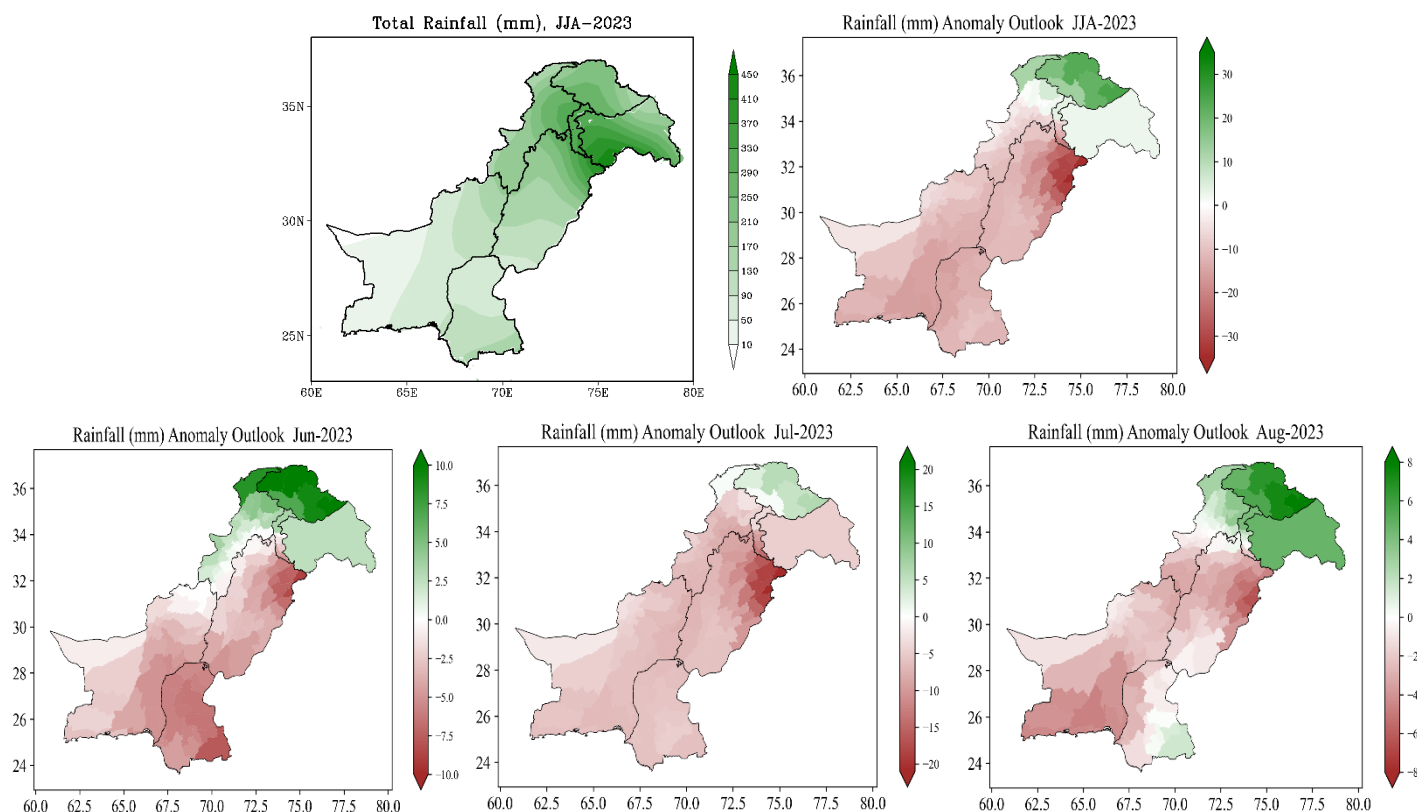


Seasonal Agro-Climat outlook for June - August 2023

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)



