

Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Dry weather prevailed in upper parts, while hot and dry weather in southern parts of the country. Light rainfall was also reported from south Sindh, south Punjab, western Khyber Pakhtunkhwa and Gilgit Baltistan.
- ❖ Highest amount of rainfall recorded as 11.0 mm at Karachi during the last decade.
- ❖ Highest maximum temperature recorded as 39.3°C at Turbat during the last decade.
- ❖ Mainly dry weather is expected in most parts of the country. However, rain-wind/thunderstorm is likely in Gilgit Baltistan and Kashmir 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, Director*

Editor: *Mr. Irshad Ali, Assistant Meteorologist*

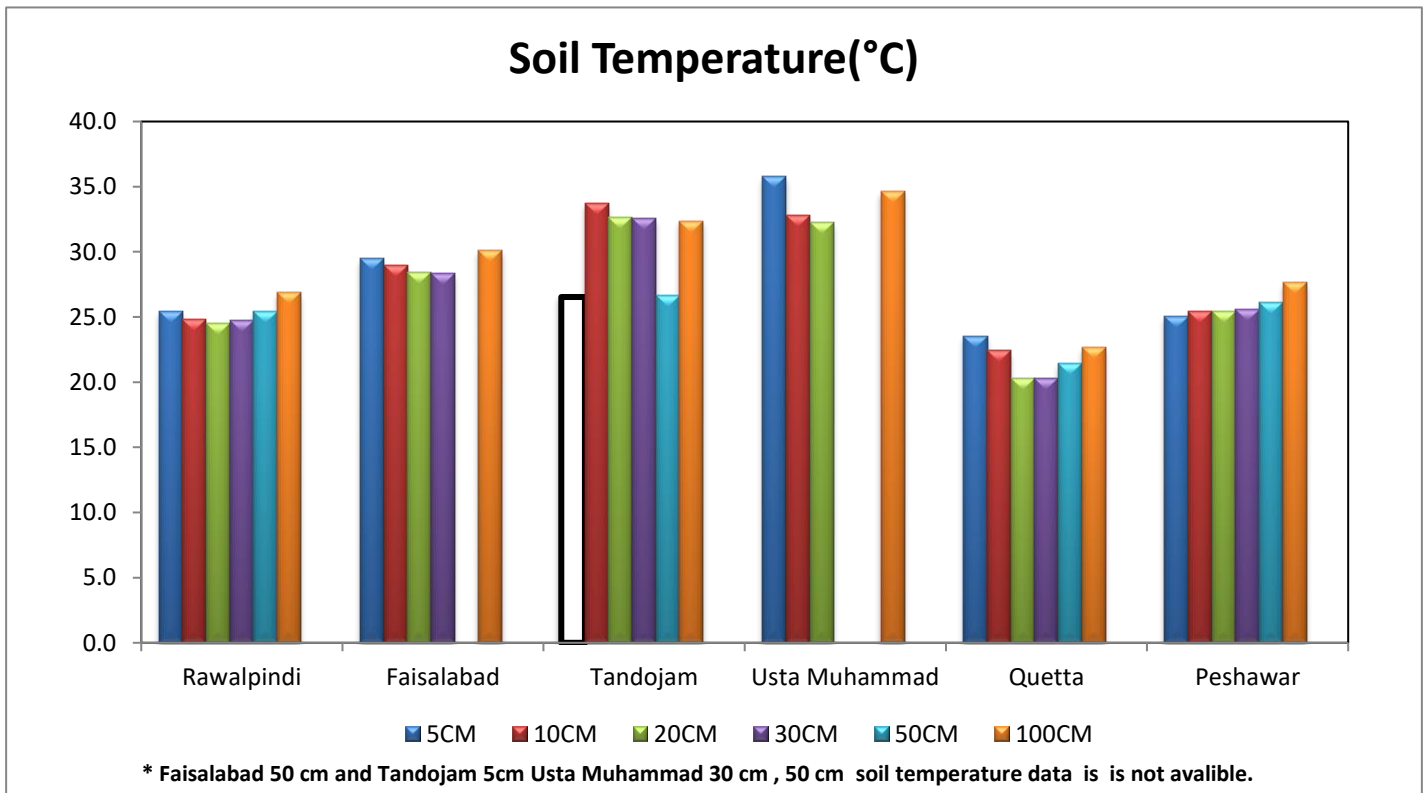
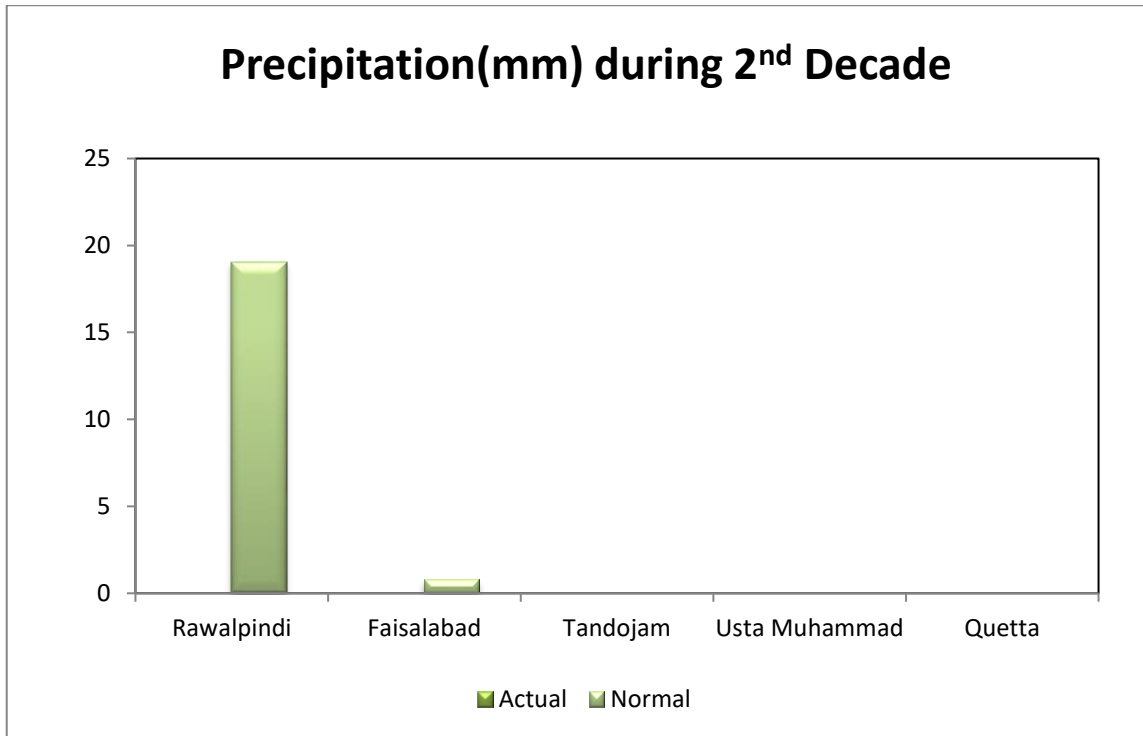
Phone: [+92-51-9250592](tel:+92-51-9250592) Email: dirnamc@yahoo.com

