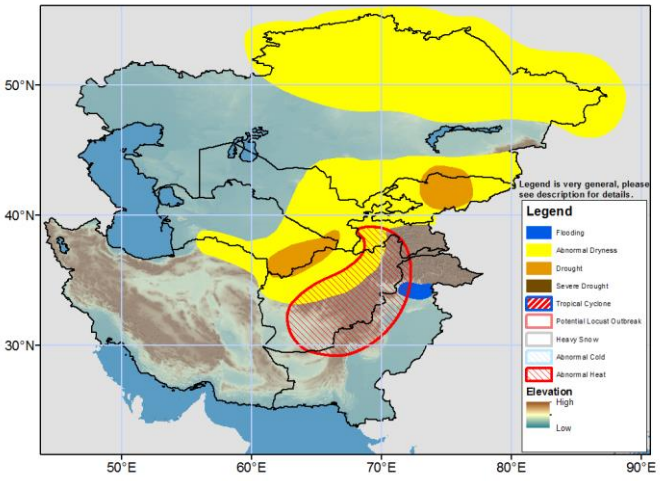
Climate Prediction Center's Central Asia Hazards Outlook
For USAID / FEWS-NET
22 – 28 June, 2023

Temperature:

Weekly average minimum temperatures were 2-8ºC warmer than normal from western to southern Kazakhstan, eastern and south-central Turkmenistan, eastern and central Uzbekistan, parts of eastern Iran, western Tajikistan, western and eastern Kyrgyzstan, western Pakistan, and southern and northern Afghanistan between 13 – 19 June 2023. Conversely, parts of central Tajikistan, east-central Afghanistan, and eastern and north-central Kazakhstan experienced cooler than normal minimum temperatures (2-6 ºC colder than normal). Furthermore, mean minimum temperatures were above freezing over most of Central Asia. Likewise, mean maximum temperatures in western, southern, central, and eastern Kazakhstan, Uzbekistan, Turkmenistan, western and eastern Kyrgyzstan, western Tajikistan, northern and western Afghanistan, and northern and eastern Iran were primarily 2-8 ºC warmer than normal (with the highest anomalies from south-central Kazakhstan to western Afghanistan). Eastern and central Turkmenistan, most of Uzbekistan, south-central and southwestern Kazakhstan, southern, western, northern, and east-central Afghanistan, eastern, central, and southern Iran, and most of the lower lying areas of Pakistan recorded mean maximum temperatures above 35ºC (and above 40 ºC in southern, western, and northern Afghanistan, central and eastern Turkmenistan, the Turkistan region of south-central Kazakhstan, central, eastern, and southwestern Iran, and parts of western and central Pakistan).

The GEFS model predicts mean minimum temperatures that are 2-6ºC warmer than average primarily over eastern and northern Tajikistan, most of Afghanistan (outside of northern portions of the country), southeastern Uzbekistan, parts of northern and western Pakistan, and southern and central Iran. Mean minimum temperatures are expected to be 2-6 ºC below normal in most of Kazakhstan, central Uzbekistan, and parts of eastern Turkmenistan. Likewise, mean maximum temperatures are predicted to be 2-6ºC warmer than average over parts of southeastern Kazakhstan, northeastern and southeastern Uzbekistan, central and southern Kyrgyzstan, Tajikistan, central, southern, and eastern Afghanistan, parts of eastern Iran, and parts of northern and western Pakistan. Conversely, most of southern Pakistan, northern, central, and western Kazakhstan, and far southeastern Iran could experience mean maximum temperatures up to 6 ºC below normal. Northeastern Tajikistan will likely record below freezing nighttime temperatures, along with some higher elevations of northern Pakistan. The GEFS model forecasts also indicate mean maximum temperatures will exceed 40ºC in southern, northern, and parts of western Afghanistan, northeastern Turkmenistan, southern and parts of eastern Iran, and much of western and central Pakistan. Maximum temperatures are expected to be more anomalous (4-8 ºC above normal) earlier in the forecast period from southern Afghanistan to southern Kyrgyzstan, with the largest anomalies from the Central Highlands of Afghanistan to southwestern Tajikistan. Similarly, below-average maximum temperature anomalies are expected to be largest (4-10 ºC below normal) earlier in the forecast period in northwestern and central Kazakhstan, western Uzbekistan, north-central and southwestern Turkmenistan, and southwestern Pakistan. Southwestern Tajikistan, central and eastern Afghanistan, and northern Pakistan may observe maximum temperatures that are above the 90th percentile for three or more consecutive days with light winds and little cloud cover.



Precipitation:

Much of Central Asia remained largely dry. According to the CPC Unified Gauge Analysis, northwestern and north-central Kazakhstan, eastern and western Kyrgyzstan, eastern and central Tajikistan, eastern Afghanistan, northwestern Iran, and central and northern Pakistan observed light to moderate precipitation up to 50 mm from 13 – 19 June 2023. The northeastern portion of the Punjab region of Pakistan observed up to 100 mm of rainfall, and the southern portion of the Sindh region observed up to 150 mm of rainfall due to Tropical Cyclone Biparjoy. Based on USGS snow water equivalent analysis, negative SWE anomalies persisted across eastern and northwestern Tajikistan, most of northeastern and parts of central Afghanistan, and parts of western and eastern Kyrgyzstan. Because of the continuing large 30-day/90-day precipitation deficits and degrading vegetation conditions, an abnormal dryness polygon covers western and northern Afghanistan, southern and eastern Turkmenistan, eastern and central Uzbekistan, western and northern Tajikistan, Kyrgyzstan, and north-central, northeastern, south-central, and southeastern Kazakhstan. A drought polygon covers eastern Turkmenistan, central Kyrgyzstan, and parts of southeastern Kazakhstan.

Northern and eastern Kazakhstan, northern, eastern, and southern Kyrgyzstan, northeastern Tajikistan, eastern Afghanistan, and parts of northern and central Pakistan are expected to receive light to moderate (10-50 mm) precipitation. The northern Punjab (including Islamabad) and central Khyber Pakhtunkhwa regions of Pakistan may observe precipitation rates around 50 mm in a 24-hour period and 7-day accumulations between 50-100 mm. Therefore, a flooding polygon has been drawn for this region. Below normal precipitation is expected to fall across much of eastern Kazakhstan, Kyrgyzstan, eastern and northern Tajikistan, and northeastern Afghanistan.

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