

Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Hot and dry weather reported from most of the agriculture plains during the decade. However light rainfall observed from upper parts of Khyber Pakhtunkhwa, Gilgit Baltistan, Kashmir and a few scattered places of Punjab.
- ❖ Highest amount of rainfall recorded was 11.0 mm at Pattan during the last decade.
- ❖ Highest maximum temperature recorded as 52.5°C at Moenjodaro during the last decade.
- ❖ Rain-wind/thunderstorm is expected in most parts of Punjab, Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir during the decade.
- ❖ Farmers are advised to view the weather forecast before any field activity.

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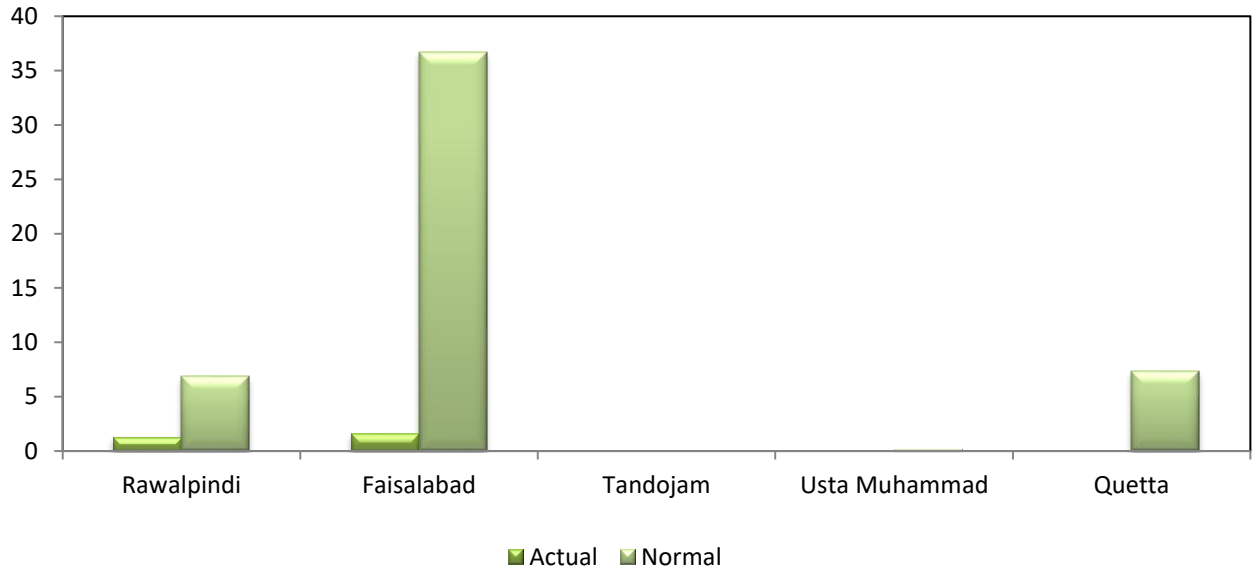
Meteorological Conditions during 3rd Decade of May 2024

