

Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Light to moderate rain occurred in upper/central Balochistan, whereas light rain in Punjab, Khyber Pakhtunkhwa, upper Sindh, Kashmir, Gilgit Baltistan. Smoggy/foggy condition persisted at plain areas of Punjab during night/morning hours.
- ❖ Highest amount of rainfall recorded was 57.3 mm at Khuzdar during the last decade.
- ❖ Lowest minimum temperature recorded was -4.3 °C at Skardu during the last decade.
- ❖ Mainly dry weather may prevail in most parts of the country. However, rain-wind/thunderstorm (snowfall over mountains) is expected in upper Khyber Pakhtunkhwa, Gilgit Baltistan, Kashmir, south Punjab and northeast Balochistan during start and end of decade. Smog/fog is likely to prevail in plain areas of Punjab and upper Sindh during night/morning hours.
- ❖ Farmers are advised to view the weather forecast before any field activity.

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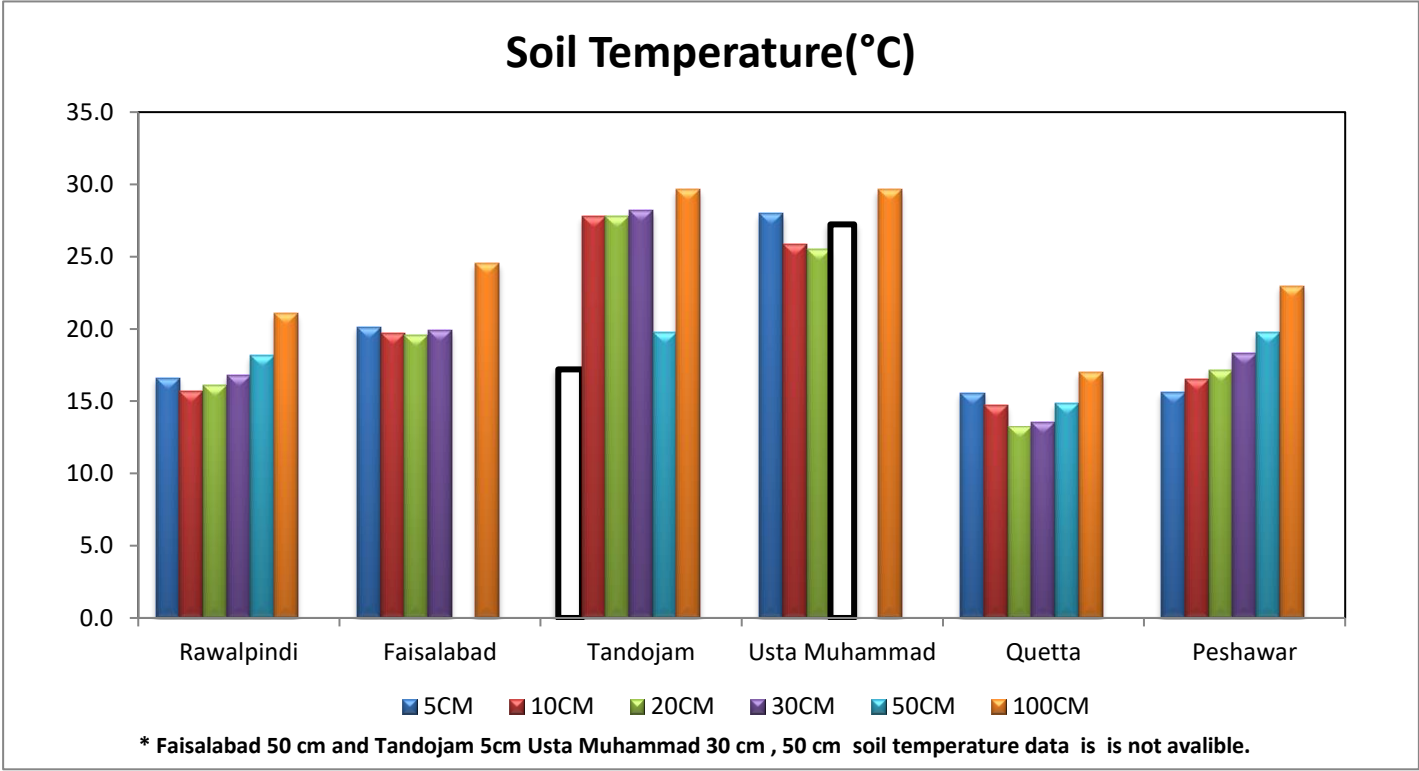
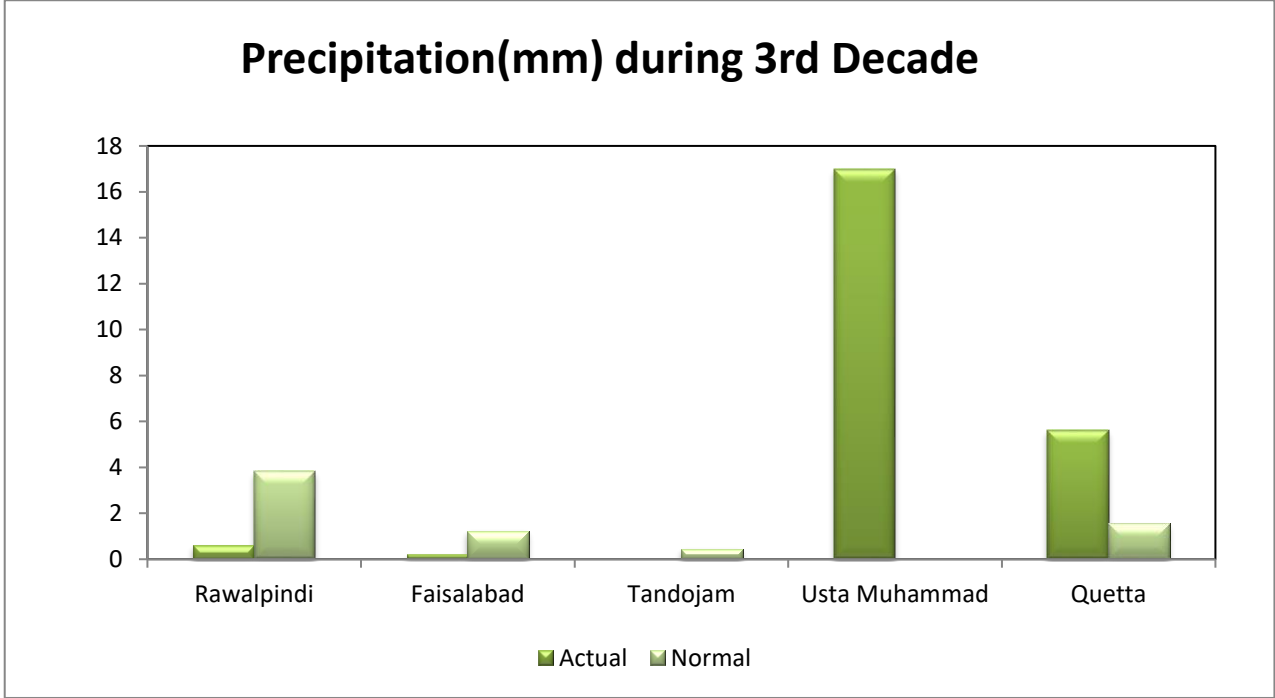
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Meteorological Conditions during 3rd Decade of November 2024

