

Weekly Weather and Crop Bulletin for Pakistan

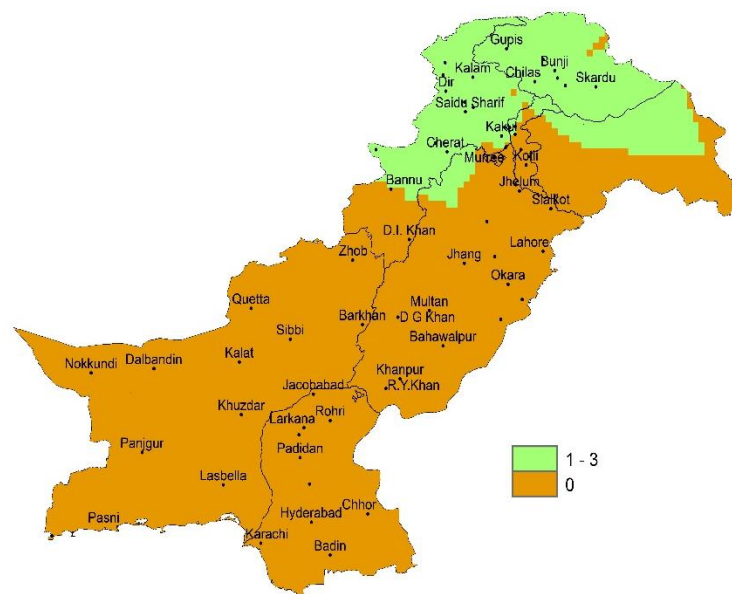
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Rainfall Distribution (mm) during the Previous Week (19th - 25th October, 2020)



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Highlights of Past Weather (19th - 25th October, 2020)

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

Rainfall reported as follows during the last week:

1. Light rainfall observed in upper Khyber Pakhtunkhwa.
2. Dry weather prevailed over Baluchistan, lower Khyber Pakhtunkhwa, Sindh, Punjab, Kashmir and Gilgit-Baltistan.

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

Editor: Ruqiya Mehmood (Assistant Meteorologist)

Past Weather of Provinces (19th- 25th October, 2020)**Punjab**

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 32.5°C & 15.2°C respectively. For the recent week on average 132.2 growing degree days were accumulated. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 0.3/1.0 Knots. During the previous week the highest maximum temperature was recorded as 38.0°C at Bahawalpur.

Baluchistan

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 30.4°C & 12.0°C respectively. For the recent week on average 113.6 growing degree days were accumulated. Average relative humidity recorded as 25% and wind speed in the morning/evening recorded as 2.2/3.8 Knots. During the previous week the highest maximum temperature was recorded as 39.2°C at Lasbella.

Khyber Pakhtunkhwa

Light rainfall reported from upper Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 26.7°C & 10.4°C respectively. For the recent week on average 94.6 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 1.1/1.2 Knots. During the previous week the highest precipitation was recorded as 3.0 mm at Lower Dir & Mirkhani, while the highest maximum temperature was recorded as 36.0°C at D.I.Khan.

Sindh

Dry weather reported from most parts of Sindh during the week. Weekly maximum and minimum temperatures recorded as 35.7°C & 18.9°C respectively. For the recent week, on average 156.1 growing degree days were accumulated. Average

relative humidity recorded as 48% and wind speed in the morning/evening recorded as 0.8/2.3 Knots. During the previous week the highest maximum temperature was recorded as 41.8°C at Shaheed Benazirabad.

Gilgit-Baltistan and Azad Jammu & Kashmir

Dry weather reported from most parts of Gilgit-Baltistan and Kashmir during the week. Weekly maximum and minimum temperatures recorded as 24.6°C & 7.9°C respectively. For the recent week on average 78.7 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 0.9/0.8 Knots. During the previous week the highest maximum temperature was recorded as 34.0°C at Muzaffarabad.

