

Weekly Weather and Crop Bulletin for Pakistan

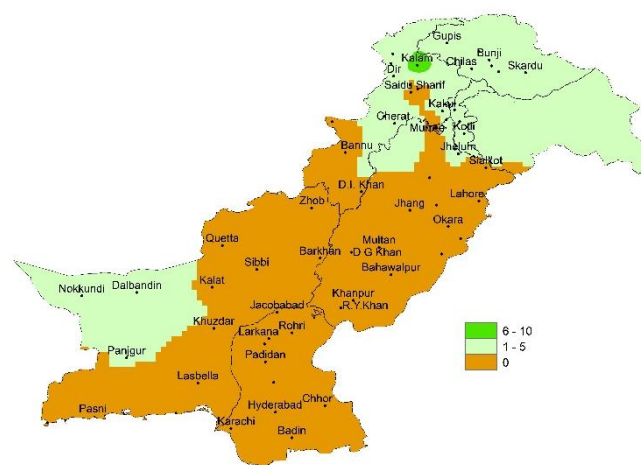
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Rainfall Distribution (mm) during the Previous Week (15th – 21st February, 2021)



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Highlights of Past Weather (15th - 21st February, 2021)

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

Rainfall reported as follows during the last week:

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

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Editor: Ruqiya Mehmood (Assistant Meteorologist)

Past Weather of Provinces (15th - 21st February, 2021)**Punjab**

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 25.8°C & 10.0°C respectively. For the recent week on average 90.1 growing degree days were accumulated. Average relative humidity recorded as 64% and wind speed in the morning/evening recorded as 0.7/2.4 Knots. During the previous week the lowest minimum temperature was recorded as 2.5°C at Murree.

Baluchistan

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 27.1°C & 8.5°C respectively. For the recent week on average 91.5 growing degree days were accumulated. Average relative humidity recorded as 42% and wind speed in the morning/evening recorded as 1.4/5.9 Knots. During the previous week the lowest minimum temperature was recorded as -3.0°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 22.3°C & 5.8°C respectively. For the recent week on average 63.3 growing degree days were accumulated. Average relative humidity recorded as 62% and wind speed in the morning/evening recorded as 1.0/1.3 Knots. During the previous week the highest precipitation was observed as 8.0 mm at Kalam while the lowest minimum temperature was recorded as -3.5°C at Parachinar.

Sindh

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 31.5°C & 13.1°C respectively. For the recent week, on average 121.1 growing degree days were accumulated. Average relative humidity recorded as 58% and wind speed in the morning/evening recorded as 1.6/2.5 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 18.8°C & 1.9°C respectively. For the recent week on average 39.5 growing degree days were accumulated. Average relative humidity recorded as 56% and wind speed in the morning/evening recorded as 0.0/1.7 Knots. During the previous week the lowest minimum temperature was recorded as -5.8°C at Skardu.

Past Weather for Major Agricultural Plains**(15th - 21st February, 2021)****Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.9/0.2 Oktas while, average relative humidity observed as 68%. Mean night time temperature recorded as 7.6°C & for the recent week 83.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.8 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.3/0.7 Oktas while, average relative humidity observed as 70%. Mean night time temperature recorded as 9.9°C & for the recent week 91.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.3 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.8/0.4 Oktas while, average relative humidity observed as 64%. Mean night time temperature recorded as 7.5°C & for the recent week 113.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.0/1.3 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.7/0.5 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 13.1°C & for the recent week 114.5 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 1.0/2.3 Oktas while, average relative humidity observed as 20%. Mean night time temperature recorded as 4.0°C & for the recent week 50.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.8/3.6 Knots.

Past Weather for Sub-Regional Agricultural Plains (15th - 21st February, 2021)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.7/1.3 Oktas while, average relative humidity observed as 64%. Mean night time temperature recorded as 11.6°C & for the recent week 100.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/4.0 Knots.

Lahore

Dry weather reported from Lahore during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 78%. Mean night time temperature recorded as 11.4°C & for the recent week 87.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/10.6 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.7/0.5 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 14.5°C & for the recent week 61.5 growing degree days accumulated. Calm wind reported in the morning/evening.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.6/1.9 Oktas while, average relative humidity observed as 50%. Mean night time temperature recorded as 3.5°C & for the recent week 36.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.0/4.0 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.7/0.4 Oktas while, average relative humidity observed as 70%. Mean night time temperature recorded as 11.1°C & for the recent week 100.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.3/2.3 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 9.1°C & for the recent week 95.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.9/4.0 Knots.

