

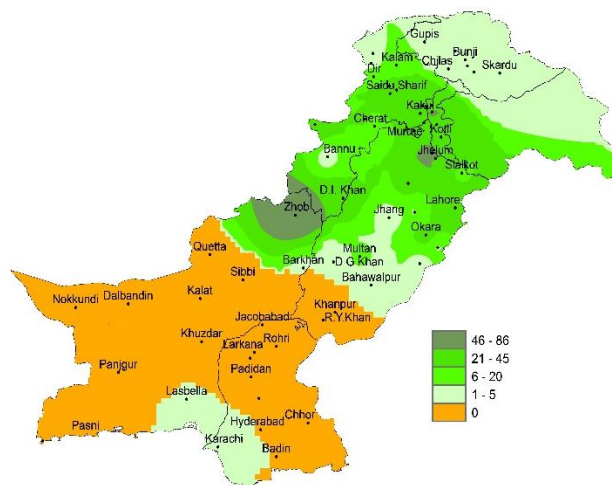
# Weekly Weather and Crop Bulletin for Pakistan

NATIONAL AGROMET CENTRE PAKISTAN  
METEOROLOGICAL DEPARTMENT SECTOR H-8/2,

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### Rainfall Distribution (mm) during the Previous Week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)

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### Highlights of Past Weather (2<sup>th</sup> – 8<sup>th</sup> August, 2021)

Above normal day time temperatures were observed almost all over the country during the last week.

Rainfall reported as follows during the last week:

1. Light to moderate rainfall (with few heavy falls) reported from Punjab.
2. Light to moderate rainfall reported from Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan.
3. Light rainfall reported from a single station in Baluchistan.

**Past Weather of Provinces (2<sup>th</sup> – 8<sup>th</sup> August, 2021)****Punjab**

Light to moderate rainfall (with few heavy falls) reported from upper/central Punjab during the week. Weekly maximum and minimum temperatures recorded as 36.5°C & 26.3°C respectively. For the recent week on average 184.6 growing degree days were accumulated. Average relative humidity recorded as 72% and wind speed in the morning/evening recorded as 2.8/3.5 Knots. During the previous week the highest precipitation was observed as 103.0 mm at Bhakkar while the highest maximum temperature was recorded as 42.0°C at Bahawalnagar.

**Baluchistan**

Light to moderate rainfall reported from a single station in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 37.1°C & 23.0°C respectively. For the recent week on average 184.0 growing degree days were accumulated. Average relative humidity recorded as 46% and wind speed in the morning/evening recorded as 0.8/5.9 Knots. During the previous week the highest precipitation was observed as 86.0 mm at Zhob while the highest maximum temperature was recorded as 44.0°C at Turbat.

**Khyber Pakhtunkhwa**

Light to moderate rainfall reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 33.7°C & 20.3°C respectively. For the recent week on average 153.7 growing degree days were accumulated. Average relative humidity recorded as 69% and wind speed in the morning/evening recorded as 1.4/2.9 Knots. During the previous week the highest precipitation was observed as 56.0 mm at Risalpur while the highest maximum temperature was recorded as 39.5°C at D.I.Khan.

**Sindh**

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures

recorded as 37.4°C & 27.0°C respectively. For the recent week, on average 190.3 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 5.4/6.5 Knots. During the previous week the highest maximum temperature was recorded as 44.0°C at Dadu.

**Gilgit-Baltistan and Azad Jammu & Kashmir**

Light to moderate rainfall reported from Gilgit-Baltistan, Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 32.2°C & 18.7°C respectively. For the recent week on average 143.1 growing degree days were accumulated. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 0.3/3.2 Knots. During the previous week the highest precipitation was observed as 54.3 mm at Garhi Dupatta while the highest maximum temperature was recorded as 41.5°C at Chillas.

**Past Weather for Major Agricultural Plains****(2<sup>th</sup> – 8<sup>th</sup> August, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 55.2 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.7/1.7 Oktas while, average relative humidity observed as 70%. Mean day time temperature recorded as 36.6°C & for the recent week 177.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.8 Knots.

**Faisalabad (Central Punjab)**

Rainfall reported as 2.4 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 3.3/3.9 Oktas while, average relative humidity observed as 67%. Mean day time temperature recorded as 37.0°C & for the recent week 187.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.1 Knots.

**Tandojam (Lower Sindh)**

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 3.1/1.7 Oktas while, average relative humidity observed as 67%. Mean day time temperature recorded as 35.1°C & for the recent week 174.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.8/6.5 Knots.

