# **Decadal Agromet Bulletin of Pakistan**



# Highlights...

- Light to moderate amount of rainfall was reported from most parts of the country whereas dry weather was reported from Sindh and the coastal belt of Baluchistan.
- ❖ Highest amount of rainfall recorded was 56.0 mm at Kakul during the last decade.
- Highest maximum temperature recorded as 48.5°C at Shaheed Benazirabad and Dadu during the last decade.
- Rain is expected in Gilgit-Baltistan and Kashmir while dry and hot weather is expected over most parts of the country 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

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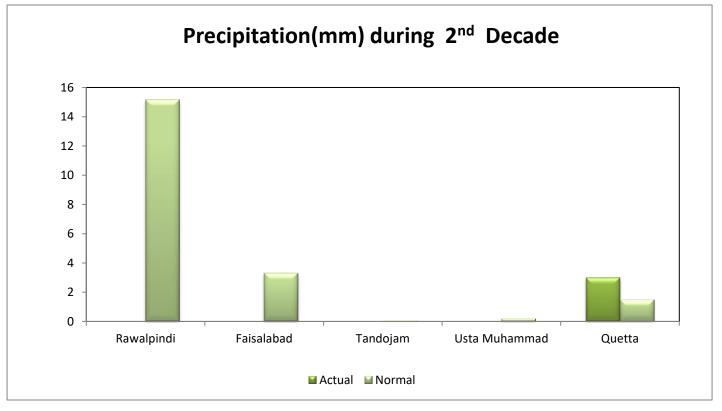
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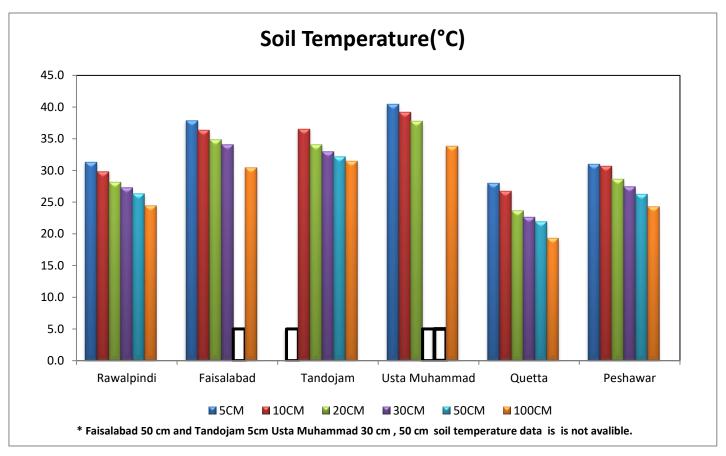
# Meteorological Conditions during 2<sup>nd</sup> Decade of May 2024

