



ICPAC

Summary for Decision Makers

# SEASONAL FORECAST

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October to December 2024

# Rainfall and Temperature

October to December (OND) is an important rainfall season, particularly in the equatorial region of the GHA, where it contributes up to 70% of the annual total rainfall over parts of Kenya and Somalia. Analysis of global climate model predictions from nine Global Producing Centres (GPCs), customized for the GHA, indicates an increased likelihood of drier than usual conditions during OND 2024 in the eastern Horn of Africa, including southern Ethiopia, much of Somalia, eastern Kenya, and parts of central and southern Tanzania (Figure 1a). The highest likelihoods for below-normal rainfall (probability = 55%) are indicated for southern Ethiopia and central and northern Somalia.

Conversely, wetter-than-normal conditions are predicted for western parts of the region, including southeastern South Sudan, much of northern and eastern Uganda, western and northwestern Kenya, northern Tanzania, and parts of southern Burundi.

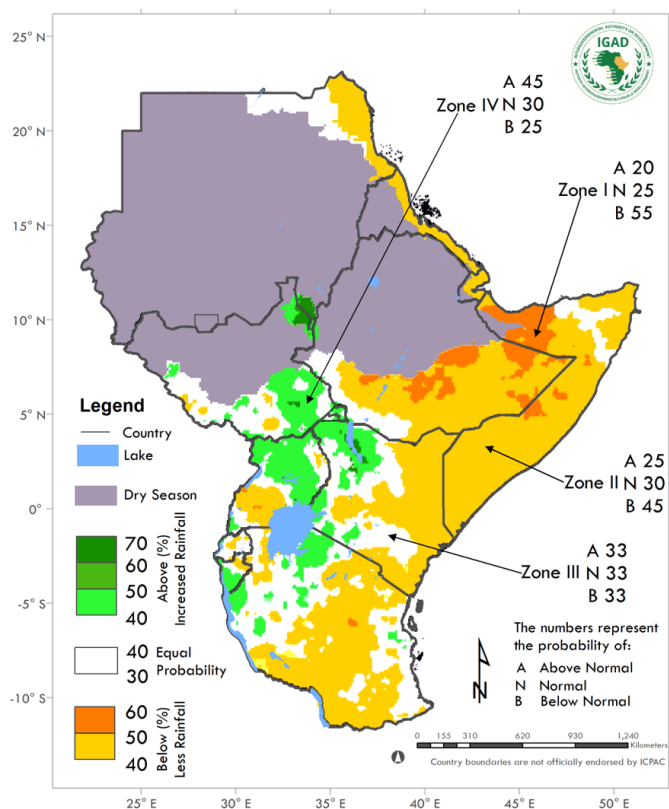
In some areas, such as southwestern Ethiopia and South Sudan, central and southern Kenya, central and southern Uganda, eastern Rwanda, most parts of Burundi, and eastern and northwestern Tanzania, the forecast probabilities for above-, near-, and below-normal rainfall are equal at 33% thus each of the three categories are predicted to have an equal likelihood of occurring.

The predicted start dates of the October to December 2024 season based on 5 Global Climate Model forecasts that provide daily rainfall outputs are provided in Figure 2 (a). The analysis indicates higher chances of early to normal onset dates over much of the western parts of the region including southwestern Ethiopia, much of southern South Sudan, Uganda, western Kenya, much of Burundi, Rwanda, and western as well as central Tanzania (Figure 2b).

The most spatially coherent areas with predicted enhanced chances for delayed onset are in southern Somalia, parts of southern and eastern Tanzania as well as central/western and northeastern South Sudan and eastern/central Kenya. However, isolated pockets with enhanced chances of delayed onset are also predicted in other areas (Figure 2b).

**How should I use seasonal forecasts?** Seasonal forecasts are tailored for planning purposes as they are associated with uncertainties. Therefore, this seasonal forecast should be used in conjunction with weekly and monthly forecasts as well as climate monitoring products issued by ICPAC and National Meteorological and Hydrological Services (NMHSs) of the region.

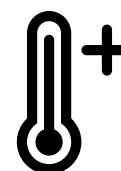
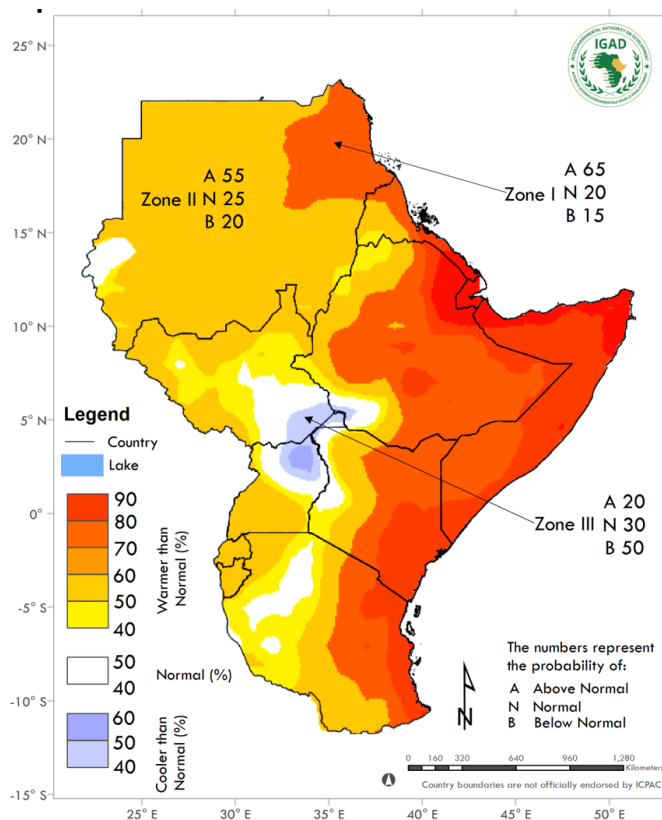
## Rainfall Probabilistic Forecast October - December 2024



Rainfall

Figure 1 (a): October - December 2024 rainfall probabilistic forecast

## Temperature Probabilistic Forecast for October - December 2024

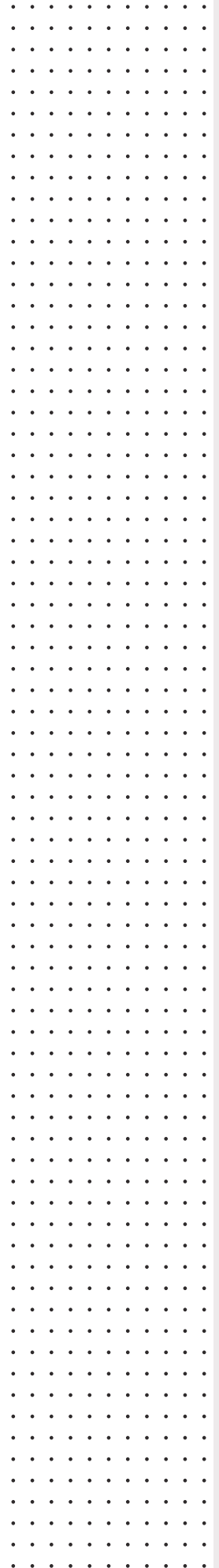


Temperature

Figure 1 (b): October - December 2024 temperature forecast

Drier-than-normal conditions are expected in the eastern Horn of Africa as western parts likely to experience above-normal rainfall conditions