**Usta Muhammad (Eastern Baluchistan)**

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.2/0.8 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 40.9°C & for the recent week 210.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/5.0 Knots.

**Quetta (Northern Baluchistan)**

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/1.3 Oktas while, average relative humidity observed as 26%. Mean day time temperature recorded as 34.4°C & for the recent week 147.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/2.4 Knots.

**Past Weather for Sub-Regional Agricultural Plains (2<sup>th</sup> – 8<sup>th</sup> August, 2021)****Multan**

Rainfall reported as 6.5 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 2.6/2.4 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 38.0°C & for the recent week 198.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 6.9/7.7 Knots.

**Lahore**

Rainfall reported as 89.6 mm from Lahore during the week; cloudiness in the morning/evening recorded as 4.3/4.2 Oktas while, average relative humidity observed as 76%. Mean day time temperature recorded as 35.0°C & for the recent week 176.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.7 Knots.

**Zhob**

Rainfall reported as 86.0 mm from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.3/2.4 Oktas while, average relative humidity observed as 46%. Mean day time temperature recorded as 35.7°C & for the recent week 215.0 growing degree days accumulated. cloudiness in the morning/evening recorded as 1.7/6.0 Oktas.

**Murree**

Rainfall reported as 26.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 3.7/6.7 Oktas while, average relative humidity observed as 80%. Mean day time temperature recorded as 24.0°C & for the recent week 105.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/1.1 Knots.

**D.I. Khan**

Rainfall reported as 33.0 mm from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 5.0/0.6 Oktas while, average relative humidity observed as 71%. Mean day time temperature recorded as 37.3°C & for the recent week 183.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/2.3 Knots.

**Peshawar**

Rainfall reported as 23.3 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.9/6.1 Oktas while, average relative humidity observed as 69%. Mean day time temperature recorded as 37.4°C & for the recent week 186.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/3.3 Knots.

**Kalam**

Rainfall reported as 17.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.0/6.4 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 26.1°C & for the recent week 95.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.6 Knots.

**Gilgit**

Rainfall reported as 2.2 mm from Gilgit during the week. However, cloudiness in the morning/evening recorded as 3.7/6.1 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 33.1°C & for the recent week 145.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.0 Knots.

**Skardu**

Rainfall reported as 0.2 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 4.7/5.7 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 29.3°C & for the recent week 121.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.6 Knots.

**Crop Condition for Major Agricultural Plains  
(Based on data from Regional Agromet Centers)****Potohar Region (Rawalpindi)**

There is presently no crop grown in the fields of RAMC Rawalpindi.

**Central Punjab (Faisalabad)**

Presently Cotton crop is grown in the fields of RAMC Faisalabad.

**Cotton: Very Good**, Flowering Stage Completed.

**Lower Sindh (Tandojam)**

Presently Cotton crop is grown in the fields of RAMC Tandojam.

