Decadal Agromet Bulletin of Pakistan



Highlights...

- ❖ Moderate to heavy rainfall was observed almost all over the country except dry coastal areas and lower Sindh where dry weather was observed.
- ❖ The highest amount of rainfall recorded was 186.0 mm at Rawalakot during the last decade.
- Highest maximum temperature recorded as 43.0°C at Jacobabad, Moin-Jo-Daro and Dadu during the last decade.
 - Again/thunderstorm is expected in most parts of the country during the decade whereas dry weather is expected in Sindh.
- Farmers are advised to view the weather forecast before any field activity.

NATIONAL AGROMET CENTRE (NAMC) PAKISTAN METEOROLOGICAL DEPARTMENT SECTOR H-8/2, ISLAMABAD

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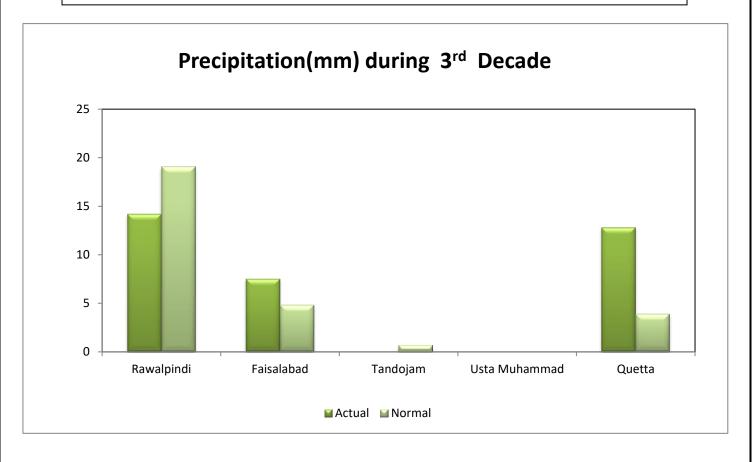
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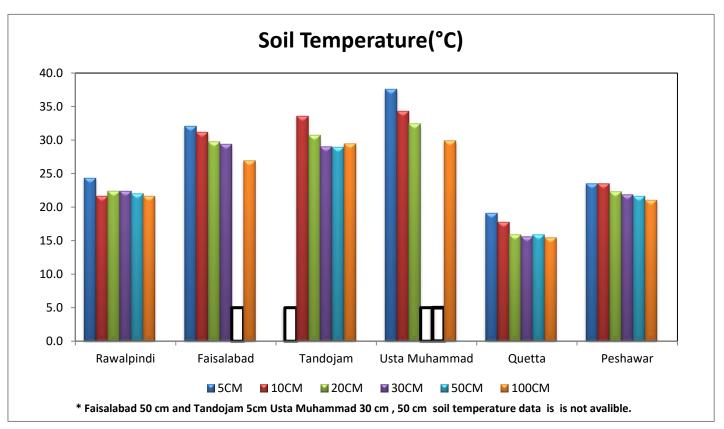
Meteorological Conditions during 3rd Decade of April 2024

