

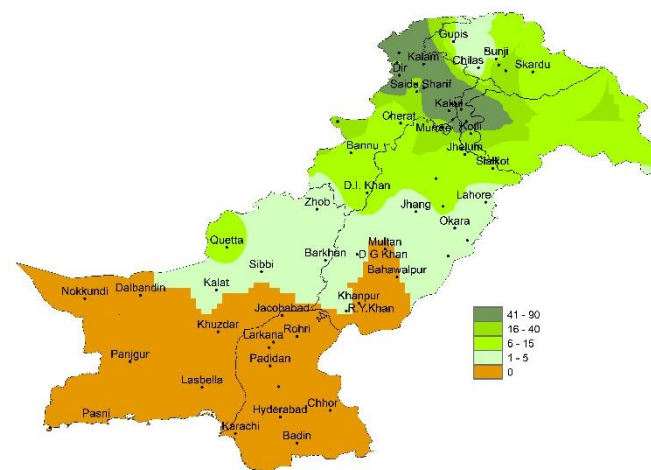
# Weekly Weather and Crop Bulletin for Pakistan

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

## ISLAMABAD

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**Rainfall Distribution (mm) during the Previous Week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)**

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## Highlights of Past Weather (8<sup>th</sup> - 14<sup>th</sup> March, 2021)

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

Rainfall reported as follows during the last week:

1. Light to moderate rainfall reported from upper/central Punjab, Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan.
2. Light rainfall reported from northeast Baluchistan.
3. Dry weather prevailed over south Punjab, Sindh and northwest Baluchistan.

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

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

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

**Past Weather of Provinces (8<sup>th</sup> - 14<sup>th</sup> March, 2021)****Punjab**

Light to moderate rainfall reported from upper/central Punjab during the week. Weekly maximum and minimum temperatures recorded as 28.0°C & 14.5°C respectively. For the recent week on average 113.6 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 2.2/3.1 Knots. During the previous week the highest precipitation was observed as 42.0 mm at Murree while the lowest minimum temperature was recorded as 3.0°C at Murree.

**Baluchistan**

Light rainfall reported from northeast Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 28.3°C & 13.0°C respectively. For the recent week on average 109.4 growing degree days were accumulated. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 1.4/5.4 Knots. During the previous week the highest precipitation was observed as 10.0 mm at Quetta while the lowest minimum temperature was recorded as 1.0°C at Quetta.

**Khyber Pakhtunkhwa**

Light to moderate rainfall reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 19.3°C & 8.5°C respectively. For the recent week on average 63.3 growing degree days were accumulated. Average relative humidity recorded as 74% and wind speed in the morning/evening recorded as 1.5/1.6 Knots. During the previous week the highest precipitation was observed as 88.1 mm at Kalam while the lowest minimum temperature was recorded as -2.5°C at Kalam.

**Sindh**

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 33.3°C & 18.5°C respectively. For the

recent week, on average 146.9 growing degree days were accumulated. Average relative humidity recorded as 56% and wind speed in the morning/evening recorded as 3.0/4.7 Knots. During the previous week the lowest minimum temperature was recorded as 13.5°C at Moenjodaro.

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

Light to moderate rainfall reported from Gilgit-Baltistan and Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 16.0°C & 5.3°C respectively. For the recent week on average 39.8 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 1.1/1.7 Knots. During the previous week the highest precipitation was observed as 70.6 mm at Rawalakot while the lowest minimum temperature was recorded as -1.1°C at Skardu.

**Past Weather for Major Agricultural Plains****(8<sup>th</sup> - 14<sup>th</sup> March, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 25.7 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 5.7/4.7 Oktas while, average relative humidity observed as 67%. Mean night time temperature recorded as 11.9°C & for the recent week 93.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.2 Knots.

**Faisalabad (Central Punjab)**

Rainfall reported as 3.2 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 3.0/1.3 Oktas while, average relative humidity observed as 58%. Mean night time temperature recorded as 16.0°C & for the recent week 126.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/1.6 Knots.

