

Weekly Weather and Crop Bulletin for Pakistan

NATIONAL AGROMET CENTRE PAKISTAN

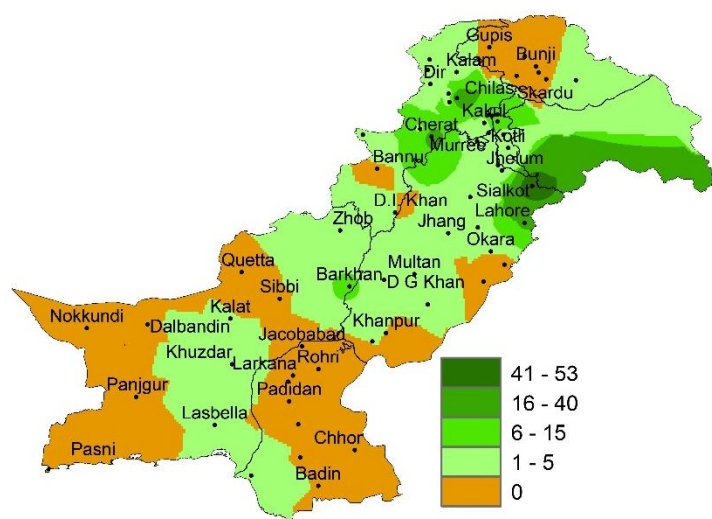
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Rainfall Distribution (mm) during the Previous Week (16th – 22nd August, 2021)



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Highlights of Past Weather (16th – 22nd August, 2021)

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

Rainfall reported as follows during the last week:

1. Light to moderate rainfall reported from upper Punjab, upper Khyber Pakhtunkhwa, and Kashmir.
2. Light rainfall reported from northeast Baluchistan.

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Past Weather of Provinces (16th – 22nd August, 2021)**Punjab**

Light to moderate rainfall reported from upper Punjab during the week. Weekly maximum and minimum temperatures recorded as 37.3°C & 26.4°C respectively. For the recent week on average 188.0 growing degree days were accumulated. Average relative humidity recorded as 64% and wind speed in the morning/evening recorded as 1.6/3.8 Knots. During the previous week the highest precipitation was observed as 53.5 mm at Sialkot while the highest maximum temperature was recorded as 42.5°C at Bhakkar.

Baluchistan

Light rainfall reported from northeast Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 36.2°C & 23.3°C respectively. For the recent week on average 173.1 growing degree days were accumulated. Average relative humidity recorded as 47% and wind speed in the morning/evening recorded as 1.0/7.2 Knots. During the previous week the highest precipitation was observed as 6.0 mm at Barkhan while the highest maximum temperature was recorded as 44.0°C at Sibbi.

Khyber Pakhtunkhwa

Light to moderate rainfall reported from upper Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 33.8°C & 19.4°C respectively. For the recent week on average 151.4 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 1.0/2.1 Knots. During the previous week the highest precipitation was observed as 29.0 mm at Malamjabba while the highest maximum temperature was recorded as 41.5°C at D.I.Khan.

Sindh

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures

recorded as 38.0°C & 26.2°C respectively. For the recent week, on average 189.4 growing degree days were accumulated. Average relative humidity recorded as 62% and wind speed in the morning/evening recorded as 4.1/5.0 Knots. During the previous week the highest maximum temperature was recorded as 42.0°C at Sukkur.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall reported from Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 32.9°C & 17.6°C respectively. For the recent week on average 141.8 growing degree days were accumulated. Average relative humidity recorded as 50% and wind speed in the morning/evening recorded as 1.0/2.2 Knots. During the previous week the highest precipitation was observed as 14.5 mm at Garhi Dupatta while the highest maximum temperature was recorded as 40.0°C at Chillas.

Past Weather for Major Agricultural Plains**(16th – 22nd August, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 0.5 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.0/2.0 Oktas while, average relative humidity observed as 63%. Mean day time temperature recorded as 36.5°C & for the recent week 172.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.5 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.7/0.7 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 38.1°C & for the recent week 192.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/1.0 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 71%. Mean day time temperature recorded as 36.4°C & for the recent week 182.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.7/4.9 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 1.5/0.0 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 39.2°C & for the recent week 196.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/2.0 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/2.7 Oktas while, average relative humidity observed as 31%. Mean day time temperature recorded as 32.8°C & for the recent week 141.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/3.8 Knots.