Kalam

Rainfall reported as 8.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.3/2.6 Oktas while, average relative humidity observed as 56%. Mean night time temperature recorded as -1.8°C & for the recent week 14.2 growing degree days accumulated. Calm wind reported in the morning/evening.

Gilgit

Rainfall reported as trace (not measurable) from Gilgit during the week. However, cloudiness in the morning/evening recorded as 1.7/2.6 Oktas while, average relative humidity observed as 42%. Mean night time temperature recorded as 0.4°C & for the recent week 37.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.6 Knots.

Skardu

Rainfall reported as trace (not measurable) from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.1/2.6 Oktas while, average relative humidity observed as 53%. Mean night time temperature recorded as -4.3°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 Completed.

Lower Sindh (Tandojam)

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

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

Northern Baluchistan (Quetta)

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

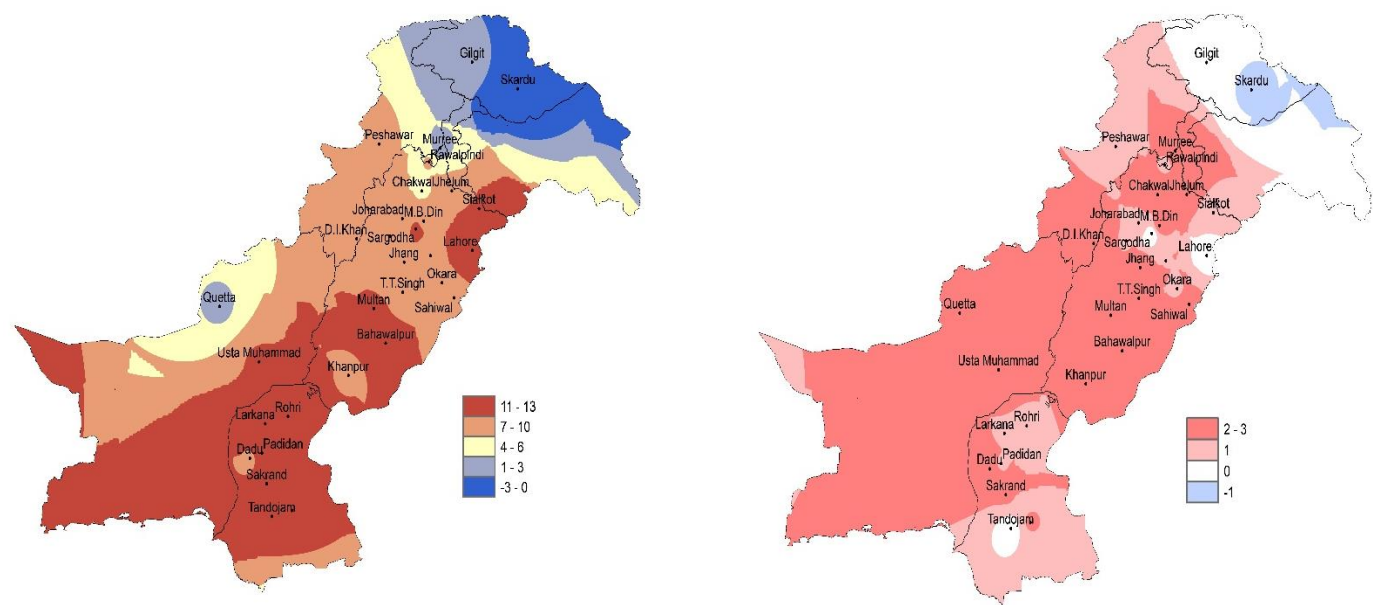
Wheat: Good, Crop Variety (Seriab-92), Third leaf Stage.

