



# CLIMATE SERVICES FOR KEY SOCIOECONOMIC SECTORS

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# ICPAC: CLIMATE SERVICES FOR EASTERN AFRICA

- Established in **1988** as the Drought Monitoring Centre (DMC) for Eastern Africa
- ICPAC is a one of the WMO regional climate centres
- Collaborate with international partners (EUMETSAT, UKMO, IRI, etc.)
- Our main mission is to provide climate services to 11 East African countries.



## ABOUT CLIMATE SERVICES

- **GFCS:** climate services provide climate information to help individuals and organizations make climate-smart decisions
- One step further beyond climate information: drive advisories to help with decision makers process: **toward Impact-based forecast.**
- It requires users engagement to co-produce services and iteration to improve it and timely dissemination to enable early action and preparedness

# ICPAC SERVICES



Climate Forecasting



Disaster Risk Management



Water Resources



Climate Information Dissemination



Agriculture and Food Security



Environmental Monitoring



Capacity Development

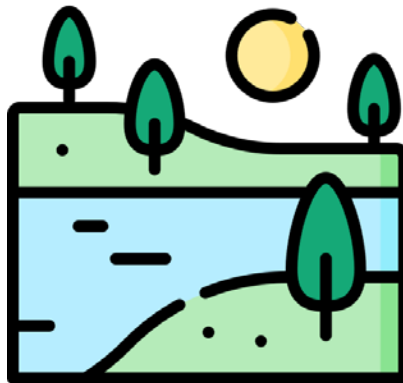


Climate Change

# ICPAC: WEATHER, HYDROLOGICAL, AND CLIMATE SERVICES



Weather and  
climate forecast



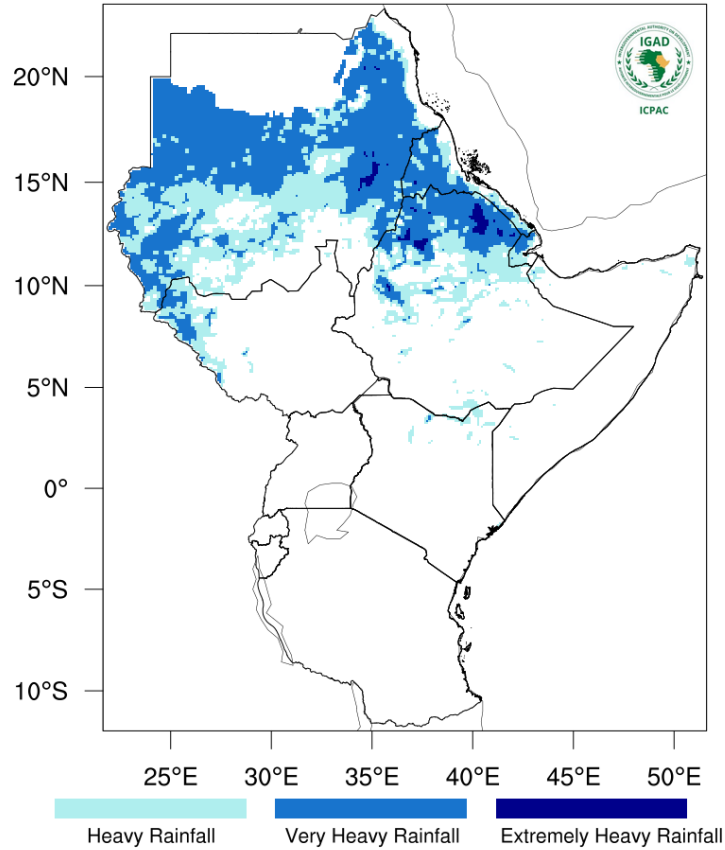
Hydrological  
forecast



Disaster Risk  
management

