

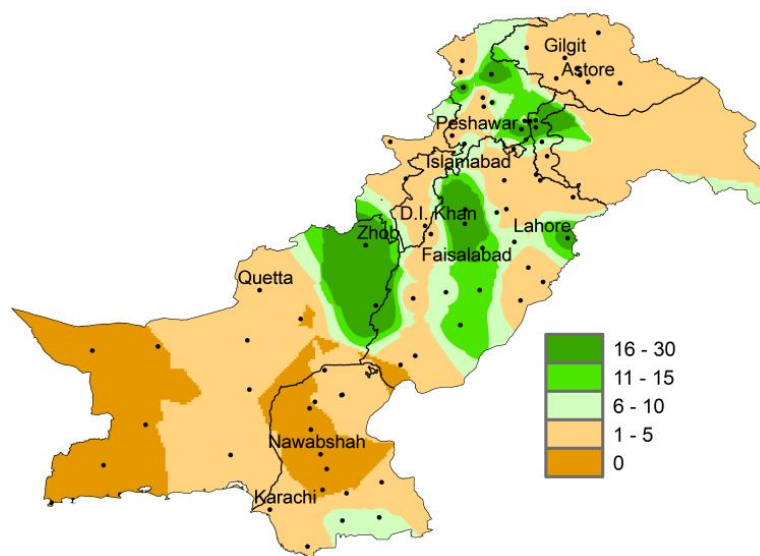
# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the  
Previous Week (24<sup>th</sup> June - 30<sup>th</sup> June, 2019)**



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## Highlights of Past Weather (24<sup>th</sup> June – 30<sup>th</sup> June, 2019)

Above normal day time temperatures were observed in Sindh, while mix trend was observed all over the country during the last week.

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

1. Light to moderate rainfall observed in Punjab, Khyber Pakhtunkhwa, Baluchistan and Gilgit Baltistan.
2. Light rainfall observed in Sindh during the last week.

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

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

**Editor: Saeeda Saleh (Asst. Meteorologist)**

**Past Weather of Provinces (24<sup>th</sup> June - 30<sup>th</sup> June, 2019)****Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 39.8°C & 26.1°C respectively. For the recent week on average 194.5 growing degree days were accumulated. Average relative humidity recorded as 50% and wind speed in the morning/evening recorded as 2.2/3.7 Knots. During the previous week the highest precipitation was recorded as 29.00 mm at Noorpur Thal while maximum temperature was recorded as 45.3°C at D. G. Khan.

**Baluchistan**

Light to moderate rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 38.5°C & 25.9°C respectively. For the recent week on average 191.1 growing degree days were accumulated. Average relative humidity recorded as 45% and wind speed in the morning/evening recorded as 1.8/5.3 Knots. During the previous week the highest precipitation was recorded as 30.00 mm at Barkhan while maximum temperature was recorded as 48.5°C at Sibbi.

**Khyber Pakhtunkhwa**

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 33.6/34.8°C & 18.6°C respectively. For the recent week on average 149.0 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 0.9/2.3 Knots. During the previous week the highest precipitation recorded as 23.00 mm at Kakul while maximum temperature was recorded as 43.0°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

30.2°C & 14.9°C respectively. For the recent week on average 118.1 growing degree days were accumulated. Average relative humidity recorded as 45% and wind speed in the morning/evening recorded as 1.4/3.0 Knots. During the previous week the highest precipitation recorded 29.20 mm at Garhi Dupatta while maximum temperature was recorded as 41.9°C at Kotli.

**Sindh**

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 41.5°C & 28.5°C respectively. For the recent week, on average 211.4 growing degree days were accumulated. Average relative humidity recorded as 53% and wind speed in the morning/evening recorded as 4.7/3.7 Knots. During the previous week the highest precipitation was recorded as 9.00 mm at Badin while maximum temperature was recorded as 47.4°C at Dadu.

