

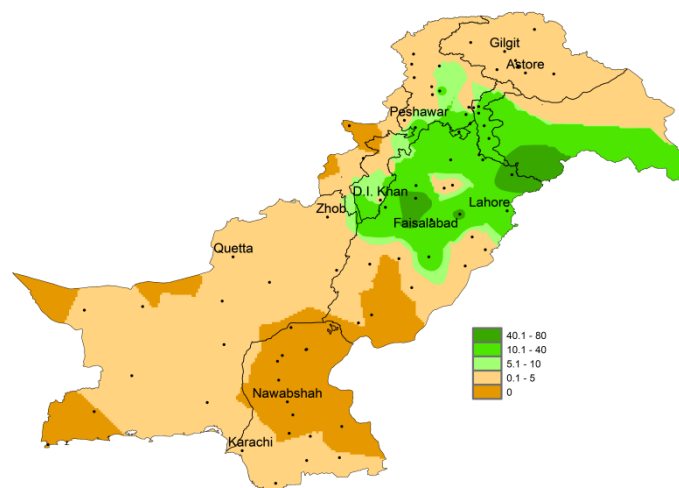
# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the  
Previous Week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)**



## Contents

Highlights of past weather	1-2
Past weather for Agri Plains	3-4
Crop progress	4
Agrometeorological parameters	
• Temperature	5
• R.H and GDD	6
• Wind speed	7
• Cloudiness	8
Advisory for Farmers	9
Weather Outlook	10
National data for selected stations	11
AgMIP project findings	12

## Highlights of Past Weather (1<sup>st</sup> July -7<sup>th</sup> July, 2019)

Above normal day time temperatures were 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 and Gilgit-Baltistan.
2. Light rainfall observed in Baluchistan and lower Sindh.

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

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

**Past Weather of Provinces (1<sup>st</sup> July -7<sup>th</sup> July, 2019)****Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 40.1°C & 27.7°C respectively. For the recent week on average 201.2 growing degree days were accumulated. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 3.6/4.6 Knots. During the previous week the highest precipitation was recorded as 86.00 mm at Gujrat while maximum temperature was recorded as 47.0°C at Bhakkar.

**Baluchistan**

Light rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 39.2°C & 26.9°C respectively. For the recent week on average 196.4 growing degree days were accumulated. Average relative humidity recorded as 41% and wind speed in the morning/evening recorded as 1.4/6.0 Knots. During the previous week the highest precipitation was recorded as 1.80 mm at Khuzdar while the maximum temperature was recorded as 48.0°C at Sibbi.

**Khyber Pakhtunkhwa**

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 36.8°C & 21.3°C respectively. For the recent week on average 166.2 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 1.8/3.0 Knots. During the previous week the highest precipitation recorded as 16.00 mm at Kakul while maximum temperature was recorded as 46.5°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

34.3°C & 18.2°C respectively. For the recent week on average 142.0 growing degree days were accumulated. Average relative humidity recorded as 46% and wind speed in the morning/evening recorded as 1.2/5.4 Knots. During the previous week the highest precipitation recorded as 35.00 mm at Kotli while maximum temperature was recorded as 42.5°C at Chilas.

**Sindh**

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 40.9°C & 28.4°C respectively. For the recent week, on average 208.6 growing degree days were accumulated. Average relative humidity recorded as 58% and wind speed in the morning/evening recorded as 5.9/6.0 Knots. During the previous week the highest precipitation recorded as 0.51 mm at Karachi while the maximum temperature was recorded as 46.5°C at Dadu.

## **Past Weather for Major Agricultural Plains** **(1<sup>st</sup> July -7<sup>th</sup> July, 2019)**

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

23.00 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 3.1/1.3 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded 41.5°C & for the recent week 204.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.7 Knots.

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

72.50 mm rainfall reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.1/1 Oktas while, average relative humidity observed as 60%. Mean day time temperature recorded as 40.1°C & for the recent week 203.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.2/1.2 Knots.

