



FORTNIGHTLY DROUGHT WATCH BULLETIN

(16th to 31st March, 2025)



Pakistan Meteorological Department

National Drought Monitoring Centre

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1. Rainfall Analysis during Second Fortnight of March, 2025

Between March 16 and 31, 2025, light to moderate rainfall was observed across Khyber Pakhtunkhwa (KP), Kashmir, and Gilgit-Baltistan, with the upper regions of KP and Kashmir experiencing the most significant precipitation. Figure 1 illustrates the spatial distribution of rainfall during this period, while Table 1 provides detailed measurements recorded at various stations throughout Pakistan.

Rainfall Table-I					
S. No	Station	Rainfall (mm)	S. No	Station	Rainfall (mm)
1.	Chitral	155.0	6.	Astore	86.5
2.	Dir	127.0	7.	Lower Dir	63.0
3.	Mirkhani	122.0	8.	Malamjabba	61.0
4.	Kalam	118.8	9.	Rawalakot	50.4
5.	Drosh	100.0	10.	Gari Dopatta	44.6

Table 1: Chief amounts of rainfall (mm)

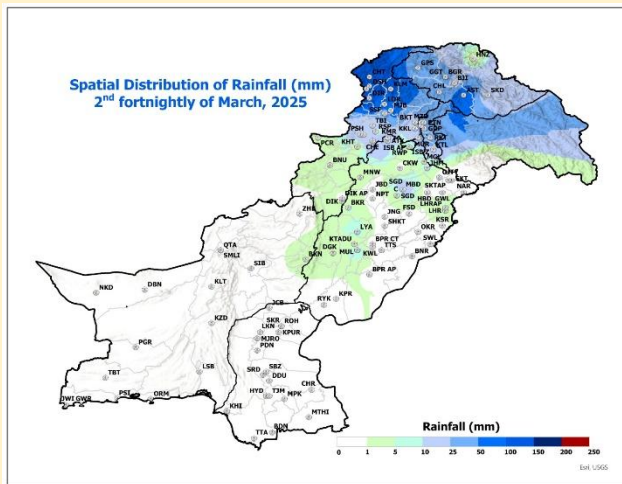


Figure 1: Spatial distribution of rainfall (mm)

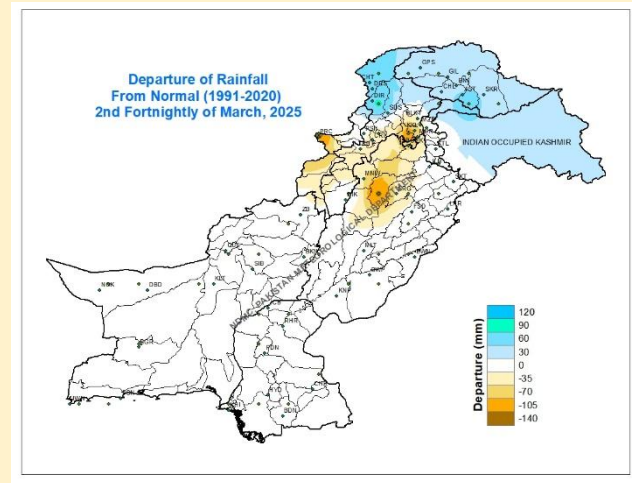


Figure 2: Departure of rainfall (mm)

2. Departure of Rainfall during Second Fortnight of March, 2025

Figure 2 illustrates the deviation of observed rainfall during the second fortnight of March 2025 from the 30-year normal (1991–2020). The Potohar region, Mianwali, Hazara Division, and Parachinar experienced significantly below-normal rainfall. In contrast, the upper parts of Kashmir, Khyber Pakhtunkhwa, and Gilgit-Baltistan recorded above-normal rainfall. The rest of the country remained predominantly dry.

