

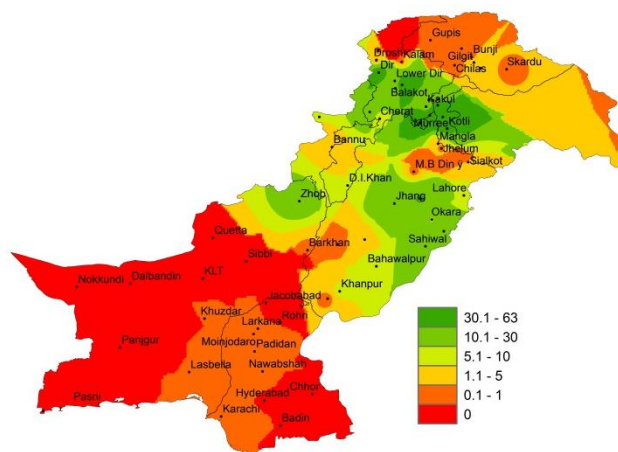
# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous  
Week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)**



## Highlights of Past Weather (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)

Above normal day temperature was observed in most parts of the country however mix trend was observed in Punjab.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed in Punjab, Khyber Pakhtunkhwa, Balochistan Azad Kashmir during the previous week.
- Light rainfall observed in Sindh, G.B during the previous week.

## Contents

Highlights of past weather (General)	1-2
Past weather for Agri Plains	3-4
Crop progress	4
Min Temperature maps	5
R.H and GDD	6
Wind speed maps	7
Cloudiness maps	8
Farmers advisory	9
Weather Outlook	10
National data for selected stations	11-13
AgMIP findings	14

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**Editor-in-Chief: Asma Jawad Hashmi (Director)**

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

## **Past Weather of Provinces (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)**

### **Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 39.8°C & 27.6°C respectively. For the recent week on average 201.2 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 47% and wind speed in the morning/evening recorded as 4.4/4.8 Knots. During the previous week the highest amount of rainfall was recorded as 61.0 mm at Murree & highest maximum temperature was recorded as 48.5°C at Bhakkar.

### **Sindh**

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 42.0°C & 28.0°C respectively. For the recent week, on average 209.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 49% and wind speed in the morning/evening recorded as 6.5/10.1 Knots. During the previous week the highest amount of rainfall was recorded as 0.01 mm at Moinjodaro & highest maximum temperature was recorded as 50.5°C at Jacobabad.

### **Khyber Pakhtunkhwa**

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 36.6°C & 21.0°C respectively. For the recent week on average 166.4 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 45% and wind speed in the morning/evening recorded as 1.3/3.1 Knots. During the previous week the highest amount of rainfall was recorded as 64.0 mm at Malamjabba & highest maximum temperature was recorded as 46.5°C at D.I.Khan.

### **Balochistan**

Light to moderate rainfall observed only at single station (Zhob=15.0mm) in Balochistan during the week. Weekly maximum and minimum temperatures recorded as 39.5°C & 25.2°C respectively. For the recent week on average 188.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 2.0/6.3 Knots. During the previous week the highest maximum temperature was recorded as 50.0°C at Sibbi.

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

Light rainfall observed in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 32.9°C & 17.9°C respectively. For the recent week on average 135.7 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 41% and wind speed in the morning/evening recorded as 1.1/3.0 Knots. During the previous week the highest amount of rainfall was recorded as 51.4 mm Rawalakot & highest maximum temperature was recorded as 43.5°C at Kotli.

### **Past Weather for Major Agricultural Plains (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)**

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

Rainfall reported as 16.2 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 1.0/1.6 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 39.8°C & for the recent week 181.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/0.5 Knots.

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

Rainfall reported as 19.2 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.9/0.0 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 39.4°C & for the recent week 200.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.5/1.6 Knots.

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

Dry weather reported from Tandojam during the week; however, cloudiness recorded in the morning/evening as 0.0/0.0 Oktas while, average relative humidity observed as 61%. Mean day time temperature recorded as 38.6°C & for the recent week 190.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 5.4/6.3 Knots.

#### **Usta Muhammad (Eastern Balochistan)**

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.7 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 48.2°C & for the recent week 237.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/2.8 Knots.

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

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.3/2.4 Oktas while, average relative humidity observed as 17%. Mean day time temperature recorded as 34.3°C & for the recent week 161.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.0/4.7 Knots.

### **Past Weather for Sub-Regional Agricultural Plains (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)**

#### **Multan**

Rainfall reported as 2.2 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 1.0/0.4 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 40.7°C & for the recent week 211.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 10.3/6.6 Knots.

#### **Lahore**

Rainfall reported as 8.4 mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 1.1/1.7 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 38°C & for the recent week 201.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/4.9 Knots.

#### **Zhob**

Rainfall reported as 15.0 mm from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 41%. Mean day time temperature recorded as 38.9°C & for the recent week 178.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.1/7.0 Knots.

#### **Murree**

Rainfall reported as 61.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 1.0/2.9 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 27.1°C & for the recent week 120.1 growing degree days

accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.6 Knots.

