

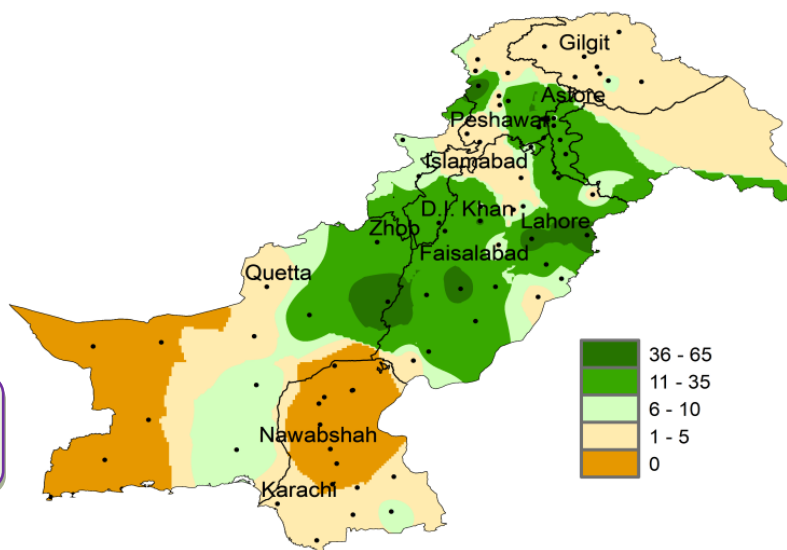
# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous  
Week (17<sup>th</sup> June -23<sup>rd</sup> June, 2019)**



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## Highlights of Past Weather (17<sup>th</sup> June – 23<sup>rd</sup> June, 2019)

During the last week, below normal day time temperatures were observed in all over the country except Sindh and Baluchistan where mix trend day time temperatures were observed.

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

1. Light to moderate rainfall observed in all provinces except Sindh where light rainfall was observed.

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

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

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

**Past Weather of Provinces (17<sup>th</sup> June – 23<sup>rd</sup> June, 2019)****Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 38.6°C & 24.9°C respectively. For the recent week on average 192.8 growing degree days were accumulated. Average relative humidity recorded as 53% and wind speed in the morning/evening recorded as 3.1/3.6 Knots. During the previous week the highest precipitation was recorded as 47.00 mm at Faisalabad while maximum temperature was recorded as 44.5°C at Rahim Yar Khan.

**Baluchistan**

Light to moderate rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 38.5°C & 25.6°C respectively. For the recent week on average 195.7 growing degree days were accumulated. Average relative humidity recorded as 45 % and wind speed in the morning/evening recorded as 2.0/7.5 Knots. During the previous week the highest precipitation was recorded as 58.01 mm at Barkhan while maximum temperature was recorded as 48.5°C at Turbat.

**Khyber Pakhtunkhwa**

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 33.4°C & 18.2°C respectively. For the recent week on average 151.9 growing degree days were accumulated. Average relative humidity recorded as 53% and wind speed in the morning/evening recorded as 1.6/2.5 Knots. During the previous week the highest precipitation recorded as 62.00 mm at Dir while maximum temperature was recorded as 44°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 30.1°C & 15.4°C respectively. For the recent week on average 123.3 growing degree days were accumulated. Average relative humidity recorded as 46% and wind speed in the morning/evening recorded as 2.0/4.5 Knots. The highest precipitation recorded as 53.5 mm at Muzafarabad while maximum temperature was recorded as 40.1°C at Kotli.

**Sindh**

Light rainfall was observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 40.7°C & 28.1°C respectively. For the recent week, on average 211.0 growing degree days were accumulated. Average relative humidity recorded as 55.0% and wind speed in the morning/evening recorded as 4.8/5.2 Knots. The highest precipitation recorded as 7.00 mm at Mithi while maximum temperature was recorded as 46°C at Jacobabad.

### **Past Weather for Major Agricultural Plains (17<sup>th</sup> June – 23<sup>rd</sup> June, 2019)**

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

4.5 mm rainfall was reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.4 /4Oktas while, average relative humidity observed as 46%. Mean day time temperature recorded 38.5°C & for the recent week 174.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/2 Knots.

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

34.2 mm (trace) rainfall was reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.6/3.6 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 38.8°C & for the recent week 189.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.5/1.3 Knots.

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

Dry weather reported from Tandojam during the week; however, Clear sky recorded in the morning/evening while, average relative humidity observed as 64%. Mean day time temperature recorded as 39.1°C & for the recent week 195.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.5/3.4 Knots.

