

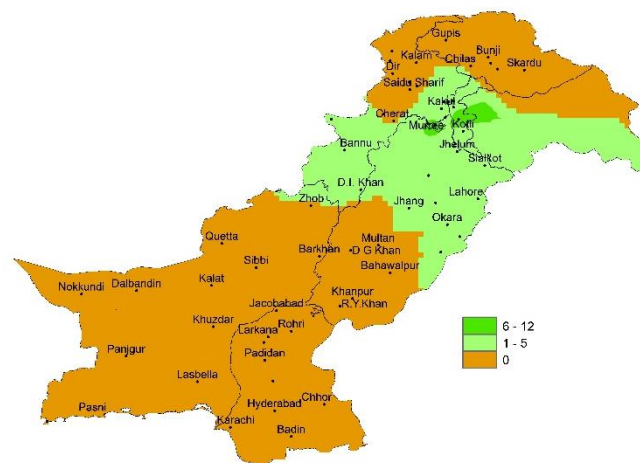
# Weekly Weather and Crop Bulletin for Pakistan

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

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

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

Rainfall reported as follows during the last week:

1. Light rainfall reported from a few stations in Punjab, Khyber Pakhtunkhwa and Azad Jammu & Kashmir.
2. Cold and dry weather reported from Sindh, Baluchistan and Gilgit-Baltistan.

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

Light rainfall reported from a few stations in Punjab during the week. Weekly maximum and minimum temperatures recorded as 22.1°C & 6.4°C respectively. For the recent week on average 64.8 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 0.7/3.5 Knots. During the previous week the highest precipitation was recorded as 7.0 mm at Islamabad while the lowest minimum temperature was recorded as -1.0°C at Murree.

**Baluchistan**

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 23.2°C & 5.4°C respectively. For the recent week on average 65.0 growing degree days were accumulated. Average relative humidity recorded as 43% and wind speed in the morning/evening recorded as 1.7/4.4 Knots. During the previous week the lowest minimum temperature was recorded as -6.0°C at Kalat.

**Khyber Pakhtunkhwa**

Light rainfall reported from a few stations in upper Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 17.7°C & 2.3°C respectively. For the recent week on average 37.0 growing degree days were accumulated. Average relative humidity recorded as 64% and wind speed in the morning/evening recorded as 1.4/1.5 Knots. During the previous week the highest precipitation was recorded as 3.0 mm at Parachinar while the lowest minimum temperature was recorded as -7.0°C at Kalam.

**Sindh**

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 27.0°C & 9.8°C respectively. For the recent week, on average 94.5 growing degree days were accumulated. Average relative humidity

recorded as 57% and wind speed in the morning/evening recorded as 3.0/2.6 Knots. During the previous week the lowest minimum temperature was recorded as 4.5°C at Mithi.

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

Light rainfall reported from Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 13.2°C & -1.5°C respectively. For the recent week on average 16.9 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 0.3/0.4 Knots. During the previous week the highest precipitation was recorded as 11.2 mm at Rawalakot while the lowest minimum temperature was recorded as -10.0°C at Astore.

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

Rainfall reported as 1.5 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.7/2.9 Oktas while, average relative humidity observed as 72%. Mean night time temperature recorded as 4.8°C & for the recent week 56.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.6 Knots.

**Faisalabad (Central Punjab)**

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.9/2.1 Oktas while, average relative humidity observed as 67%. Mean night time temperature recorded as 6.8°C & for the recent week 68.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.3 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 7.6°C & for the recent week 84.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.8/1.7 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 58%. Mean night time temperature recorded as 9.4°C & for the recent week 83.5 growing degree days accumulated. Calm wind reported in the morning/evening.

**Quetta (Northern Baluchistan)**

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.3/1.0 Oktas while, average relative humidity observed as 30%. Mean night time temperature recorded as 0.9°C & for the recent week 27.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.0/4.1 Knots.

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

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.7/0.0 Oktas while, average relative humidity observed as 60%. Mean night time temperature recorded as 8.0°C & for the recent week 74.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/4.9 Knots.