**Tandojam (Lower Sindh)**

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 1.2/3.1 Oktas while, average relative humidity observed as 57%. Mean night time temperature recorded as 15.9°C & for the recent week 136.8 growing degree days accumulated. Cal wind reported in the morning/evening.

**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 56%. Mean night time temperature recorded as 15.9°C & for the recent week 135.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.5/0.2 Knots.

**Quetta (Northern Baluchistan)**

Rainfall reported as 3.2 mm from Quetta during the week; however, cloudiness in the morning/evening recorded as 3.3/3.6 Oktas while, average relative humidity observed as 40%. Mean night time temperature recorded as 8.1°C & for the recent week 66.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.1/3.1 Knots.

**Past Weather for Sub-Regional Agricultural Plains (8<sup>th</sup> - 14<sup>th</sup> March, 2021)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 2.1/2.3 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 16.5°C & for the recent week 128.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/4.9 Knots.

**Lahore**

Rainfall reported as 1.6 mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 1.6/2.0 Oktas while, average relative humidity observed as 55%. Mean night time temperature recorded as 16.4°C & for the recent week 122.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.1/6.6 Knots.

**Zhob**

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 2.4/3.4 Oktas while, average relative humidity observed as 49%. Mean night time temperature recorded as 7.6°C & for the recent week 81.0 growing degree days accumulated. cloudiness in the morning/evening recorded as 4.3/0.0 Oktas.

**Murree**

Rainfall reported as 42.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 6.6/5.9 Oktas while, average relative humidity observed as 68%. Mean night time temperature recorded as 4.9°C & for the recent week 27.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.6/2.9 Knots.

**D.I. Khan**

Rainfall reported as 8.0 mm from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 4.1/1.4 Oktas while, average relative humidity observed as 62%. Mean night time temperature recorded as 15.9°C & for the recent week 120.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/2.3 Knots.

**Peshawar**

Rainfall reported as 6.8 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 4.9/5.7 Oktas while, average relative humidity observed as 65%. Mean night time temperature recorded as 14.3°C & for the recent week 105.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/2.0 Knots.

**Kalam**

Rainfall reported as 88.1 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 7.3/7.4 Oktas while, average relative humidity observed as 91%. Mean night time temperature recorded as -1.7°C. Wind speed recorded in the morning/evening as 0.0/1.4 Knots.

**Gilgit**

Rainfall reported as trace (not measurable) from Gilgit during the week. However, cloudiness in the morning/evening recorded as 7.3/6.7 Oktas while, average relative humidity observed as 51%. Mean night time temperature recorded as 7.1°C & for the recent week 52.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/2.3 Knots.

**Skardu**

Rainfall reported as 6.6 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 7.3/7.0 Oktas while, average relative humidity observed as 63%. Mean night time temperature recorded as 1.3°C & for the recent week 10.8 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 Completed.