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## October - December 2024 onset

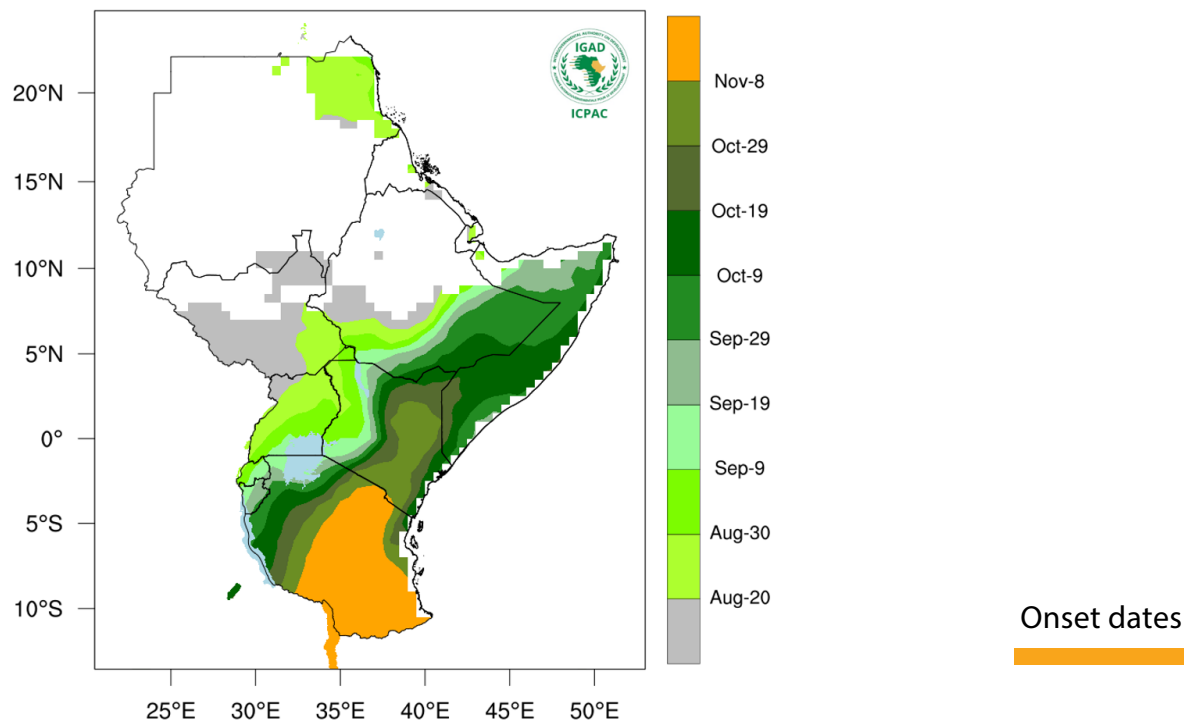


Figure 2 (a): October - December 2024 onset dates.

## October - December 2024 onset probability

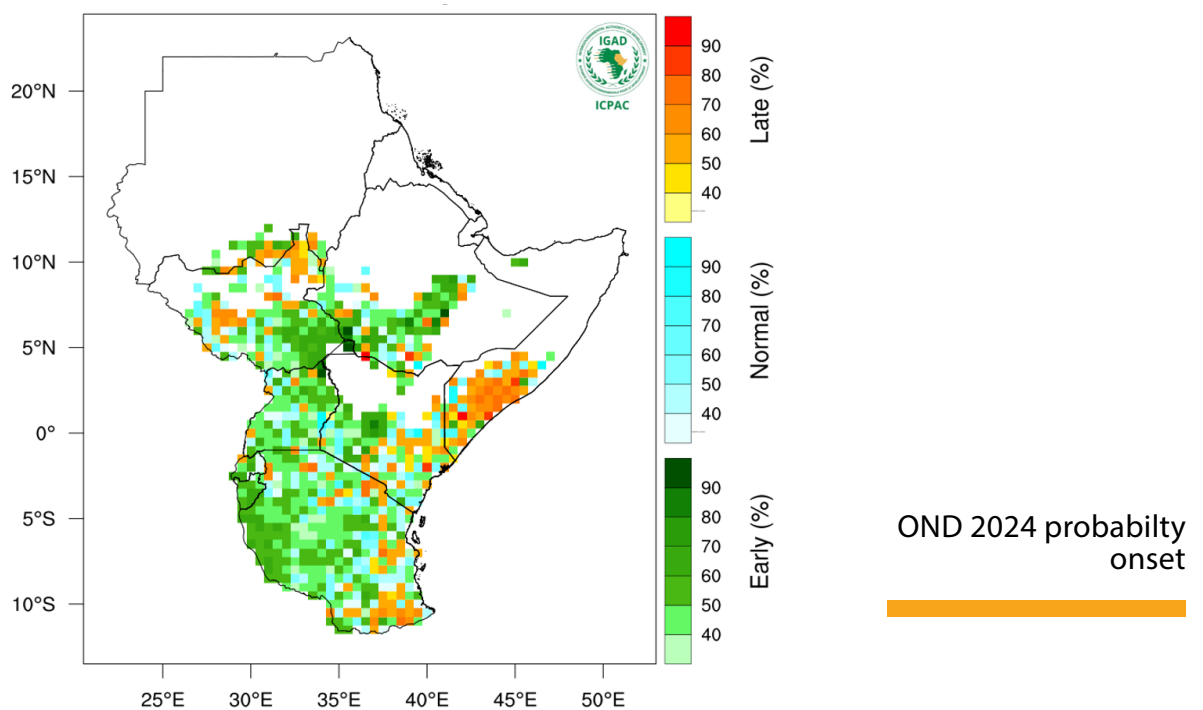


Figure 2 (b): October - December 2024 probability onset dates.



