

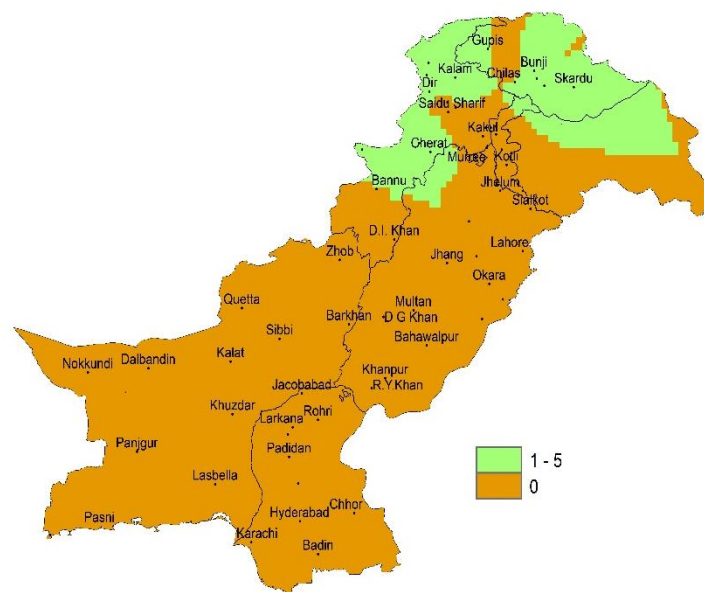
Weekly Weather and Crop Bulletin for Pakistan

**NATIONAL AGROMET CENTRE
PAKISTAN METEOROLOGICAL
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**Rainfall Distribution (mm) during the Previous
Week (5th - 11th October, 2020)**



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Highlights of Past Weather (5th - 11th October, 2020)

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

Patron-in-Chief: Muhammad Riaz (Director General)

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

Editor: Ruqiya Mehmood (Assistant Meteorologist)

Past Weather of Provinces (5th- 11th October, 2020)**Punjab**

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 36.0°C & 19.1°C respectively. For the recent week on average 157.7 growing degree days were accumulated. Average relative humidity recorded as 47% and wind speed in the morning/evening recorded as 0.3/3.0 Knots. During the previous week the highest maximum temperature was recorded as 41.0°C at Noorpur Thal.

Baluchistan

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 33.0°C & 17.0°C respectively. For the recent week on average 139.8 growing degree days were accumulated. Average relative humidity recorded as 38% and wind speed in the morning/evening recorded as 1.5/6.7 Knots. During the previous week the highest maximum temperature was recorded as 41.5°C at Turbat.

Khyber Pakhtunkhwa

Light rainfall reported from upper parts of Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 30.2°C & 13.1°C respectively. For the recent week on average 116.8 growing degree days were accumulated. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 0.6/0.9 Knots. During the previous week the highest precipitation was recorded as 5.0 mm at Mirkhani while the highest maximum temperature was recorded as 38.5°C at D.I.Khan.

Sindh

Dry weather reported from most parts of Sindh during the week. Weekly maximum and minimum temperatures recorded as 37.3°C & 23.6°C respectively. For the recent week, on average 178.0 growing degree days were accumulated. Average relative humidity recorded as 59% and

wind speed in the morning/evening recorded as 1.4/3.3 Knots. During the previous week the highest maximum temperature was recorded as 42.5°C at Shaheed Benazirabad.

Gilgit-Baltistan and Azad Jammu & Kashmir

Dry weather reported from Gilgit-Baltistan and Kashmir during the week. Weekly maximum and minimum temperatures recorded as 28.4°C & 10.6°C respectively. For the recent week on average 101.3 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 0.1/0.4 Knots. During the previous week the highest maximum temperature was recorded as 36.0°C at Muzaffarabad.

