

Weekly Weather and Crop Bulletin for Pakistan

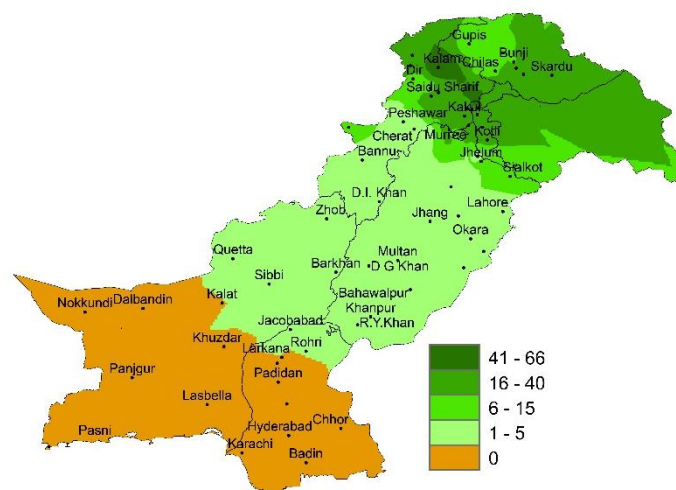
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Rainfall Distribution (mm) during the Previous Week (5th – 11th April, 2021)



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Highlights of Past Weather (5th – 11th April, 2021)

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

Rainfall reported as follows during the last week:

1. Light to moderate rainfall reported from Punjab, Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan.
2. Light rainfall reported from a few stations in northeast Baluchistan and upper Sindh.

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

Editor: Ruqiya Mehmood (Assistant Meteorologist)

Past Weather of Provinces (5th – 11th April, 2021)**Punjab**

Light to moderate rainfall reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 35.4°C & 22.4°C respectively. For the recent week on average 136.7 growing degree days were accumulated. Average relative humidity recorded as 41% and wind speed in the morning/evening recorded as 1.6/4.3 Knots. During the previous week the highest precipitation was observed as 38.0 mm at Murree while the highest maximum temperature was recorded as 42.1°C at R.Y.Khan.

Baluchistan

Light rainfall reported from one to two stations in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 33.5°C & 17.9°C respectively. For the recent week on average 136.8 growing degree days were accumulated. Average relative humidity recorded as 38% and wind speed in the morning/evening recorded as 1.5/8.6 Knots. During the previous week the highest precipitation was observed as 5.0 mm at Barkhan while the highest maximum temperature was recorded as 41.5°C at Lasbella.

Khyber Pakhtunkhwa

Light to moderate rainfall reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 29.3°C & 15.6°C respectively. For the recent week on average 84.5 growing degree days were accumulated. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 2.1/1.9 Knots. During the previous week the highest precipitation was observed as 66.2 mm at Kalam while the highest maximum temperature was recorded as 36.5°C at D.I.Khan.

Sindh

Hot & dry weather reported from upper Sindh during the week. Weekly maximum and minimum temperatures recorded as 36.0°C & 25.1°C

respectively. For the recent week, on average 178.0 growing degree days were accumulated. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 2.8/3.8 Knots. During the highest precipitation was observed as 1.0 mm at Jacobabad while the maximum temperature was recorded as 44.0°C at Chhor.

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 24.9°C & 12.0°C respectively. For the recent week on average 62.3 growing degree days were accumulated. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 0.7/2.0 Knots. During the previous week the highest precipitation was observed as 37.0 mm at Muzaffarabad while the highest maximum temperature was recorded as 32.2°C at Kotli.

Past Weather for Major Agricultural Plains**(5th – 11th April, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 9.6 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 1.1/3.4 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 30.6°C & for the recent week 121.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/0.9 Knots.

Faisalabad (Central Punjab)

Rainfall reported as 1.4 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 2.1/2.4 Oktas while, average relative humidity observed as 41%. Mean day time temperature recorded as 33.4°C & for the recent week 143.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.7/2.3 Knots.

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 45%. Mean day time temperature recorded as 39.1°C & for the recent week 161.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/3.1 Knots.