Eastern Baluchistan (Usta Muhammad)

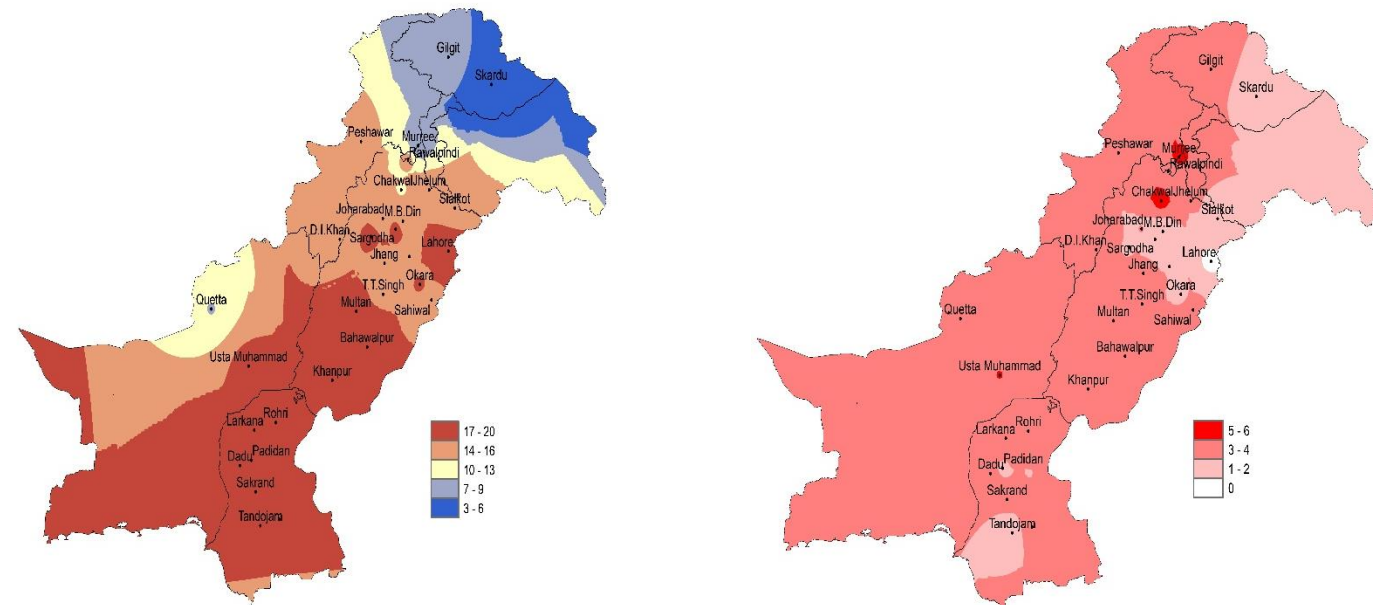
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

Wheat: Good, Shooting Stage.

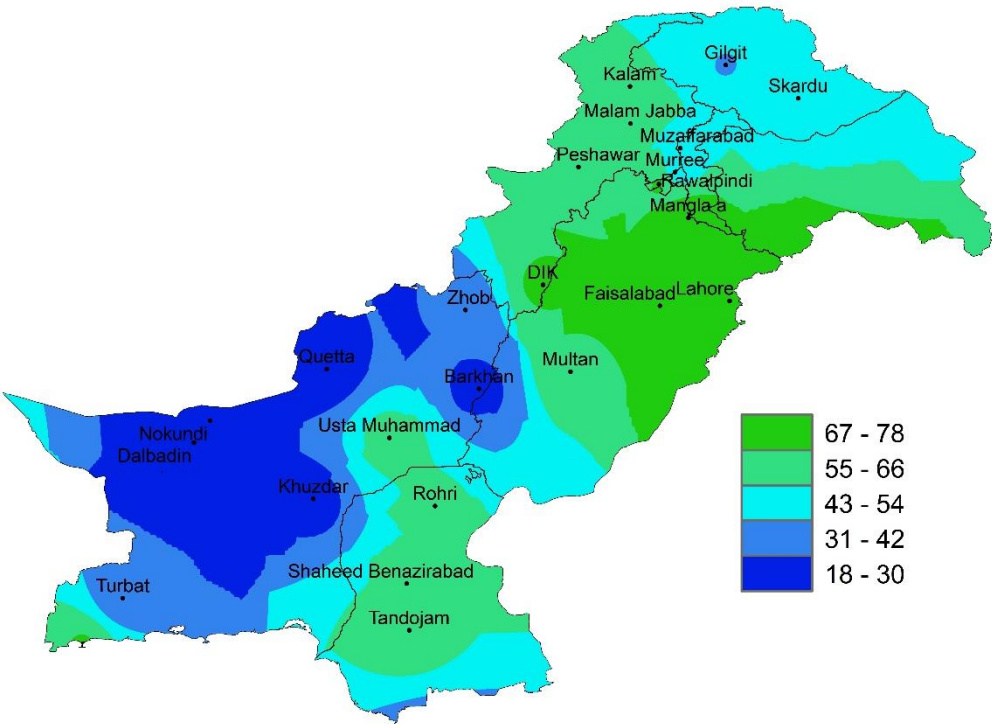
Normal & Departure of Minimum temperature (°C) for the previous week (15th – 21st February, 2021)



