor largely rely on informal vendors for water, the rural consumers often draw their water from unprotected sources.

In rural contexts the main sources of water remain rivers, wells, and boreholes whereas in urban contexts piped water is the main source (38.4%). However, there are problems with regard to piped water management, with many urban centers, including Eldoret, having frequent water shortage problems (and, following, large-scale outbreaks of water-borne diseases such as cholera). To cope with water scarcity, many households purchase and install storage tanks. Those who cannot afford to incur these costs are forced to survive with the little water available, to use unsafe water, or to pay much higher prices for the little water available.

Inadequate maintenance of the water infrastructures and corruption in the sector are the major explanations for the water scarcity. Insufficiencies in provision and in the institutional structure of public water management occur against the backdrop of a water policy that seeks to:

- supply water of good quality and in sufficient quantities to meet the various needs for water while ensuring safety; and
- establish an efficient and effective institutional framework to achieve systematic development and management of the water sector.

The government has recognized the need to reform the water sector and, in doing so, to delink its own institutions from the provision of water and sanitation. As in other African contexts, the way out chosen by the Kenyan Government in the 1980s and 1990s – as part of the

<sup>&</sup>lt;sup>4</sup> Nationally, the figures are 61% and 28% respectively, according to 2004 statistics from the Joint Monitoring Programme for Water Supply and Sanitation, an initiative of the WHO and UNESCO.

<sup>&</sup>lt;sup>5</sup> One should note that 'having access to piped water' and 'having a piped connection' are not synonymous, especially in the informal settlements in which most of the urban population of Kenya lives. In these settlements, the poor rarely have piped water connections to their homes and have to access piped water from kiosks or vendors, which are expensive and often of poor quality.

implementation of Structural Adjustment Programs (SAPs) and other donor conditionalities – was to privatize public sector enterprises, including public water services.<sup>6</sup>

SAPs have had profound effects on service delivery in several ways. First, the retrenchment programs in the public sector that followed the implementation of SAPs led to losses of employment and incomes and increased the proportion of the urban poor who could not afford basic services.

Second, SAPs led to cost-sharing arrangements in key sectors where the government had previously either provided services free of charge or at subsidized rates through its ministries, specialized agencies, or state-owned companies. Third, it led to rapid expansion of the informal settlements without access to any meaningful services from the local authorities, which could not cope with the influx of immigrants from rural areas who came to towns to look for work and ended up jobless in the informal sector economy and informal settlements.

In short, in Kenya, as in other experiences with water privatization in low- and middle-income nations, the results have proved unacceptable, especially with regard to expanding provision for lower-income groups. In addition, privatization has generally failed to attract private capital, reduce corruption, reduce tariffs, or protect the interests of the poor. As a result of this situation, individual municipalities, including Eldoret, have taken the initiative to form companies to undertake water supply in their respective jurisdictions

# **Policy development**

# **Background**

In the first decades after independence, the state invested strongly in the water distribution system in Kenya. However, although with substantial funding available, throughout the years the public municipal water services accumulated large debt burdens to the point where they were financially insolvent. Most have become dependent on central government to bail them out. As a result, there was little or no capacity to expand to areas lacking services, replace obsolete technology, address leaks, and ensure adequate water quality and quantity.

The initial steps to privatize water services were also problematic. Indeed, there is a strong spatial link between water provision and poverty. Most of the urban poor live on the city peripheries, largely because the price of land near city centres, where infrastructure and services are available, is far above what they can afford. In the peripheral areas, water supply infrastructure may not be in place or, where it is, the pressure in the pipes may be so low that this leads to persistent shortages, as those closer to the central areas tend to use up the available supply.

As in Eldoret, most of these peripheral settlements are located on hazardous sites. These sites present many engineering difficulties for infrastructure provision and supplying these areas with water requires higher unit costs. This situation, combined with the limited capacity of the population to pay for water, results in a large gap between costs and potential cost-recovery.

<sup>&</sup>lt;sup>6</sup> See the 2003 UN-Habitat review of water and sanitation in cities (UN-Habitat 2003b), which highlighted the many different forms that privatization in the water sector have taken, including service contract, management contract, affermage contract, lease contract, concession contract, build-own-transfer contract, divestiture, joint venture, and multi-utility contract.

Private enterprises seeking to maximize profits or minimize losses tend to avoid these areas because they are not profitable.

