

Rainfall in parts of the Saharan zone create favorable conditions for locust development

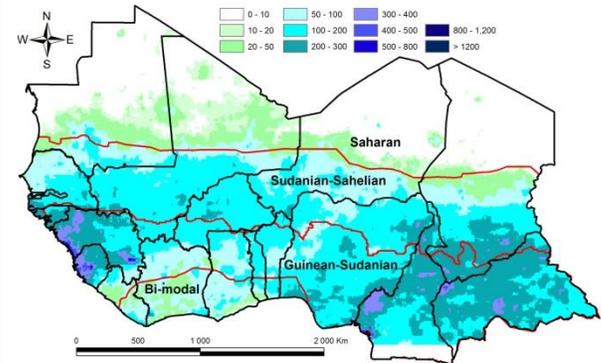
KEY MESSAGES

- April to July rains were below average over most of the bi-modal zone, resulting in critical moisture deficits for maize and a significant drop in production levels during the July harvest. While a certain percentage of crop production from this harvest will be traded northwards to the Sahel, its impact on improving market supply during the peak of the Sahelian lean season will be weaker than usual.
- In many areas north of the bi-modal zone, July rainfall levels were below average. This has been a source of concern, particularly in areas that have also experienced poor temporal rainfall distribution, such as the Batha region of Chad.
- Parts of the Saharan zone where locust breeding grounds are located received above average rainfall in July. While FEWS NET is still assuming normal levels of locust-related crop losses this season, these recent rains will improve vegetation levels and provide favorable conditions for locust development in these areas.

UPDATE ON SEASONAL PROGRESS

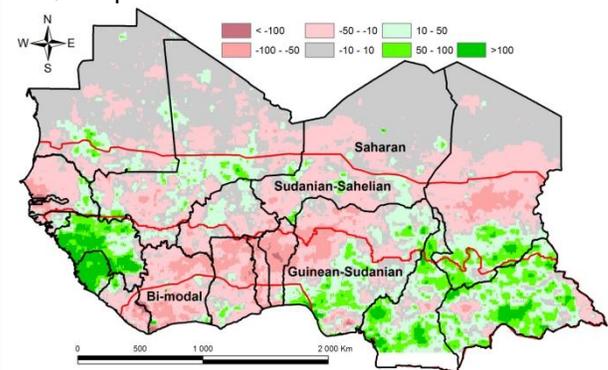
- The Inter-Tropical Front (ITF)¹ is continuing its northward migration and as of the end of July, it was located near its normal position, somewhere between the 16th and 20th degrees of latitude. More specifically, the ITF was located slightly north of its normal position in Mali and Mauritania and slightly south of its normal position in eastern Chad. This caused average to above-average rainfall, improved vegetation levels, and favorable conditions for locust development in breeding areas of the Saharan zone. According to FAO, solitary adults were observed in the Air Mountains in Niger, in Trarza and southeastern Mauritania, and in Kanem, Batha, and northeastern Chad. In northern Mali, civil instability has also prevented the surveying of locust breeding areas and this, along with the favorable rainfall conditions, will increase the risk of a locust invasion in areas further south towards the end of the season (late September/early October). However at this time, FEWS NET is still assuming normal levels of locust-related damages throughout West Africa.
- The month of July concluded the first season in the bi-modal zone, though harvest activities are still ongoing in some places. Poor rainfall performance with moderate to severe deficits during the first season affected maize development and caused a significant drop in yields. While a certain percentage of maize production will be traded northwards

Figure 1. July total rainfall estimate (RFE), in mm



Source: USGS/FEWS NET

Figure 2. July total rainfall estimate (RFE) anomaly in mm, compared to the 2001-2010 mean



Source: USGS/FEWS NET

More information on remote sensing can be found at: http://www.cpc.ncep.noaa.gov/products/african_desk/cpc_intl/ and <http://earlywarning.usgs.gov/?l=en>

¹ Inter-Tropical Front (ITF): The separation line, at ground level, between cool, moist monsoon air from the south and hot, dry air from the north.