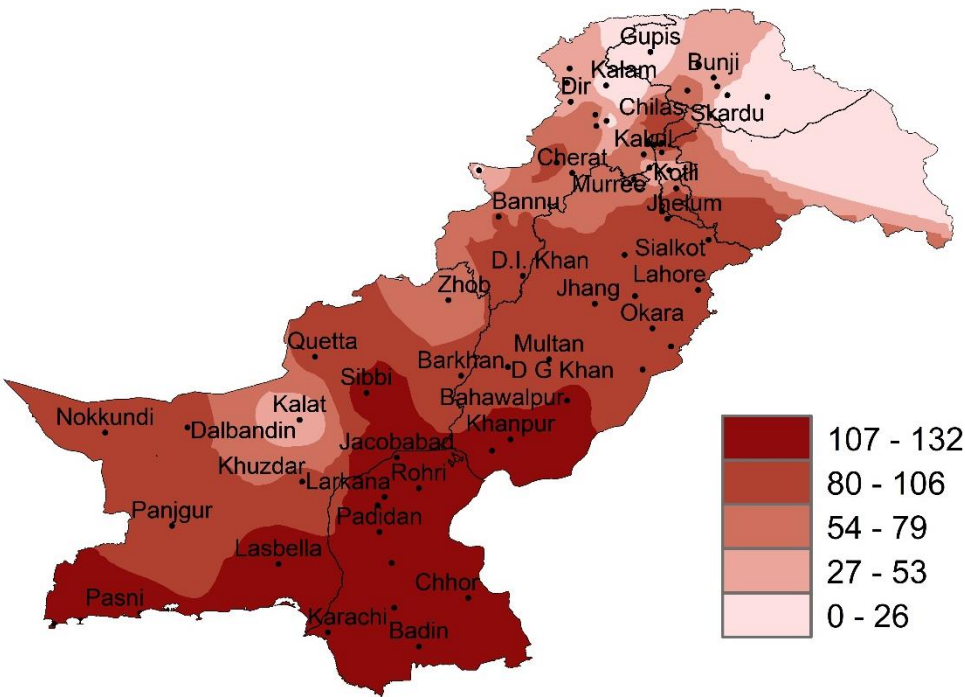
Normal & Departure of Mean temperature (°C) for the previous week (15th – 21st February, 2021)



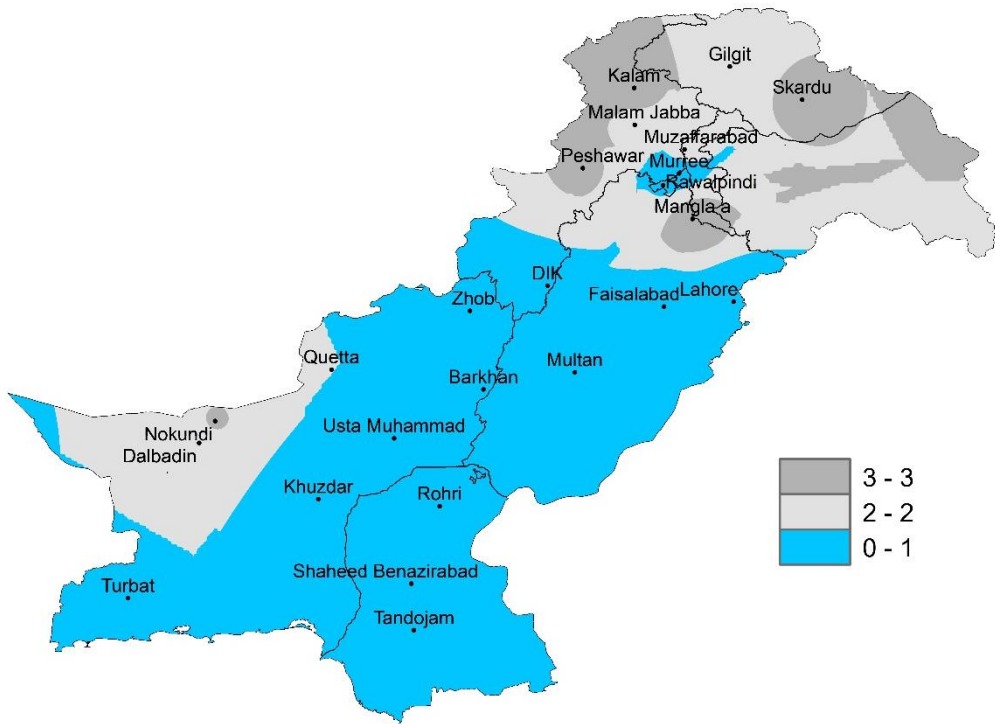
Mean Relative Humidity (%) during the previous week (15th – 21st February, 2021)