# WEEKLY WEATHER FORECASTING

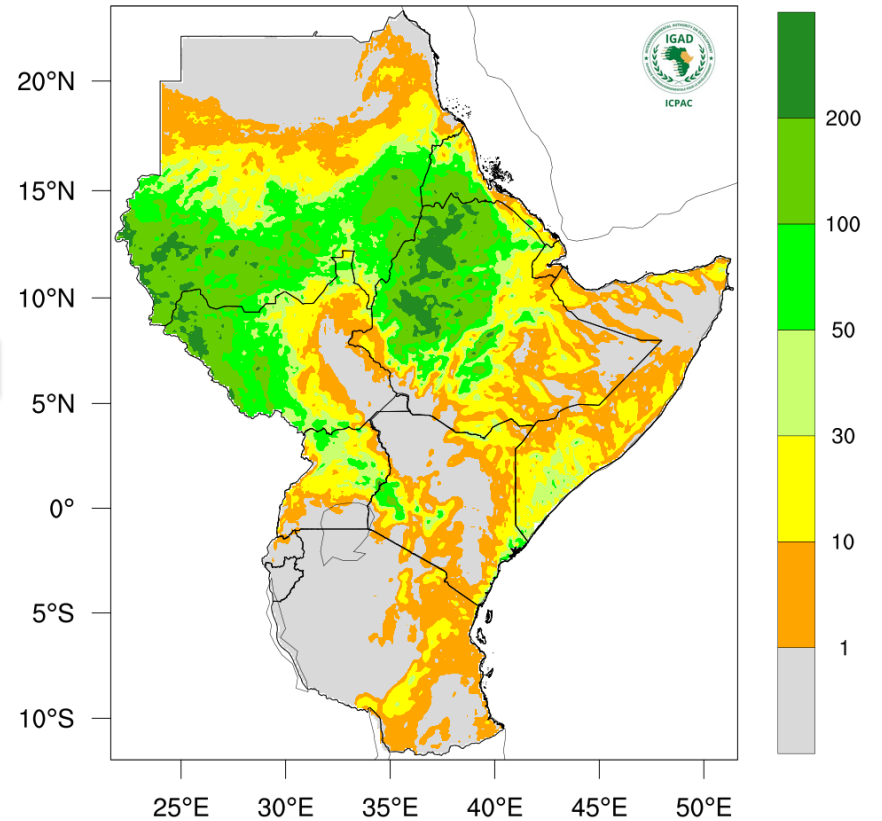
Exceptional Rainfall for 18-24 Aug 2020



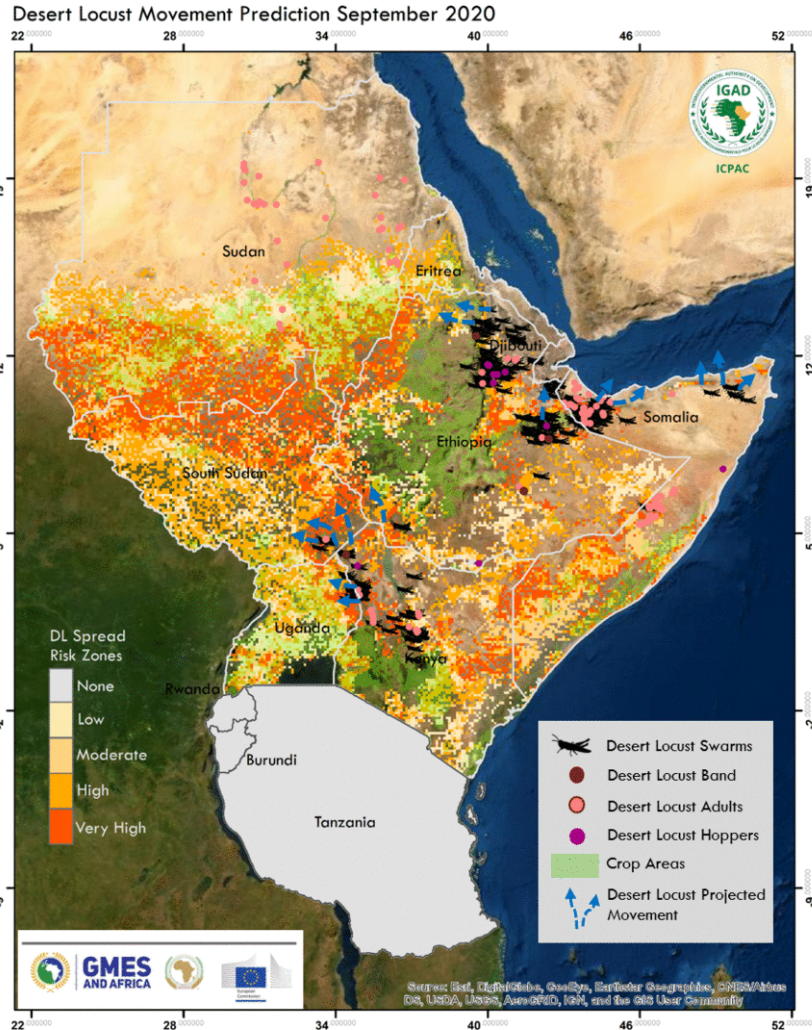
Analysis



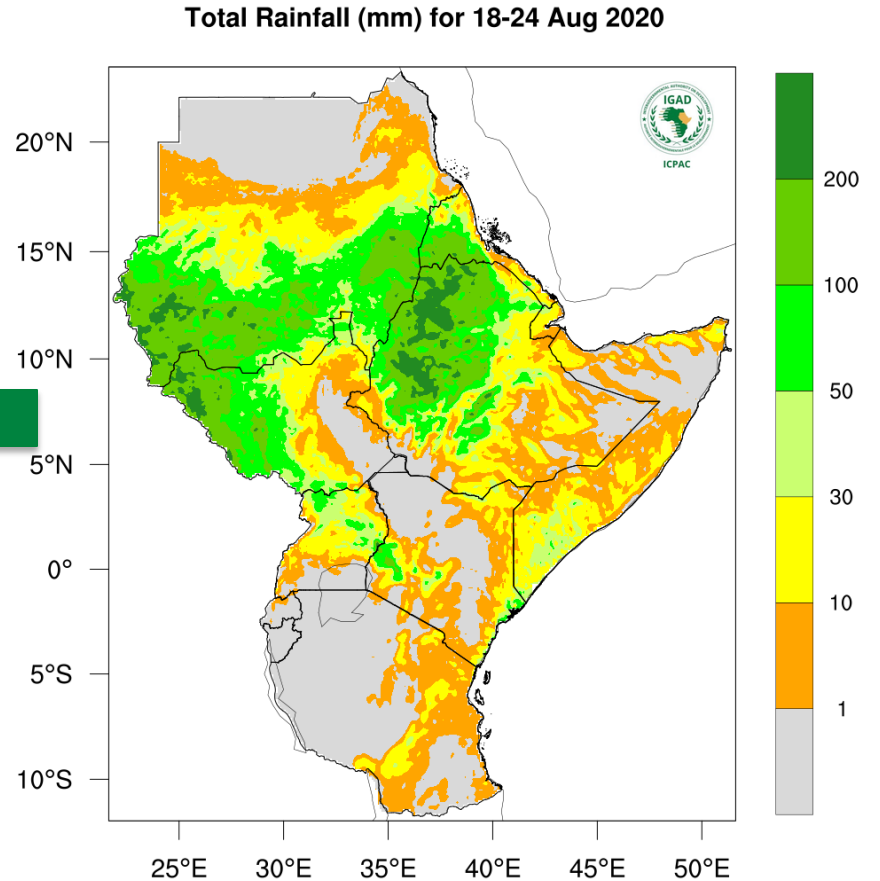
Total Rainfall (mm) for 18-24 Aug 2020



# EARTH OBSERVATION FOR WEATHER FORECASTING



Analysis



