



# Summary for Decision Makers SEASONAL FORECASI

June to September 2020

## Rainfall and Temperatures

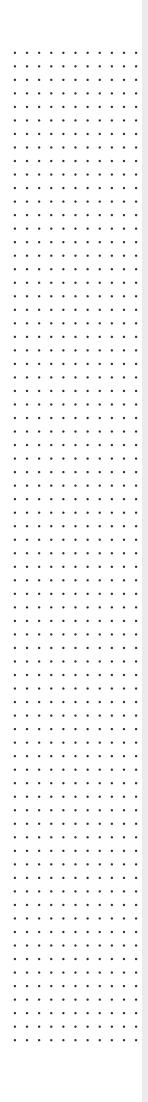
June to September is an important season for Sudan, South Sudan, Ethiopia, Eritrea, Djibouti, and Uganda. A wetter than usual season is forecasted for western and central Sudan, southwestern Ethiopia, southeastern South Sudan, western Kenya, eastern and central Uganda. The rest of the region is expected to receive the usual rainfall, except for a limited area of coastal of Somalia, where less than usual rain is expected.

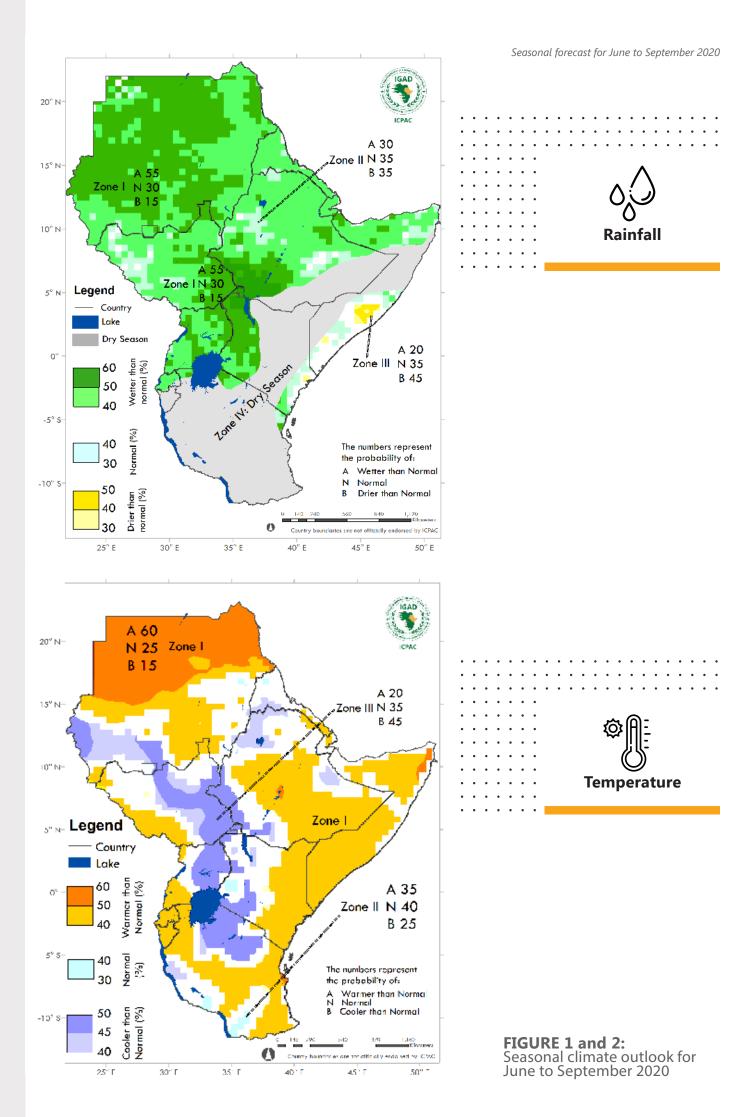
An early start of the rains is expected over central and southern Sudan, central and southeastern Ethiopia, South Sudan, southern Eritrea and western Kenya. A delayed start of the rains is expected in eastern Somalia and Ethiopia, Djibouti, northern Eritrea, northern Sudan and Uganda.