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

Dry weather was reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.2/0.5 Oktas while, average relative humidity observed as 42%. Mean day time temperature recorded as 42.4°C & for the recent week 222.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/2.5 Knots.

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

Dry weather was reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 1.1/1.7 Oktas while, average relative humidity observed as 27%. Mean day time temperature recorded as 33.6°C & for the recent week 146.0 growing degree days accumulated.

Wind speed recorded in the morning/evening as 3.2/3.8 Knots.

### **Past Weather for Sub-Regional Agricultural Plains (17<sup>th</sup> June – 23<sup>rd</sup> June, 2019)**

#### **Multan**

45.01 mm rainfall was reported from Multan during the week; however, cloudiness in the morning/evening recorded as 3.9/2.4 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 38.4°C & for the recent week 198.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 5.4/4.6 Knots.

#### **Lahore**

45.61 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 1.3/1.7 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 38.6°C & for the recent week 193.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/4.3 Knots.

#### **Zhob**

11.00 mm rainfall was reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/5.4 Oktas while, average relative humidity observed as 30%. Mean day time temperature recorded as 34.4°C & for the recent week 179.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 5.4/9.0 Knots.

#### **Murree**

28.00 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 2.0/4.1 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 24.8° C & for the recent week 105.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.0/2.0 Knots.

#### **D.I. Khan**

30.00 mm rainfall reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.6/3.7 Oktas while,

average relative humidity observed as 60%. Mean day time temperature recorded as 40.1°C & for the recent week 201.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/1.1Knots.

**Peshawar**

0.01 mm rainfall reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.6/5.1 Oktas while, average relative humidity observed as 41%. Mean day time temperature recorded as 37.7°C & for the recent week 158.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/2.9 Knots.

**Kalam**

1.00 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 1.0/5.6 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 25.1°C & for the recent 90.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.3 Knots.

**Gilgit**

1.12 mm rainfall was reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 3.7/5.3 Oktas while, average relative humidity observed as 42%. Mean day time temperature recorded as 30.9°C & for the recent week 131.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/4.9 Knots.

**Skardu**

1.62 mm rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 5.0/6.0 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 25.7°C & for the recent week 104.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/6.3 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)**