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	6.9	1.3	-5.6	3.9	1.0	32.1	34.3	32.8	30.7	29.9	29.8	26.7	30	115.0	2.5	6.1
2	Faisalabad	36.7	1.6	-35.1	8.4	-0.2	36.0	41.4	43.2	38.0	37.2	***	33.1	31	129.3	2.2	6.6
3	Jhelum	115.6	0.0	-115.6	9.5	0.6	34.6	32.1	30.8	29.2	27.8	28.5	***	37	122.8	3.5	7.1
4	Lahore	87.5	0.0	-87.5	1.3	1.3	32.3	36.4	35.2	33.0	32.4	***	28.8	24	118.3	2.9	6.1
5	Sargodha	59.4	0.0	-59.4	-8.6	19.9	37.6	39.7	38.1	35.7	34.8	***	***	23	3.0	3.0	4.4
6	Multan	18.9	0.0	-18.9	7.9	0.9	37.8	***	***	***	***	***	***	21	108.0	4.0	7.1
7	Khanpur	21.5	0.0	-21.5	8.9	1.6	38.0	***	38.5	38.5	38.2	37.6	34.1	30	109.0	***	9.0
8	Tandojam	0.0	0.0	0.0	4.1	0.8	35.8	***	36.4	34.1	32.6	31.7	31.5	49	***	9.3	6.1
9	Sakrand	0.0	0.0	0.0	1.6	2.0	37.4	46.9	***	***	***	***	***	33	127.0	5.4	8.4
11	Rohri	19.7	0.0	-19.7	8.4	1.9	38.3	***	***	***	***	***	***	24	123.0	2.4	6.2
12	D.I Khan	30.0	0.0	-30.0	7.5	1.7	36.6	35.3	34.8	13.1	***	21.2	***	26	115.6	4.1	7.3
13	Peshawar	32.2	0.0	-32.2	5.1	-2.1	33.0	33.4	32.6	30.3	29.4	28.1	26.3	25	111.9	7.2	8.3
14	Usta M.	0.2	0.0	-0.2	0.0	0.0	35.3	39.3	38.8	36.7	***	***	33.9	33	***	4.2	8.0
15	Quetta	7.3	0.0	-7.3	-3.2	-3.0	25.3	28.1	26.6	23.3	22.2	21.6	19.2	20	117.0	5.7	8.1
16	Skardu	5.4	3.8	-1.6	-4.6	-4.8	19.7	***	***	***	***	***	***	29	99.2	5.5	5.6
17	Gilgit	8.0	2.8	-5.2	-1.0	-2.4	25.1	***	***	***	***	***	***	32	100.9	5.3	6.3

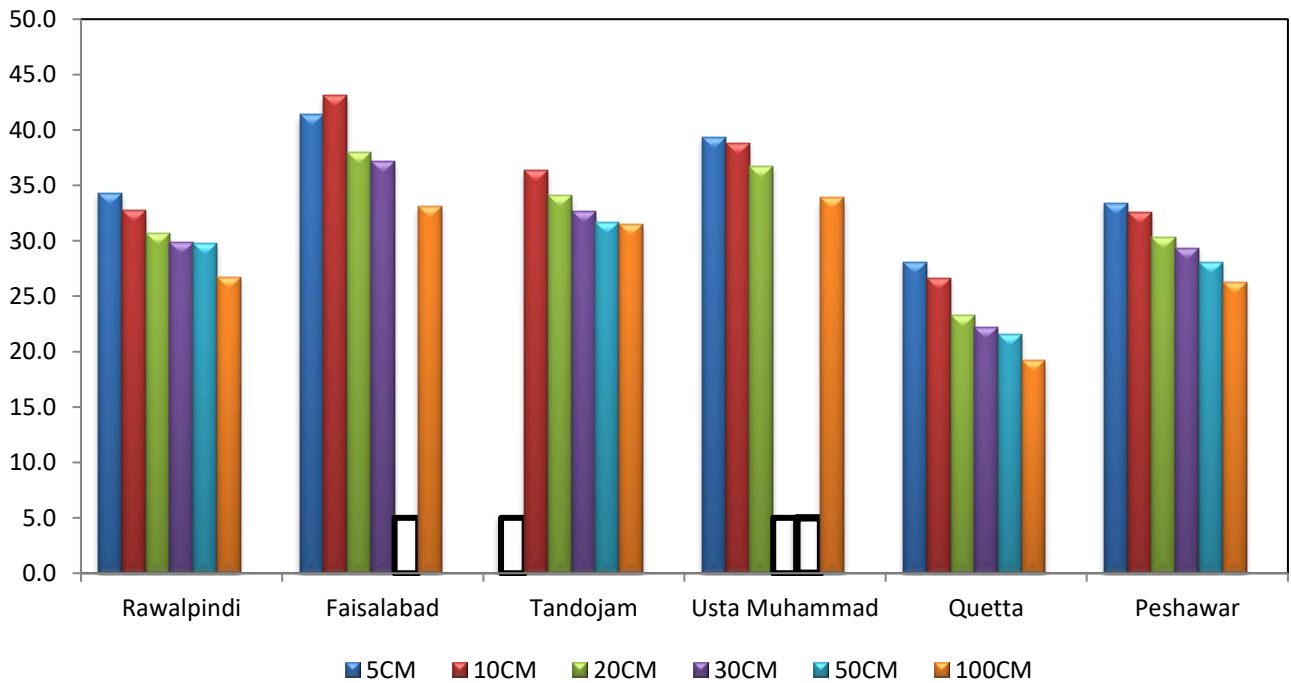
Table-1: Meteorological parameters for selected station of Pakistan. "Dep" in the table stands for difference from climatic normal, i.e. actual value minus normal. The climatic normally used in the Bulletin is extracted from the 2007 - 2016 observed data. 'ETo' stands for reference crop Evapotranspiration***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