Past Weather for Major Agricultural Plains
(19th - 25th October, 2020)**Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.6/0.6 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 31.9°C & for the recent week 122.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.1 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 33.5°C & for the recent week 136.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.2 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 55%. Mean day time temperature recorded as 36.1°C & for the recent week 147.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.6 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 51%. Mean day time temperature recorded as 34.9°C & for the recent week 141.5 growing degree days accumulated. Calm wind observed in the morning/evening.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 18%. Mean day time temperature recorded as 21.0°C & for the recent week 53.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.2/2.9 Knots.

Past Weather for Sub-Regional Agricultural Plains (19th - 25th October, 2020)**Multan**

Dry weather reported from Multan during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 55%. Mean day time temperature recorded as 33.8°C & for the recent week 136.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.0 Knots.

Lahore

Dry weather reported from Lahore during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 53%. Mean day time temperature recorded as 31.9°C & for the recent week 138.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.3 Knots.

Zhob

Dry reported from Zhob during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 22%. Mean day time temperature recorded as 35.5°C & for the recent week 149.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.3/5.0 Knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/0.9 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 20.9°C & for the recent week 77.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/0.9 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, clear sky observed in in the morning/evening while, average relative humidity observed as 60%. Mean day time temperature recorded as 33.1°C & for the recent week 133.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/0.9 Knots.

Peshawar

Rainfall reported as trace (not measurable) from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.9/1.0 Oktas while, average relative humidity observed as 68%. Mean day time temperature recorded as 29.6°C & for the recent week 118.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.6 Knots.

Kalam

Rainfall reported as 2.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.6/3.0 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 18.4°C & for the recent week 35.1 growing degree days accumulated. Calm wind observed in the morning/evening.

Gilgit

Rainfall reported as trace (not measurable) from Gilgit during the week. However, cloudiness in the morning/evening recorded as 2.4/3.7 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 25.3°C & for the recent week 70.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.4 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 1.9/1.0 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 20.0°C & for the recent week 35.0 growing degree days accumulated. Calm wind observed 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 sown in the fields of RAMC Faisalabad.

Cotton: V. Good, Maturity Stage Completed.

Lower Sindh (Tandojam)

Field is being prepared for the next crop.

Crop Variety: Nil

Northern Baluchistan (Quetta)

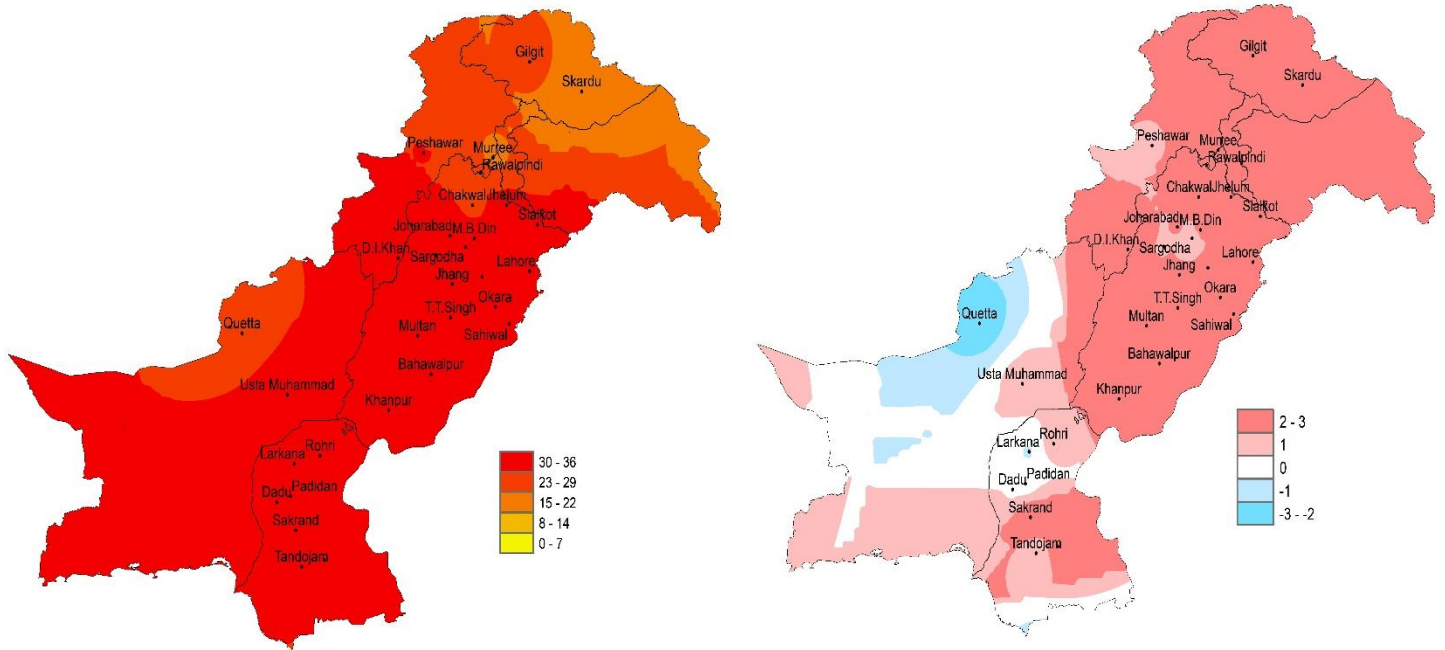
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

