

Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Light to moderate amount of rainfall was reported from most parts of the country while heavy to very heavy showers were reported from Punjab and upper parts of Sindh.
- ❖ Highest amount of rainfall recorded was 176 mm at Jhang and Jhelum during the last decade.
- ❖ Highest maximum temperature recorded as 45.35°C at Nokkundi during the last decade.
- ❖ Rain-windstorm/thundershower is expected in most parts of Punjab, KP, GB, Kashmir, Northeastern & South Balochistan and Sindh during 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, Deputy Director*
Editor: *Ms. Saeeda Saleh, Assistant Meteorologist*
Phone: [+92-51-9250592](tel:+92-51-9250592) Email: dirnamc@yahoo.com

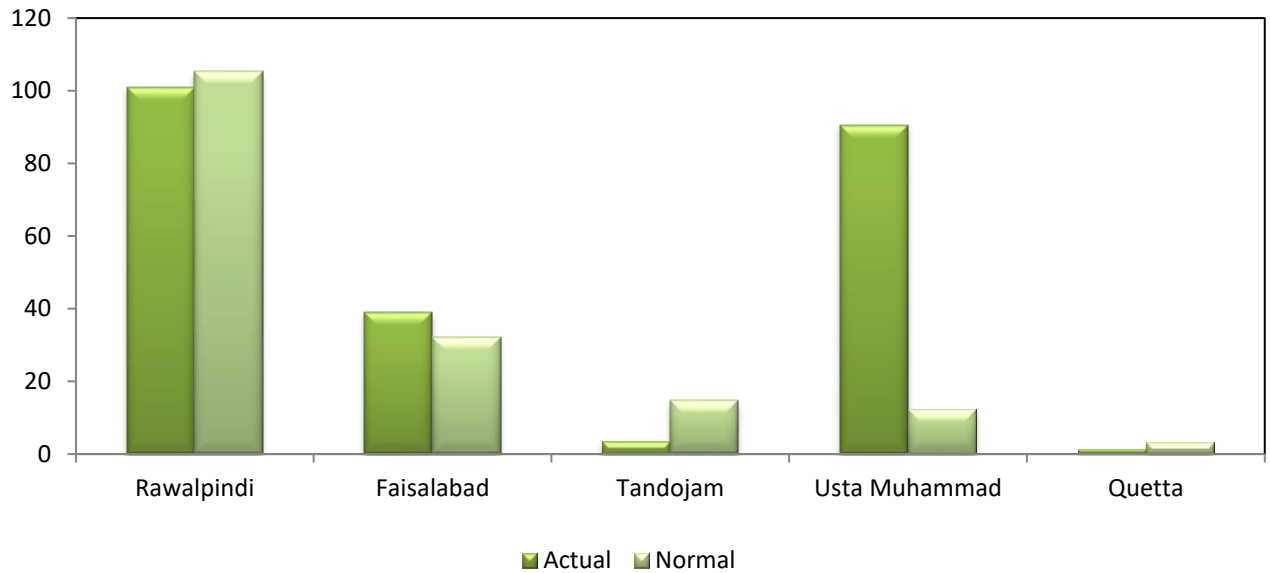
Meteorological Conditions during 2nd Decade of August 2024

