

## OVER 450 IRRIGATION SCHEMES CONSTRUCTED TO BOOST FARMING

PHOTOS BY IBRAHIM RUHWEZA

## HOW BAMBOO IS PRESERVING RIVER NILE TRIBUTARIES

By Ibrahim Ruhweza

River Ora begins its long, restless journey from the DR Congo, cutting across Zombo, Nebbi, Madi-Okollo, and finally snaking through Pakwach district before emptying into the River Nile. Along its path, it gathers momentum as a fast, heavy-flow river that has become both a blessing and a threat to the farming communities that depend on the fertile soils it leaves behind. When it floods, crops vanish overnight. When the riverbanks collapse, entire fields slide into the water.

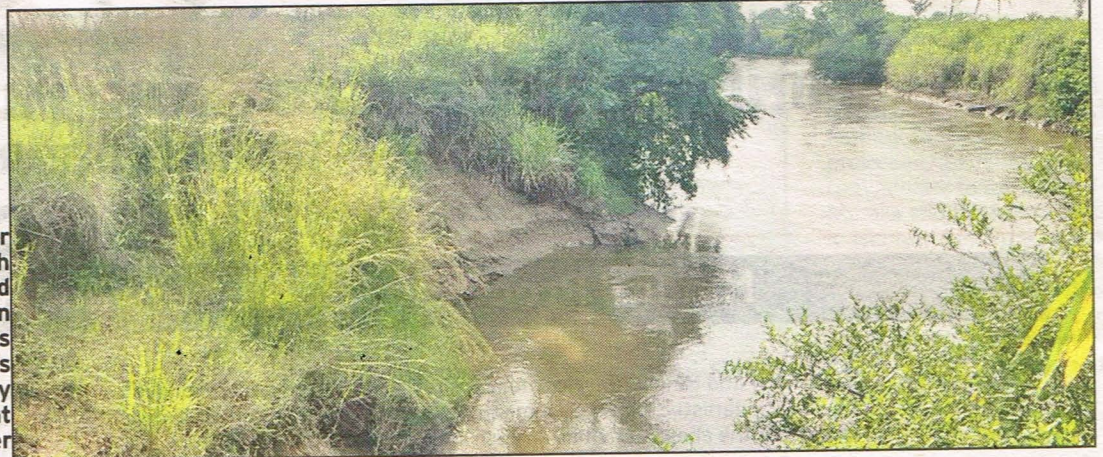
For a long time, farmers

in Wadelai and Ragem sub-counties, Pakwach district, have been helpless as floods have occasionally swept through their gardens of maize, sunflower and rice.

The force of water coming from the highlands of Zombo would often tear through the riverbanks, depositing silt downstream and eroding land that locals have cultivated for generations.

"We used to have a big challenge with floods. The floodwaters from Congo would destroy a lot of crops. It was becoming unbearable," David Picho, the Pakwach district forest officer, says as he

A section of River Ora in Pakwach district exposed to eroding. When silting takes place, the soils are washed away due to the current of the River



stands at Wadelai Bridge, the boundary between Wadelai and Ragem sub-counties.

It is this devastation that prompted government intervention through the Farm Income Enhancement and Forestry Conservation Project II (FIEFOC II), implemented by the Ministry of Water and Environment.

While the project is best known for supporting irrigation schemes in the West Nile sub-region districts, it has introduced a transformative idea: restoring riverbanks

## BENEFICIARY'S ACCOUNT

On the ground, farmers feel both the benefits and gaps of the project. David Oketch, the proprietor of Ojigo Mixed Farm, which covers a 2km stretch along River Ora, is grateful for the irrigation scheme introduced under FIEFOC II. However, Oketch has lived with the floods long enough to remain sceptical.

His farm, which supports commercial production of rice, maize and sunflower, has lost millions of shillings over the years. "During floods, we are adversely affected. With rice, it is manageable, but maize and sunflower suffer the most. Every year, we make losses, and

the authorities have not been very helpful. We have never been compensated," he says.

This year's flooding in May destroyed hundreds of acres, leaving Oketch and 56 tenant farmers in financial distress. Of the usual 254 acres he cultivates, only about 25 could be planted. School fees, loan repayments, and operational costs have all become difficult to meet, Oketch says. While he welcomes the new contractor sent to rehabilitate the irrigation canal, Oketch believes the bamboo restoration would be more effective if it were not planted in isolated patches.

using bamboo.

The ministry targeted hotspots along River Ora, planting bamboo in sections where the soil had become dangerously loose.

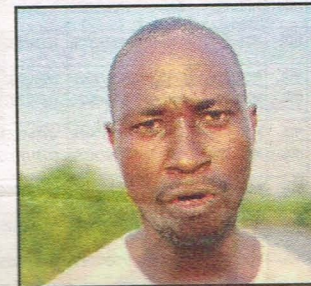
Picho says the impact is already noticeable. Flood intensity has reduced. The construction of Wadelai Bridge, once regularly interrupted by strong water flows, is proceeding smoothly after bamboo started slowing the speed of the water.

He says the bamboo plants' dense root network now grips the riverbank firmly, binding loose soils and calming the river's flow as it heads towards the Nile.

Patrick Igulot, the Ministry of Water and Environment northern region forest officer, says the bamboo planted along the River Ora banks has tremendously reduced flooding, thereby protecting farmlands.

"Trees are planted within a distance of 30m from the river," he said, adding that the Government has restored 104.3ha along the riverbanks at a cost of sh831.8m.

Igulot asked locals to plant



Oketch: Beneficiary

trees on their private land near the river to protect their crops from flooding. Igulot said the Government has spent sh875.2m on planting trees on 108.84ha along the riverbanks. Picho points to a green thicket behind him.

"That bamboo was planted through FIEFOC. Where we have bamboo, the soils have stabilised. The water no longer washes them away like before," he says.

At Ragem Prison Farm, assistant superintendent of Prisons Joab Rashaku Oweyesiga says the change is visible every rainy season.

"The place used to flood, but since bamboo was planted, flooding has reduced and erosion is no more,"

he explains.

So far, 1,500 acres of bamboo have been planted along River Ora banks, which not only shield adjacent land from flooding, but also break strong winds. Through inmate labour, the Government has also planted 20 acres of giant Lira trees, mangoes, neem trees, guavas, and eucalyptus, all adding to the green buffer surrounding the river to protect farmlands.

Oweyesiga says bamboo has also helped the community in farming. Locals use bamboo stems to support sim sim plants so that they grow straight, improving their harvests. Its leaves also fall and decompose into rich humus. When water speeds up, the bamboo slows it down, allowing sediments to settle instead of washing away entire fields.

The urgency of such interventions has grown with shifting climate patterns, droughts, erratic rains and stronger floods.

Picho sees bamboo as part of a wider conservation plan aimed at restoring riverbanks, which is part of adapting to climate change.

"Through such interventions, people are now interested not only in bamboo, but also in planting trees. It is creating awareness on the changing environment," he says.

Pakwach chief administrative officer Jesca Ongiertho says although bamboo has helped, flooding remains a problem, especially for farmers whose gardens sit dangerously close to the water channel.

"A lot still needs to be done. We must strengthen enforcement against wetland encroachment. Communities also cut trees as if there is no tomorrow. They need sensitisation to appreciate conservation," she says.

The Government has constructed over 450 irrigation schemes and domestic solar-powered clean water projects across the country to boost farming and provide clean water.