Graph at RAMCs during May 2024

Precipitation(mm) during 3rd 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 (21th to 31st May 2024)

Hot and dry weather reported from most of the agriculture plains during the decade. However, light rainfall observed from upper parts of Khyber Pakhtunkhwa, Gilgit Baltistan, Kashmir and a few scattered locations of Punjab

Punjab

Dry weather prevailed in most parts while light rainfall was reported from a few scattered locations in the province. The decadal maximum temperature rose above normal by 4.5 °C and minimum temperature by 3.6°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 28%, 100.7hrs, 3.0 km/hr and 6.6mm/day respectively.

1.1 Sindh

Dry weather was reported from most parts of the province. The decadal maximum and minimum temperatures rose above normal by 4.7 and 1.6 degree in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 35%, 125hrs, 5.7km/hr and 6.9mm/day respectively.

1.2 Khyber Pakhtunkhwa

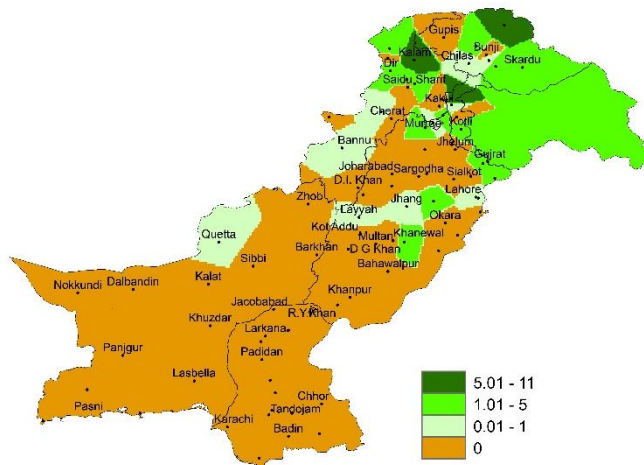
Light rainfall was reported from the province. The decadal maximum rose above normal by 6.3°C and minimum temperatures were observed nearly normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 26%, 113.7hrs, 5.6km/hr and 7.8mm/day respectively.

1.3 Baluchistan

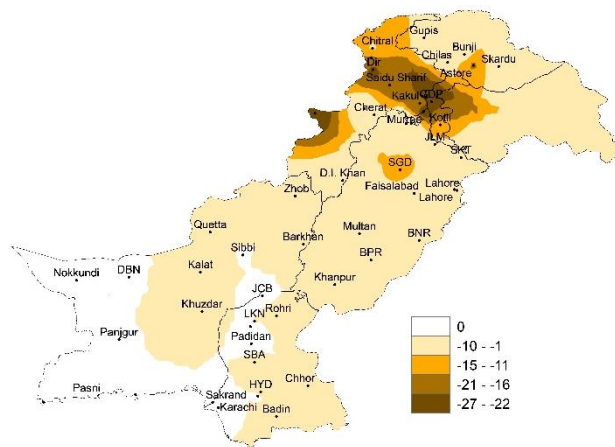
Dr weather reported from most parts of the province. Decadal maximum temperature was observed below normal by 0.5 °C whereas above normal minimum temperature by 0.3 degree in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 27%, 117hrs, 4.9km/hr and 8.0 mm/day respectively.

