Government of Pakistan
Pakistan Meteorological Department
Islamabad

Tel: 051-9250364
Fax: 051-9250368

Issue date: 1st September 2025

Outlook for September 2025

1. Current Meteorological Conditions

Above-normal rainfall was observed across most parts of the country during August 2025. Three rainfall spells of light to heavy intensity have occurred including a few isolated episodes of very heavy rainfall that triggered severe urban and flash flooding, particularly in the northern and northeastern areas. Temperatures during the month remained near normal to slightly above normal across much of the country with maximum positive anomaly in Gilgit-Baltistan (Table 1).

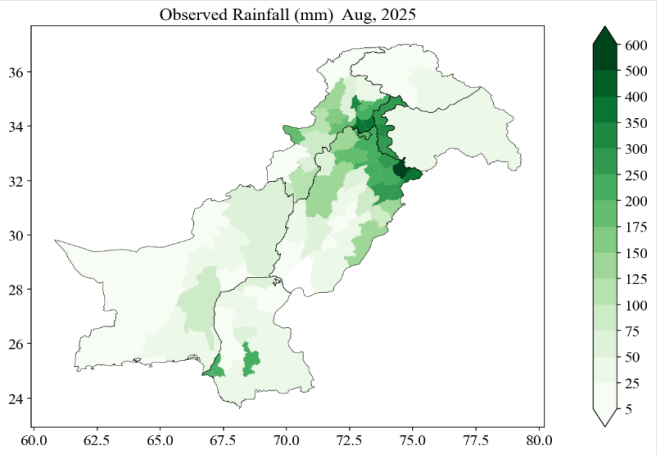

Figure 1: Observed rainfall (mm), August 2025

Table 1: Summary of August 2025 Observed Rainfall and Temperature

Region	Total Rainfall (mm)	Normal* Rainfall (mm)	Rainfall Departure (%)	Mean Temp (°C)	Anomaly (°C)
Pakistan	99.1	87.8	+14.4	29.8	+0.4
AJK	265.9	214.4	+24.0	28.2	+0.0
Balochistan	25.9	20.1	+30.9	30.6	+0.7
Gilgit-Baltistan	20.4	21.0	-2.8	27.1	+1.7
Khyber Pakhtunkhwa	122.3	112.1	+13.9	28.1	+0.5
Punjab	178.5	159.6	+11.9	30.1	-0.3
Sindh	53.6	48.8	+10.0	32.3	+0.4

* Normal Period (1990 – 2020)

2. Monthly Rainfall Outlook:

The MME based monthly outlook is derived from the outputs of nine global seasonal prediction models with optimal skill. The output of the selected models is used to generate operational outlooks for monthly and seasonal rainfall and temperature. The state of the global earth system suggests that, the El Niño–Southern Oscillation (ENSO), currently in a marginally negative phase, is expected to persist in this state during the forecast month. Similarly, the negative phase of the Indian Ocean Dipole (IOD) is also likely to continue through September. Based on this analysis, overall, a tendency for **near-normal* to above normal** rainfall is anticipated in most parts of the country with maximum departure over northeastern Punjab and southeastern Sindh during the forecast month. In contrast, the northern parts of the country including northern Khyber Pakhtunkhwa, Gilgit-Baltistan and adjoining areas of Kashmir are expected to receive below normal rainfall during September 2025 (Figure 2, 3).