**Cotton: Crop Variety (Sindh-1)**, Boll Opening Stage.

**Northern Baluchistan (Quetta)**

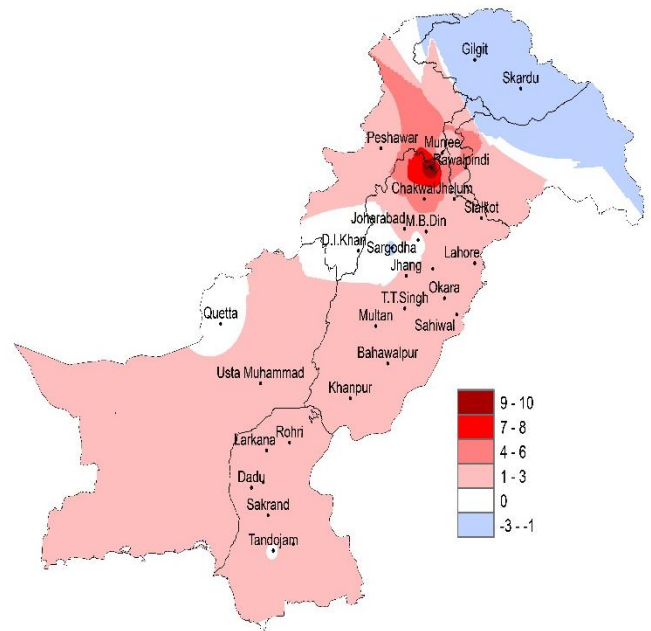
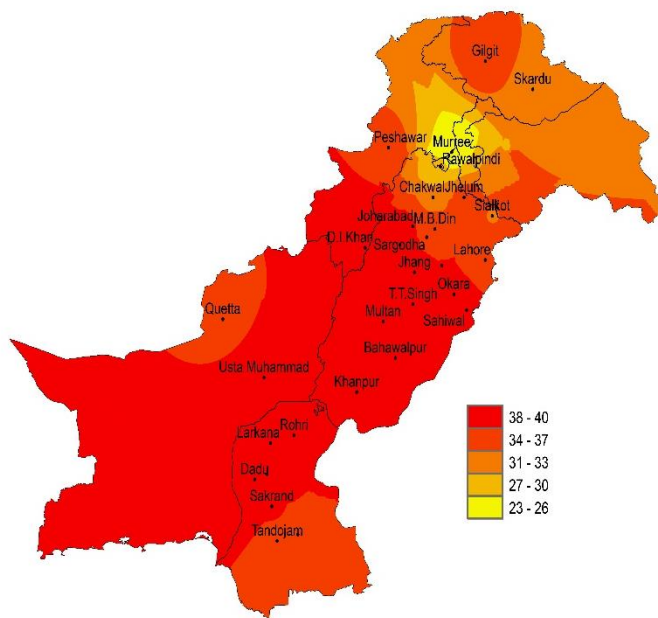
There is presently no crop grown in the fields of RAMC Quetta.

**Eastern Baluchistan (Usta Muhammad)**

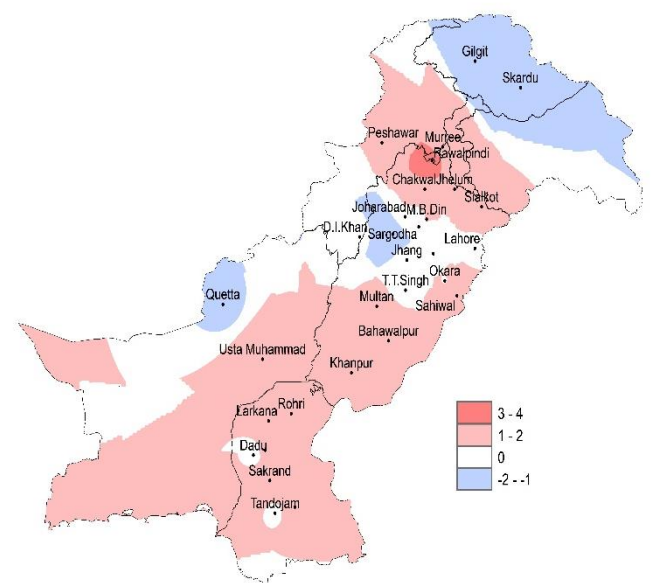
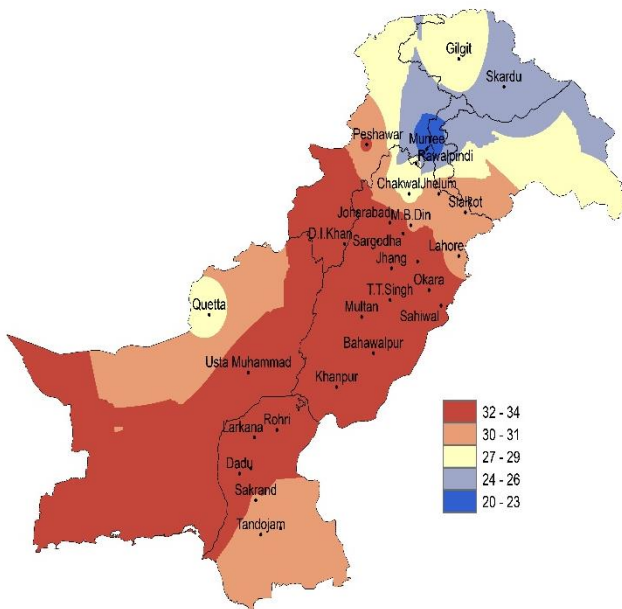
Presently Rice crop is sown in the fields of RAMC Usta Muhammad.

