Food and Agriculture Organization of the United Nations

SOUTH SUDAN

DEKADAL WEATHER UPDATE

11-20 May 2020 | Issue 02

Above-average rainfall continues in most parts of the country, and the risk of flooding increases as rainfall spreads northwards to flood-prone areas

HIGHLIGHTS

- The rainy season has intensified in the second Dekad of May, spreading to the northern parts of the country (*Figure 1*), with most of Upper Nile State, Jonglei State, Unity State, Warrap State and parts of Western Bahr el Ghazal State experiencing above-average rainfall. Other parts of the country that experienced above-average rainfall include the western parts of Western Equatoria State and the eastern parts of Central Equatoria State.

- The counties of Kapoeta, Abyei, Aweil North, Aweil East, and parts of Lakes State and Jonglei State (*Figure 2*) experienced normal to below-normal rainfall. For the Kapoetas, the dry spell has provided some reprieve for its populations who are at a high risk of experiencing floods in June – a period when it is predicted that the eastern parts of Kapoeta East bordering Ethiopia, Kenya and Uganda are likely to experience rainfall that is way above-normal when compared to other parts of the country[1].

- Incidents of flash floods and destruction of infrastructure and assets have been reported during the second Dekad of May 2020. For example, parts of the Juba-Bahr el Ghazal asphalt highway were destroyed by flash floods while some neighbourhoods of Juba, such as Gudelle II, also experienced flash floods[2].

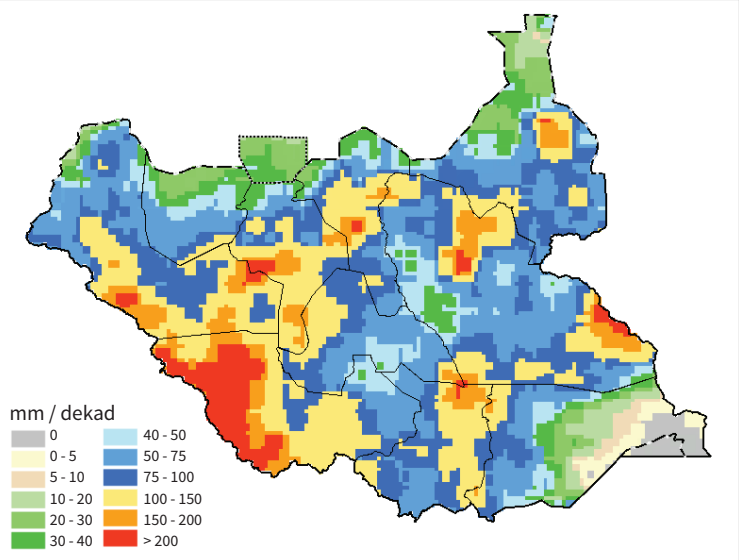

Figure 1 - Estimated rainfall, Dekad 2, May 2020 (Source: FAO GIEWS)

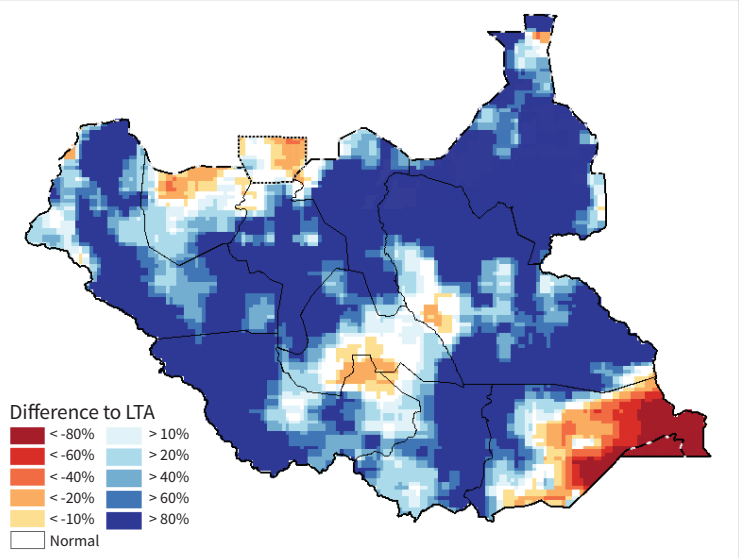

Figure 2 - Estimated rainfall anomaly, Dekad 2, May 2020 (Source: FAO GIEWS)