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	3.8	0.6	-3.2	1.4	2.1	16.4	16.6	15.7	16.1	16.8	18.1	21.1	60.0	65.3	0.4	1.1
2	Faisalabad	1.2	0.2	-1.0	0.6	3.3	19.0	20.1	19.7	19.6	19.9	***	24.5	62.0	68.0	1.1	1.6
3	Jhelum	2.1	0.0	-2.1	-2.0	0.6	16.5	17.2	16.8	16.9	18.3	19.8	***	70.0	63.3	0.4	1.2
4	Lahore	1.8	0.0	-1.8	0.7	0.5	19.4	***	***	***	***	***	***	57.0	51.8	0.5	1.3
5	Sargodha	0.0	0.1	0.1	0.5	2.8	19.3	21.3	21.1	21.6	22.4	***	***	63.0	49.6	0.9	1.3
6	Multan	0.2	0.0	-0.2	-0.1	7.0	21.5	***	***	***	***	***	***	59.0	81.8	1.7	2
7	Khanpur	0.4	0.0	-0.4	2.1	3.9	21.4	***	22.5	23.2	23.7	24.6	26.6	64.0	40.3	0.3	1.5
8	Tandojam	0.4	0.0	-0.4	2.7	3.3	23.9	***	27.8	27.8	28.2	29.3	29.6	63.0	72.4	1.4	2.4
9	Sakrand	0.0	0.0	0.0	2.0	5.8	23.7	30.3	26.6	26.2	27.2	28.8	***	59.0	81.8	2.3	2.5
11	Rohri	0.0	0.0	0.0	1.9	3.6	23.5	***	***	***	***	***	***	56.7	71.4	3.2	2.6
12	D.I Khan	0.3	3.0	2.7	0.2	4.6	19.5	20.1	20.0	20.6	***	11.9	***	66.0	37.8	2.1	1.6
13	Peshawar	4.9	0.0	-4.9	0.3	-0.6	15.7	15.6	16.5	17.2	18.3	19.8	23.0	65.0	59.4	1.4	1.3
14	Usta M.	0.0	17.0	17.0	1.1	-2.8	20.5	28.0	25.8	25.5	***	***	29.7	67.0	0.0	1.1	1.7
15	Quetta	1.6	5.6	4.1	2.0	5.6	12.7	15.6	14.7	13.2	13.5	14.9	17.0	40.1	84.4	4.7	2.3
16	Skardu	0.5	0.0	-0.5	-1.4	0.2	3.0	***	***	***	***	***	***	51.0	48.2	0.9	0.7
17	Gilgit	0.1	0.0	-0.1	0.1	0.8	8.3	***	***	***	***	***	***	50.7	39.8	1.9	1.1

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 November 2024



Past Weather (21st to 30th November 2024)

Light to moderate rain occurred in upper/central Balochistan, whereas light rain in Punjab, Khyber Pakhtunkhwa, upper Sindh, Kashmir, Gilgit Baltistan. Smoggy/foggy condition persisted at plain areas of Punjab during night/morning hours.

1.1 Punjab

Mainly dry weather prevailed in most parts while light rain was also reported from the province. Smoggy/foggy condition persisted at plain areas of Punjab. The decadal maximum and minimum temperatures rose above normal by 0.5°C and 2.9°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded 62%, 60.0hrs, 0.8km/hr and 1.4mm/day respectively.

1.2 Sindh

Mainly dry weather prevailed in most parts while light rain was also reported from the upper parts of the province. The decadal maximum and minimum temperatures rose above normal by 2.2°C and 4.2°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 60%, 75.2hrs, 2.3km/hr and 2.5mm/day respectively.

1.3 Khyber Pakhtunkhwa

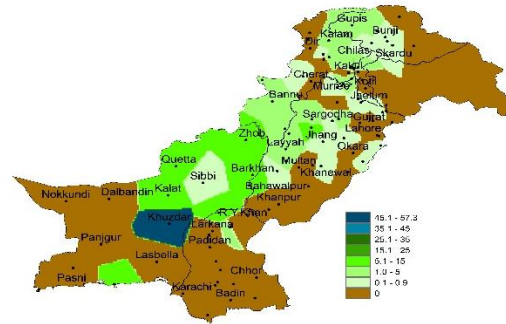
Light rain was reported from most parts of the province. The decadal maximum and minimum temperatures rose above normal by 0.2°C and 2.0°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 66%, 48.6hrs, 1.8km/hr and 1.5mm/day respectively.