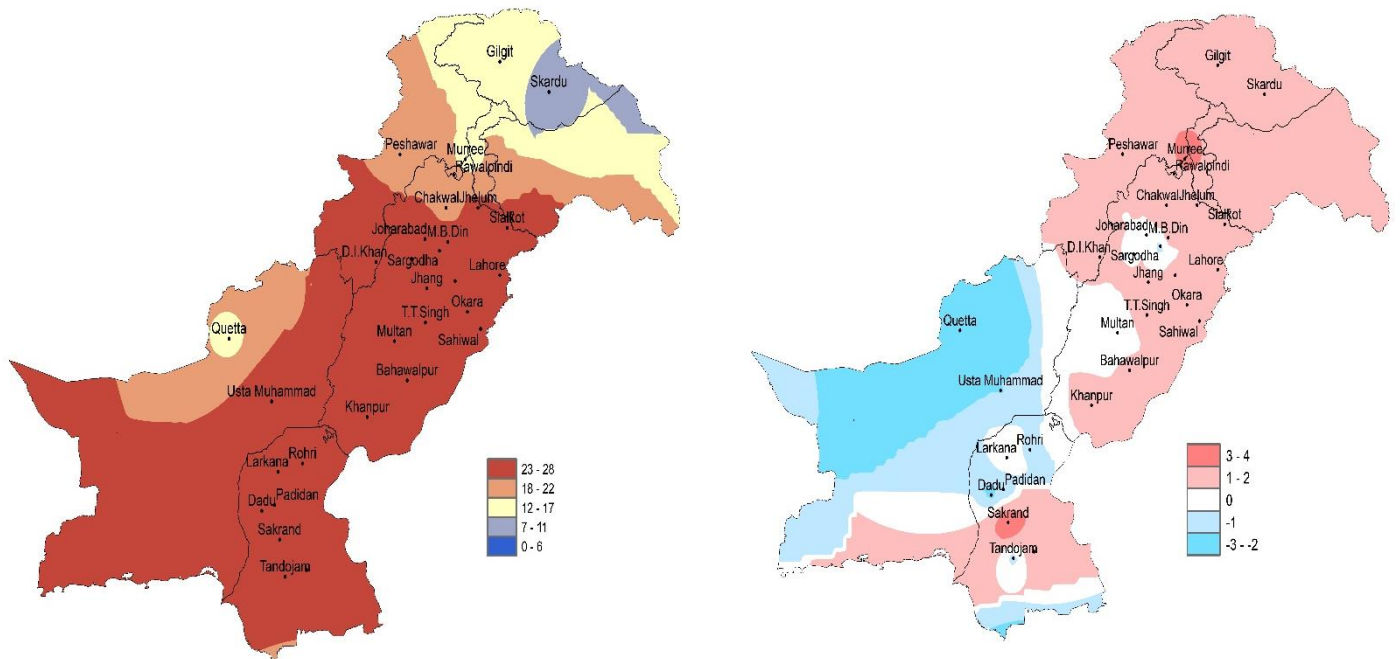
Rice crop is sown in the fields of RAMC Usta Muhammad.