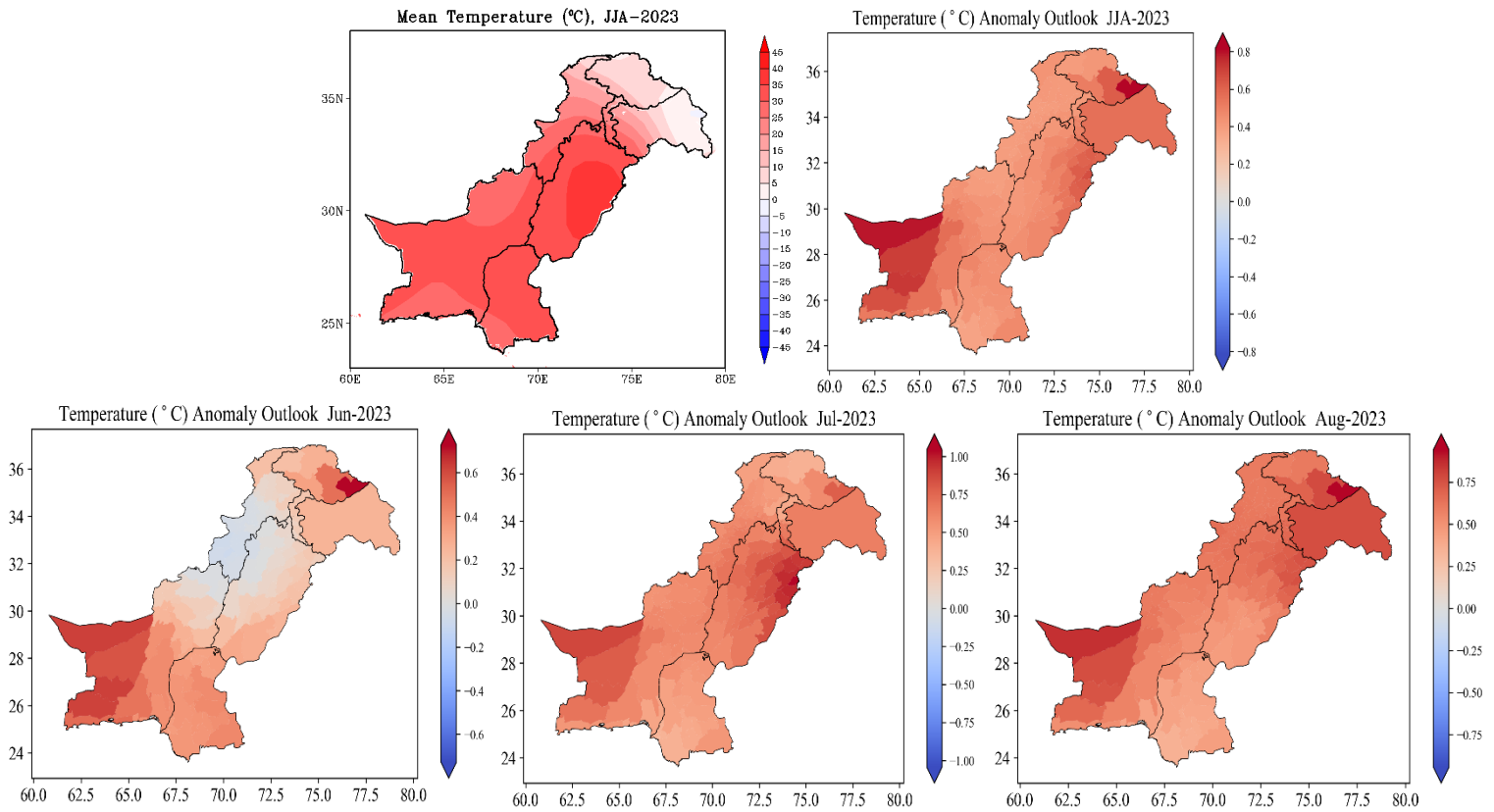
A tendency of below normal precipitation is likely over most parts of the country during the next three months (JJA). Whereas, slightly above normal rain is expected in the northern parts of Khyber Pakhtunkhwa and Gilgit Baltistan. Western parts of Baluchistan, including the coastal belt, may experience near normal rainfall during the forecast season