1.4 Baluchistan

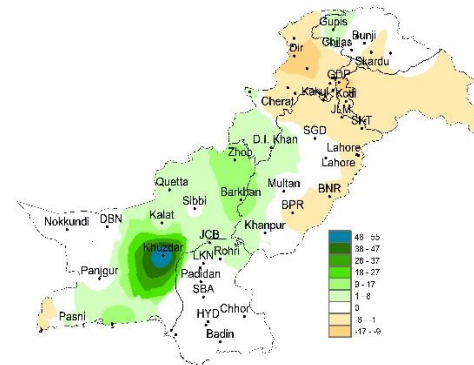
Light to moderate rainfall was reported from north & central parts of the province. The decadal maximum and minimum temperatures rose above normal by 1.5°C and 1.4°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 54%, 42.2hrs, 2.9km/hr and 2.0mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

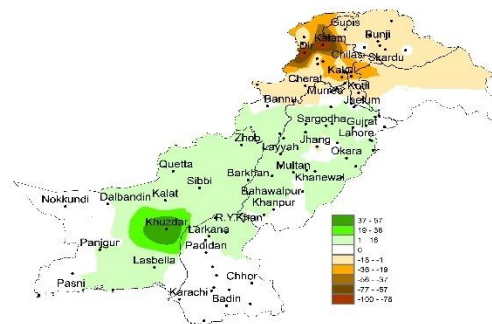
Light rain was reported from Kashmir and Gilgit-Baltistan. The decadal maximum temperature was recorded as -0.6°C below normal and minimum temperature rose above normal by 0.5°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 51%, 44.0hrs, 1.4km/hr and 0.9mm/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 (21st to 30th November 2024)**

2.1 RAMC, Rawalpindi (Potohar region)

Rain was reported 0.6mm during the decade; however, weather remained partially cloudy for 05 days. Average relative humidity recorded as 60%. Mean day temperature was 25.0°C while night temperature recorded as 7.8°C with 65.3 hours bright sunshine duration. Wind speed recorded as 0.4km/hr with mean wind direction north westerly.

2.2 RAMC, Faisalabad (Central Punjab)

Rain was reported 0.2mm during the decade; however, weather remained partially cloudy for 04 days. Average relative humidity recorded as 62%. Mean day temperature was 26.3°C while night temperature recorded as 11.7°C with 68.0 hours bright sunshine duration. Wind speed recorded as 1.1km/hr with mean wind direction westerly.

Wheat: *Very good, emergence.*

2.3 RAMC, Tandojam (Lower Sindh)

Dry weather with clear sky was observed during the decade. Average relative humidity recorded as 63%. Mean day temperature was 32.2°C while night temperature recorded as 15.5°C with 72.4 hours bright sunshine duration. Wind speed recorded as 1.4km/hr with mean wind direction south westerly.

Wheat: *Good, third leaf.*

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

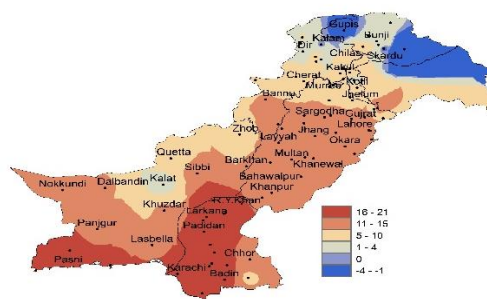
Rain was reported 17.0mm during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 67%. Mean day temperature was 28.1°C while night temperature recorded as 12.9°C. Wind speed recorded as 1.1 km/hr with mean wind direction north westerly.