**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.

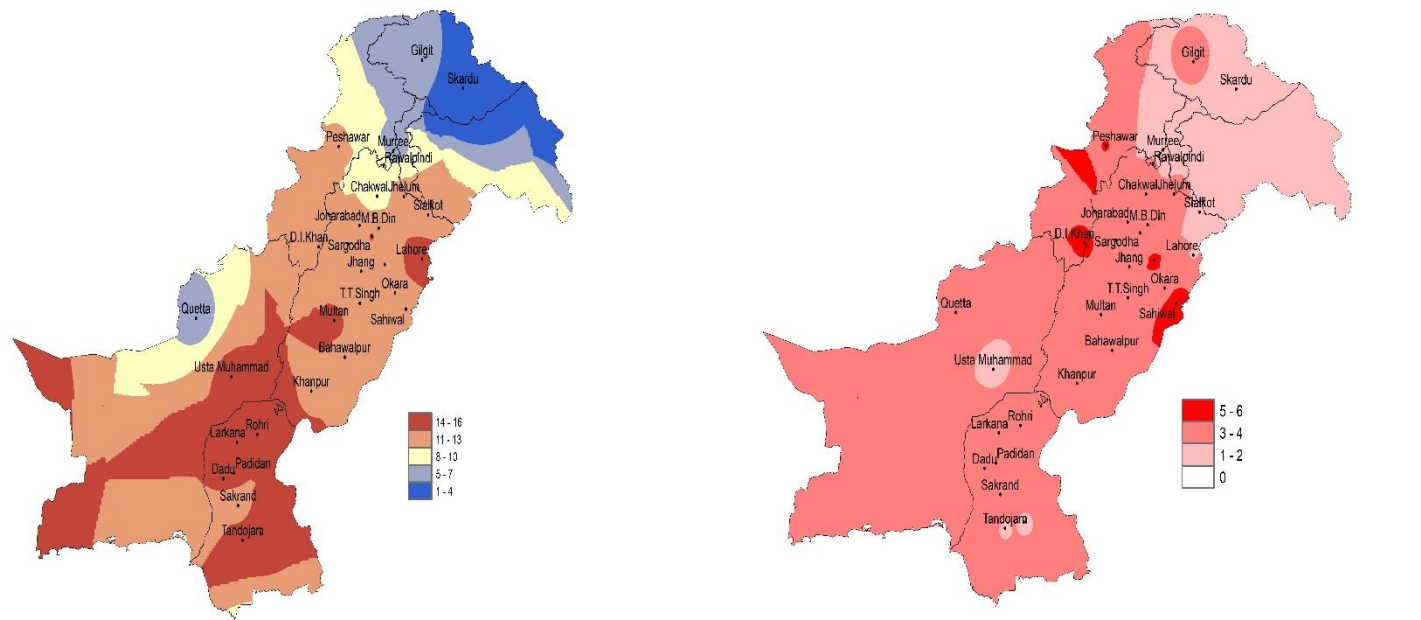
**Wheat: Good, Crop Variety (Seriab-92),** Tillering Stage.

**Eastern Baluchistan (Usta Muhammad)**

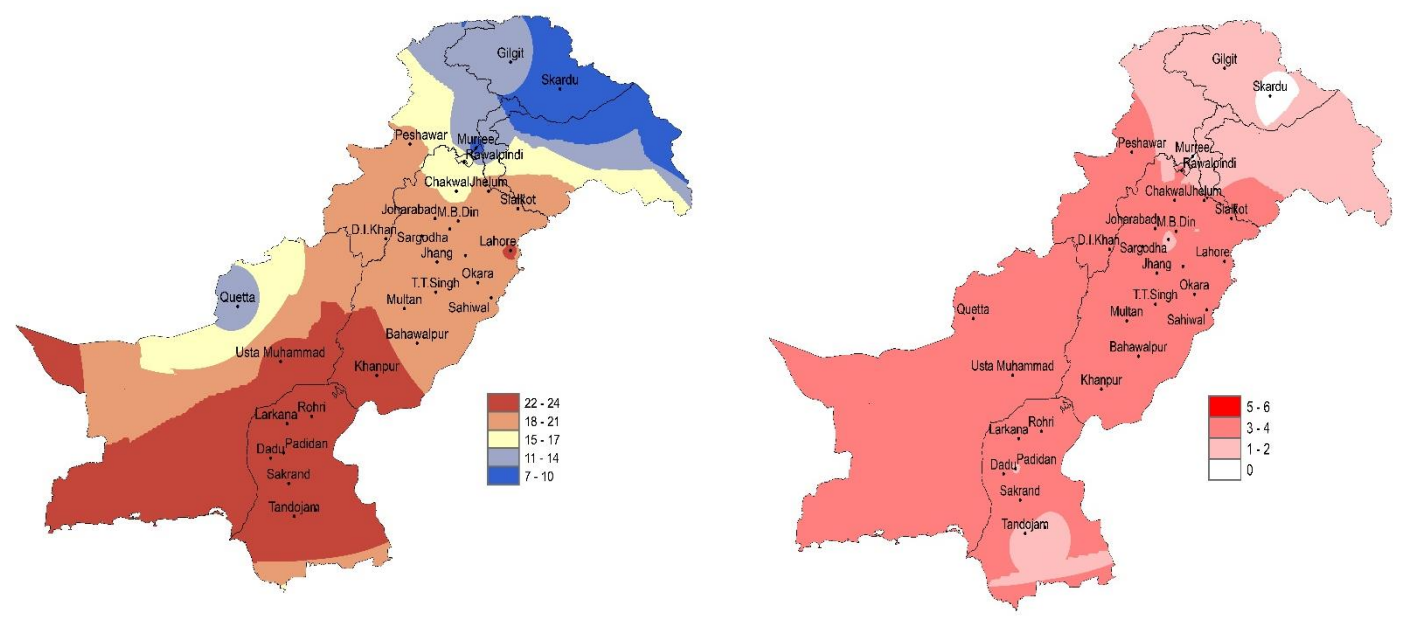
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

