

Weekly Weather and Crop Bulletin for Pakistan

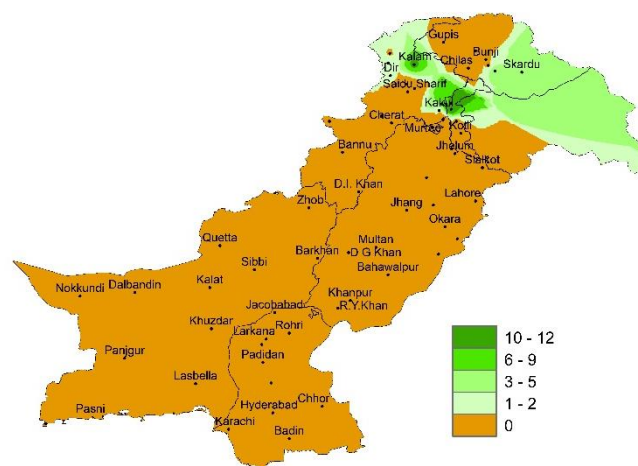
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Rainfall Distribution (mm) during the Previous Week (29th March – 4th April, 2021)



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Highlights of Past Weather (29th March – 4th April, 2021)

Above normal day time temperatures were observed all over the country, 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 Potohar region, upper Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan.
2. Dry weather prevailed over Sindh, Baluchistan, Lower Khyber Pakhtunkhwa, and Punjab.

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Past Weather of Provinces (29th March – 4th April, 2021)**Punjab**

Light rainfall reported from a few stations in Potohar region during the week. Weekly maximum and minimum temperatures recorded as 35.4°C & 22.4°C respectively. For the recent week on average 138.6 growing degree days were accumulated. Average relative humidity recorded as 35% and wind speed in the morning/evening recorded as 2.7/5.8 Knots. During the previous week the highest precipitation was observed as 1.8 mm at Islamabad while the highest maximum temperature was recorded as 41.5°C at R.Y.Khan.

Baluchistan

Light rainfall reported from a single station 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 141.8 growing degree days were accumulated. Average relative humidity recorded as 31% and wind speed in the morning/evening recorded as 2.4/8.3 Knots. During the previous week the highest precipitation was observed as 1.0 mm at Quetta while the highest maximum temperature was recorded as 43.0°C at Lasbella.

Khyber Pakhtunkhwa

Light rainfall reported from upper 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 88.0 growing degree days were accumulated. Average relative humidity recorded as 43% and wind speed in the morning/evening recorded as 2.9/3.7 Knots. During the previous week the highest precipitation was observed as 10.0 mm at Kalam & Pattan 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 180.8 growing degree days were accumulated. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 2.4/4.7 Knots. During the highest maximum temperature was recorded as 45.5°C at Shaheed Benazirabad.

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 24.9°C & 12.0°C respectively. For the recent week on average 62.0 growing degree days were accumulated. Average relative humidity recorded as 37% and wind speed in the morning/evening recorded as 3.5/5.9 Knots. During the previous week the highest precipitation was observed as 11.8 mm at Garhi Dupatta while the highest maximum temperature was recorded as 31.0°C at Muzaffarabad.

Past Weather for Major Agricultural Plains**(29th March – 4th April, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 0.1 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 1.3/0.9 Oktas while, average relative humidity observed as 33%. Mean day time temperature recorded as 29.9°C & for the recent week 119.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.7 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.9 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 34.0°C & for the recent week 136.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.7 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 48%. Mean day time temperature recorded as 40.1°C & for the recent week 158.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/2.8 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.2 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 40.3°C & for the recent week 176.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/1.1 Knots.

Quetta (Northern Baluchistan)

Rainfall reported as 1.0 mm from Quetta during the week; however, cloudiness in the morning/evening recorded as 1.0/1.3 Oktas while, average relative humidity observed as 19%. Mean day time temperature recorded as 23.7°C & for the recent week 87.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.4/4.4 Knots.