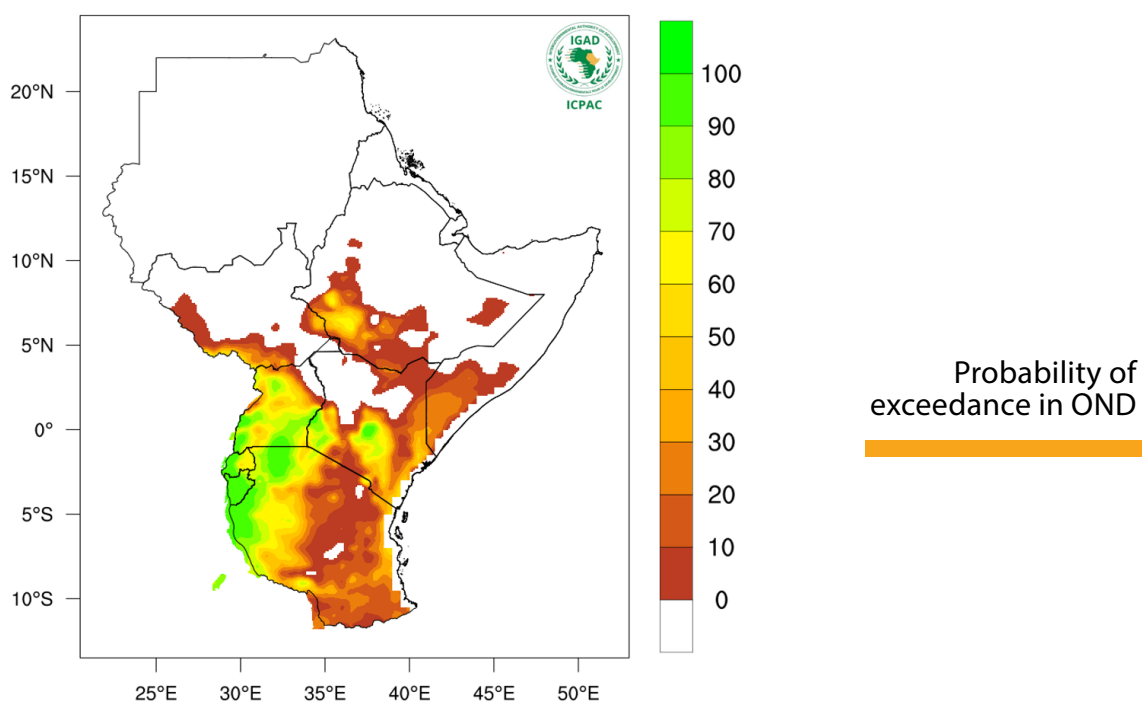


Figure 3: October - December 2024 probability of exceeding 300 mm in OND.

- There is over 80 % chance of exceeding the 300mm threshold over western parts of the region including much Burundi, Rwanda, Uganda, north-western Tanzania, and western Kenya.

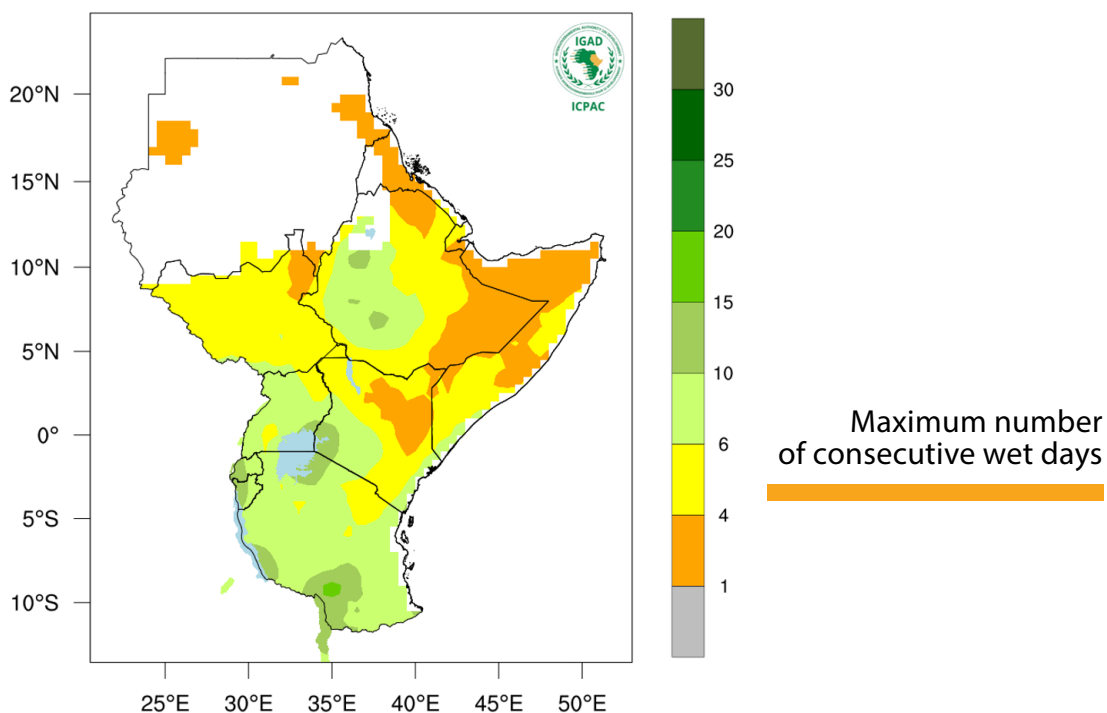


Figure 4 : October - December 2024 maximum number of consecutive wet days

- Highest number of consecutive wet days (6-10) are expected over western Kenya, Uganda, Rwanda, Burundi, South Sudan, southwestern Ethiopia, and western Tanzania.

# September 2024 forecast

## Rainfall Probabilistic Forecast for September 2024

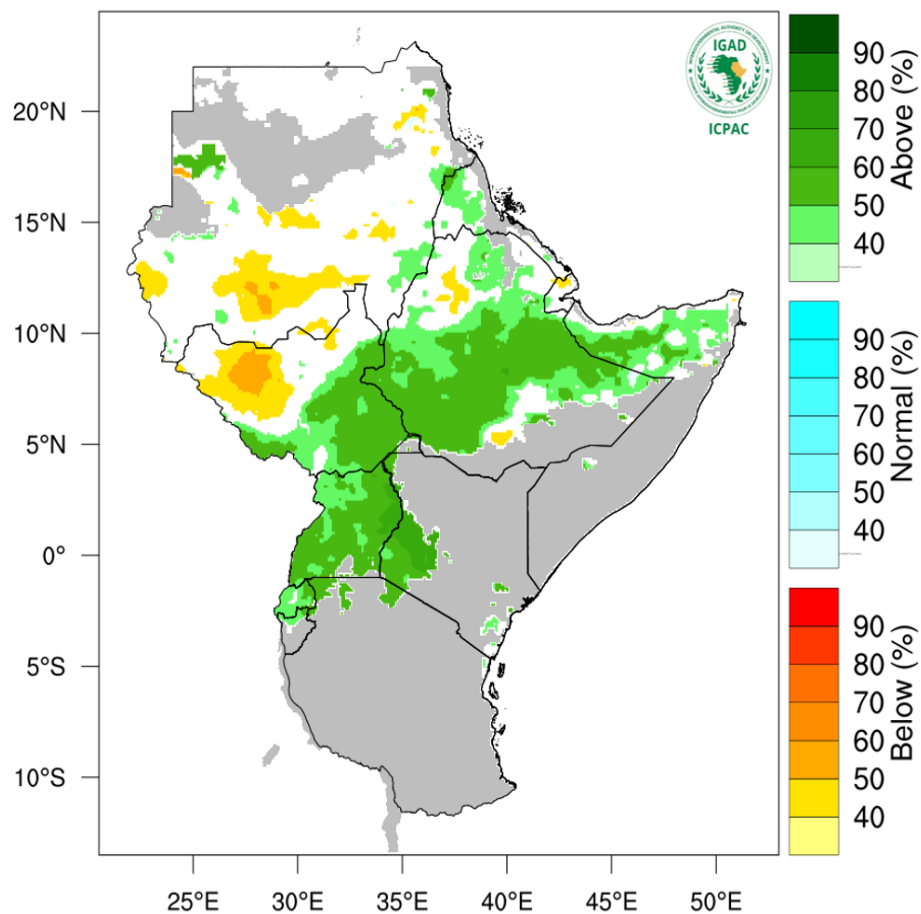


Figure 5 : September rainfall forecast

- Wetter than usual conditions expected over Rwanda, Uganda, western Kenya, southern South Sudan, most parts of Ethiopia, and northern Somalia.