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

Rainfall reported as 5.0 mm from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.6/2.1 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded 41.6°C & for the recent week 207.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.1/1.4 Knots.

#### **Peshawar**

Rainfall reported as 18.0 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.9/2.6 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 41.3°C & for the recent week 195.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.7 Knots.

#### **Kalam**

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.9/5.3 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 28.5°C & for the recent week 106.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.7 Knots.

#### **Gilgit**

Rainfall reported as Trace (not measureable) from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.6/5.7 Oktas while, average relative humidity observed as 35%. Mean day time temperature recorded as 34.5°C & for the recent week 143.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.6/11.0 Knots.

#### **Skardu**

Rainfall reported as 0.31 from Skardu during the week; however, cloudiness in the morning/evening recorded as 3.4/5.3 Oktas while, average relative humidity observed as 33%. Mean day time temperature recorded as 29.3°C & for the recent week 112.6 growing degree days accumulated by

the end of last week. Wind speed recorded in the morning/evening as 0.0/2.4 Knots.

### **Crop Situation for Major Agricultural Plains (Based on data from Regional Agromet Centres)**

#### **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;** *Budding* stage in good condition.

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

There is presently one crop in the fields of RAMC Tandojam.

**Cotton (CIM 6.2);** *Budding* in good condition.

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

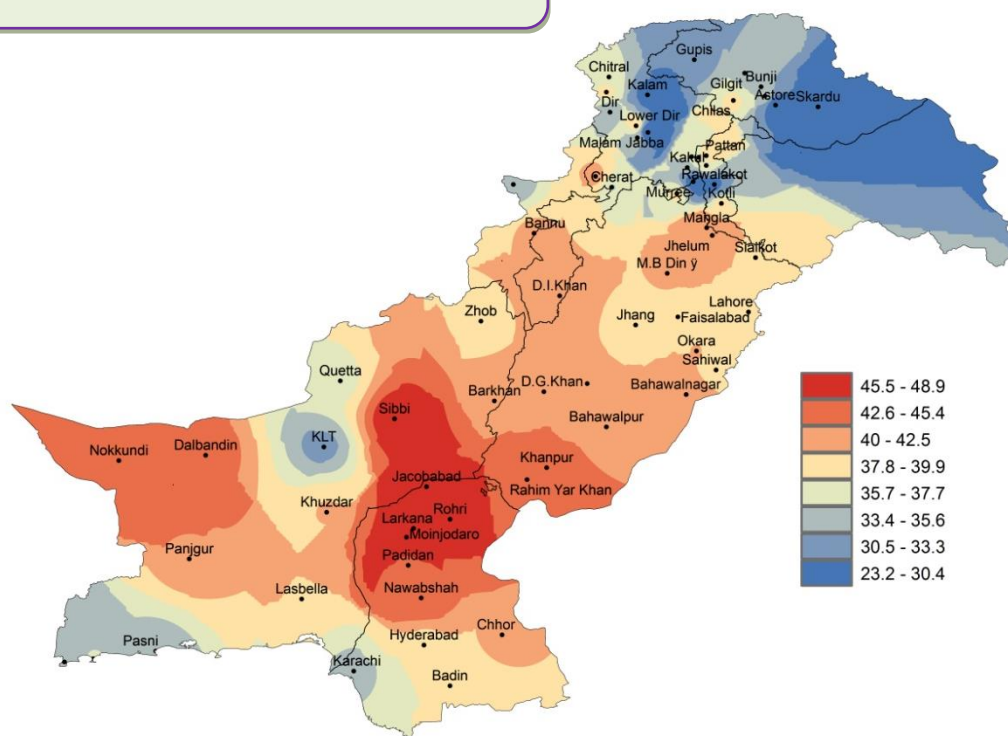
There is presently no crop grown in the fields of RAMC Quetta.

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

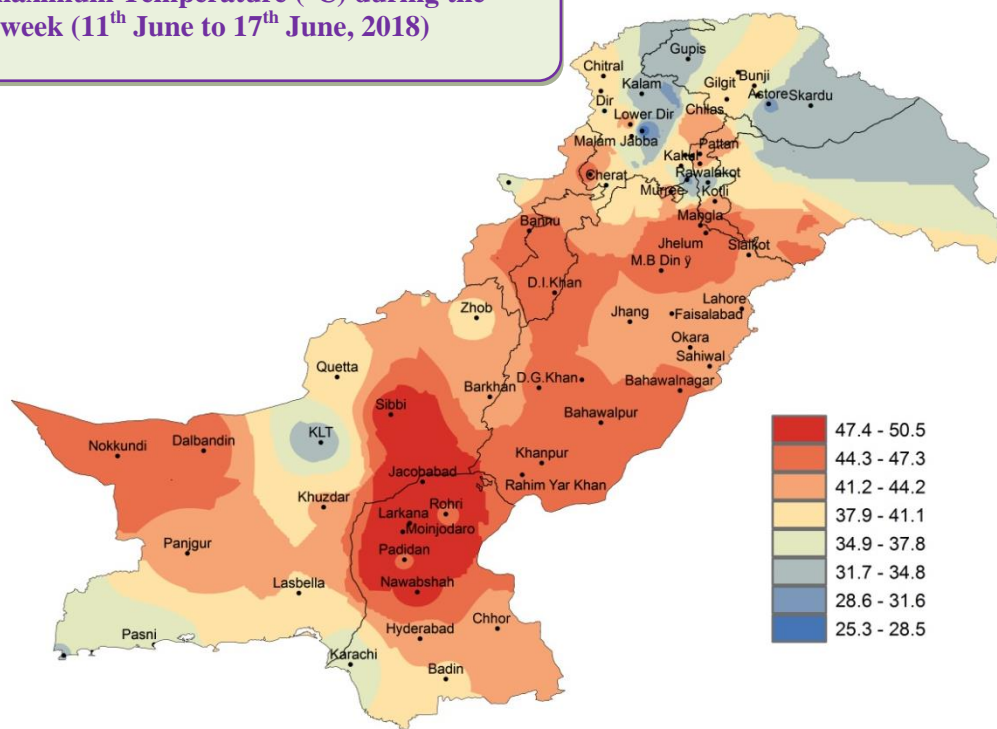
There is presently one crop grown in the fields of RAMC Usta Muhammad.

