

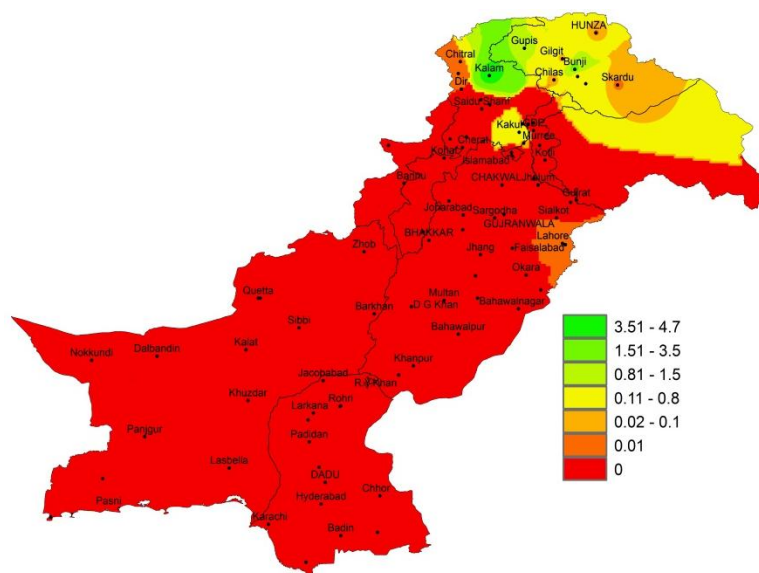
# Weekly Weather and Crop Bulletin for Pakistan

**NATIONAL AGROMET CENTRE  
PAKISTAN METEOROLOGICAL  
DEPARTMENT SECTOR H-8/2,  
ISLAMABAD.**

**Phone: +92-51-9250299**

**Email: dirnamc@yahoo.com**

**Rainfall Distribution (mm) during the Previous  
Week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)**



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## Highlights of Past Weather (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)

Above normal day temperatures were observed in Punjab, GB, Azad Kashmir, Sindh, KP and Balochistan.

Province wise distribution of rainfall reported as follows:

- Light rainfall observed at single station in Punjab and few places at Khyber Pakhtunkhwa, Gilgit-Baltistan, Azad Jammu & Kashmir during the previous week.
- Dry weather observed at Sindh and Baluchistan during the previous week.

**Patron-in-Chief: Dr. Ghulam Rasul (Director General)**

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

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

**Past Weather of Provinces (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)****Punjab**

Light rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 43.5°C & 26.1°C respectively. For the recent week on average 208.8 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 33% and wind speed in the morning/evening recorded as 3.6/2.8 Knots. During the previous week the highest amount of rainfall was recorded as 0.01 mm (trace) at Lahore & highest maximum temperature was recorded as 49.5°C at Bahawalnagar.

**Sindh**

Dry weather observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 45.5°C & 27.6°C respectively. For the recent week, on average 222.9 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 36% and wind speed in the morning/evening recorded as 4.5/6.3 Knots. During the previous week the highest maximum temperature was recorded as 51°C at Jacobabad.

**Khyber Pakhtunkhwa**

Light rainfall observed at few places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 37.9°C & 20.2°C respectively. For the recent week on average 168.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 35% and wind speed in the morning/evening recorded as 1.3/3.5 Knots. During the previous week the highest amount of rainfall was recorded as 4.7 mm at Kalam & highest maximum temperature was recorded as 47°C at D.I.Khan.

**Balochistan**

Dry weather observed in Balochistan during the week. Weekly maximum and minimum

temperatures recorded as 40.3°C & 23.5°C respectively. For the recent week on average 187.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 34% and wind speed in the morning/evening recorded as 2.1/6.3 Knots. During the previous week the highest maximum temperature was recorded as 50°C at Turbat.

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

Light rainfall observed in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 33.2°C & 16.2°C respectively. For the recent week on average 132.1 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 36% and wind speed in the morning/evening recorded as 0.9/2.5 Knots. During the previous week the highest amount of rainfall was recorded as 2.02 mm at Bunji & highest maximum temperature was recorded as 42.5°C at Chilas.

### **Past Weather for Major Agricultural Plains (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)**

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

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.7/0.0 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 40.6°C & for the recent week 183.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/1.1 Knots.

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

Dry weather reported from Faisalabad during the week; however, no cloudiness in the morning/evening recorded while, average relative humidity observed as 34%. Mean day time temperature recorded as 44.3°C & for the recent week 211 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.5/1.0 Knots.

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

Dry weather reported from Tandojam during the week; however, cloudiness recorded in the morning/evening as 0.7/0.0 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded as 42.2°C & for the recent week 198.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.8/3.6 Knots.

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

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 35%. Mean day time temperature recorded as 46.4°C & for the recent week 226 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/4.9 Knots.

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

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.4/0.7 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 33.8°C & for the recent week 148.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.4/3.4 Knots.

### **Past Weather for Sub-Regional Agricultural Plains (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)**

#### **Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 26%. Mean day time temperature recorded as 45.2°C & for the recent week 225.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 5.1/6.3 Knots.

#### **Lahore**

0.01mm (trace) rainfall reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.7/0.4 Oktas while, average relative humidity observed as 35%. Mean day time temperature recorded as 42.6°C & for the recent week 211.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/3.4 Knots.

#### **Zhob**

Dry weather reported from during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 26%. Mean day time temperature recorded as 38.2°C & for the recent week 187.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/4.3 Knots.

