Above-average precipitation and temperatures through mid-December may support winter wheat planting

Key Messages

- Below-average precipitation conditions are expected across most parts of the country till December 5, 2024, except for near-average precipitation conditions in Badakhshan in the northeast **(Figure 1)**.
- A mix of above- and below-average snow depth conditions is seen over the higher elevations in the eastern, northeastern, and central water sheds as of November 25, 2024. Below-average snow depths are visible over lower elevations in some in the northern, central, and southern watersheds as of the reporting date. Positive snowpack development is observed in Panj basin while it is below-average in Kabul basin as of the reporting date (**Figure 2**).
- Borderline **La Niña conditions are forecast** during December 2024 - February 2025. These will most likely be followed by ENSO-neutral conditions through the end of July-September 2025. Cumulative precipitation will most likely be below-average for 2024/25 winter wet season (**Figures 3**) and the same is expected to continue till the end of the 2025 spring season. Consequently, below-average snowpack development, snow depths, and snow water volumes (SWV) may be seen throughout the 2024/25 precipitation season.
- **ECMWF** weekly forecasts indicate no tilt of above- or below-average precipitation in most parts of the country till December 16, 2024, except for higher likelihood of below-average precipitation in the western, southwestern, and southern parts of the country till December 9, 2024. There is a likelihood of above-average precipitation in the northeast during December 2-9, 2024 (**Figure 4, left and right insets**). The likelihood of average precipitation during the forecast period ending December 16, 2024, may help winter wheat planting activity except in the southwest.
- As per field reports, the progress of 2024/25 winter wheat planting has been somewhat better than that during 2023/24 as of the reporting date. Field reports also indicate that the winter wheat planting window may be extended through the end of December 2024 taking advantage of the average precipitation and above-average temperatures during this period.
- Above-average temperatures are forecast throughout the country from December 2024 – February 2025 (Figure 5). Forecasts of below-average precipitation coupled with higher-than-normal temperatures through spring 2025 (March to May) may lead to below-average vegetative conditions in the rainfed cropped areas and pastoral areas during this same period. Above-average temperatures during April-May 2025 may cause moisture stress in rainfed crops and rangelands and reduce water availability for crop water use in these areas. It is important to note that despite the forecasts of above-average temperatures and below-average precipitation, there is a wide range of possible outcomes by the end of the season depending on the regional storms during 2024/25 spring and summer months.

Update on Seasonal Progress

Current conditions

As per field reports, land preparation and winter wheat planting activities were supported by good precipitation and soil moisture conditions in the first half of November. However, during the third week of November there were reports of a slight reduction of agricultural activities in areas that received below-average precipitation. Field reports al-

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so indicate that the current winter wheat planting has been somewhat better than that during 2023/24 season as of

