FEWS NET
FAMINE EARLY WARNING SYSTEMS NETWORK

EAST AFRICA Seasonal Monitor

April 27, 2017

Mid-season rains perform very poorly in much of the Horn of Africa

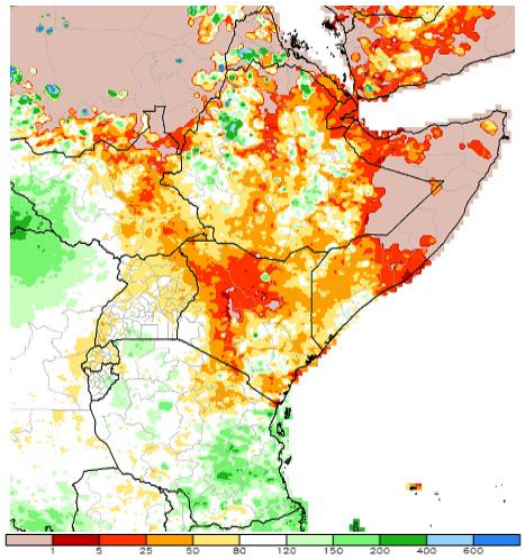
KEY MESSAGES

- Seasonal rainfall has performed very poorly during the month of April in much of the Horn of Africa, following a delayed onset and well below-average rainfall over many areas. During this time, some of the worst drought-affected areas, including much of Somalia, northeastern Kenya, and southeastern Ethiopia, receiving little or no rainfall.

- Rainfall has intensified during the past two to three weeks over western areas of the region, including in Burundi, Rwanda, and parts of Tanzania and Uganda. These rains have improved cropping prospects in some areas, although the season has not yet gotten fully underway in parts of northern Tanzania.

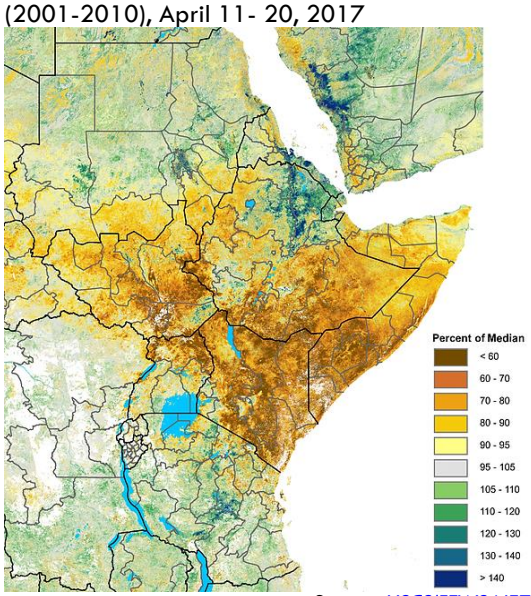
- The short-to-medium term rainfall forecasts indicate moderate to heavy rainfall is likely across the region during the next two weeks, except in extreme southern Somalia and the bordering counties of northeastern and eastern Kenya. March to May seasonal rains expected to cease on time by end of May, but coupled with a late start of season, cropping prospects are much poorer than usual due to a combination of a shortened growing period and overall below-average rainfall totals.

Figure 1. ARC2 seasonal rainfall estimate anomalies, as percent of normal (1983-2009), March 1 – April 24, 2017



Source: NOAA/NWS/CPC

Figure 2. eMODIS/NDVI percent of normal (2001-2010), April 11- 20, 2017



Source: USGS/FEWS NET

SEASONAL PROGRESS

Seasonal rainfall performance has been generally poor since March in many areas of East Africa, characterized by a delayed onset, poorly distributed rainfall, and large rainfall deficits, particularly in the Horn of Africa (Figure 1). Poor seasonal progress to date in the Horn is increasing concerns that many pastoral and agricultural areas in Somalia, southern and southeastern Ethiopia, northern and eastern Kenya, and northern Tanzania will face another well below-average season. Moderate to heavy rains in late April may reduce rainfall deficits that have accumulated since early March and contribute to some short-term improvements in water and pasture. However, prospects for rainfed crops are poor in many of these areas and overall regeneration of pasture and water resources is likely to be limited. Warder Zone of eastern Ethiopia, and central and northern Somalia have remained generally hotter-than-normal and with no significant rainfall, missing their normal peak in rainfall in April, and will require close monitoring. Vegetation conditions according to eMODIS/NDVI imagery (Figure 2) are much poorer than usual across wide areas of Kenya, Somalia, southern and eastern Somali regions of Ethiopia and northern Uganda.

