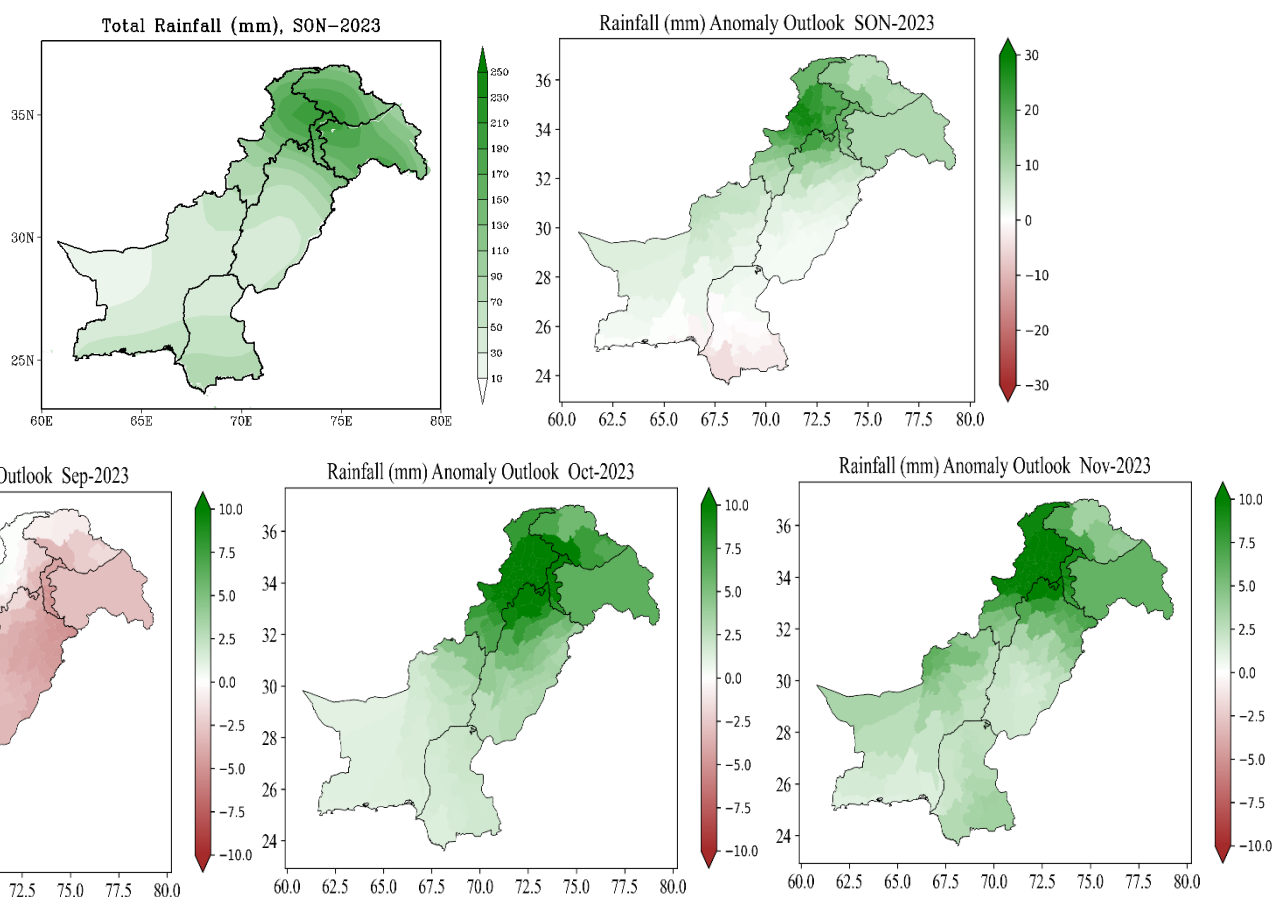


## Seasonal Agro-Climat outlook for September - November 2023

### **Brief Introduction**

Pakistan Meteorological Department issues monthly and seasonal forecast at the end of each month using global climate models. As the result of a single model and single data set are not considered reliable for prediction and forecast for a longer period, therefore models developed by different institutes and different data sets are being used for accuracy along with different boundary conditions for each model output. At present, 13 recommended models are adopted to obtain multi-model ensemble for seasonal predictions.