Meteorological Conditions during 2nd Decade of October 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	19.1	0.0	-19.1	2.2	-0.7	24.0	25.4	24.8	24.5	24.7	25.4	26.9	58.0	91.1	7.0	4.2
2	Faisalabad	0.8	0.0	-0.8	1.8	2.7	27.5	29.5	29.0	28.4	28.3	***	30.1	53.0	96.1	1.4	3.3
3	Jhelum	10.5	0.0	-10.5	0.6	1.8	26.2	26.5	25.8	25.7	25.8	26.7	***	67.0	92.1	4.9	3.8
4	Lahore	5.6	0.0	-5.6	1.9	0.0	27.5	***	***	***	***	***	***	50.0	83.4	7.0	4.6
5	Sargodha	4.1	0.0	-4.1	1.6	2.0	28.0	30.5	30.5	29.5	29.5	***	***	53.0	75.9	1.5	3.0
6	Multan	0.4	0.0	-0.4	1.9	5.2	30.3	***	***	***	***	***	***	51.0	77.3	2.2	3.5
7	Khanpur	0.0	0.2	0.2	2.5	1.4	29.2	***	31.4	31.8	32.3	32.8	32.9	51.0	91.8	0.0	4.5
8	Tandojam	0.0	0.0	0.0	0.9	2.1	29.7	***	33.7	32.6	32.6	32.4	32.4	58.0	73.0	1.8	3.6
9	Sakrand	0.0	0.0	0.0	2.2	5.1	31.3	40.5	***	***	***	***	***	51.0	77.3	2.2	3.8
11	Rohri	0.0	0.0	0.0	1.0	2.8	31.0	***	***	***	***	***	***	49.2	89.7	3.1	4.2
12	D.I Khan	1.7	0.0	-1.7	2.0	2.6	28.3	28.5	28.1	28.3	***	18.7	***	55.0	82.0	2.5	3.5
13	Peshawar	5.1	0.0	-5.1	1.9	0.3	25.1	25.0	25.4	25.4	25.6	26.1	27.6	63.0	73.0	1.0	2.6
14	Usta M.	0.0	0.0	0.0	0.0	0.0	27.1	35.8	32.8	32.2	***	***	34.7	62.0	0.0	1.9	3.4
15	Quetta	0.0	0.0	0.0	-0.6	1.7	18.4	23.5	22.4	20.3	20.3	21.4	22.7	24.7	103.3	4.5	3.7
16	Skardu	2.3	0.0	-2.3	0.8	0.0	12.3	***	***	***	***	***	***	38.0	58.5	0.0	3.2
17	Gilgit	0.9	0.0	-0.9	5.6	1.4	18.2	***	***	***	***	***	***	47.1	77.8	1.7	2.4

