PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

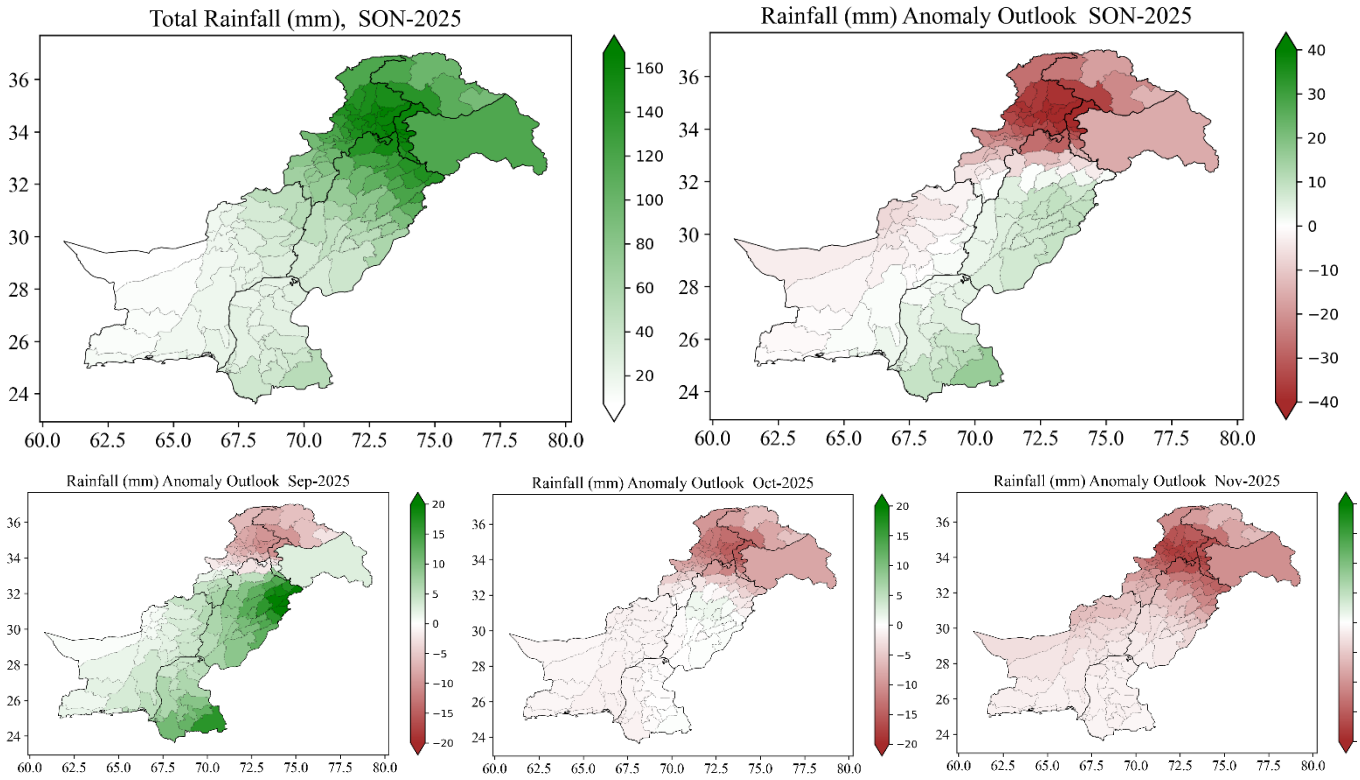
Tele:+92-51-9250592
Fax: +92-51-9250368

Seasonal Agro-Climate Outlook for September - November 2025

Brief Introduction

The Pakistan Meteorological Department issues monthly and seasonal forecasts using global climate models at the end of each month. Since a single model and dataset are not deemed reliable for long-term prediction and forecasting, models developed by various institutes and different datasets are utilized for accuracy, along with different boundary conditions for each model output. Currently, 13 recommended models are employed to generate a multi-model ensemble for seasonal predictions.

Seasonal Projections (Precipitation)



The rainfall outlook for September to November (SON) 2025 in Pakistan indicates a varied distribution of precipitation. The northern regions, particularly Gilgit Baltistan, Kashmir, Upper Khyber Pakhtunkhwa and the Potohar region are expected to experience significant deficits. In contrast, southern Sindh and certain areas of central and southern Punjab may receive slightly above-normal rainfall. Overall, there is a noticeable north-south gradient, with the northern highlands facing shortfalls, whereas the southern lowlands are anticipated to receive satisfactory precipitation.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368