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

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

**Lower Sindh (Tandojam)**

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

**Cotton (Shahbaz 95): Good, Flowering stage.**

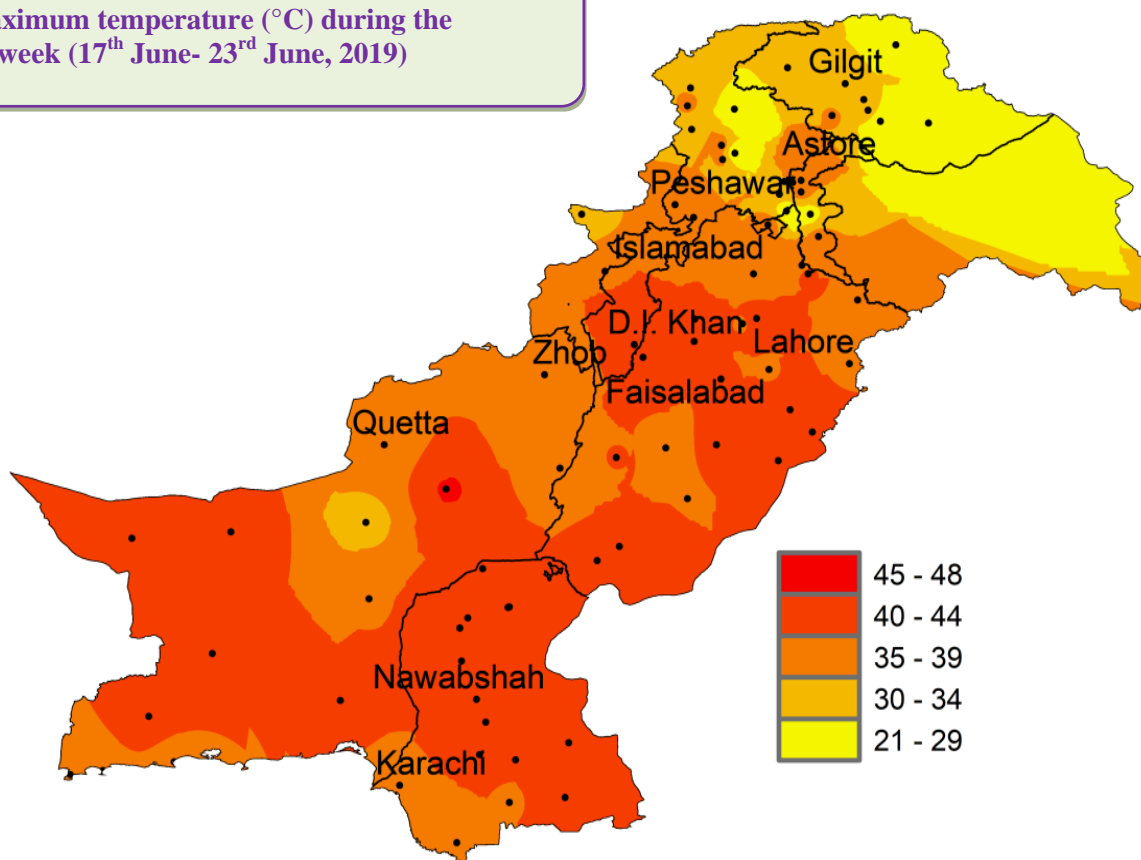
**Northern Baluchistan (Quetta)**

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

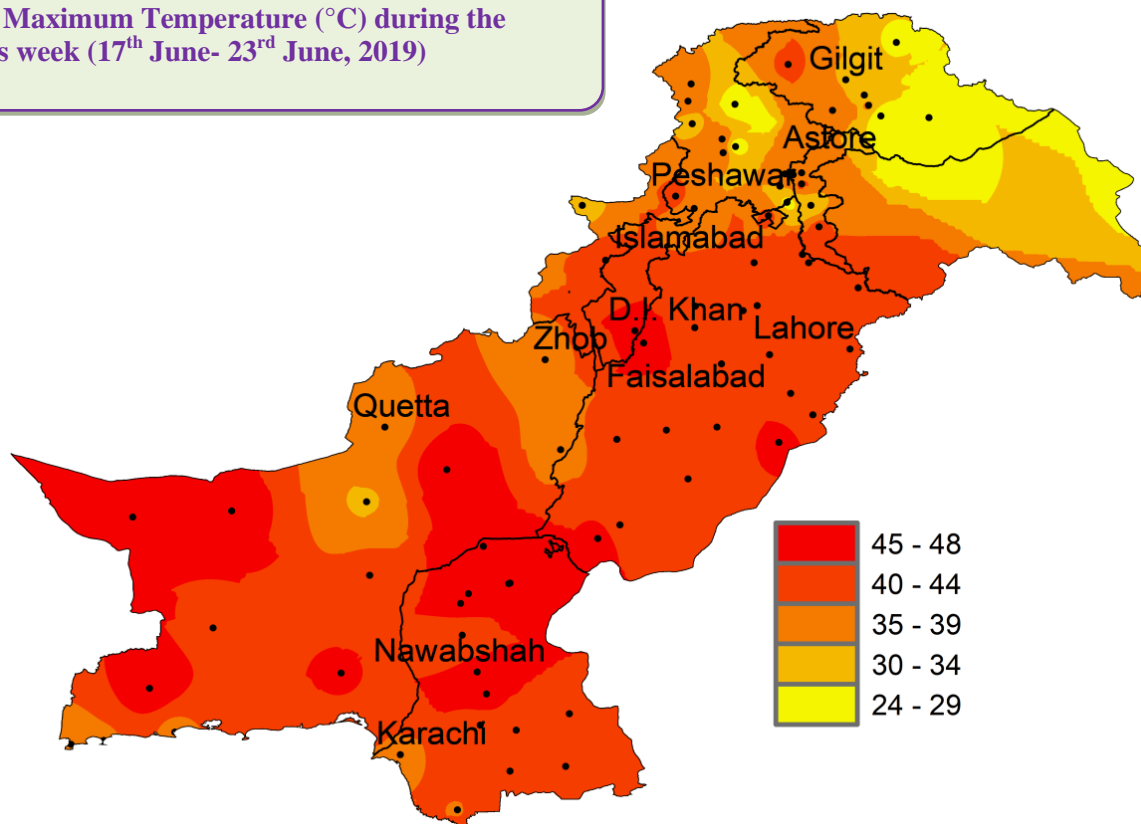
**Eastern Baluchistan (Usta Muhammad)**

Presently rice seedling is in process.

