

Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Light to moderate amount of rainfall was reported from most parts of the country while heavy showers were reported from northeast Punjab and northeast Balochistan during the decade.
- ❖ Highest amount of rainfall recorded was 93.2 mm at Sialkot during the last decade.
- ❖ Highest maximum temperature recorded as 48.0°C at Turbat during the last decade.
- ❖ Rain-windstorm/thundershower is expected in most parts of Punjab, KP, GB, Kashmir, Northeastern & Southeastern Balochistan and lower Sindh during the decade.
- ❖ Farmers are advised to view the weather forecast before any field activity.

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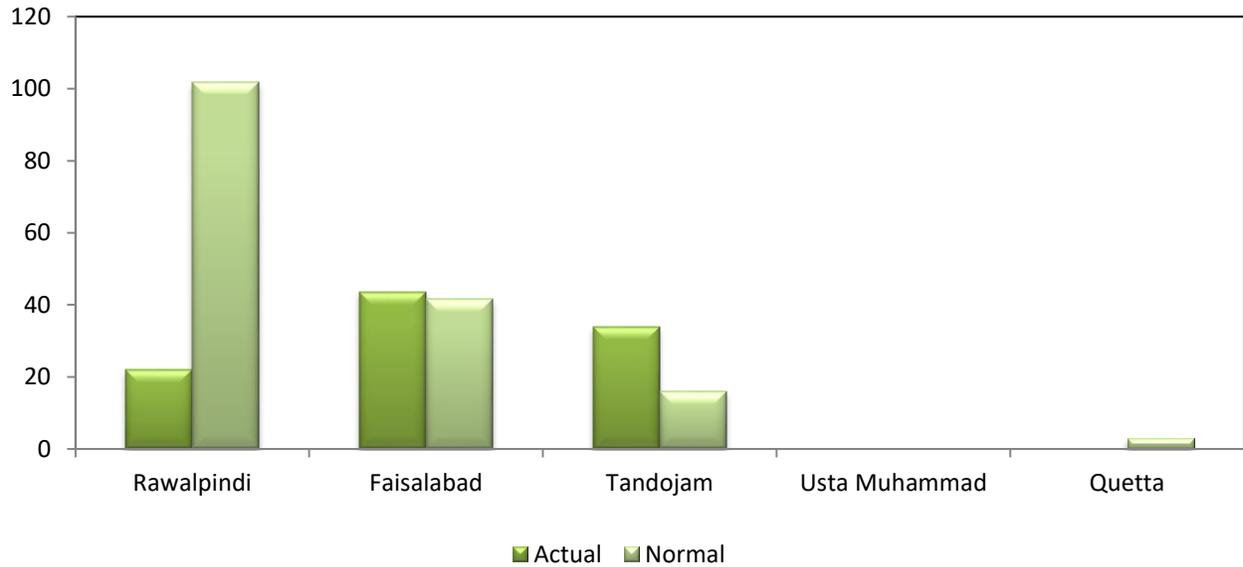
Meteorological Conditions during 2nd Decade of July 2024

