

Disappearing Wetlands

SET
UP

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Livelihood. Many people living in and around Wakiso District earn their living from the 12 wetlands in the district, through sand and clay mining, papyrus, timber and medicinal plant harvesting.

The disappearing wetlands of Wakiso District

Degradation. Wakiso has both permanent and seasonal wetlands. Environmentalists predict these wetlands will vanish within a few years because colossal infrastructural developments, urban migrations, a messy land tenure system, and institutional weaknesses of NEMA and the district land office are tipping the scales in favour of degradation as **Gillian Nantume** found out.

Uganda is gifted by nature – or so it was, until the population growth exploded, unemployment and poverty rates soared, and people discovered the ‘free’ land in Wakiso’s wetlands.

The Uganda Wetlands Atlas estimates that wetlands in Wakiso cover 8.6 per cent of the land, with many of the permanent wetlands found in Entebbe Municipality and Busiro County, on the shores of Lake Victoria.

The wetlands in Wakiso fall under two systems: Lake Victoria and River Kafu. When it comes to sustainable development, many people living in and around Wakiso earn their living from the 12 wetlands in the district, through sand and clay mining, and papyrus, timber and medicinal plant harvesting.

Access to safe drinking water coverage in rural areas in Uganda is estimated at 69.5 per cent; consequently wetlands are crucial in the provision of water, especially during the dry season (UBOS2014).

According to the Uganda Wetlands Atlas, the value of Uganda’s wetlands for domestic water use is estimated at \$34m (Shs122.4 billion).

Wetlands have countless benefits, ranging from freshwater supply to flood control and climate change mitigation. Wetlands provide fresh water to the communities that live around them. They guarantee a steady supply of food, more specifically fish, throughout the year. They are habitats for animals, such as, snakes, monitor lizards, and other species, and are breeding and migration grounds for birds.

They absorb rainfall, creating surface pools that reduce flooding of streams and rivers that surround them. They are also carbon sinks, which slow down global warming. However, wetlands can only fulfill their ecological and economic contributions to the economy if they are left intact.

A moderately degraded wetland is only partly able to meet its potential for flood control whereas a degraded one may lose its ability to purify water and ultimately destroy the habitat for aquatic biodiversity.

Development vs. conservation

In 1994, the wetland coverage in Uganda was 15.6 per cent but according to projections

of the Wetlands Management Department in the Ministry of Water and Environment, by December 2016, the wetland coverage was down to 8.4 per cent.

These wetlands are under threat from encroachment, over-exploitation, agricultural cultivation, and degradation because, among other things, Wakiso is a major source of sand and clay for the construction industry.

Uganda is trying to jump into middle income status almost as an afterthought

Encroachment. Many wetlands in Uganda are under threat from encroachment, mainly for farming and sand mining activities.
PHOTO BY JOSEPH KIGGUNDU

and as such, development has become a necessary evil. For instance, there are two NEMA approved sand mining sites in Lutembe Bay wetland.

Mr Tom Okurut, executive director of National Environment Management Authority (NEMA), says the Authority issues permits for sand mining in wetlands.

“Sand mining is a regulated activity because people need sand to construct houses. The sand in wetlands is of high quality – glass sand – not the coarse sand found at lakeshores. That high quality sand is used in big projects such as Karuma and Isimba dams construction. If we have 10 such projects which consume 5,000 metric tonnes of sand every month, we would be finished. Such huge deposits of sand are only found in Lwera,” he explains.

Mr Okurut argues that a country cannot watch its resources (wetlands) going to waste when they can be utilised, under conditions.

“The condition we give mining companies is that they should extract sand up to a certain level and that they should not refill the pits with foreign soil. Unfortunately, these developers get so excited by the sand that they take all of it and violate the conditions we have set.”

Road construction in wetlands is a regulated activity. Kampala Northern Bypass Highway and Entebbe Express Highway are built in wetlands. Parts of the Northern Bypass were dumped directly in Lubigi swamp. The periphery of the swamp was filled with rock base to create the road surface. More rock base was dumped during the construction of roads in Nansana and Nabweru in 2010 raising concern about biodiversity conservation.

