



The Official Government of Uganda Inter-Ministerial/Agencies
Monthly National Integrated Multi-Hazard Early Warning Bulletin

15th JANUARY - 15th FEBRUARY 2023

Issue 74

# Yellow Fever Advisory

#### Background

Yellow Fever is a seasonal disease caused by viruses and it affects humans. Uganda lies in the Yellow Fever belt. Yellow fever is primarily transmitted to humans through an infected Aedes mosquito bite, especially individuals in areas bordering forests. The High risk areas are Agago, Abim, Kitgum, Lamwo, Wakiso, Nebbi, Koboko, Pader, Moyo, Maracha, Bulisa, Masaka, Kalangala and Rukungiri because of the history of yellow fever in these areas.

Presentation of yellow fever in humans; It presents with sudden onset of fever, with yellowing of eyes, bleeding and has not responded to malaria treatment.

#### Mitigation measures.

Sleep under a mosquito net or use mosquito repellents, Avoid stagnant waters and clear bushes around homes, Avoid forest like areas during the risk months, Vaccination .

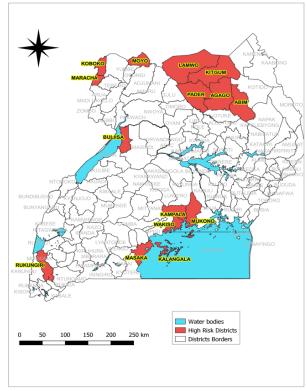
#### Seasons for Yellow fever

Rainy months of April, May, October and November, promote Aedes species mosquito breeding. Figure 1:Yellow Fever risk calendar for Uganda.

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Yellow Fever	Jan	Feb	Mar	Aprl	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Risk												



#### Map showing high risk areas for yellow fever between 2010 to 2022.



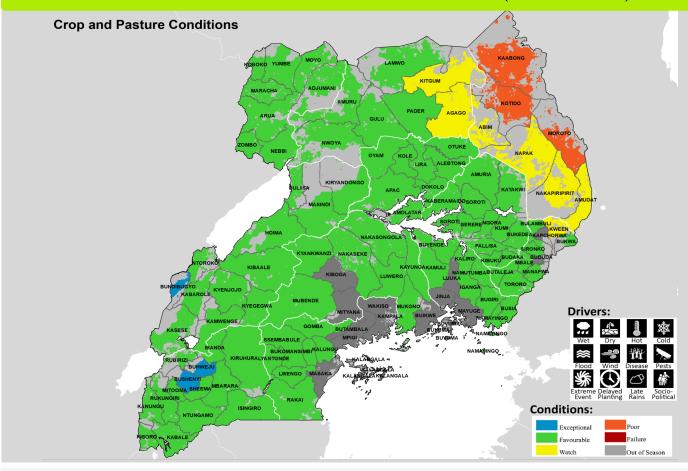
#### Health contact information

If a suspected yellow fever case is detected from the community, send sms to 6767 or call MoH Toll free 0800-203-033 / 0800-100-066/0800-303-033, or the National Emergency Coordination and Operations Centre (NECOC) ON Toll free line: 0800177777 and also report to the nearest health facility. Notify the area veterinarian for anthrax cases in animals.



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#### CROP & PASTURE CONDITIONS MAP OF UGANDA (DECEMBER 2022)



Source: Crop Monitor of Uganda. This crop conditions map synthesizes information for selected crops and pasture as of 19th December 2022. Crop and Pasture conditions over the month of December based on a combination of national and regional analysts' inputs along with remote sensing and rainfall data.

#### Early Warning for Regions!

Central 1, and Central 2: Due to the extended rainfall episodes through the months of December— January, the region maintained favorable to exceptional conditions. Both pasture and water availability has been sustained and is still expected to remain favourable throughout the month of February 2023. Farmers are advised to start land preparations for the coming season, ensure mulch of the perennial crops in the garden to reduce soil moisture loss. Livestock farmers are advised to store water for the coming weeks in preparation for the January - February dry period. Animal vaccinations against diseases associated with dry weather conditions such as Anthrax is strongly advised.

