

Below-average precipitation and above-average temperatures are most likely for the 2022-23 wet season

KEY MESSAGES

- Higher elevations in Badakhshan, Takhar, and Ghor received normal precipitation while below-average precipitation was observed in the eastern and central provinces (**Figure 1**). Negligible precipitation was received in the areas under the dry mask.
- A [La Niña Advisory](#) has been issued by NOAA. La Nina is likely to persist into Northern Hemisphere Winter 2022-2023 and will increase the likelihood of below-average precipitation in Afghanistan (**Figure 2**).
- Normally, winter wheat planting starts earliest in the northeastern and eastern parts of the country. It is supported by precipitation that begins in early October and progresses westward. (**Figure 3**). Due to lack of sufficient precipitation and below-average soil moisture until now, winter wheat planting activity is below-average in the above areas as per key informants in the field.
- Below-average precipitation throughout the 2020-2021 and 2021-2022 wet seasons has severely depleted surface and ground water resources. The forecast of a prolonged dry spell may shorten the planting-window of winter wheat.
- Forecasts of below-average precipitation and above-average temperatures throughout the 2022-23 season may lead to below-normal snowpack development, which would reduce snow water volumes, runoff, and further reduce reservoir levels (**Figures 4 and 5, Kajaki Reservoir**).
- Rainfed wheat cultivation in the northern wheat belt is most likely to be below-average for a third consecutive season due to La Nina conditions. Pasture resources will most likely be adversely affected by the below-average precipitation and above-average temperatures conditions during spring.

Figure 1: October 1 – October 20, 2022, CHIRPS precipitation percent of average. Source: UCSB/CHC.

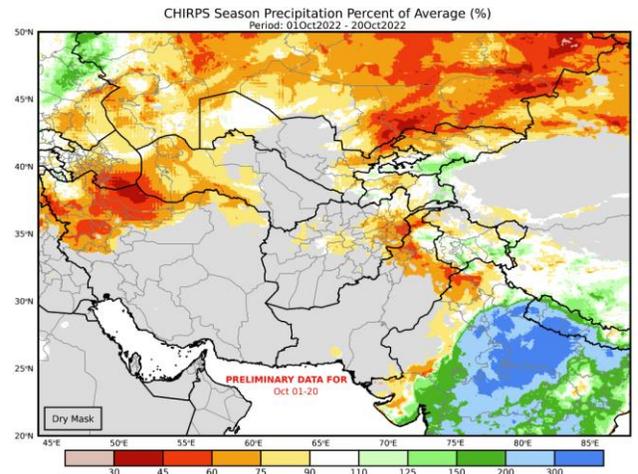
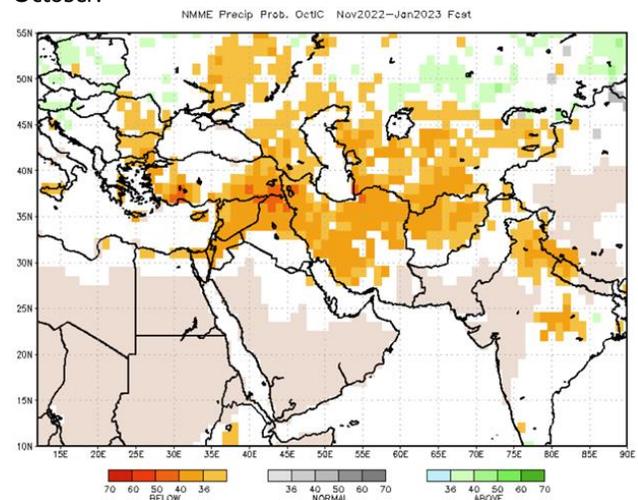


Figure 2: The North American Multi-Model Ensemble precipitation forecast for November 2022-January 2023 made in October.



