



FAO Key Messages: South Sudan Weather Outlook as depicted from Greater Horn of Africa Climate Outlook Forum (GHACOF69) 20-21 January 2025, Addis Ababa-Ethiopia

Highlights

- The March to May (MAM)2025 season is an important agricultural production season for South Sudan, particularly in the bimodal rainfall zone, as this marks the beginning of the rainfall and cultivation season
- According to the latest report from ICPAC GHACOF69, eastern including isolated areas in central and western parts of South Sudan (*colored green*) are likely to experience wetter than normal conditions (above normal rainfall) while the rest of the country (*colored orange*) are likely to experience below normal rainfall condition.
- Rainfall exceeding 200mm (*colored dark green*) is predicted in the eastern part of the country around Pochalla
- Enhance rainfall during this period may potentially contribute to flash flooding in flood prone areas. Northern parts of the country are likely to experience dry conditions typical of the MAM season as late onset is expected in those areas.
- Mixture of early, normal to late onset of rainfall is predicted in most parts of South Sudan with exception of the northern parts of the country which is expected to remain dry.
- Warmer than usual temperature condition (*colored orange*) is expected in the country, including Abyei.

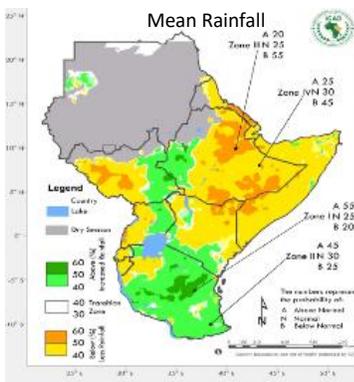


Fig1. Rainfall forecast

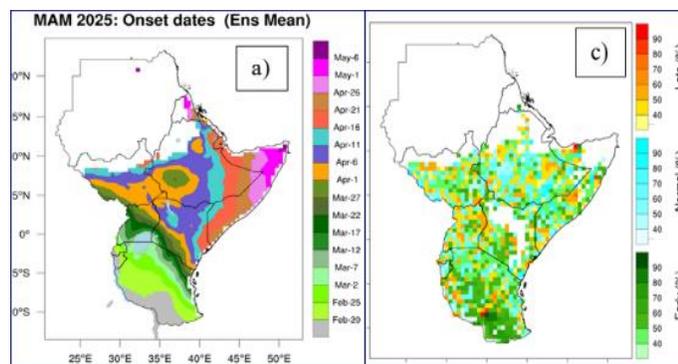


Fig2. Rainfall Onset dates

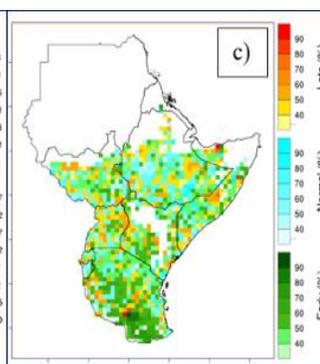


Fig 3. Rainfall Onset

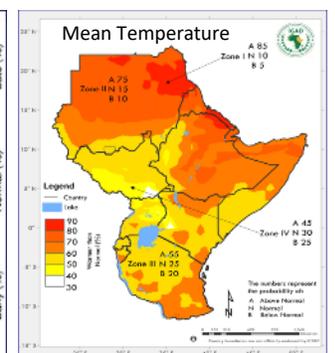


Fig 4 .Temperature forecast

SOUTH SUDAN STATES-BASED CLIMATE OUTLOOK: MARCH- MAY 2025 SEASON

Central Equatoria State:

The forecast indicates that, northern parts of CES i.e Terekeka, Juba and Lainya counties (*colored green*) are predicted to have 45% probability of experiencing above normal rainfall while the rest of the state (*colored orange*) has 45-55% probability of experiencing below normal rainfall i.e most of Kajo-Keji, Morobo, and Yei Counties. Early to normal onset of rainfall is predicted to start from 12 of March in Morobo and Kajo-keji and progressing to the rest of the state. The state is predicted to have a 45-55% probability of experiencing warmer than usual temperature.