Elgon: Favorable, though declining conditions were maintained in all the districts except **Tororo** and **Butaleja** that registered improvements in the NDVI values though the temperatures are currently rising to usher in dry conditions. Crops have been harvested and the remains can be used to mulch the crops still in the garden to reduce moisture loss. Farmers are advised to utilize the harvests sustainably to ensure stable food supplies to the next season, utilize the period for implementing environmental restoration measures in the high risk communities, enhance production of the off season crops (mostly vegetables) through drip irrigation.

West Nile, Acholi, Lango: The region sustained favorable conditions with slight decline due to extended ND season though most of the crops have been harvested. The current high temperatures in the region, coupled by the culture of bush burning is likely to increase the risk of bush fires. Communities are advised to create fire lines around homes, gardens and, increase water intake by both the population and the livestock. Incidences of human wildlife conflicts are likely to increase in the communities neighboring national parks as the wildlife may stray in search of water, food and safe habitats. Uganda Wildlife Authority and the Districts are advised to intensify surveillance and awareness creation on human-wildlife conflict mitigation.

#### Early Warning for Regions!

Teso and Karamoja: The dry season continues to get fully established in Karamoja as observed from the poor conditions (red) observed in Moroto, Kotido and Kaabong. Teso sub region still maintained favorable conditions. Communities are advised to utilize the period for establishing flood control structures around homes and gardens. There is also need to prevent bushfires that are common during the drier months. Government and partners should start planning the Karamoja drought response noting the monthly increase in the number of districts whose conditions are declining as drier months unfold.

Western and South Western: Favorable to excellent conditions were observed with stable to improving values implying that the region still maintained wetter weeks throughout December. This will bring stability in milk production that has traditional been interrupted during the months of January and February. Farmers are advised to continue with land preparation and vaccination and treatment of livestock while watching out for isolated risks of flooding in the low lying areas. DDMCs are advised to assess and report all events that may occur during this period.

East central sub region: Favorable conditions were maintained throughout the month of December 2022 with stable to improving values, these improvements however came off season and is of minimal benefit to the farmers except for the off season crops that are rarely planted and land preparation that farmers should now be concluding. Generally, pasture conditions and water availability have been guaranteed through the late rains and these have reduced the risks associated with high temperatures during the January February season.



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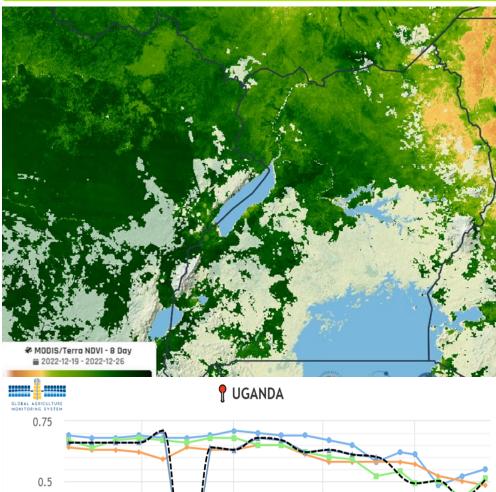
Oct

MODIS/Terra NDVI - 8 Day

# **U - NIEWS**

### Uganda National Integrated Early Warning System - Monthly Bulletin

#### HIGHLIGHTS - NDVI Anomaly (11th- 19th, DECEMBER 2022)



NDVI 0.25

Nov

No Mask 🌃 No Mask 31 2020-09 - 2021-01 3 2018-09 - 2019-01 MODIS/Terra NDVI - 8 Day MODIS/Terra NDVI - 8 Day 🎸 No Mask 🎸 No Mask 31 2022-09 - 2023-01 31 2021-09 - 2022-01 MEAN MODIS/Terra NDVI - 8 Day 🌃 No Mask 31 2022 - 2023

Dec

MODIS/Terra NDVI - 8 Day

glam.nasaharvest.org

Jan

The Normalized Difference Vegetation Index (NDVI) is used to characterize the health of the vegetation for a particular timeframe compared to what is considered normal. In agricultural monitoring, negative values can be a good indicator of poor crop conditions or a slower growth rate of the crop due to a variety of environmental conditions such as drought or a significantly delayed season is commonly used as an indicator for droughts early warning which enable preventive early action to minimize their impacts.

