

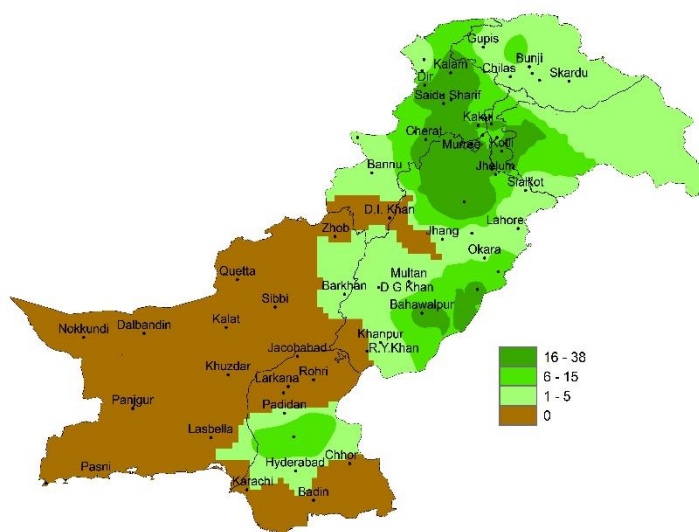
# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous  
Week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**



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## Highlights of Past Weather (4<sup>th</sup> – 10<sup>th</sup> October, 2021)

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

Rainfall reported as follows during the last week:

1. Light to moderate rainfall reported from Punjab, upper Khyber Pakhtunkhwa, Kashmir and Gilgit-Baltistan.
2. Light rainfall reported from a single station in upper Sindh.

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

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

**Editor: Ruqiya Mehmood (Assistant Meteorologist)**

**Past Weather of Provinces (4<sup>th</sup> – 10<sup>th</sup> October, 2021)****Punjab**

Light to moderate rainfall reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 35.0°C & 22.9°C respectively. For the recent week on average 167.8 growing degree days were accumulated. Average relative humidity recorded as 64% and wind speed in the morning/evening recorded as 7.2/3.9 Knots. During the previous week the highest precipitation was observed as 38.0 mm at Islamabad while the highest maximum temperature was recorded as 40.0°C at Bahawalnagar.

**Baluchistan**

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 33.3°C & 18.8°C respectively. For the recent week on average 147.2 growing degree days were accumulated. Average relative humidity recorded as 45% and wind speed in the morning/evening recorded as 1.0/5.4 Knots. During the highest maximum temperature was recorded as 43.0°C at Turbat.

**Khyber Pakhtunkhwa**

Light to moderate rainfall reported from upper Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 30.1°C & 16.3°C respectively. For the recent week on average 127.3 growing degree days were accumulated. Average relative humidity recorded as 67% and wind speed in the morning/evening recorded as 1.8/2.1 Knots. During the previous week the highest precipitation was observed as 31.0 mm at Malamjabba while the highest maximum temperature was recorded as 38.0°C at D.I.Khan.

**Sindh**

Light rainfall reported from a single station in upper Sindh during the week. Weekly maximum and minimum temperatures recorded as 37.1°C & 25.3°C respectively. For the recent week on

average 183.6 growing degree days were accumulated. Average relative humidity recorded as 63% and wind speed in the morning/evening recorded as 2.5/4.0 Knots. During the previous week the highest precipitation was observed as 15.3 mm at Shaheed Benazirabad while the highest maximum temperature was recorded as 41.5°C at Shaheed Benazirabad.

**Gilgit-Baltistan and Azad Jammu & Kashmir**

Light to moderate rainfall reported from Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 28.2°C & 13.6°C respectively. For the recent week on average 111.1 growing degree days were accumulated. Average relative humidity recorded as 59% and wind speed in the morning/evening recorded as 0.1/1.5 Knots. During the previous week the highest precipitation was observed as 22.0 mm at Kotli while the highest maximum temperature was recorded as 35.0°C at Chillas.

