FEWS NET
FAMINE EARLY WARNING SYSTEMS NETWORK

USGS
science for a changing world

AFGHANISTAN Seasonal Monitor

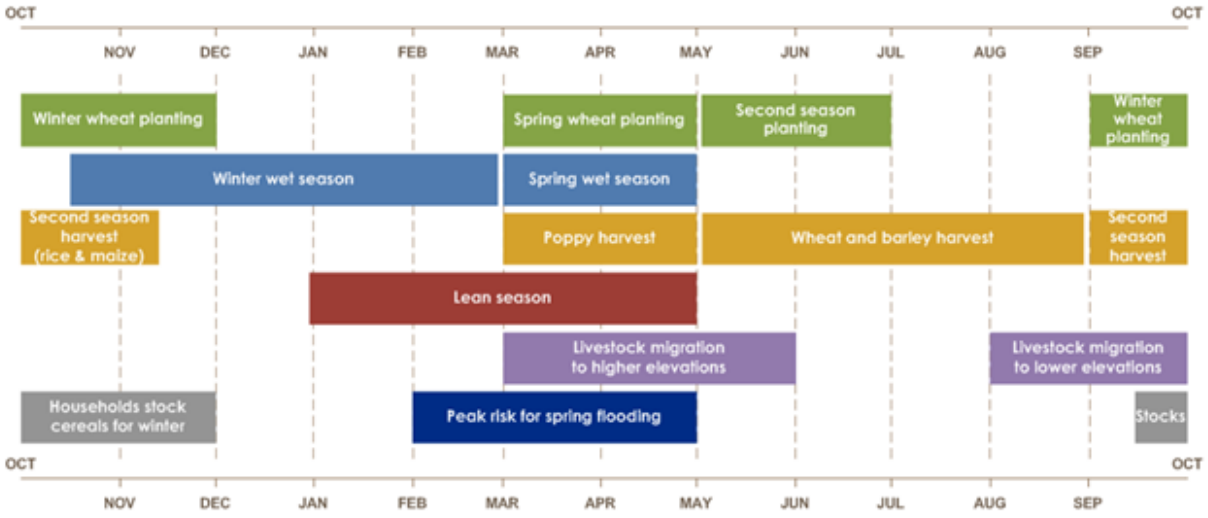
November 18, 2019

Favorable rainfall during late October-early November facilitates winter wheat planting

KEY MESSAGES

- Above average rainfall during late October-early November well supported winter wheat planting. The forecast of widespread precipitation during the latter half of November will be very useful for healthy progress of winter wheat planting.
- ENSO-neutral conditions are predicted between October 2019 and June 2020. Seasonal forecast models predict precipitation to be above-average till the end of December. For the season overall, average rainfall and above-average temperatures are expected during the forecast period in the region.

SEASONAL CALENDAR IN A TYPICAL YEAR



Source: *FEWS NET*

FEWS NET Afghanistan
fewsinquiry.afghanistan@fews.net
www.fews.net/afghanistan

UPDATE ON SEASONAL PROGRESS

Precipitation anomalies:

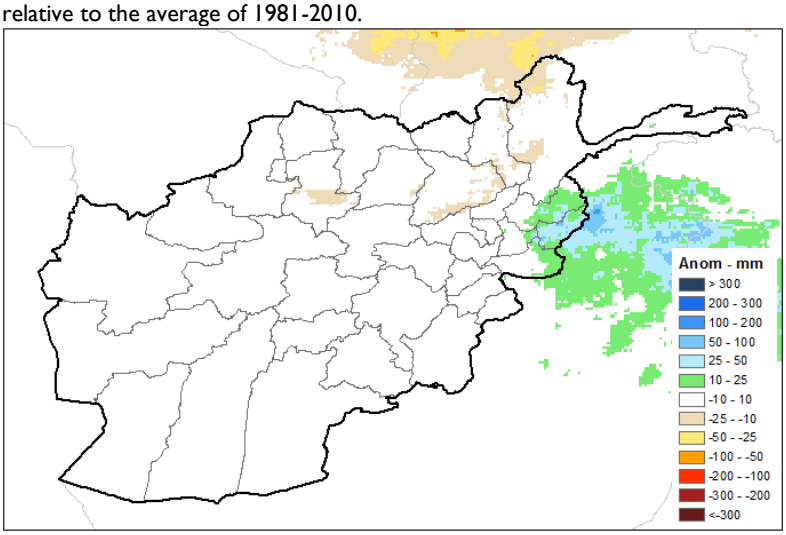
The 2019/20 winter wet season began with well-distributed rainfall across the country between late October and mid-November. The cumulative precipitation anomalies during this period (**Figure 1)** indicate positive anomalies (10-50 mm) in the northeast provinces (Kunar, Laghman, Nangarhar, and Nuristan) while average conditions are observed in the rest of the country. The rainfall has facilitated healthy progress of winter wheat planting in the country.

Snowpack and snow water storage:

Figure 2 shows the spatial distribution of snow depth (m) as of November 17. High elevation snow depths of 1.0-2.0 m are observed in the northeast; while snow depths of 0.2-0.4 m are seen over central highlands.