NDVI anomaly is the difference between the average NDVI for a particular period of the year and the average NDVI for same period over a specified number of

For the period of 11th - 19th, December, the NDVI anomaly shows in green color in the areas where conditions are "above normal." The light green color represents areas where conditions are better than 'normal". The yellowish-brown to dark brown areas represent areas where the vegetation conditions are below normal and associated with delayed onset of SOND over those areas. Due to cloud cover, anomalies cannot be assessed in the grey areas.

It is observed that much of the East Central, Central and South Western parts of the Country were still under thick cloud cover, implying the possibility of getting occasional off season rains. With the exception of Karamoja which is already in poor to watch conditions, though with declining to stable values. The rest of the Country; namely; Teso, Acholi, Lango and West Nile sub regions remain under favourable conditions December- January period.

Below is a graphical representation of the current vegetation conditions. The orange line represents the conditions for five months from September 2018 - January 2019 and the blue line above all the others shows the same period of 2020 - 2021. The green line indicates the 2021 - 2022 conditions. The 2022-2023 conditions are shown by the deep blue line lying on the average line from early October to Mid December. The black dotted line is the average of the four (4) years represented by the graph and it shows that 2022 values largely remain below average till early November when the late rains caused an improvement.

Generally, the NDVI values have presented normal

conditions all over the Country for the period November 2022 - January 2023 that are expected to be maintained in the next couple of weeks. Farmers across the country are advised to utilize current conditions to complete land preparations, ensure hay processing, harvest and store enough water, ensure pest and disease/vector controls. Communities country wide are encouraged to ensure adequate water intake to minimize the risk of dehydration. Office of the Prime Minister in collaboration with Uganda National Meteorological Authority (UNMA) shall continue monitoring the evolution of January—February to provide subsequent updates and further advisories.



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#### RAINFALL OUTLOOK OVER UGANDA

#### **WESTERN REGION**

**Central Western** (Bundibugyo, Ntoroko, Kabarole, Bunyangabu, Kyenjojo, Kyegegwa, Kamwenge, Masindi, Buliisa, Hoima, Kakumiro, Kagadi, Kikuube and Kibaale) districts . Overall, near normal rainfall is expected over most parts of the region.

South Western (Kabale, Kisoro, Rubanda, Rukungiri, Rukiga, ,Kanungu, Ntungamo, Rvvampara, Kazo, Mbarara, Kiruhura, Isingiro, Ibanda, Bushenyi, Buhweju, Mitooma, Sheema, Rubirizi, Kitagwenda and Kasese) districts . Over all, near normal rainfall with high tendency to below normal is expected to prevail over most parts of the region.

#### **LAKE VICTORIA BASIN & CENTRAL REGION**

Northern& Southern parts of Central(Nakasongola, Luwero, Kyankwanzi, Kakumiro,,Kasanda, Nakaseke, Kiboga, Mubende, Kasanda, Sembabule, Lwengo, Lyantonde, Kyotera, and Rakai) districts. Overall, there are high chances of below average conditions over most parts of the region.

Eastern parts of Central (Mukono, Buikwe, Kayunga, Buvuma) districts. Over all, there are high chances for near normal rainfall over most parts of this region.

Central and Western Lake Victoria Basin (Kalangala, Kampala, Wakiso, Masaka, Lwengo, Mpigi, Butambala, Gomba, Kalungu, Bukomansimbi, and Mityana) districts. Overall, near normal with a slight tendency to near normal is expected to prevail over this region.

Eastern Lake Victoria Basin (Jinja, Bugiri, Kamuli, Iganga, Buyende ,Bugweri, Luuka, Namutumba, Kaliro, Busia, Mayuge, Namayingo and Tororo) districts. Overall, near normal rainfall during this season is expected to prevail over this region.

#### EASTERN REGION

**South Eastern**: (Kamuli ,Iganga, Luuka, Namutumba, Buyende, Kaliro & Butaleja) districts. Overall, there are high chances of below normal rainfall conditions over this region.

**EasternCentral:** (Pallisa, Budaka, Butebo, Kibuku, Mbale, Sironko, Manafwa, Bududa, Bulambuli, Namisindwa, Kapchorwa, Kween, Bukwo, Bukedea, Kumi, Kalaki, Ngora, Serere and Soroti) districts. Overall, there is a good possibility of near normal rainfall over this region.