#### **Murree**

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.4/0.3 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 28.5°C & for the recent week 128.8 growing degree days accumulated by

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

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

Dry weather reported from D.I. Khan during the week; however, no cloudiness in the morning/evening recorded while, average relative humidity observed as 36%. Mean day time temperature recorded as 45.9°C & for the recent week 220.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/1.1 Knots.

#### **Peshawar**

Dry weather reported from Peshawar during the week; however, no cloudiness in the morning/evening recorded while, average relative humidity observed as 36%. Mean day time temperature recorded as 42.1°C & for the recent week 202 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/3.7 Knots.

#### **Kalam**

Rainfall reported as 4.70 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.4/3.3 Oktas while, average relative humidity observed as 46%. Mean day time temperature recorded as 29.9°C & for the recent week 98.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 Knots.

#### **Gilgit**

Rainfall reported as 0.01 mm(trace) from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.3/3.6 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 34.3°C & for the recent week 136.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/8.3 Knots.

#### **Skardu**

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.3/3.9 Oktas while, average relative humidity observed as 27%. Mean day time temperature recorded as 29.2°C & for the recent week 106.3 growing degree days accumulated by

the end of last week. Wind speed recorded in the morning/evening as 0.0/2.1 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 ; *Very Good*, emergence** stage completed in good condition and field is irrigated.