### **Past Weather for Major Agricultural Plains** **(24<sup>th</sup> June - 30<sup>th</sup> June, 2019)**

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

0.01 mm (trace) rainfall was reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 1.7/1.7 Oktas while, average relative humidity observed as 46%. Mean day time temperature recorded 40.3°C & for the recent week 188.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.7 Knots.

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

20.30 mm rainfall was reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 3.6/0.6 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 39.9°C & for the recent week 195.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.6 Knots.

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

Dry weather reported from Tandojam during the week; however, clear sky was observed in the morning/evening while, average relative humidity observed as 62%. Mean day time temperature recorded as 40.9°C & for the recent week 199.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.2/3.6 Knots.

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

Dry weather reported from Usta Muhammad during the week; however, clear sky was observed in the morning/evening while, average relative humidity observed as 46%. Mean day time temperature recorded as 43.0°C & for the recent week 226.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.5/2.8 Knots.

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

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.9/2.4 Oktas while, average relative humidity observed as 28%. Mean day time temperature recorded as 34.0°C & for the recent week 153.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.8/3.6 Knots.

### **Past Weather for Sub-Regional Agricultural Plains (24<sup>th</sup> June - 30<sup>th</sup> June, 2019)**

#### **Multan**

8.61 mm rainfall reported from Multan during the week; however, cloudiness in the morning/evening recorded as 1.9/2.9 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 38.8°C & for the recent week 196.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.4/5.4 Knots.

#### **Lahore**

17.20 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 3.3/1.0 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 38.3°C & for the recent week 196.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/3.1 Knots.

#### **Zhob**

23.00 mm rainfall reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 1.1/5.7 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 39.0°C & for the recent week 178.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 5.0/5.0 Knots.

#### **Murree**

11.61 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.7/2.9 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 27.4°C & for the recent week 117.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/2.6 Knots.

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

3.00 mm rainfall reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.4/1.6 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 40.5°C & for the recent week 194.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.1 Knots.

**Peshawar**

1.00 mm rainfall reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.7/3.9 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 40.1°C & for the recent week 159.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/2.7 Knots.

**Kalam**

20.20 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 1.7/3.1 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 25.7°C & for the recent 85.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.7 Knots.

**Gilgit**

2.23 mm rainfall reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 3.6/6.0 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 29.9°C & for the recent week 121.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/5.1 Knots.

**Skardu**

4.41 mm rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 3.7/5.0 Oktas while, average relative humidity observed as 41%. Mean day time temperature recorded as 26.8°C & for the recent week 97.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/2.9 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)**

