

Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Light to moderate amount of rainfall was reported from most parts of the country while dry weather was observed in South Balochistan.
 - ❖ Highest amount of rainfall recorded was 79.0 mm at Lahore and Mithi during the last decade.
 - ❖ Highest maximum temperature recorded as 40.7°C at Sibbi during the last decade.
- Mainly hot and dry weather is expected in most parts of the country during the decade. However, rain-wind/thunderstorm is likely in upper Punjab, KP, GB and Kashmir during first half of 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

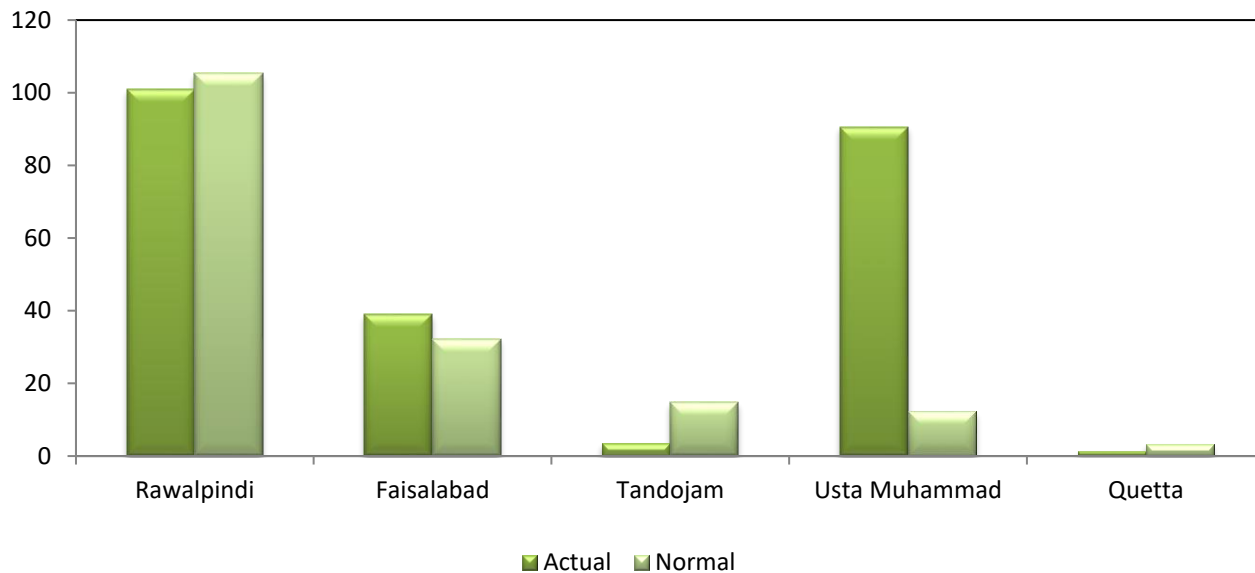
Meteorological Conditions during 1st Decade of September 2024

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	7.1	1.315	-0.4	28.2	30.5	29.9	29.2	28.9	28.9	29.3	69	73.8	1.5	3.9	7.1	1.315
2	Faisalabad	0.4	-1.3	2.3	30.4	32.2	31.9	31.8	31.4	***	31.5	67	78.5	1.8	4.3	0.4	-1.3
3	Jhelum	-10.6	0.8	1.0	30.4	32.4	31.6	31.0	30.2	30.4	***	74	87.4	2.6	4.6	-10.6	0.8
4	Lahore	40.3	0.5	-0.3	30.2	30.8	31.1	30.7	30.4	***	30.2	69	59.2	0.7	3.6	40.3	0.5
5	Sargodha	-12.0	-0.4	-1.8	30.9	33.1	32.4	31.5	31.2	***	***	68	81.1	1.9	4.4	-12.0	-0.4
6	Multan	-10.7	-0.1	-0.7	31.1	***	***	***	***	***	***	68	94.4	4.4	5.2	-10.7	-0.1
7	Khanpur	-6.8	1.3	1.8	32.9	***	34.2	34.2	34.4	34.5	34.2	65	91.7	3.4	6.0	-6.8	1.3
8	Tandojam	-22.2	-0.7	-0.3	29.6	***	32.3	31.8	35.0	31.5	31.9	73	75.2	5.4	4.8	-22.2	-0.7
9	Sakrand	-10.4	0.0	0.9	31.0	42.5	***	***	***	***	***	68	94.4	4.4	5.3	-10.4	0.0
11	Rohri	-0.8	0.4	0.2	33.3	***	***	***	***	***	***	58	99.1	2.6	5.4	-0.8	0.4
12	D.I Khan	5.6	0.6	1.6	31.4	32.0	31.4	13.1	***	0.0	***	67	82.4	2.7	4.6	5.6	0.6
13	Peshawar	-10.5	1.4	0.0	30.5	32.1	30.9	31.6	31.3	30.5	30.5	65	67.0	3.4	4.3	-10.5	1.4
14	Usta M.	-6.2	0.0	0.0	30.6	34.5	34.0	33.5	***	***	34.9	66	NILL	2.3	2.1	-6.2	0.0
15	Quetta	1.2	-0.8	2.7	24.2	29.6	28.4	26.2	25.7	26.4	26.4	38	101.6	3.8	5.0	1.2	-0.8
16	Skardu	-6.4	3.39	1.3	19.7	***	***	***	***	***	***	52	41.5	0.5	2.6	-6.4	3.39
17	Gilgit	2.4	-0.8	3.9	23.6	***	***	***	***	***	***	57	67.6	3.1	3.8	2.4	-0.8