### Seasonal Projections (Precipitation)



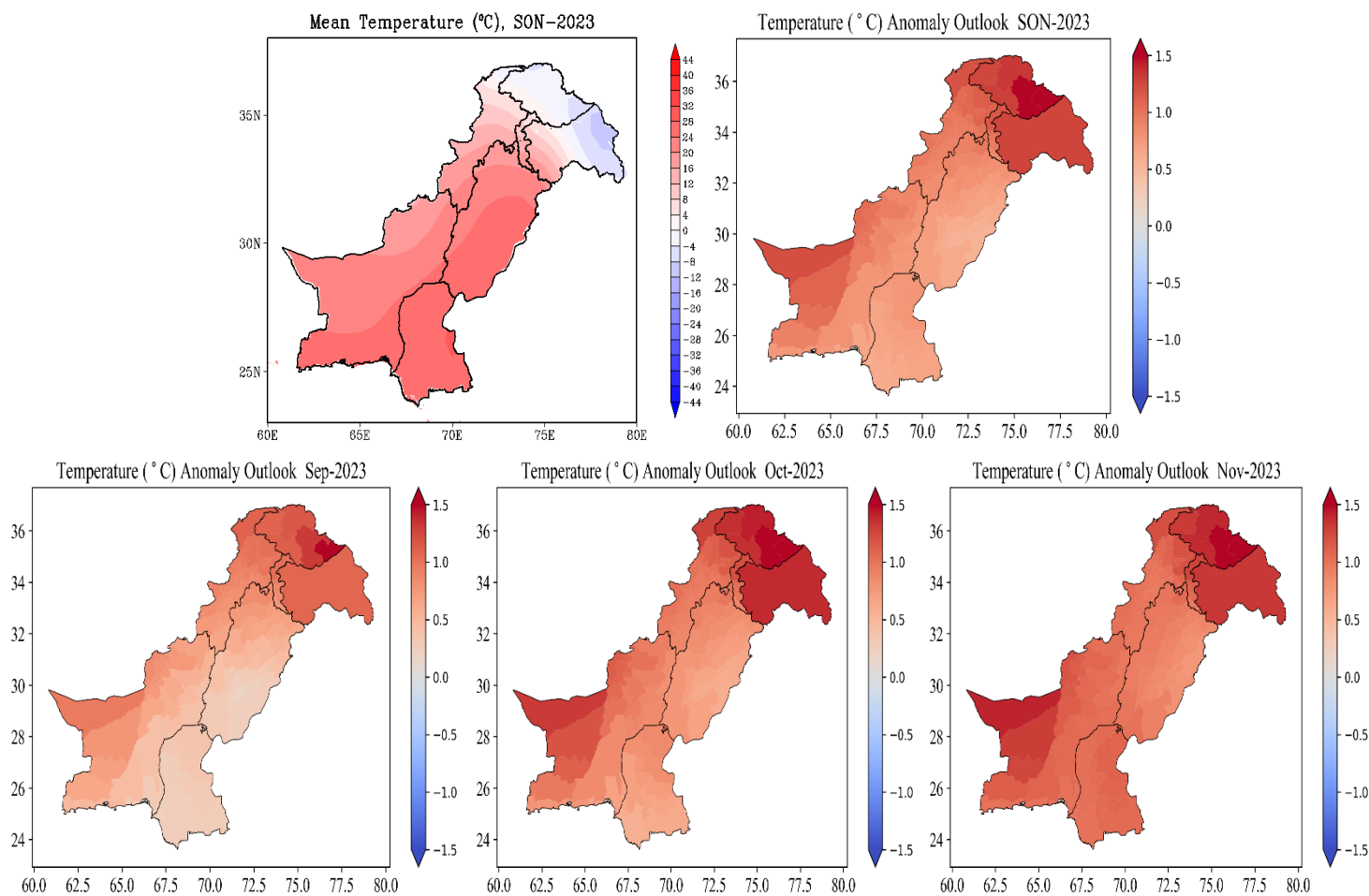
A tendency of normal to slightly above normal precipitation is likely over most parts of the country during the next three months (SON) particularly over the northwestern parts.