Usta Muhammad (Eastern Baluchistan)

Rainfall reported as 1.0 mm from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.4/0.2 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 38.7°C & for the recent week 170.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.7/1.4 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 1.0/3.3 Oktas while, average relative humidity observed as 21%. Mean day time temperature recorded as 24.7°C & for the recent week 91.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.2/4.7 Knots.

Past Weather for Sub-Regional Agricultural Plains (5th – 11th April, 2021)**Multan**

Rainfall reported as 3.7 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 1.4/2.6 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 33.6°C & for the recent week 149.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.7/7.4 Knots.

Lahore

Rainfall reported as 1.8 mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 3.7/2.0 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 33.5°C & for the recent week 148.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.7/3.4 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 1.7/3.4 Oktas while, average relative humidity observed as 29%. Mean day time temperature recorded as 27.5°C & for the recent week 111.5 growing degree days accumulated. cloudiness in the morning/evening recorded as 4.0/9.3 Oktas.

Murree

Rainfall reported as 38.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 2.4/3.4 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 18.2°C & for the recent week 52.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/2.0 Knots.

D.I. Khan

Rainfall reported as 3.0 mm from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.7/3.7 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 32.1°C & for the recent week 137.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.1 Knots.

Peshawar

Rainfall reported as 3.0 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.4/5.0 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 30.2°C & for the recent week 122.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/2.0 Knots.

Kalam

Rainfall reported as 66.2 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 5.0/5.7 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 13.1°C & for the recent week 9.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

Gilgit

Rainfall reported as 8.4 mm from Gilgit during the week. However, cloudiness in the morning/evening recorded as 6.3/5.9 Oktas while, average relative humidity observed as 48%. Mean day time temperature recorded as 21.2°C & for the recent week 65.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/3.0 Knots.

Skardu

Rainfall reported as 16.8 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 5.7/5.0 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 15.0°C & for the recent week 31.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

**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 standing in the fields of RAMC Faisalabad.

Wheat: V. Good, Full Maturity Stage.

Lower Sindh (Tandojam)

Field is being prepared for the next crop at RAMC Tandojam.

Northern Baluchistan (Quetta)

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

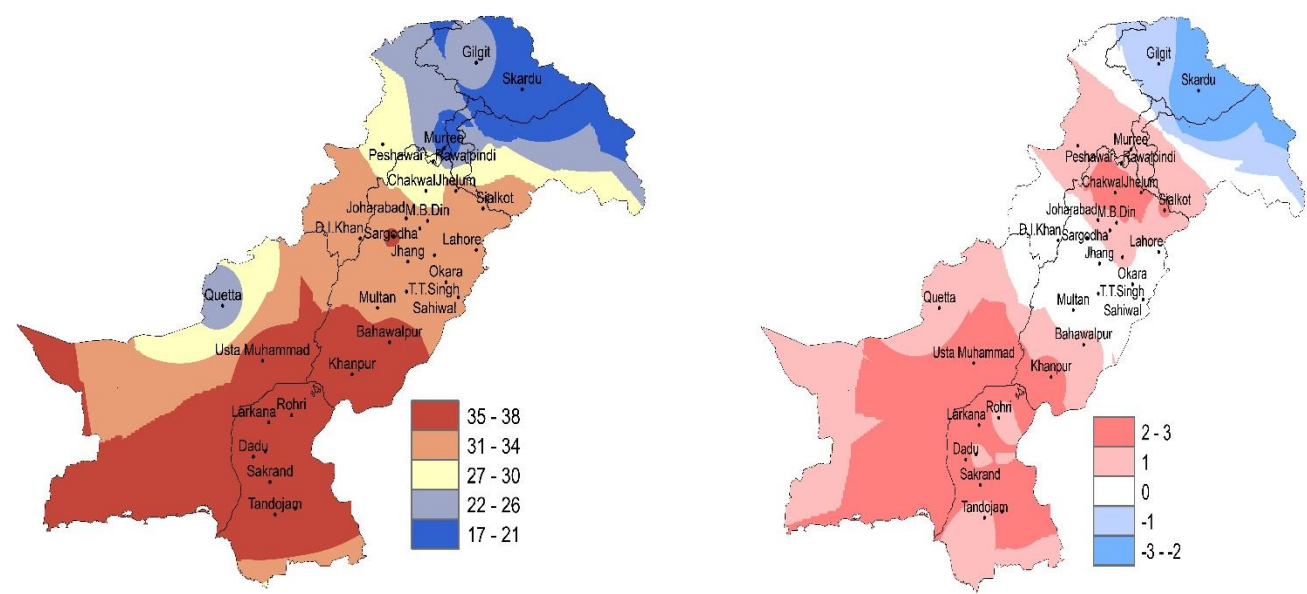
Wheat: Good, Crop Variety (Seriab-92), Shooting Stage.