A warmer than usual season is expected in northern and central Sudan, coastal parts of the region from Eritrea to Tanzania, central Ethiopia, Burundi, Rwanda, and western South Sudan. A colder than usual season is expected for the central parts of the region, including central and eastern South Sudan, western Ethiopia, and Lake Victoria basin.

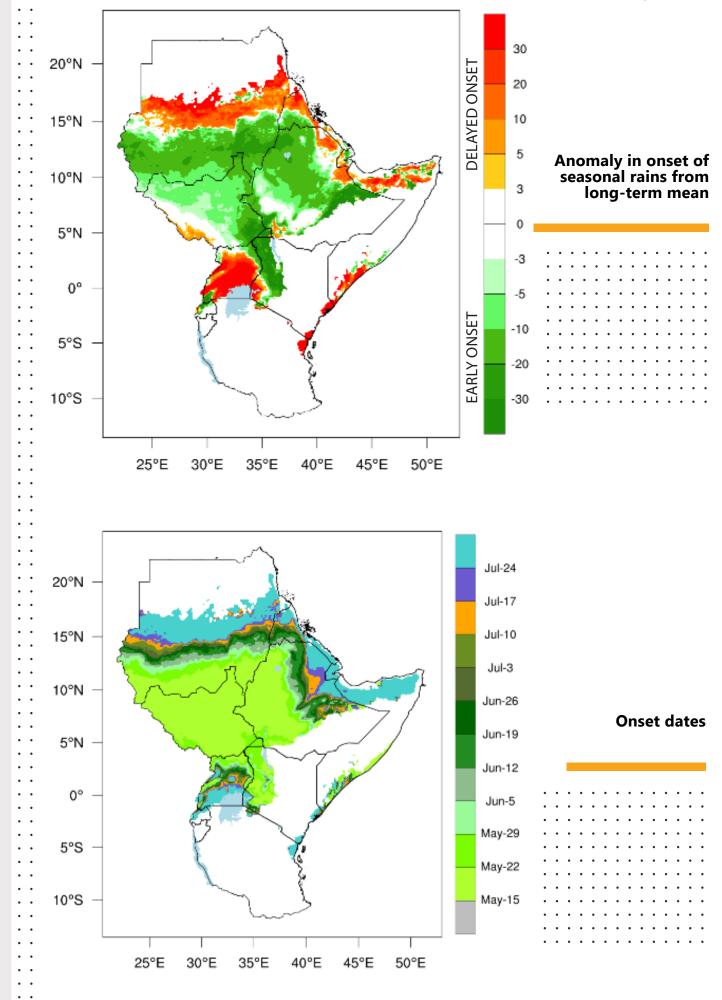
Considering the ongoing simultaneous emergencies affecting the region, including floods, the desert locust invasion and the COVID19 pandemic, regional and national authorities are encouraged to use this seasonal forecast to adjust contingency plans, and to update them

**Caution:** Seasonal forecasts need to be used as indicators for the upcoming season for early planning. It is crucial to update seasonal forecasts with weekly and monthly forecasts issued by ICPAC and NMHSs. This is due to the uncertainty inherent in seasonal forecasting.

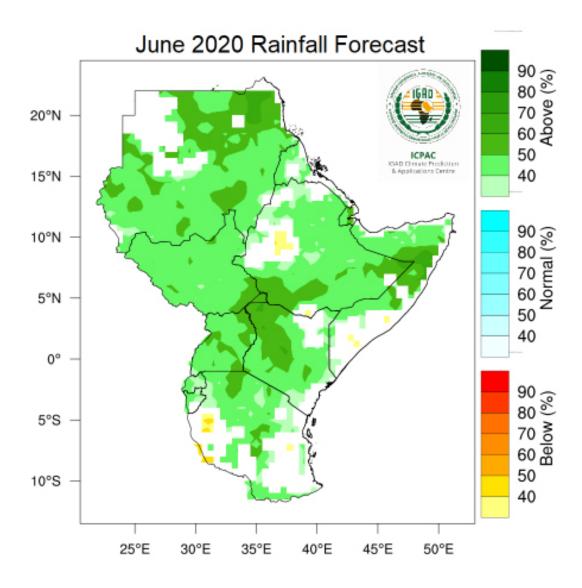




## Early rains are expected over most farming areas of the region and late onset along the eastern coast, northern Sudan, and Uganda.