Past Weather for Sub-Regional Agricultural**Plains (29th March – 4th April, 2021)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.6/0.6 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 36°C & for the recent week 156.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.7/7.7 Knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 30%. Mean day time temperature recorded as 32.8°C & for the recent week 144.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.7/6.9 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/1.1 Oktas while, average relative humidity observed as 20%. Mean day time temperature recorded as 30.5°C & for the recent week 124.3 growing degree days accumulated. cloudiness in the morning/evening recorded as 6.0/9.3 Oktas.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 2.1/1.9 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 17.4°C & for the recent week 55.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.6/2.9 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.9/1.4 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 35.4°C & for the recent week 154.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.6/2.6 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.1/1.6 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 30.9°C & for the recent week 135.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.9/5.4 Knots.

Kalam

Rainfall reported as 10.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.3/3.6 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 16.1°C & for the recent week 20.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.9 Knots.

Gilgit

Rainfall reported as 2.2 mm from Gilgit during the week. However, cloudiness in the morning/evening recorded as 2.7/3.6 Oktas while, average relative humidity observed as 25%. Mean day time temperature recorded as 22.4°C & for the recent week 73.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 5.7/8.3 Knots.

Skardu

Rainfall reported as 6.8 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.0/2.9 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 15.2°C & for the recent week 26.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.9 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, Wax 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.

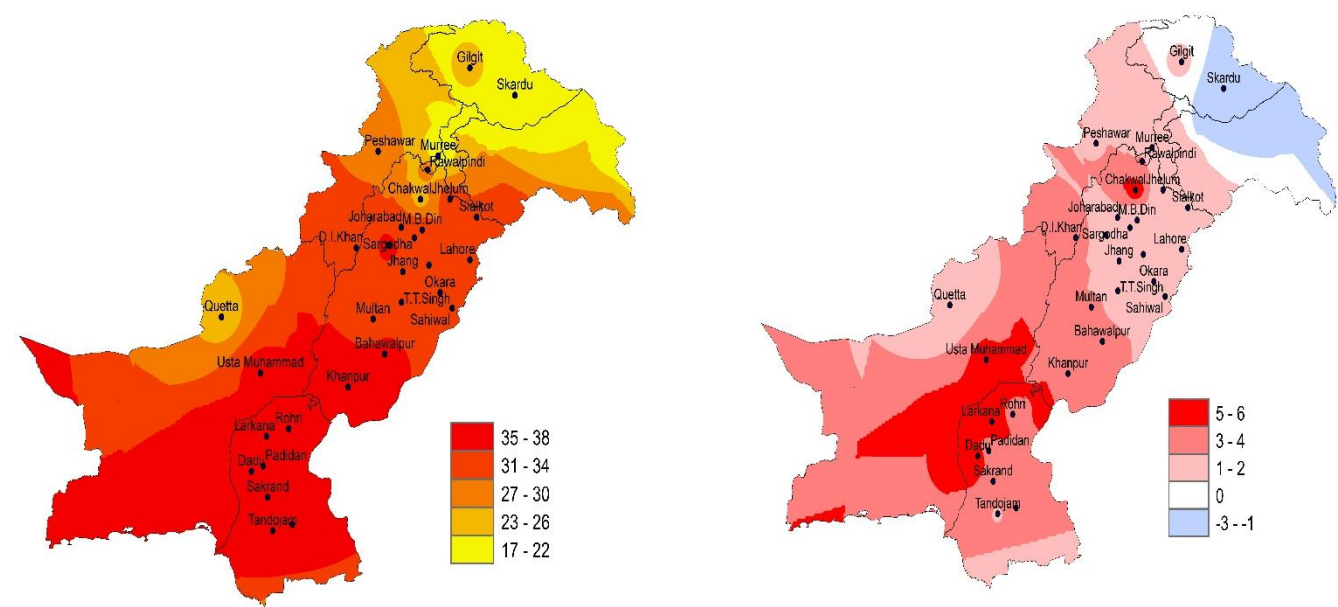
Wheat: Good, Crop Variety (Seriab-92), Shooting Stage.