Eastern Baluchistan (Usta Muhammad)

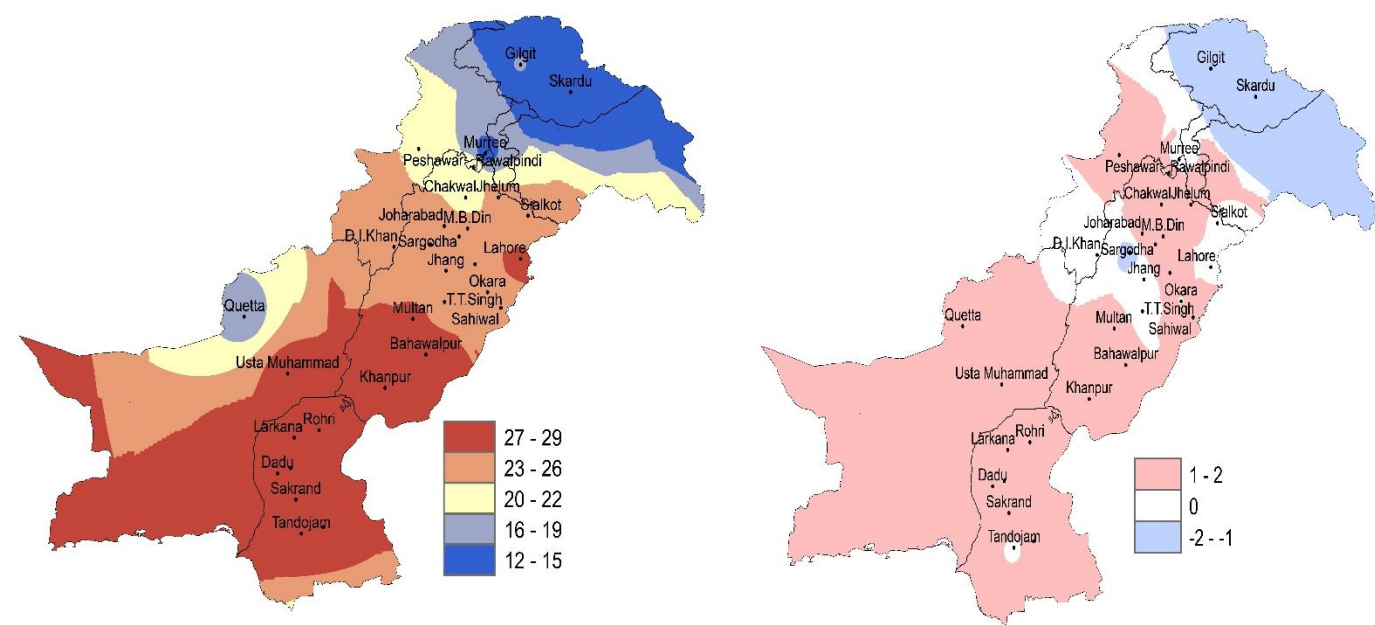
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

Wheat: Good, Wax Maturity Stage.

