





Climate Prediction Center's Central America Hazards Outlook For USAID / FEWS-NET 12 – 18 October 2023

An unevenly-distributed seasonal rainfall has resulted in dryness, droughts, and many localized flooding over 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 Guatemala. 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) Abnormal heat hazards are posted in northern Guatemala, eastern Honduras, and northeastearn Nicaragua as well above-average maximum temperature and high heat index are expected to persist for three or more consecutive days during the next week.
- 3) The past few weeks heavy rainfall has caused flooding over many areas in Central America. In Guatemala, flooding have led to fatalities in Guatemala City and crop damages in the Retalhuleu and Suchitepéquez Departments, according to reports. In Nicaragua, localized flooding have affected areas in the western and central portions of the country. High risks for flooding remain as heavy rainfall is forecasted to continue during the next week.

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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Dryness and droughts have prevailed in Central America; but flooding have also impacted many localized areas.

During early October, while an increase in rainfall was overall observed over the Pacific-facing region in Central America, reduced rainfall was received along the Atlantic Littorals of the sub-region. Specifically, rainfall amounts in excess of 100 mm were recorded in southern Guatemala, the Gulf of Fonseca, and the Pacific coastlines of Costa Rica and Panama, which have triggered flooding in southern and central Guatemala, western and central Nicaragua, whereas little to no rainfall was experienced in eastern and northeastern Guatemala, Belize, eastern Honduras, eastern Nicaragua, and the Caribbean coasts of Costa Rica and Panama. An analysis of the 90-day rainfall anomalies has indicated that except for areas in central Guatemala, central Honduras, and central Nicaragua, much of Central America has experienced a poor *Postrera*, August-November rainfall season performance, with the lowest rainfall accumulation between 5-50% of the average in northern Guatemala, northern Belize, and parts of Costa Rica and Panama. This lack of rainfall has already led to deteriorated vegetation conditions and droughts in many areas.

During the next week, heavy rainfall is forecast to continue along the Pacific tier in Central America, maintaining high flooding risks over many areas, including the Pacific Region in southern Guatemala. Also, well above-average maximum temperatures and excessive heat are expected to persist in northern Guatemala, Belize, eastern Honduras and northeastern Nicaragua.