Rice: Good, Milk Maturity Stage.

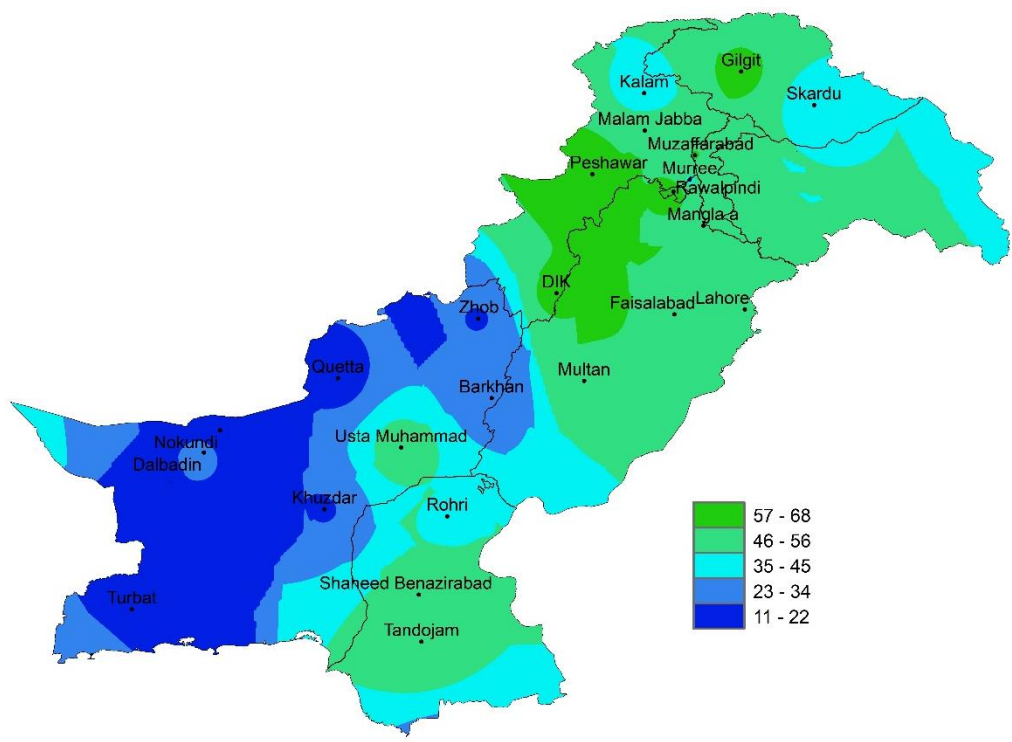
Normal & Departure of Maximum temperature (°C) for the previous week (19th - 25th October, 2020)



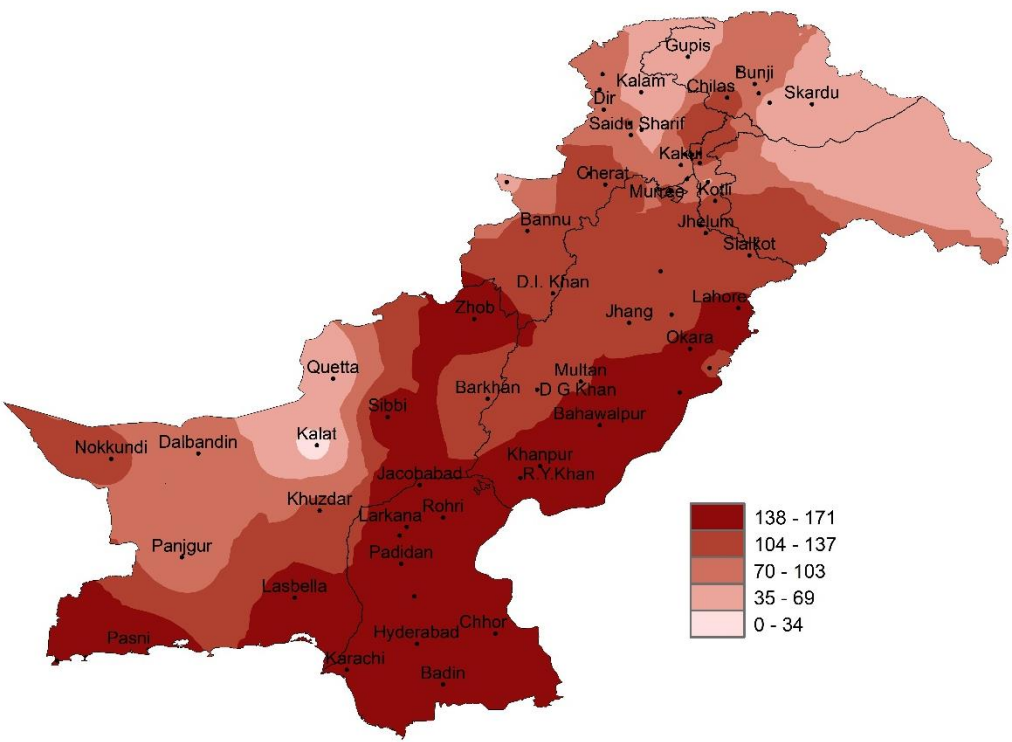
Normal & Departure of Mean temperature (°C) for the previous week (19th - 25th October, 2020)