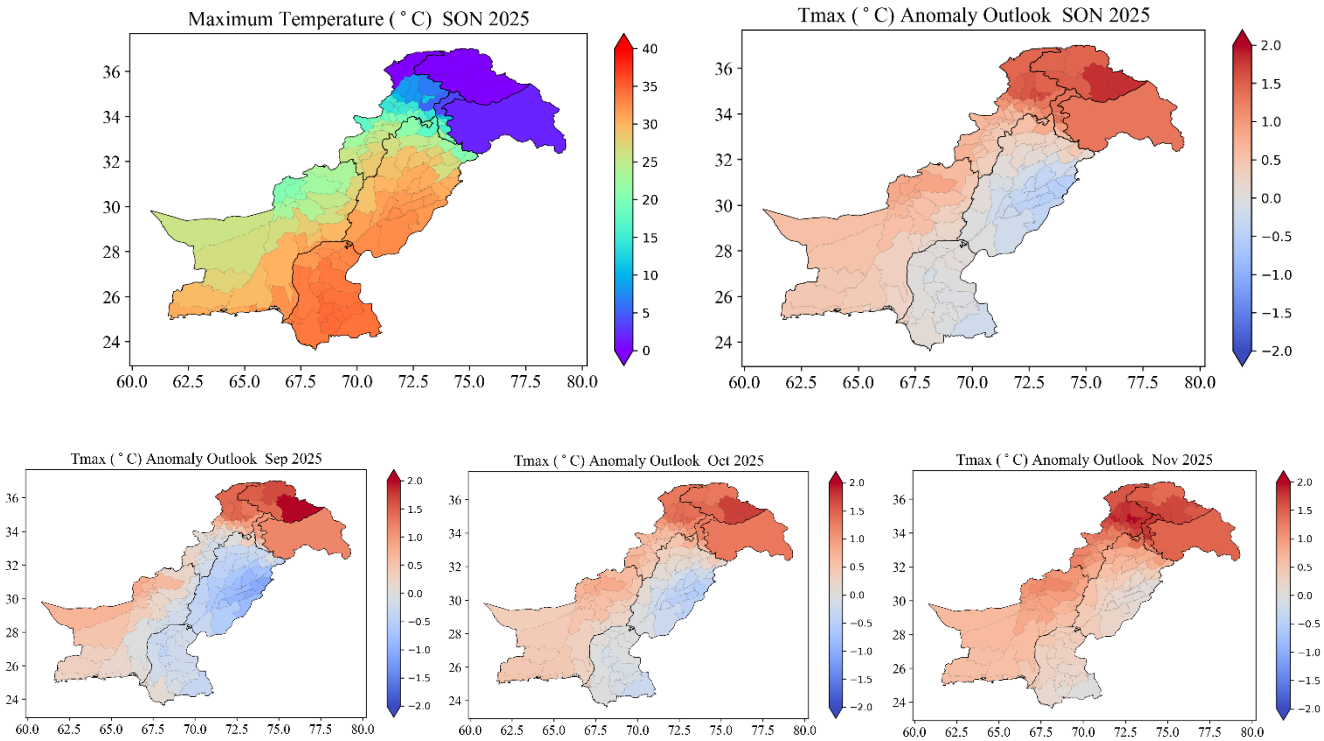
Month-wise Situation

- During September 2025, rainfall is anticipated to be normal to slightly above normal across most regions, particularly in the northeastern parts of Punjab and southern Sindh. In contrast, Gilgit-Baltistan, along with neighboring areas of upper Khyber Pakhtunkhwa and Azad Kashmir, is expected to experience normal to slightly below normal precipitation during this period.
- For October 2025, forecasts suggest that most regions across the country may experience rainfall levels below normal. The northern areas are anticipated to face particularly low precipitation, with the most substantial deficits expected in Kashmir, nearby regions of upper Khyber Pakhtunkhwa, and Gilgit-Baltistan.
- The trend of below normal precipitation is predicted to persist during November 2025, impacting lower regions as well. The most notable shortfalls are expected in the same areas as observed in October, with slightly below normal rainfall also occurring in the southern regions.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368

Seasonal Projections (Maximum Air Temperature)



A tendency of normal to above-normal maximum/day temperature is anticipated across the upper parts extending along the western belt of the country, particularly in upper Khyber Pakhtunkhwa, Gilgit-Baltistan, and Kashmir during the period SON 2025. While in Punjab and Sindh, it is expected to be slightly below normal.

