

*Widespread and well above-average amounts of March to May rains fell in East Africa*

**KEY MESSAGES**

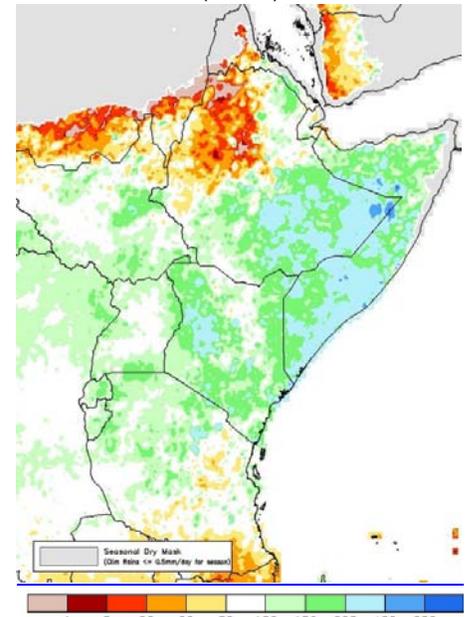
- The March to May rainy season has, so far, been characterized by widespread and well above-average amounts of rains in most parts of East Africa. These rains have remained particularly above average, up to over 200 percent above average, over southern and central Somalia, eastern and parts of southern Ethiopia, northern and western Tanzania, Rwanda, Burundi, and Kenya. They have been near normal in Uganda. As a result of heavy rain, floods have occurred in Kenya, Uganda, Somalia, and eastern Ethiopia (Figure 1).
- Total rainfall has continued to be below average in the northern, central, and western parts of Ethiopia. In the *Belg*-producing areas of eastern Amhara and southern Tigray, planted area is below normal, and crops are performing poorly due to moisture stress in March and April.

**SEASONAL PROGRESS**

The March to May rains are important rains in both cropping and livestock-producing areas in East Africa, accounting for up to 80 percent of total annual rainfall in some areas (see Figure 1 in the [March East Africa Seasonal Monitor](#)). The March to May season, has so far, been characterized by widespread and well above-average rains in most of the receiving areas. These rains have been particularly above average, by over 200 percent of the 1983 to 2011 mean in **Somalia**. They've also been well above average in eastern and parts of southern **Ethiopia**, northern and western **Tanzania**, **Rwanda**, **Burundi**, and **Kenya**, while being near normal in **Uganda** (Figure 1). Floods in **Kenya**, **Uganda**, **Somalia**, and eastern **Ethiopia** have occurred.

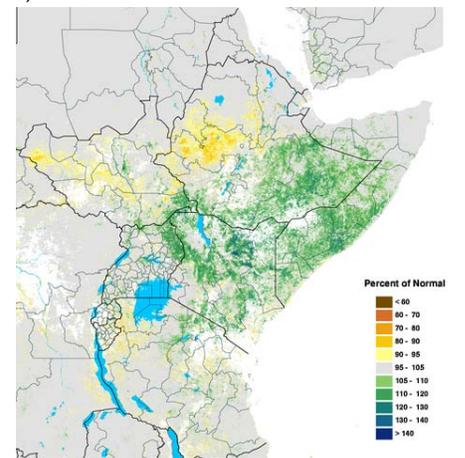
Floods were reported at the end of March and in early April along the Shabelle and Juba Rivers in **Somalia** and **Ethiopia**, following high amount of rainfall in the river catchments in the highlands in Ethiopia. The floods have caused loss of property and temporary displacement of people in parts of Shabelle (formerly Gode) Zone of Ethiopia. Heavy rains at the beginning of May caused the banks of the Nyamwamba River in **Uganda** to burst, resulting in flooding in Kasese District. It is reported that more than 19,000 people were affected. Floods were also reported in the western, central, and coastal areas of **Kenya** and between 30,000 and 35,000 people were affected. In **Rwanda**, landslides were reported in April in Kamonyi, Nyamagabe, and Rutsiro Districts following heavy rains. During both March and April, heavy rainfall destroyed about 700 hectares (ha) of crops in Rwanda. Damaged houses and loss of life and property was also reported. With heavy rainfall in late April, there is continued risk of flooding in central and southern **Somalia** as well as in the Lake Victoria basin in Uganda (Figure 3).

**Figure 1.** March 1- May 7, 2013 rainfall total (RFE2 estimates) as percent of 1983-2012 mean (ARC2)



Source: [National Oceanic and Atmospheric Administration \(NOAA\)/National Weather Service \(NWS\)/Climate Prediction Center \(CPC\)](#)

**Figure 2.** Percent of 2001 to 2012 average eMODIS Normalized Difference Vegetation Index (NDVI), March 26-April 5, 2013



Source: [U.S. Geological Survey \(USGS\)/FEWS NET](#)

Please see [http://www.cpc.ncep.noaa.gov/products/african\\_desk/cpc\\_intl/](http://www.cpc.ncep.noaa.gov/products/african_desk/cpc_intl/) and <http://earlywarning.usgs.gov/?l=en> for more information on remote sensing.