### **Month Wise Situation**

- During September 2023, nearly normal to slightly below normal rainfall is likely over most parts of the country particularly over the southeastern belt in lower Sindh.
- In October 2023, slightly above normal rainfall is expected over most of the central to upper parts of the country particularly Khyber Pakhtunkhwa, northern Punjab, Gilgit Baltistan and Kashmir. Whereas, nearly normal rain is expected in southern parts of Punjab, Baluchistan and Sindh.
- Slightly above normal rainfall is likely over most of the northwestern parts of the country particularly Khyber Pakhtunkhwa whereas the lower half may experience nearly normal rainfall during November 2023.

### Seasonal Projections (Mean Air Temperature)



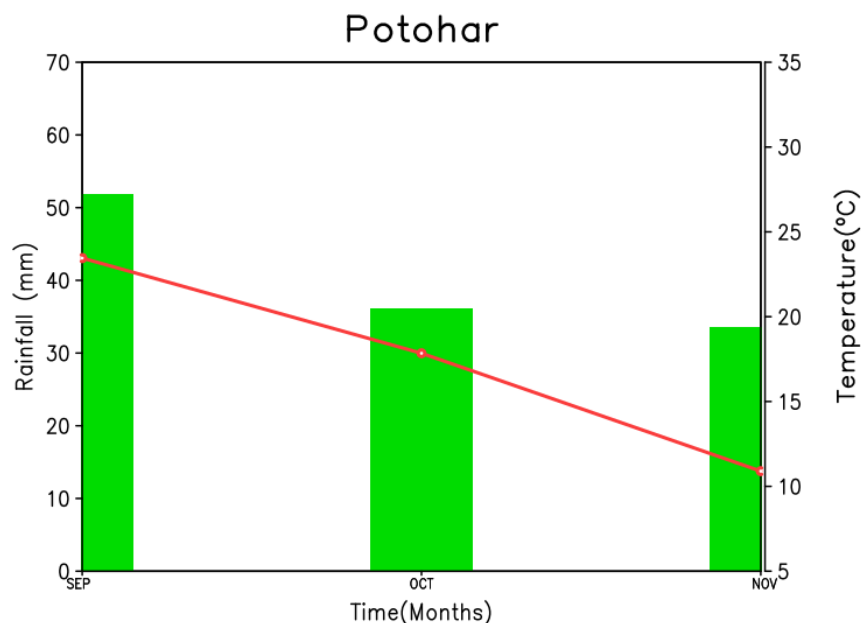
A tendency of normal to slightly above normal mean temperature is likely over most parts of the country during the period (SON) particularly the northeastern region including Gilgit Baltistan, Kashmir and western belt of Baluchistan.