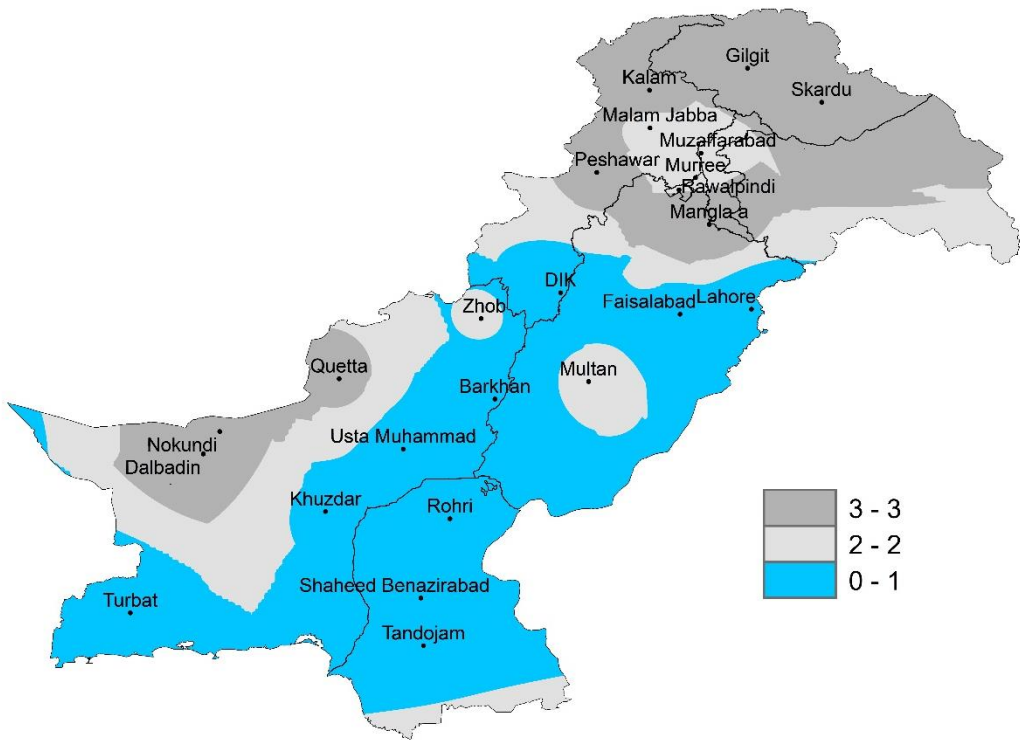
Total Growing Degree Days accumulated during the previous week (15th – 21st February, 2021)