1.4 Gilgit-Baltistan and Azad Jammu & Kashmir.

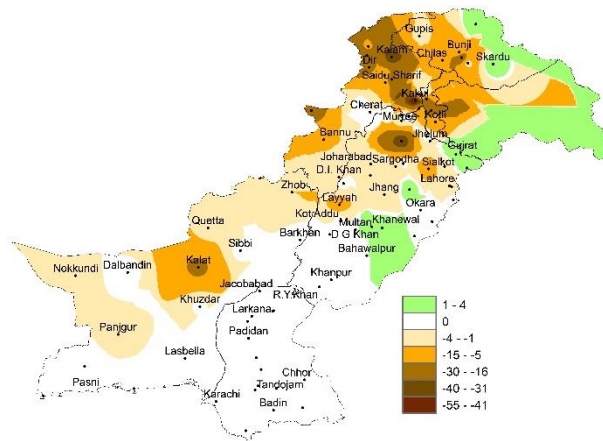
Light rain was reported from the province. Decadal maximum temperature and minimum temperatures were observed below normal by -2.8 degree and -3.6 degree in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 31%, 100.hrs, 5.4km/hr and 5.95mm/day respectively.



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 (21th to 31st May 2024)**

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 1.3 mm during the decade; however, weather remained cloudy for 07 days. Average relative humidity recorded as 30%. Mean day temperature was 41.7°C while night temperature recorded as 22.5°C with 115 hours bright sunshine duration. Wind speed recorded as 2.5 km/hr with mean wind direction *north westerly*.

2.2 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 1.6 mm during the decade; however, weather remained cloudy for 03 days. Average relative humidity recorded as 31%. Mean day temperature was 45.0°C while night temperature recorded as 26.9°C with 129.3 hours bright sunshine duration. Wind speed recorded as 2.2 km/hr with mean wind direction *westerly*.

Cotton: *Very good, Budding completed.*

2.3 RAMC, Tandojam (Lower Sindh)

The weather was dry during the decade; however, weather remained cloudy for 02 days. Average relative humidity recorded as 49%. Mean day temperature was 44.7°C while night temperature recorded as 26.9°C. Wind speed recorded as 9.3 km/hr with mean wind direction *south westerly*.

Cotton: *Good, Third true leaf.*

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

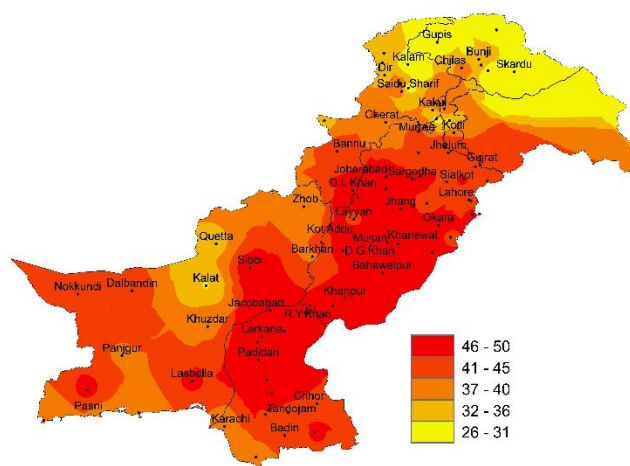
The weather was dry during the decade; however, weather remained cloudy for 00 days. Average relative humidity recorded as 33%. Mean day temperature was 46.2°C while night temperature recorded as 24.4°C. Wind speed recorded as 4.2 km/hr with mean wind direction *south easterly*.

Crop: *Nil.*

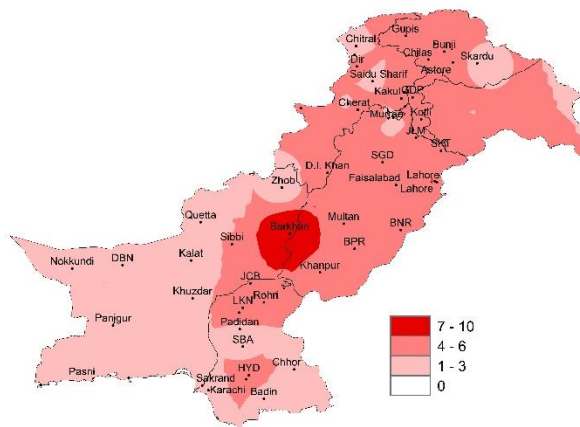
2.5 RAMC, Quetta (Northern Baluchistan)

Rainfall reported as 0.01 mm during the decade; however, weather remained cloudy for 07 days. Average relative humidity recorded as 20.2%. Mean day temperature was 32.7°C while night temperature recorded as 17.8°C with 117 hours bright sunshine duration. Wind speed recorded as 5.7 km/hr with mean wind direction *north westerly*.