Past Weather for Sub-Regional Agricultural Plains (16th – 22nd August, 2021)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 1.0/2.1 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 37.8°C & for the recent week 191.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.6/6.6 Knots.

Lahore

Rainfall reported as 15.8 mm from Lahore during the week; cloudiness in the morning/evening recorded as 2.2/4.0 Oktas while, average relative humidity observed as 67%. Mean day time temperature recorded as 35.8°C & for the recent week 189.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/3.7 Knots.

Zhob

Rainfall reported as 1.0 mm from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.9/2.9 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 35.3°C & for the recent week 168.0 growing degree days accumulated. cloudiness in the morning/evening recorded as 2.6/7.0 Oktas.

Murree

Rainfall reported as 3.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 0.9/4.1 Oktas while, average relative humidity observed as 72%. Mean day time temperature recorded as 24.9°C & for the recent week 105.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/1.1 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.4/0.4 Oktas while, average relative humidity observed as 64%. Mean day time temperature recorded as 40.1°C & for the recent week 204.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/0.8 Knots.

Peshawar

Rainfall reported as 4.0 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.4/2.1 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 38.2°C & for the recent week 184.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/2.3 Knots.

Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.0/4.3 Oktas while, average relative humidity observed as 32%. Mean day time temperature recorded as 27.0°C & for the recent week 90.0 growing degree days accumulated. Calm wind recorded in the morning/evening.

Gilgit

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 2.9/4.7 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 34.9°C & for the recent week 144.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/0.6 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 3.4/2.6 Oktas while, average relative humidity observed as 32%. Mean day time temperature recorded as 30.8°C & for the recent week 118.6 growing degree days accumulated. Calm wind recorded 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 Cotton crop is grown in the fields of RAMC Faisalabad.

Cotton: Very Good, Flowering Stage Completed.

Lower Sindh (Tandojam)

Presently Cotton crop is grown in the fields of RAMC Tandojam.

Cotton: Crop Variety (Sindh-1), Boll Opening Stage.

Northern Baluchistan (Quetta)

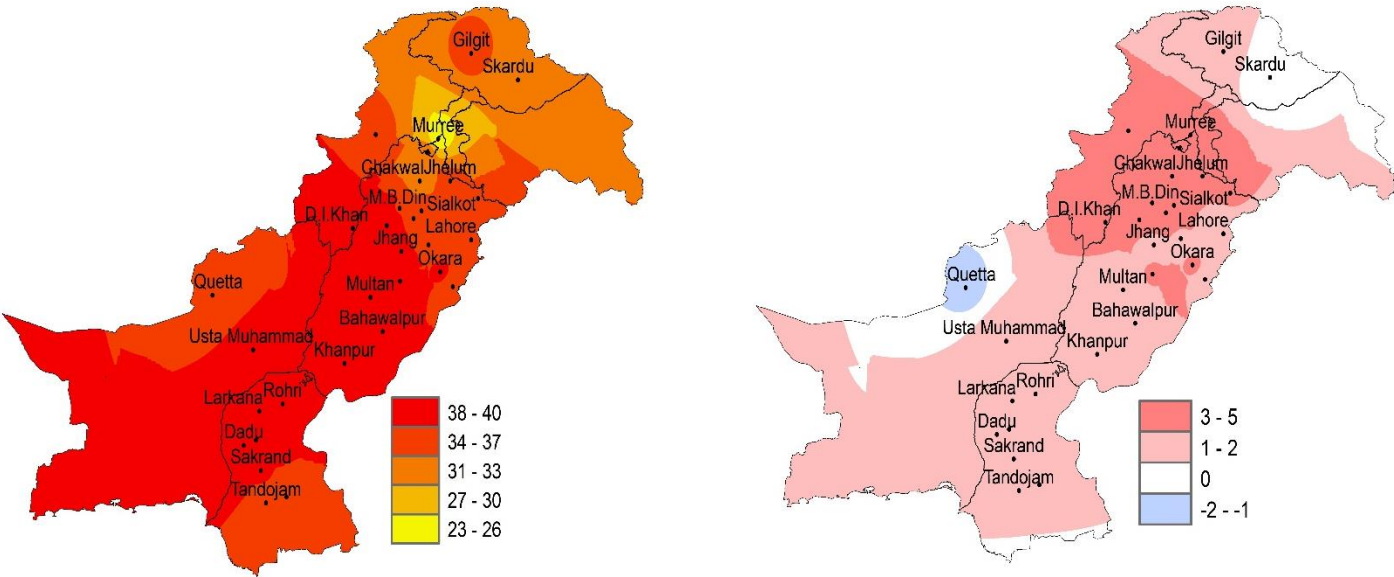
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