Rice: *Good, harvesting*

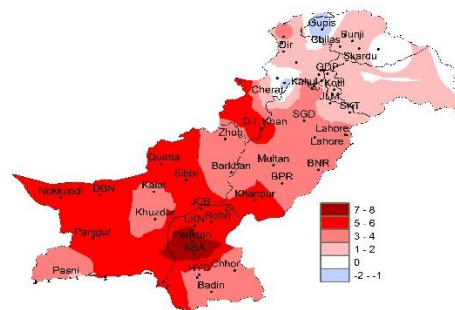
2.5 RAMC, Quetta (Northern Baluchistan)

Rain was reported 5.6mm during the decade; however, weather remained partially cloudy for 08 days. Average relative humidity recorded as 40%. Mean day temperature was 19.6°C while night temperature recorded as 5.7°C with 84.4 hours bright sunshine duration. Wind speed recorded as 4.7km/hr with mean wind direction north easterly.

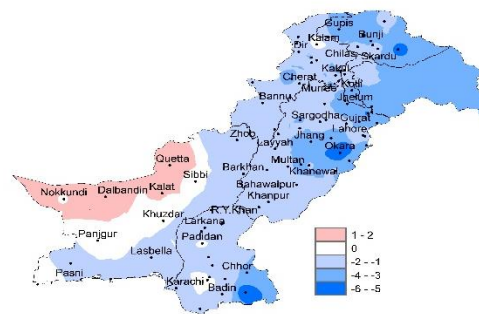
Wheat: *Good, emergence.*



I. Actual min-temperature



II. Departure of min-temperature from Normal



III. Departure of min-temperature from Previous Decade

Figure.2: Minimum Temperature distribution during previous decade (°C)

2(b) Past Weather or Sub-Regional Agricultural Plains (21st to 30th November 2024)

2.6 Jhelum

Dry weather was observed during the decade; however, weather remained partially cloudy for 05 days. Average relative humidity recorded as 70%. Mean day temperature was 23.7°C while night temperature recorded as 9.3°C with 63.3 hours bright sunshine duration. Wind speed recorded as 0.4km/hr with mean wind direction *variable*.

2.7 Lahore

Dry weather was observed during the decade; however, weather remained partially cloudy for 03 day. Average relative humidity recorded as 57%. Mean day temperature was 25.9°C while night temperature recorded as 12.8°C with 51.8 hours bright sunshine duration. Wind speed recorded as 0.5 km/hr with mean wind direction *westerly*.

2.8 Sargodha

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 03 days. Average relative humidity recorded as 63%. Mean day temperature was 26.0°C while night temperature recorded as 12.6°C with 49.6hours bright sunshine duration. Wind speed recorded as 0.9km/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 61%. Mean day temperature was 26.5°C while night temperature recorded as 13.7°C with 62.8 hours bright sunshine duration. Wind speed recorded as 1.7 km/hr with mean wind direction *southerly*.

2.10 Khanpur

Dry weather was observed during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 64%. Mean day temperature was 29.2 °C while night temperature recorded as 13.6°C with 40.3 hours bright sunshine duration.

2.11 Sakrand

Dry weather with clear skies was reported during the decade. Average relative humidity recorded as 59%. Mean day temperature was 30.9°C while night temperature recorded as 16.5 °C with 81.8 hours bright sunshine duration. Wind speed recorded as 2.3 km/hr with mean direction *variable*.

