Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Mainly cold and dry weather prevailed in most parts of the country, while very cold in hilly areas. However, light to moderate rain with snowfall over the hills occurred in most parts except Sindh. Foggy conditions persisted in plain areas of Punjab and upper Sindh.
- ❖ Highest amount of rainfall recorded was 24.0 mm at Dalbandin during the last decade.
- ❖ Lowest minimum temperature recorded was -8.0 °C at Skardu and Gupis during the last decade.
- Cold and dry weather is likely in most parts of the country, while very cold in hilly areas. However, rain wind-thunderstorm with snowfall over the hills is expected in west Balochistan, upper Khyber Pakhtunkhwa, Pothohar region, Gilgit-Baltistan and Kashmir. Fog is likely in plain areas of Punjab, Khyber Pakhtunkhwa and upper Sindh.
- Farmers are advised to view the weather forecast before any field activity.

NATIONAL AGROMET CENTRE (NAMC) PAKISTAN METEOROLOGICAL DEPARTMENT SECTOR H-8/2, ISLAMABAD

Patron-in-Chief: Mr. Sahibzad Khan, Director General Editor-in-Chief: Ms. Asma Jawad Hashmi, Director Editor: Mr. Irshad Ali, Assistant Meteorologist Phone: +92-51-9250592 Email: dirnamc@yahoo.com

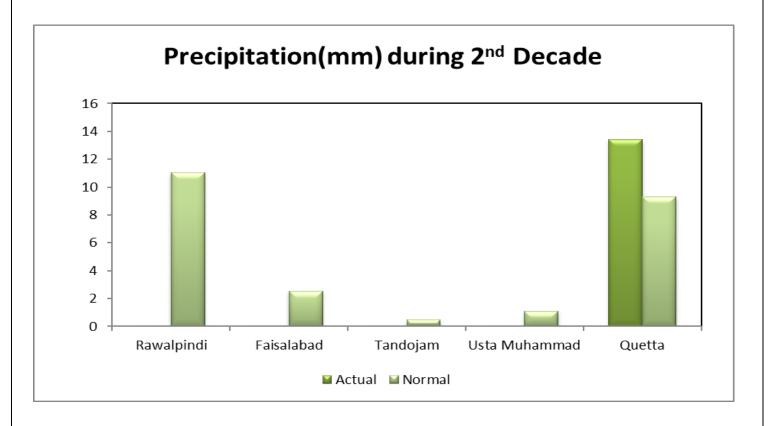
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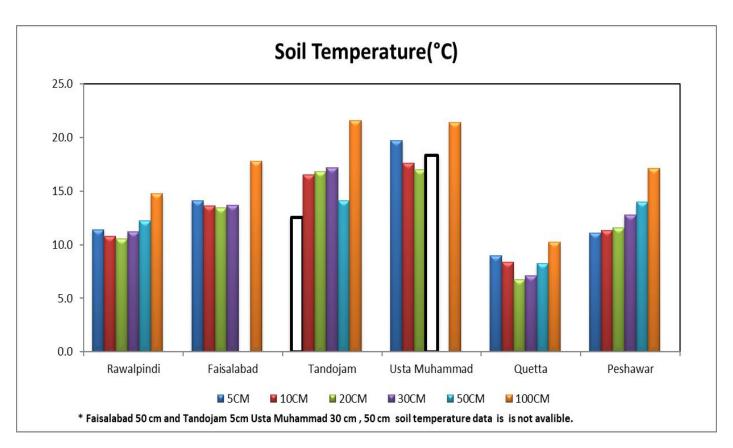
Meteorological Conditions during 2nd Decade of January 2025

