

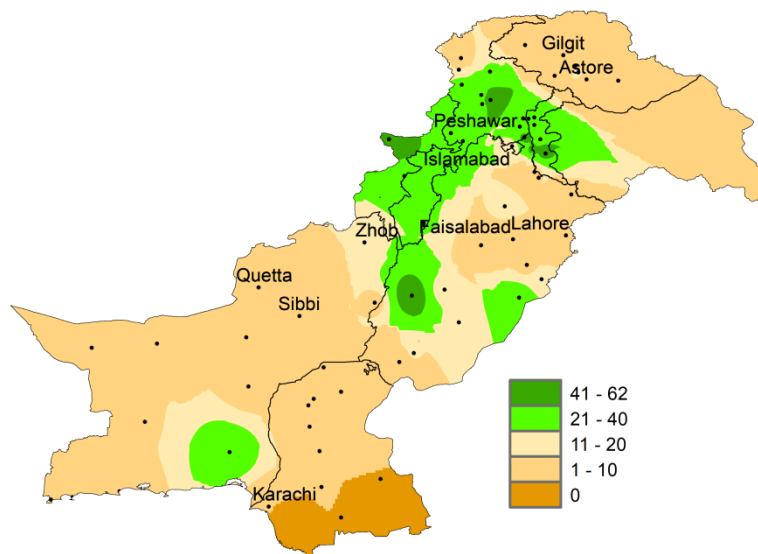
# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous  
Week (13<sup>th</sup> May-19<sup>th</sup> May, 2019)**



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## Highlights of Past Weather (13<sup>th</sup> May-19<sup>th</sup> May, 2019)

Above normal day time temperatures were observed in Punjab and Balochistan while mix trend was observed in rest of the country during the last week.

Province wise distribution of rainfall reported as follows during the last week:

1. Light to moderate rainfall observed all over the provinces except Sindh where light rainfall observed.

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**Editor-in-Chief: Dr M. Afzaal (Director)**

**Editor: Saeeda Saleh (Assistant Meteorologist)**

**Past Weather of Provinces (13<sup>th</sup> May-19<sup>th</sup> May, 2019)****Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 34.8°C & 21.6°C respectively. For the recent week on average 162.5 growing degree days were accumulated. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 2.9/4.8 Knots. During the previous week the highest precipitation was recorded as 57.00 mm at D.G Khan while maximum temperature was recorded as 42.3°C at Rahim Yar Khan.

**Baluchistan**

Light to moderate rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 32.9°C & 20.2°C respectively. For the recent week on average 148.6 growing degree days were accumulated. Average relative humidity recorded as 49% and wind speed in the morning/evening recorded as 1.8/6.8 Knots. During the previous week the highest precipitation was recorded as 31.00 mm at Lasbella while maximum temperature was recorded as 42.5°C at Turbat.

**Khyber Pakhtunkhwa**

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 28.7°C & 15.4°C respectively. For the recent week on average 119.0 growing degree days were accumulated. Average relative humidity recorded as 63% and wind speed in the morning/evening recorded as 1.5/2.5 Knots. During the previous week the highest precipitation recorded as 65.01 mm at Kohat while maximum temperature was recorded as 41.0°C at D I Khan.

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

Light to moderate rainfall observed in Gilgit-Baltistan & Kashmir during the week. Weekly

maximum and minimum temperatures recorded as 26.7°C & 13.3°C respectively. For the recent week on average 100.0 growing degree days were accumulated. Average relative humidity recorded as 48% and wind speed in the morning/evening recorded as 0.8/6.1 Knots. The highest precipitation recorded as 45.00 mm at Kotli while maximum temperature was recorded as 36.1°C at Kotli.

**Sindh**

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 39.5 °C & 25.0 °C respectively. For the recent week, on average 190.0 growing degree days were accumulated. Average relative humidity recorded as 54% and wind speed in the morning/evening recorded as 2.5/4.9 Knots. The highest precipitation recorded as 8.00 mm at Jacobabad while maximum temperature was recorded as 47.0 °C at Dadu.

### Past Weather for Major Agricultural Plains (13<sup>th</sup> May-19<sup>th</sup> May, 2019)

#### **Rawalpindi (Potohar region)**

29.0 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 3.9/5.4 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded 34.2°C & for the recent week 146.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.1 Knots.

#### **Faisalabad (Central Punjab)**

17.0 mm rainfall was reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 3.3/2.9 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 36.0°C & for the recent week 169.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.5 Knots.

#### **Tandojam (Lower Sindh)**

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0/0.3 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 39.1°C & for the recent week 190.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 2/4.3 Knots.

#### **Usta Muhammad (Eastern Baluchistan)**

10.0 mm rainfall was reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 2/2.7 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 42.0°C & for the recent week 190.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/1.1 Knots.

#### **Quetta (Northern Baluchistan)**

19.4 mm rainfall was reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 4.1/5.4 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 38.0°C & for the

recent week 106.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.1/3 Knots.

