Decadal Agromet Bulletin of Pakistan



Highlights...

- Dry weather prevailed in most parts of the country, while hot in Sindh. Light to moderate rain was also reported from upper Khyber Pakhtunkhwa and Gilgit Baltistan.
- Highest amount of rainfall recorded as 15.0 mm at Saidu Sharif during the last decade.
- Highest maximum temperature recorded as 38.45°C at Shaheed Benazirabad during the last decade.
- Mainly dry weather may prevail in most parts of the country. Smog is likely in most parts of Punjab and plain areas of Khyber Pakhtunkhwa, while dense fog may occur during night/morning hours. Rain-wind/thunderstorm (light snowfall over high mountains) is expected in upper Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir, while in Potohar region (Punjab) during first half of the decade.
- Farmers are advised to view the weather forecast before any field activity.

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

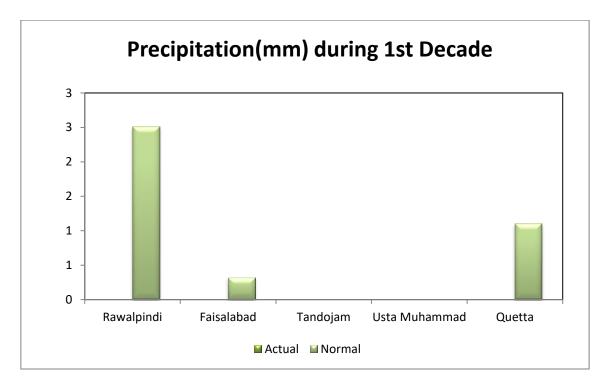
Patron-in-Chief: Mr. Sahibzad Khan, Director General Editor-in-Chief: Ms. Asma Jawad Hashmi, Director Editor: Mr. Irshad Ali, Assistant Meteorologist Phone: +92-51-9250592 Email: dirnamc@yahoo.com

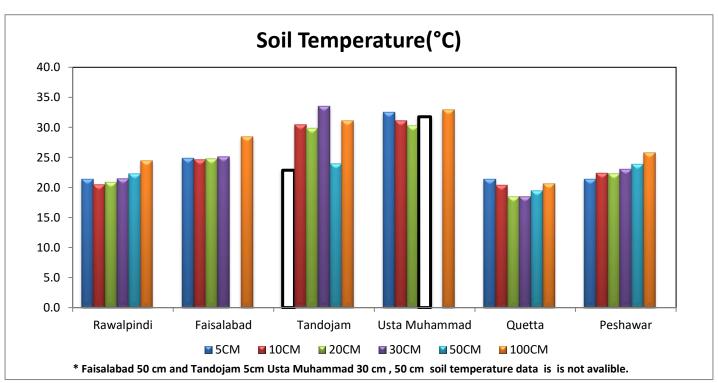
Meteorological Conditions during 1st Decade of November 2024

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	2.5	0.0	-2.5	3.0	1.8	21.5	21.4	20.4	20.9	21.5	22.3	24.4	63.0	65.8	0.4	1.7
2	Faisalabad	0.3	0.0	-0.3	0.3	4.0	23.8	24.9	24.6	24.8	25.1	***	28.5	66.0	45.6	0.9	1.8
3	Jhelum	1.1	0.0	-1.1	0.0	2.0	22.7	22.9	22.3	22.5	22.9	24.0	***	70.0	56.0	0.0	1.6
4	Lahore	0.0	0.0	0.0	0.6	1.6	24.2	***	***	***	***	***	***	66.0	21.9	0.3	1.5
5	Sargodha	0.5	0.0	-0.5	1.2	3.6	24.6	26.2	25.8	26.2	26.7	***	***	64.0	32.9	0.6	1.7
6	Multan	0.0	0.0	0.0	0.0	6.1	25.9	***	***	***	***	***	***	46.0	95.6	3.3	3.1
7	Khanpur	0.0	0.0	0.0	1.4	4.0	26.4	***	28.2	28.7	29.2	29.8	30.6	65.0	51.4	1.8	3.6
8	Tandojam	0.0	0.0	0.0	3.9	1.6	28.0	***	30.5	29.9	33.6	30.7	31.1	54.0	79.1	3.0	3.6
9	Sakrand	0.0	0.0	0.0	4.9	4.7	29.4	36.9	32.3	31.6	31.8	32.7	***	46.0	95.6	3.3	3.9
11	Rohri	0.0	0.0	0.0	3.3	3.8	29.3	***	***	***	***	***	***	48.6	91.3	2.2	3.3
12	D.I Khan	0.5	0.0	-0.5	1.0	4.6	24.6	24.9	24.8	25.2	***	16.1	***	67.0	18.7	1.9	1.8
13	Peshawar	4.3	0.0	-4.3	2.2	1.2	21.8	21.4	22.4	22.3	23.1	23.8	25.8	67.0	58.4	1.3	1.8
14	Usta M.	0.0	0.0	0.0	0.0	0.0	26.1	32.5	31.1	30.3	***	***	33.0	60.0	**	1.4	2.8
15	Quetta	1.5	0.0	-1.5	0.0	1.9	9.3	***	***	***	***	***	***	49.0	51.2	0.6	1.1
16	Skardu	1.5	0.0	-1.5	2.2	2.5	14.7	***	***	***	***	***	***	52.3	58.9	1.7	1.7
17	Gilgit	2.5	0.0	-2.5	3.0	1.8	21.5	21.4	20.4	20.9	21.5	22.3	24.4	63.0	65.8	0.4	1.7