**Lahore**

Rainfall reported as 1.8 mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 1.1/1.9 Oktas while, average relative humidity observed as 64%. Mean night time temperature recorded as 8.5°C & for the recent week 70.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/8.0 Knots.

**Zhob**

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.4/0.4 Oktas while, average relative humidity observed as 38%. Mean night time temperature recorded as 0.7°C & for the recent week 32.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.6/0.0 Knots.

**Murree**

Rainfall reported as 1.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 2.7/3.7 Oktas while, average relative humidity observed as 58%. Mean night time temperature recorded as -0.1°C & for the recent week 2.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/4.9 Knots.

**D.I. Khan**

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.7/0.0 Oktas while, average relative humidity observed as 62%. Mean night time temperature recorded as 7.1°C & for the recent week 74.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.6 Knots.

**Peshawar**

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 3.4/1.9 Oktas while, average relative humidity observed as 62%. Mean night time temperature recorded as 5.2°C & for the recent week 59.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/4.3 Knots.

**Kalam**

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 1.3/1.1 Oktas while, average relative humidity observed as 67%. Mean night time temperature recorded as -5.7°C. Calm wind reported in the morning/evening.

**Gilgit**

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 3.7/3.0 Oktas while, average relative humidity observed as 51%. Mean night time temperature recorded as -2.9°C. Wind speed recorded in the morning/evening as 1.1/0.0 Knots.

**Skardu**

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 3.3/3.4 Oktas while, average relative humidity observed as 62%. Mean night time temperature recorded as -6.7°C. 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, Shooting Stage.**

**Lower Sindh (Tandojam)**

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

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

**Northern Baluchistan (Quetta)**

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

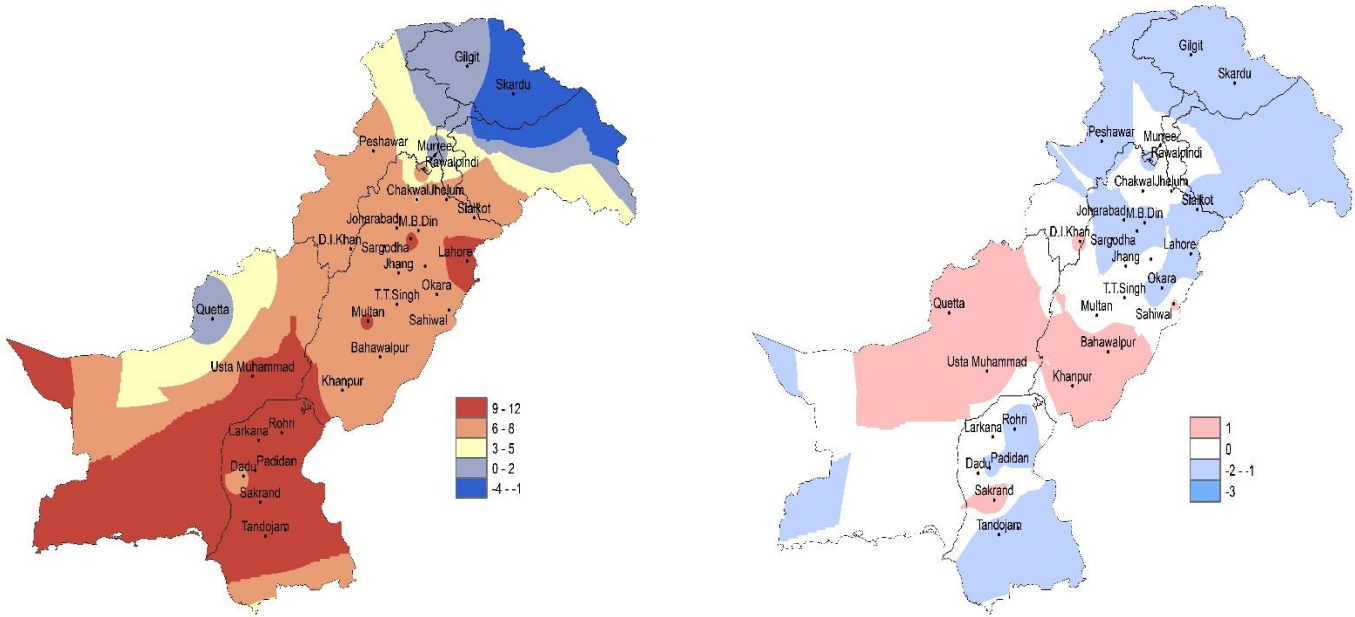
**Wheat: Good, Crop Variety (Seriab-92), Third leaf Stage.**

