

# WATER AND SANITATION IN

## KENYA

Water and sewerage in Kenya have narrow access, especially in the urban slum areas. Nevertheless, water even in the urban areas is intermittent, not safe for drinking and unaffordable. Water and sanitation scarcity is contributed to by the common rural-urban migration and the fact that much of Kenya is relatively dry country. Water in this context implies piped domestic water. Sanitation on the other hand is the adequacy of clean drinking water and proper disposal of effluents or sewage disposal; matters dealing with public health.

In 2014, the average standard cost of water in urban areas was Ksh.60 per  $m^3$ . Most of the water provided is non-revenue water, that is, water that does not generate income. For instance, water for domestic purposes. As a result, water utility is expensive; and mostly does not even recover the capital expenditure incurred to tap and distribute it, more so to far flung areas. This is still a strained sector of the economy of Kenya, where improvement needs to be made. According to the United Nations, only 43% of Kenyans have access to tap water. In Africa, women are relied on to fetch water in case of scarcity, leading to many girls missing out on school. Lack of safe water, especially Sub-Saharan Africa, leads to an increase in water borne diseases such as diarrhoea and typhoid.

Water Aid, a UK based charity organisation, reports that slightly above half of Kenya's population has access to clean water. The rest of the population depends on water vendors and kiosks, which leads to an increase in the risk of contracting water borne diseases. Diarrhoea is the leading cause of mortality among children under 5 years, followed by pneumonia. Another

point of concern in Kenya is the illegal connections and the faulty or disconnected meters which contribute to losses in revenue for Nairobi Water and Sewerage Company.

Water services are managed by the Ministry of Water and Irrigation, whereas sanitation is under the Ministry of Public Health and Sanitation. Water services provision was previously the role of National Water Conservation and Protection Corporation (NWCPs) solely, and a few local utilities. However, in 2002, the Water Act underwent major reforms to allow for other local water service providers who are linked to 8 Water Service Boards to provide water to the locals. The local water service providers cater for 21% while the rest is serviced by other sources. The water service boards are responsible for asset management through issue of water Service Provision Agreements (SPAs) and lease their infrastructure to the water providers. The new Act also led to the establishment of a national regulatory body, the Water Resources Regulatory Board (WASREB), which carries out performance benchmarking, and also approves SPAs and adjusts tariffs. Its functions are separated from those of the Water Resources Management Authority (WRMA), which was also established in 2003 following the enactment of the new Water Act of 2002. Its main objectives are to ensure equality in allocation and access of water resources. WRMA is also supporting the government's Vision 2030 through the following projects:

- Development and implementation of the National Water Master Plan, Vision 2030.
- Continuously collecting and analysing water resources data
- Establishing Water Resources Monitoring stations nationwide
- Carrying out ground water assessment
- Developed a Water Resource Users Association (WRUAs) that enables them collaborate with members of the community in managing water catchment areas.

With regard to sanitation, only a quarter of the dense Nairobi population (around 4 million residents) have household toilet facilities; a third use shared facilities and the rest resort to 'flying toilets' which means disposal of human waste is done in plastic bags and disposed of haphazardly.

In Mombasa, a Ksh.1.3 billion project was launched in June 2014 to raise safe drinking water prevalence from 70% to 90% of the city's population. It was financed by the World Bank and the Netherlands.

## FUTURE FOR THE WATER AND SANITATION DEPARTMENT

According to the National Water Master Plan, the per capita renewable water resources increased by a compounded annual growth rate of 4.1% in 13 years from 1997. This is expected to increase significantly with the discovery of the Turkana water sources, which could last the country 70 years according to the government. The two water sources which are located at the Turkana Basin and Lotikipi Basin, were discovered using satellites by Kenya aquifers, and are said to have a capacity of 250 billion cubic metres.

Vision 2030 requires \$1.9 billion to provide adequate water and sanitation services. Currently, only a third has been raised. The annual budget is estimated between Ksh.35 to 38 billion; a third of which is raised by national treasury and the rest through foreign assistance. A Ksh.302 million project is already underway in Kitui to support the drilling of boreholes, construction of dams, extension of water pipes and irrigation schemes.

Potential investors from all over the world are awaiting the passing of the New Water Bill that will state with clarity the roles of private sector investors and also facilitate investments. Vision 2030 seeks to close down on the problem of water and sanitation scarcity in Kenya.