

Weekly Weather and Crop Bulletin for Pakistan

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



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Highlights of Past Weather (15th – 21st November, 2021)

Below normal night time temperatures were observed almost all over the country except lower Sindh during the last week.

Rainfall reported as follows during the last week:

1. Dry weather reported from all over the country.

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Past Weather of Provinces (15th – 21st October, 2021)**Punjab**

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 26.2°C & 9.3°C respectively. For the recent week on average 89.3 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 0.8/0.8 Knots. During the previous week the lowest minimum temperature was recorded as 3.0°C at Murree.

Baluchistan

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 24.7°C & 8.2°C respectively. For the recent week on average 83.3 growing degree days were accumulated. Average relative humidity recorded as 37% and wind speed in the morning/evening recorded as 2.2/3.0 Knots. During the previous week the lowest minimum temperature was recorded as -5.0°C at Kalat.

Khyber Pakhtunkhwa

Dry weather reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 21.8°C & 4.7°C respectively. For the recent week on average 55.7 growing degree days were accumulated. Average relative humidity recorded as 58% and wind speed in the morning/evening recorded as 0.7/0.6 Knots. During the previous week the lowest minimum temperature was recorded as -3.5°C at Kalam.

Sindh

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 29.5°C & 13.2°C respectively. For the recent week on average 114.6 growing degree days were accumulated. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 2.1/2.8 Knots. During the previous week the lowest minimum temperature was recorded as 9.0°C at Mithi.

Gilgit-Baltistan and Azad Jammu & Kashmir

Dry weather reported from Gilgit-Baltistan, Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 17.9°C & 1.5°C respectively. For the recent week on average 33.5 growing degree days were accumulated. Average relative humidity recorded as 62% and wind speed in the morning/evening recorded as 0.0/0.3 Knots. During the previous week the lowest minimum temperature was recorded as -7.2°C at Skardu.

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

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.3/0.7 Oktas while, average relative humidity observed as 69%. Mean night time temperature recorded as 5.4°C & for the recent week 73.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.5 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 67%. Mean night time temperature recorded as 9.0°C & for the recent week 93.1 growing degree days accumulated. Calm wind reported in the morning/evening.

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 61%. Mean night time temperature recorded as 13.2°C & for the recent week 111.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.6 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 57%. Mean night time temperature recorded as 12.6°C & for the recent week 108.5 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 0.0/0.7 Oktas while, average relative humidity observed as 31%. Mean night time temperature recorded as 0.9°C & for the recent week 26.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.5/2.0 Knots.

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

Dry weather reported from Multan during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 60%. Mean night time temperature recorded as 11.1°C & for the recent week 96.7 growing degree days accumulated. Calm wind reported in the morning/evening.

Lahore

Dry weather reported from Lahore during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 61%. Mean night time temperature recorded as 11.5°C & for the recent week 96.7 growing degree days accumulated. Calm wind reported in the morning/evening.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.3/0.3 Oktas while, average relative humidity observed as 38%. Mean night time temperature recorded as 5.6°C & for the recent week 60.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.1/4.4 Knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.6/0.7 Oktas while, average relative humidity observed as 35%. Mean night time temperature recorded 7.1°C & for the recent week 48.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/2.3 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, average relative humidity observed as 62%. Mean night time temperature recorded as 10.7°C & for the recent week 95.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/0.6 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.0/2.3 Oktas while, average relative humidity observed as 68%. Mean night time temperature recorded as 5.7°C & for the recent week 73.2 growing degree days accumulated. Calm wind reported in the morning/evening.

Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.0/2.0 Oktas while, average relative humidity observed as 55%. Mean night time temperature recorded as -2.4°C & for the recent week 88.8 growing degree days accumulated. Calm wind reported in the morning/evening.

Gilgit

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 0.4/1.7 Oktas while, average relative humidity observed as 67%. Mean night time temperature recorded as -1.1°C & for the recent week 34.0 growing degree days accumulated. Calm wind reported in the morning/evening.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.0/1.1 Oktas while, average relative humidity observed as 55%. Mean night time temperature recorded as -5.6°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: Very Good, Emergence Stage.

Lower Sindh (Tandojam)

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

Wheat (TD-I): Good, Emergence Stage.