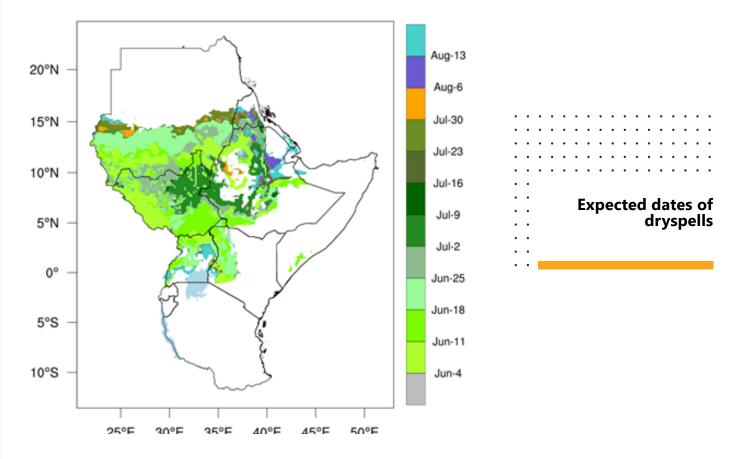


## June forecast



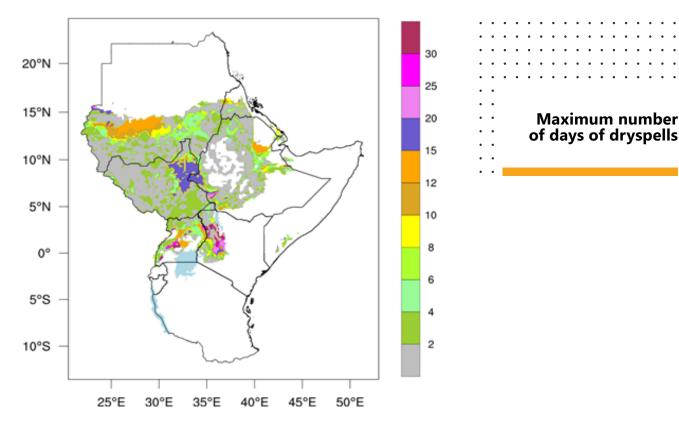
A wetter than usual month is expected over a wide area of the region including Sudan, South Sudan, western and central Ethiopia, northern and western Somalia, Djibouti, western Eretria, Kenya, Uganda, Rwanda and northern Burundi and Tanzania.

Less than usual rainfall is expected over southern parts of Somalia, part of coastal & northeastern Kenya, eastern and western Tanzania extending to Burundi, and part of western Ethiopia.



### JJAS 2020: Expected date of dryspell after onset

JJAS 2020: Expeced length of dryspell after onset (days)





This is usually a dry and hot season in Djibouti. However, the forecast indicates wetter than usual conditions, which may help in reducing the riskof the heatwaves and hot temperatures. COVID-19 still threaten lives.

#### **Advisory**

• Disseminate early warning information and coordinate between all national institutions and agencies (e.g. IGAD, UN, and NGOs)

- Water tracking and supply for the rural areas
- Provide sanitization, hygiene and cleaning material to vulnerable communities

## **Agriculture and Food Security**

This is an unfavorable season for agriculture due to the usually dry conditions across the country. But the expected wetter than usual conditions might help with water supply. Desert locust and COVID-19 threaten food security.

#### Advisory

- · Import and provide fruit, vegetables, and other food, health items
- Minimize the risk of supply chain disturbance due to COVID-19
- Drilling to mobilize groundwater for irrigated farms
- · Monitor and surveillance of Desert locust's movement

## Water and Energy

These months are usually dry. But the season is expected is to be wetter than usual, which will help water supply.

#### Advisory

- · Disseminate early warning information through national and social media
- Water tracking and supply to vulnerable and remote communities
- Use renewable energy sources for power supply

## Livestock

The dry conditions are expected to result in poor pastures regeneration. The degradation of pastures, desert locust and continuous livestock movements increases pressure at watering points, and the risk of animal diseases.

