

# Weekly Weather and Crop Bulletin for Pakistan

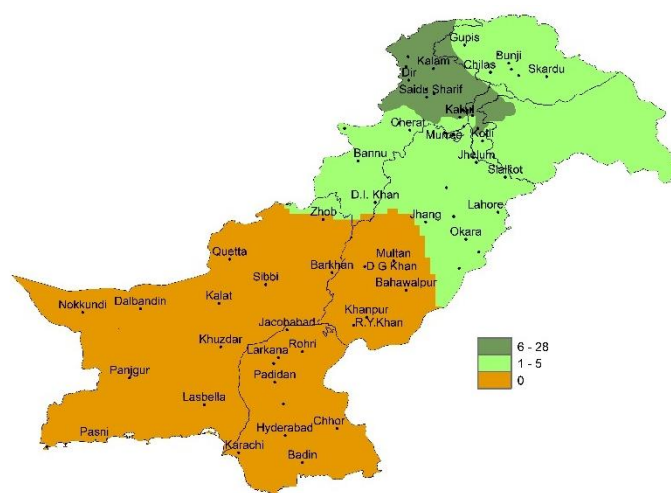
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METEOROLOGICAL DEPARTMENT SECTOR H-8/2,

## ISLAMABAD

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**Rainfall Distribution (mm) during the Previous Week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)**



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## Highlights of Past Weather (1<sup>st</sup> - 7<sup>th</sup> March, 2021)

Above normal night time temperatures were observed in Punjab, Khyber Pakhtunkhwa, Sindh, Kashmir & Gilgit-Baltistan, while mix trend was observed in Baluchistan during the last week.

Rainfall reported as follows during the last week:

1. Light rainfall reported from upper Punjab, Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan.
2. Dry weather reported from Sindh and Baluchistan.

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**Editor-in-Chief:** Dr Muhammad Afzaal (Director)

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**Past Weather of Provinces (1<sup>st</sup> - 7<sup>th</sup> March, 2021)****Punjab**

Light rainfall reported a few stations in upper Punjab during the week. Weekly maximum and minimum temperatures recorded as 29.4°C & 12.2°C respectively. For the recent week on average 110.7 growing degree days were accumulated. Average relative humidity recorded as 50% and wind speed in the morning/evening recorded as 1.5/3.4 Knots. During the previous week the highest precipitation was observed as 8.0 mm at Kasur while the lowest minimum temperature was recorded as 4.0°C at Murree.

**Baluchistan**

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 29.2°C & 11.2°C respectively. For the recent week on average 106.5 growing degree days were accumulated. Average relative humidity recorded as 41% and wind speed in the morning/evening recorded as 1.8/6.5 Knots. During the previous week the lowest minimum temperature was recorded as -3.0°C at Kalat.

**Khyber Pakhtunkhwa**

Light rainfall reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 22.5°C & 6.9°C respectively. For the recent week on average 68.1 growing degree days were accumulated. Average relative humidity recorded as 59% and wind speed in the morning/evening recorded as 0.8/1.4 Knots. During the previous week the highest precipitation was observed as 29.0 mm at Dir while the lowest minimum temperature was recorded as -4.7°C at Kalam.

**Sindh**

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 34.6°C & 15.5°C respectively. For the recent week, on average 140.2 growing degree days were accumulated. Average relative humidity

recorded as 51% and wind speed in the morning/evening recorded as 2.0/4.5 Knots. During the previous week the lowest minimum temperature was recorded as 9.0°C at Moenjodaro.

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

Light rainfall reported from Gilgit-Baltistan and Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 15.7°C & 4.3°C respectively. For the recent week on average 36.6 growing degree days were accumulated. Average relative humidity recorded as 50% and wind speed in the morning/evening recorded as 0.1/3.8 Knots. During the previous week the highest precipitation was observed as 8.0 mm at Muzaffarabad while the lowest minimum temperature was recorded as -5.0°C at Astore.

**Past Weather for Major Agricultural Plains****(1<sup>st</sup> - 7<sup>th</sup> March, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 0.3 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.0/1.6 Oktas while, average relative humidity observed as 59%. Mean night time temperature recorded as 9.6°C & for the recent week 95.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/1.1 Knots.