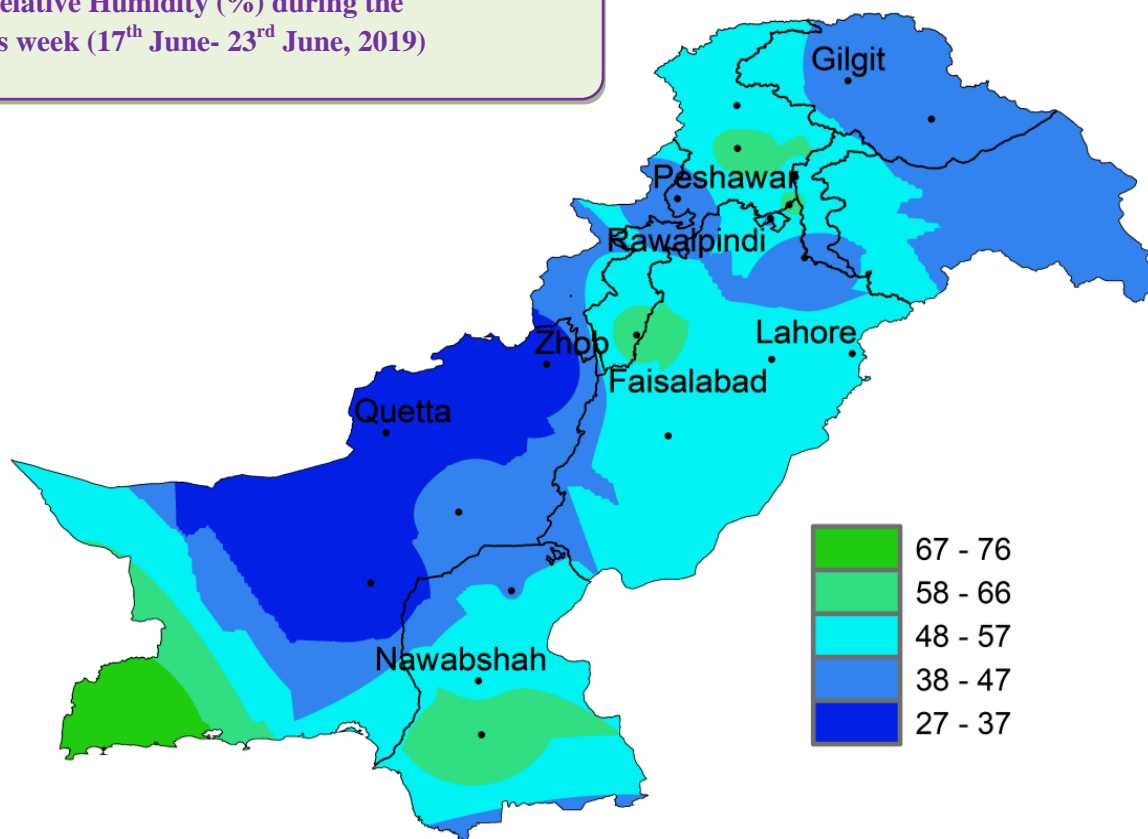
Mean Maximum temperature (°C) during the  
Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)



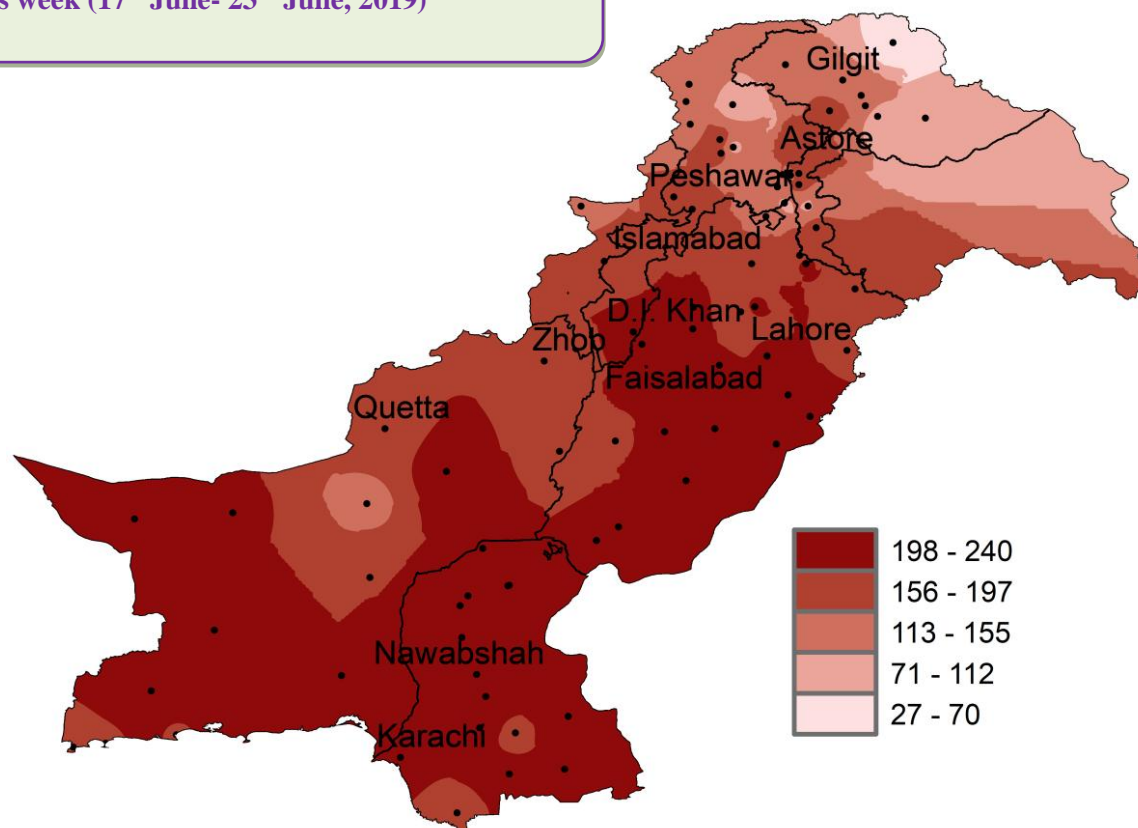
Highest Maximum Temperature (°C) during the  
Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)