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

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 1.1/0.3 Oktas while, average relative humidity observed as 69%. Mean day time temperature recorded as 37.7°C & for the recent week 192.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.8/3.4 Knots.

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

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0/0.4 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded as 42.9°C & for the recent week 225.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/2.5 Knots.

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

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 2.1/3.3 Oktas while, average relative humidity observed as 22%. Mean day time temperature recorded as 35.9°C & for the recent week 158.7 growing degree days accumulated.

Wind speed recorded in the morning/evening as 1.7/3.8 Knots.

## **Past Weather for Sub-Regional Agricultural Plains (1<sup>st</sup> July -7<sup>th</sup> July, 2019)**

### **Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 2.3/0.3 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 40.4°C & for the recent week 212.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 9.1/6.6 Knots.

### **Lahore**

27.10 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 2.4/2.1 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 39.0°C & for the recent week 201.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/4.7 Knots.

### **Zhob**

Dry weather reported from reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.3/3.6 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 39.2°C & for the recent week 199.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.5/4.1 Knots.

### **Murree**

22.01 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 2.7/4.0 Oktas while, average relative humidity observed as 61%. Mean day time temperature recorded as 27.6°C & for the recent week 129.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/2.6 Knots.

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

1.00 mm rainfall reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 2.9/2.0 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 42.0°C & for the recent week 206.0 growing degree days

accumulated. Wind speed recorded in the morning/evening as 0.9/1.7Knots.

### **Peshawar**

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.1/0.7 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 40.5°C & for the recent week 170.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.3/1.7 Knots.

### **Kalam**

5.00 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.6/2.4 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 28.5°C & for the recent 104.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/3.1 Knots.

### **Gilgit**

1.21 mm rainfall reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 1.7/3.0 Oktas while, average relative humidity observed as 42%. Mean day time temperature recorded as 35.7°C & for the recent week 147.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/2.9 Knots.

### **Skardu**

0.01 mm (trace) rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 1.3/1.0 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 30.7°C & for the recent week 117.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 9.0/11.7 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 (Shahbaz):** Good, *Flowering stage.*

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

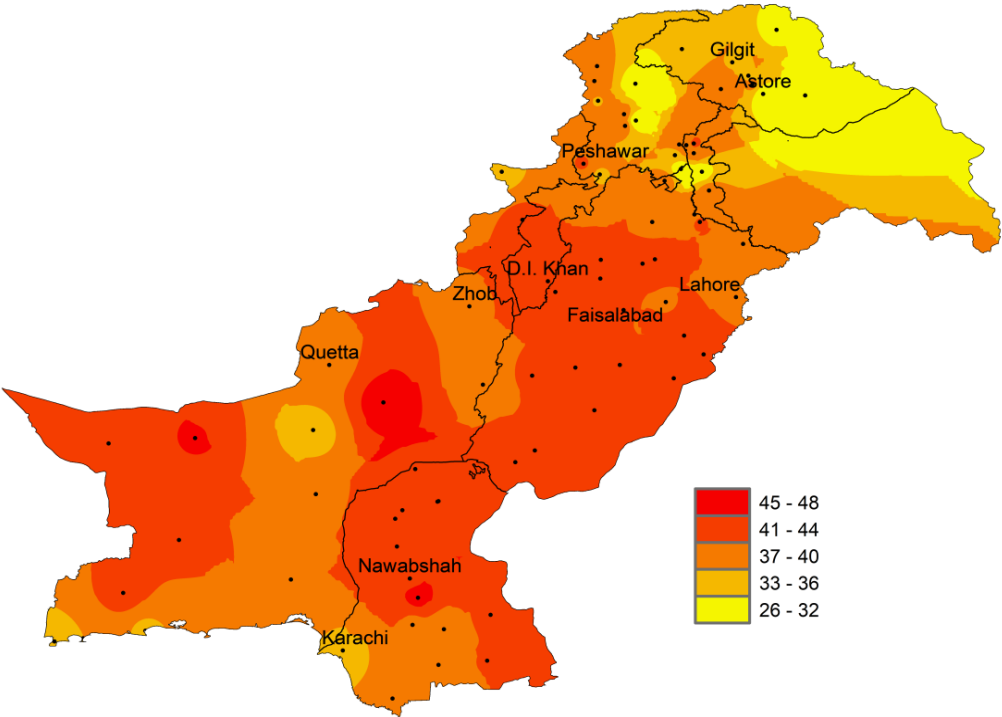
There is presently no crop grown in the fields of RAMC Quetta.

