

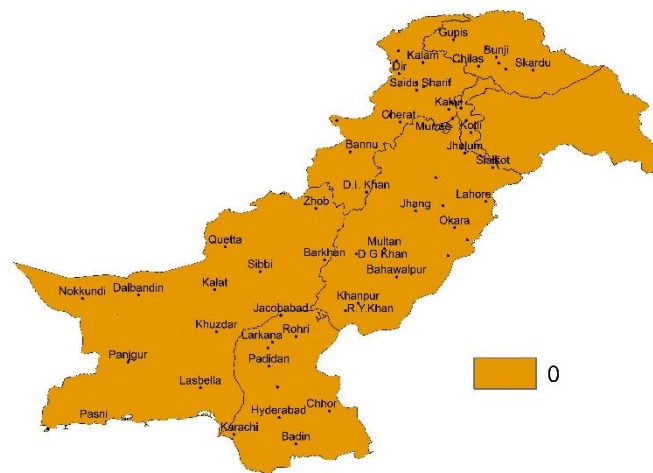
# Weekly Weather and Crop Bulletin for Pakistan

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

## ISLAMABAD

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**Rainfall Distribution (mm) during the Previous Week (11<sup>th</sup>– 17<sup>th</sup> January, 2021)**

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### Highlights of Past Weather (11<sup>th</sup> - 17<sup>th</sup> January, 2021)

Below normal night time temperatures were observed all over the country during the last week.

Rainfall reported as follows during the last week:

1. Cold and dry weather reported from Sindh, Baluchistan, Punjab, Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan.

**Patron-in-Chief: Muhammad Riaz (Director General)**

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

**Editor: Ruqiya Mehmood (Assistant Meteorologist)**

**Past Weather of Provinces (11<sup>th</sup> - 17<sup>th</sup> January, 2021)****Punjab**

Cold & dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 15.2°C & 4.0°C respectively. For the recent week on average 32.2 growing degree days were accumulated. Average relative humidity recorded as 67% and wind speed in the morning/evening recorded as 1.0/1.4 Knots. During the previous week the lowest minimum temperature was recorded as -1.0°C at Mianwali.

**Baluchistan**

Cold & dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 21.8°C & 1.9°C respectively. For the recent week on average 49.0 growing degree days were accumulated. Average relative humidity recorded as 35% and wind speed in the morning/evening recorded as 1.5/3.7 Knots. During the previous week the lowest minimum temperature was recorded as -13.5°C at Kalat.

**Khyber Pakhtunkhwa**

Cold & dry weather reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 17.2°C & 1.1°C respectively. For the recent week on average 30.0 growing degree days were accumulated. Average relative humidity recorded as 68% and wind speed in the morning/evening recorded as 4.7/1.6 Knots. During the previous week the lowest minimum temperature was recorded as -7.8°C at Kalam.

**Sindh**

Cold and dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 24.5°C & 5.6°C respectively. For the recent week, on average 70.4 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 1.3/3.0 Knots.

During the previous week the lowest minimum temperature was recorded as 1.0°C at Mithi.

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

Cold & dry weather reported from Gilgit-Baltistan and Kashmir during the week. Weekly maximum and minimum temperatures recorded as 11.3°C & -4.5°C respectively. For the recent week on average 14.0 growing degree days were accumulated. Average relative humidity recorded as 65% and wind speed in the morning/evening recorded as 0.0/0.4 Knots. During the previous week the lowest minimum temperature was recorded as -15.6°C at Skardu.

**Past Weather for Major Agricultural Plains****(11<sup>th</sup> - 17<sup>th</sup> January, 2021)****Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, clear sky reported in the morning/evening while, average relative humidity observed as 79%. Mean night time temperature recorded as 3.0°C & for the recent week 39.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/1.7 Knots.

**Faisalabad (Central Punjab)**

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/2.9 Oktas while, average relative humidity observed as 89%. Mean night time temperature recorded as 4.9°C & for the recent week 25.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.7/0.8 Knots.