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						R.H	Compile	Wind	ЕТо
		Normal	Actual	Dep	Tmx Dep	Tmin Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm	(%)	Sunshine Duration(hours)	Speed (km/hr)	(mm/day)
1	Rawalpindi	15.2	0.0	-15.1	0.6	-0.6	29.4	31.3	29.8	28.1	27.3	26.3	24.4	37	97.9	2.5	5.5
2	Faisalabad	3.3	0.0	-3.3	1.5	2.7	33.9	37.9	36.4	34.9	34.1	***	30.5	37	110.9	2.6	6.1
3	Jhelum	7.7	1.2	-6.5	1.1	-0.3	31.3	32.2	30.3	29.4	27.7	27.6	***	38	***	4.9	6.9
4	Lahore	4.9	6.0	1.1	1.3	1.0	33.4	33.5	32.7	30.7	29.6	***	26.9	31	86.6	2.6	5.5
5	Sargodha	7.5	2.0	-5.5	-14.6	19.8	35.0	35.2	33.8	31.7	30.9	***	***	35	3.1	3.1	4.2
6	Multan	2.7	0.0	-2.7	1.0	1.6	34.9	***	***	***	***	***	***	29	88.0	5.1	6.9
7	Khanpur	0.6	0.0	-0.6	1.7	1.9	35.4	***	36.7	36.4	36.0	35.4	32.0	31	0.0	**	8.6
8	Tandojam	0.1	0.0	-0.1	0.8	-0.4	33.7	***	36.6	34.1	33.0	32.2	31.5	5	**	7.8	8.6
9	Sakrand	0.0	0.0	0.0	-0.7	1.1	35.4	45.8	***	***	***	***	***	36	116.8	5.8	8.0
11	Rohri	0.6	0.0	-0.6	1.0	2.2	36.4	***	***	***	***	***	***	29	112.6	3.6	6.9
12	D.I Khan	3.0	2.0	-1.0	1.3	2.4	33.5	32.6	31.5	13.1	***	18.4	***	40	83.3	4.0	6.1
13	Peshawar	5.3	0.0	-5.3	1.1	0.2	30.0	31.0	30.7	28.6	27.5	26.3	24.3	42	78.2	3.9	5.6
14	Usta M.	0.2	0.0	-0.2	0.0	0.0	35.8	40.4	39.2	37.8	***	***	33.9	36	**	5.6	8.6
15	Quetta	1.5	3.0	1.5	-2.2	1.7	22.7	28.0	26.7	23.7	22.6	21.9	19.3	30	95.5	4.1	5.3
16	Skardu	7.5	0.0	-7.5	1.5	1.5	18.6	***	***	***	***	***	***	27	89.2	5.0	5.1
17	Gilgit	5.2	10.0	4.8	0.3	2.0	22.2	***	***	***	***	***	***	42	71.2	3.9	4.7

**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**





# Past Weather (11th to 20th May 2024)

Light to moderate amount of rainfall was reported from most parts of the country whereas dry weather was reported from Sindh and coastal belt of Baluchistan.

# 1.1 Punjab

Light to moderate rainfall was reported in the province. The decadal maximum temperature rose above normal by -0.1 °C and minimum temperature by -1.2°C in the province. Values of relative humidity, sunshine hour, wind speed & ETo were recorded 34%,64.4hrs, 3.4 km/hr and 6.2mm/day respectively.

#### 1.2 Sindh

Dry weather was reported from the province. The decadal maximum and minimum temperatures rose above normal by 0.1 and -0.4 degree in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 23%, 114.7hrs, 5.7km/hr and 7.8mm/day respectively.

# 1.3 Khyber Pakhtunkhwa

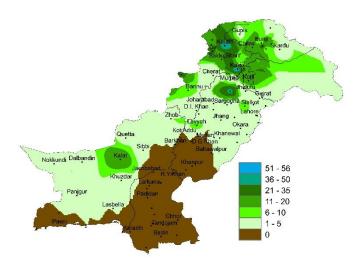
Light to moderate rainfall was reported from the province. The decadal maximum and minimum temperatures were observed above normal by 3.2 °C and 0.5 °C respectively in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 41%,80.7hrs, 3.9km/hr and 5.8mm/day respectively.

## 1.4 Baluchistan

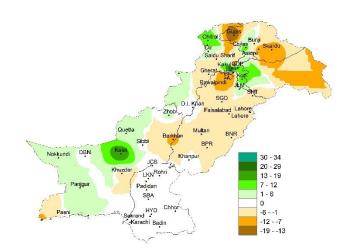
Light to moderate rain reported from the province. Decadal maximum temperature was observed below normal by  $0.5\,^{\circ}\text{C}$  whereas above normal minimum temperature by 0.3 degree in the province. Values of relative humidity, sunshine hour, wind speed & ETo were recorded as 33%, 95.5hrs, 4.8km/hr and 6.9 mm/day respectively.

# 1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

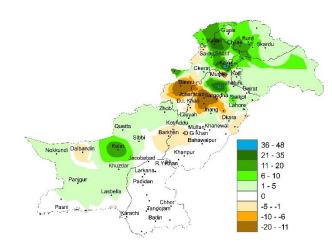
Light to moderate rain was reported from the province. Decadal maximum temperature was observed above normal by 1.6 degree and the minimum temperature below normal by -0.6 degree in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 35%, 80.2hrs, 4.4km/hr and 4.9mm/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) <u>Past Weather for Major Agricultural Plains</u> (11<sup>th</sup> to 20<sup>th</sup> May 2024)

# 2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 0.01 mm during the decade; however, weather remained cloudy for 07 days. Average relative humidity recorded as 37%. Mean day temperature was 38.2°C while night temperature recorded as 20.6°C with 97.9 hours bright sunshine duration. Wind speed recorded as 2.5 km/hr with mean wind direction *VARIABLE*.