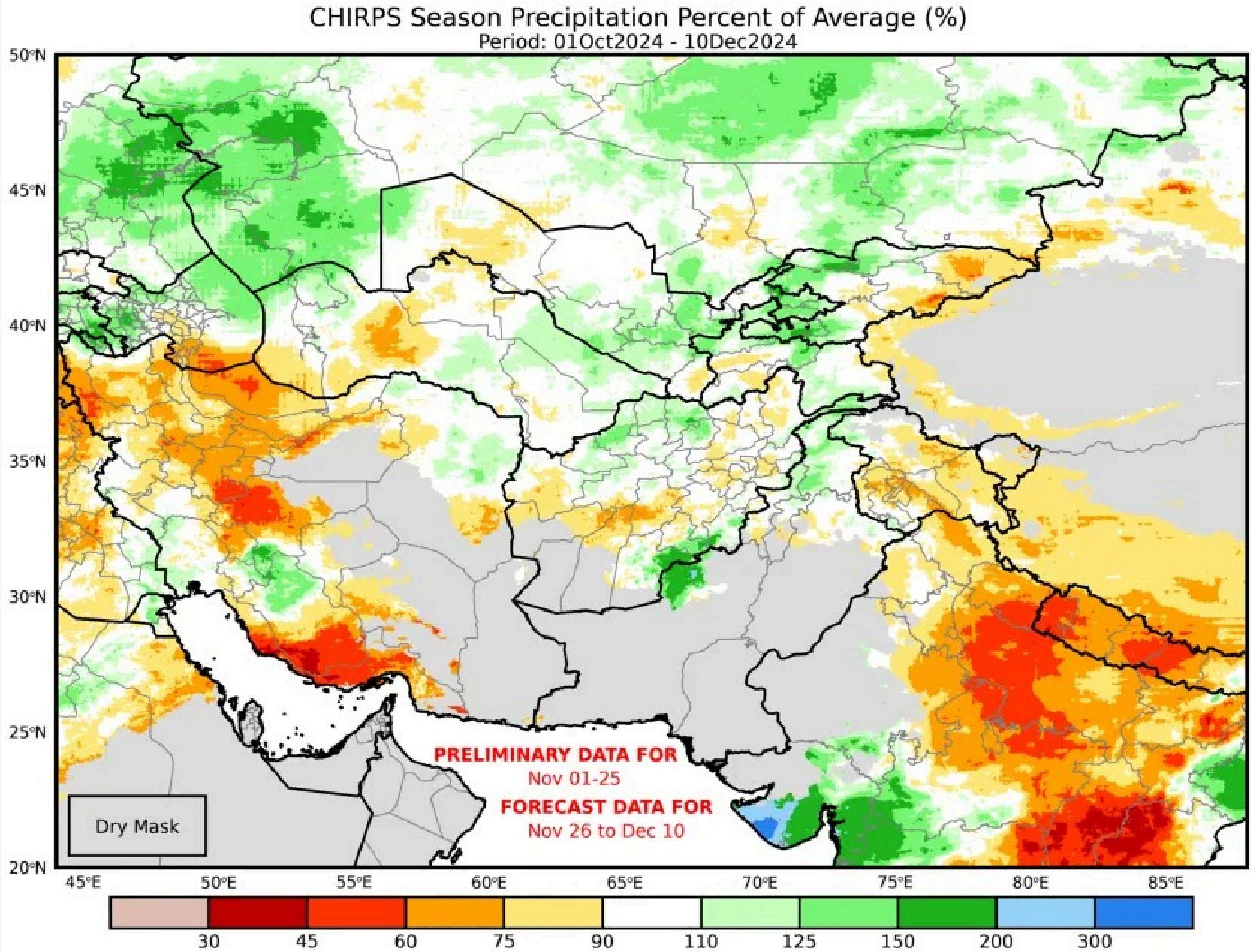
support wheat planting before the onset of winter.

Precipitation

Cumulative precipitation from October 1 to December 5, 2024, is expected to be below-average in most parts of the country as of the reporting date. Majority of the northwestern, northern, central, northeastern, eastern, and southern areas may receive 45 to 75 percent of the average by the end of the month. Small negative cumulative precipitation anomalies may be present over higher elevations in the northeast till the end of this month. Parts of the west and southwest are yet to receive precipitation as of the reporting date (**Figure 1**).

Figure 1

CHIRPS season precipitation percent of average



Light green to violet colors indicates cumulative precipitation above normal while light brown to red colors indicates cumulative precipitation below normal.

