## March to May 2019 Climate Outlook for South Sudan – FAO Key Messages

Based on the 51st Greater Horn of Africa Climate Outlook Forum (GHACOF 51) from 11 to 12 February 2019 convened in Entebbe, Uganda

## Consensus Outlook for South Sudan from March to May 2019

As depicted in the Greater Horn of Africa consensus maps on rainfall and temperature outlooks below (generated from GHACOF 51), it is predicted that between March and May 2019, majority of South Sudan will likely experience normal rainfall while the mean temperatures are likely to be near normal. The southern part of the country is likely to experience increased rainfall whereas the eastern part of the country is likely to experience cooler than normal mean temperatures.

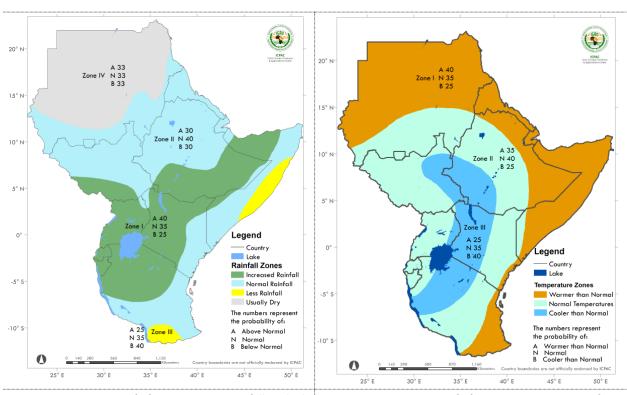


Figure 1 - Greater Horn of Africa Consensus Rainfall Outlook for the March to May 2019 rainfall season

Figure 2 - Greater Horn of Africa Consensus Mean Surface Temperature Outlook for March to May 2019

**Zone I:** Increased likelihood of above to near normal rainfall **Zone II:** Increased likelihood of near normal rainfall

Zone III: Increased likelihood of near to below normal rainfall

Zone IV: Usually dry

**Zone I:** Increased likelihood of above (i.e. warmer) to near normal mean temperatures.

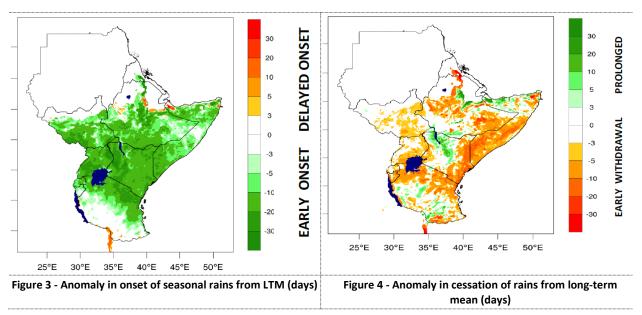
**Zone II:** Increased likelihood of near normal mean temperatures.

**Zone III:** Increased likelihood of below (i.e. cooler) to near normal mean temperatures.

Rainfall Outlook: Counties that are likely to experience increased rainfall (Figure 1, Zone I) are Ikotos, Magwi, Torit, southwestern Lafon, western Budi, Juba, Kajo Keji, Lainya, Yei, Mundri East and West, southern Terekeka, southern Mvolo, southern Wulu, Maridi, Ibba, Yambio, Nzara, Ezo and southern Tambura.

Temperature Outlook: Counties that are likely to experience cooler than normal mean temperatures (Figure 2, Zone III) are Kapoeta East, Pibor, Pochalla, Akobo, Uror, eastern Duk, eastern Ayod, Canal Pigi, eastern Panyikang, eastern Malakal, Ulang, Baliet, southern Maban, Longochuk, Luakpiny/Nasir and Maiwut.

# Onset and Withdrawal of Rains from March to May 2019



From the anomaly maps in Figures 3 and 4, the increased rainfall that is anticipated between March and May will arrive early (by 10-20 days), particularly for the southern parts of the country and will withdraw early (by 10 days).

### Implications of the March to May 2019 Rainfall Outlook on Agriculture and Food Security

#### a) Figure 1, Zone 1 – Areas with increased likelihood of above normal rainfall

The likelihood of increased, earlier than normal rainfall, particularly in Greater Equatoria region, is expected to favour early planting and establishment of crops such as sorghum and maize as well as groundnuts and production of leafy vegetables. Good crop performance is expected if the rains do not exceed the specific crop requirements.

The likelihood of increased rainfall is also expected to reduce the impact of Fall Armyworm infestation as most larvae are likely to be washed away in areas experiencing heavy rains.

It is worth noting though that there might be cases of flash flooding that could lead sown seeds to be washed out from the soil.

Livestock are expected to move back from the dry season grazing lands in areas such as Kapoeta and Budi and this is likely to create conflict between the crop farmers and livestock keepers. Some cases of cattle raiding are also likely.

#### b) Figure 1, Zone II – Areas with increased likelihood of normal rainfall

The majority of the country will experience increased likelihood of normal rainfall. These areas are incidentally also expected to see the rains arrive about 3 to 10 days early. These rains will favour early pasture establishment and availability of water for animals in pastoral areas of South Sudan. However, even as pasture regenerates and livestock migrate towards homesteads, there are possibilities of disease outbreaks, pastoralist-farmer conflict and cases of cattle raiding. This zone also encompasses the mostly

unimodal rainfall areas of the country and the high likelihood of normal rainfall will support cultivation as per the seasonal calendar.

### Recommendations

- As the rains start, enabling new returnees (former refugees and IDPs) to rebuild their livelihoods will be critical; given the high number of returnees expected, it is recommended they be provided with livelihood kits (i.e. seeds, tools, and fishing equipment) to enable them to participate in agricultural activities.
- There is need for early pre-positioning of agricultural inputs in anticipation of the start of the planting season and to ensure that inputs are transported to distribution locations before roads degrade.
- Training on good agronomic practices and Fall Armyworm control measures should be provided, particularly to cereal farmers.
- Early warning messages on the possible impacts of flooding need to be communicated to people living in areas likely to experience heavy rainfall.
- There is a need to scale up monitoring of livestock movements to minimize spread of diseases by timely identifying incidences and treating livestock as needed. Furthermore, increased likelihood of conflict between pastoralists and farmers can be addressed through peace conferences.
- With the start of the rainy season coinciding with the lean season, factors that affect nutrition, such as access to safe drinking water and hygiene, are expected to decline, resulting in increased incidences of human diseases such as malaria and acute watery diarrhea (AWD). Health and WASH partners should scale up their response capacity to prevent and mitigate such outcomes.



The seasonal calendar above applies to most of the country except Greater Equatoria region, which has a bimodal rainfall pattern.