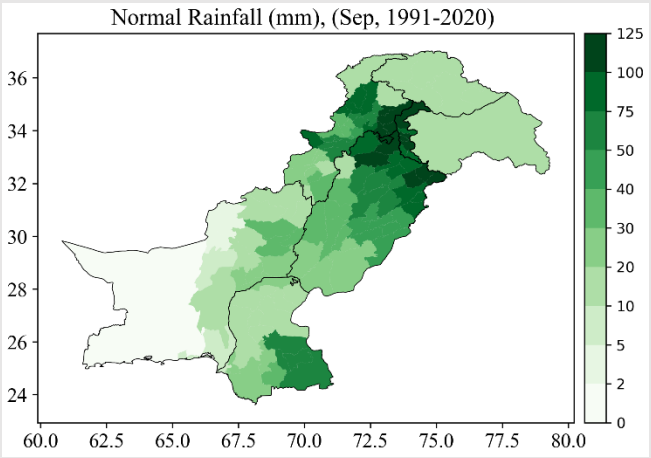

Figure 2: Normal (1991-2020) rainfall for Sep

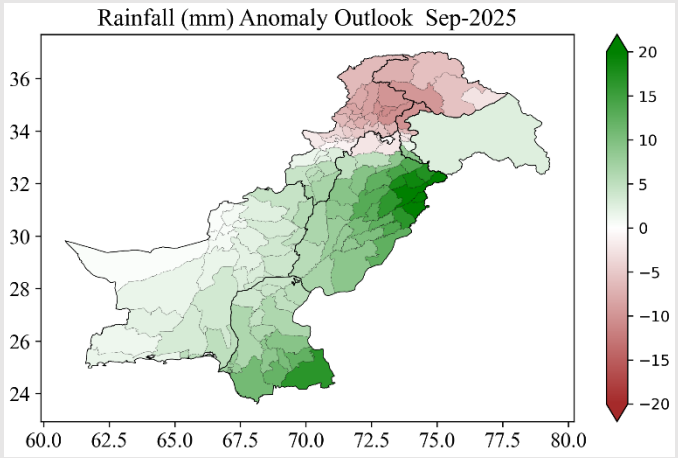

Figure 3: Monthly rainfall anomaly for Sep 2025

The probabilistic rainfall outlook reflects a consensus among all models used in the ensemble. The tercile probability forecast (Figure 4) indicates that most ensemble members predict the likelihood of near-normal to above normal rainfall in central and southern parts of the country. Northeastern Punjab and southeastern Sindh are likely to receive above normal rainfall. Rest of the country is likely to receive nearly normal rainfall during September 2025. Below normal rainfall is likely over northern Khyber Pakhtunkhwa, Gilgit-Baltistan and Kashmir.

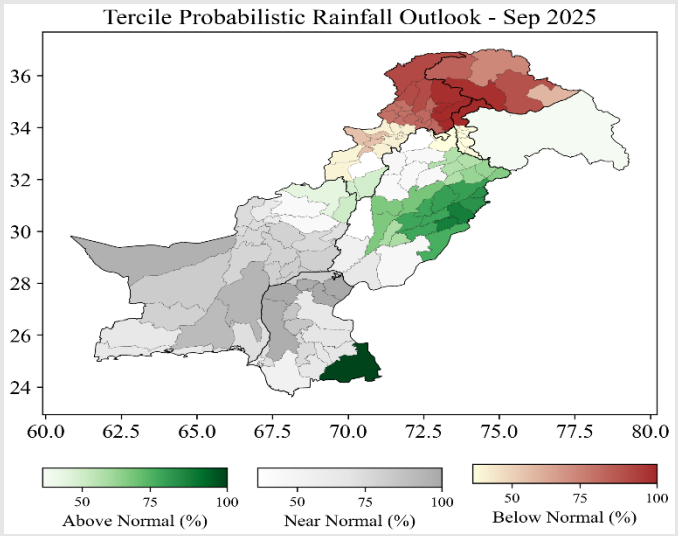

Figure 4: Probabilistic rainfall outlook for Sep 2025

* Normal = 30-years average climatology

3. Monthly Temperature Outlook:

Mean temperatures are expected to remain **above normal*** over mountainous regions in the northern and western parts of the country whereas, the plain areas of eastern Punjab are expected to experience near normal temperature during September 2025 (Figure 5, 6).