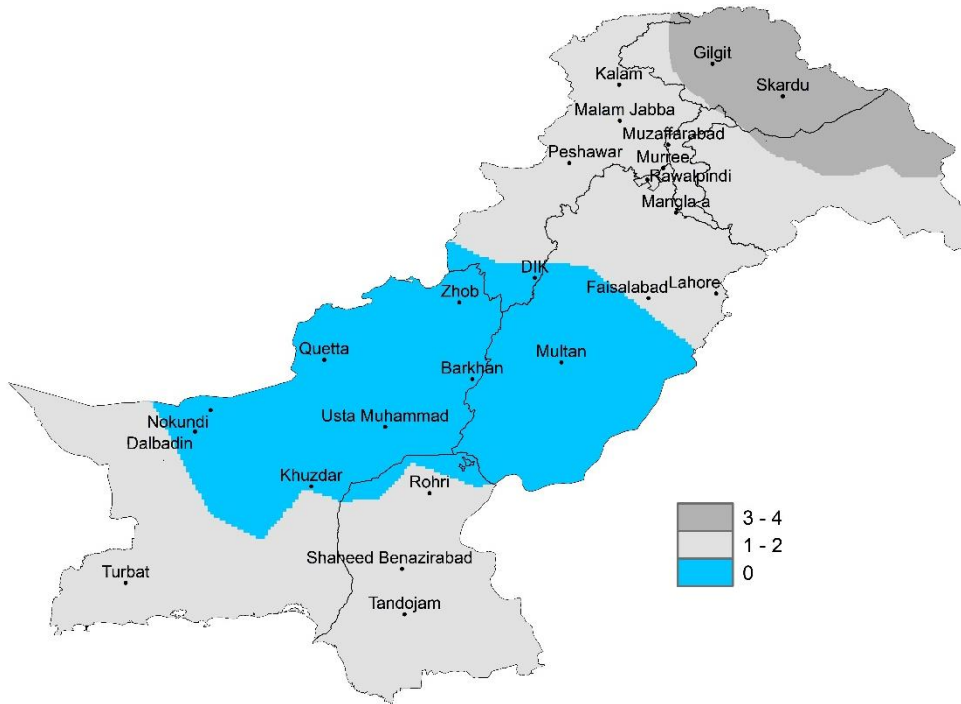
Mean Relative Humidity (%) during the previous week (19th - 25th October, 2020)



