SILTATION, NOISY GENERATORS, & AIR POLLUTION

DOCUMENTING OIL SECTOR DAMAGE TO MURCHISON FALLS NATIONAL PARK & UGANDA'S WETLANDS

JULY 2026

A Malachite Kingfisher
Uganda's oil activities under the Kingfisher, EACOP and Tilenga oil projects have impacted bird and wildlife habitats.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

On June 5, 2025, Uganda's president, H.E. Yoweri Kaguta Museveni, launched an ambitious national development plan[1].

The National Development Plan (NDP) IV, which lays out a strategy to ensure a tenfold growth in Uganda's economy by 2029/2030, seeks to promote socio-economic transformation for all Ugandans.

The plan hinges the country's growth on four key sectors including agriculture, tourism, mining including oil and gas as well as science and technology (ATMS).

Embedded within the plan is a recognition of the important role that the environment, natural resources, climate change and land management programme has to play to enable attainment of the NDP IV goal.

The Government of Uganda (GoU) recognises that without ensuring sustainable utilisation and conservation of the country's natural resources while addressing climate change risks, the country may not be able to attain the tenfold economic growth that is aspired to.

Uganda's wetlands are one of the key country's natural resources. The wetlands not only play important climate stabilisation and biodiversity conservation roles but also support socio-economic growth.

The wetlands are key to supporting the agricultural, fisheries, sustainable tourism, clean energy and other green economic sectors in the country on which the NDP IV is hinged.

Unfortunately, wetlands in Uganda are under immense pressure from urbanisation, agriculture, sand mining and others. Increasingly the wetlands have also come under pressure due to the country's oil and gas activities.

Uganda is developing the country's oil and gas reserves under three main projects,

[1]https://www.parliament.go.ug/news/3724/president-launches-ndp-iv-drive-ugandas-economic-transformation

namely, the Tilenga, Kingfisher and East African Crude Oil Pipeline (EACOP). A fourth project, an oil refinery, is planned. The Ugandan government is working with TotalEnergies and China National Offshore Oil Corporation (CNOOC) to develop the above-mentioned projects.

The country and oil companies are also developing a network of pipelines. Some of the oil pipelines that are under development or have been developed include the Victoria Nile Pipeline Crossing under the Tilenga oil project, Kingfisher feeder pipeline and the EACOP.

The aforementioned pipelines are affecting major wetlands in the country. This not only risks conservation of the wetlands and the roles that they play, but also puts Uganda's national development at risk.

Because of the above risks, it is imperative that Ugandans are aware of the impact of the pipelines on the affected wetlands. Through this publication therefore, Africa Institute for Energy Governance (AFIEGO) documents the impacts of the EACOP, Victoria Nile Pipeline Crossing and Kingfisher feeder pipeline to selected wetlands.

This publication is aimed at raising public awareness to stop, minimise or mitigate the impacts of the pipelines to wetlands, thereby safeguarding national development aspirations.

The oil impacts to wetlands that are covered in this publication were gathered during Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) that were held with communities as well as tour and travel operators that live or work near oil-affected wetlands. The communities as well as tour and travel operators were drawn from Buliisa, Hoima, Kikuube, Kakumiro and Kyotera districts.

AFIEGO collected the information for this publication from the above stakeholders between March and June 2026.

The key impacts of the Victoria Nile Pipeline Crossing, Kingfisher feeder pipeline and

EACOP to selected wetlands as identified by this study include:

Population influx, air and noise pollution: The Victoria Nile Pipeline Crossing is an approximately 1,760m pipeline that is supposed to be located 15 to 20 metres under the bed of River Nile[19].

The pipeline's purpose is to collect oil from Total's Tilenga oil fields that are north of River Nile. The oil is supposed to be delivered to the company's Central Processing Facility (CPF) in Buliisa district and thereafter to the Kabaale Industrial Area, where the EACOP begins its journey in Uganda.

Tour and travel operators that work inside Murchison Falls National Park (MFNP) note that in order to develop the Victoria Nile Pipeline Crossing, a temporary workers' camp was set up within the area of influence of the Murchison Falls-Albert Delta Ramsar wetland area in the park. This increased the human population inside the area of influence of the eco-sensitive delta.

In addition, fossil fuel-powered air-polluting generators were operated inside the area of influence of the Ramsar site. Furthermore, heavy, noisy and air-polluting trucks were used to deliver the construction materials for the pipelines in the park.

A combination of noise and air pollution within the area of influence of the delta, which is a Key Biodiversity Area (KBA) and one of the most significant conservation areas in East Africa , raises immense biodiversity conservation risks.

A biodiversity expert observes that anthropogenic (human-generated) noise and vibrations can cause stress in wildlife, while affecting communication, movement, and foraging, especially for sensitive species such as elephants. MFNP park is home to 144 mammal species, 556 bird species, 51 reptiles, and 51 amphibians[3].

The expert also notes that fossil fuel-powered generators release carbon monoxide, carbon dioxide, nitrogen dioxide and sulphur dioxide. These compounds can cause

respiratory distress which can lead to weakened immunity, and reproductive disruptions in wildlife. The responses to air pollution vary by species.

The delta is also an important breeding ground for the Lake Albert fisheries. Lake Albert is Uganda's most important fishery, with the lake contributing 51% of the 2023 fish catch in Uganda[6].

A biodiversity expert observes that air pollution can be deadly for aquatic species, including fish. Acid rain causes harmful metals such as aluminum to accumulate in fish, and human beings risk suffering negative impacts when they eat the affected fish.

Increased siltation: The Victoria Nile Pipeline Crossing is not the only pipeline that has created biodiversity conservation risks. The EACOP and Tilenga feeder pipelines have as well.

The EACOP crosses the Kibale/Bukoora wetland, which is located in Rakai and Kyotera districts, at latitude 0.813 and longitude 31.471 on the border between Rakai and Kyotera districts[7]. This wetland is the one of the most important in the Sango Bay-Musambwa Island-Kagera (SAMUKA) Ramsar Wetland System.

The Kibale/Bukoora wetland is also renowned for having the largest swamp forest in Uganda, hosting approximately 65 mammal species and 417 bird species.

Communities note that by March 2026, the wetland crossing was yet to be developed. However, activities affecting the tributaries of the wetland had been undertaken, and these activities had resulted in the siltation of these tributaries.

In addition, Kabale wetland in Kakumiro district, which is part of the Kafu wetland system, was also affected by siltation, which led to flooding of community gardens. The wetland is crossed by the EACOP and the construction activities for the pipeline caused the siltation, communities note.