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

**Cotton:** V. Good, *Budding Stage Completed.*

**Lower Sindh (Tandojam)**

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

**Cotton:** Good, *Flowering stage.*

**Northern Baluchistan (Quetta)**

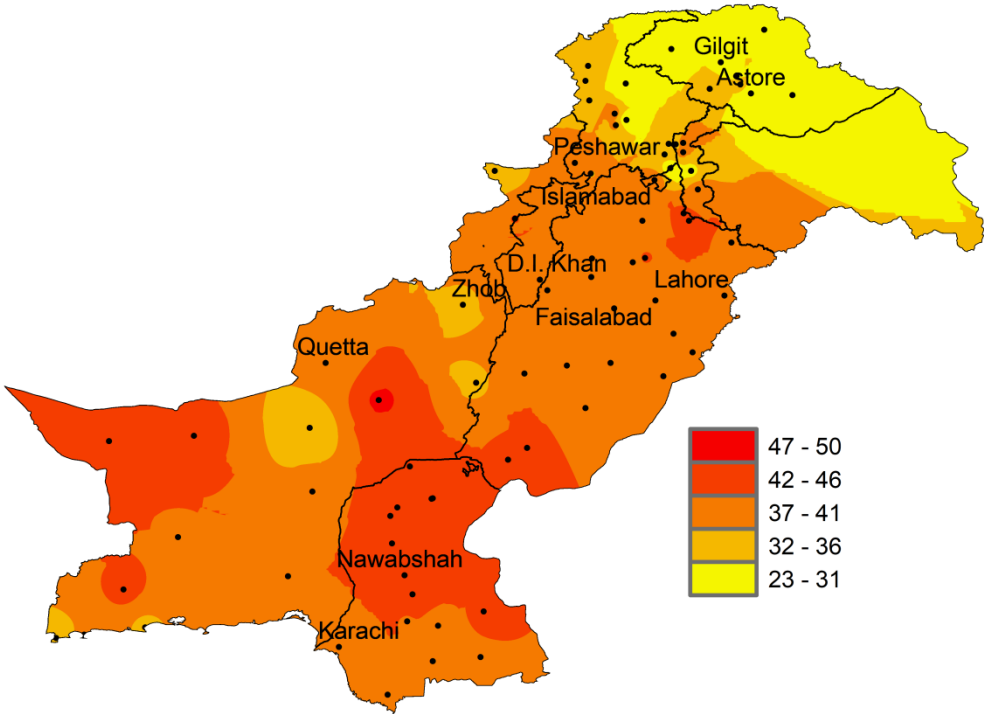
There is presently no crop grown in the fields of RAMC Quetta.

**Eastern Baluchistan (Usta Muhammad)**

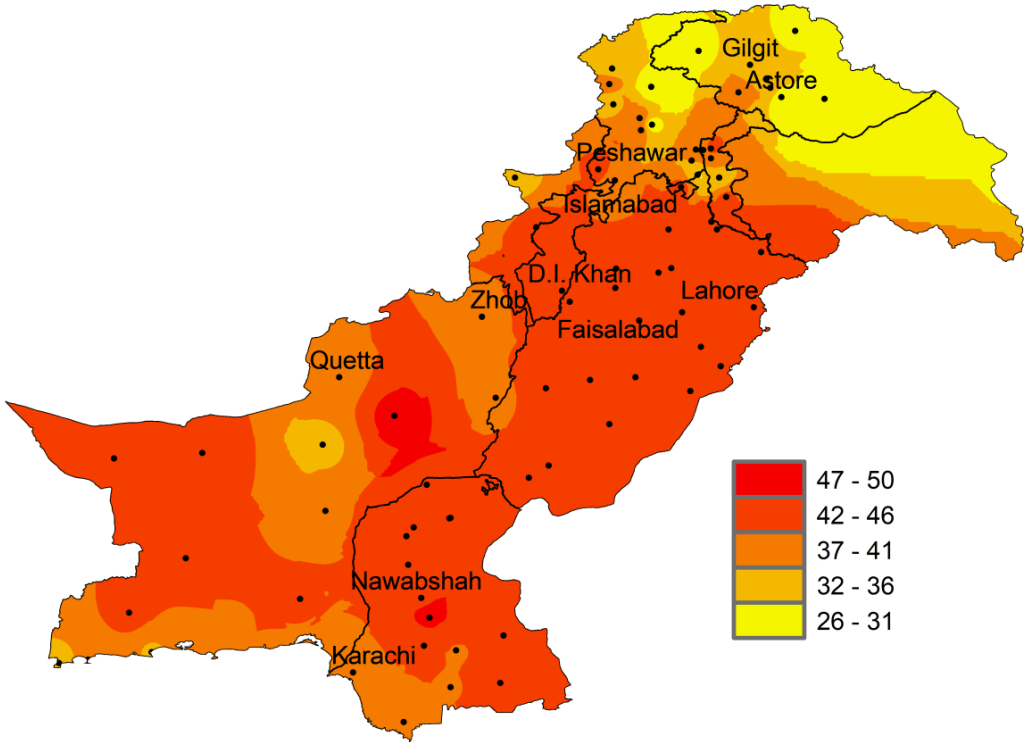
Presently rice crop is sown in the fields of RAMC Usta Muhammad.