Past Weather for Major Agricultural Plains**(5th - 11th October, 2020)****Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 56%. Mean day time temperature recorded as 34.3°C & for the recent week 141.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.3 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 50%. Mean day time temperature recorded as 37.3°C & for the recent week 161.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/0.8 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 66%. Mean day time temperature recorded as 37.1°C & for the recent week 172.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/1.2 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 65%. Mean day time temperature recorded as 35.4°C & for the recent week 167.5 growing degree days accumulated. Calm wind recorded 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 22%. Mean day time temperature recorded as 26.2°C & for the recent week 87.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/3.1 Knots.

Past Weather for Sub-Regional Agricultural**Plains (5th - 11th 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 45%. Mean day time temperature recorded as 36.6°C & for the recent week 156.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/6.3 Knots.

Lahore

Dry weather reported from Lahore during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 50%. Mean day time temperature recorded as 35.6°C & for the recent week 169.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.6 Knots.

Zhob

Dry reported from Zhob during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 24%. Mean day time temperature recorded as 30.7°C & for the recent week 127.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.9/5.3 Knots.

Murree

Dry weather reported from Murree during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 47%. Mean day time temperature recorded as 24.7°C & for the recent week 101.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.0 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 26%. Mean day time temperature recorded as 37.1°C & for the recent week 165.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/3.1 Knots.

Peshawar

Rainfall reported as trace (not measurable) from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.3/2.3 Oktas while, average relative humidity observed as 63%. Mean day time temperature recorded as 34.3°C & for the recent week 150.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.9 Knots.

Kalam

Rainfall reported as 0.7 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.6/1.6 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 21.5°C & for the recent week 52.0 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 1.9/4.1 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 29.1°C & for the recent week 93.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/0.9 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 0.1/0.7 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 24.4°C & for the recent week 64.9 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 sown in the fields of RAMC Faisalabad.

Cotton: V. Good, Maturity Stage Completed.

Lower Sindh (Tandojam)

Cotton crop is sown in the fields of RAMC Tandojam.

Cotton Variety (Sindh-I): Good, Boll Opening Stage.

Northern Baluchistan (Quetta)

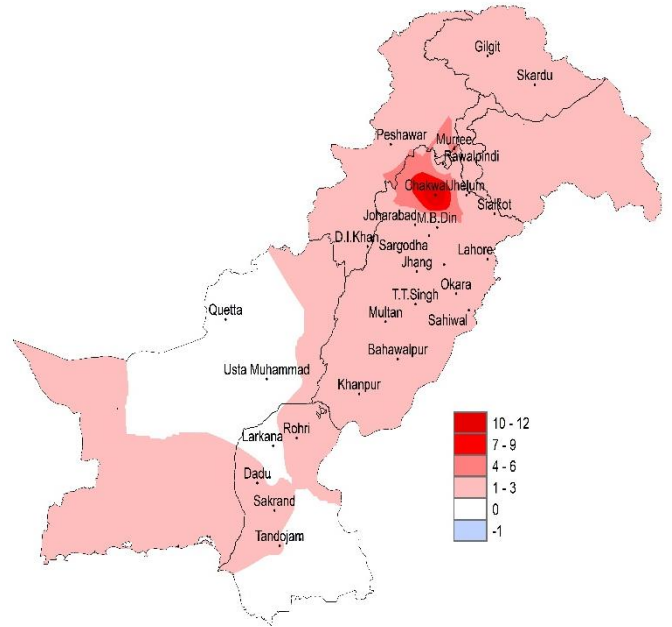
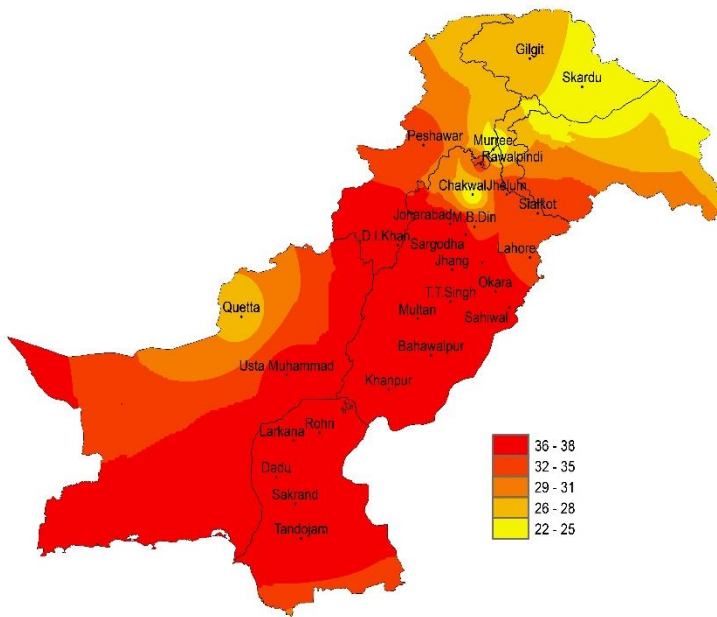
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

