

Climate Prediction Center's Central America Hazards Outlook For USAID / FEWS-NET 25 May – 31 May 2023

An abnormal dryness polygon is placed over southern, eastern, and northern Costa Rica, all of Panama, southern and eastern Guatemala, parts of western and central El Salvador, and central and southern Nicaragua due to persistent dryness in the past 30 days. An abnormal heat polygon has been placed from southern Guatemala to northwestern Panama. A flooding polygon is placed in the vicinity of the Fuego volcano and downstream due to recent heavy (localized) rainfall in southern Guatemala.



Note: The Hazards outlook map is based on current weather/climate information, short and medium-range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed and predicted to continue during the outlook period. The boundaries of these polygons are only approximate at the spatial scale of the map. This product takes into account long-range seasonal climate forecasts but does not reflect current or projected food security conditions. FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards outlook process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and a number of other national and regional organizations in the countries concerned.

Questions or comments about the hazards outlooks may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdina@usaid.gov

During the last week, above average rainfall was observed only over Panama northeast of the Panama Bay and a small portion of northwestern Guatemala. According to CMORPH, a small portion of northwestern Guatemala, southwestern Costa Rica, and southwestern/eastern Panama received moderate rainfall between 50 to 150mm. According to Insivumeh, on 21 May, nearly 75mm of rainfall fell in the Chama Mountains of Guatemala in 24 hours. Except for parts of central/southern Nicaragua, northern Honduras, western El Salvador, northern Guatemala, and most of Belize, most places throughout Central America observed precipitation. The 30-day cumulative rainfall analysis shows dry conditions especially in most of Costa Rica, Panama, El Salvador, northwestern, central, and southern Nicaragua, and in northeastern and southern Guatemala, with deficits of at least 50-100 mm throughout much of the region and larger deficits >100 mm in southern, eastern, and northern Costa Rica, western and eastern Panama, southern Guatemala, northeastern and southwestern El Salvador, and northwestern and southeastern Nicaragua. An abnormal dryness polygon has been expanded to include much of northern Costa Rica, southern and parts of eastern Guatemala, central and western El Salvador, and central and southern Nicaragua where SPI values are also well below normal. Although the latest analysis indicates near or above average vegetation conditions over much of Central America, vegetation health is relatively poor in northern and eastern Honduras, eastern Nicaragua, northern and eastern (up to Chiquimula) Guatemala, parts of northern Belize, central, eastern, and northwestern El Salvador, and much of central Panama. In addition, minimum temperatures were 4 to 6°C warmer than average over parts of southern Guatemala and western and central El Salvador. Maximum temperature anomalies were between 2 to 4 °C above normal in western and southern Honduras, central Guatemala, western and central Nicaragua, and northern and central Costa Rica. Maximum temperature anomalies were 4 to 6 °C above normal in southern Guatemala and western El Salvador.

During the next week, forecasts suggest moderate rainfall (50mm-100mm) across southern Guatemala, northern and eastern El Salvador, southern Honduras, northwestern Nicaragua, western and central Costa Rica, and most of Panama. Heavy rainfall (>100mm) is expected in eastern Panama and localized areas in southwestern Guatemala, south-central Honduras, and southwestern Costa Rica. Most of Central America is expected to receive below normal rainfall, especially Costa Rica, western Panama, southern, western, and eastern Nicaragua, southeastern El Salvador, western and eastern Honduras, and central Guatemala -- which are expected to receive rainfall more than 50mm below normal during the coming week (Fig 1). Rainfall in the vicinity of the Fuego volcano (Guatemala) could result in localized flooding in that region as well as downstream. Maximum temperatures are forecasted to be 2 to 6°C warmer than normal in most areas, with the highest anomalies expected in central Honduras and eastern Nicaragua. A majority of the area between southern Guatemala and northwestern Panama is expected to receive maximum temperatures above the 90th percentile for three or more consecutive days. Increased cloudiness may suppress maximum temperatures for much of the aforementioned region.