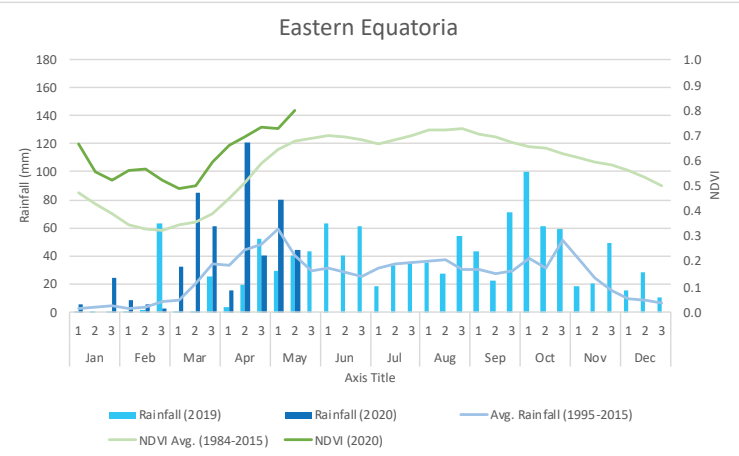

Figure 3 - Rainfall and NDVI trends for Eastern Equatoria State (Source: FAO GIEWS)

1 Above normal rainfall is based on comparisons with the long-term average rainfall. To understand better the intensity of rainfall being referred to as above-normal / average, download the raw data (MS Excel, 147KB)

2 This bulletin will continue to monitor the situation and publish a flood-risk map

SEASONAL FORECAST

- According to ICPAC's rainfall prediction for June 2020, most of South Sudan will continue to experience above normal rainfall, with the eastern parts of Kapoeta East County likely to be wetter than normal – increasing the probability of flooding incidents in the area (*Figure 4*).

- According to ICPAC's temperature prediction for June 2020, most of South Sudan will experience seasonally normal temperatures, with the exception of localized areas in eastern South Sudan (*Figure 5*).

IMPLICATIONS OF THE SEASON'S PROGRESSION

- The above-average rainfall conditions in most parts of the country continue to favour the agricultural season and fishing activities. There is also adequate pasture and water for the pastoral communities, which is contributing to limited migration and concentration of livestock near homesteads, thus providing access to milk and meat.

- However, with heavy rainfall, and given the poor road infrastructure, many areas will be cut-off from Juba and other major towns, and this will significantly affect provision of humanitarian support and supply of traded commodities across the country. Not only will flooding impact on infrastructure, but may also contribute to the outbreaks of water-borne diseases, especially in highly populated towns such as Juba, Malakal, Bor, Aweil, Bentiu and Kuajok.

SEASONAL PROGRESSION AND DESERT LOCUSTS

The wet and warm conditions in Eastern Equatoria State are creating a favourable environment for the reproduction and development of desert locusts. This is because female locusts prefer bare sandy soils that are moist at 5-10 cm below the surface – conditions that currently exist in Eastern Equatoria State. *Figure 6* and *Figure 7* show the optimum conditions for egg development and hopper development respectively.

Similar conditions are available in some locations of the neighbouring countries e.g. Kenya where it was predicted that depending on the extent and effectiveness of the surveillance and control measures, the swarms are likely to increase to 20-400 their current size. According to *Figure 8*, some of those swarms are likely to cross into South Sudan in June as they migrate northwards into Sudan.

RECOMMENDATIONS

- With the heavy rains having a negative impact on movement, and COVID-19 related movement restrictions, prepositioning and distribution of agricultural inputs should be hastened to ensure that farmers take advantage of the favourable farming conditions.

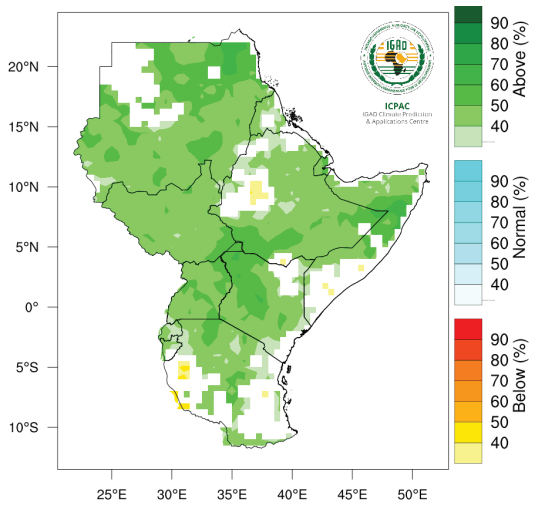

Figure 4 - Rainfall forecast for June 2020 (Source: ICPAC)