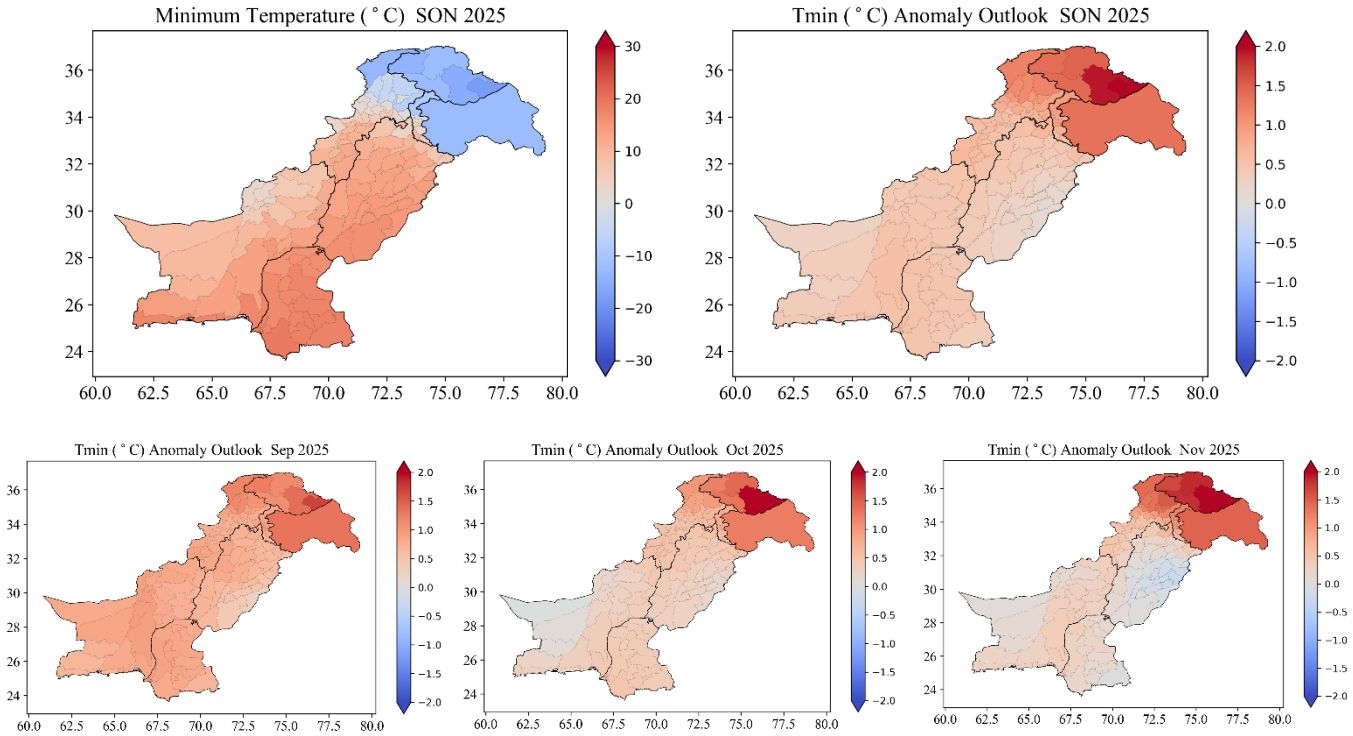
Month-wise Situation

- In September 2025, above normal maximum temperatures are likely over the north-western parts of the country, particularly upper Khyber Pakhtunkhwa, Gilgit Baltistan, and Kashmir. However, slightly below normal maximum temperatures are expected in Punjab, lower Khyber Pakhtunkhwa, Sindh, and the eastern belt of Balochistan.
- Maximum temperatures are expected to be above normal throughout the north-western parts of the country, especially over Gilgit-Baltistan and Kashmir regions during October 2025. In contrast, maximum temperatures across Punjab and Sindh are expected to be slightly below normal.
- Above-normal daytime temperatures are projected to persist across most parts of the country, except certain areas in southeastern Punjab and lower Sindh, where conditions are likely to remain near-normal to slightly below-normal during November 2025.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368

Seasonal Projections (Minimum Air Temperature)



Normal to above-normal minimum/night temperatures are expected nationwide, with the most significant warming anomaly affecting most of northern Pakistan, particularly over Gilgit-Baltistan and upper Khyber Pakhtunkhwa. In contrast, the southern and central regions of Pakistan are only experiencing minor positive anomalies, suggesting mild nighttime warming, while certain areas in Punjab and western Balochistan are expected to see normal temperature conditions.

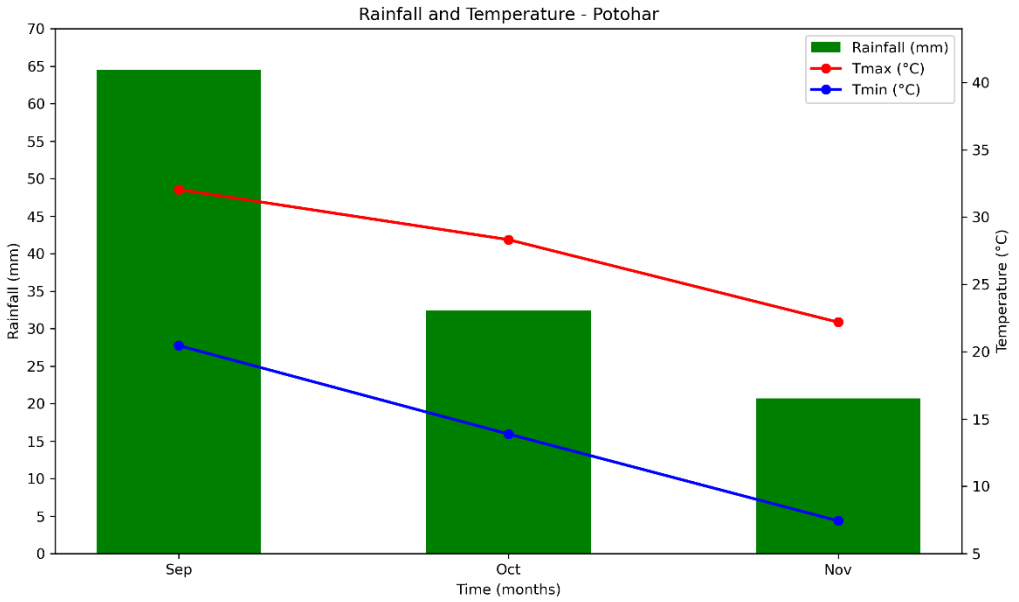
Month-wise Situation

- Normal to slightly above-normal minimum temperatures are likely across the country, with the most pronounced warming anomalies impacting northern Pakistan, especially in Gilgit-Baltistan and Upper Khyber Pakhtunkhwa during September 2025.
- During October 2025, slightly above-normal nighttime temperatures are expected to persist in the northern regions, particularly in Gilgit-Baltistan and the surrounding areas of Khyber Pakhtunkhwa. Meanwhile, central and southern Punjab, along with certain parts of Sindh and western Baluchistan, are expected to experience normal temperatures.
- Above-normal minimum temperatures are expected to persist in the northern regions of the country, particularly with the most pronounced warm anomalies occurring in Gilgit Baltistan and upper Khyber Pakhtunkhwa during November 2025. In contrast, central and southern Punjab, Sindh, and western Balochistan are anticipated to experience normal to slightly below normal night time temperatures.