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

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

**Cotton (CIM 6.2); *Good*, Third true leaf** stage in good condition.

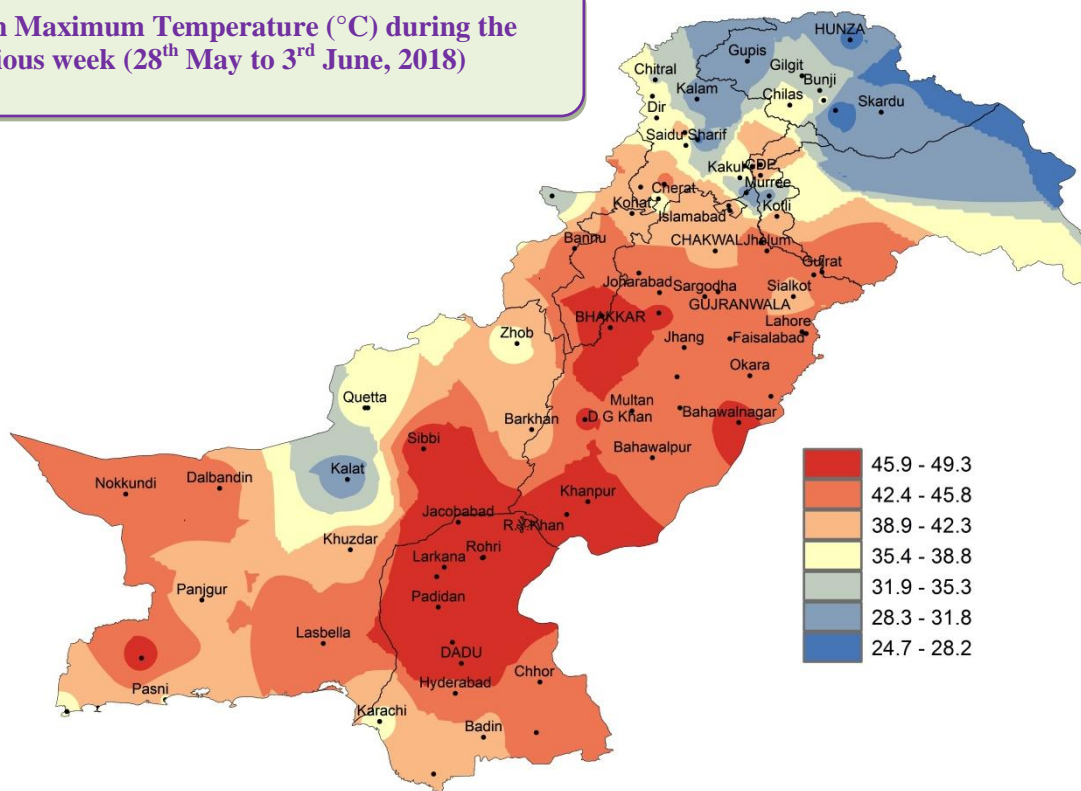
#### **Northern Baluchistan (Quetta)**

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

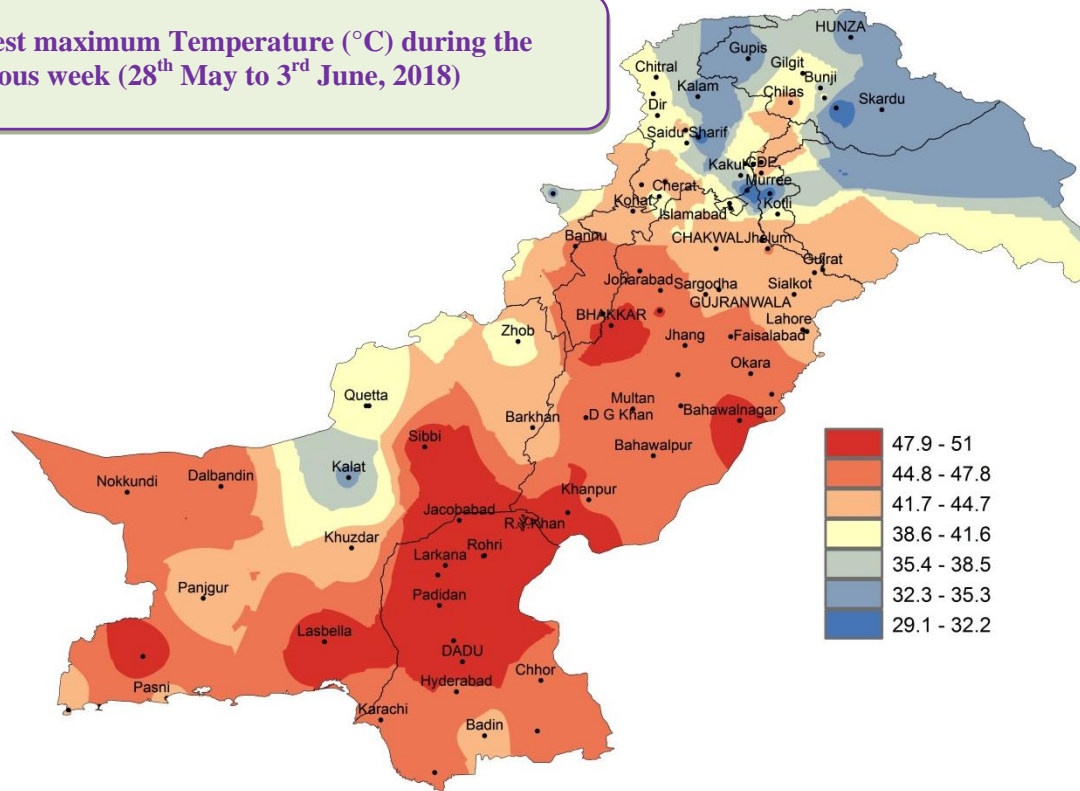
#### **Eastern Baluchistan (Usta Muhammad)**