Please see http://www.cpc.ncep.noaa.gov/products/african_desk/cpc_intl/ and http://earlywarning.usgs.gov/?l=en for more information on remote sensing.

FEWS NET EAST AFRICA
GHA@fews.net
www.fews.net/East

In other areas of the region that receive rainfall between March and May, particularly key maize production zones in western and rift valley regions of Kenya, Uganda, Burundi, and parts of Rwanda and northern Tanzania, the timely to early onset of the seasonal rains in February was punctuated by long-dry spells and hotter-than-normal land surface temperatures, likely resulting in localized crop-water-stress. However, recent widespread and intense rains across this region and forecast near-average rainfall amounts are likely to improve yield prospects by the end of the cropping season.

The following is a country-by-country update on recent seasonal progress to date:

- In **Somalia**, the *Gu* rains typically start in April, but the onset of rains have been significantly delayed and rainfall deficits are increasing during this critical period for development of rainfed crops in southern Somalia. Cropping conditions are unlikely to be favorable if the rains cease on time at the end of May, as the length of the growing period will be very constrained and overall seasonal rainfall performance will likely be poor. However, the irrigated riverine regions of Shabelle, may benefit of the current seasonal rains. Meanwhile, the northern and central regions of Somalia are forecast to receive widespread moderate to heavy rains in the coming weeks, which may help improve the current drier-than-normal conditions.

- In **Ethiopia**, February to May *Belg* 2017 began in February in a majority areas of SNNPR and most *Belg*-producing areas of eastern Amhara and southern Tigray. Satellite based rainfall estimates suggest that to date has been near average in eastern Amhara (80-120% of normal) and somewhat below average in southern Tigray (less than 80%) but with large spatial variability. Meanwhile, field reports generally suggest rainfall in both these areas was above normal for February and March. In central, southern, and eastern Oromia, rainfall has been below average and poorly distributed over time, and the cropping activities are not yet fully underway in some areas. Areas of eastern Somali Region where *Gu* rainfall typically begins in April remained atypically dry through mid-April. The rainfall forecast for the coming weeks indicates increased rainfall amounts in the coming week, followed by a gradual decline in early May. Rainfall during this time would likely help regenerate rangeland resources in the short-term, although overall seasonal performance may remain well below average.

- In **Kenya,** the March-May "long" rains have been delayed and cumulative rainfall has been well below average. Ongoing rainfall in late April is likely to help ease rainfall deficits in areas of northern and eastern Kenya, but is unlikely to substantially improve cropping prospects, particularly for maize in coastal and southeastern marginal agricultural areas of Kenya, due to the shortened growing period associated with a late start of season and an expected normal timing for the cessation of rains in May. Field reports suggests area planted is likely below average in many coastal marginal agricultural areas, and in lowland areas of Taita Taveta, as many as half of farmers have opted to not plant at all. Meanwhile, in the western and central Rift Valley regions, crops are expected to gradually recover from the long dry spells with the ongoing rains and may result in near average yields, although Fall Armyworm infestations remain a concern.

- In **Tanzania,** *Msimu* (November to April) rainfall in unimodal areas has increased substantially during early to mid-April, but due to the late onset and erratic distribution of rainfall, cropping prospects are poorer than usual and harvests are likely to be delayed by one to two months, occurring in July/August instead of June. In bimodal Tanzania, the *Masika* (March to May) rainy season is ongoing and harvest prospects are below normal.

- In **Uganda,** the March – May seasonal rains started earlier than in normal in February, but rainfall in March was erratically distributed and below average for most parts of the country. Rainfall has recently intensified and cumulative totals have reached near-average levels. This increased rainfall has improved cropping conditions across most of the country, except in northeastern areas where the rains are yet to be fully established.

