

Amuru fish pond in Uganda. Photo Credit: Lominda Afedraru

## Uganda scientists breathe new life into fish farming

By Lominda Afedraru

**WELO** Fish Farm Ltd in Northern Uganda's Oyam district is a model agricultural enterprise.

Set on a former rural homestead, the company runs a fairly complex operation that includes a fish hatchery, fish ponds, and milling machines for maize, sunflower and rice.

Incubator rooms are designed to mimic a natural stream environment, with constant upwelling flow of fresh water to supply oxygen and wash away waste.

Incubator trays are filled with small, plastic, saddle-shaped pieces that act as artificial gravel. The substrate also provides hiding spaces where

hatched young fingerlings can remain undisturbed until they have absorbed their yolk material for body development.

The company is building a fish feed mill, the only facility of its kind in the region, to enable it produce and supply fish pellets to farmers in Oyam and neighbouring districts in addition to fingerlings of the African catfish.

James Ebuku, the 33-year-old founder of Awelo Fish Farm, puts the entire investment in the enterprise at between UGShs600-700 million.

But its origin couldn't have been humbler, with Ebuku starting off with little more than passion for fish rearing and personal ingenuity.

It all started in 2013 when he completed an IT course at Makerere University in Uganda's capital city, Kampala.

Instead of continuously searching for jobs and failing, he decided to undertake a one-year training in fish breeding at the Aquaculture Research and Development Centre in Kajansi.

In 2015, he left the city and moved to the village to start his fish farm.

"I saw my father's house in the village empty and decided to put it to good use, with every room turned into a fish pond. Most famers in the region concentrate on using wetlands where they dig ponds but mine is unique," he says.

Ebuku hatches and sells fingerlings to fellow farmers at between Shs400-Shs500 each depending on the size.

The facility at the moment has a capacity to hatch and breed 20,000 fingerlings at ago but his target is to produce 100,000 fingerlings at the end of this year

Mature fish, at six weeks if well fed, is sold at a farm gate price of UGShs8,000 and UG Shs10,000 in the open market.

Ebuku hopes involvement in a programme implemented by scientists from the National Agricultural Research Organisation (Naro) will improve his farm's capacity to breed fingerlings and meet the growing demand.

The Naro scientists under the Development Initiative for Northern Uganda (Dinu) are promoting adoption of better farming technologies.

The DINU Northern Uganda coordinator, Dr Alfred Komakech, said they were taking stock of active fish farmers in the district and identifying the challenges they are faced with in a bid to give assistance in terms of technical advice and inputs.

According to recent Food and Agriculture Organisation (FAO) data Uganda produces up to 15,000 tonnes of fish from aquaculture.

There are an estimated 20,000 ponds throughout the country with an average surface area of 500 metre square per pond.

Production ranges between 1,500 kg per hectare per year for subsistence farmers to 15,000 kg per hectare per year for emerging commercial fish farmers.

But aquaculture faces several challenges, mainly disease outbreaks, poor quality brood stock of fingerlings, poor quality feeds and water quality management which needs to be addressed.

Merecelino Onencan started his farm in early 1970s but was forced to halt operations due to the insurgency in Northern Uganda.

He revived it in 2004 as Kukure Integrated Fish farm.

But the Naro scientists say the few catfish and tilapia fingerlings in his four ponds are too old to yield much, being from a brood stock of 2014.

They intend to help Onencan revamp the business by providing new brood stock, a good water pumping system to enable enough oxygen for the fish as well as quality feed. His hatchery will also be refurbished.

Howard Kasigwa, a fish breeder, notes that the Naro intervention comes in handy because fish farmers like Onencan lack knowledge of good pond management and access to quality fingerlings.



James Ebuku at his fish farm in Northern Uganda where he hatches catfish species. Photo Credit: Lominda Afedraru