

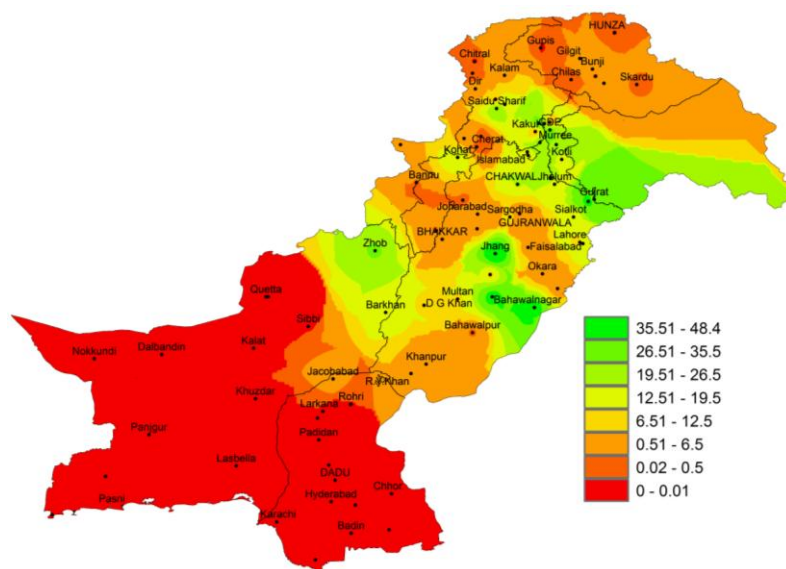
Weekly Weather and Crop Bulletin for Pakistan

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PAKISTAN METEOROLOGICAL
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**Rainfall Distribution (mm) during the Previous
Week (4th June to 10th June, 2018)**



Highlights of Past Weather (4th June to 10th June, 2018)

Above normal day temperature was observed in Sindh, GB, Azad Kashmir however mix trends was observed in Punjab, KP and Baluchistan.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed in Punjab, Khyber Pakhtunkhwa, Gilgit-Baltistan, Azad Jammu & Kashmir and Baluchistan during the previous week.
- Light rainfall observed in Sindh during the previous week.

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Editor: Saeeda Saleh (Assistant Meteorologist)

Past Weather of Provinces (4th June to 10th June, 2018)**Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 40.3°C & 27.6°C respectively. For the recent week on average 202.7 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 2.8/3.6 Knots. During the previous week the highest amount of rainfall was recorded as 48.4 mm at Jhang & highest maximum temperature was recorded as 49°C at Bhakkar.

Sindh

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 42.5°C & 28.2°C respectively. For the recent week, on average 212.1 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 6.5/7.4 Knots. During the previous week the highest amount of rainfall was recorded as 01 mm at Jacobabad & highest maximum temperature was recorded as 49.8°C at Dadu.

Khyber Pakhtunkhwa

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 37.1°C & 22.8°C respectively. For the recent week on average 174.4 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 1.6/5.1 Knots. During the previous week the highest amount of rainfall was recorded as 32.9 mm at Balakot & highest maximum temperature was recorded as 46°C at D.I.Khan.

Balochistan

Light to moderate rainfall observed in Balochistan during the week. Weekly maximum and minimum temperatures recorded as 40.7°C & 26.0°C respectively. For the recent week on average 196.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 42% and wind speed in the morning/evening recorded as 2.3/7.3 Knots. During the previous week the highest amount of rainfall was recorded as 27 mm at Zhob & highest maximum temperature was recorded as 50.5°C at Turbat.

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 35.2°C & 19.3°C respectively. For the recent week on average 147.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 42% and wind speed in the morning/evening recorded as 0.8/1.9 Knots. During the previous week the highest amount of rainfall was recorded as 33 mm at Ghari Dopatta & highest maximum temperature was recorded as 43.5°C at Chilas.

Past Weather for Major Agricultural Plains (4th June to 10th June, 2018)

Rawalpindi (Potohar region)

Rainfall reported as 9 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.1/3.0 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 38.6°C & for the recent week 185.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/2.6 Knots.

Faisalabad (Central Punjab)

Rainfall reported as 22 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.6/1.0 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 40.6°C & for the recent week 206.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/1.4 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 59%. Mean day time temperature recorded as 40.4°C & for the recent week 197.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/4.9 Knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, average relative humidity observed as 35%. Mean day time temperature recorded as 46.8°C & for the recent week 22.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/6.6 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/1.7 Oktas while, average relative humidity observed as 17%. Mean day time temperature recorded as 35.8°C & for the recent week 169.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.9/4.2 Knots.

Past Weather for Sub-Regional Agricultural Plains (4th June to 10th June, 2018)

Multan

Rainfall reported as 11.8 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 2.2/1.2 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 42.1°C & for the recent week 218.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 7.0/5.6 Knots.

Lahore

Rainfall reported as 22 mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 2.7/1.2 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 39°C & for the recent week 197.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.3/1.6 Knots.

Zhob

Rainfall reported as 27 mm from during the week; however, cloudiness in the morning/evening recorded as 0.0/1.6 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 38.9°C & for the recent week 186 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.8/8.6 Knots.

Murree

Rainfall reported as 25 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 2.5/3.8 Oktas while, average relative humidity observed as 65%. Mean day time temperature recorded as 26.1°C & for the recent week 114.2 growing degree days accumulated by

the end of last week. Wind speed recorded in the morning/evening as 0.0/3.0 Knots.