**Eastern Baluchistan (Usta Muhammad)**

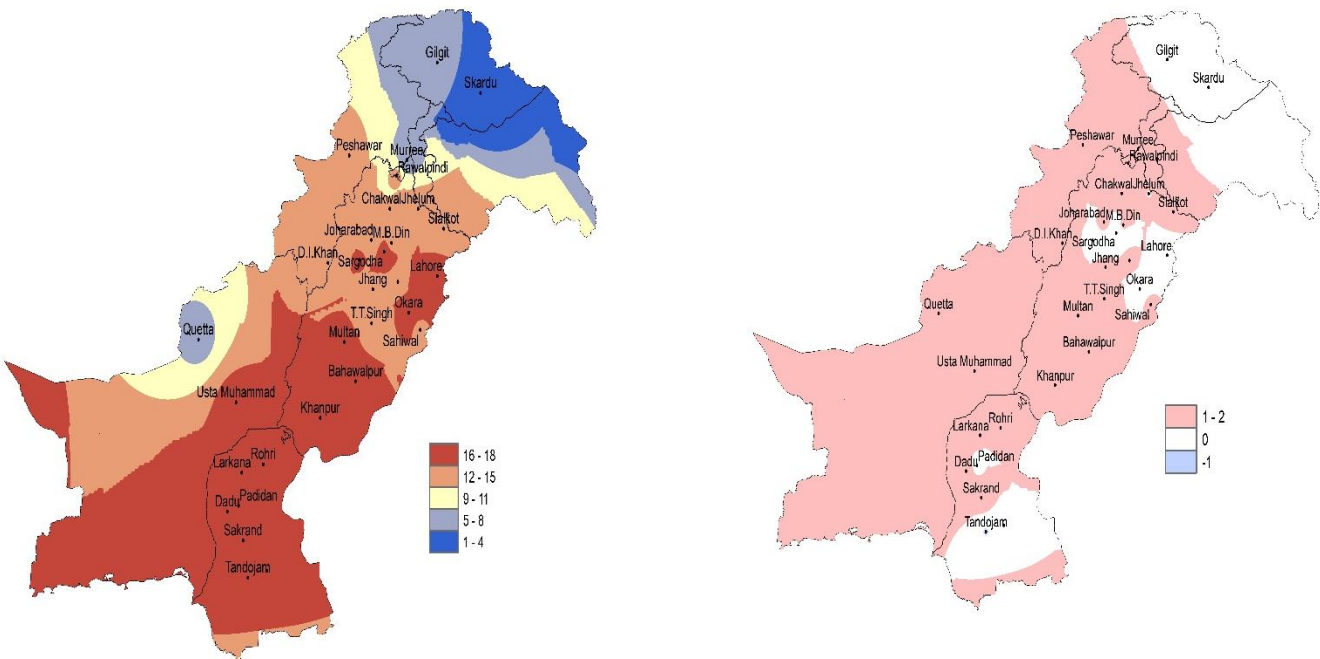
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