### Past Weather for Sub-Regional Agricultural Plains (13<sup>th</sup> May-19<sup>th</sup> May, 2019)

#### **Multan**

11.60 mm rainfall reported from Multan during the week; however, cloudiness in the morning/evening recorded as 3.0/4.1 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 35.3°C & for the recent week 172.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.6/7.4 Knots.

#### **Lahore**

4.03 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 2.3/3.3 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 34.5°C & for the recent week 162.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.6/4.9 Knots.

#### **Zhob**

11.00 mm rainfall reported was reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 1.4/4.0 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 29.1°C & for the recent week 122.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.7/9.3 Knots.

#### **Murree**

46.00 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 2.6/6.1 Oktas while, average relative humidity observed as 66%. Mean day time temperature recorded as 20.5° C & for the recent week 76.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.6/2.0 Knots.

**D.I. Khan**

21.00 mm rainfall was reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 2.7/3.9 Oktas while, average relative humidity observed as 61%. Mean day time temperature recorded as 37.3 °C & for the recent week 172.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/2.9 Knots.

**Peshawar**

28.00 mm rainfall reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 3.9/5.3 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 34.3 °C & for the recent week 157.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/3.4 Knots.

**Kalam**

21.80 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 4.7/6.7 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 19.1°C & for the recent 55.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.3 Knots

**Gilgit**

5.82 mm rainfall was reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 5.4/7.1 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 28.3°C & for the recent week 111.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/8.3 Knots.

**Skardu**

0.03 mm rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 5.0/6.9 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 24.2°C & for the recent week 81.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/8.9 Knots.

**Crop Situation for Major Agricultural Plains  
(Based on data from Regional Agro met Centers)****Potohar Region (Rawalpindi)**

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

**Central Punjab (Faisalabad)**

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

**Lower Sindh (Tandojam)**

Presently cotton crop is sown in the fields of RAMC Tandojam.