**Rice:** *Good condition, Paneri in process*

**Mean Maximum Temperature (°C) during the  
Previous week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)**

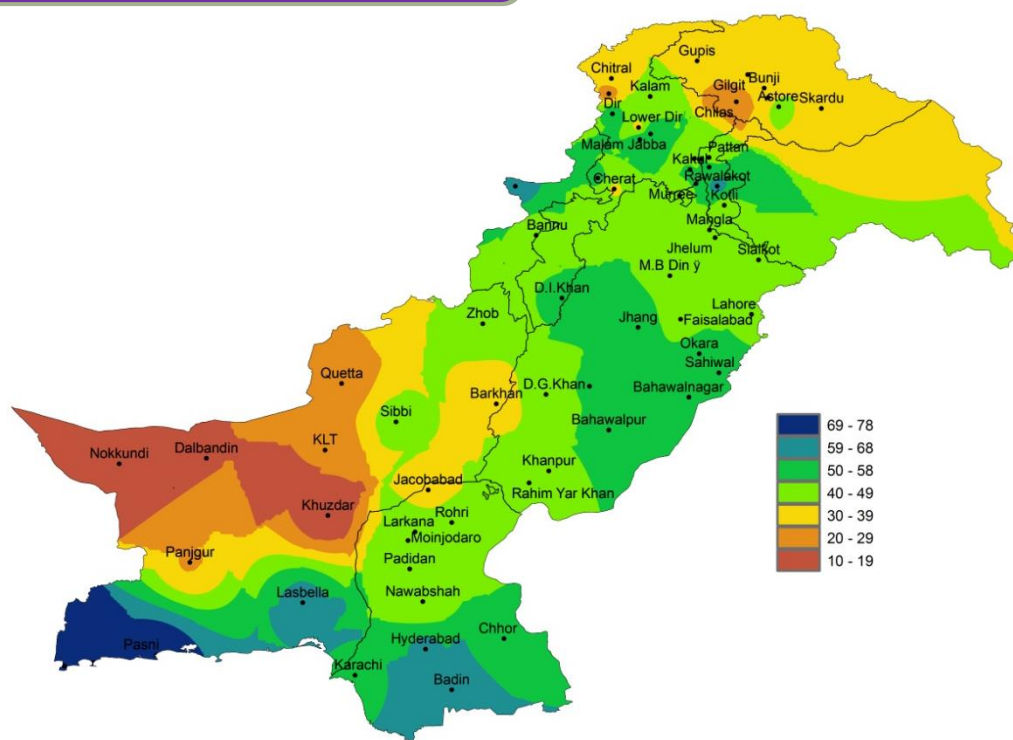


**Highest maximum Temperature (°C) during the  
Previous