**Wheat: Good,** Milk Maturity Stage.

Normal & Departure of Minimum temperature (°C) for the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)

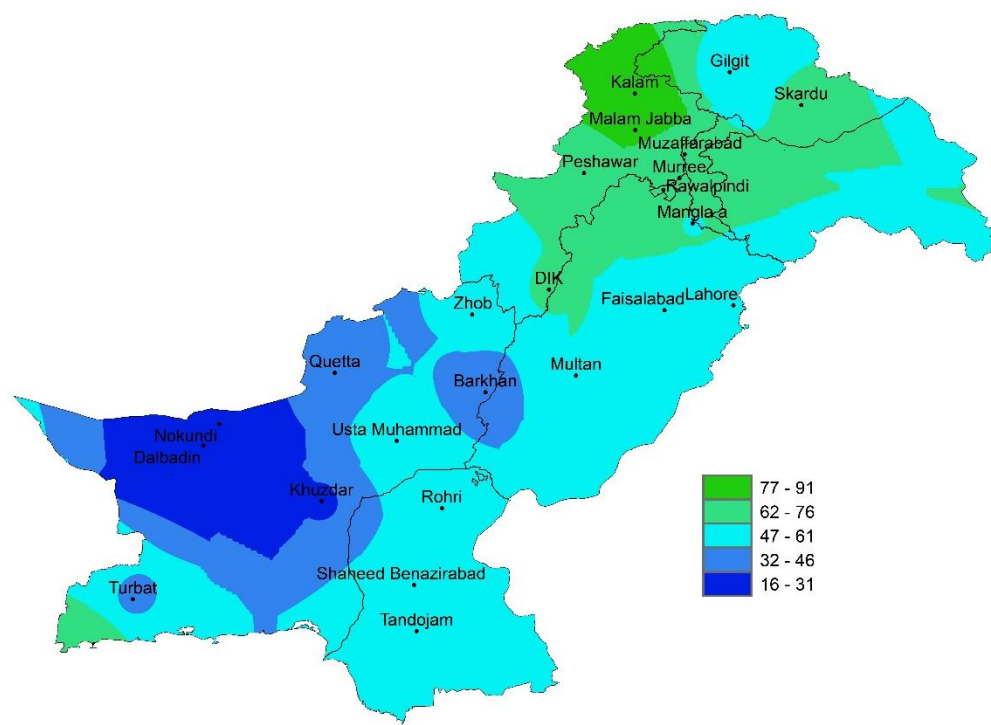


Normal & Departure of Mean temperature (°C) for the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)