**Past Weather for Major Agricultural Plains****(4<sup>th</sup> – 10<sup>th</sup> October, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 31.2 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 1.3/1.6 Oktas while, average relative humidity observed as 69%. Mean day time temperature recorded as 33.8°C & for the recent week 149.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.8 Knots.

**Faisalabad (Central Punjab)**

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/1.6 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 36.3°C & for the recent week 174.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.6 Knots.

**Tandojam (Lower Sindh)**

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.6/0.0 Oktas while, average relative humidity observed as 67%. Mean day time temperature recorded as 36.4°C & for the recent week 177.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.2/4.8 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 69%. Mean day time temperature recorded as 37.3°C & for the recent week 187.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.2 Knots.

**Quetta (Northern Baluchistan)**

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.3/0.1 Oktas while, average relative humidity observed as 32%. Mean day time temperature recorded as 27.2°C & for the recent week 100.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/2.3 Knots.

**Past Weather for Sub-Regional Agricultural****Plains (4<sup>th</sup> – 10<sup>th</sup> October, 2021)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.0/1.1 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 37.2°C & for the recent week 175.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.9/6.6 Knots.

**Lahore**

Dry weather reported from Lahore during the week; cloudiness in the morning/evening recorded as 1.5/0.0 Oktas while, average relative humidity observed as 66%. Mean day time temperature recorded as 37.0°C & for the recent week 170.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 17.3/1.6 Knots.

**Zhob**

Dry weather reported from Zhob during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 29%. Mean day time temperature recorded as 32.5°C & for the recent week 140.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/3.3 Knots.

**Murree**

Rainfall reported as 9.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 1.0/3.1 Oktas while, average relative humidity observed as 67%. Mean day time temperature recorded 25.0°C & for the recent week 96.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/3.4 Knots.

**D.I. Khan**

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, average relative humidity observed as 66%. Mean day time temperature recorded as 38.0°C & for the recent week 181.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/1.4 Knots.

**Peshawar**

Rainfall reported as 6.0 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.1/1.0 Oktas while, average relative humidity observed as 66%. Mean day time temperature recorded as 35.5°C & for the recent week 158.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/2.0 Knots.

**Kalam**

Rainfall reported as 29.5 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 1.7/4.0 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 26.0°C & for the recent week 64.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.1 Knots.

**Gilgit**

Rainfall reported as 7.5 mm from Gilgit during the week. However, cloudiness in the morning/evening recorded as 2.6/4.3 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 32.0°C & for the recent week 104.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.6 Knots.

**Skardu**

Rainfall reported as 0.4 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 1.6/4.0 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 25.4°C & for the recent week 74.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.1 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 Cotton crop is grown in the fields of RAMC Faisalabad.

