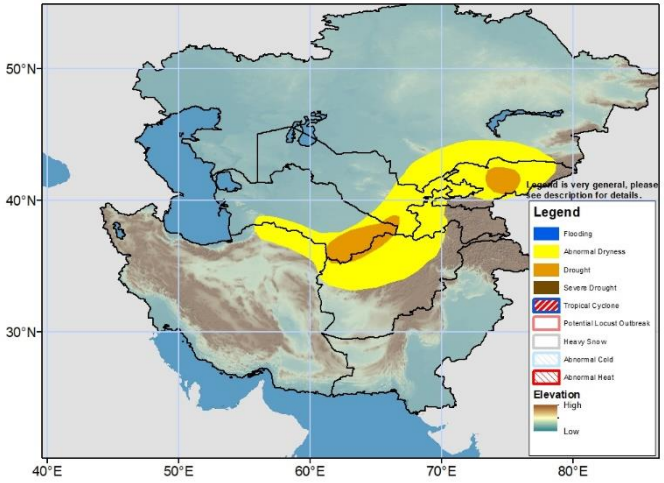
Climate Prediction Center's Central Asia Hazards Outlook
For USAID / FEWS-NET
18 – 24 May, 2023

Temperature:

Weekly average minimum temperatures were 2 to 8ºC warmer than average in Mangghystau, Qyzylorda, Qaraghandy, and Almaty provinces of Kazakhstan, over central & eastern provinces of Uzbekistan, and across southeastern provinces of Turkmenistan during the period 09 – 15 May 2023. The highest positive anomaly of minimum temperature reaching 8ºC was recorded in Uzbekistan. In contrast, 2-6ºC cooler than average minimum temperatures were observed at few places in central Kyrgyzstan, over eastern Tajikistan and northeastern Afghanistan. Minimum temperatures were up to -5ºC below freezing in the eastern extremes of Kyrgyzstan and eastern Tajikistan. Likewise, maximum temperatures were 2-8ºC warmer than average over much of Central Asia running across western Afghanistan, southeastern Turkmenistan, southern and central Uzbekistan, western Tajikistan, and the eastern half of Kazakhstan. On the other hand, northern and a few western border areas of Kazakhstan, eastern Tajikistan and few places in eastern Afghanistan experienced 2-4ºC cooler than average maximum temperatures. The southern lowlands of Afghanistan experienced the warmest afternoon temperatures exceeding 40ºC during 09 – 15 May 2023.

During the next week, a large portion of Central Asia is expected to experience warmer than average minimum and maximum temperatures. According to the GEFS model, minimum temperatures will be 2-4ºC warmer than average across western and northern regions of Afghanistan and over much of Tajikistan and Kyrgyzstan, while a few places in the border areas of Kazakhstan and Turkmenistan and eastern Kazakhstan will experience a slightly cooler than average minimum temperatures. Eastern Tajikistan will continue to experience 5-10ºC below freezing temperatures through this forecast period. Maximum temperatures are also predicted to follow similar spatial patterns, with warming of 2-4ºC above average temperatures in the southeastern parts of Central Asia (western and northern provinces of Afghanistan, central and southern Turkmenistan, central and southern Uzbekistan, Tajikistan, and Kyrgyzstan), and cooling of 1-2ºC below average temperatures limited to a few places in the border areas of Kazakhstan and Turkmenistan and eastern Kazakhstan. The warmest maximum temperature of 40-45ºC is forecasted for southern lowlands of Afghanistan.



Precipitation:

Light to moderate precipitation (10-25 mm) was observed at few places in Tajikistan and Kyrgyzstan, in border areas of northern and eastern Kazakhstan, and over central Turkmenistan and western Uzbekistan. Few places in southern Kazakhstan and eastern borders of Kazakhstan recorded moderate to heavy (25-50 mm) precipitation. While the precipitation recorded near the northern boundaries of Kazakhstan were above the long-term average, Kyrgyzstan and Tajikistan experienced drier than average conditions. Over the 30-day period, precipitation deficits exceeded 25-50 mm over southern Kazakhstan, eastern Uzbekistan, western Tajikistan and much of Kyrgyzstan. Deficits are much larger over the 90-day period, reaching 50-100mm over the cross-border areas of Afghanistan & Turkmenistan, eastern Uzbekistan, western Tajikistan, and over southern Kazakhstan. Large areas of Kyrgyzstan showed deficits of 100-200mm according to CPC Unified Gauge measurements. Based on USGS snow water equivalent (SWE) analysis, negative SWE anomalies persisted across eastern and northwestern Tajikistan, most of northeast and central Afghanistan, and western and eastern Kyrgyzstan. Because of the large 30-day and 90-day precipitation deficits, abnormal dryness polygon has been extended to cover large parts of Central Asia.

During the next week, the GEFS model forecasts light to moderate (10 to 25 mm) precipitation over Kazakhstan, which are above the long-term average values in northern and central parts of the country. Although up to 50mm heavy precipitation is forecasted over Kyrgyzstan and Tajikistan, these areas are likely to experience below average precipitation for the week, which will add up to the lingering dryness in the region. Up to 25 mm weekly total precipitation is expected in northeastern Afghanistan, which will be slightly below average for the 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. Questions or comments about this product 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