Climate change: Can the north rise against the tide?

Northern Uganda continues to experience adverse climatic changes and the consequences are biting hard.

BY BILL OKETCH

Climate change effects continue to ravage the world with challenges such as rising temperature, and flush floods, leaving lives endangered. In northern Uganda, there are concerns that the climate crisis manifests as a "three-fold" risk, including drought, erratic heavy rainfall leading to floods, and systemic environmental degradation.

Droughts are increasingly drying up traditional water systems, while floods physically isolate communities from essential services.

This isolation has a profound social dimension, particularly for women and youth. For instance, the loss of access to reproductive health centres during floods has been identified as a significant driver of the regional teenage pregnancy epidemic and child marriages.

Local leaders, members of civil society organisations and officials from the Ministry of Water and Environment say these physical risks are compounded by human activities, specifically deforestation and the encroachment of cultivation into protected wetlands.

Mr Joel Agabi, the minister of water at Lango Cultural Institution, identified the key drivers to climate crisis as cutting of trees, cultivation in swamps and mismanagement of waste.

"If nothing is done to mitigate climate risks, crop production will greatly reduce, another recipe for famine and death is not far from the discussion," Mr Agabi said at the dialogue to commemorate Northern Uganda Water and Environment Week in Lira City on Thursday.

Water week

The Uganda Water and Environment Week (UWEWK) is an annual multi-stakeholder week-long event organised by the Ministry of Water and Environment through the Water Resources Institute (WRI). It serves as a vital arena for advocacy, knowledge sharing, and policy influence within the water and environment spectrum.

The overall goal of UWEWK 2026 is to demonstrate the role of water and environment in achieving Uganda's tenfold growth strategy and aligning the sector implementation objectives with Africa Agenda 2063 and other global frameworks.

This year's theme Water Week focused on "environment and water inclusivity for a prosperous Uganda." Sub-theme: "Ensuring environmentally sustainable and climate resilient economies and communities."



Residents of Geregere Sub-county, Agago District, have constructed water retention ponds as a remedy to the devastating floods that have affected them in the last 10 years. PHOTO/BILL OKETCH

Mr Morris Chris Ongom, the Chief Executive Officer of Global Forum for Development (GLOFORD), said climate variability and unchecked human development are pushing water and environmental resources to the brink. He said northern Uganda's future hangs in the balance, demanding a shift from elite-focused advocacy to community-driven action.

Waste.
A unique challenge identified is the "rural-to-urban" waste stream, where fresh produce brought from villages, such as cassava and mangoes, is often left to rot on city streets when unsold – Mr Morris Chris Ongom, chief executive officer, Global Forum for Development

From the Aswa River's banks to urban centres, the impact is stark, he said. Unmanaged waste and industrial pollution, especially within Lira City, threaten livelihoods, while droughts and floods wrought by climate change leave communities vulnerable.

Industrialisation

As regional hubs like Lira expand, waste management has become a critical threat to water security. The concentration of population within central business districts creates immense pressure on sanitation systems.

"The rapid industrial growth in northern Uganda presents a dual-edged sword of economic wealth and environmental risk. With increased industrialisation in Lira City significantly since 2020, there are growing concerns regarding uncontrolled industrial fumes and the mismanagement of medical and industrial waste," he says.

To counter this, Mr Ongom, who doubles as the director of the Uganda National Chamber of Commerce and Industry for the Lango Sub-region called upon the private sector to strictly adhere to Environmental, Social, and Governance (ESG) principles.

"Industrialists must be encouraged to invest in carbon credits and community-supported environmental solutions to cushion the impact of their economic activities," he said.

Mr Paskwale Kerudong, team leader for the Upper Nile Water Management Zone at the Ministry of Water and Environment, highlighted the importance of water security, infrastructure resilience, and community-level conservation in mitigating climate-induced economic volatility.

"Rather than viewing floods and droughts as purely destructive forces, they should be treated as management challenges and opportunities for resource optimisation," he said.

A flood situation, from a technical perspective, provides a vital opening for large-scale water storage and conservation efforts, he added.

By effectively harnessing excess water during flood periods, the impact of subsequent droughts can be significantly minimized or even eliminated. The core of this approach lies in transitioning from reactive disaster management to proactive water resource management.

Water scarcity

The National Water and Sewerage Corporation (NWSC) manager in Lira, Mr Gerazio Tukahirwa, said they are currently addressing the supply-demand gap in Lira caused by rapid population growth. Historically producing 6.5 million litres daily in 2021, NWSC's piped water system in Kachung, Dokolo District, has undergone a two-phase upgrade; Phase one increased capacity to 10 million litres, and the nearly completed Phase two will add another 3 million litres to stabilise the supply.

Interestingly, the Ministry of Water and Environment has transitioned to a "bottom-up" stakeholder-driven approach for catchment management. This model prioritises consultations with local communities, religious institutions, and cultural leaders to ensure environmental plans are contextualized to local challenges.

To sustain these efforts, Mr Kerudong said, the ministry is partnering with institutions like Makerere and Lira University to align academic syllabuses with practical field practices, ensuring graduates possess the skills needed for modern water resource management.

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