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

**Mean Maximum Temperature ( $^{\circ}\text{C}$ ) during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)**

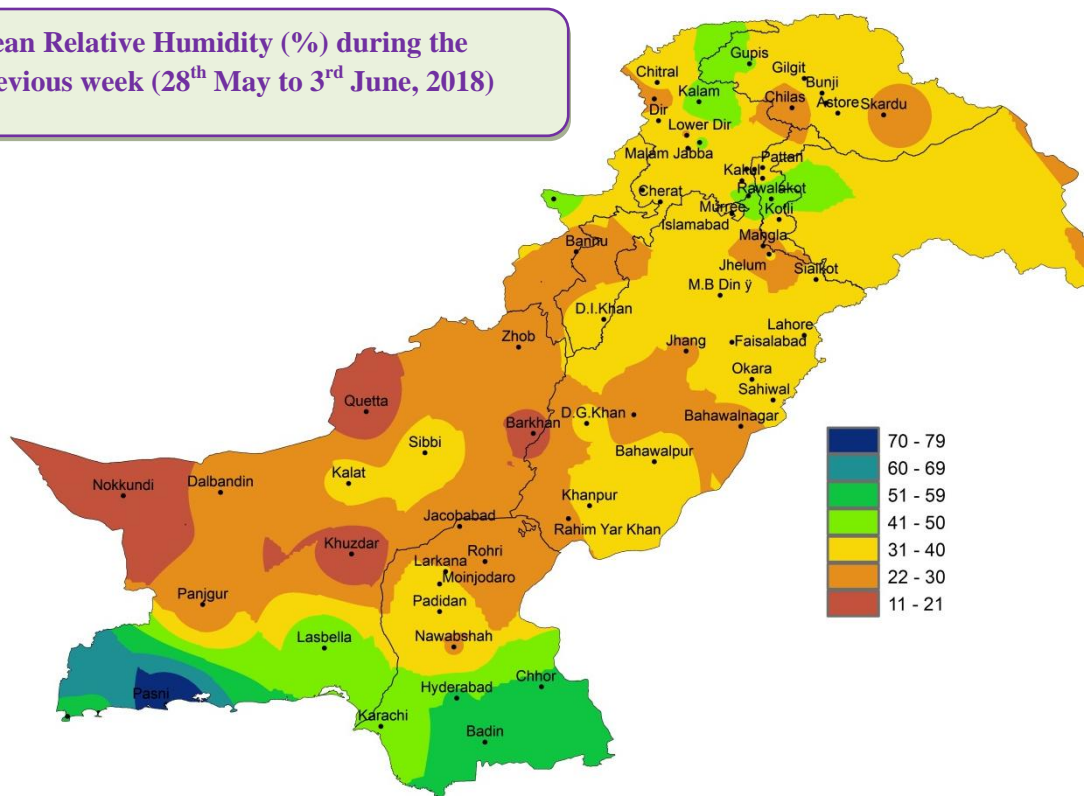


**Highest maximum Temperature ( $^{\circ}\text{C}$ ) during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)**

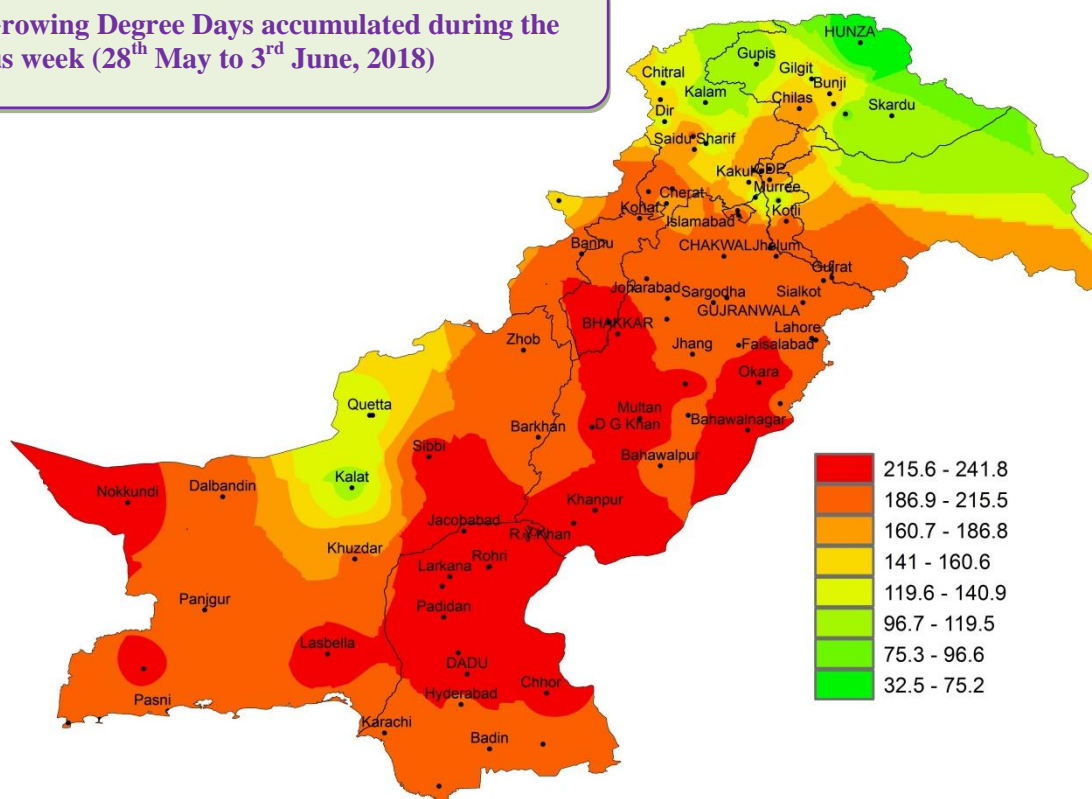




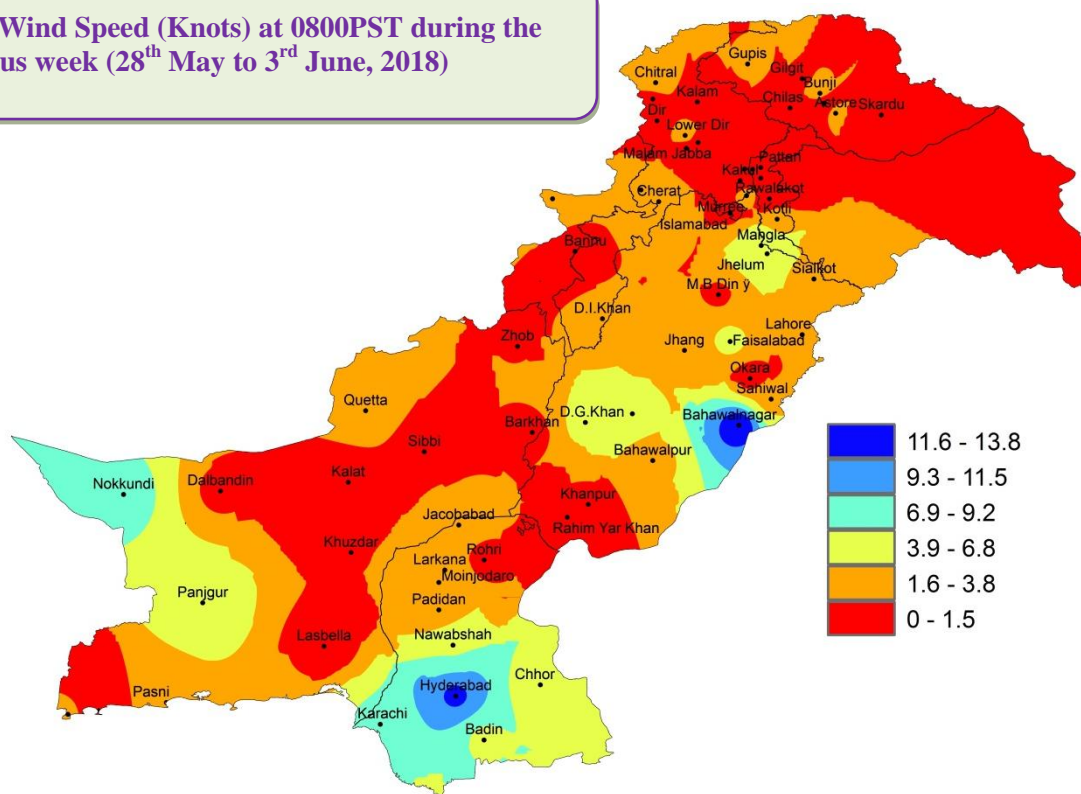
### Mean Relative Humidity (%) during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)