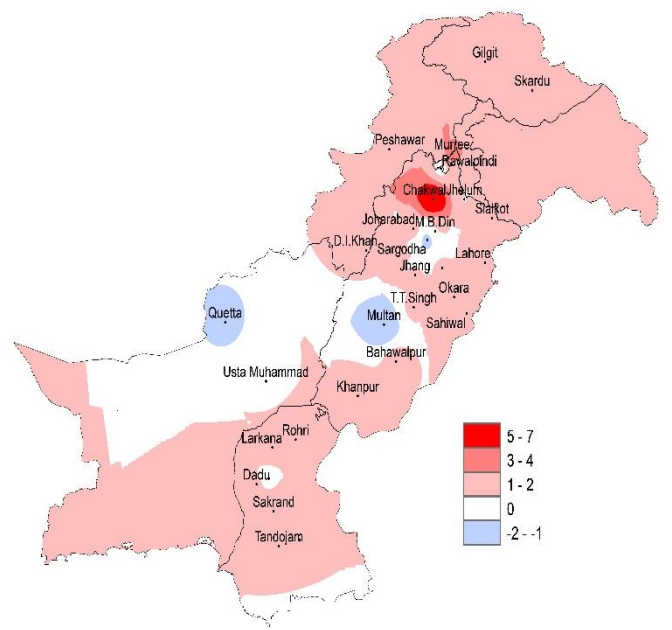
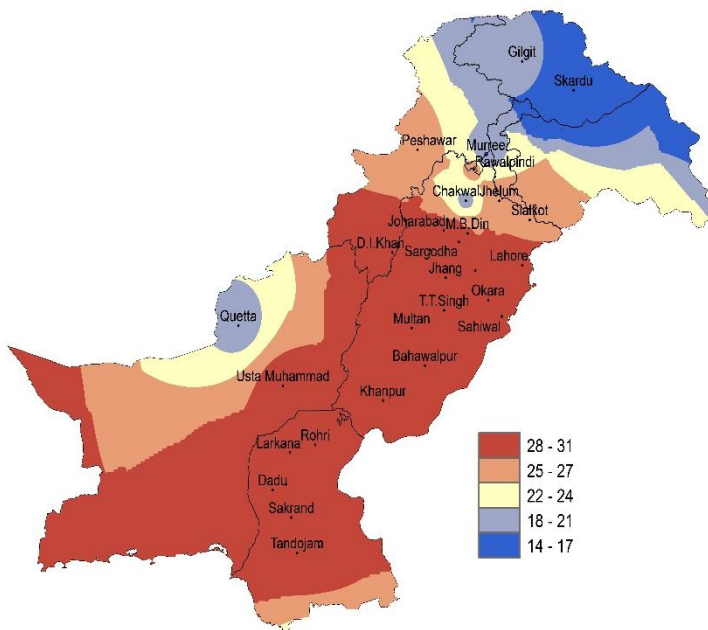
Rice crop is sown in the fields of RAMC Usta Muhammad.