# 2.2 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 0.01 mm during the decade; however, weather remained cloudy for 05 days. Average relative humidity recorded as 37%. Mean day temperature was 41.2°C while night temperature recorded as 26.6°C with 110.9 hours bright sunshine duration. Wind speed recorded as 2.6 km/hr with mean wind direction *westerly*.

Cotton: Very good, Third true leaf completed.

# 2.3 RAMC, Tandojam (Lower Sindh)

The weather was dry; however, weather remained cloudy for 00 days. Average relative humidity recorded as 45%. Mean day temperature was 42.1°C while night temperature recorded as 25.3°C. Wind speed recorded as 7.8 km/hr with mean wind direction *south westerly*.

Cotton: Good, Germination..

## 2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

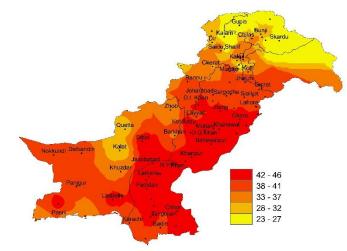
The weather is dry; however, weather remained cloudy for 08 days. Average relative humidity recorded as 36%. Mean day temperature was 46.6°C while night temperature recorded as 25°C. Wind speed recorded as 5.6 km/hr with mean wind direction *south easterly*.

Nill.

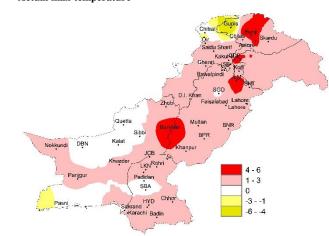
#### 2.5 RAMC, Quetta (Northern Baluchistan)

Rainfall reported as 3.0 mm during the decade; however, weather remained cloudy for 09 days. Average relative humidity recorded as 30%. Mean day temperature was 29.6°C while night temperature recorded as 15.7°C with 95.5 hours bright sunshine duration. Wind speed recorded as 4.1 km/hr with mean wind direction *southerly*.

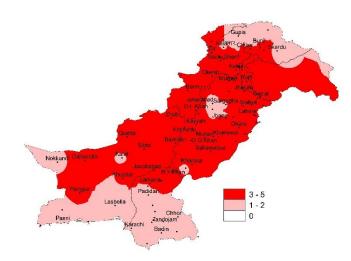
Wheat: Good, Maturity stage.



# 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> <u>Plains (11<sup>th</sup> to 20<sup>th</sup> May 2024)</u>

# 2.6 Jhelum

Rainfall reported as 1.2 mm during the decade; however, weather remained cloudy for 08 days. Average relative humidity recorded as 38%. Mean day temperature was 39.7°C while night temperature recorded as 22.8°C with 00 hours bright sunshine duration. Wind speed recorded as 4.9 km/hr with mean wind direction *variable*.

#### 2.7 Lahore

Rainfall reported as 6.0 mm during the decade; however, weather remained cloudy for 05 days. Average relative humidity recorded as 31%. Mean day temperature was 40.4°C while night temperature recorded as 26.3°C with 86.6 hours bright sunshine duration. Wind speed recorded as 2.6 km/hr with mean wind direction *north westerly*.

## 2.8 Sargodha

Rainfall reported as 2.0 mm during the decade; however, weather remained cloudy for 06 days. Average relative humidity recorded as 35%. Mean day temperature was 41.1°C while night temperature recorded as 25.3°C with 93.2 hours bright sunshine duration. Wind speed recorded as 3.1 km/hr with mean wind direction *south westerly*.

#### 2.9 Multan

The weather is dry; however, weather remained cloudy for 08 days. Average relative humidity recorded as 29%. Mean day temperature was 42.6°C while night temperature recorded as 27.2°C with 88 hours bright sunshine duration. Wind speed recorded as 5.1 km/hr with mean wind direction *south westerly*.