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 normal 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 October 2024



Past Weather (11th to 20th October 2024)

Dry weather prevailed in upper parts, while hot and dry in southern parts of the country. Light rainfall was also reported from south Sindh, south Punjab, western Khyber Pakhtunkhwa and Gilgit Baltistan.

Punjab

Hot and dry weather prevailed in most parts, whereas light rain observed from southern parts of the province. The decadal maximum and minimum temperatures rose above normal by 1.8°C and 1.7°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 55%, 86.8hrs, 3.4km/hr and 3.8mm/day respectively.

1.1 Sindh

Hot and dry weather prevailed in most parts, whereas light rain observed from southern parts of the province. The decadal maximum and minimum temperatures rose above normal by 1.4°C and 3.3°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 53%, 80.0hrs, 2.4km/hr and 3.9mm/day respectively.

1.2 Khyber Pakhtunkhwa

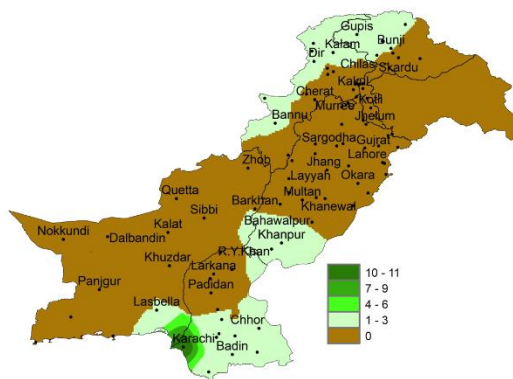
Dry weather prevailed in most parts, whereas light rain observed from western parts of the province. The decadal maximum and minimum temperatures rose above normal by 2.0°C and 1.4°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 59%, 77.5hrs, 1.8km/hr and 3.1mm/day respectively.

1.3 Baluchistan

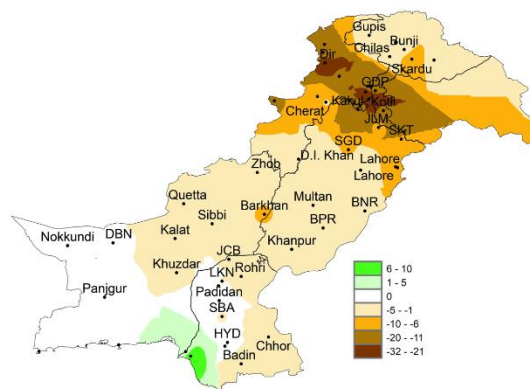
Hot and dry weather prevailed in most parts of the province. The decadal maximum was observed slightly below normal by -0.3°C and minimum temperatures rose above normal by 0.8°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 43%, 51.7hrs, 3.2km/hr and 3.6mm/day respectively.

1.4 Gilgit-Baltistan and Azad Jammu & Kashmir.

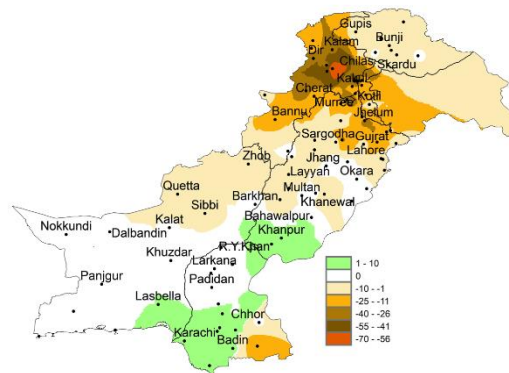
Light rain was reported from Gilgit-Baltistan, whereas dry weather prevailed in Kashmir. The decadal maximum and minimum temperatures rose above normal by 3.2°C and 0.7°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 43%, 68.2hrs, 0.9km/hr and 2.8mm/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 October 2024)

2.1 RAMC, Rawalpindi (Potohar region)

Dry weather was observed during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 53%. Mean day temperature was 34.9°C while night temperature recorded as 20.1°C with 96.1 hours bright sunshine duration. Wind speed recorded as 1.4km/hr with mean wind direction variable.