Northern Baluchistan (Quetta)

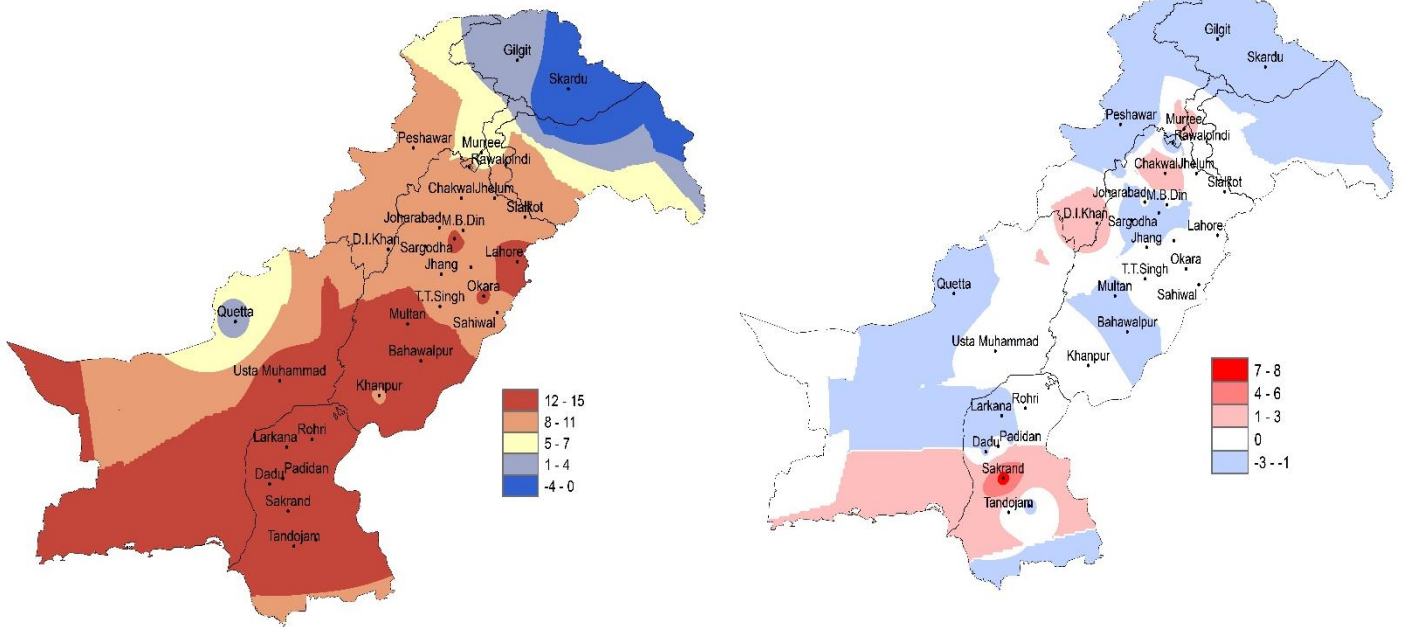
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