Month Wise Situation

- During June 2023, nearly normal to below normal rainfall is likely over the most parts of the country particularly in Sindh, eastern belt of Punjab. Whereas, slightly above normal rain is expected in the northern parts of Khyber Pakhtunkhwa and Gilgit Baltistan.
- In July 2023, nearly normal rainfall is expected almost all over the country whereas below normal rainfall is expected in northeastern belt of Punjab.
- Nearly normal to below normal rainfall is likely over the most parts of the country with above normal in Gilgit Baltistan, Northern KPK and Kashmir during August 2023.

Seasonal Projections (Mean Air Temperature)

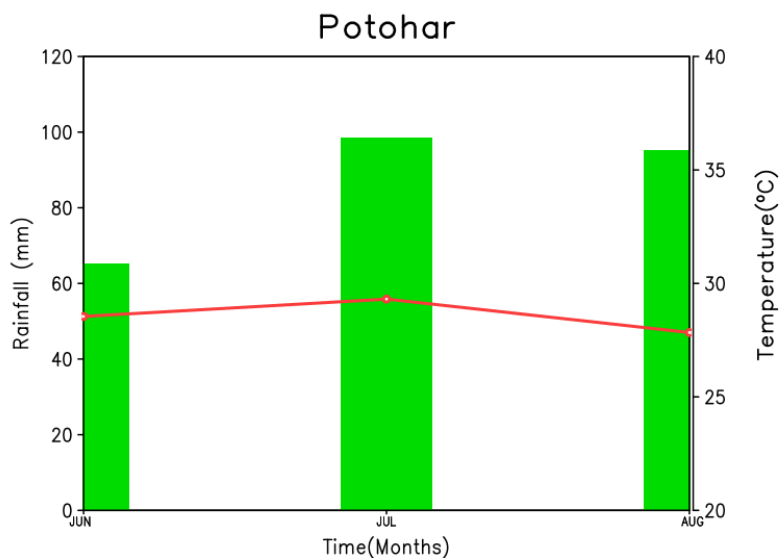


A tendency of nearly normal to slightly above normal mean temperatures are expected in most parts of the country during the period (JJA) particularly over the south western region of Baluchistan. However, towards the end of the season, Upper Khyber Pakhtunkhwa, Gilgit-Baltistan, Kashmir, and Baluchistan could see a temperature increase.

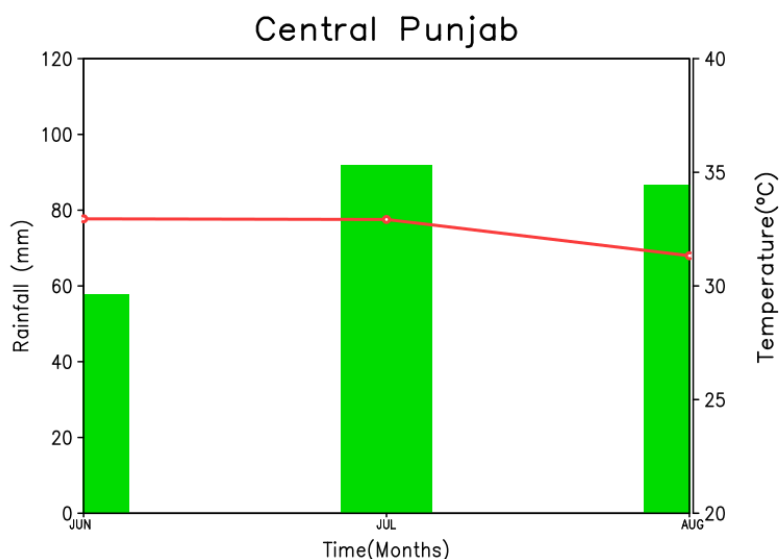
Month Wise Situation

- During June 2023, nearly normal to slightly above normal mean temperature is likely in most parts of the country particularly over south western belt of Baluchistan and eastern parts of Gilgit Baltistan.
- Slightly above normal mean temperature is likely in most parts of the country during July 2023 particularly over south western Baluchistan and eastern belt of Punjab.
- Slightly above normal mean temperatures are expected in most parts of the country especially over the western Baluchistan during August 2023.