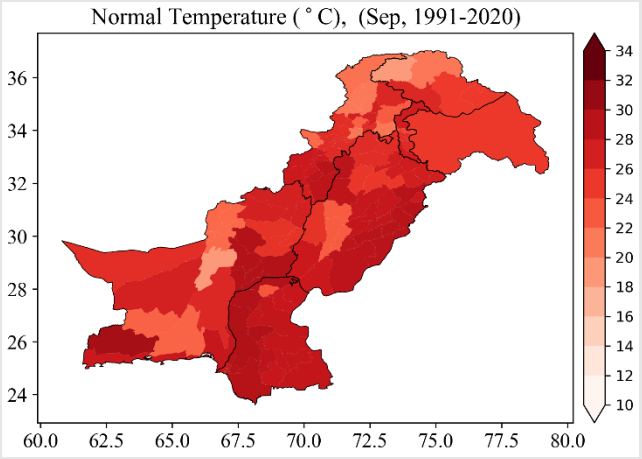

Figure 5: Normal (1991 - 2020) temperature for Sep

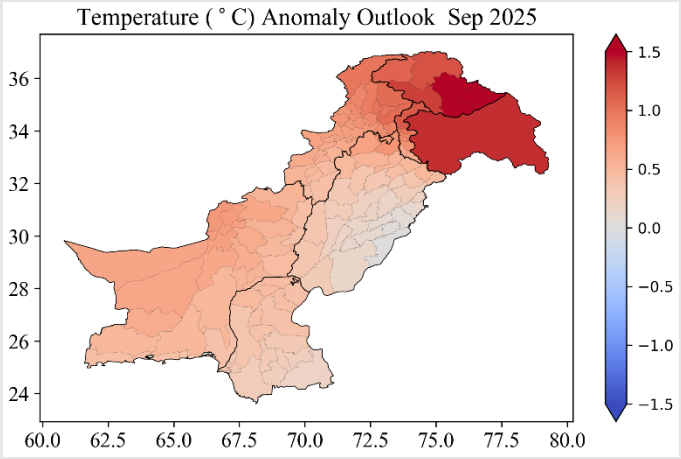

Figure 6: Monthly temperature anomaly outlook for Sep 2025

The tercile probabilistic temperature outlook (Figure 7) indicates that the majority of the models agree on the above-normal temperatures across the country with maximum likelihood over north and northeastern parts, Sindh and most parts of Balochistan during the forecast month.

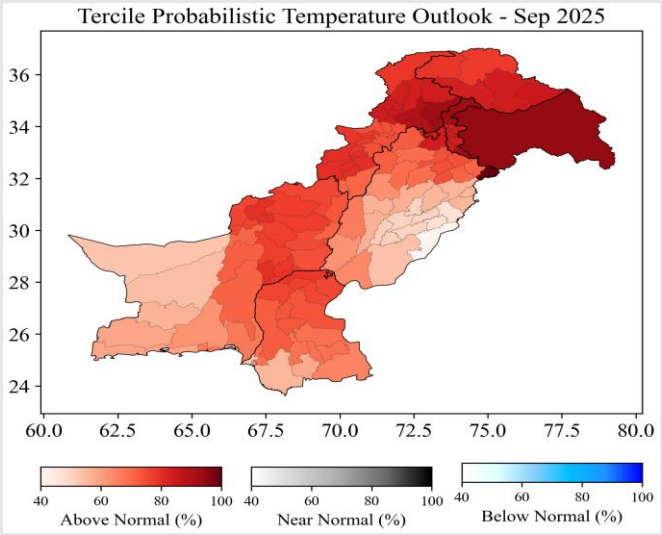

Figure 7: Probabilistic temperature outlook for Sep 2025

4. Impacts:

- Isolated extreme rainfall events may lead to urban flooding in the first fortnight of September.
- Although temperatures are decreasing, a short warming episode or an extreme rainfall event may still trigger GLOFs in Northern Pakistan, necessitating vigilant monitoring and disaster preparedness.
- The normal to above normal rainfall in September is expected therefore farmers are advised to follow periodic agro-meteorological bulletins (https://namc.pmd.gov.pk/).
- Sufficient availability in water reservoirs will provide a positive impact on irrigation and power generation.
- Dengue outbreak due to stagnant water is likely in inundated areas.

Note: The seasonal outlook is updated monthly in the first week of the month. The forecast reliability varies with location, time of year, and global ocean/atmospheric conditions. It provides general trends using probabilities rather than precise predictions and compares expected conditions to historical averages. For better decision-making, it should be used alongside short-term forecasts and other climate data.