**Cotton: Very Good**, Maturity Stage.

**Lower Sindh (Tandojam)**

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

**Cotton: Crop Variety (Sindh-1)**, Third Picking Done.

**Northern Baluchistan (Quetta)**

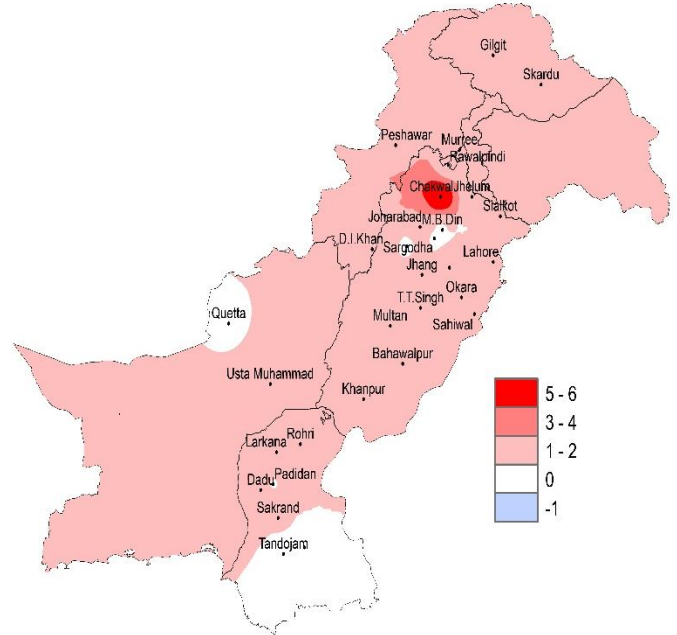
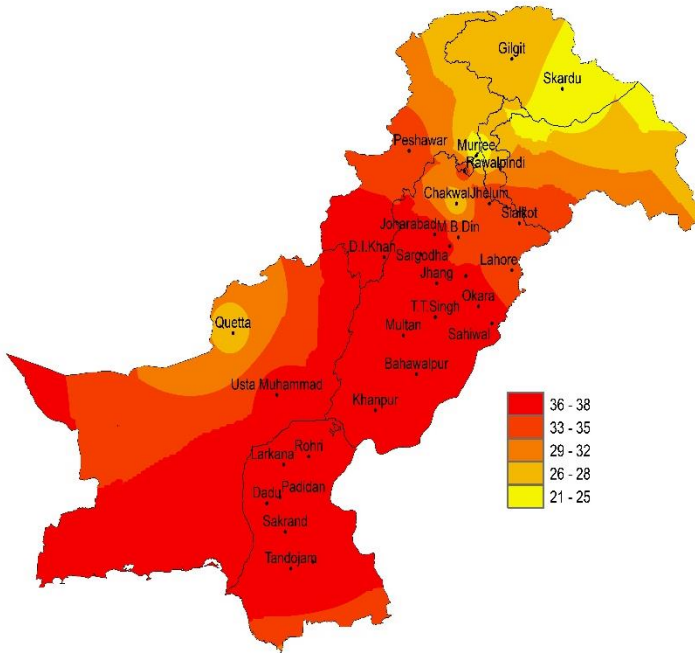
There is presently no crop grown in the fields of RAMC Quetta.

**Eastern Baluchistan (Usta Muhammad)**

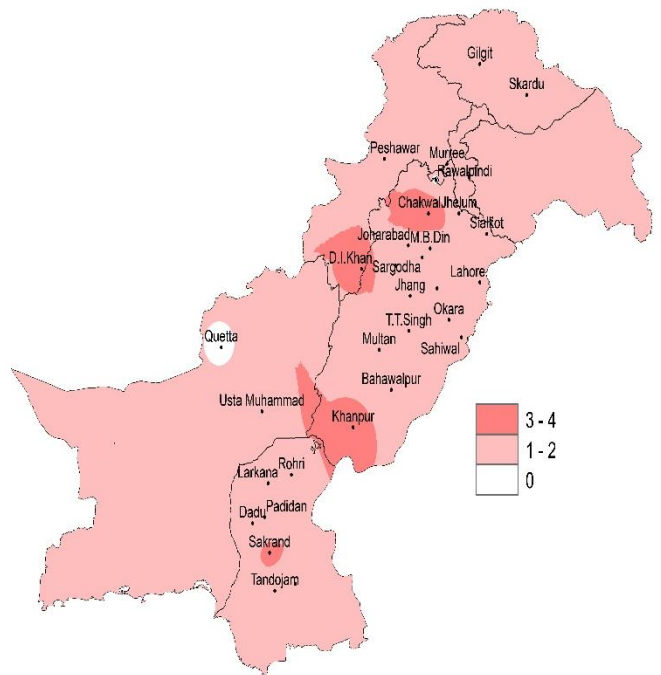
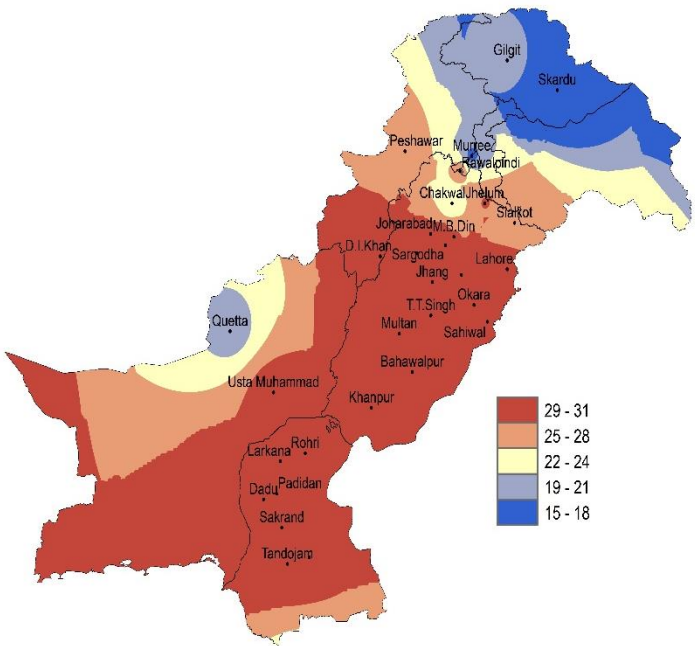
Presently Rice crop is sown in the fields of RAMC Usta Muhammad.