**Rice:** Good, *Germination Stage.*

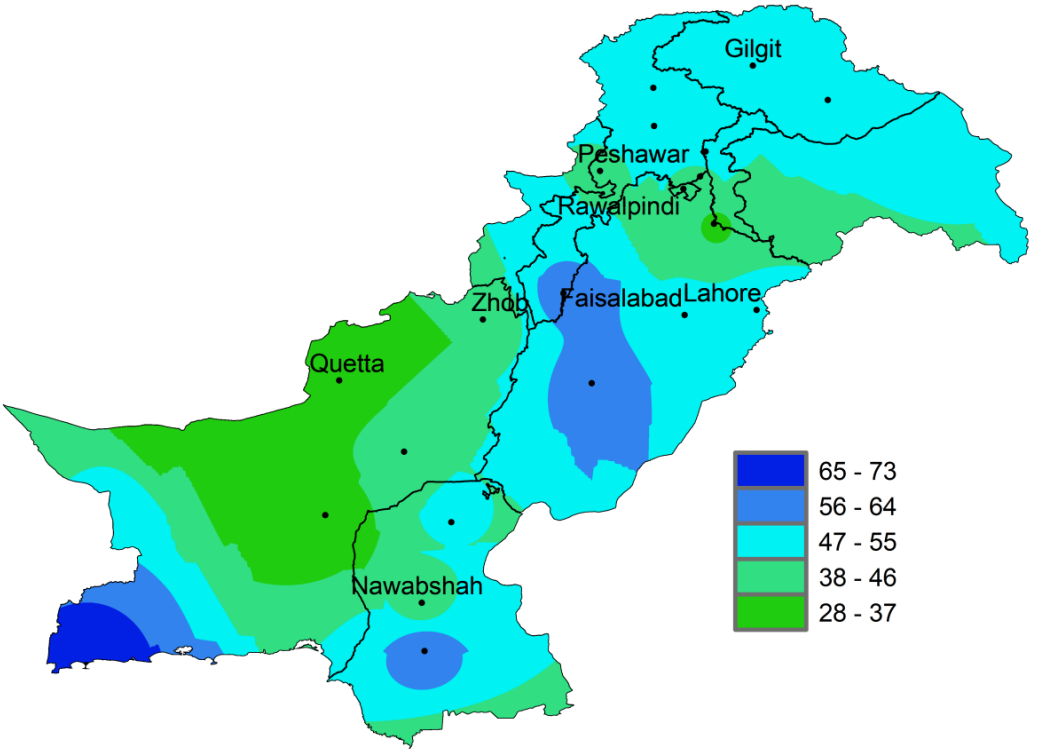
Mean Maximum temperature (°C) during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)