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	105.3	101.0	-4.3	0.4	-1.2	27.6	30.5	29.9	29.5	29.4	29.8	30.2	76	44.7	1.8	3.5
2	Faisalabad	32.2	39.0	6.8	-1.2	1.0	31.7	33.7	33.3	33.1	32.9	***	32.8	73	58.5	3.1	4.4
3	Jhelum	70.8	176.6	105.8	-2.1	-0.2	29.2	32.2	31.4	31.1	30.8	31.2	***	84	55.2	2.5	3.9
4	Lahore	57.3	97.4	40.1	-0.8	-0.8	30.3	31.2	32.3	32.1	30.9	***	30.5	72	48.1	0.8	3.6
5	Sargodha	33.0	85.5	52.5	-1.7	-0.1	31.1	34.1	33.7	33.8	23.6	***	***	76	49.8	5.0	4.3
6	Multan	11.0	92.0	81.0	-2.0	-1.3	31.4	***	***	***	***	***	***	69	65.7	5.4	5.0
7	Khanpur	3.4	46.0	42.6	-1.6	2.0	32.3	***	35.7	35.9	36.2	36.3	36.4	71	70.0	**	5.4
8	Tandojam	14.7	3.5	-11.2	-0.8	0.7	30.2	***	33.8	32.9	35.0	32.0	32.4	74	64.5	10.0	5.2
9	Sakrand	20.5	14.0	-6.5	-0.6	2.0	31.6	41.2	***	***	***	***	***	69	65.7	5.4	5.1
11	Rohri	3.4	145.0	141.6	-2.6	2.2	32.3	***	***	***	***	***	***	70	67.2	**	5.3
12	D.I Khan	17.1	75.4	58.3	-0.9	1.3	32.0	34.9	34.3	13.1	***	0.0	***	72	56.7	3.9	4.5
13	Peshawar	22.4	16.0	-6.4	-1.2	-0.5	30.5	31.3	31.7	31.0	30.8	30.4	30.2	74	43.4	4.3	4.0
14	Usta M.	12.3	90.6	78.3	0.0	0.0	30.6	36.7	36.4	36.2	***	***	37.7	73	0.0	5.0	4.8
15	Quetta	3.2	1.3	-1.9	-1.8	0.8	27.1	34.3	33.1	30.9	30.1	30.1	28.4	50	89.6	5.8	5.7
16	Skardu	3.9	3.4	-0.5	0.6	2.0	24.8	***	***	***	***	***	***	42	55.5	0.7	3.5
17	Gilgit	4.5	1.0	-3.5	2.1	4.4	29.5	***	***	***	***	***	***	47	75.8	5.1	5.5

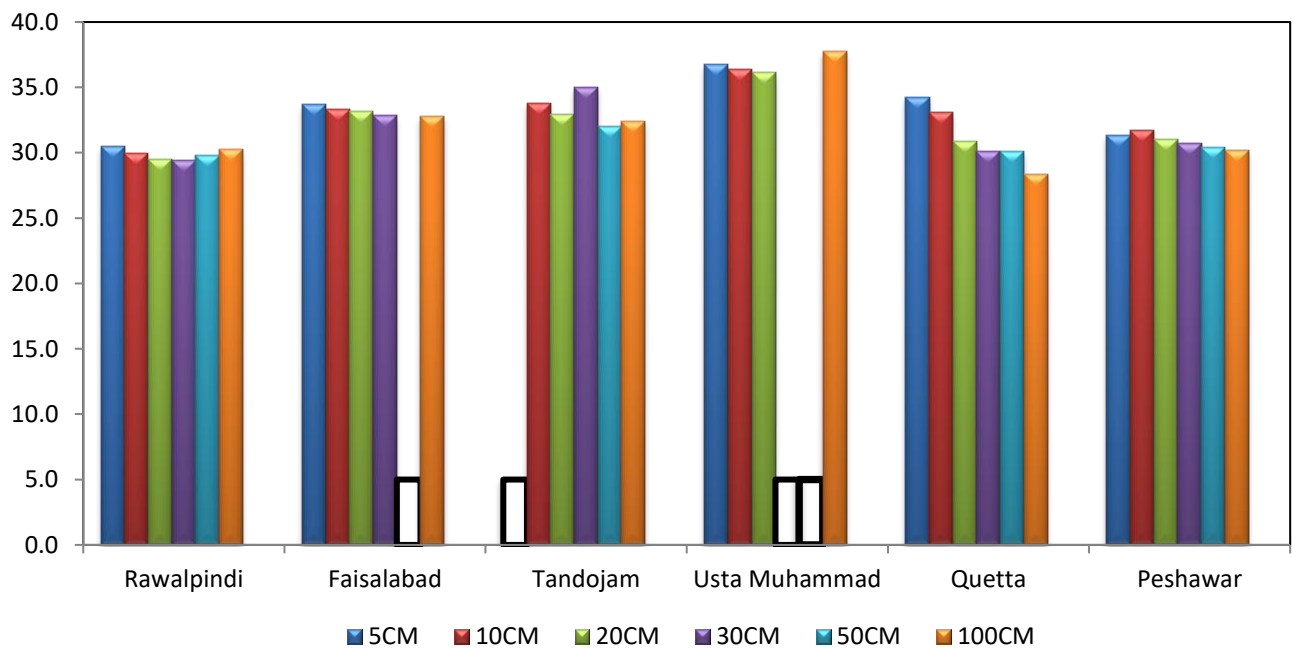
Table-1: Meteorological parameters for selected station of Pakistan. "Dep" in the table stands for difference from climatic normal, i.e. actual value minus normal. The climatic normally used in the Bulletin is extracted from the 2007 - 2016 observed data. 'ETo' stands for reference crop Evapotranspiration***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