Mean Relative Humidity (%) during the  
Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)

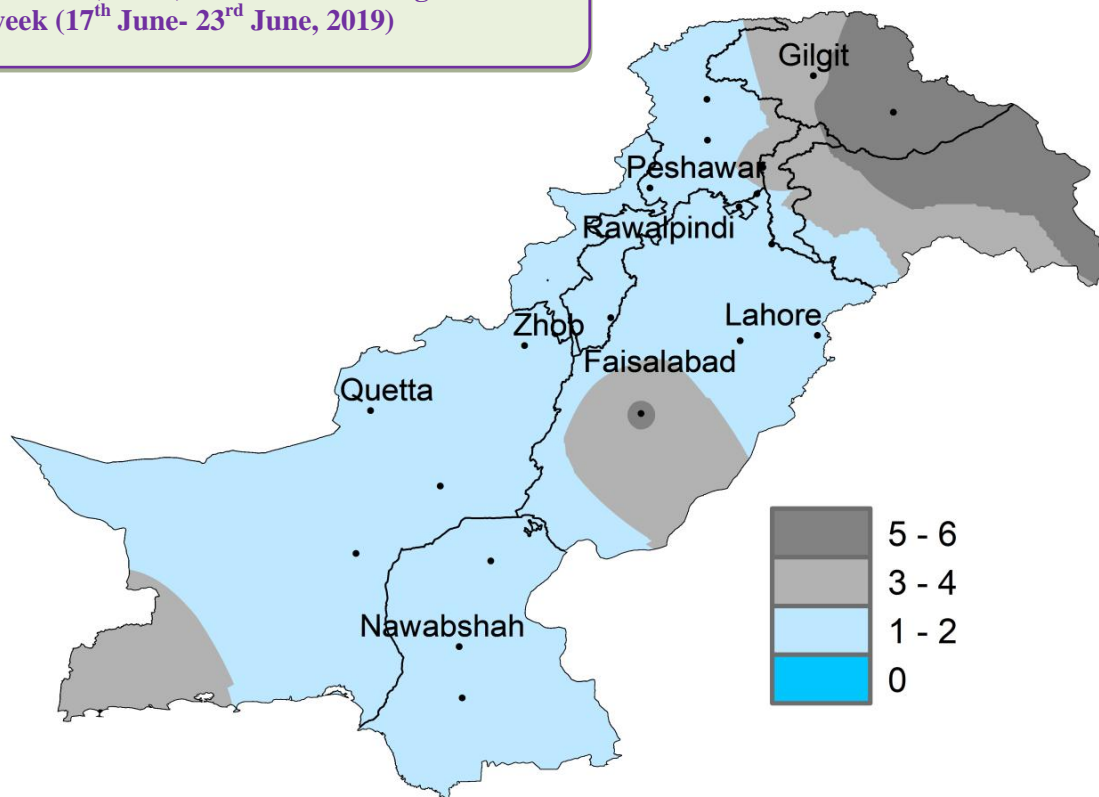


Total Growing Degree Days accumulated during the  
Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)