**Rice: Good**, Flowering Stage, irrigated.

**Normal & Departure of Maximum temperature (°C) for the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**

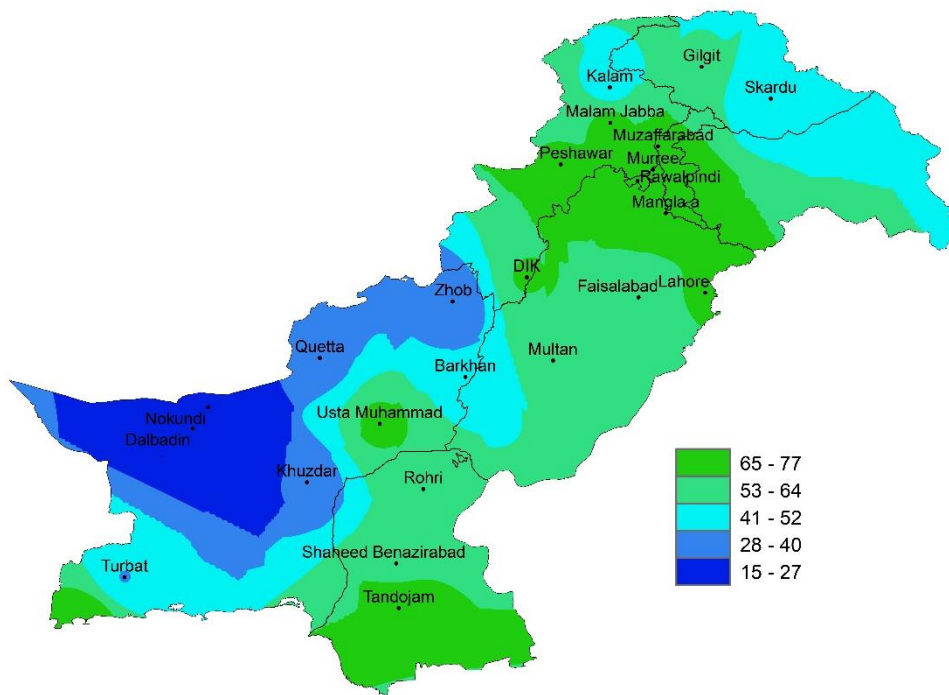


**Normal & Departure of Mean temperature (°C) for