**Cotton: Good**, Third true leaf stage.

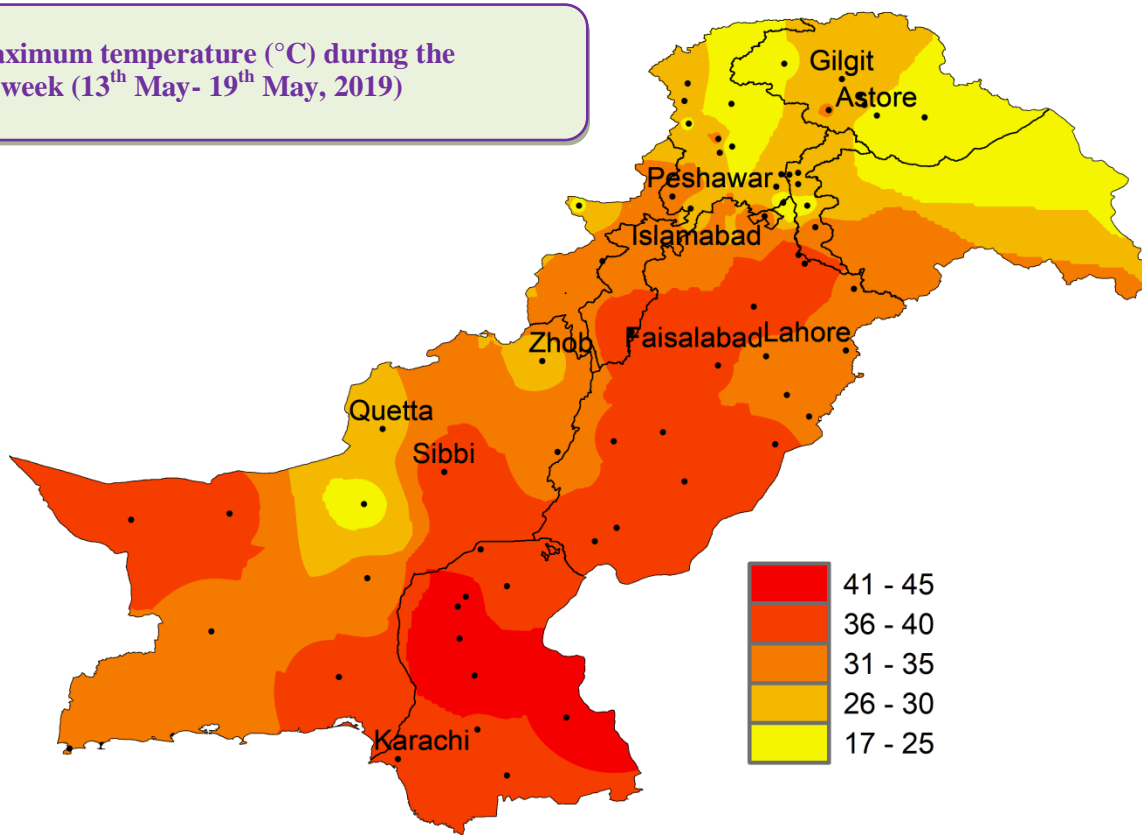
**Northern Baluchistan (Quetta)**

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

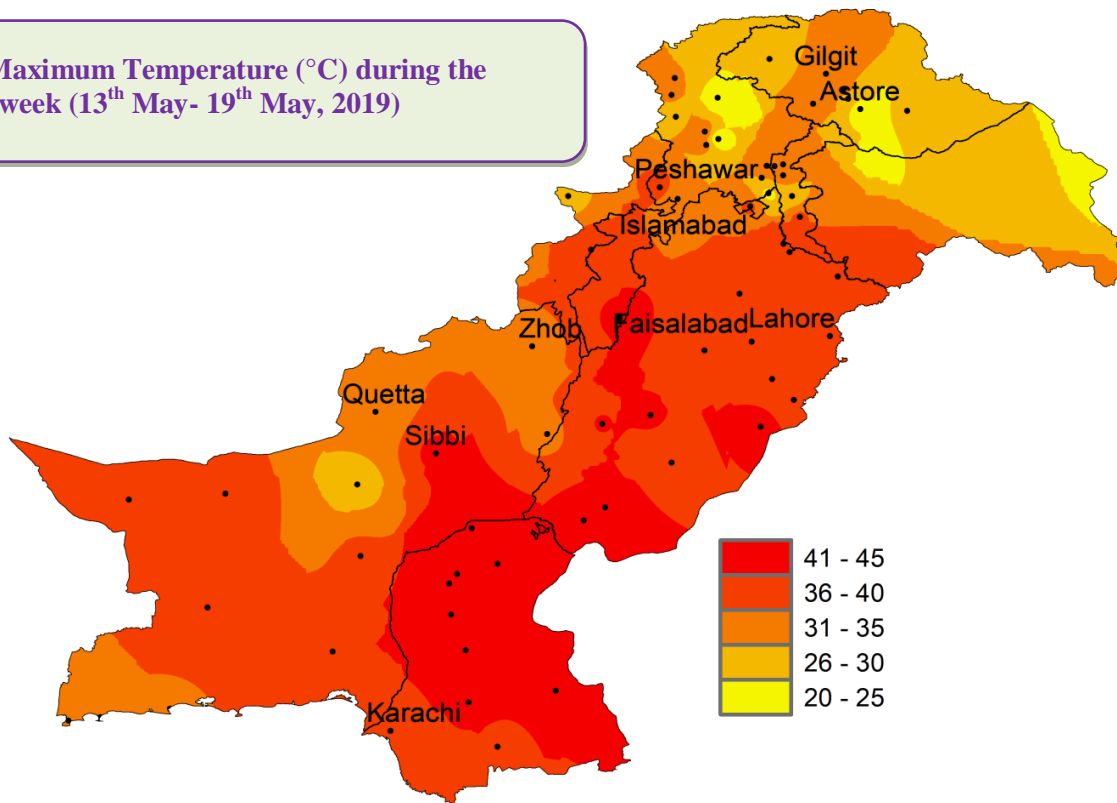
**Eastern Baluchistan (Usta Muhammad)**

Presently no crop is sown in the fields of RAMC Usta Muhammad.

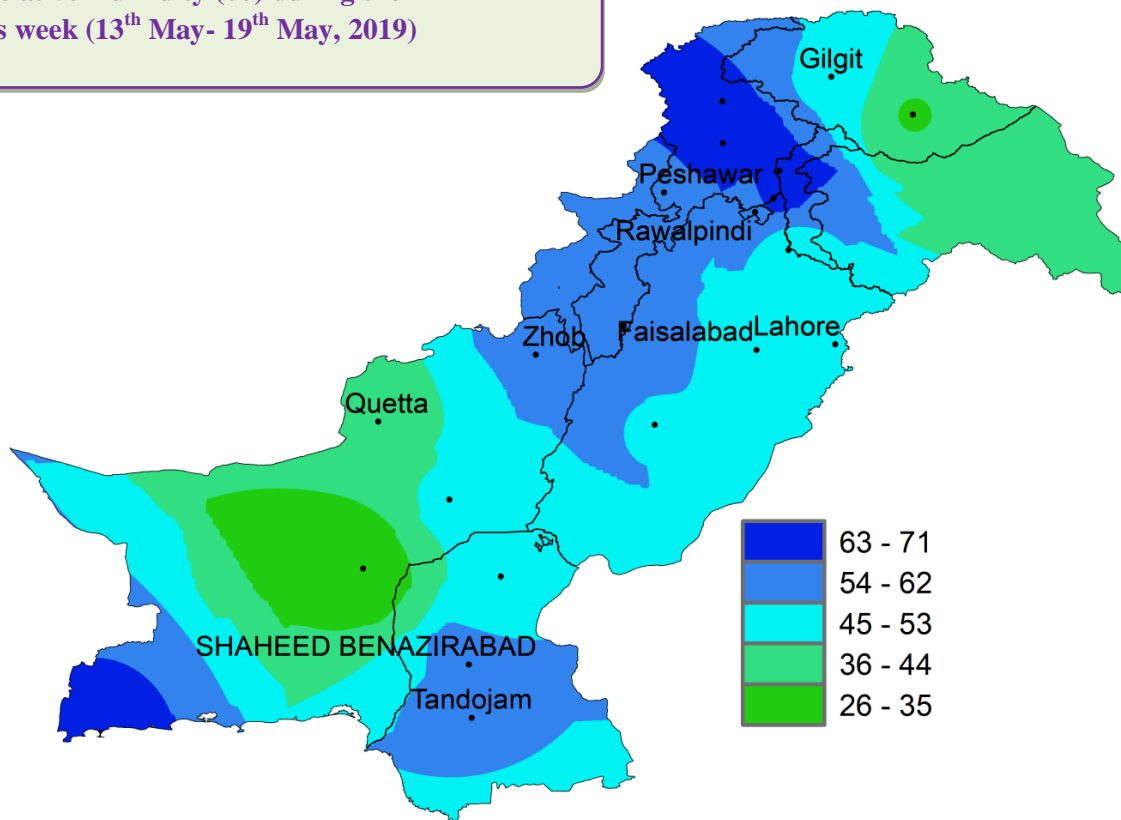
Mean Maximum temperature (°C) during the Previous week (13<sup>th</sup> May- 19<sup>th</sup> May, 2019)



