Decadal Agromet Bulletin of Pakistan



Highlights...

- Light amount of rainfall was reported from the southwestern part of Baluchistan while the rest parts of the country remained dry.
- ❖ Highest amount of rainfall recorded was 17.0 mm at Lasbella during the last decade.
- ❖ Lowest minimum temperature recorded as -14.2 °C at Turbat during the last decade.
- Mainly cold and dry weather is expected in plain areas of the country, while very cold and partly cloudy in the upper parts. However, rain (snow over mountains) is likely in Gilgit Baltistan, northwestern Baluchistan, and Khyber Pakhtunkhwa during the end days of 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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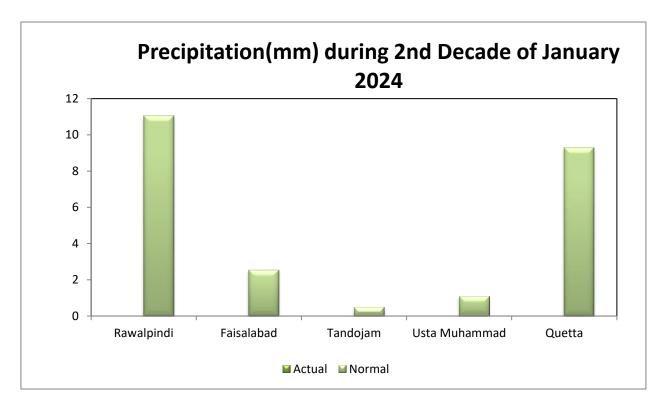
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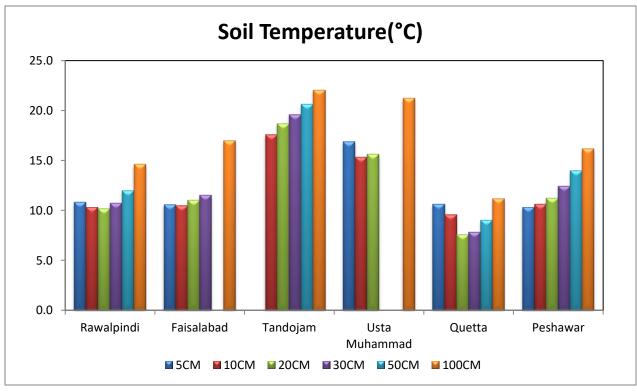
Meteorological Conditions during 2nd Decade of January 2024

C.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						R.H	Complian	Wind	ЕТо
Sr. No.		Normal	Actual	Dep	Tmx Dep	Tmin Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm	(%)	Sunshine Duration(hours)	Speed (km/hr)	(mm/day)
1	Rawalpindi	11.1	0.0	-11.1	20.0	1.1	10.6	10.8	10.3	10.2	10.7	12.0	14.6	64.5	67.3	0.9	1.0
2	Faisalabad	2.5	0.0	-2.5	12.1	4.7	8.4	10.6	10.5	11.0	11.5	***	17.0	87.0	13.1	1.5	0.8
3	Jhelum	14.2	0.0	-14.2	13.5	4.0	8.8	11.0	10.9	11.5	12.3	14.2	***	85.0	33.7	1.5	0.9
4	Lahore	2.9	0.0	-2.9	13.4	4.9	9.2	11.5	11.8	12.3	12.9	***	17.2	78.0	0.0	0.8	0.8
5	Sargodha	2.1	0.0	-2.1	12.4	4.0	8.2	12.1	12.1	12.9	13.7	***	***	87.0	12.8	0.6	0.8
6	Multan	2.3	0.0	-2.3	13.7	5.1	9.4	***	***	***	***	***	***	83.0	13.4	2.3	0.9
7	Khanpur	9.9	0.0	-9.9	17.0	5.6	11.3	***	14.3	14.7	15.3	16.2	18.8	81.0	26.8	US	1.8
8	Tandojam	0.5	0.0	-0.5	24.7	7.7	16.2	***	17.6	18.7	19.6	20.6	22.1	59.0	-	2.7	2.3
9	Sakrand	3.8	0.0	-3.8	23.4	7.2	15.3	23.0	***	***	***	***	***	56.0	80.8	2.7	2.1
11	Rohri	6.2	0.0	-6.2	20.6	7.5	14.1	***	0.0	***	***	***	***	69.0	58.2	2.7	1.7
12	D.I Khan	1.0	0.0	-1.0	13.7	4.3	9.0	11.1	11.5	13.1	***	3.7	***	89.0	18.7	1.4	0.8
13	Peshawar	16.0	0.0	-16.0	20.5	2.4	11.5	10.3	10.6	11.2	12.4	14.0	16.2	67.0	16.2	0.7	1.3
14	Usta M.	1.1	0.0	-1.1	17.3	4.5	10.9	16.9	15.3	15.6	***	***	21.2	59.0	NIL	1.5	1.4
15	Quetta	9.3	0.0	-9.3	16.4	1.1	8.8	10.6	9.6	7.6	7.8	9.0	11.2	42.0	84.0	3.4	1.8
16	Skardu	14.5	0.0	-14.5	8.8	-7.5	0.7	***	***	***	***	***	***	47.0	51.7	0.0	0.6
17	Gilgit	2.6	0.0	-2.6	16.1	-4.7	5.7	***	***	***	***	***	***	43.0	41.2	1.3	1.0

