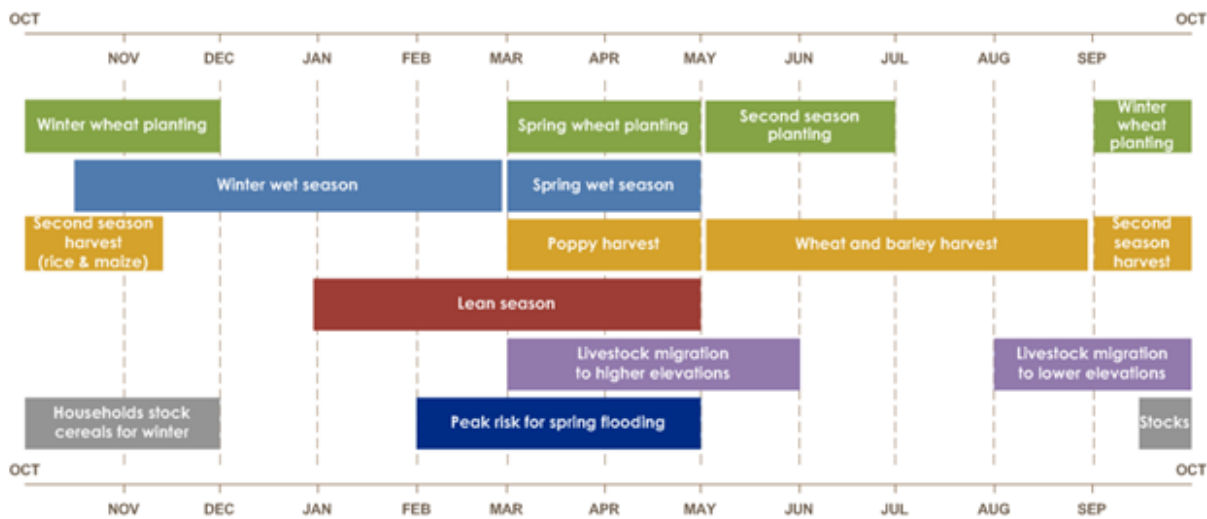


*Rainfall was sufficient during final weeks of winter wheat planting*

**KEY MESSAGES**

- Well distributed rainfall continues to ensure favorable moisture conditions for farmers to complete winter wheat planting. Above average rainfall and temperatures have been observed since the beginning of 2019/20 winter wet season till December 10.
- Snow accumulation is above average in the basins in the east and central highlands but below average in parts of the northeast mainly due to excess snowfall in the east and deficit in the northern parts of the country.
- Snow water volumes have just begun increasing in the east and northeastern basins while they are yet to begin accumulating in the rest. Snow water volumes in the eastern basins are above average while those in the north are below average.
- Average precipitation and above average temperatures are expected during December 2019 through February 2020 due to prevailing ENSO-neutral conditions.

**SEASONAL CALENDAR IN A TYPICAL YEAR**



Source: FEWS NET

**UPDATE ON SEASONAL PROGRESS**

**Precipitation anomalies:**

Strong rainfall performance continued till December 05 with positive cumulative precipitation anomalies between 50 and 75 mm in the central, east, northeast provinces, and between 10 and 25 mm positive anomalies in Daykundi, Ghazni, Uruzgan and Zabul provinces in the south. On the other hand, slightly below average anomalies have also been observed in parts of Jawzjan, and SariPul provinces in the north during this period (Figure 1).

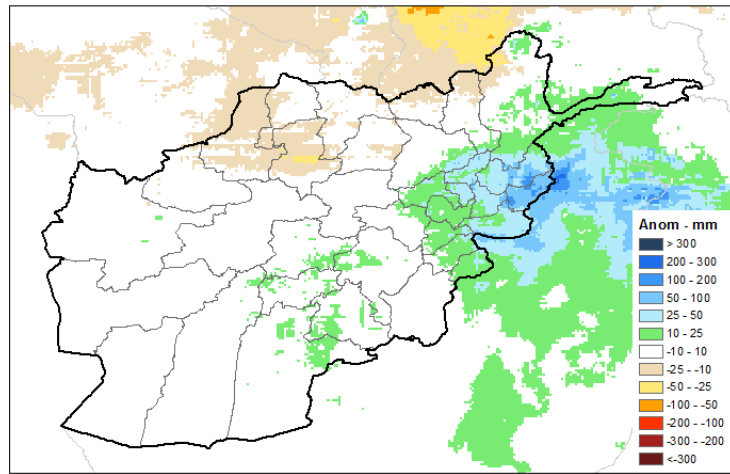
The above average rainfall till December 05 has provided favorable moisture conditions for farmers completing winter wheat planting across the country.