Eastern Equatoria states

The forecast indicates that most of the states (colored light green) are predicted to have a 45% probability of experiencing above normal rainfall, with the exception of the eastern part of Kapoeta East (colored orange), which is expected to have a 45% probability of experiencing below normal rainfall. Early to normal onset of rainfall is predicted to start from first week of April and progressing north wards. Forecast also indicates, the state is predicted to have 45 - 55% probability of experiencing warmer than usual temperature.

Western Equatoria State.

The forecast indicates that the whole of Western Equatoria State (*colored Orange*) is predicted to have a 45-55% probability of experiencing below normal rainfall. Early to normal onset of rainfall is predicted from the 12 of March and progressing to the rest of the state. Forecast also indicates the state is predicted to have 45 - 55% probability of experiencing warmer-than-usual temperature.

Western Bahr-el-Ghazal State

The forecast indicates that most of Western Bahr-el-Ghazal Equatoria State (colored Orange) is predicted to have a 45 - 55% probability of experiencing below normal rainfall, with the exception of the northern parts of Raja County (colored grey), which are predicted to experience no rainfall. Early to normal onset of rainfall is predicted to start from 6 April and progress northwards. Forecast also indicates the state is predicted to have 45 - 55% probability of experiencing warmer-than-usual temperatures.

Northern Bahr-el-Ghazal State

The forecast indicates that most of Northern Bahr-el-Ghazal Equatoria State (colored Orange) is predicted to have a 45-55% probability of experiencing below normal rainfall, with the exception of the northern parts of Aweil North, Aweil West, and Aweil East counties (colored grey), which are predicted to experience no rainfall. Normal onset of rainfall is predicted to start from 6 of April and

progressing north wards. Forecast also indicates, the state is predicted to have 55% probability of experiencing warmer than usual temperature.

Warrap State

The forecast indicates that most of Warrap State (colored orange) is predicted to have a 45-55% probability of experiencing below-normal rainfall. The normal onset of rainfall is predicted to start on April 6th and progress northwards. The forecast also indicates that the state is predicted to have a 55% probability of experiencing warmer-than-usual temperatures.

Lakes State

The forecast indicates that most of Lakes State (*colored orange*) is predicted to have a 45-55% probability of experiencing below-normal rainfall. The normal onset of rainfall is predicted to start on the 6th of April and progress northwards. The forecast also indicates that the state is predicted to have a 55% probability of experiencing warmer-than-usual temperatures.

Unity State

The forecast indicates that the southern part of Unity State (colored orange), i.e, Panyijiar, Leer, Koch, and Meyendit, is predicted to have a 45% probability of experiencing below normal rainfall, while most of Guit, Rubkona, and Mayom are predicted to experience no rainfall. Rainfall onset is predicted to start from the 6th of April in Panyijiar and progress northwards. Forecast also indicates the state is predicted to have 55% probability of experiencing warmer than usual temperature

Upper Nile State

The forecast indicates that the south to eastern parts of Upper Nile state (colored green), i.e, Maiwut, Longechuk, Nasir, and southern Maban, are predicted to have a 45% probability of experiencing above normal rainfall, while the rest of the state is expected to have no rainfall. Rainfall onset is predicted to start from the 11th of April and progress northwards. Forecast also indicates the state is predicted to have a 55% probability of experiencing warmer-than-usual temperatures.

Jonglei State.

The forecast indicates that most of the state (colored green) is predicted to experience above normal rainfall with 45% probability in Bor South, Twic East, Duk, South of Ayod, Nyirol, and Akobo, with some areas in the northern parts expected to receive normal rainfall or remain dry. Rainfall onset is predicted to start from first week of April in the southern parts and progressing northward. Forecast also indicates, the state is predicted to have 55% probability of experiencing warmer than usual temperature.