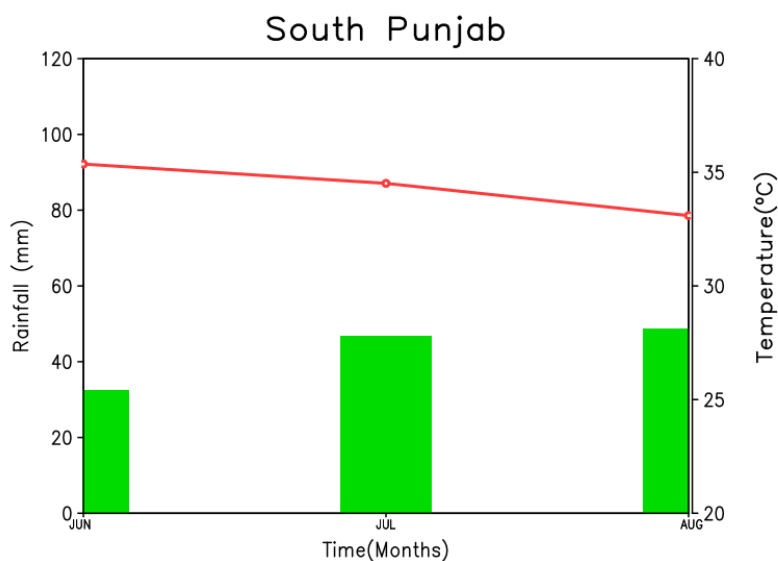
Outlook for Agroclimatic Zones



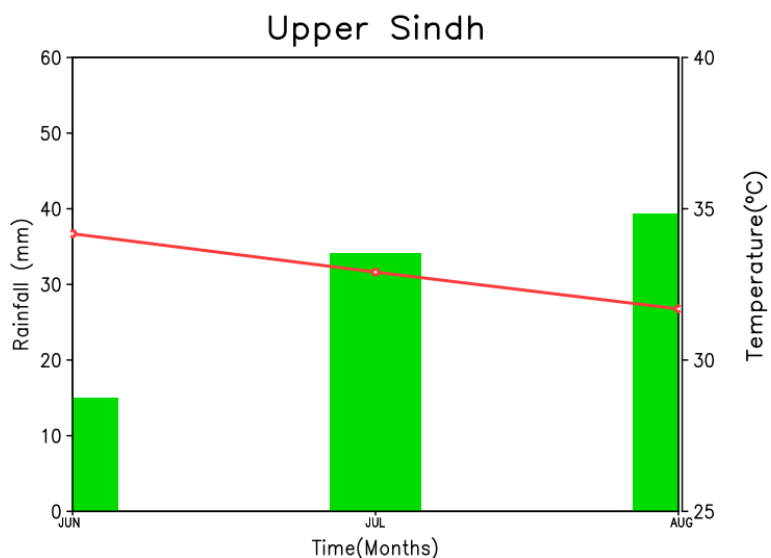
The Potohar Region is expected to receive fewer rainfall throughout the period (JJA). The mean temperature is expected to increase in July and gradually decrease in August 2023 following the seasonal pattern.



