

FAO Key Messages: South Sudan Weather Outlook as depicted from Greater Horn of Africa Climate Outlook Forum (GHACOF68) 19-20 August 2024, Nairobi, Kenya

Highlights

- October to December marks the harvest period for most crops and the end of the cultivation season in both bimodal and unimodal rainfall zones of South Sudan as the rainy season recedes.
- According to the latest report from ICPAC GHACOF68, southeastern and isolated areas in the northeastern part of South Sudan are likely to experience wetter-than-normal conditions (above-normal rainfall), while central to western parts of the country are likely to experience a mixture of normal to below-normal conditions.
- Enhanced rainfall during this period may potentially contribute to flooding in flood-prone areas. The northern region of the country is likely to experience dry conditions earlier than expected.
- Early to normal onset of rainfall is predicted in most parts of South Sudan, except for isolated areas in the northeastern and western parts of the country, which are likely to experience a late onset.
- Cooler-than-normal to normal temperature conditions are predicted in the central to southeastern parts of the country, while the rest of the country is expected to experience warmer-than-normal conditions.

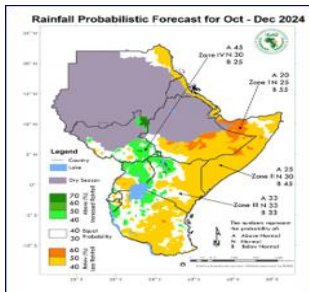


Figure 1: Rainfall Forecast for OND. Source: ICPAC.

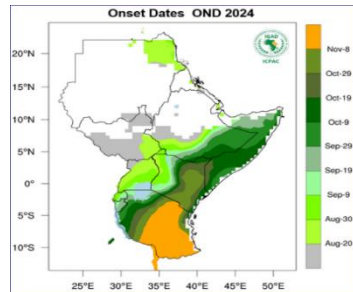


Figure 2: Rainfall Onset Dates for OND. Source: ICPAC.

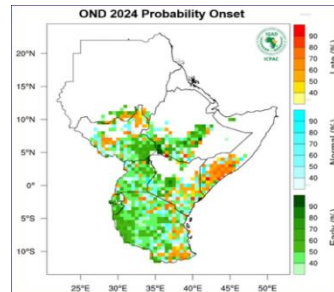


Figure 3: Rainfall Onset Probability for OND. Source: ICPAC.

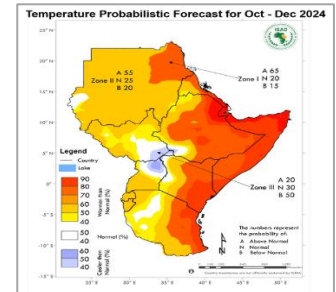


Figure 4: Temperature Forecast for OND. Source: ICPAC.

SOUTH SUDAN STATES-BASED CLIMATE OUTLOOK: OCTOBER - DECEMBER 2024

Eastern Equatoria State

The forecast indicates that much of greater Kapoeta (Figure 1 colored cyan) is likely to receive normal rainfall while the rest of the state (colored green) has a high chance of receiving above-normal rainfall. Early to onset of the season (Figure 3) is predicted over much of the state. The forecast also indicates that the state (Figure 4 - colored cyan and purple) has a high chance of experiencing average to cooler than average conditions (below normal temperature).

Central Equatoria State

The forecast indicates that most of the state (Figure 1 - colored cyan and orange) has an average chance of receiving normal to below-normal rainfall. Normal and delayed onset of the season (Figure 2 and 3) is predicted in most parts of the state starting in September. The forecast also indicates that the state (Figure 4 - colored cyan) is likely to experience average conditions (normal temperatures).

Western Equatoria State

The forecast indicates that most of the state (Figure 1 - colored cyan) has an average chance of receiving normal rainfall, while isolated areas have a moderate chance (colored orange) of receiving below-normal rainfall. Late to delayed onset of the season (Figure 3) is predicted in most parts of the state starting in September. That forecast also indicates that most of the state (Figure 4 - colored: orange) has a high chance of experiencing warmer than usual temperatures.