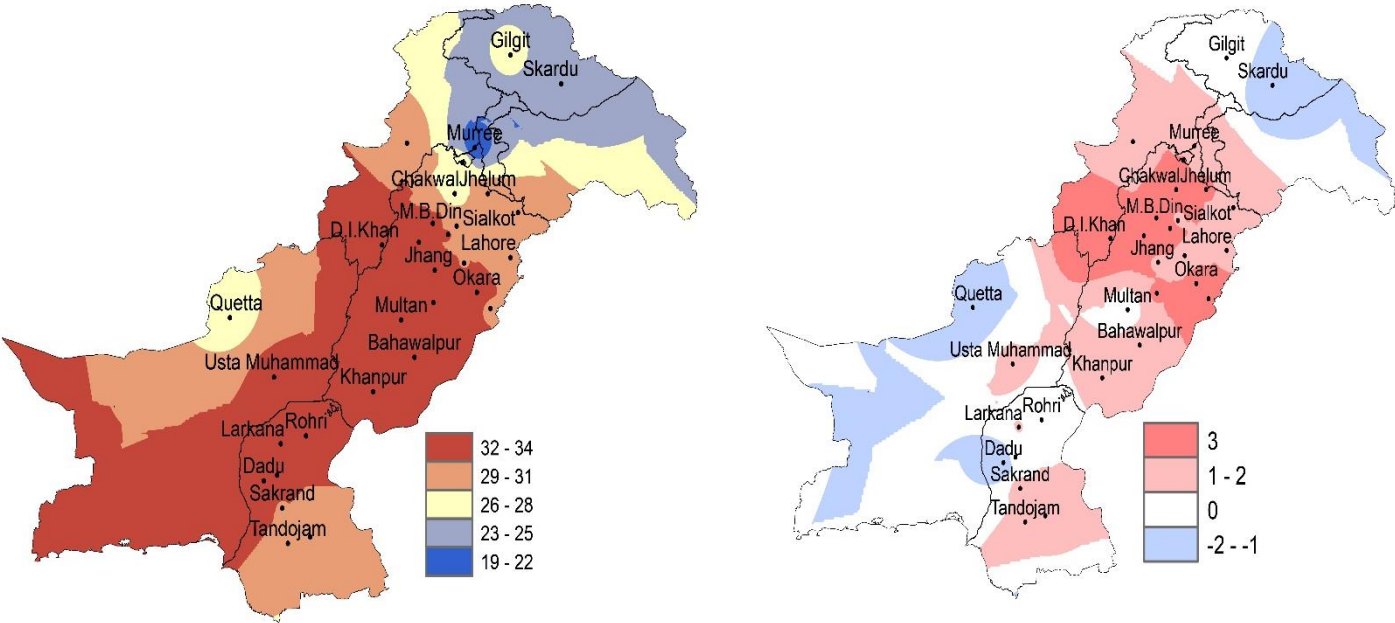
Presently Rice crop is sown in the fields of RAMC Usta Muhammad.

Rice: Good, Third Leaf Stage.