As several authors have underlined (UN-Habitat 2003; K'Akumu 2004), another problem with regard to improving water provision is that the urban poor live mostly in informal settlements that breach official laws and regulations. Hence, these settlements are almost entirely left out of the programs and budgets of national and local authorities, and are generally viewed as an eyesore by middle- and upper-income groups. In terms of water supply, most of these areas lack a piped water network, largely because providing connections to each house plot is difficult where plot ownership is unregistered (and perhaps contested) and settlements are unplanned.

The approach chosen by the government to de-link itself from the water supply business by privatizing water services brought with it several risks in terms of the welfare of the poor, as the majority of the urban population of Kenya experienced during the 1980s and the 1990s.

The main changes in Kenya's water services sector happened with the completion of the Water Act of 2002<sup>7</sup> (enacted in 2003). As underlined in several reports, among the most positive attributes of this Act is that it provides for the decentralization of powers from the national to the regional and local level, making a provision for a participatory approach to the management of water resources. There are instruments and institutions that the poor or their advocates may use to ensure that they receive their share of the water. In urban contexts, as in Eldoret, Water Services Providers – mostly local authority-owned utilities – have been established as commercialized, publicly owned companies.

# Policy goals

After a long debate on the issue, Kenyan government decided to let commercialization proceed on a case-by-case basis in the leading urban areas. In Eldoret, the Eldoret Water and Sanitation Company (ELDOWAS) was incorporated as a wholly owned subsidiary of Eldoret Municipal Council in 1997, and began operations in 1999. The company's mandate was to carry on the business of water and sanitation services of Eldoret Municipal Council and its environs. The board of the company is the policymaking body and is composed of members representing various stakeholders in and around Eldoret.

Eldoret Municipal Council is the principal stakeholder as the sole shareholder, and is represented by the mayor and its chief officers (the Town Clerk and the Treasurer). The Kenyan Government is represented by two officials, one from the Ministry of Water Resource Management and Development and one from the Ministry of Local Government. Other stakeholders are the local people, a significant group from the water catchment areas concerned with both water extraction and conservation of forest cover and ecosystem, institutions such as Moi University, and professional and industry associations concerned with how to have access to the water en route to Eldoret.

To carry on this work, the company realized that it had to pursue a policy of social inclusion and used a two-pronged strategy, concentrating its activities in the medium-income areas to achieve returns on its capital, and also in low-income areas to reduce incidents of water-related diseases common among those who use shallow wells for water and pit latrines for sewerage. The social service motive would also contribute to helping the country attain at least one of the Millennium Development Goals by freeing the time the poor spent each day looking for water to spend on income-generating activities. (In general, the poor require 45 minutes each

<sup>&</sup>lt;sup>7</sup> The Kenya Gazette (24 October 2002), Supplement No. 107 (Acts No. 9), pp. 935–1053.

day to look for water while the wealthier groups spend only 18 minutes on this activity.) Also, with Free Primary School now available to all in Kenya, provision of portable water frees girls to go to school instead of fetching water for the family, and reduces the incidences of water-borne diseases in the informal settlements, improving attendance and performance in schools.

# Chronological development

Since its formation as a wholly owned subsidiary of the Eldoret Municipal Council, ELDOWAS has been working hard to fulfill its mandate through pipeline network extensions and the inclusion of new consumers. It has also spent considerable resources rehabilitating the existing network to reduce transmission loses and developing new supply and treatment systems meant to ensure supply adequacy and improve service quality.

In 1999, when this new policy initiative was initiated, only 60% of the population of Eldoret was served by portable water and an even lower 40% had access to sewer lines. Given that the estimated labor force in the town is only 40% of the population, this meant that more than 60% of the population had an income equivalent of about U.S.\$20 per month, or less than U.S.\$1 per day. Nowadays, 88% of the population has an income below U.S.\$40 per month, which corresponds to about U.S.\$1.50 per day. Only a very small fraction (4.4%) of the town's population earns more than U.S.\$3 per day. Although the overall income situation has not changed much, the policy intervention has given people hope of a more decent life at their level of income.