October 1 – December 10, 2024

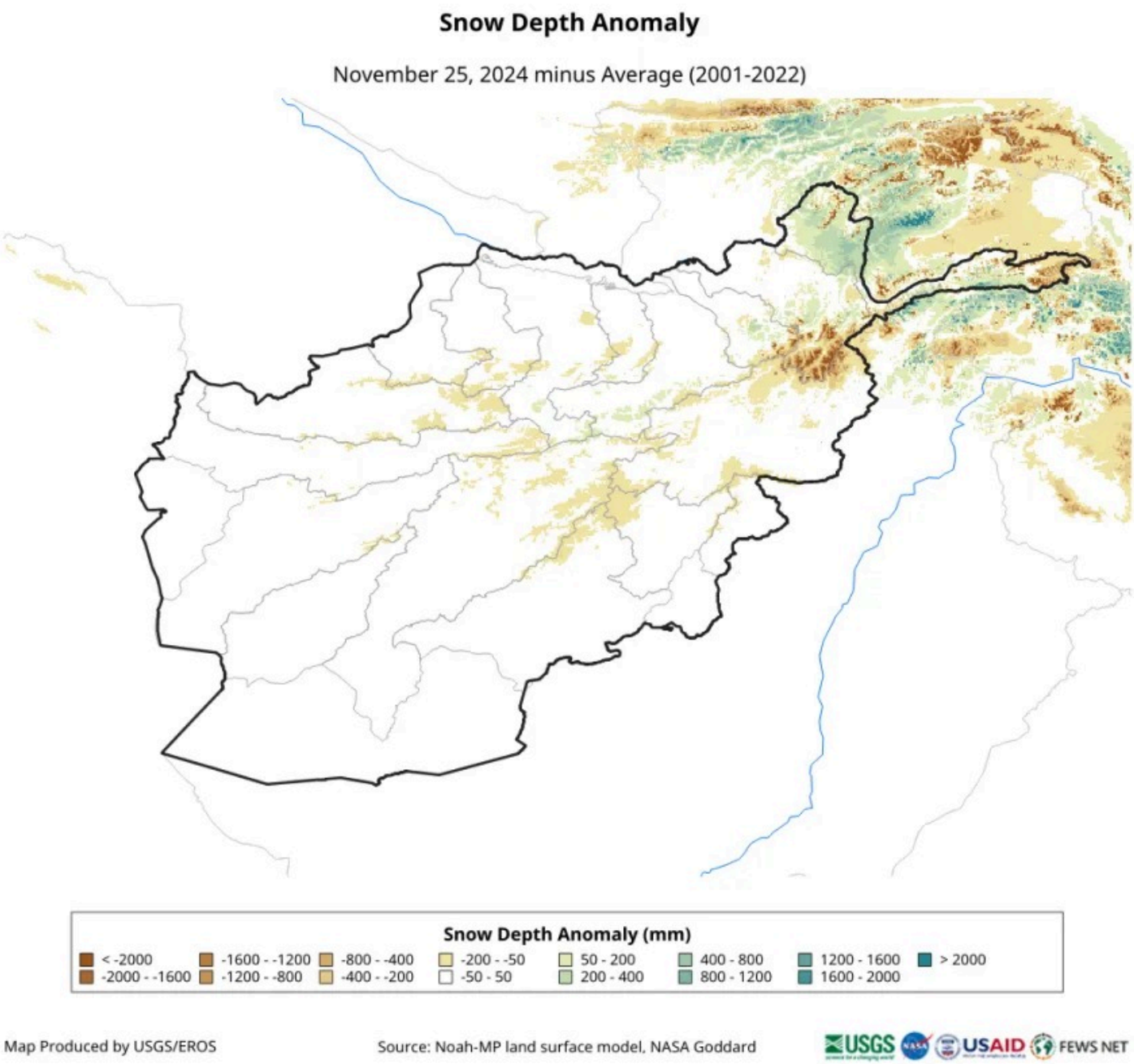
Source: UCSB CHC

Snow depth and snow water volume

Average snow depths are observed over higher elevations in the northeast especially in Panj, Kokcha Ab_i_Rustaq, and Khanabad basins while they are noticeably below-average over higher elevations in the Kabul basin as of the reporting date. Further, slightly above-average snow depths are seen over higher elevations of central Afghanistan while below-average snow depths are observed over lower elevations of the northern and southern parts of the country as of the reporting date (**Figure 2**). **Snow water volumes** normally begin to increase from early November in Panj, Kokcha_ab-i-Rustaq, Khanabad, and Kabul basins however they are either at record early season minimums or below-normal levels as of the reporting date.