A wetlands expert observed that the siltation of wetlands poses huge biodiversity

[2]https://www.academia.edu/60646361/Herpetofaunal_diversity_and_community_structure_in_the_Murchison_Falls_Albert_Delta_Ramsar_site_Uganda
[3]https://ugandawildlife.org/national-parks/murchison-falls-national-park/
[4]https://www.ecotrendsalliance.org/assets/files/Waterbirds-ofMurchisonFallsJuly2020.pdf
[5]https://onlinelibrary.wiley.com/doi/abs/10.1002/aqc.70145
[6]https://www.ubos.org/wp-content/uploads/publications/The-Annual-Statistical-Abstract-2024.pdf

conservation and socio-economic risks. Some of these include loss of aquatic habitats, and the disruption of life cycles for many species, including fish and birds that rely on the seasonal flow patterns for breeding and migration.

The expert also observed that stagnant, blocked water may become anoxic (depleted of oxygen) or eventually dry up, converting an aquatic ecosystem into a terrestrial one, thereby eliminating all dependent species while having socio-economic impacts including flooding and destruction of croplands.

Increasing chimpanzee-human conflicts: The EACOP is also crossing the Kanywabarogo and Wambabya wetlands that drain into Lake Albert. Communities observe that the construction activities for the EACOP and Tilenga feeder pipeline caused siltation, culminating into blockages of some sections of the Kanywabarogo wetland in Hoima district.

The blockage, communities note, eventually affected water flow into Wambabya river, which flows through Wambabya forest.

With the water disruptions into the forest came increased human-wildlife conflicts. Communities from Hoima district note that "chimpanzees [in Wambabya forest] seem not to be getting water well anymore so they come to the community to access water. They destroy gardens when they leave the forest."

Pumping of water from rivers/wetlands: In relation to the above, communities from Hoima district observed that CNOOC's sub-contractors that developed the Kingfisher feeder pipeline pumped water from Rutooha river, which drains into Wambabya wetland and eventually Lake Albert, during the construction period.

This increased the risk of chimpanzee-human conflicts. This is because pumping of water from a river may not only deprive dependent species of their habitats, leading to their loss, it could also deprive species that are dependent on a river of water.

In light of the key impacts discussed in this brief, AFIEGO recommends that the

GoU undertakes a wider participatory assessment of the impacts of Uganda's oil activities to wetlands. The assessment should cover all oil-affected wetlands.

The findings of the assessment should be publicly communicated and measures taken, at oil companies' cost, to remediate oil impacts to wetlands.

In addition, instead of focusing on climate- and wetland-wrecking oil projects that could derail attainment of the NDP IV goal in the medium- and long-run, the GoU

[7]https://www.afiego.org/wp-content/uploads/2024/03/Factsheet-on-EACOP-impacted-wetlands-in-Uganda-July-2023.pdf

should prioritise investment in clean energy and other green industries.
Uganda's wetlands, which cover 13.9% of the country[8], play important water regulation, carbon storage, biodiversity conservation and socio-economic roles[9].

The country's key economic activities including agriculture, fisheries, tourism and others depend on intact ecosystems[10] including conserved wetlands.

These wetlands are concentrated around the country's lake and river basins[11]. Available information indicates that hydrologically, Uganda's wetlands fall under ten river and lake drainage basins[4].

These include the Lake Kyoga basin, which is the largest wetland basin in Uganda[12], as well as the lakes Victoria, Albert, and Edward basins[4]. Others include the Lake Rudolf, Victoria Nile, Albert Nile, White Nile, and Kidepo basins[4] among others.

While Uganda's wetlands are important, they are under immense pressure. The country's wetlands declined from 15% in 1994 to 10.9% in 2008[13]. Government and other stakeholders' efforts to recover and restore wetlands saw the resource's coverage increasing to 13.9%.

However, urbanisation, industrialisation, sand and clay mining as well as demand for arable (agricultural) land[14] continue to exert pressure on Uganda's wetlands.

Increasingly, the wetlands are also faced with immense pressure from the country's oil and gas industry.

[8] https://www.nema.go.ug/en/nema-celebrates-wetland-recovery-as-uganda-marks-world-wetlands-day-2026/
[9] https://researchconsultuganda.com/wetlands-in-uganda/
[10] https://create.finance.go.ug/sites/default/files/2025-07/FOURTH%20NATIONAL%20DEVELOPMENT%20PLAN%20%28NDP-IV%29.pdf
[11] https://www.unep.org/resources/report/uganda-wetlands-atlas-volume-ii
[12] https://news.mak.ac.ug/wp-content/uploads/2011/06/Musinguzi-2.pdf
[13] https://www.mwe.go.ug/about/departments/wetland-management
[14] https://archive.finance.go.ug/sites/default/files/Publications/BMAU%20Briefing%20Paper%2012-22-Wetlands%20Restoration%20and%20Management%20in%20Uganda-Are%20the%20approaches%20sufficient%20to%20achieve%20the%20NDP%20III%20targets.pdf

2. OIL AND UGANDA'S WETLANDS

Uganda is home to 6.6 billion barrels of oil reserves, up to 1.7 billion barrels of which are recoverable[15] . The country is also home to 1.9 billion cubic metres of gas[16] . These oil and gas reserves are located in the Lake Albert basin[15] .

The Ugandan government is working alongside TotalEnergies E&P U. (TEPU) B.V. and China National Offshore Oil Corporation Uganda Ltd (CUL) to exploit the country's oil and gas reserves[17] .

The reserves are being exploited under the Tilenga, Kingfisher and East African Crude Oil Pipeline (EACOP) projects.

The EACOP and pipelines belonging to the Tilenga and Kingfisher oil projects are crossing wetlands belonging to the Lake Victoria, Lake Albert and Victoria Nile basins.

These pipelines include:

- The Victoria Nile Pipeline Crossing under the Tilenga oil project;
- The Kingfisher feeder pipeline; and
- The EACOP.

More on these pipelines can be seen in section 3 below.

Infrastructure under the Tilenga, Kingfisher and EACOP oil projects is affecting wetlands in Uganda
Source of map:[18]

[15] https://ntv.co.ug/business/ugandas-petroleum-resources-revised-upward-to-6-6-billion-barrels
[16] https://ict.go.ug/media/news/prepare-for-life-after-oil-and-gas
[17] https://totalenergies.ug/projects/tilenga/our-partners-0

3.1. Victoria Nile Pipeline Crossing

The above is a pipeline that connects TotalEnergies' Jobiri oil field that is located north of River Nile to the Ngiri oil field that is south of the Nile.

