

Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Moderate to heavy amount of rainfall was reported from most parts of the country while light rain was observed in Gilgit-Baltistan.
- ❖ Highest amount of rainfall recorded was 251.02 mm at Islamabad Zero point during the last decade.
- ❖ Highest maximum temperature recorded as 45.5°C at Nokkundi during the last decade.
- ❖ Rain-windstorm/thundershower is expected in most parts of Punjab, KP, Kashmir, Balochistan and Sindh during the second half of the decade.
- ❖ Farmers are advised to view the weather forecast before any field activity.
- ❖ In case of heavy rains, extra water should be removed from the field.

**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: *Ms. Saeeda Saleh, Meteorologist*

Phone: [+92-51-9250592](tel:+92-51-9250592) Email: dirnamc@yahoo.com

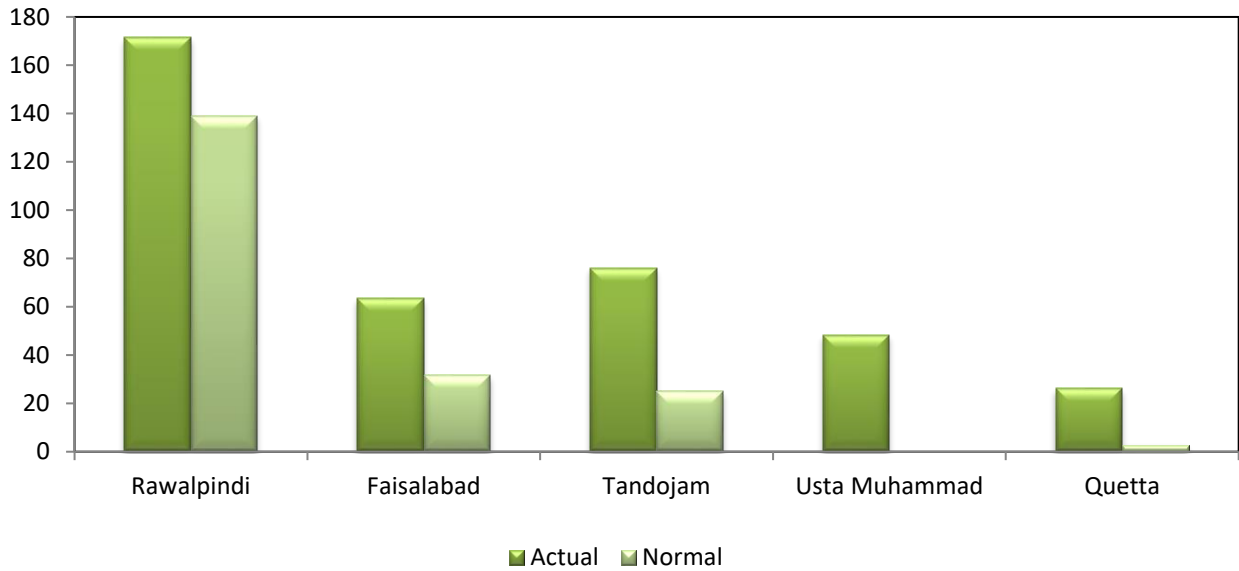
Meteorological Conditions during 1st Decade of August 2024