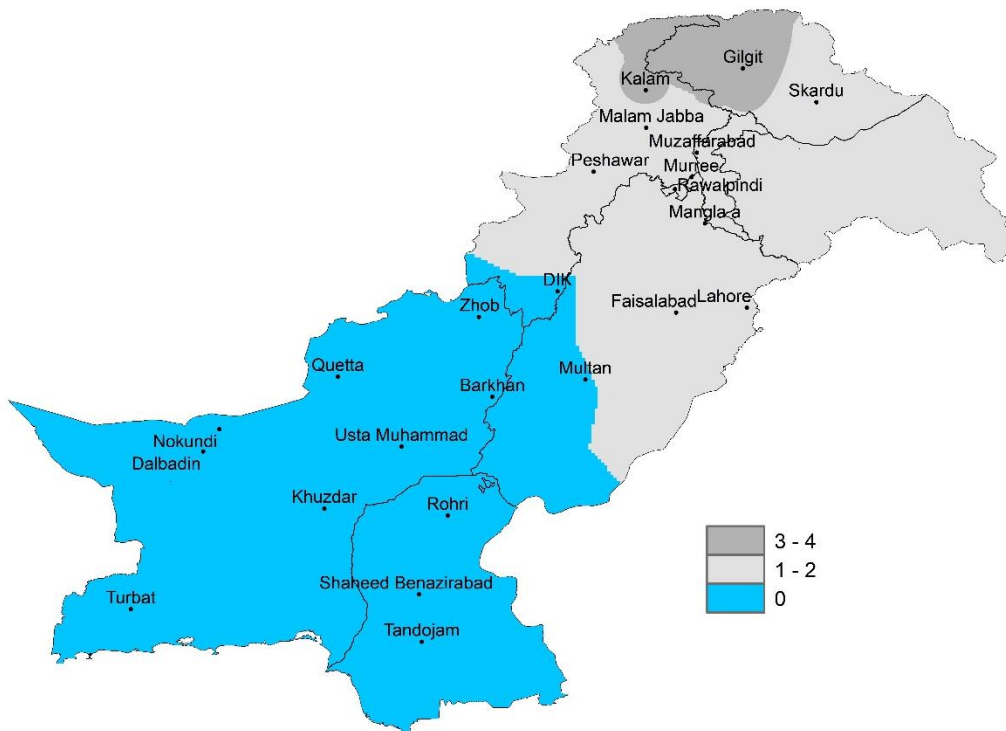
Total Growing Degree Days accumulated during the previous week (19th - 25th October, 2020)



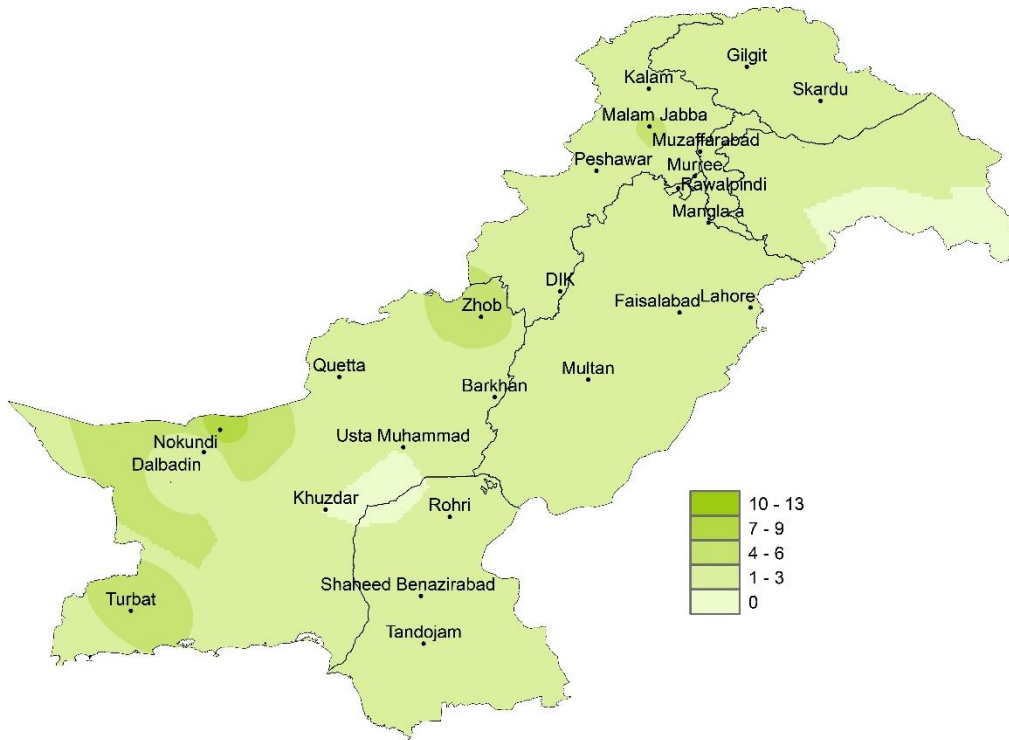
Mean Cloudiness (Oktas) at 0800PST during the previous week (19th - 25th October, 2020)



