

Food and Agriculture Organization of the United Nations

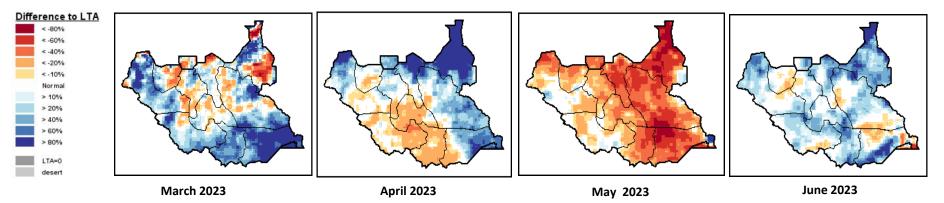
South Sudan Climate Outlook

FSL Cluster meeting 29 November 2023

Mark Nyeko / Agroclimatologist

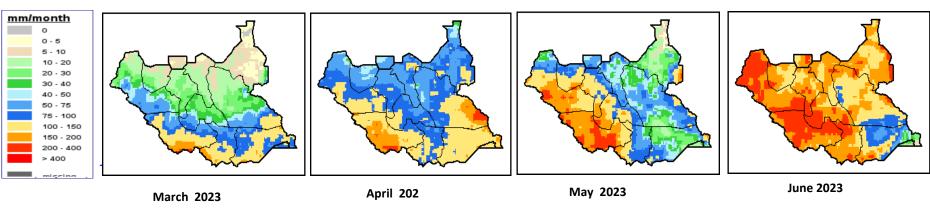
Food and Agriculture Organization of the United Nations (FAO)

Seasonal Rainfall anomalies trend (March-October 2023)(source: FAO GIEWS)



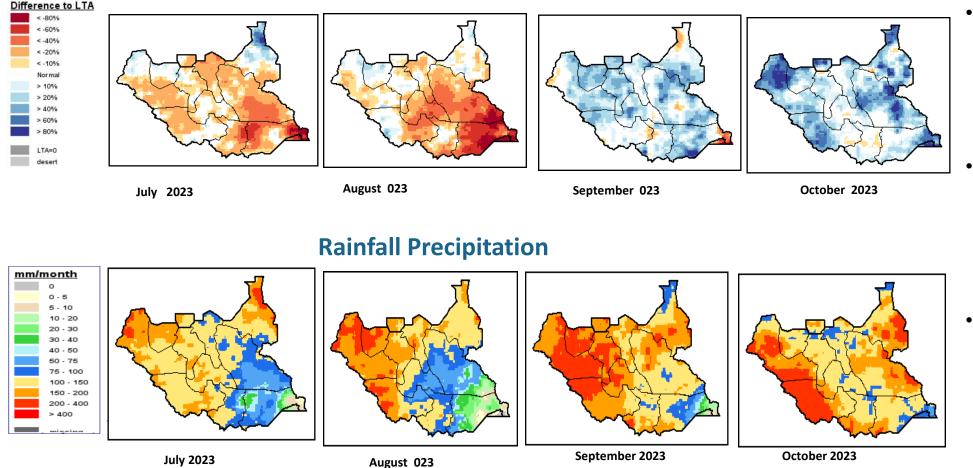
Rainfall Anomalies

Rainfall Precipitation



- Most southern parts of the country experienced ontime onset of the rainy season in March with onset progressed to May in the northern parts of the country
- The season had a slow start, with greater Equatoria WBG and southern Jonglei and Pibor experiencing above normal rainfall.
- October and September were the wettest months of the year, with above normal rainfall experienced across most parts of the country, even as the same areas posted cumulative monthly rainfall amounts of 200mm or more.
- Most of South Sudan experienced below average rainfall between March and July

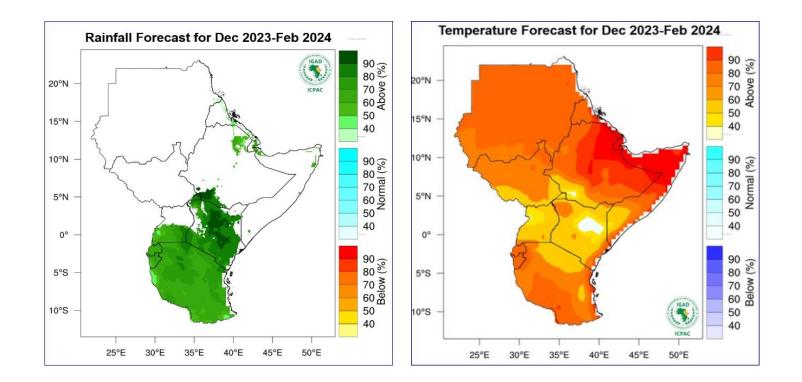
Seasonal Rainfall anomalies trend (March-October 2023)(source: FAO GIEWS) cont.



