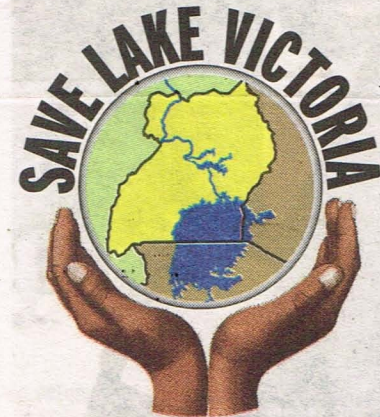


EXPERTS CALL FOR CONCERTED EFFORTS



SPECIAL REPORT

Lake Victoria, the world's largest tropical freshwater lake and a lifeline for millions, is in peril. Pollution, illegal fishing and overfishing, as well as unchecked human activity are choking its waters, destroying breeding grounds and depleting fish stocks, while communities that depend on the lake face an uncertain future. For seven weeks, starting December 20, *New Vision* is running stories weekly examining this ecological crisis and what must be done to save Lake Victoria before it is too late.

BY GEORGE BITA

Pro-environment and nature activists have insisted that efforts to save Lake Victoria must be accelerated as violations hit peak.

They argue that the pooling of state and non-state efforts is needed more than ever before to secure not only the dignity of the lake whose waters are shared between Uganda, Kenya and Tanzania, but also sustaining the over 42 million people who draw livelihood from it.

On the side of Uganda, multi-dimensional efforts to secure the lake have, among others, brought on board combat-ready soldiers from the Uganda People's Defence Forces or Fisheries Protection Unit.

Until the recent presidential directive that suspended the military efforts to restore order on the lake, the fellows in uniform had cracked down on illegal fishing

since 2017. They have, among others, confiscated undersized boats and nets, bringing some relief.

President Yoweri Museveni has since charged the fishermen and communities around Victoria and other water bodies with ensuring the dignity of marine potentials and broader eco-systems.

A survey by the Lake Victoria Fisheries Organisation (LVFO), in Tanzania, indicated that illegal boats reduced by 6% from 2016 to 2020, while monofilament nets dropped by 52.3%. In Uganda, about 30,000 improper fishing boats had been destroyed.

Monofilament nets are tough, single string fishing nets that are not easily seen when laid in the waters, hence can catch young and mature fish, threatening extinction of species.

In 2016, Tanzania launched Operation Sangara, a multi-sector task force to save Nile perch and curb black market swim bladder (fish maw) sales, with 1,747 tonnes of fish maw worth \$124m (about sh440.8b) exported collectively from Tanzania, Uganda and Kenya by 2018.

Patrick Otuo, a researcher at Kenya Marine and Fisheries Research Institute, said although the export was worth that much, the East African states earn only \$86m every year from the swim



A fisherman from the DR Congo surrenders as Uganda People's Defence Marine Forces stop him over fishing illegally during a patrol on Lake Edward in Rwenshama, Rukungiri district, on August 13, 2018



Uganda Junior Rangers environment activists and Rotarians removing plastic waste that is endangering Lake Victoria at Port Bell in Luzira, Nakawa division

LAKE VICTORIA'S WATER LEVELS HAVE RISEN DRAMATICALLY, REACHING ABOUT TWO METRES IN MAY 2020 COMPARED TO 1.06 METRES IN THE 1960S.

bladder trade, indicating the power of the black market. (Swim bladders are eaten by Chinese as an aphrodisiac, and are said to improve the immune system. They are also used for making threads for stitching wounds during surgical operations).

Despite interventions, records from the Kenya fisheries department show an increase of over five times in maw exports by 2023 as compared to data of 2017.

Veronica Mpomwenda, a researcher at the National Fisheries Resources Research

Institute, optimistically said: "Strict enforcement in both Uganda and Tanzania may in the long-run achieve the intended management goal, which is boosting biomass of previously dwindling fish stock."

The violations against the lake, according to the environmental advocates, are not limited to establishing human settlements in its buffers or invading for agriculture, they extend to plastic pollution, discharge of industrial residue into the lake, swamp reclamation and fishing related illegalities, among others.

The tropical forests along the lake are also being reclaimed at a worrying speed, the advocates highlighted.

Richard Kimbowa, the programmes manager at Uganda Coalition for Sustainable Development, said the destruction of forests around Lake Victoria is driven by a growing population and urbanisation.

He emphasised the importance of the forests for wildlife, tourism and potential sources of medicine and genes for crops.