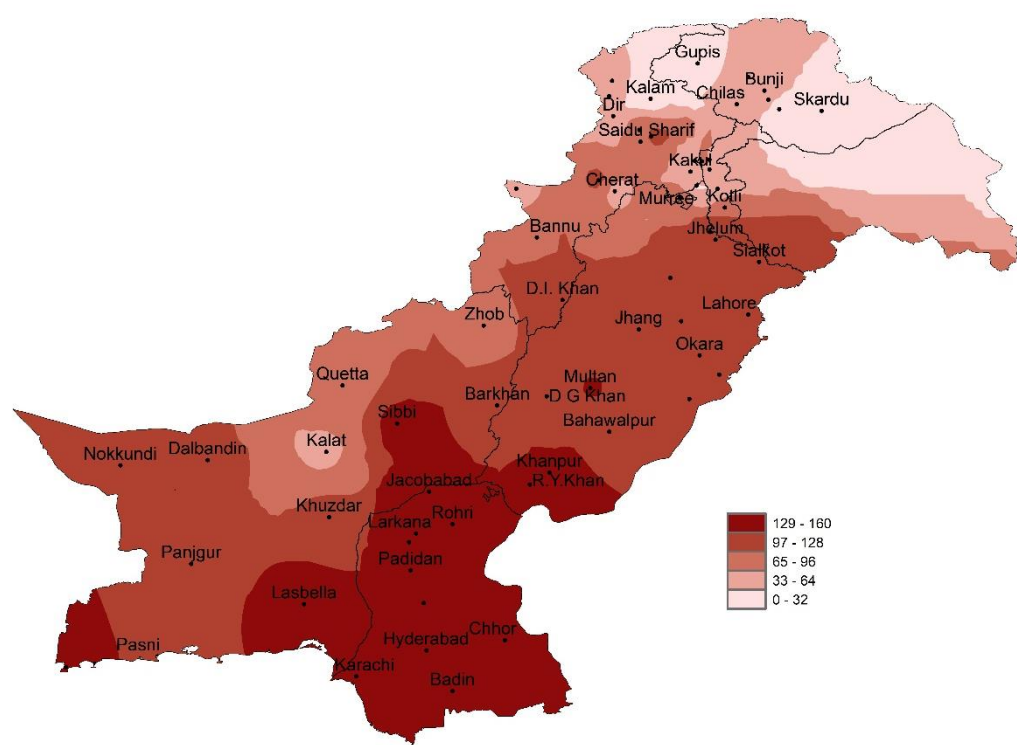




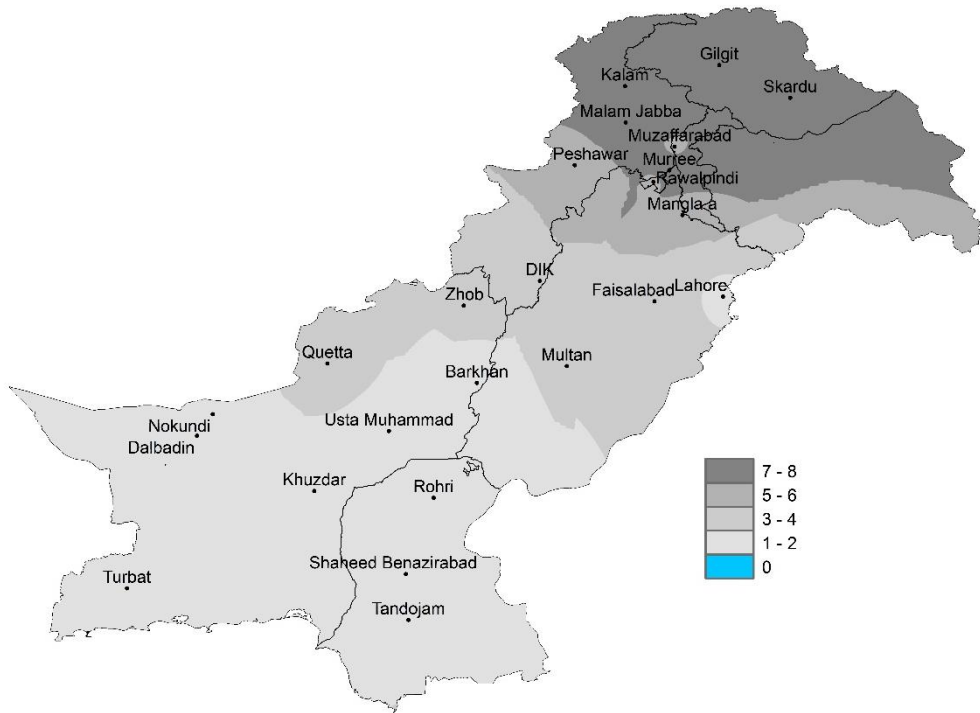
Mean Relative Humidity (%) during the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)