**Rice: Good**, Third Leaf Stage.

**Normal & Departure of Maximum temperature (°C) for the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**

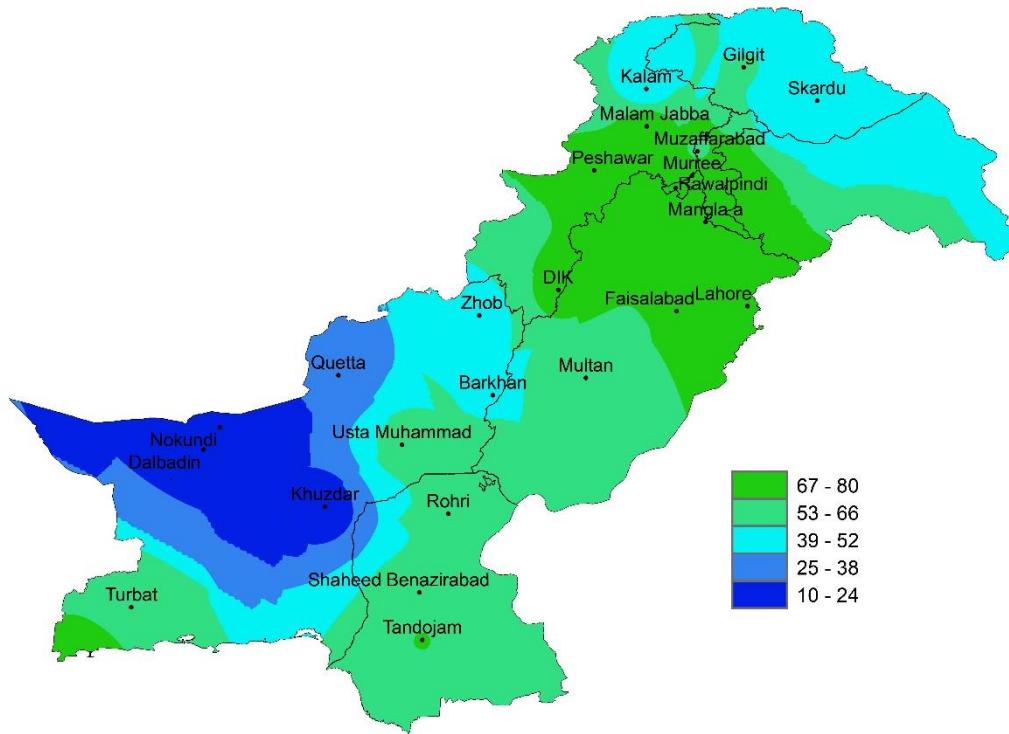


**Normal & Departure of Mean temperature (°C) for the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**

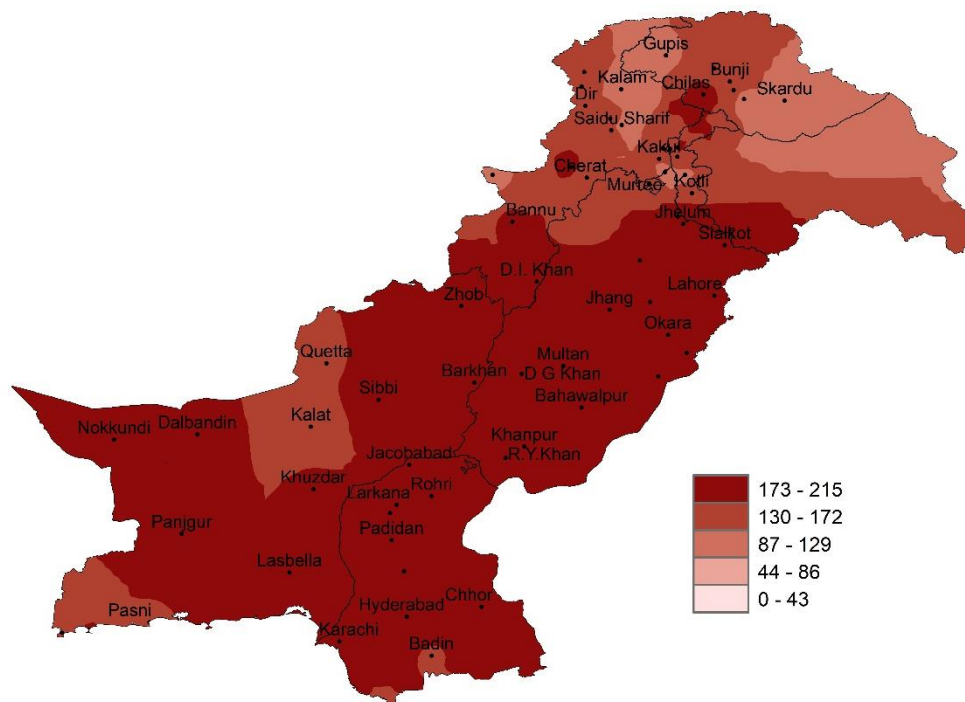