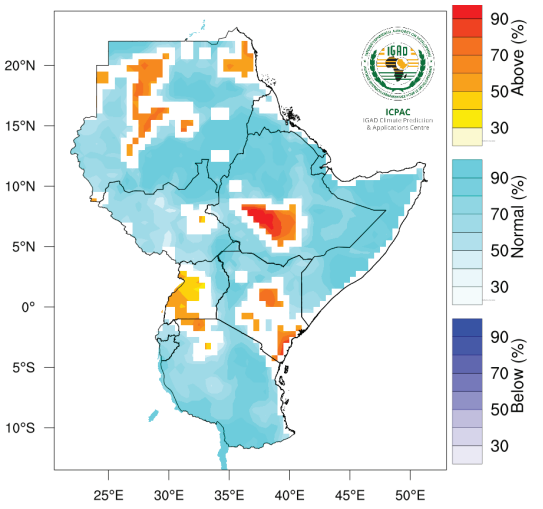

Figure 5 - Temperature forecast for June 2020 (Source: ICPAC)

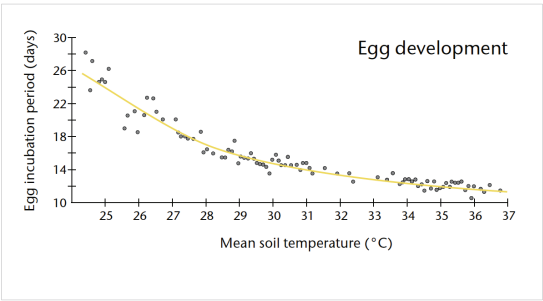

Figure 6 - Relationship between egg development and temperature showing that eggs will hatch sooner under warmer conditions. (Source: FAO/WMO)

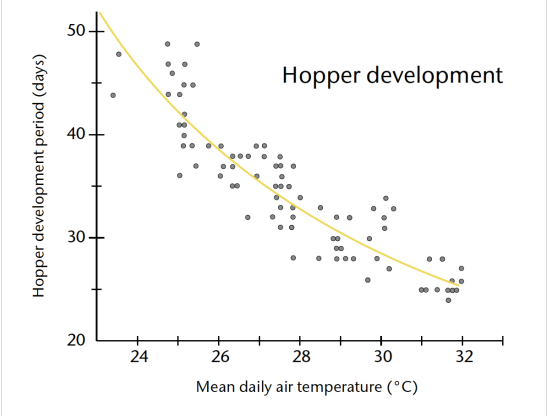

Figure 7 - Relationship between hopper development and air temperature showing that the warmer the temperature, the faster hoppers will mature and become adults. (Source: FAO/WMO)

- Humanitarian and development organizations need to establish a timely mechanism for supporting community rehabilitation of assets such as roads and bridges through modalities such as cash for work, which will have a positive impact not only on improving access to these communities, but also on the food security situation of the beneficiaries.

- Distribution of fishing kits to fisherfolk should be hastened to take advantage of the peak fishing season, thereby increasing production and ensuring that fishing contributes to reducing the seasonal food gaps in households.

- The Ministry of Health and other partners such as WHO and UNICEF who are key actors in the health sector need to be on the alert and continue monitoring towns (e.g. Juba, Bor, Aweil, Malakal, Bentiu, Kuajok, Kapoeta etc.) which are at high risk of flooding and susceptible to outbreaks of water-borne diseases.

- FAO, in collaboration with the Ministry of Agriculture and Food Security (MAFS) should continue their surveillance and control measures to mitigate the loss of crops and pasture to desert locusts. This is in light of the latest forecast which indicates that the desert locusts will migrate through South Sudan's states of Eastern Equatoria, Jonglei, Upper Nile and Unity on their way to West Africa via Sudan (*Figure 8*).

- FAO, in collaboration with the Ministry of Livestock and Fisheries to continue supporting and scaling up livestock disease surveillance systems for early detection, identification and reporting on animal health risks for timely intervention. Vaccination campaigns should also be carried out against deadly diseases such as Rift Valley Fever (RVF) during this period in order to minimize livestock loss.

