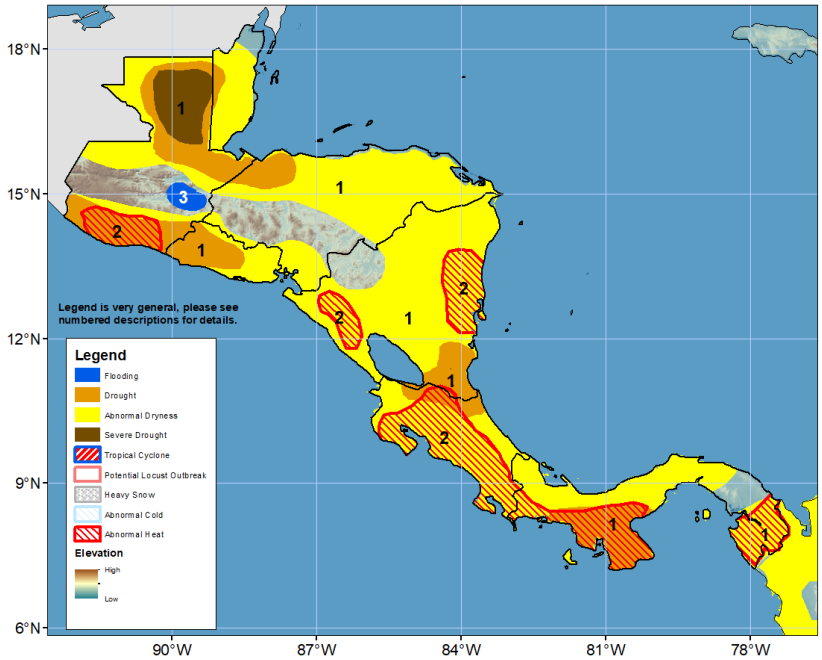
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
31 August – 06 September 2023

Rainfall deficits and abnormally warmer temperatures continue in Central America.



1) Inconsistent and insufficient rainfall since the beginning of the "Primera" season, starting in April, has led to abnormal dryness across the region. Moreover, a severe drought polygon is maintained in northern Guatemala due to the continuing rainfall deficits, significant vegetation stress and dry soil conditions. The irregular rains since the start of the Primera season have mainly affected the crops of subsistence farmers, these farmers might experience yield reductions of 25% to 50% of average yields. In addition, the high temperatures and the lack of rain have exacerbated moisture availability in the soil. Also, flash floods were reported in local areas in Alta Verapaz and Huehuetenango deparments in Guatemala. While on the border between Guatemala and El Salvador, the sowing activity has been delayed due to the rainfall deficits and high temperatures observed last week. In addition, in Panama, the rainfall deficits have affected the shipping industry in the Panama Canal, where the water level of the Gatun Lake has remained below average.
2) Weekly mean maximum temperatures are forecast to be 30-35°C and warmer than average (2-4°C) in southern Guatemala, localized areas in Nicaragua, most of Costa Rica, and northern and southern Panama. Therefore, an abnormal heat hazard has been added in these regions.
3) Furthermore, Southeastern Alta Verapaz and northern Zapata departments have observed above-average rainfall during the 90 days. Heavy rain is expected to continue the following week, and therefore, a flooding polygon has been added to this area.

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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Heavy rains are likely to happen in central Guatemala.
During the last week, heavy downpours (values larger than 100mm) were observed in the coastal areas of Nicaragua, Costa Rica, and Panama, and some of these areas observed above rainfall precipitation. Meanwhile, light rainfall was observed in northern and southern Guatemala, most parts of Honduras, northern El Salvador, northeastern Nicaragua, and southern Panama (values lower than 25 mm). Moreover, Guatemala, most parts of El Salvador, western and eastern Honduras, northeastern Costa Rica, eastern Nicaragua, and northern and southern Panama still show the largest below-normal conditions during the 7 days. Additionally, the 30-day rainfall period shows that northern and southern Guatemala, northern El Salvador, some areas in Honduras; and localized areas in Nicaragua, Costa Rica, and Panama have received less than 50 percent of normal rainfall. Moreover, in the 90-day seasonal period, the largest rainfall deficits are still observed in northern and southern Guatemala, El Salvador, the border between Nicaragua and Costa Rica, and central and southern Panama, where deficits are larger than 300 mm. Further, vegetation health indices shows that dryer-than-average conditions are observed in northern Guatemala, and western Honduras and western Nicaragua. Meanwhile, warmer than average temperatures (1-2 °C above the mean) were observed in El Salvador, western and eastern Honduras, eastern Nicaragua, and some areas in Panama.

During the next week, forecasts suggest heavy rainfall (values larger than 50 mm) across Central America, with the largest values in central Guatemala. Additionally, the forecast suggests above-average rainfall conditions in central Guatemala, southern Belize, and most parts of Honduras (more than 10 mm above the mean). On the contrary, the eastern coastal areas of Costa Rica and Panama are likely to be observed below-average conditions (more than 50 mm below the mean). Furthermore, the maximum temperature anomalies forecast suggests hotter than average temperatures during next week in southern Guatemala, localized areas in Nicaragua, Costa Rica, and northern and southern Panama.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm)
31 August – 06 September 2023

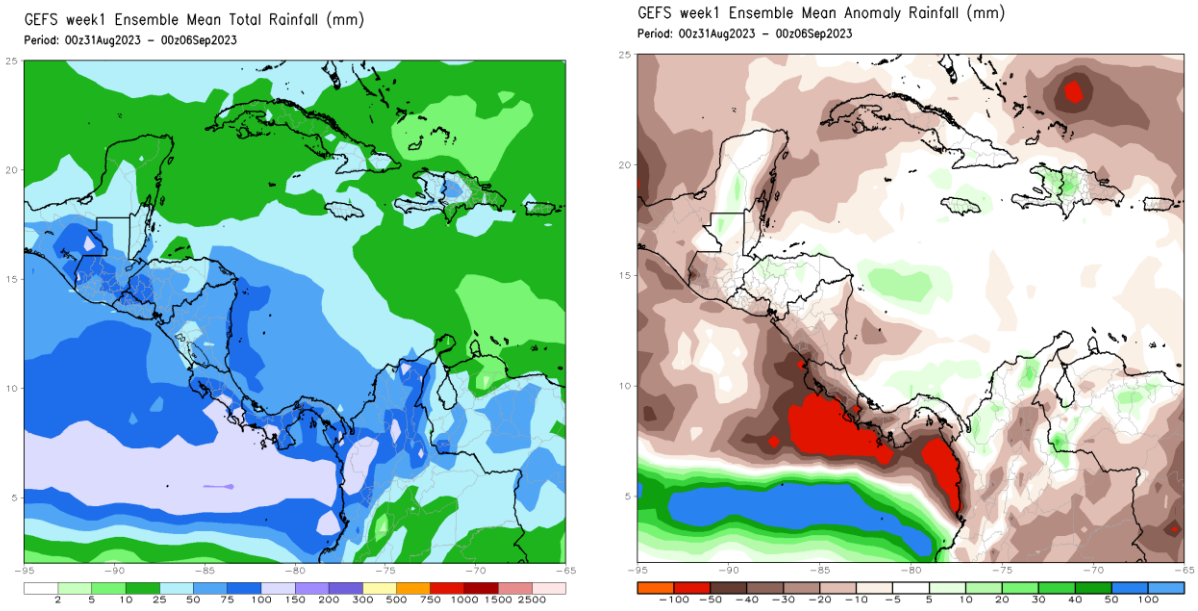

Figure 1: Source NOAA / CPC