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 November 2024





Past Weather (1st to 10th November 2024)

Dry weather prevailed in most parts of the country, while hot in Sindh. Light to moderate rain was also reported from upper Khyber Pakhtunkhwa and Gilgit Baltistan.

Punjab

Mainly dry weather prevailed in most parts of the province. The decadal maximum and minimum temperatures rose above normal by 0.9°C and 3.3°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 63%, 52.7hrs, 1.0km/hr and 2.1mm/day respectively.

1.1 Sindh

Mainly dry weather prevailed in most parts of the province. The decadal maximum and minimum temperatures rose above normal by 4.0°C and 3.3°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 50%, 88.7hrs, 2.8km/hr and 3.6mm/day respectively.

1.2 Khyber Pakhtunkhwa

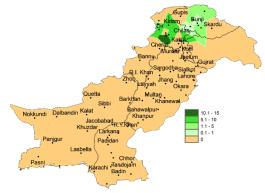
Mainly dry weather prevailed in most parts, whereas light to moderate rainfall was reported from upper parts of the province. The decadal maximum and minimum temperatures rose above normal by 1.6°C and 2.9°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 67%, 38.6hrs, 1.6km/hr and 1.8mm/day respectively.

1.3 Baluchistan

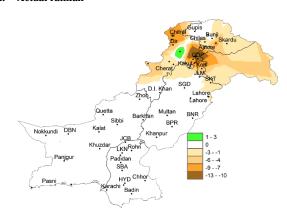
Mainly dry weather prevailed in most parts of the province. The decadal maximum and minimum temperatures rose above normal by 1.7°C and 2.7°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 45%, 98.6hrs, 2.7km/hr and 2.9mm/day respectively.

1.4 Gilgit-Baltistan and Azad Jammu & Kashmir.

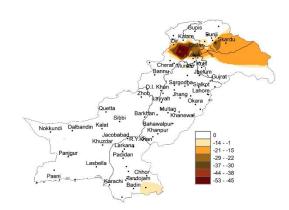
Light rain was reported from Gilgit-Baltistan, whereas dry weather prevailed in Kashmir. The decadal maximum and minimum temperatures rose above normal by 1.1°C and 2.2°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 55%, 55.1hrs, 1.2km/hr and 1.4mm/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> (1st to 10th November 2024)

2.1 RAMC, Rawalpindi (Potohar region)

Dry weather was observed during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 63%. Mean day temperature was 30.7°C while night temperature recorded as 12.3°C with 65.8 hours bright sunshine duration. Wind speed recorded as 0.4km/hr with mean wind direction north westerly.

2.2 RAMC, Faisalabad (Central Punjab)

Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 66%. Mean day temperature was 30.1°C while night temperature recorded as 17.5°C with 45.6 hours bright sunshine duration. Wind speed recorded as 0.9km/hr with mean wind direction variable.

Cotton: Harvested, Land preparation for next crop.

2.3 RAMC, Tandojam (Lower Sindh)

Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 54%. Mean day temperature was 38.0°C while night temperature recorded as 18.0°C with 79.1 hours bright sunshine duration. Wind speed recorded as 3.0km/hr with mean wind direction *south easterly*. *Crop:*, *Nil*.

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

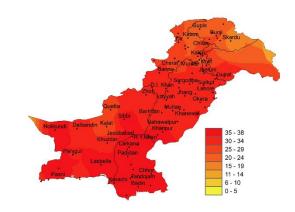
Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 60%. Mean day temperature was 34.6°C while night temperature recorded as 17.6°C. Wind speed recorded as 1.4 km/hr with mean wind direction *south easterly*.

Rice: Good, maturity.

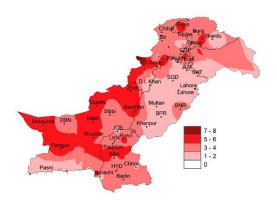
2.5 RAMC, Quetta (Northern Baluchistan)

Dry weather was observed during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 29.3%. Mean day temperature was 25.7°C while night temperature recorded as 9.9°C. Wind speed recorded as 4.0km/hr with mean wind direction *north* westerly.

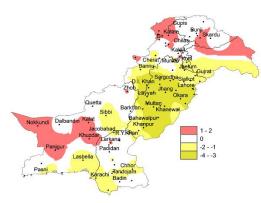
Crop: Nil.