Figure 3 illustrates the average rainfall distribution (in millimeters) during the latter half of March, based on data from 1991 to 2020. In this period, most of the southern regions of the country typically receive between 0 to 60 mm of rainfall. In contrast, areas such as Kashmir, Khyber Pakhtunkhwa, the Potohar region, Mianwali, Sargodha, and their vicinities experience higher average rainfall, ranging from 90 to 180 mm.

Figure 4 presents the normal temperature distribution for the same fortnightly period. The data indicates that Sindh province, along with Lasbela and the coastal areas of Balochistan, are the warmest regions, with average temperatures ranging between 24 to 28°C. The remainder of the country experiences mild to moderate temperature conditions during this time.

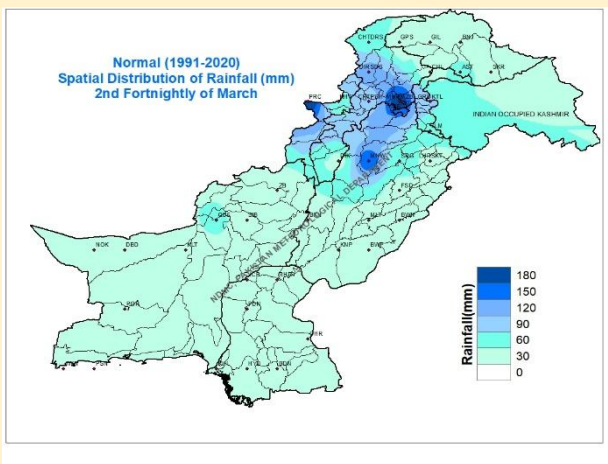


Figure 3: Normal distribution of rainfall (mm)

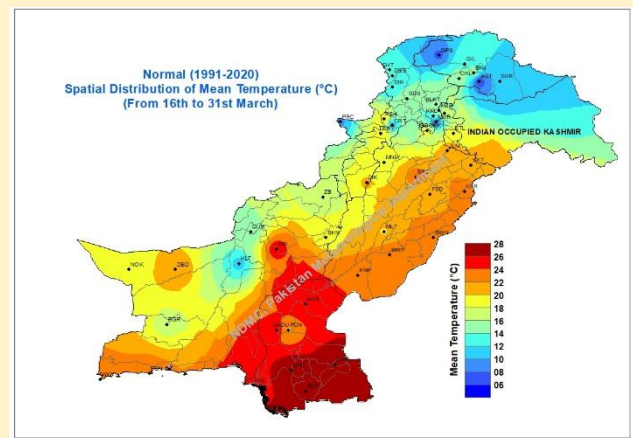


Figure 4: Normal distribution of Temperature (°C)

3. Mean Temperature Analysis during the Second Fortnight of March, 2025

Figure 5 illustrates the spatial distribution of average temperatures (°C) during the latter half of March 2025. The lowest average temperatures were observed in upper Khyber Pakhtunkhwa and Gilgit-Baltistan. Moderate temperatures occurred in central regions, while higher temperatures were recorded in Makran, Lasbella Division, and Sindh Province.

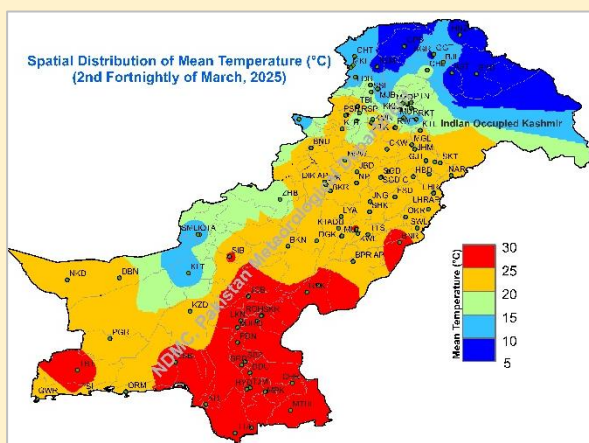


Figure 5: Spatial distribution of the Mean Temperature (°C)