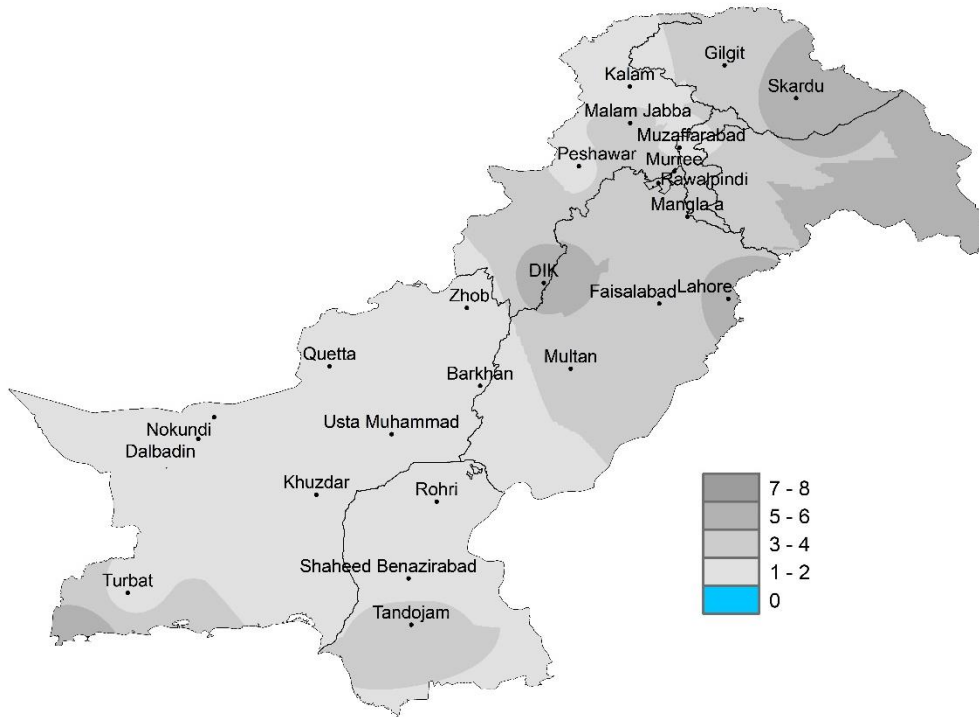
**Mean Relative Humidity (%) during the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**



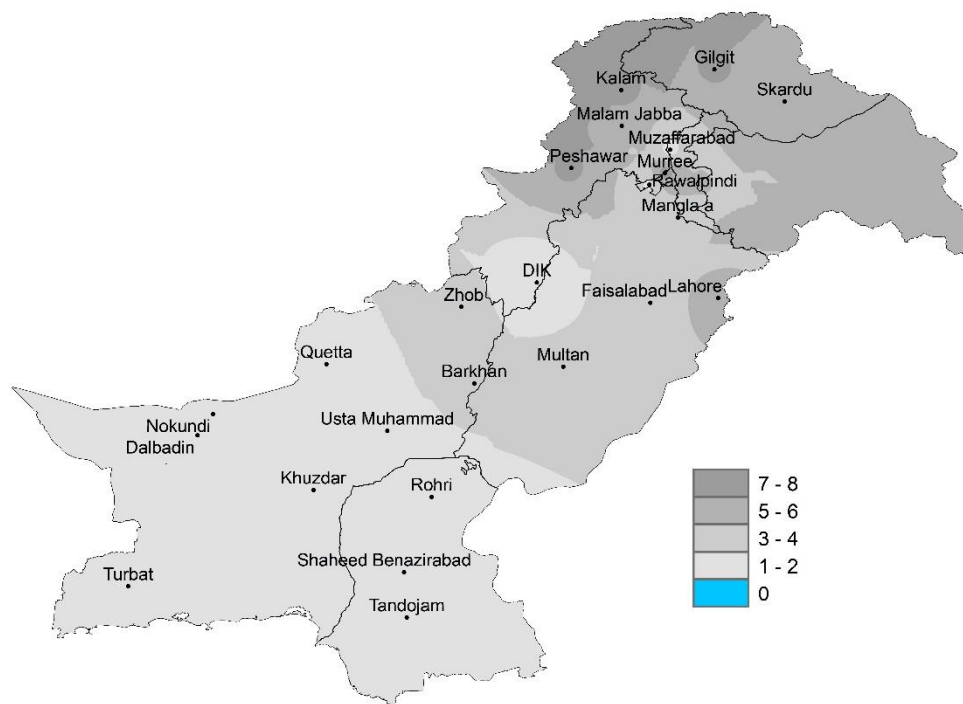
**Total Growing Degree Days accumulated during the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**