Western Bahr-el-Ghazal State

The forecast indicates that western parts of Wau County (part of Bagari) (*Figure 1 - colored cyan*) are predicted to have an average chance of receiving normal rainfall while southwestern parts of Raja County (*Figure 1 - colored green*) are predicted to have a high chance of receiving above normal rainfall. However, the rest of the state (*Figure 1-colored grey*) is predicted to experience no rainfall (dry condition). Normal onset of the season (*Figure 3*) is predicted in Wau and Southwestern parts of Raga counties. The state (*Figure 4 - colored: orange*) has a high chance of experiencing warmer than usual temperatures.

Northern Bahr-el-Ghazal State

The forecast indicates that Northern Bahr-el-Ghazal State (*Figure 1 - colored grey*) is predicted to receive no rainfall (dry condition) during this period. The forecast also indicates that the state (*Figure 4 - colored orange*) has a high chance of experiencing warmer than usual temperatures.

Warrap State

The forecast indicates that Warrap state (*Figure 1 - colored grey*) is predicted to receive no rainfall (dry condition) during this period. The forecast also indicates that the state (*Figure 4 - colored orange*) has a high chance of experiencing warmer than usual temperatures.

Lakes State

The forecast indicates that most of Lakes' state (*Figure 1 - colored grey*) is predicted to receive no rainfall (dry condition) except parts of Wulu (*Figure 1 - colored green*) predicted to have a high chance of receiving above-normal rainfall. Yirol, Rumbek Centre and Wulu are predicted to experience (*Figure 3 - colored bluish and green*) normal and early onset of rainfall while the western parts of the state (*colored orange*) are predicted to experience delayed onset of rainfall. The forecast also indicates that the southeastern parts of Lakes the state (*Figure 4 - colored orange*) have an average chance of experiencing normal temperature while the rest of the state has a moderate chance of experiencing above normal temperature (*colored yellow*).

Unity State

The forecast indicates that Unity State (*Figure 1 - colored grey*) is predicted to receive no rainfall (dry condition). The forecast also indicates that the state (*Figure 4 - colored yellow and orange*) has a high chance of experiencing warmer than usual temperatures.

Upper Nile State

The forecast indicates that most of the state (*Figure 1 - colored grey*) is predicted to receive no rainfall, except Maiwut, eastern Maban, parts of Longechuk and Baliel (*colored green*) predicted to have a high chance of receiving above-normal rainfall with late-onset (*Figure 3 - colored orange*) of the season. The forecast also indicates that the state (*Figure 4-colored orange*) has a high chance of experiencing warmer than usual temperatures.

Jonglei State

The forecast indicates that southern parts of the state i.e. Bor South and parts of Duk counties (*Figure 1 - colored light green*) have a high chance of receiving above-normal rainfall while the rest of the state (*Figure 1 - colored grey*) are predicted to receive no rainfall (dry condition). The early onset of the season (*Figure 3*) is predicted in areas with rainfall. The forecast also indicates that Bor South, Duk and parts of Twic East counties (*Figure 4 - colored cyan*) are likely to experience average conditions (normal temperature) while the rest of the state (*colored yellow*) is predicted to experience warmer than usual temperature.

Pibor Administrative Area

The forecast indicates that most of the administrative area (*Figure 1 - colored green*) has a high chance of receiving above-normal rainfall while southeastern part of Boma (*colored cyan*) is predicted to have an average chance of receiving normal rainfall. The early onset of the season (*Figure 3*) is predicted in most parts of the Administrative Area. The forecast also indicates that most

parts of the administrative area (*Figure 4-colored cyan*) are likely to experience average conditions (normal temperature) while parts of Pochalla (*colored Yellow*) have a moderate chance of experiencing warmer than usual temperatures.

Ruweng Administrative Area

The forecast indicates that most of the administrative area (*Figure 1 - colored grey*) is predicted to receive no rainfall (dry condition). The forecast also indicates that the administrative area (*Figure 4 - colored orange*) has a moderate chance of experiencing warmer than usual temperatures.