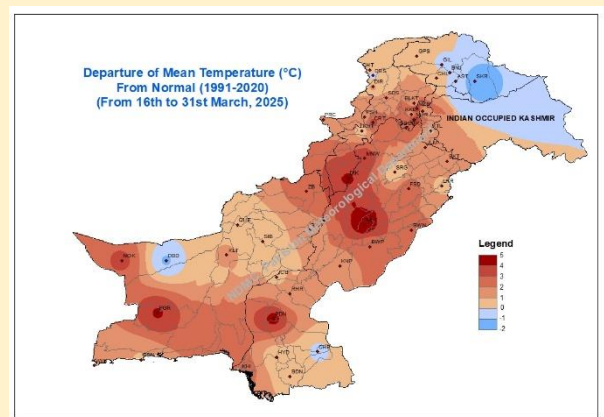


Figure 6: Departure of Mean Temperature (°C) from the Normal (1991-2020)

4. Departure of Temperature during the Second Fortnight of March, 2025

Figure 6 depicts the variation of average temperatures from the normal (1991-2020) during the latter half of March 2025. Most regions experienced temperatures 1-5°C above normal, except for isolated areas such as Dir, Dalbandin, Chhor, and Gilgit-Baltistan, where temperatures were 1-2°C below normal.

5. Water availability/ Dams flow data

During the month, water inflow, outflow and levels of the Rawal, Khanpur, Tarbela , and Mangla dams are shown in Figure 14. The water level at Mangla, Tarbela, Rawal and Khanpur reservoirs has started to increase due to glacial melt and recent rainfall received during the month.

