





Climate Prediction Center's Central America Hazards Outlook For USAID / FEWS-NET 23 – 29 November 2023

Rainfall deficits in the long term have brought abnormal dryness and drought in several areas in Central America.



1) Although reasonable amounts of rainfall during the last month have helped to improve soil moisture and vegetation health conditions across the region, irregular and insufficient rainfall for the season (long-term) has led to abnormal dryness and drought conditions across Central America. Therefore, abnormal dryness polygons are kept in most parts of Central America. Particularly in northern Guatemala, these deficits in the rain since the start of the Primera season have affected the agricultural sector, and farmers of subsistence crops report damages and sowing delays; for this reason, farmers might experience yield reductions of 25% to 50% of the average. The rainfall deficits are also affecting the shipping industry in Panama Canal, where the water level of Gatun Lake is below average.

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

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.

The forecast suggests an increase in the risk of flooding across many areas in Central America.

Last week, tropical weather disturbances brought moderate to heavy rainfall across the countries of Central America. Rainfall totals between 75 mm and 300 mm were observed in the Gulf of Honduras, eastern Honduras, eastern Nicaragua, and Panama. Most of these areas observed positive rainfall anomalies, and the larger values (50-200 mm above the normal) were observed in Gracias a Dios department in Honduras and Atlántico Norte department in Nicaragua. 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. Rainfall conditions across the region have improved for the past 30 days, showing above-average rainfall over western Guatemala, El Salvador, Honduras, Belize, Nicaragua, central Costa Rica, and western Panama. Meanwhile, below-average rainfall conditions have been confined to localized areas in southern Guatemala, southern Nicaragua, northern and southern Costa Rica, and northern Panama. In addition, over the past 90 days, north and south Guatemala, southeastern and southwestern Honduras, northern and southern Nicaragua, most of Costa Rica, and Panama still registered rainfall deficits larger than 100 mm. The prolonged insufficient rainfall has already led to degraded vegetation in some regions and impacted the agricultural sector in Guatemala.

During the next week, the GEFS forecast suggests that moderate to heavy rainfall (values from 50 mm to 100 mm) might occur in coastal areas of Costa Rica and most of Panama. The rest of Central America might expect total rainfalls between 10 mm and 50 mm. Rainfall deficits are forecast to continue in coastal areas facing the Caribbean Sea, Costa Rica, and Panama.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly Forecast (mm) 23 November – 29 November 2023 GEFS week1 Ensemble Mean Total Rainfall (mm) GEFS week1 Ensemble Mean Anomaly Rainfall (mm) Period: 06z23Nov2023 - 06z29Nov2023 Period: 06z23Nov2023 - 06z29Nov2023 150 200 Figure 1: Source NOAA / CPC