- Drier than usual conditions expected over parts of South Sudan, north-western Ethiopia, and Sudan.

# DJIBOUTI



## Disaster Risk Management

Increased respiratory complications as a result of heatwaves and increased dehydration among people due to high temperature.

### Advisories

- Urge public officials to disseminate early warning information with clear advisories for communities to hydrate.



## Agriculture and Food Security

Possibility of drying of shallow wells may lead to a reduction in water for domestic and agricultural use. As farming season begins in September in coastal areas, the expected below average rains could lead to a reduction in soil moisture.

### Advisories

- Distribute agricultural inputs (seeds, fertilizers, phytosanitary products, etc.) to farmers early.
- Set up an early warning plan.
- Urge the government and actors to distribute food rations to the most vulnerable and food-insecure populations.



## Water and Energy

Adequate water availability.

### Advisories

- Implement water conservation as this is not the main rainy season.



## Livestock

There is a conducive window for livestock offtake before animals' body condition deteriorates, and animal prices remain stable. Reduced pasture and water availability could lead to increased livestock mobility. Deterioration of animal body condition, leading to poor prices, reduced food security, decreased animal reproduction and productivity (including milk, meat, hides, and skins), and an increased risk of disease outbreaks, especially Transboundary Animal Diseases (TADs). Increased community vulnerability, especially for women and children, due to the added burden of fetching water, caring for the sick, and searching for pasture.

### Advisories

- Promote the provision of supplemental animal feeding.
- Encourage the use of crop residues and agro-processing by-products as animal feed.
- Enhance the production and conservation of fodder, including benefits from June to September (JJAS) beneficiary areas.
- Promote gender-responsive migration and establish peace committees to mitigate conflicts between pastoralists, farmers, and water users.
- Encourage livestock offtake before the deterioration of animal body condition.
- Promote the rehabilitation and servicing of critical water sources.
- Advocate for anticipatory action and mobilize resources accordingly.



# ETHIOPIA



## Disaster Risk Management

There is a likelihood of a shortage of grazing pasture for pastoralists, high chances of livestock diseases, and the drying up of water resources/points for both human and animal consumption. This may lead to resource based conflict.

### Advisories

- Disseminate early warning information to communities in vulnerable areas.
- Promote the production and storage of fodder for livestock.
- Rehabilitate water points.
- Enhance livestock disease surveillance and advocate for early vaccinations.



## Agriculture and Food Security

Drier conditions expected from October in JJAS receiving areas (mainly northern and most central areas) will support crop maturity and the harvesting of early maturing crops. Likelihood of high temperatures and dry spells could increase the frequency of irrigation in Afar and the eastern part of the country, and there is a likelihood of decreased crop production (e.g., tef, beans, maize) in the southeast part of Somali, southern Oromia, and southern Ethiopia.

### Advisories

- Encourage water harvesting during the OND season to support irrigation.
- Maintain irrigation schemes and boreholes.
- Urge the government and other actors to activate the shock response plan for southern Oromia and the eastern Somali region.
- Recommend an emergency seed reserve for the MAM 2025 season.



## Water and Energy

There is a potential reduction of water availability for basins in the east of the country, while the south will have adequate water availability. The west of the country, where OND is not the main rainy season, might also have sufficient water availability. However, there is a risk of flooding in the south.

### Advisories

- Raise awareness about water shortages and floods, and coordinate with the country's disaster response team.



## Livestock

Positive impacts - Western part of country

The regeneration of pasture and availability of water will reduce livestock mobility to access water and pasture, enhance food security and good nutrition, and increase livestock productivity (meat, milk, hides, and skins). This will also lead to good animal body conditions and expected stable or improved prices (UG), as well as creating favorable conditions for vaccination and water harvesting.

Eastern part of country

Pasture and water harvested from JJAS rain will support livestock, providing a conducive window for livestock offtake before animals' body condition deteriorates, maintaining stable animal prices, and ensuring the availability of crop residues and by-products in some parts of the country.

## Negative impacts

### Western part of country

Displacement due to floods and mudslides, along with livestock deaths, leading to outbreaks of waterborne diseases, internal parasites, and Transboundary Animal Diseases (TADs). The influx of livestock from Sudan seeking water and pasture could cause a strain on natural resources and animal health services. This also could cause migration related conflicts due to inadequate pasture in areas with little rain or those affected by floods. Additionally, there is a likelihood of damage to infrastructure, especially roads and water-holding structures, which will affect market access.

### Eastern part of country

Reduced pasture and water availability could lead to increased livestock mobility, which in turn heightens community vulnerability, especially for women and children, due to the increased burden of fetching water, caring for the sick, and searching for pasture. This situation could result in the deterioration of animal body condition, leading to poor prices, reduced food security, and decreased animal reproduction and productivity (milk, meat, hides, and skins). Additionally, there is a risk of disease outbreaks, especially Transboundary Animal Diseases (TADs), and increased conflicts over pasture and water among animals, wildlife, and humans.

### Advisories

- Promote the provision of supplemental animal feeding.
- Promote the use of crop residues and agro-processing by-products as animal feed.
- Enhance disease surveillance, especially for Rift Valley Fever (RVF).
- Enhance the production and conservation of fodder, including benefits from JJAS beneficiary areas and March April May (MAM) seasons.
- Facilitate community awareness about expected rains to plant fodder, present animals for vaccination, and harvest and conserve water and pastures.
- Facilitate community awareness on the possibilities of animal disease outbreaks, such as anthrax and TADs.
- Promote gender-responsive migration and establish peace committees to mitigate conflicts between pastoralists, farmers, and water users.
- Promote livestock offtake before the deterioration of animal body condition.
- Promote the rehabilitation and servicing of critical water sources.
- Advocate for anticipatory action and mobilize resources accordingly.



## Health

From September to November—the peak malaria transmission season—is expected to cause a rise in malaria cases leading to more illness and deaths, particularly in areas where the surge is already in progress. Additionally, normal and wetter conditions, coupled with warmer-than-normal temperatures, could accelerate malaria transmission. A rise in cholera cases is expected in areas experiencing drier conditions due to a shortage of water supply. Historically, eastern Ethiopia is known for its semi-arid and arid conditions. Recent forecasts indicate that these drier conditions may worsen, potentially leading to cholera outbreaks. Dengue fever disease Storing water in small containers at the household and community levels to overcome water shortages may lead to an increase in Aedes mosquito density, which transmits Dengue fever. Malnutrition is likely to occur in areas facing drier conditions due to disruptions in food production and reduced availability of animal products.

