

Climate Prediction Center's Central Asia Hazards Outlook For USAID / FEWS-NET 23 March – 29 March, 2023

Temperature:

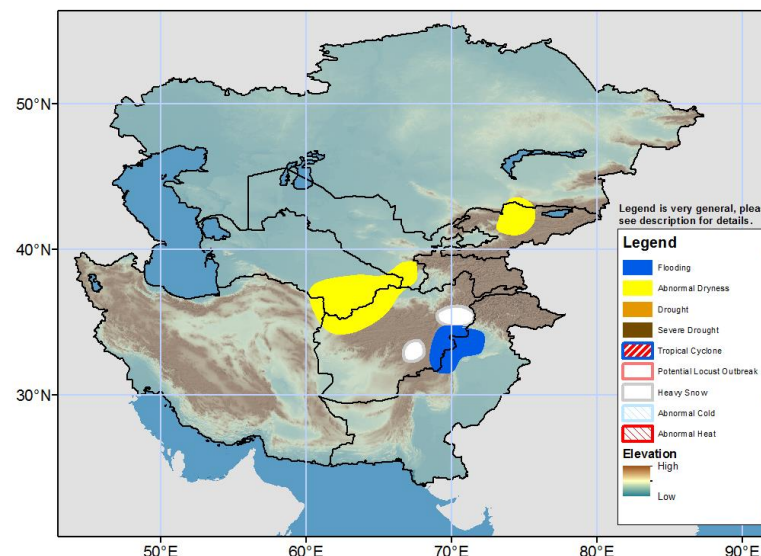
Weekly average minimum temperatures were above normal (4 to 8 °C) across most of Kazakhstan outside of north-central/southeastern portions, western/central/southern Uzbekistan, western/central Turkmenistan, and northwestern/northeastern Iran from 13 Mar – 19 Mar 2023, with larger anomalies (8 to 12 °C) situated in northeastern/northwestern Kazakhstan. Weekly average minimum temperatures were observed around -15 to -5 °C across higher elevations of Kyrgyzstan (>3000 m), higher elevations of eastern Tajikistan (>4000 m), northern and higher elevations of eastern Kazakhstan, and the higher elevations of northeastern Afghanistan (>4500 m). Minimum temperatures in higher elevations of eastern Tajikistan were up to 4 °C below normal.

The GEFS model forecasts above normal mean temperatures (1 to 6 °C) across southern/northern Kazakhstan, most of Turkmenistan, most of northern/western Kyrgyzstan, western/central Tajikistan, northern/central Afghanistan, northwestern/northeastern Iran, and far northern Pakistan from 22 Mar – 28 Mar 2023. Anomalies could exceed 6 to 12 °C above normal in northwestern Kazakhstan. Colder than normal mean temperatures (1 to 4 °C) are expected in east-central (primarily around Lake Balkhash) and northeastern Kazakhstan, higher elevations of eastern Kyrgyzstan, southern/eastern Afghanistan, central/southern Pakistan, and central/southern Iran. Weekly average minimum temperatures are forecast around -25 to 0 °C across higher elevations of central/northern/eastern Tajikistan, higher elevations of central/eastern/southern Kyrgyzstan, higher elevations of northeastern/central Afghanistan, and north-central/eastern Kazakhstan. Maximum temperature anomalies between 6 to 12 °C above normal are expected from western portions of Kazakhstan to northwestern Uzbekistan. Weekly average maximum temperatures are forecast around 20 to 30 °C in southwestern/south-central Kazakhstan, northern, western, and southern Afghanistan, most of Turkmenistan, lower elevations of central/southern/eastern Uzbekistan, and lower elevations of southwestern Tajikistan. Weekly average maximum temperatures are forecast to be between 30 to 35 °C across localized areas of southeastern Iran and across south-central/eastern Pakistan. Enhanced snowmelt due to anomalously high temperatures could increase runoff and streamflow throughout much of Central Asia. Throughout Afghanistan, this could result in further melting of the snowpack (currently about 0.5 to 1 meter below normal) and could increase the flooding potential for eastern Afghanistan.

Precipitation:

Light to moderate precipitation was observed across northern/eastern Kazakhstan (with heavy precipitation in southeastern Kazakhstan from the higher elevations of eastern Almaty to eastern Jetisu regions), central/eastern Afghanistan (with heavier precipitation in eastern regions near Kabul and due east), southwestern Turkmenistan, eastern Uzbekistan, western/central Tajikistan, and northern/eastern/western Kyrgyzstan. Higher elevations of western Iran, as well as northwestern Pakistan also received heavy precipitation from 13 Mar – 19 Mar 2023. Based on USGS snow water equivalent (SWE) analysis, negative SWE anomalies exist across eastern Tajikistan, northeastern/western/central Afghanistan, and most of Kyrgyzstan outside of lower elevations in west-central portions of the country. Low standardized precipitation index (SPI) values and precipitation accumulation over the last two months supports the extension of the abnormal dryness polygon into northwestern Afghanistan along the border with Turkmenistan.

The GEFS weekly ensemble mean forecasts moderate to heavy precipitation across northwestern Tajikistan, throughout most of central/northwestern/eastern Afghanistan, northern Pakistan, and northern/western Iran from 22 Mar – 28 Mar 2023. The GFS deterministic model predicts heavy snowfall across higher elevations of central/northeastern Afghanistan. The heaviest rainfall is expected in eastern Afghanistan, from the Nangarhar to the Paktika provinces (and including Kabul). Accumulations of 75-100 mm of rainfall could fall from the Nangarhar to the Khost provinces and includes Pakistan's Fata province.



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.