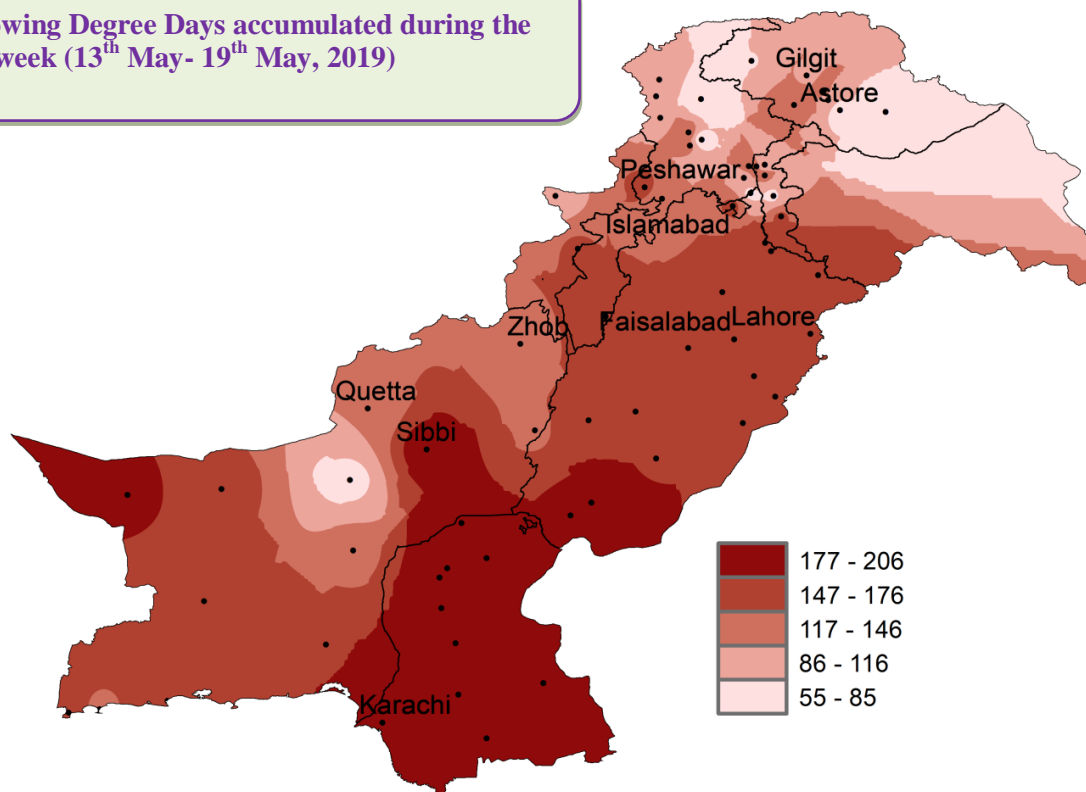
Highest Maximum Temperature (°C) during the Previous week (13<sup>th</sup> May- 19<sup>th</sup> May, 2019)