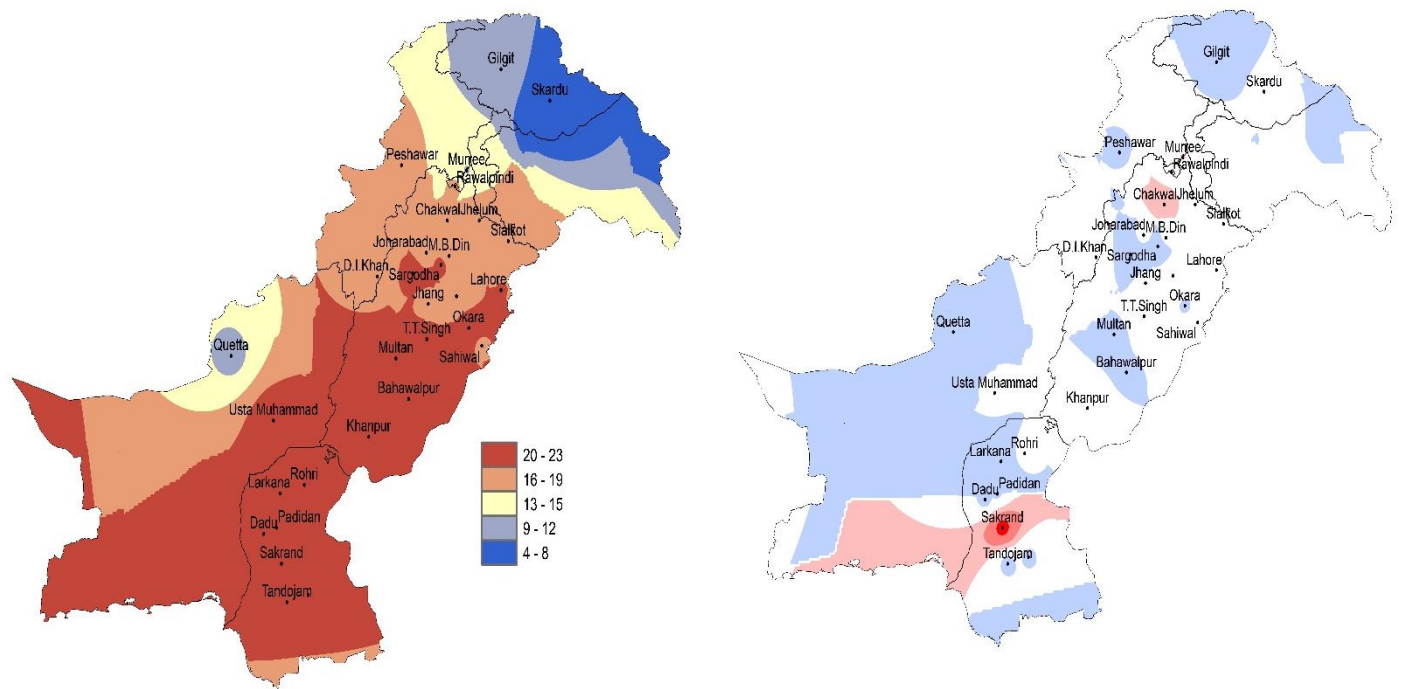
Presently Rice Crop is sown in the fields of RAMC Usta Muhammad.

Rice: Good, Full Maturity Stage.

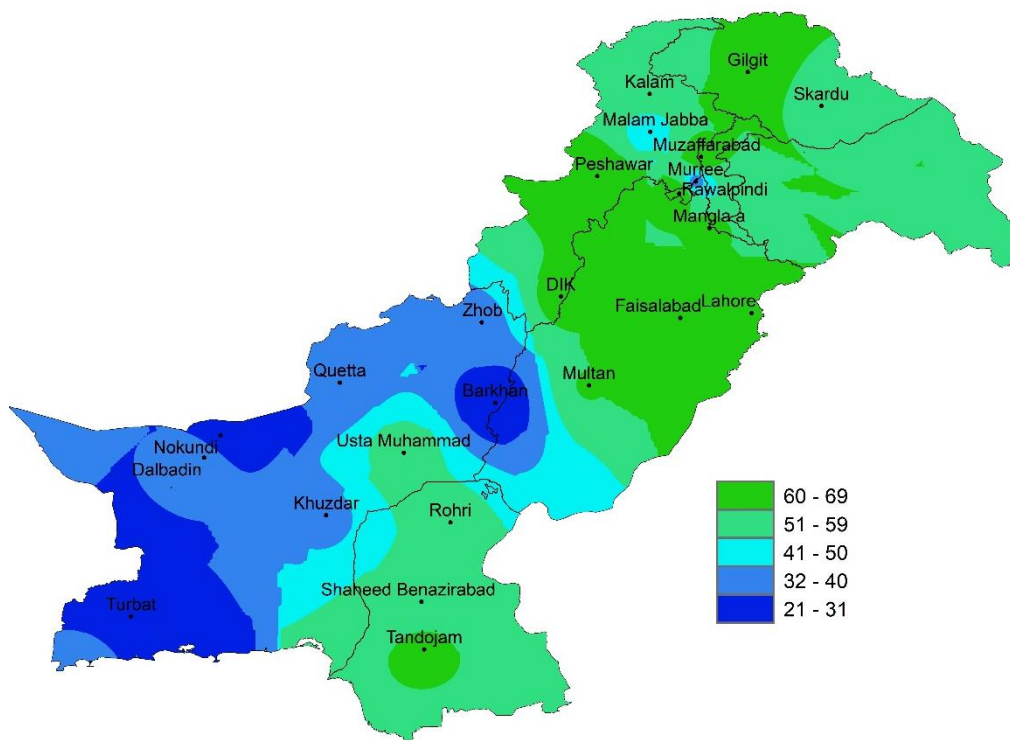
Normal & Departure of Minimum temperature (°C) for the previous week (15th – 21st November, 2021)