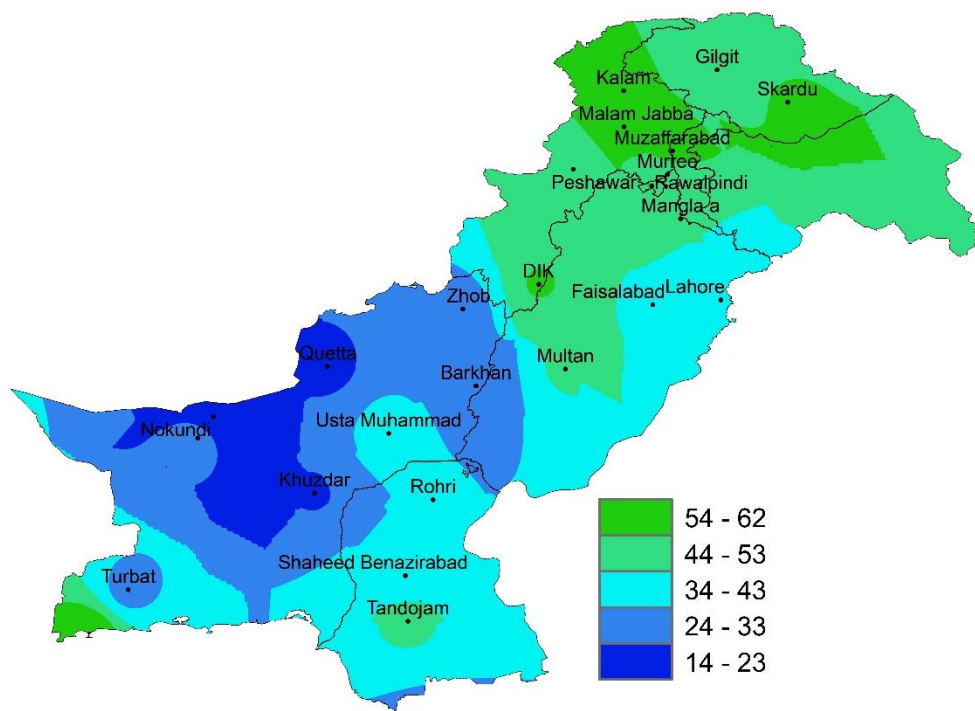
Normal & Departure of Maximum temperature (°C) for the previous week (5th – 11th April, 2021)



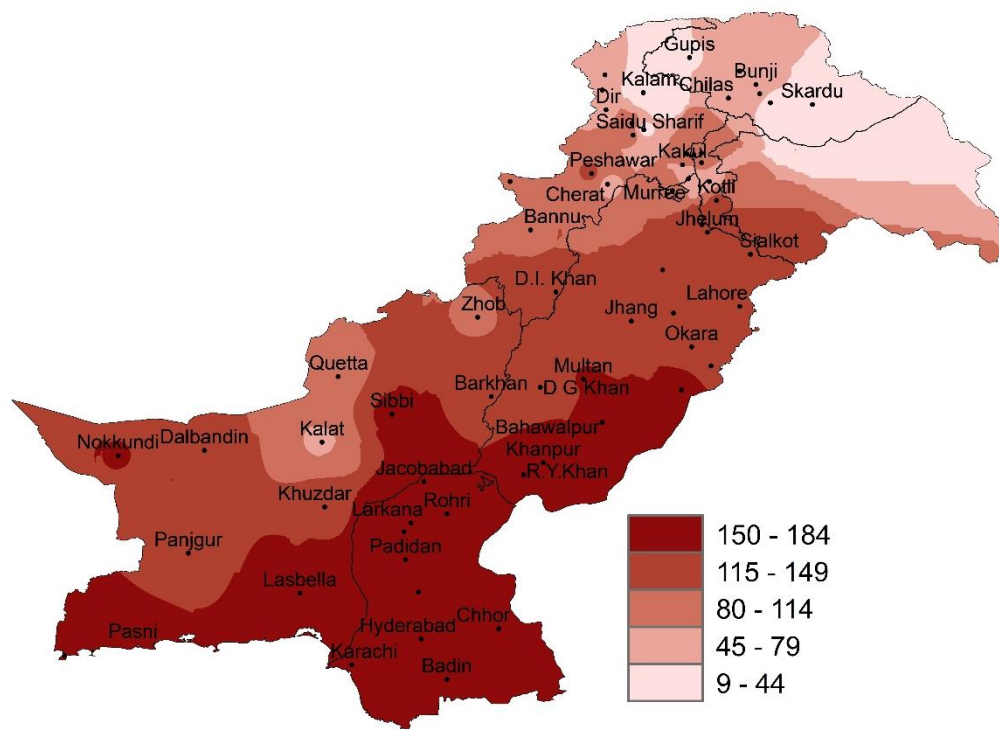
Normal & Departure of Mean temperature (°C) for the previous week (5th – 11th April, 2021)