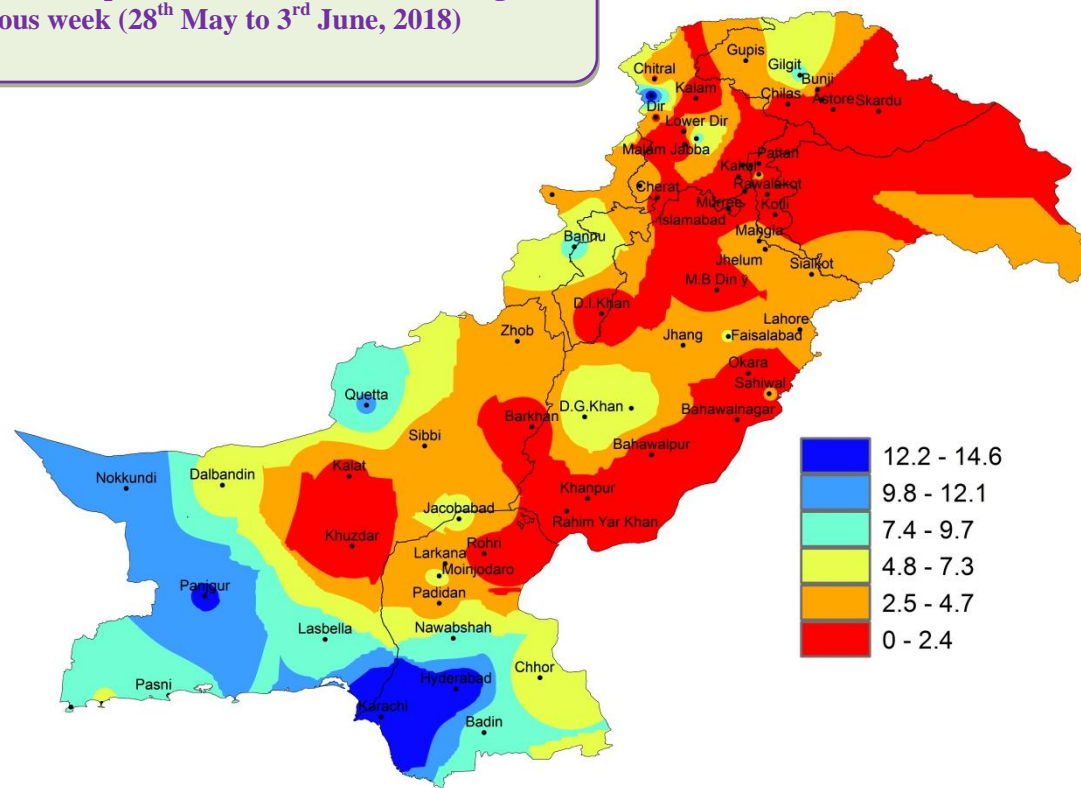
**Total Growing Degree Days accumulated during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)**



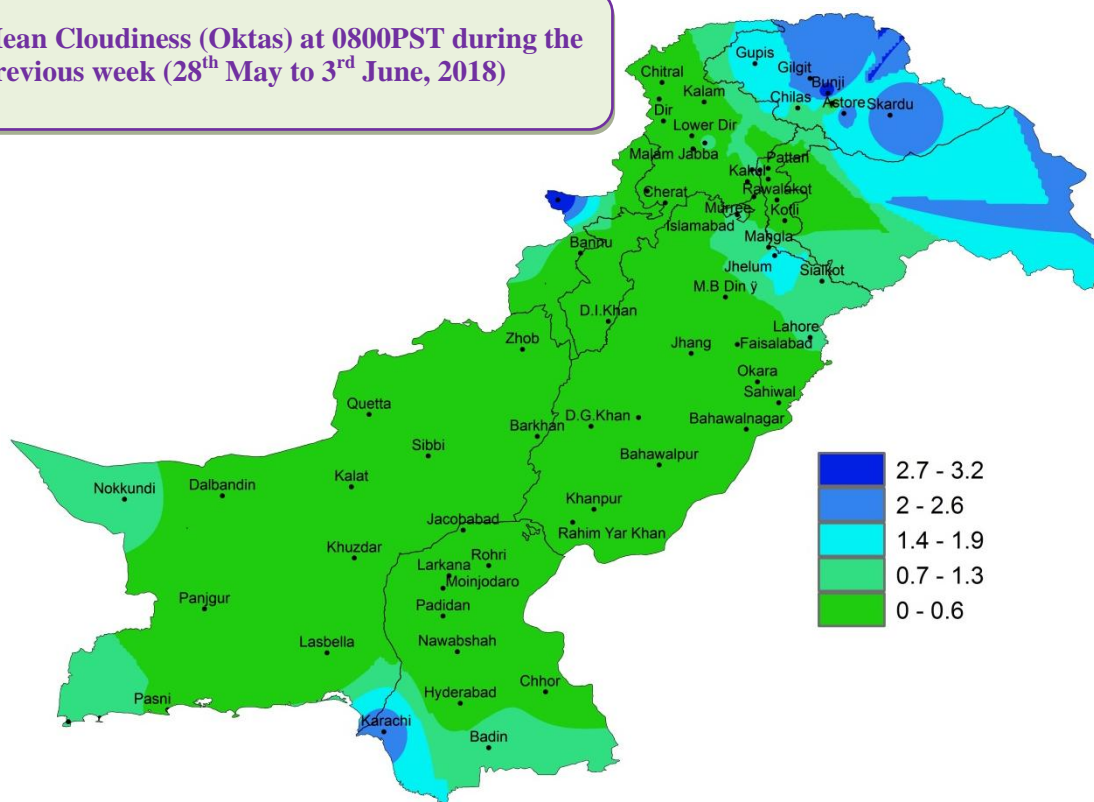
Mean Wind Speed (Knots) at 0800PST during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)