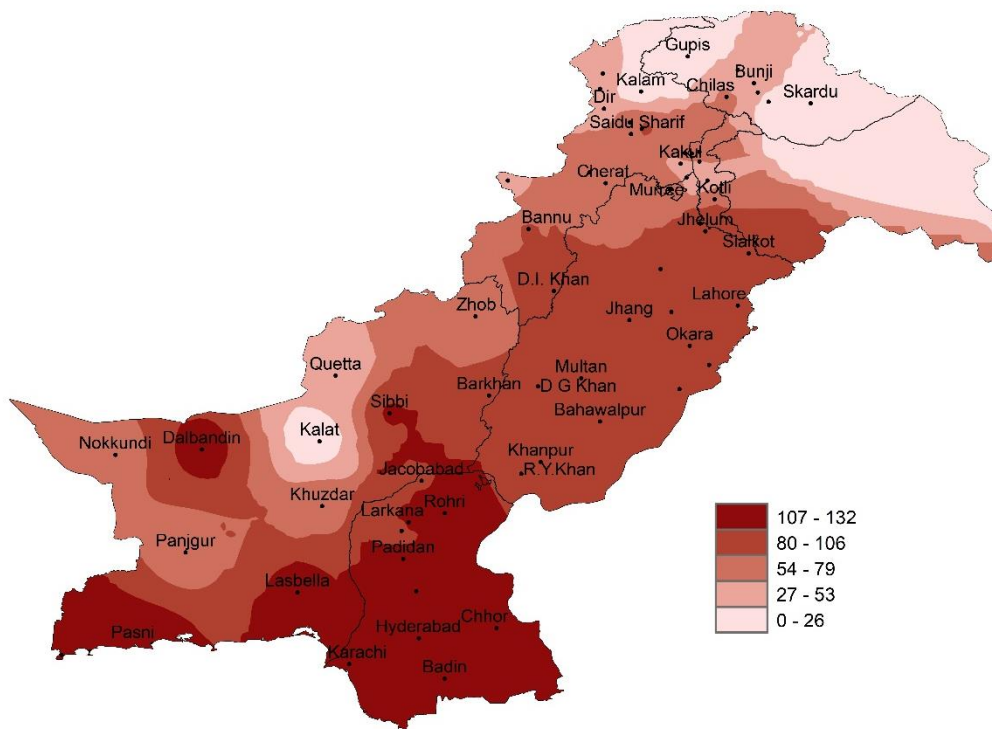
Normal & Departure of Mean temperature (°C) for the previous week (15th – 21st November, 2021)