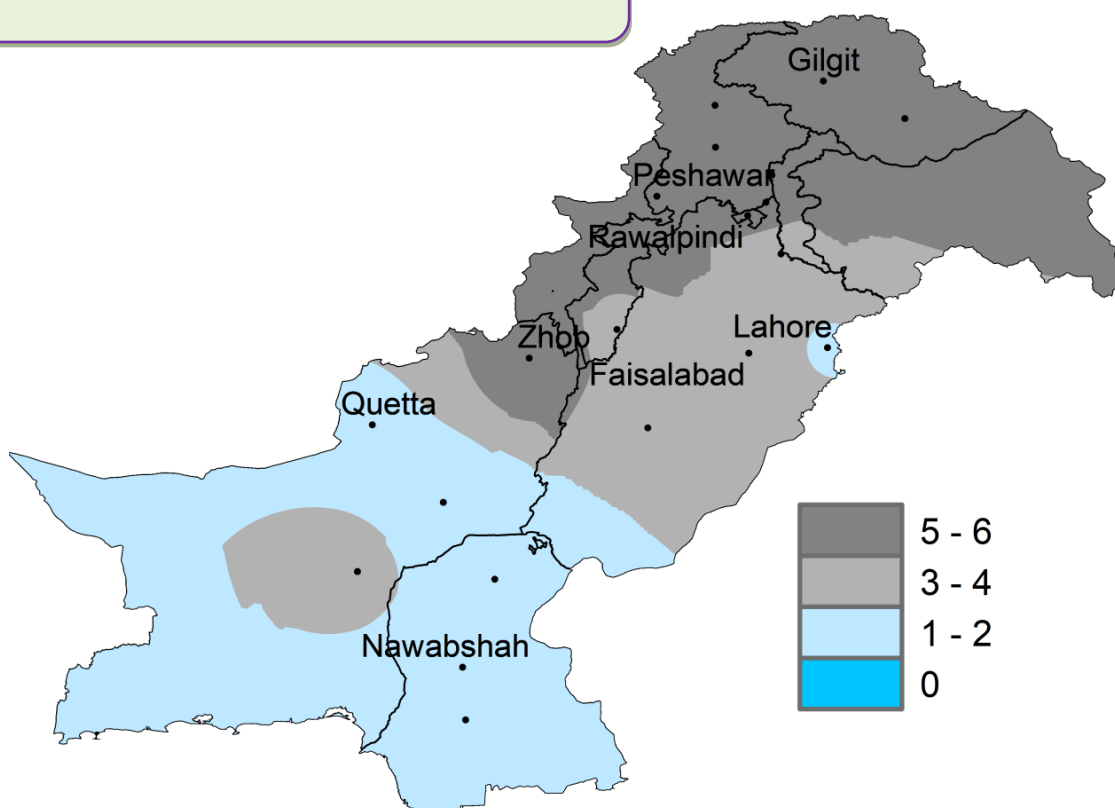




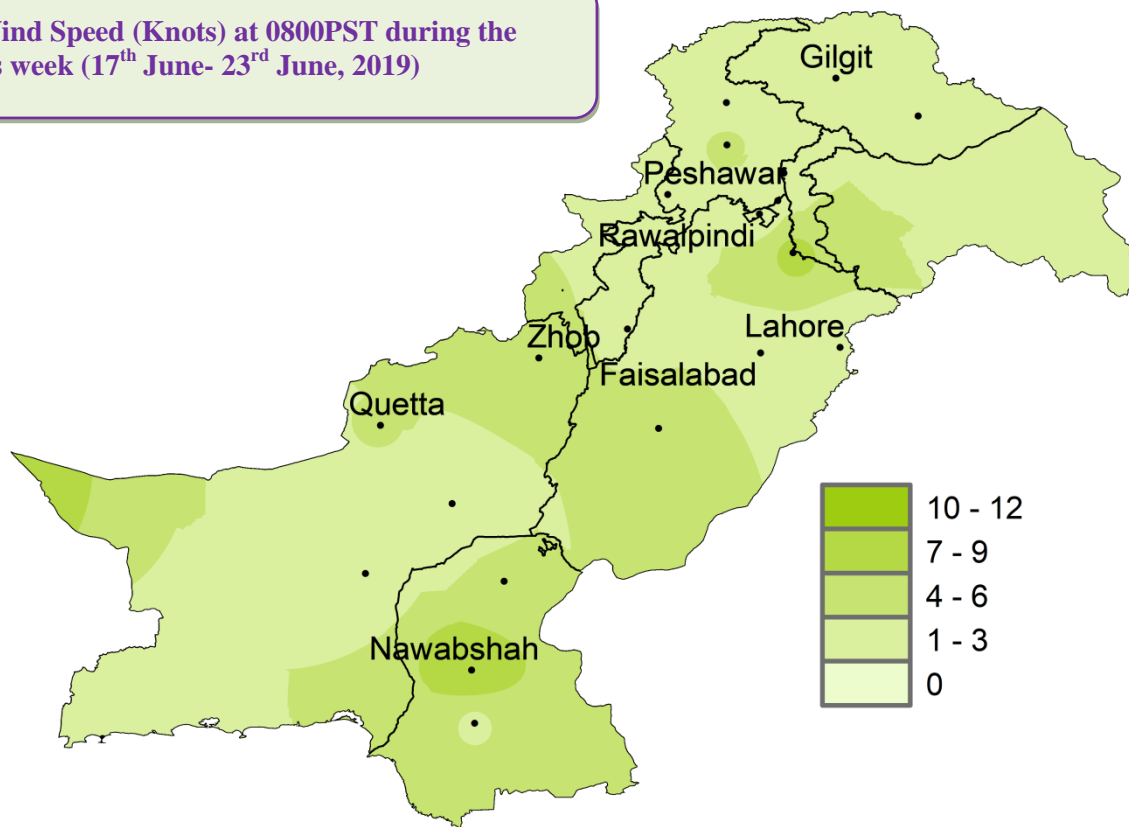
Mean Cloudiness (Oktas) at 0800PST during the Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)