Apart from flooding, the overall impact of the rains has largely been beneficial for both crops and pastoral conditions (Figure 2). An exception to the overall favorable condition of crops is found in the *Belg*-producing parts of eastern Amhara and southern Tigray Regions in **Ethiopia**, where performance of the rains has been below average so far. Planted area is lower than usual, and some of the crops are suffering from moisture stress due to below average rainfall in March and April. In other *Belg*-producing areas, despite the delay in the onset of rains by three to four weeks, total rainfall and crop conditions had become near normal by late April. This has generally been the case in central and eastern Oromia and in Southern Nations, Nationalities, and Peoples' Region (SNNPR) of Ethiopia.

In **Somalia**, planted crops are well established and are generally healthy in most agropastoral zones of the south. However, pests in Bay Region ate early stage crops, and replanting has taken place. In **Kenya**, apart from a few areas with slightly below average rainfall in the southeastern lowlands and southern coastal strip, normal to above normal rains were received through the country, which has led to normal development of crops. Early maturing vegetables are ready for household consumption. In the coastal mixed farming areas of Kwale, Kilifi, and Lamu, planting and land preparation are still underway. In **Tanzania**, the *Msimu* crops in the southern, unimodal areas are reaching maturity while *Masika* crops in the northern and western bimodal areas are at late vegetative to tasseling stages. In **Uganda**, land preparation and planting activities have been completed for most first season staple crops. Nearly half of planted crops are at vegetative or flowering stages. In **Rwanda**, Season B crops are at early stages of development up to the flowering stage. Above average rains in March across **Burundi** were not beneficial for crops at their early stage of development, and these rains may have already reduced yields by damaging young crops.

Pasture and water availability has substantially improved since the start of the rains in March in the pastoral areas, including most of **Somalia**, northeastern **Kenya**, most of **Djibouti**, and Afar, Somali Region, and lowland areas of Oromia Region in **Ethiopia**. Southeastern parts of Djibouti and the northern regions of Sool, Sanag, and Bari in Somalia still have unseasonably poor pasture and water availability.

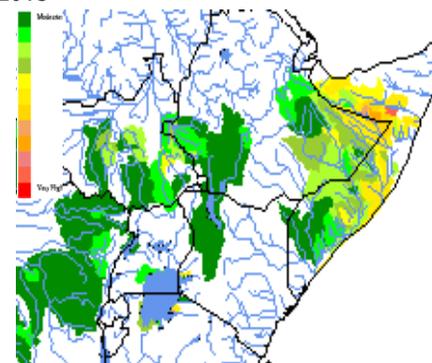
## FORECAST

May is often the peak month for current rainfall season along the East African coastal strip and in northern and central **Somalia**. However, the March to May rains are expected to gradually subside in the eastern sector as the season ends in May or June, depending on the area. As the rainbelt shift northwards into the western and northern sectors, the onset of June to September rainy season in **Ethiopia**, **Sudan**, **South Sudan**, and **Eritrea** is expected to be on time (Figure 4).

The March to May rains are expected to cease normally by mid-May in much of the eastern sector. With El Niño-Southern Oscillation (ENSO) conditions expected to remain neutral for the coming months, strong variation from seasonally normal conditions are not expected. However, the currently warmer-than-normal sea surface temperatures (SSTs) off of **Somalia's** Indian Ocean coast are likely to encourage normal to above normal May/June rains in the coastal areas of **Somalia**, **Kenya**, and northern **Tanzania**. The Coastal/*Hagaa* rains are, therefore, expected to increase from their current levels in May/June.

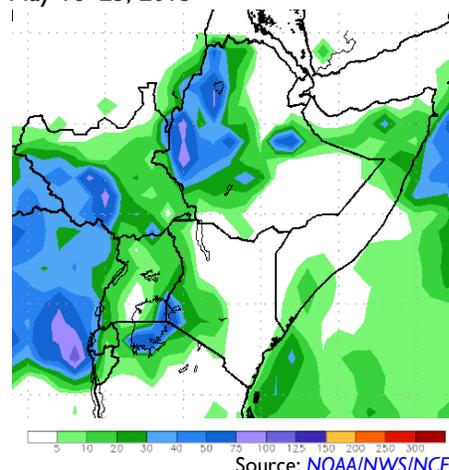
Long range seasonal forecasts from the [European Centre for Medium-Range Weather Forecasts \(ECMWF\)](#) and from [National Oceanic and Atmospheric Administration's \(NOAA/CPC\) Climate Prediction Center](#), suggest near-normal June to September rains with a near normal onset across the northern sector, including in **Ethiopia**, **Sudan**, **South Sudan**, and **Eritrea**.

**Figure 3.** Flood risk based on basin excess rainfall map (BERM), April 21-31, 2013



Source: [USGS/FEWS NET](#)

**Figure 4.** Global Forecast System (GFS) precipitation forecast in millimeters (mm), May 16–23, 2013



Source: [NOAA/NWS/NCEP](#)