

Uganda pays high price for

By Gloria Nakajubi

Due to the increasingly declining water levels in River Rwizi, the Ministry of Water and Environment has been forced to start drawing water from River Kagera, which still has a good water flow. However, this is coming at a huge cost to the taxpayer in excess of sh500b.

According to a 2017 bid document by the National Water and Sewerage Corporation (NWSC) and the water and environment ministry calling for consultation services for the project, it was stated that Kagera Water Works Package 1, which consists construction of the Kagera water supply system (intake from Kagera River) as well as main transmission pipe was estimated to cost about euros 50m (about sh230b), while Package 2, consisting of rehabilitation improvement of the Mbarara water supply network and sanitation systems at about euros 20m (about sh92b).

With increasing demands for water due to urbanisation and increasing population amidst unsustainable use of the environment have left River Rwizi barely holding on to dear life.

River Kagera, according to the permanent secretary of the Ministry of Water and Environment, Alfred Okidi, has adequate and stable flow of water throughout the year.

The projects detailed designed are nearing completion. It will provide water for both urban and rural communities from Isingiro to Mbarara along the main transmission line and the surrounding rural areas. The intake has been designed to provide water for production too," he explained.

River Rwizi banks, according to Okidi have been heavily settled and the wetlands that fed it with water have been drained for human settlement, agriculture and grazing. This has resulted into siltation and pollution of the river by agricultural chemicals, human and animal waste.

Mbarara is one of the largest urban centres in Uganda, according to the 2014 National Housing and Population Census and has had its population more than double in the last decade with a total of 195,165 residents up from the 69,503 in 2001.

The population has also increased in the other 10 districts, including Buhweju, Sheema, Bushenyi, Ntungamo, Isingiro and Kiruhura through which River Rwizi flows.

According to a 2015 study titled *A shared water risk assessment for vulnerable water basin: River Ruzizi in Uganda* by P. Songa, J. Rumohr and R. Musota, all the water demand trends examined were increasing, mainly as a result of population growth and increasing urbanisation.

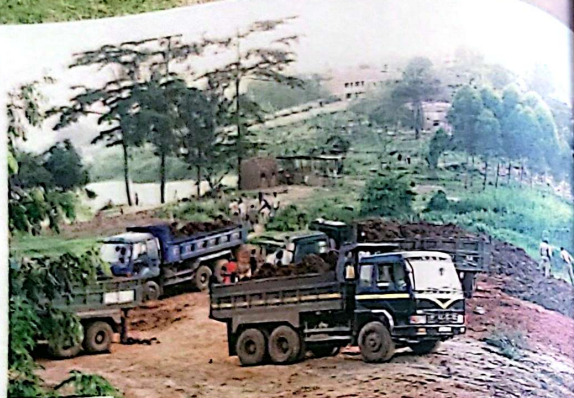
"Total water demand in the catchment was projected to grow from 28 million cubic metres per year in 2011 to 95 million cubic metres by the year 2035" reads the report.

River Kagera is the largest of the 23 rivers that drain into Lake Victoria and it carries 34 per cent of the annual inflow to the lake, over twice as much as the next largest river, the Nzoia in Kenya. This proportion drops to 24 per cent when



Human activities such as unsustainable grazing of cattle are threatening water resources

RWANDA THROUGH WHICH RIVER KAGERA FLOWS TO UGANDA HAS OFFICIALLY TURNED ITS WETLANDS INTO FARMLANDS. SO YOU CAN IMAGINE THE KIND OF WATER THAT IS FLOWING FROM THERE INTO THE RIVER.



Construction in wetlands means the areas can no longer hold and filter water

the input of rain less evaporation on the lake surface is taken into account.

Is it worth it?

Though there is excitement for an alternative source, Evelyn Busingye, the programme officer for Water and Biodiversity at the International Union for Conservation of Nature (IUCN) thinks otherwise.

"The focus has been on the fact that Kagera has sufficient waters. However, when it comes to water quality, the water from Kagera is of poor quality that we shall eventually have to spend billions in its treatment," she says.

She argues that the most sustainable alternative is to restore R. Ruzizi's capacity. "The upper

catchment of R. Ruzizi is well endowed with wetlands and when it rains the recharge capacity is very high. Unfortunately, it is this area that is being degraded." The Government, she says, just needs to enforce the environment conservation policies.

For the period between 2014-2016 when IUCN was implementing a conservation project in the Ruzizi area, one of the major wetlands, Katara-Kanyabukuna was restored hence improving the quality of water flowing into the river but also is able to retain the water after it rains.