Rice: Good, Flowering Stage.

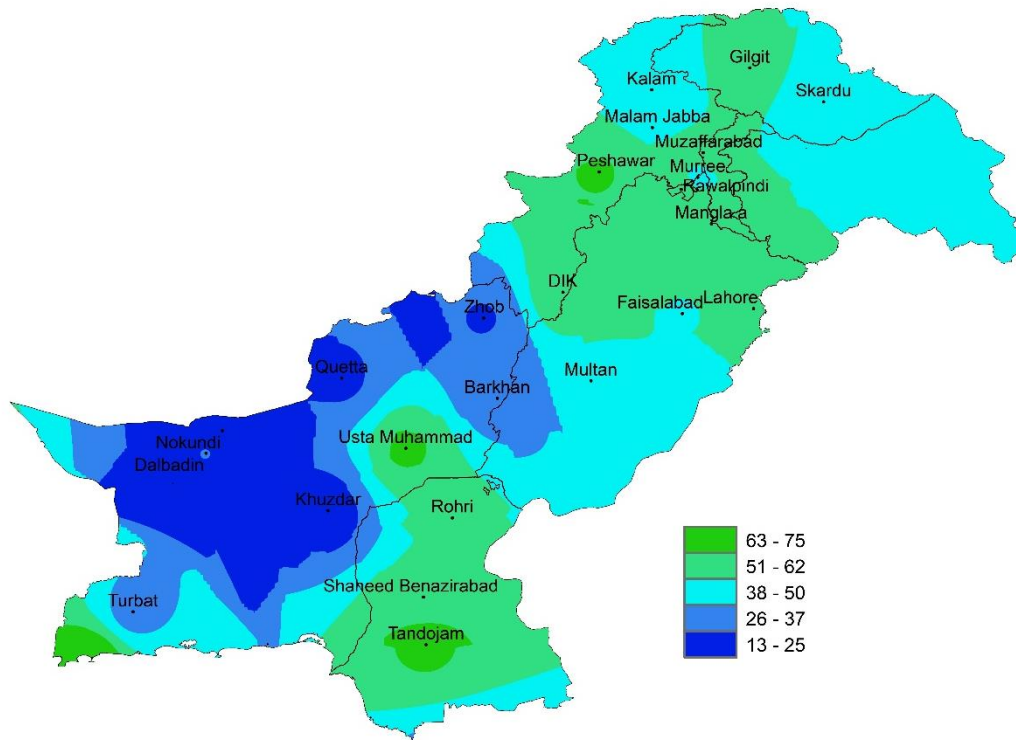
Normal & Departure of Maximum temperature (°C) for the previous week (5th - 11th October, 2020)