the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**

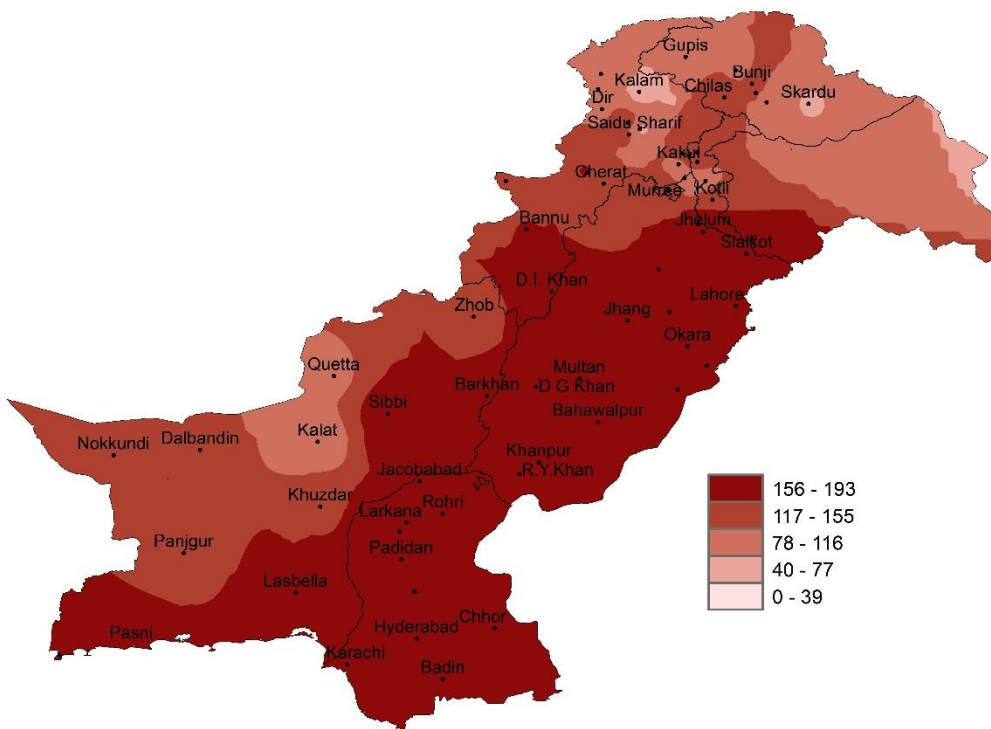




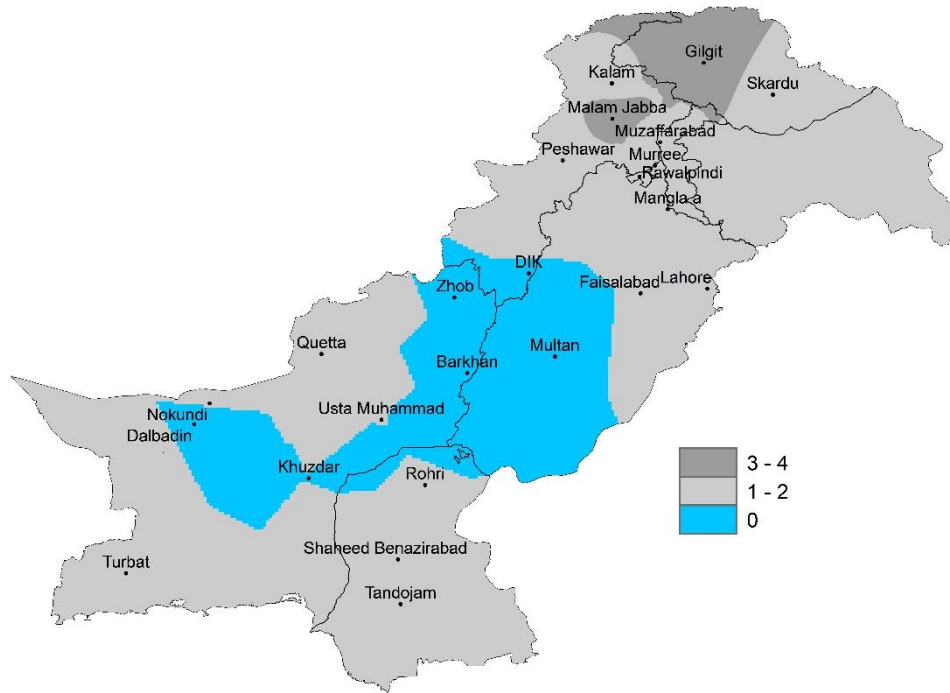
**Mean Relative Humidity (%) during the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**