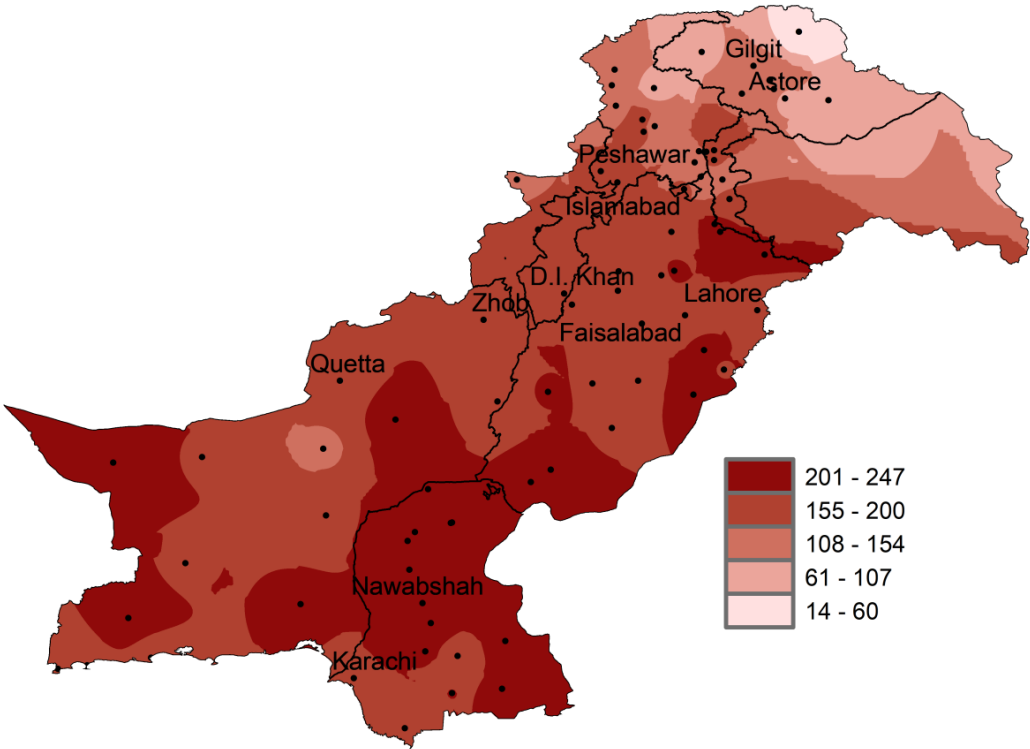
Highest Maximum Temperature (°C) during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)



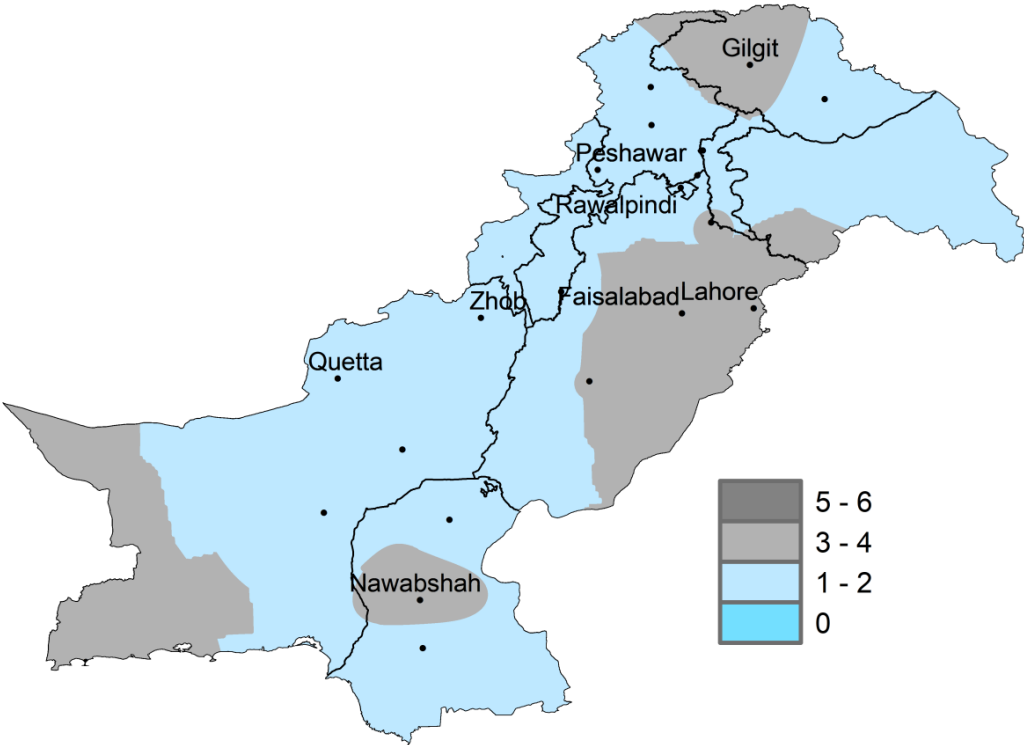
Mean Relative Humidity (%) during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)