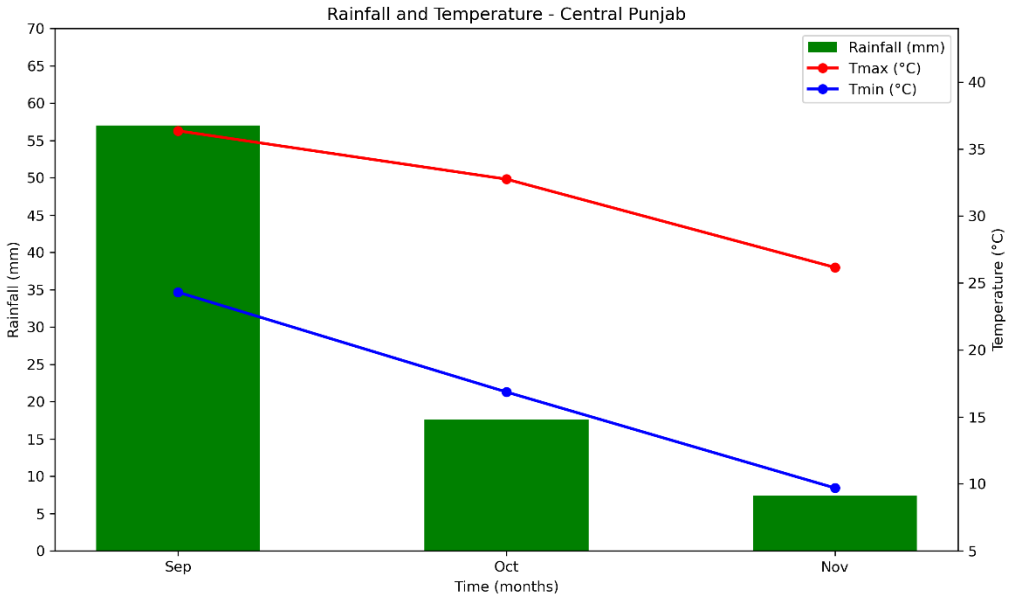
PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368

Outlook for Agroclimatic Zones



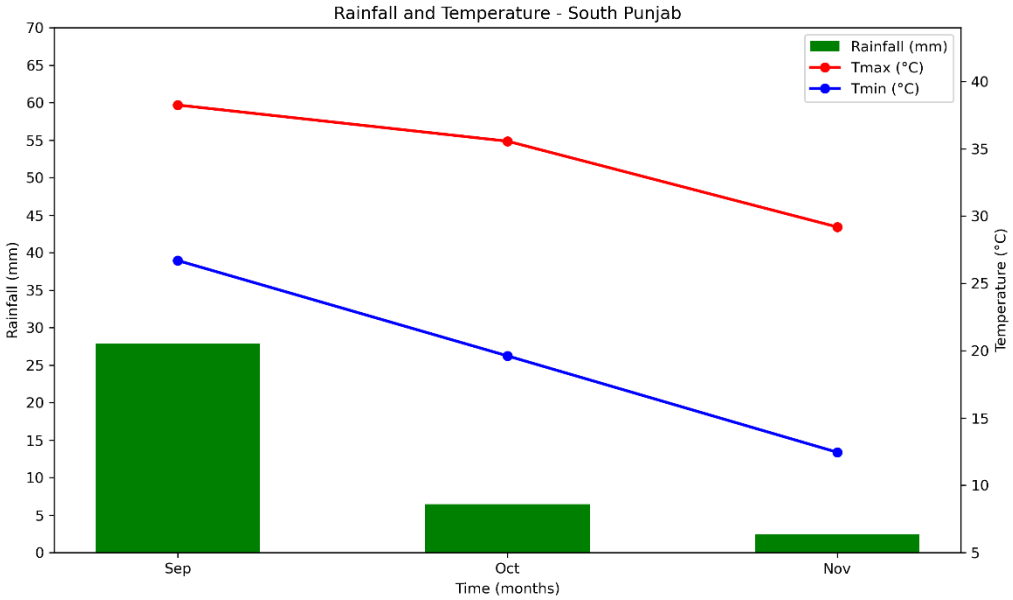
Potohar Region is expected to receive considerable rainfall, especially in September 2025. Additionally, maximum and minimum temperatures are projected to gradually decline according to the seasonal trends.