**Faisalabad (Central Punjab)**

Rainfall reported as trace (not measurable) from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.3/0.6 Oktas while, average relative humidity observed as 53%. Mean night time temperature recorded as 12.4°C & for the recent week 112.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.9 Knots.

**Tandojam (Lower Sindh)**

Dry weather reported from Tandojam during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 55%. Mean night time temperature recorded as 12.7°C & for the recent week 132.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/3.4 Knots.

**Usta Muhammad (Eastern Baluchistan)**

Dry weather reported from Usta Muhammad during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 48%. Mean night time temperature recorded as 12.9°C & for the recent week 121.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/0.5 Knots.

**Quetta (Northern Baluchistan)**

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.9/2.1 Oktas while, average relative humidity observed as 25%. Mean night time temperature recorded as 6.1°C & for the recent week 61.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.5/4.2 Knots.

**Past Weather for Sub-Regional Agricultural****Plains (1<sup>st</sup> - 7<sup>th</sup> March, 2021)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 1.1/0.6 Oktas while, average relative humidity observed as 52%. Mean night time temperature recorded as 13.2°C & for the recent week 117.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/5.1 Knots.

**Lahore**

Rainfall reported as trace (not measurable) from Lahore during the week; however, cloudiness in the morning/evening recorded as 2.4/1.3 Oktas while, average relative humidity observed as 50%. Mean night time temperature recorded as 15.5°C & for the recent week 120.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/12.6 Knots.

**Zhob**

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.6/2.1 Oktas while, average relative humidity observed as 38%. Mean night time temperature recorded as 6.1°C & for the recent week 77.8 growing degree days accumulated. cloudiness in the morning/evening recorded as 4.3/0.0 Oktas.

**Murree**

Rainfall reported as 4.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 2.3/3.6 Oktas while, average relative humidity observed as 50%. Mean night time temperature recorded as 5.3°C & for the recent week 41.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.9/3.1 Knots.

**D.I. Khan**

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.3/1.1 Oktas while, average relative humidity observed as 57%. Mean night time temperature recorded as 13.4°C & for the recent week 121.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.0 Knots.

**Peshawar**

Rainfall reported as 1.9 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.3/1.1 Oktas while, average relative humidity observed as 56%. Mean night time temperature recorded as 9.8°C & for the recent week 99.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/3.4 Knots.

**Kalam**

Rainfall reported as 28.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 3.4/4.9 Oktas while, average relative humidity observed as 71%. Mean night time temperature recorded as -2.3°C. Wind speed recorded in the morning/evening as 0.0/1.6 Knots.

**Gilgit**

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 4.7/5.3 Oktas while, average relative humidity observed as 41%. Mean night time temperature recorded as 4.4°C & for the recent week 37.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/6.6 Knots.

**Skardu**

Rainfall reported as 1.2 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 4.9/5.4 Oktas while, average relative humidity observed as 58%. Mean night time temperature recorded as 0.5°C & for the recent week 19.0 growing degree days accumulated. Calm wind reported in the morning/evening.

**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 wheat crop is sown in the fields of RAMC Faisalabad.

**Wheat: V. Good,** Flowering Stage.

**Lower Sindh (Tandojam)**

Presently wheat crop is sown in the fields of RAMC Tandojam.

**Wheat: Good, Crop Variety (TD-1),** Full Maturity Stage.

**Northern Baluchistan (Quetta)**

Presently wheat crop is grown in the fields of RAMC Quetta.