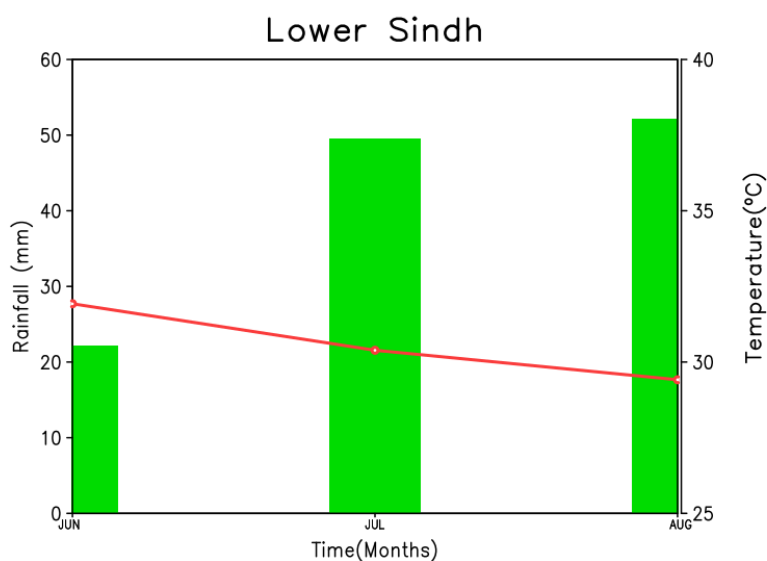
Similarly, **Central Punjab** is expected to receive lesser rainfalls during the mentioned period. The mean temperature is projected to gradually decrease as per seasonal pattern.



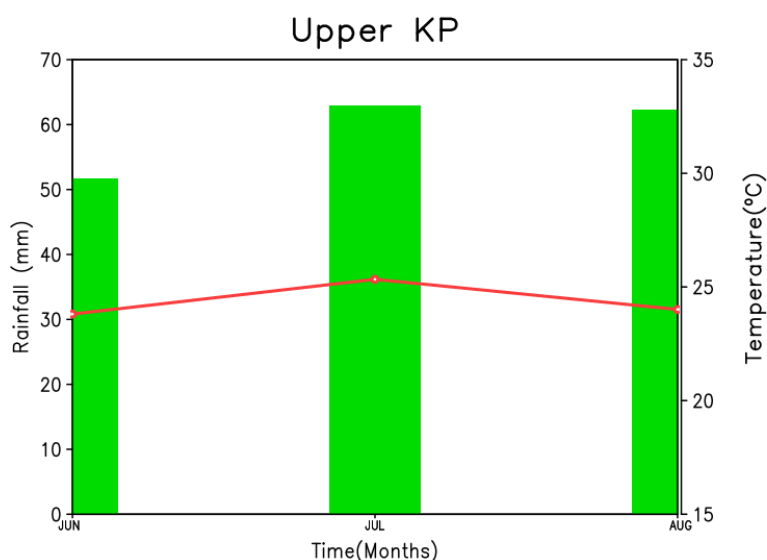
Southern Punjab is expected to receive very few rainfalls during the next three months. The mean temperature is expected to decrease slightly towards the end of the season.



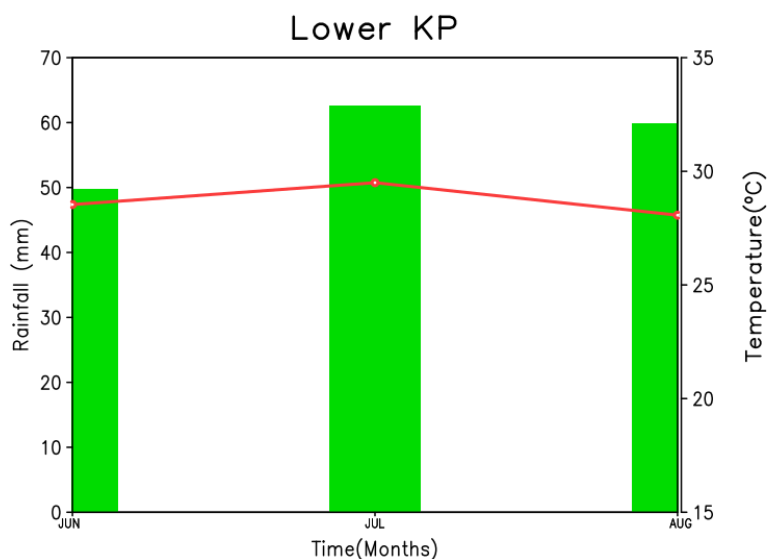
Upper Sindh is expected to receive a few rainfall during the period. The mean temperature is expected to gradually decrease following the seasonal pattern.