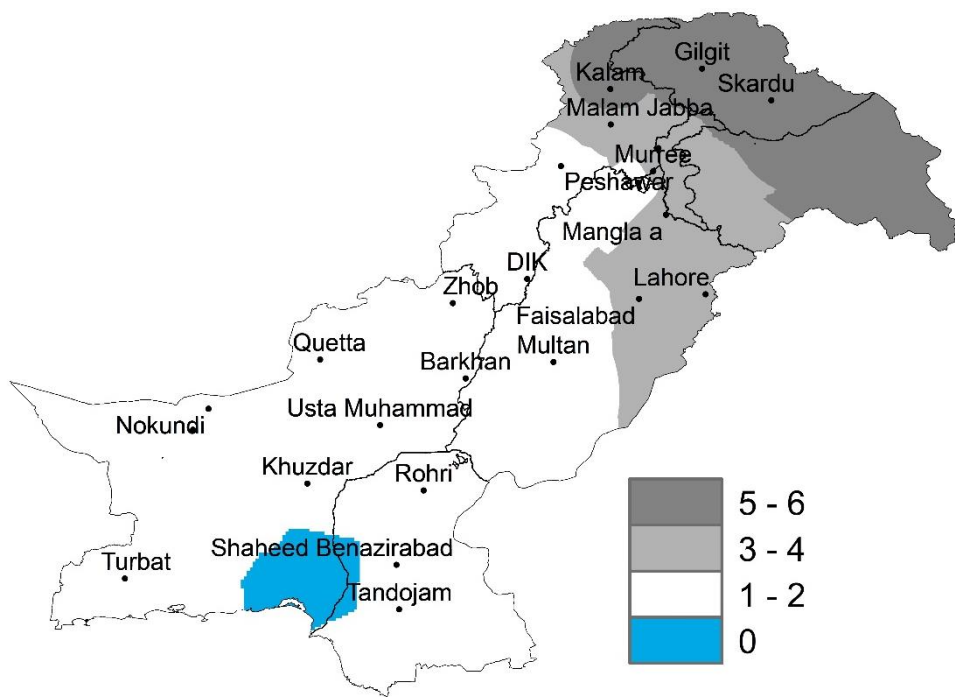
Mean Relative Humidity (%) during the previous week (5th – 11th April, 2021)