#### Advisory

- Review of the distribution of concentrates before the pastures deteriorate.
- Supplemental feed supply and destocking and strategic offtakes.
- Animal treatments and vaccinations at sharing water points.
- Disseminate early warning on the expected conditions to inform the public



### Health

The season might lead to health risks associated with heat stress, water shortage, and poor sanitation. Likely outbreak of diseases such as Malaria, Dengue Fever, and the ongoing risk of COVID-19.

#### Advisory

- Surveillance for early detection and treatment of cases
- Treatment of domestic water Chlorine-based
- Promote health education, hygiene, and other preventive measures of COVID-19



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## **Conflict Early Warning**

This is a dry season characterized by water scarcity and limited pasture causing risk of conflict and competition over limited resources.

#### Advisory

• Downscaling and dissemination of the forecast at the local level

• Coordination with security agencies, local authorities, and other organizations for conflict prevention



Floods are expected in the southwestern part of the country increasing the risk of landslides and soil erosion, which might affect crop production. Desert locust and COVID-19 put pressure on livelihoods.

#### Advisory:

- Issue early warning advisories and bulletins in a timely manner
- Protection measures against soil erosion and relocating inhabitants at high risks areas
- Update contingency and humanitarian plan, and clear waterways

## **Agriculture and Food Security**

The enhanced rain is good for growing crops but it poses a challenge the harvesting for the maturing crops grown during the previous season. Desert Locust still threatens food security. The control mission is affected by COVID-19.

#### Advisory

- Use machines to speed the harvesting process and avoid crowd gathering
- Disseminate information through hotlines, radio, mobile, TV and social media
- Monitoring and controlling of Desert Locust spread using drones and aircrafts
- Provide agricultural inputs and tools to support and improve production

## Water and Energy

The wetter than usual rain is expected to enhance hydropower production, water storage, and water supply. It also increase the risk of flash flood.

#### Advisory

• Improve communication between operators of reservoirs (hydropower, agriculture, water supply)

- Encourage storage of water in pans for small farmers
- Improve design of intakes for water supply schemes

## Livestock

Good forecasted rains in the north and southwestern parts of the country likely to lead to pasture regeneration. The potential migration of animals from flooded areas increases the risk of animal diseases.

#### Advisory

- Increase fodder production, provide veterinary services and mobile clinic
- Prepare for animal vaccination to reduce the risk of the spread of animal diseases
- · Monitor continuously the forecasts and disseminate early warning in a timely manner
- · Monitor desert locust impact on pasture land and its migration to new areas

## Health

The wetter conditions and water temperature increase the risk of waterborne diseases (Malaria, Diarrhea, etc.). The risk of COVID-19 threatens lives and livelihoods.

### Advisory

- Surveillance and coordination between partners to control the spread of COVID19
- Surveillance for early detection and treatment of cases
- Treatment of domestic water Chlorine-based
- · Supply sanitizations, hygiene material, and promote preventive measures

## **Conflict Early Warning**

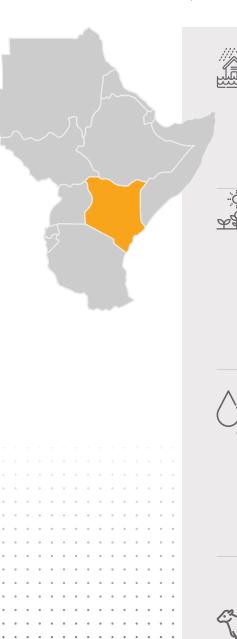
The limited movement due to COVID19 and the risk of floods might increase tension and exposure to violence.

#### Advisory

- Downscale and disseminate the forecast at the local level
- Provide support to vulnerable communities



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The more than usual rains in the western part of the country increases the risk of floods, landslides and high water level in Lake Victoria, which already affected the nearby counties the past season. The risk of Desert locust and COVID19 still threaten livelihoods.

#### Advisory

- · Monitor and disseminate early warning information in a timely manner
- Coordinate between all the stakeholders such as government, IGAD, UN, and NGO
- Relocate people out of landslide and flood-prone areas and support displaced populations

## **Agriculture and Food Security**

The expected wetter than usual season in the western part of the country is good for production but might harm mature crops. It also increases flood risk. Desert Locust, Post-Harvest losses, and COVID19 threaten food production, transport and security.