Rainfall Anomalies

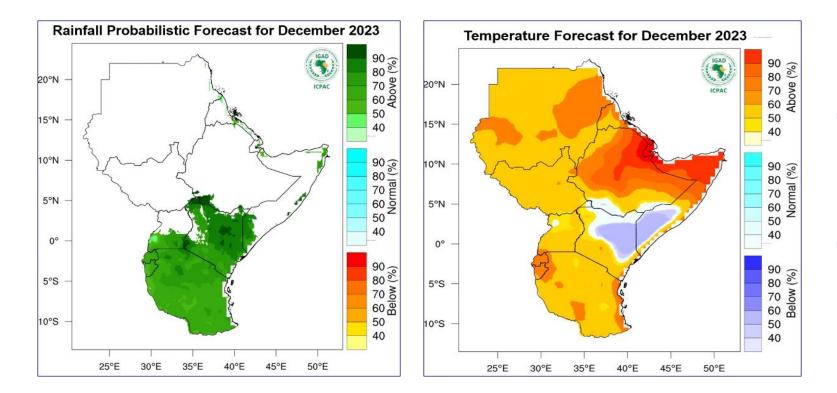
- Most of the northwestern parts of the country (WBEG, NBEG, Warrap, northern Unity) experienced above average rainfall in June and July.
- Most of the country experienced low rainfall including dry spells in May, July and August with greater Equatoria and Jonglei most affected

Seasonal Weather forecast (December 2023- February 2024) (source: ICPAC).



- South Sudan is generally dry during this period with wetter than usual conditions expected over southern Uganda.
- Warmer than usual temperatures indicated over South Sudan

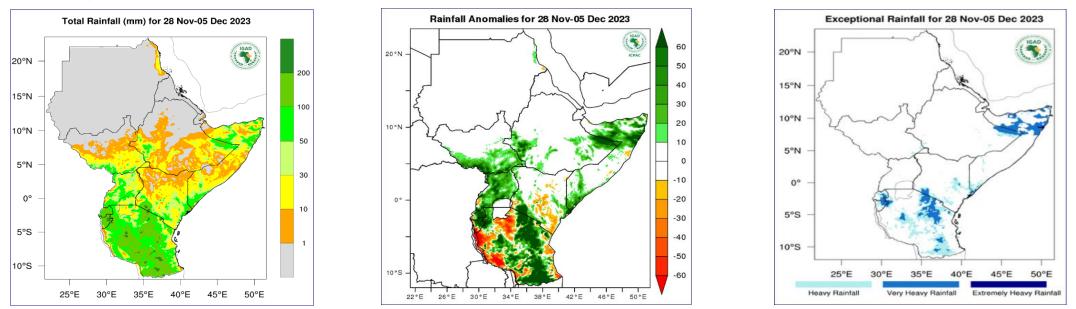
Monthly Rainfall and Temperature Forecast -December 2023 (source: ICPAC)



- Rainfall: Dry conditions are expected over South Sudan typical of this time of the season. However, heavy to very heavy rainfall is expected in southern Uganda around lake Victori.
- Temperature: Warmer than usual conditions expected over South Sudan.

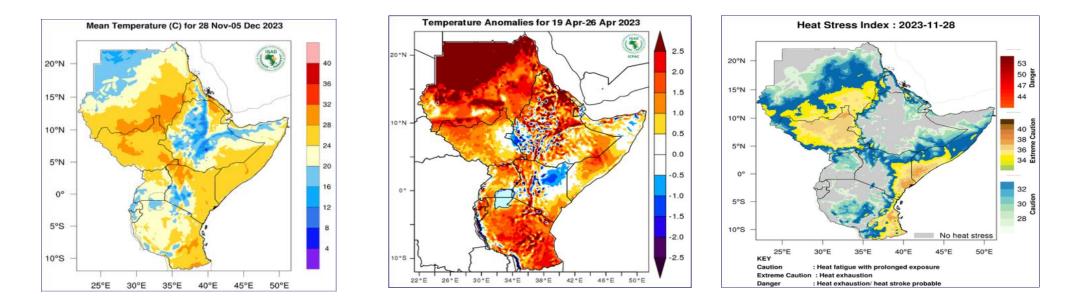
Weekly Weather Forecast 28 November to 05 December 2023 (source: ICPAC)