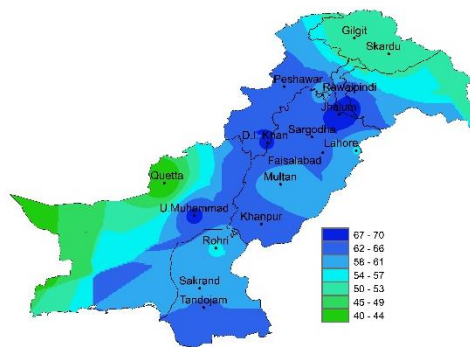


Figure.3: Relative Humidity in Percentage (%)

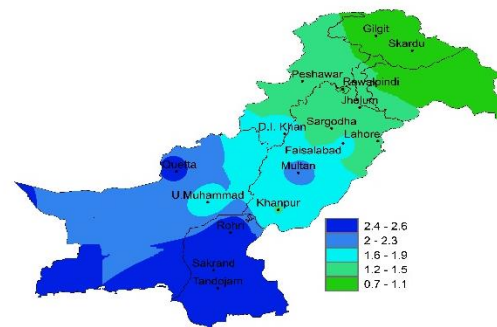


Figure.4: Reference Crop Evapotranspiration ETO (mm/day)

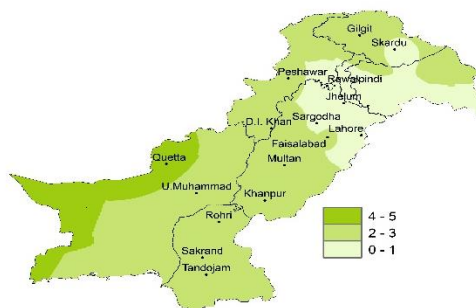


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Dry weather with clear skies was reported weather during the decade. Average relative humidity recorded as 56.7%. Mean day temperature was 29.7°C while night temperature recorded as 17.3°C with 71.4 hours bright sunshine duration. Wind speed recorded as 3.2km/hr with Mean wind direction as *easterly*.

2.13 D.I. Khan

Rain was reported 3.0mm during the decade; however, weather remained partially cloudy for 01 day. Average relative humidity recorded as 66%. Mean day temperature was 26.0°C while night temperature recorded as 12.9°C with 37.8 hours bright sunshine duration. Wind speed recorded as 2.1km/hr with mean wind direction as *northerly*.

2.14 Peshawar

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 05 days. Average relative humidity recorded as 65%. Mean day temperature was 24.0°C while night temperature recorded as 7.4 recorded as 1.4km/hr with mean wind direction as *north easterly*.

2.15 Skardu

Dry weather with clear skies was reported weather during the decade. however, weather remained partially cloudy for 04 days. Average relative humidity recorded as 51%. Mean day temperature was 10.3°C while night temperature recorded as 4.3°C with 48.2 hours bright sunshine duration. Wind speed recorded as 0.9km/hr with mean wind direction as *north westerly*.

2.16 Gilgit

Rain was reported 0.01mm during the decade; however, weather remained partially cloudy for 09 days. Average relative humidity recorded as 51%. Mean day temperature was 17.1°C while night temperature recorded as -0.6°C with 39.8hours bright sunshine duration. Wind speed recorded as 1.9km/hr with mean wind direction as *south westerly*.

Ten Days Weather Advisory for Farmers
(1st to 10th December 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 of the province. However, rain-wind/thunderstorm is likely in south Punjab from 1st to 3rd December, whereas in northeast Punjab on 8th & 9th of the decade. Smog/fog is likely to prevail in plain areas of Punjab in night and morning hours during the decade.

❖ Khyber Pakhtunkhwa:

Rain-wind/thunderstorm is expected in Khyber Pakhtunkhwa at the start and end of the decade.

❖ Sindh:

Mainly dry weather is expected in most parts, while fog is likely to prevail in the upper parts of the province during the night and morning hours throughout the decade

❖ Baluchistan:

Mainly dry weather is expected in most parts. While rain-wind/thunderstorm is likely in northeast parts of the province during first half of the decade.

❖ Gilgit-Baltistan:

Rain-wind/thunderstorm is expected in Gilgit Baltistan at the start and end of the decade.

❖ Kashmir:

Rain-wind/thunderstorm is expected in Kashmir at the start and end of the decade.

3.4 Advisory for Farmers

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