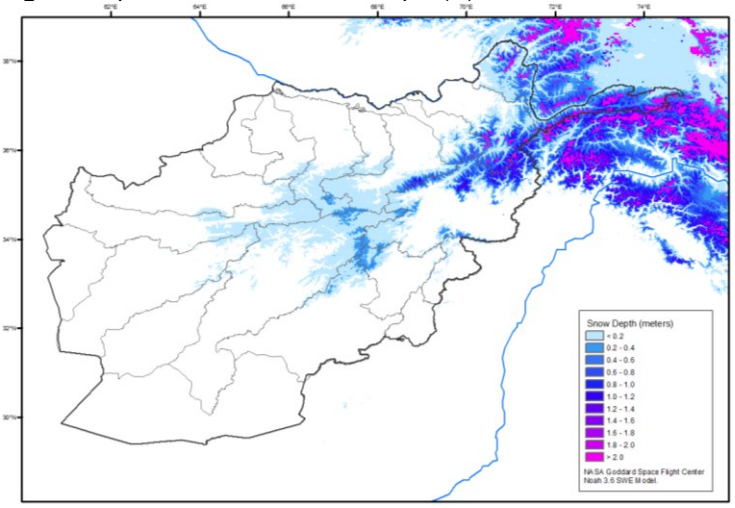
As the season is in the early stage, snow water storages are either negligible or yet to begin accumulating in most basins in the country. Currently, noticeable snow accumulation is observed over central highlands which will be helpful for subsequent development of permanent snowpack and glaciers.

Figure 1. October 1- November 15, 2019 cumulative precipitation anomaly relative to the average of 1981-2010.



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

Figure 2. Spatial distribution of snow depth (m) as of November 17, 2019.



Source: *USGS/EROS*

FORECASTS

Precipitation:

Precipitation:

Global Forecast System 7-day forecasts of total precipitation (mm) ending November 25 (top panel) and December 02 (bottom panel) are shown in **Figure 3**.

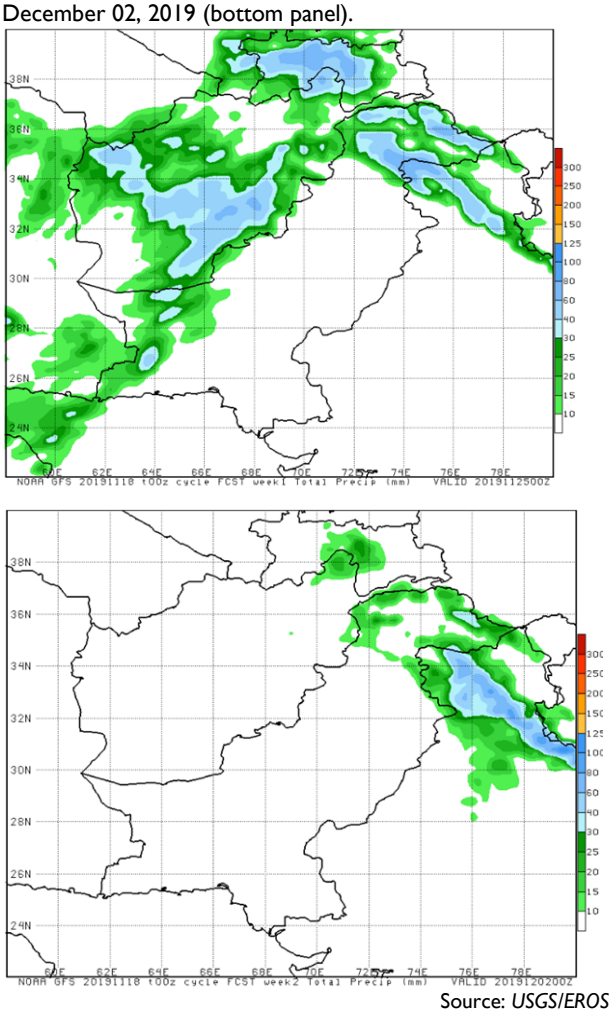
The forecast ending November 25 (top panel, **Figure 3**) predicts widespread rainfall (25-100 mm) across the country. Intense rainfall (25-50 mm) is expected in Badakhshan, Herat, Badghis, Ghor, Faryab, Uruzgan, Zabul, Ghazni, Kabul, and Nuristan.

In the week ending December 02 (bottom panel, **Figure 3**), dry weather is expected across the country except for intense rainfall (20-30 mm) in the northern part of Badakhshan.

Temperatures:

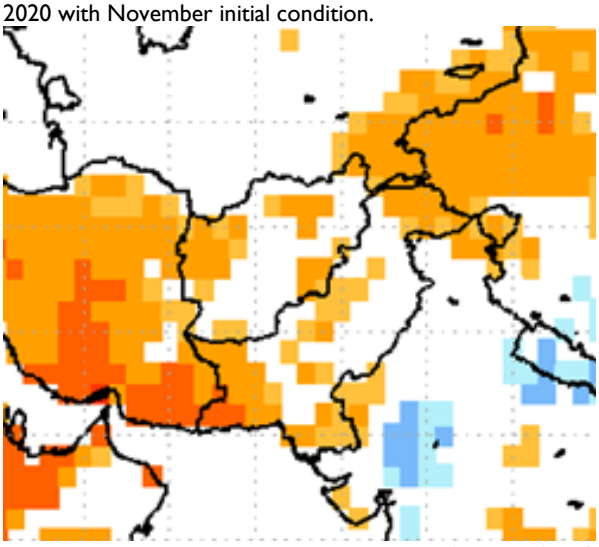
The 2019/20 winter wet season began with above average temperatures in October and early-November which are beneficial for winter wheat planting. The North American Multi-Model Ensemble forecast for December 2019-February 2020 indicates above-average temperatures over parts of southwest and central Afghanistan (**Figure 4)**. The above-average temperatures would be beneficial for rapid germination-vegetative growth of winter wheat.

Figure 3. The Global Forecast System 7-day precipitation forecasts in mm ending November 25 (top panel) and December 02, 2019 (bottom panel).



Source: *USGS/EROS*

Figure 4. The North American Multi-Model Ensemble temperature (^{0}C) forecast for December 2019 to February 2020 with November initial condition.



Source: *NOAA CPC*