# MONITORING THE CLIMATE

## Satellite Observations



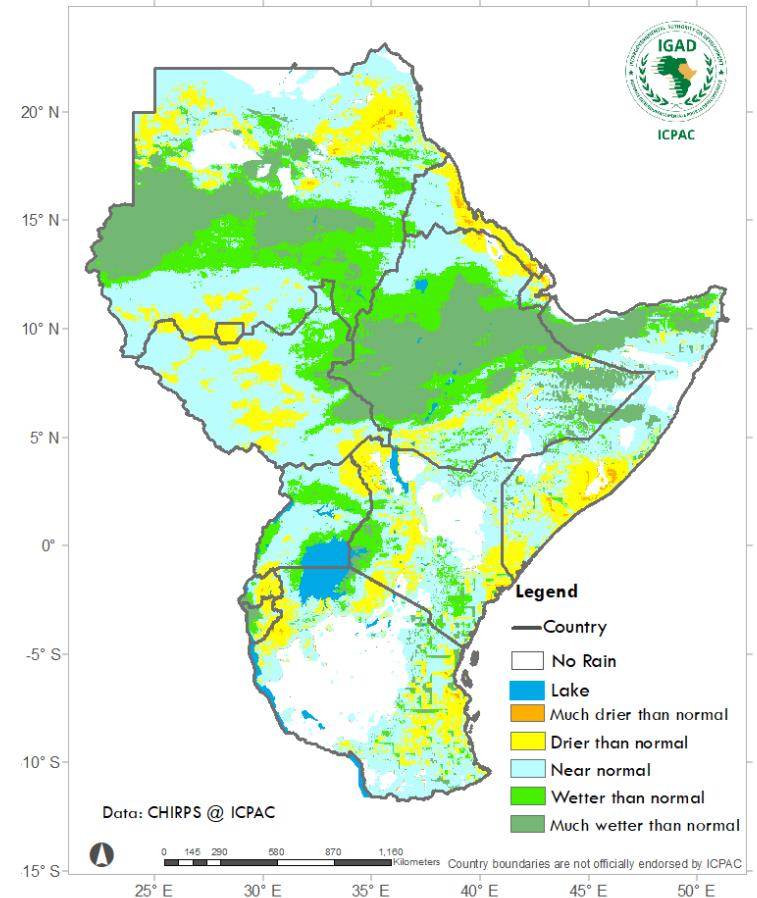
## Ground Observations



Analysis

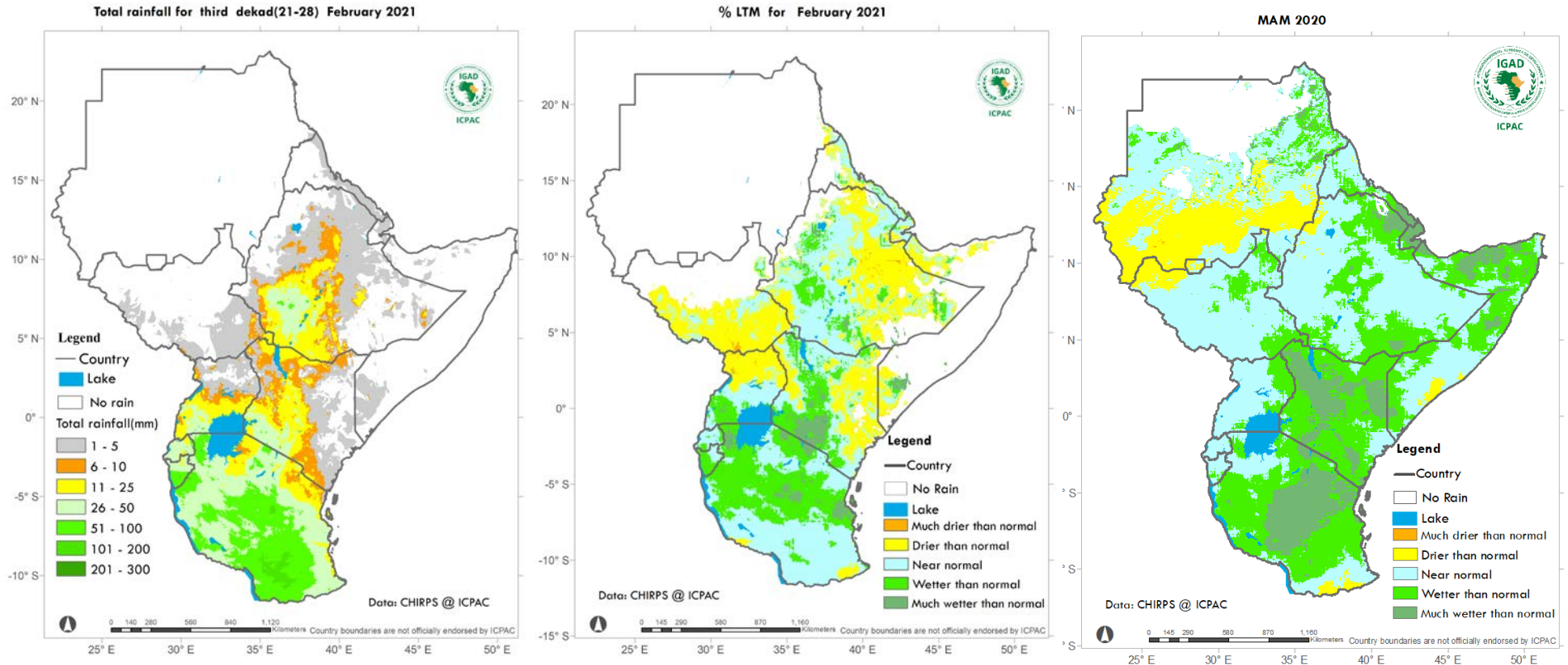


% LTM for third dekad(21-31) of August 2020

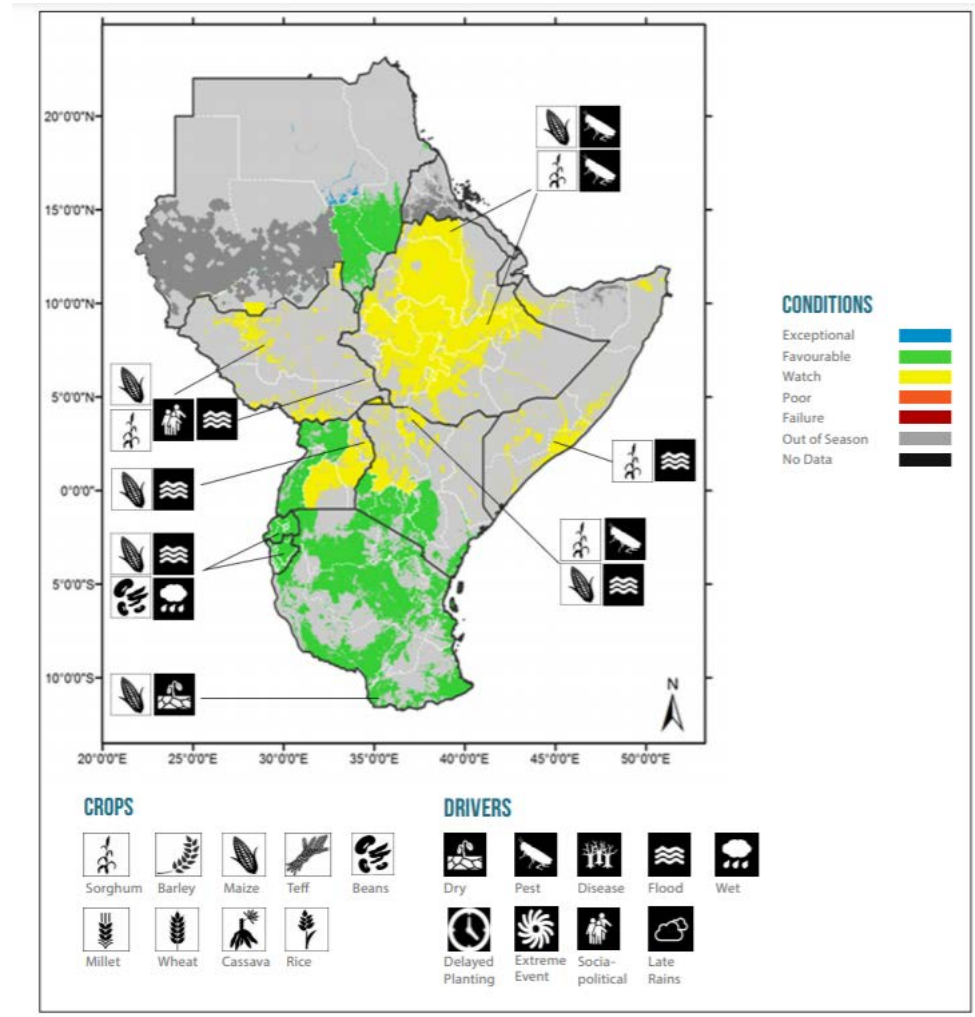




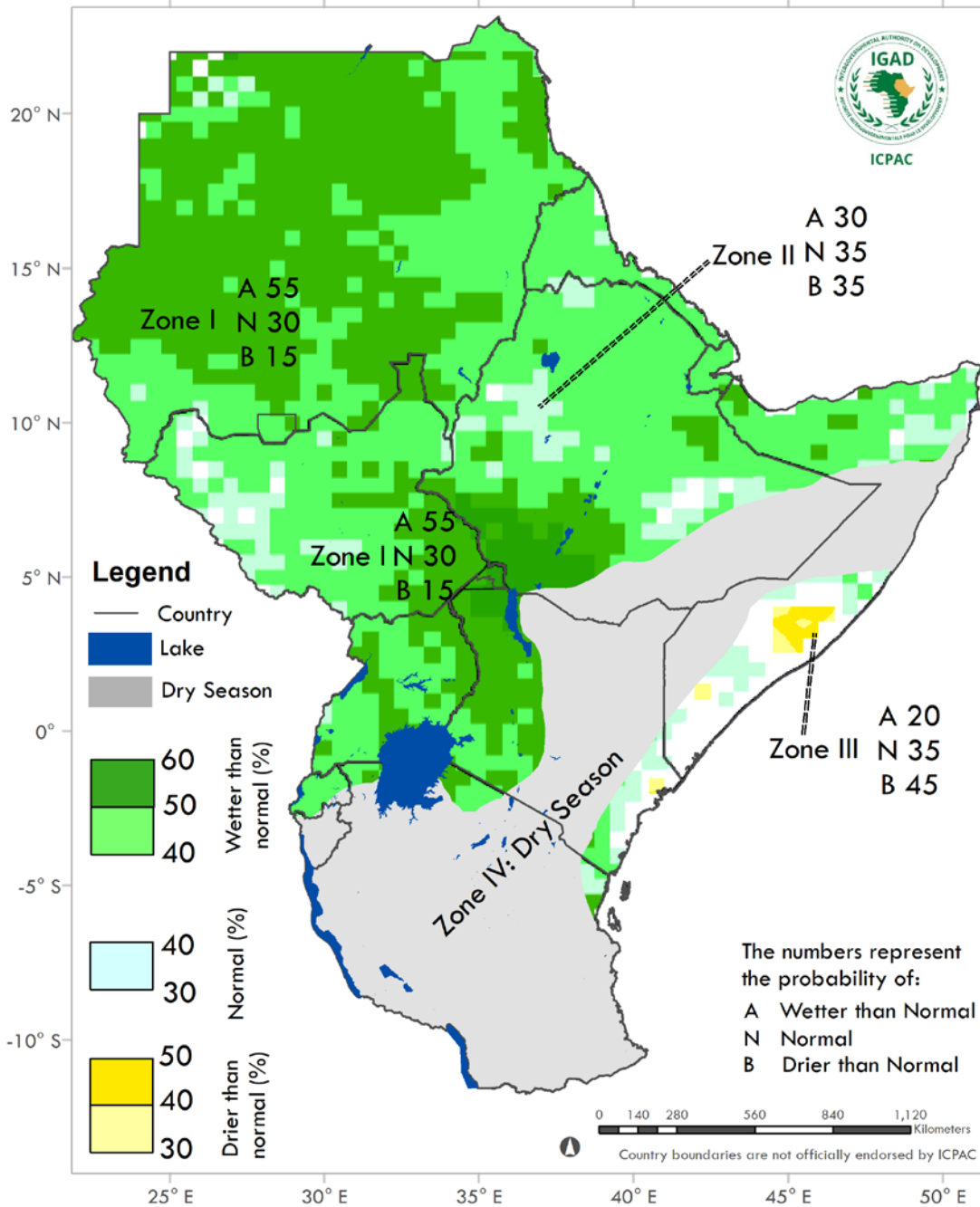
# DROUGHT MONITORING: SEASONAL, MONTHLY, AND 10-DAYS