**Wheat: Good, Tillering Stage.**

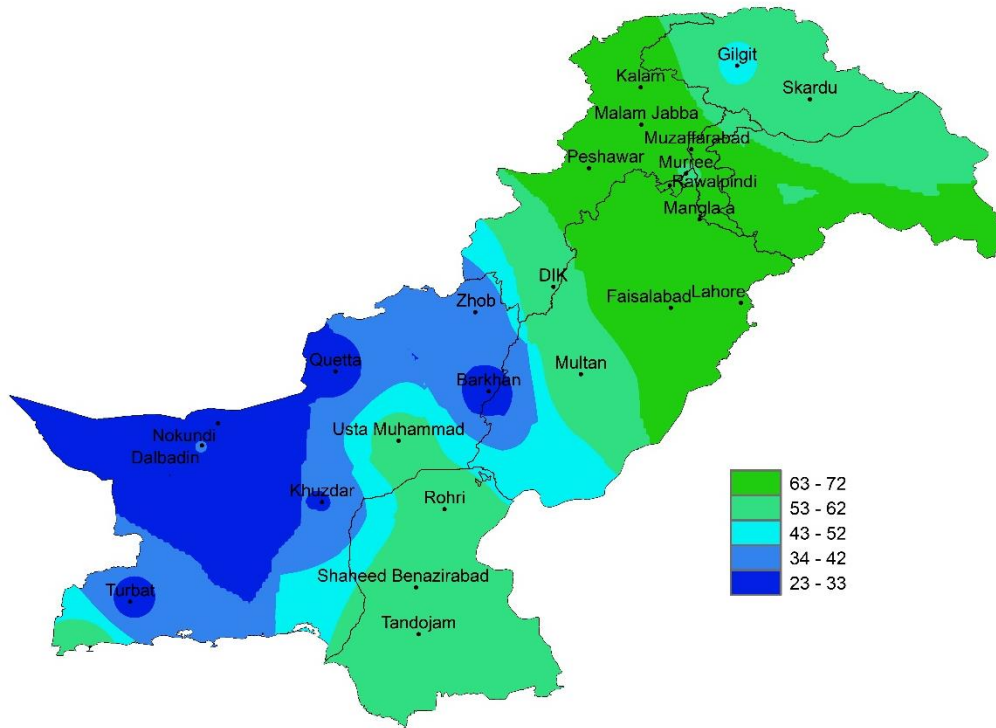
**Normal & Departure of Minimum temperature ( $^{\circ}\text{C}$ ) for the previous week (1<sup>st</sup> – 7<sup>th</sup> February, 2021)**



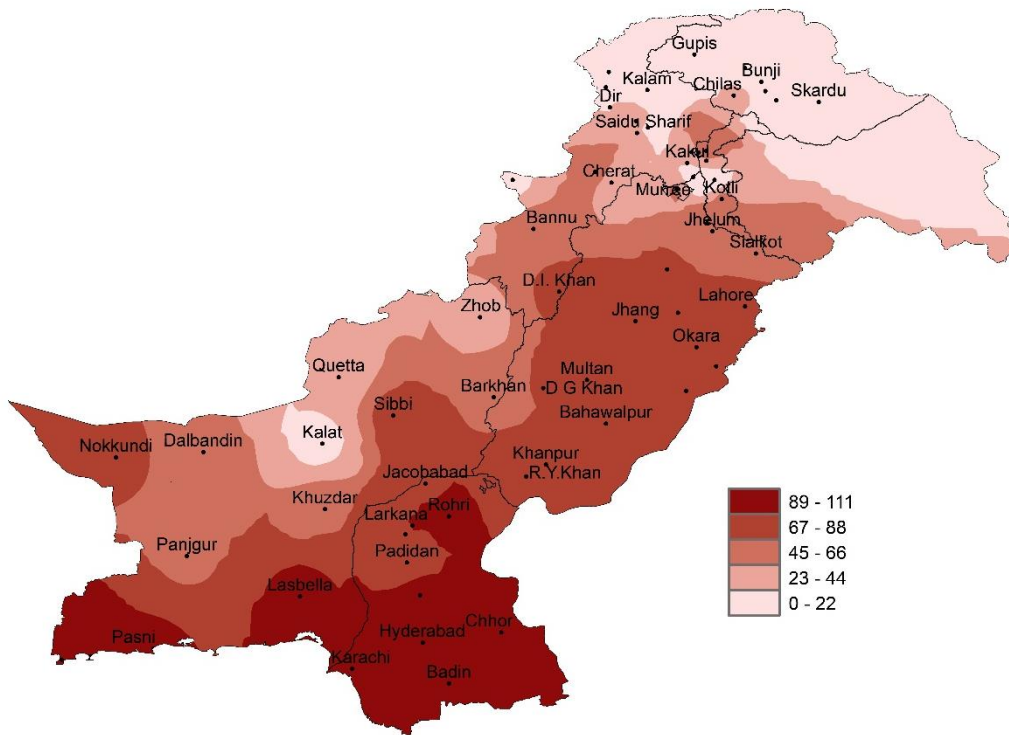
**Normal & Departure of Mean temperature ( $^{\circ}\text{C}$ ) for the previous week (1<sup>st</sup> – 7<sup>th</sup> February, 2021)**