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	101.8	22.0	-79.8	2.1	-0.7	30.5	32.1	31.6	30.9	30.8	30.7	30.0	57	83.7	2.3	5.2
2	Faisalabad	41.5	43.6	2.1	0.7	1.2	33.1	33.8	33.4	33.2	32.9	***	32.8	64	88.1	2.7	5.6
3	Jhelum	80.6	74.7	-5.9	1.0	-0.2	31.3	33.2	32.7	32.2	31.5	31.7	***	63	91.9	1.8	5.3
4	Lahore	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
5	Sargodha	38.2	58.4	20.2	1.7	0.5	33.7	36.5	35.4	34.3	33.8	***	***	58	80.2	3.9	5.8
6	Multan	16.5	3.0	-13.5	0.1	0.0	34.1	***	***	***	***	***	***	58	91.1	6.2	6.6
7	Khanpur	9.0	0.0	-9.0	2.4	2.6	36.1	***	40.6	40.4	40.2	39.8	36.8	55	89.5	**	7.3
8	Tandojam	15.8	34.0	18.2	3.4	0.9	33.4	***	38.1	36.6	35.7	34.7	34.1	64	73.6	8.2	6.4
9	Sakrand	19.6	3.0	-16.6	1.9	2.2	34.9	46.5	***	***	***	***	***	58	91.1	6.2	6.8
11	Rohri	9.9	0.0	-9.9	1.8	3.4	36.6	***	***	***	***	***	***	50	87.9	**	7.5
12	D.I Khan	19.7	21.3	1.6	0.5	1.8	33.5	34.3	33.8	13.1	***	21.9	***	64	61.3	3.5	5.1
13	Peshawar	16.1	29.5	13.4	2.0	-1.6	32.2	35.3	35.1	33.4	32.7	31.7	30.3	55	78.5	5.3	6.1
14	Usta M.	0.0	0.0	0.0	0.0	0.0	34.7	40.5	41.1	40.9	***	***	38.7	47	0.0	6.0	8.0
15	Quetta	2.9	0.0	-2.9	-1.1	0.3	28.6	37.7	35.3	32.1	31.2	31.1	28.7	35	86.5	5.7	6.3
16	Skardu	2.9	0.4	-2.5	-3.1	-1.0	22.0	***	***	***	***	***	***	40	62.3	0.8	3.8
17	Gilgit	5.0	1.2	-3.8	-3.0	1.2	26.0	***	***	***	***	***	***	42	50.6	4.6	4.9

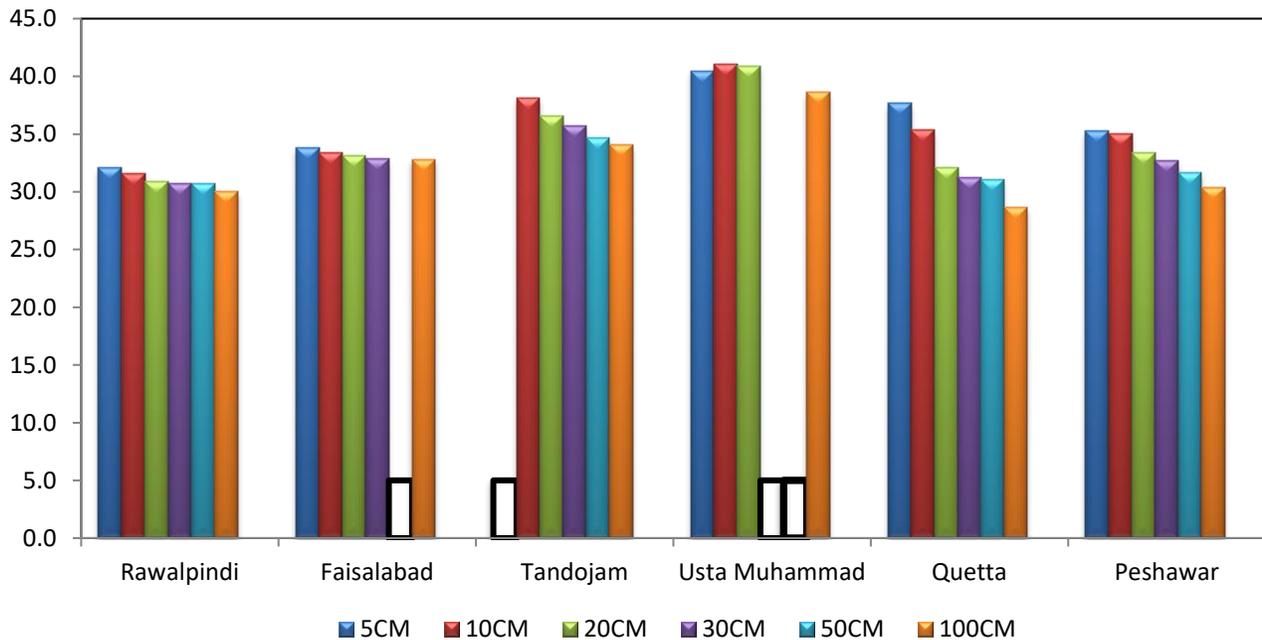
Table-1: Meteorological parameters for selected station of Pakistan. “Dep” in the table stands for difference from climatic normal, i.e. actual value minus normal. The climatic normally used in the Bulletin is extracted from the 2007 - 2016 observed data. ‘ETo’ stands for reference crop Evapotranspiration***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