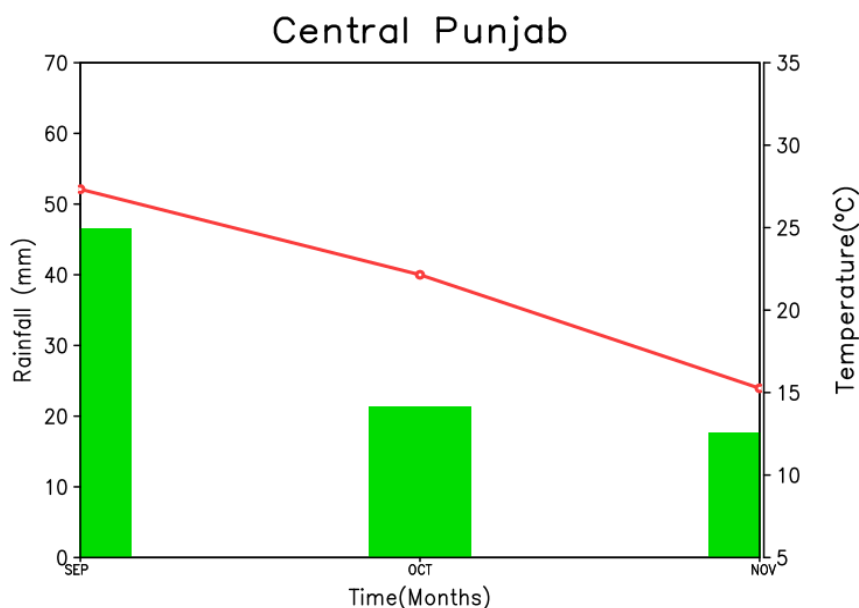
### **Month Wise Situation**

- During September 2023, nearly normal to slightly above normal mean temperature is likely in most parts of the country particularly over the northeastern region including Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir. Whereas, plains of Punjab and Sindh may have the normal conditions.
- Normal to slightly above normal mean temperature is likely in most parts of the country during October 2023 particularly over western Baluchistan, Gilgit Baltistan and Kashmir.
- Slightly above normal mean temperatures are expected in most parts of the country especially over the western and northeastern parts of the country during November 2023.