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

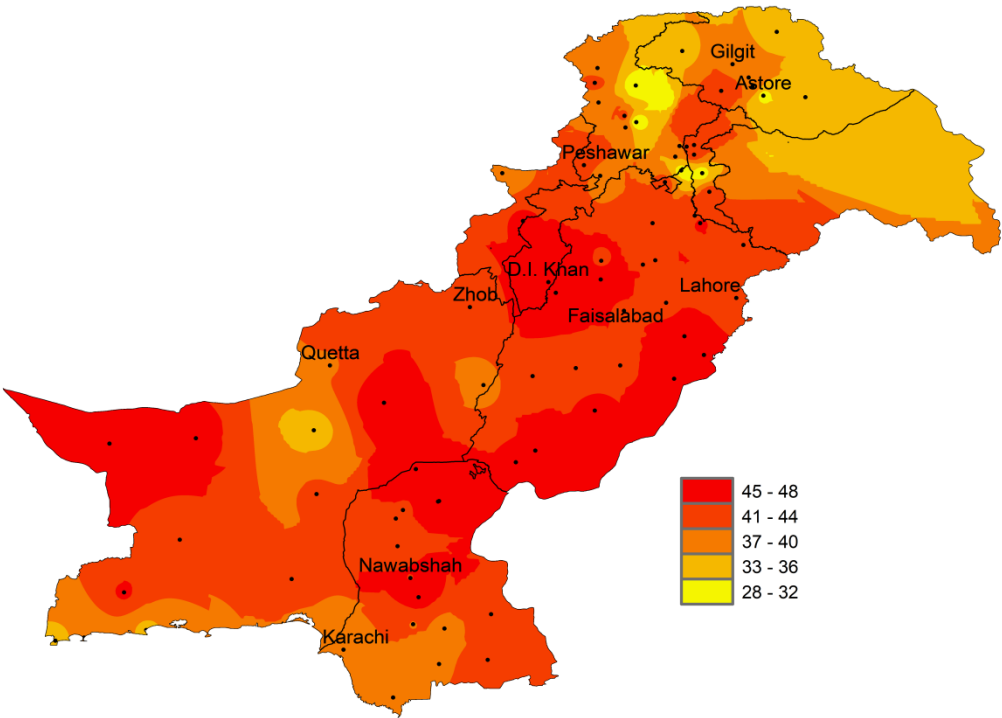
Presently rice crop is sown in the fields of RAMC Usta Muhammad.