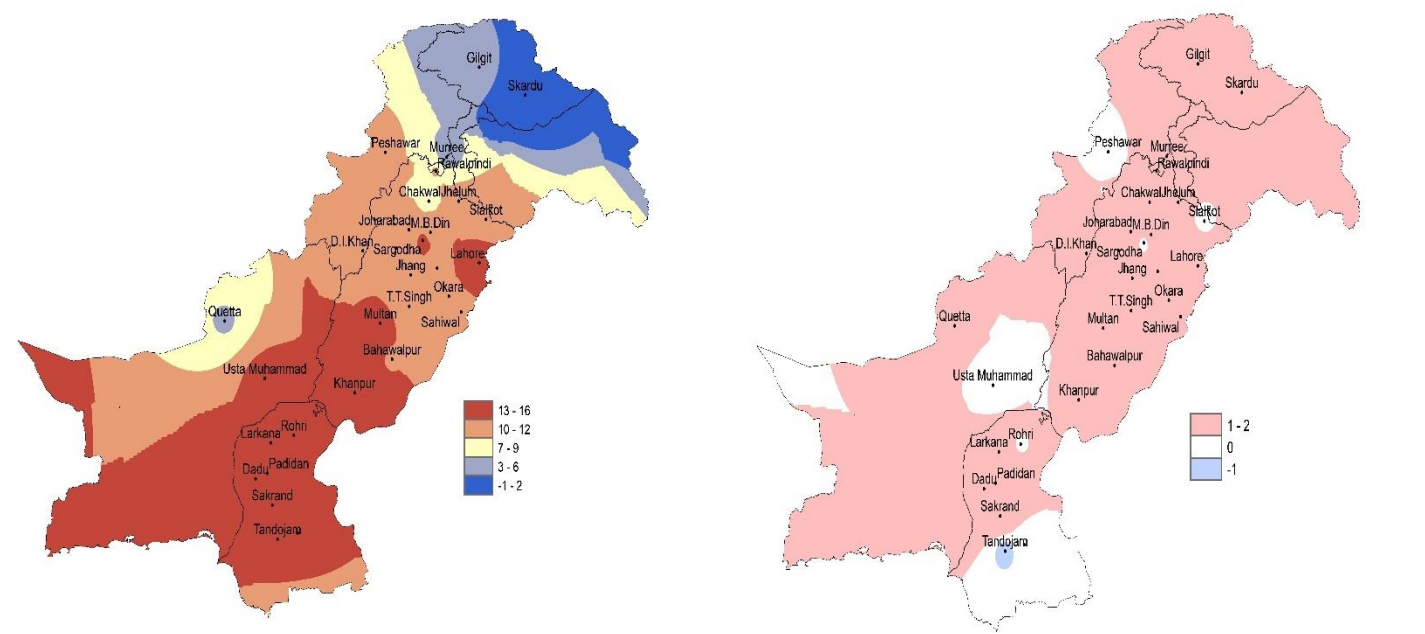
**Wheat: Good, Crop Variety (Seriab-92),** Tillering Stage.

**Eastern Baluchistan (Usta Muhammad)**

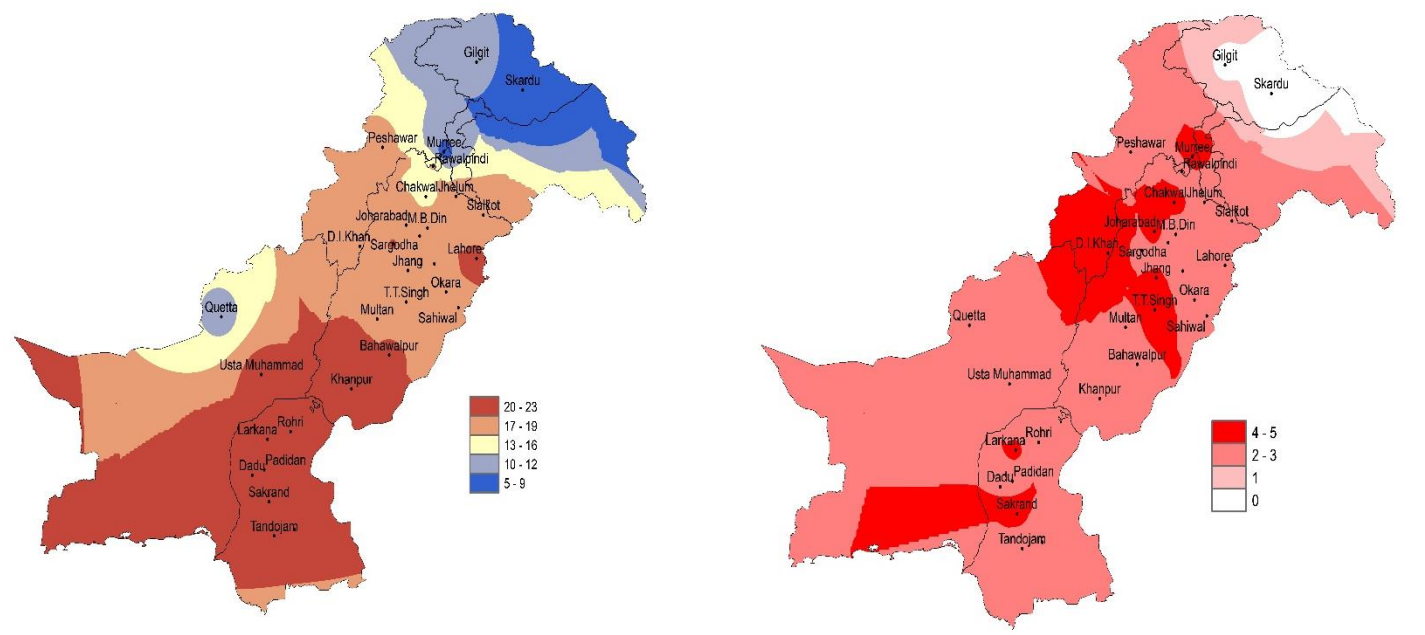
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