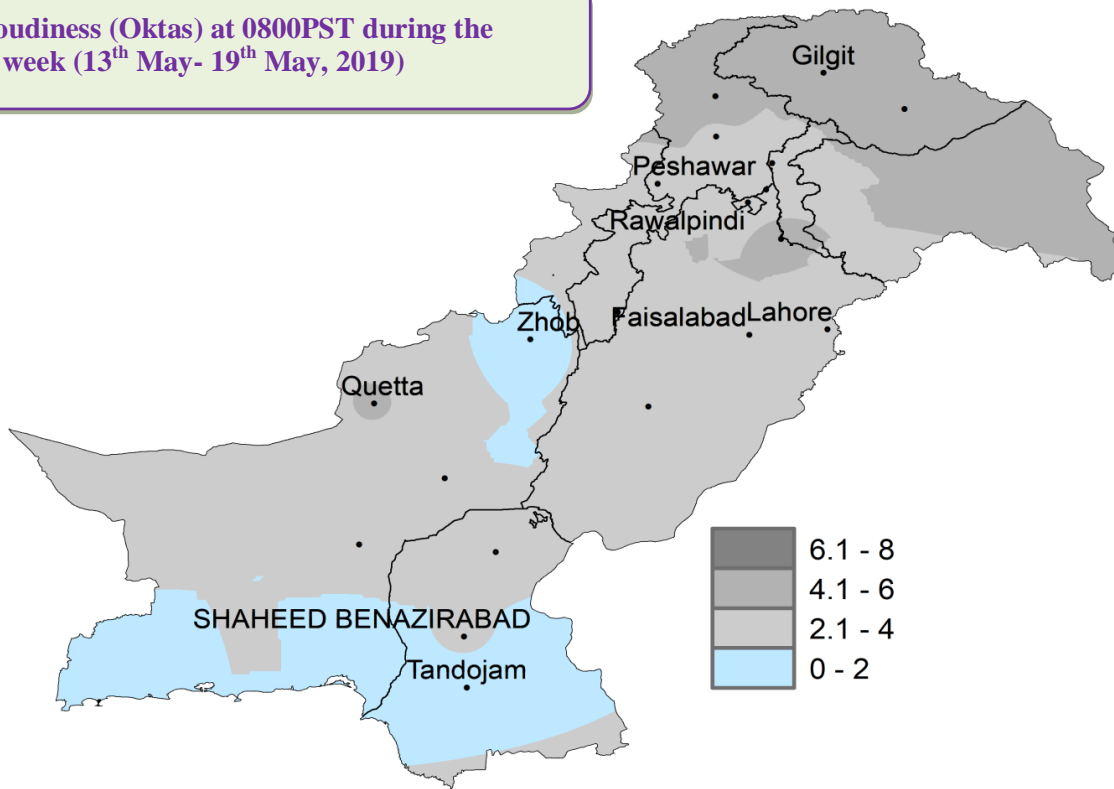
Mean Relative Humidity (%) during the Previous week (13<sup>th</sup> May- 19<sup>th</sup> May, 2019)



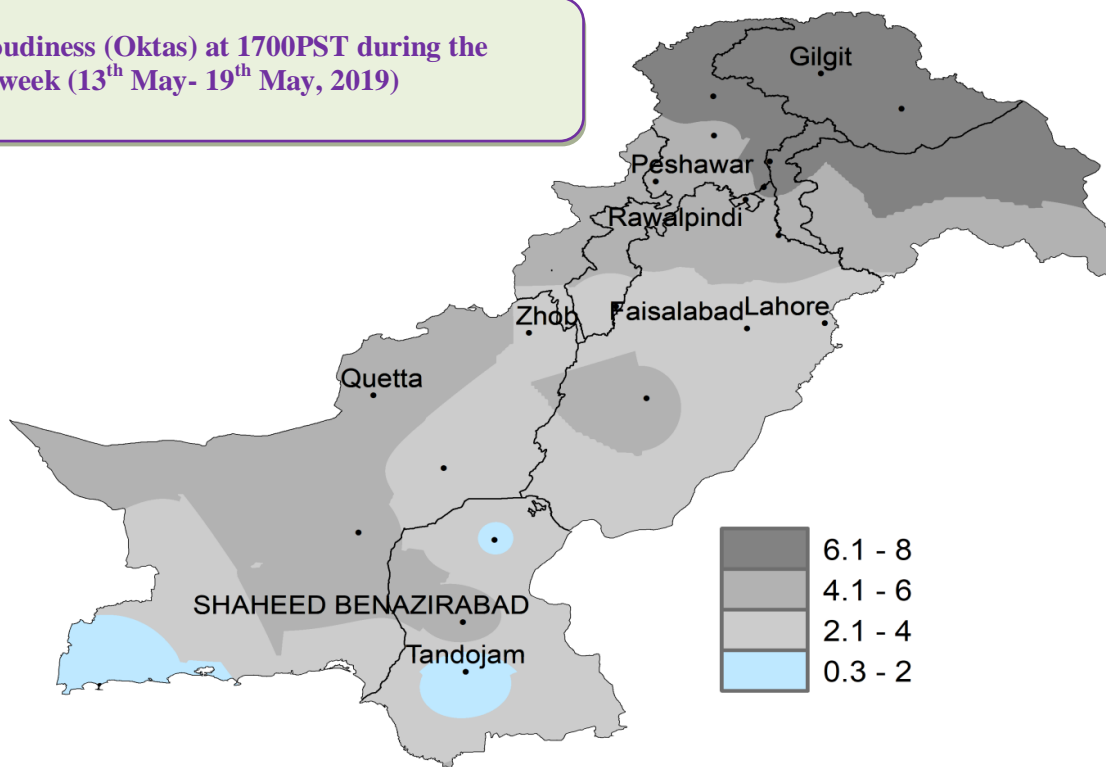
Total Growing Degree Days accumulated during the Previous week (13<sup>th</sup> May- 19<sup>th</sup> May, 2019)