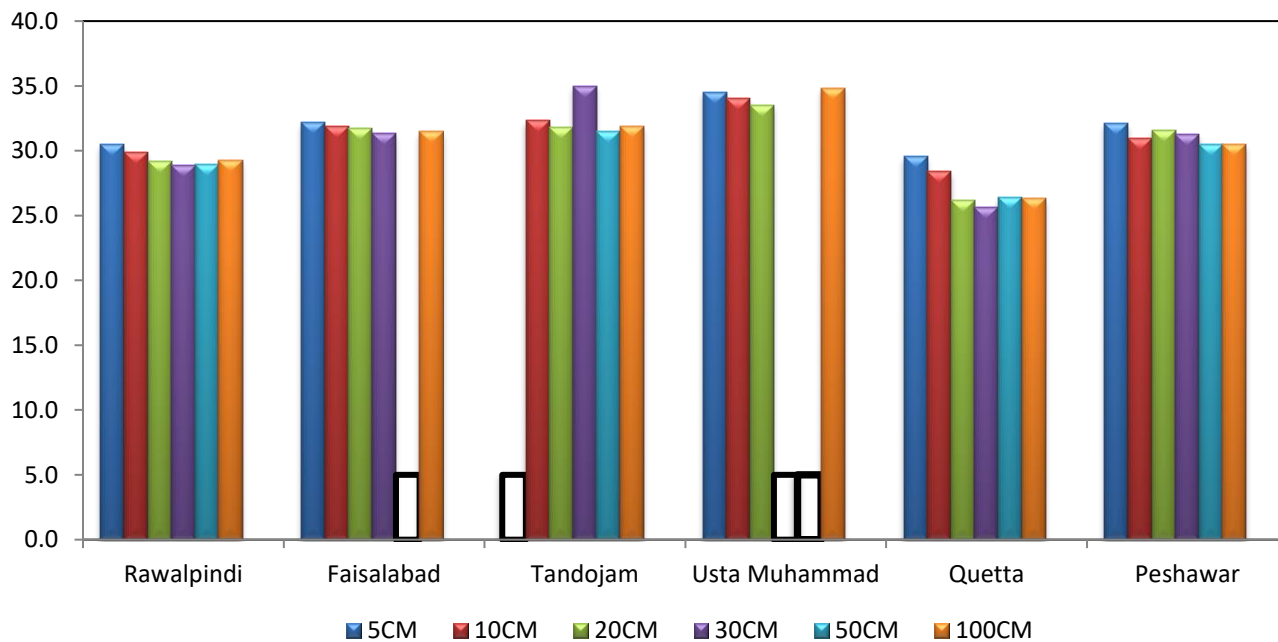
Table-1: Meteorological parameters for selected station of Pakistan. "Dep" in the table stands for difference from climatic normal, i.e. actual value minus normal. The climatic normally used in the Bulletin is extracted from the 2007 - 2016 observed data. 'ETo' stands for reference crop Evapotranspiration***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

Graph at RAMCs during September 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 September 2024)

Light to moderate amount of rainfall was reported from most parts of the country while dry weather was observed in South Balochistan.