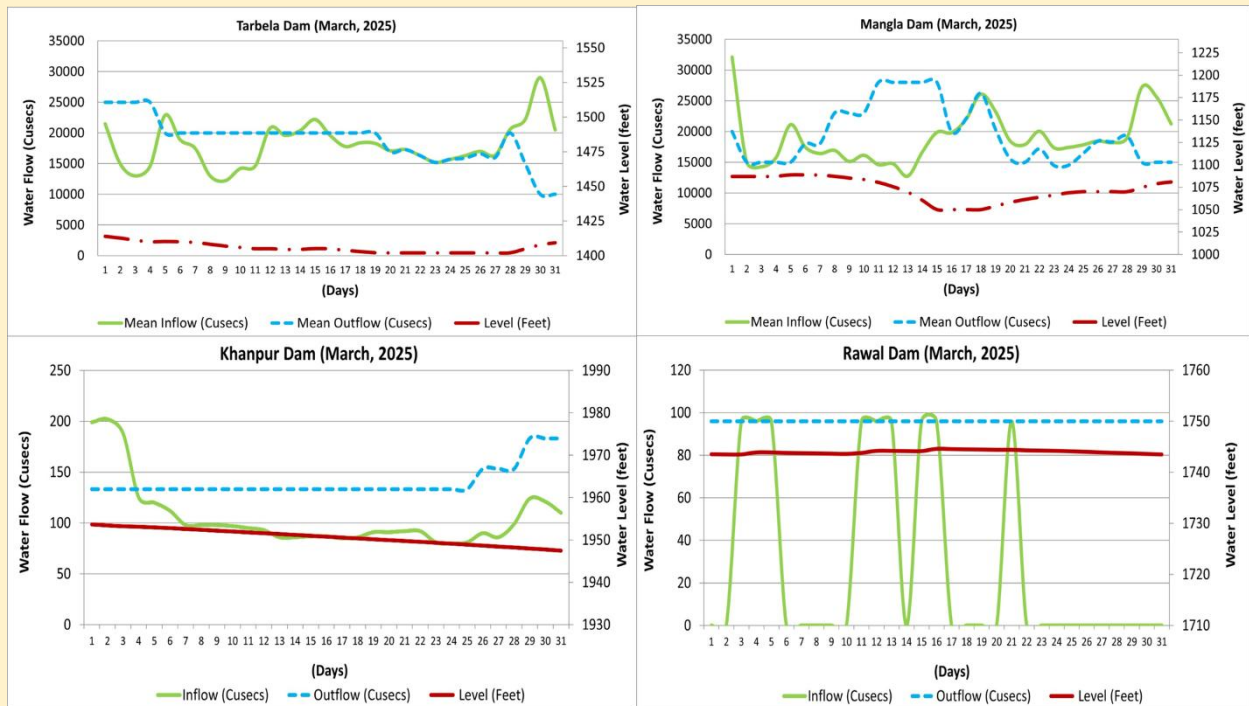


Figure 7: Water inflow, outflow and level of Rawal, Khanpur, Tarbela and Mangla Dams, March, 2025

6. Maximum Length of Consecutive Dry Days (CCD)

The length of dry spells is measured by Consecutive Dry Days (CDD), defined as periods receiving less than one millimeter of rainfall. Figure 7 illustrates the spatial distribution of CDD across various regions. Turbat recorded the highest number of consecutive dry days at 237, while

Lasbela and Sindh experienced between 170 and 230 consecutive dry days, indicating increased water demand in these areas

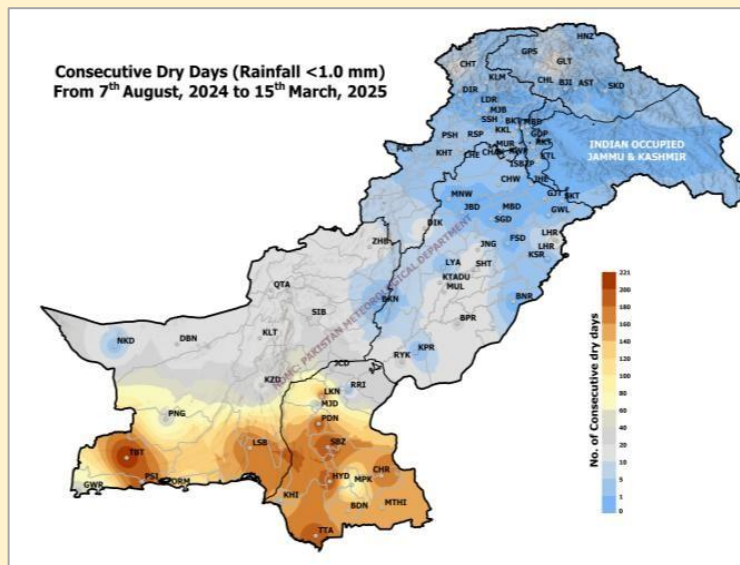


Figure 7: Spatial Distribution of Dry Days Spell

7. Weather Forecast

Forecasts suggest a slight decrease in rainfall from the 1991-2020 average in northern Punjab, Kashmir, and adjacent areas of northern Khyber Pakhtunkhwa. Conversely, southern regions are anticipated to receive near-normal rainfall, aligning with their typical climatological patterns.

Nationwide, mean temperatures are projected to be above normal, with the most significant deviations expected in Kashmir, Gilgit-Baltistan, and northern Khyber Pakhtunkhwa.

8. Drought Situation Analysis

Light to moderate rainfall was observed in Khyber Pakhtunkhwa (KP), Kashmir, and Gilgit-Baltistan, with the upper parts of KP and Kashmir receiving the highest amounts. The remainder of the country remained predominantly dry.

Temperatures were 1-5°C above normal in most regions, except in Dir, Dalbandin, Chhor, and Gilgit-Baltistan, where they were 1-2°C below normal. Given the ongoing below-normal rainfall and above-normal

temperatures, existing drought conditions are likely to worsen in the already affected areas of Sindh and Balochistan.

Residents and businesses are advised to conserve water by repairing leaks, using water-efficient appliances, and limiting lawn and garden watering to early morning or late evening hours to reduce evaporation.

All relevant stakeholders in these regions should stay updated with weather advisories and adjust disaster risk reduction plans