Eastern Baluchistan (Usta Muhammad)

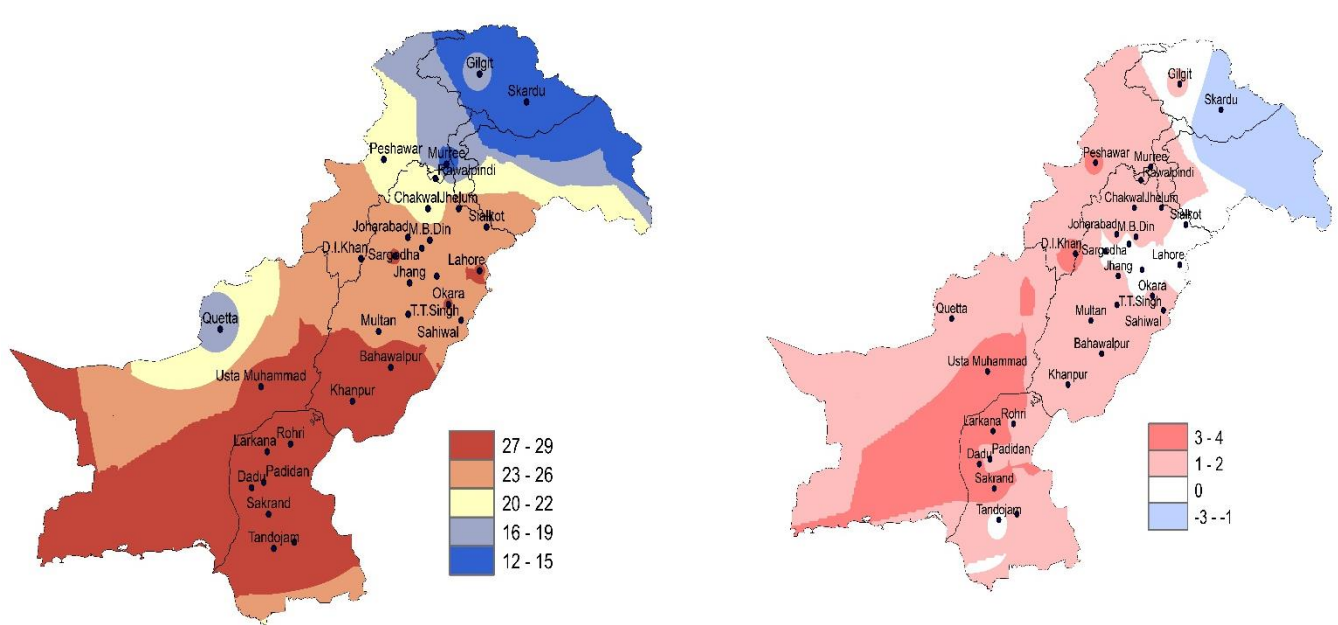
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

Wheat: Good, Wax Maturity Stage.