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

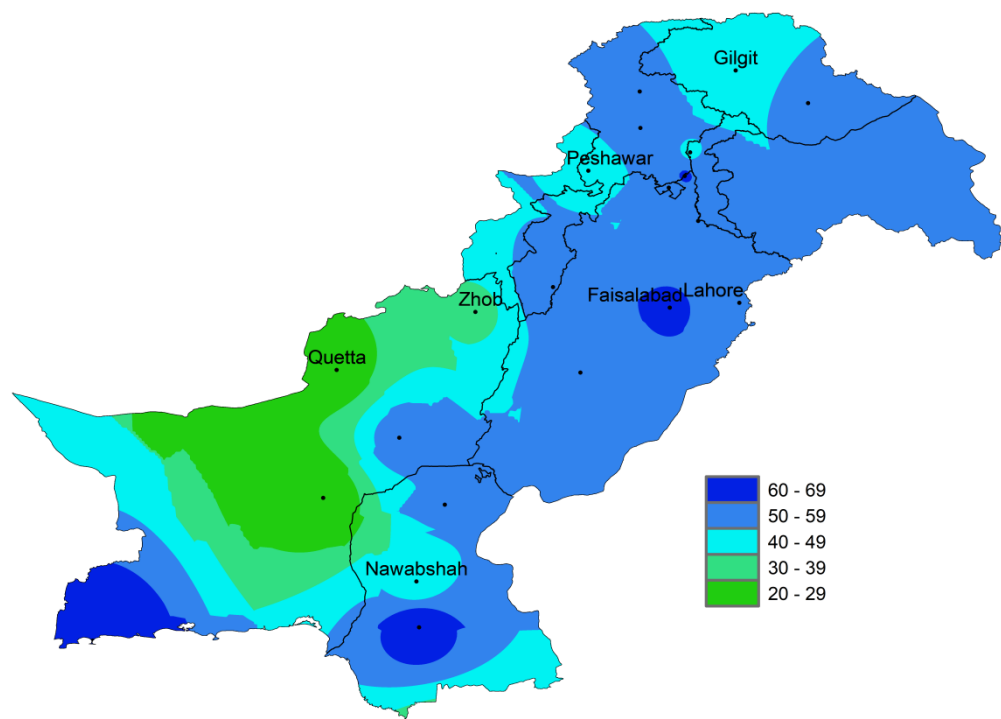
Mean Maximum temperature (°C) during the Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)



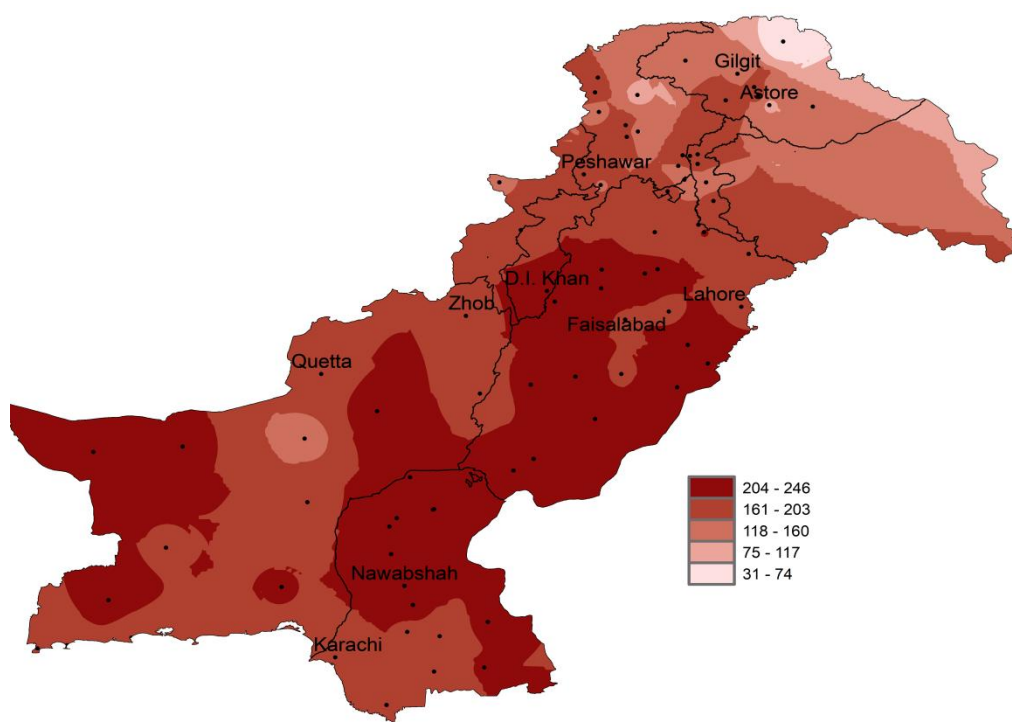
Highest Maximum Temperature (°C) during the Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)