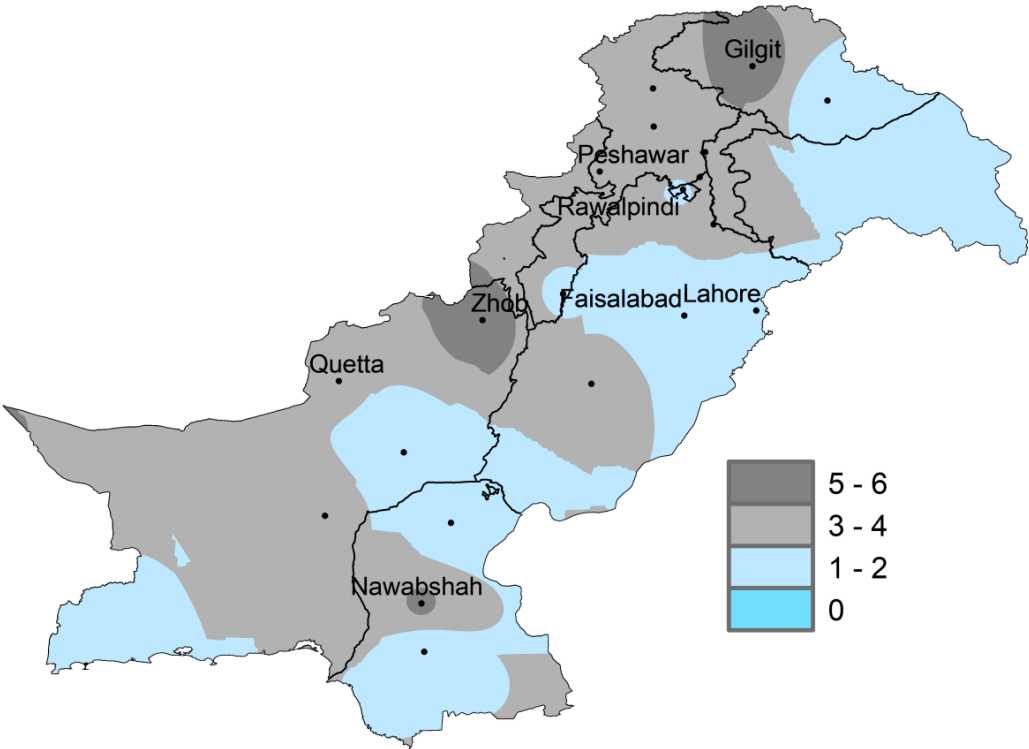
Total Growing Degree Days accumulated during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)



Mean Cloudiness (Oktas) at 0800PST during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)