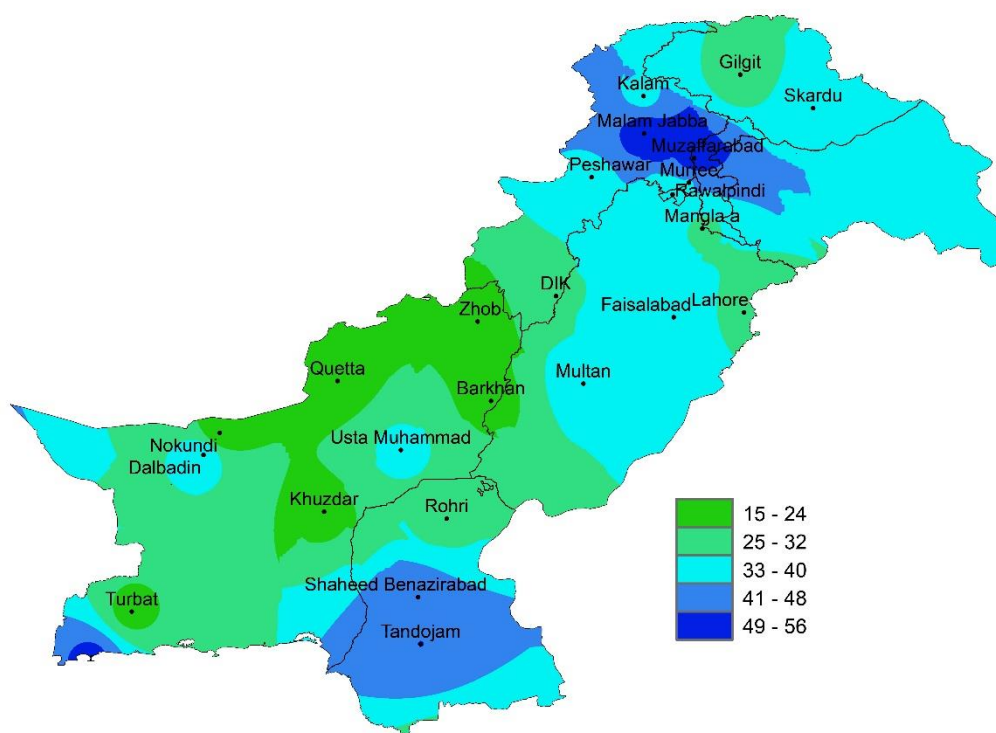
Normal & Departure of Maximum temperature (°C) for the previous week (29th March – 4th April, 2021)



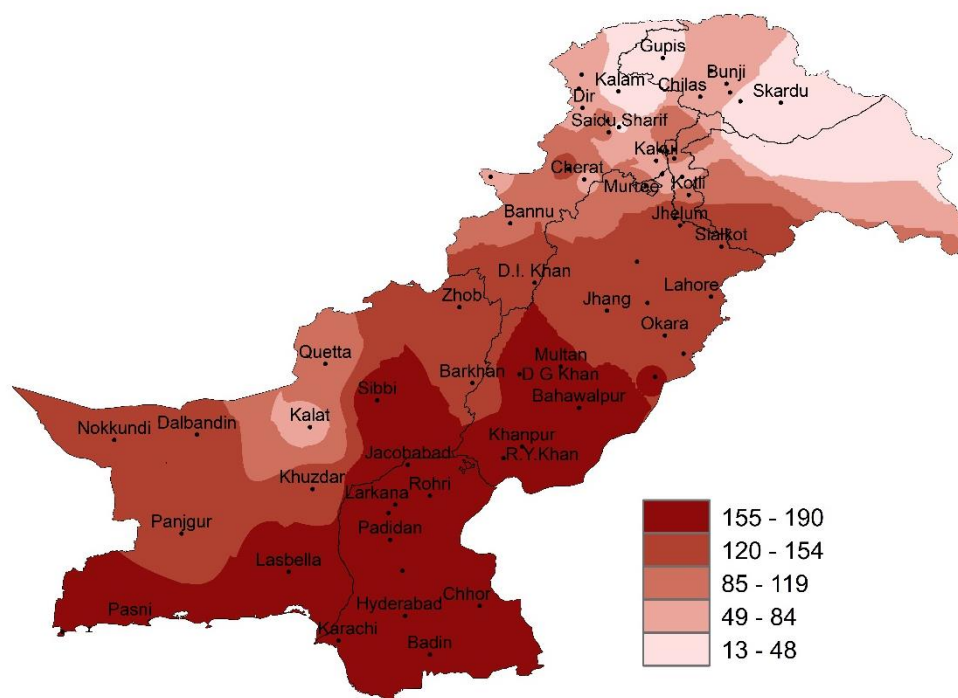
Normal & Departure of Mean temperature (°C) for the previous week (29th March – 4th April, 2021)