#### **Advisory**

- Distribute agro-inputs to farmers especially in the western part of the country
- Avoid planting in flood-prone areas and put in place soil-erosion control structures
- Proper harvesting and post-harvest handling of the production of March-May season
- Monitoring and control of Desert locust breeding and migration
- Engage in alternative income-generating enterprises

## Water and Energy

The wetter than usual season in western Kenya might lead to flooding, landslides, mudslides, increased water level in Lake Victoria and waterborne disease. However, it also provides an opportunity for stable hydropower production, water storage, and supply.

#### Advisory

- Raise Awareness and inform the people about the risks associated with the season
- Improve communication among operators of reservoirs (hydropower, agri, water supply)
- Develop measures for bulk transfer of water from flooded areas to dry areas in order to avoid displacement of people and destruction of property
- Design groundwater recharge areas (subsurface dams) to store flood waters

## Livestock

The continuous wetter than usual conditions has a positive impact on pastures, water availability, animal health and body conditions. Prices of milk and meat are expected to decrease due to increased production and lockdowns due to COVID19.

### Advisory

- Harvest and storage of fodder for future use
- Monitor the risk of Rift Valley Fever and animal diseases
- · Support export of milk and meat to maintain fair prices for the producers
- Encourage the private sector to invest in milk products (Cheese, milk powder, yogurt)

## Health

The risk of floods is high in the flood-prone areas, which might result in displacement and damage in health sector facilities. Also increased climate suitability (conducive conditions) for vector-borne and waterborne diseases and food stress due to COVID19.

#### Advisory

Intensify surveillance and provide daily and weekly situation reports on any detected outbreaks

- Multi Disease risk mapping of hotspots in the Countries
- Intensify Vector control for Malaria Nets, IRS, larviciding

## **Conflict Early Warning**

More pastures and likely water opportunistic crime incidents. Potential safety risk due to heavy rainfall, flood, and damage in the roads in the western part of the country.

#### Advisory

· Improve coordination with security departments and other concerned agencie







This is a dry season in most parts of the country. But the impacts of the floods during March-May season are still remain. COVID-19 threatens lives and livelihoods.

#### Advisory

- Support the displaced communities to ensure their well being
- Take precautions to reduce the risk of COVID-19 and its impact on food security
- Provide sanitation, cleaning, and hygiene material to the vulnerable communities

## **Agriculture and Food Security**

The wetter than usual season over the northern and western parts of the country are expected to improve production. The risks of floods, displacement, Desert Locust and COVID19 are expected to threaten food security.

#### Advisory

- · Share the seasonal forecast information with the agricultural community
- · Monitor and control Desert Locust spread and sustain supply chains and transport
- Support and speed the harvesting process of the crops of the past season

## Water and Energy

The expected wetter than usual season will increase water storage, hence provide a stable water supply, especially in the northern and western parts of the country.

#### Advisory

- Improve design of intakes for water supply schemes
- Develop measures for bulk transfer of water from flooded areas to dry areas in order to avoid displacement of people/destruction of property

• Design and develop groundwater recharge areas (subsurface dams) that store floodwaters and subsequently provide supply during drought

## Livestock

Good fodder is expected due to the good rains. Disease outbreaks like waterborne diseases, tickborne diseases like trypanosomiasis. Desert Locust invasion in agricultural areas, and rangelands.

#### Advisory

- Vaccination and treatment of animals
- Issue early earning on pasture and water conditions and desert locust outbreak
- Train animal health workers to provide veterinary services
- · Support producers to export their animals products to maintain good prices

## Health

Displacement due to floods and conflicts might lead to outbreaks of vector-borne diseases such as Malaria, Diarrhea, Cholera. Measles and Pneumonia are also expected. COVID-19 is a major threat as well.

### Advisory

- Activating and facilitating rapid response teams (RRTs) at National and sub-National
- Ensure vaccination against measles and provide clean water
- Development of contingency plans to contain COVID-19
- Support displaced and vulnerable communities with sanitization and hygiene material

## **Climate change**

The country is sensitive to climate variability and change. Mainly changes in rainfall patterns, surface temperature and tropical cyclones.