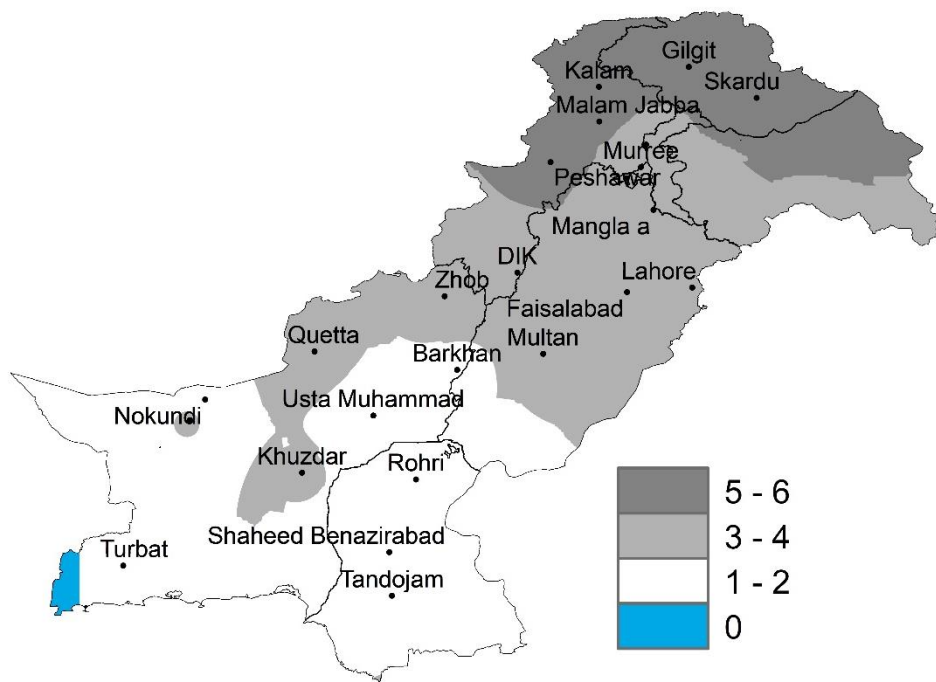
Total Growing Degree Days accumulated during the previous week (5th – 11th April, 2021)



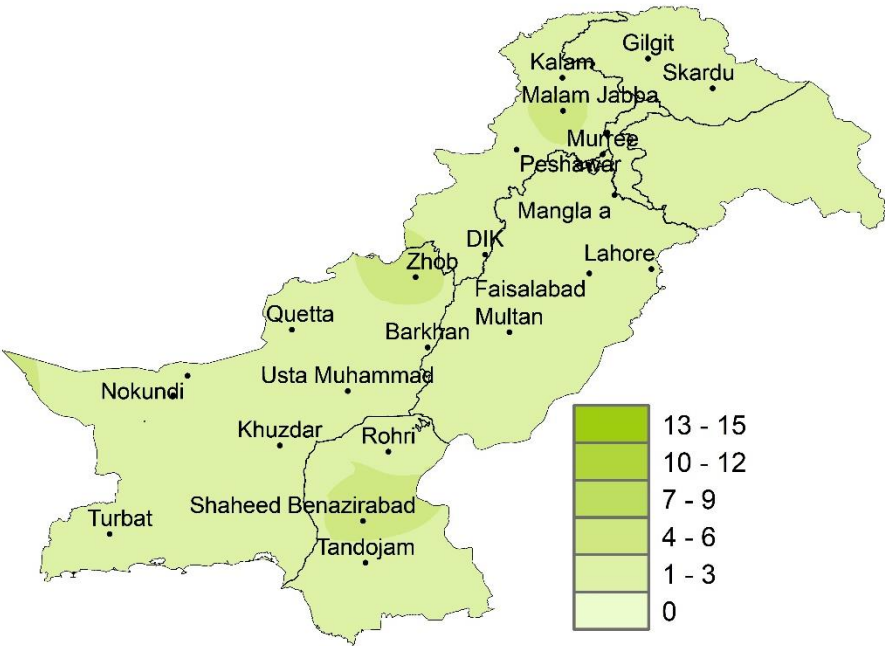
Mean Cloudiness (Oktas) at 0800PST during the previous week (5th – 11th April, 2021)