week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)**

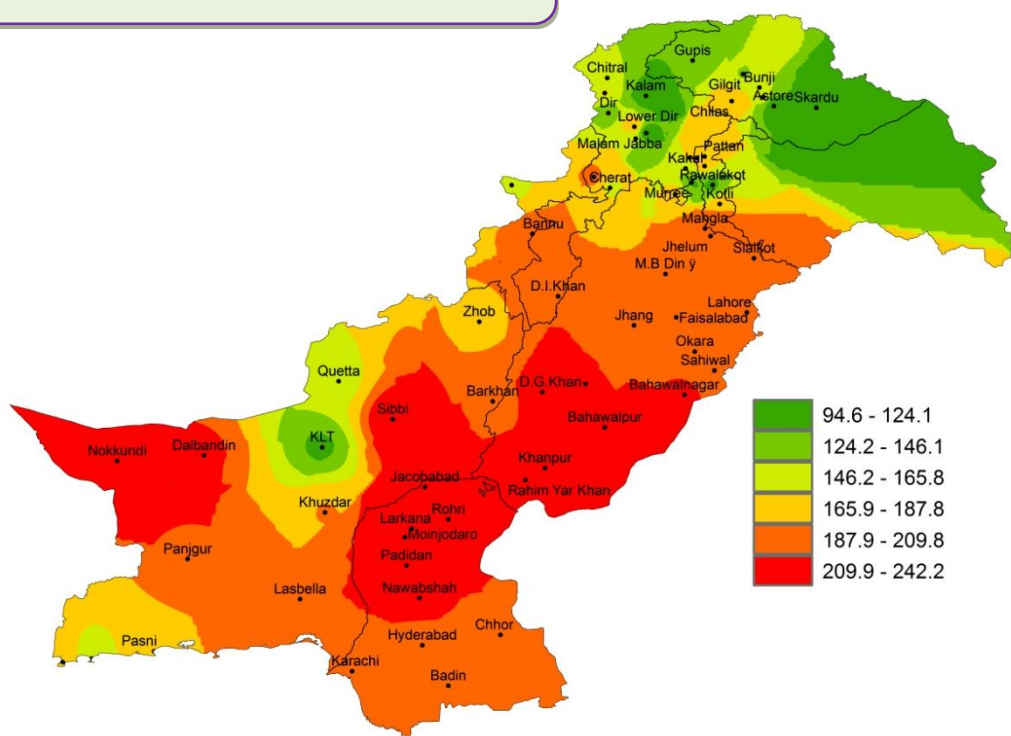




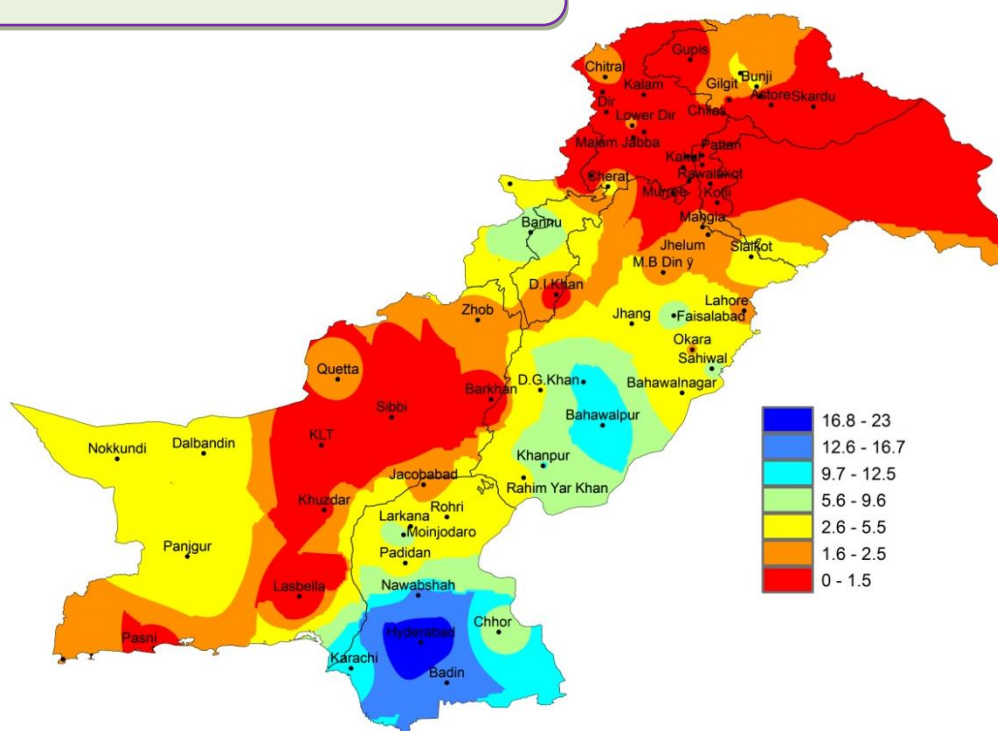
Mean Relative Humidity (%) during the  
Previous week 11<sup>th</sup> June to 17<sup>th</sup> June, 2018)