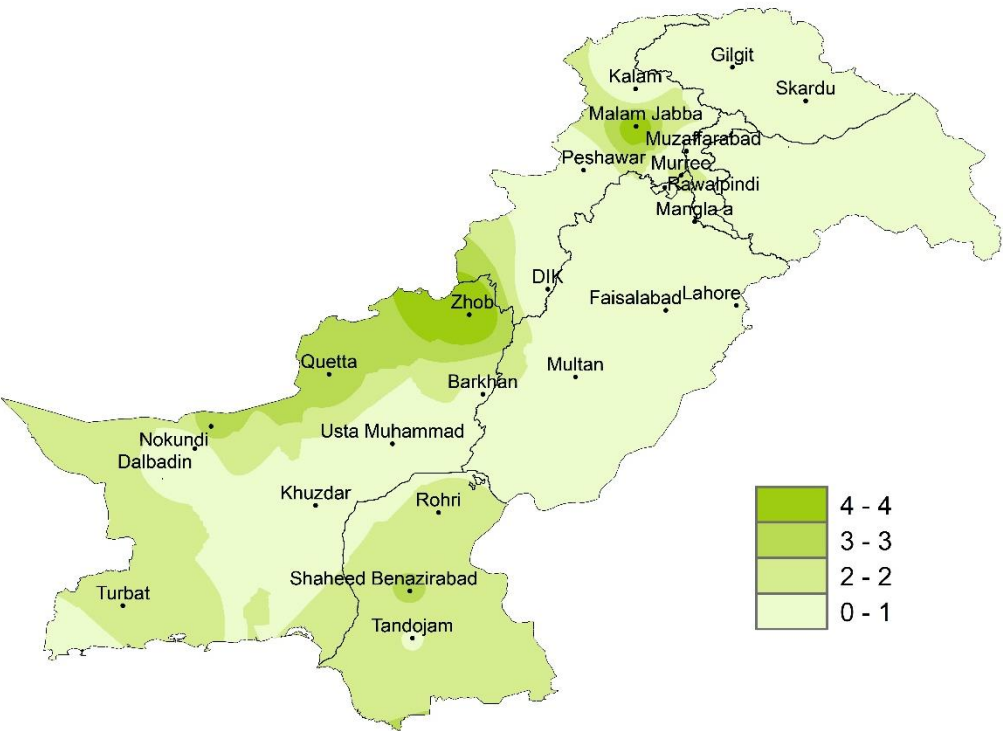
Mean Cloudiness (Oktas) at 0800PST during the previous week (15th – 21st February, 2021)



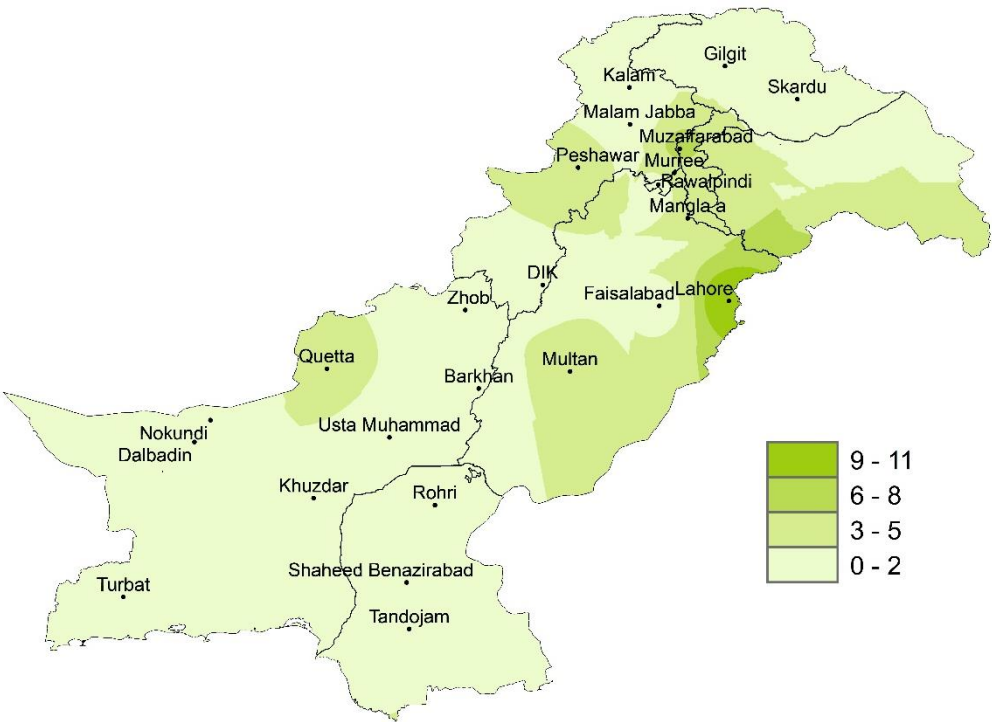
Mean Cloudiness (Oktas) at 1700PST during the previous week (15th – 21st February, 2021)



Mean Wind Speed (Knots) at 0800PST during the previous week (15th – 21st February, 2021)



Mean Wind Speed (Knots) at 1700PST during the previous week (15th – 21st February, 2021)



Weekly Weather Advisory for Farmers**(22nd – 28th February, 2021)**

Continental air is prevailing over most parts of the country. A shallow westerly wave is also present over western and upper parts of the country.