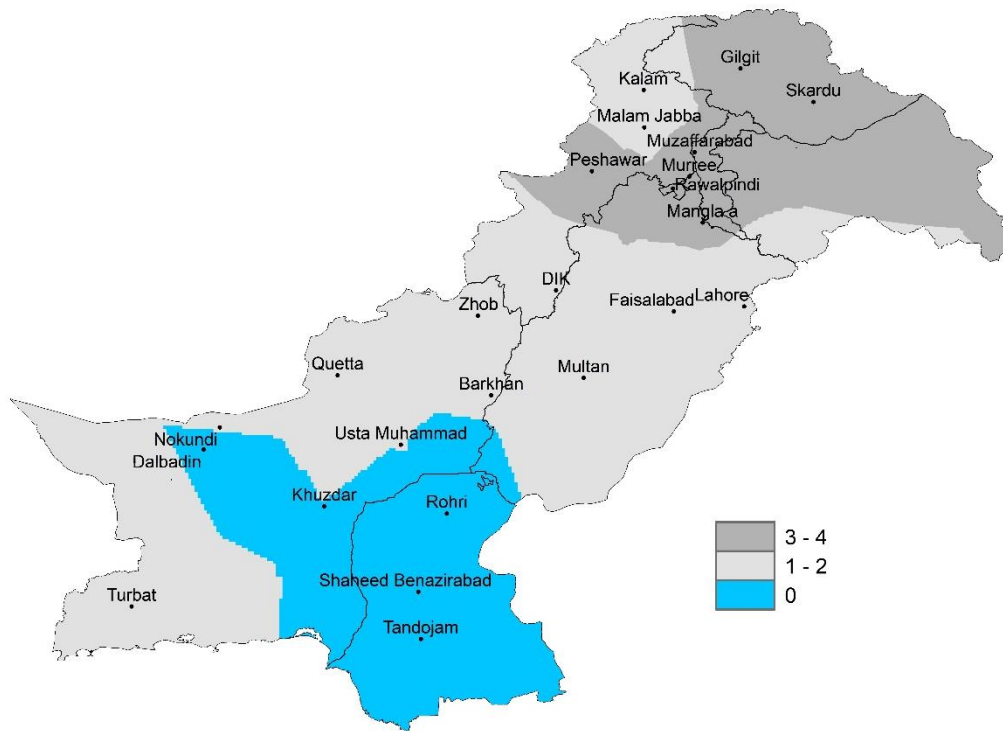
**Mean Relative Humidity (%) during the previous week (1<sup>st</sup> – 7<sup>th</sup> February, 2021)**