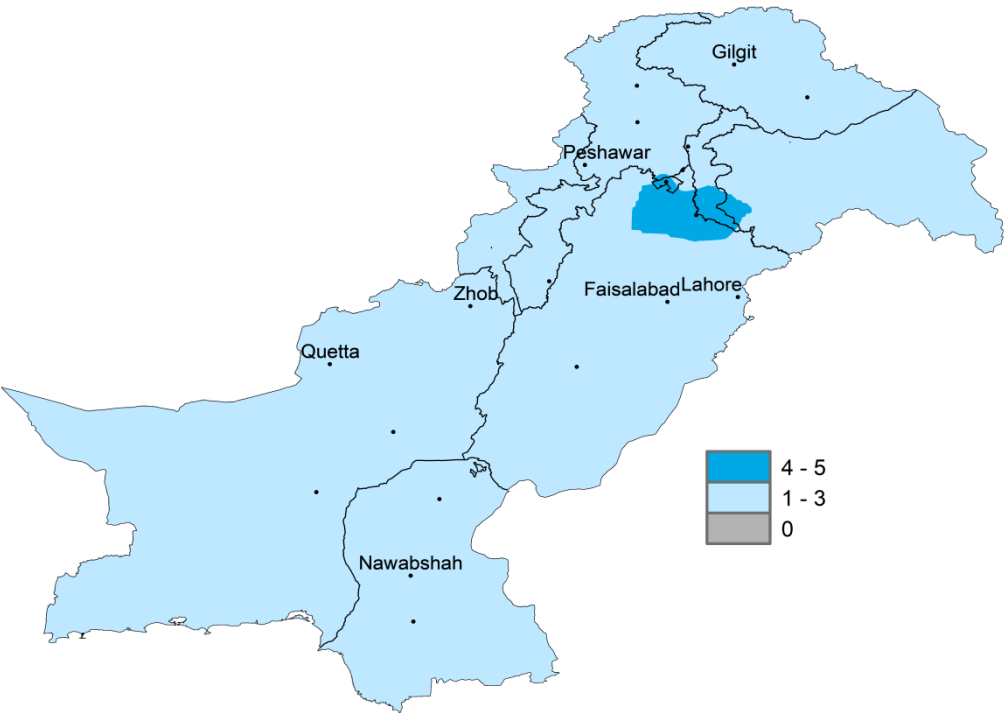
Mean Relative Humidity (%) during the  
Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)



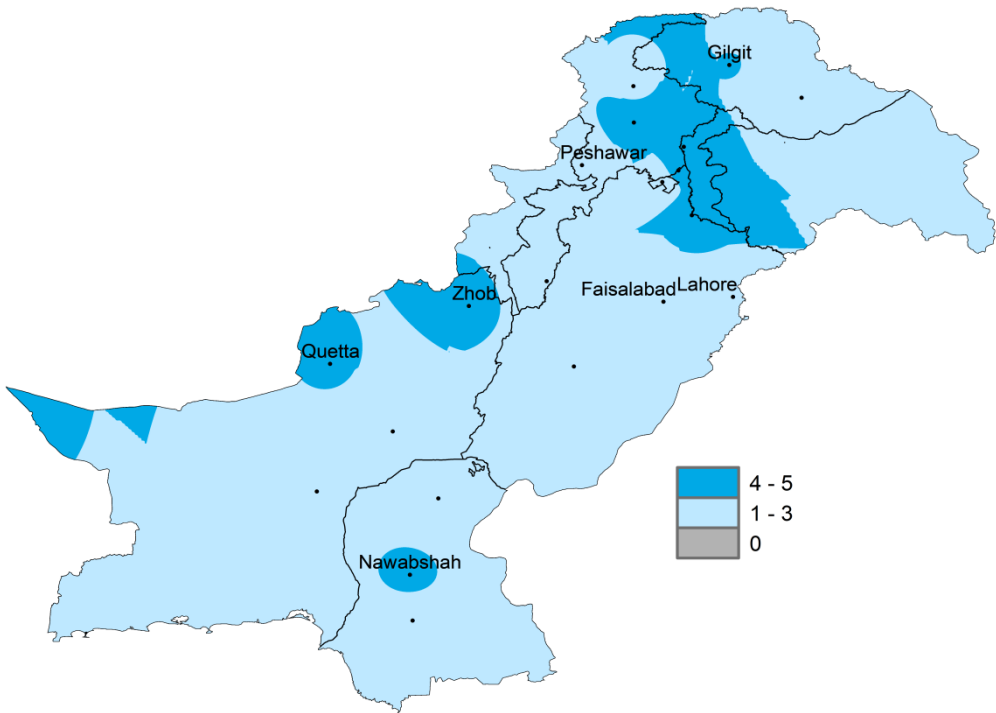
Total Growing Degree Days accumulated during the  
Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)