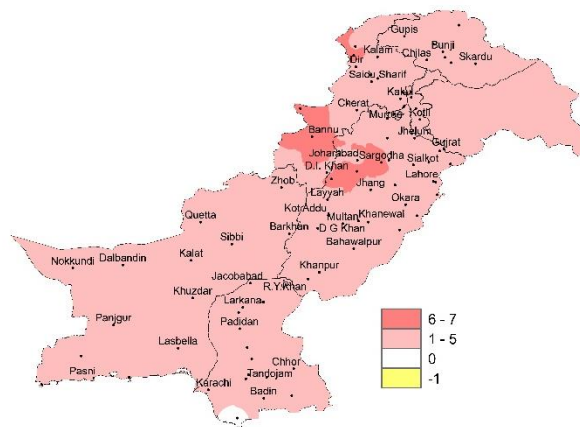
Wheat: *Good, Full maturity.*



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 (21th to 31st May 2024)

2.6 Jhelum

Dry weather reported during the decade; however, weather remained cloudy for 3 days. Average relative humidity recorded as 37%. Mean day temperature was 44.1°C while night temperature recorded as 25.1°C with 122.8 hours bright sunshine duration. Wind speed recorded as 4.9 km/hr with mean wind direction *variable*.

2.7 Lahore

Rainfall reported as 0.01 mm (Trace) during the decade; however, weather remained cloudy for 01 day. Average relative humidity recorded as 24%. Mean day temperature was 36.2°C while night temperature recorded as 28.3°C with 118.3 hours bright sunshine duration. Wind speed recorded as 2.9 km/hr with mean wind direction *north easterly*.

2.8 Sargodha

Dry weather reported during the decade; however, weather remained cloudy for 01 day. Average relative humidity recorded as 23%. Mean day temperature was 45.6°C while night temperature recorded as 28°C with 110 hours bright sunshine duration. Wind speed recorded as 2.96 km/hr with mean wind direction *south easterly*.

2.9 Multan

Dry weather reported during the decade; however, weather remained cloudy for 03 days. Average relative humidity recorded as 21%. Mean day temperature was 45.9°C while night temperature recorded as 29.6°C with 108 hours bright sunshine duration. Wind speed recorded as 4.0 km/hr with mean wind direction *north easterly*.

2.10 Khanpur

Dry weather reported during the decade; however, clear sky was observed during this period. Average relative humidity recorded as 30%. Mean day temperature was 47.4°C while night temperature recorded as 28.6°C with 109 hours bright sunshine duration. Mean wind direction *north easterly*.

2.11 Sakrand

Dry weather reported during the decade; however, weather remained cloudy for 01 day. Average relative humidity recorded as 33%. Mean day temperature was 46.1°C while night temperature recorded as 28.6°C with 127 hours bright sunshine duration. Wind speed recorded as 5.4 km/hr with mean direction as *variable*.

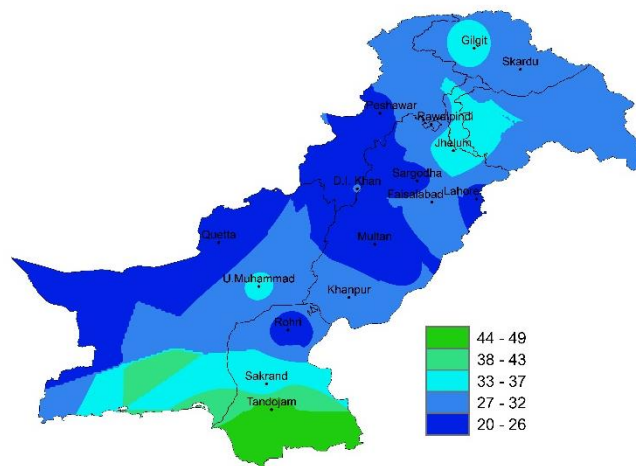


Figure.3: Relative Humidity in Percentage (%)