**Wheat: Good,** Flowering Stage.

Normal & Departure of Minimum temperature (°C) for the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)

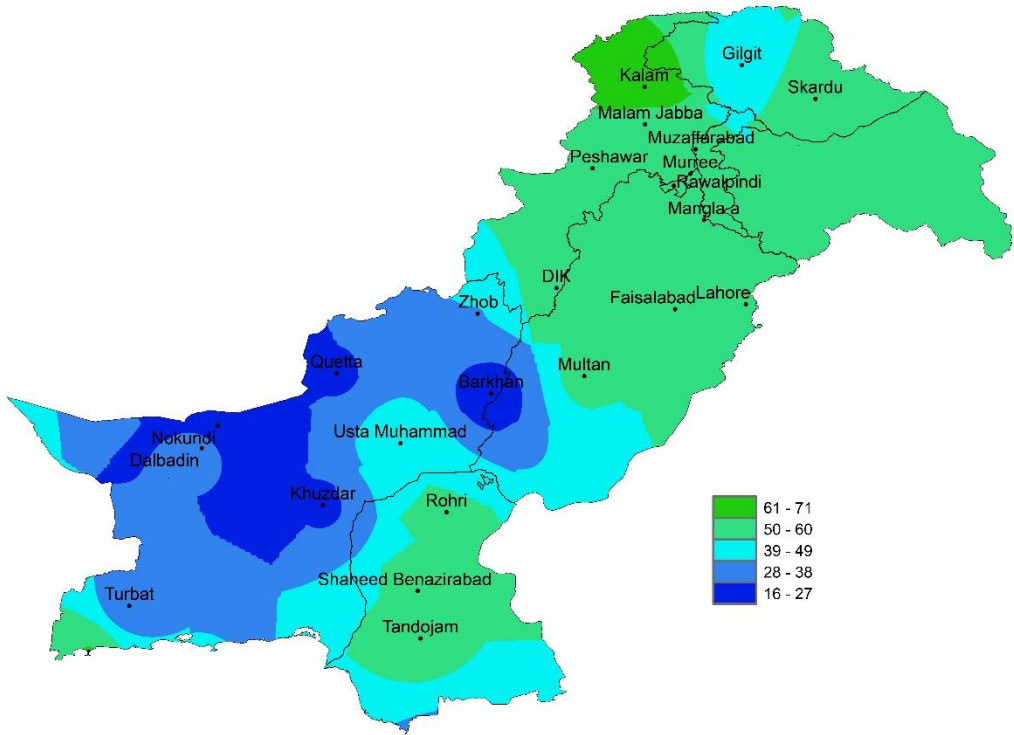


Normal & Departure of Mean temperature (°C) for the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)