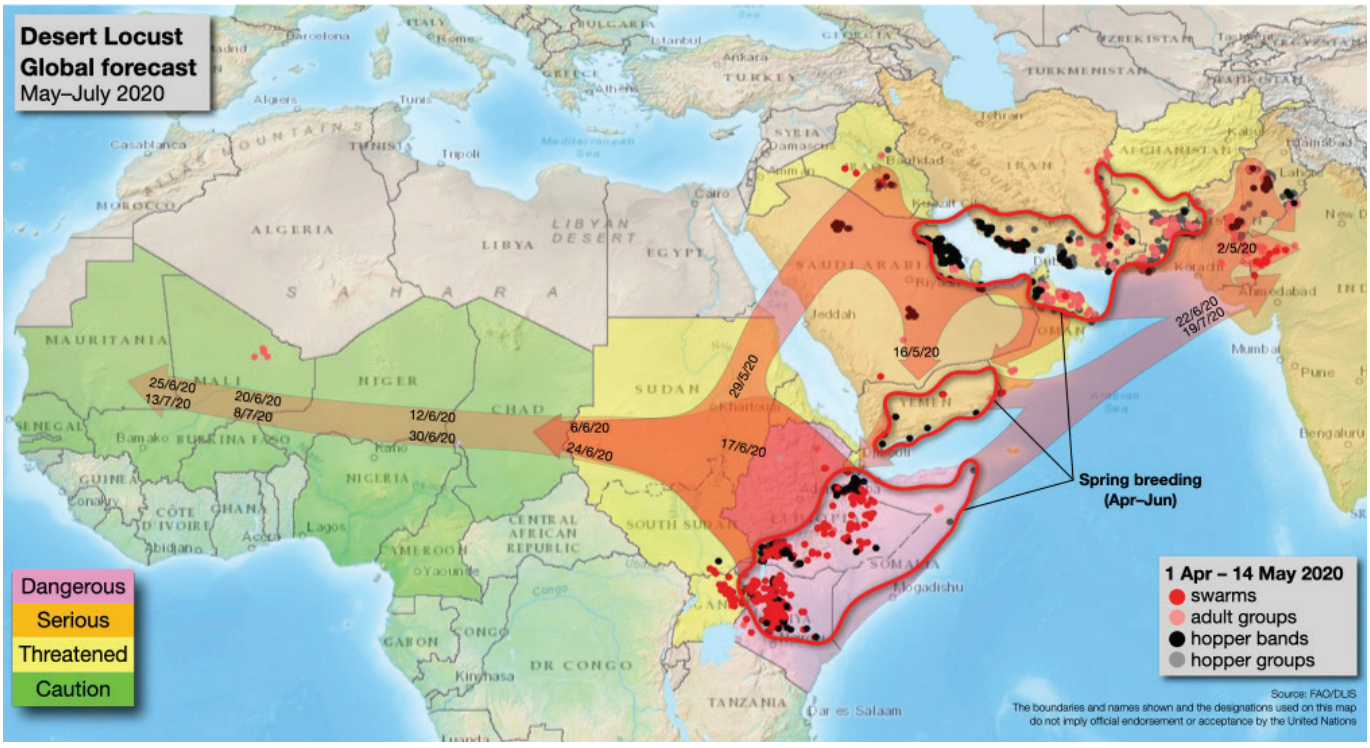

Figure 8 - Global forecast of desert locust upsurge, May-July 2020 (Source: FAO/DLIS)

This report is produced by FAO South Sudan's project (*Strengthening the Livelihoods of Pastoral and Agropastoral Communities in South Sudan's Cross-border Areas with Sudan, Ethiopia, Kenya and Uganda*) which is funded by the European Union.

2020 Dekadal Seasonal Progression Tracker (PDF, 1.31MB)

2020 Rainfall & NDVI Graphs and data (MS Excel, 123KB)

Project Website:

http://www.fao.org/in-action/south-sudan-cross-border-project/en/

CLIMIS Portal:

http://www.climis-southsudan.org

Contacts

Mark Nyeko
Agrometeorologist
Mark.Nyeko@fao.org

Nicholas Kerandi
Food Security Analyst
Nicholas.Kerandi@fao.org

FAO South Sudan
Juba, South Sudan
FAO-South-Sudan@fao.org

Food and Agriculture Organization of the United Nations
www.fao.org/south-sudan