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 January, 2024





Past Weather (11th to 20th January 2024)

Light amount of rainfall was reported from the southwestern part of Baluchistan while the rest parts of the country remained dry.

1.1 Punjab

Dry weather was reported in the province. The decadal maximum and minimum remained below normal by 4.4 and 1.2 respectively in the province. Values of relative humidity, sunshine hour, wind speed & ETo were recorded as 81%,23.9 hrs,1.3 km/hr and 1.0 mm/day respectively.

1.2 Sindh

Dry weather reported from the province. The decadal maximum remained above normal by 1.9 while minimum remained near normal in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 63%, 65.5 hrs, 2.7 km/hr and 1.9 mm/day respectively.

1.3 Khyber Pakhtunkhwa

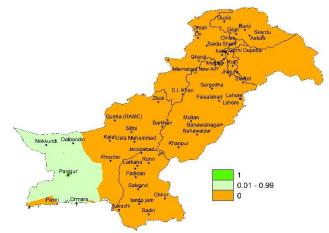
Dry weather reported from the province. The decadal maximum and minimum remained below normal by 1.5 and 1.3 respectively in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 78%, 17.5 hrs, 1.1 km/hr and 1.1mm/day respectively.

1.4 Baluchistan

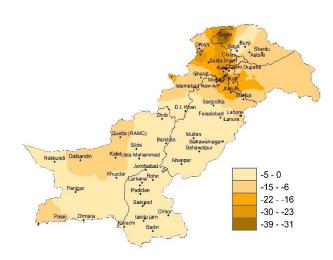
Light rain reported south western part of the province. Decadal maximum and minimum rose by 2.2 and 1.1 degree centigrade respectively from normal in the province. Values of relative humidity, sunshine hour, wind speed & ETo were recorded as 51%, 84.0 hrs, 2.5km/hr and 1.6 mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir.

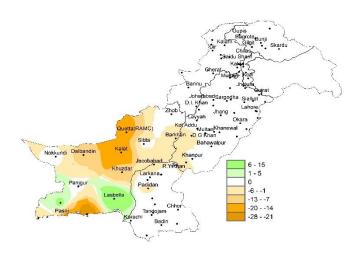
Dry weather reported from the province. Decadal maximum rose by 5.1 and the minimum remained below normal 1.3 degrees centigrade in the province. Whereas values of relative humidity, sunshine hour, wind speed & ETo were recorded as 45%, 46.5 hrs, 0.7 km/hr and 0.8 mm/day respectively



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 January 2024)

2.1 RAMC, Rawalpindi (Potohar region)

Dry weather was reported during the decade; however, weather remained cloudy for 02 days. Average relative humidity recorded as 68%. Mean day temperature was 20.0°C while night temperature recorded as 1.1°C with 67.3 hours bright sunshine duration. Wind speed recorded as 0.8 km/hr with mean wind direction *southeastern*.