### Advisories

- Enhance the current prevention and control measures for malaria surges in various parts of Ethiopia.
- Prepare for malaria week, conducted annually during the first and second weeks of September.
- Strengthen the cholera control campaign and limit its expansion.
- Monitor water points, enhance risk communication, and improve the preparedness plan.
- Collaborate with other sectors to enhance the preparedness plan for water supply and environmental control, targeting the discarding of containers that support Aedes mosquito breeding.
- Raise awareness and engage the community in eastern Ethiopia, known for dengue fever outbreaks.
- Partner with Disaster Risk Management to prepare seasonal assessments and plans for hotspot districts facing potential food shortages.

# KENYA



## Disaster Risk Management

The drying up of water sources could force women and girls to trek long distances, exposing them to safety risks. This situation may also lead to livestock disease outbreaks and loss, human disease outbreaks (waterborne and vector-borne), increased resource-based conflicts and cross-border movements, and infrastructure damage, including drainage clogging, roads, and bridges.

### Advisories

- Activate and/or review drought contingency plans.
- Mobilize resources for early action.
- Initiate measures to mitigate protection issues, including empowerment, law enforcement, and reporting mechanisms.
- Implement the transhumance protocol and promote cross-border movement negotiations by member states.
- Conduct community awareness campaigns on public safety two weeks before the predicted onset dates in mid-September 2024.
- Clear drainages and repair weak points.



## Agriculture and Food Security

There is sufficient soil moisture to support crop growth and development, particularly in the western part of the country, however, there is a likelihood of post-harvest losses in this region. In contrast, the eastern region faces inadequate soil moisture to support crop growth and development, along with the prevalence of pests and disease outbreaks. This situation may lead to an increase in the number of food-insecure households across the country. Additionally, there is a likelihood of increased conflict, especially in the eastern parts, involving human-wildlife interactions and community disputes, as well as a potential rise in Gender-Based Violence (GBV) cases.

### Advisories

- Plant drought-tolerant and early maturing crop varieties in the eastern parts of the country.
- Reduce farm acreage to manageable sizes.
- Undertake water harvesting on farms.
- Practice climate smart agriculture and conservation agriculture.
- Share GBV referral pathways on the Ministry of Agriculture bulletin, boards, and other platforms.
- Store, handle, and use the previous season's harvest properly.
- Urge government to plan early for the provision of food relief to all food-insecure households.



## Water and Energy

There is a potential reduction in water supply for human consumption, livestock, irrigation, and hydropower production, coupled with the risk of water contamination and conflicts over water use and access. Additionally, there is a risk of flooding in the western part of the country.

### Advisories

- Raise awareness about both floods and water shortages.
- Prepare and activate a conflict resolution plan.
- Provide water treatment chemicals to rural communities that use untreated water.



## Livestock

### Positive impacts

#### Western part

The regeneration of pasture and availability of water may lead to reduced livestock mobility for accessing water and pasture, which in turn supports food security and good nutrition. This situation results in increased livestock productivity, including meat, milk, hides, and skins, and maintains good animal body conditions with expected stable prices. Additionally, these conditions are favourable for vaccination and water harvesting.

#### Eastern part

A conducive window for livestock offtake before the animals' body condition deteriorates likely to be characterized by stable animal prices and the availability of crop residues or by-products in some parts of the country.

### Negative impacts

#### Western Parts

Displacement due to floods and mudslides, and livestock deaths, along with the outbreak of waterborne diseases, internal parasites, and TADs, the outbreak of RVF, anthrax, and other vector-borne diseases due to increased livestock mobility, migration-related conflicts due to inadequate pasture in areas of little rain or flood-affected areas, and the likelihood of damage to some infrastructure, especially roads and water-holding structures, might affect market access.

#### Eastern part

Reduced pasture and water availability could lead to increased livestock mobility, increased community vulnerability (especially for women and children) due to the increased burden of fetching water, caring for the sick, and searching for pasture, deterioration of animal body condition resulting in poor prices, reduced food security, reduced animal reproduction (calving, kidding, lambing) and productivity (milk, meat, hides, and skins), disease outbreaks, especially TADs, and increased conflict (animal-wildlife, human-human, and human-animal) over pasture and water.

### Advisories

- Provide supplemental animal feeding.
- Use crop residues and agro-processing by-products as animal feed.
- Enhance disease surveillance, especially for RVF in hotspot countries.
- Produce and conserve fodder, including benefits from JJAS beneficiary areas and MAM (ET).
- Raise community awareness about expected rains to plant fodder, present animals for vaccination, and harvest and conserve water and pastures.
- Inform communities about the possibilities of animal disease outbreaks, such as RVF, anthrax, and TADs.
- Implement gender-responsive migration policies, prioritizing the needs, challenges, and vulnerable situations of women, girls, and vulnerable groups, and establish peace committees to mitigate conflicts between pastoralists, farmers, and water users.
- Facilitate livestock offtake before the deterioration of animal body condition.
- Rehabilitate and service critical water sources.
- Advocate for anticipatory action and mobilize resources accordingly.



## Health

Increased incidence of vector-borne diseases, especially in counties in the southern, western, and central regions of the country, and increased incidence of waterborne diseases such as dysenteries and watery diarrhea.

### Advisories

- Provide humanitarian support, including distributing relief food and offering psychosocial support to regions experiencing drier conditions.
- Sensitize and educate the community.
- Issue early warning advisories.
- Procure and strategically distribute household water treatment chemicals.

# SOMALIA



## Disaster Risk Management

Reduction in crop yields, livestock disease outbreaks, potential school dropouts in search of pasture and water, likelihood of gender-based violence, and potential drying up of water resources/points in the community.

### Advisories

- Disseminate early warning information.
- Preposition water trucks to help supply water to affected communities.
- Distribute drought-tolerant seeds to farmers.
- Promote anti-GBV programs.
- Promote school feeding programs to mitigate school dropouts.
- Promote fodder and pasture storage programs.



## Agriculture and Food Security

Good conditions for harvesting Gu season crops and reduced impact of flooding on planted crops and irrigation infrastructure are expected. Furthermore, below normal rainfall and higher temperatures may lead to inadequate soil moisture for crop production, domestic use, and livestock use. This will likely result in a reduction in the area under crop production, leading to reduced harvests, reduced access to farm labor, and increased gender burden due to long distances in search of clean water. Additionally, reduced household food stocks will lead to worsening food insecurity, and if this persists into 2025, malnutrition might set in.

### Advisories

- Sensitize and raise community awareness on early warning information through multiple channels, such as radio, TV, newspapers, and social media platforms.
- Advise farmers to select drought-tolerant and fast-maturing seed varieties.
- Rehabilitate irrigation infrastructure.
- Implement a community-based early warning system with an emphasis on the participation of women and marginalized groups in the decision-making process.
- Consider alternative livelihoods to supplement crop production.
- Sustain and scale up ongoing interventions to prevent the deterioration of current food and nutrition security.
- Undertake specific anticipatory actions, such as rehabilitating safe drinking water points.