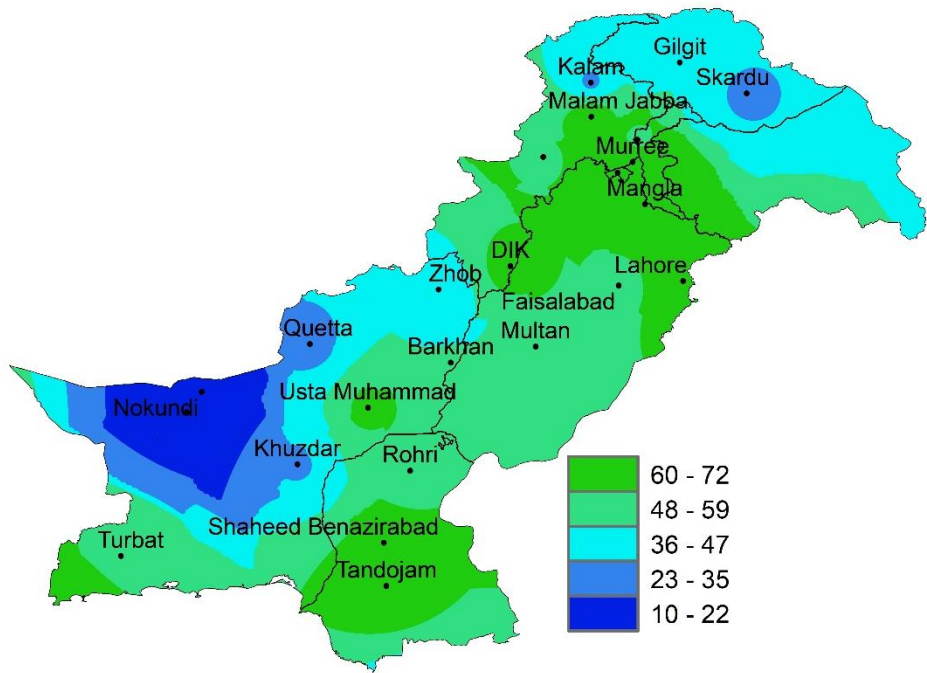
Normal & Departure of Maximum temperature (°C) for the previous week (16th – 22nd August, 2021)



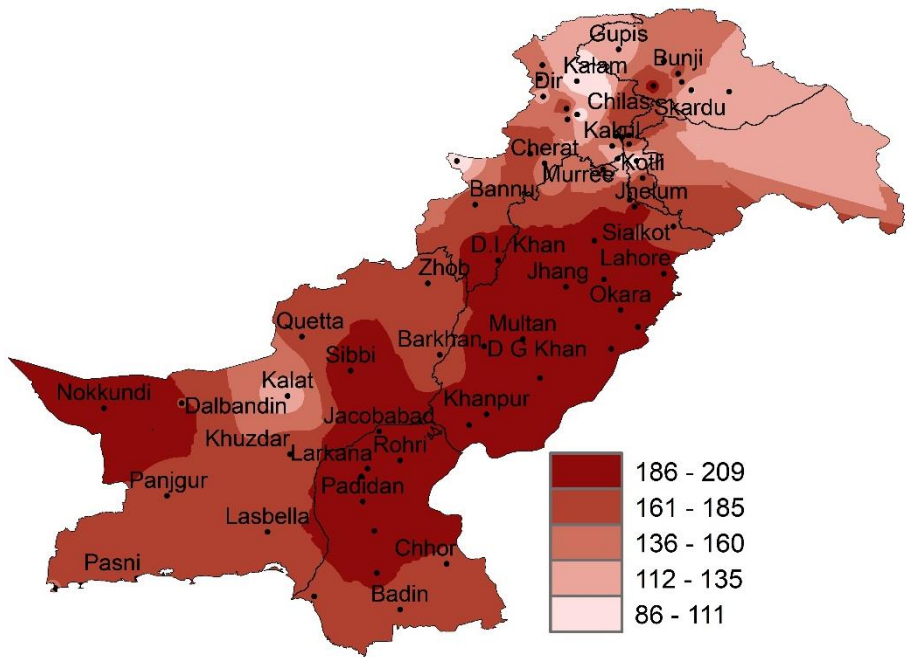
Normal & Departure of Mean temperature (°C) for the previous week (16th – 22nd August, 2021)