D.I. Khan

Rainfall reported as 0.01 mm from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 2.2/1.8 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 42.1°C & for the recent week 214 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/2.0 Knots.

Peshawar

Rainfall reported as 4.01 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.2/2.4 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 39.1°C & for the recent week 199.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.0/4.8 Knots.

Kalam

Rainfall reported as 5.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 1.8/2.0 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 28.8°C & for the recent week 110.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/4.0 Knots.

Gilgit

Rainfall reported as 0.61 mm from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.5/3.0 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 38.4°C & for the recent week 158.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/4.0 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.0/3.0 Oktas while, average relative humidity observed as 28%. Mean day time temperature recorded as 33.3°C & for the recent week 133 growing degree days accumulated by the

end of last week. Wind speed recorded in the morning/evening as 0.3/0.8 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*, Third leaf stage in good condition.

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.

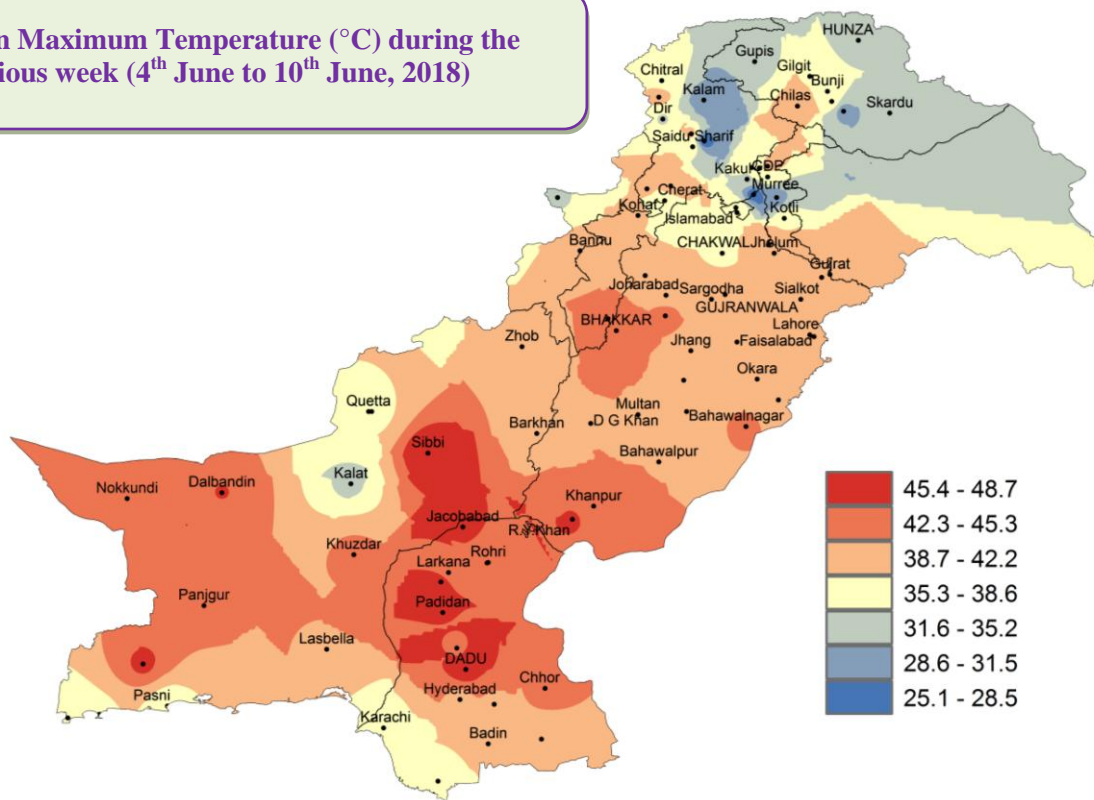
Northern Baluchistan (Quetta)

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

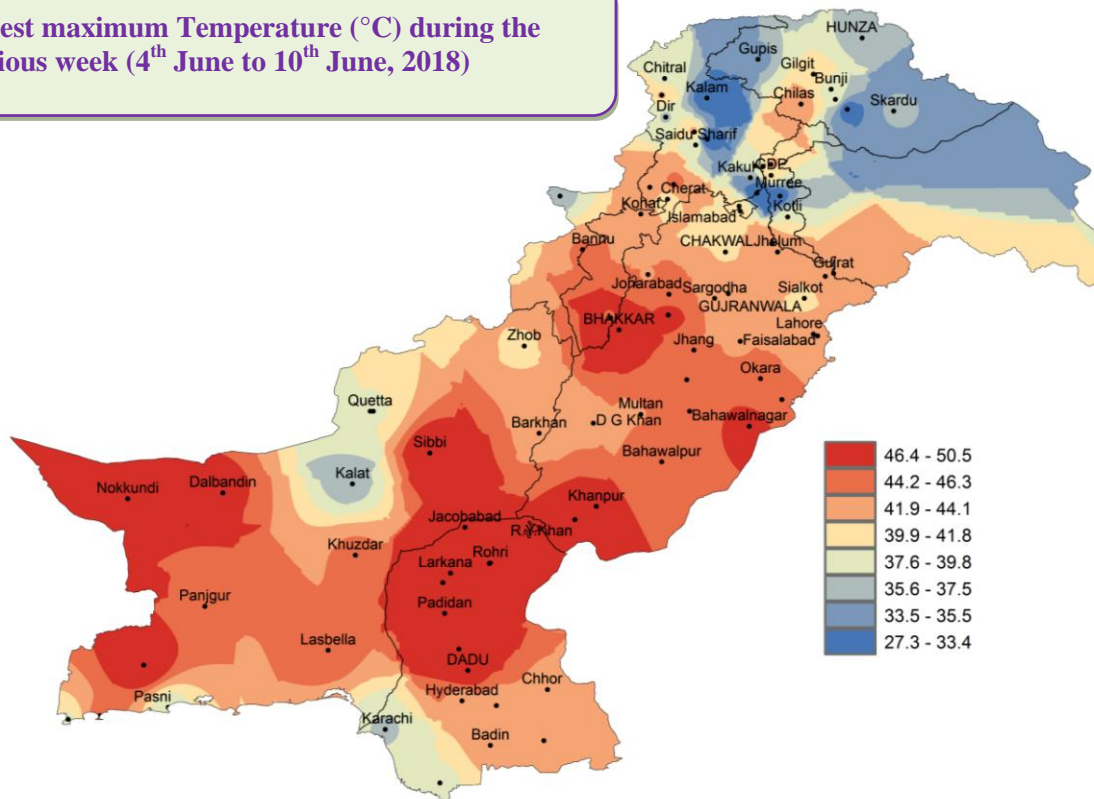
Eastern Baluchistan (Usta Muhammad)

