

Figure 1 - Maps showing estimated rainfall progression between 21 May and 20 June 2021 (Source: FAO/GIEWS)

SEASONAL PROGRESSION

- According to satellite imagery analysis of estimated rainfall, the 2nd Dekad¹ of June 2021 posted a better distribution of rainfall across the country compared to the previous two Dekads (See the *Estimated Precipitation maps in Figure 1 above*). **Kapoeta East County of Eastern Equatoria continues to experience very low amounts of rainfall, increasing the likelihood of drought in the area.**
- During the 2nd Dekad of June 2021, the satellite imagery analysis showed that the country experienced mixed precipitation patterns, with rainfall amounts of 150 mm² or above in Central Equatoria State (parts of Lainya, Terekeka and Juba counties); Western Equatoria (parts of Mundri East County); Jonglei State (eastern Pibor and parts of Akobo counties); Upper Nile State (western Panyikang County); the northern part of Unity State (Pariang, Abiemnhom, Rubkona, Guit, Mayom, Koch, Mayendit and Leer counties); Warrap State (parts of Tonj North, Tonj South and Gogrial East counties); and Western Bahr el Ghazal State (western part of Raga County) (See the *Estimated Precipitation maps in Figure 1 above*).
- Compared to the Long Term Average (LTA)³, significant amounts of above average rainfall⁴ (dark blue areas in *Estimated Precipitation Anomaly map for Dekad 2 of June 2021 in Figure 1 above*) were experienced in parts of Juba and Lainya counties in Central Equatoria State; the eastern parts of Pibor in Jonglei State; counties in the northern part of Unity State; Mundri East County in Western Equatoria State; Tonj North County and northern part of Gogrial East in Warrap State; and the western parts of Raga County in Western Bahr el Ghazal. Over the past three Dekads, below average rainfall and dry spells have been experienced in Kapoeta East County (Jonglei State); Panyijiar County (Unity State); Ulang, Nasir, Maiwut and Longochuk counties (Upper Nile State) - with greatest concern of dry spells in Kapoeta East and Nasir counties.

1 A dekad is a ten-day rainfall period

2 1 mm of rainfall is equivalent to 1 litre of rainfall per square meter

3 To generate the estimated precipitation anomaly, rainfall levels are compared with the Long-Term Average (LTA), which refers to the period 1989-2015. Warmer colours (orange to maroon) identify areas which have received lower-than-average rainfall, while colder colours (light to dark blue) are given to areas where precipitation has been above average. (Source: FAO/GIEWS, <http://www.fao.org/giews/earthobservation/country/index.jsp?lang=en&code=SSD>)

4 When considering rainfall amounts and comparing to the long-term average (LTA), it is important to also look at the actual rainfall amounts as the LTA is relatively generated. For example, if current rainfall is 20 mm while the LTA is 15 mm, the LTA % value will show a 33% increase in rainfall for a 5mm increase which in reality is not significant. This is why we provide Estimated Precipitation and Estimated Precipitation Anomaly maps next to each other for comparison and contextualization purposes.

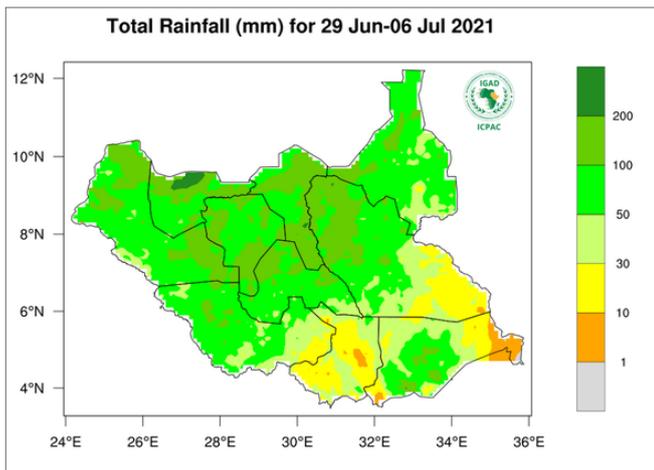


Figure 2 - Rainfall probabilistic forecast, 29 June - 6 July 2021 (Source: ICPAC)

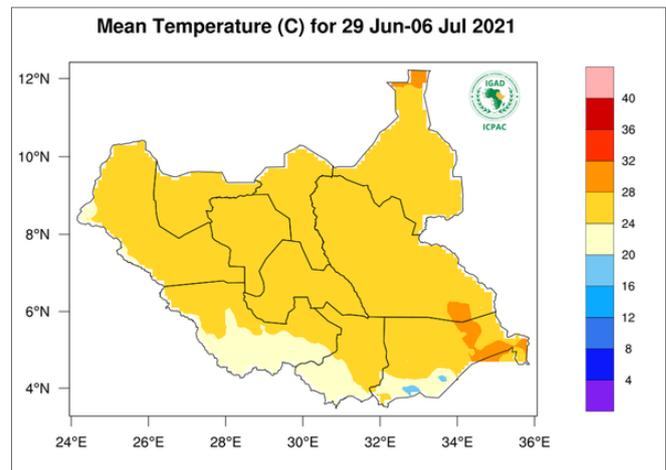


Figure 3 - Temperature probabilistic forecast, 29 June - 6 July 2021 (Source: ICPAC)

WEEKLY FORECAST

- **Rainfall Forecast:** According to ICPAC, between 29 June and 6 July 2021, heavy to very heavy rainfall is expected in limited areas in northern South Sudan, while moderate rainfall between 50 - 200 mm is expected in northern and western South Sudan.
- **Temperature Forecast:** According to ICPAC, between 29 June and 6 July 2021, moderate temperatures between 20 - 32°C are expected in South Sudan (Figure 3).

IMPLICATIONS AND RECOMMENDATIONS

- The dry spells being experienced in Kapoeta East and Nasir counties in Eastern Equatoria and Upper Nile states respectively are likely to affect crop and livestock production. It is important for all concerned actors to monitor the situation closely and take appropriate action to mitigate the effects.
- Heavy rainfall in the northern parts of the country will result in improved water and pasture availability for livestock, as well as favourable conditions for crop production. However, the heavy rainfall is likely to cause flooding events or result in stagnant pools of water in the flat areas of Unity, Warrap and Upper Nile states. Stakeholders are advised to take appropriate mitigation measures and advise communities in these areas accordingly.
- Heavy rainfall with moderately warm temperature will favour an increase of water borne diseases for humans, livestock, and crops. Stakeholders working in the human health, agriculture and livestock sectors are advised to embark on provision of appropriate services. Similarly, FAO should continue its collaboration with other partners to provide weather information and related messages to farmers and livestock keepers through its radio talk show ZIRA TANNA.
- Below normal rainfall will favour an increase in Fall Armyworm infestation in parts of Jonglei, Central Equatoria, Western Equatoria, Unity and Western Bahr el Ghazal states. Stakeholders are advised to advise farmers on appropriate mitigation measures.



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Project Website:
<http://www.fao.org/in-action/south-sudan-cross-border-project/en/>
CLIMIS Portal - Rainfall Data:
https://climis-southsudan.org/agromet/rainfall_data

Disclaimer: The boundaries and names shown and the designations used on all maps in this bulletin do not imply official endorsement or acceptance by UN-FAO. Final boundary between the Republic of South Sudan and the Republic of Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

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