**Snowpack and snow water volume:**

Slightly positive snow depth anomalies have been observed in the areas of the eastern and central highlands (Daykundi, Ghazni, Kunar, Laghman, Nuristan, Panjsher, and Ghazni) while negative snow depth anomalies are noticeable in the northern portions of Badakhshan, southern parts of Kunduz, Samangan, Sari Pul, and Takhar provinces as of December 10 (Figure 2).

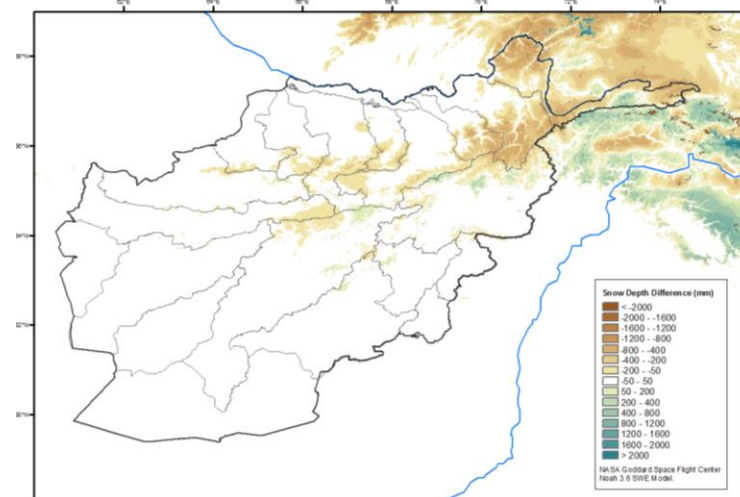
Snow water volumes started increasing in the recent weeks in the Kabul, Khanabad, Kokcha-Ab\_i\_Rustaq and Panj basins in eastern Afghanistan while they are yet to begin in the rest of country. The snow water volumes in the Kokcha\_Ab-i-Rustaq, Khanabad and Khulm basins in the north are below average due to negative precipitation anomalies in cumulative snow depth in the region. On the other hand, Kabul basin is showing above average snow water volume because of consistent good precipitation in the region (Figure 3).

**Figure 1.** October 1- December 05, 2019 cumulative precipitation anomaly relative to the average of 1981-2010 in mm.



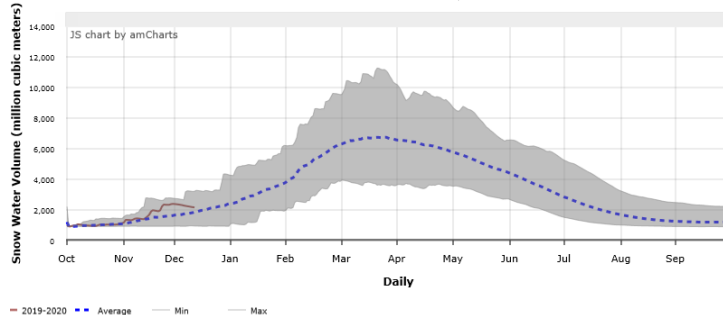
Data: CHIRPS version 2.0 prelim., Source: USGS/UCSB