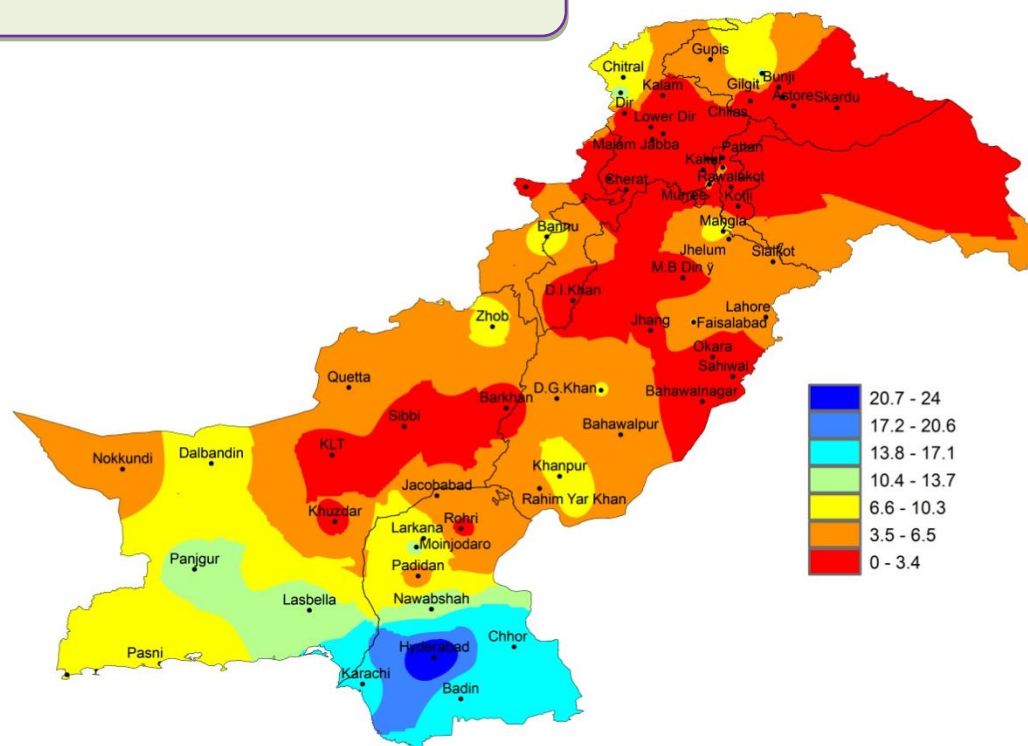
Total Growing Degree Days accumulated during the  
Previous week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)



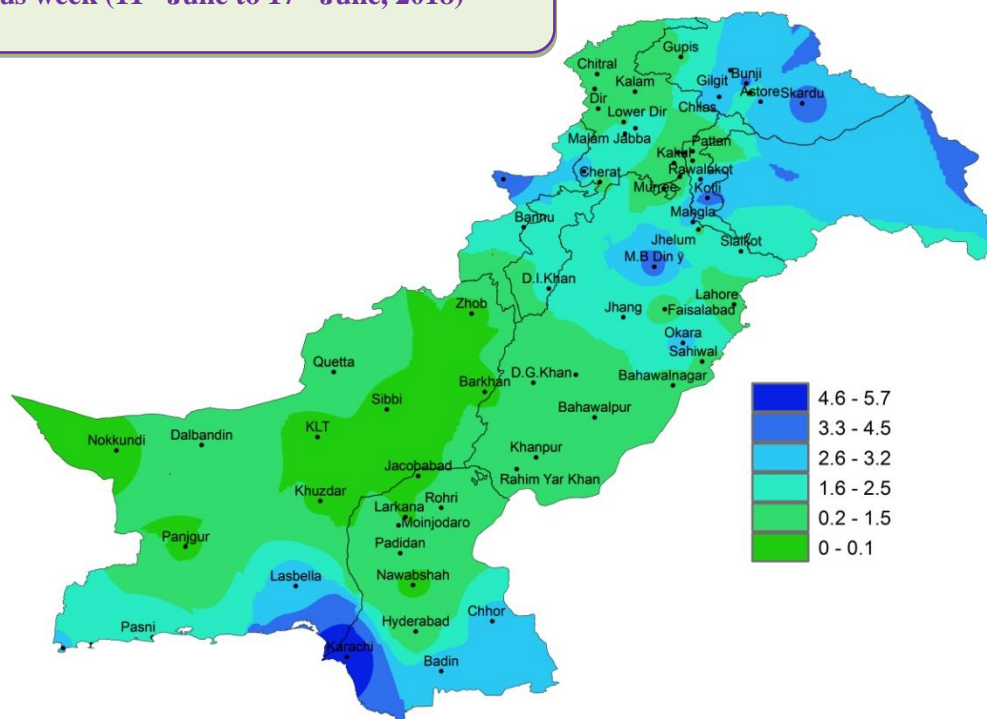
Mean Wind Speed (Knots) at 0800PST during the Previous week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)