## Water and Energy

Below average water availability for both streamflow and water pans, combined with potential water contamination due to low volumes and pollution.

### Advisories

- Implement water conservation measures and provide water trucking services.
- Raise awareness about below average water supply and quality.
- Implement a water conflict resolution plan.



## Livestock

### Positive impacts

Pasture and water harvested from JJAS rain will support livestock, creating a conducive window for livestock offtake before animals' body condition deteriorates, with stable animal prices and the availability of crop residues or by-products in some parts of the country.

### Negative impacts

Reduced pasture and water availability could lead to increased livestock mobility, increased community vulnerability (especially for women and children) due to the increased burden of fetching water, caring for the sick, and searching for pasture, deterioration of animal body condition resulting in poor prices, reduced food security, reduced animal reproduction (calving, kidding, lambing) and productivity (milk, meat, hides, and skins), disease outbreaks, especially TADs, and increased conflict (animal-wildlife, human-human, and human-animal) over pasture and water.

### Advisory

- Promote the provision of supplemental animal feeding.
- Promote the use of crop residues and agro-processing by-products as animal feed.
- Enhance disease surveillance, especially for RVF and other TADs.
- Enhance the production and conservation of fodder, including benefits from JJAS beneficiary areas.
- Facilitate community awareness about expected rains to plant fodder, present animals for vaccination, and harvest and conserve water and pastures.
- Facilitate community awareness about the possibilities of animal disease outbreaks, such as anthrax and TADs.
- Promote gender-responsive migration policies, prioritizing the needs, challenges, and vulnerable situations of women, girls, and vulnerable groups, and establish peace committees to mitigate conflicts between pastoralists, farmers, and water users.
- Promote livestock offtake before the deterioration of animal body condition.
- Promote the rehabilitation and servicing of critical water sources.
- Advocate for anticipatory action and consequently mobilize resources.



## Health

AWD/Cholera outbreaks due to water scarcity and poor hygienic conditions in most parts of Somalia, along with a shortage of water sources in dry regions could lead to communal conflict over water source scarcity in remote nomadic areas. This situation could cause increased population movement to urban towns in search of food and water, forming IDP camps/Drought IDPs, and resulting in outbreaks of scabs and other skin diseases in dry areas. Additionally, there is a likelihood of increased incidence of malnutrition among children and women due to food insecurity, loss of animals due to lack of grazing and water shortage, measles outbreaks in drought IDP camps and elsewhere, and a possibility of continued diphtheria outbreak causing weakness and malnourishment..

### Advisories

- Implement all AWD/Cholera preventive measures and case management activities, including enhancing surveillance and building human resource capacity.
- Provide medical and nutrition supplies for the drought-affected population and establish health facilities as applicable.
- Strengthen routine immunization and outreach services for all antigens, including measles and diphtheria.
- Track water and dig more hand-dug or borehole wells in the affected areas and IDP settlements.
- Distribute general dry food among affected people.
- Conduct nutrition screening among children under five and women.
- Establish a supplementary feeding program.
- Set up water kiosks/water collection points.
- Undertake conflict resolution sessions and engage government forces to support peace-making in conflict areas.



# SOUTH SUDAN



## Disaster Risk Management

Displacement of the population as a result of floods, damages to infrastructure such as roads and houses, outbreaks of diseases for both humans and livestock, and poor sanitation due to flooding.

### Advisories

- Disseminate early warning information to people in risk areas.
- Provide basic WASH services to communities.
- Identify higher grounds for possible relocation.
- Enhance disease surveillance and promote early vaccination.



## Agriculture and Food Security

High prospects for good crop production in the second season in Maban, Pibor Administrative areas, and parts of East Equatoria State like Kapeota area and Lopa, as well as in the western parts such as Nzara, Ezzo, and Tombura, are expected. Additionally, dry conditions in the northern and western parts are conducive for main season harvesting. However, with drier than normal conditions in the northern parts, water availability would be affected, increasing the workload for women and girls and likely leading to an increase in child labor.

### Advisories

- Encourage water harvesting at the farm and community levels to supplement production during times of water stress.
- Create awareness about the importance of children's right to education, the sharing of farm responsibilities between men, women, and children, and the equitable use of farm produce.



## Water and Energy

Adequate water availability for various uses and sustained high streamflow levels along the Bahr el Jebel/White Nile may increase the risk of riverine floods.

### Advisories

- Communicate and coordinate with the disaster response team for early warning.
- Develop a preparedness and response plan.
- Improve drainage systems.



## Livestock

### Positive impacts

In the western part, the regeneration of pasture and availability of water will reduce livestock mobility to access water and pasture, leading to food security and good nutrition. This will result in increased livestock productivity (meat, milk, hides, and skins), good animal body conditions, and expected stable or improved prices. The conditions are favorable for vaccination and water harvesting, and there will be reduced conflict between pastoralists, farmers, and wildlife. In the eastern part, pasture and water harvested from JJAS rain will support livestock, creating a conducive window for livestock offtake before the animals' body condition deteriorates. Stable animal prices and the availability of crop residues or by-products in some parts of the country will reduce the influx of Sudanese pastoralists seeking pasture and water.

### Negative impacts

In the western parts, displacement due to floods and mudslides, along with livestock deaths, will occur. There will be outbreaks of waterborne diseases and internal parasites, TADs, as well as RVF, anthrax, and other vector-borne

diseases attributed to increased livestock mobility. Conflicts due to migration related to inadequate pasture in areas with little rain or flood-affected areas are likely, along with damage to infrastructure, especially roads and water-holding structures, affecting market access.

In the eastern part, reduced pasture and water availability will lead to increased livestock mobility, increased community vulnerability (especially for women and children) due to the burden of fetching water, caring for the sick, and searching for pasture. This will cause deterioration of animal body condition, resulting in poor prices, reduced food security, reduced animal reproduction (calving, kidding, lambing) and productivity (milk, meat, hides, and skins), disease outbreaks, especially TADs, and increased conflict (animal-wildlife, human-human, and human-animal) over pasture and water..

#### Advisories

- Promote the provision of supplemental animal feeding.
- Promote the use of crop residues and agro-processing by-products as animal feed.
- Enhance disease surveillance, especially for RVF in hotspot countries.
- Enhance the production and conservation of fodder, including benefits from JJAS beneficiary areas.
- Facilitate community awareness about expected rains to plant fodder, present animals for vaccination, and harvest and conserve water and pastures.
- Facilitate community awareness about the possibilities of animal disease outbreaks, such as RVF, anthrax, and TADs.
- Promote gender-responsive migration policies, prioritizing the needs, challenges, and vulnerable situations of women, girls, and vulnerable groups, and establish peace committees to mitigate conflicts between pastoralists, farmers, and water users.
- Promote livestock offtake before the deterioration of animal body condition.
- Promote the rehabilitation and servicing of critical water sources.
- Advocate for anticipatory action and consequently mobilize resources.