2.2 RAMC, Faisalabad (Central Punjab)

Dry weather was observed during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 58%. Mean day temperature was 32.8°C while night temperature recorded as 15.2°C with 91.1 hours bright sunshine duration. Wind speed recorded as 7.0km/hr with mean wind direction north westerly.

Cotton: Very good, First picking.

2.3 RAMC, Tandojam (Lower Sindh)

Dry weather was observed during the decade; however, weather remained partially cloudy for 05 days. Average relative humidity recorded as 58%. Mean day temperature was 37.3°C while night temperature recorded as 22.0°C with 73.0 hours bright sunshine duration. Wind speed recorded as 1.8km/hr with mean wind direction south easterly.

Cotton: Good, Fourth picking.

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

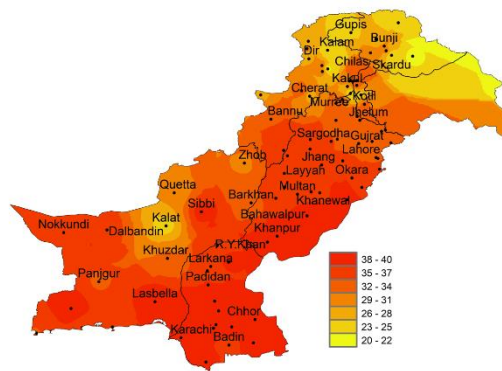
Dry weather was observed during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 62%. Mean day temperature was 34.5°C while night temperature recorded as 19.6°C. Wind speed recorded as 1.9 km/hr with mean wind direction variable.

Rice: Good, milk maturity.

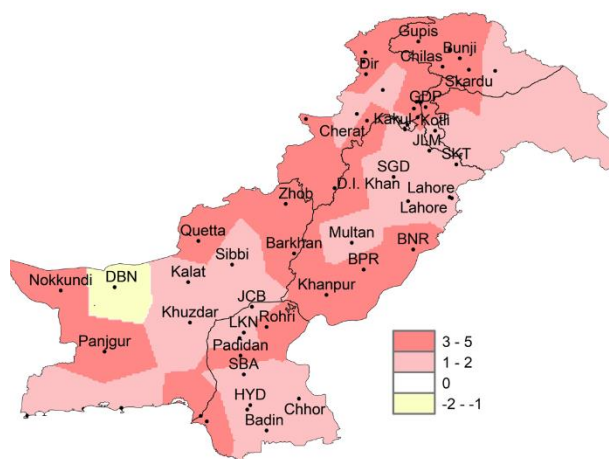
2.5 RAMC, Quetta (Northern Baluchistan)

Dry weather was observed during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 25%. Mean day temperature was 26.7°C while night temperature recorded as 10.0°C with 103.3hours bright sunshine duration. Wind speed recorded as 4.5km/hr with mean wind direction north westerly.

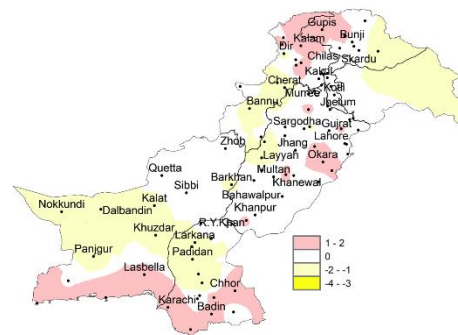
Wheat: Nil.



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 (11th to 20th October 2024)

2.6 Jhelum

Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 67%. Mean day temperature was 33.2°C while night temperature recorded as 19.1°C with 92.1 hours bright sunshine duration. Wind speed recorded as 4.9 km/hr with mean wind direction *variable*.

2.7 Lahore

Dry weather was observed during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 50%. Mean day temperature was 33.9°C while night temperature recorded as 21.1°C with 83.4 hours bright sunshine duration. Wind speed recorded as 7.0 km/hr with mean wind direction *westerly*.

2.8 Sargodha

Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 53%. Mean day temperature was 34.8°C while night temperature recorded as 21.1°C with 75.9 hours bright sunshine duration. Wind speed recorded as 1.5 km/hr with mean wind direction *variable*.