- In **Rwanda,** there was a delayed onset of seasonal rainfall in key cropping areas and rainfall remained erratic into March, with much of the country receiving slightly below average rainfall amounts. Rainfall has improved in past two to three weeks, but overall below-average cumulative totals are expected for Season B rains. Nevertheless, a late March FEWS NET field visit to eastern areas of Rwanda confirmed that while planting was somewhat delayed, especially compared to Burundi, bean and maize crops were in good condition.

- In **Burundi**, the seasonal start of Season B also occurred in February, and cropping and rangeland resources are expected to continue to improve with the ongoing seasonal rains, which have recently been near or above average and are forecast to continue into the coming weeks. A late March FEWS NET field assessment also confirmed that Season B crops were maturing well.

- In **Yemen**, rainfall since the start of March has been below average, although the most serious constraints on agricultural activities remain conflict-related limitations on access to farms, as well as high diesel prices. Moderate to heavy rains are forecast to continue over its western coastal areas of Yemen.

- In **Djibouti**, Diraac/Sugum (March to May) rains have been generally near average except in parts of Ali Sabieh and Dikhil, except for some southeastern areas of Ali Sabieh and Dikhil. Although NDVI suggests below-average vegetation conditions in some coastal areas, these are largely urban areas and may not reflect a deterioration in primarily pastoral areas.

- In **eastern DRC**, significant rainfall deficits have accumulated since March in areas Rwanda and northwestern Burundi. This resulted in slightly below average vegetation conditions as the rains intensified in April. Current cropping conditions for the early planted crops remain favorable and more moderate to very heavy rains are forecast in the coming weeks.

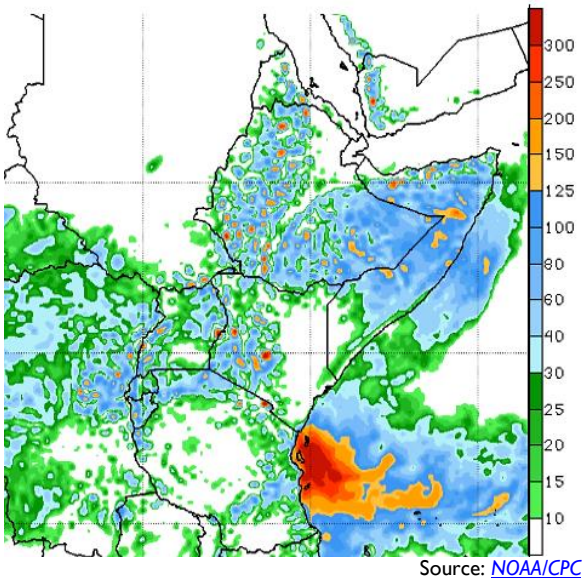
FORECAST

The 1-week NOAA/GFS rainfall forecast (Figure 3) through May 2, 2017, indicates moderate to very heavy rainfall is likely over northern and eastern Tanzania, DRC, Rwanda, Burundi, Uganda, *Belg*-producing areas and Somali Region in Ethiopia, northern and central Somalia, and western Kenya. However, eastern Kenya and extreme southern Somalia are not likely to receive any significant rains during this week.

Meanwhile, medium-term GFS rainfall forecasts indicate widespread rains in western areas of the region, Ethiopia's *Belg* cropping areas, and much of the eastern Horn of Africa, apart from southeastern Kenya. TheEast Africa coastal strip is also likely to receive heavy rains in the coming weeks as is typical during mid-May/early April.

Regional and national climate forecasting centres are indicating that the current March – May seasonal rains are likely to cease normally in May. This raises serious concerns for overall performance of Gu/long-rains, due to its poor performance so far. Agricultural production prospects in rainfed production areas of southern Somalia and in marginal cropping areas in the southeastern lowlands of Kenya will likely remain poor if the rains end on time as forecast, even if rainfall during the next couple of weeks results in some short-term improvements in conditions in pastoral areas.

Figure 3. 1-Week GFS-Rainfall forecast (mm), valid until May 2, 2017



Source: NOAA/CPC