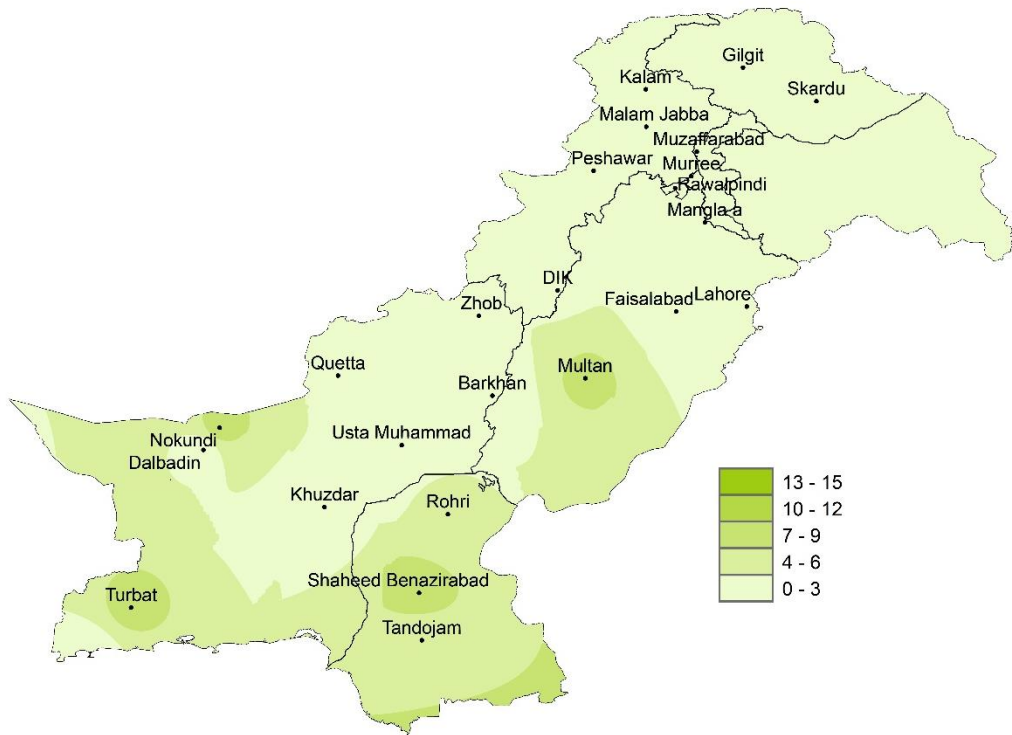
**Mean Cloudiness (Oktas) at 0800PST during the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**