**Tandojam (Lower Sindh)**

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.3/0.6 Oktas while, average relative humidity observed as 63%. Mean night time temperature recorded as 4.7°C & for the recent week 63.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.5 Knots.

**Usta Muhammad (Eastern Baluchistan)**

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 1.1/1.0 Oktas while, average relative humidity observed as 59%. Mean night time temperature recorded as 4.5°C & for the recent week 105.8 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 0.9/1.0 Oktas while, average relative humidity observed as 33%. Mean night time temperature recorded as -3.7°C & for the recent week 2.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.2/2.3 Knots.

**Past Weather for Sub-Regional Agricultural****Plains (11<sup>th</sup> - 17<sup>th</sup> January, 2021)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.0/1.6 Oktas while, average relative humidity observed as 76%. Mean night time temperature recorded as 4.0°C & for the recent week 42.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.1 Knots.

**Lahore**

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 5.0/2.0 Oktas while, average relative humidity observed as 85%. Mean night time temperature recorded as 5.6°C & for the recent week 30.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/6.0 Knots.

**Zhob**

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.4/0.6 Oktas while, average relative humidity observed as 26%. Mean night time temperature recorded as -3.1°C & for the recent week 22.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.4/0.0 Knots.

**Murree**

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.4/1.0 Oktas while, average relative humidity observed as 41%. Mean night time temperature recorded as 1.2°C & for the recent week 24.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.9/6.0 Knots.

**D.I. Khan**

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 4.0/0.0 Oktas while, average relative humidity observed as 85%. Mean night time temperature recorded as 2.1°C & for the recent week 24.8 growing degree days accumulated. Calm wind reported in the morning/evening.

**Peshawar**

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.3/1.1 Oktas while, average relative humidity observed as 60%. Mean night time temperature recorded as 2.6°C & for the recent week 50.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 6.3/2.0 Knots.

**Kalam**

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.7/1.7 Oktas while, average relative humidity observed as 69%. 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 1.3/1.9 Oktas while, average relative humidity observed as 57%. Mean night time temperature recorded as -6.1°C. Calm wind reported in the morning/evening.

**Skardu**

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 1.9/3.0 Oktas while, average relative humidity observed as 64%. Mean night time temperature recorded as -13.8°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, Tillering Stage Completed.**

**Lower Sindh (Tandojam)**

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

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

**Northern Baluchistan (Quetta)**

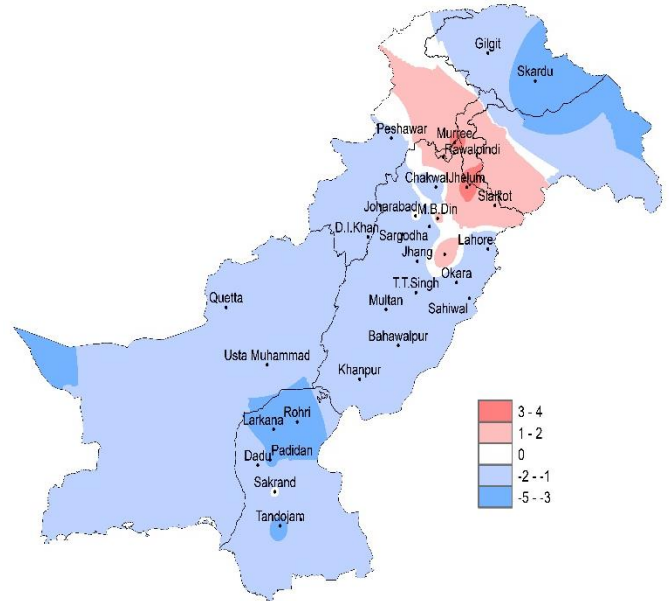
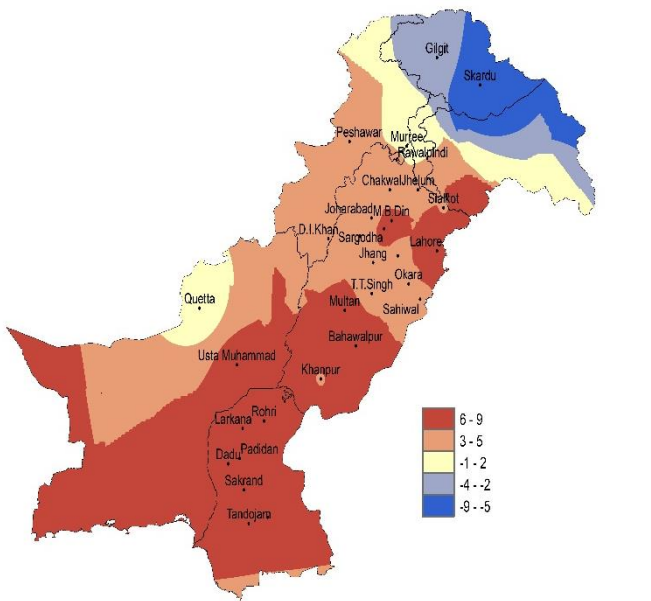
There is presently no crop grown in the fields of RAMC Quetta.