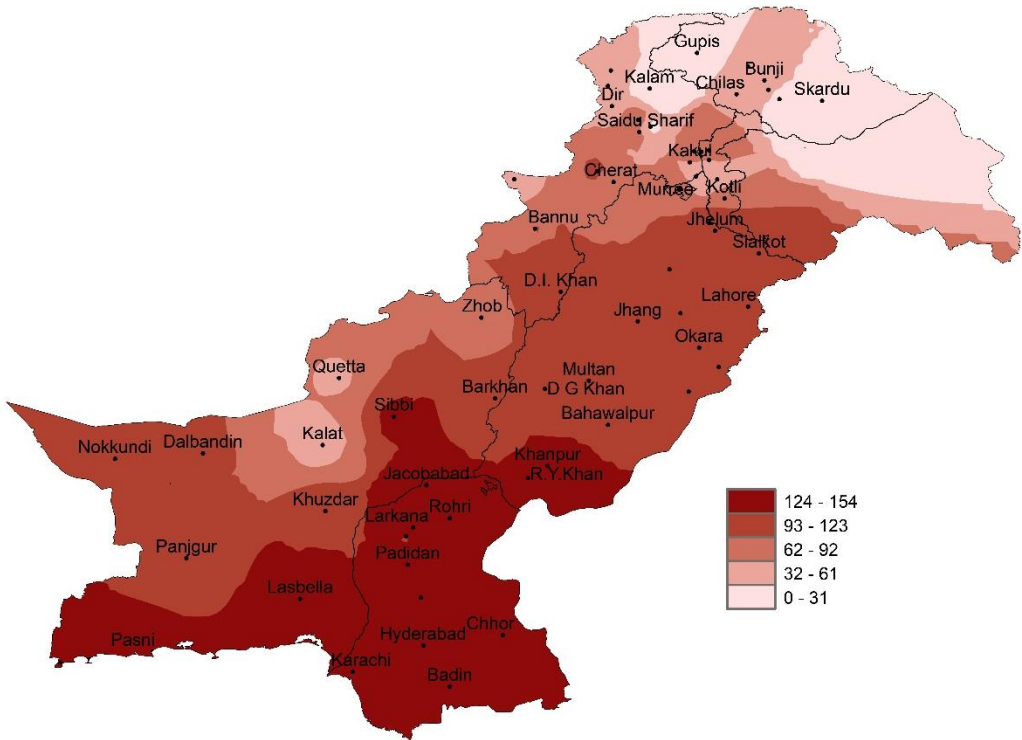




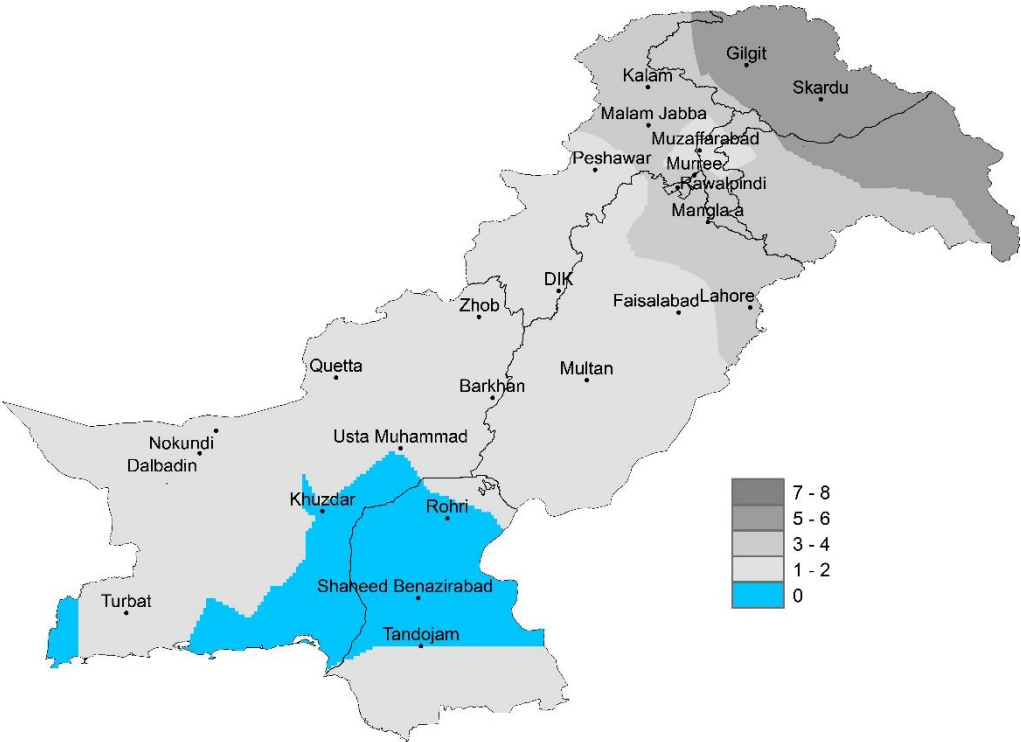
Mean Relative Humidity (%) during the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)