Recent statistics show that the corporation has made an impact on access to portable water and sewerage services, although more still needs to be done. As at end of 2006, there were 10,476 water connections in the town comprising 9,439 domestic connections, 42 community kiosks, 58 institutional connections, and 937 industries or commercial connections, altogether serving a population of 167,330. The community kiosks are a joint project of Eldoret Municipal Council and ELDOWAS to increase access to more reliable and safer water sources for the poor majority who cannot afford the water connections. Sewer services have also improved, but at a much lower rate. The sewer lines only connect 6, 254 customers and serve a population of 62,540. The population in the medium- to high-income areas is served by 1,654 septic tanks that serve 16,540 people. The vast majority of the residents (125,000) use the 12,775 pit latrines.

The population connected to piped water has steadily increased. In 1994/1995, when Eldoret Municipal Council was in charge of the water services and sewage, prior to the formation of ELDOWAS, about 68,440 people had access to piped water. In 2002/2003 this number had risen to 151,250. In the same period, the population connected to sewer lines rose from 41,480 to 73,600. In addition, 42 water kiosks were established in several low income and peri-urban areas, charging a low price per cubic meter. Although kiosks charge more than the ELDOWAS rates, their rates are still lower than the national tariff average per cubic metre, since the bill includes also a sanitation surcharge of about 75%. As a result of these improvements, the Unaccountable for Water (UFW) has also declined from 55-60% prior to ELDOWAS to about 38%. The national average ranges between 40 and 70%. The revenue collection efficiency also increased from 62% for Eldoret Municipal Council to 85% for ELDOWAS. This value compares favourably to the national average of 50-70%, which is further hampered by a normal collection lag of many months behind billing.

<sup>&</sup>lt;sup>8</sup> The kiosks represent a huge burden to households as fetching water is time consuming. A typical household makes 4-6 trips daily to fetch water. As women largely shoulder the burden of fetching water, inadequate access to water has a major gender dimension.

This lag is not the case in Eldoret due to ELDOWAS. Moreover, outstanding debts have been reduced from U.S.\$4.4 million to U.S.\$3.1 million, and operating profit increased U.S.\$127,000 to U.S.\$486,000 in the 2002/2003 period.<sup>9</sup>

The strengthening in training capacity should also be noted. ELDOWAS inherited a bloated workforce of poorly trained, low remunerated, and unmotivated staff. Their attitude towards service provision was negative and in need of a culture change. Staff reduction to 160 and intensive training programs at the Kenya Water Institute have been instituted and results are encouraging. Initially, the company did not receive the public goodwill that it needed to do its work. Critical areas such as the collection of huge unpaid debts, the high Unaccountable for Water that is consumed or lost without income to the company, high transmission losses due to leakages in the pipeline and at the faulty meters estimated at some 25% of the 8,500 plots and 12,000 consumers connected presented a challenge that initially looked insurmountable, but as the public begun to receive improved services, the company found willing partners among them.

In 2004, the municipality had a water pipeline of 188 km. Of these, 65 km were laid in the 1928-1960 period and was therefore over 40 years old, well pass its useful life. Such an old network needed rehabilitation and extension to reduce leakage losses and extend the coverage. From taking over until 2008, ELDOWAS laid 7 km of pipes in previously neglected areas.

In several low-, medium-, and upper-income areas and in peri-urban areas, many plot owners had sunk shallow wells as alternative sources of water. Provision of good quality portable water and sewer lines in the low-income areas and the peri-urban areas has been hampered by the continued use of shallow wells and pit latrines due to deficiencies of water and sewerage services. Even with water kiosks provided, 60% of the poor households continue to use the free well water due to the current level of tariffs, which are still high for them, and the long distances to the water kiosks for those who cannot afford to connect to personal meters. The quality of the water from the shallow wells (most are 5-7 meters deep) is compromised by a high level of minerals in Eldoret's groundwater and contamination from pit latrines in the high-density low-income areas, causing water-borne diseases.

# Stakeholders, beneficiaries and participatory methodologies

The water and sewage services of Eldoret count upon several sources of financial support, both national and international. At a national level, both state and civil society initiatives are involved, including the Eldoret Municipal Council, ELDOWAS, local communities in the water catchment areas of Kaptagat and Moiben, several local organizations of civil society, the Kenya Water Institute, Moi University's Department of Civil and Structural Engineering Prof. Huissmann Water Laboratories, Ministry of Water Management and Development, and the Ministry of Local Government. Internationally, it counts upon support from KWF-Germany project grants and GTZ – German Technical Cooperation.

## **Beneficiaries**

This initiative benefits the broad population of Eldoret since it seeks to broaden the equity of access to safe water supplies. One of its targets is to broaden access to safer water and sewage services for the poor population of Eldoret, which represents the vast majority (more than 90%) of the urban and peri-urban population.