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						R.H (%)	Sunshine Duration(hours)	Wind Speed (km/hr)	ETo (mm/day)
		Normal	Actual	Dep	Tmx Dep	Tmin Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm				
1	Rawalpindi	139.0	171.3	32.3	2.0	0.2	29.2	31.8	31.4	30.7	30.5	30.5	30.3	73	49.7	3.6	4.1
2	Faisalabad	31.5	63.4	31.9	-1.5	0.9	31.6	32.7	32.5	32.8	32.7	***	33.2	73	65.9	3.8	4.8
3	Jhelum	97.6	29.4	-68.2	-0.5	1.1	30.4	32.8	32.3	31.9	31.5	31.6	***	80	46.0	4.8	4.0
4	Lahore	59.2	132.0	72.8	-0.4	0.2	30.8	31.3	31.1	30.8	30.5	***	30.2	75	45.3	1.4	3.8
5	Sargodha	28.5	0.1	-28.4	-0.5	1.4	32.6	36.2	35.4	34.7	34.3	***	***	68	46.4	5.6	4.7
6	Multan	23.3	30.6	7.3	-0.2	-1.0	32.3	***	***	***	***	***	***	72	55.6	5.6	3.9
7	Khanpur	22.3	78.6	56.3	-1.3	1.6	32.3	***	35.6	35.9	36.4	36.8	36.2	75	65.8	**	5.2
8	Tandojam	24.8	76.0	51.2	-2.2	-0.4	29.4	***	32.5	32.6	35.0	32.9	33.4	78	43.6	1.8	3.7
9	Sakrand	38.9	141.0	102.1	-0.5	-2.7	31.2	39.3	***	***	***	***	***	72	55.6	5.6	4.8
11	Rohri	55.6	85.0	29.4	-2.4	1.3	31.9	***	***	***	***	***	***	70	56.9	**	5.1
12	D.I Khan	31.5	8.7	-22.8	0.9	-5.2	29.5	35.9	35.3	13.1	***	23.6	***	73	59.6	4.2	5.4
13	Peshawar	38.8	66.6	27.8	-0.6	-0.2	30.5	32.0	32.0	30.8	30.9	30.7	30.1	74	41.7	2.8	6.4
14	Usta M.	0.0	48.3	48.3	0.0	0.0	31.4	37.1	36.7	37.6	***	***	38.4	66	***	5.1	5.4
15	Quetta	2.9	26.2	23.3	-3.5	-0.7	26.9	32.1	30.8	29.0	28.6	29.1	28.5	56	70.1	5.7	5.2
16	Skardu	4.8	1.6	-3.2	1.7	0.9	25.9	***	***	***	***	***	***	38	71.3	1.4	4.2
17	Gilgit	4.7	1.4	-3.3	2.8	3.8	30.3	***	***	***	***	***	***	46	89.5	3.9	5.7

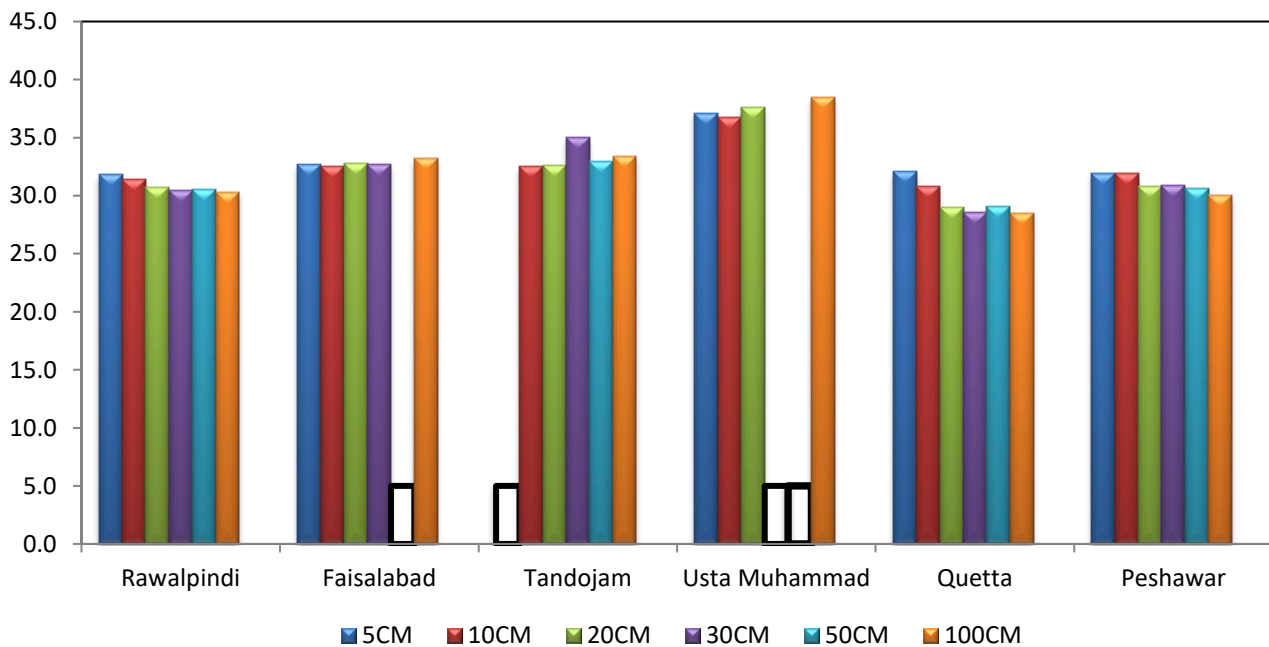
Table-1: Meteorological parameters for selected station of Pakistan. "Dep" in the table stands for difference from climatic normal, i.e. actual value minus normal. The climatic normally used in the Bulletin is extracted from the 2007 - 2016 observed data. 'ETo' stands for reference crop Evapotranspiration***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