- Ensure sustainable water supply for agro-pastoralists
- Continue to implement water and land management approaches to mitigate the im-
- pacts of climatic extreme events in Puntland and Somaliland
- Improve forecast of tropical cyclones and build evacuation shelters







The wetter than usual season increases the risk of floods in the south-east, waterborne diseases, blocking of unpaved roads, and lack of access to health care and COVID-19.

#### Advisory

- Coordinate between partners including goverment, IGAD, NGOs, and UN organizations
- Continue monitoring the season through the meteorological department
- Inform communities about the possible impacts and disseminate early warnings
- Open waterway and early prepositioning of Food and Non-Food Items
- Prepare and update contingency plans for each sector

## **Agriculture and Food Security**

Enhanced rainfall brings negative impacts such as flooding and waterlogging. However, it will also reduce desert locust breeding. COVID19 hinders food production in the country.

#### Advisory

- · Support farmers with agricultural input to benefit from the rain and improve productivity
- Avoid planting in flood-prone areas and update the forecast regularly
- Monitor the desert locust migration and movement
- Ensure the continuity of supply chains to avoid any food shortages



## Water and Energy

The season is wetter than usual, Lake Victoria is at its highest water level, increasing the risks of river and flash floods.

#### Advisory

- Disseminate early warning information and raise awareness about flood risks
- Clear waterways and relocate people living in low areas to reduce the risk of flash floods
- · Coodinate between all the national, IGAD, UN, and NOGs



## **Climate change**

The country is impacted by climate change due to global (e.g. global warming) and local factors (e.g. deforestation and changes in land use)

- Assess the impacts of global and local factors
- Continue to revise National Determined Contributions (NDCs) and finalize National Adaptation Plans (NAPs)
- Continue local interventions by local communities to increase resilience to climate shocks (eg. Construction of dikes to reduce impacts from river line flooding)



The wetter than usual season increases flood risks in western and central parts of the country, which might affect agricultural and urban areas. COVID19 cotninue to threaten livelihoods.

#### Advisory

- Monitor and disseminate early warning information in a timely manner
- Coordinate between all the stakeholder: government, IGAD, UN, and NGOs
- · Provide essential food and non-food items to vulnerable communities

## **Agriculture and Food Security**

This is the main growing season and higher than usual rains are good for farming. However, the risk of floods and dry spells might impact agriculture negatively. COVID19 poses a threat to food production and livelihoods.

#### Advisory

- Support farmers with inputs and finance to increase production
- Avoid planting in waterways and flood paths
- Provide pesticides and monitor Desert locust migration and breeding areas
- · Monitor rainfall performance and disseminate early warning information to users

## Water and Energy

The wetter than usual season increases the risk of river and flash floods. While, rain supports irrigation and hydropower generation, there are also risk of rivers floods due to high water-level at Lake Victoria and expected wetter conditions in Sudan and Ethiopia.

#### **Advisory**

- · Monitor water level in the rivers and update hydro-forecast with the weather forecast
- Disseminate early warning information in a timely manner
- Clean waterway for early time to reduce the risk of flash floods
- Enact and enforce policies preventing people from settling in flood plains

## Livestock

The season started early and is expected to be wetter than usual, which could lead to positive impacts on livestock. However, the risk of floods, Tick-Borne Diseases, Tsetse (Blue Nile state, South Darfur) and Desert locust continue to threaten livestock activities.

#### Advisory

- · Prepare for flood risks and avoid keeping the animals in low lying land
- · Animal treatments and vaccinations at sharing points
- · Early warning on expected conditions
- · Monitor Desert Locust migration and impacts on the pasture land

## Health

This is the main rainy season and is expected to be wetter than usual, increasing the risks of flood-related diseases like Malaria and Diarrheal (Typhoid, dysentery), hepatitis A and E in central Sudan, Great Darfur and Kordufan. COVID19 is spreading fast.