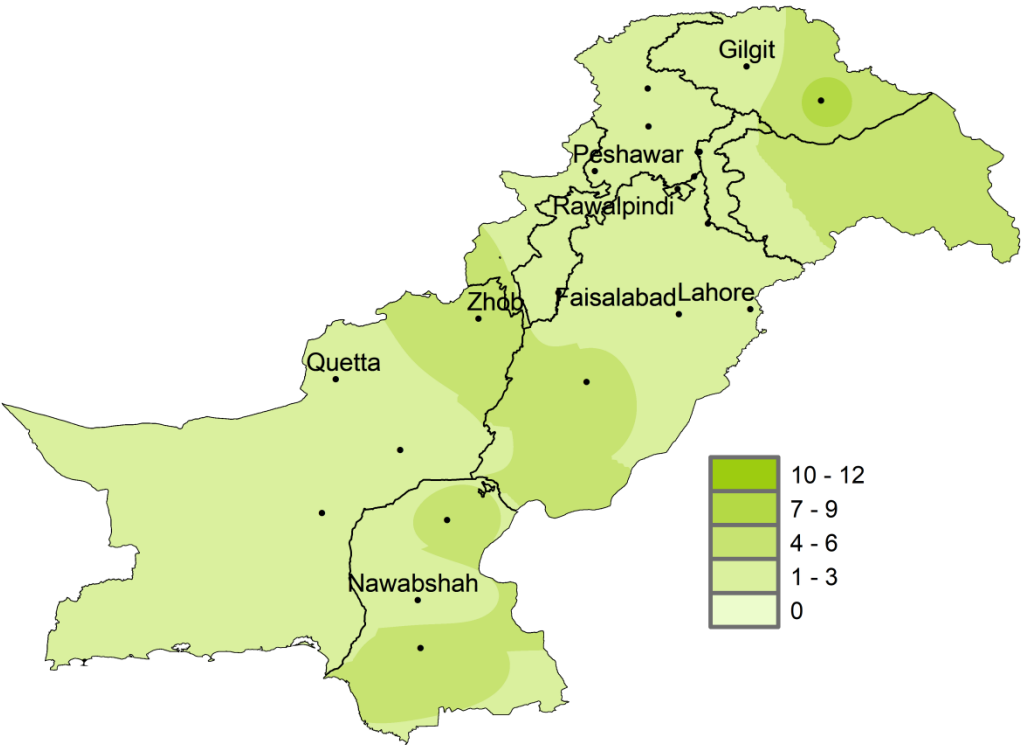


Mean Cloudiness (Oktas) at 1700PST during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)

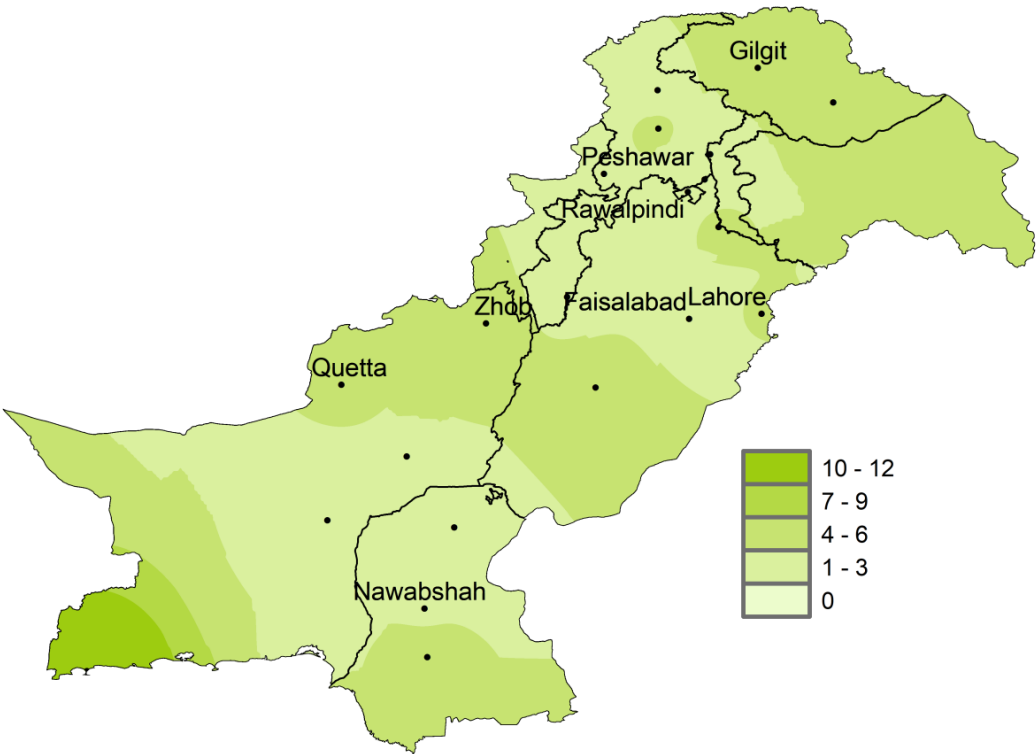




Mean Wind Speed (Knots) at 0800PST during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)



Mean Wind Speed (Knots) at 1700PST during the  
Previous week (24<sup>th</sup> June- 30<sup>th</sup> June, 2019)





## **Weekly Weather Advisory for Farmers** **(1<sup>st</sup> July to 7<sup>th</sup> July, 2019)**

Seasonal low lies over north Balochistan. A weak westerly wave is present over northern parts of the country. Weak monsoon currents are likely to reach northeastern parts of the country from midweek.