Central Punjab is expected to receive considerable rainfall especially in September 2025. The maximum and minimum temperatures are likely to gradually decrease in line with seasonal patterns.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

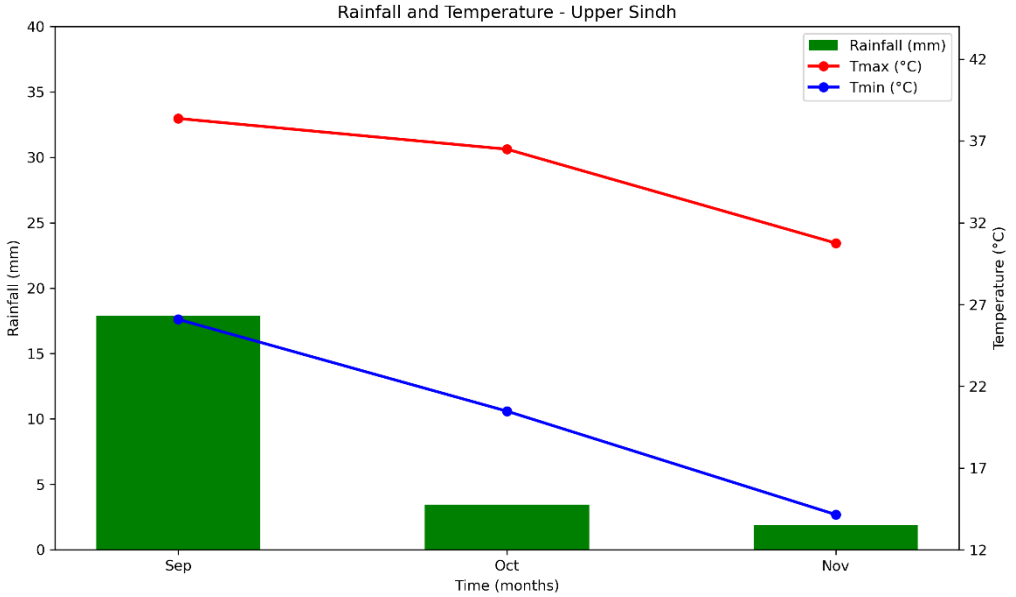
Tele:+92-51-9250592
Fax: +92-51-9250368



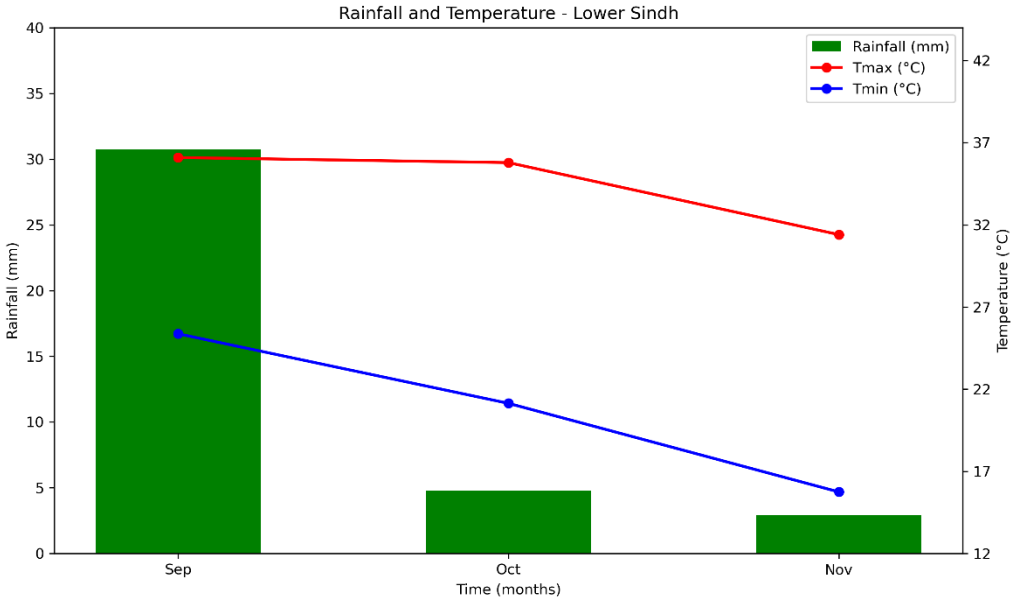
Southern Punjab is projected to receive satisfactory rainfall over the next three months (SON). The maximum and minimum temperatures may gradually decrease, following the seasonal trend.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368



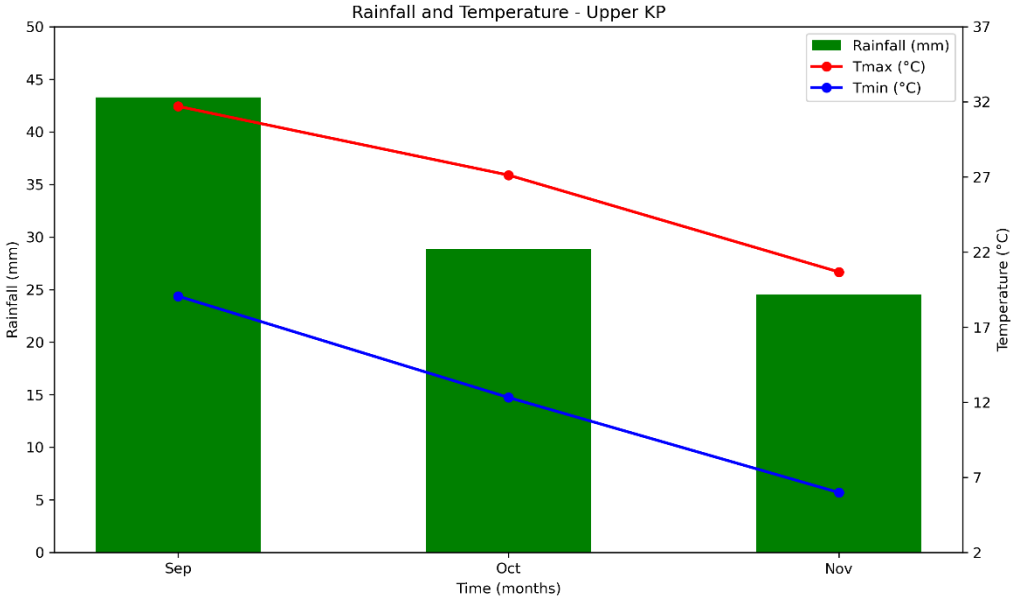
Upper Sindh is projected to experience a beneficial amount of rainfall during September 2025 and lower in the latter two months of the period SON 2025. Additionally, the maximum and minimum temperatures are expected to decrease following established seasonal patterns.



