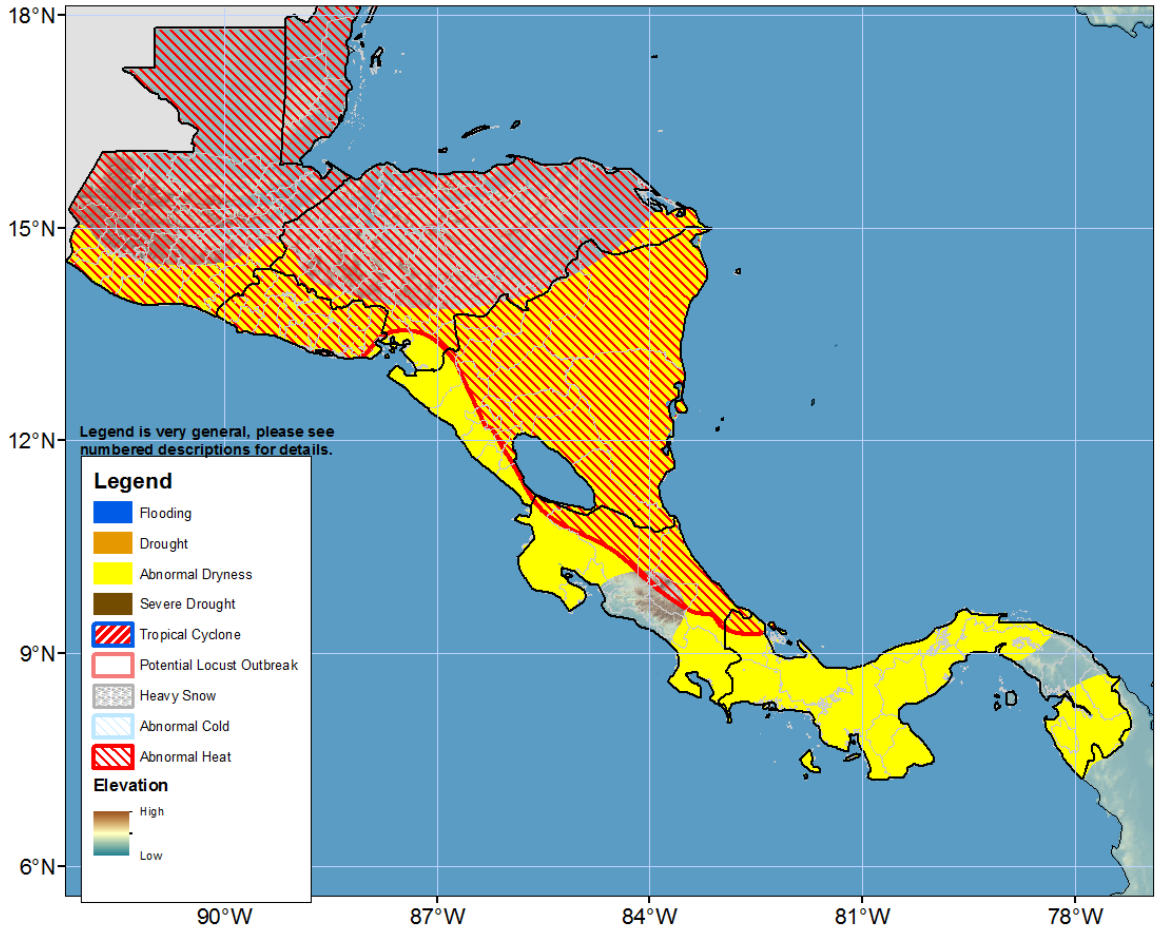
Climate Prediction Center's Central America Hazards Outlook
For USAID / FEWS-NET
01 June – 07 June 2023

An abnormal dryness polygon is placed over southern, eastern, and northern Costa Rica, all of Panama (outside of areas northeast of the Bay of Panama), southern and eastern Guatemala, El Salvador, and most of Nicaragua, and southern Honduras due to persistent dryness in the past 30 days. An abnormal heat polygon has been placed from Guatemala and Belize to northwestern Panama, but does not include much of the Pacific coast of Nicaragua and Costa Rica.



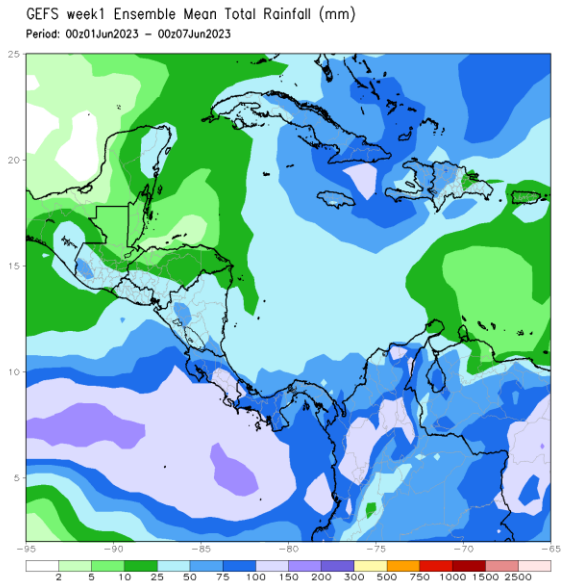
Note: The Hazards outlook map is based on current weather/climate information, short and medium-range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous 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