2.2 RAMC, Faisalabad (Central Punjab)

Dry weather reported during the decade; however, weather remained cloudy for 04 days. Average relative humidity recorded as 86%. Mean day temperature was 12.16°C while night temperature recorded as 4.7°C. Wind speed recorded as 1.5 km/hr with mean wind direction southwesterly.

Cotton: Very good, shooting completed.

2.3 RAMC, Tandojam (Lower Sindh)

Dry weather prevailed during the decade; however, weather remained cloudy for 02 days. Average relative humidity recorded as 59%. Mean day temperature was 24.7°C while night temperature recorded as 7.7°C with 74.9 hours bright sunshine duration. Mean wind direction was *Northeasterly*. *Wheat: good, shooting stage*.

2.4 RAMC, Usta Muhammad (Eastern Baluchistan)

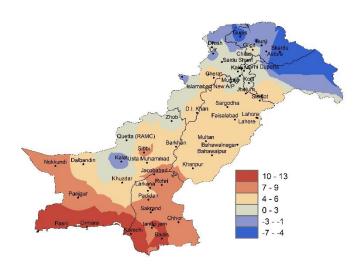
Dry weather prevailed during the decade; however, weather remained cloudy for 09 days. Average relative humidity recorded as 74%. Mean day temperature was 17.3°C while night temperature recorded as 4.5°. Mean wind direction was *Northern*.

Wheat: good, Third leaf stage.

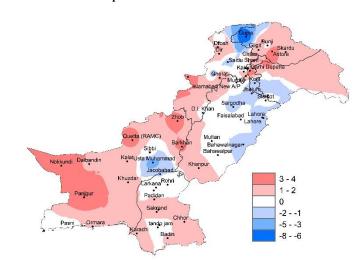
2.5 RAMC, Quetta (Northern Baluchistan)

Dry weather prevailed during the decade; however, weather remained cloudy. Average relative humidity recorded as 42%. Mean day temperature was 16.4°C while night temperature recorded as 1.1°C with 84.0 hours bright sunshine duration. Wind speed recorded as 3.4 km/hr with mean wind direction *north easterly*.

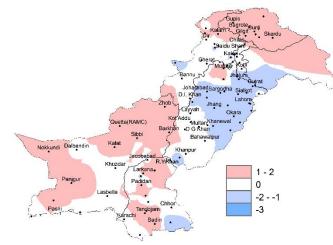
Wheat: good, Tillering stage.



I. Actual min-temp



II. Departure of min-temp from Normal



III. Departure of min-temp from Previous Decade

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

2(b) <u>Past Weather or Sub-Regional Agricultural</u> Plains (11th to 20th January 2024)

2.6 Jhelum

Dry weather prevailed during the decade; however, weather remained cloudy for 05 days. Average relative humidity recorded as 85%. Mean day temperature was 13.5°C while night temperature recorded as 4.0°C with 33.7 hours bright sunshine duration. Wind speed recorded as 1.5 km/hr with mean wind direction *south westerly*.

2.7 Lahore

Dry weather prevailed during the decade; however, weather remained cloudy for 03 days. Average relative humidity recorded as 78%. Mean day temperature was 13.4°C while night temperature recorded as 4.9°C. Wind speed recorded as 1.4 km/hr with mean wind direction *north westerly*.

2.8 Sargodha

Dry weather prevailed during the decade; however, weather remained cloudy for 01 days. Average relative humidity recorded as 92%. Mean day temperature was 12.4°C while night temperature recorded as 4.0°C with 12.8 hours bright sunshine duration. Wind speed recorded as 0.3 km/hr with mean wind direction *southwesterly*.

2.9 Multan

Dry weather prevailed during the decade; however, weather remained cloudy for 05 days. Average relative humidity recorded as 83%. Mean day temperature was 13.8°C while night temperature recorded as 5.1°C with 5.8 hours bright sunshine duration. Wind speed recorded as 1.6 km/hr with mean wind direction *northeasterly*.

2.10 Khanpur

Dry weather prevailed during the decade; however, weather remained cloudy for 03 days. Average relative humidity recorded as 81%. Mean day temperature was 17.0°C while night temperature recorded as 5.6 °C with 26.8 hours bright sunshine duration. Mean wind direction is *northeasterly*.