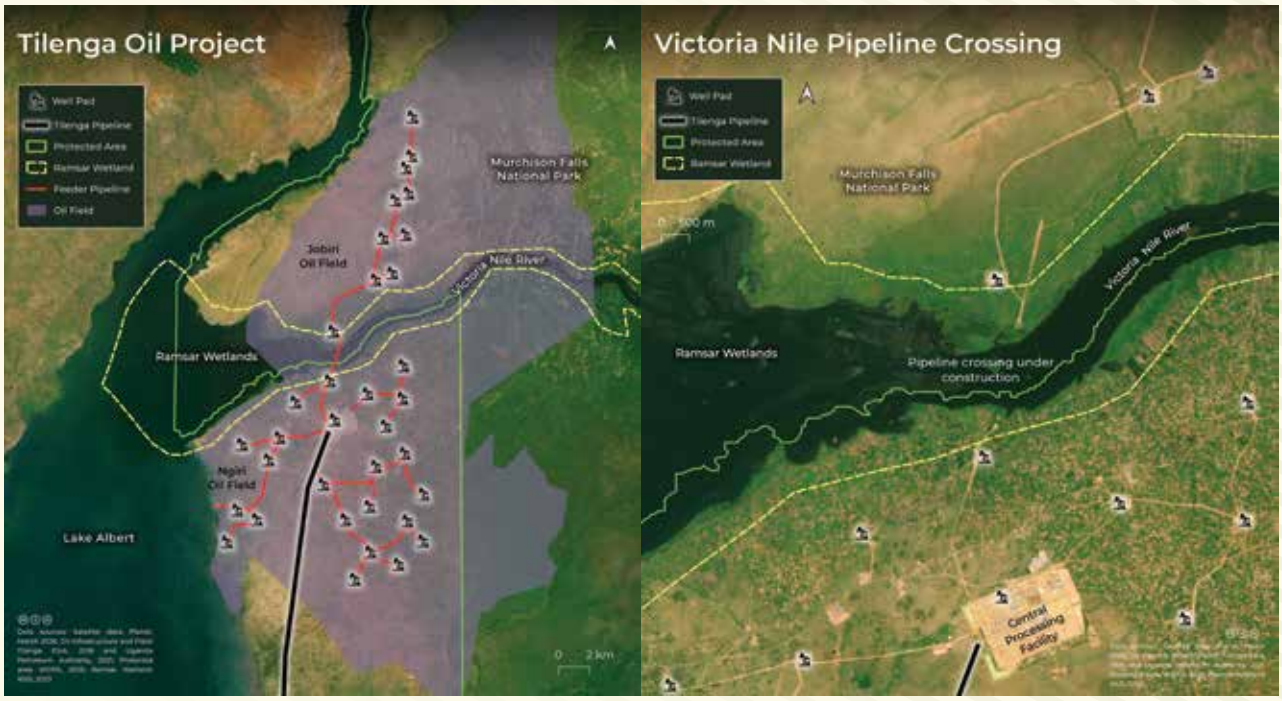
The Jobiri, Ngiri and other oil fields make up the Tilenga oil fields.

The Victoria Nile Pipeline is supposed to collect oil from the Jobiri oil field and transport it, including via other pipelines, to a Central Processing Facility (CPF) in Buliisa district[19].

Satellite maps show that site clearance and other activities to enable development of the pipeline were ongoing as far back as 2024. Some of the activities to enable the development of the pipeline took place within the eco-sensitive and biodiverse Murchison Falls-Albert Delta Ramsar Wetland.

The wetland, which is partly located in Murchison Falls National Park (MFNP), is of international importance and it belongs to the Victoria Nile basin.

Below are maps showing the Tilenga oil fields and Victoria Nile Pipeline Crossing that connects them.



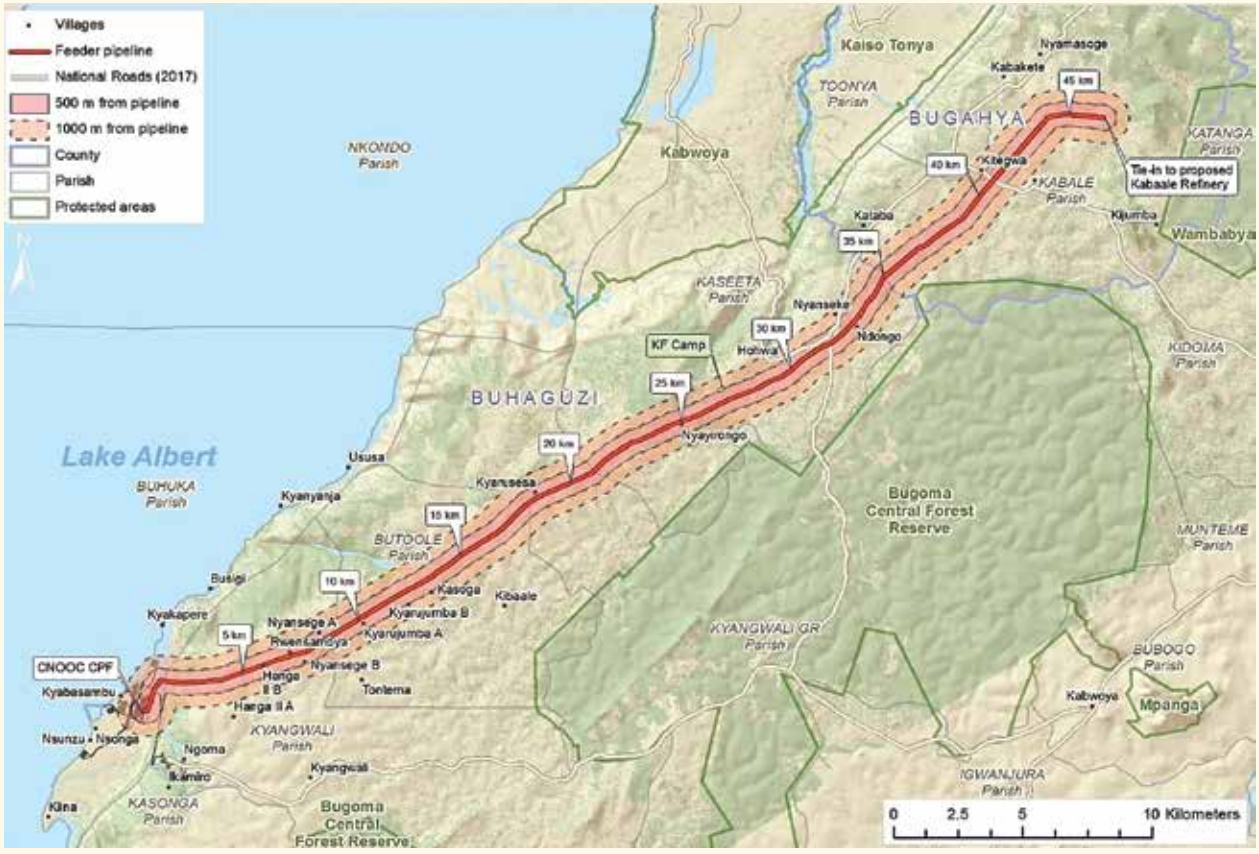
The Victoria Nile Pipeline crosses under the River Nile to connect the Jobiri oil fields to the CPF in Buliisa