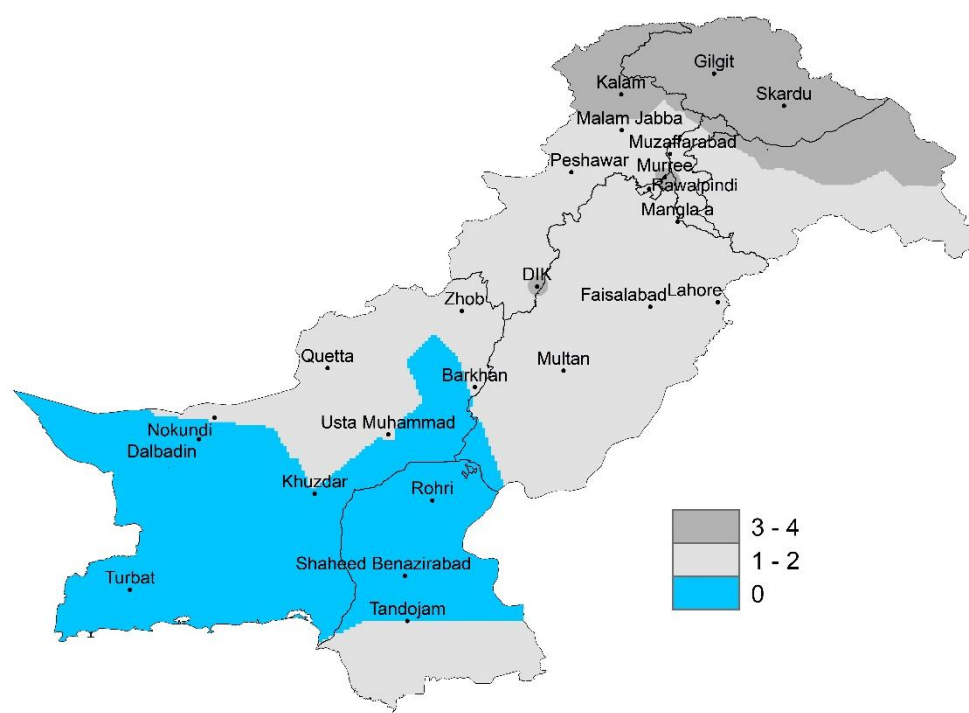
Mean Relative Humidity (%) during the previous week (29th March – 4th April, 2021)



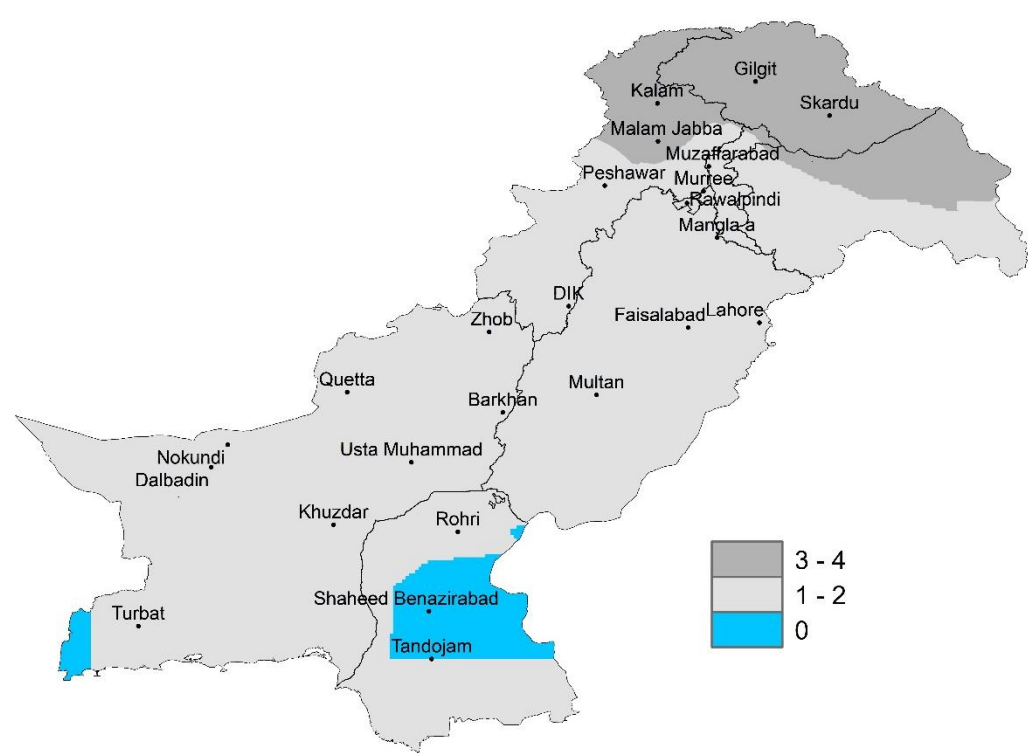
Total Growing Degree Days accumulated during the previous week (29th March – 4th April, 2021)