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

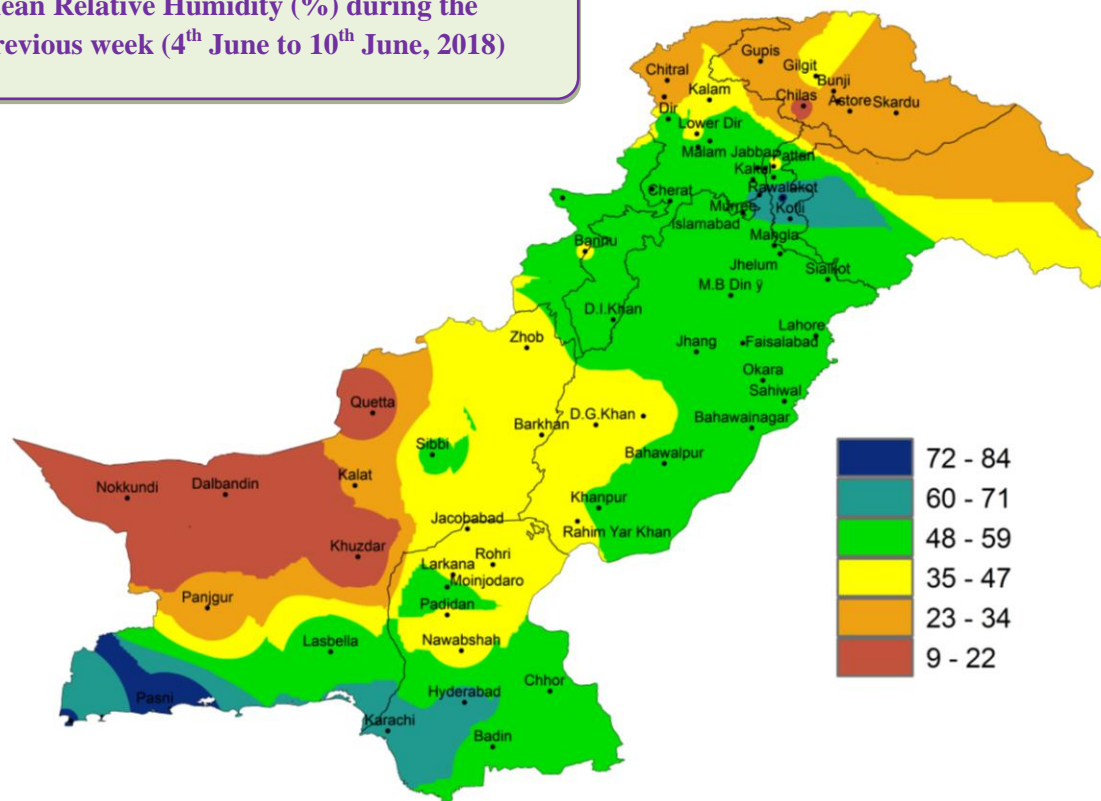
**Mean Maximum Temperature (°C) during the
Previous week (4th June to 10th June, 2018)**