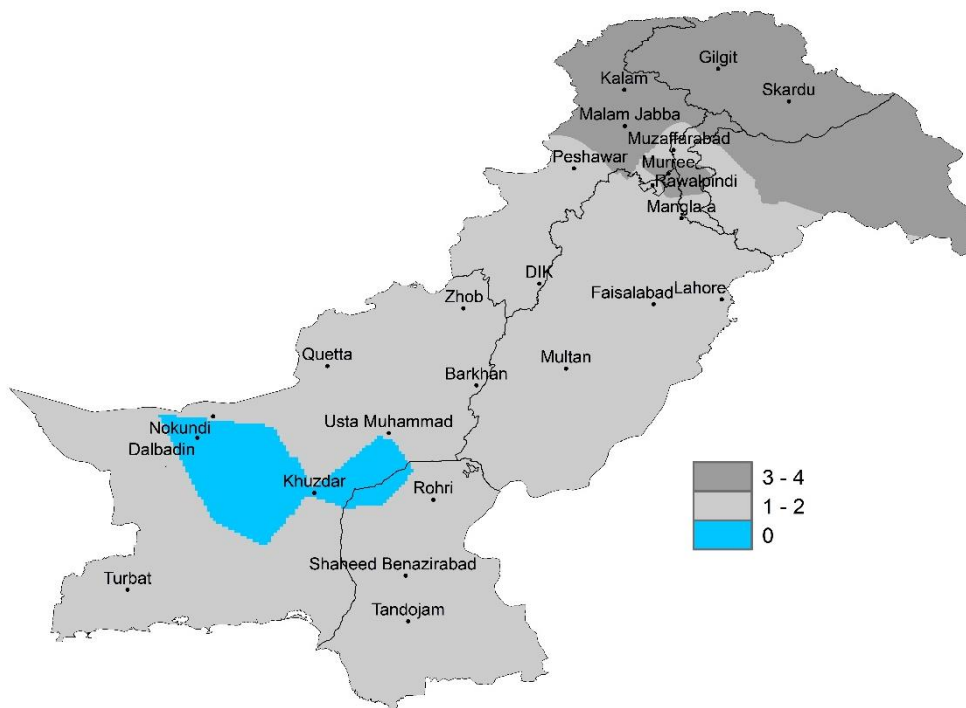
**Total Growing Degree Days accumulated during the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**



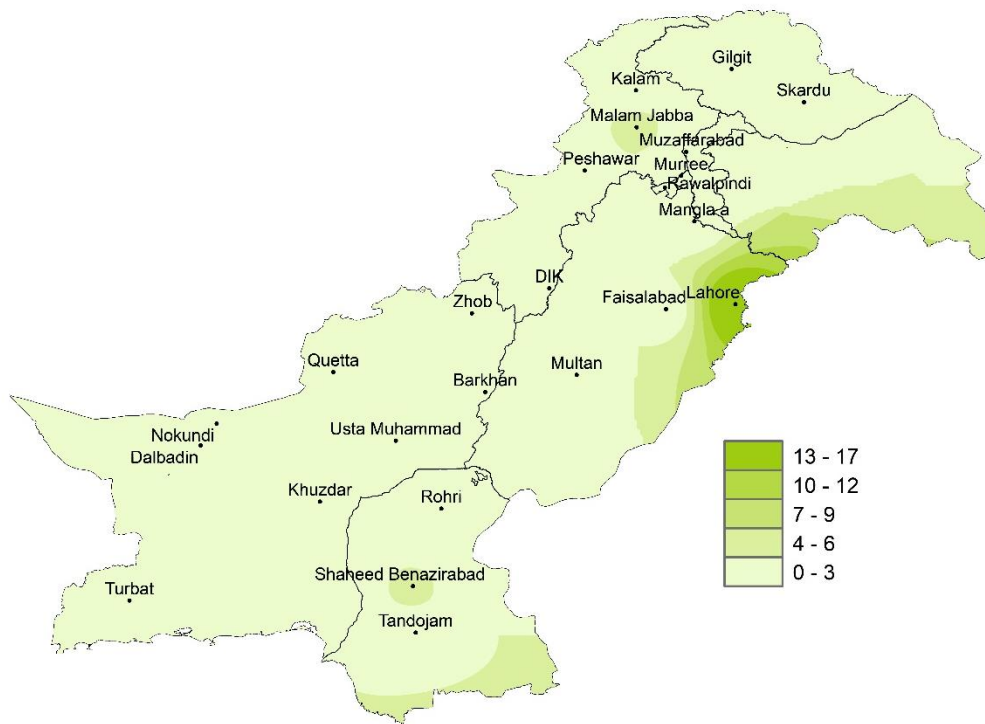
**Mean Cloudiness (Oktas) at 0800PST during the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**