During the last week, above average rainfall was observed only over Panama northeast of the Panama Bay. According to CMORPH, a small portion of northwestern Nicaragua, southwestern Costa Rica, southwestern/south-central Honduras, northwestern El Salvador, and southwestern/eastern Panama received moderate to heavy rainfall between 50 to 150mm. According to Insivumeh, on 28 May, up to 75mm of rainfall fell along parts of southern Guatemala in 24 hours. Much of the Pacific-facing coasts of Honduras and Nicaragua also received moderate to heavy precipitation over the last few days of the valid period, resulting in localized flooding and landslides in southern Honduras (near the Gulf of Fonseca) and western Nicaragua. However, one-month accumulations remain below normal for these regions. Except for parts of southeastern Nicaragua, northeastern Costa Rica, northwestern Honduras, northern/eastern Guatemala, and parts of western Belize, most places throughout Central America observed precipitation. The 30-day cumulative rainfall analysis shows dry conditions especially in most of Costa Rica, Panama (outside of the area northeast of Panama Bay), El Salvador, Nicaragua, southern and eastern Honduras, and in northern and southern Guatemala, with deficits of at least 50-100 mm throughout much of the region and larger deficits >100 mm in most of Costa Rica, western and eastern Panama, southern and northern Guatemala, El Salvador, southwestern and eastern Honduras, and western and eastern Nicaragua. An abnormal dryness polygon has been expanded to include all of El Salvador, parts of southern and eastern Honduras, and most of Nicaragua where SPI values are also well below normal. Vegetation health is relatively poor in northern and eastern and central Honduras, eastern Nicaragua, northern and southeastern (up to Chiquimula) Guatemala, parts of northern Belize, most of El Salvador, and much of central and southern Panama. Minimum temperatures were 4 to 6^{o}C warmer than average over parts of southern Guatemala and western and central El Salvador. Maximum temperature anomalies were between 2 to 4 ^{o}C above normal in northwestern, central, and southern Guatemala, western El Salvador, most of Honduras, most of Nicaragua, and northern Costa Rica. Maximum temperature anomalies were 4 to 6 ^{o}C above normal in west-central and southeastern Guatemala, north-central Nicaragua, and south-central and west-central Honduras.

During the next week, forecasts suggest moderate rainfall (50mm-100mm) across southwestern Guatemala, parts of southern Honduras, western and southern Nicaragua, northern and eastern Costa Rica, and central and eastern Panama. Heavy rainfall (100mm-150mm) is expected in central and southern Costa Rica and western Panama (especially along the Pacific coast of both countries). Most of Central America is expected to receive below normal rainfall, including most of Guatemala, northern and eastern Belize, El Salvador, western and eastern Honduras, and northwestern and northeastern Nicaragua -- which are expected to receive rainfall >50mm below normal during the coming week (Fig 1). Maximum temperatures are forecasted to be at least 2 to 6^{o}C warmer than from Guatemala and Belize to northeastern Costa Rica. Maximum temperatures could be 6 to 8 ^{o}C warmer than normal in northern and central Guatemala, western and eastern Honduras, and northeastern Nicaragua. A majority of the area between Guatemala/Belize and northwestern Panama – outside of the Pacific-facing coasts of Honduras, Nicaragua, and Costa Rica -- is expected to receive maximum temperatures >90th percentile for 3 or more consecutive days. Decreased cloudiness (<50% cloud cover for 3 or more consecutive days) could increase the potential for abnormal maximum temperatures for Belize and northern and central Guatemala, and western Honduras.

Week 1 GEFS Rainfall Total Forecast and GEFS Rainfall Anomaly forecast (mm): 01 June – 07 June 2023



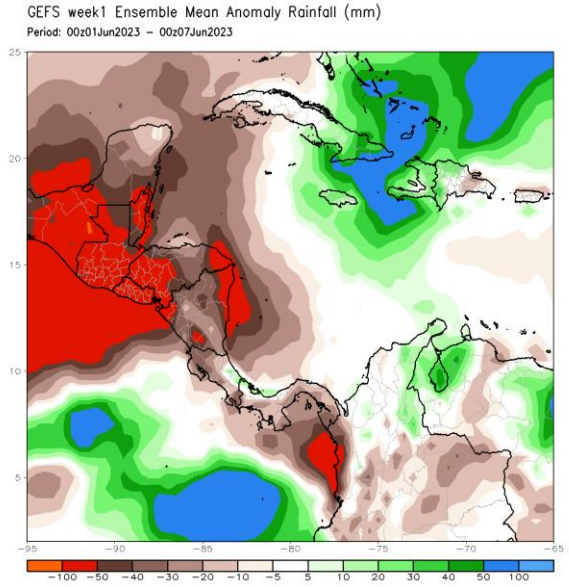


Figure 1: Source NOAA / CPC

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