<sup>&</sup>lt;sup>9</sup> In 2002/03, ELDOWAS received revenues of U.S.\$2.2 million, with cost of sales and operating expenses of U.S.\$1.6 million.

#### Participation processes implemented

The Water Act requests consultation on a number of provisions and regulations. A culture of public consultation and active stakeholder engagement is gradually being built. Consumer and civil society representatives have been appointed onto the boards of the respective institutions. The Water Services Providers of Eldoret are broadening the process of improving customer service.

# **Outcomes and reflections**

# Key results and achievements

Eldoret is a rapid growing city, whose water infrastructure is one of the key infrastructures needed to support this rapid expansion. With high industrial activity, scientific and administrative activities, and high-demand households, access to water is a crucial political vector. Following the industrial decline of the 1980s and 1990s and the Kenyan policies of privatization of public sector water enterprises, Eldoret continued to have excess water capacity but its domestic consumers remained undersupplied due to historical injustices that limited network expansion to many areas that were located far from the centre. ELDOWAS had the opportunity to extend supply, but it was also going to be a costly affair.

The policy of commercialization of water and sewage services introduced by the Kenyan Government was implemented in all the large and medium-sized towns in Kenya. In Eldoret, it succeeded much faster than in other areas due to existing, working infrastructures that were easily hived off as a profitable internal venture of the city council, through a process that some have called 'modernization of municipal services'. There already existed a sustainable revenue stream from the water and sewerage services that only required an appropriate institutional framework to be successfully administered. The problems of illegal supply connections and huge unpaid bills that hindered system improvements due to lack of funds were addressed by public awareness campaigns. The council and its elected representatives stressed the gains to be had from a public company operating profitably, but with a community service responsibility so that it is able to expand services quickly and reliably to its consumers. Eldoret was not too big for the problems to be unwieldy. ELDOWAS adopted a market segmentation approach so that the tariffs reflected the key revenue and service provision goals to be achieved in specific time frames to ensure social inclusion. These goals included extending the network to the poor while charging reasonable tariffs. To do this, revenue collection had to be streamlined, services and billing efficiently run, and both poor and high-income areas served to gain revenue and provide community service.

# Overall assessment and replicability

The success of similar policies elsewhere will depend to a large extent on the ability of the municipal authority to identify service provision areas in which profit and community service goals could be pursued in tandem. Lobbying for the support of the central government in infrastructure improvement so that incremental investments could be leveraged later to gain both revenue streams and community service quality by the divested arms of the councils would be necessary. Advocacy for the development of appropriate legal institutional frameworks that support the pursuit of increased revenues from appropriate returns to capital, which can then enable the councils to extend services to hitherto excluded groups, would also be essential.

This policy initiative has a good chance of being sustainable. It is based on two key principles of the user and the polluter pays. To fulfill its public service and non-profit motive, the user

and polluter costing is based on a cost recovery approach since the water and sewerage infrastructures were, and continue to be, established using public funds. Although there was initial skepticism on whether the mix of business and public service models could be usefully applied, the success of ELDOWAS in terms of improved service delivery, quick and timely response to consumer concerns and complains, and increased access to sections of the community that were previously excluded, has shown that this is a workable model of service provision in Kenyan urban areas.

There are threats, though. Initially ELDOWAS was established as a wholly owned subsidiary of the Eldoret Municipal Council, but the repeal of several legal documents by the coming into force of the Water Act of 2002 has created new institutional arrangements currently being implemented. The problem is that there is now going to be increased bureaucracy in the way approvals for new services and extensions are handled. The regionalization of the water services has resulted in ELDOWAS being licensed to serve as a water and sanitation provider by Lake Victoria North Water Services Board (LVNWSB), in Northern province. The distance involved in this initiative has resulted in the leaders of ELDOWAS spending a lot of time not attending to their customers in Eldoret, but with bureaucrats in LVNWSB or in Nairobi. Also, LVNWSB is taking over the assets that ELDOWAS initially leased from Eldoret Municipal Council as the public custodian. This divorcing of water and sewerage services from the municipal councils may prove counterproductive in the long term. There does not seem to have been any need for further bureaucratization.