**Eastern Baluchistan (Usta Muhammad)**

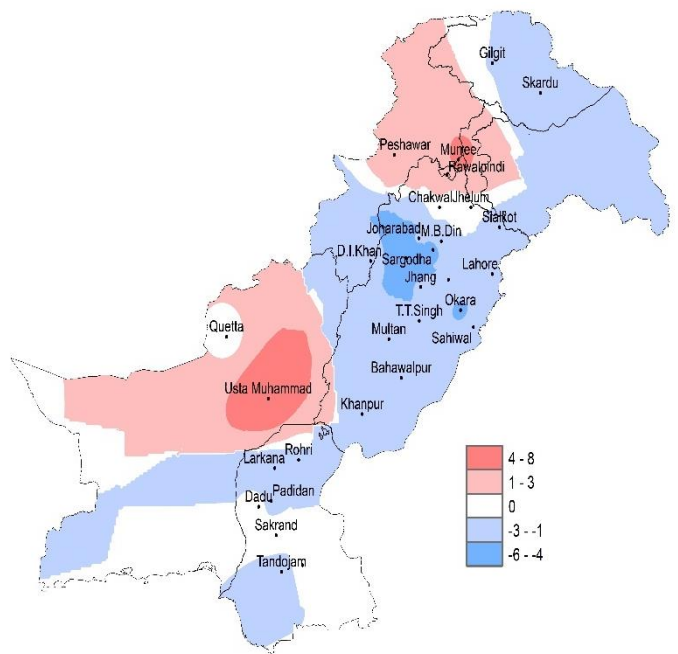
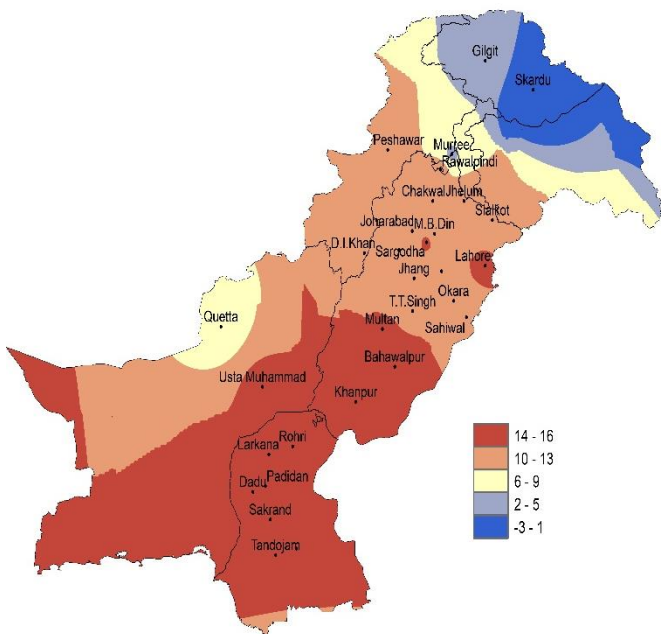
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