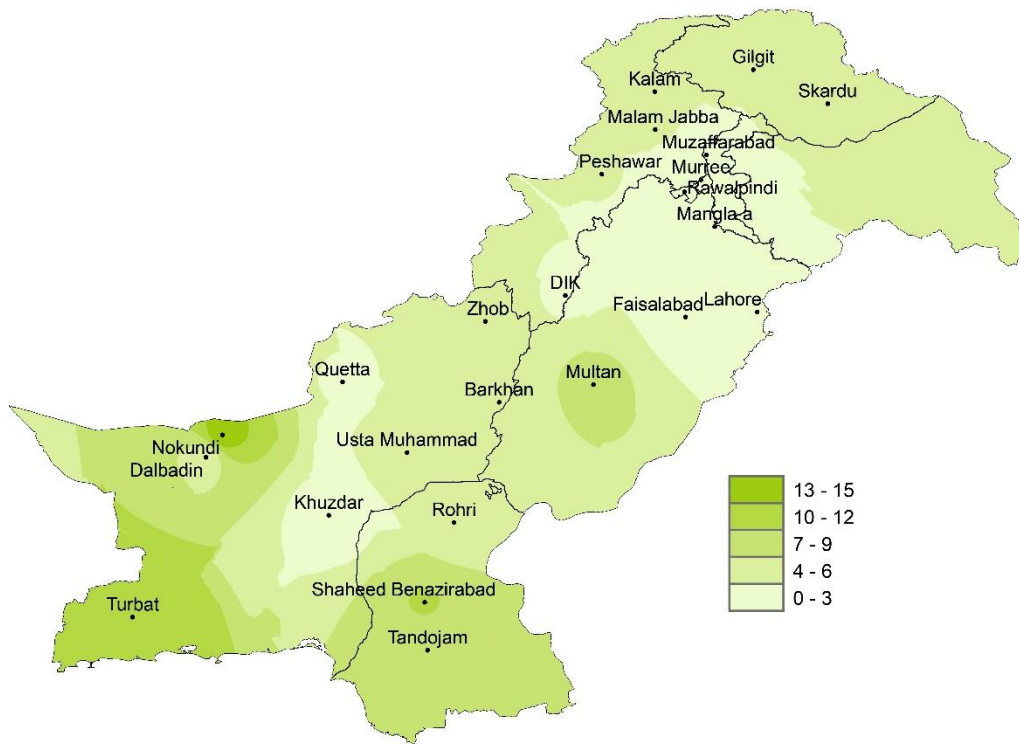
**Mean Cloudiness (Oktas) at 1700PST during the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**



**Mean Wind Speed (Knots) at 0800PST during the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**



**Mean Wind Speed (Knots) at 1700PST during the previous week (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**





**Weekly Weather Advisory for Farmers****(9<sup>th</sup> – 15<sup>th</sup> August, 2021)**

Weak monsoon currents are penetrating northeastern parts of the country. A shallow westerly wave is also present over upper parts of the country.

**MONDAY****09-08-2021**

Hot and humid weather is likely to prevail over most parts of the country. However, rain-wind/thundershower is expected in Kashmir, upper Punjab, upper Khyber Pakhtunkhwa and Gilgit-Baltistan.

**TUESDAY****10-08-2021**

Hot and humid weather is likely to prevail over most parts of the country. However, rain-wind/thundershower is expected in Kashmir, northeast Punjab, upper Khyber Pakhtunkhwa and Gilgit-Baltistan.

**WEDNESDAY****11-08-2021**

Hot and humid weather is likely to prevail over most parts of the country. However, rain-wind/thundershower is expected in upper Khyber Pakhtunkhwa, Pothohar region, northeast Punjab and Kashmir.

**THURSDAY****12-08-2021**

Rain-wind/thundershower is expected in upper Khyber Pakhtunkhwa, upper Punjab and Kashmir. Hot and humid weather is likely to prevail over other parts of the country.

**FRIDAY****13-08-2021.**

Rain-wind/thundershower is expected in upper Khyber Pakhtunkhwa, upper Punjab and Kashmir. Hot and humid weather is likely to prevail over other parts of the country.

**SATURDAY****14-08-2021**

Rain-wind/thundershower is expected in upper Khyber Pakhtunkhwa, upper & central Punjab and Kashmir. Hot and humid weather is likely to prevail over other parts of the country. Isolated

heavy falls also expected in Potohar region and Kashmir.

**SUNDAY****15-08-2021**

Hot and humid weather is likely to prevail over most parts of the country. However, rain-wind/thundershower is expected in upper Khyber Pakhtunkhwa, Pothohar region, northeast Punjab and Kashmir.

**ADVISORY FOR FARMERS**

During the last week, light to moderate rainfall (with few heavy falls) reported from Punjab. Light to moderate rainfall reported from Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan. Light rainfall reported from a single station in Baluchistan. Keeping in view the expected weather conditions farmers are advised the following advisories.

- ❖ Farmers are advised to irrigate the crops according to its need.
- ❖ Pesticides may be applied to avoid any pest attack.