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						R.H	Sunshine	Wind	ЕТо
		Normal	Actual	Dep	Tmx Dep	Tmin Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm	(%)	Duration(hours)	Speed (km/hr)	(mm/day)
1	Rawalpindi	11.1	0.0	-11.1	0.7	-1.1	10.7	11.4	10.8	10.6	11.2	12.2	14.8	63.0	42.9	0.6	0.8
2	Faisalabad	2.5	0.0	-2.5	1.3	0.6	12.5	14.1	13.6	13.4	13.7	***	17.8	68.0	52.0	1.1	1.0
3	Jhelum	14.2	0.1	-14.1	0.7	-1.1	12.2	12.6	12.2	12.3	12.9	14.1	***	64.0	46.9	1.6	0.9
4	Lahore	2.9	0.0	-2.9	0.6	0.0	13.3	13.3	13.4	13.5	13.9	***	17.8	66.0	43.3	0.3	1.0
5	Sargodha	2.1	0.0	-2.1	1.4	0.8	13.2	15.3	14.9	15.3	15.8	***	***	65.0	47.2	1.4	1.0
6	Multan	2.3	0.0	-2.3	-0.9	1.5	13.1	***	***	***	***	***	***	61.0	77.5	2.8	1.2
7	Khanpur	9.9	0.0	-9.9	0.7	0.8	13.7	***	14.0	14.9	15.3	15.8	17.7	65.0	53.6	2.0	1.2
8	Tandojam	0.5	0.0	-0.5	-2.2	-1.0	14.9	***	16.5	16.8	17.2	20.4	21.6	60.0	75.0	4.0	1.6
9	Sakrand	3.8	0.0	-3.8	3.4	0.3	14.5	20.2	17.5	17.1	18.4	19.7	***	61.0	77.5	4.0	1.5
11	Rohri	6.2	0.0	-6.2	-0.8	-0.5	14.9	***	***	***	***	***	***	61.2	73.9	4.3	1.4
12	D.I Khan	1.0	0.0	-1.0	1.8	2.1	13.5	13.8	13.4	13.9	***	5.0	***	68.0	42.4	2.7	1.0
13	Peshawar	16.0	0.6	-15.4	1.5	-1.9	11.6	11.1	11.3	11.6	12.8	14.0	17.1	56.0	50.4	2.5	0.8
14	Usta M.	1.1	0.0	-1.1	-0.9	-4.8	12.6	19.7	17.6	17.0	***	***	21.4	63.0	**	1.5	1.3
15	Quetta	9.3	13.4	4.1	-0.5	1.5	5.9	9.0	8.4	6.8	7.1	8.3	10.2	48.2	65.0	5.1	1.0
16	Skardu	14.5	0.0	-14.5	0.5	-1.1	-2.0	***	***	***	***	***	***	55.0	32.6	0.0	0.6
17	Gilgit	2.6	0.6	-2.0	0.9	-1.8	3.8	***	***	***	***	***	***	49.5	25.8	1.8	0.6

Table-1: Meteorological parameters for selected station of Pakistan. "Dep" in the table stands for difference from climatic normal, i.e. actual value minus normal. The climatic normally used in the Bulletin is extracted from the 2007 - 2016 observed data. 'ETO' stands for reference crop Evapotranspiration*** stands for data non-availability.

Graph at RAMCs during January 2025





Past Weather (11th to 20th January 2025)

Mainly cold and dry weather prevailed in most parts of the country, while very cold in hilly areas. However, light to moderate rain with snowfall over the hills occurred in most parts except Sindh. Foggy conditions persisted in plain areas of Punjab and upper Sindh.

1.1 Punjab

Cold and dry weather prevailed over most areas, however, light rain was reported from the province. Fog also persisted in plain areas. The decadal maximum and minimum temperatures were observed above normal by 0.6° C and 0.2° C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 64.6%, 51.9hrs, 1.4km/hr and 1.0mm/day respectively.

1.2 Sindh

Cold and dry weather prevailed, fog also persisted in upper areas of the province. The decadal maximum temperature was observed above normal by $0.1\,^{\circ}\text{C}$ and minimum temperature below normal by $-0.4\,^{\circ}\text{C}$ in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 60.7%, 75.5hrs, 4.1km/hr and 1.5mm/day respectively.

1.3 Khyber Pakhtunkhwa

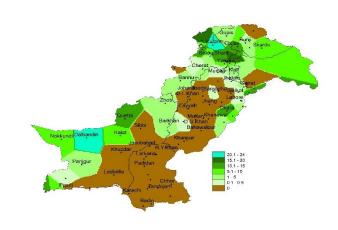
Light to moderate rain/snow was reported from the province. The decadal maximum and minimum temperatures were observed above normal by 1.6°C and 0.1°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 62.0%, 46.4hrs, 2.6km/hr and 0.9mm/day respectively.

1.4 Baluchistan

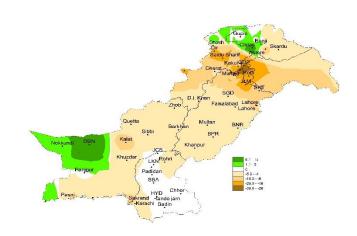
Light to moderate rain/snow was reported from the province. The decadal maximum and minimum temperatures were observed below normal by -0.7°C and -1.7°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 55.6%, 65.0hrs, 3.3km/hr and 1.2mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

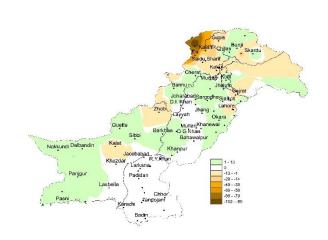
Very cold weather with light to moderate rain/snow was reported from Gilgit Baltistan and Kashmir. The decadal maximum temperature was observed above normal by 0.7°C and minimum temperature below normal by -1.4°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 52.0%, 29.2hrs, 0.9km/hr and 0.6mm/day respectively.