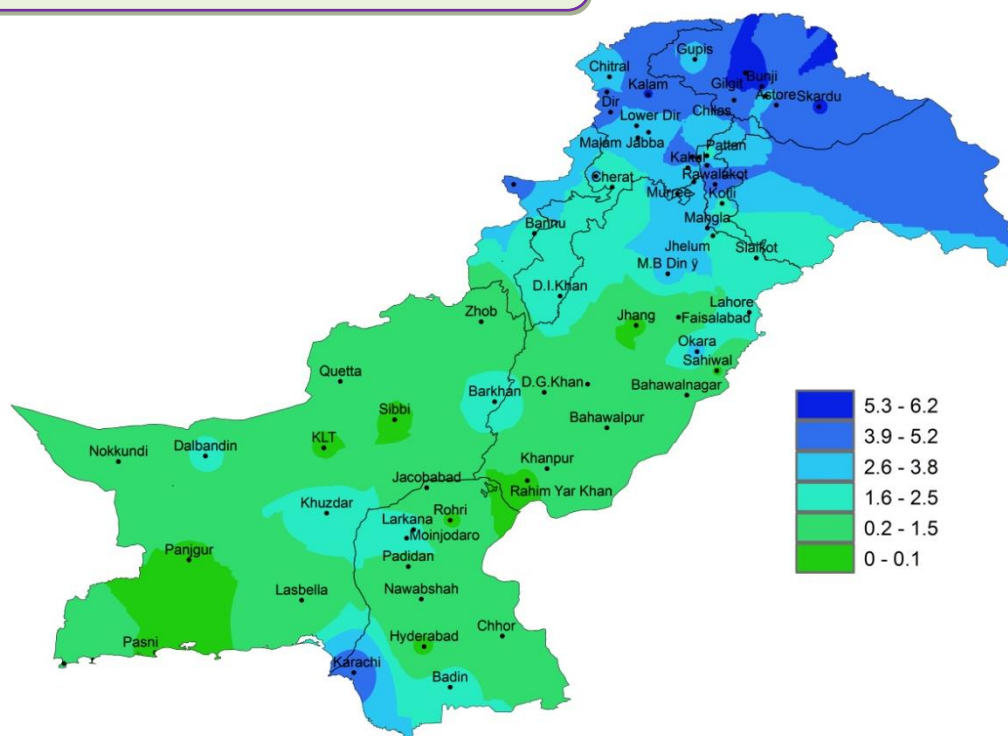
Mean Wind Speed (Knots) at 1700PST during the Previous week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (11<sup>th</sup> June to 17<sup>th</sup> June, 2018)





**Weekly Weather Advisory for Farmers****(19<sup>th</sup> June to 25<sup>th</sup> June, 2018)**

Normal wind pattern may prevail in most of the agricultural plains of the country during the decade; however dust/sand storms may occur in southern Punjab and upper Sindh.

**TUESDAY****19-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds is expected at isolated places in Malakand, Hazara, Multan, D.G.Khan divisions, FATA, Kashmir and Gilgit-Baltistan.

**WEDNESDAY****20-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, isolated rain-thundershower is expected in Malakand division, FATA and Gilgit-Baltistan.

**THURSDAY****21-06-2018**

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

**FRIDAY****22-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds is expected at isolated places in Malakand, Hazara, Rawalpindi, Sargodha division, upper FATA, Kashmir and Gilgit-Baltistan.

**SATURDAY****23-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, more rain-thundershower with gusty winds is expected at

isolated places in Malakand division, FATA, Kashmir and Gilgit-Baltistan.

**SUNDAY****24-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, more rain-thundershower with gusty winds is expected at isolated places in Malakand division and Gilgit-Baltistan.

**MONDAY****25-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, more rain-thundershower with gusty winds is expected at isolated places in Gilgit-Baltistan.

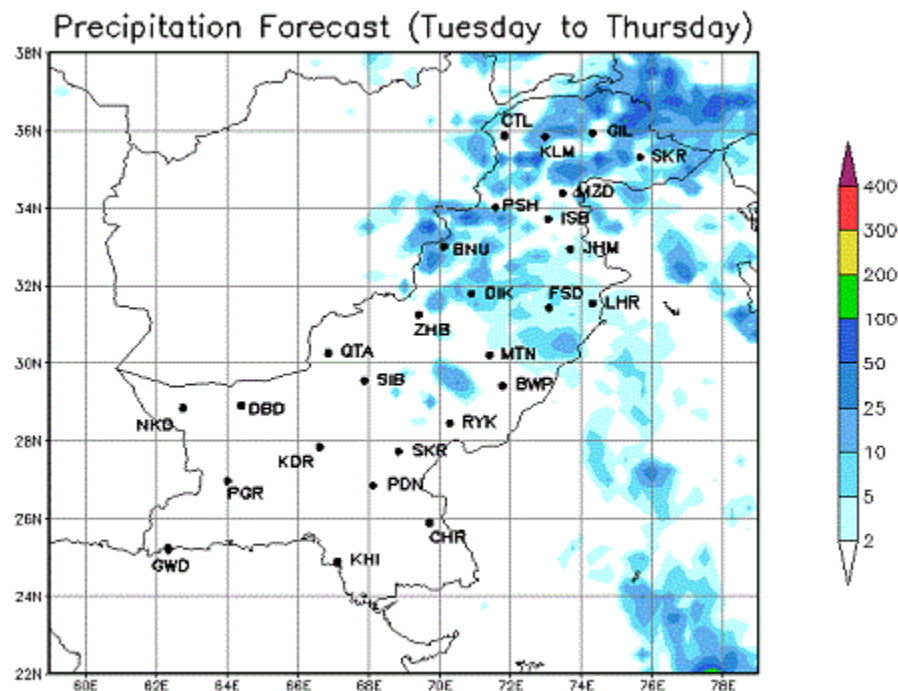
**ADVISES FOR FARMERS**

During the last week, light to moderate rainfall occurred in central parts of the country while hot and dry weather prevailed in rest parts. This may continue with almost the same pattern in coming days as well. Keeping in view the expected weather conditions following advises are suggested for farming community.