**National Weather Data of Selected Cities from (2<sup>th</sup> – 8<sup>th</sup> August, 2021)**

Stations	Maximum /Day Time Temperature (°C)		Growth Degree Days	Relative Humidity (%)	Rainfall (mm)	Cloudiness (Oktas) 0800 PST	Cloudines s (Oktas) 1700 PST	Wind Speed (Knots) 0800 PST	Wind Speed (Knots) 1700 PST
	Mean	Maximum							
Barkhan	36.5	37.0	177.0	51	0.0	0.0	3.3	0.0	3.4
Dalbandin	42.5	43.0	197.0	24	0.0	0.0	0.0	0.9	3.4
D.I. Khan	37.3	39.5	183.2	71	33.0	5.0	0.6	2.3	2.3
Faisalabad	37.0	39.0	187.0	67	2.4	3.3	3.9	0.9	1.1
Gawadar	33.1	33.5	172.8	75	0.0	5.1	0.0	0.6	11.1
Gilgit	33.1	36.0	145.9	53	2.2	3.7	6.1	0.0	5.0
Kalam	26.1	27.5	95.0	39	17.0	0.0	6.4	0.0	5.6
Khuzdar	38.6	40.0	181.3	17	0.0	0.0	0.3	0.0	0.6
Lahore	35.0	36.4	176.6	76	89.6	4.3	4.2	0.0	1.7
Malam Jabba	22.4	24.0	90.5	79	27.0	3.4	5.7	2.6	3.4
Mangla	34.9	35.8	176.2	74	53.6	3.6	3.3	1.1	2.3
Multan (PBO)	38.0	39.0	198.9	58	6.5	2.6	2.4	6.9	7.7
Murree	24.0	24.8	105.9	80	26.0	3.7	6.7	1.4	1.1
Muzaffarabad	36.7	38.0	169.7	64	26.0	0.9	1.6	0.0	0.0
Nokkundi	39.9	43.3	198.6	59	0.0	1.1	0.7	6.9	9.7
Nawabshah	42.4	43.0	215.0	10	0.0	0.3	0.0	8.0	15.4
Peshawar	37.4	39.0	186.0	69	23.3	1.9	6.1	0.9	3.3
Quetta	34.4	35.0	147.3	26	0.0	0.0	1.3	2.3	2.4
Rawalpindi	36.6	40.5	177.3	70	55.2	2.7	1.7	0.2	0.8
Rohri	40.2	41.5	204.0	57	0.0	0.0	0.0	4.6	3.4
Skardu	29.3	30.4	121.4	39	0.2	4.7	5.7	0.0	5.6
Tandojam	35.1	36.2	174.7	67	0.0	3.1	1.7	4.8	6.5
Turbat	41.9	44.0	211.3	53	0.0	1.6	0.4	7.3	11.9
Usta. M	40.9	42.0	210.5	58	0.0	0.2	0.8	0.8	5.0
Zhob	35.7	37.0	215.0	46	0.0	0.3	2.4	1.7	6.0

\*\*\* Shows that data was not available.

## Findings of AgMIP Pakistan, University of Agriculture, Faisalabad

1. There would be significant increase in temperature i.e., 2.8°C in day and 2.2°C in the night during mid-century (2040-2069).
2. There would be significant variability in rainfall patterns (about 25% increase in summer & 12% decrease in winter during 2040-2069).
3. Climate Change will affect the crop yields negatively (about 17% for rice and 14 % for wheat).
4. If there will be no adaptation to Climate Change, majority of farmers would be the economic losers.
5. With Adaptation to Climate Change (through technology and management), there would be significant decrease in poverty and improvement in the livelihood of farming community.

*(Agricultural Model Inter-comparison and Improvement Project (AgMIP)*

*Pakistan 2012-2014)*

- 1- سال 2040-69 کے دوران درجہ حرارت میں قابل ذکر اضافہ ہو سکتا ہے۔ جو کہ دن کے وقت 2.8°C اور رات کو 2.2°C تک ہوگا۔
- 2- گرمیوں کی بارش میں 25 فیصد اضافہ اور سردیوں کی بارش میں 12 فیصد تک کمی کا امکان ہے۔
- 3- مندرجہ بالا موسمی تغیرات کی وجہ سے دھان کی پیداوار میں 17 فیصد اور گندم کی پیداوار میں 14 فیصد تک کمی ہو سکتی ہے۔
- 4- اگر موسمی تغیرات کا مناسب بندوبست نہ کیا گیا۔ تو کسانوں کی اکثریت کو معاشی نقصان کا سامنا کرنا پڑے گا۔
- 5- موسمی تغیرات کے سدباب (بذریعہ نئی ٹیکنالوجی کا استعمال اور بہتر نظم و نسق) سے غربت میں کمی اور کسانوں کی زندگی میں خوشحالی لائی جاسکتی ہے۔

(ایگمپ پاکستان 2012-2014)