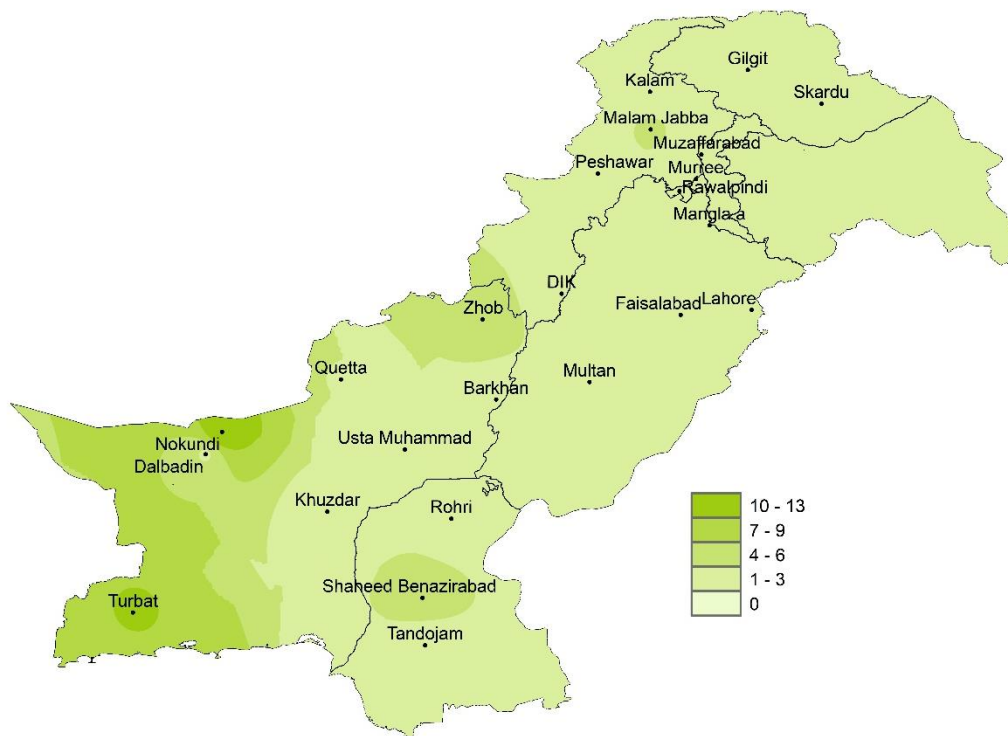
Mean Cloudiness (Oktas) at 1700PST during the previous week (19th - 25th October, 2020)



Mean Wind Speed (Knots) at 0800PST during the previous week (19th - 25th October, 2020)



Mean Wind Speed (Knots) at 1700PST during the previous week (19th - 25th October, 2020)



Weekly Weather Advisory for Farmers**(26th October – 1st November, 2020)**

Continental air is prevailing over most parts of the country.

MONDAY**26-10-2020**

Mainly dry weather is likely to prevail over most parts of the country and hot in southern areas during day time. While cold in northern areas.

TUESDAY**27-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, and hot in southern areas during day time. While cold in northern areas.

WEDNESDAY**28-10-2020**

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places district Chitral and surroundings.

THURSDAY**29-10-2020**

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in northern Khyber Pakhtunkhwa and Gilgit-Baltistan.

FRIDAY**30-10-2020**

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at a few places in upper Khyber Pakhtunkhwa and Gilgit-Baltistan.

SATURDAY**31-10-2020**

Mainly dry weather is expected in most parts of the country.