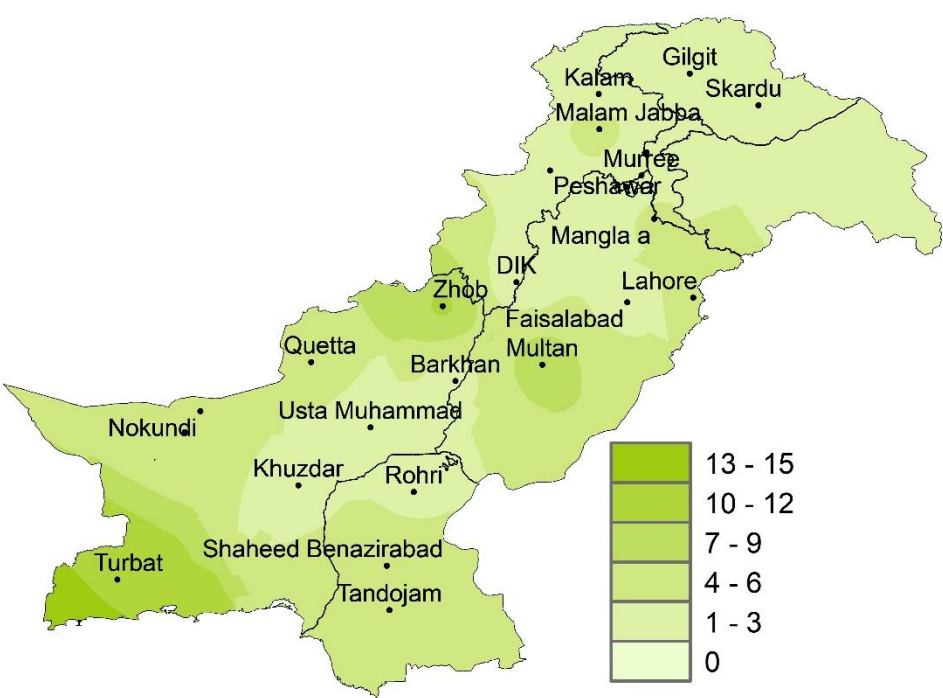
Mean Cloudiness (Oktas) at 1700PST during the previous week (5th – 11th April, 2021)



Mean Wind Speed (Knots) at 0800PST during the previous week (5th – 11th April, 2021)



Mean Wind Speed (Knots) at 1700PST during the previous week (5th – 11th April, 2021)



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Weekly Weather Advisory for Farmers**(12th – 18th April, 2021)**

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

MONDAY**12-04-2021**

Hot and dry weather is expected in most plain areas of the country, while dust-storm/gusty winds are likely in Upper Khyber Pakhtunkhwa and Potohar region during evening/night. Light rain may occur in upper Khyber Pakhtunkhwa, Kashmir and Gilgit Baltistan during the period.

TUESDAY**13-04-2021**

Hot and dry weather is expected in most plain areas of the country, while dust-thunderstorm with light rain is expected in Upper Khyber Pakhtunkhwa, Potohar region, Gilgit Baltistan and Kashmir during evening/night.

WEDNESDAY**14-04-2021**

Hot and dry weather is expected in most plain parts of the country, while partly cloudy in upper parts with chances of light rain wind-thunderstorm in upper Khyber Pakhtunkhwa, Potohar region, Kashmir and Gilgit Baltistan.

THURSDAY**15-04-2021**

Rain-wind-thunderstorm is expected in Khyber Pakhtunkhwa, Potohar region, Gilgit-Baltistan, Kashmir and north Balochistan. Gusty/dust-raising winds are also expected in central/south Punjab during the period. Hot and dry weather is expected in other parts of the country.

FRIDAY**16-04-2021.**

Rain-wind-thunderstorm is expected in Khyber Pakhtunkhwa, Punjab, Gilgit-Baltistan, Kashmir and north Balochistan. Hot and dry weather is expected in other parts of the country.

SATURDAY**17-04-2021**

Mainly hot and dry weather is expected in most parts of the country. However, rain wind-thunderstorm is expected in Upper Khyber Pakhtunkhwa, Gilgit Baltistan, Potohar region, Kashmir and adjoining hilly areas.

SUNDAY**18-04-2021**

Mainly hot and dry weather is expected in most parts of the country. However, rain wind-thunderstorm is expected in Upper Khyber Pakhtunkhwa, Gilgit Baltistan, Potohar region, Kashmir and adjoining hilly areas.