Weekly Rainfall Forecast



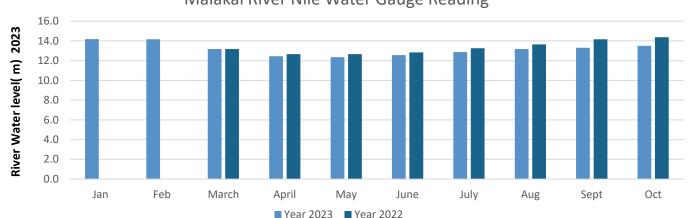
- Moderate rainfall (50-200mm) is expected over isolated areas in southern South Sudan such as Morobo, Kajo-keji, southern parts of Budi, and southern parts of Western Equatoria, while Light rainfall (less than 50 mm) expected over central to southern regions of South Sudan such as much of greater Equatoria, Jonglei, Lakes and southern parts of Western Bahr-el-Ghazal. Dry conditions are expected in northern parts of South Sudan indicating rainfall is regressing southwards typical of this time of the year.
- In terms of rainfall anomalies, wetter than usual conditions are expected over southern South Sudan.
- No exceptional rainfall is expected over South Sudan during the week of 28 November to 05 December2023.

Weekly Temperature Forecast



- Moderate to high temperatures (20- 32 °C) are expected over South Sudan while elevated levels of heat stress are expected over eastern South Sudan.
- According to the temperature anomalies map, warmer than usual temperatures are predicted in most parts of South Sudan.

Seasonal Weather Forecast, Dec 2023-Feb 2024 (Implications, Risks and Recommendations)



Malakal River Nile Water Gauge Reading

In 2022, the water level in river Nile at Malakal was high by 0.9 m (14.4 m) compared to 2023 (13.5m) showing more water was pouring into the Nile contributed to more flooding downstream in Unity and Upper Nile as compared to 2023.

Disaster Risk Management

Risk and Implications

- Enhanced rainfall in southern Uganda will increase water volume in the Nile flowing to south Sudan, increasing the likelihood of flash flood in downstream riverine areas along the Nile specifically in Jonglei, Upper Nile and Unity as the water level in the Nile may continue to rise.
- Flash floods is likely to cause displacement of affected populations and an increase in disease outbreaks e.g., malaria, cholera.

Mitigating measures

Initiate interventions to improve infrastructure such as roads and dykes (cash for work).

Agriculture and Food Security

- Risk and Implications
 - As harvest is on-going and ending soon , there is likelihood of improved food security related to availability of own produce in most parts of the country.

• Mitigating measures

- With the dry season, farmers should be encouraged to engage in dry season cultivation in riverine areas where the soil is moist.
- Train farmers on post-harvest technologies to minimize losses of produce.

Seasonal Weather Forecast, Dec 2023-Feb 2024 (Implications, Risks and Recommendations)

Water

• Risk and Implications

- Increase river and lake water levels will lead to high flood risk during the forecast period and will
 not give a chance for inundated areas to dry up..
- Limited availability of watering points for livestock, particularly in the northern parts of the country, is likely to lead to resource-based conflicts.

Mitigating measures

 Peace conferences should be conducted to address resource-based (water) conflicts among pastoralists.

Seasonal Weather Forecast, Dec 2023-Feb 2024 (Implications, Risks and Recommendations)

- Livestock
 - Risk and Implications
 - As the dry season encroaches, there is increased movement of animals in search of pasture and water, creating conducive conditions for increased cattle-related conflicts in the southern parts of the country.
 - In wetter areas in the southern parts of the country, an increase in vector-borne animal diseases is expected.

Mitigating measures

- Enhanced surveillance, treatment and vaccination against expected water-borne animal diseases.
- Support pastoralists in drier areas to access pasture (by promoting conservation of crop residues for use as animal feeds) and water (by promoting water conservation and harvesting).
- Promoting peace dialogues between pastoralists and farmers as appropriate.

FAO weather information services to farmers and for decision support

CLIMIS Portal

✓ <u>http://climis-</u> <u>southsudan.org/agromet/rainfall_data</u>

Weekly radio talk show programme:

 \checkmark Is on-going.

Thank you