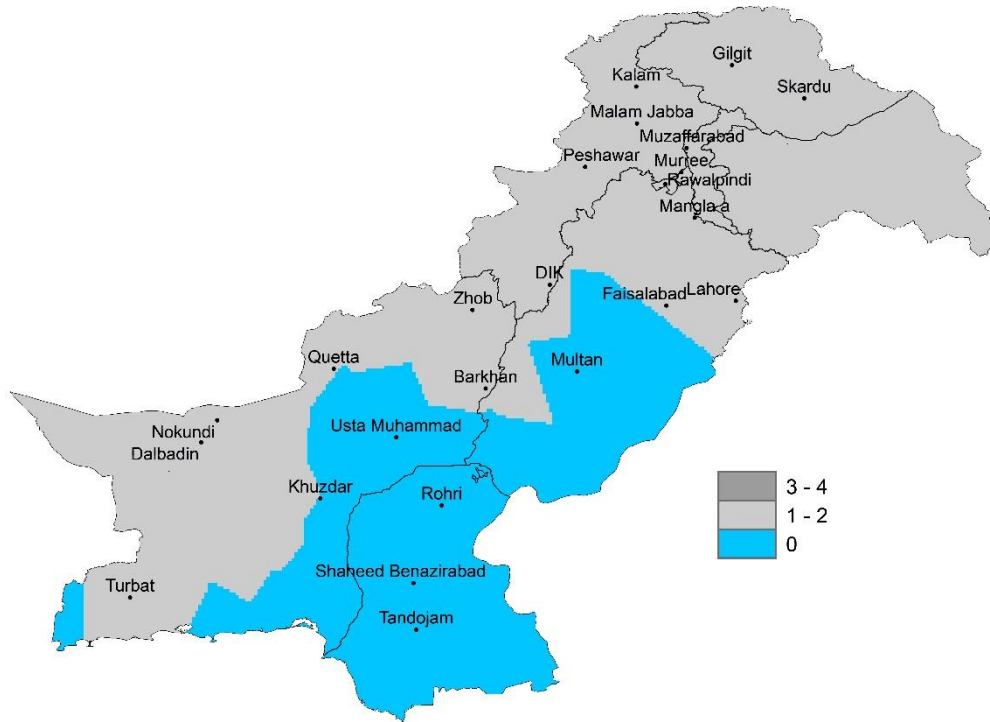
Mean Relative Humidity (%) during the previous week (15th – 21st November, 2021)



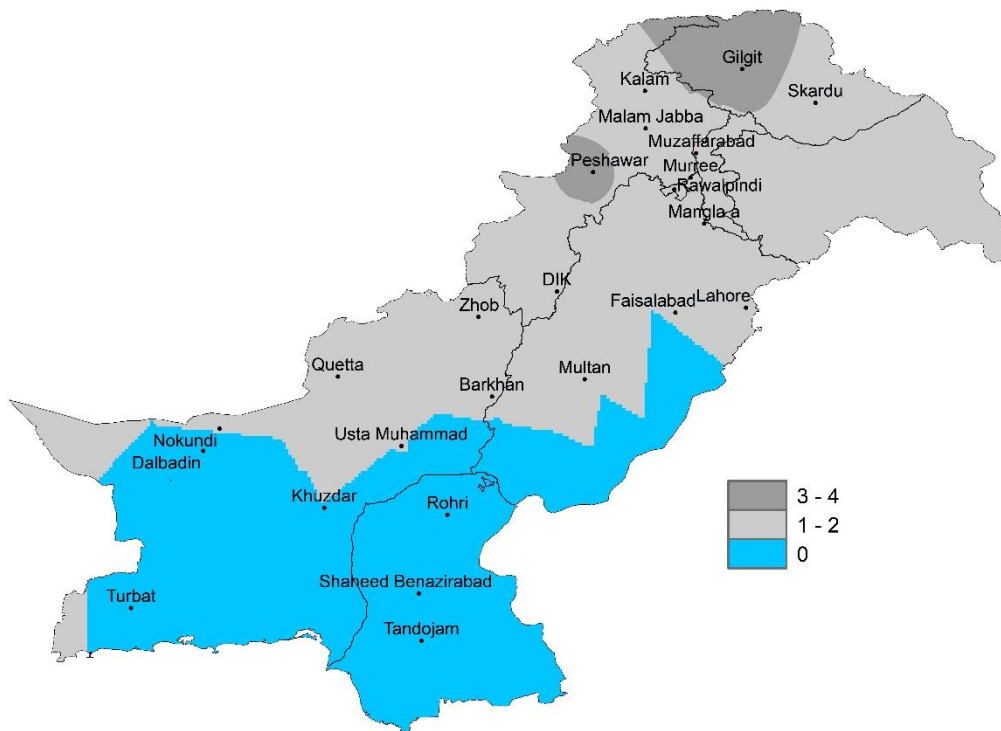
Total Growing Degree Days accumulated during the previous week (15th – 21st November, 2021)