Graph at RAMCs during August 2024

Precipitation(mm) during 2nd Decade



Soil Temperature(°C)



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

Past Weather (11th to 20th August 2024)

Light to moderate amount of rainfall was reported from most parts of the country while heavy to very heavy showers were reported particularly from Punjab and upper Sindh.

1.1 Punjab

Light to moderate rain observed from most parts (with few heavy to very heavy falls was reported from some isolated places) of the province. The decadal maximum temperature was observed below normal by -1.2°C while minimum temperature remained nearly normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 74%, 56hrs, 3.1km/hr and 4.3mm/day respectively.

1.2 Sindh

Light to moderate rain observed from most parts (with isolated heavy to very heavy falls was reported from upper parts) of the province. The decadal maximum was observed below normal by -1.3°C and minimum temperatures rose above normal by 1.6°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 71%, 65.8hrs, 7.7km/hr and 5.2mm/day respectively.

1.3 Khyber Pakhtunkhwa

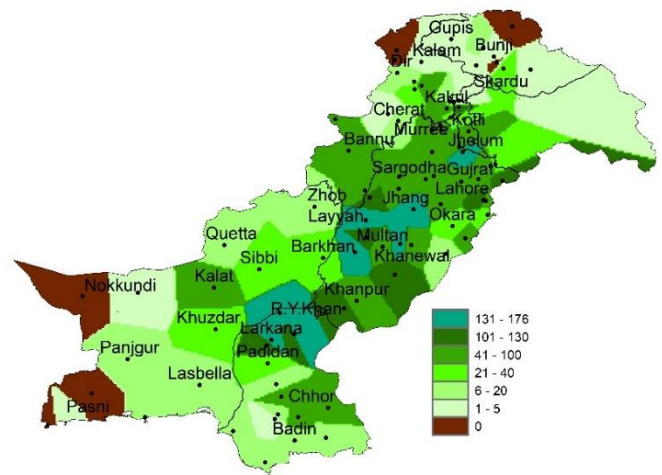
Light to moderate rain was reported from most parts of the province. The decadal maximum temperature was observed below normal by -1.06°C and minimum temperatures rose above normal by 0.4°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 73%, 50.05hrs, 4.1km/hr and 4.2mm/day respectively.

1.4 Baluchistan

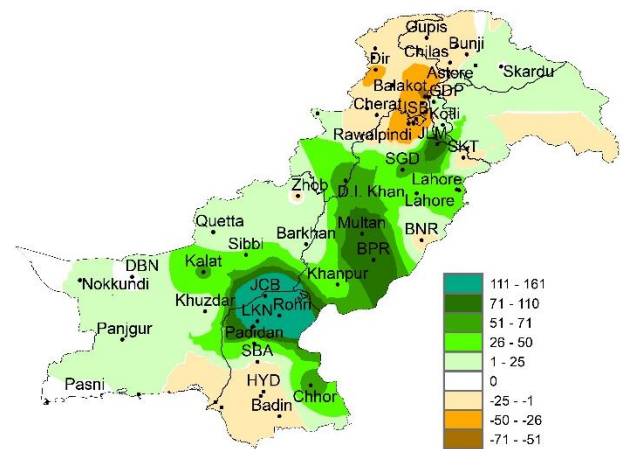
Light to moderate rain was reported from most parts of the province. The decadal maximum and minimum temperatures remained nearly normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 62%, 44.8hrs, 5.4km/hr and 5.2 mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