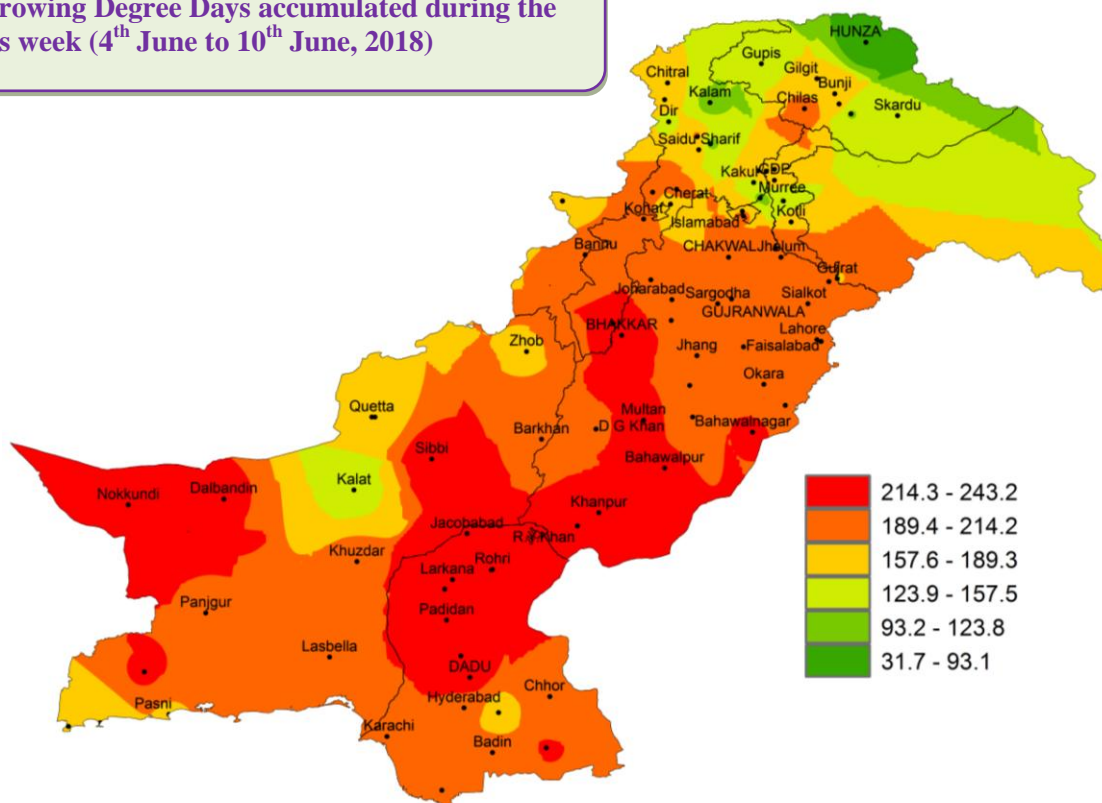
**Highest maximum Temperature (°C) during the
Previous week (4th June to 10th June, 2018)**



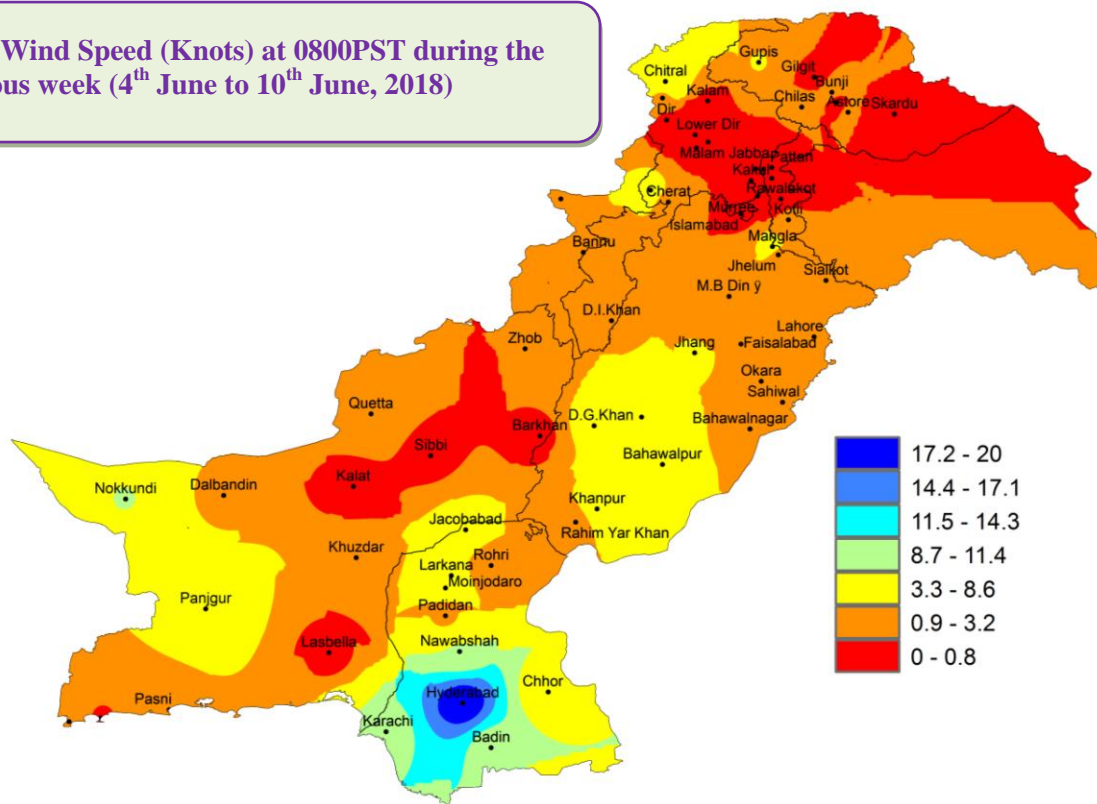
Mean Relative Humidity (%) during the
Previous week (4th June to 10th June, 2018)