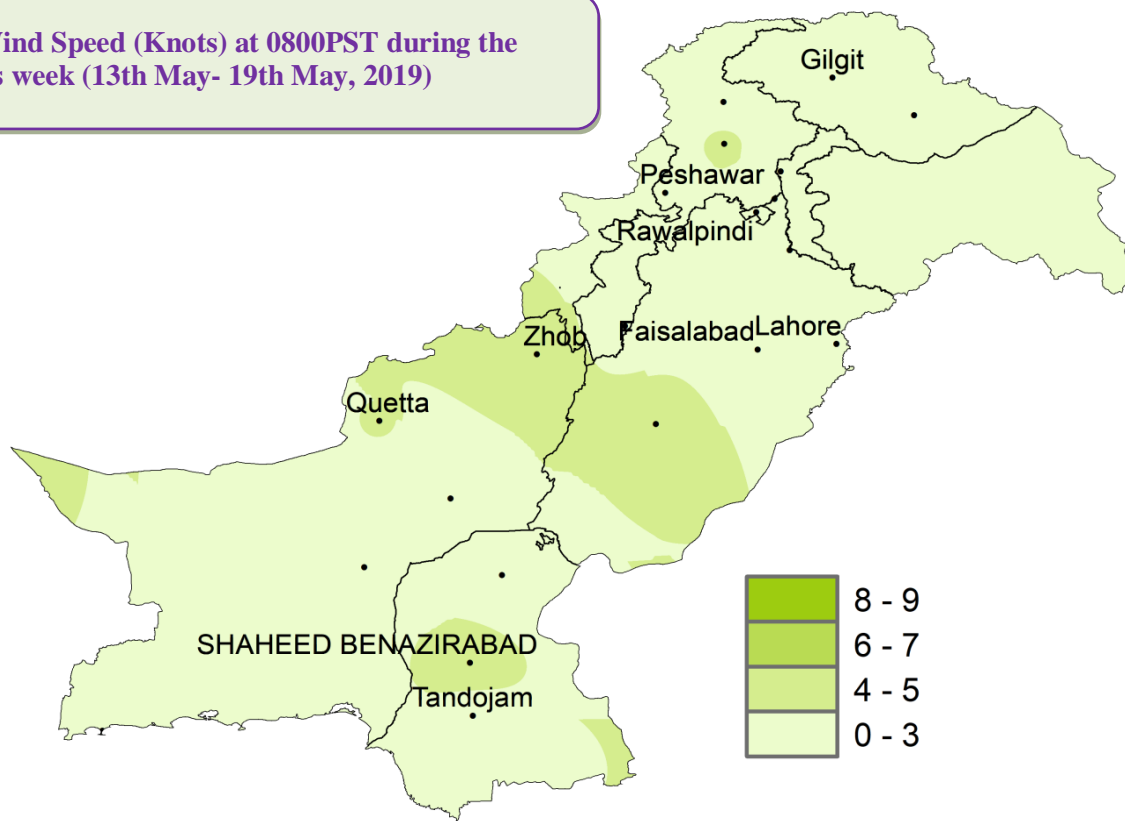
Mean Cloudiness (Oktas) at 0800PST during the Previous week (13<sup>th</sup> May- 19<sup>th</sup> May, 2019)