3.2 THE KINGFISHER FEEDER PIPELINE

The Kingfisher oil project's feeder pipeline is a ten-inch diameter feeder pipeline that is approximately 48km long[20]. The pipeline is supposed to transport the crude oil that is extracted by CNOOC from the Kingfisher oil field on Lake Albert to the Kabaale Industrial Area in Hoima.

From there, part of the oil from Total and CNOOC's oil fields is supposed to be refined in Uganda (if an oil refinery is built) while part of it is supposed to be transported to export markets via the EACOP.

The Kingfisher feeder pipeline affected several wetlands, with the Environmental and Social Impact Assessment (ESIA) report for the Kingfisher oil project indicating that "many permanent wetlands along the feeder pipeline route connect to those in the Bugoma Forest Reserve"[21].



A map of the Kingfisher feeder pipeline, which affected wetlands connected to Bugoma CFR and Lake Albert basin

Source:[21]

[20]https://www.pau.go.ug/projects/development-and-production/kingfisher-project

[21]https://nema.go.ug/sites/all/themes/nema/docs/Vol_0_CNOOC_Kingfisher_ESIA_Non-Technical_Summary_Final.pdf

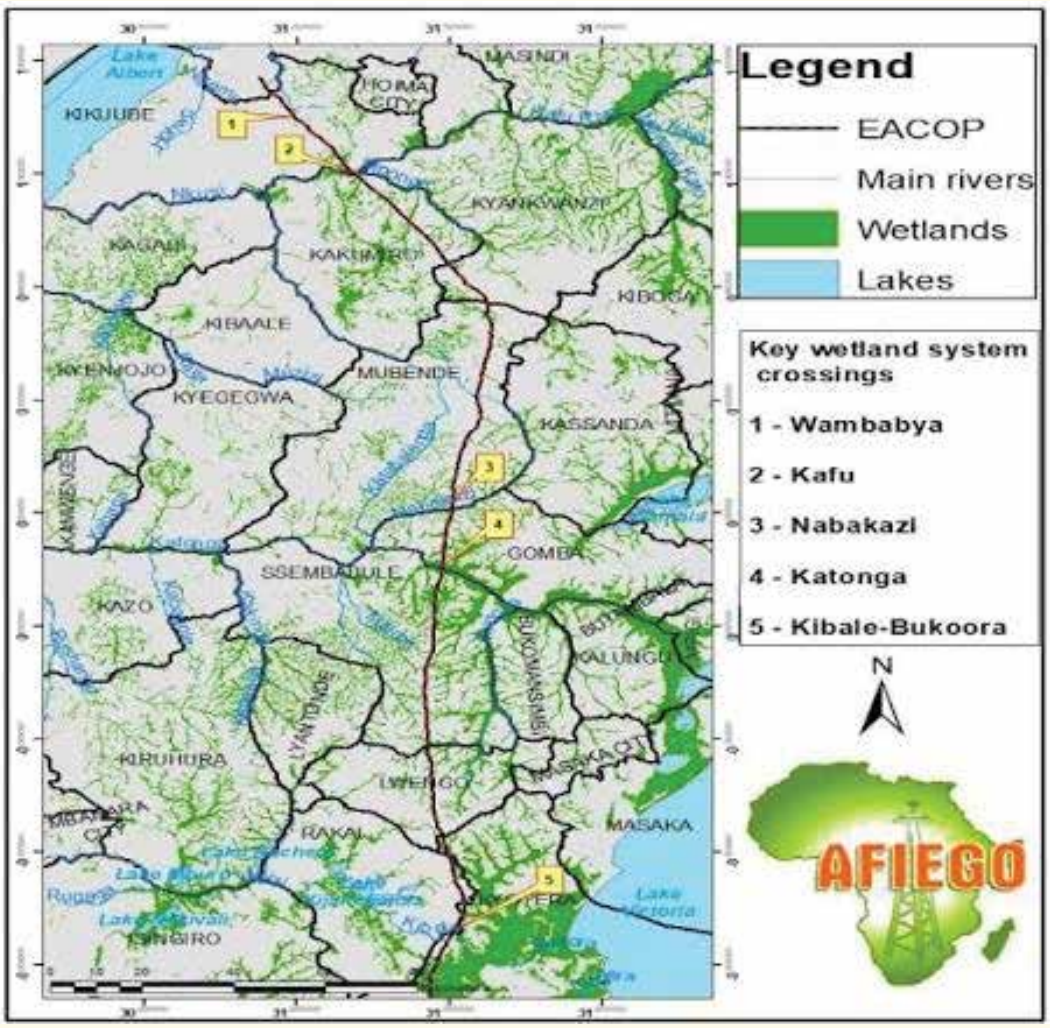
3.3. THE EACOP

The EACOP is a 1,443km pipeline that is being developed from Hoima district in Western Uganda to the port of Tanga in Tanzania.

The pipeline will carry oil from the Tilenga and Kingfisher oil fields in Uganda to export markets. That oil will be transported to the starting point of the EACOP at the Kabaale Industrial Area by the Victoria Nile Pipeline Crossing, a host of other pipelines as well as the Tilenga and Kingfisher feeder pipelines.

The EACOP is affecting 158 wetland sections[22] in Uganda belonging to the Lake Albert and Victoria basins.

Below is a map showing some of the EACOP wetland crossings.



A map of the EACOP wetland crossings in Uganda

[22]https://www.afiego.org/wp-content/uploads/2024/03/Factsheet-on-EACOP-impacted-wetlands-in-Uganda-July-2023.pdf

4. PROBLEM STATEMENT

In recognition of the important role that natural resources such as soil, lakes, rivers, forests, and wetlands among others play in supporting Uganda's economy, the Ugandan government places strong emphasis on natural resources' conservation.

Indeed, through the country's National Development Plan (NDP) IV, government recognises the country's natural resources, environment, climate change, land and water management programme as an important enabler that needs to be invested in to support attainment of government's ten-fold growth strategy by 2029/2030[23].