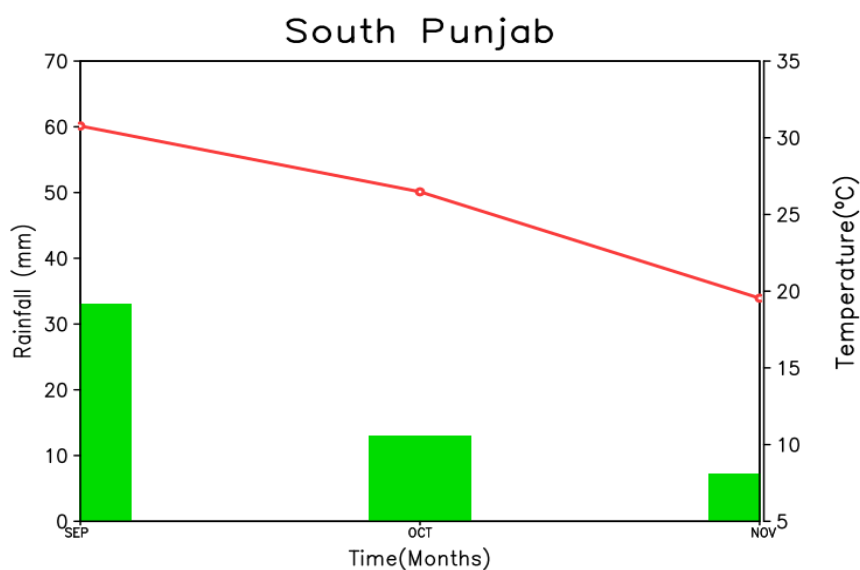
### Outlook for Agroclimatic Zones



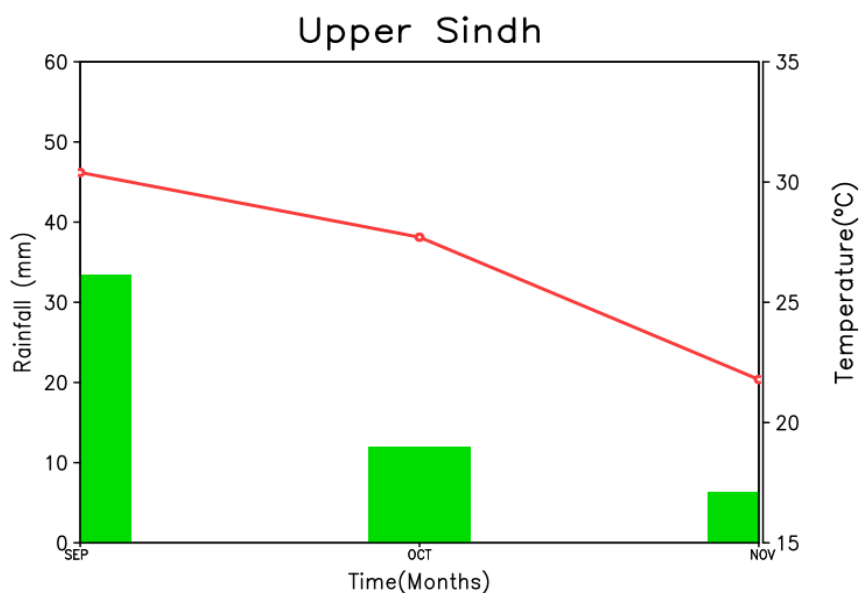
The **Potohar Region** is expected to receive considerable amount of rainfalls during September 2023 and comparatively lower in the last two months of the period (SON). The mean temperature is expected to decrease gradually following the seasonal pattern.



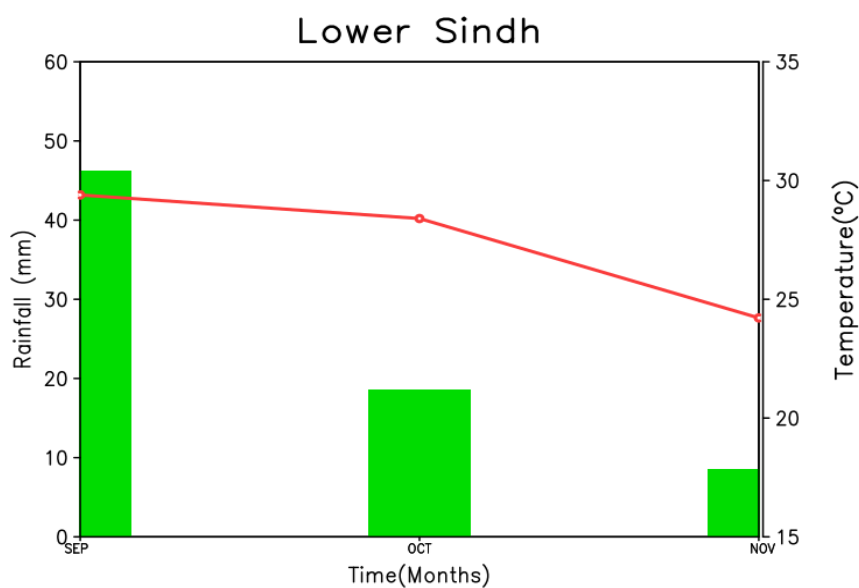
Similarly, **Central Punjab** is expected to receive considerable rainfalls during September 2023 and comparatively fewer rainfall in the latter two months of the period (SON). The mean temperature is projected to gradually decrease as per seasonal pattern.