1.1 Punjab

Light to moderate rain observed from most parts of the province. The decadal maximum and minimum temperatures rose above normal by 0.3°C and 0.3°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 69%, 80.9hrs, 2.2km/hr and 4.6mm/day respectively.

1.2 Sindh

Light to moderate rain observed from most parts of the province. The decadal maximum was observed below normal by -1.1°C and minimum temperatures rose above normal by 0.3°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 66%, 89.6hrs, 4.1km/hr and 5.2mm/day respectively.

1.3 Khyber Pakhtunkhwa

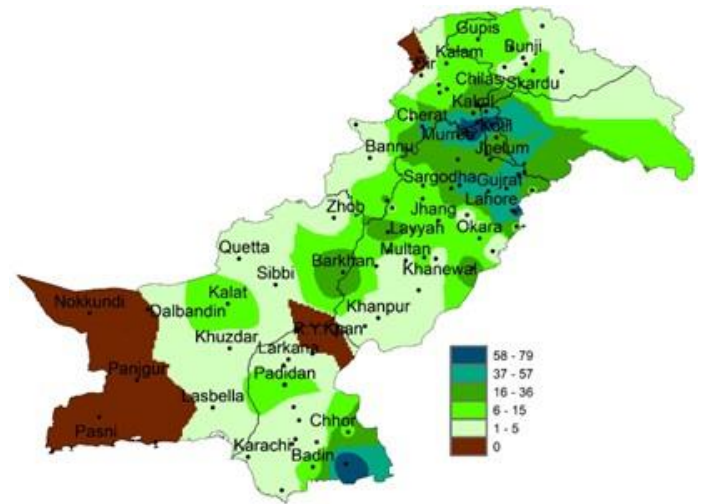
Light to moderate rain was reported from most parts of the province. The decadal maximum and minimum temperatures rose above normal by 1.0°C and 0.8°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 66%, 74.7hrs, 3.1km/hr and 4.5mm/day respectively.

1.4 Baluchistan

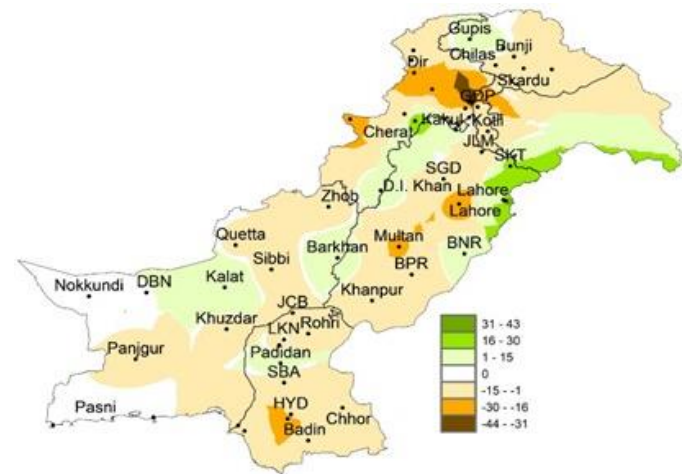
Light rain was reported from most parts of the province. dry weather was observed in South Balochistan. The decadal maximum was observed below normal by -0.4°C and minimum temperatures rose above normal by 1.4°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 52%, 101.6hrs, 3.1km/hr and 3.6 mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

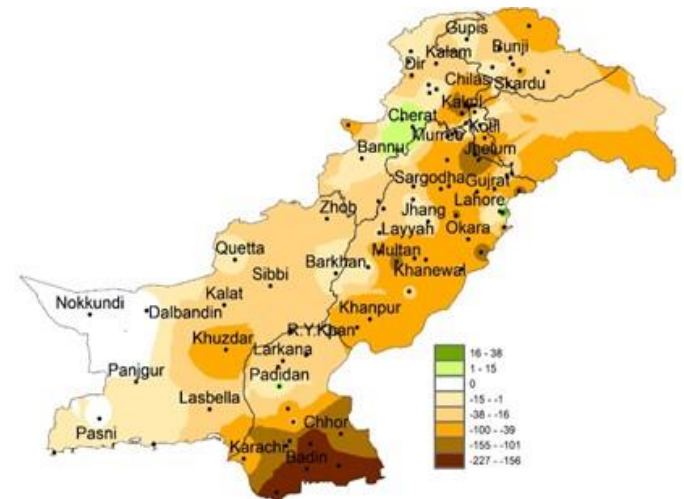
Light to moderate rain was reported from most parts of Kashmir and Gilgit-Baltistan. The decadal maximum and minimum temperatures rose above normal by 1.3°C and 2.6°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 55%, 54.6hrs, 1.8km/hr and 3.2mm/day 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 September 2024)**

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 61 mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 60%. Mean day temperature was 34.7°C while night temperature recorded as 21.7°C with 73.8 hours bright sunshine duration. Wind speed recorded as 1.5 km/hr with mean wind direction *variable*.

