



Alert

Preparedness Planning Needed for Potential Drought in the Eastern Horn of Africa during the October - December Rainy Season

2 August 2024

With varying degrees of certainty, climate models predict a transition to La Niña conditions during the second half of 2024, which would likely bring below-average rainfall to the eastern Horn of Africa. The greatest impacts are expected in central and southern Somalia, southern Ethiopia, and the arid and semi-arid lands of Kenya. Should below-average rains materialize, crop failures, deteriorating pastoral conditions, water shortages, atypical livestock movements, increased disease outbreaks, and heightened food insecurity and malnutrition are likely. Humanitarian partners should engage with local and national governments to support their contingency planning, the implementation of preparedness activities and the identification of anticipatory actions to mitigate the impacts of potential below-average rains.

Forecasts by ICPAC and Other Meteorological Agencies Suggest Likely Below-Normal Rains

While ENSO neutral conditions currently prevail after the strong 2023/24 El Niño event, most climate prediction centers are forecasting the emergence of a La Niña episode by October - December,¹ combined with above-normal sea surface temperatures in the eastern Indian and western Pacific Oceans. In the past, such conditions were associated with drought in the eastern Horn of Africa during the October - December *Deyr/Hageya*/short rains season, as well as elevated chances of dry conditions during the following March - May 2025 *Gu/Genna*/long rains season.

The most recent consolidated forecast from the IGAD Climate Prediction and Applications Centre (ICPAC) suggests a high probability of below-normal rains over southern Ethiopia, Somalia, Kenya, most parts of Uganda, Rwanda, Burundi and Tanzania, where the October - December season accounts for a significant share of yearly precipitation (Figure 1a). July forecasts from [NOAA](#), [ECMWF](#), [UK MET](#) and [WMO](#) also indicate probable dry conditions during the October - December rainy season in the areas identified by ICPAC's consolidated outlook. The Climate Hazards Center's (CHC) statistical [forecasts](#), based on Indian and Pacific Ocean sea surface temperature forecasts (Figure 1b) resemble closely the outlook provided by ICPAC and suggest significant rainfall deficits across several areas of

¹ The outlook for October - December La Niña conditions, as of late July, remains fluid, with probability estimates ranging from 50 to 80%. By mid-August, modeling center updates should bring a substantial reduction in uncertainty.

Inputs for this analysis were provided by:



the region during the October - December season, particularly in central and southern Somalia, northern Kenya, and southern Ethiopia.