I. Actual rainfall



II. Departure of rainfall from Normal



III. Departure of rainfall from Previous Decade

Figure.1: Rainfall distribution during previous decade (mm)

(a) <u>Past Weather for Major Agricultural Plains</u> (11th to 20th January 2025)

2.1 RAMC, Rawalpindi (Potohar region)

Cold and dry weather was observed during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 63%. Mean day temperature was 19.5°C while night temperature recorded as 1.9°C with 42.9 hours bright sunshine duration. Wind speed recorded as 0.6km/hr with mean wind direction *north westerly*.

2.2 RAMC, Faisalabad (Central Punjab)

Rain was reported 0.01 mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 68%. Mean day temperature was 19.7°C while night temperature recorded as 5.3°C with 52.0 hours bright sunshine duration. Wind speed recorded as 1.1km/hr with mean wind direction westerly.

Wheat: Very good, tillering completed.

2.3 RAMC, Tandojam (Lower Sindh)

Cold and dry weather was observed during the decade; however, weather remained partially cloudy for 01 days. Average relative humidity recorded as 60%. Mean day temperature was 22.3°C while night temperature recorded as 7.5°C with 75.6hours bright sunshine duration. Wind speed recorded as 4.0km/hr with mean wind direction *north-north easterly*.

Wheat: Good, Heading.

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

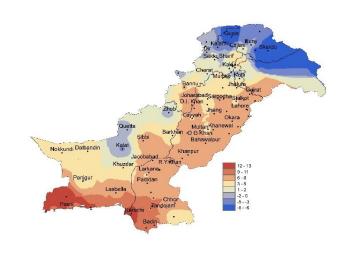
Cold and dry weather was observed during the decade; however, weather remained partially cloudy for 05 days. Average relative humidity recorded as 63%. Mean day temperature was 21.3°C while night temperature recorded as 3.9°C. Wind speed recorded as 1.5 km/hr with mean wind direction *variable*.

Wheat: Good, Emergent.

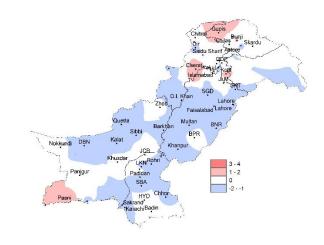
2.5 RAMC, Quetta (Northern Baluchistan)

Rain was reported 13.4 mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 48%. Mean day temperature was 11.4°C while night temperature recorded as 0.3°C with 65.0 hours bright sunshine duration. Wind speed recorded as 5.1 km/hr with mean wind direction *southerly*.

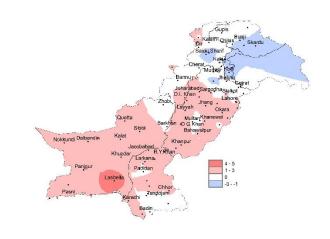
Wheat: Good, Tillering.



IV. Actual min-temperature



V. Departure of min-temperature from Normal



VI. Departure of min-temperature from Previous Decade

Figure.2: Minimum Temperature distribution during previous decade (°C)

2(b) <u>Past Weather or Sub-Regional Agricultural</u> Plains (11th to 20th January 2025)

2.6 Jhelum

Rain was reported 0.01 mm during the decade; weather remained partially cloudy for 07 days. Average relative humidity recorded as 64%. Mean day temperature was 19.5°C while night temperature recorded as 4.8°C with 46.9 hours bright sunshine duration. Wind speed recorded as 1.6km/hr with mean wind direction variable.

2.7 Lahore

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 66%. Mean day temperature was 18.8°C while night temperature recorded as 7.7°C with 43.3 hours bright sunshine duration. Wind speed recorded as 0.3 km/hr with mean wind direction *westerly*.

2.8 Sargodha

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 07 days. Average relative humidity recorded as 65%. Mean day temperature was 20.0°C while night temperature recorded as 6.3°C with 47.2 hours bright sunshine duration. Wind speed recorded as 1.3km/hr with mean wind direction *variable*.