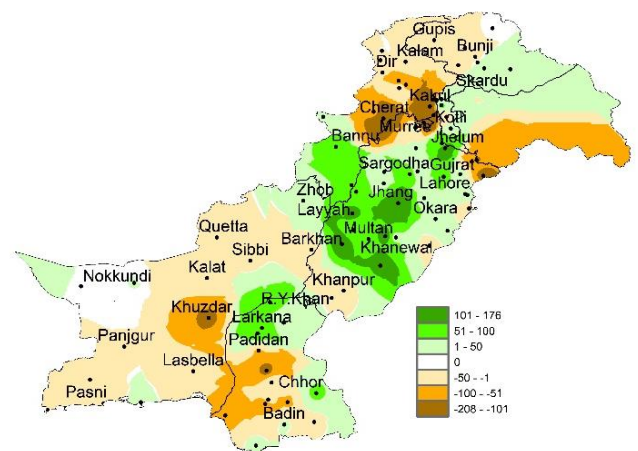
Light to moderate rain from Gilgit-Baltistan and Light to moderate rain with few heavy falls was reported from Kashmir during the decade. The decadal maximum and minimum temperatures rose above normal by 1.32°C and 3.21°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 44%, 65.6hrs, 2.9km/hr and 4.5mm/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**
(11th to 20th August 2024)

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 101.00 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 76%. Mean day temperature was 32.9°C while night temperature recorded as 22.3°C with 44.7 hours bright sunshine duration. Wind speed recorded as 1.8 km/hr with mean wind direction *south easterly*.

2.2 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 39.00 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 73%. Mean day temperature was 35.4°C while night temperature recorded as 27.9°C with 58.5 hours bright sunshine duration. Wind speed recorded as 3.1 km/hr with mean wind direction *south easterly*.

Cotton: *Very good, Ball opening.*

2.3 RAMC, Tandojam (Lower Sindh)

Rainfall reported as 3.50 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 74%. Mean day temperature was 34.2°C while night temperature recorded as 26.1°C with 64.5 hours bright sunshine duration. Wind speed recorded as 10.0 km/hr with mean wind direction *south westerly*.

Cotton: *Fair, Flowering.*

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

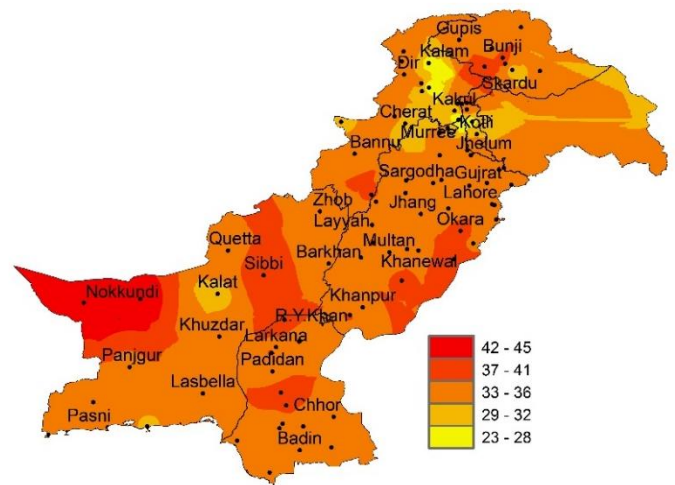
Rainfall reported as 90.60 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 73%. Mean day temperature was 35.5°C while night temperature recorded as 25.6°C. Wind speed recorded as 5.0 km/hr with mean wind direction *southeasterly*.

Rice: *Good, Third Leaf.*

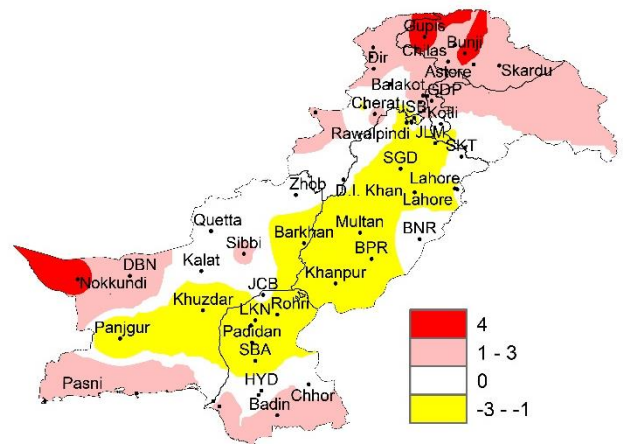
2.5 RAMC, Quetta (Northern Baluchistan)

Rainfall reported as 1.3 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 50%. Mean day temperature was 33.8°C while night temperature recorded as 20.3°C with 89.6 hours bright sunshine duration. Wind speed recorded as 5.8 km/hr with mean wind direction *southern*.