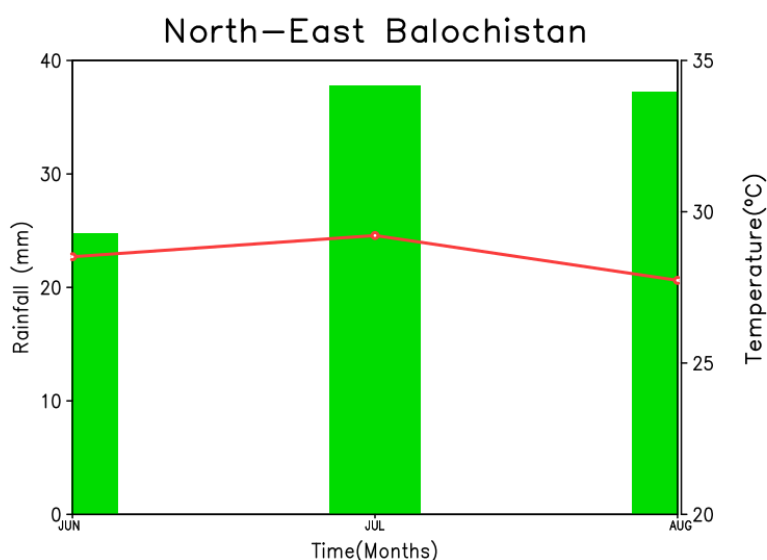
Similarly, **Lower Sindh** is expected to receive fewer rainfalls during the period and the mean temperature is expected to gradually decrease following the seasonal pattern.



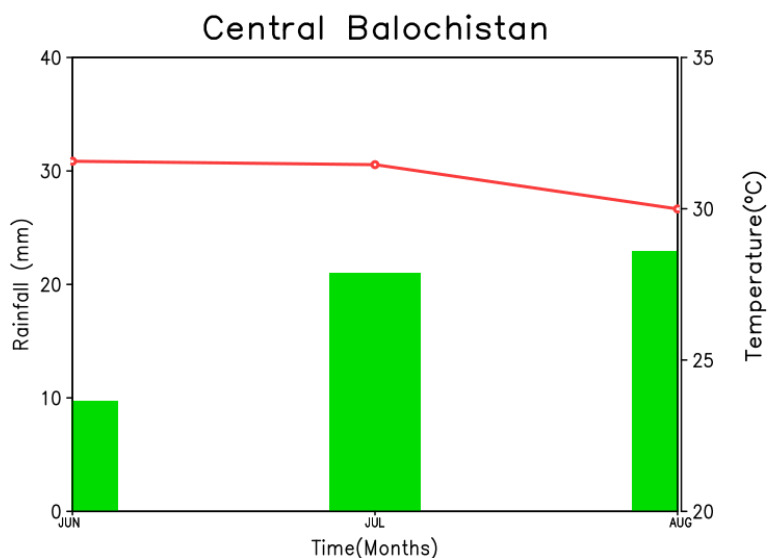
Upper Khyber Pakhtunkhwa may receive lesser precipitation throughout the period. The mean temperature is expected to increase in July and slightly decrease in August 2023 following the seasonal pattern.