Further, between the collapsed public sector services and the initial push for privatization by the donors under SAPs, commercialization of water services and sewage was seen as the lesser evil. Now, there is a proliferation of oversight institutions and the new Public Procurements and Disposal Act of 2005 classifies companies owned by public institutions for purposes of service provision (e.g., ELDOWAS and Eldoret Municipal Council) as public organizations that must comply with the new law. While the intent is noble – to eliminate corruption in public procurements – the law virtually paralyses purchases, creates room for all kinds of litigation and, once again, binds water services and sewage organizations to the weaknesses of public institutions they were running away from.

There is there a real danger that, in time, the inefficiencies of the past will creep back into water services and sewage and this may give future administrations the excuse to totally privatize these services, to the disadvantage of low-income urban residents. If this happened, all the gains so far realized would be lost.

## **Further information**

The narrative was written in 2007 by Dr. Gordon Okoth Achar, Lecturer at the School of Human Resource Development at Moi University, Eldoret under the coordination and edition of Prof. Cabannes assisted by Yasar Adnan Adanali, at the Development Planning Unit, University College London, UK.

All narratives compiled in 2007 including this one were revised by a DPU editorial committee composed of Ernesto Jose Lopez Morales, Sonia Roitman, Michelle Pletsch, Steffen Lajoie, Luisa Dornelas, Iyad Issa and Pechladda Pechpakdee.

<sup>&</sup>lt;sup>10</sup> Among the arrangements, one should point out the transfer of the provision of water and sewerage services to the Ministry of Water and Irrigation (MWI) from the Ministry of Local Government (MLG) through the various councils. Four organs have been created to implement this policy: the Water Services Regulatory Board (WSRB), the Water Resources Management Authority (WRMA), the Water Appeal Board (WAB), and the Water Services Boards (WSBs).

The original text was edited to a standard CISDP Observatory format in 2010 by Leonardo Veronez de Sousa (doctoral student) under the supervision of Dr. Paula Menses at the Centre for Social Studies, University of Coimbra, Portugal.

## UCLG Committee on Social Inclusion, Participatory Democracy and Human Rights

Website: https://www.uclg-cisdp.org/

Contact information: <a href="mailto:cisdp1@uclg.org">cisdp1@uclg.org</a> | +34 933 42 87 70

# References

Budds, J. & McGranahan, G., 2003, Are debates on water privatization missing the point? Experiences from Africa, Asia and Latin America, *Environment and Urbanization*, 15(2): 87-114.

ELDOWAS, 2001, Eldoret Water and Sanitation Company Ltd. corporate plan 2000/1-2004/5.

Hardoy, J.E., Mitlin, D. & Satterthwaite, D., 2001, *Environmental problems in an urbanizing world: Finding solutions for cities in Africa, Asia and Latin America*. London: Earthscan.

K'Akumu, O.A., 2004, Privatization of the urban water supply in Kenya: Policy options for the poor, *Environment and Urbanization*, 16: 213-222.

Kimani-Murage, E.W. & Ngindu, A.M., 2007, Quality of water the slum dwellers use: The case of a Kenyan slum, *Journal of Urban Health*, 84(6): 829-838.

Mehta, M. & Virjee, K., 2007, Microfinance for rural piped water services in Kenya, *Policy Note*, no. 1. World Bank.

Ministry of Water and Irrigation, 2007, *The national water services strategy: 2007/2015*. Nairobi.

Republic of Kenya, 2001, *Poverty reduction strategy paper for the period 2001-2004*. Vols. I and II. Ministry of Finance and Planning. Nairobi: Government Printer.

Republic of Kenya, 2002, National development plan 2002-2008. Effective management for sustainable economic growth and poverty reduction.

Schäfer, D., Werchota, R. & Dölle, K., 2007, MDG monitoring for urban water supply and sanitation: Catching up with reality in Sub-Saharan Africa. Eschborn: GTZ.

UN-Habitat, 2003a, *Slums of the world: The face of urban poverty in the new millenium?* Global Urban Observatory. Nairobi: UN-Habitat.

UN-Habitat, 2003b, *Water and sanitation in the world's cities: Local action for global goals*. London: Earthscan.

Uwazi, 2010, It's our water too!: Bringing greater equity in access to water in Kenya, *Policy Brief*, No. 1.

Various, 2006, Accelerating water supply and sanitation for the urban poor: East Africa regional conference. Nairobi.

World Bank, 2009, Country status overview of water supply and sanitation Kenya. Consultation Draft. Nairobi.