Graph at RAMCs during August 2024

Precipitation(mm) during 1st Decade



Soil Temperature(°C)



* Faisalabad 50 cm and Tandojam 5cm Usta Muhammad 30 cm , 50 cm soil temperature data is is not available.

Past Weather (1st to 10th August 2024)

Moderate to heavy amount of rainfall was reported from most parts of the country while light rain was observed in Gilgit-Baltistan.

1.1 Punjab

Moderate to heavy rain with isolated heavy falls was reported from the province. The decadal maximum and minimum temperature was observed near normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 74%, 53.5hrs, 4.1km/hr and 4.3mm/day respectively.

1.2 Sindh

Moderate to heavy rain with isolated heavy falls was reported from the province. The decadal maximum were observed below normal by -1.6°C while minimum temperatures remained near normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 73%, 52.0hrs, 3.7km/hr and 4.5mm/day respectively.

1.3 Khyber Pakhtunkhwa

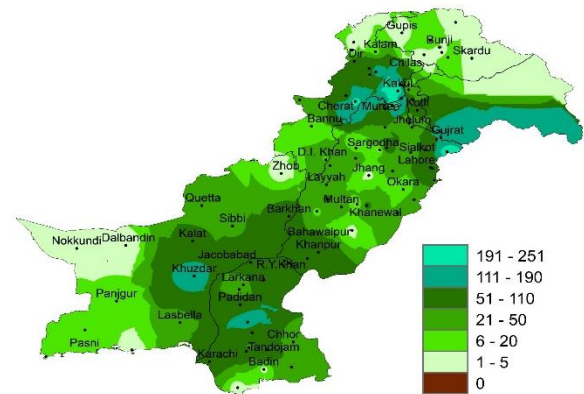
Moderate to heavy rain with isolated heavy falls was reported from the province. The decadal maximum temperature remained near normal by minimum temperature was observed below normal by -2.7°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 74%, 50.6hrs, 3.5km/hr and 5.9mm/day respectively.

1.4 Baluchistan

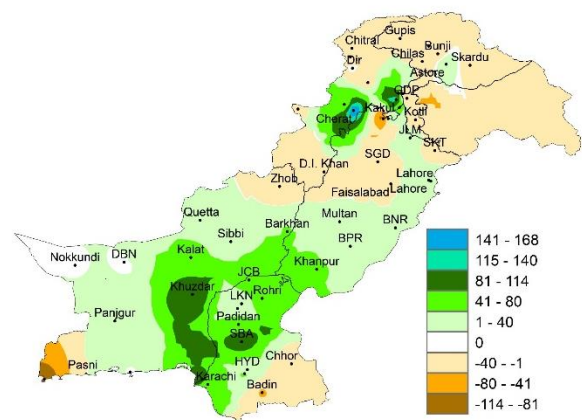
Moderate to heavy rain with isolated heavy falls with isolated heavy falls was reported from the province. The decadal maximum were observed below normal by -1.7°C and minimum temperatures were observed near normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 61%, 70.1hrs, 5.4km/hr and 5.3 mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