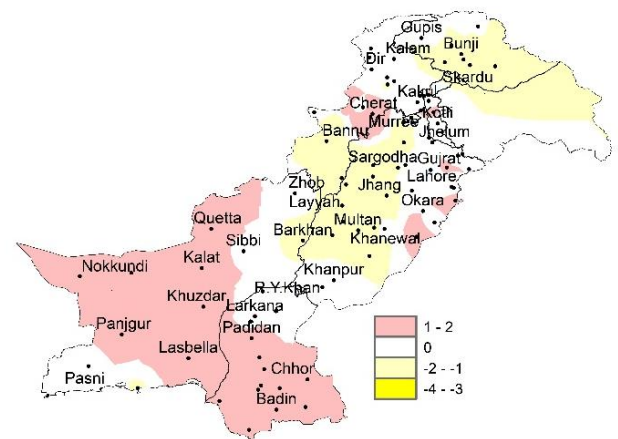
Wheat: *Nil.*



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 (11th to 20th August 2024)**

2.6 **Jhelum**

Rainfall reported as 176.6 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 84%. Mean day temperature was 32.7°C while night temperature recorded as 25.6°C with 55.2 hours bright sunshine duration. Wind speed recorded as 2.5 km/hr with mean wind direction *north westerly*.

2.7 **Lahore**

Rainfall reported as 97.40 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 72%. Mean day temperature was 34.3°C while night temperature recorded as 26.3°C with 48.1 hours bright sunshine duration. Wind speed recorded as 0.8 km/hr with mean wind direction *north easterly*.

2.8 **Sargodha**

Rainfall reported as 85.5 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 76%. Mean day temperature was 35.0°C while night temperature recorded as 27.2°C with 49.8 hours bright sunshine duration. Wind speed recorded as 5.0 km/hr with mean wind direction *north easterly*.

2.9 **Multan**

Rainfall reported as 92.00 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 73%. Mean day temperature was 35.7°C while night temperature recorded as 27.7°C with 59.9 hours bright sunshine duration. Wind speed recorded as 6.5 km/hr with mean wind direction *southerly*.

2.10 **Khanpur**

Rainfall reported as 46.00 mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 71%. Mean day temperature was 36.3°C while night temperature recorded as 28.2°C with 70 hours bright sunshine duration. Mean wind direction *south westerly*.

2.11 **Sakrand**

Rainfall reported as 14.0 mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 69%. Mean day temperature was 36.2°C while night temperature recorded as 27.0°C with 65.7 hours bright sunshine duration. Wind speed recorded as 5.4 km/hr with mean direction southerly.

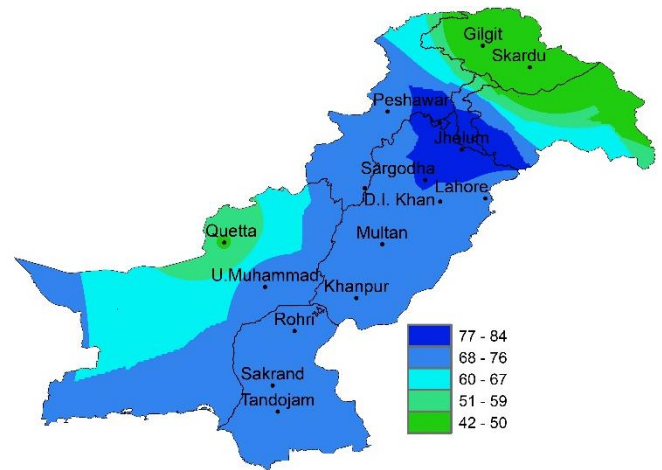


Figure.3: Relative Humidity in Percentage (%)

