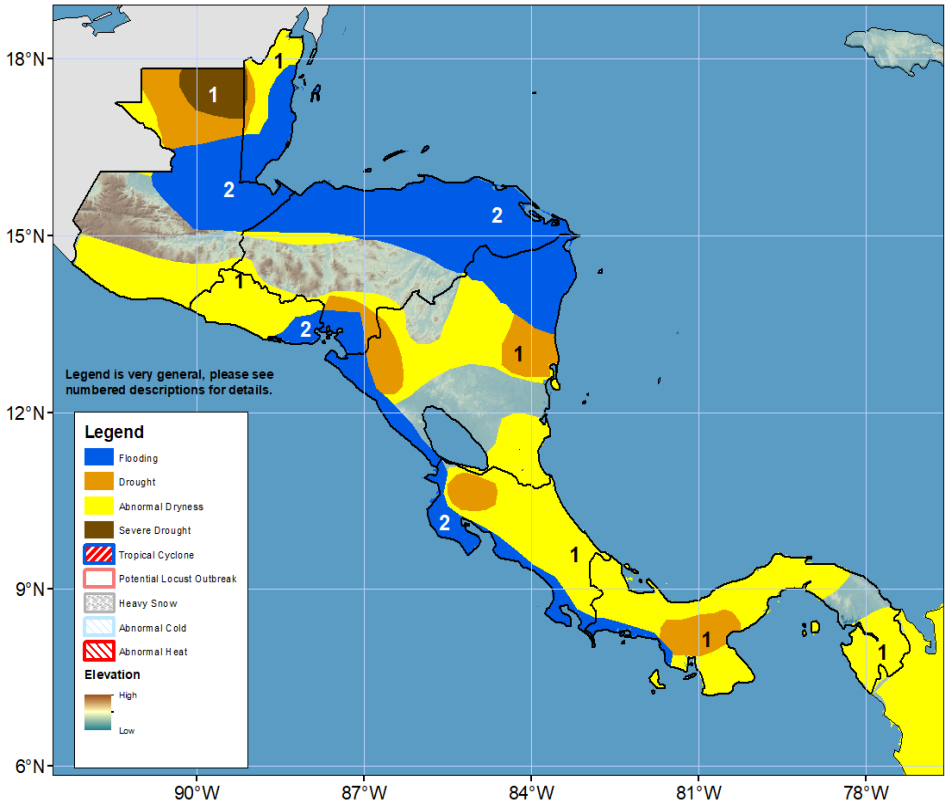
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
9 – 15 November 2023

Tropical disturbances might bring heavy rainfall across Central America.



1) Inconsistent and insufficient rainfall since the beginning of April has led to abnormal dryness and patches of drought across Central America. Moreover, a severe drought polygon is maintained in northern Guatemala due to the continuing rainfall deficits, significant vegetation stress and deficits in soil moisture conditions. The irregular rains since the start of the *Primera* season have mainly affected the crops of subsistence farmers, who might experience yield reductions of 25% to 50% of average. In addition, high temperatures and a lack of rain continuing affecting the agriculture sector. Sowing delays are still reported in Guatemala. The rainfall deficits are also affecting the shipping industry in Panama Canal, where the water level of the Gatun Lake is below average.

2) Tropical Storm Pilar and tropical distubrances in the Caribbean Sea brought heavy rainfall acrros Central America. Storm Pilar mainly affected El Salvador, Honduras and Costa Rica. In El Salvador at least 3 facilities were reported, and hundreds of people were evacuated. Tropical dis Forecast for the next week suggest heavy to moderate rainfall acrros some countries in Central America, given that rainfall form the past week replenished the water soil, flood risks are high in Guatemala, eastern Honduras, coastal areas along El Salvador, Nicaragua Costa Rica and northern Panama.

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.

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Tropical weather disturbances increase the risk of flooding in northeastern Central America and along coastal areas facing the Pacific Ocean.