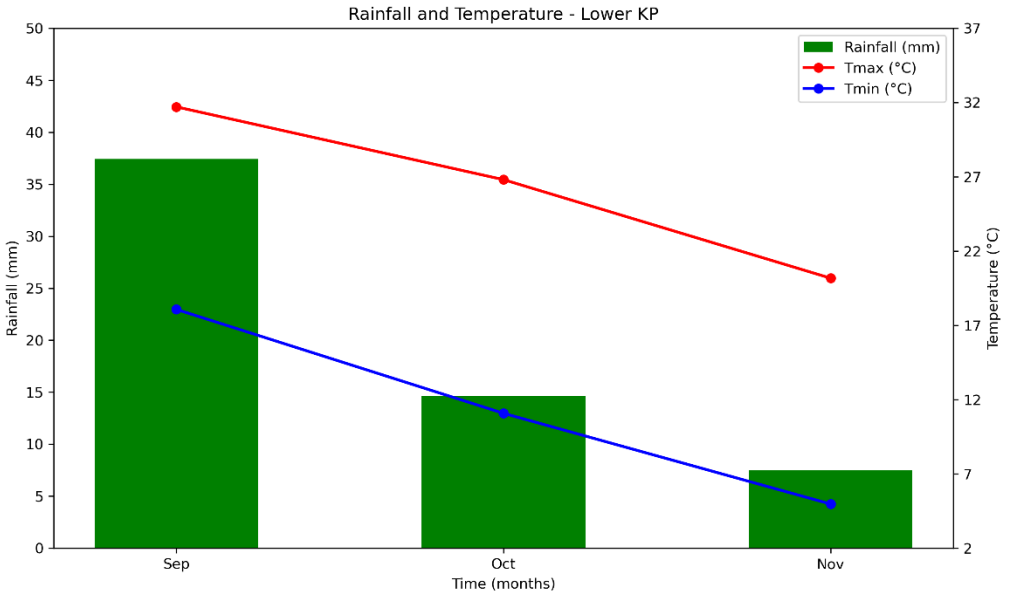
Lower Sindh is projected to experience considerable amount of rainfall during the month of September 2025. It is expected that the maximum and minimum temperatures will gradually decrease following the seasonal pattern.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368



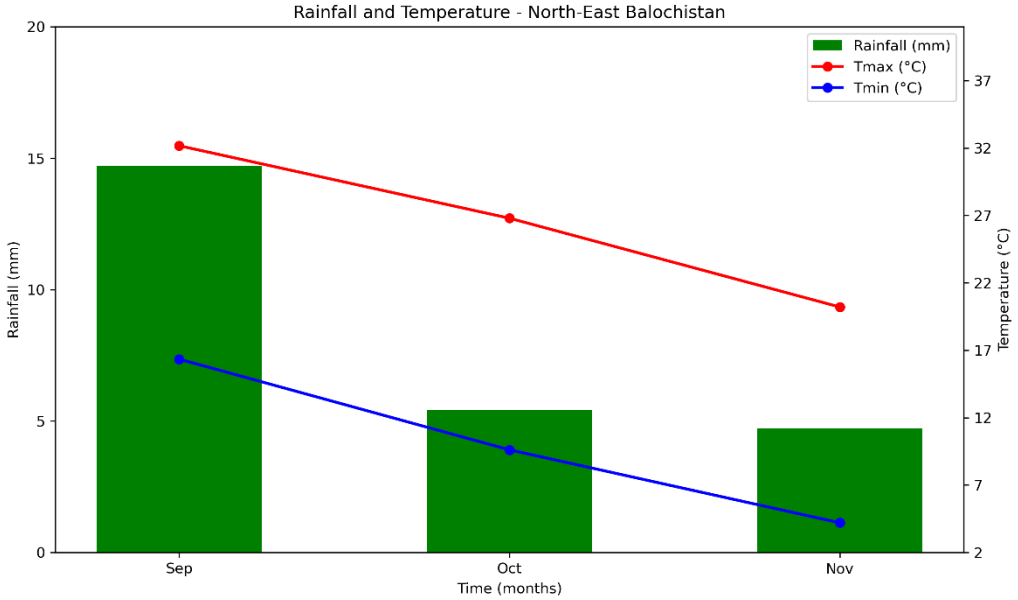
Upper Khyber Pakhtunkhwa is expected to experience satisfactory precipitation throughout the period. The maximum and minimum temperatures are anticipated to gradually decrease during SON 2025, following the usual seasonal pattern.