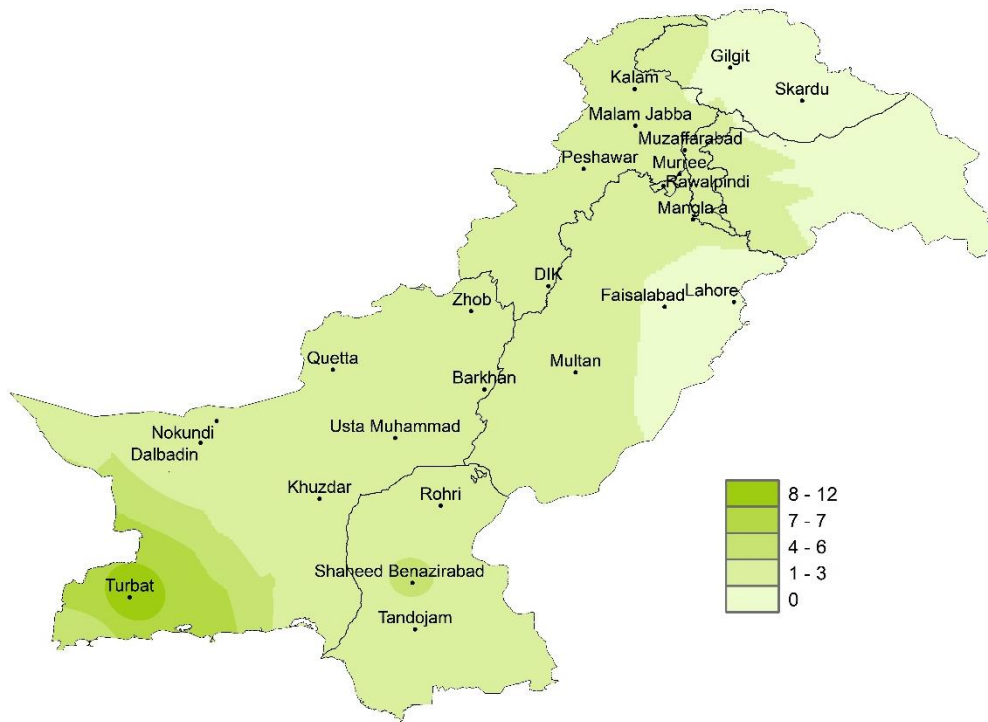
Mean Cloudiness (Oktas) at 0800PST during the previous week (15th – 21st November, 2021)



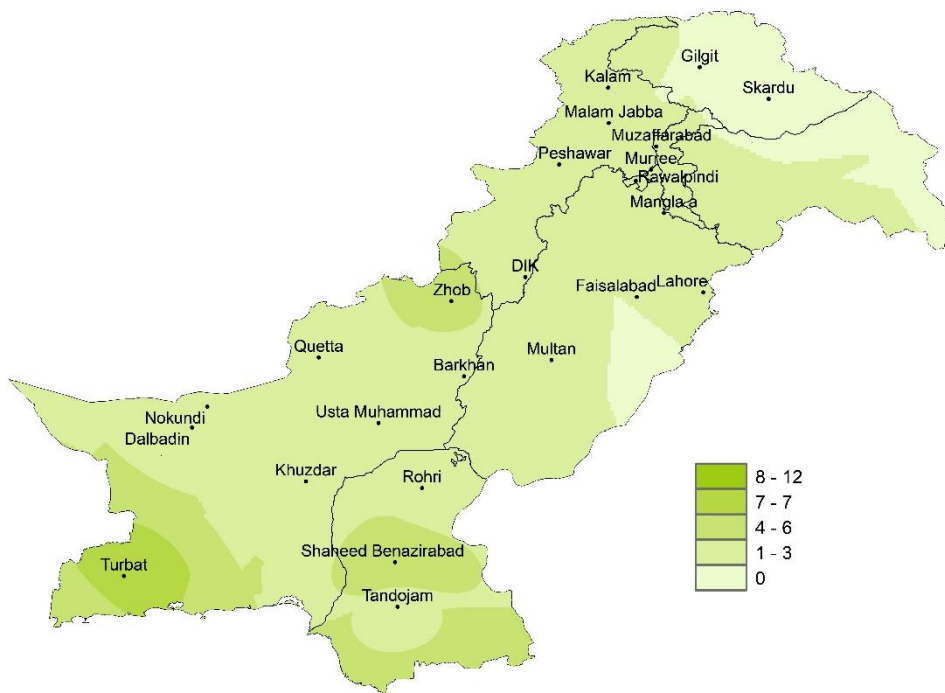
Mean Cloudiness (Oktas) at 1700PST during the previous week (15th – 21st November, 2021)



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



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



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

Continental air is prevailing over most parts of the country.