Graph at RAMCs during July 2024

Precipitation(mm) during 2nd 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 (11th to 20th July 2024)

Light to moderate amount of rainfall was reported from most parts of the country while heavy showers were reported from northeast & south Punjab and northeast Balochistan.

1.1 Punjab

Light to moderate rain with isolated heavy falls was reported from the province. The decadal maximum and minimum temperatures rose above normal by 1.3°C and 0.5°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 59%, 87.4hrs, 3.3km/hr and 5.9mm/day respectively.

1.2 Sindh

Light to moderate rain was reported from the province. The decadal maximum and minimum temperatures rose above normal by 2.3°C and 2.1°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 57%, 84.2hrs, 7.2km/hr and 6.9mm/day respectively.

1.3 Khyber Pakhtunkhwa

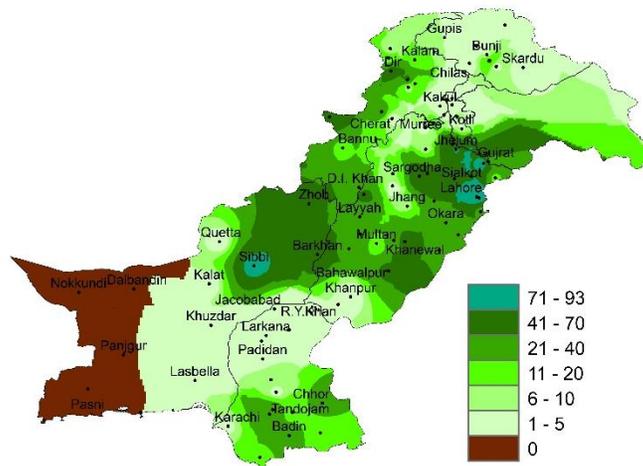
Light to moderate rain was reported from the province. The decadal maximum and minimum temperatures rose above normal by 1.2°C and 0.08°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 60%, 69.9hrs, 4.4km/hr and 5.6mm/day respectively.

1.4 Baluchistan

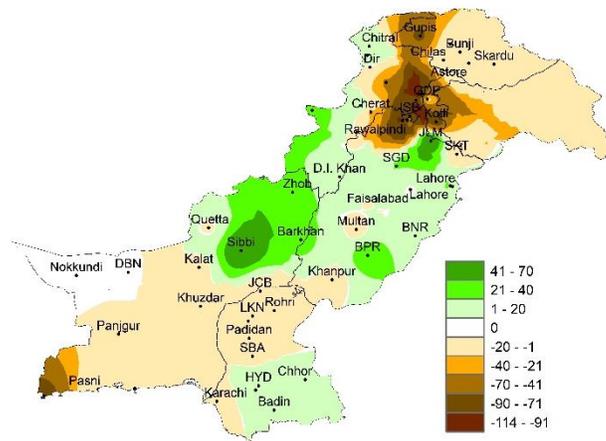
Light to moderate rain with isolated heavy falls was reported from the province. The decadal maximum temperature was observed below normal by -0.5°C and minimum temperatures rose above normal by 0.1°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 41%, 43.2hrs, 5.8km/hr and 7.1 mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

