### AS THE POPULATION INCREASES, MANY OF THE WATER SOURCES GET CONTAMINATED



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## Spring water in urban areas not safe

**By Gilbert Kidimu** 

ast year, typhoid fever ravaged the central business district of Kampala in February and March, affecting over 1,090 people. An outbreak of typhoid, a water-borne disease, spreads through eating food and drinking water contaminated with faecal matter, was declared in Kampala on February 19, after numerous cases were reported and confirmed in the city centre.

By the time it was controlled, the fever had already claimed lives and spread to all the city divisions, with Rubaga and Makindye being the most affected. Later, the outbreak spread to the neighbouring districts of Wakiso and Mukono.

Dr Jane Ruth Aceng, the director general of health services at the health ministry, says the declaration of an end to the outbreak came after four weeks of treatment centres reporting cases below the baseline typhoid outbreak thresholds of less than five cases in every 50,000 people.

She says the ministry, together with Kampala Capital City Authority (KCCA), Word Health Organisation as well as the US Centre for Disease Control, constituted teams of epidemiologists to investigate the outbreak. From the findings, it was established that the outbreak was due to consumption of contaminated water from underground sources and springs and vended locally-made juices prepared with contaminated water.

Following the control of the outbreak, the ministry recommended National Water and Sewerage Corporation(NWSC) to be the only source of water in the city.

The director of water development at the ministry of Water and Environment, Eng. Aaron Kabirizi, adds his voice to Dr Aceng's by warning people in urban settings against using spring water because it is contaminated.

"As the population increases, many water sources get contaminated. For



President Yoweri Museveni commissioning water stand tap. This is water deemed to be safe by NWSC

example, we cannot advise people in urban settings, to use spring water because it is contaminated. Originally, when we drilled boreholes, water was safe, but now when you go to urban centres, many of the water sources are contaminated," Kabirizi says.

However, while NWSC has expanded to more major towns in Uganda, the majority of residents of Kampala and areas around lack access to the national water grid.

According to Water Uganda, more than 40% of people living in the greater Kampala live in unplanned

# 63% OF THE TOTAL POPULATION LIVES ON LESS THAN \$2 PER DAY

settlements. Of those residents, only 17% have access to piped water. Many people use springs and other surface sources that are highly contaminated due to poor drainage and poor waste disposal.

"High population growth (more

than 5% annually) due to migration to informal settlements stresses water and sanitation resources that are currently available," the report reads.

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In unplanned urban settlements near Kampala, residents pay up to three times more for safe tap water than residents living in planned urban communities. "A total of 63% of the total population lives on less than \$2 per day.

As a result, residents collect water from alternate contaminated sources, which causes frequent outbreaks of waterborne diseases, such as cholera and dysentery."

#### Challenges

Dry zones, especially in Kampala due to low water pressure as a result of the hilly terrain and aged pipe infrastructure, make it hard to provide water for the whole district, according to the Ministry of Water and Environment 2015 report.

The report further highlights the high levels of water losses, which stand at 31.2%. This is attributed to the aged pipe network, leaks, bursts and water crimes, such as illegal connections and meter vandalism.

There is inadequate infrastructure to meet the increasing demand. The rising demand for water supply is as a result of the growing construction industry and increased urban population. Whereas this demand presents an opportunity to grow, the existing infrastructure cannot adequately support it.

There is also a high level of arrears accruing from domestic, institutional and commercial customer segments.

### Saving Lake Victoria

NWSC started the Kampala Water Lake Victoria WatSan Project, which involves the rehabilitation of Ggaba 1 and II treatment plants and a new transmission from Ggaba to Namasuba, with the aim of improving water supply reliability in the surrounding areas. It is about 6km

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The Lake Victoria Protection project, also known as Nakivubo-Kinawataka Sewer project, is part of the Kampala Sanitation Programme, aimed at ensuring improvement in urban hygiene, sanitation and protection of Kampala's natural environment. It involves construction of the Nakivubo waste water treatment plant, Kinawataka pre-treatment and pumping station, pumping mains from Kinawataka sewerage system to Nakivubo sewerage system and laying a trunk sewer line of 24km and construction of feeders to the trunk sewer line of 5.8km. Other associated works include manholes and tie-in