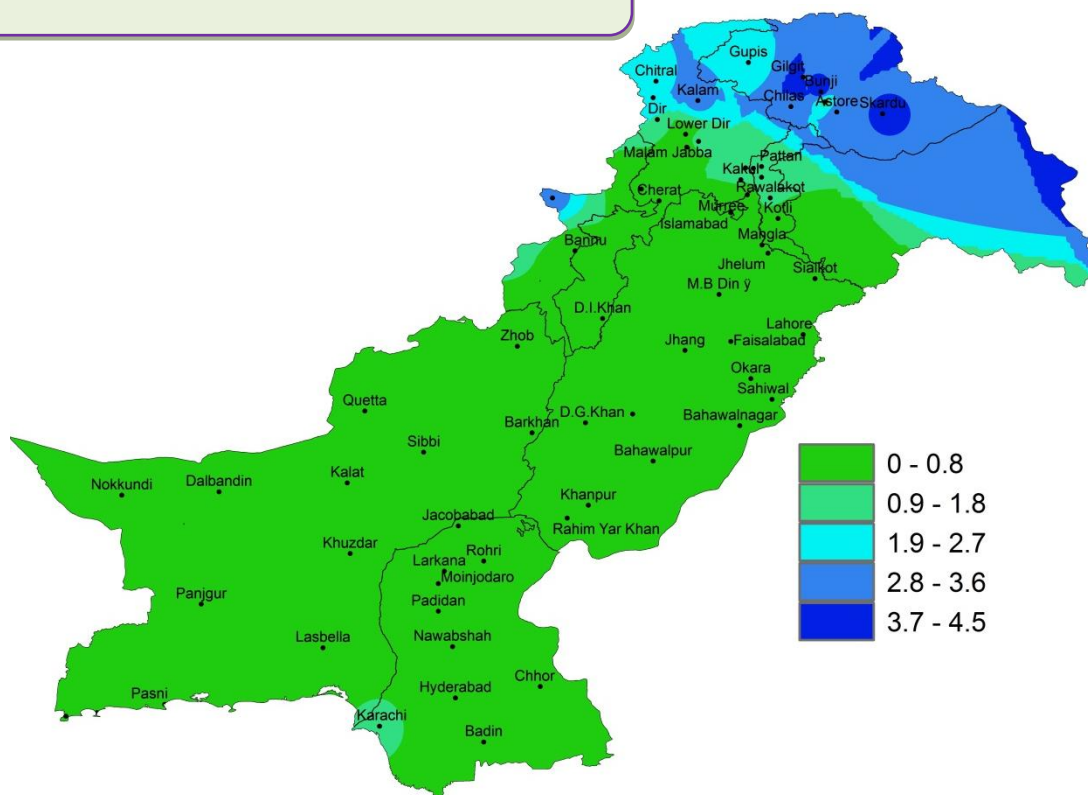
Mean Wind Speed (Knots) at 1700PST during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (28<sup>th</sup> May to 3<sup>rd</sup> June, 2018)





**Weekly Weather Advisory for Farmers****(4<sup>th</sup> June to 10<sup>th</sup> June, 2018)**

Continental air is prevailing over most parts of the country. An intense heat wave over plain areas of Pakistan is likely to persist during current week.

**MONDAY****04-06-2018**

Very hot and dry weather is expected in most parts. Intense heat wave conditions are likely to persist over upper/interior Sindh, Punjab and eastern Balochistan. However, gusty winds/Loo is expected in upper parts of Punjab, while rain-thundershower with gusty winds is expected at few places in Kashmir and its adjoining hilly areas.

**TUESDAY****05-06-2018**

Very hot and dry weather is expected in most parts. Intense heat wave conditions are likely to persist over upper/interior Sindh, Punjab and eastern Balochistan. However, rain-thundershower with gusty winds/duststorm is expected at isolated places in Rawalpindi, Gujranwala, Lahore divisions, Islamabad and Kashmir.

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

Very hot and dry weather is expected in most parts. Intense heat wave conditions are likely to continue over upper/interior Sindh, Punjab and eastern Balochistan.

**THURSDAY****07-06-2018**

Very hot and dry weather is expected in most parts. Intense heat wave conditions are likely to continue over upper/interior Sindh, Punjab and eastern Balochistan

**FRIDAY****08-06-2018**

Very hot and dry weather is expected in most parts. Intense heat wave conditions are likely to continue over upper/interior Sindh, Punjab and eastern

Balochistan. However, rain-thundershower with gusty winds/duststorm is expected at isolated places in Gujranwala, Lahore divisions and Kashmir.

**SATURDAY****09-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds/duststorm is expected at isolated places in Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad, Peshawar divisions, Islamabad and Kashmir.

**SUNDAY****10-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds/duststorm is expected at isolated places in Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad, Hazara, Peshawar, Kohat divisions, FATA, Islamabad and Kashmir..