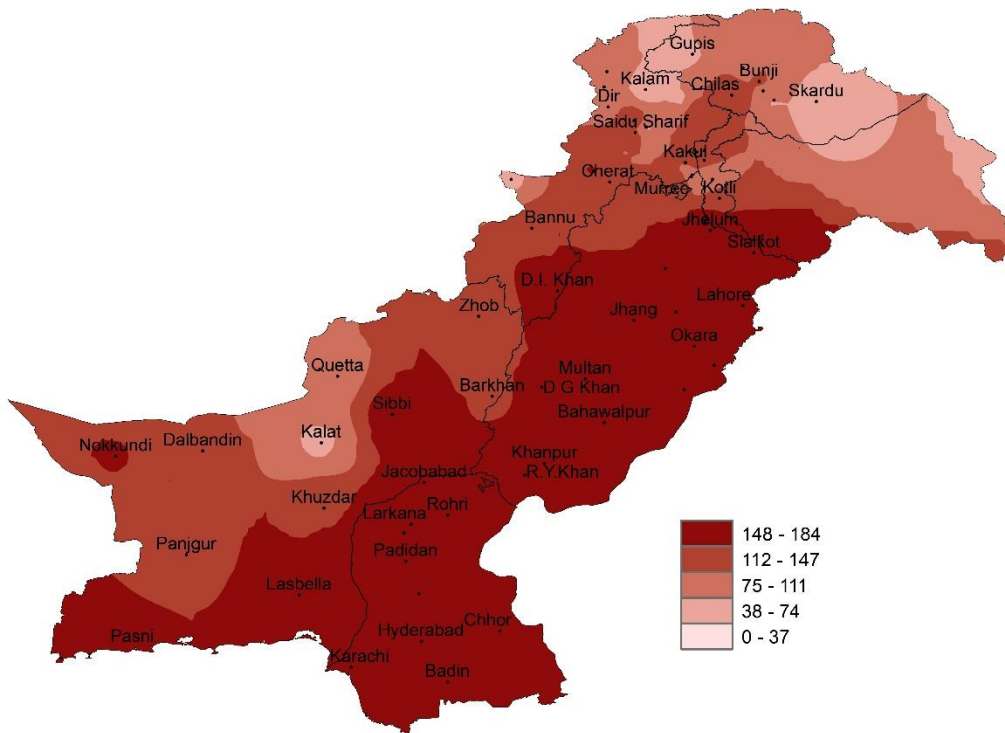
Normal & Departure of Mean temperature (°C) for the previous week (5th - 11th October, 2020)



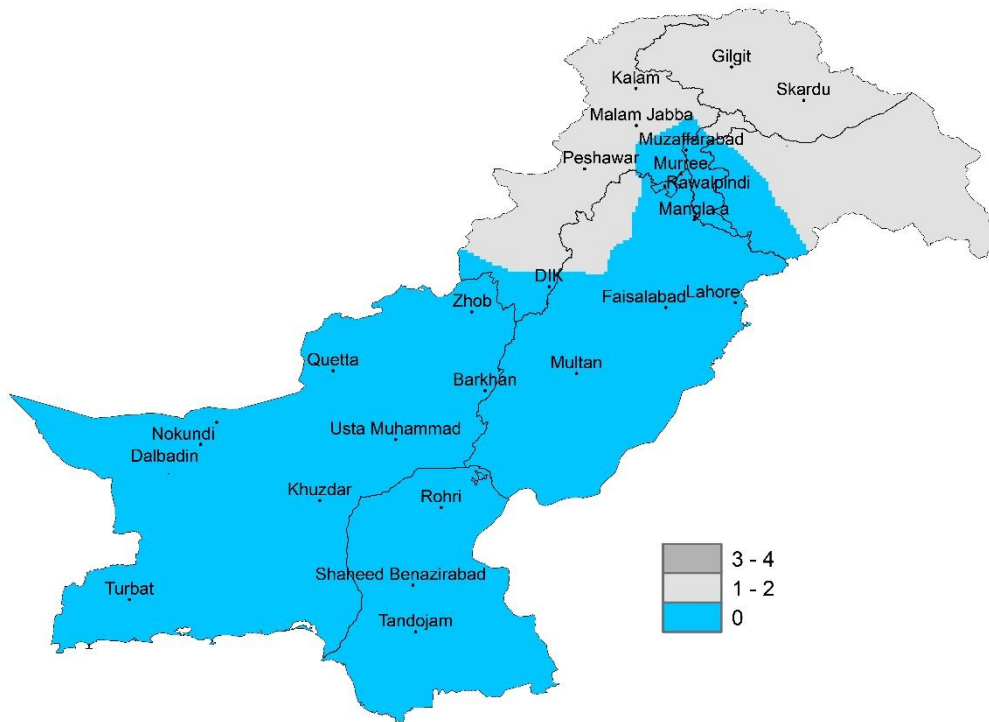
Mean Relative Humidity (%) during the previous week (5th - 11th October, 2020)