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

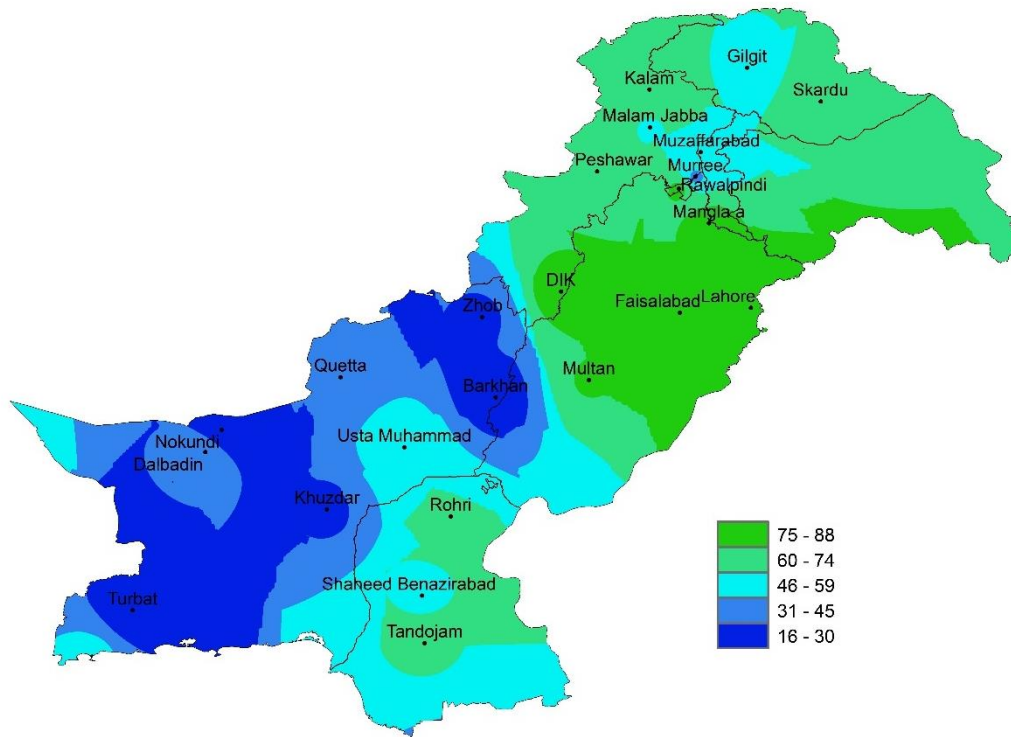
**Normal & Departure of Minimum temperature (°C) for the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)**



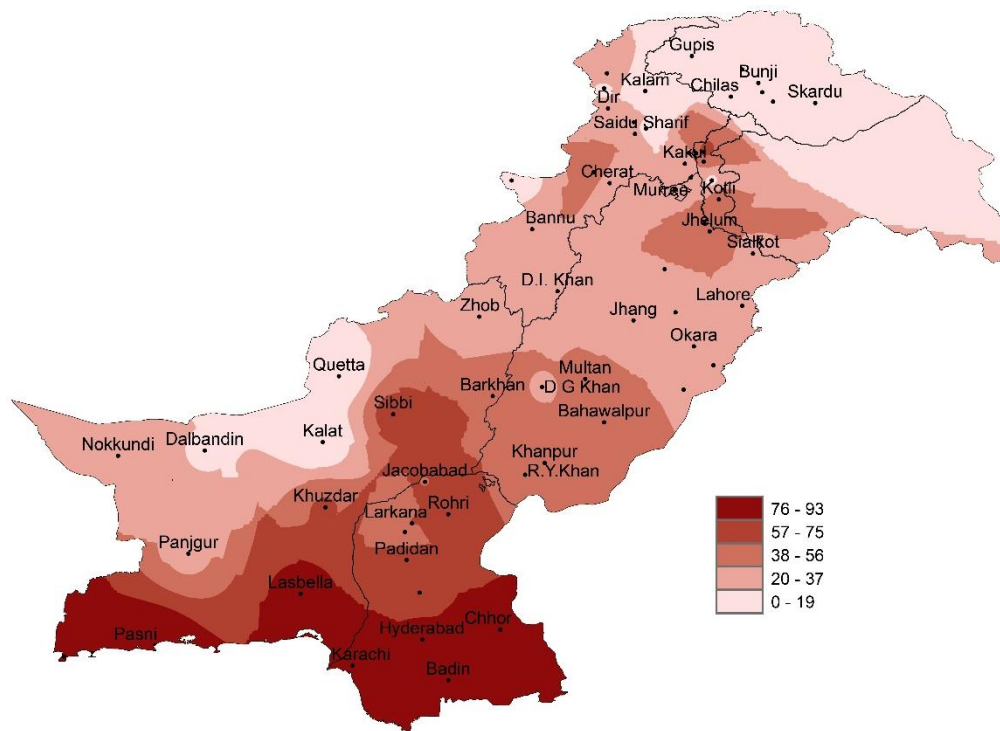
**Normal & Departure of Mean temperature (°C) for the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)**