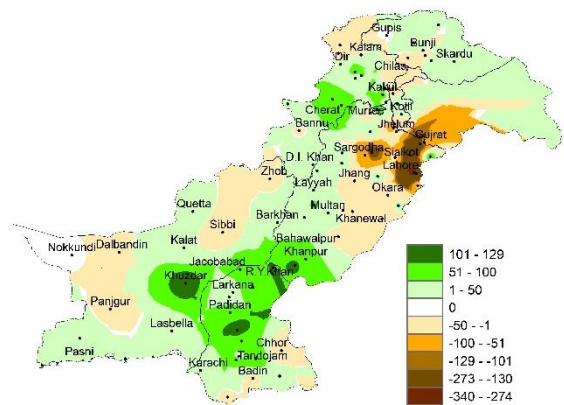
Light rain was reported from Gilgit-Baltistan while moderate to heavy was reported in Kashmir during the decade. The decadal maximum and minimum temperatures rose above normal by 2.2°C and 2.3°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 42%, 80.4hrs, 2.6km/hr and 4.9mm/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) **Past Weather for Major Agricultural Plains**
(1st to 10th August 2024)

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 171.3 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 73%. Mean day temperature was 34.5°C while night temperature recorded as 23.9°C with 49.7 hours bright sunshine duration. Wind speed recorded as 3.6 km/hr with mean wind direction *south easterly*.

2.2 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 63.4 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 73%. Mean day temperature was 35.0°C while night temperature recorded as 28.1°C with 65.9 hours bright sunshine duration. Wind speed recorded as 3.8 km/hr with mean wind direction *south easterly*.

Cotton: *Very good, Ball opening.*

2.3 RAMC, Tandojam (Lower Sindh)

Rainfall reported as 76 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 78%. Mean day temperature was 33.2°C while night temperature recorded as 25.5°C with 43.6 hours bright sunshine duration. Wind speed recorded as 1.8 km/hr with mean wind direction *south westerly*.

Cotton: *Fair, Flowering.*

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

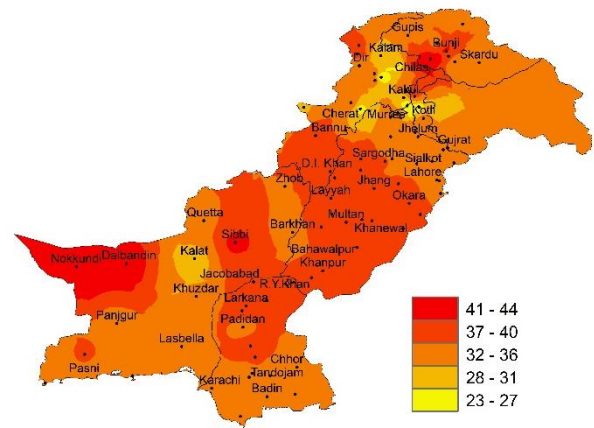
Rainfall reported as 48.3 mm during the decade; however, weather remained partially cloudy for 10 days. Average relative humidity recorded as 66%. Mean day temperature was 37.0°C while night temperature recorded as 25.7°C. Wind speed recorded as 5.1km/hr with mean wind direction *variable*.

Rice: *Good, Third Leaf.*

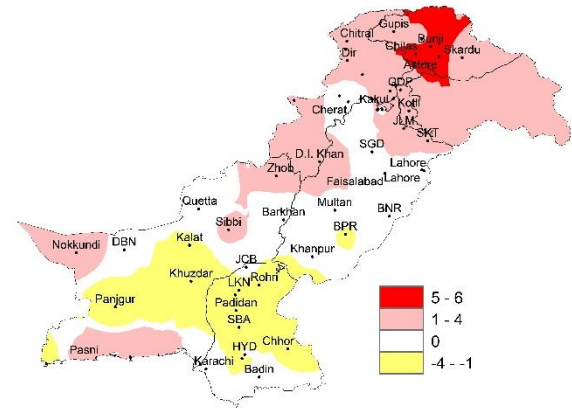
2.5 RAMC, Quetta (Northern Baluchistan)

Rainfall reported as 26.2 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 56%. Mean day temperature was 33.2°C while night temperature recorded as 20.5°C with 70.1 hours bright sunshine duration. Wind speed recorded as 5.7 km/hr with mean wind direction *south westerly*.