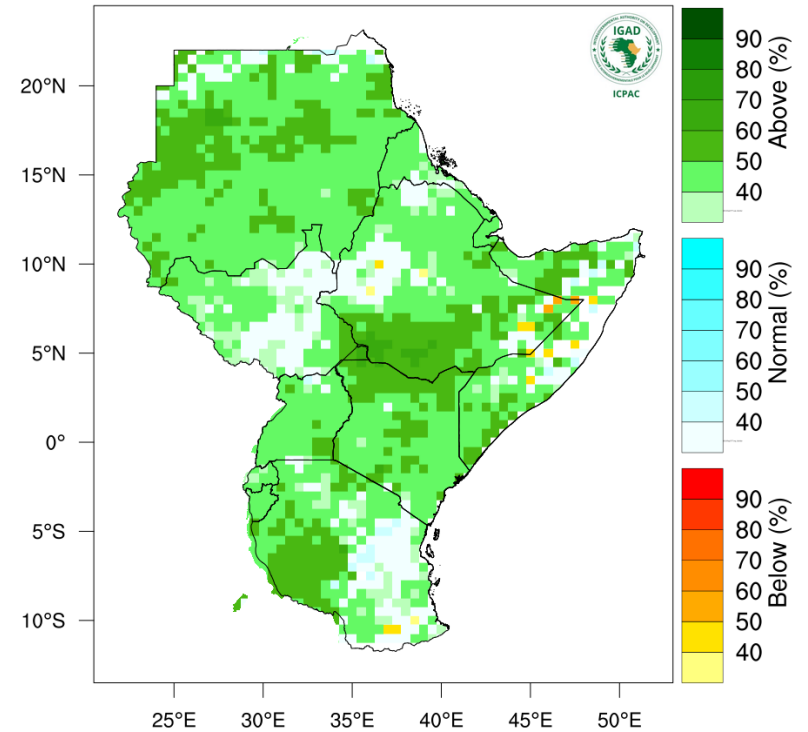
# CROP MONITORING



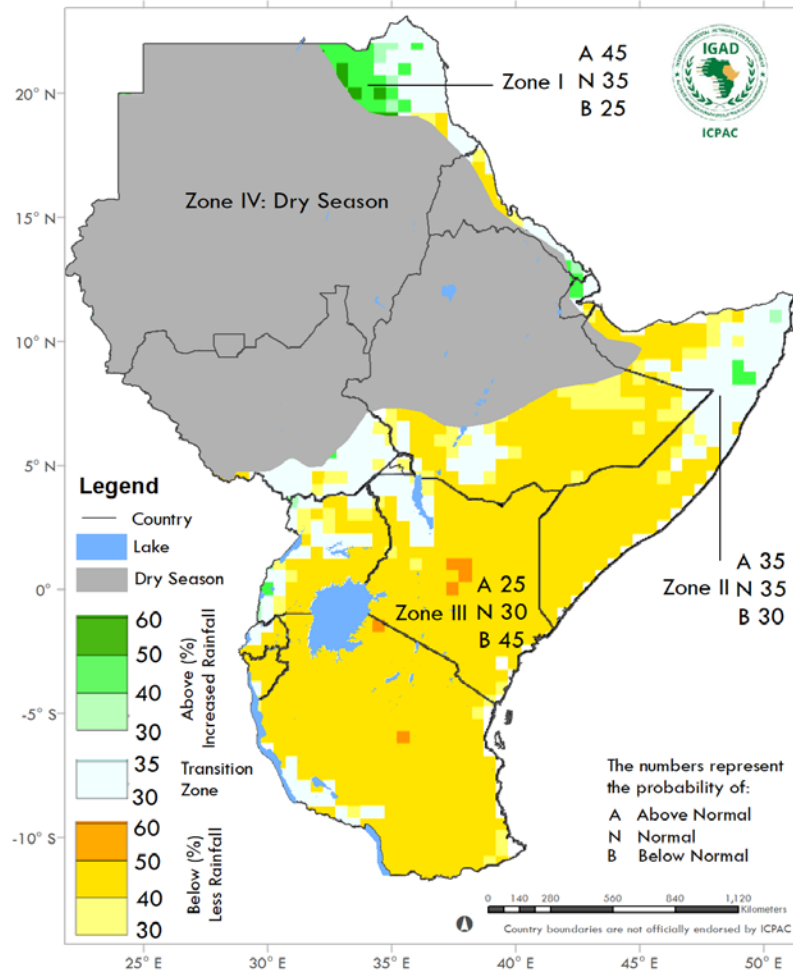
# ND CLIMATE SERVICES



**Rainfall Probabilistic Forecast for August**



# EARTH OBSERVATION FOR USER ADVISORIES



## Analysis of impacts and advisories



### Disaster Risk Management

Deficient water and pastures might affect crops and pasture availability. Resource based conflicts could be expected. COVID-19 and associated impacts.