Figure 2

Snow depth anomaly difference (mm) relative to the average of 2001-2022



As of November 25, 2024

Source: USGS/NASA

Forecast

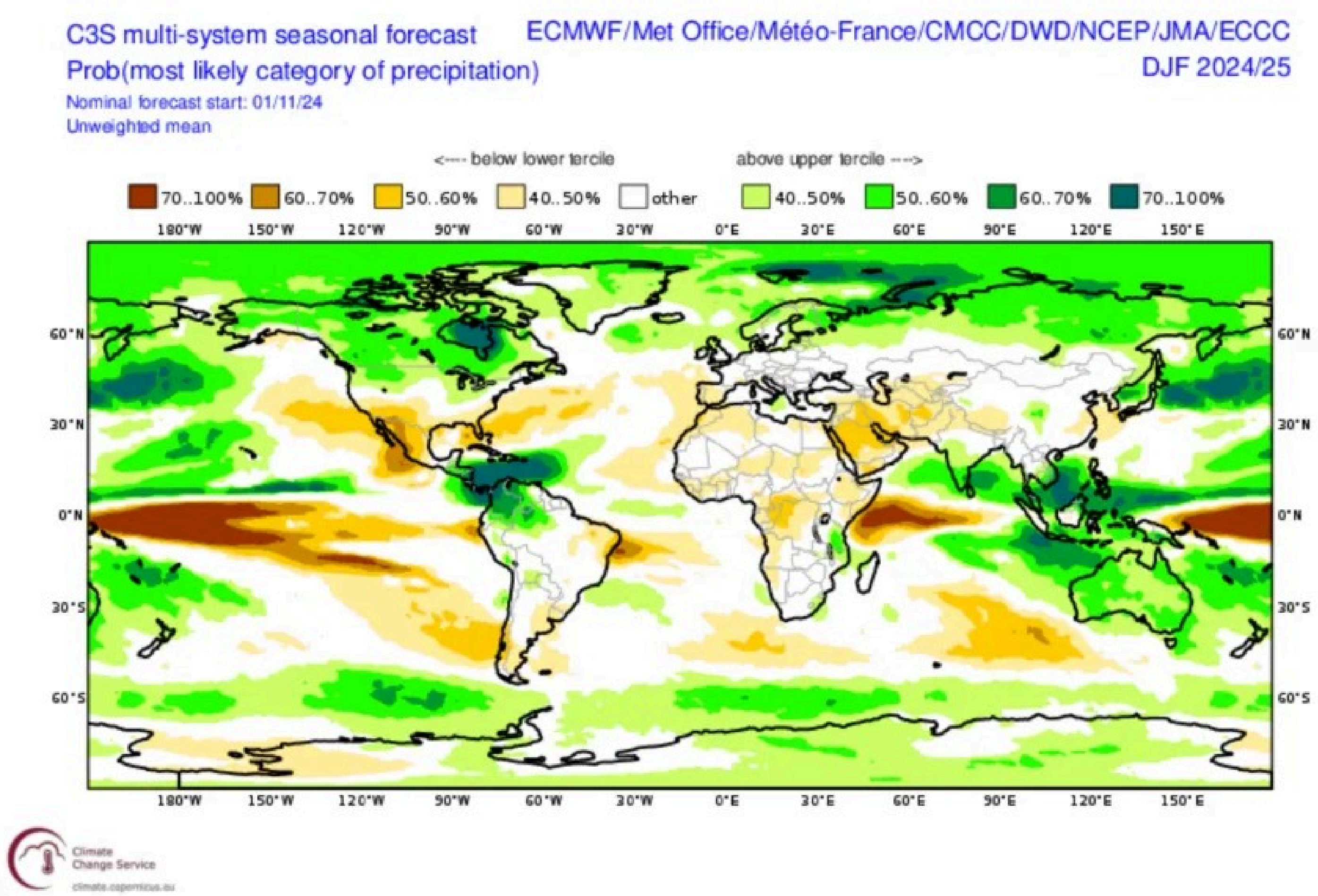
Precipitation

Cumulative precipitation for the 2024/25 winter wet season (October 2024 – February 2025) is expected to be below-

2024 through May 2025, a wide range of possible outcomes are possible during the 2024/25 winter wet season. ECMWF weekly precipitation forecasts till December 16, 2024. indicate no tilt for above- or below-average precipitation over most of the country except for below-average precipitation in the southwest (**Figure 4, left and right insets**). The expected average precipitation during the forecast period will improve soil moisture conditions and promote winter wheat planting activities.