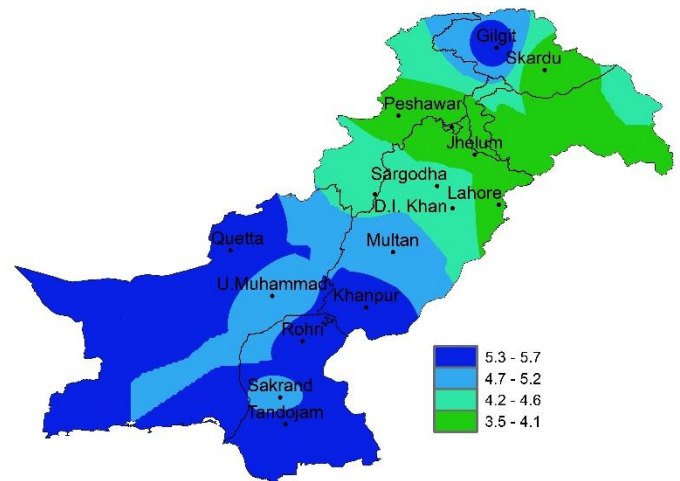


Figure.4: Reference Crop Evapotranspiration ET0 (mm/day)

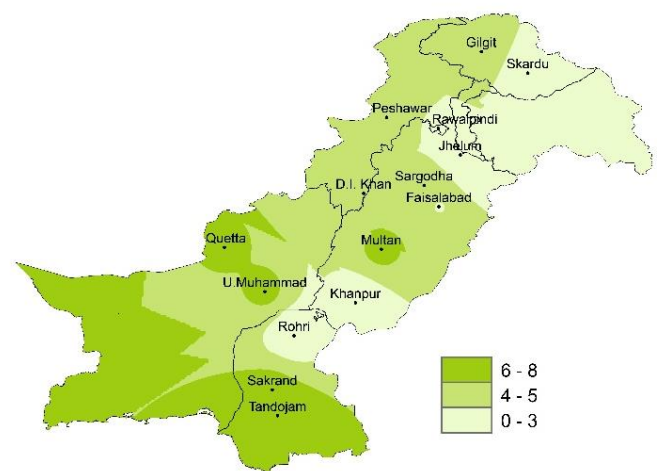


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Rainfall reported as 145.00 mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 70%. Mean day temperature was 36.1°C while night temperature recorded as 28.5°C with 67.25 hours bright sunshine duration. Mean wind direction as *south easterly*.

2.13 D.I. Khan

Rainfall reported as 75.4 mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 72%. Mean day temperature was 36.6°C while night temperature recorded as 27.3°C with 56.7 hours bright sunshine duration. Wind speed recorded as 3.9 km/hr with mean wind direction as *south easterly*.

2.14 Peshawar

Rainfall reported as 16.00 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 74%. Mean day temperature was 35.2°C while night temperature recorded as 25.7°C with 43.4 hours bright sunshine duration. Wind speed recorded as 4.3 km/hr with mean wind direction as *northeast westerly*.

2.15 Skardu

Rainfall reported as 3.4 mm during the decade; however, weather remained partially cloudy for 05 days during the decade. Average relative humidity recorded as 42%. Mean day temperature was 32.0°C while night temperature recorded as 17.6°C with 55.5 hours bright sunshine duration. Wind speed recorded as 0.7 km/hr with mean wind direction as *south easterly*.

2.16 Gilgit

Rainfall reported as 1.00 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 47%. Mean day temperature was 37.5°C while night temperature recorded as 21.5°C with 75.8 hours bright sunshine duration. Wind speed recorded as 5.1 km/hr with mean wind direction as *south easterly*.

**Eleven Days Weather Advisory for Farmers
(21st to 31st 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. Isolated heavy falls are also likely during first two days in northeast parts and in whole Province during the second half of decade.

❖ Khyber Pakhtunkhwa:

Rain-windstorm/thundershower (with few heavy falls at isolated places) is expected in the province during the decade.

❖ Sindh:

Mainly dry and humid weather may prevail in most parts of the Province. However, rain-windstorm/thundershower is expected in the province. Isolated heavy falls may also occur in lower parts during the second half of the decade.

❖ Baluchistan:

Rain-windstorm/thundershower is expected in northeast/south of the province. Isolated heavy falls may also occur during 2nd half of the decade.

❖ Gilgit-Baltistan:

Mainly partly cloudy to cloudy weather conditions with rain, wind/thunderstorm is expected during the decade.

❖ Kashmir:

Rain-windstorm/thundershower is expected in most parts. However, Isolated heavy falls may also occur during the 2nd half of the decade.

3.4 Advisory for Farmers

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