Mean Cloudiness (Oktas) at 0800PST during the  
Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)

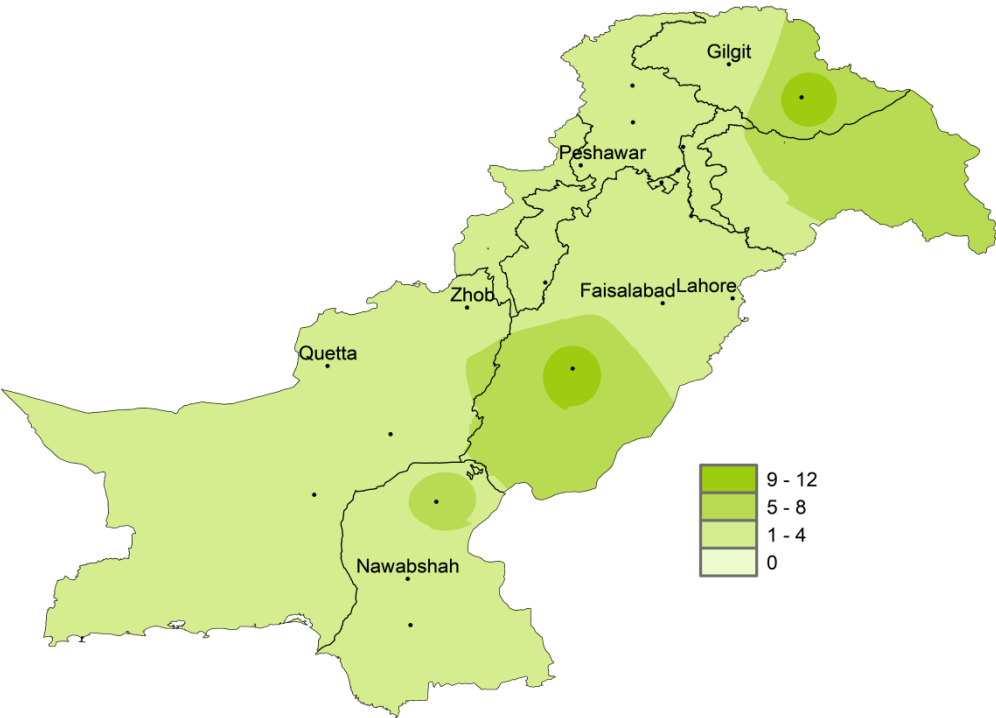


Mean Cloudiness (Oktas) at 1700PST during the  
Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)

