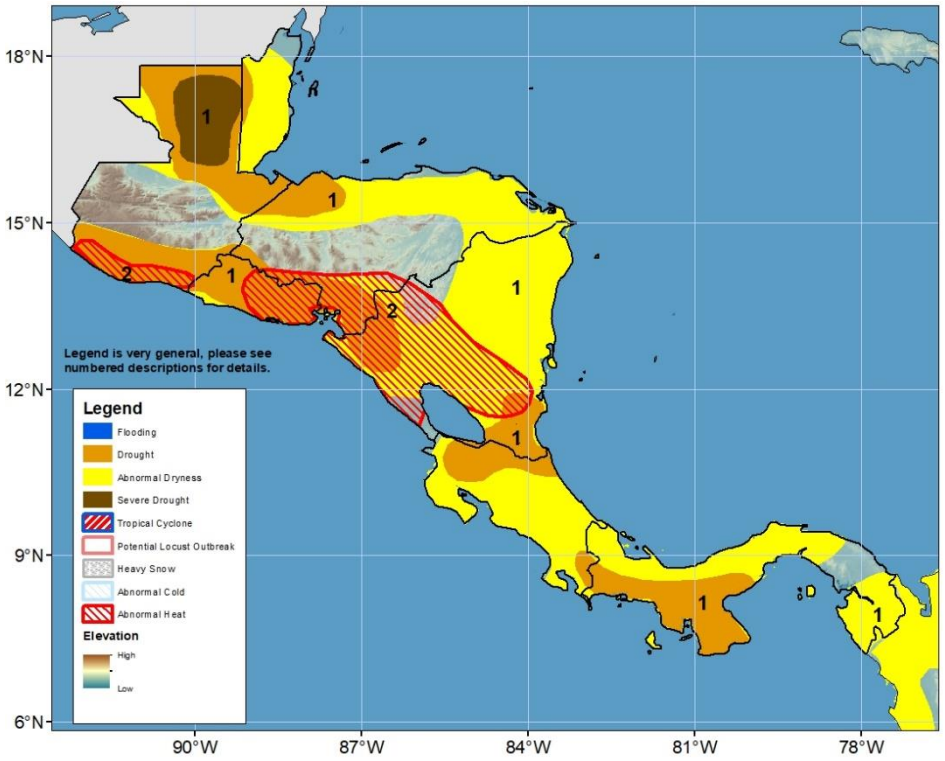
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
28 September – 4 October 2023

Rainfall deficits and abnormally warm 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 and patches of drought 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 who might experience yield reductions of 25% to 50% of average. In addition, the high temperatures and the lack of rain have exacerbated moisture availability in the soil. Sowing delays are still reported in Gautemala. The rainfall deficits in Panama are affecting the shipping industry in the Panama Canal, where the water level of the Gatun Lake is below average.
2) Weekly mean maximum temperatures are forecast to be 30-35°C and warmer than average (2-6°C anomalies) in southern Guatemala, western/central Nicaragua, southern Honduras and eastern El Salvador. Therefore, an abnormal heat hazard has been added in these regions.

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

Increased rains are likely in Honduras, Guatemala, and El Salvador this week

During the last week, heavy rainfall (75-200mm totals) was observed in southeastern and west-central Guatemala, El Salvador, and localized parts of coastal Nicaragua, Costa Rica, and Panama. Heavy rains falling during short periods were enough to cause flash floods or landslides in portions of Guatemala including Guatemala, Petén, and Suchitepequez resulting in 21 deaths. Conversely, areas receiving especially light rainfall (less than 10mm) include central and northern Guatemala, northern Belize, parts of Honduras, and western/central Nicaragua. Moreover, central/northern Guatemala, Belize, the Gulf of Fonseca region, parts of Costa Rica, and parts of Panama show the largest deficits during the 7 days (>50mm anomalies). The 30-day analysis shows that northern and southern Guatemala, eastern El Salvador, southern Honduras, parts of Nicaragua, and many parts of Costa Rica and Panama 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, southern Honduras, northwestern Nicaragua, northern Costa Rica, and Panama, where deficits are larger than 500 mm. Meanwhile, warmer than average maximum temperatures (2-4 °C above the mean) were observed over most of Central America.

During the next week, forecasts suggest that heavier and above average rainfall (values larger than 100 mm) will occur across parts of Guatemala, Honduras, and El Salvador. However, the forecast suggests below-average rainfall conditions in Nicaragua, southern El Salvador, and Costa Rica (10-40 mm below the mean). Furthermore, the maximum temperature anomalies forecast suggests hotter than average temperatures during next week in southern Guatemala, El Salvador, southern Honduras, Nicaragua, and Costa Rica.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm)
28 September – 4 October 2023

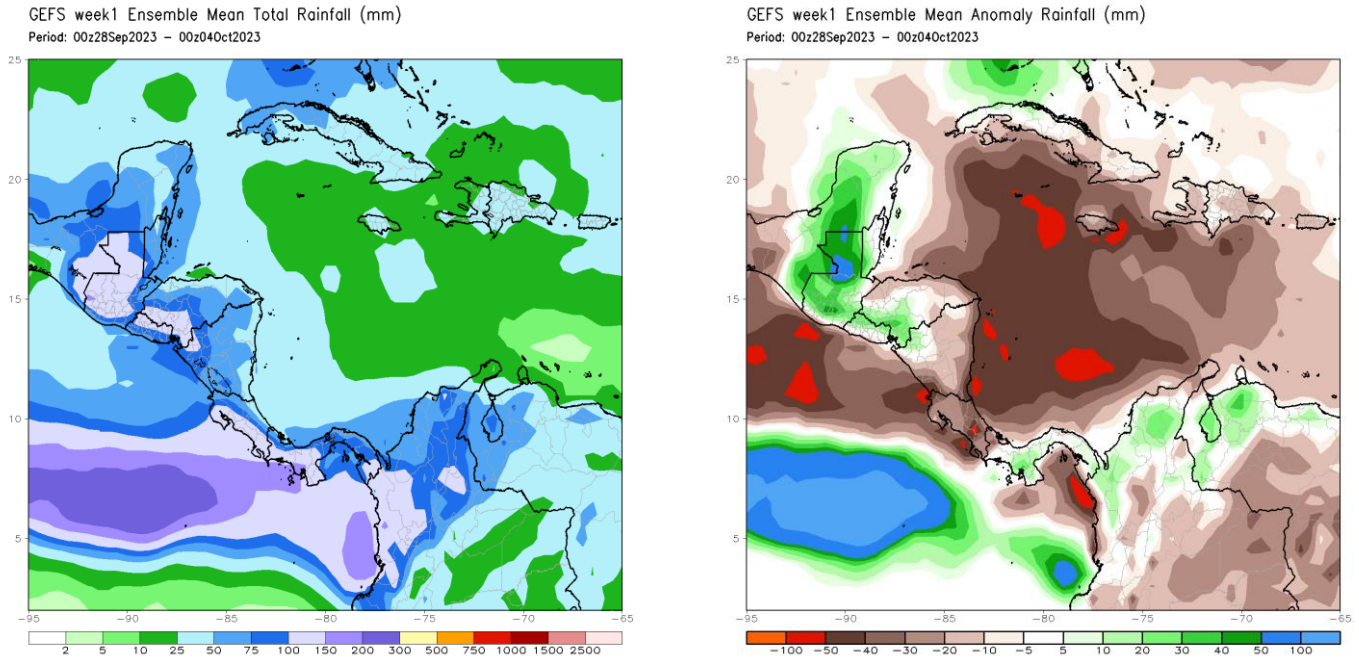


Figure 1: Source NOAA / CPC