Figure 3

Copernicus Climate Change Service (C3S) multi-system seasonal precipitation forecast probabilities for December 2024 through February 2025 as of November 1, 2024



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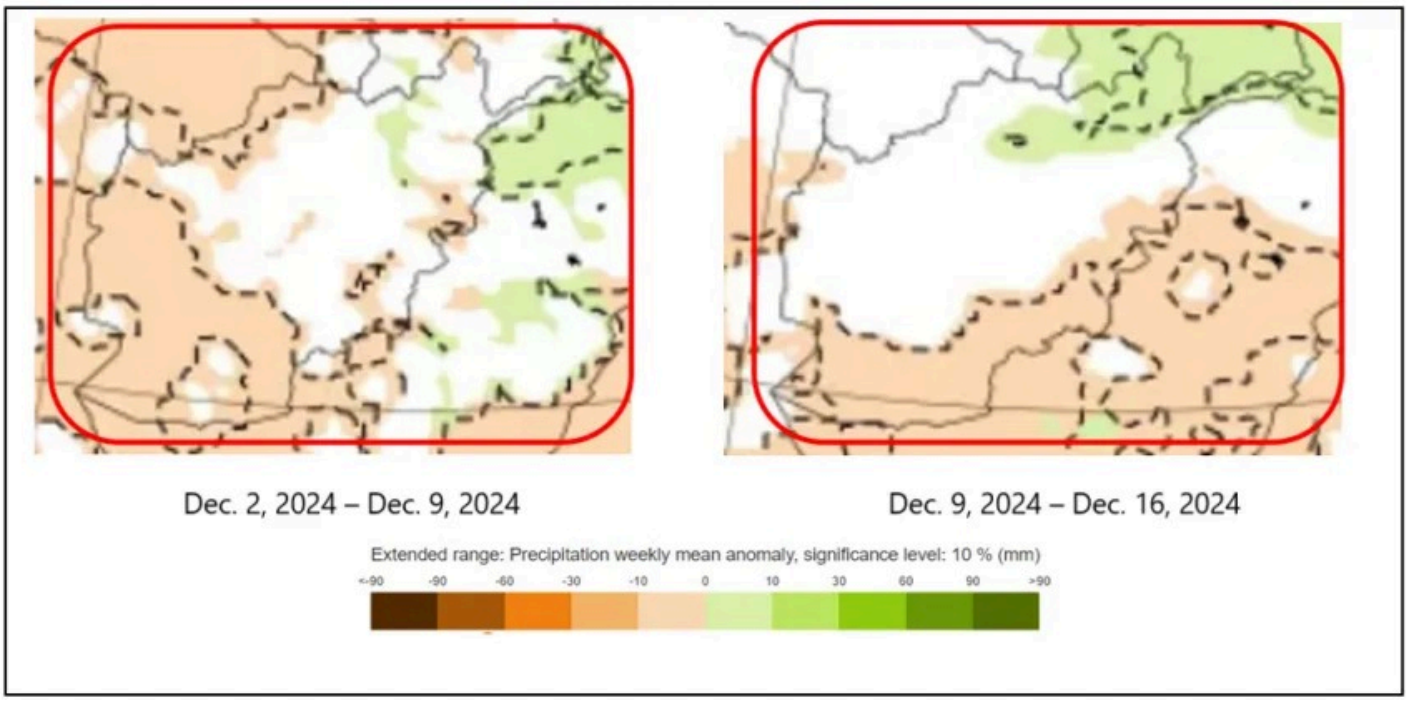
Source: Copernicus Climate Change Service

Figure 4

Weekly mean precipitation forecasts made for December 2 - 9, 2024, and December 9 – 16, 2024, made on November 27, 2024