# 2.10 Khanpur

The weather is dry; however, weather remained cloudy for 03 days. Average relative humidity recorded as 31%. Mean day temperature was 44.2°C while night temperature recorded as 26.5°C. Mean wind direction *south westerly*.

# 2.11 Sakrand

The weather is dry; however, weather remained cloudy for 00 days. Average relative humidity recorded as 36%. Mean day temperature was 43.8°C while night temperature recorded as 27°C with 116.8 hours bright sunshine duration. Wind speed recorded as 5.8 km/hr with mean direction as *southerly*.

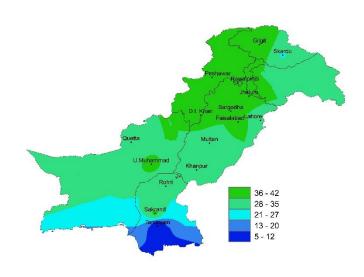


Figure.3: Relative Humidity in Percentage (%)



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

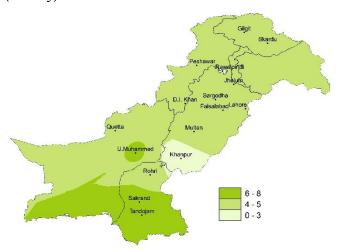


Figure 5: Wind Speed in kilometer per hour (km/h)

#### 2.12 Rohri

The weather is dry; however, weather remained cloudy for 08 days. Average relative humidity recorded as 29%. Mean day temperature was 44.3°C while night temperature recorded as 28.5°C with 112.6 hours bright sunshine duration. Wind speed recorded as 3.6 km/hr with mean direction as *south westerly*.

## 2.13 D.I. Khan

Rainfall reported as 2.0 mm during the decade; however, weather remained cloudy for 05 days. Average relative humidity recorded as 40%. Mean day temperature was 40.9°C while night temperature recorded as 26.1°C with 83.3 hours bright sunshine duration. Wind speed recorded as 4 km/hr with mean direction as *north easterly*.

#### 2.14 Peshawar

Rainfall reported as 0.01 mm during the decade; however, weather remained cloudy for 09 days. Average relative humidity recorded as 42%. Mean day temperature was 38°C while night temperature recorded as 22°C with 78.2 hours bright sunshine duration. Wind speed recorded as 3.9 km/hr with mean wind direction as *north westerly*.

#### 2.15 Skardu

The weather is dry; however, weather remained cloudy for 04 days during the decade. Average relative humidity recorded as 27%. Mean day temperature was 26.1°C while night temperature recorded as 11°C with 89.2 hours bright sunshine duration. Wind speed recorded as 5 km/hr with mean wind direction as *south westerly*.

#### **2.16** Gilgit

Rainfall reported as 10.0 mm during the decade; however, weather remained cloudy for 9 days during the decade. Average relative humidity recorded as 42.4%. Mean day temperature was 30.6°C while night temperature recorded as 13.8°C with 71.2 hours bright sunshine duration. Wind speed recorded as 3.9 km/hr with mean wind direction as *south easterly*.

# Eleven Days Weather Advisory for Farmers (21<sup>th</sup> to 31<sup>th</sup> May 2024)

# 3.1 Temperature Forecast

Above normal mean temperature is likely over most parts of the country whereas below normal temperature in northern parts of the country including upper Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir.

# 3.2 Wind Forecast

Generally, normal wind patterns may prevail in most of the agricultural plains of the country.

# 3.3 Rain Forecast

- ❖ **Punjab:** Dry and hot weather (very hot in southern parts) is expected in most parts of the province.
- **❖ Khyber Pakhtunkhwa:** Dry and hot weather (very hot in lower parts) is expected in most parts of the province.
- Sindh: Mainly dry and very hot weather is expected in Sindh province during the decade.
- **Baluchistan:** Mainly dry and hot weather is expected in most parts of the province.
- ❖ Gilgit-Baltistan: Rain is expected during the last date of the decade.
- **Kashmir:** Rain is expected during the last date of the decade.

# 3.4 Advisory for Farmers

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