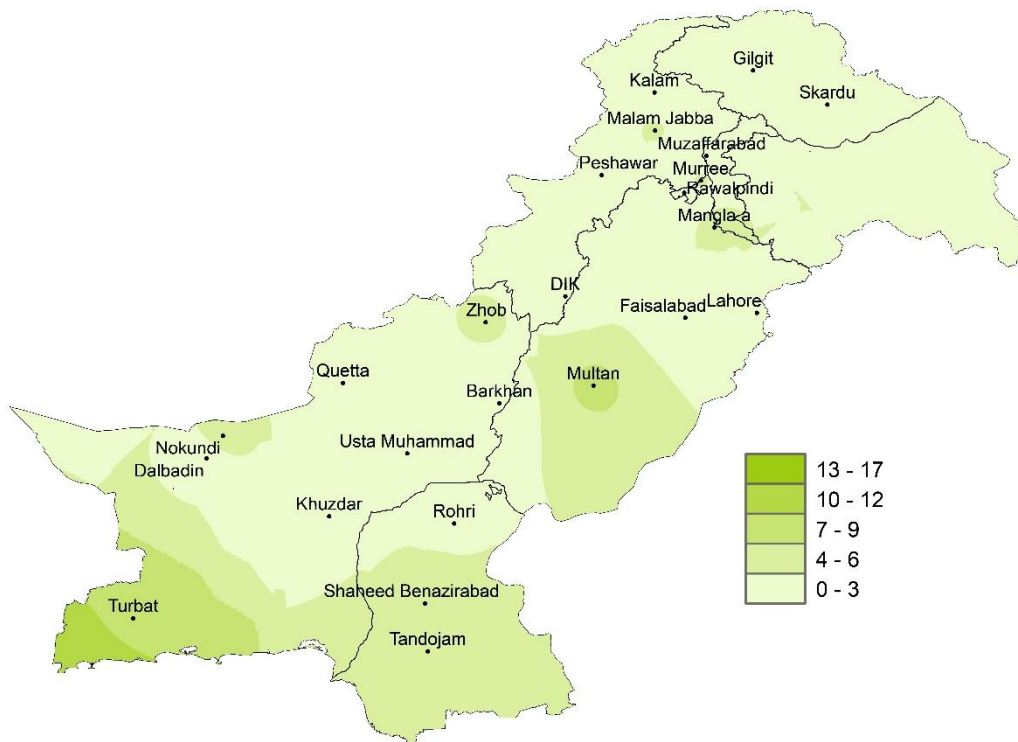
**Mean Cloudiness (Oktas) at 1700PST during the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**



**Mean Wind Speed (Knots) at 0800PST during the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**



**Mean Wind Speed (Knots) at 1700PST during the previous week (4<sup>th</sup> – 10<sup>th</sup> October, 2021)**





**Weekly Weather Advisory for Farmers****(11<sup>th</sup> – 17<sup>th</sup> October, 2021)**

A Westerly wave is affecting upper parts of the country.