2.2 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 16.4 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 67%. Mean day temperature was 34.4°C while night temperature recorded as 26.3°C with 78.5 hours bright sunshine duration. Wind speed recorded as 1.8 km/hr with mean wind direction *west south westerly*.

Cotton: *Very good, Maturity.*

2.3 RAMC, Tandojam (Lower Sindh)

Rainfall reported as dry weather during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 73%. Mean day temperature was 34.8°C while night temperature recorded as 24.3°C with 75.2 hours bright sunshine duration. Wind speed recorded as 5.4 km/hr with mean wind direction *south westerly*.

Cotton: *Good, Ball opening.*

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

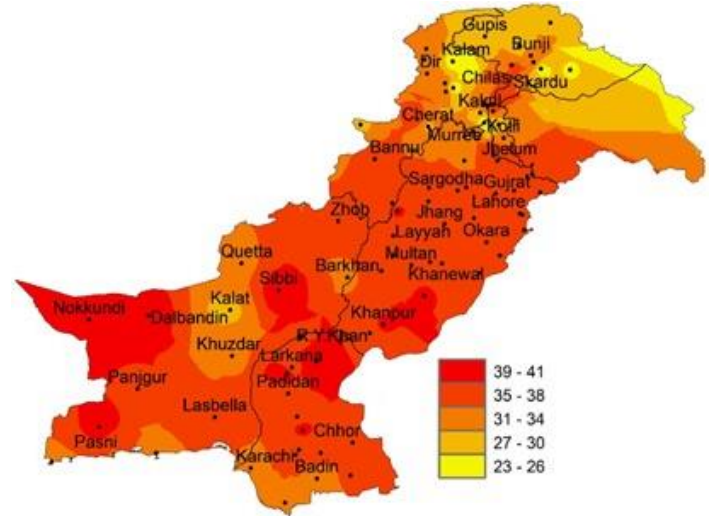
Rainfall reported as dry weather during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 66%. Mean day temperature was 36.6°C while night temperature recorded as 24.6°C. Wind speed recorded as 2.3 km/hr with mean wind direction *variable*.

Rice: *Good, Tillering.*

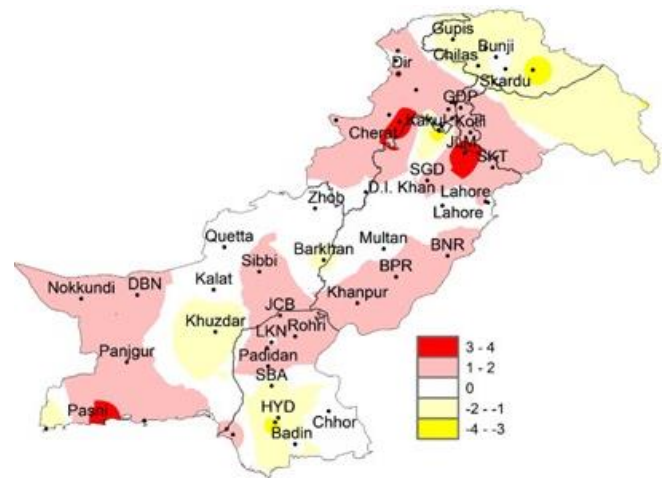
2.5 RAMC, Quetta (Northern Baluchistan)

Rainfall reported as 1.2 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 38.4%. Mean day temperature was 32.0°C while night temperature recorded as 16.4°C with 101.6 hours bright sunshine duration. Wind speed recorded as 3.8 km/hr with mean wind direction *north westerly*.