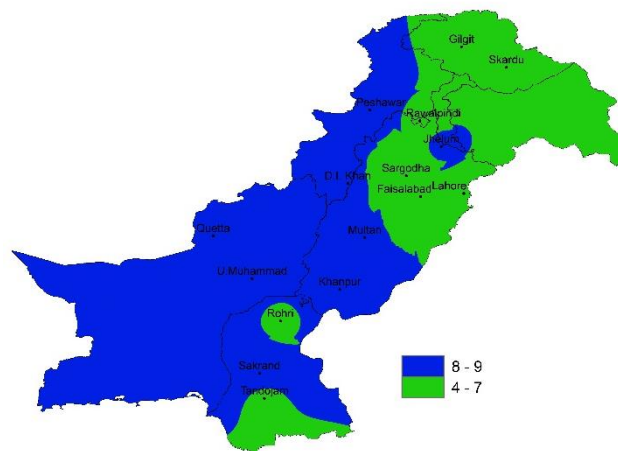


Figure.4: Reference Crop Evapotranspiration ET0 (mm/day)

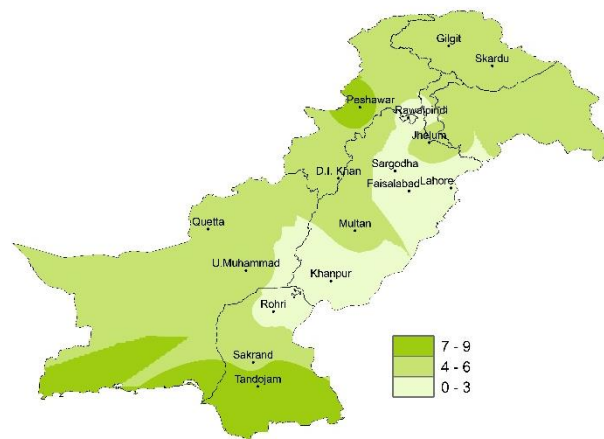


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Dry weather reported during the decade; however, weather remained cloudy for 2 days. Average relative humidity recorded as 24%. Mean day temperature was 47.9°C while night temperature recorded as 28.6°C with 123.2 hours bright sunshine duration. Wind speed recorded as 2.4 km/hr with mean direction as *variable*.

2.13 D.I. Khan

Dry weather reported during the decade; however, clear sky was observed during this period. Average relative humidity recorded as 26%. Mean day temperature was 45.1°C while night temperature recorded as 28.1°C with 115.6 hours bright sunshine duration. Wind speed recorded as 4.1 km/hr with mean direction as *north easterly*.

2.14 Peshawar

Dry weather reported during the decade; however, weather remained cloudy for 03 days. Average relative humidity recorded as 25%. Mean day temperature was 41.7°C while night temperature recorded as 24.2°C with 111.9 hours bright sunshine duration. Wind speed recorded as 7.2 km/hr with mean wind direction as *north westerly*.

2.15 Skardu

Rainfall reported as 3.8 mm during the decade; however, weather remained cloudy for 03 days during the decade. Average relative humidity recorded as 29%. Mean day temperature was 27.6°C while night temperature recorded as 11.8°C with 99.2 hours bright sunshine duration. Wind speed recorded as 5.5 km/hr with mean wind direction as *westerly*.

2.16 Gilgit

Rainfall reported as 2.8 mm during the decade; however, weather remained cloudy for 11 days during the decade. Average relative humidity recorded as 32.3%. Mean day temperature was 34.6°C while night temperature recorded as 15.5°C with 100.9 hours bright sunshine duration. Wind speed recorded as 5.3 km/hr with mean wind direction as *south easterly*.

Eleven Days Weather Advisory for Farmers
(1st to 10th June 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-wind/thunderstorm is expected in isolated places in Punjab during the decade whereas dry weather is expected in some parts of the province.
- ❖ **Khyber Pakhtunkhwa:** Rain-wind/thunderstorm is expected during the decade.
- ❖ **Sindh:** Mainly dry weather is expected in Sindh province during the decade.
- ❖ **Baluchistan:** Mainly dry weather is expected in most parts of the province.
- ❖ **Gilgit-Baltistan:** Rain-wind/thunderstorm is expected during the decade.
- ❖ **Kashmir:** Rain/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.