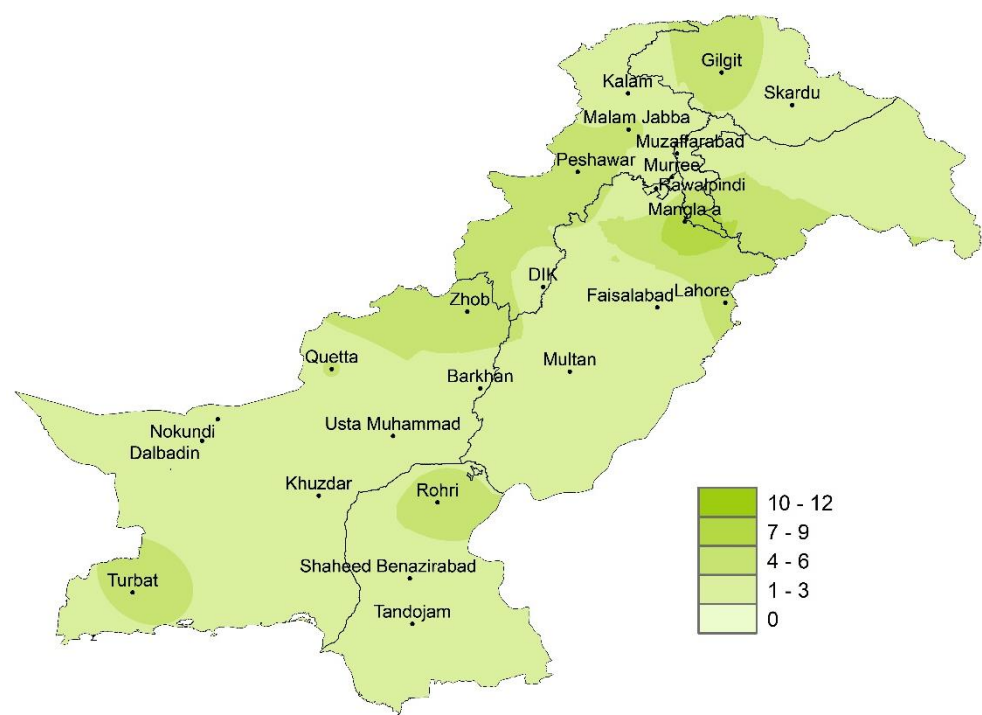
Mean Cloudiness (Oktas) at 0800PST during the previous week (29th March – 4th April, 2021)