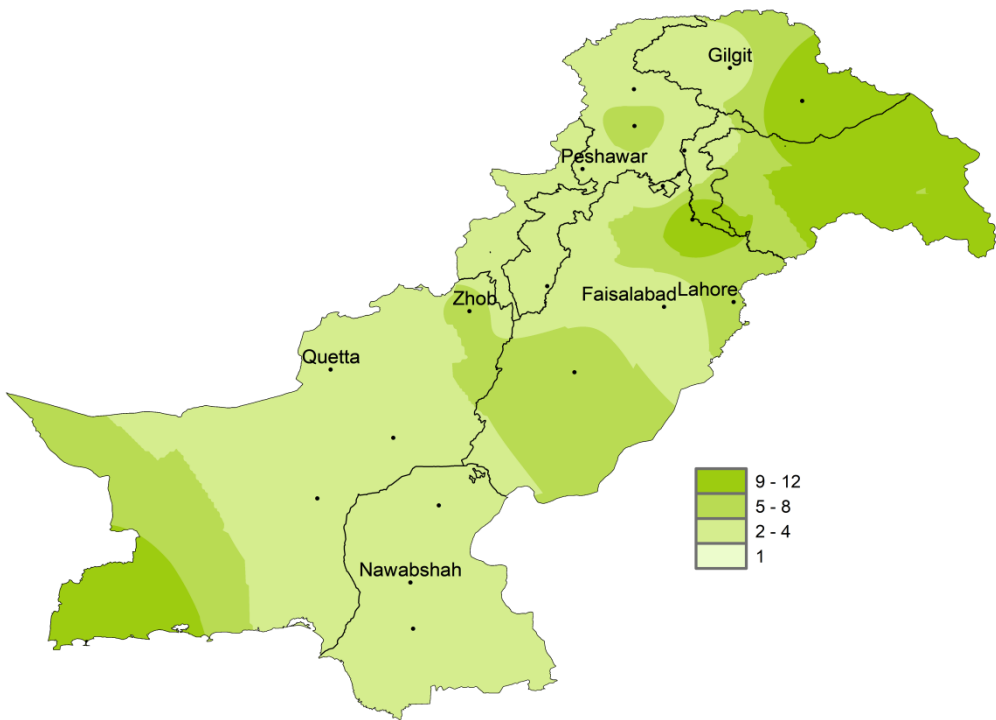




Mean Wind Speed (Knots) at 0800PST during the Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)



Mean Wind Speed (Knots) at 1700PST during the Previous week (1<sup>st</sup> July -7<sup>th</sup> July, 2019)





**Weekly Weather Advisory for Farmers****(8<sup>th</sup> July to 14<sup>th</sup> July, 2019)**

Seasonal low lies over north Balochistan. Moist currents are reaching northeastern parts of the country and likely to strengthen in coming days.

**MONDAY****08-07-2019**

Mainly hot and humid weather is expected in most parts of the country. However, dust-thundershower/rain (with few heavy falls) accompanied by gusty winds is expected at scattered places in Islamabad, upper Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad divisions) and Kashmir. Dust-thundershower/rain with gusty winds is expected at isolated places in Hazara, Peshawar, Mardan, Kohat, Zhob, Multan, D.G.Khan divisions during evening/night.

**TUESDAY****09-07-2019**

Dust-thundershower/rain (with few heavy falls) accompanied by gusty winds is expected at scattered places in Islamabad, upper Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad divisions) and Kashmir. Dust-thundershower/rain with gusty winds is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Kohat, Bannu, D.I.Khan, Zhob, D.G.Khan, Multan divisions and Gilgit Baltistan. Hot and humid weather is expected elsewhere in the country.

**WEDNESDAY****10-07-2019**

Dust-thundershower/rain (with few heavy falls) accompanied by gusty winds is expected at scattered places in Islamabad, upper Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad divisions) and Kashmir. Dust-thundershower/rain with gusty winds is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Kohat, Bannu, D.I.Khan, Zhob, D.G.Khan, Multan divisions and Gilgit Baltistan. Hot and humid weather is expected elsewhere in the country.