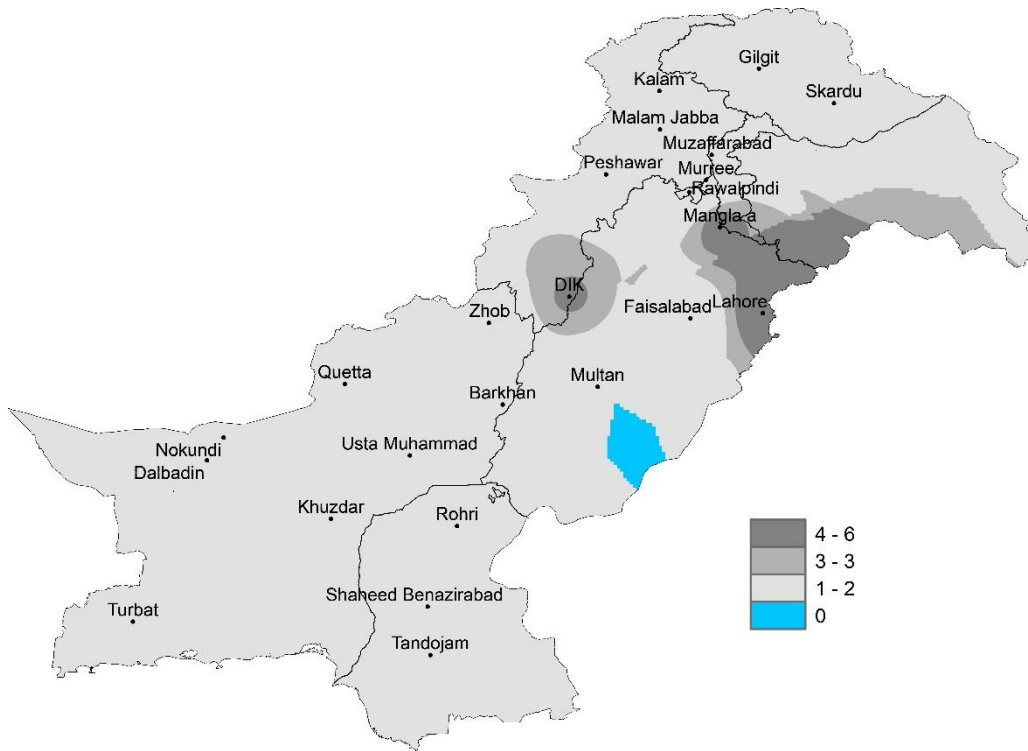
Mean Relative Humidity (%) during the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)