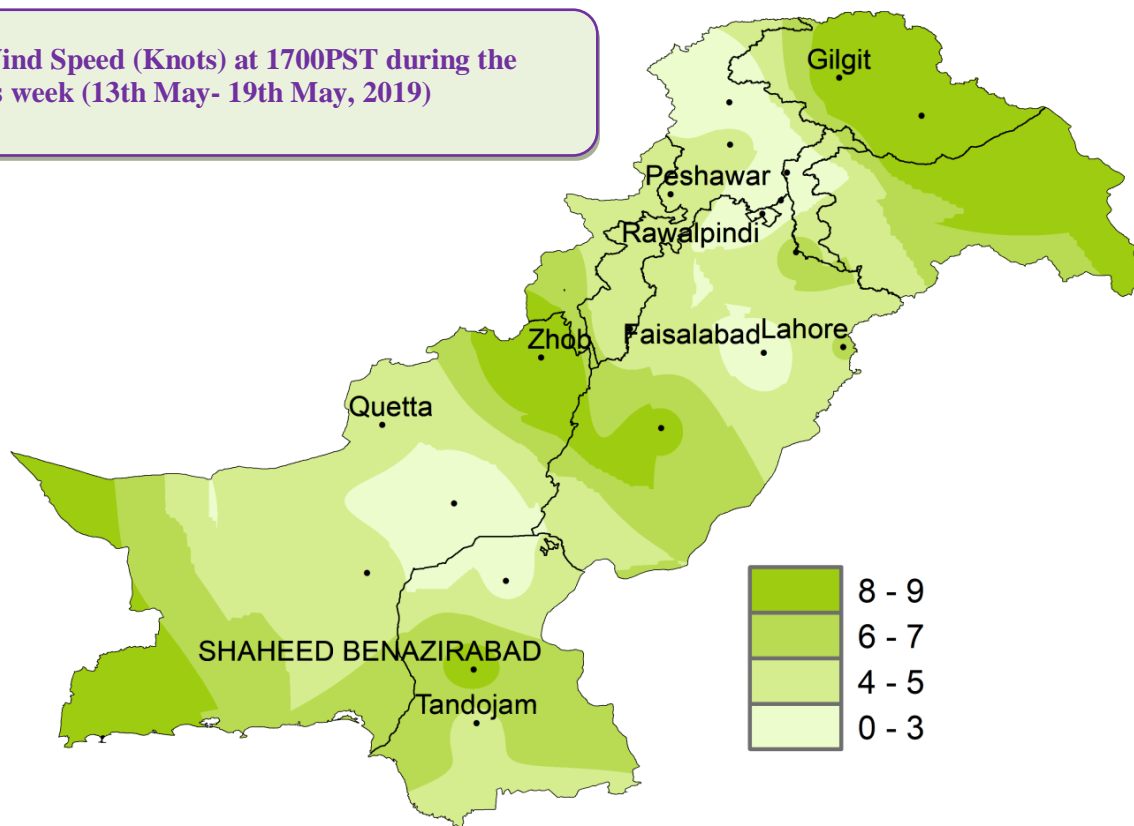
Mean Cloudiness (Oktas) at 1700PST during the Previous week (13<sup>th</sup> May- 19<sup>th</sup> May, 2019)



Mean Wind Speed (Knots) at 0800PST during the Previous week (13th May- 19th May, 2019)



Mean Wind Speed (Knots) at 1700PST during the Previous week (13th May- 19th May, 2019)





**Weekly Weather Advisory for Farmers**  
**(20<sup>th</sup> to 26<sup>th</sup> May, 2019)**

A shallow westerly wave is present over upper and central parts of the country and likely to intensify on Wednesday and may persist till Friday morning.

**MONDAY**

**20-05-2019**

Mainly hot and dry weather is expected in most parts of the country. However dust-thunderstorm/rain is expected at isolated places in Quetta, Kalat, Zhob, D.G.Khan, D.I.Khan, Larkana divisions, Kashmir and its adjoining hilly areas.

**TUESDAY**

**21-05-2019**

Mainly hot and dry weather is expected in most parts of the country. However dust-thunderstorm/rain is expected at isolated places in Quetta, Kalat, Zhob, Sukkur, Larkana, Bahawalpur, Multan, D.G.Khan, Sargodha, Faisalabad, Sahiwal, D.I.Khan divisions, Kashmir and its adjoining hilly areas.

**WEDNESDAY**

**22-05-2019**

Mainly hot and dry weather is expected in most parts of the country. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Khyber Pakhtunkhwa, Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad, Sahiwal, Multan, D.G.Khan divisions), Zhob divisions, Islamabad, Kashmir and Gilgit Baltistan.

**THURSDAY**

**23-05-2019**

Dust-thunderstorm/rain with gusty winds is expected at scattered places in Khyber Pakhtunkhwa, Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad, Sahiwal, Multan,

D.G.Khan divisions), Islamabad, Kashmir and Gilgit Baltistan. Hot and dry weather is expected elsewhere in the country.

**FRIDAY**

**24-05-2019**

Mainly hot and dry weather is expected in most parts of the country. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Rawalpindi, Gujranwala, Lahore, Sargodha divisions, Islamabad, Kashmir and Gilgit Baltistan.

**SATURDAY**

**25-05-2019**

Mainly hot and dry weather is expected in most parts of the country. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Rawalpindi divisions, Kashmir and Gilgit Baltistan.

**SUNDAY**

**26-05-2019**

Mainly hot and dry weather is expected in most parts of the country. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Gilgit Baltistan, Kashmir and its adjoining areas.