### **MONDAY**

**01-07-2019**

Mainly hot and dry weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand, Bannu, Kohat, Zhob, Kalat, Sargodha, Lahore divisions and Kashmir.

### **TUESDAY**

**02-07-2019**

Mainly hot and dry weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Kalat division and Kashmir.

### **WEDNESDAY**

**03-07-2019**

Mainly hot and dry weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand division and Gilgit Baltistan.

### **THURSDAY**

**04-07-2019**

Mainly hot and humid weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand, Hazara divisions, Kashmir and Gilgit Baltistan.

### **FRIDAY**

**05-07-2019**

Mainly hot and humid weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand, Hazara,

Rawalpindi, Gujranwala, Lahore divisions, Islamabad, Kashmir and Gilgit Baltistan.

### **SATURDAY**

**06-07-2019**

Mainly hot and humid weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand, Hazara, Rawalpindi divisions, Islamabad, Kashmir and Gilgit Baltistan.

### **SUNDAY**

**07-07-2019**

Mainly hot and humid weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh. However, dust-thunderstorm/rain with gusty winds is expected at isolated places in Malakand, Hazara, Rawalpindi divisions, Islamabad, Kashmir and Gilgit Baltistan.

### **ADVISORY FOR FARMERS**

During the last week, light rainfall occurred at scattered places in Sindh and light to moderate rainfall occurred over rest of the country. 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 from (24<sup>th</sup> June to 30<sup>th</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	40.5	43.0	194.3	58	3.00	1.4	1.6	0.6	1.1
Faisalabad	39.9	42.0	195.6	49	20.30	3.6	0.6	1.1	1.6
Gawadar	36.2	36.5	190.3	69	0.00	3.4	0.3	0.0	10.6
Gilgit	29.9	35.0	121.3	50	2.23	3.6	6.0	1.1	5.1
Kalam	25.7	27.5	85.9	52	20.20	1.7	3.1	0.0	1.7
Khuzdar	37.1	39.0	185.0	29	0.00	0.6	3.4	0.3	0.3
Lahore	38.3	42.0	196.7	50	17.20	3.3	1.0	0.9	3.1
Malam Jabba	24.6	26.5	99.5	52	12.00	0.9	2.6	1.4	3.4
Mangla	41.1	44.1	200.5	36	0.02	2.0	2.7	2.6	3.4
Multan (PBO)	38.8	41.1	196.8	58	8.61	1.9	2.9	3.4	5.4
Murree	27.4	30.5	117.4	43	11.61	0.7	2.9	2.3	2.6
Muzaffarabad	35.5	39.0	154.0	52	20.50	0.7	2.9	0.9	0.7
Nawabshah	44.0	45.5	219.5	49	0.00	0.0	0.0	6.6	6.3
Peshawar	40.1	42.0	159.5	44	1.00	1.7	3.9	1.4	2.7
Quetta	34.0	35.6	153.9	28	0.00	0.9	2.4	1.8	3.6
Rawalpindi	40.3	42.0	188.4	46	0.01	1.7	1.7	0.6	1.7
Rohri	43.7	44.5	271.0	47	0.00	0.9	0.0	3.4	1.1
Skardu	26.8	30.7	97.8	41	4.41	3.7	5.0	0.8	2.9
Tandojam	40.9	46.5	199.5	62	0.00	0.0	0.0	4.2	3.6
Usta. M	43.0	43.5	226.3	46	0.00	0.0	0.0	0.5	2.8
Zhob	35.4	39.0	178.3	37	23.00	1.1	5.7	5.0	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)