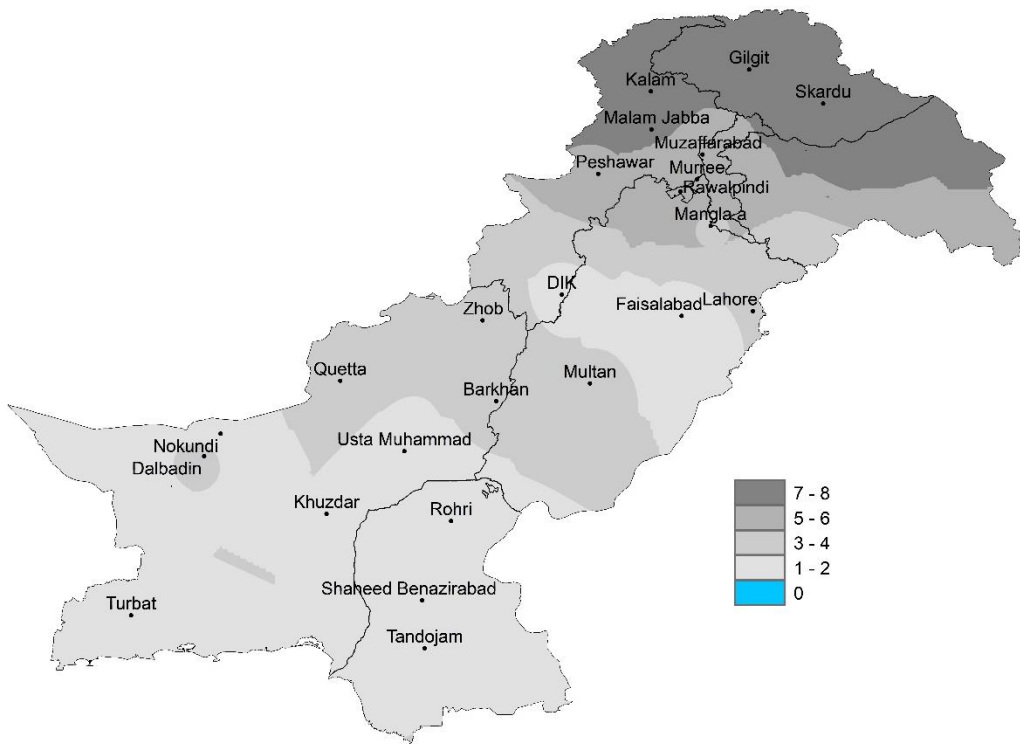
Total Growing Degree Days accumulated during the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)



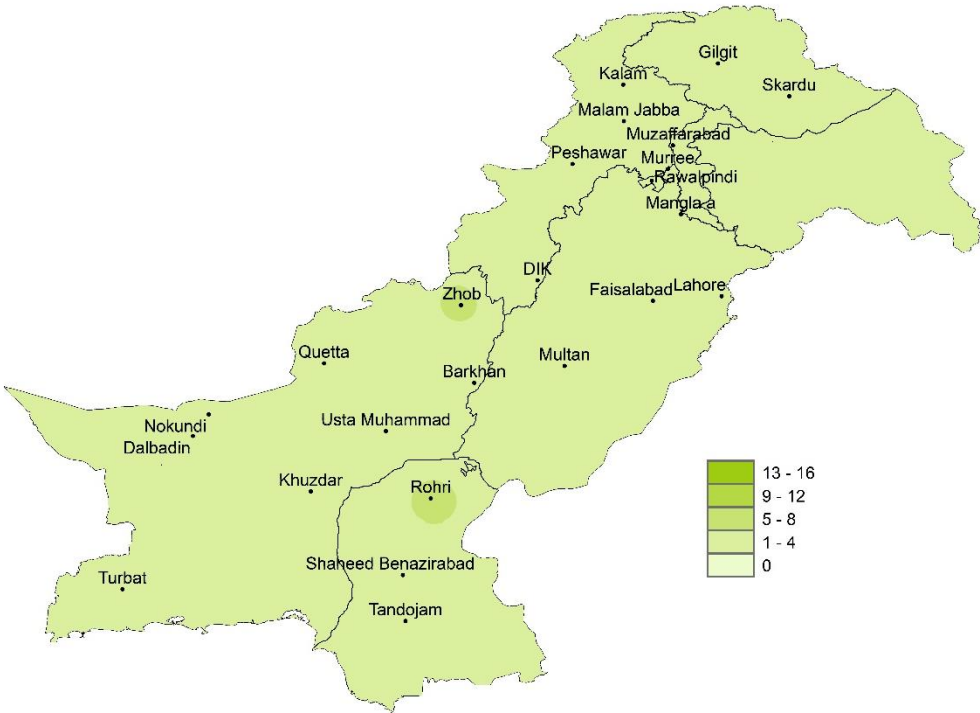
Mean Cloudiness (Oktas) at 0800PST during the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)