Through the NDP IV, government recognises the need to ensure sustainable management and utilisation of land, environment and natural resources as well as the effective response to climate change and other disasters as key to ensuring the attainment of the NDP IV goal.

While the above is the case, the country's oil and gas activities are exerting pressure on wetlands, which could harm Uganda's capacity to promote biodiversity conservation while enabling socio-economic transformation for all.

To promote conservation of the country's wetlands from oil degradation, it is important to document the impacts of oil activities to wetlands.

It is also important to raise public awareness of the impacts with the aim of promoting action from government and other relevant stakeholders to prevent, minimise or mitigate the impacts.

5. OBJECTIVES

The main objective of this publication therefore is: to document the impacts of Uganda's oil activities on the country's wetlands to promote public awareness and stakeholder action to support conservation of the wetlands.

6. METHODOLOGY

This publication spotlights the impacts that the Victoria Nile Pipeline crossing, Kingfisher feeder pipeline and EACOP have had on selected wetlands.

The wetlands that are the focus of this publication include the Murchison Falls-Albert Delta Ramsar wetland, and Kafu wetland of the Victoria Nile and Lake Albert basins. They also include the Kibale/Bukora wetland of the Lake Victoria basin in Southern Uganda.

The above wetlands are focused on because the stakeholders that contributed information for this publication were knowledgeable about oil impacts to the wetlands.

The information in this publication was collected from 23 stakeholders including community-based tour and travel operators working in MFNP, and communities that live near the wetlands.

AFIEGO organised Focus Group Discussions (FGDs) in March 2026 during which tour and travel operators discussed the impacts of oil activities to the Murchison Falls-Albert Delta Ramsar wetland and MFNP in general.

In addition, between March and June 2026, AFIEGO organised FGDs and Key Informant Interviews (KIIs) during which communities that live near the other oil affected-wetlands that are focused on in this brief discussed the impacts of oil activities to the wetlands.

The FGD and KII participants were drawn from five districts including Buliisa, Hoima, Kikuube, Kakumiro and Kyotera.

Wetlands and biodiversity experts were also interviewed for this brief. The experts discussed the risks associated with the impacts of oil activities to wetlands.

7.1. Impacts to Murchison Falls-Albert Delta Ramsar Wetland

As earlier indicated in this brief, the Victoria Nile Pipeline is a pipeline whose purpose is to connect Total's oil fields north of the Nile to the company's CPF in Buliisa district.

The pipeline, with an approximate length of 1,760m[24], is supposed to be located 15 to 20 metres under the bed of River Nile[19].

The pipeline is supposed to consist of three Horizontal Directional Drilling (HDD) pipelines. Two of these pipelines, with a minimum 30-inch diameter, are supposed to house the production pipeline and water injection pipeline[19]. The other pipeline is expected to house electrical and other components[19].

The activities that were undertaken to enable the development of the pipeline included site clearance, stringing, welding and others.

Tour and travel operators working in MFNP note that some of the above activities took place within the area of influence of the Murchison Falls-Albert Delta Ramsar wetland. This created risks for biodiversity conservation.

> ***A female tour and travel operator observed as follows in March 2026, "The park in general has suffered because of the oil activities. Before any pipelines could be laid, those people that are developing the Tilenga oil project would do vegetation clearance. They would use big cars. You know those caterpillars that are used in construction? Some of the cars were like that. Even those one that were carrying construction materials and pipes to the park were big. The cars would move, make noise, and also cause vibrations. This would scare the animals."***

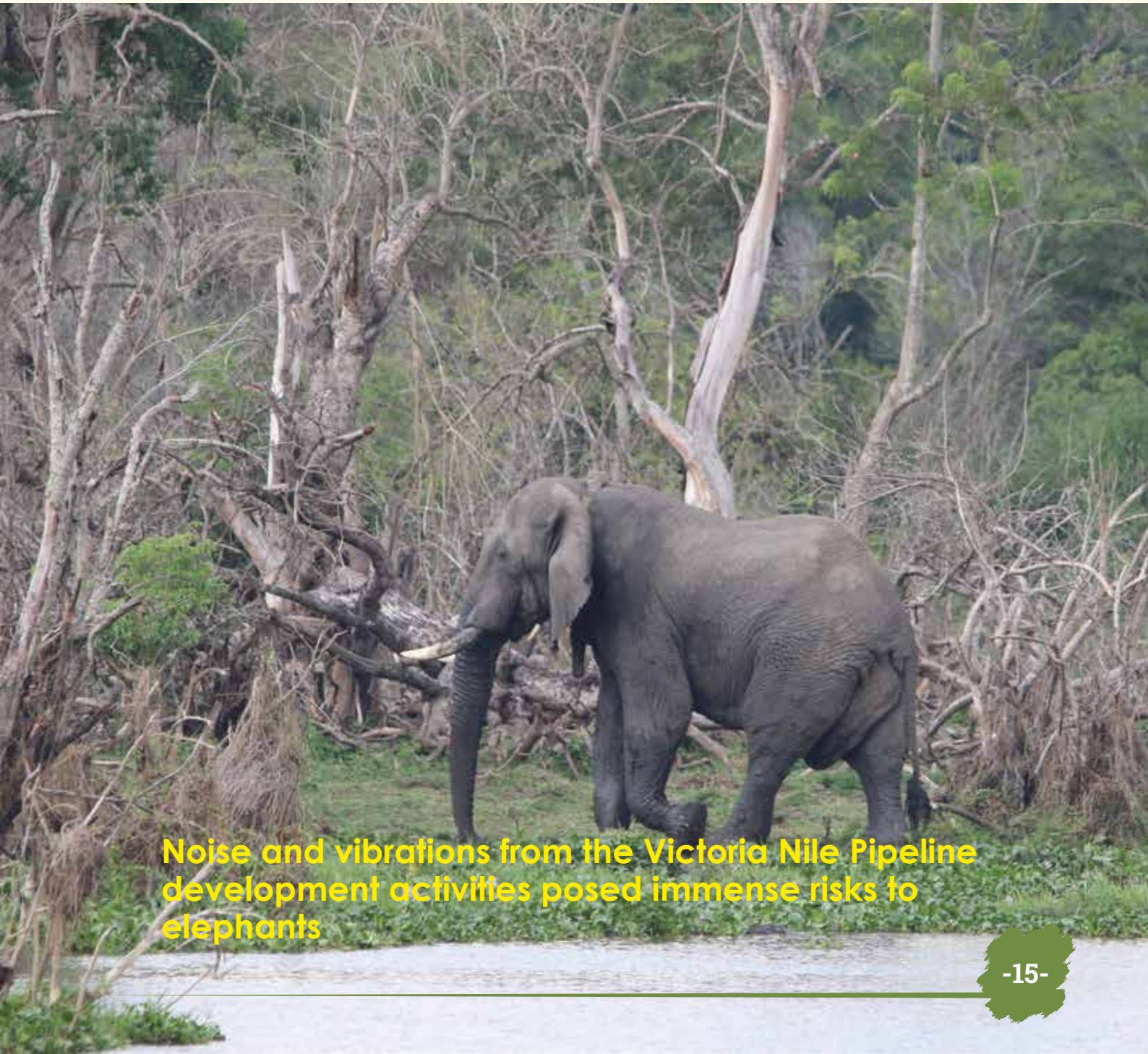
A biodiversity expert notes that anthropogenic (human-generated) noise and vibrations in a wildlife reserve can have significant impacts on biodiversity.