**THURSDAY****11-07-2019**

Dust-thundershower/rain with gusty winds expected at isolated places in Islamabad, upper Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad divisions), Kashmir, while dust-thunderstorm is expected at a few places in D.G Khan and D.I. Khan divisions. Hot and humid weather is expected elsewhere in the country.

**FRIDAY****12-07-2019**

Dust-thundershower/rain (with few heavy falls) accompanied by gusty winds expected at isolated places in Islamabad, upper Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad divisions), Kashmir, while dust-thunderstorm is expected at a few places in D.G Khan and D.I.Khan divisions. Hot and humid weather is expected elsewhere in the country.

**SATURDAY****13-07-2019**

Dust-thundershower/rain (with few heavy falls) accompanied by gusty winds is expected at scattered places in Islamabad, upper Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad divisions) and Kashmir. Dust-thundershower/rain with gusty winds is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Kohat, Bannu, D.I.Khan, Zhob, D.G.Khan, Multan divisions and Gilgit Baltistan. Hot and humid weather is expected elsewhere in the country.

**SUNDAY****14-07-2019**

Dust-thundershower/rain (with few heavy falls) accompanied by gusty winds is expected at scattered places in Islamabad, upper Punjab (Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad divisions) and Kashmir. Dust-thundershower/rain with gusty winds is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Kohat, Bannu, D.I.Khan, Zhob, D.G.Khan, Multan divisions and Gilgit Baltistan. Hot and humid weather is expected elsewhere in the country.

**ADVISORY FOR FARMERS**

During the last week, light rainfall occurred at scattered places in Punjab, GB and KPK, while light rainfall occurred in Sindh and Baluchistan. 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 (1<sup>st</sup> July to 7<sup>th</sup> July, 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	42.0	46.5	206.0	57	1.00	2.9	2.0	0.9	1.7
Faisalabad	40.1	43.5	203.0	60	72.50	1.1	1.0	1.2	1.2
Gawadar	36.0	36.5	190.8	68	0.00	2.8	1.1	0.7	12.3
Gilgit	35.7	39.0	147.8	42	1.21	1.7	3.0	0.3	2.9
Kalam	28.5	30.0	104.8	51	5.00	0.6	2.4	0.0	3.1
Khuzdar	37.9	40.5	190.8	20	1.80	0.9	1.7	0.0	1.7
Lahore	39.0	42.3	201.2	56	27.10	2.4	2.1	1.4	4.7
Malam Jabba	25.9	28.0	111.5	52	14.00	2.0	4.4	4.0	5.3
Mangla	39.7	43.5	198.6	52	29.20	3.3	4.1	2.0	12.3
Multan (PBO)	40.4	42.2	212.2	54	0.00	2.3	0.3	9.1	6.6
Murree	27.6	30.1	129.8	61	22.01	2.7	4.0	0.3	2.6
Muzaffarabad	38.0	40.6	173.9	48	0.01	2.3	3.6	2.6	2.7
Nawabshah	38.0	40.6	173.9	40	0.01	2.1	4.0	0.0	3.7
Peshawar	40.5	43.5	170.0	47	0.00	2.1	0.7	2.3	1.7
Quetta	35.9	37.0	158.7	22	0.00	2.1	3.3	1.7	3.8
Rawalpindi	41.5	46.7	204.4	50	23.00	3.1	1.3	0.6	1.7
Rohri	43.4	44.0	269.0	51	0.00	0.0	0.0	5.0	2.9
Skardu	30.7	33.6	117.7	54	0.01	1.3	1.0	9.0	11.7
Tandojam	37.7	39.0	192.8	69	0.00	1.1	0.3	3.8	3.4
Usta. M	42.9	45.0	225.5	55	0.00	0.0	0.4	0.8	2.5
Zhob	39.2	41.0	199.0	36	0.00	0.3	3.6	3.5	4.1

\*\*\* 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)