**Figure 2.** Snow depth difference anomaly from average (2002-2016) in mm as of December 10, 2019.



Source: USGS/NASA

**Figure 3.** Daily progression of snow water volume in million cubic meters in Kabul basin as of December 10, 2019.



Source: USGS/NASA

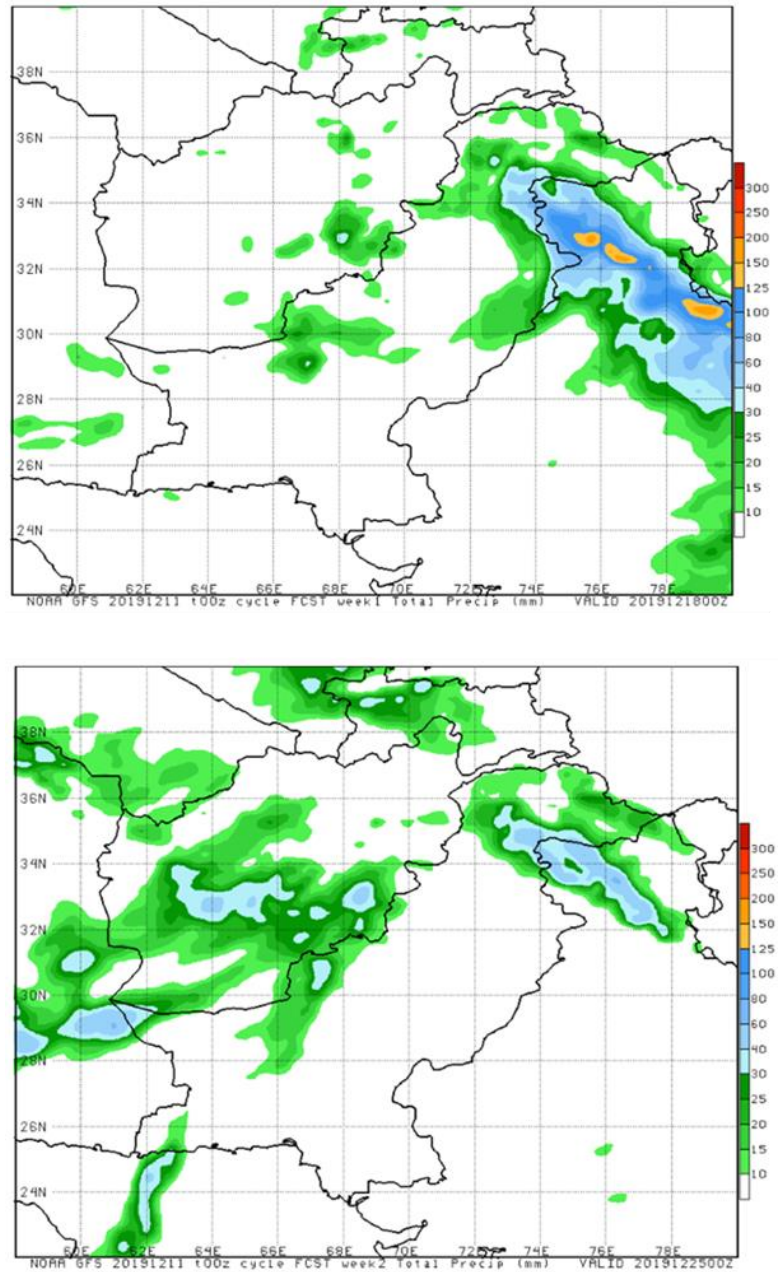
**FORECAST**

**Precipitation:**

According to the Global Forecast System 7-day total precipitation forecast, dry weather is expected across the country except 10 to 20 mm precipitation in a few places in Ghazni and Paktya provinces in the week ending December 18 (top panel, **Figure 4**).

During the second week of the forecast ending December 25, 20-40 mm precipitation is expected over parts of central highlands, southwest, south and west provinces while dry weather is expected in most of east, north, and northeast provinces (bottom panel, **Figure 4**).

**Figure 4.** The Global Forecast System 7-day forecasts of total precipitation in mm for the periods ending December 18 (top panel) and December 25, 2019 (bottom panel).

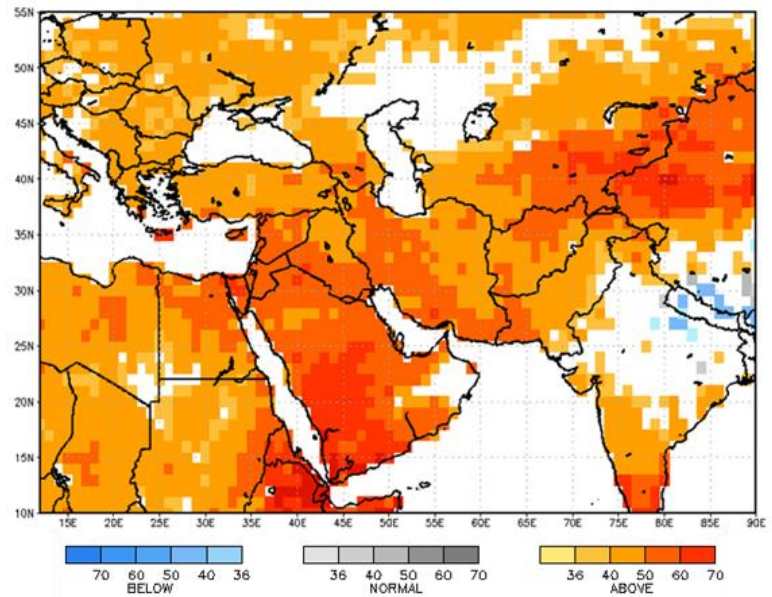


Source: NOAA CPC

**Temperatures :**

Above average temperatures have been observed from the beginning of the 2019/20 winter wet season through December 10. The North American Multi-Model Ensemble forecast for January-March 2020 indicates relatively high probability of above average temperatures in and around Afghanistan (Figure 5). The forecast of above average temperatures during January through March 2020 would be beneficial for rapid germination-vegetative growth of winter wheat.

**Figure 5.** The North American Multi-Model Ensemble temperature (<sup>0</sup>C) forecast for January-March 2020 with December initial condition.



Source: NOAA CPC