> ***He noted as follows during a KII in April 2026, "Anthropogenic noise can cause stress in wildlife, while affecting communication, movement, and foraging."***

The expert identified elephants as being especially vulnerable to the increased noise and vibrations.

He observed as follows, "Elephants are more sensitive to noise than human beings are. Noise that a human being hears from 100 to 200 metres away is heard by elephants a kilometre away. When anthropogenic high frequency noise is introduced in an area therefore, elephants could become stressed, and they could increasingly move from the areas where the noise is. Elephants could also experience reduced feeding and resting time."

He further noted, "Noise could also affect social behavior. Elephants are social animals, and they often live in groups. The groups may split and regroup. To regroup, the elephants communicate using their low frequency tones. If a place is noisy, the elephants' capacity to hear and locate each other could be affected."



Noise and vibrations from the Victoria Nile Pipeline development activities posed immense risks to elephants

When it comes to the Murchison Falls-Albert Delta Ramsar wetland, communities noted that a temporary workers' camp, generators and other equipment were put within the area of influence of the delta.

The delta is one of the most significant conservation areas in East Africa , with surveys showing that the delta is home to 78 waterbird species[26], three of which are globally threatened while another seven are nationally threatened[26]. Some of these bird species include the Shoebill, Grey Crowned Crane and Papyrus Gonolek.

The Ramsar site is also home to 25 reptile species[25], and serves as watering hole for some of the over 144 mammal species in the Murchison Falls Protected Area[27].

The site, which is home to over 52 fish species[28] and 27 amphibian species[29], is also an important spawning and breeding ground for the Lake Albert fisheries, containing indigenous fish species[30]. Lake Albert is Uganda's most important fishery, with the lake contributing 51% of the 2023 fish catch in Uganda[31].

In addition, the site is home to various plant species including reeds, trees and others.

Noise and air pollution in the delta poses immense risks to biodiversity, an expert notes.

> ***He observes, "Fossil fuel-powered generators release carbon monoxide, carbon dioxide, nitrogen dioxide and sulphur dioxide. Those compounds can cause respiratory distress which can lead to weakened immunity, and reproductive disruptions in wildlife. The responses to air pollution vary by species."***

Available evidence indicates that birds[32], amphibians which breathe through their thin skin[33] and fungi[34] are some of the most sensitive to air pollution.

[25]https://www.academia.edu/60646361/Herpetofaunal_diversity_and_community_structure_in_the_Murchison_Falls_Albert_Delta_Ramsar_site_Uganda
[26]https://www.ecotrendsalliance.org/assets/files/Waterbirds-ofMurchisonFallsJuly2020.pdf
[27]https://www.researchgate.net/figure/List-of-medium-sized-mammals-observed-in-the-MFPA-from-camera-trap-photos_tbl2_283122588
[28]https://onlinelibrary.wiley.com/doi/abs/10.1002/aqc.70145
[29]https://www.researchgate.net/publication/344192328_Herpetofau nal_diversity_and_community_structure_in_the_Murchison_ Falls_-_Albert_Delta_Ramsar_site_Uganda_Herpetofaunal_diversity
[30]https://ugandawildlife.org/ramsar-program/
[31]https://www.ubos.org/wp-content/uploads/publications/The-Annual-Statistical-Abstract-2024.pdf
[32]https://www.sciencedirect.com/science/article/pii/S2351989421004480
[33]https://www.canada.ca/en/environment-climate-change/services/air-pollution/quality-environment-economy/ecosystem/wild-animals.html
[34]https://testbook.com/question-answer/which-of-the-following-is-indicator-of-air-polluti--618118af3a531b27fd31b759

The expert also noted that "Air pollution creates acidic rain which ends up in lakes and streams. This is deadly to aquatic life. Acid rain also causes harmful metals such as aluminum to accumulate in fish, and human beings risk suffering negative impacts when they eat the affected fish."

Birds and fish in the Murchison Falls-Albert Delta were exposed to air pollution during development of the Victoria Nile Pipeline crossing. The two species are especially vulnerable to air pollution, which can affect breathing and breeding in the species.

7.2. IMPACTS TO KANYWABAROGO WETLAND/RIVER

As earlier indicated, the EACOP is crossing 158 wetland sections in Uganda. Some of the wetlands crossed by the EACOP include Kanywabarogo, which is located in Hoima City as well as Hoima and Kikuube districts.

The wetland, which drains into Kafu, is mainly a swamp forest with woodland, natural grassland, shrubland and bushland/palms.

Kanywabarogo wetland, like many other Albertine wetlands, supports high biodiversity typically with around 80 plant species. The main plants found in the wetland include ferns, Marantachloa, Afromomum, Phoenix, Acanthus, "mususa" and Alchornea, Miscanthus.