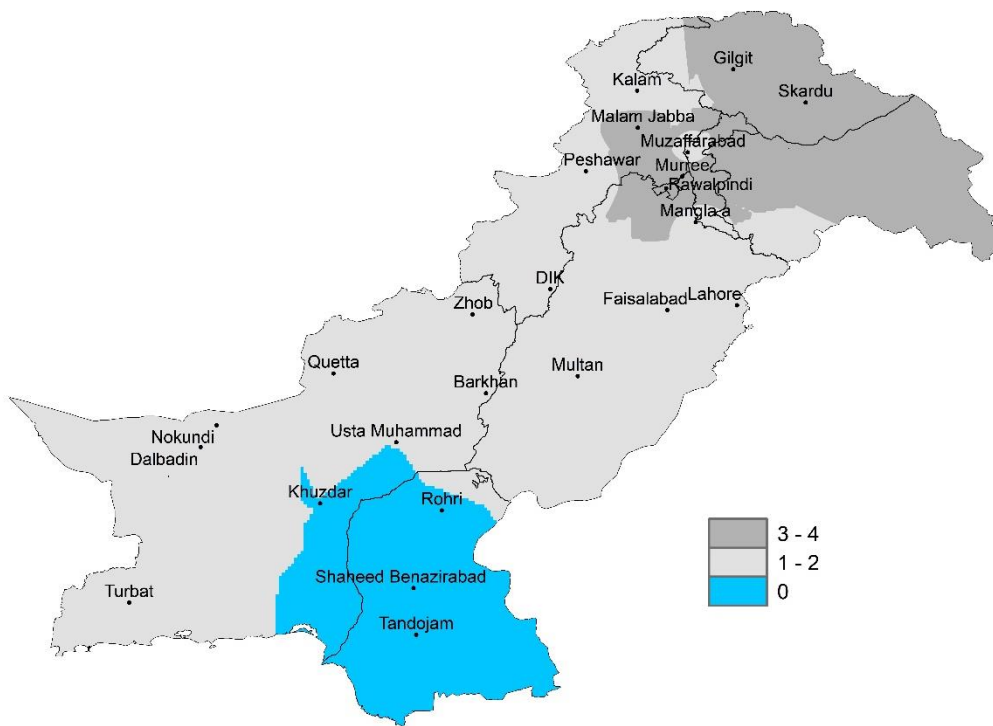
**Total Growing Degree Days accumulated during the previous week (1<sup>st</sup> – 7<sup>th</sup> February, 2021)**



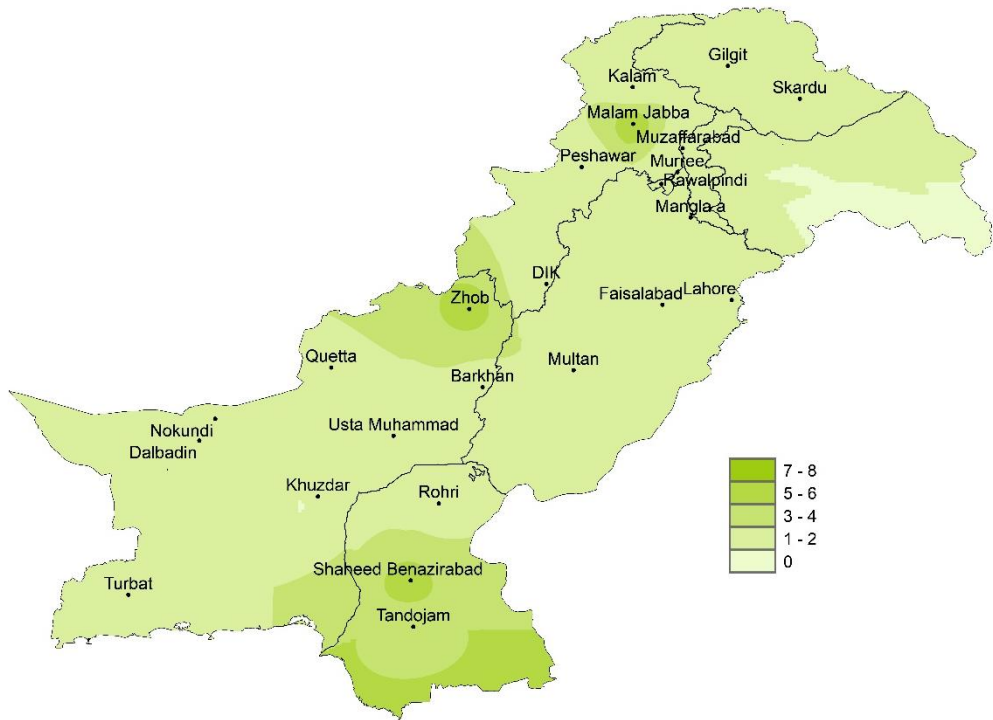
**Mean Cloudiness (Oktas) at 0800PST during the previous week (1<sup>st</sup> – 7<sup>th</sup> February, 2021)**