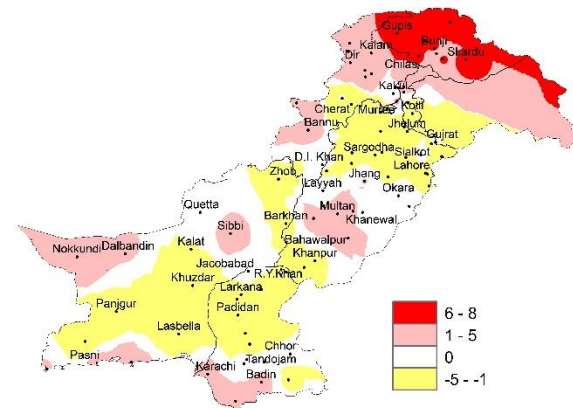
Wheat: *Nil.*



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) Past Weather or Sub-Regional Agricultural Plains (1st to 10th August 2024)

2.6 Jhelum

Rainfall reported as 29.4 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 80%. Mean day temperature was 33.8°C while night temperature recorded as 26.9°C with 46.0 hours bright sunshine duration. Wind speed recorded as 4.8 km/hr with mean wind direction *south easterly*.

2.7 Lahore

Rainfall reported as 132.0 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 75%. Mean day temperature was 34.4°C while night temperature recorded as 27.1°C with 45.3 hours bright sunshine duration. Wind speed recorded as 1.4 km/hr with mean wind direction *north easterly*.

2.8 Sargodha

Rainfall reported as 0.01 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 68%. Mean day temperature was 36.2°C while night temperature recorded as 28.9°C with 46.4 hours bright sunshine duration. Wind speed recorded as 5.6 km/hr with mean wind direction *south easterly*.

2.9 Multan

Rainfall reported as 30.6 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 66%. Mean day temperature was 37.4°C while night temperature recorded as 38.9°C with 60.9 hours bright sunshine duration. Wind speed recorded as 6.0 km/hr with mean wind direction *southerly*.

2.10 Khanpur

Rainfall reported as 78.6 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 75%. Mean day temperature was 37.436.5°C while night temperature recorded as 28.1°C with 65.8 hours bright sunshine duration. Mean wind direction *south westerly*.

2.11 Sakrand

Rainfall reported as 141 mm during the decade; however, weather remained partially cloudy for 07 days. Average relative humidity recorded as 72%. Mean day temperature was 35.3°C while night temperature recorded as 27.1°C with 55.6 hours bright sunshine duration. Wind speed recorded as 5.6 km/hr with mean direction southerly.

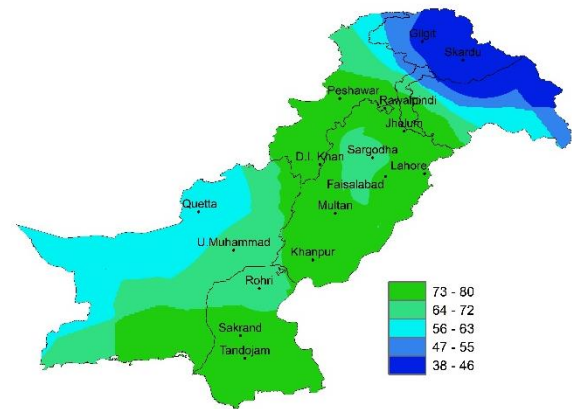


Figure.3: Relative Humidity in Percentage (%)