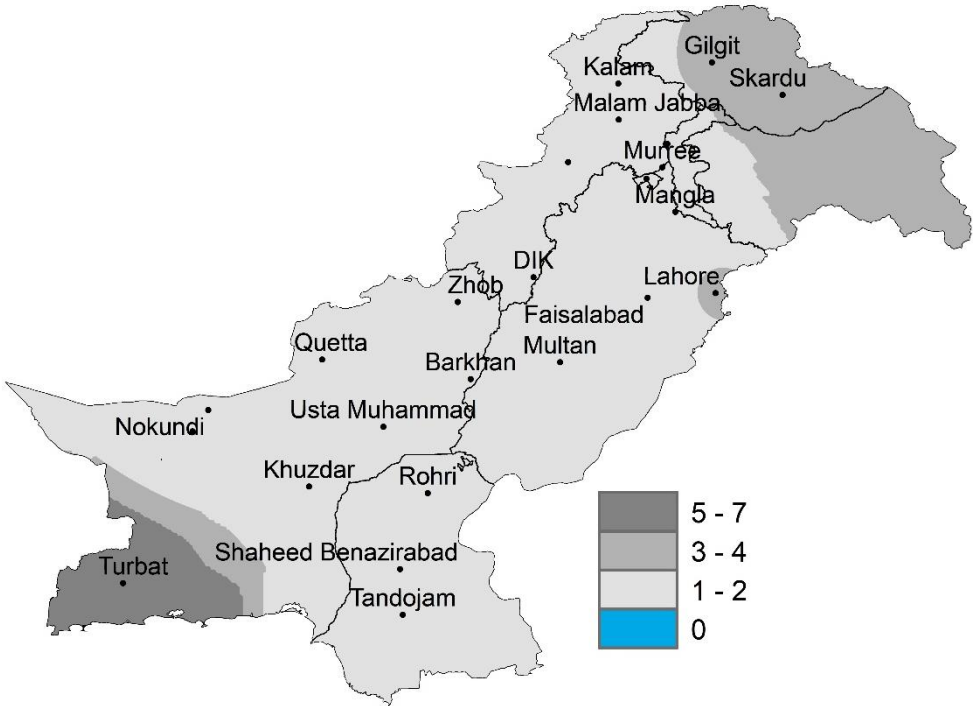
Mean Relative Humidity (%) during the previous week (16th – 22nd August, 2021)



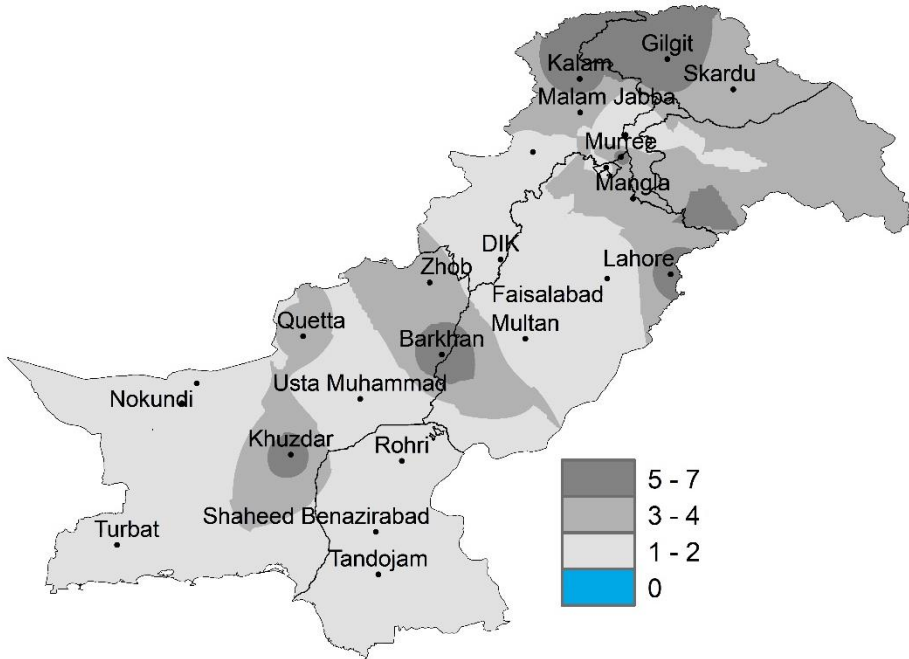
Total Growing Degree Days accumulated during the previous week (16th – 22nd August, 2021)