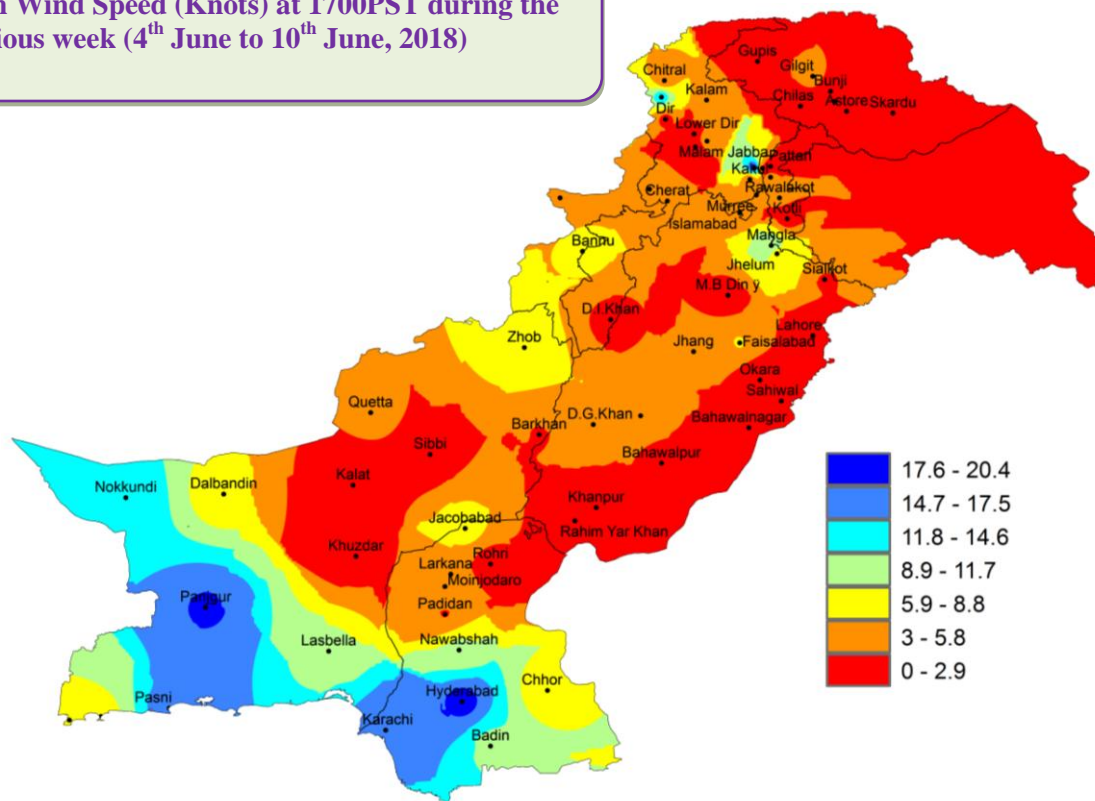
Total Growing Degree Days accumulated during the
Previous week (4th June to 10th June, 2018)



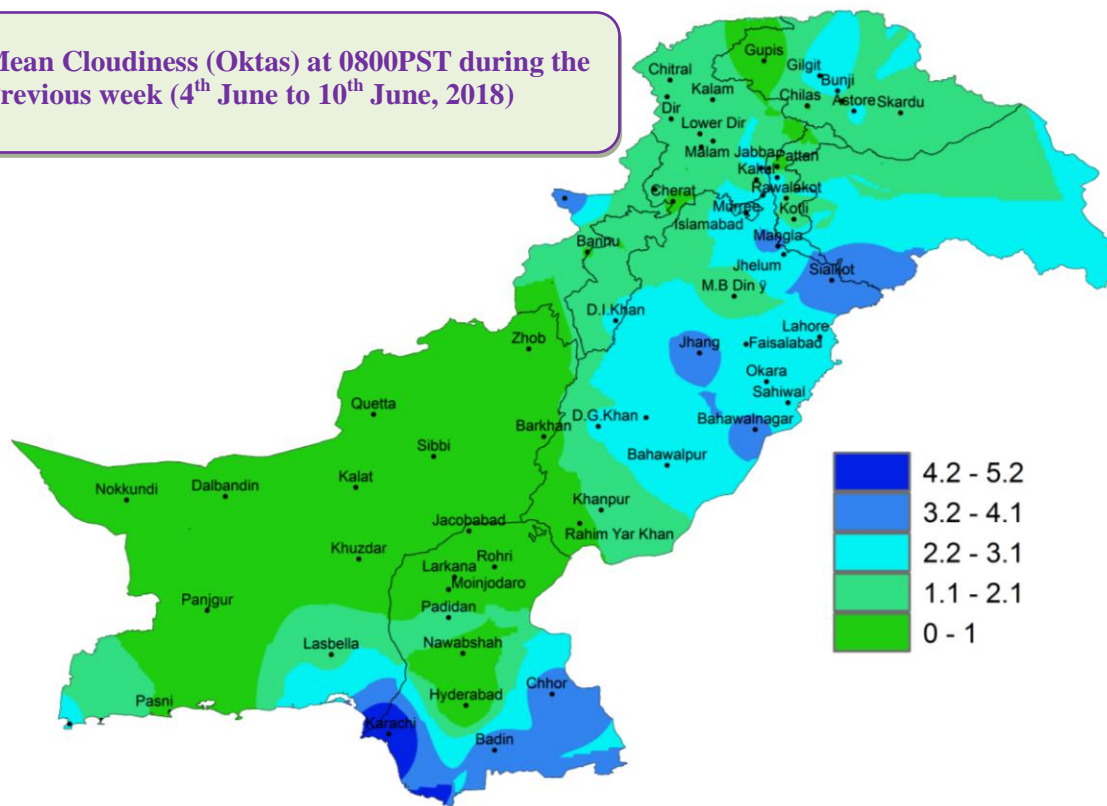
Mean Wind Speed (Knots) at 0800PST during the Previous week (4th June to 10th June, 2018)