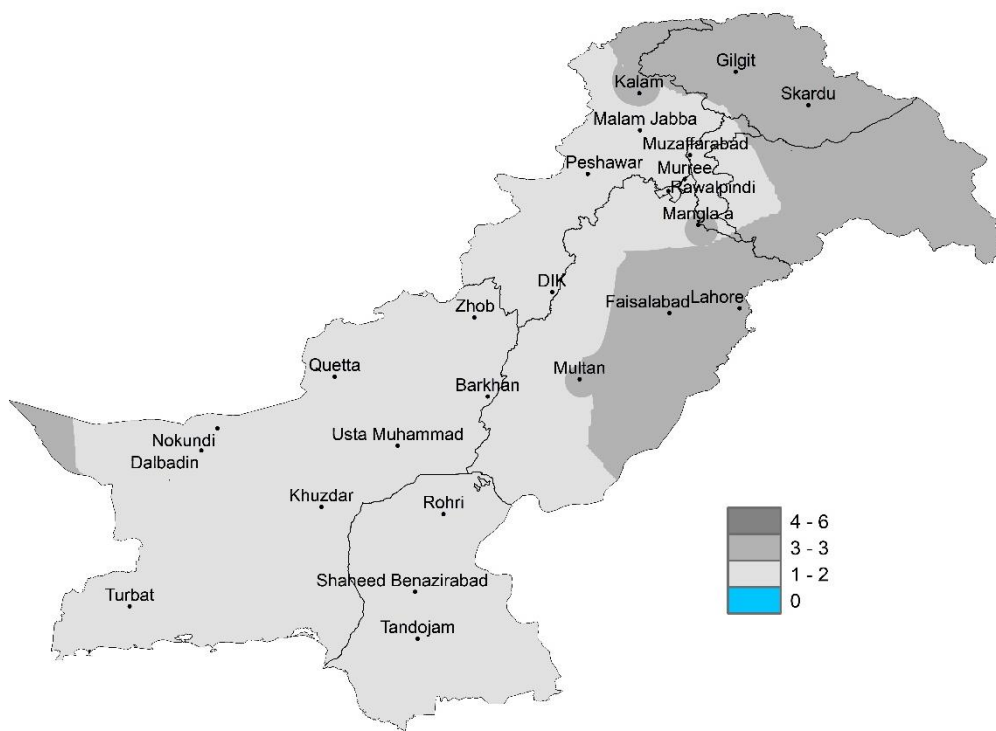
Total Growing Degree Days accumulated during the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)



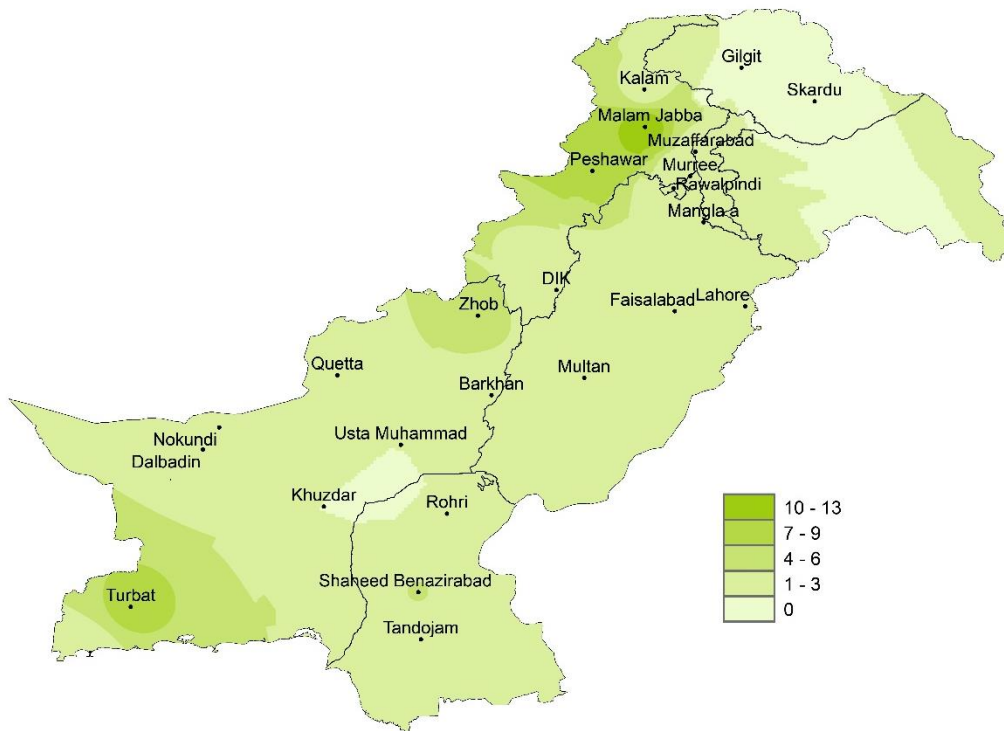
**Mean Cloudiness (Oktas) at 0800PST during the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)**