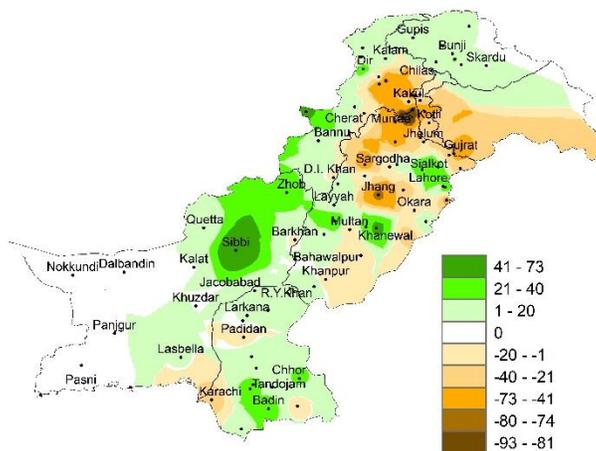
Light rain was reported from Gilgit-Baltistan and Kashmir during the decade. The decadal maximum temperature was observed below normal by -3.0°C and minimum temperatures rose above normal by 0.1°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 41%, 56.4hrs, 2.7km/hr and 4.3mm/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 July 2024)**

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 22 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 57%. Mean day temperature was 37.9°C while night temperature recorded as 23.1°C with 83.7 hours bright sunshine duration. Wind speed recorded as 2.3 km/hr with mean wind direction *south easterly*.

2.2 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 43.6 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 64%. Mean day temperature was 37.9°C while night temperature recorded as 28.3°C with 88.1 hours bright sunshine duration. Wind speed recorded as 2.7 km/hr with mean wind direction *variable*.

Cotton: *Very good, Flowering completed.*

2.3 RAMC, Tandojam (Lower Sindh)

Rainfall reported as 34.0 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 64%. Mean day temperature was 39.5°C while night temperature recorded as 27.3°C. Wind speed recorded as 8.2 km/hr with mean wind direction *south westerly*.

Cotton: *Fair, Budding.*

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

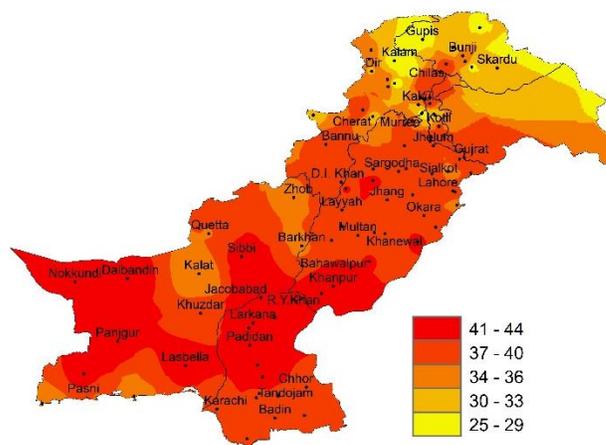
The weather was dry during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 47%. Mean day temperature was 44.0°C while night temperature recorded as 25.4°C. Wind speed recorded as 6.0 km/hr with mean wind direction *north easterly*.

Rice: *Good, Germination.*

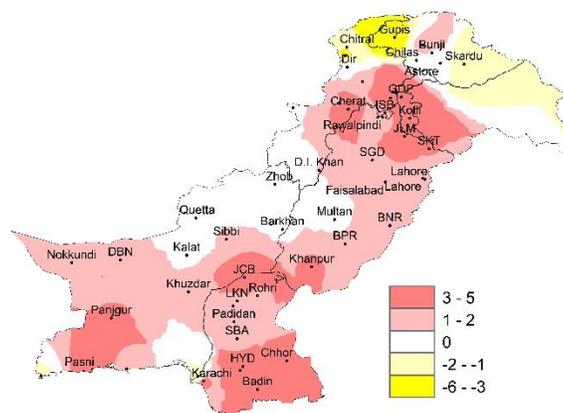
2.5 RAMC, Quetta (Northern Baluchistan)

The weather was dry during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 35.2%. Mean day temperature was 35.6°C while night temperature recorded as 21.5°C with 86.5 hours bright sunshine duration. Wind speed recorded as 5.7 km/hr with mean wind direction *north westerly*.