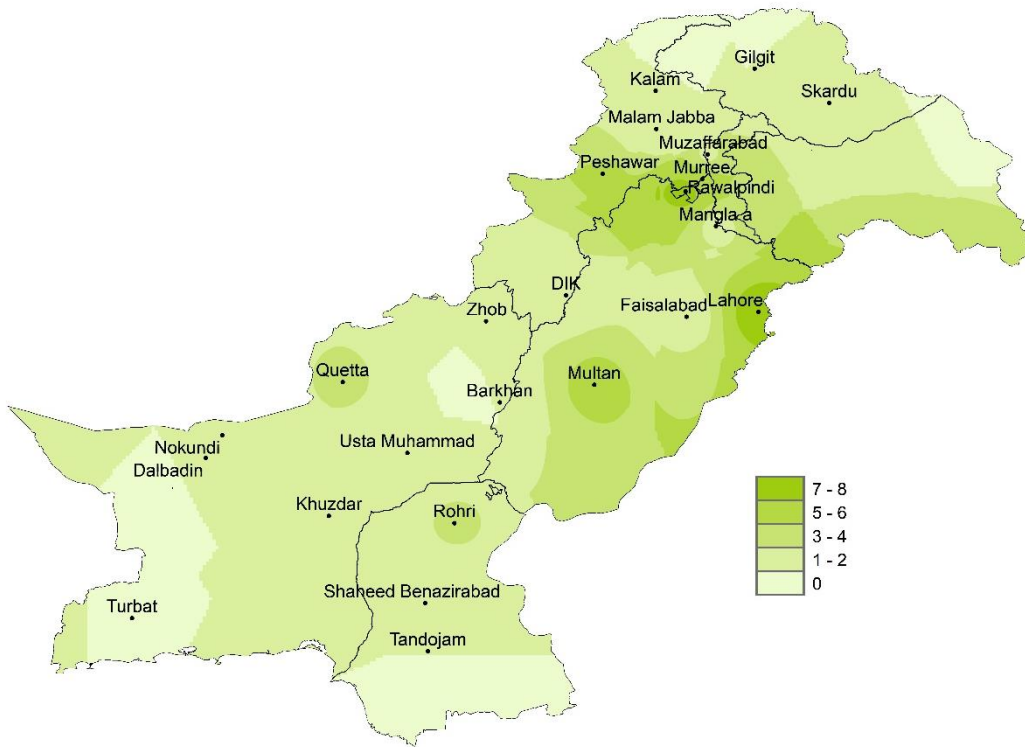
**Mean Cloudiness (Oktas) at 1700PST during the previous week (1<sup>st</sup> – 7<sup>th</sup> February, 2021)**



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



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





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

Continental air is prevailing over most parts of the country. However, a westerly wave is present over upper parts of the country and may persist during next 36 hours.

**MONDAY****08-02-2021**

Cold and dry weather is expected in most parts of the country, while very cold/partly cloudy in upper parts.

**TUESDAY****09-02-2021**

Cold and dry weather is expected in most parts of the country, while light rain/snowfall over the hills is expected in Upper Khyber Pakhtunkhwa, Potohar region, Kashmir and Gilgit-Baltistan.

**WEDNESDAY****10-02-2021**

Mainly cold and dry weather is expected in most parts of the country, while very cold in upper parts and north Balochistan.