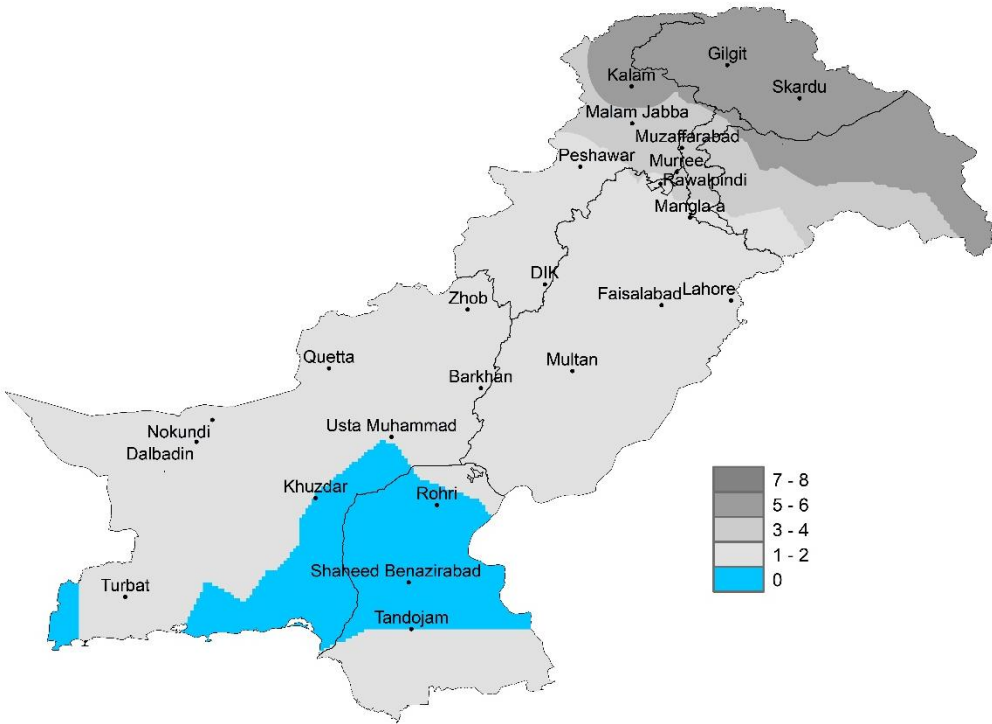
Total Growing Degree Days accumulated during the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)



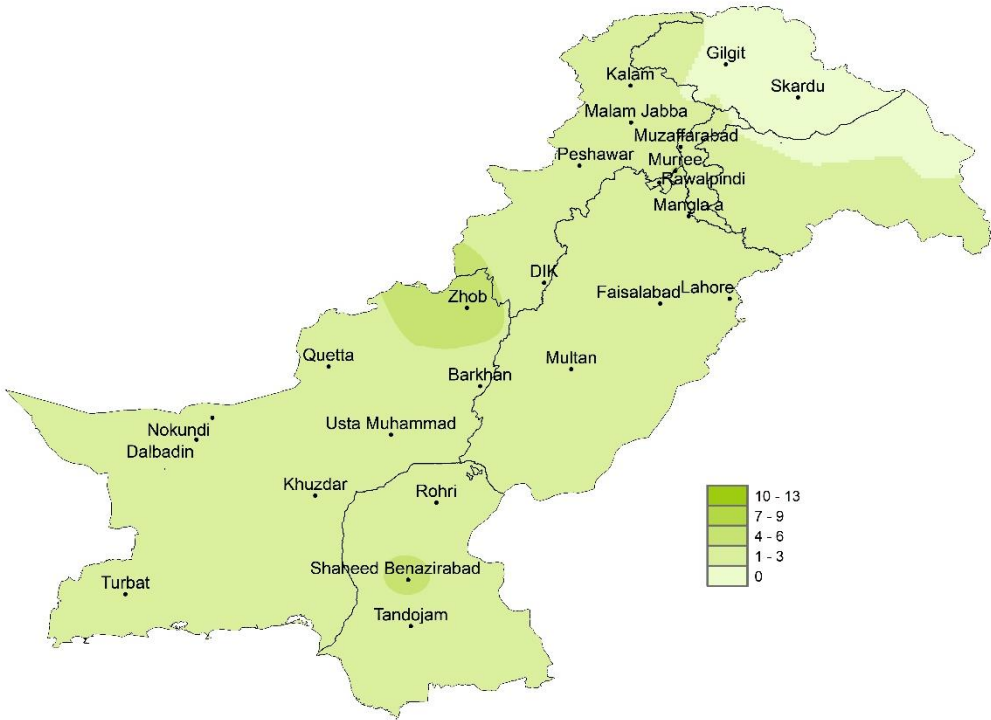
Mean Cloudiness (Oktas) at 0800PST during the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)