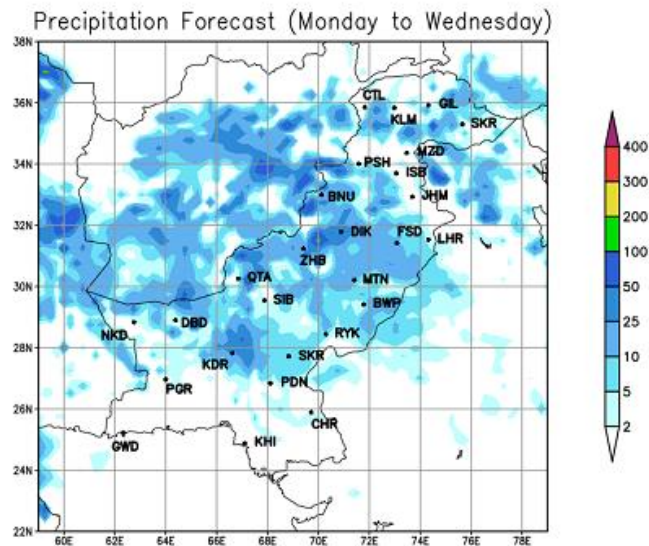
**ADVISORY FOR FARMERS**

During the last week, light to moderate rainfall occurred almost all over the country, while light rainfall observed over sindh. Keeping in view the above expected weather conditions following advisories are suggested for farming community.

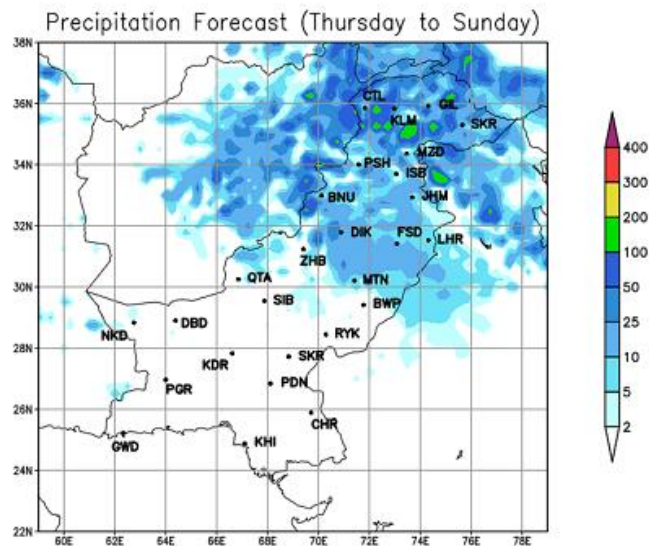
1. Farmers are advised to apply deep ploughing in the fields after harvested the Wheat crops.
2. Agriculture department should be consulted for seed suggestion and proper time of cultivation.

## Precipitation Outlook from 20<sup>th</sup> to 26<sup>th</sup> May, 2019

The outlook from 20<sup>th</sup> May to 22<sup>nd</sup> May, 2019 shows that light to moderate rainfall is expected all over the country except the coastal line where dry weather may prevail.



The outlook from 23<sup>rd</sup> May to 26<sup>th</sup> May, 2019 shows that light to moderate rainfall is expected in the upper half part of the country.



**National Weather Data of Selected Cities Weekly Data from (13<sup>th</sup> May to 19<sup>th</sup> May, 2019)**

Stations	Minimum/Night 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	highest							
D.I.Khan	37.3	41.0	172.3	61	21.00	2.7	3.9	1.4	2.9
Faisalabad	36.0	39.0	169.2	49	17.00	3.3	2.9	0.9	1.5
Gawader	34.3	35.0	137.0	66	0.00	1.9	1.3	0.0	8.3
Gilgit	28.3	31.5	111.0	49	5.82	5.4	7.1	0.3	8.3
Kalam	19.1	22.0	55.8	62	21.80	4.7	6.7	0.0	0.3
Khuzdar	30.9	36.0	127.8	26	4.30	2.0	4.9	0.6	2.9
Lahore	34.5	39.3	162.2	51	4.03	2.3	3.3	2.6	4.9
Malam Jabba	16.9	19.5	53.5	70	62.00	3.9	5.7	3.7	3.4
Mangla	35.2	38.0	161.1	47	4.80	4.6	5.3	0.6	5.7
Multan (PBO)	35.3	40.5	172.5	52	11.60	3.0	4.1	4.6	7.4
Murree	20.5	23.4	76.8	66	46.00	2.6	6.1	1.6	2.0
Muzaffarabad	28.9	32.3	120.9	63	22.50	3.3	6.1	1.3	1.4
Nawabshah	34.3	37.0	157.9	57	28.00	3.9	5.3	0.9	3.4
Peshawar	38.0	29.8	106.8	38	19.40	4.1	5.4	3.1	3.0
Quetta	34.2	36.0	146.4	55	29.00	3.9	5.4	1.1	1.1
Rawalpindi	39.1	43.0	206.3	50	0.02	2.3	1.9	1.1	2.3
Rohri	42.3	45.5	199.8	53	3.40	2.4	5.7	4.3	8.0
Skardu	24.2	25.4	81.0	34	0.03	5.0	6.9	1.1	8.9
Tandojam	39.1	41.0	190.0	59	0.00	0.0	0.3	2.0	4.3
Usta.M	42.0	45.0	190.3	47	10.00	2.0	2.7	0.8	1.1
Zhob	29.1	32.5	122.8	56	11.00	1.4	4.0	4.7	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)