As of November 27, 2024

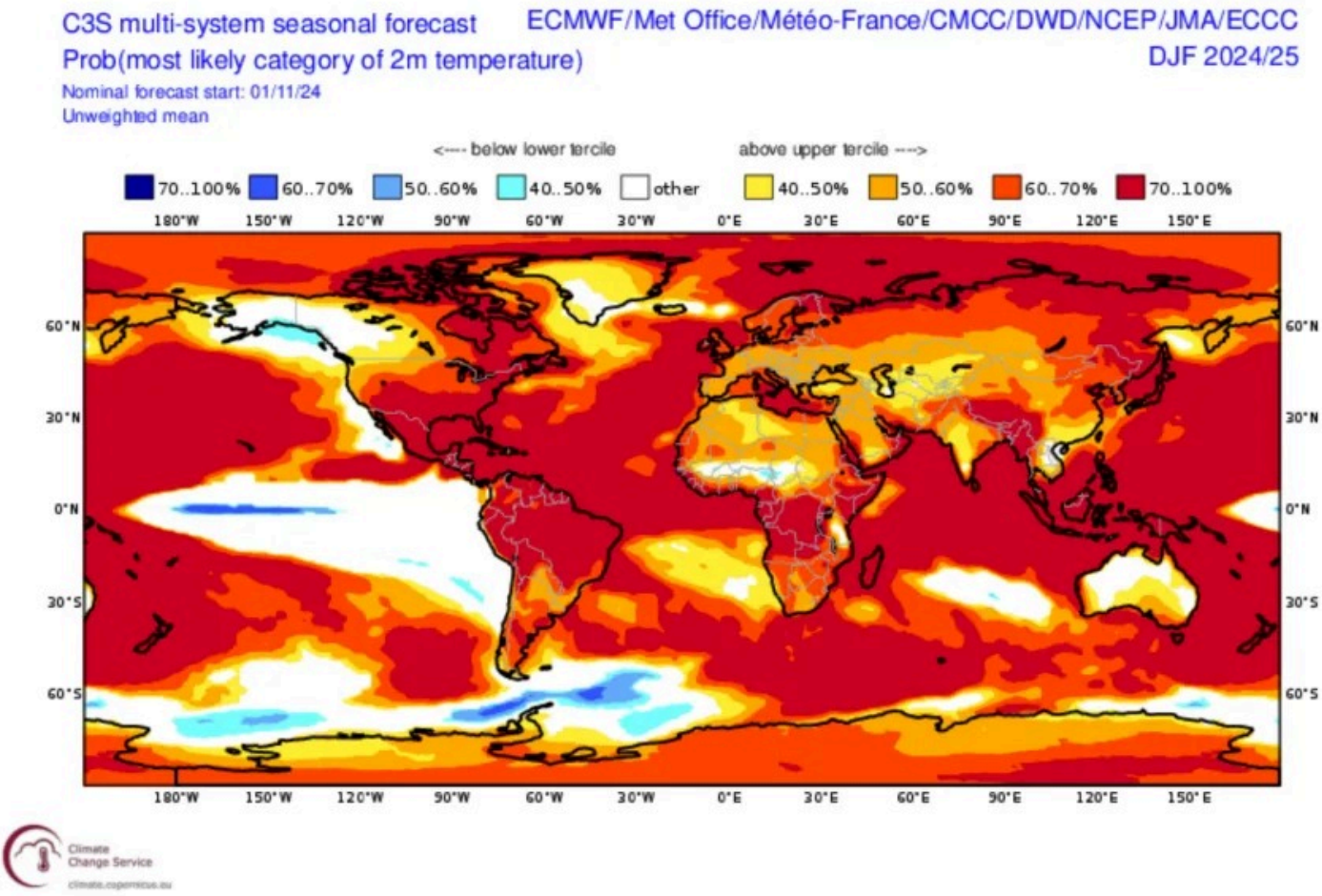
Source: ECMWF Forecast System

Temperature

Temperature forecasts for December 2024 – February 2025 as of November 2024 indicate a high probability of above-average temperatures across the country (**Figure 5**). As per field reports, the normal winter wheat planting ends by mid-December but the forecast of above-average day time temperatures may extend the winter wheat planting window to the end of December. On the other hand, persistent above-average temperatures would lead to early snow pack depletion, resulting in reduced water availability for irrigated crop water use, and moisture stress in rainfed crops and rangelands during spring and summer months.

Figure 5

Climate Change Service (C3S) multi-system seasonal temperature forecast probabilities (2 m temperature) for December 2024 through February 2025 as of November 1, 2024.



Light yellow to red indicates likelihood of warmer temperatures in the upper tercile, and cyan to dark blue indicates likelihood of cooler temperatures in the lower tercile.

As of November 23, 2024

Source: Copernicus Climate Change Service

Seasonal Monitor

FEWS NET's Seasonal Monitor reports are produced for Central America and the Caribbean, West Africa, East Africa, Central Asia, and Somalia every 10-to-30 days during the region's respective rainy season(s). Seasonal Monitors report updates on weather events (e.g., rainfall patterns) and associated impacts on ground conditions (e.g., cropping conditions, pas-