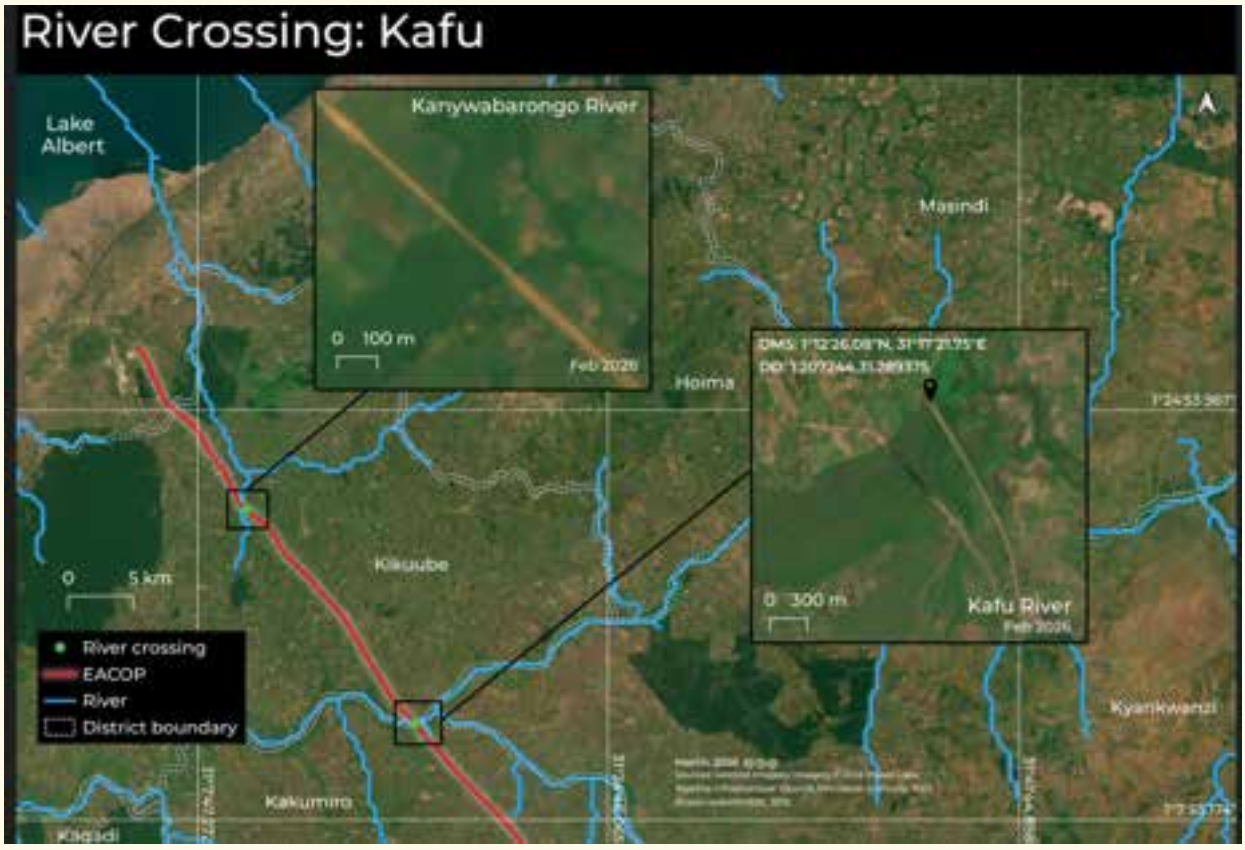
The key fauna species found in the wetland include Colobus monkeys, vervet monkeys, baboons, bush bucks, snakes, toads, frogs, mudfish, eagles, crested cranes, hornbills, turaccos and butterflies.

Worth noting is that the wetland supports species of conservation concern, such as the endangered (IUCN), Grey Crowned Crane (Balearica regulorum) and sometimes the papyrus gonolek (Laniarius mufumbiri).

Communities report that some tributaries of the wetland were blocked during the Tilenga feeder pipeline construction activities. This has resulted in noticeable impacts.

> ***One EACOP-affected woman from Hoima district notes, "Water no longer flows into Wambabya forest very well because some tributaries belonging to Kanywabarogo were blocked. The forest is home to chimpanzees. These seem not to be getting water well anymore so they come to the community to access water. They destroy gardens when they leave the forest. We no longer grow maize because the chimpanzees take it when they come out of the forest looking for water."***

A chimpanzee; Communities report that blocking of tributaries belonging to the Kanywabarogo and Wambabya wetlands has increased chimpanzee incursions into communities, leading to crop destruction.



A map showing the EACOP crossing of Kafu river in Kikuube and Kakumiro districts; communities in Kakumiro report that the wetland was affected by siltation during the EACOP construction activities, which led to flooding of nearby homesteads.

7.3. IMPACTS TO KIBALE/BUKOORA WETLAND

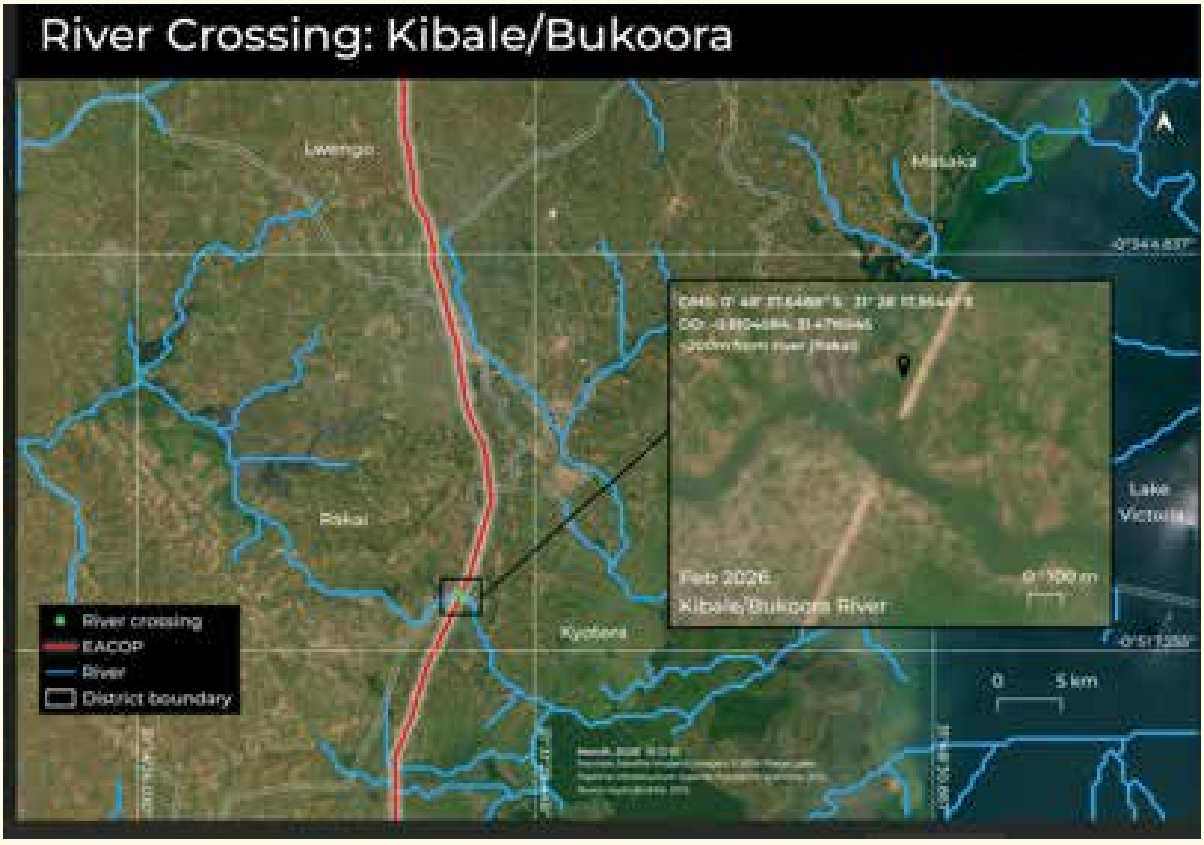
The EACOP also crosses Kibale/Bukoora wetland. Bukoora is the main wetland system in the Sango-Bay landscape. It is also a key river in the Sango Bay-Musambwa Island-Kagera (SAMUKA) Ramsar site.