Pibor Administrative Area

The forecast indicates that the Pibor Administrative Area (colored green) is predicted to have a 45% probability of experiencing above normal rainfall in Pochalla and Pibor, while there is a 55% probability of experiencing above normal rainfall in the eastern part of Boma (*colored dark green*). Rainfall onset is predicted to start from the first week of April in the southern parts and progress northward. Forecast also indicates the Pibor is predicted to have a 55% probability of experiencing warmer-than-usual temperatures.

Ruweng Administrative Area

The forecast indicates that Ruweng Administrative Area (colored grey) is predicted to experience dry conditions. The forecast also indicates that the state is predicted to have a 55% probability of experiencing warmer-than-usual temperatures.

Abyei Administrative Area

The forecast indicates that the Abyei Administrative Area (colored grey) is predicted to experience dry conditions. The forecast also indicates that the state is predicted to have a 55% probability of experiencing warmer-than-usual temperatures.

SEASONAL IMPLICATIONS, RISK, AND RECOMMENDATIONS.

Agriculture and Food Security

Risk and implications.

Positive impacts

- Enhance rainfall provides favorable conditions for crops production and wild food availability in areas where above normal rainfall is expected in the country, hence normalizing food insecurity.

Negative impacts

- Below normal rainfall will reduce water availability for the growth of wild fruits and agriculture and may lead to crop failure.
- Below normal rainfall and warmer conditions may also increase the incidence of FAW in areas prone to the pest, reducing crop production and exacerbating food insecurity.

Mitigation measures

- It is recommended that farmers be encouraged to plant fast-maturing, flood-resistant crop varieties, such as rice, to take advantage of the excess water inundating their farmlands.
- Train farmers on Climate-Savvy Agriculture (CSA) practices to address the interlinked challenges of food security and climate change in areas with below-normal rainfall.

Livestock

Risk and implications.

Positive impacts

- Above normal rainfall will improve water and pasture availability for livestock, increase milk availability, increase fishing opportunities for fishermen, and improve food security.

Negative impacts

- Above-normal rainfall may cause outbreaks of water-borne diseases, which in turn may negatively impact livestock production and productivity.
- In drier areas (below normal rainfall conditions), animals move more frequently in search of pasture and water, creating conducive conditions for increased resource-based conflicts. In the wetter (above normal rainfall condition) parts, increased conflict between pastoralists and farmers is likely.

Mitigation measures

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

Disaster Risk Management and Water

Risks & Implications

Positive impacts

- Above normal rainfall is likely to improve fish opportunity, increase fish and wild food availability and

Negative impacts

- Above normal rainfall is likely to cause flash floods, resulting to the displacement of populations, and the destruction of property such as dwellings
- There is likely to be an increase in water-borne disease outbreaks such as Malaria and Diarrhoea
- In areas prone to flooding, access to markets and market functionality are likely to be affected as road infrastructure deteriorates and markets flood.

Mitigation measures

- Initiate interventions to improve infrastructure such as roads and dykes.
- Propose emergency food and medical supplies for response purposes.
- Peace conferences should be held to address resource-based conflicts (water and pasture) among pastoralists.

- Water harvesting and conservation activities should be encouraged in areas with below normal rainfall to support livestock keeping.
- Provide weather advisories and early warning messages through radio and other media to people in flood-prone areas so that they can take action to lessen the impacts of extreme weather conditions.

Source: ¹ South Sudan Meteorology Directorate and <https://www.icpac.net/weekly-forecast/>

This weather bulletin is derived from ICPAC weekly updates and funded by FAO South Sudan's projects, including the Program to Build Resilience for Food and Nutrition Security in the Horn of Africa (funded by the African Development Bank), the Resilient Agricultural Livelihoods Project (funded by the World Bank), and the funding from the Norwegian and Swiss governments.

Visit the CLIMIS Portal: <http://www.climis-southsudan.org>; **and View Rain Gauge Data on the CLIMIS Portal:** http://www.climis-southsudan.org/agromet/rainfall_data

For more details, contact FAO South Sudan: FAO-South-Sudan@fao.org