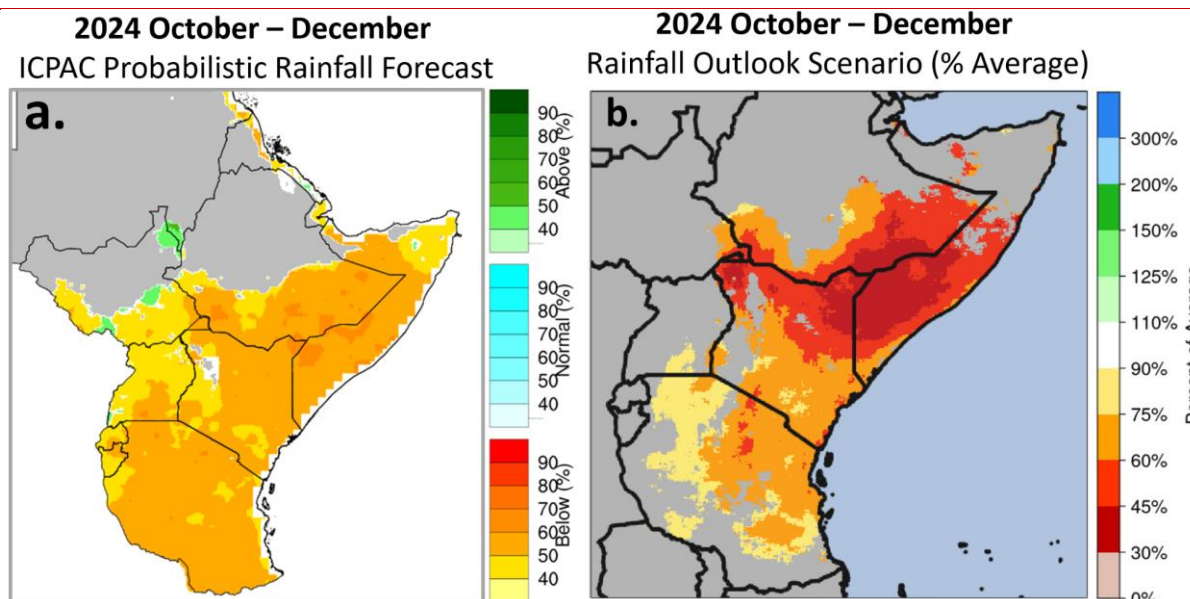


Figure 1. a. Preliminary probability forecast of rainfall for the Greater Horn of Africa region for October to December 2024. The forecast indicates increased chances of drier conditions (below-average rainfall) over most areas where October to December is a rainy season. b. Climate Hazards Center’s (CHC) October-December 2024 rainfall outlook scenario, expressed as percent of average rainfall. The CHC most-likely scenario anticipates rainfall of less than 75% of normal over much of Kenya, central and southern Somalia, and parts of southern Ethiopia.

Reduced Agricultural Production and Worsening Food Insecurity, Nutrition, and Health Outcomes Would be Anticipated if Below-Average Rains Materialize

Recent severe drought events (e.g., 2010/11, 2016/17 and 2020/23) were characterized by consecutive poor seasonal rains. This, combined with hotter-than-normal temperatures, resulted in severe pasture and water shortages, livestock deaths, failed cropping seasons, population displacements, rising food prices, worsening human health, and widespread food insecurity and malnutrition among pastoral and agro-pastoral communities, as well as increased protection risks, particularly for women and children. If the expected sea surface temperature conditions emerge (La Niña combined with above-normal sea surface temperatures in the eastern Indian and western Pacific Oceans), a similar shock in late 2024 and early 2025 could pose a serious hazard.

Food insecurity across the Horn of Africa remains alarmingly high, with 20.4 million people facing high levels of food insecurity and in need of urgent assistance across Kenya, Somalia, and Ethiopia. Acute malnutrition continues to be a major source of concern with estimates indicating that over 6.2 million children below five years will suffer from acute malnutrition in 2024 in Ethiopia, Kenya, and Somalia, out of which 1.7 million will suffer from severe acute malnutrition. Additionally, multiple disease outbreaks pose significant public health emergencies, exacerbated by extreme climate events and conflict. For example, recent floods have heightened the risk of water-borne and vector-borne diseases. All three countries are responding to cholera outbreaks while battling active measles outbreaks. Malaria cases have also notably increased, particularly in Ethiopia.

Household resilience remains low across the three countries in the aftermath of the historic late 2020 - early 2023 drought, which was also linked to La Niña conditions and resulted in severely eroded household assets and livelihoods. While agricultural and livestock production in late 2023 and early

2024 improved with the end of the drought due to consecutive above-average rainy seasons, other compounding shocks such as widespread floods in late 2023 and early 2024, persistent conflict and insecurity, and economic challenges have limited the degree of recovery.

The recent seasons of above-average rains in 2023 and early 2024 will likely help to buffer the impacts of the expected below-average *deyr/hageya*/short rains to some degree through late 2024; however, given the erosion of coping capacity from prior and current shocks, crop and livestock production losses will most likely lead to elevated levels of acute food insecurity and malnutrition by early 2025. If a second consecutive poor rainy season materializes in early 2025, then this would likely lead to a rapid worsening of acute food security, nutrition, and health outcomes through late 2025, as the next potential window of recovery would not occur until the late October - December 2025 rains.

Preparedness Actions Needed In Advance of Potential Multi-Season Drought

While substantial uncertainty regarding the forecasts remains, it is imperative that the humanitarian community engages with local and national governments to support their contingency planning, the implementation of preparedness activities and the identification of anticipatory actions that could mitigate the effects of forecast below-average rains. It is crucial to build on the lessons learned from previous droughts, where a lack of preparedness and early action, despite forecasts, led to serious consequences. If drought conditions emerge again, proactive planning can help ensure that potential impacts are mitigated. In the context of already high levels of food insecurity, disease outbreaks, and concerning rates of malnutrition, managing potential climate shocks in late 2024 and early 2025 would be an important step towards safeguarding lives and livelihoods, reversing the cycle of poor nutrition and disease, and protecting household resilience within the region.

The humanitarian community should also closely monitor seasonal forecast updates, including the upcoming Greater Horn of Africa Climate Outlook Forum (GHACOF), scheduled for 19 - 20 August 2024, which will provide a regionally downscaled and more detailed rainfall outlook for the October - December *deyr/hageya*/short rainy season. At that time, uncertainty over the October - December seasonal rainfall outlook will be substantially lower. By contrast, uncertainty concerning the likely performance of the March - May 2025 *Gu/Genna*/long rains season will remain high until the first quarter of 2025.