"Rwanda through which R. Kagera flows to Uganda has officially turned its wetlands into farmlands. So you can imagine the kind of water that is

flowing from there into the river," she says.

According to Busingye, if the different water users in Mbarara such as the beverage and dairy companies and other industries, they should be able to pool funds for environmental conservation knowing that water is at the core of their production processes.

To protect River Kagera from becoming as vulnerable as Ruzizi, Okidi the ministry together with partners has embarked on restoration of wetlands, demarcation of the boundaries and protection of the river banks and success is already seen in a number of areas' and education of the communities along the river is being undertaken.

tampering with environment



River Ruzizi in western Uganda is quickly running dry

jobs through the value chain.

According to Sumin Namaganda, the brewery's external communications manager, the Mbarara establishment currently pays approximately \$20,895,522 (about sh76b) per year in taxes to the Government. But also there is a chain of over 20,000 farmers benefiting from the Nile Breweries local sourcing project and are growing sorghum, barley, maize and sugar, all are - ingredients used in beer production. This is just one company in the area. This, therefore, means the cost

would be quite immense if the river was to dry up.

Way forward

River Ruzizi catchment, according to Okidi receives a lot of water in the rainy season but this water flushes through due to rampant conversion of wetlands to farm lands. "As a result the water moves through the catchment very fast and causes flooding and erosion of river banks and siltation of water bodies," he says, adding that just after the floods, there is unfortunately a drought that results in low water levels.

Working with other stakeholders such as local governments, civil society, private sector such as Coca Cola and development partners (GIZ, Austria, Denmark), Okidi says they have already restored six wetlands in the whole Ruzizi catchment, embarked in demarcation of river banks and protected two micro catchments in Buhweju and Sheema districts. A catchment management committee for Ruzizi has been set up and is chaired by the district chairperson of Isingiro and includes all the 11 districts through which the river flows.

Uganda Timber Growers Association (UTGA) would like to join the world as we celebrate the International Day of Forests under the theme "Forests and sustainable cities". UTGA is the umbrella body for commercial tree growers in Uganda.

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What sh312b could do?

In a resource constrained economy like Uganda, sh312b is but a huge loss given the numerous demands that have seen the Government forced to borrow to fund some of the national budget activities. If spread out in the other sectors of the economy, this amount could for instance:

Education wage budget

As of June 30, last year 2017, the education ministry had a cumulative wage expenditure of sh12,365b and a non-wage expenditure of sh131,12b. This is a total of sh143,479b. So basically, the money that is to be spent on R. Kagera would have cleared this bill and leave the country with a balance of sh168,522.

Year's capitation grant

At the rate of sh10,000 for each primary school going pupil, sh312b would clear a school year's capitation grant for the current 2,655,224 pupils. For one term, the schools require a total of sh26,56b which comes to sh259,67b for the three terms. According to a 2015 'Pre-primary and Primary Education in Uganda

Access, Cost, Quality and Relevance' report by the National Planning Authority, the Government had continuously defaulted on the payment of capitation grant which was at sh7,000 at the time. The figure from 2002 to 2012 averaged between sh4,000 to sh6,000. This therefore created a cumulative shortfall of sh11,53b or an equivalent of 15,932,857 over that period.

Wages at public universities

The financial year 2016/17 had a total of sh25,74b paid out in wages for all the staff at the different public universities; Makerere (sh100,66b), Masarua University of Science and Technology (sh22,11b), Makerere University Business School (sh18,21b), Kyambogo University (sh31,97b), Uganda Management Institute (sh3,95b), Gulu University (sh19,89), Busitema University (sh5,82), Muni University (sh3,81b), Lira University (sh2,91b), Kabale University (sh3,86b), Soroti University (sh2,54b). After paying off these wages, there would still be an unused sh8,26b of the sh312 going to River Kagera project.

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The staff and management of AWICO Engineering Company Ltd with great pleasure join the World in celebrating World Water Day today 22.3.2018. We also want to thank the Government of Uganda and other development partners for providing adequate support in water sector. Remember our **MISSION** is to provide professional, innovative & client focussed performance in Engineering & general trade.

1200cu m Water Reservoir Tank Constructed at Kibuka-Lyantonde District under Water and Sanitation Development Facility, South Western Branch in 2016

Installation of solar street light council, 21

Newly Constructed Reservoir Tank by Awico for Mucwini Sub County under Ministry of Water and Environment (NSDF-N) in 2017

Solar Grid system installed by Awico to pump water from the production well at Mucwini Sub County under Ministry of Water and Environment (NSDF-N) in 2017

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