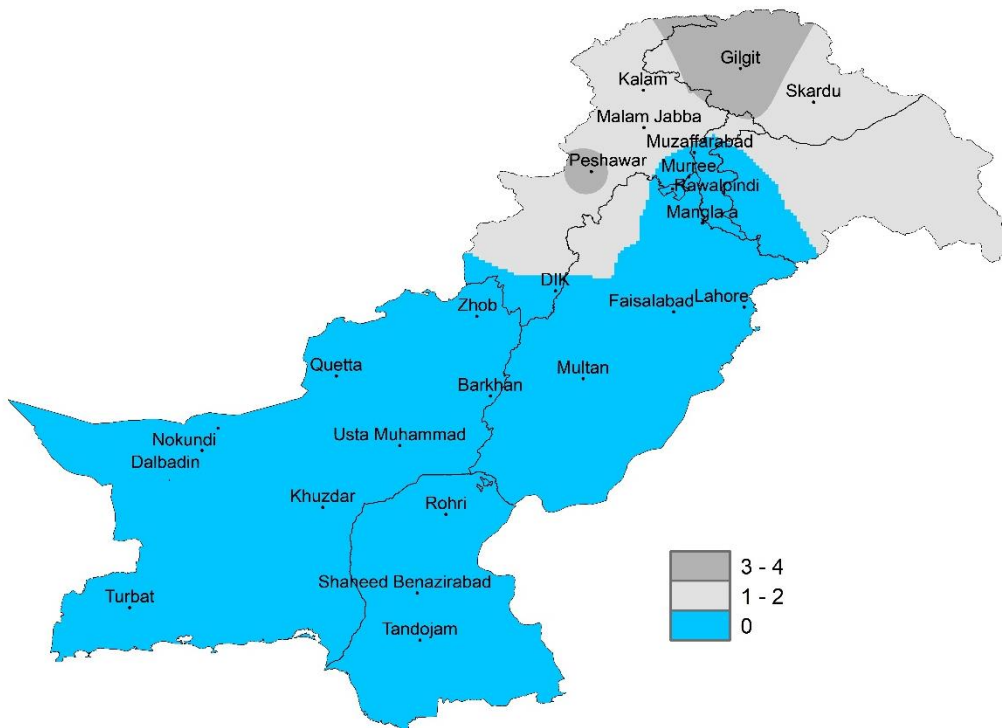
Total Growing Degree Days accumulated during the previous week (5th - 11th October, 2020)



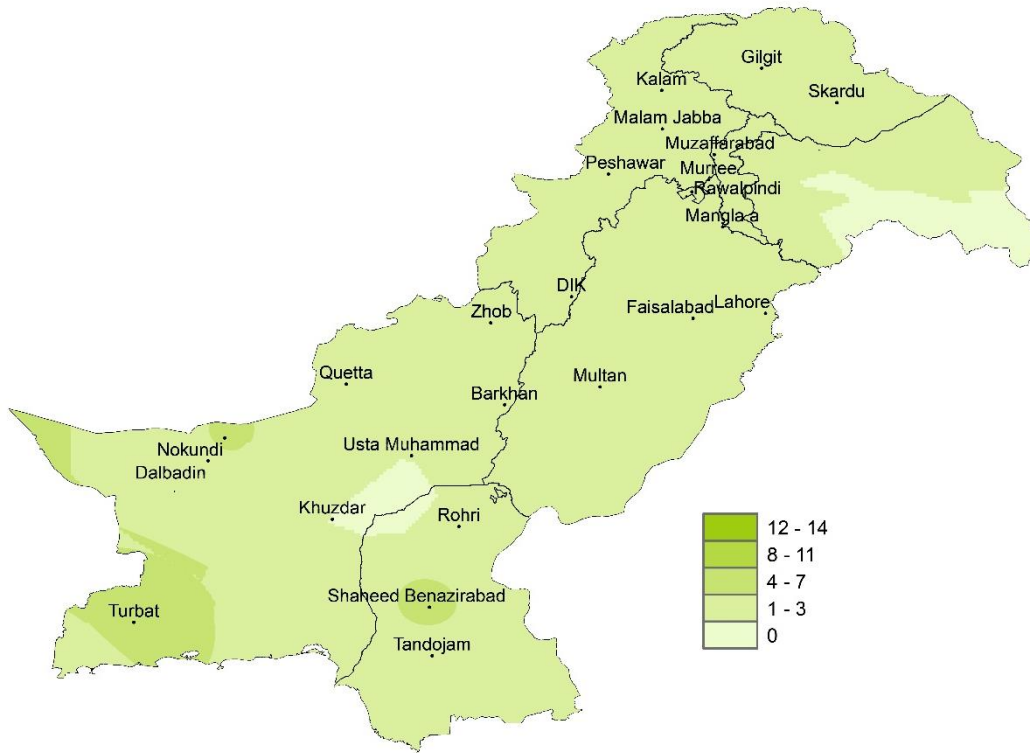
Mean Cloudiness (Oktas) at 0800PST during the previous week (5th - 11th October, 2020)