Source: NOAA CPC

Figure 3: Afghanistan crop calendar. Source: FEWS NET

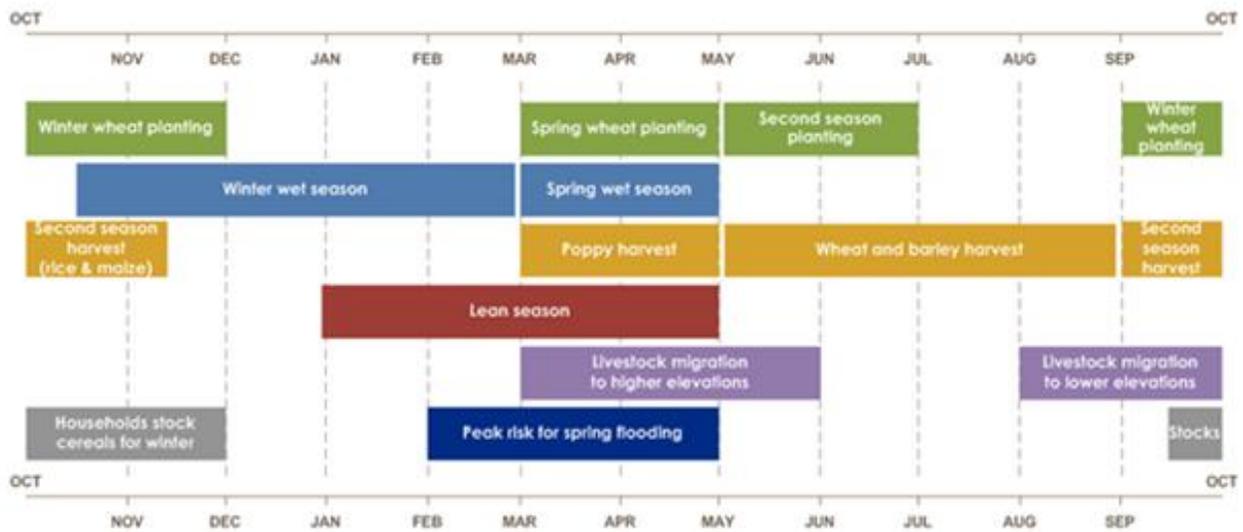


Figure 4: Kajaki Reservoir water level in meters as of September 25, 2022. Data points marked in red correspond to the satellite images in Figure 5. Source: Database for Hydrological Time Series of Inland Waters.

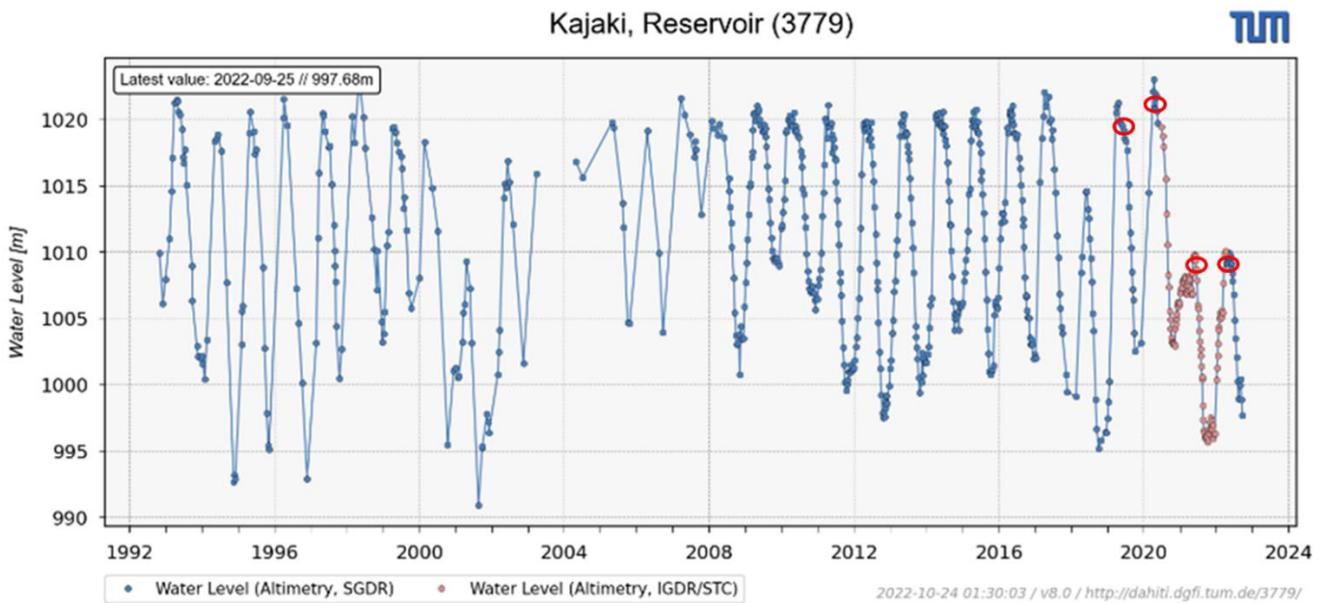


Figure 5: Satellite images of Kajaki Reservoir surface extents on dates in the month of May in 2019, 2020, 2021, and 2022, as marked in Figure 4. Drought conditions in 2021 and 2022 are clearly evident. Source: USGS EROS.