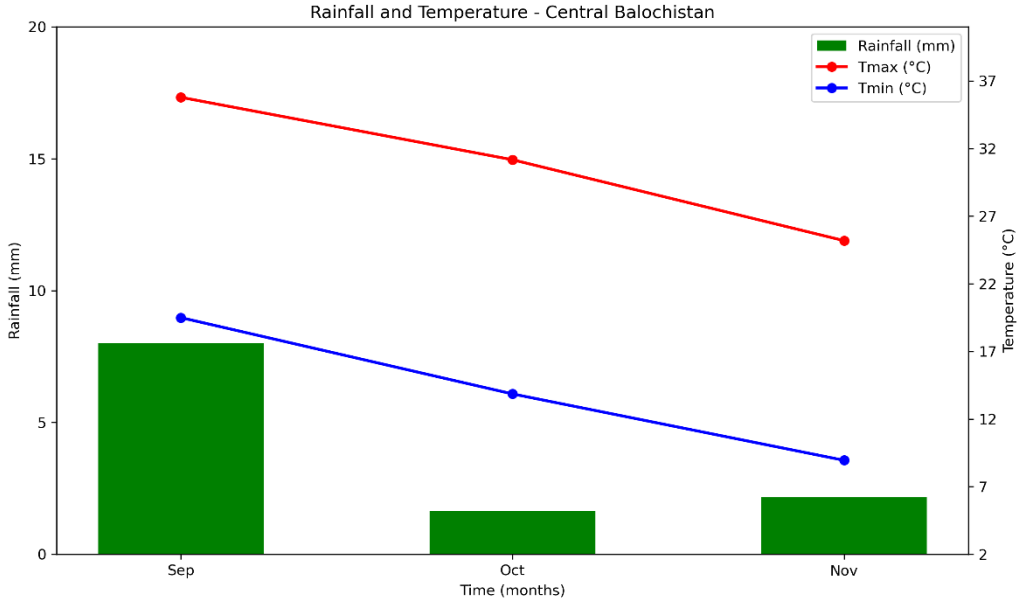
Lower Khyber Pakhtunkhwa is projected to experience a substantial amount of precipitation during the period (SON 2025). Additionally, maximum and minimum temperatures are expected to gradually decrease, following the established seasonal pattern.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368



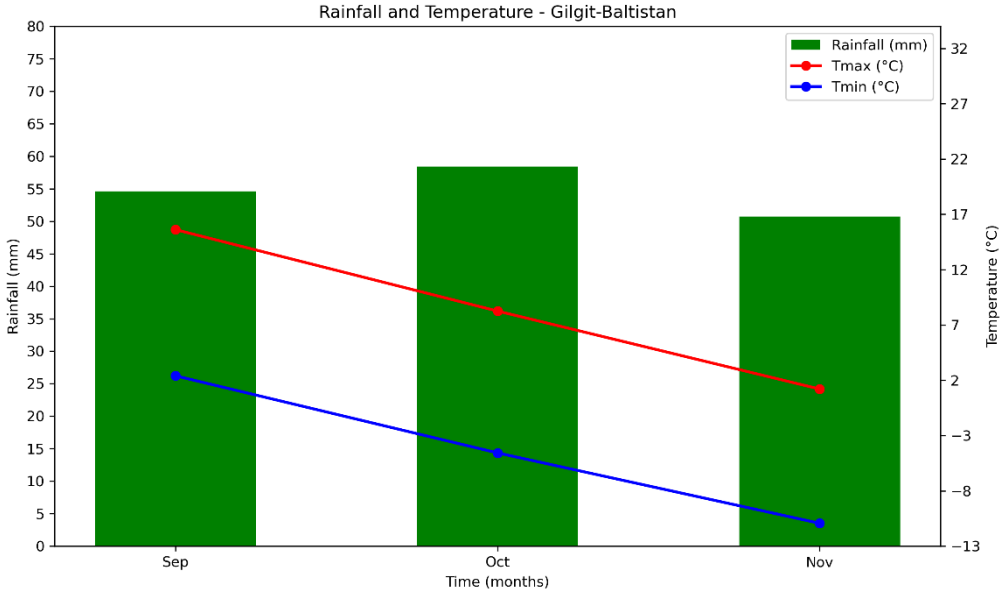
North-Eastern Balochistan is expected to receive fewer rainfalls during the period SON 2025. Additionally, maximum and minimum temperatures are expected to decrease as per the seasonal pattern.