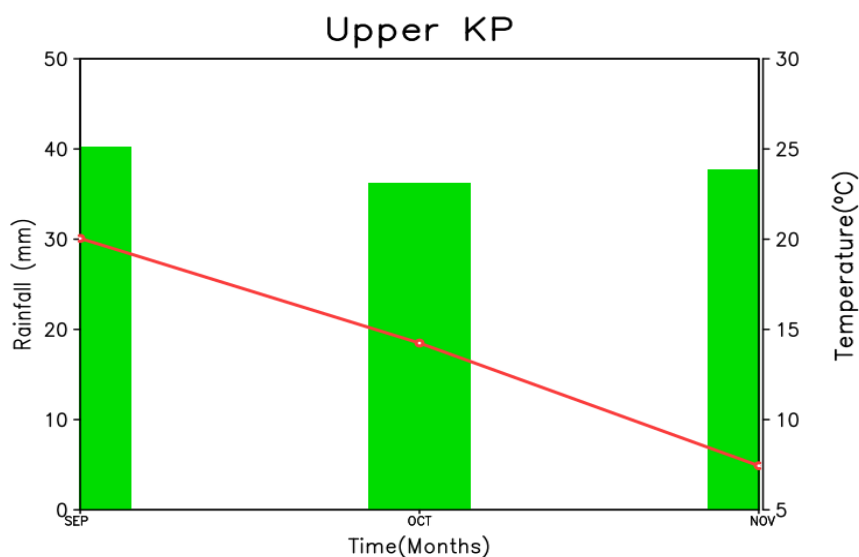
**Southern Punjab** is expected to receive reasonable amount of rainfall during September 2023 and lesser in October to November. The mean temperature is expected to gradually decrease following the seasonal pattern.



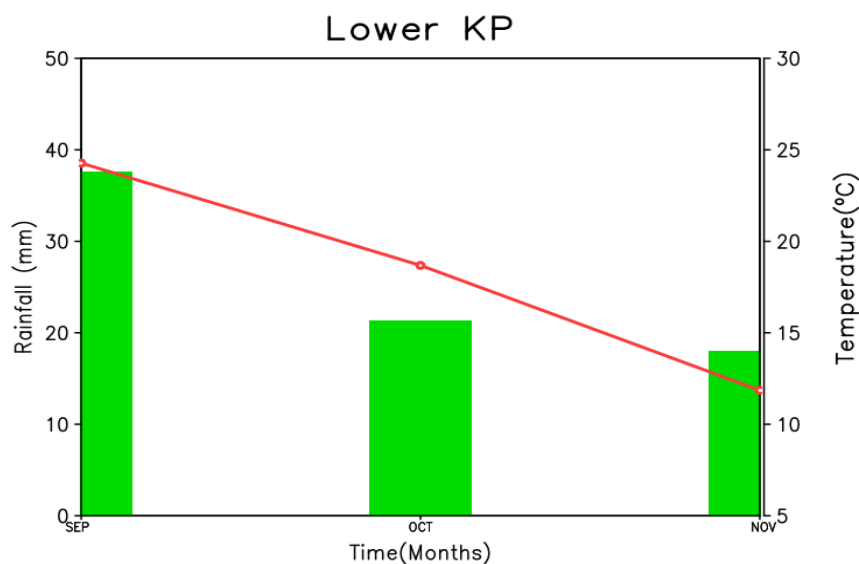
**Upper Sindh** is expected to receive valuable rainfall during September 2023 and lower in the last two months of period (SON). The mean temperature is expected to gradually decrease following the seasonal pattern.



Similarly, **Lower Sindh** may comparatively receive considerable rainfalls during the initial month of the period and mean temperature is expected to decrease gradually following the seasonal pattern.