North Eastern: (Amuria, Kapelebyong, Katakwi, Nabilatuk, Moroto, Kotido, Nakapiripirit, Abim, Napak, Amudat, Karenga and Kaabong) districts .Overall, near normal with a higher probability of below normal rainfall is expected during the forecast period.

#### **NORTHERN REGION**

North Western (Zombo, Nebbi, Pakwach, Madi-Okolo, Arua, Maracha, Terego, Koboko, Yumbe, Moyo, Obongi, and Adjumani) districts. Overall, there are high chances for below normal rainfall over most parts of this region.

Eastern Northern Parts: (Lira, Alebtong, Amolatar, Kitgum, Lamwo, Agago, Otuke, Pader, Kole, and Dokolo and Kaberamaido) districts. Overall, there are high chances for near normal rainfall over most parts of the region.

**Central Northern Parts**: (Gulu, Omoro, Nwoya, Amuru , Oyam and Kiryandongo) districts Overall, there is a high likelihood of below normal rainfall over this region.

#### Rainfall Forecast (mm):Jan- Feb 2023

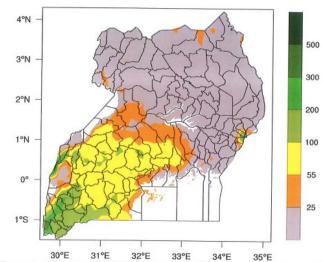


Figure 1: Expected Spatial rainfall forecast for January - February 2023

#### RAINFALL OUTLOOK

Overall, the January–February rainfall outlook indicates that most parts of the country are likely to experience dry weather conditions. However, parts of South Western and Central Uganda are expected to receive occasional rainfall.

Temperatures are expected to be warmer than average over most parts of the country.

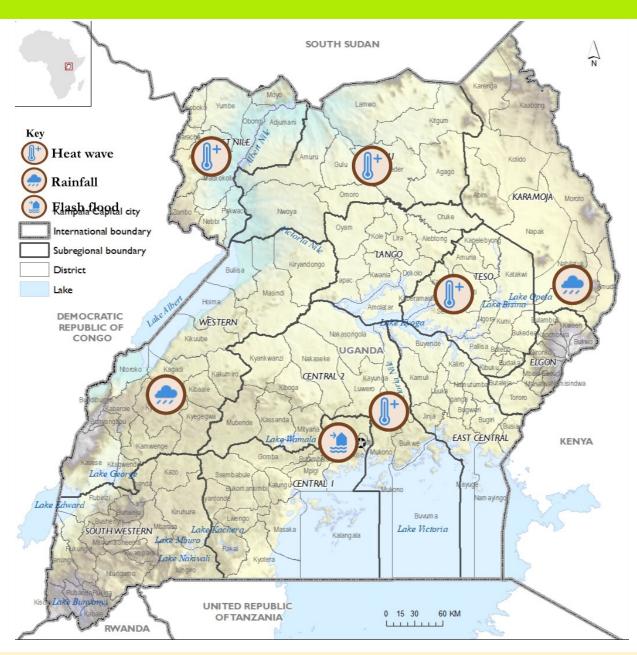
#### **Advisories:**

The predicted weather conditions over the month of January 2023 are expected to have impacts. The following are advisories to the communities;

- Communities are advised to practise good sanitation and personal hygiene to prevent disease outbreaks
- Increase surveillance to report any disease incidences to responsible authorities for immediate interventions.
- Monitor and report any emergence of crop pests, animal parasites and plant diseases to responsible authorities.
- Health education, awareness campaigns and health inspections should continue within the communities.
- Health units are encouraged to stock medicines for any anticipated disease incidents.
- Communities are urged to avoid bush burning to preserve ecosystems
- Communities are encouraged to practise rotational grazing of livestock..
- Farming communities are advised to practise good post harvest handling practises such as using tarpaulins to avoid compromising the quality of harvested crops.
- General public is encouraged to manage water resources to minimize water shortages.

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#### MULTI HAZARD EARLY WARNING PROBABILITY MAP – 15th January 2022 -15th February 2023



#### **BIOLOGICAL HAZARDS**

#### Communicable disease outbreaks, epidemics and health emergencies

- The outlook for January to February 2023 indicates that most parts of the country are likely to experience dry weather conditions. Though, parts of South Western and Central Uganda are expected to receive occasional rains. There is likely to be an increased prevalence of malaria. The associated risk of outbreak of water borne diseases such as typhoid, cholera is expected.
- Areas close to the shorelines and banks of water basins are advised to keep their surroundings clean and in proper hygiene to avoid disease outbreaks. The public is advised to enhance diseases surveillance in flood –prone areas for prevention and treatment.
- ♦ Encourage routine water treatment at all levels
- ♦ Monitor and reposition stocks of drugs & routine distribution of long —lasting insecticide mosquito nets.

