

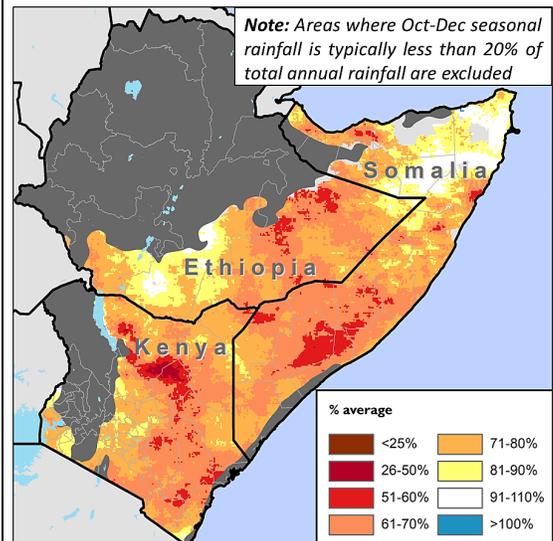
Forecast below-average rainfall in late 2020 and early 2021 likely to drive high food assistance needs

Food security across the eastern Horn of Africa is likely to deteriorate in late 2020, driven by below-average rainfall from October to December. Food assistance needs across the region are already high, due to recurrent climatic shocks since 2016, the economic impact of COVID-19, and the desert locust upsurge, as well as long-term deterioration in macroeconomic conditions in Ethiopia and conflict in Somalia and Ethiopia. Based on already high levels of acute food insecurity and the vulnerability of the eastern Horn to crop failure and reduced livestock productivity during below-average rainfall seasons, food security outcomes will likely deteriorate through at least early 2021 in Somalia, southern and southeastern Ethiopia, and northern and eastern Kenya. Furthermore, a long-term decline in rainfall performance and preliminary climatological research suggest an elevated likelihood of below-average rainfall in the March to May 2021 season. Two consecutive poor seasons would likely result in rapidly worsening acute food insecurity. Although uncertainty exists for long-range seasonal forecasts, national governments and humanitarian actors should plan for heightened food assistance needs through at least early 2021 and possibly through late 2021.

Three climate drivers elevate the likelihood of below-average rainfall during the October to December (OND) 2020 rainfall season in the eastern Horn. First, forecast model outputs predict enhanced sea surface temperature gradients in the Indo-Pacific Ocean, which are strongly correlated to poor OND rainfall in this region. Second, the [early July IRI/CPC ENSO forecast](#) indicates an increased likelihood of a La Niña event between September 2020 and March 2021. Finally, the [July BOM forecast](#) suggests an increased likelihood of a borderline negative Indian Ocean Dipole, which is also correlated with below-average OND rainfall. In recent years with similar climate drivers (1998, 1999, 2005, 2007, 2010, 2016, and 2017), rainfall was below average (Figure 1). Based on current forecast global climate conditions, the North American Multi-Model Ensemble (NMME) predicts below-average rainfall is most likely in the OND 2020 season. FEWS NET'S research shows that the NMME forecast has predicted nine below-average OND rainfall seasons in this region since 1996, and eight of these forecasts correctly anticipated droughts. Furthermore, the development of La Niña would amplify the Indo-Pacific gradients, increasing the likelihood that climatic conditions in OND 2020 may be similar to OND 2016, when poor rainfall resulted in drought.

The OND rains are critical for crop production in southern Somalia, southeastern Kenya, and southern and southeastern Ethiopia. Although crop production in these areas of Kenya and Ethiopia contributes little to national cereal requirements, it is an important source of food and income locally. Based on an analysis of cereal crop production data in OND seasons with similar climatic conditions during the 1995 to 2017 period, crop losses were greater than 20 percent of average nearly 60 percent of the time in agropastoral areas in southern Somalia and 100 percent of the time in marginal agricultural areas in southeastern Kenya. Crop losses will reduce demand for agricultural labor, diminishing a key income source for poor households and limiting their capacity to purchase food during the September to November lean season. Crop losses will also reduce local food availability and contribute to rising food prices leading up to and after the January/February 2021 harvests. The reduction in labor income, combined with anticipated rising staple food prices linked to tight supply in Somalia and Kenya and inflation in Ethiopia, is expected to limit household purchasing power. As a result, Crisis (IPC Phase 3) outcomes are expected in southern Somalia and southern and southeastern Ethiopia. In southeastern Kenya, where international maize and wheat imports are more likely to mitigate steeper price increases, a rising number of households will likely be in Crisis (IPC Phase 3). *Bay-Bakool Low Potential Agropastoral Livelihood Zone* of Somalia is of highest concern, where households are highly vulnerable to labor shocks and some households will be at risk of Emergency (IPC Phase 4).

Figure 1. Average October to December rainfall performance in years with similar climate drivers, shown as a percent of the 1981 to 2010 average



Source: FEWS NET

The OND rains are also critical for livestock production in pastoral areas of southern and southeastern Ethiopia, Somalia, and Kenya. Below-average rainfall will limit pasture regeneration and water availability. Further, the concurrent threat of desert locusts is likely to contribute to reduced pasture availability in some areas. Although poor households will initially benefit from livestock births and seasonal milk availability linked to livestock conceptions that occurred during the favorable March to May (MAM) 2020 rainfall season, pasture and water resources will most likely be depleted earlier than normal. As a result, household milk consumption and milk sales will be below normal by late 2020 due to both persistently low livestock holdings and below-average OND 2020 rainfall. In addition, the goat-to-cereals terms of trade are projected to decline due to rising staple food prices, which will erode household purchasing power. Poor pastoral households will also likely face below-normal income from other key sources due to the economic impacts of COVID-19, including remittances, social support, and lower livestock exports following the cancellation of the *Hajj*. Below-average rainfall is also associated with atypical livestock migration patterns; higher household expenditures on water, livestock feed, and/or transport; and increased resource-based conflict. Overall, poor households are expected to increasingly engage in unsustainable livestock sales to purchase food or will have food consumption gaps. Crisis (IPC Phase 3) outcomes are expected in southern and southeastern Ethiopia, north-central Somalia, and parts of northeastern Kenya. While the emergency scale-up of Kenya's interannual Hunger Safety Net Programme is triggered during drought conditions to prevent worse outcomes, a rising number of pastoral households are likely to deteriorate to Crisis (IPC Phase 3).

Although uncertainty exists with long-range forecasts, below-average rainfall is also possible during the MAM 2021 season. First, rainfall in this region has declined since the late 1990s, and dry MAM seasons have occurred every 2.5 years. The predicted sea surface temperature patterns are similar to those associated with this decline. Second, analysis of climate and sea surface temperature patterns in 1998/1999, 2010/2011, and 2016/2017 shows that the predicted Indo-Pacific gradients are associated with consecutive below-average rainfall seasons resulting in drought conditions. The development of La Niña would enhance the likelihood of poor MAM rains, but the gradients could result in dry conditions even in the absence of La Niña. Food security in the eastern Horn of Africa is already anticipated to deteriorate due to below-average OND rainfall, and historical trends indicate food security outcomes could rapidly worsen in the event of two consecutive below-average seasons. While close monitoring of the seasonal forecast is required, national governments and humanitarian partners should prepare for likely increased assistance needs through at least early 2021 and possibly through late 2021.