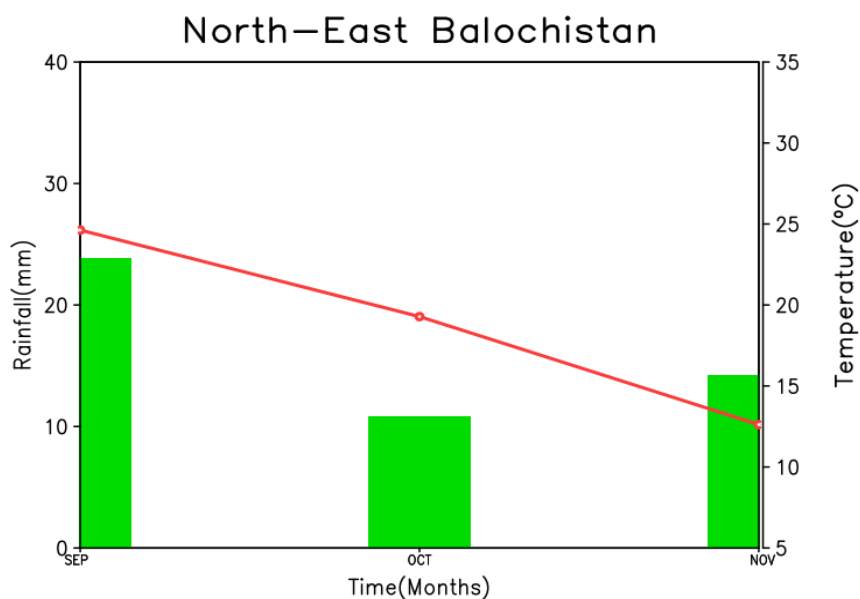


**Upper Khyber Pakhtunkhwa** may receive good amount of precipitation throughout the period. The mean temperature is expected to gradually decrease following the seasonal pattern.

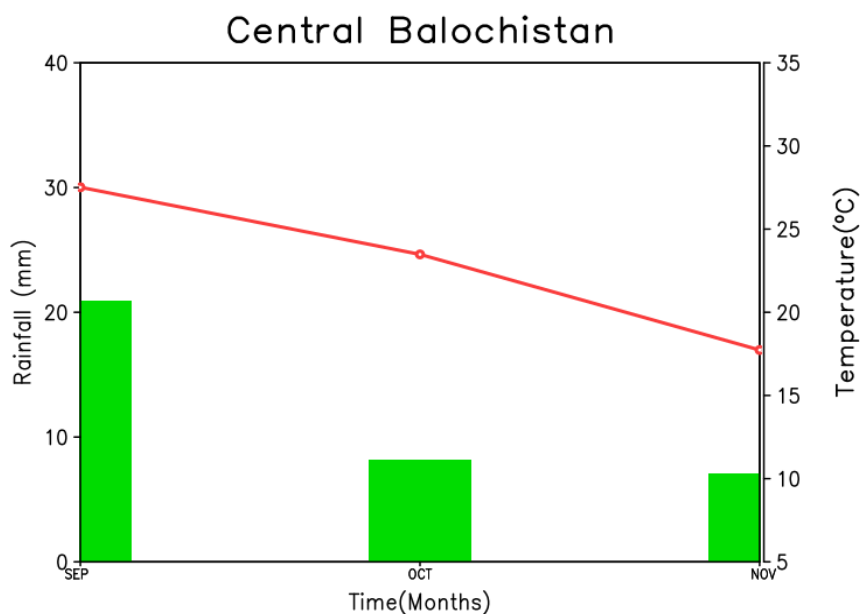


**Lower Khyber Pakhtunkhwa** is expected to receive considerable amount of precipitation especially during the initial month of the period (SON). The mean temperature is expected to gradually decrease following the seasonal pattern.