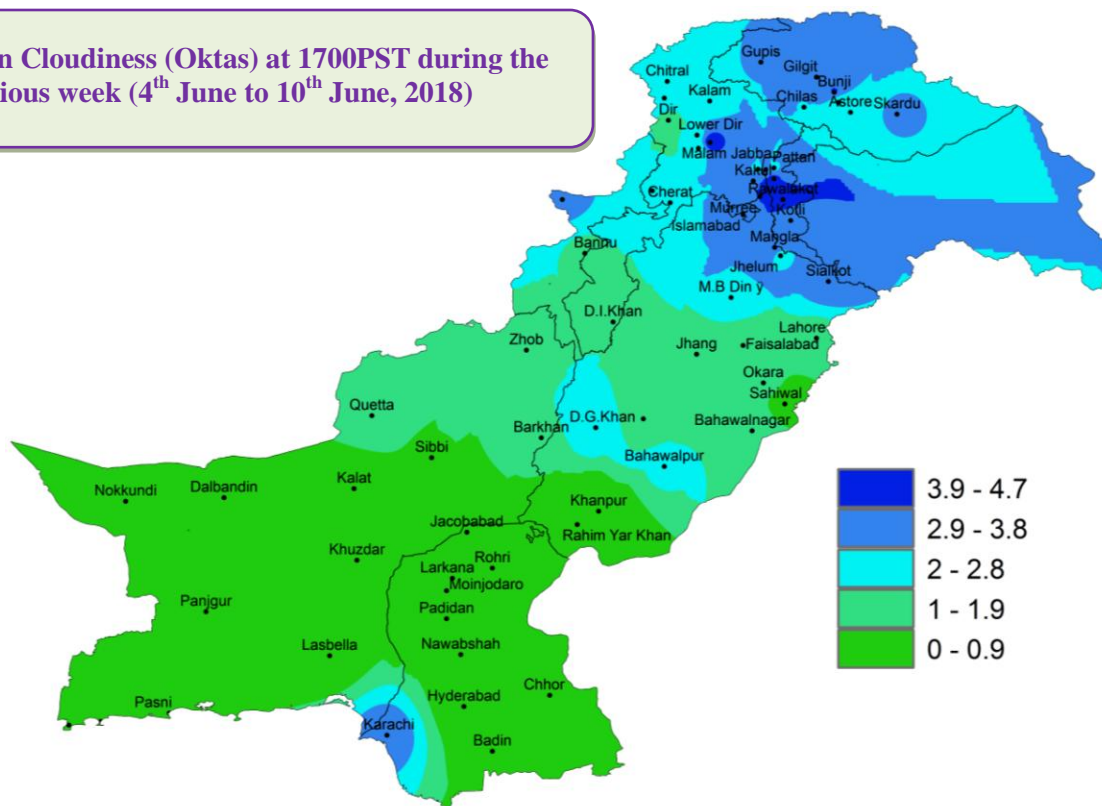
Mean Wind Speed (Knots) at 1700PST during the Previous week (4th June to 10th June, 2018)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (4th June to 10th June, 2018)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (4th June to 10th June, 2018)



Weekly Weather Advisory for Farmers**(11th June to 17th June, 2018)**

Continental air is prevailing over most parts of the country.

MONDAY**11-06-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper Sindh. However rain-thundershower with gusty winds is expected at isolated places in Hazara division, Kashmir and its adjoining hilly areas.

TUESDAY**12-06-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper Sindh and south Punjab.

WEDNESDAY**13-06-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper Sindh and Punjab.

THURSDAY**14-06-2018**

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

FRIDAY**15-06-2018**

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 Hazara, Rawalpindi divisions, Gilgit-Baltistan and Kashmir.

SATURDAY**16-06-2018**

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 Hazara, Peshawar, Rawalpindi, Gujranwala, Sargodha, Lahore divisions, Islamabad, Gilgit-Baltistan and Kashmir.

SUNDAY**17-06-2018**

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 Malakand, Hazara, Peshawar, Rawalpindi, Gujranwala, Sargodha, Lahore, Faisalabad, Sahiwal divisions, Islamabad, FATA, Gilgit-Baltistan and Kashmir.

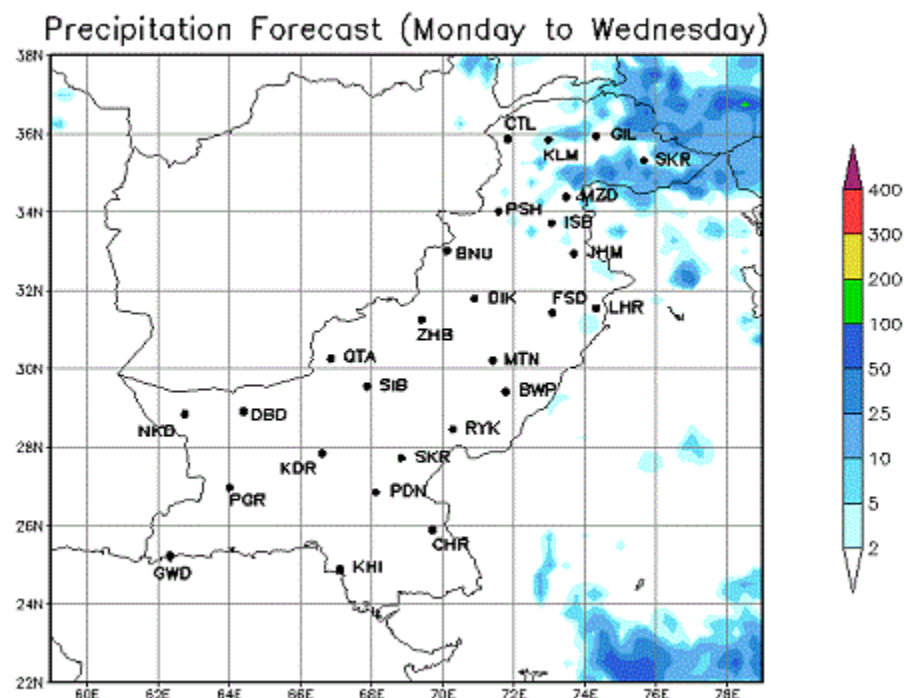
ADVISES FOR FARMERS

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.