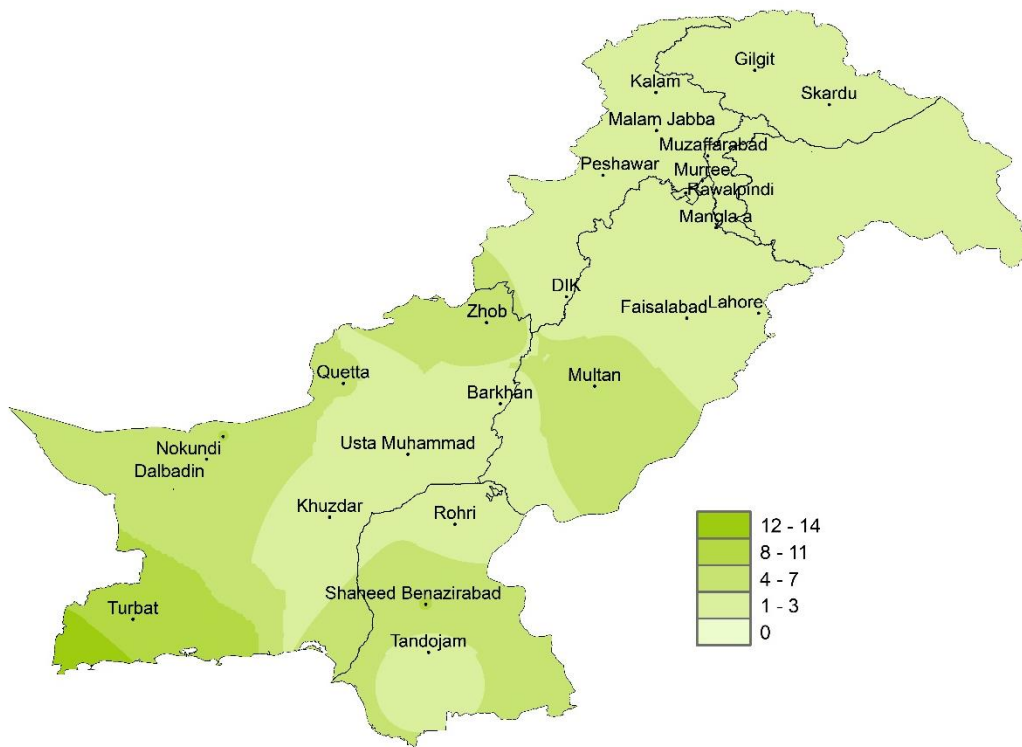
Mean Cloudiness (Oktas) at 1700PST during the previous week (5th - 11th October, 2020)



Mean Wind Speed (Knots) at 0800PST during the previous week (5th - 11th October, 2020)



Mean Wind Speed (Knots) at 1700PST during the previous week (5th - 11th October, 2020)



Weekly Weather Advisory for Farmers**(12th – 18th October, 2020)**

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

MONDAY**12-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, while hot in plain areas during day time. However, light rain-thunderstorm is expected in upper Khyber Pakhtunkhwa and Gilgit-Baltistan.