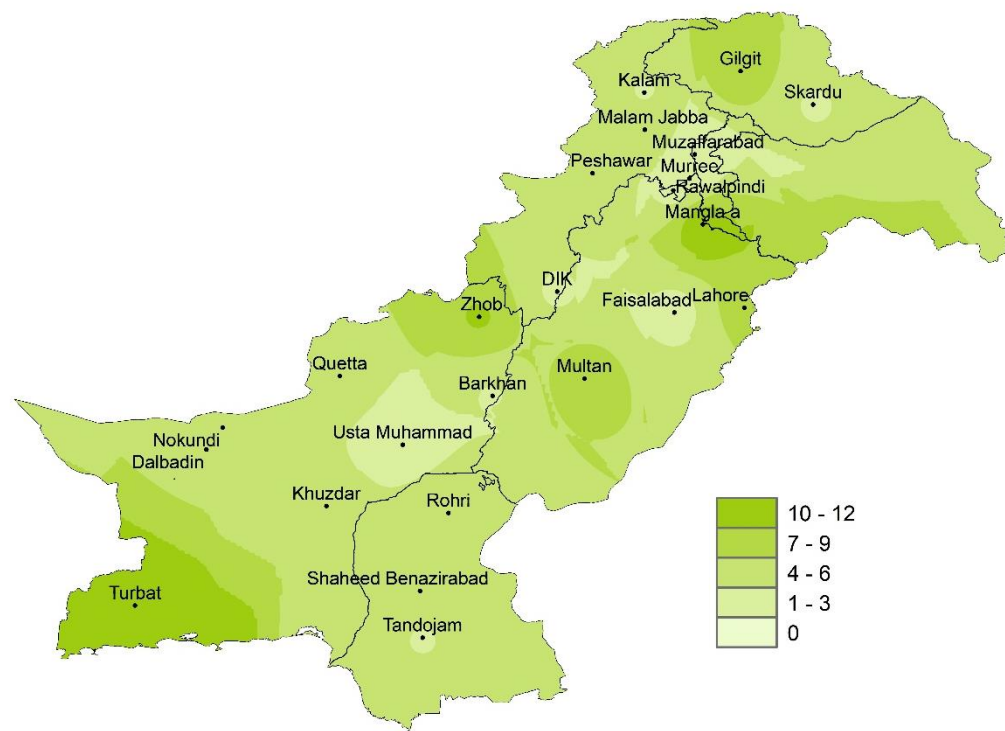
Mean Cloudiness (Oktas) at 1700PST during the previous week (29th March – 4th April, 2021)



Mean Wind Speed (Knots) at 0800PST during the previous week (29th March – 4th April, 2021)



Mean Wind Speed (Knots) at 1700PST during the previous week (29th March – 4th April, 2021)



Weekly Weather Advisory for Farmers**(5th – 11th April, 2021)**

A westerly wave is likely to approach western and upper parts of the country from today & may persist in upper parts till Wednesday.

MONDAY**05-04-2021**

Rain-wind-thunderstorm is expected in Khyber Pakhtunkhwa, Gilgit Baltistan, Upper Punjab and Kashmir. Hot and dry weather is expected elsewhere in the country.

TUESDAY**06-04-2021**

Rain-wind-thunderstorm is expected in Khyber Pakhtunkhwa, north Balochistan, Upper/Central Punjab, Gilgit Baltistan and Kashmir. Hot and dry weather is expected elsewhere in the country.

WEDNESDAY**07-04-2021**

Cloudy weather with rain wind-thunderstorm is expected in upper Khyber Pakhtunkhwa, Gilgit Baltistan, Potohar region and Kashmir. Hot and dry weather is expected in other parts of the country.

THURSDAY**08-04-2021**

Mainly hot and dry weather is expected in most parts of the country. However, rain wind-thunderstorm is expected in Gilgit Baltistan, Kashmir.

FRIDAY**09-04-2021.**

Mainly hot and dry weather is expected in most parts of the country. While very hot in Sindh and Balochistan.

SATURDAY**10-04-2021**

Mainly hot and dry weather is expected in most parts of the country. While very hot in Sindh and Balochistan.

SUNDAY**11-04-2021**

Mainly hot and dry weather is expected in most parts of the country. While very hot in Sindh and Balochistan.