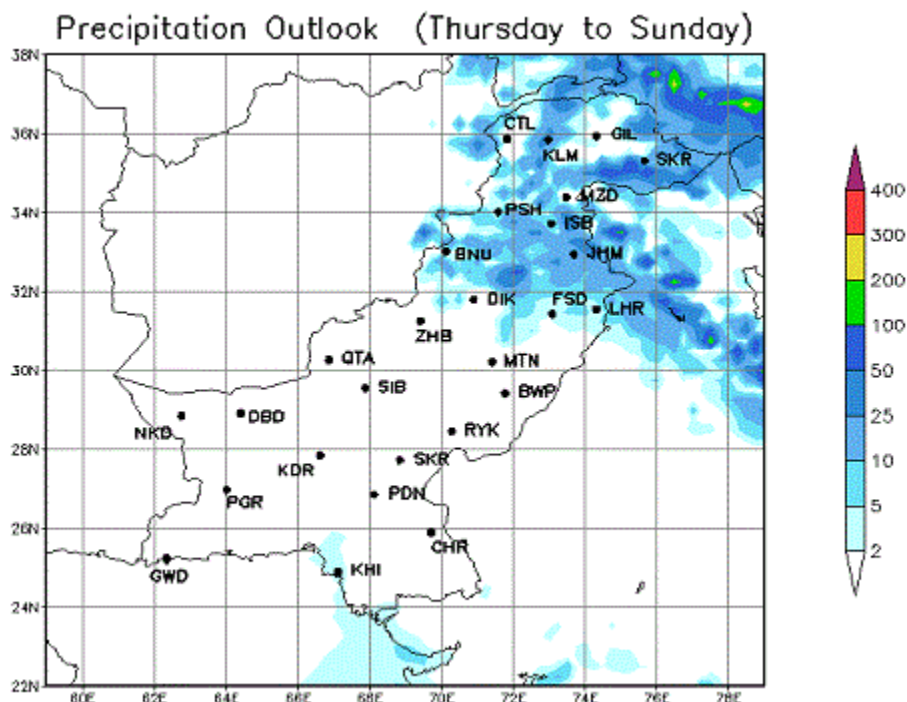
- Farmers of southern Punjab and Sindh are advised to complete the sowing of cotton and other Kharif crops to utilize the maximum soil moisture.
- In the upper half of the country specially in Potohar region, if required moisture is available in field, should complete cultivating peanut crops
- Farmers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

Weather Outlook from 11th June to 17th June, 2018

The forecast from 11th June to 13th June, 2018 shows that light to moderate rainfall is expected at isolated places in GB and Kashmir, KP and at few areas of Punjab, whereas dry weather may prevail in rest of the country.



The outlook from 14th June to 17th June, 2018 shows that light to moderate rainfall is expected at most places in Upper Punjab, KP and GB. However, dry weather may prevail in rest of the country.



National Weather Data of Selected Cities (Weekly Data from 4th June to 10th 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	29.0	31.0	118.2	30.3	5.40	2.3	2.6	1.0	2.4
Badin	39.8	43.0	200.2	56.5	0.00	3.8	0.0	9.3	10.8
Bahawalnagar	42.6	47.5	218.0	49.2	40.01	3.3	1.6	1.0	0.0
Bahawalpur	42.1	44.6	216.3	50.2	0.01	2.5	2.2	4.3	1.2
Balakot	36.3	38.3	169.4	47.0	32.90	2.5	2.4	0.3	20.8
Bannu	40.5	44.5	204.2	46.5	0.40	1.0	1.6	1.0	7.2
Barkhan	39.9	43.5	198.0	43.6	18.00	0.7	1.6	0.0	2.8
Bunji	37.5	39.4	183.1	28.8	2.00	2.7	4.0	2.0	0.8
Cherat	35.2	40.0	165.8	48.7	0.00	1.0	2.6	2.7	4.0
Chhor	42.6	43.5	213.1	54.2	0.00	3.5	0.0	5.3	6.4
Chilas	40.7	43.5	200.5	19.5	0.00	1.0	2.8	1.3	1.6
Chitral	37.2	39.0	165.9	31.1	0.00	1.3	2.6	8.0	2.8
D.G.Khan	41.8	43.8	213.3	41.7	12.00	2.2	2.6	4.7	5.6
D.I.Khan	42.1	46.0	214.0	53.2	0.01	2.2	1.8	2.0	2.0
Dalbandin	45.4	47.0	220.0	19.7	0.00	0.0	0.0	2.0	6.4
Dir	34.8	37.0	147.0	53.6	1.00	1.5	1.6	0.0	2.0
Drosh	40.2	42.2	180.4	20.7	0.00	1.5	2.6	2.3	14.0
Faisalabad	40.6	44.5	206.2	51.0	22.00	1.6	1.0	2.0	1.4
Garidopatta	37.8	41.0	172.9	57.2	33.00	2.7	4.2	0.0	4.8
Gawader	37.8	45.0	162.8	65.0	0.00	1.7	0.0	0.7	7.6
Gilgit	38.4	41.0	158.7	39.8	0.61	2.5	3.0	0.0	4.0
Gupis	32.1	34.5	137.3	27.4	0.00	0.5	3.0	3.3	1.6