MONDAY**22-11-2021**

Mainly cold and dry weather is expected in most parts of the country. However, smog/fog is likely to prevail in plain areas of Punjab.

TUESDAY**23-11-2021**

Mainly cold and dry weather is expected in most parts of the country. However, smog/fog is likely to prevail in plain areas of Punjab.

WEDNESDAY**24-11-2021**

Mainly cold and dry weather is expected in most parts of the country. However, smog/fog is likely to prevail in plain areas of Punjab.

THURSDAY**25-11-2021**

Mainly cold and dry weather is expected in most parts of the country. However, smog/fog is likely to prevail in plain areas of Punjab.

FRIDAY**26-11-2021.**

Mainly cold and dry weather is expected in most parts of the country. However, smog/fog is likely to prevail in plain areas of Punjab.

SATURDAY**27-11-2021**

Mainly cold and dry weather is expected in most parts of the country. However, smog/fog is likely to prevail in plain areas of Punjab.

SUNDAY**28-11-2021**

Mainly cold and dry weather is expected in most parts of the country. However, smog/fog is likely to prevail in plain areas of Punjab.

ADVISORY FOR FARMERS

During the last week, dry weather reported from all over the country. Keeping in view the expected weather conditions farmers are advised the following advisories.

- ❖ Farmers are advised to cultivate Rabi Crops well in time.

National Weather Data of Selected Cities from (15th – 21st November, 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	10.6	9.0	86.5	20.9	0.0	0.0	0.0	2.0	0.3
Dalbandin	***	***	***	38.2	0.0	0.4	0.0	0.9	1.4
D.I.Khan	10.7	10.0	95.8	62.7	0.0	0.0	0.6	0.6	0.6
Faisalabad	9.0	8.0	93.1	67.0	0.0	0.0	0.0	0.0	0.0
Gawadar	15.4	15.0	127.3	34.1	0.0	0.0	0.0	4.6	4.6
Gilgit	-1.9	-3.5	26.0	63.6	0.0	1.6	3.0	0.0	0.0
Kalam	9.6	9.0	88.8	55.5	0.0	2.0	2.0	0.0	0.0
Khuzdar	5.6	4.5	69.0	37.6	0.0	0.0	0.0	0.0	0.0
Lahore	11.5	10.8	96.9	61.3	0.0	0.0	0.0	0.0	0.0
Malam Jabba	4.1	4.0	0.0	44.5	0.0	1.1	1.1	2.3	2.0
Mangla	6.8	6.1	82.1	61.5	0.0	0.6	0.3	0.0	1.1
Multan	11.1	10.6	96.7	60.4	0.0	0.0	0.0	0.0	0.0
Murree	7.1	6.5	48.6	35.2	0.0	0.7	0.7	2.3	2.3
Muzaffarabad	5.6	4.7	59.7	69.1	0.0	0.9	0.6	0.0	0.0
Nawabshah	12.3	11.8	111.8	55.6	0.0	0.0	0.0	3.4	5.4
Nokkundi	6.6	4.5	68.8	21.1	0.0	0.7	0.0	2.3	2.6
Peshawar	5.7	5.0	73.2	68.4	0.0	1.0	2.3	0.0	0.0
Quetta	0.9	-0.5	26.3	31.0	0.0	0.0	0.7	1.5	2.0
Rawalpindi	5.4	4.5	73.3	69.5	0.0	0.3	0.7	0.2	0.5
Rohri	13.9	13.0	113.1	53.6	0.0	0.0	0.0	2.0	1.4
Skardu	-5.6	-7.2	0.0	55.5	0.0	2.0	1.1	0.0	0.0
Tandojam	13.2	12.5	11.2	61.0	0.0	0.0	0.0	0.9	1.6
Turbat	15.6	14.0	125.5	21.5	0.0	0.0	0.0	10.1	7.4
Usta Muhammad	12.6	12.0	108.5	56.5	0.0	0.0	0.0	0.0	0.0
Zhob	5.6	5.0	60.0	38.0	0.0	0.3	0.3	2.1	4.4

*** 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)