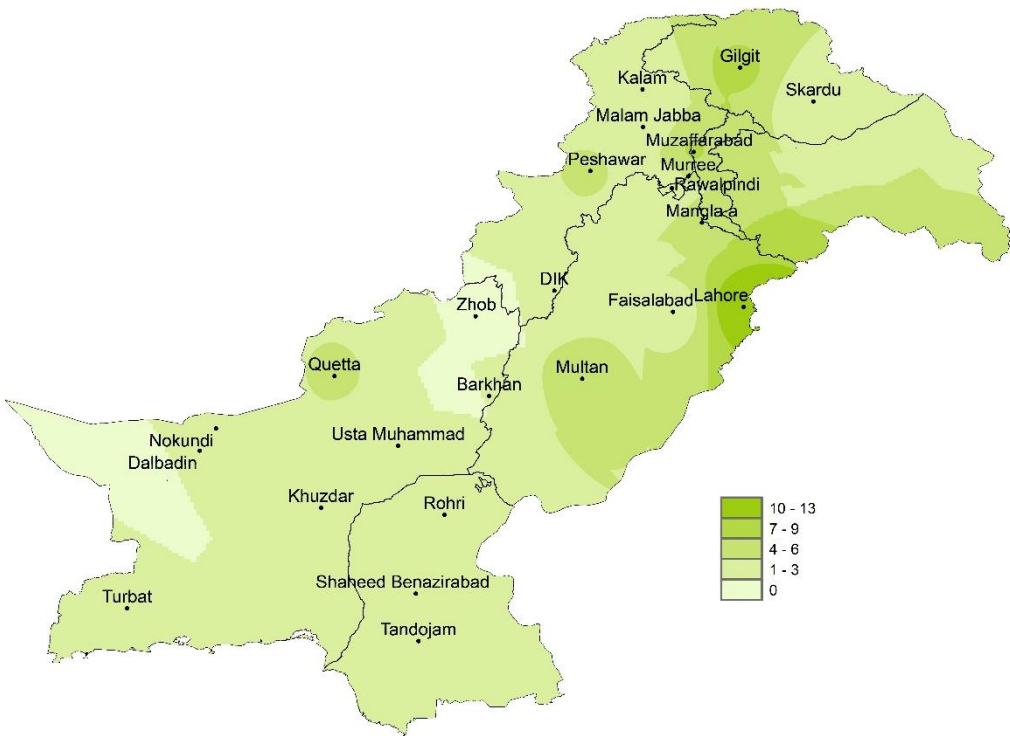
Mean Cloudiness (Oktas) at 1700PST during the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)



Mean Wind Speed (Knots) at 0800PST during the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)



Mean Wind Speed (Knots) at 1700PST during the previous week (1<sup>st</sup> – 7<sup>th</sup> March, 2021)





**Weekly Weather Advisory for Farmers****(8<sup>th</sup> – 14<sup>th</sup> March, 2021)**

A westerly wave is present over upper parts of the country. Another westerly wave is likely to approach on Wednesday.

**MONDAY****08-03-2021**

Mainly dry weather is expected in most parts of the country. More rain-wind-thunderstorm is expected in upper Khyber Pakhtunkhwa, Islamabad, Kashmir and Gilgit Baltistan.

**TUESDAY****09-03-2021**

Mainly dry weather is expected in most parts of the country. Rain-wind-thunderstorm is expected in upper Khyber Pakhtunkhwa, north Balochistan, Kashmir and Gilgit Baltistan during evening/night.

**WEDNESDAY****10-03-2021**

Rain-thunderstorm is expected in Khyber-Pakhtunkhwa, Gilgit-Baltistan, Kashmir, Islamabad and Upper Punjab during evening/night. Dry weather is expected in elsewhere in the country.