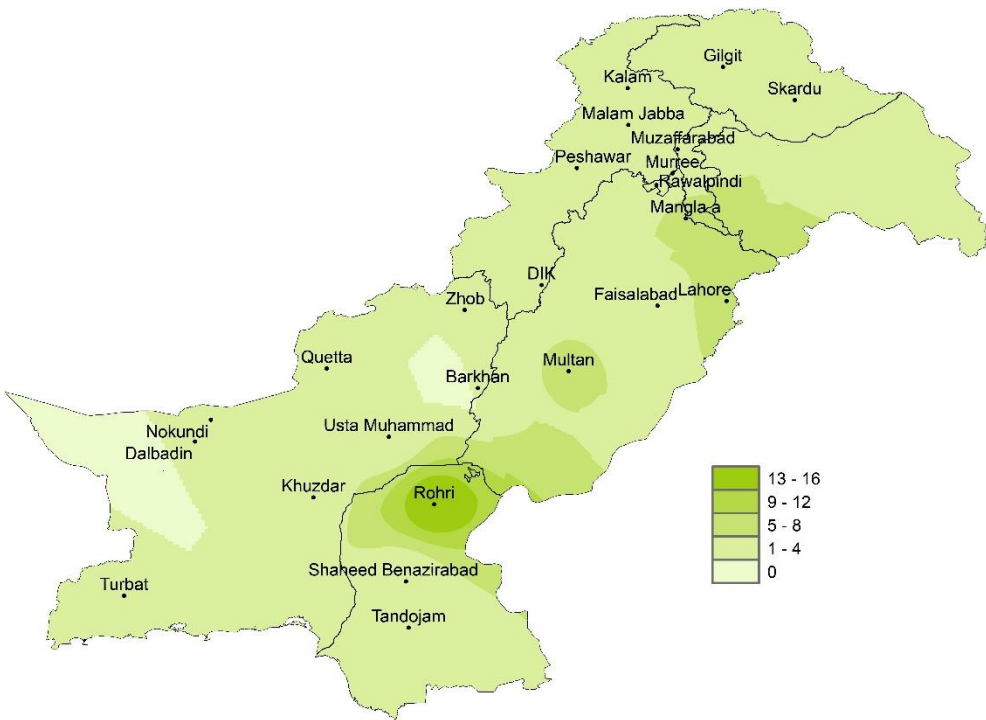
Mean Cloudiness (Oktas) at 1700PST during the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)



Mean Wind Speed (Knots) at 0800PST during the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)



Mean Wind Speed (Knots) at 1700PST during the previous week (8<sup>th</sup> – 14<sup>th</sup> March, 2021)





**Weekly Weather Advisory for Farmers****(15<sup>th</sup> – 21<sup>st</sup> March, 2021)**

A westerly wave is affecting upper parts of the country.

**MONDAY****15-03-2021**

Mainly dry weather is expected in most plain areas of the country. However, rain (with snowfall over high mountains) is expected in upper Khyber Pakhtunkhwa, Kashmir and Gilgit Baltistan.