The wetland is generally permanent with a few seasonal parts. The dominant vegetation in the wetland varies from place to place. Some parts are dominated by papyrus, swamp forest, reeds, sedges, and natural grassland. A relatively big part of the wetland has been converted to farmland and now the EACOP is adding pressure to the wetland.

The plants in the wetland include: Vossia, Miscanthus, papyrus, Sesbania, Afromomum, Pistia, Phragmites, Cyperus articulata, Phoenix, Acacia and Phoenix.

The Kibale/Bukoora wetland is renowned for having the largest swamp forest in Uganda, hosting approximately 65 mammal species and 417 bird species. The fauna includes: bush buck, catfish, herons, ibis, crested cranes and egrets.

The wetland also supports species of conservation concern, such as the endangered (IUCN), Grey Crowned Crane (Balearica regulorum) and the papyrus gonolek (Laniarius mufumbiri).



A map showing the EACOP crossing of Kibale/Bukora river

While communities report that the EACOP was yet to be developed through the wetland by March 2026, some tributaries belonging to the wetland in Rakai district are reported to have been blocked with mud from the EACOP construction activities.

The tributaries were also reported to have been affected by soil runoff due to the EACOP construction activities.

A wetlands expert notes that soil sedimentation affecting wetlands could have grievous impacts.

> ***He says, "Blocking a tributary is a severe disruption to the wetland's hydrology and has profound impacts on biodiversity and ecological integrity with issues such as loss of aquatic habitat being seen. The disruption of life cycles for many species, including fish and birds that rely on the seasonal flow patterns for breeding and migration, could also be seen."***
>
> ***He adds, "Stagnant, blocked water may also become anoxic (depleted of oxygen) or eventually dry up, converting an aquatic ecosystem into a terrestrial one, thereby eliminating all dependent species."***

The expert also notes that livelihood impacts could be seen as a result of blocking of the tributary.

> ***He observes, "Beyond the biodiversity impacts, such a blockage could have more severe socio-economic and physical impacts including but not limited to: Loss of livelihoods for wetland-dependent communities such as fishing and loss of access to water sources for domestic use (cooking, drinking), and watering livestock."***

A photo of Crested Cranes; Siltation of Kibale/Bukoora wetland endangers the conservation of this species of concern, which is also Uganda's national symbol.

Fisherfolk on the shores of Lake Victoria; communities report that wetlands connected to Lake Victoria have been negatively impacted by the EACOP construction activities.

7.4. IMPACTS TO RUTOOHA RIVER

Communities report that Rutooha river in Hoima district which drains into the Wambabya wetland and eventually Lake Albert was impacted by the Kingfisher feeder pipeline development activities.

Water was pumped from the river and into community gardens during development of the pipeline.

Pumping of water from a river can deprive dependent species of their habitats, leading to their loss.

8. CONCLUSION AND RECOMMENDATIONS

Uganda's wetlands, covering 13.9% of the country, represent a vital national asset that provides essential ecosystem services including water regulation, carbon storage, biodiversity conservation, and socio-economic benefits. These wetlands support key economic sectors such as agriculture, fisheries, and tourism, and are critical to the country's sustainable development aspirations as outlined in the NDP IV.

However, Uganda's oil and gas sector is placing unprecedented pressure on these fragile ecosystems. This brief shows that the EACOP as well as Tilenga and Kingfisher feeder pipelines are already having impacts on Uganda's wetlands.

The Victoria Nile Pipeline Crossing has affected the internationally significant Murchison Falls-Albert Delta Ramsar Wetland through noise and air pollution as well as the establishment of temporary workers' camps within the area of influence of this biodiversity hotspot. These disturbances pose particular risks to sensitive species including elephants, waterbirds, amphibians, and fish communities that are critical to both conservation and the livelihoods of local communities.

The EACOP and Kingfisher feeder pipeline have increased siltation of and pumping of water from key wetlands, risking biodiversity conservation.

The pipelines' impacts extend beyond biodiversity concerns to include socio-economic repercussions for wetland-dependent communities. The impacts to wetlands risk causing loss of fishing livelihoods, reduced access to water for domestic use and livestock, and increased crop damage from wildlife displaced by habitat degradation.

Recommendations

In light of the above, the following recommendations are made:

(i) The Ugandan government should task the EACOP Company, TEPU and CUL to address the oil impacts to wetlands that have been identified in this brief. Silted and blocked wetlands should be restored to protect biodiversity and protect communities' livelihoods.

(ii) This brief assesses oil impacts to a few selected wetlands. The Ugandan

government should undertake a wider participatory assessment of the impacts of Uganda's oil activities to all oil-affected wetlands. The findings of the assessment should be publicly communicated and measures taken, at oil companies' cost, to address oil impacts to wetlands.

(**iii) Before the above assessment is conducted, the Ugandan government should establish a multi-stakeholder Wetland Protection Oversight Committee specifically focused on oil and gas activities.** The committee should comprise of representatives from the Ministry of Water and Environment, Ministry of Energy and Mineral Development, National Environment Management Authority, Uganda Wildlife Authority, as well as civil society, cultural and religious leaders. These should supervise, participate in or provide oversight over the activities related to the aforementioned assessment.

(iv) In addition to the above, government, through its local government structures, should establish a community-based monitoring programme through which local communities can report oil impacts to wetlands and other natural resources. These reports should be discussed by the Wetlands Protection Oversight Committee with a view of ensuring that these oil impacts are addressed at oil companies' cost.

(v) Government must never again allow oil and other degrading activities to take place in Ramsar and other wetlands. The socio-economic cost of these activities may far outweigh any envisaged benefits from the degrading activities.

P.O. Box 34913 Kampala
Tel: +256 (0) 393 228323
Website: https://www.afiego.org
Email: afiego@afiego.org