TUESDAY**13-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, while hot in plain areas during day time. However, light rain-thunderstorm is expected in upper Khyber Pakhtunkhwa and Gilgit-Baltistan.

WEDNESDAY**14-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, while hot in plain areas. However, light rain-thunderstorm (with snowfall over high mountains) is expected in upper Khyber Pakhtunkhwa (Chitral, Dir, Malakand & surrounding) and Gilgit-Baltistan. Heat wave conditions likely to prevail over Karachi.

THURSDAY**15-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, while hot in plain areas. Heat wave condition likely to prevail over Karachi.

FRIDAY**16-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, while hot in plain areas. Heat wave condition likely to prevail over Karachi.

SATURDAY**17-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, while hot in plain areas.

SUNDAY**18-10-2020**

Mainly dry weather is likely to prevail over most parts of the country, while hot in plain areas.

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 (5th – 11th 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	33.0	34.0	143.0	60	0.00	0.0	0.0	0.3	0.3
Dalbandin	33.4	36.5	125.8	27	0.00	0.0	0.0	0.3	1.1
D.I. Khan	37.1	38.5	165.5	26	0.00	0.0	0.0	0.9	3.1
Faisalabad	37.3	38.0	161.3	50	0.00	0.0	0.0	0.6	0.8
Gawadar	35.4	39.0	162.5	75	0.00	0.0	0.0	1.7	14.0
Gilgit	29.1	31.0	93.3	57	0.00	1.9	4.1	0.6	0.9
Kalam	21.5	25.0	52.0	38	0.70	0.6	1.6	0.0	0.0
Khuzdar	32.3	33.0	143.3	17	0.00	0.0	0.0	0.0	0.9
Lahore	35.6	36.5	169.2	50	0.00	0.0	0.0	0.0	2.6
Malam Jabba	19.4	20.0	64.3	50	0.00	0.0	0.7	1.7	1.1
Mangla	35.7	36.2	150.6	60	0.00	0.0	0.0	0.0	0.6
Multan (PBO)	36.6	37.4	156.9	45	0.00	0.0	0.0	0.6	6.3
Murree	24.7	25.4	101.9	47	0.00	0.0	0.0	0.3	0.0
Muzaffarabad	34.2	36.0	130.3	53	0.00	0.0	0.0	0.0	0.3
Nokkundi	39.5	42.5	181.8	58	0.00	0.0	0.0	4.0	7.1
Nawabshah	33.8	36.0	148.5	13	0.00	0.0	0.0	3.7	7.1
Peshawar	34.3	37.5	150.3	63	0.01	0.3	2.3	0.3	0.9
Quetta	26.2	27.2	87.4	22	0.00	0.0	0.0	2.3	3.1
Rawalpindi	34.3	35.5	141.1	56	0.00	0.0	0.0	0.3	0.3
Rohri	38.5	39.5	183.5	53	0.00	0.0	0.0	0.0	1.4
Skardu	24.4	25.8	64.9	38	0.00	0.1	0.7	0.0	0.0
Tandojam	37.1	37.5	172.5	66	0.00	0.0	0.0	0.3	1.2
Turbat	40.9	41.5	193.5	31	0.00	0.0	0.0	4.3	8.6
Usta. M	35.4	36.5	167.5	65	0.00	0.0	0.0	0.0	0.0
Zhob	30.7	31.5	127.5	24	0.00	0.0	0.0	2.9	5.3

*** 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)