#### Advisory

- Prepare a contingency plan. Consider all sectors in the response plan
- Closely monitor the season and take action in providing water and pasture



### Agriculture and Food Security

Drier than usual conditions, late onset and long dry spell might lead to agricultural drought, presenting poor prospects for the season. The impacts of COVID-19, desert locust, past climatic and non-climatic shocks might escalate food insecurity. In the pastoral communities scarcity of grazing resources until May 2021 might occur. Across Pastoral and Agro-pastoral livelihood areas, early depletion of water and pasture may lead to scarcity of milk and other products, negatively impacting food security and nutrition. This may trigger resource-based conflicts, atypical pastoral migration, declined calving and kidding rates.

#### Advisory

- Immediately disseminate this (early warning) information to decision makers
- Early land preparation for the short rains cultivation. Promote early maturing crops and varieties
- Expand irrigated areas, rehabilitate irrigation infrastructure and subsidize irrigation equipment
- Expand and promote value chain inputs subsidy and crop insurance cover to cushion farmers
- Mitigate impacts of COVID-19 on agriculture across the country, intensify desert locust control measures
- Develop contingency plans and prepare to act early in response to the imminent humanitarian crisis
- Provide adequate kitchen garden kits to vulnerable Households to take care of their nutritional needs
- Utilise the delayed onset (and forecasted dry conditions) to harvest maturing crops in the field
- Repair/rehabilitate irrigation and water harvesting infrastructure across irrigated areas such as Kano, Buryala and Ahero, and other parts of the country that are currently experiencing flooding
- In areas that might receive over 300 mm (L. Victoria region and central highlands), maximise cultivation of high yielding varieties of all important seasonal crops such as maize, sorghum, potatoes, beans, millet, rice, cassava, etc.
- Closely monitor pasture and water across all pastoral and agro-pastoral areas until May 2021 – and plan for feed/water assistance (water trucking, fodder supplementations for the breeding stock, etc.)
- Use the available grazing resources sparingly. Harvest and keep water, dry herbage and standing hay
- Promote livestock insurance cover to cushion farmers against impacts of climate variability



### Water and Energy

Water shortages are expected for both urban and energy production especially towards the end of the season. There is also a low risk of flooding in a few areas.

#### Advisory

- Water conservation measures, repair and desilting of water storage and conveyance systems
- Increase water users awareness of possible water supply shortages to improve water use efficiency
- Conduct flood risk awareness campaigns
- Coordinate with Disaster Risk Management agencies



### Livestock

Expected deterioration of pasture in quality and quantity and drying of water pans, increased trekking distance to water sources impacting on body condition and productivity. Outward migration to dry season fall back areas including out of the counties. Weakening price trends, declining body condition, effects of COVID-19

#### Advisory

- Intensify DL control both aerial and on the ground
- Karamoja area: Close monitoring and activation of peace committees in various parts of the country
- Disease surveillance, vaccinations and treatments to continue. Conduct vaccinations before movements begin.
- Coastal strip expected to receive animals from North East, monitoring water and pastures for conflict prevention
- Monitor stocks for offtake. Supplemental feeds and water may be necessary.



### Health

Increased Malaria transmission in the western part of Kenya. Malnutrition due to inadequate food supply. Due to below normal rains, scarcity of water may lead to water related and water washed diseases, cholera, typhoid, scabies, trachoma and including COVID 19. Dryness and winds may lead to dust and lead to respiratory allergies

#### Advisory

- Expediting distribution and Promotion of ITN use

**KENYA**

# SUMMARY AND CONCLUSIONS

- **ICPAC** generates weather and climate information at different time scales: weekly, monthly, and seasonal
- Weather and climate information are analysed in suitable context to provides advisories to key social economical sectors.
- ICPAC uses multiple channels to disseminate climate services (mailing list, website, Facebook, Twitter, etc.)

**THANK YOU!**  
[www.icpac.net](http://www.icpac.net)