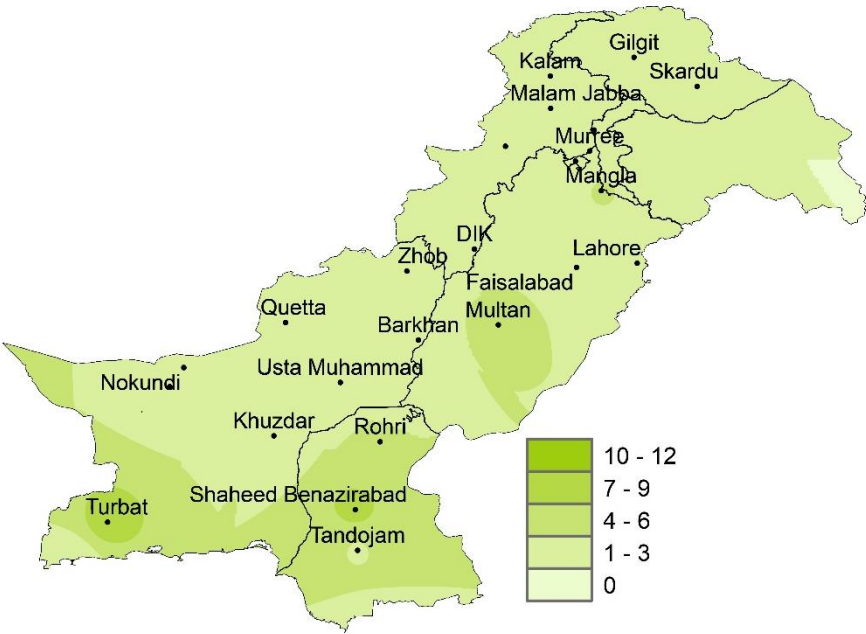
Mean Cloudiness (Oktas) at 0800PST during the previous week (16th – 22nd August, 2021)



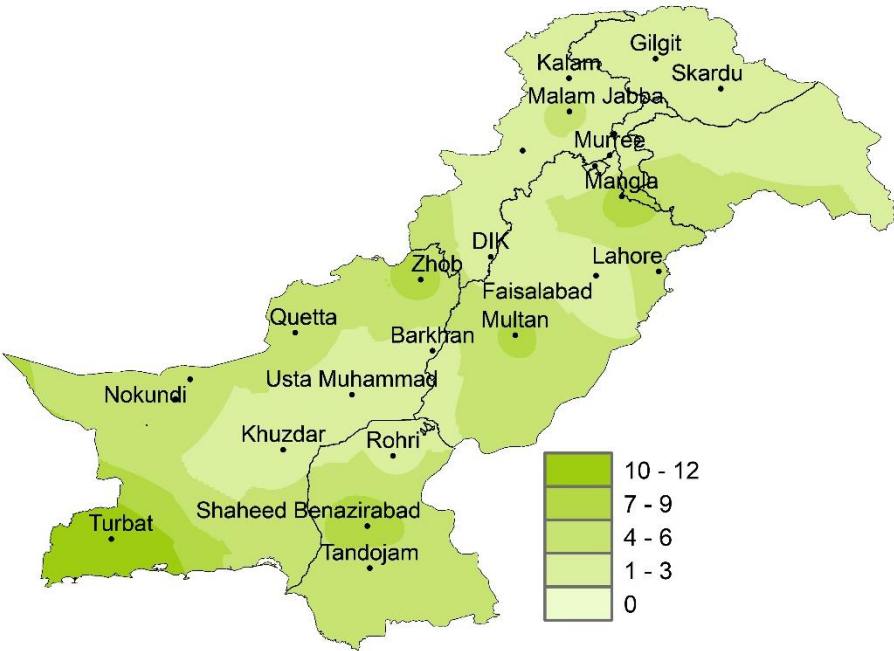
Mean Cloudiness (Oktas) at 1700PST during the previous week (16th – 22nd August, 2021)



Mean Wind Speed (Knots) at 0800PST during the previous week (16th – 22nd August, 2021)



Mean Wind Speed (Knots) at 1700PST during the previous week (16th – 22nd August, 2021)



Weekly Weather Advisory for Farmers**(23rd – 29th August, 2021)**

Weak monsoon currents are still penetrating eastern parts of the country during next 03 days. More monsoon currents are likely to enter upper parts from Friday and may strengthen during the weekend.

MONDAY**23-08-2021**

Mainly hot and humid weather is expected in most plain areas of the country. However, rain-wind-thundershower is expected at isolated places in upper Khyber Pakhtunkhwa, northeast Punjab and Kashmir.