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						R.H	Comple	Wind	ETo
		Normal	Actual	Dep	Tmax Dep	Tmin Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm	к.н (%)	Sunshine Duration(hours)	Speed (km/hr)	(mm/day)
1	Rawalpindi	19.1	14.2	-4.9	-3.5	-3.2	22.3	24.3	21.7	22.4	22.4	22.0	21.6	60	66.3	5.0	4.3
2	Faisalabad	4.8	7.5	2.7	-1.5	-0.7	27.8	32.1	31.2	29.8	29.4	***	26.9	50	91.0	2.7	4.9
3	Jhelum	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
4	Lahore	3.4	25.2	21.8	-6.0	-4.3	24.7	27.2	26.5	24.9	24.1	***	22.4	30	40.9	2.3	3.6
5	Sargodha	7.1	10.6	3.5	-3.4	-2.0	26.7	29.8	28.6	27.1	27.1	***	***	40	72.8	4.4	5.1
6	Multan	3.6	13.1	9.5	-4.2	-1.9	27.6	***	***	***	***	***	***	40	91.8	5.4	5.9
7	Khanpur	0.7	16.0	15.3	-2.6	-0.1	29.3	***	31.6	31.6	31.5	31.3	28.9	40	***	***	7.0
8	Tandojam	0.7	0.0	-0.7	-2.8	0.1	30.0	***	33.6	30.7	29.0	28.9	29.4	40	***	6.5	6.8
9	Sakrand	0.0	0.0	0.0	-1.4	0.7	30.9	43.3	***	***	***	***	***	30	110.5	4.6	4.8
11	Rohri	0.9	0.0	-0.9	-2.1	-0.4	31.1	***	***	***	***	***	***	30	109.4	2.8	5.8
12	D.I Khan	3.9	1.1	-2.8	-4.6	-1.2	26.0	26.0	25.3	13.1	***	13.4	***	50	76.3	4.7	4.9
13	Peshawar	9.8	24.8	15.0	-4.8	-1.8	22.8	23.5	23.5	22.3	21.9	21.6	21.0	60	49.2	4.3	3.8
14	Usta M.	0.0	0.0	0.0	0.0	0.0	29.5	37.6	34.3	32.4	***	***	29.9	20	***	2.9	5.5
15	Quetta	3.9	12.8	8.9	-8.1	-2.0	15.0	19.1	17.7	15.9	15.6	15.9	15.5	40	78.3	5.0	4.1
16	Skardu	11.3	20.6	9.3	-2.0	-0.5	13.7	***	***	***	***	***	***	40	60.0	5.2	3.7
17	Gilgit	9.6	11.0	1.4	-2.4	1.3	18.0	***	***	***	***	***	***	50	45.2	4.4	3.6

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 April 2024





Past Weather (21st to 30th April 2024)

Moderate to heavy rainfall was observed almost all over the country except dry coastal areas and lower Sindh where dry weather was observed.

1.1 Punjab

Moderate to heavy rainfall was reported in the province. The decadal maximum and minimum temperature dropped below normal by -3.5 and -2.1°C in the province. Values of relative humidity, sunshine hour, wind speed & ETo were recorded 43%,72.6hrs, 4.0 km/hr and 5.1mm/day respectively.

1.2 Sindh

Light rainfall was reported from the upper half of the province. The decadal maximum temperature dropped below normal by -2.1 and decadal minimum temperature remained near normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 33%, 110.0hrs, 4.6 km/hr and 5.8 mm/day respectively.

1.3 Khyber Pakhtunkhwa

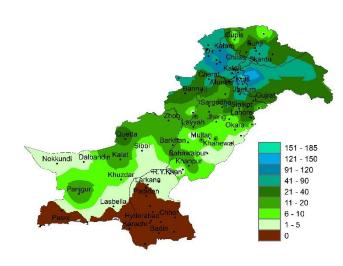
Moderate to heavy rainfall was reported from the province. The decadal maximum and minimum temperature dropped below normal by -4.7 and -1.5°C in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 55%,62.8 hrs, 4.5km/hr and 4.4 mm/day respectively.

1.4 Baluchistan

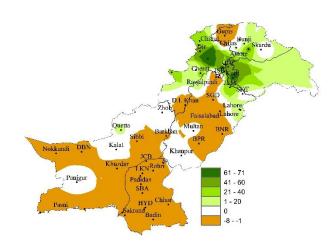
Moderate to heavy rainfall was reported from the province. The decadal maximum temperature dropped below normal by -4.1 and the decadal minimum temperature remained near normal in the province. Values of relative humidity, sunshine hour, wind speed & ETo were recorded as 30%, 78.3 hrs, 4.0km/hr and 4.8 mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