ADVISORY FOR FARMERS

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

- ❖ Farmers of central parts and upper half may be ready to harvest the Wheat crop in the coming weeks.
- ❖ 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 (5th – 11th April, 2021)

| Stations | Maximum /Day Time Temperature (°C) | | Growin g Degree Days | Relative Humidity (%) | Rainfall (mm) | Cloudiness (Oktas) 0800 PST | Cloudines s (Oktas) 1700 PST | Wind Speed (Knots) 0800 PST | Wind Speed (Knots) 1700 PST |
|--------------|--|---------|-------------------------------|-----------------------------|------------------|--------------------------------------|--|---|---|
| | Mean | Maximum | | | | | | | |
| Barkhan | 28.9 | 32.0 | 125.2 | 25 | 5.0 | 0.9 | 1.4 | 0.9 | 2.0 |
| Dalbandin | 33.9 | 36.5 | 138.3 | 28 | 0.0 | 0.4 | 2.1 | 0.0 | 4.9 |
| D.I. Khan | 32.1 | 36.5 | 137.3 | 54 | 3.0 | 1.7 | 3.7 | 1.1 | 1.1 |
| Faisalabad | 33.4 | 37.5 | 143.2 | 41 | 1.4 | 2.1 | 2.4 | 0.7 | 2.3 |
| Gawadar | 35.6 | 38.0 | 162.0 | 63 | 0.0 | 0.6 | 0.0 | 0.6 | 14.6 |
| Gilgit | 21.2 | 23.5 | 65.5 | 48 | 8.4 | 6.3 | 5.9 | 0.6 | 3.0 |
| Kalam | 13.1 | 17.5 | 9.2 | 53 | 66.2 | 5.0 | 5.7 | 0.0 | 0.9 |
| Khuzdar | 31.1 | 34.0 | 135.8 | 23 | 0.0 | 0.0 | 2.3 | 0.0 | 2.0 |
| Lahore | 33.5 | 36.0 | 148.1 | 36 | 1.8 | 3.7 | 2.0 | 0.7 | 3.4 |
| Malam Jabba | 12.8 | 14.0 | 20.8 | 58 | 38.0 | 3.4 | 5.0 | 6.0 | 4.3 |
| Mangla | 32.2 | 34.5 | 129.9 | 43.6 | 3.6 | 2.6 | 4.1 | 2.3 | 3.7 |
| Multan (PBO) | 33.6 | 37.0 | 149.6 | 44 | 3.7 | 1.4 | 2.6 | 1.7 | 7.4 |
| Murree | 18.2 | 20.5 | 52.6 | 44 | 38.0 | 2.4 | 3.4 | 2.3 | 2.0 |
| Muzaffarabad | 27.7 | 32.0 | 100.2 | 59 | 37.0 | 2.6 | 3.3 | 0.0 | 0.6 |
| Nokkundi | 41.1 | 43.3 | 179.3 | 40 | 0.0 | 0.0 | 0.0 | 4.3 | 6.0 |
| Nawabshah | 34.3 | 37.0 | 149.8 | 14 | 0.0 | 0.6 | 1.1 | 2.0 | 3.4 |
| Peshawar | 30.2 | 33.3 | 122.5 | 47 | 3.0 | 0.4 | 5.0 | 1.1 | 2.0 |
| Quetta | 24.7 | 27.8 | 91.1 | 21 | 0.0 | 1.0 | 3.3 | 2.2 | 4.7 |
| Rawalpindi | 30.6 | 32.5 | 121.2 | 53 | 9.6 | 1.1 | 3.4 | 0.8 | 0.9 |
| Rohri | 38.5 | 41.5 | 176.5 | 34 | 0.0 | 1.1 | 0.6 | 2.9 | 2.3 |
| Skardu | 15.0 | 17.5 | 31.8 | 53 | 16.8 | 5.7 | 5.0 | 0.0 | 0.9 |
| Tandojam | 39.1 | 41.5 | 161.4 | 45 | 0.0 | 0.0 | 0.0 | 1.4 | 3.1 |
| Turbat | 39.2 | 40.5 | 179.3 | 29 | 0.0 | 0.0 | 0.0 | 1.1 | 11.0 |
| Usta. M | 38.7 | 41.0 | 170.3 | 39 | 1.0 | 0.4 | 0.2 | 1.7 | 1.4 |
| Zhob | 27.5 | 29.5 | 111.5 | 29 | 0.0 | 1.7 | 3.4 | 4.0 | 9.3 |

*** 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 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)