2.9 Multan

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 67%. Mean day temperature was 19.0°C while night temperature recorded as 5.9°C with 32.8 hours bright sunshine duration. Wind speed recorded as 2.8 km/hr with mean wind direction *north easterly*.

2.10 Khanpur

Cold and dry weather was observed during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 66%. Mean day temperature was 21.0°C while night temperature recorded as 6.3°C with 53.6 hours bright sunshine duration. Wind speed recorded as 2.0 km/hr with mean wind direction *north easterly*.

2.11 Sakrand

Cold and dry weather was observed during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 61%. Mean day temperature was 21.8°C while night temperature recorded as 7.2°C with 77.5hours bright sunshine duration. Wind speed recorded as 4.0 km/hr with mean direction *north westerly*.

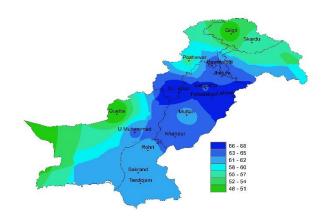


Figure.3: Relative Humidity in Percentage (%)

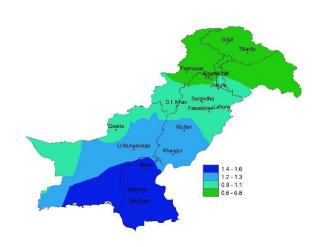


Figure.4: Reference Crop Evapotranspiration ETO (mm/day)



Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Cold and dry weather was observed during the decade; however, weather remained partially cloudy for 04 days. Average relative humidity recorded as 61%. Mean day temperature was 20.9°C while night temperature recorded as 8.8°C with 73.9 hours bright sunshine duration. Wind speed recorded as 4.3km/hr with mean wind direction as *north easterly*.

Wheat: Very good, Tillering completed.

2.13 D.I. Khan

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 59%. Mean day temperature was 21.3°C while night temperature recorded as 5.9°C with 59.5 hours bright sunshine duration. Wind speed recorded as 2.7km/hr with mean wind direction as north westerly.

2.14 Peshawar

Rain was reported 0.6mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 56%. Mean day temperature was 20.2°C while night temperature recorded as 2.9°C with 50.4 hours bright sunshine duration. Wind speed recorded as 2.5km/hr with mean wind direction as north westerly.

2.15 Skardu

Rain was reported 5.2mm during the decade; however, weather remained partially cloudy for 07 days. Average relative humidity recorded as 73%. Mean day temperature was 3.9°C while night temperature recorded as 5.2°C with 22.9 hours bright sunshine duration. Wind speed recorded as 0.0km/hr with mean wind direction as variable.

2.16 Gilgit

Rain was reported 0.6 mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 50%. Mean day temperature was 11.5°C while night temperature recorded as -4.0°C with 25.8 hours bright sunshine duration. Wind speed recorded as 1.8km/hr with mean wind direction as *south easterly*.

Eleven Days Weather Advisory for Farmers (21st to 31st January 2025)

3.1 Temperature Forecast

Normal mean temperature is likely over most parts of the county.

3.2 Wind Forecast

Generally, normal wind patterns may prevail in most of the agricultural plains of the country.

3.3 Rain Forecast

Punjab:

Mainly cold and dry weather is expected in most parts; however, rain/wind-thunderstorm is likely in Pothohar region on 21st, 22nd, 29th to 31st January, while foggy conditions may prevail in plain areas of the province during the decade.

Khyber Pakhtunkhwa:

❖ Mainly cold and dry weather is expected in most parts; however, rain/wind-thunderstorm with snowfall is likely in upper areas on 21st, 22nd, 28th to 31st January, while foggy conditions may prevail in plain areas of the province during the decade.

❖ Sindh:

Mainly cold and dry weather is expected in most parts, while fog is likely in upper areas of province during the decade.

❖ Baluchistan:

❖ Mainly cold and dry weather is expected in most parts, while very cold in upper areas. However, rain/wind-thunderstorm is likely in western parts on 21st, 22nd, 29th to 31st January during the decade.

❖ Gilgit-Baltistan:

Mainly very cold and dry weather is expected, while rain/wind-thunderstorm with snowfall is likely in Gilgit Baltistan on 21st, 22nd, 29th to 31st January during the decade.

***** Kashmir:

Mainly very cold and dry weather is expected, while rain/wind-thunderstorm with snowfall is likely in Gilgit Baltistan on 21st, 22nd, 30th and 31st January during the decade.

3.4 Advisory for Farmers

Farmers are advised to follow the weather forecast to proceed for any field activity.