**THURSDAY****11-02-2021**

Mainly cold and dry weather is expected in most parts of the country, while very cold in upper parts and north Balochistan

**FRIDAY****12-02-2021.**

Mainly cold and dry weather is expected in most parts of the country, while very cold in upper parts and north Balochistan.

**SATURDAY****13-02-2021**

Mainly cold and dry weather is expected in most parts of the country, while very cold in upper parts and north Balochistan.

**SUNDAY****14-02-2021**

Mainly cold and dry weather is expected in most parts of the country, while very cold in upper parts and north Balochistan.

**ADVISORY FOR FARMERS**

During the last week, light rainfall reported from a few stations in Punjab, Khyber Pakhtunkhwa and Azad Jammu & Kashmir. Cold and dry weather reported from Sindh, Baluchistan and Gilgit-Baltistan. Keeping in view the expected weather conditions farmers are advised the following advisories.

- ❖ Farmers should make proper arrangements to protect their nurseries, fruit plants and vegetables from cold weather.
- ❖ Farmers are advised to spray pesticides to avoid any pest attack.

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

Stations	Minimum /Night Time Temperature (°C)		Growing Degree Days	Relative Humidity (%)	Rainfall (mm)	Cloudiness (Oktas) 0800 PST	Cloudiness (Oktas) 1700 PST	Wind Speed (Knots) 0800 PST	Wind Speed (Knots) 1700 PST
	Mean	Minimum							
Barkhan	5.7	4.0	57.5	29	0.00	0.0	1.1	1.4	0.0
Dalbandin	2.9	0.0	58.5	33	0.00	0.0	0.3	0.0	0.0
D.I. Khan	7.1	6.0	74.5	62	0.00	0.7	0.0	0.0	0.6
Faisalabad	6.8	6.0	68.1	67	0.00	0.9	2.1	0.3	0.6
Gawadar	10.6	9.5	99.0	60	0.00	0.4	0.0	0.6	0.0
Gilgit	-2.9	-5.5	8.3	51	0.00	3.7	3.0	1.1	0.0
Kalam	-5.7	-7.0	0.0	67	0.00	1.3	1.1	0.0	0.0
Khuzdar	4.7	1.5	60.8	32	0.00	0.0	0.0	0.0	0.6
Lahore	8.5	7.0	70.6	64	1.81	1.1	1.9	0.0	8.0
Malam Jabba	-2.8	-4.0	0.0	65	0.00	2.1	3.6	5.1	0.0
Mangla	5.8	3.6	61.4	63.9	0.30	2.7	2.0	0.0	1.1
Multan (PBO)	8.0	6.8	74.4	60	0.00	0.7	0.0	0.9	4.9
Murree	-0.1	-1.0	2.1	58	1.01	2.7	3.7	1.1	4.9
Muzaffarabad	4.0	2.8	45.4	67	2.60	2.9	2.0	0.0	1.4
Nokkundi	9.4	7.0	95.0	60	0.00	0.0	0.0	4.3	0.0
Nawabshah	6.4	3.0	70.3	23	0.00	0.0	0.0	2.0	0.0
Peshawar	5.2	2.8	59.8	62	0.00	3.4	1.9	0.3	4.3
Quetta	0.9	-1.5	27.7	30	0.00	0.3	1.0	2.0	2.3
Rawalpindi	4.8	2.3	56.0	72	1.50	2.7	2.9	0.3	7.6
Rohri	10.2	9.0	91.8	57	0.00	0.0	0.0	0.9	2.3
Skardu	-6.7	-9.5	0.0	62	0.00	3.3	3.4	0.0	0.0
Tandojam	7.6	5.5	84.2	55	0.00	0.0	0.0	3.8	0.0
Turbat	12.9	10.0	112.5	30	0.00	0.7	0.3	0.6	0.0
Usta. M	9.4	9.0	83.5	58	0.00	0.0	0.0	0.0	0.0
Zhob	0.7	-1.0	32.0	38	0.00	0.4	0.4	4.6	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)