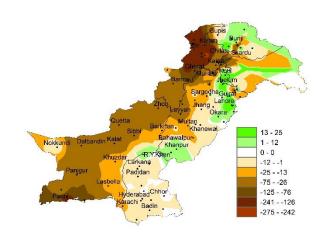
Moderate to heavy rain was reported from the province. The decadal maximum temperature dropped below normal by -2.2 and decadal minimum temperature remained near normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 45%, 52.6 hrs, 4.8 km/hr and 3.7mm/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) <u>Past Weather for Major Agricultural Plains</u> (21st to 30th April 2024)

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 14.2 mm during the decade; however, weather remained cloudy for 10 days. Average relative humidity recorded as 60%. Mean day temperature was 30.1°C while night temperature recorded as 14.5°C with 66.3 hours bright sunshine duration. Wind speed recorded as 5.0 km/hr with mean wind direction *north westerly*.

2.2 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 7.5 mm during the decade; however, weather remained cloudy for 09 days. Average relative humidity recorded as 60%. Mean day temperature was 35.6°C while night temperature recorded as 20.0°C with 91.0 hours bright sunshine duration. Wind speed recorded as 2.7 km/hr with mean wind direction *variable*.

Cotton: Very good, Emergence completed.

2.3 RAMC, Tandojam (Lower Sindh)

The weather is dry; however, weather remained cloudy for 08 days. Average relative humidity recorded as 40%. Mean day temperature was 37.8°C while night temperature recorded as 22.2°C. Wind speed recorded as 6.5 km/hr with mean wind direction *south westerly*.

Land is preparing for new crop.

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

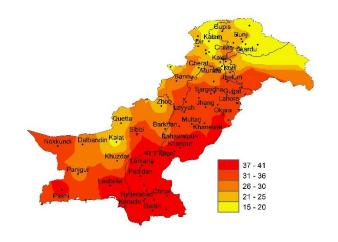
The weather is dry; however, weather remained cloudy for 05 days. Average relative humidity recorded as 20%. Mean day temperature was 38.0°C while night temperature recorded as 21.0°C. Mean wind direction *variable*.

Wheat: good, Harvesting.

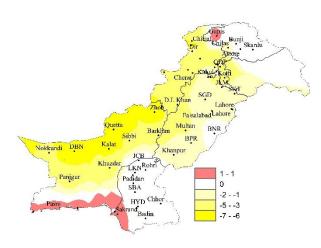
2.5 RAMC, Quetta (Northern Baluchistan)

Rainfall reported as 12.8 mm during the decade; however, weather remained cloudy for 08 days. Average relative humidity recorded as 40%. Mean day temperature was 20.6°C while night temperature recorded as 9.4°C with 78.3 hours bright sunshine duration. Wind speed recorded as 5.0 km/hr with mean wind direction *north westerly*.

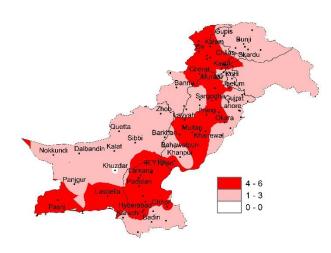
Wheat: good, Flowering stage.



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) <u>Past Weather or Sub-Regional Agricultural</u> Plains (21st to 30th April 2024)

2.6 Jhelum

Data is not available.

2.7 Lahore

Rainfall reported as 25.20 mm during the decade; however, weather remained cloudy for 09 days. Average relative humidity recorded as 30%. Mean day temperature was 30.9°C while night temperature recorded as 18.4°C with 40.9 hours bright sunshine duration. Wind speed recorded as 2.3 km/hr with mean wind direction *north easterly*.

2.8 Sargodha

Rainfall reported as 10.6 mm during the decade; however, weather remained cloudy for 07 days. Average relative humidity recorded as 40%. Mean day temperature was 33.7°C while night temperature recorded as 19.7°C with 72.8 hours bright sunshine duration. Wind speed recorded as 4.4 km/hr with mean wind direction *variable*.

2.9 Multan

Rainfall reported as 13.1 mm during the decade; however, weather remained cloudy for 10 days. Average relative humidity recorded as 40%. Mean day temperature was 34.6°C while night temperature recorded as 20.6°C with 91.8 hours bright sunshine duration. Wind speed recorded as 5.4 km/hr with mean wind direction *variable*.