I. Actual max-temperature



II. Departure of max-temperature from Normal



III. Departure of max-temperature from Previous Decade

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

2(b) <u>Past Weather or Sub-Regional Agricultural</u> Plains (1st to 10th November 2024)

2.6 Jhelum

Dry weather was observed during the decade; however, weather remained partially cloudy for 02 days. Average relative humidity recorded as 70%. Mean day temperature was 29.6°C while night temperature recorded as 15.7°C with 56.0 hours bright sunshine duration. Wind speed recorded as 0.0 km/hr with mean wind direction *calm*.

2.7 Lahore

Dry weather was observed during the decade; however, weather remained partially cloudy for 02 days. Average relative humidity recorded as 66%. Mean day temperature was 29.9°C while night temperature recorded as 18.4°C with 21.9 hours bright sunshine duration. Wind speed recorded as 0.3 km/hr with mean wind direction north *westerly*.

2.8 Sargodha

Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 64%. Mean day temperature was 30.7°C while night temperature recorded as 18.4°C with 32.9hours bright sunshine duration. Wind speed recorded as 0.6km/hr with mean wind direction *variable*.

2.9 Multan

Dry weather with clear skies was observed during the decade. Average relative humidity recorded as 64%. Mean day temperature was 30.9°C while night temperature recorded as 18.8°C with 47.2 hours bright sunshine duration. Wind speed recorded as 1.9 km/hr with mean wind direction *northerly*.

2.10 Khanpur

Dry weather with clear skies was observed during the decade. Average relative humidity recorded as 65%. Mean day temperature was 33.6 °C while night temperature recorded as 19.2 °C with 51.4 hours bright sunshine duration. Mean wind direction *south westerly*.

2.11 Sakrand

Dry weather with clear skies was reported during the decade. Average relative humidity recorded as 46%. Mean day temperature was 38.0° C while night temperature recorded as 20.8° C with 95.6 hours bright sunshine duration. Wind speed recorded as 3.3° km/hr with mean direction southerly.

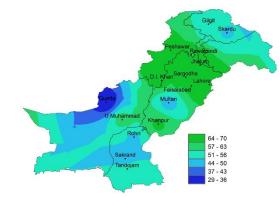


Figure.3: Relative Humidity in Percentage (%)



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



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

2.12 Rohri

Dry weather with clear skies was reported weather during the decade. Average relative humidity recorded as 49%. Mean day temperature was 36.4°C while night temperature recorded as 22.2°C with 91.3 hours bright sunshine duration. Wind speed recorded as 2.2km/hr with Mean wind direction as *south easterly*.

2.13 D.I. Khan

Dry weather with clear sky was observed during the decade; Average relative humidity recorded as 67%. Mean day temperature was 31.0°C while night temperature recorded as 18.2°C with 18.7 hours bright sunshine duration. Wind speed recorded as 1.9km/hr with mean wind direction as *north easterly*.

2.14 Peshawar

Dry weather was observed during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 67%. Mean day temperature was 29.1°C while night temperature recorded as 14.4 °C with 58.4 hours bright sunshine duration. Wind speed recorded as 1.3km/hr with mean wind direction as *north easterly*.

2.15 Skardu

Dry weather was observed during the decade; however, weather remained partially cloudy for 02 days. Average relative humidity recorded as 49%. Mean day temperature was 17.3°C while night temperature recorded as 1.2°C with 51.2 hours bright sunshine duration. Wind speed recorded as 0.6km/hr with mean wind direction as east-*south easterly*.

2.16 Gilgit

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 52%. Mean day temperature was 24.8°C while night temperature recorded as 4.5°C with 58.9hours bright sunshine duration. Wind speed recorded as $1.7 \, \mathrm{km/hr}$ with mean wind direction as *south easterly*.

Ten Days Weather Advisory for Farmers (11th to 20th November 2024)

3.1 Temperature Forecast

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

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 dry weather may prevail while smog is likely in most parts of the province. Dense fog may also occur during night/morning hours. Rainwind/thunderstorm is expected in Potohar region during first half of the decade.

***** Khyber Pakhtunkhwa:

❖ Rain-wind/thunderstorm is expected in upper Khyber Pakhtunkhwa during first half of the decade. Smog is likely to prevail in the plain areas of the province over the decade, while dense fog may also occur during the morning and night hours.

❖ Sindh:

Mainly dry weather is expected in most parts of the province during the decade.

❖ Baluchistan:

Mainly dry weather is expected in most parts of the province during the decade.

❖ Gilgit-Baltistan:

* Rain-thunderstorm (light snowfall over high mountains) is expected in Gilgit Baltistan during the decade.

***** Kashmir:

* Rain-thunderstorm (light snowfall over high mountains) is expected in Kashmir during the decade.

3.4 Advisory for Farmers

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