**MONDAY****11-10-2021**

Dry weather is expected in central/southern parts of the country. However, rain wind-thunderstorm (light snowfall over the mountains) is expected in Kashmir, Gilgit-Baltistan, Islamabad, upper Punjab and upper Khyber Pakhtunkhwa during evening/night. Isolated heavy falls are also expected during the period.

**TUESDAY****12-10-2021**

Dry weather is expected in most parts of the country. However, isolated rain-thunderstorm is expected in Kashmir, Gilgit-Baltistan and northeast Punjab.

**WEDNESDAY****13-10-2021**

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

**THURSDAY****14-10-2021**

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

**FRIDAY****15-10-2021.**

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

**SATURDAY****16-10-2021**

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

**SUNDAY****17-10-2021**

Dry weather is expected in central/southern parts of the country. However, rain wind-thunderstorm (light snowfall over the mountains) is expected in Kashmir, Gilgit-Baltistan, Islamabad, upper Punjab and upper Khyber Pakhtunkhwa.

**ADVISORY FOR FARMERS**

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

- ❖ Farmers are advised to irrigate the crop according to its need.
- ❖ Farmers are advised to schedule picking of cotton on time.

**National Weather Data of Selected Cities from (4<sup>th</sup> – 10<sup>th</sup> October, 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	34.5	36.0	160.5	42	0.0	0.0	0.9	0.6	1.1
Dalbandin	33.9	36.5	133.0	27	0.0	0.0	0.0	0.9	2.0
D.I.Khan	37.4	38.0	181.0	66	0.0	0.0	0.6	1.4	1.4
Faisalabad	36.3	38.0	174.7	58	0.0	0.0	1.6	1.1	1.1
Gawadar	33.1	36.0	162.6	77	0.0	1.6	0.0	0.6	11.7
Gilgit	29.2	32.0	104.1	54	7.5	2.6	4.3	0.0	0.6
Kalam	21.5	26.0	64.0	45	29.5	1.7	4.0	0.0	2.1
Khuzdar	32.1	33.5	144.5	28	0.0	0.0	0.0	0.0	1.1
Lahore	34.6	37.0	170.9	66	0.0	1.5	0.0	17.3	1.6
Malam Jabba	16.9	19.5	59.0	69	31.0	2.4	4.0	5.4	3.1
Mangla	33.7	34.6	159.5	70	32.8	1.7	1.4	0.6	3.4
Multan	36.2	37.2	175.7	59	0.0	0.0	1.1	2.9	6.6
Murree	23.0	25.0	96.0	67	9.0	1.0	3.1	1.4	3.4
Muzaffarabad	33.1	34.0	144.7	67	12.0	1.9	1.1	0.0	0.0
Nawabshah	39.8	41.5	193.2	63	15.3	0.3	1.4	3.7	4.9
Nokkundi	34.9	38.5	148.8	15	0.0	0.0	0.0	2.0	3.7
Peshawar	34.3	35.5	158.7	66	6.0	1.1	1.0	0.3	2.0
Quetta	27.2	29.0	100.6	32	0.0	0.3	0.1	2.3	2.3
Rawalpindi	33.8	33.0	149.4	69	31.2	1.3	1.6	0.2	0.8
Rohri	38.7	40.0	193.3	60	0.0	0.0	0.0	0.6	2.3
Skardu	23.7	25.4	74.5	45	0.4	1.6	4.0	0.0	2.1
Tandojam	36.4	38.0	177.7	67	0.0	0.6	0.0	3.2	4.8
Turbat	40.1	43.0	192.3	39	0.0	1.1	0.7	1.4	7.9
Usta Muhammad	37.3	38.0	187.0	69	0.0	0.0	0.0	0.2	0.2
Zhob	31.4	32.5	140.8	29	0.0	0.0	0.0	2.3	3.3

\*\*\* 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)