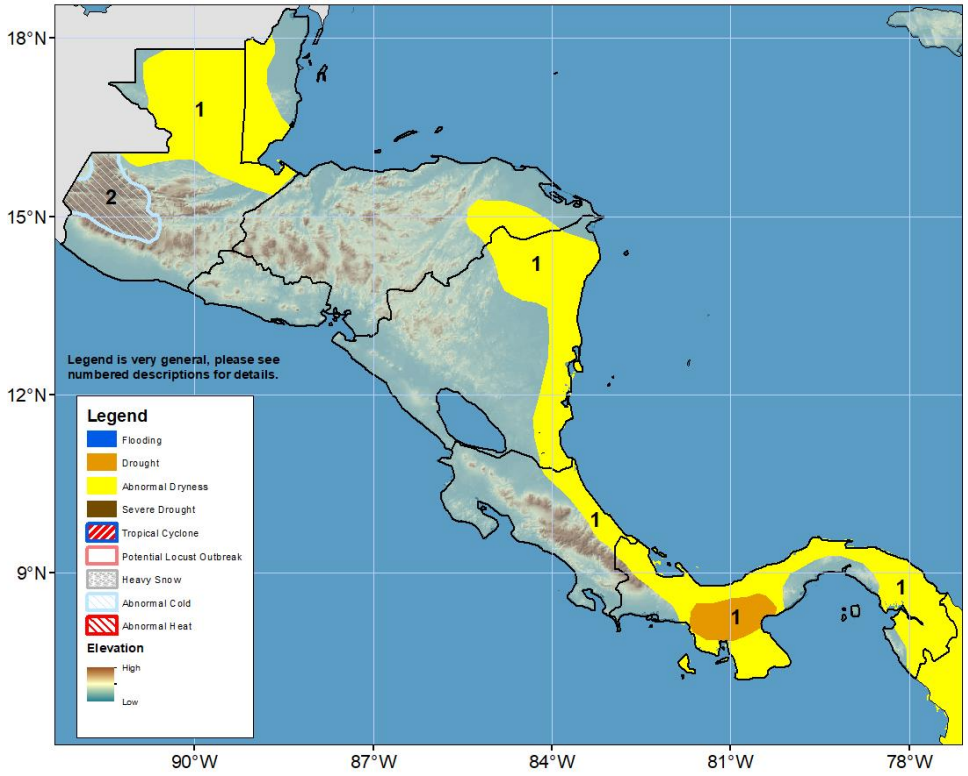
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
08 – 14 February 2024

Dry conditions are expected to continue in Central America during the next week.



1) In the past seven days, light to locally moderate rainfall was observed in central and northern Guatemala, Gulf of Fonseca, coastal areas in Honduras, central Costa Rica, and the Caribbean Littorals in Costa Rica and Panama. However, the lack of rainfall in the last weeks, coupled with abnormally-low rainfall in both the past 30 days and 90 days have resulted in a long dryness across northern Guatemala, Belize, southeastern Honduras, eastern Nicaragua, and the Caribbean Tiers of Costa Rica and Panama. The rainfall deficits and above-average temperatures continue to affect the shipping industry in the Panama Canal due to below-average water levels in the Gatun Lake.

2) The forecast suggests near-freezing to below-freezing temperatures in Huehuetenango, San Marcos, Quetzaltenango, Totonicapán, Sololá, Quiché, Chimaltenango, and surrounding areas for the following days.

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, jverdin@usaid.gov

Next week below-average rainfall are expected in most of the eastern areas of Central America.

During the last week, Central America observed close-to-average conditions. Light to locally moderate rainfall was received in central and northern Guatemala, the Gulf of Fonseca, coastal areas in Honduras, central Costa Rica, and the Caribbean Littorals in Costa Rica and Panama. In central Guatemala and Costa Rica, rainfall values were between 25 mm and 75 mm. Light above-average conditions were observed (10-25 mm above the mean). Meanwhile, over the past 30 days, rainfall deficits have ranged between 25-200 mm in portions of Guatemala, Belize, southeastern Honduras, eastern Nicaragua, eastern Costa Rica, and Panama. Further, cumulative rainfall over the past 90 days totaled 200-400% of the average across most places in northern Central America, and rainfall accumulation varied between 5-80% of the average in south-central Guatemala, northeastern Nicaragua, eastern Costa Rica, and Panama. The latest Normalized Difference Vegetation Index (NDVI) analysis showed near-average vegetation conditions throughout much of Central America, while below-average conditions persisted in southern Guatemala due to poor rainfall performance during the previous second rainfall season.

For next week, drier-than-average conditions are forecast in central and northern Guatemala, the Gulf of Honduras, northern Honduras, eastern Nicaragua, and east Costa Rica. The largest rainfall amounts are likely to happen in the Atlantic Tiers of Nicaragua, Costa Rica, and Panama, where rainfall forecast values range from 10 mm to 50 mm. Meanwhile, near-freezing to below-freezing temperatures are forecast in northern Central America due to passing cold fronts. These cold temperatures might affect agricultural activities and increase the risk of hypothermia in vulnerable groups of residents who live in higher terrains of western and central Guatemala

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly Forecast (mm)
08 – 14 February 2024

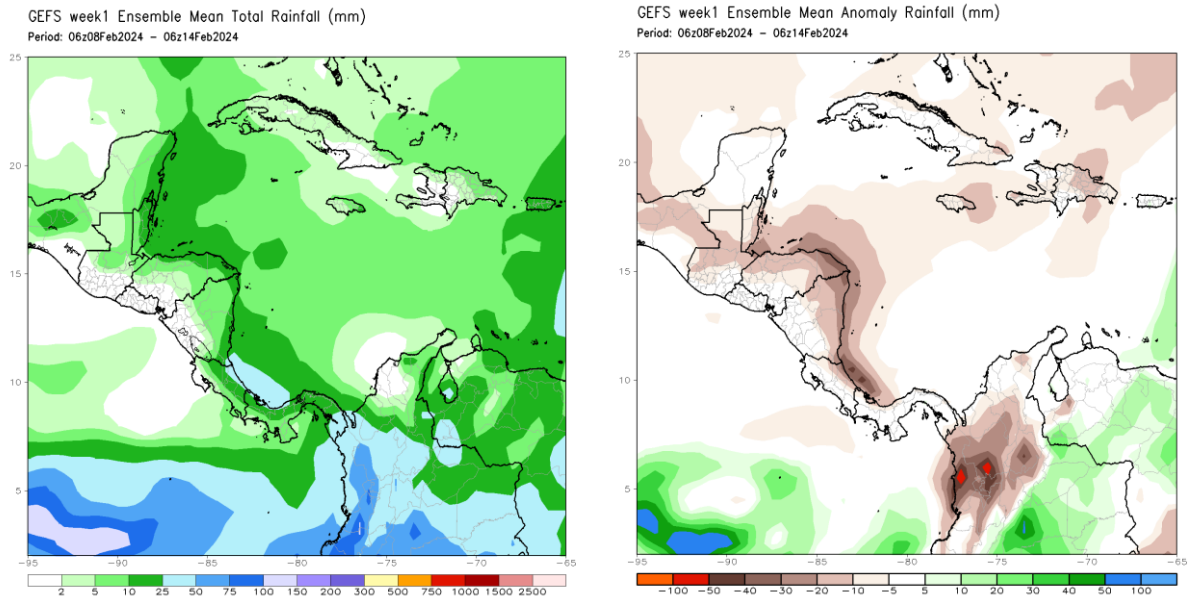


Figure 1: Source NOAA / CPC