SEASONAL IMPLICATIONS, RISK AND RECOMMENDATIONS

Agriculture and Food Security

Risk and implications

Positive

- High prospects for good crop production in the second season in Maban, Pibor Administrative areas, and parts of East Equatoria State like Kapoeta area and Lopa, as well as in the western parts such as Nzara, Ezzo, and Tambura, are expected.
- Additionally, dry conditions in the northern and western parts are conducive for main-season harvesting.

Negative

- However, with drier than normal conditions in the northern parts, water availability would be affected, increasing the workload for women and girls and likely leading to an increase in child labour.

Mitigation measures

- Encourage water harvesting at the farm and community levels to supplement production during times of water stress.
- Create awareness about the importance of children's right to education, the sharing of farm responsibilities between men, women, and children, and the equitable use of farm produce.

Livestock

Risk and implications

Positive impacts

- In the western part, the regeneration of pasture and availability of water will reduce livestock mobility needed to access water and pasture, leading to improved food security and nutrition. This will result in increased livestock productivity (meat, milk, hides, and skins), good animal body conditions, and expected stable or improved prices.
- Normal rainfall conditions are favorable for vaccination and water harvesting, and there will be reduced conflict between pastoralists, farmers, and wildlife.
- In the eastern part, pasture and water harvested from JJAS rain will support livestock, creating a conducive window for livestock offtake before the animals' body conditions deteriorate.
- Stable animal prices and the availability of crop residues or by-products in some parts of the country will reduce the influx of Sudanese pastoralists seeking pasture and water.

Negative impacts

- In flood-prone areas, displacement due to floods and mudslides, along with livestock deaths, is likely to occur.
- There will likely be outbreaks of waterborne diseases, internal parasites, transboundary animal diseases (TADs), as well as Rift Valley Fever (RVF), anthrax, and other vector-borne diseases during this period, contributing to increased livestock mobility.
- Conflicts due to migration related to inadequate pasture in areas with little rain or flood-affected regions are likely, along with damage to infrastructure, especially roads and water-holding structures, affecting market access.

- In the northern and eastern parts, reduced pasture and water availability will lead to increased livestock mobility and heightened community vulnerability (especially for women and children) due to the burden of fetching water, caring for the sick, and searching for pasture. This will result in the deterioration of animal body conditions, leading to poor prices, reduced food security, decreased animal reproduction (calving, kidding, lambing), lower productivity (milk, meat, hides, and skins), disease outbreaks (especially TADs), and increased conflict (animal-wildlife, human-human, and human-animal) over pasture and water.

Mitigation measures

- Promote the provision of supplemental animal feeding.
- Promote the use of crop residues and agro-processing by-products as animal feed.
- Enhance disease surveillance, especially for RVF in hotspot countries.
- Enhance the production and conservation of fodder, including benefits from JJAS beneficiary areas.
- Facilitate community awareness about expected rains to plant fodder, present animals for vaccination, and harvest and conserve water and pastures.
- Facilitate community awareness about the possibilities of animal disease outbreaks, such as RVF, anthrax, and TADs.
- Promote gender-responsive migration policies, prioritizing the needs, challenges, and vulnerable situations of women, girls, and vulnerable groups, and establish peace committees to mitigate conflicts between pastoralists, farmers, and water users.
- Promote livestock offtake before the deterioration of animal body condition.
- Promote the rehabilitation and servicing of critical water sources.
- Advocate for anticipatory action and consequently mobilize resources.

Disaster Risk, Water, and Floods

Risk and implications

- Enhance rainfall will lead to the displacement of the population as a result of floods, damages to infrastructure such as roads and houses, outbreaks of diseases for both humans and livestock and poor sanitation due to flooding.

Mitigation measures

- Disseminate early warning information to people in risk areas.
- Provide basic WASH services to communities.
- Identify higher grounds for possible relocation.
- Enhance disease surveillance and promote early vaccination.

This weather bulletin is derived from ICPAC seasonal 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 Emergency Locust Response Program and Resilient Agricultural Livelihoods Project (funded by the World Bank), with additional funding from the Norwegian and Swiss governments.

Visit the CLIMIS Portal: <http://www.climis-southsudan.org>

View Rain Gauge Data on the CLIMIS Portal: http://www.climis-southsudan.org/agromet/rainfall_data

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