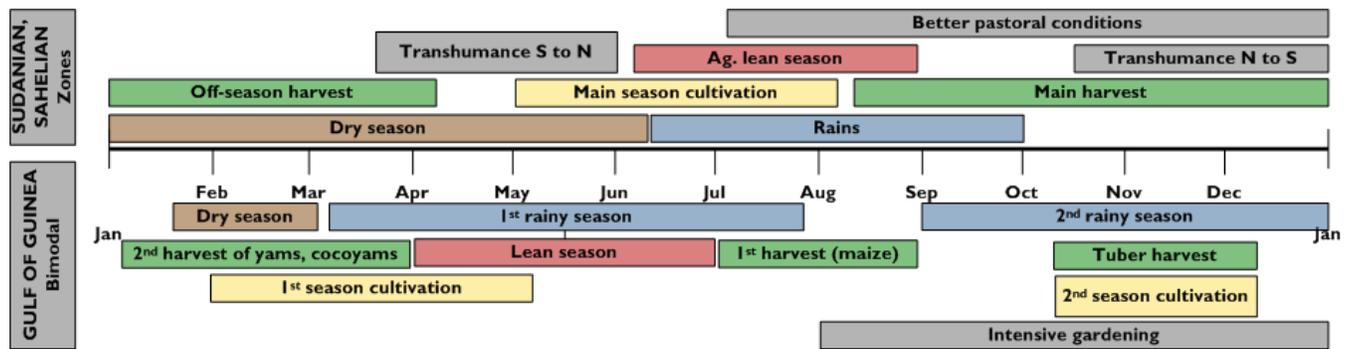
towards the Sahel over the next several months, trade activities will be approximately one month delayed and will be at below-average levels. As a result, this harvest will have less of an impact on improving market supplies in the Sahel during this year's peak of the lean season compared to a normal year. Roots and tubers are generally less vulnerable to dry weather conditions and production levels for these crops are estimated to be similar to average in the bi-modal zone.

- Outside of the bi-modal zone, the July rains had different implications for agricultural activities depending on the locality:
 - Parts of the Guinean-Sudanian zone, including Guinea, Sierra Leone, eastern Nigeria, Cameroon, Central African Republic, and southern Chad, experienced above-average rainfall. These July rains also followed average to above-average rainfall levels in May and June. Consequently crop water requirements continue to be fully met in these areas and average to above-average harvests are expected, particularly in Guinea and Sierra Leone.
 - The middle of the Guinea-Sudanian zone, including the northern parts of Cote d'Ivoire, Ghana, Togo, Benin and west-central Nigeria, experienced light to moderate rainfall deficits in July. However in most of these areas, relatively good temporal rainfall distribution partially offset the negative effects of the below-average total precipitation levels. However, parts of northern Ghana experienced both below-average rainfall levels and poor temporal distribution. This caused planting activities to be delayed until early July (compared to May in a normal year) and many farmers to plant shorter cycle crop varieties, rather than higher yield, long cycle varieties, this year.
 - In the Sudanian-Sahelian zone, crop/range water requirements were generally met with light deficits in most areas offset by relatively good temporal rainfall distribution. Provided that the rains continue until the end of September, an average harvest is expected in October. However certain areas of this zone (parts of Batha and Wadi Fira in Chad, Katsina and Kano states in Nigeria, Tillaberi region in Niger, Koulikoro region in Mali and the groundnut basin in Senegal) experienced moderate deficits along with poor rainfall distribution. As a result, these areas experienced crop and range development delays, as well as light and moderate wilting during the second half of July. In these areas, this year's seasonal performance will be highly dependent on rainfall levels between August and October, and given that seasonal forecasts are predicting a normal to late end of the season (in early to late October), an average harvest is still possible.

FORECASTS

- According to the short and medium term forecasts from [NOAA/CPC](#), rainfall is expected to continue over the next two weeks in the Guinean-Sudanian and Sudanian-Sahelian zones. No dry spells are expected but there is an increased chance for above-average rainfall over southern and central Mali, northern Guinea, Senegal, Burkina Faso, eastern Niger, Cameroon, and eastern Nigeria. In addition, an increased change for below-average rainfall is forecasted over southeastern Nigeria and parts of southern Benin, Togo, Cote d'Ivoire, and Ghana. Good conditions for agricultural activities and crop development are expected to prevail across the Guinean-Sudanian and Sudanian-Sahelian zones.
- Seasonal forecasts from the major centers ([IRI](#), [ECMWF](#), [NOAA-NCEP](#), [UK Met Office](#)) for the next several 3-month periods (August-October and September-November) are mostly showing a slightly increased chance for above-average rainfall in the western part of the Sahel and a normal to late end of season (early to late October). This will help contribute to normal crop development and an average harvest in most areas of the region.

SEASONAL CALENDAR IN A TYPICAL YEAR



Source: FEWS NET