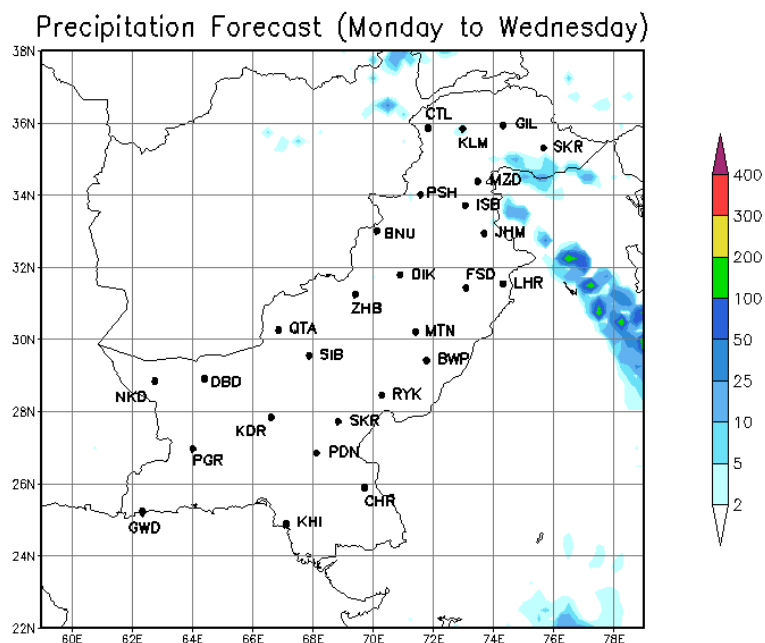
**ADVISES FOR FARMERS**

During the last week, light to moderate rainfall occurred in upper half 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.

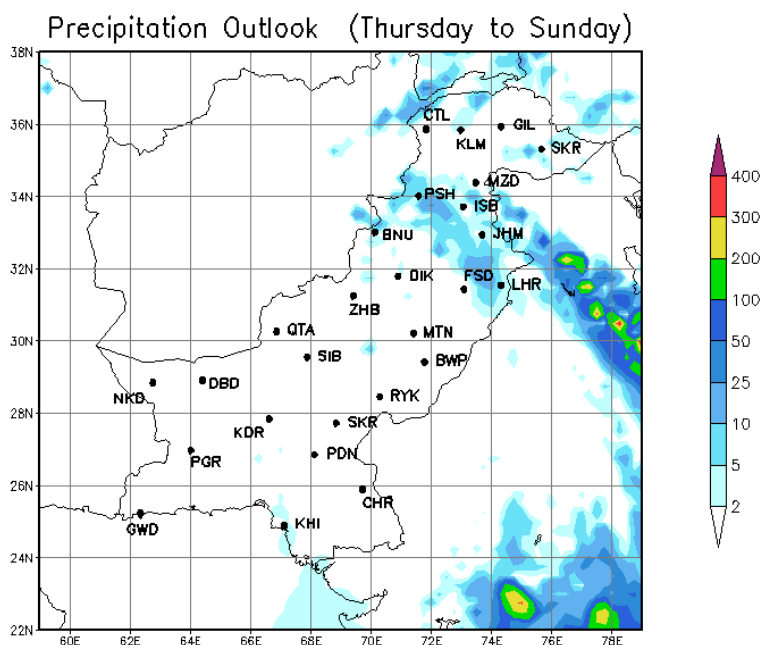
- Rice growers are advised to sow the crop “paneeri” in accordance with the recommendations by the agriculture experts.
- Farmers of southern Punjab and Sindh are advised to complete the sowing of cotton and other Kharif crops to utilize the maximum soil moisture.
- In the upper half of the country where 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.
- Farmers of upper Sindh and southern Punjab are advised to complete the sowing of cotton crop.

## Weather Outlook from 4<sup>th</sup> June to 10<sup>th</sup> June, 2018

The forecast from 4<sup>th</sup> June to 6<sup>th</sup> June, 2018 shows that light rainfall is expected at isolated places in GB and Kashmir, whereas dry weather may prevail in rest of the country.



The outlook from 7<sup>th</sup> June to 10<sup>th</sup> June, 2018 shows that light to moderate rainfall is expected at few places in Punjab, KP and GB. However, dry weather may prevail in rest of the country.



**National Weather Data of Selected Cities (Weekly Data from 28<sup>th</sup> May to 3<sup>rd</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	24.6	29.3	87.1	38	0.41	2.3	3.4	1.7	2.3
Badin	41.4	43.5	207.3	57	0.00	1.3	0.0	6.3	8.0
Bahawalnagar	47.1	49.5	230.0	26	0.00	0.3	0.0	13.9	1.1
Bahawalpur	44.0	45.8	213.0	34	0.00	0.0	0.0	2.6	0.3
Balakot	37.7	38.8	172.8	33	0.00	0.7	1.1	0.7	0.9
Bannu	43.9	45.2	212.7	21	0.00	0.0	0.0	0.6	7.7
Barkhan	40.4	42.5	197.0	18	0.00	0.0	0.0	0.9	0.9
Bunji	33.1	38.3	150.6	35	2.02	3.3	4.6	2.0	2.3
Cherat	36.6	39.5	172.0	30	0.00	0.3	0.0	2.9	2.0
Chhor	44.4	46.4	217.2	50	0.00	0.6	0.1	5.1	5.1
Chilas	37.6	42.5	173.0	22	0.00	1.1	3.4	0.9	1.1
Chitral	35.0	38.4	137.4	35	0.01	0.3	2.4	3.1	2.0
D.G.Khan	46.0	47.0	217.4	32	0.00	0.0	0.0	4.6	6.9
D.I.Khan	45.9	47.0	220.5	36	0.00	0.0	0.0	2.0	1.1
Dalbandin	42.8	46.5	196.5	23	0.00	0.0	0.3	0.9	6.0
Dir	35.6	39.0	135.8	37	0.00	0.4	1.7	0.0	2.0
Drosh	36.8	40.2	152.9	21	0.00	0.4	2.7	0.6	14.0
Faisalabad	44.3	46.0	211.0	34	0.00	0.0	0.0	1.5	1.0
Garidopatta	40.3	42.0	175.8	40	0.00	0.0	1.4	0.0	2.9
Gawader	39.5	45.5	193.0	58	0.00	1.3	0.6	0.6	6.9
Gilgit	34.3	39.0	136.8	34	0.01	2.3	3.6	1.4	8.3
Gupis	28.8	34.0	108.3	40	1.00	1.7	2.0	1.7	4.1