Kimbowa stressed the role of state actors like the Ministry of Water and Environment in enforcing forest cover protection and supporting tree planting.

He also called for local level actions such as getting the masses

TO SAVE LAKE VICTORIA

involved in planting trees wherever they are.

SCIENTIFIC SOLUTIONS

Scientists across East Africa are stepping up efforts to protect Lake Victoria from mounting climate and ecological threats.

In 2023, experts from Uganda, Kenya and Tanzania formed the Lake Victoria Advisory Group (LVAG), under the African Centre for Aquatic Research and Education, to address challenges such as climate change, biodiversity loss, and the impact of aquaculture. Their strategies include afforestation drives, fishing holidays to allow species recovery and regulating cage farming to maintain the lake's natural balance.

The urgency is clear. Lake Victoria's water levels have risen dramatically, reaching about two metres in May 2020 compared to 1.06 metres in the 1960s, disrupting fish breeding sites and lakeside settlements, Frank Onyango, a researcher at the University of Eldoret's Aquatic Science Department in Kenya, warned.

"This presents an urgent need for research to address climate and weather extremes," Onyango said, stressing that predictive systems are vital to safeguard the lake and the millions who depend on it.

Beyond water levels, scientists are calling for a review of population dynamics and aquaculture investments such as cage fish farming to prevent biodiversity loss and disease spread, according to Stella Mbabazi of the Ministry of Agriculture, Animal Industry and Fisheries. Other threats persist.

"Getting rid of invasive species like water hyacinth and stopping untreated waste discharge could save the lake," Winnie Nkalubo of the National Fisheries Resources Research Institute said.

She explained that untreated waste introduces dissolved nutrients that fuel massive algal growth. Like water hyacinth, these algal blooms reduce dissolved oxygen critical for aquatic life, leading to large-scale organism deaths; a process known as eutrophication.

Nkalubo added that the environment protection police often crack down on factories that release waste into lake waters.

The enforcement effort is ongoing. Naomi Karekaho, the spokesperson of the National Environment Management Authority (NEMA), said they continuously monitor and penalise

COMMUNITY-LEVEL INTERVENTIONS

The beach management units (BMUs) are also involved in the fight to save Lake Victoria. At Kabuka beach in Mayuge district, the BMU chairperson, Jeremiah Okello, said his crew has impounded over 200 undersized boats since 2015.

"We also control beach sand mining, which destroys fish breeding grounds. The limit is four trucks allowed at the lakeside per week. The sand is mined for construction, but it shouldn't be an excuse to harm nature," he said.

Magidu Magumba, the Masese BMU chief in Jinja district, shared similar actions aimed at saving the lake, saying they confiscate illegal fishing gear like monofilament nets, fishing

hooks, under-sized boats and gill nets.

"We are glad to have received a donation of a patrol boat from the Lake Victoria Fisheries Organisation to facilitate our enforcement activities on the lake. Unfortunately, at times we fail to fuel the boat to ensure effective patrol of the beachside," he said.

Beach managers are enforcing size limits of certain fish species to protect them. For example, they only allow Nile perch measuring over 52cm to be taken from the lake, says Nuhu Takulwa, the chairperson of the Buluba Beach Management Unit in Mayuge district.

offenders polluting water bodies.

"In January 2022, for example, NEMA suspended operations at Southern Range Nyanza Limited, formerly NYTIL, in Njeru, Buikwe district, over pollution concerns. The textile industry was releasing waste directly into River Nile," Karekaho said.

REGIONAL, POLICY EFFORTS

The Lake Victoria Basin Commission (LVBC), set up in 2003, is spearheading the Lakewide Inclusive Sanitation strategy, which requires about \$1.9b in investment in sustainable sanitation so as to save the water body. Partner

states that include Uganda, Kenya, Tanzania, Rwanda and Burundi are tasked with tackling sanitation collectively. The commission is engaging the World Bank over the proposed ambitious programme for the Lake Victoria basin.

Dr Bwire Masinde, the LVBC executive secretary, argued that overfishing is another factor that is killing the lake, given the enormous amount of people who depend on the age-old activity.

To curb this, he said: "We are embarking on reforestation programmes throughout partner states to rejuvenate watersheds, smoothen water flow and control soil erosion."

He also cited eco-friendly tourism, which emphasises preserving natural environments visited for leisure and cage fish farming as ways to reduce strain on the lake's resources.

Masinde said the project involves partners like German Development Agency and it involved use of indigenous tree species.