Mr Esau Mpoza, the Wakiso District

PERMITS. The Parliamentary Committee on Natural Resources found that NEMA regulated 14 sand miners in the wetland through issuance of wetland resource user permits offered at Shs100,000 each. However, many companies had violated their permit conditions.

environment officer, says there are procedures, such as the wise use principle, that should be followed when constructing in wetland. “For instance, every part of Entebbe Express Highway that passes through the wetland has been built on columns. There was no dumping of rock base.

The condition given to the construction company was that after construction, they must restore the wetland. Right now, they are removing all the soil they dumped, so with time, the road and the wetland will co-exist.”

69.5%

Water supply. Access to safe drinking water coverage in rural areas in Uganda is estimated at 69.5%; consequently wetlands are crucial in the provision of water, especially during the dry season (UBOS2014).

According to Mr Okurut, wetland conservation is a good idea up to a certain point. “There are areas that can be utilised. The Serena Kigo golf course is seated on top of a wetland. We allowed them to build it because they were putting up greenery. Though the golf course interferes with the ecosystem, it will soon bring more value. Nowadays, there are many bird species in the area. People need to stop worrying. Wakiso’s wetlands are here to stay. Some of the big ones have not even been touched.”

To mitigate the problem of development coming at the expense of conservation, the Ministry of Water and Environment,





Regulated. "Sand mining is a regulated activity because people need sand to construct houses. The sand in wetlands is of high quality – glass sand – not the coarse sand found at lakeshores. **YONI THURUTU, EXECUTIVE DIRECTOR OF NEMA**

WETLANDS IN WAKISO

Lake Victoria System

- The 10 wetlands in this system are found on the north-western shore of the lake.
- Kaliddubi wetland is located in Makindye-Ssabagabo. A few years ago, its swamp used to run from Wankulukuku, across Entebbe Road, through Makindye-Ssabagabo and then pour into Lake Victoria at Munyonyo. However, due to encroachment, what is left is just a trickle of water. Kaliddubi's tributaries are Walugogo and Lufuka wetlands.
- Kasa Mabamba Wetland Ramsar Site is a permanent wetland in Mabamba Bay, west of Entebbe International Airport in Kasanje Sub County. It is a breeding ground for over 300 bird species, and in 2006, became a Ramsar-listed wetland.
- Lutembe Wetland Ramsar Site, also known as Kachinda swamp, is a shallow wetland that is important for bird conservation.
- Makanaga wetland, located in Bussi Sub County is also rich in migrant birds, fish, and animals.
- Lufuka (Kayirigiti) wetland found in Makindye Sub-county, between Mutungo and Kigo is a permanent swamp into which River Lufuka drains.
- Lumpewo wetland in Kajjansi has an inflow of River Kakuku, River Kyetinda, and River Kajjansi. More than 20 years ago, it was dominated by papyrus, sitatunga, and crested crane.
- The Entebbe Peninsula lakeshore

- wetlands include Kanyamusanga, Namiro, Lunyo, and Busambaga, all located in Entebbe Municipality. These wetlands are part of Entebbe Bird Sanctuary and since they are largely untouched, ensure that sediment and nutrients from storm water is retained in Waiya Bay, thus ensuring high quality water.
- Nambirigwa wetland forms part of the boundary for Entebbe Municipality, and Katabi and Ssisa Sub-counties. The tributaries of this wetland, include Kalandazi, Nalumunya and Mugomba riverine wetlands.
- Kisubi Bay wetlands
- Tende Bay wetlands in Lyamutundwe and Kisubi.

River Kafu System

- Mayanja Kato wetland is permanently

flooded and covers 54.1 square kilometres. Its most famous feature is the Lubigi swamp. The tributaries that feed Mayanja Kato, include Namaya-Kasansa-Mwerango, Muyoboi, Nonve, and Kanyogoga. The rivers that feed Mayanja Kato wetland are Kanyogoga, Nabaziza, Namusizabulusi, Kasomba, Wakyato, Balisanga, Nonve, Nalubagga, Nakatumba, Namitanda, Kasiwa, Wemago, Nakinyika, Namukyama, and Kayanja.

- The Mayanja Wasswa permanent wetland covers 45 square kilometres and is found north of Kakiri. It has many seasonal wetlands and rivers linked to it. It joins Mayanja Kato to drain as River Samugabi in Mubende District.