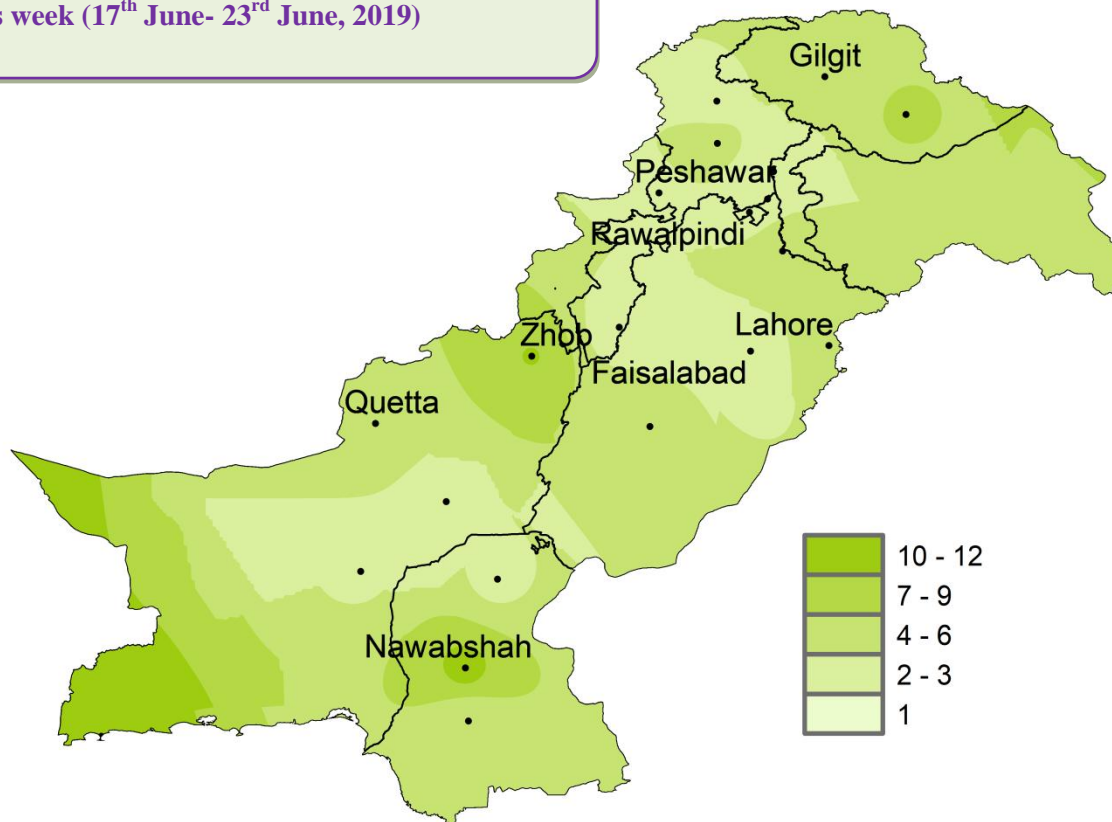
Mean Cloudiness (Oktas) at 1700PST during the Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)



Mean Wind Speed (Knots) at 0800PST during the Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)



Mean Wind Speed (Knots) at 1700PST during the Previous week (17<sup>th</sup> June- 23<sup>rd</sup> June, 2019)





**Weekly Weather Advisory for Farmers**  
**(24<sup>th</sup> June to 30<sup>th</sup> June, 2019)**

Seasonal low lies over northeast Balochistan. A westerly wave is affecting upper and central parts of the country.

