





Climate Prediction Center's Central Asia Hazards Outlook For USAID / FEWS-NET 22 December, 2022 – 28 December, 2022

Temperature:

Weekly average minimum temperatures were below normal across central and eastern Kazakhstan from 13 December – 19 December 2022, including 8 to 12 °C below normal from southern Ulytau to western Jetisu and eastern Pavlodar to northern East Kazakhstan. Minimum temperature anomalies between 2 to 6 °C below normal also extended throughout most of central Kazakhstan, western Uzbekistan, northern Turkmenistan, eastern and central Kyrgyzstan, eastern Tajikistan, and western Afghanistan. Slightly above normal minimum temperatures were observed across localized areas of northwestern Tajikistan and northwestern Kazakhstan (not exceeding 2-4 °C above normal). Weekly average minimum temperatures were observed around -20 to -30 °C across central and northeastern Kazakhstan, as well as eastern Kyrgyzstan. Minimum temperatures were observed around -25 to 0 °C across the rest of Kyrgyzstan, northwest, central, and eastern Tajikistan, the rest of Kazakhstan, Uzbekistan, northern Turkmenistan.

The GEFS model forecasts below normal mean temperatures (2-8 °C below normal) across southern and eastern Kazakhstan from 22 December – 28 December 2022. The largest anomalies could extend from the vicinity of Lake Balkhash to the region of East Kazakhstan. Below normal mean temperatures (1-4 °C below normal) are also expected in eastern and central Uzbekistan, most of Turkmenistan, central Tajikistan, central and eastern Kyrgyzstan, and western and northeastern Afghanistan. Above normal mean temperatures are expected (2-6 °C above normal) in central and eastern Afghanistan, and northern and northwestern Kazakhstan, with the largest anomalies (4-6 °C above normal) in West Kazakhstan and North Kazakhstan. Weekly average minimum temperatures are forecast around -25 to -15 °C across northeastern Kazakhstan and eastern and central Kyrgyzstan. Northeastern Afghanistan and eastern Tajikistan could experience minimum temperatures between -30 to -25 °C. Minimum temperatures are forecast around -15 to 0 °C across western Kyrgyzstan, the rest of Kazakhstan (except southwestern portions), most of Uzbekistan, northern Turkmenistan, and central and northeastern Afghanistan. An abnormal cold hazard is posted across eastern Kazakhstan from the vicinity of Lake Balkhash to East Kazakhstan.

Precipitation:

Light to moderate precipitation (2 to 25 mm) was observed across northern and especially northeastern Kazakhstan from 12 December – 18 December 2022. Based on USGS analysis, positive snow depth and SWE anomalies currently exist across eastern Kazakhstan, central Tajikistan, western Kyrgyzstan, and in northern Afghanistan.

The GEFS weekly ensemble mean forecasts light to moderate precipitation across northern and southeastern Kazakhstan, northern and western Kyrgyzstan, and western, central, and southern Afghanistan. Moderate to heavy precipitation is also expected in western Iran from 22 December -28 December 2022. An abnormal dryness polygon has been placed from northern Afghanistan to western Kyrgyzstan and in Afghanistan's western province of Herat due to low SPI values (>0.7 standard deviations below the mean) and low monthly precipitation accumulation (25-50% of normal).

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, <u>wassila.thiaw@noaa.gov</u>. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdin@usaid.gov