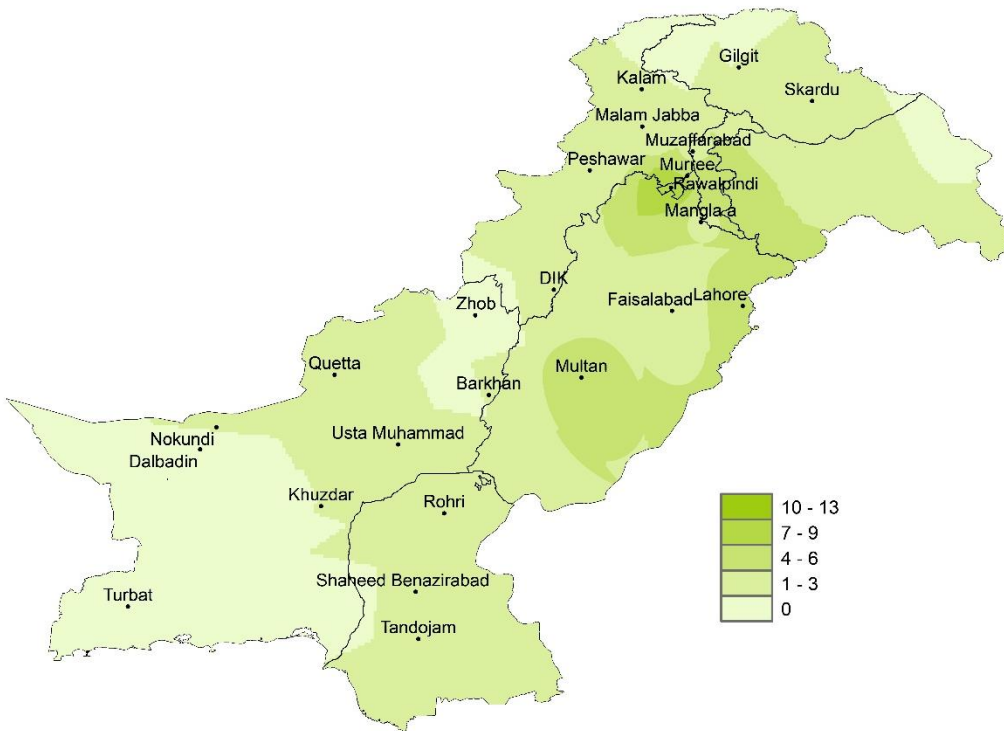
**Mean Cloudiness (Oktas) at 1700PST during the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)**



**Mean Wind Speed (Knots) at 0800PST during the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)**



**Mean Wind Speed (Knots) at 1700PST during the previous week (11<sup>th</sup> – 17<sup>th</sup> January, 2021)**





**Weekly Weather Advisory for Farmers****(18<sup>th</sup> – 24<sup>th</sup> January, 2021)**

Continental air is prevailing over most parts of the country.

**MONDAY****18-01-2021**

Fog is likely to persist in plain areas of Punjab. Very cold weather is expected in Kashmir, Gilgit Baltistan, upper Khyber Pakhtunkhwa and north Balochistan, while cold and dry in other parts of the country.

**TUESDAY****19-01-2021**

Fog is likely to persist in plain areas of Punjab and upper Sindh. Very cold weather is expected in Kashmir, Gilgit Baltistan, upper Khyber Pakhtunkhwa and north Balochistan, while cold and dry in other parts of the country.