Hyderabad	41.0	42.5	202.9	62.7	0.00	0.0	0.0	20.0	18.8
Islamabad	37.7	41.0	187.3	57.5	19.00	3.0	3.2	0.0	3.6
Jacobabad	45.5	47.5	228.0	38.8	1.00	0.3	0.0	4.7	7.6
Jhang	40.8	44.2	205.4	51.6	48.40	3.5	1.4	3.3	3.6
Jhelum	40.4	44.0	203.5	49.7	14.01	2.2	2.4	2.3	7.6
Jiwani	35.6	39.5	186.8	72.0	0.00	2.3	0.6	1.7	8.2
Kakul	34.4	35.5	151.6	49.0	4.70	1.3	3.8	0.0	2.8
Kalam	28.8	31.0	110.5	44.1	5.00	1.8	2.0	0.0	4.0
Kalat	34.6	36.0	131.5	22.4	0.00	0.0	0.0	0.0	0.0
Karachi	35.7	37.2	192.0	61.3	0.00	5.2	3.8	9.7	16.0
Khanpur	43.9	46.5	222.9	47.5	1.00	1.2	0.0	5.7	1.2
Khuzdar	43.1	45.0	204.8	11.3	0.00	0.0	0.0	2.0	1.2
Kotli	38.1	40.0	187.7	59.1	18.00	1.8	3.2	1.3	1.2
Lahore	39.0	42.3	197.1	53.2	21.90	2.7	1.2	1.3	1.6
Larkana	45.0	47.5	234.3	45.2	0.00	0.5	0.0	3.7	4.0
Lasbella	42.0	45.5	210.5	58.7	0.00	2.0	0.0	0.0	10.0
Lower Dir	40.4	43.0	196.0	41.9	5.00	1.0	2.2	0.0	2.0
M.B Din	40.0	44.0	199.3	51.2	1.11	1.3	2.6	1.3	1.2
Malam Jabba	24.9	28.0	108.3	57.9	19.00	2.0	4.8	0.7	5.2
Mangla	39.2	42.3	196.2	51.9	24.10	3.7	3.8	4.3	11.6
Mir Khani	38.2	39.0	173.7	33.9	0.00	0.7	1.8	0.0	2.4
Moinjodaro	45.6	48.5	226.8	48.5	0.00	0.8	0.0	4.0	5.2
Multan(PBO)	42.1	44.1	218.4	43.6	11.80	2.2	1.2	7.0	5.6
Murree	26.1	27.2	114.2	64.9	25.00	2.5	3.8	0.0	3.0
Muzaffarabad	38.4	40.0	175.2	54.8	26.00	2.3	3.8	0.0	0.6
Nawabshah	44.9	46.5	219.6	42.6	0.00	0.8	0.0	9.0	10.0

Nokkundi	45.0	47.5	236.8	9.4	0.00	0.0	0.0	8.7	14.0
Okara	40.8	44.5	205.2	51.7	0.60	2.3	1.2	3.0	0.0
Padidan	45.4	46.5	215.0	46.3	0.00	1.3	0.0	2.3	2.8
Panjgur	42.9	45.0	210.0	23.6	0.00	0.0	0.0	6.3	17.8
Parachinar	34.7	36.3	168.6	49.9	2.00	3.7	3.4	3.0	3.0
Pasni	36.0	38.0	186.8	83.9	0.00	0.8	0.0	1.7	16.6
Pattan	39.3	42.5	191.5	41.7	0.00	0.0	2.4	0.0	0.0
Peshawar	39.1	43.5	199.8	53.1	4.01	1.2	2.4	4.0	4.8
Quetta	35.8	38.0	169.0	17.0	0.00	0.0	1.7	2.9	4.2
R. Y. Khan	45.6	47.5	225.1	45.7	6.40	0.8	0.0	1.3	0.8
Rawalakot	29.0	31.5	122.2	72.6	25.10	2.0	4.2	0.0	3.6
Rawalpindi	38.6	41.0	185.9	56.0	9.00	2.1	3.0	0.3	2.6
Rohri	45.2	47.0	216.8	46.0	0.00	1.0	0.0	2.0	1.2
Sahiwal	40.7	44.5	202.3	51.1	3.00	2.5	0.6	3.0	1.6
Saidu Sharif	37.5	39.8	168.8	49.6	26.00	1.0	1.8	0.0	0.0
Sialkot	38.8	42.3	195.3	52.3	37.70	4.0	3.8	2.7	2.8
Sibbi	48.7	50.0	243.3	49.0	0.00	0.7	0.8	0.0	1.2
Skardu	33.3	35.7	133.0	28.0	0.00	2.0	3.0	0.3	0.8
Tandojam	40.4	41.5	197.8	59.0	0.00	0.7	0.0	0.9	4.9
Usta muhamad	46.8	48.0	227.5	35.0	0.00	0.0	0.6	0.6	6.6
Zhob	38.9	41.5	186.0	44.6	27.00	0.0	1.6	0.8	8.6

*** 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)