Last week tropical weather was very active in the surroundings of Central America. First, tropical Storm Pilar brought heavy to moderate rainfall across Central America, particularly areas in El Salvador, Nicaragua, and Costa Rica, observed values between 100 mm to 300 mm of total weekly precipitation. Tropical Storm Pilar affected mainly El Salvador, where floods and river overflow were reported, and hundreds of people were evacuated. Second, a low-pressure system over the Caribbean Sea brought heavy rainfall in Belize, eastern Guatemala, northern Honduras, and eastern Nicaragua. Overall, most of Central America reported positive rainfall anomalies larger than 25 mm during the last week. According to reports, the recent increase in rainfall has contributed to elevated river levels and flooding over many areas in Central America, including the Huehuetenango, Alta Verapaz, and Baja Verapaz Departments in Guatemala. Over the past 30 days, most of the region registered near-average conditions, however, above-average rainfall was registered in northern Honduras, eastern Nicaragua, and some local areas in Costa Rica and Panama. Meanwhile, northern Guatemala, eastern Belize, southeastern Honduras, eastern Nicaragua, and northeastern El Salvador still registered the largest rainfall deficits in the region. Over the past 90 days, the lowest (< 25% of the average) accumulation was observed in northeastern Guatemala and northern Belize. The prolonged insufficient rainfall has already led to moderate to large rainfall deficits and degraded vegetation, which resulted in abnormal dryness and droughts over many areas across the region.

During the next week, the GEFS forecast suggests that moderate to heavy rainfall (values from 50 mm to 200 mm) might occur across Central America. Particularly, high potentials for flooding are posted over eastern areas of Guatemala, Belize, Honduras, and Nicaragua as a tropical disturbance system might continue in the Caribbean. Also, it is expected that moderate rains will lead to flash floods in areas surrounding the Gulf of Fonseca and along the coasts of western Nicaragua, western Costa Rica, and northwestern Panama.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly Forecast (mm)
09 November – 15 November 2023

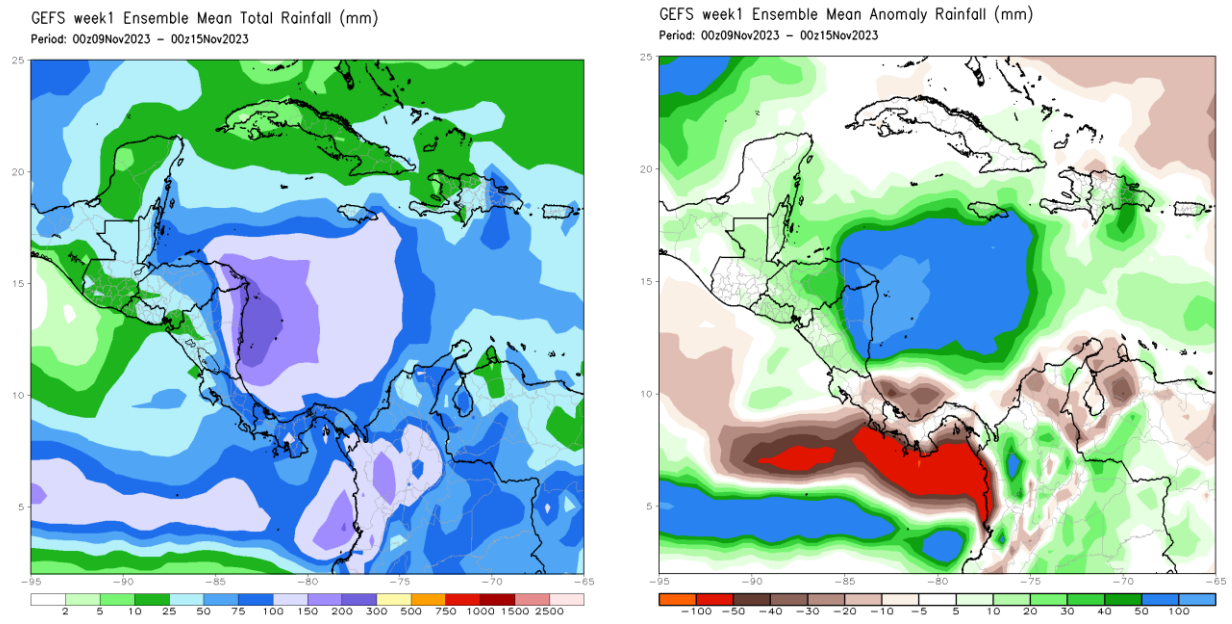

Figure 1: Source NOAA / CPC