**WEDNESDAY****20-01-2021**

Cold and dry weather is expected in most parts of the country, while very cold in upper parts and north Balochistan. Dense fog is likely in plain areas of Punjab and upper Sindh.

**THURSDAY****21-01-2021**

Cold and dry weather is expected in most parts of the country, while very cold/ partly cloudy in upper parts. Dense fog is likely in plain areas of Punjab and upper Sindh.

**FRIDAY****22-01-2021**

Cold and dry weather is expected in most parts of the country, while very cold in upper parts and north Balochistan. However, rain/snow is expected in upper Khyber Pakhtunkhwa, Gilgit Baltistan, Kashmir and adjoining hilly areas. Dense fog is likely in plain areas of Punjab and upper Sindh.

**SATURDAY****23-01-2021**

Rain/snow is expected in upper Khyber Pakhtunkhwa, Gilgit Baltistan, Potohar region, Islamabad, Kashmir and adjoining hilly areas. Dense fog is likely in plain areas of Punjab and upper Sindh. Cold and dry weather is expected elsewhere in the country.

**SUNDAY****24-01-2021**

Rain/snow is expected in Gilgit Baltistan and Kashmir. Dense fog is likely in plain areas of Punjab and upper Sindh. Cold and dry weather is expected elsewhere in the country.

**ADVISORY FOR FARMERS**

During the last week, cold and dry weather reported from Sindh, Baluchistan, Punjab, Khyber Pakhtunkhwa, Kashmir 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 (11<sup>th</sup> - 17<sup>th</sup> January, 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	4.1	2.0	54.8	19	0.00	0.0	0.7	1.4	0.0
Dalbandin	-3.7	-6.5	17.0	38	0.00	0.7	0.7	0.6	0.0
D.I. Khan	2.1	0.5	24.8	85	0.00	4.0	0.0	0.0	0.0
Faisalabad	4.9	3.5	25.0	89	0.00	0.0	2.9	0.7	0.3
Gawadar	7.4	5.5	84.0	52	0.00	0.7	0.3	0.0	0.0
Gilgit	-6.1	-7.0	0.0	57	0.00	1.3	1.9	0.0	0.0
Kalam	-5.7	-7.8	0.0	69	0.00	0.7	1.7	0.0	0.0
Khuzdar	5.9	3.0	58.0	27	0.00	0.0	0.7	0.0	0.0
Lahore	5.6	5.0	30.9	85	0.00	5.0	2.0	0.0	6.0
Malam Jabba	-0.8	-4.0	0.0	58	0.00	0.6	0.9	12.6	0.0
Mangla	5.7	3.6	40.4	82.1	0.00	28.5	1.7	0.0	2.3
Multan (PBO)	4.0	2.8	42.1	76	0.00	0.0	1.6	0.0	5.1
Murree	1.2	0.0	24.4	41	0.00	0.4	1.0	2.9	6.0
Muzaffarabad	2.2	1.1	41.4	59	0.00	0.0	0.6	0.0	1.7
Nokkundi	4.5	3.5	67.1	58	0.00	0.7	0.6	3.1	0.0
Nawabshah	-0.9	-3.5	33.8	22	0.00	0.3	0.0	2.0	0.0
Peshawar	2.6	2.2	50.7	60	0.00	1.3	1.1	6.3	2.0
Quetta	-3.7	-7.0	2.2	33	0.00	0.9	1.0	1.2	2.6
Rawalpindi	3.0	2.0	39.7	79	0.00	0.0	0.0	0.3	7.7
Rohri	5.3	3.5	63.5	61	0.00	0.7	1.1	0.0	2.0
Skardu	-13.8	-15.6	0.0	64	0.00	1.9	3.0	0.0	0.0
Tandojam	4.7	4.0	63.8	63	0.00	0.3	0.6	0.9	0.0
Turbat	12.1	8.5	105.5	16	0.00	0.7	0.6	7.7	0.0
Usta. M	4.5	3.5	105.8	59	0.00	1.1	1.0	0.0	0.0
Zhob	-3.1	-5.0	22.8	26	0.00	0.4	0.6	4.4	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)