MONDAY**22-02-2021**

Cloudy weather with rain/snowfall is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan and Kashmir. Cold and dry weather is expected elsewhere in the country. However, light rain/drizzle is expected in Potohar region.

TUESDAY**23-02-2021**

Cloudy weather with rain/snowfall is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan and Kashmir. Cold and dry weather is expected elsewhere in the country. However, light rain/drizzle is expected in Potohar region. Fog is likely to prevail over plain areas of Punjab.

WEDNESDAY**24-02-2021**

Cloudy weather with rain/snowfall is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan and Kashmir. Cold and dry weather is expected elsewhere in the country. However, light rain/drizzle is expected in Potohar region. Fog is likely to prevail over plain areas of Punjab.

THURSDAY**25-02-2021**

Rain-thunderstorm with snowfall over hills is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan, Kashmir and Potohar region. Cold and dry weather is expected in other parts of the country.

FRIDAY**26-02-2021.**

Rain-thunderstorm with snowfall over hills is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan, Kashmir and Potohar region. Cold and dry weather is expected in other parts of the country.

SATURDAY**27-02-2021**

Rain-thunderstorm with snowfall over hills is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan, Kashmir and Potohar region. Cold and dry weather is expected in other parts of the country.

SUNDAY**28-02-2021**

Cold and dry weather is expected in most parts of the country. However, light rain is expected at isolated places in upper Khyber Pakhtunkhwa and Gilgit Baltistan.

ADVISORY FOR FARMERS

During the last week, light rainfall reported from upper Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan. Dry weather reported from Punjab, lower Khyber Pakhtunkhwa, 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.

National Weather Data of Selected Cities from (15th - 21st February, 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	10.0	9.0	87.0	26	0.00	0.0	0.0	0.9	0.0
Dalbandin	5.9	3.0	84.0	28	0.00	1.0	2.3	0.0	0.0
D.I. Khan	11.1	10.5	100.4	70	0.00	0.7	0.4	0.0	0.9
Faisalabad	9.9	9.0	91.9	70	0.00	0.3	0.7	0.0	0.5
Gawadar	13.1	12.0	116.0	67	0.00	0.0	0.0	0.0	0.3
Gilgit	0.4	-1.5	37.8	42	0.01	1.7	2.6	0.0	0.6
Kalam	-1.8	-3.5	14.2	56	8.00	2.3	2.6	0.0	0.0
Khuzdar	9.0	8.0	83.3	24	0.00	0.0	0.7	0.0	1.4
Lahore	11.4	10.0	87.6	78	0.00	0.0	0.0	0.0	10.6
Malam Jabba	2.2	1.5	5.8	61	0.00	1.9	1.7	4.0	0.0
Mangla	8.9	8.3	83.9	75.5	0.00	3.0	3.0	0.0	2.3
Multan (PBO)	11.6	10.8	100.6	64	0.00	0.7	1.3	0.0	4.0
Murree	3.5	2.5	36.5	50	0.00	0.6	1.9	2.0	4.0
Muzaffarabad	8.2	7.3	85.2	52	0.01	1.3	1.6	0.0	6.3
Nokkundi	11.9	11.5	122.2	55	0.00	0.6	0.3	2.3	0.0
Nawabshah	10.9	7.0	105.0	18	0.00	2.1	2.3	2.9	0.0
Peshawar	9.1	8.5	95.8	61	0.00	2.1	2.3	0.0	4.0
Quetta	4.0	1.0	50.0	20	0.00	1.0	2.3	2.8	3.4
Rawalpindi	7.6	6.9	83.6	68	0.00	0.9	2.0	0.2	0.6
Rohri	13.5	13.0	118.6	57	0.00	0.0	0.0	1.4	2.0
Skardu	-4.3	-5.8	0.0	53	0.01	2.1	2.6	0.0	0.0
Tandojam	7.5	6.5	113.0	64	0.00	0.8	0.4	1.0	0.0
Turbat	14.6	13.5	132.3	32	0.00	0.7	0.7	2.1	0.0
Usta. M	13.1	12.0	144.5	61	0.00	0.7	0.5	0.0	0.0
Zhob	2.8	2.0	61.5	33	0.00	0.3	1.1	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)