Water minister Sam Cheptoris appreciated the efforts by LVBC and development partners in saving Lake Victoria.

"A lot remains to be done, but I can say something is already being done to ensure this fresh water body is not destroyed by man's uncontrolled activities. The

governments are playing their role even as some people trade counter accusations of excesses in enforcement by soldiers on the lake," he said.

MORE TO BE DONE

Mpomwenda and Mbabazi agreed that saving Lake Victoria will require more than enforcement and research, hence suggest the following.

Sanitation infrastructure: Most lakeside settlements lack proper waste treatment, allowing raw sewage to flow directly into the lake. Lakeside residents need to be sensitised about proper effluent management and treatment plants installed with help of development partners.

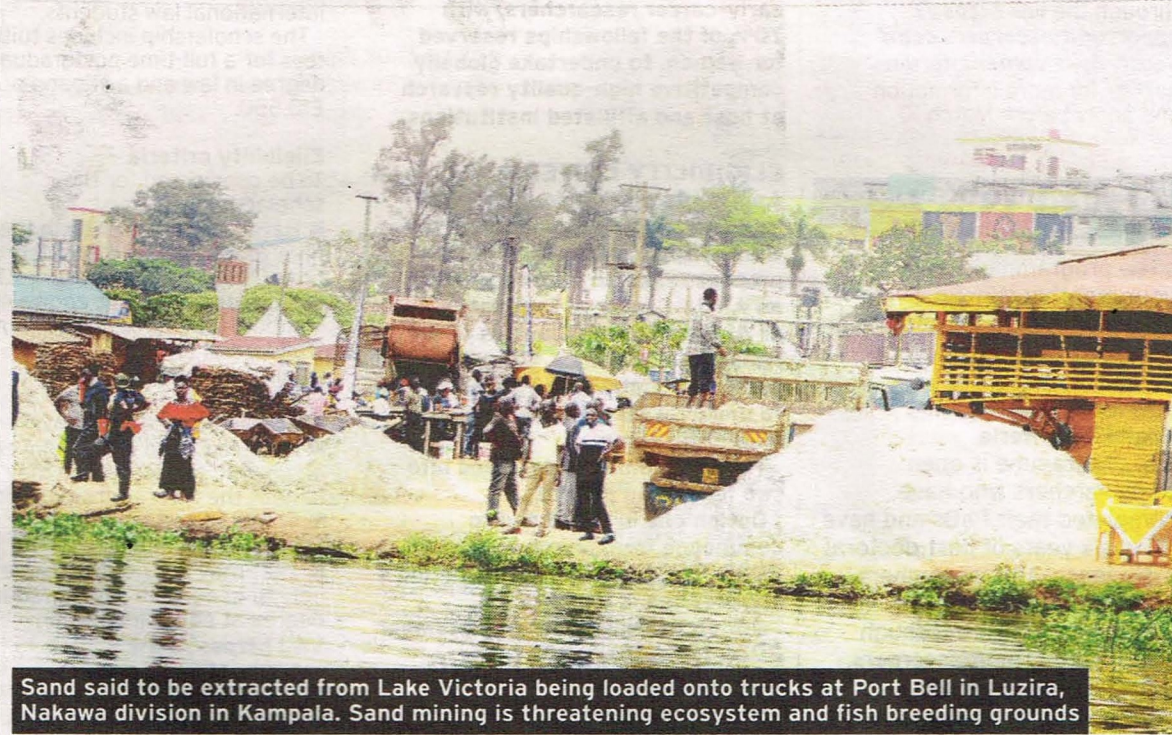
Community involvement: Fishermen and traders must be part of conservation efforts, not just targets of enforcement. They need to be empowered to diversify into alternative sources of income like eco-friendly tourism and farming so as to stop over dependency on the lake and reduce dependence on destructive practices.

Regional co-ordination: Partner states must harmonise policies and share resources to avoid fragmented efforts.

Lake Victoria is more than a body of water; it is a lifeline for millions across East Africa. Military enforcement, community action, scientific research and regional co-operation offer hope, but without stronger sanitation systems, sustained funding and grassroots involvement, the lake risks sliding further into crisis. The challenge now is to act quickly, before this lake loses the very potential that has sustained generations.



In 2016, Tanzania launched Operation Sangara to save Nile perch and curb black market fish maw sales



Sand said to be extracted from Lake Victoria being loaded onto trucks at Port Bell in Luzira, Nakawa division in Kampala. Sand mining is threatening ecosystem and fish breeding grounds