#### Advisory

- Distribute Chlorine for water treatment to households
- Distribute Mosquito nets to protect children and vulnerable groups against Malaria
- Strengthen treatment services for detection and case management of diseases

• Undertake tailor-made social marketing campaigns and behavior change communication for prompt care seeking, personal protection and appropriate utilization of preventive tools and services targeting potential diseases

Coordinate between national, IGAD, UN, and NGOs health institutes and organizations



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## **Climate change**

Climate change impacts are noticeable across the country and are causing many environmental and socio-economic challenges.

- · Improve access and use of technology to increase adaptive capacity
- Link intervention with development goals eg. Sustainable Development Goals (SDGs)







The season increases risks of floods, landslides, and will continue to lead to high waterlevels in Lake Victoria, post-harvest losses and waterborne diseases. COVID19 also continues to threaten lives and livelihoods.

#### Advisory

- Revise contingency plans for all sectors and coordinate with IGAD, UN, NGOs
- Disseminate early warning information in a timely manner
- Advise people not to return back to areas identified by the authorities as at high-risk
- Support displaced communities with food, sanitization and hygiene items

## Agriculture and Food Security

The wetter than usual season is good for agriculture in the northern parts of the country. But it also poses a risk of flooding and landslides, post-Harvest Losses and Desert Locusts.

#### Advisory

- Maximize production of cereals, legumes, root crops, vegetables, plantation crops
- Good agronomic and IP/DM principles
- Avoid planting in flood-prone areas
- Control and monitor Desert Locusts to reduce risks
- Speed the harvesting process in the south to avoid impact of rainfall and post-harvest losses

## Water and Energy

The wetter than usual season is likely to enhance and stabilize hydropower production due to the increase of water supply and storage. It also increases the risk of floods and landslides and will continue to increase Lake Victoria water levels.

#### **Advisory**

• Improve communication between operators of reservoirs (hydropower, agriculture, water supply) and take safety measures against landslides

• Disseminate early warning information in a timely manner



## Livestock

The expected wetter than usual season increases fodder and pastures leading to good animal body conditions. Risk of Rift Valley Fever and other animal diseases.

#### Advisory

- · Prepare for animal treatments and vaccinations
- · Early warning on expected conditions
- Encourage farmers to cut and store fodder for future use
- · Encourage farmers to weed out/control undesired grass and pasture species
- · Utilize the dry spell to open/construct water reservoirs

## Health

The expected wetter than usual conditions might lead to an abundance of surface water flooding and result in vector breeding, intense transmission, and possible outbreaks of malaria. COVID19 represents a risk to lives and livelihoods.

#### **Advisory**

- Surveillance for early detection and treatment of cases
- Distribute of LLINs (planned to start in June)
- Distribute anti-malarials as well as pre dispositioning and redistribution
- Health education and awareness about hygiene and sanitization to prevent COVID19



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## **Climate change**

Increasing risk of flooding, landslides, crop losses, internal population displacements, frost, pests or diseases.

#### Advisory

Improve data collection and analysis to assess impacts of climate change



## **Agriculture and Food Security**

The wetter than usual season might harm the crops from the previous season and delay the harvesting process. COVID19 poses another challenge to food security and harvesting.

#### Advisory

- Conduct speed harvesting and promote good post-harvest technologies
- Rehabilitate storage spaces and warehouses
- · Sustain the supply chain to ensure export and import of food and non food items

• Optimize all potential marshlands in the current season with the cultivation of early maturing vegetable crops

## Water and Energy

This is generally a dry season for Rwanda. However, the forecast indicates higher than usual rains.

#### Advisory

- Water-harvesting activities using ponds and small dams
- Monitoring and dissemination of information to the public

## Health

A wetter than usual season might increase the risk of Malaria in June, mostly in eastern and southern provinces. Increase of cases of Schito, intestinal worms, and other waterborne diseases. COVID19 continues to pose a risk to lives and livelihoods.



RWANDA

- · Improve supervision of malaria cases at the community level and Health centers
- Pre-position treatments for intestinal worms, Schisto, and other water-borne diseases
  Early detection and treatment of cases and prepositioning of testing and IRS in houses
- and larviciding in vector breeding water habitat using of drones
- Distribute and promote use of mosquitos nets
- Improve chain management of malaria commodities to avoid stock out
- Distribute sanitization and hygiene material to vulnerable communities



## **ICPAC**

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