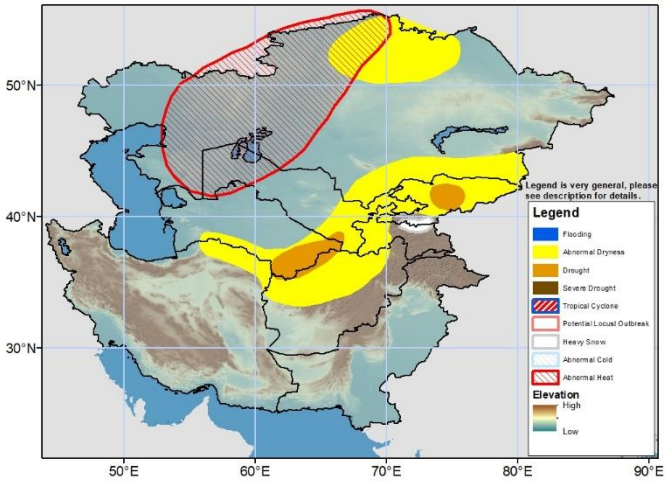
Climate Prediction Center's Central Asia Hazards Outlook
For USAID / FEWS-NET
1 – 7 June, 2023

Temperature:

Weekly average minimum temperatures were 2-6ºC warmer than the long term values over western Kazakhstan, western Turkmenistan, central and western Uzbekistan, and southeastern Afghanistan during 23-29 May 2023. On the other hand, a few areas in eastern Kazakhstan, central Kyrgyzstan, eastern Tajikistan, and parts of northeastern/eastern Afghanistan experienced cooler than average minimum temperatures. Furthermore, minimum temperatures were 0-5ºC below freezing in eastern Tajikistan and eastern borders of Kyrgyzstan. Likewise, maximum temperatures in western and northern Kazakhstan, western Uzbekistan, and western Turkmenistan were 2-8ºC warmer compared to their corresponding long-term average values. A few places in eastern Kyrgyzstan and eastern Tajikistan experienced 2-6ºC cooler than average daytime temperatures. Most of Turkmenistan and parts of southern Afghanistan recorded above 35ºC daytime temperatures during 23– 29 May 2023.

During the next week, the GEFS model predicts a substantial warming of both nighttime and daytime temperatures over most places in Central Asia. Accordingly, minimum temperatures will be 2-8ºC warmer than average over western, central and northern Kazakhstan, western Uzbekistan, and central and northern Turkmenistan. Likewise, maximum temperatures are predicted to be 2-8ºC warmer than average over much of Kazakhstan, Uzbekistan and Turkmenistan. On the other hand, most of Afghanistan and eastern Turkmenistan are predicted to experience cooler than average minimum temperatures. Eastern Tajikistan will likely record below freezing nighttime temperatures. GEFS model forecasts also indicate maximum temperatures will exceed 35ºC in southern Afghanistan and across Turkmenistan, Uzbekistan, and western and southern Kazakhstan. Due to the expected large increase in both minimum and maximum temperatures, an abnormal heat polygon is now placed over the western Uzbekistan and northern Kazakhstan.



Precipitation:

The western parts of Central Asia remained largely dry, while western, southeastern and north-central Kazakhstan, northeastern Kyrgyzstan, and central and western Tajikistan experienced wet conditions. According to CPC Unified Gauge measurements, these later areas received 10-25 mm light to moderate precipitation during 23-29 May 2023. On the other hand, according to CMORPH satellite estimates, northeastern Afghanistan (Badakhshan province) received heavy (50-75 mm) precipitation that could have caused localized flooding in the area as some ground reports suggested. Based on USGS snow water equivalent (SWE) analysis, negative SWE anomalies persisted across eastern and northwestern Tajikistan, most of northeastern and central Afghanistan, and western and eastern Kyrgyzstan. Because of the continuing large 30-day and 90-day precipitation deficits, abnormal dryness polygon has been extended to cover western and northern Afghanistan, southern Turkmenistan, southern Uzbekistan, western Tajikistan, Kyrgyzstan, and northern and southeastern Kazakhstan.

During the next week, eastern Kyrgyzstan, eastern half of Tajikistan and a few places in northeastern Afghanistan are expected to receive moderate to heavy (25-50 mm) precipitation during the forecast period. In addition, the GFS model predicts a total snowfall that accumulates to more than 30cm at a few eastern highlands of Kyrgyzstan and eastern Tajikistan. Light to moderate precipitation (5-25 mm) is predicted to cover the remaining parts of Kyrgyzstan, western Tajikistan, northern and eastern Afghanistan and northern and western borders of Kazakhstan. The heavy snowfall polygons are now updated and a new heavy snowfall polygon is placed in the eastern extremes of Kyrgyzstan and Tajikistan, where the GFS model indicates heavy snowfall and the GEFS model forecasts moderate to heavy precipitation over the highlands. Due to the continuing dryness over the past 30 days, a new abnormal dryness polygon has been added for northern Kazakhstan.

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