SUNDAY**01-11-2020**

Mainly dry weather is expected in most parts of the country.

ADVISORY FOR FARMERS

During the last week, light rainfall observed in upper Khyber Pakhtunkhwa. Dry weather prevailed over Baluchistan, lower Khyber Pakhtunkhwa, Sindh, Punjab, Kashmir and Gilgit-Baltistan. Keeping in view the ongoing dry weather conditions farmers may continue their routine field activities.

National Weather Data of Selected Cities from (19th – 25th October, 2020)

| 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 | 29.1 | 30.5 | 115.0 | 24 | 0.00 | 0.0 | 0.0 | 0.9 | 1.4 |
| Dalbandin | 27.9 | 30.5 | 86.5 | 25 | 0.00 | 0.0 | 0.0 | 0.6 | 2.6 |
| D.I. Khan | 33.1 | 36.0 | 133.5 | 60 | 0.00 | 0.0 | 0.0 | 0.9 | 0.9 |
| Faisalabad | 33.5 | 35.0 | 136.4 | 56 | 0.00 | 0.0 | 0.4 | 0.2 | 0.2 |
| Gawadar | 36.3 | 37.0 | 150.8 | 33 | 0.00 | 0.4 | 0.0 | 2.3 | 6.3 |
| Gilgit | 25.3 | 29.5 | 70.3 | 59 | 0.01 | 2.4 | 3.7 | 0.6 | 1.4 |
| Kalam | 18.4 | 20.5 | 35.1 | 39 | 2.00 | 0.6 | 3.0 | 0.0 | 0.0 |
| Khuzdar | 28.4 | 30.5 | 108.3 | 22 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Lahore | 31.9 | 33.5 | 138.7 | 53 | 0.00 | 0.0 | 0.0 | 0.0 | 0.3 |
| Malam Jabba | 14.3 | 15.5 | 33.5 | 51 | 0.00 | 0.9 | 1.0 | 3.7 | 3.7 |
| Mangla | 32.5 | 34.3 | 126.5 | 53 | 0.00 | 0.6 | 1.1 | 0.0 | 1.1 |
| Multan (PBO) | 33.8 | 36.3 | 136.5 | 55 | 0.00 | 0.0 | 0.0 | 0.0 | 2.0 |
| Murree | 20.9 | 22.4 | 77.6 | 44 | 0.00 | 0.0 | 0.9 | 0.9 | 0.9 |
| Muzaffarabad | 30.6 | 34.0 | 106.4 | 57 | 0.00 | 0.1 | 1.0 | 2.9 | 0.6 |
| Nokkundi | 38.2 | 41.8 | 160.2 | 47 | 0.00 | 0.3 | 0.0 | 2.3 | 5.1 |
| Nawabshah | 28.5 | 31.0 | 105.3 | 14 | 0.00 | 0.0 | 0.0 | 8.0 | 12.9 |
| Peshawar | 29.6 | 32.4 | 118.4 | 68 | 0.01 | 0.9 | 1.0 | 0.0 | 0.6 |
| Quetta | 21.0 | 22.8 | 53.2 | 18 | 0.00 | 0.0 | 0.0 | 1.2 | 2.9 |
| Rawalpindi | 31.9 | 33.3 | 122.6 | 62 | 0.00 | 0.6 | 1.1 | 0.6 | 0.6 |
| Rohri | 35.0 | 35.5 | 149.5 | 44 | 0.00 | 0.0 | 0.0 | 0.0 | 1.1 |
| Skardu | 20.0 | 22.4 | 35.0 | 39 | 0.00 | 1.9 | 1.0 | 0.0 | 0.0 |
| Tandojam | 36.1 | 39.0 | 147.7 | 55 | 0.00 | 0.0 | 0.0 | 0.2 | 0.6 |
| Turbat | 35.9 | 37.5 | 164.5 | 11 | 0.00 | 0.3 | 0.0 | 3.9 | 9.4 |
| Usta. M | 34.9 | 35.5 | 141.5 | 51 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Zhob | 35.5 | 37.5 | 149.8 | 22 | 0.00 | 0.0 | 0.0 | 4.3 | 5.0 |

*** 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)