Hyderabad	43.4	46.5	210.3	51	0.00	0.0	0.0	12.0	14.6
Islamabad	40.3	41.0	182.0	35	0.00	0.7	0.3	0.9	1.1
Jacobabad	49.1	51.0	239.8	23	0.00	0.4	0.6	3.1	5.4
Jhang	44.1	46.4	212.0	30	0.00	0.3	0.0	2.0	3.1
Jhelum	43.8	45.0	208.7	31	0.00	1.7	0.7	4.0	2.3
Jiwani	38.0	42.0	194.8	59	0.00	0.9	0.7	1.7	9.1
Kakul	35.5	36.5	145.3	35	0.80	0.3	0.9	0.0	1.7
Kalam	29.9	34.0	98.8	46	4.70	0.4	3.3	0.0	0.0
Kalat	30.1	35.0	115.4	34	0.00	0.0	0.0	0.0	1.7
Karachi	38.4	46.0	198.5	43	0.00	2.3	1.0	7.4	14.6
Khanpur	46.6	47.5	221.0	33	0.00	0.0	0.0	1.1	2.0
Khuzdar	40.4	42.5	189.0	14	0.00	0.0	0.0	1.1	0.6
Kotli	40.4	41.7	197.2	37	0.00	0.0	0.0	2.6	0.3
Lahore	42.6	44.5	211.5	35	0.01	0.7	0.4	2.0	3.4
Larkana	48.6	50.0	238.0	31	0.00	0.3	0.0	3.4	2.9
Lasbella	45.2	49.0	220.5	47	0.00	0.0	0.0	0.3	8.3
Lower Dir	40.9	43.5	194.8	29	0.00	0.3	0.0	2.9	2.0
M.B Din	43.4	44.5	206.3	37	0.00	0.3	0.3	1.1	0.9
Malam Jabba	26.4	29.0	116.3	42	0.00	0.9	1.6	0.6	8.9
Mangla	42.4	43.5	199.2	26	0.00	1.0	0.4	6.9	4.9
Mir Khani	36.7	39.0	156.0	34	0.00	0.0	1.1	0.7	2.3
Moinjodaro	49.3	51.0	229.0	30	0.00	0.4	0.0	3.7	5.7
Multan(PBO)	45.2	46.4	225.1	26	0.00	0.0	0.4	5.1	6.3
Murree	28.5	29.0	128.8	50	0.00	0.4	0.3	2.4	0.0
Muzaffarabad	38.8	40.6	170.1	38	0.00	0.9	1.3	0.0	2.0
Nawabshah	47.4	50.5	226.5	29	0.00	0.0	0.0	6.7	8.3



Nokkundi	42.9	47.0	226.5	11	0.00	1.0	0.6	8.3	12.1
Okara	44.5	46.5	222.5	35	0.00	0.0	0.0	0.3	0.6
Padidan	47.6	49.0	225.8	34	0.00	0.3	0.0	1.7	3.1
Panjgur	41.4	43.0	197.0	24	0.00	0.0	0.0	6.0	12.3
Parachinar	32.2	35.2	142.9	47	0.00	3.0	3.1	3.0	3.6
Pasni	38.6	44.0	196.5	79	0.00	0.4	0.0	2.4	9.3
Pattan	40.3	43.5	176.3	36	0.00	0.3	1.4	0.0	0.0
Peshawar	42.1	43.0	202.0	36	0.00	0.0	0.0	2.0	3.7
Quetta	33.8	37.8	148.2	50	0.00	0.4	0.7	2.4	3.4
R. Y. Khan	47.9	49.1	225.3	29	0.00	0.0	0.0	1.1	1.4
Rawalakot	30.5	31.0	115.4	48	0.00	0.0	1.1	0.0	2.0
Rawalpindi	40.6	41	183.8	36	0.00	0.7	0	0.6	1.1
Rohri	43.3	45.0	194.5	22	0.00	0.0	0.0	0.6	1.1
Sahiwal	47.4	48.5	235.5	35	0.00	0.0	0.0	2.3	2.6
Saidu Sharif	37.5	39.5	164.3	39	0.00	0.0	0.0	0.3	0.0
Sialkot	42.2	43.8	203.1	31	0.00	1.1	0.4	2.3	3.7
Sibbi	48.9	50.0	229.3	36	0.00	0.0	0.0	0.0	3.4
Skardu	29.2	33.6	106.3	27	0.00	2.3	3.9	0.0	2.1
Tandojam	42.2	44	198.3	55	0.00	0.7	0	2.8	3.6
Usta muhamad	46.4	48	226	35	0.00	0	0.3	0	4.9
Zhob	38.2	41.0	187.8	26	0.00	0.0	0.3	1.4	4.3

\*\*\* 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)