**MONDAY****24-06-2019**

Dust-thundershower/rain with gusty winds is expected at scattered places in Malakand, Hazara, Kohat, Bannu, D.I.Khan, Zhob, Sibbi, Rawalpindi, Gujranwala, Lahore, Faisalabad, Sahiwal, Multan, Bahawalpur, D.G.Khan divisions, Islamabad, Kashmir and Gilgit Baltistan, Hot and dry weather is expected else where in the country.

**TUESDAY****25-06-2019**

Hot and dry weather is expected in most parts of the country. However, dust-thundershower/rain with gusty winds is expected at isolated places in Zhob, Sibbi, Kalat, Bahawalpur divisions and Gilgit Baltistan.

**WEDNESDAY****26-06-2019**

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 and Kashmir.

**THURSDAY****27-06-2019**

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, Kohat divisions, Lower Sindh and Gilgit Baltistan.

**FRIDAY****28-06-2019**

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 lower Sindh and Gilgit Baltistan.

**SATURDAY****29-06-2019**

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 lower Sindh and Gilgit Baltistan.

**SUNDAY****30-06-2019**

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

**ADVISORY FOR FARMERS**

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

1. Rice growers are advised to sow the crop "paneeri" in accordance with the recommendations by the agriculture experts.
2. Farmers of southern Punjab and Sindh are advised to complete the sowing of cotton and other Kharif crops to utilize the maximum soil moisture.
3. In the upper half of the country where the fields which are just vacated after the recent wheat crops, the fields may be ploughed and "Suhaga" applied to conserve the soil moisture for the upcoming Kharif crops.
4. Farmers of upper Sindh and southern Punjab are advised to complete the sowing of cotton crop.

**National Weather Data of Selected Cities Weekly Data from (17<sup>th</sup> June to 23<sup>rd</sup> June, 2019)**

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	Highest							
D.I.Khan	40.1	44.0	201.5	60	30.00	0.6	3.7	1.4	1.1
Faisalabad	38.8	41.5	189.4	51	34.20	0.6	3.6	1.5	1.3
Gawader	36.6	38.0	194.0	76	0.00	3.6	0.4	0.0	10.9
Gilgit	30.9	33.5	131.8	42	1.12	3.7	5.3	0.3	4.9
Kalam	25.1	26.0	90.0	51	1.00	1.0	5.6	0.0	2.3
Khuzdar	38.4	40.0	195.5	29	9.00	0.0	2.7	0.6	2.6
Lahore	38.6	41.4	193.5	50	45.61	1.3	1.7	0.9	4.3
Malam Jabba	22.6	24.5	94.5	60	29.00	0.7	4.4	3.7	3.7
Mangla	38.3	41.2	191.2	41	31.01	2.0	3.9	6.9	5.7
Multan (PBO)	38.4	41.1	198.0	52	45.01	3.9	2.4	5.4	4.6
Murree	24.8	27.0	105.1	59	28.00	2.0	4.1	3.0	2.0
Muzaffarabad	34.0	37.0	143.9	56	53.50	2.7	4.3	1.0	1.3
Nawabshah	41.9	44.0	216.5	55	0.00	0.9	0.6	8.9	10.0
Peshawar	37.7	39.5	158.8	41	0.01	1.6	5.1	1.4	2.9
Quetta	33.6	34.5	146.0	27	0.00	1.1	1.7	3.2	3.8
Rawalpindi	38.5	40.3	174.3	46	4.50	0.4	4.0	1.1	2.0
Rohri	42.2	45.5	260.5	47	0.00	0.0	0.0	3.1	2.3
Skardu	25.7	28.6	104.2	44	1.62	5.0	6.0	0.0	6.3
Tandojam	39.1	40.0	195.8	64	0.00	0.0	0.0	2.5	3.4
Usta.M	42.4	43.0	222.8	42	0.00	0.2	0.5	0.8	2.5
Zhob	34.4	36.5	179.0	30	11.00	0.0	5.4	5.4	9.0

\*\*\* 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 سبب (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 2014-2012)