#### TECNOLOGICAL HAZARDS

Road Accidents: . To prevent traffic accidents, drivers are advised to drive carefully, avoid driving after consuming alcohol, respect road signs and road conditions, and follow the guidelines of the Uganda National Roads Authority (UNRA).

# **P**

# **U - NIEWS**

#### Uganda National Integrated Early Warning System - Monthly Bulletin

#### DISASTER EARLY WARNINGS AND OUTLOOK - 15th January 2023- 15th February 2023

#### **BIOLOGICAL HAZARDS**

#### Disease outbreak

Sunny and dry conditions are expected to prevail over most parts of the country that include the Northern, Eastern and Karamoja sub region .However, a few parts of South Western extending to Central Uganda and Mount Elgon areas are likely to experience occasional rainfall conditions. This will most likely lead to;

- High risk of diarrheal diseases such as cholera, dysentery ,typhoid fever and infections such as trachoma in some parts of the country.
   Communities are advised to draw water from safe water points. Village Health teams are urged to sensitize the communities to maintain good sanitation and hygiene so as to avoid exposing themselves to preventable health risks.
- Clearing bushes, opening of drainages, use of mosquito nets, fumigating in & around homesteads is encouraged as a precautionary control measure against malaria.

To minimize public health risks during the projected rainy period: There is need to conduct community awareness about the potential outbreak of the diseases and improve surveillance.

Alert Level: Moderate Hig

#### HYDRO-METEREOLOGICAL HAZARD

#### WATER SHORTAGES

The rainfall outlook for January indicates that most parts of the country are expected to experience dry conditions while some areas in the South West to Central regions will continue to receive occasional rains.

- Farmers and pastoral communities are advised to fully utilize the forecasted dry conditions to harvest pasture especially in the Northern and Eastern regions.
- Practice rotational grazing and control burning of bushes
- Harvest and keep water & dry pastures .
- Enhance efficiency on water storage and use to minimize losses.
- Ensure that there is proper postharvest handling of food crops so as to meet food requirements at household level.

Alert Level: Moderate High

#### FIRE OUTBREAKS

Considering that dry conditions are likely to prevail over most parts of the country and temperatures warmer than average, the risk of fire outbreaks are high;

There is a tendency in the rural communities to burn the bushes ahead of the start of the next season, this at times negatively impacts on the livelihoods and assets more so at the household level ,given the nature of roofing materials used in some communities

- Community leaders are advised to sensitize the masses against engaging in bush burning as it destroys the micro ecosystems.
- Formulate a team of community helpers to carry out regular fire safety drills in the communities.
- Fire safety education among the communities to help them know the causes of fires at household level and keep them mindful in their

Alert Level: Moderate High

#### TRANSPORT TECHNOLOGICAL HAZARDS

Transport Accidents: Any Location

Fire: Any Location

- Road users should take extra care to avoid driving recklessly and /or under poor visibility conditions.
- Caution should be taken if driving by keeping both hands on the wheel and slowing down.
- Local Government Authorities should consider providing mechanisms to update the public on the state of the roads in their areas of jurisdiction.

Alert Level: Moderate High

# **D**

# **U - NIEWS**

#### Uganda National Integrated Early Warning System - Monthly Bulletin

#### **DISASTER STATISTICS - DECEMBER**

#### TRANSPORT/ TECHNOLOGICAL EVENTS

Motor and Aero Accidents

**Reported in** | Accross the country.



86



efootod.



3 :



Death

**SUFFOCATION** | 02Reported

Affected: 03 | Deaths: 03 | Injured: 00

**DROWNING** | Reported 07

Affected: 07 Deaths 07 Injured 00

Building Collapse:03 Reported | Deaths 06 | Injured 01

Source: NECOC/OPM, and Partners - December 2022 Summary

#### **FIRE**

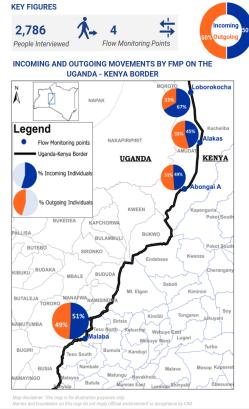
Fire incidents across the country.