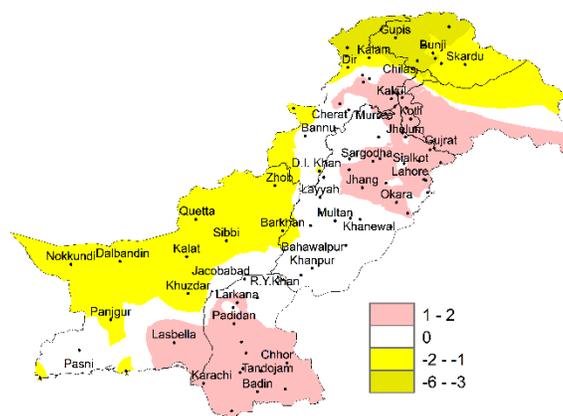
Wheat: *Nil.*



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 (

2(b) **Past Weather or Sub-Regional Agricultural Plains (11th to 20th July 2024)**

2.6 **Jhelum**

Rainfall reported as 74.7 mm during the decade; however, weather remained partially cloudy for 06 days. Average relative humidity recorded as 63%. Mean day temperature was 36.8°C while night temperature recorded as 25.8°C with 91.9 hours bright sunshine duration. Wind speed recorded as 1.8 km/hr with mean wind direction *variable*.

2.7 **Lahore**

Data not received.

2.8 **Sargodha**

Rainfall reported as 58.4 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 58%. Mean day temperature was 39.2°C while night temperature recorded as 28.1°C with 80.2 hours bright sunshine duration. Wind speed recorded as 3.9 km/hr with mean wind direction *south easterly*

2.9 **Multan**

Rainfall reported as 13.9 mm during the decade; however, weather remained partially cloudy during the decade.. Average relative humidity recorded as 55%. Mean day temperature was 39.3°C while night temperature recorded as 30.3°C with 55.1 hours bright sunshine duration. Wind speed recorded as 5.0km/hr with mean wind direction *south westerly*.

2.10 **Khanpur**

The weather was dry during the decade; however, weather remained partially cloudy for 07 days. Average relative humidity recorded as 55%. Mean day temperature was 42.1°C while night temperature recorded as 30.0°C with 89.5 hours bright sunshine duration. Mean wind direction *north easterly*.

2.11 **Sakrand**

Rainfall reported as 3.0 mm during the decade; however, weather remained partially cloudy for 07 days. Average relative humidity recorded as 58%. Mean day temperature was 40.8°C while night temperature recorded as 28.9°C with 91.1 hours bright sunshine duration. Wind speed recorded as 6.2 km/hr with mean direction *south easterly*.

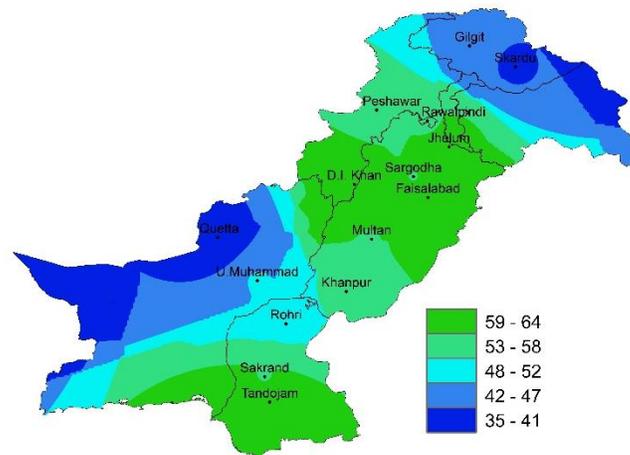


Figure.3: Relative Humidity in Percentage (%)