2.10 Khanpur

Rainfall reported as 16.0 mm during the decade; however, weather remained cloudy for 07 days. Average relative humidity recorded as 40%. Mean day temperature was 37.5°C while night temperature recorded as 21.1°C. Mean wind direction *north westerly*.

2.11 Sakrand

Dry weather was reported however, skies remained cloudy for 03 days. Average relative humidity recorded as 30%. Mean day temperature was 38.6°C while night temperature recorded as 23.1°C with 110.5 hours bright sunshine duration. Wind speed recorded as 4.6 km/hr with mean direction as *north easterly*.

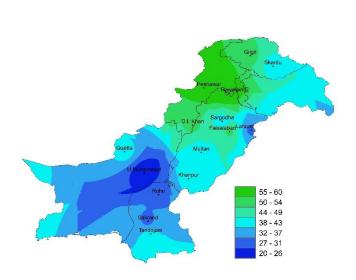


Figure.3: Relative Humidity in Percentage (%)

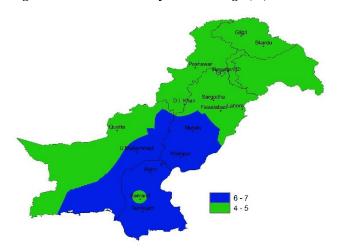


Figure.4: Reference Crop Evapotranspiration ETo (mm/day)

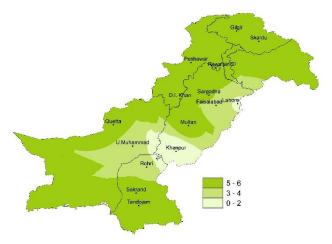


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Rainfall reported as 0.01 mm during the decade; however, weather remained cloudy for 05 days. Average relative humidity recorded as 30%. Mean day temperature was 38.7°C while night temperature recorded as 23.5°C with 109.4 hours bright sunshine duration. Wind speed recorded as 2.8 km/hr with mean direction as *north easterly*.

2.13 D.I. Khan

Rainfall reported as 1.10 mm during the decade; however, weather remained cloudy for 07 days. Average relative humidity recorded as 50%. Mean day temperature was 32.2°C while night temperature recorded as 19.7°C with 76.3 hours bright sunshine duration. Wind speed recorded as 4.7 km/hr with mean direction as *south easterly*.

2.14 Peshawar

Rainfall reported as 24.8 mm during the decade; however, weather remained cloudy for 10 days. Average relative humidity recorded as 60%. Mean day temperature was 28.9°C while night temperature recorded as 16.6°C with 49.2 hours bright sunshine duration. Wind speed recorded as 4.3 km/hr with mean wind direction as *north westerly*.

2.15 Skardu

Rainfall reported as 20.6 mm during the decade; however, weather remained cloudy for 05 days during the decade. Average relative humidity recorded as 40%. Mean day temperature was 20°C while night temperature recorded as 7.4°C with 60 hours bright sunshine duration. Wind speed recorded as 5.2 km/hr with mean wind direction as *westerly*.

2.16 Gilgit

Rainfall reported as 11.0mm during the decade; however, weather remained cloudy for 10 days during the decade. Average relative humidity recorded as 50%. Mean day temperature was 24.7°C while night temperature recorded as 11.2°C with 45.2 hours bright sunshine duration. Wind speed recorded as 4.4 km/hr with mean wind direction as *variable*.

Ten Days Weather Advisory for Farmers (1st to 10th May 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/thunderstorm is expected in central/southern Punjab during the decade whereas dry weather is expected in most parts of the province.
- **Khyber Pakhtunkhwa:** Rain 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. However, two spells of light rain are likely in Baluchistan during the first two days and last days of the decade.
- ❖ Gilgit-Baltistan: Rain is expected during the decade.
- **Kashmir:** Rain is expected during the decade.

3.4 Advisory for Farmers

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