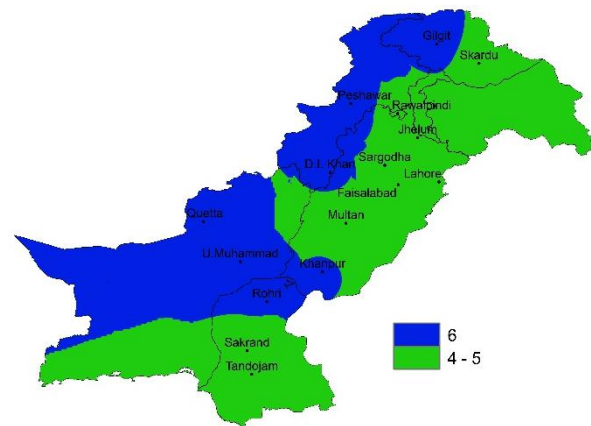


Figure.4: Reference Crop Evapotranspiration ETo (mm/day)

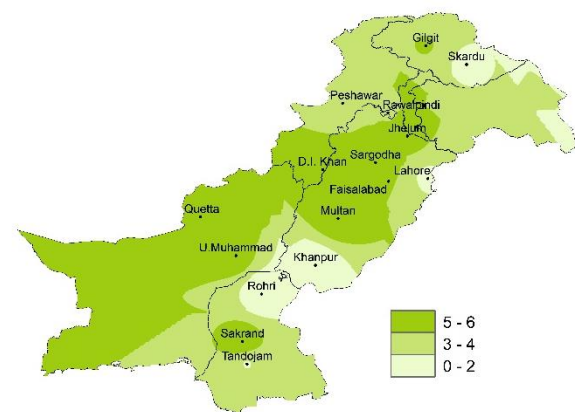


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Rainfall reported as 85.0 mm during the decade; however, weather remained partially cloudy for 10 days. Average relative humidity recorded as 70%. Mean day temperature was 36.2°C while night temperature recorded as 27.6°C with 56.9 hours bright sunshine duration. Mean wind direction as *south easterly*.

2.13 D.I. Khan

Rainfall reported as 8.7 mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 73%. Mean day temperature was 38.2°C while night temperature recorded as 20.8°C with 59.6 hours bright sunshine duration. Wind speed recorded as 4.2 km/hr with mean wind direction as *south easterly*.

2.14 Peshawar

Rainfall reported as 66.6 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 74%. Mean day temperature was 35.1°C while night temperature recorded as 25.9°C with 41.7 hours bright sunshine duration. Wind speed recorded as 2.8 km/hr with mean wind direction as *northeast westerly*.

2.15 Skardu

Rainfall reported as 1.6 mm during the decade; however, weather remained partially cloudy for 03 days during the decade. Average relative humidity recorded as 38%. Mean day temperature was 34.0°C while night temperature recorded as 17.7°C with 71.3 hours bright sunshine duration. Wind speed recorded as 1.4 km/hr with mean wind direction as *westerly*.

2.16 Gilgit

Rainfall reported as 1.4 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 46%. Mean day temperature was 38.5°C while night temperature recorded as 22.0°C with 89.5 hours bright sunshine duration. Wind speed recorded as 3.9 km/hr with mean wind direction as *south easterly*.

**Ten Days Weather Advisory for Farmers
(11th to 20th August 2024)****3.1 Temperature Forecast**

Nearly 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:**

Rain-windstorm/thundershower is expected in most parts of the province during the decade, whereas scattered heavy falls are also likely during 1st half of decade.

❖ Khyber Pakhtunkhwa:

Rain-windstorm/thundershower (with scattered heavy falls) is expected in most parts of the province during the decade.

❖ Sindh:

Hot and humid weather is expected in most parts of the province during the first half, whereas rain-windstorm/thundershower (with few heavy falls) is expected during 2nd half of the decade.

❖ Baluchistan:

Mostly dry weather is expected during the decade while, rain-windstorm/thundershower is expected in most parts of the province during 2nd half of the decade.

❖ Gilgit-Baltistan:

Mainly partly cloudy to cloudy weather conditions with rain, wind/thunderstorm is expected during first half, whereas dry weather during 2nd half of the decade.

❖ Kashmir:

Rain-windstorm/thundershower (with scattered heavy falls) is expected in most parts during the decade.

3.4 Advisory for Farmers

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

In case of heavy rains, extra water should be removed from the fields.