2.9 Multan

Dry weather was observed during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 42%. Mean day temperature was 36.2°C while night temperature recorded as 22.4°C with 82.6 hours bright sunshine duration. Wind speed recorded as 3.0 km/hr with mean wind direction *south westerly*.

2.10 Khanpur

Rain was reported 0.2mm during the decade; however, weather remained partially cloudy for 05 days. Average relative humidity recorded as 51%. Mean day temperature was 37.7 °C while night temperature recorded as 20.7°C with 91.8 hours bright sunshine duration. Mean wind direction *south westerly*.

2.11 Sakrand

Dry weather was reported during the decade. however, weather remained partially cloudy for 05 days. Average relative humidity recorded as 51%. Mean day temperature was 38.2°C while night temperature recorded as 24.4 °C with 77.3 hours bright sunshine duration. Wind speed recorded as 2.2 km/hr with mean direction *south easterly*.

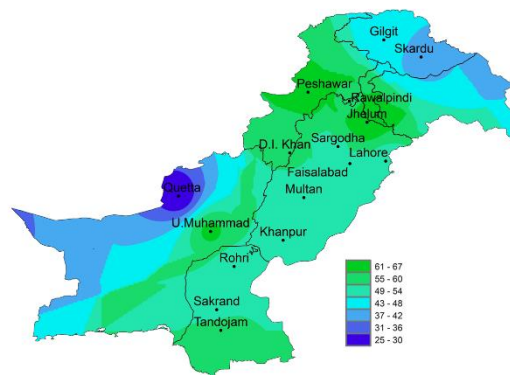


Figure.3: Relative Humidity in Percentage (%)

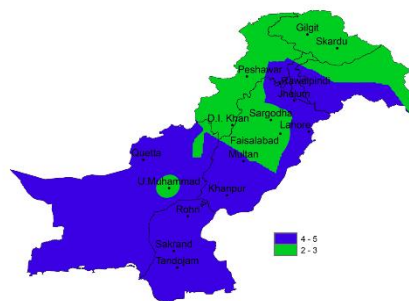


Figure.4: Reference Crop Evapotranspiration ET0 (mm/day)

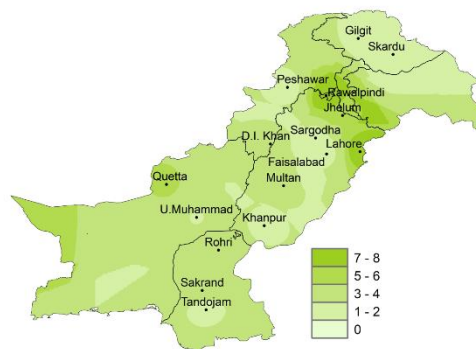


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Dry weather was reported weather during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 49%. Mean day temperature was 37.1 °C while night temperature recorded as 24.9°C with 89.7 hours bright sunshine duration. Wind speed recorded as 3.1km/hr with Mean wind direction as *north*.

2.13 D.I. Khan

Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 55%. Mean day temperature was 36.6°C while night temperature recorded as 20.7°C with 82hours bright sunshine duration. Wind speed recorded as 2.5km/hr with mean wind direction as *east-south easterly*.

2.14 Peshawar

Dry weather was observed during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 63%. Mean day temperature was 32.6°C while night temperature recorded as 17.5 °C with 73 hours bright sunshine duration. Wind speed recorded as 1.0km/hr with mean wind direction as *north westerly*.

2.15 Skardu

Dry weather was observed during the decade; however, weather remained partially cloudy for 02 days. Average relative humidity recorded as 38%. Mean day temperature was 21.3°C while night temperature recorded as 3.3°C with 58.8hours bright sunshine duration. Wind speed recorded as calm.

2.16 Gilgit

Dry weather was observed during the decade; however, weather remained partially cloudy for 07 days. Average relative humidity recorded as 47%. Mean day temperature was 29.1°C while night temperature recorded as 7.2°C with 77.8hours bright sunshine duration. Wind speed recorded as 1.7km/hr with mean wind direction as *south westerly*.

**Eleven Days Weather Advisory for Farmers
(21st to 31st October 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 dry weather is expected in most parts, while hot and dry in southern parts of the province during the decade.

❖ Khyber Pakhtunkhwa:

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

Sindh:

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

❖ Baluchistan:

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

❖ Gilgit-Baltistan:

Partly cloudy to cloudy weather is expected in Gilgit Baltistan. However, rain-wind/thunderstorm is expected during the decade.

❖ Kashmir:

Partly cloudy to cloudy weather is expected in Kashmir. However, 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.