ADVISORY FOR FARMERS

During the last week, light rainfall reported from Potohar region, upper Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan. Dry weather prevailed over Sindh, Baluchistan, Lower Khyber Pakhtunkhwa, and Punjab. 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 (29th March – 4th 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 | 31.6 | 33.0 | 142.5 | 22 | 0.0 | 0.0 | 0.0 | 1.1 | 2.9 |
| Dalbandin | 33.3 | 38.0 | 134.8 | 39 | 0.0 | 0.0 | 0.6 | 0.6 | 5.7 |
| D.I. Khan | 35.4 | 36.5 | 154.5 | 31 | 0.0 | 1.9 | 1.4 | 2.6 | 2.6 |
| Faisalabad | 34.0 | 35.5 | 136.9 | 38 | 0.0 | 0.0 | 0.9 | 0.9 | 1.7 |
| Gawadar | 37.5 | 39.0 | 170.0 | 51 | 0.0 | 0.0 | 0.0 | 0.0 | 11.4 |
| Gilgit | 22.4 | 25.0 | 73.8 | 25 | 2.2 | 2.7 | 3.6 | 5.7 | 8.3 |
| Kalam | 16.1 | 18.5 | 20.8 | 37 | 10.0 | 2.3 | 3.6 | 0.0 | 2.9 |
| Khuzdar | 32.0 | 35.0 | 138.0 | 21 | 0.0 | 0.0 | 1.3 | 1.1 | 4.3 |
| Lahore | 32.8 | 34.3 | 144.1 | 30 | 0.0 | 0.0 | 0.4 | 3.7 | 6.9 |
| Malam Jabba | 13.9 | 15.0 | 29.9 | 54 | 2.0 | 1.7 | 2.9 | 4.3 | 6.0 |
| Mangla | 31.2 | 32.5 | 128.2 | 30.7 | 0.0 | 1.1 | 1.3 | 8.4 | 12.3 |
| Multan (PBO) | 36.0 | 37.5 | 156.2 | 37 | 0.0 | 0.6 | 0.6 | 1.7 | 7.7 |
| Murree | 17.4 | 18.6 | 55.7 | 40 | 0.0 | 2.1 | 1.9 | 2.6 | 2.9 |
| Muzaffarabad | 26.5 | 31.0 | 95.6 | 56 | 9.0 | 1.1 | 1.4 | 0.0 | 0.0 |
| Nokkundi | 42.5 | 45.5 | 185.3 | 43 | 0.0 | 0.0 | 0.0 | 2.3 | 5.7 |
| Nawabshah | 34.6 | 39.5 | 145.8 | 15 | 0.0 | 0.0 | 0.9 | 1.7 | 3.4 |
| Peshawar | 30.9 | 31.8 | 135.4 | 37 | 1.5 | 1.1 | 1.6 | 4.9 | 5.4 |
| Quetta | 23.7 | 28.4 | 87.5 | 19 | 0.0 | 1.0 | 1.3 | 3.4 | 4.4 |
| Rawalpindi | 29.9 | 31.5 | 119.5 | 33 | 0.1 | 1.3 | 0.9 | 0.9 | 1.7 |
| Rohri | 40.1 | 43.0 | 184.4 | 27 | 0.0 | 0.0 | 0.0 | 4.6 | 5.7 |
| Skardu | 15.2 | 17.5 | 26.0 | 37 | 6.8 | 2.0 | 2.9 | 0.0 | 2.9 |
| Tandojam | 40.1 | 42.5 | 158.7 | 48 | 0.0 | 0.0 | 0.0 | 0.3 | 2.8 |
| Turbat | 40.9 | 43.0 | 187.0 | 20 | 0.0 | 0.0 | 0.0 | 4.9 | 12.1 |
| Usta. M | 40.3 | 42.0 | 176.3 | 34 | 0.0 | 0.0 | 0.2 | 0.8 | 1.1 |
| Zhob | 30.5 | 33.5 | 124.3 | 20 | 0.0 | 0.0 | 1.1 | 6.0 | 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 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)