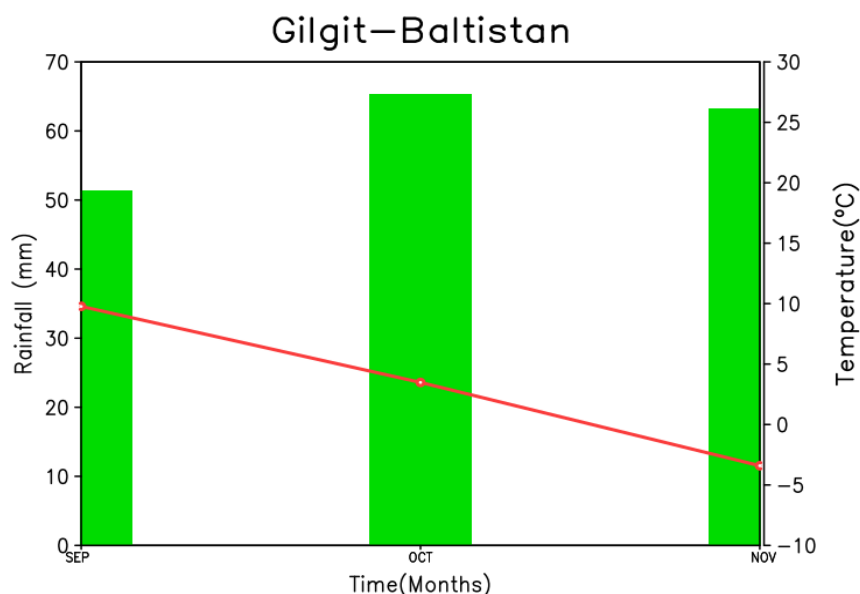




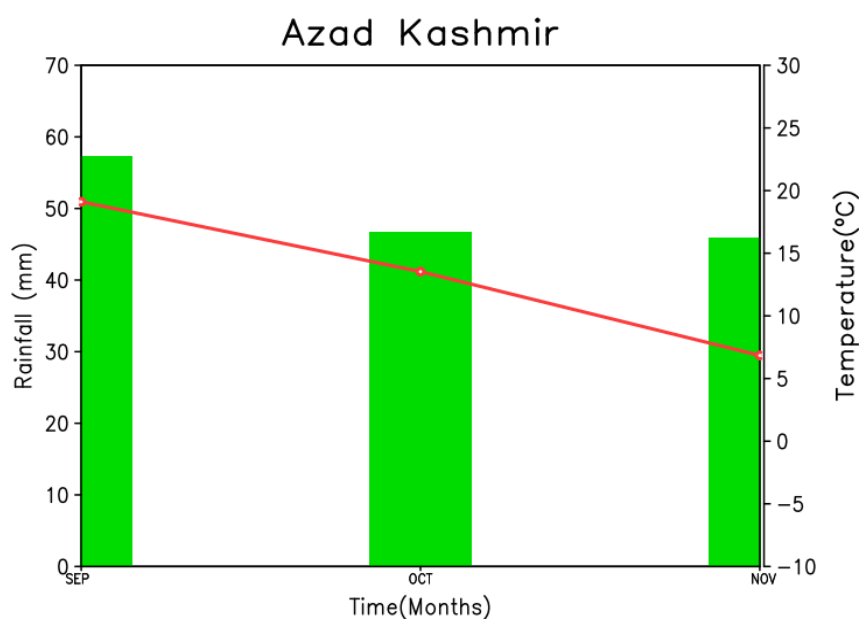
**North-Eastern Baluchistan** may receive fewer rainfalls throughout the period especially in October. The mean temperature is expected to decrease gradually following the seasonal pattern.



**Central Baluchistan** is expected to receive low rainfalls during the period particularly in the latter two months. The mean temperature is expected to gradually decrease following the seasonal pattern.



**Gilgit Baltistan** is expected to receive valuable amount of precipitation during the period (SON). The mean temperature is expected to decrease gradually following the seasonal pattern.



**Kashmir** may receive favorable rainfall events during the period (SON). The mean temperature is expected to gradually decrease following the seasonal pattern.



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### **Advisories for Farmers Based on the Recent and Expected Weather conditions**

At present, the major agricultural soils hold considerable reserves of the moisture contents in most parts of the country due to plentiful monsoon rains especially over the northern half. Accordingly, the standing crops and vegetable/orchards are growing well in most parts of the country. However, some severe weather events (heavy rainfall / hails / windstorm) observed at isolated places has damaged the seasonal vegetables and fruits. Besides, fewer rains over the lower half during the recent month would have generated adverse impacts on the soil moisture in these regions.

During the next three months (SON), in addition to seasonal decrease in temperatures, slightly above normal rains are expected over the upper parts. Whereas, lesser rains are projected over the lower half therefore, additional irrigation would be required for orchards and vegetables.

Importantly, September/October are the final months for the Kharif crops in lower parts of the country. Farmers of these regions may complete their harvesting timely in consultation with the local agriculture departments and prepare the fields for sowing of upcoming Rabi crops in October/November.