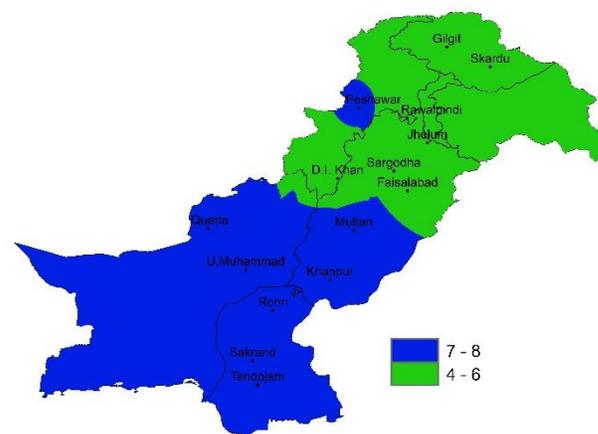


Figure.4: Reference Crop Evapotranspiration ETc (mm/day)

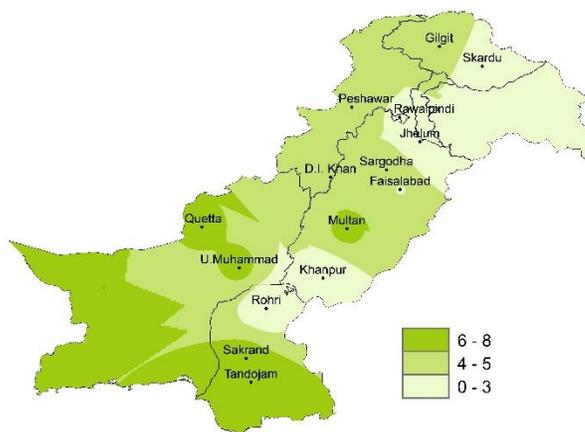


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Rainfall reported as 0.01 mm during the decade; however, weather remained partially cloudy for 07 days. Average relative humidity recorded as 50%. Mean day temperature was 42.6°C while night temperature recorded as 30.6°C with 87.9 hours bright sunshine duration. Mean direction as *north easterly*.

2.13 D.I. Khan

Rainfall reported as 21.3 mm during the decade; however, weather remained partially cloudy for 06 days. Average relative humidity recorded as 64%. Mean day temperature was 38.9°C while night temperature recorded as 28.1°C with 61.3 hours bright sunshine duration. Wind speed recorded as 3.5 km/hr with mean wind direction as *south easterly*.

2.14 Peshawar

Rainfall reported as 29.5 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 55%. Mean day temperature was 39.4°C while night temperature recorded as 25.0°C with 78.5 hours bright sunshine duration. Wind speed recorded as 5.3 km/hr with mean wind direction as *north easterly*.

2.15 Skardu

Rainfall reported as 0.4 mm during the decade; however, weather remained partially cloudy for 06 days during the decade. Average relative humidity recorded as 40%. Mean day temperature was 28.9°C while night temperature recorded as 15.1°C with 62.3 hours bright sunshine duration. Wind speed recorded as 0.8 km/hr with mean wind direction as *south south-easterly*.

2.16 Gilgit

Rainfall reported as 1.2 mm during the decade; however, weather remained partially cloudy during the decade. Average relative humidity recorded as 42%. Mean day temperature was 33.2°C while night temperature recorded as 18.7°C with 50.6 hours bright sunshine duration. Wind speed recorded as 4.6 km/hr with mean wind direction as *westerly*.

**Eleven Days Weather Advisory for Farmers
(21st to 31st July 2024)****3.1 Temperature Forecast**

Above 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.

❖ Khyber Pakhtunkhwa:

❖ Rain-windstorm/thundershower is expected in most parts of the province during the decade.

❖ Sindh:

❖ Mainly very hot and humid weather is expected in Sindh province however rain is expected in lower Sindh during the decade.

❖ Baluchistan:

❖ Mainly hot and humid weather is expected in province during the decade. However, rain, wind/thunderstorm is expected in northeastern and southeastern parts during the decade.

❖ Gilgit-Baltistan:

❖ Rain, wind/thunderstorm is expected during the decade.

❖ Kashmir:

❖ Rain, wind/thunderstorm is expected during the decade.

3.4 Advisory for Farmers

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