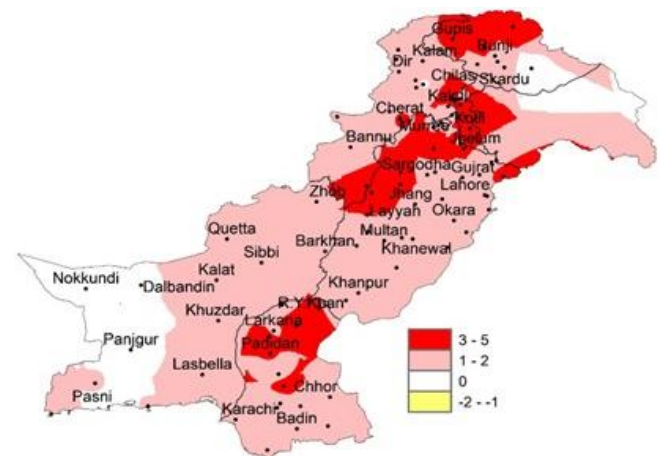
Wheat: *Nil.*



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 September 2024)**

2.6 **Jhelum**

Rainfall reported as 23.8mm during the decade; however, weather remained partially cloudy for 10 days. Average relative humidity recorded as 73.8%. Mean day temperature was 35.3°C while night temperature recorded as 25.4°C with 87.4 hours bright sunshine duration. Wind speed recorded as 2.6km/hr with mean wind direction *south easterly*.

2.7 **Lahore**

Rainfall reported as 79.0 mm during the decade; however, weather remained partially cloudy for 10 days. Average relative humidity recorded as 69%. Mean day temperature was 34.7°C while night temperature recorded as 25.7°C with 59.2hours bright sunshine duration. Wind speed recorded as 0.7km/hr with mean wind direction *north westerly*.

2.8 **Sargodha**

Rainfall reported as 21.0 mm during the decade; however, weather remained partially cloudy for 10 days. Average relative humidity recorded as 68%. Mean day temperature was 36.3°C while night temperature recorded as 25.5°C with 81.1hours bright sunshine duration. Wind speed recorded as 1.9km/hr with mean wind direction *variable*.

2.9 **Multan**

Rainfall reported as dry weather during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 61%. Mean day temperature was 36.5°C while night temperature recorded as 28.5°C with 71.1hours bright sunshine duration. Wind speed recorded as 5.4 km/hr with mean wind direction *south easterly*.

2.10 **Khanpur**

Rainfall reported as dry weather during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 65%. Mean day temperature was 38.0°C while night temperature recorded as 27.8 °C with 91.7hours bright sunshine duration. Mean wind direction *south westerly*.

2.11 **Sakrand**

Rainfall reported as dry weather during the decade; however, weather remained partially cloudy for 2 days. Average relative humidity recorded as 68%. Mean day temperature was 36.4°C while night temperature recorded as 25.6°C with 94.4hours bright sunshine duration. Wind speed recorded as 4.4 km/hr with mean direction south easterly.

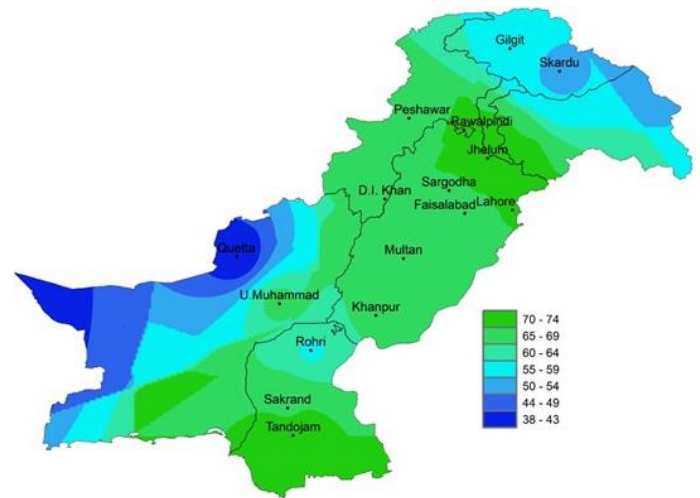


Figure.3: Relative Humidity in Percentage (%)