## Health

Malaria, Hepatitis E, malnutrition, water-borne diseases (including acute watery diarrhea and cholera), and acute respiratory tract infections (ARTI) due to poor sanitation and limited access to clean water.

#### Advisories

For Malaria:

- Provide antimalarials and RDTs to state hubs.
- Detect and treat cases.

For Hepatitis E:

- Vaccinate against the Hepatitis E virus.
- Conduct surveillance, detect cases, and offer supportive treatment.
- Promote health education and hygiene.

For Water-borne diseases:

- Educate the public on health and hygiene.
- Conduct surveillance, detect cases, and provide supportive treatment, including oral cholera vaccination.



## Conflict Early Warning

Positive impacts

Dampened Conflicts: Some areas may experience reduced conflicts due to anticipated adequate precipitation, leading to more evenly distributed resources. These areas include: Sudan-Ethiopia (Assosa) Conflict System: Involving the Sudan/South Sudan nomadic Fallata and Ambororo with the Benishangul of Assosa.

Negative impacts

South Sudan Conflict Systems: Predicted depressed rainfall will exacerbate water and pasture stress, particularly affecting: Cattle Corridors: Lakes, Central & Eastern Equatoria, and Jonglei, especially Bor, where most incidents were reported during the June-July-August (JJA) season, Abyei-Aweil Conflict System: Involving the Messeriya-Dinka and Dinka Ngok-Dinka Malual and Cluster 1 (Karamoja-Turkana-Toposa) System: Including the Turkana-northern rift valley regions of Kenya (Elgeyo, southern parts of Marsabit, and Isiolo).

**Advisories**

- Activate peace committees, both local and cross-border, in and around the identified vulnerable areas.
- Review and and enforce water and pasture management policies and ordinances to prevent resource congestion and ensure mechanisms are in place for the quick and fair resolution of disputes that could trigger violent and revenge attacks.
- Deploy effective deployment of security services to avert imminent attacks and facilitate the recovery of raided or stolen animals.

# SUDAN



## Disaster Risk Management

Children below 5 years could face respiratory and dehydration complications due to heatwaves, while communities in flood-risk areas might experience displacement. Additionally, outbreaks of water-borne and vector-borne diseases are likely, roads and infrastructural facilities may be destroyed, and crop yields could be reduced in areas affected by dry spells.

**Advisories**

- Disseminate early warning messages to people in risk areas.
- Preposition health services and enhance disease surveillance.
- Promote WASH programs at community levels.
- Empower communities with income-generating activities.



## Agriculture and Food Security

The season is conducive for harvesting summer crops and preparing land for winter crops, while lower rainfall in the Red Sea coastal areas is likely to impact supplementary irrigation in the Toker Delta area.

**Advisories**

- Urge the government and other actors to provide finance and credit for the winter season.
- Urge the government and actors to supply improved seeds and fuel for winter season crops.
- Encourage the government to finance the building of a strategic grain reserve.



## Water and Energy

Sufficient water availability to last to the next rainy season.

**Advisories**

- Implement water conservation of measures in reservoirs to sustain human, hydropower and irrigation use.

# UGANDA



## Disaster Risk Management

Floods could cause damage to infrastructure, livelihoods, and crops, leading to increased school dropouts, internal displacements, and outbreaks of diseases affecting both humans and livestock.

### Advisories

- Sensitize and raise awareness in the community.
- Disseminate early warning messages.
- Harvest crops early.
- Open drainage channels.
- Promote conservation and afforestation.
- Temporarily relocate persons at risk.



## Agriculture and Food Security

Predicted wetter-than-usual conditions from September likely to offer good prospects for crop production (e.g., bananas, sugarcane, pineapples, millet, maize, greengram, cowpeas) in most parts of the country, likely reducing household conflict (gender-based violence, pasture), food commodity prices, and incidences of malnutrition, especially in children. However, there is also a likelihood of flooding, which could lead to crop destruction, damage to infrastructure (granaries, roads, bridges), and limited market access, along with increased incidences of crop diseases (bacterial wilt, fungal infections), post-harvest losses, and an increased workload on women and children.

### Advisories

- Urge farmers to plant improved varieties adapted for high yields, enhanced nutrition, and other attributes such as NAROBEAN 1, 2, 3, and 6.
- Encourage farmers to apply good agronomic practices throughout the season, such as timely weeding, thinning, and harvesting, by regularly consulting government extension experts.
- Establish and observe soil and water conservation practices, such as contour bands, grass bands, trenches, and preserving crop residues for mulch.
- Advise farmers to avoid farming along riverbanks and gorges to minimize losses during floods.
- Promote water harvesting for use during dry periods and for irrigation during dry spells.
- Monitor and surveil crops for pests (vectors) and diseases, and report new epidemics to the nearest extension officer.
- Control pests and diseases like bacterial and fungal infections in a timely manner.
- Urge farmers to plant agro-forestry species/crops, such as fruit trees, *Ficus* spp., *Albizia*, and *Meiosis*, within their farms.
- Implement measures to reduce post-harvest losses, such as using cribs, silos, hermetic bags, raised drying racks, and tarpaulins.
- Discourage unnecessary spraying of pesticides and excessive use of herbicides to avoid contaminating water sources that provide safe water for domestic use.
- Urge farmers to access quality seeds ready for planting from reliable sources.
- Encourage farmers to use early warning weather updates (monthly, 10-day, and daily).
- Promote alternative livelihoods (e.g., apiary, small-scale businesses) to cushion farmers against unpredictable patterns.



## Water and Energy

Sustained high streamflow in major rivers and elevated lake water levels could pose a risk of riverine and flash floods, as well as landslides.

### Advisories

- Raise awareness through available channels about the enhanced risks of flooding and landslides, and coordinate with disaster risk agencies.
- Develop a preparedness plan that includes cleaning drainage systems and waterways.



## Livestock

Livestock mobility to access water and pasture enhances food security and good nutrition, increases livestock productivity (meat, milk, hides, and skins), improves animal body conditions with stable or improved prices, and is favorable for vaccination and water harvesting. Additionally, the availability of crop residues and by-products in some parts of the country reduces conflict between pastoralists, farmers, and wildlife.

However, there are negative impacts such as displacement due to floods and mudslides, livestock deaths, outbreaks of water-borne diseases and internal parasites, TADs, and vector-borne diseases like RVF and anthrax, which are also attributed to increased livestock mobility.

The influx of livestock from Kenya and South Sudan into Uganda to access water and pasture strains natural resources and animal health services, leading to conflicts due to migration related to inadequate pasture in areas with little rain or flood-affected regions. There is also a likelihood of damage to infrastructure, especially roads and water-holding structures, affecting market access.