2.11 Sakrand

Dry weather prevailed during the decade; however, weather remained cloudy for 02 days. Average relative humidity recorded as 56%. Mean day temperature was 23.4°C while night temperature recorded as 7.2°C with 56 hours bright sunshine duration. Wind speed recorded as 4.3 km/hr with mean direction as *northwesterly*.

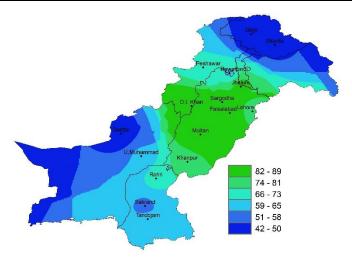


Figure.3: Relative Humidity in Percentage (%)

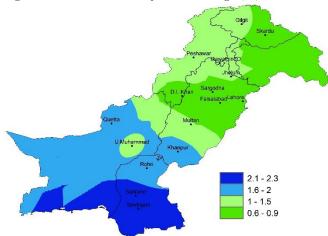


Figure.4: Reference Crop Evapotranspiration ETo (mm/day)

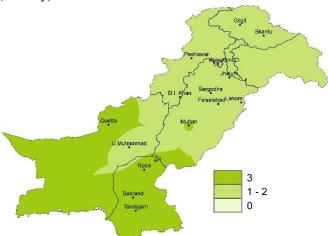


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Dry weather prevailed during the decade; however, weather remained cloudy for 03 days. Average relative humidity recorded as 69%. Mean day temperature was 20.6°C while night temperature recorded as 7.5°C with 58.2 hours bright sunshine duration. Wind speed recorded as 3.4 km/hr with mean wind direction *northeasterly*.

2.13 D.I. Khan

Dry weather prevailed during the decade; however, weather remained sunny. Average relative humidity recorded as 89%. Mean day temperature was 13.7°C while night temperature recorded as 4.3°C with 18.7 hours bright sunshine duration. Wind speed recorded as 1.6 km/hr with mean wind direction *southeasterly*.

2.14 Peshawar

Dry weather prevailed during the decade; however, weather remained cloudy for 04 days. Average relative humidity recorded as 67%. Mean day temperature was 20.5°C while night temperature recorded as 2.4°C with 16.2 hours bright sunshine duration. Wind speed recorded as 1.0 km/hr with mean wind direction *northeasterly*.

2.15 Skardu

Dry weather prevailed during the decade; however, weather remained cloudy for 02 days during the decade. Average relative humidity recorded as 47%. Mean day temperature was 8.8°C while night temperature recorded as -7.5°C with 51.7 hours bright sunshine duration. Wind was calm.

2.16 Gilgit

Dry weather prevailed during the decade; however, weather remained cloudy for 08 days. Average relative humidity recorded as 48%. Mean day temperature was 16.1°C while night temperature recorded as -4.7°C with 41.2 hours bright sunshine duration. Wind speed recorded as 1.0 km/hr with mean wind direction as *southeastern*.

Ten Days Weather Advisory for Farmers (23rd to 31st January 2024)

3.1 Temperature Forecast

Above normal mean temperature is likely over most parts of the country particularly over western Baluchistan and 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: Mainly cold and dry weather is expected in plain areas of the country, very cold and partly cloudy in the upper parts. Fog/frost also likely in plain areas during morning and night.
- ❖ Khyber Pakhtunkhwa: Mainly cold and dry weather is expected in plain areas of the country, while very cold and partly cloudy in the upper parts. However, rain (snow over mountains) is likely in Khyber Pakhtunkhwa during the end days of the decade. Fog is also likely in plain areas during morning and night in start days of the decade.
- Sindh: Mainly cold and dry weather is expected in Sindh province.
- ❖ Baluchistan: Mainly cold and dry weather is expected in most parts of the province. However, rain (snow over mountains) is likely in southwestern Baluchistan during the of the decade.
- ❖ Gilgit-Baltistan: Rain (snow over mountains) is expected during the of the decade.
- **Kashmir:** Rain (snow over mountains) is expected during the of the decade.

3.4 Advisory for Farmers

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