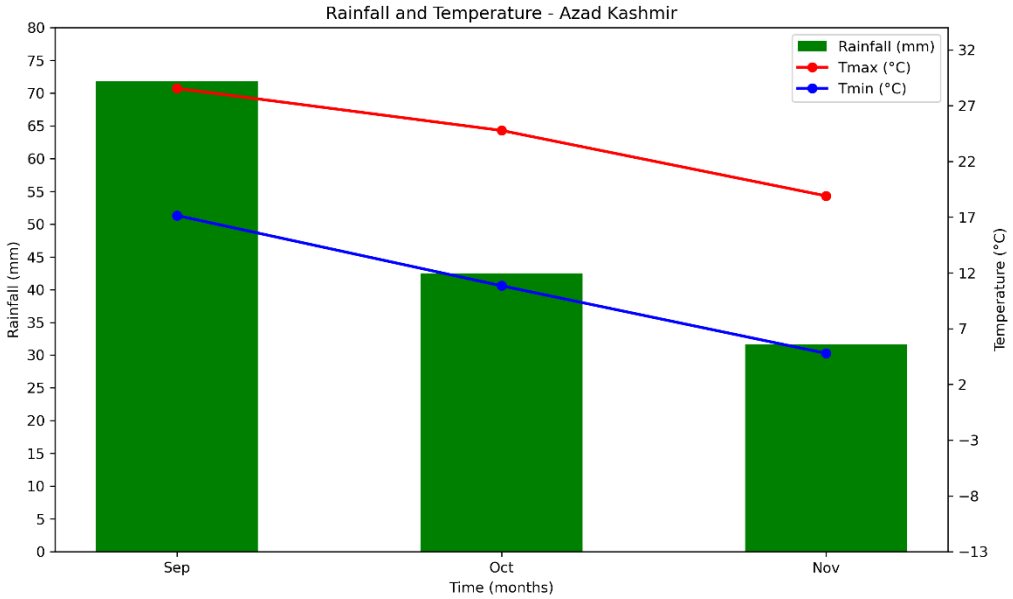
Central Balochistan is expected to receive lesser rainfalls during the period particularly in the latter two months. The maximum and minimum temperatures may decrease gradually following the seasonal pattern.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368



Gilgit Baltistan is expected to receive a considerable amount of precipitation during the mentioned period (SON 2025). The maximum and minimum temperatures may decrease during the period, following the seasonal pattern.



Azad Jammu & Kashmir is expected to receive considerable precipitation during the next three months particularly in September 2025. The maximum and minimum temperatures are expected to decrease, following the seasonal pattern.

PAKISTAN METEOROLOGICAL DEPARTMENT
National Agromet Center
H-8/2, Islamabad

Tele:+92-51-9250592
Fax: +92-51-9250368

Advisories to Farmers Based on Recent and Expected Weather Conditions

The Kharif season continues under favorable monsoon conditions, though above-normal rainfall in Punjab and Sindh has created both opportunities and challenges. Water-intensive crops such as rice and sugarcane have benefited, while cotton and maize face heightened risks from excess humidity, weeds, and pests. Northern areas (Gilgit-Baltistan, Kashmir, upper KP) are expected to remain drier with warmer nights, stressing standing crops and necessitating efficient water management. However, rice crop has been devasted by the recent heavy spells and flooding in the northeastern Punjab. Preparation for Rabi crops, particularly wheat and oilseeds, requires soil moisture conservation and timely land management.

In **Punjab**, cotton is in very good condition at flowering and boll-opening stages, though above-normal rainfall in central and northeastern Punjab is raising risks of waterlogging, weeds, and pest infestations. Farmers are advised to ensure timely weed removal, and apply balanced fertilizers as per the recommendations of local agriculture departments. Sugarcane and rice are performing well under current rainfall conditions except northeastern Punjab. In Potohar and other rainfed areas, mungbean and mash sowing should be completed promptly, with irrigation at germination, flowering, and pod-formation stages. Soil moisture conservation through bunding, leveling, and deep tillage is essential for the upcoming rabi crops. Sowing of radish, carrot and maize would be continued in central and southern Punjab during September, while Ispaghol may also be planted now for optimal yield.

In **Sindh**, cotton is at the flowering to first-picking stage in lower half, showing fair / good condition. Continued rainfall is supporting growth but requires careful drainage and pest management. In upper Sindh (Rohri and adjacent areas), cotton at the post-budding stage is performing very well, though excess humidity and high night time temperatures may elevate disease risk. Farmers are advised to prioritize weed control, monitor pest pressure, and adjust irrigation according to rainfall.

In **Khyber Pakhtunkhwa**, rainfall in lower half remains favorable for maize and rice, while northern areas face below-normal precipitation and warmer nights, which may constrain crop performance. Farmers are advised to conserve soil moisture and prepare land for timely wheat sowing. Drainage after localized heavy showers and pest vigilance are recommended.

In **Balochistan**, rice at the third-leaf stage is progressing well under adequate rainfall. Weed control and drainage should be prioritized. In northern and central Balochistan, with limited kharif crops, focus should remain on conserving monsoon rainfall through bunding and leveling to preserve the soil moisture for upcoming Rabi crops. Rice crop in Usta Muhammad region is at the germination to third-leaf stage with very good progress, supported by sufficient rainfall.

In **Gilgit-Baltistan and Kashmir**, both regions are expected to see below-normal rainfall and above-normal night time temperatures during SON 2025. This reduces water availability and standing crops may face stress like conditions.

The 2025 Kharif season has thus far been favorable, but additional rainfall in Punjab and Sindh poses risks for cotton and maize. In contrast, the northern highlands face rainfall deficits and warming anomalies, which may reduce soil moisture for Rabi crops. Focused management drainage in humid zones, weed and pest control in cotton belts, and moisture conservation in drier northern areas may be beneficial for safeguarding yields. Timely sowing of short-duration

Tele:+92-51-9250592
Fax: +92-51-9250368

crops and land preparation for Rabi are strongly recommended to sustain productivity across all regions.