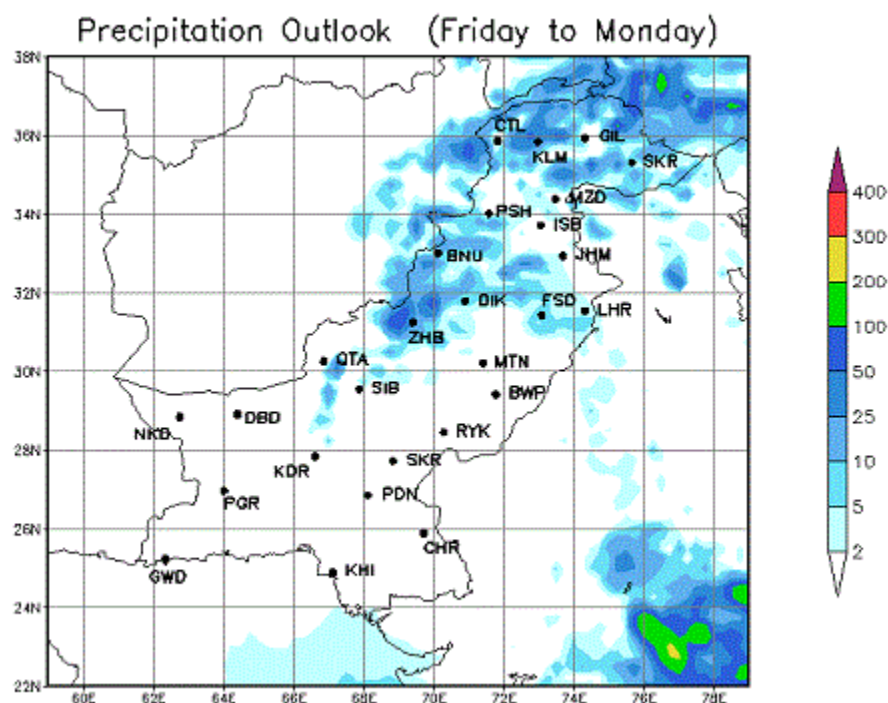
- Farmers of southern Punjab and Sindh are advised to complete the sowing of cotton and other Kharif crops to utilize the maximum soil moisture.
- In the upper half of the country specially in Potohar region, if required moisture is available in field, should complete cultivating peanut crops
- Farmers of upper Sindh and southern Punjab are advised to irrigate the crop according to the crop-water requirement if necessary.
- Rice growers are advised to complete sowing of the crop in accordance with the recommendation by the agricultural experts.

## Weather Outlook from 19<sup>th</sup> June to 25<sup>th</sup> June, 2018

The forecast from 19<sup>th</sup> June to 21<sup>st</sup> June, 2018 shows that light to moderate rainfall is expected at scattered places of the upper parts of the country, whereas dry weather may prevail in rest of the country.



The outlook from 22<sup>nd</sup> June to 25<sup>th</sup> June, 2018 shows that light to moderate rainfall is expected at few places in Upper and central Punjab, KP, northern Balochistan and GB. However, light rainfall is expected at coastal plains of Sindh. Dry weather may prevail in rest of the country.



**National Weather Data of Selected Cities (Weekly Data from 11<sup>th</sup> June to 17<sup>th</sup> June, 2018)**

Stations	Maximum/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							
Astore	26.0	30.0	93.8	43	2.70	3.1	4.4	1.4	1.1
Badin	38.0	40.5	195.9	62	0.00	3.1	2.1	13.4	13.7
Bahawalnagar	41.6	44.5	213.0	49	17.00	1.1	0.6	3.4	1.1
Bahawalpur	41.0	44.5	211.4	51	10.00	0.7	0.9	10.9	4.3
Balakot	36.2	40.0	168.1	39	16.00	1.3	4.9	0.0	0.3
Bannu	40.8	45.6	201.4	42	1.00	1.7	2.1	8.0	7.4
Barkhan	41.1	43.0	201.8	34	0.00	0.0	2.0	0.3	2.3
Bunji	34.0	38.3	156.4	35	0.01	3.7	6.3	3.1	0.0
Cherat	35.4	37.5	161.8	38	6.00	1.3	1.9	2.9	2.6
Chhor	40.6	43.2	201.4	55	0.00	2.7	0.3	8.0	14.0
Chilas	38.3	41.0	186.3	21	0.01	2.7	4.7	1.4	2.0
Chitral	36.4	38.5	149.5	33	0.00	1.0	3.4	2.6	6.9
D.G.Khan	41.4	44.5	217.8	44	0.00	0.6	1.3	5.4	5.7
D.I.Khan	41.6	46.5	207.8	51	5.00	1.6	2.1	1.1	1.4
Dalbandin	44.6	45.5	214.3	19	0.00	0.7	1.6	4.0	8.0
Dir	33.1	37.5	131.4	57	46.00	1.3	4.1	0.3	1.7
Drosh	38.8	40.6	167.7	23	0.00	1.1	3.9	0.0	12.4
Faisalabad	39.4	43.5	200.8	53	19.20	0.9	0.0	2.5	1.6
Garidopatta	37.1	41.5	169.7	52	48.00	1.6	4.3	1.1	4.0
Gawader	35.8	36.5	155.5	71	0.00	1.6	0.1	1.7	6.9
Gilgit	34.5	38.5	143.9	35	0.01	2.6	5.7	2.6	11.0