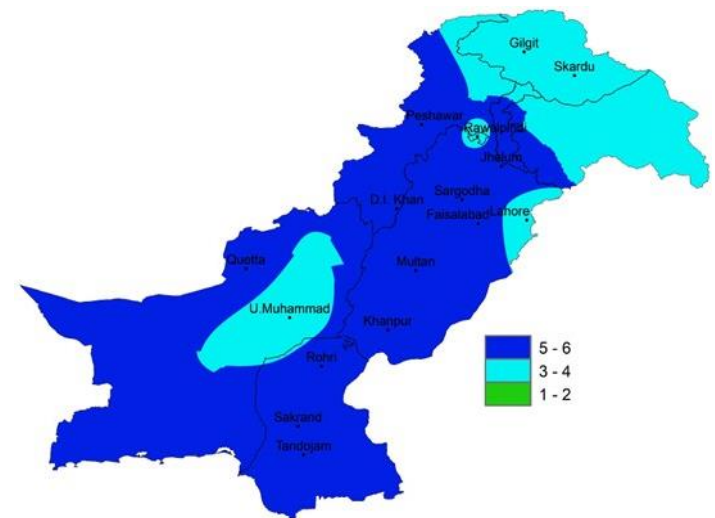


Figure.4: Reference Crop Evapotranspiration E₀ (mm/day)

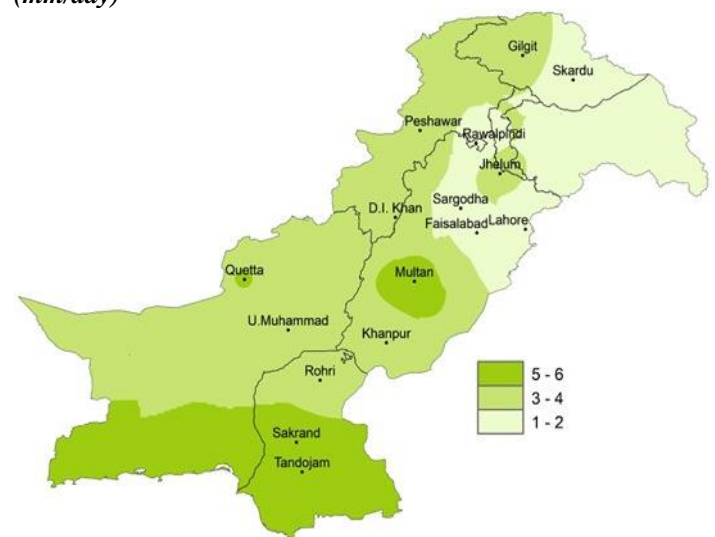


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Rainfall reported as dry weather during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 58%. Mean day temperature was 38.4°C while night temperature recorded as 28.2°C with 99.1 hours bright sunshine duration. Mean wind direction as *north easterly*.

2.13 D.I. Khan

Rainfall reported as 16.8mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 67%. Mean day temperature was 37°C while night temperature recorded as 25.8°C with 82.4 hours bright sunshine duration. Wind speed recorded as 2.7 km/hr with mean wind direction as *south easterly*.

2.14 Peshawar

Rainfall reported as 1.0 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 67%. Mean day temperature was 36.4°C while night temperature recorded as 24.6 °C with 67 hours bright sunshine duration. Wind speed recorded as 3.4 km/hr with mean wind direction as *north westerly*.

2.15 Skardu

Rainfall reported as 1.2mm during the decade; however, weather remained partially cloudy for 04 days during the decade. Average relative humidity recorded as 52%. Mean day temperature was 26.1°C while night temperature recorded as 13.2°C with 41.5 hours bright sunshine duration. Wind speed recorded as 0.5 km/hr with mean wind direction as *south westerly*.

2.16 Gilgit

Rainfall reported as 7.0mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 56.9%. Mean day temperature was 31.2°C while night temperature recorded as 15.9°C with 67.6 hours bright sunshine duration. Wind speed recorded as 3.1 km/hr with mean wind direction as *south easterly*.

**Ten Days Weather Advisory for Farmers
(11th to 20th September 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 hot and dry weather is expected in most parts of the province during the decade. However, rain-wind/thundershower is likely in Potohar region on 13th, 14th September and northeast Punjab on 14th September.

❖ Khyber Pakhtunkhwa:

Rain-wind/thundershower is likely during the first half of the decade. Mainly hot and dry weather is expected in most parts of the province during the 2nd half of decade.

❖ Sindh:

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

❖ Baluchistan:

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

❖ Gilgit-Baltistan:

Mainly hot and dry weather is expected in most parts of Gilgit Baltistan during the decade. However, rain-wind/thundershower is expected on 15th September.

❖ Kashmir:

Mainly hot and dry weather is expected in most parts of Kashmir during the decade. However, rain-wind/thundershower is expected on 14th September.

3.4 Advisory for Farmers

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