Source: Uganda Wetlands Atlas

has developed guidelines for integrating and mainstreaming wetlands conservation in the work plans of ministries with a high impact on wetlands disappearance, such as, Ministry of Lands, Housing and Urban Development, Ministry of Energy and Mineral Development, Ministry of Works and Transport, and Ministry of Agriculture, Animal Industry and Fisheries.

Mr Collins Oloya, commissioner, Wetlands Management Department, says, "Both development and conservation can coexist through the use of Environmental Impact Assessments (EIA), which identify the likely negative impact of a development

on segments of the environment and develop mitigation measures. EIAs limit an investor's development to within specific location coordinates which are not in the wetland."

Loopholes in EIAs

As with every other mitigating measure, if the issuing authority is not vigilant, people will always find and exploit loopholes. For instance, 24 sand mining sites were established in Lwera wetland, on Masaka Road, but according to NEMA, only four have valid permits. The Parliamentary Committee on Natural Resources found that NEMA regulated 14 sand miners in the wetland through issuance of wetland resource user permits offered at Shs100,000 each. However, many companies had violated their permit conditions.

He Sha Duo Company did not restore a number of sand borrow pits; Capital Estates erected permanent structures in the wetland, transported wet sand, and established fish ponds within 200 metres of Lake Victoria protected zone; and Lukaya Sand Dealers and Tesco Industries were mining sand within 200 metres from Kampala-Masaka Highway, weakening the stability of the road and making it prone to flooding. Businessman Peter Abomugisha and Zhong Industries were mining sand illegally without wetland user permits.

The Committee also noted that NEMA irregularly issued addendums or variations to wetland user permits without environmental audits or subsequent EIAs. For instance, Aqua World (U), which belongs to Prophet Samuel Kakande of Synagogue Church of All Nations Uganda, wrote to NEMA on July 26, 2016 seeking guidance on how to mine sand on its site given the change in interest from fish farming.

NEMA, instead of giving guidance on how to acquire a sand mining permit, issued the company with an addendum permitting sand mining on August 23, 2016 without prior environmental audit or EIA. As a result, Aqua had mined sand within 200 metres of Lake Victoria protected zone.

It is clear that once NEMA issues wetland user permits, its officials rarely

of the investor. "When they are issuing these (wetland user) certificates they tend to think they are dealing with gentlemen," Mr Mpoza says, adding: "There are a number of activities taking place in wetlands, which are not approved or are not complying with the conditions of approval."

For 2016/2017, NEMA has approved 2,600 projects but the institution does not have the logistics to inspect all those projects.

However, Mr Okurut is optimistic. "We have just been given approval (by The Parliamentary Committee on Natural Resources) to recruit 100 per cent of the staff we need. Soon, the inspections will begin."

On the rare occasion that NEMA actually carries out inspections, equipment of the defaulters is impounded, permits cancelled, restoration orders issued, and the workers found on site are arrested.

However, wetland encroachers are not only large developers, but they also include small scale wetland users.

According to the National Environment Act Cap 153, regulated activities in wetlands include brick making, spot fishing, maintenance of green spaces, cultivation, drainage, commercial exploitation of wetland resources, sewage filtration, fish farming, construction of transport and communication facilities, burning, and harvesting of papyrus.

Any person who wishes to carry out such activities must apply for a wetland resource user permit from NEMA.

Unfortunately, many encroachers in wetlands are not bothered about user permits and as such, some district officials seem to be living in denial that the wetland cover is decreasing at an alarming rate.

According to Mr Mpoza, the clarion call on wetlands conservation is misleading.

"If someone looks at urban areas, they can say the wetlands in Wakiso are finished, but, there are those in the rural areas, which are still intact. I agree though, that the percentage coverage has reduced," he says.

Wakiso District has only one wetlands officer, Stella Nalumansi, who has the unenviable task of inspecting wetlands in Matugga (Bombo Road), Nsangi (Masaka Road), Nangabo (Gayaza Road), Kira (Jinja Road), and Kigungu (behind Entebbe International Airport).

She paints a bleak picture. "In less than 10 years, none of these wetlands will be in existence. When I look at the trends, such as, the land grabs and high rate of development, if we do not wake up, we are bound to lose them."

In the second part tomorrow, we explore the driving force behind wetland degradation in Wakiso District



Profitable.
Sand mining on Lake Victoria at Lugumba Landing Site in Kasanje Sub-county, Wakiso District.
PHOTO BY JOSEPH