Reported: 12 Affected: 06 Injured: 02 Deaths: 04

Source: NECOC/OPM, Uganda Police Force, December 2022

In December 2022, a total of 2,786 people were interviewed at four Flow Monitoring Points (FMPs) across the border between Uganda and Kenya. Incoming and outgoing movements were equally represented at 50 per cent each. However, Loborokocha FMP has proportionately almost 1 in 2 incoming (67%) because it's the across





EXTRACT | DTM UGANDA: FLOW MONITORING SURVEY—DEC 2022

#### HIGHLIGHTS

By February, the number of households across bimodal areas facing Stressed (IPC Phase 2) or worse outcomes is expected to begin increasing again as stocks are exhausted, particularly in areas where production was relatively poor. While area-level Minimal (IPC Phase 1) outcomes are expected in most bimodal areas, Stressed (IPC Phase 2) outcomes are expected to persist in much of the greater northern and eastern Uganda given the impacts of consecutive poor production seasons and high prices of food and essential non-food commodities.

BRIEF ON FOOD SECURITY SITUATION

The ate-season rainfall in December improved cumulative totals for the September to December second rainy season. The season concluded with cumulative rainfall reaching average to above average levels across most parts of the country. This has slightly improved production prospects for perennial crops (including cassava and sweet potatoes) and plantation crops (including bananas, coffee, sugar cane, and tea) that will be harvested in future months, with production of these crops expected to be near average at the national level. However, unusually heavy rainfall during the ongoing harvesting results in high moisture content for the crops being offered on the market. Though performance was mixed, national-level production of these crops is estimated to be better than the first season of 2022 but still below average.

In Karamoja, below-average household food stocks and aboveaverage staple prices continue to constrain food access amid limited opportunities for income-earning. Across monitored Karamoja markets, prices of staple sorghum grain increased by 17 to 28 percent from October to November, reaching levels 22 to 71 percent higher than prices recorded last year and the five-year average. Elevated prices are being driven by the below-average 2022 main harvest in Karamoja, below-average national production in 2022, delays in supplies from neighbouring sub-regions reaching Karamoja, high prices of fuel, and general inflation in the country. Given high prices and below-average incomeearning from typical activities including casual labor and sales of firewood, charcoal, and livestock, many poor households continue to be unable to meet their basic needs. Stressed (IPC Phase 2) and Crisis (IPC Phase 3) outcomes persist in the region. The lean season is expected to begin early, by March, as more households exhaust below-average food stocks. As the lean season intensifies throughout the remainder of the projection period, an increasing number of households are expected to deteriorate to Crisis (IPC Phase 3) or worse outcomes.



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#### Important Note!

#### National Emergency Coordination and Operations Centre (NECOC)

The Office of the Prime Minister's Department for Disaster Preparedness and Management established the National Emergency Coordination and Operations Centre (NECOC) in October 2014, with the support of United Nations Development Programme (UNDP). Uganda's National Emergency Coordination and Operations Centre (NECOC) is a 24 hour, 7- days a week central facility for early warning dissemination and coordination of emergency and crisis response and recovery action. The NECOC is established under the National Policy for Disaster Preparedness and Management of Uganda (NPDPM) with the purpose of contributing towards the functionality and characteristics that make creation of an integrated and multi-sectoral system approach to planning, preparedness and management of disasters that is fundamental to sustained productivity and socio-economic growth of the country.

#### **UPCOMING DRM EVENTS:**

- District Disaster Management Committee Training in Ibanda and Rukungiri District Local Government (January 2023)
- Launch Workshop of FAO-CHINA-UGANDA South South Cooperation Project Phase 3 (20th January 2023).

For more details:

Office of the Prime Minister (OPM)

National Emergency Coordination and Operations

Centre (NECOC)

5th Floor, Postel Building, Clement Hill Road P.O Box 341, Kampala Uganda. Tel No. <u>0414 342 104</u>

Website: www.necoc-opm.go.ug
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: 0800 177 777