**TUESDAY****16-03-2021**

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

**WEDNESDAY****17-03-2021**

Dry weather is expected in most parts of the country. However, light rain-thunderstorm (with snowfall over hills) is expected in upper Khyber Pakhtunkhwa, Kashmir and Gilgit Baltistan.

**THURSDAY****18-03-2021**

Dry weather is expected in most parts of the country. However, light rain-thunderstorm (with snowfall over hills) is expected in Kashmir and Gilgit Baltistan.

**FRIDAY****19-03-2021.**

Dry weather is expected in most parts of the country. However, rain-thunderstorm (with snowfall over hills) is expected in upper Khyber Pakhtunkhwa, Kashmir and Gilgit Baltistan.

**SATURDAY****20-03-2021**

Partly cloudy to cloudy weather is expected in western & upper parts of the country. However, rain-thunderstorm (with snowfall over hills) is expected in Balochistan and Khyber Pakhtunkhwa during evening/night.

**SUNDAY****21-03-2021**

Rain-thunderstorm (with gusty winds) is expected in north Balochistan, Khyber Pakhtunkhwa, Punjab, Kashmir and Gilgit-Baltistan.

**ADVISORY FOR FARMERS**

During the last week, light to moderate rainfall reported from upper/central Punjab, Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan. Light rainfall reported from northeast Baluchistan. Dry weather prevailed over south Punjab, Sindh and northwest 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 (8<sup>th</sup> - 14<sup>th</sup> March, 2021)**

Stations	Minimum /Night Time Temperature (°C)		Growth 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	14.1	12.5	106.8	38	0.01	0.9	2.9	0.9	0.0
Dalbandin	10.1	8.0	106.0	28	0.00	1.1	2.4	1.7	0.0
D.I. Khan	15.9	15.0	120.5	62	8.02	4.1	1.4	1.4	2.3
Faisalabad	16.0	14.3	126.4	58	3.20	3.0	1.3	0.3	0.5
Gawadar	15.9	15.0	131.5	74	0.00	1.6	2.0	0.0	0.3
Gilgit	7.1	5.0	52.8	51	0.02	7.3	6.7	1.1	2.3
Kalam	-1.7	-2.5	0.0	91	88.10	7.3	7.4	0.0	1.4
Khuzdar	13.5	10.5	104.3	29	0.00	0.7	2.0	0.0	2.3
Lahore	16.4	14.5	122.9	55	1.61	1.6	2.0	3.1	6.6
Malam Jabba	0.9	0.0	0.0	76	56.00	7.0	6.0	4.0	0.0
Mangla	13.5	11.7	105.0	60.1	9.83	5.4	4.3	3.1	6.0
Multan (PBO)	16.5	15.0	128.6	61	0.00	2.1	2.3	0.9	4.9
Murree	4.9	3.0	27.5	68	42.00	6.6	5.9	2.6	2.9
Muzaffarabad	9.1	7.5	69.2	71	51.00	5.7	4.9	0.0	3.1
Nokkundi	18.3	17.5	150.5	56	0.00	0.7	1.1	3.4	0.0
Nawabshah	13.9	10.0	124.0	16	0.00	0.6	0.7	2.3	0.0
Peshawar	14.3	13.0	105.2	65	6.81	4.9	5.7	0.6	2.0
Quetta	8.1	7.2	66.6	40	3.20	3.1	3.1	3.3	3.4
Rawalpindi	11.9	9.5	93.5	67	25.70	5.7	4.7	1.1	0.6
Rohri	19.4	18.5	145.4	54	0.00	1.4	0.9	4.3	15.9
Skardu	1.3	-1.1	10.8	63	6.60	7.3	7.0	0.0	0.0
Tandojam	15.9	14.5	136.8	57	0.00	0.0	0.0	1.2	0.0
Turbat	18.6	17.0	149.8	44	0.00	1.3	1.6	1.0	0.0
Usta. M	15.9	14.0	135.3	56	0.00	1.1	1.0	0.5	0.0
Zhob	7.6	6.0	81.0	49	0.00	2.4	3.4	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 سبب باب (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)