Gupis	30.5	33.5	127.8	33	0.00	1.4	3.6	1.1	6.3
Hyderabad	38.7	42.5	194.5	60	0.00	0.7	0.0	23.0	24.0
Islamabad	38.8	43.0	180.9	42	44.00	1.3	2.7	0.3	3.1
Jacobabad	47.4	50.5	232.3	34	0.00	0.0	0.7	1.7	3.7
Jhang	38.7	42.5	199.6	54	24.20	1.9	0.0	3.7	2.9
Jhelum	41.2	46.0	206.8	40	0.01	1.2	2.2	2.0	4.0
Jiwani	34.0	34.5	179.0	72	0.00	2.7	1.0	2.0	10.3
Kakul	34.4	38.5	150.5	51	19.01	0.7	3.6	0.0	2.3
Kalam	28.5	32.0	106.7	47	0.00	0.9	5.3	0.0	1.7
Kalat	32.3	33.0	118.5	21	0.00	0.0	0.0	0.0	2.9
Karachi	34.8	35.5	188.7	56	0.01	5.7	4.6	10.6	16.6
Khanpur	43.6	46.0	218.4	47	6.40	0.4	0.3	9.7	7.7
Khuzdar	40.1	41.5	189.0	11	0.00	0.0	2.3	1.4	3.1
Kotli	38.6	43.1	185.0	45	37.20	3.4	2.1	1.1	1.4
Lahore	38.0	43.7	201.1	45	8.40	1.1	1.7	2.3	4.9
Larkana	47.1	49.0	234.3	46	0.00	0.0	1.6	3.4	7.4
Lasbella	39.9	41.0	203.3	63	0.00	3.0	0.3	0.6	11.7
Lower Dir	40.3	44.0	190.5	35	9.00	1.3	2.6	2.0	2.0
M.B Din	40.4	45.5	201.0	48	0.01	3.4	2.9	1.7	2.0
Malam Jabba	22.9	25.0	93.1	58	64.00	2.1	3.1	0.0	0.0
Mangla	40.5	45.2	200.6	39	1.01	3.0	3.0	1.7	9.1
Mir Khani	36.3	38.0	160.7	32	3.00	1.0	2.0	0.0	3.3
Moinjodaro	47.0	50.0	234.0	42	0.01	0.3	1.9	7.7	11.7
Multan(PBO)	40.7	44.4	211.0	50	2.20	1.0	0.4	10.3	6.6
Murree	27.1	30.7	120.1	49	61.00	1.0	2.9	0.0	3.6
Muzaffarabad	37.3	41.0	172.5	52	28.00	0.9	3.3	0.0	3.1



Nawabshah	45.1	48.5	221.8	40	0.00	0.0	0.4	13.1	13.4
Nokkundi	44.5	46.0	223.3	10	0.00	0.0	0.9	5.4	4.6
Okara	40.0	44.0	205.3	53	9.70	3.0	2.9	2.3	0.6
Padidan	44.9	47.0	219.5	47	0.01	0.3	1.1	2.6	4.6
Panjgur	42.1	43.0	207.0	29	0.00	0.0	0.0	4.9	11.1
Parachinar	33.5	36.6	157.2	64	5.00	3.9	4.3	3.0	3.0
Pasni	34.0	36.0	179.9	78	0.00	2.1	0.0	1.1	7.6
Pattan	38.6	43.0	181.8	42	13.00	0.0	1.7	0.0	0.0
Peshawar	41.3	45.8	195.0	51	18.00	2.9	2.6	0.0	1.7
Quetta	34.3	36.0	161.7	17	0.00	0.3	2.4	3.0	4.7
R.y.Khan	44.7	46.6	221.7	49	0.00	1.1	0.0	4.0	5.7
Rawalakot	28.6	32.0	116.3	62	51.40	2.6	5.0	0.0	1.1
Rawalpindi	39.8	42.5	181.9	51	16.20	1.0	1.6	0.6	0.5
Rohri	45.5	47.0	212.3	43	0.00	0.4	0.0	3.4	3.1
Sahiwal	39.1	44.0	200.7	52	16.00	1.1	0.0	6.0	2.9
Saidu Sharif	35.4	39.0	150.3	55	16.00	1.9	2.9	0.0	0.0
Sialkot	39.2	44.0	194.1	45	1.00	1.9	2.0	2.9	6.3
Sibbi	48.9	50.0	242.3	44	0.00	0.0	0.0	0.0	2.9
Skardu	29.3	34.6	112.6	33	0.31	3.4	5.3	0.0	2.4
Tandojam	38.6	41.5	190.5	61	0.00	0.0	0.0	5.4	6.3
Usta.M	48.2	51.0	237.3	37	0.00	0.0	0.7	1.4	2.8
Zhob	38.9	40.5	178.5	41	15.00	0.0	0.3	2.1	7.0

\*\*\* 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)