### Advisories

- Promote the provision of supplemental animal feeding.
- Encourage the use of crop residues and agro-processing by-products as animal feed.
- Enhance disease surveillance, especially for RVF in hotspot countries.
- Boost the production and conservation of fodder, including benefits from JJAS beneficiary areas.
- Raise community awareness about expected rains to plant fodder, present animals for vaccination, and harvest and conserve water and pastures.
- Inform communities about the possibilities of animal disease outbreaks, such as RVF, anthrax, and TADs.
- Promote gender-responsive migration policies, prioritizing the needs, challenges, and vulnerable situations of women, girls, and vulnerable groups, and establish peace committees to mitigate conflicts between pastoralists, farmers, and water users.
- Encourage livestock offtake before the deterioration of animal body condition.
- Promote the rehabilitation and servicing of critical water sources.
- Advocate for anticipatory action and resource mobilization.



## Health

Waterborne diseases like cholera and vector-borne diseases like malaria, along with floods and landslides disrupting health service delivery, could lead to the destruction of food crops resulting in malnutrition and cause psychosocial problems due to property destruction.

### Advisories

- Issue early warnings to communities about impending weather changes.
- Continue disease surveillance to rapidly detect outbreaks.
- Plan to conduct IRS (Indoor Residual Spraying) for vector-borne diseases like malaria in the first week of October.
- Preposition essential medical supplies in health facilities.

# BURUNDI



## Agriculture and Food Security

The predicted wetter conditions are expected to lead to sufficient soil moisture, resulting in a high likelihood of good crop production. Additionally, the early cessation of rains by mid-December is likely to reduce post-harvest losses. This favorable agricultural outlook could lead to a decrease in food prices due to increased supply. However, there are concerns about potential soil erosion and landslides in high-risk areas like the Mirwa region, as well as the potential proliferation of pests and diseases affecting crops under these conditions.

### Advisories

- Disseminate this warning information promptly and urgently convene a national climate outlook forum to inform all stakeholders.
- Urge farmers to establish soil erosion control structures like contour lines, ditches, and hedgerows in prone areas of the country.
- Organize a national tree planting campaign with the government and stakeholders.
- Encourage farmers to practice water harvesting using various technologies for future use.
- Promote Integrated Pests and Diseases Management (IPDM) technologies among the government and farmers.
- Advise farmers to engage in other income-generating activities such as trade, carpentry, and breeding small livestock like beekeeping, rabbits, pigs, and chickens.



## Water and Energy

Potential risks include water shortages for both human and productive use, as well as the risk of floods and increased inundation of Lake Tanganyika.

### Advisories

- Raise awareness about both water shortages and the risk of flooding.
- Develop a preparedness and response plan.
- Continuously monitor river and lake water levels.

# RWANDA



## Agriculture and Food Security

High chances of receiving rainfall between 200 and 300 mm are conducive for legumes and vegetables. The normal to early onset of rains is likely to increase the planting area for the 2024 season A. However, maize production is expected to decline from the highs of the previous year due to less favorable weather conditions predicted for OND 2024, as maize requires more than 300 mm of rainfall. The likelihood of poor rain distribution in the country will negatively impact crop prospects. Consequently, below-average production, particularly of maize, will adversely affect food security outcomes, with Season A contributing 50% to food production.

### Advisories

- Immediately disseminate early warning information and associated advisories to decision makers and all stakeholders.
- Advise farmers to plant early maturing and drought-tolerant varieties for this short rain season.
- Urge the timely distribution of seeds and other farm inputs to all farmers by the government and other actors.
- Governments and farmers should regularly monitor market prices for staple food to inform actions such as importation to avert food shortages, balance market prices, and implement duty waivers and subsidies.



- Encourage farmers to promote conservation agriculture and climate-smart agriculture practices, including irrigation, drought-tolerant crops, minimal tillage, mulching, terracing, and kitchen gardens, to reduce evaporation and soil water loss.
- Urge the government to strengthen the capacity of the National Strategic Grain Reserve.



## Water and Energy

There is a potential reduction in water supply for humans, livestock, irrigation, and hydropower production, coupled with the risk of flooding and landslides.

### Advisories

- Raise awareness about water flood risks.
- Monitor water levels continuously.



## Health

Malaria transmission is expected to increase mostly in the Eastern and Southern parts of Rwanda and the surroundings of Lake Kivu in the West. Additionally, schistosomiasis and soil-transmitted helminths (STH) or intestinal worms are anticipated to affect areas around marshlands, water bodies, and stagnant water across the country. The western part of Rwanda, which is likely to experience more rainfall, faces a heightened risk of injuries due to landslides. Furthermore, catastrophic landslides and the loss of properties are likely to contribute to mental health problems.

### Advisories

- Plan IRS in high malaria transmission districts before October 2024.
- Ensure an early and regular supply of malaria commodities at health facilities and community levels to avoid stockouts.
- Raise community awareness and mobilize efforts for mosquito larval source management.
- Schistosomiasis & STH/Intestinal Worms
- Plan deworming in schools, where a large number of affected populations are found, and at the community level (village) as scheduled.
- Injuries and Other Impacts Due to Landslides
- Prepare all levels, from central to local administration and health institutions.
- Raise awareness and mobilize the population in high-risk zones for preventive measures.

# TANZANIA



## Agriculture and Food Security

Generally, the season is expected to be drier in many parts of the country which is conducive for land preparation, and agricultural input distribution. Sufficient rainfall for early maturing crops like beans, maize and sunflower (200 mm is averagely expected). Normal onset in western part and Lake Victoria zone is good for early planting. Deficiency of soil moisture is expected to occur in many parts. Crop pests and diseases are expected to increase e.g. Fungi related diseases.

### Advisories

- Prepare land early for planting once the rains start.
- Plant seed crops that mature quickly and are drought-resistant.
- Distribute seeds, fertilizers, and pesticides early.
- Implement water harvesting and storage technologies to collect rainfall for use during dry spells.
- Use sustainable agriculture methods and technologies to conserve moisture and water.
- Seek close advisory from extension officers on the best way to handle farm activities during the season.
- Use produce from the previous season (2023/2024 production season) effectively.
- Pay close attention to short-term forecasts (weekly or monthly) from the Tanzania Meteorological Authority.
- Embrace alternative livelihoods such as bee farming and fisheries to mitigate the effects of dry conditions.



## Water and Energy

Below average streamflow for basins expected in the east of the country and potential reduction of water for human, agricultural, livestock and hydropower production.

### Advisories

- Optimize reservoir management to take into consideration reduction of inflow for sustained hydropower production.
- Promote use of supplemental groundwater use in areas having water shortage.



## Health

A large part of the country, from the East to the central plateau, is expected to receive below-normal rainfall. This lack of water could lead to poor hygiene and sanitation, resulting in outbreaks of waterborne diseases such as cholera, diarrhea, and dysentery. Additionally, dehydration and malnutrition may occur due to the decreased rainfall. Warmer-than-average temperatures may exacerbate these issues, leading to malaria cases in unexpected areas like the North-Eastern highlands, where conditions become favorable for malaria-vector growth. Prolonged exposure to high temperatures could also cause heat exhaustion and dehydration, while negatively impacting mental health by increasing stress levels.








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