TUESDAY**24-08-2021**

Mainly hot and humid weather is expected in most plain areas of the country. However, rain-wind-thundershower is expected at isolated places in Kashmir its adjoining areas.

WEDNESDAY**25-08-2021**

Mainly hot and very humid weather is likely to prevail over most parts of the country. However, rain-wind-thundershower is expected in upper Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir during evening/night.

THURSDAY**26-08-2021**

Mainly hot and very humid weather is likely to prevail over most parts of the country. However, rain-wind-thundershower is expected in upper Khyber Pakhtunkhwa, Pothohar region, Gilgit Baltistan and Kashmir during evening/night.

FRIDAY**27-08-2021.**

Rain-wind-thundershower is expected in upper Punjab, Khyber Pakhtunkhwa, Gilgit Baltistan, Islamabad and Kashmir. Hot and humid weather is likely to prevail elsewhere in the country.

SATURDAY**28-08-2021**

Rain-wind-thundershower is expected in upper Punjab, upper Khyber Pakhtunkhwa, Gilgit Baltistan, Islamabad and Kashmir. Hot and humid weather is likely to prevail elsewhere in the country.

SUNDAY**29-08-2021**

Rain-wind-thundershower is expected in Islamabad, Punjab, Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir. Dry weather is expected elsewhere in the country.

ADVISORY FOR FARMERS

During the last week, light to moderate rainfall reported from upper Punjab, upper Khyber Pakhtunkhwa and Kashmir. Light rainfall reported from northeast Baluchistan. Keeping in view the expected weather conditions farmers are advised the following advisories.

- ❖ Farmers are advised to irrigate the crops according to its need.

National Weather Data of Selected Cities from (16th – 22nd August, 2021)

Stations	Maximum /Day 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	Maximum							
Barkhan	35.2	168.5	48	6.0	1.3	4.1	0.0	1.7	35.2
Dalbandin	41.6	184.5	17	0.0	0.0	0.7	1.1	3.1	41.6
D.I. Khan	40.1	204.5	64	0.0	1.4	0.4	0.8	0.8	40.1
Faisalabad	38.1	192.6	56	0.0	0.7	0.7	0.8	1.0	38.1
Gawadar	32.9	172.3	70	0.0	6.7	1.6	0.0	12.3	32.9
Gilgit	34.9	144.8	47	0.0	2.9	4.7	0.9	0.6	34.9
Kalam	27.0	90.0	32	0.0	0.0	4.3	0.0	0.0	27.0
Khuzdar	36.5	171.7	33	3.2	0.6	3.9	0.6	2.3	36.5
Lahore	35.8	189.0	67	15.8	2.2	4.0	0.0	3.7	35.8
Malam Jabba	22.7	84.3	70	29.0	0.6	2.6	2.6	4.3	22.7
Mangla	36.5	180.8	66	0.0	1.5	3.0	3.3	8.3	36.5
Multan (PBO)	37.8	191.9	54	0.0	1.0	2.1	4.6	6.6	37.8
Murree	24.9	105.5	72	3.0	0.9	4.1	0.3	1.1	24.9
Muzaffarabad	37.8	168.8	57	12.0	0.7	0.4	0.0	0.0	37.8
Nokkundi	40.0	195.3	61	0.0	0.7	0.7	6.6	7.4	40.0
Nawabshah	42.0	202.5	10	0.0	0.6	0.3	1.4	3.1	42.0
Peshawar	38.2	184.2	57	4.0	0.4	2.1	0.6	2.3	38.2
Quetta	32.8	141.3	31	0.0	0.0	2.7	0.6	3.8	32.8
Rawalpindi	36.5	172.2	63	0.5	0.0	2.0	0.0	0.5	36.5
Rohri	39.8	199.5	56	0.0	1.9	0.0	3.1	2.6	39.8
Skardu	30.8	118.6	32	0.0	3.4	2.6	0.0	0.0	30.8
Tandojam	36.4	182.8	71	0.0	0.0	0.4	2.7	4.9	36.4
Turbat	38.6	191.8	52	0.0	7.0	0.7	7.3	9.0	38.6
Usta. M	39.2	196.3	62	0.0	1.5	0.0	0.8	2.0	39.2
Zhob	35.3	168.0	37	1.0	0.9	2.9	2.6	7.0	35.3

*** 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 2014-2012)