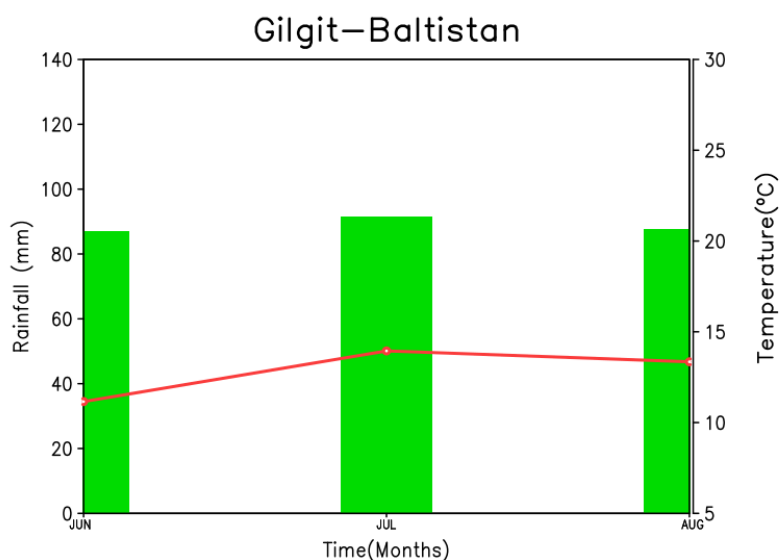
Lower Khyber Pakhtunkhwa is expected to receive lesser precipitation throughout the period. The mean temperature is expected to increase in July and gradually decrease in August 2023 following the seasonal pattern.



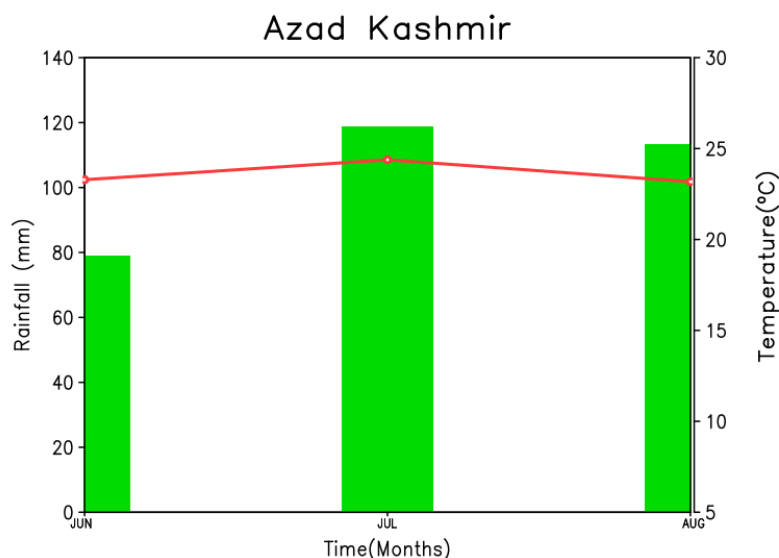
North-Eastern Baluchistan may receive fewer rainfalls throughout the period. The mean temperature is expected to increase in July and gradually decrease in August 2023 following the seasonal pattern.



Central Baluchistan is expected to receive a few rainfall events during the next three months. The mean temperature is expected to gradually decrease following the seasonal pattern.



Gilgit Baltistan is expected to receive comparatively reasonable amount of rainfall during the period. The mean temperature is expected to increase in July and August 2023.



Kashmir may receive lesser precipitation throughout the period whereas during July and August 2023 comparatively considerable amount of precipitation is expected. The mean temperature is expected to slightly increase in July and gradually decrease in August 2023 following the seasonal pattern.

Advisories to Farmers Based on the Past and expected Weather conditions

At present, the major agricultural soils hold considerable reserves of the moisture contents in most parts of the country. Accordingly, the standing crops and vegetable/orchards are growing well in most parts. But rainfall wind & hailstorm-based damages to wheat (in colder areas where harvesting is in progress) and other crops reported from some locations of Punjab Sindh and upper parts of Baluchistan.

However, fewer rainfalls (along with seasonal rise in temperatures) are expected in the month June and July, which would cause gradual declination in the moisture contents in the agricultural plains. Therefore, additional irrigation would be required for standing crops and vegetables etc especially in the lower half of the country.

On the other hand, during monsoon season strong winds / thunderstorm along with heavy rains are expected in particular regions. Accordingly, the irrigation and spray related activities for cotton, rice, sugarcane, peanut and grams crops may be scheduled in the light of expected weather conditions.