**THURSDAY****11-03-2021**

Rain-thunderstorm is expected in Khyber-Pakhtunkhwa, north Balochistan, Islamabad, Gilgit-Baltistan, Kashmir and Potohar region. Isolated heavy falls may also be expected in upper Khyber Pakhtunkhwa during the period.

**FRIDAY****12-03-2021.**

Partly cloudy weather is expected in upper parts of the country. However, rain-thunderstorm is expected in Upper Khyber-Pakhtunkhwa, Gilgit-Baltistan and Kashmir.

**SATURDAY****13-03-2021**

Rain-thunderstorm is expected in Khyber-Pakhtunkhwa, North Balochistan, Kashmir and Gilgit-Baltistan. Isolated heavy falls may also be expected in upper Khyber Pakhtunkhwa during the period.

**SUNDAY****14-03-2021**

Dry weather is expected in most parts of the country. However, rain-thunderstorm is expected in Khyber Pakhtunkhwa, Gilgit-Baltistan, Kashmir, Islamabad and Potohar region.

**ADVISORY FOR FARMERS**

During the last week, light rainfall reported from upper Punjab, Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan. Dry weather reported from Sindh and Baluchistan. Keeping in view the expected weather conditions farmers are advised the following advisories.

- ❖ Farmers are advised to irrigate the crop according to its need.
- ❖ Pesticides may be applied to avoid any pest attack as per advised by the agriculture department.
- ❖ Proper arrangements should be taken to cultivate the spring season vegetables due to the gradual rise in day time temperatures in the plain areas.

**National Weather Data of Selected Cities from (1<sup>st</sup> - 7<sup>th</sup> March, 2021)**

Stations	Minimum /Night Time Temperature (°C)		Growin g 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	Minimum							
Barkhan	11.6	9.0	101.8	20	0.00	0.9	0.4	0.9	0.0
Dalbandin	8.0	3.0	96.8	32	0.00	0.3	0.3	0.6	0.0
D.I. Khan	13.4	12.5	121.5	57	0.00	1.3	1.1	0.3	0.0
Faisalabad	12.4	10.5	112.1	53	0.01	1.3	0.6	0.3	0.5
Gawadar	14.2	12.0	126.0	60	0.00	0.0	0.0	1.1	0.9
Gilgit	4.4	2.0	37.3	41	0.00	4.7	5.3	0.0	6.6
Kalam	-2.3	-4.7	0.0	71	28.00	3.4	4.9	0.0	1.6
Khuzdar	14.7	10.0	114.8	25	0.00	0.0	0.0	0.0	0.6
Lahore	15.5	14.0	120.5	50	0.02	2.4	1.3	0.9	12.6
Malam Jabba	2.1	0.5	9.5	53	20.00	2.7	3.6	2.6	0.3
Mangla	10.2	9.4	101.5	49.7	0.01	2.7	1.9	0.6	4.9
Multan (PBO)	13.2	11.5	117.9	52	0.00	1.1	0.6	0.9	5.1
Murree	5.3	4.0	41.3	50	4.00	2.3	3.6	2.9	3.1
Muzaffarabad	8.3	7.6	67.0	52	8.00	1.3	3.0	0.0	6.6
Nokkundi	15.5	14.0	151.0	50	0.00	0.0	0.0	2.9	0.0
Nawabshah	13.4	7.5	121.8	16	0.00	0.0	0.9	1.4	0.0
Peshawar	9.8	8.0	99.4	56	1.90	1.3	1.1	0.3	3.4
Quetta	6.1	0.0	61.1	25	0.00	0.9	2.1	1.5	3.4
Rawalpindi	9.6	8.5	95.4	59	0.30	2.0	1.6	0.2	0.6
Rohri	15.6	13.5	136.8	50	0.00	0.0	0.0	1.7	2.0
Skardu	0.5	-1.4	0.0	58	1.20	4.9	5.4	0.0	0.0
Tandojam	12.7	11.0	132.3	55	0.00	0.0	0.0	1.4	0.0
Turbat	16.5	14.0	148.5	30	0.00	0.0	0.0	1.0	0.0
Usta. M	12.9	12.0	121.3	48	0.00	0.0	0.0	1.1	0.0
Zhob	6.1	4.5	77.8	38	0.00	0.6	2.1	4.3	0.0

\*\*\* 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)