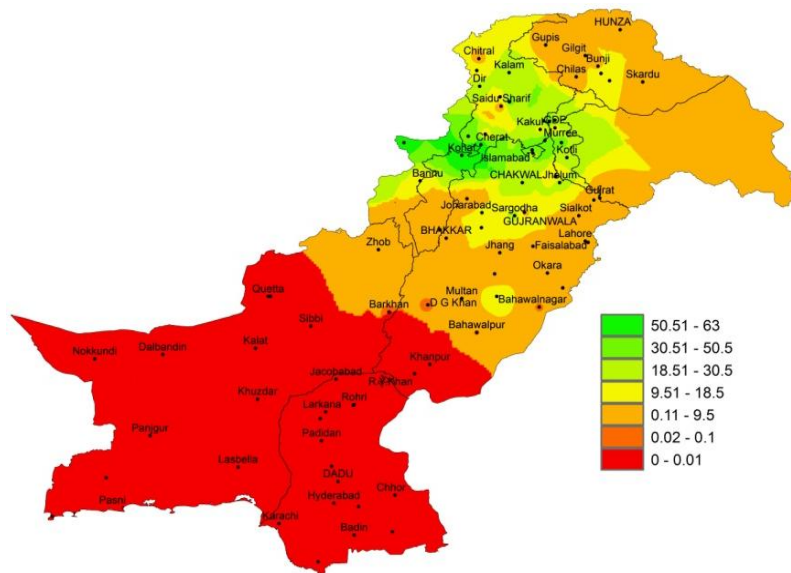


Weekly Weather and Crop Bulletin for Pakistan

**NATIONAL AGROMET CENTRE
PAKISTAN METEOROLOGICAL
DEPARTMENT SECTOR H-8/2,
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**Rainfall Distribution (mm) during the
Previous Week (30th April to 6th May, 2018)**

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Highlights of Past Weather (30th April to 6th May, 2018)

Slightly above normal day temperatures observed in Sindh and Baluchistan, where as below normal temperatures observed in rest of the country.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed at most places in Punjab, Gilgit-Baltistan, Azad Jammu & Kashmir, and Khyber Pakhtunkhwa during the previous week.
- Light rainfall reported at a single station from 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 (30th April to 6th May, 2018)

Punjab

Light to moderate rainfall observed at some places in Punjab during the week. Weekly maximum and minimum temperatures recorded as 37.7°C & 23.6°C respectively. For the recent week on average 179.1 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 3.0/3.3 Knots. During the previous week the highest amount of rainfall was recorded as 40.1 mm at Islamabad & highest maximum temperature was recorded as 48°C at Rahim Yar Khan.

Sindh

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 43.5°C & 26.1°C respectively. For the recent week, on average 203.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 39% and wind speed in the morning/evening recorded as 4.9/7.9 Knots. During the previous week the highest amount of rainfall was recorded as Trace (not measureable) at Mithi & highest maximum temperature was recorded as 50.2°C at Nawabshah.

Khyber Pakhtunkhwa

Light to moderate rainfall observed at scattered places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 30.5°C & 16.2°C respectively. For the recent week on average 127.2 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 1.4/2.9 Knots. During the previous week the highest amount of rainfall was recorded as 63.0 mm at Cherat & highest maximum temperature was recorded as 44.5°C at D.I.Khan.

Balochistan

Light rainfall observed from a single place in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 36.8°C & 22.4°C respectively. For the recent week on average 169.0 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 39% and wind speed in the morning/evening recorded as 1.9/6.4 Knots. During the previous week the highest amount of rainfall was recorded as 6.0 mm at Zhob & highest maximum temperature was recorded as 47°C at Sibbi.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall observed at some places in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 26.9 °C & 13.3°C respectively. For the recent week on average 101.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 44% and wind speed in the morning/evening recorded as 1.5/2.9 Knots. During the previous week the highest amount of rainfall was recorded as 38.0 mm at Muzaffarabad & highest maximum temperature was recorded as 38.3°C at Kotli.

Past Weather for Major Agricultural Plains (30th**April to 6th May, 2018)****Rawalpindi (Potohar region)**

Rainfall reported as 52.4 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.4/3.9 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 32.3°C & for the recent week 143.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.2 Knots.

Faisalabad (Central Punjab)

Rainfall reported as 9.0 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.7/1.0 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 36.5°C & for the recent week 177.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/1.1 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.0/1.3 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 41.4°C & for the recent week 192.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.9/4.5 Knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.4/0.4 Oktas while, average relative humidity observed as 35%. Mean day time temperature recorded as 45.8°C & for the recent week 214.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.2/2.0 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 3.3/3.1 Oktas while, average relative humidity observed as 25%. Mean day time temperature recorded as 29.6°C C & for the recent week 126.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.2/4.1 Knots.

Past Weather for Sub-Regional Agricultural Plains (30th April to 6th May, 2018)**Multan**

Rainfall reported as 3.0 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 0.6/3.4 Oktas while, average relative humidity observed as 30%. Mean day time temperature recorded as 39.9°C & for the recent week 196.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 6.8/7.4 Knots.

Lahore

Rainfall reported as 5.81 mm Lahore during the week; however, cloudiness in the morning/evening recorded as 2.0/2.7 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 37.4°C & for the recent week 185.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/2.9 Knots.

Zhob

Rainfall reported as 6.0 mm from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.8/3.7 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 31.4°C & for the recent week 142.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.0/6.1 Knots.

Murree

Rainfall reported as 39.62 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 3.8/3.3 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 22.3°C & for the recent week 91.5 growing degree days accumulated

by the end of last week. Wind speed recorded in the morning/evening as 0.8/0.0 Knots.

D.I. Khan

Rainfall reported as Trace (not measureable) from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 2.2/2.7 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 39.6 & for the recent week 163.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/0.7 Knots.

Peshawar

Rainfall reported as 42.02 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 4.0/6.6 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded as 34.6°C & for the recent week 160.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.8/4.9 Knots.

Kalam

Rainfall reported as 29.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 3.7/6.1 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded as 22.9°C & for the recent week 65.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.6 Knots.

Gilgit

Rainfall reported as 8.81 mm from Gilgit during the week; However, cloudiness in the morning/evening recorded as 4.4/5.4 Oktas while, average relative humidity observed as 42%. Mean day time temperature recorded as 27.7°C & for the recent week 102.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.4/3.7 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 3.6/5.1 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 23.9°C & for the recent week 77.3 growing degree days accumulated by the

end of last week. Wind speed recorded in the morning/evening as 0.0/4.6 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)

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

Wheat (*Galaxy*); harvested on 30th April 2018.

Lower Sindh (Tandojam)

There is presently no crop in the fields of RAMC Tandojam.

Land is being prepared for new crop.

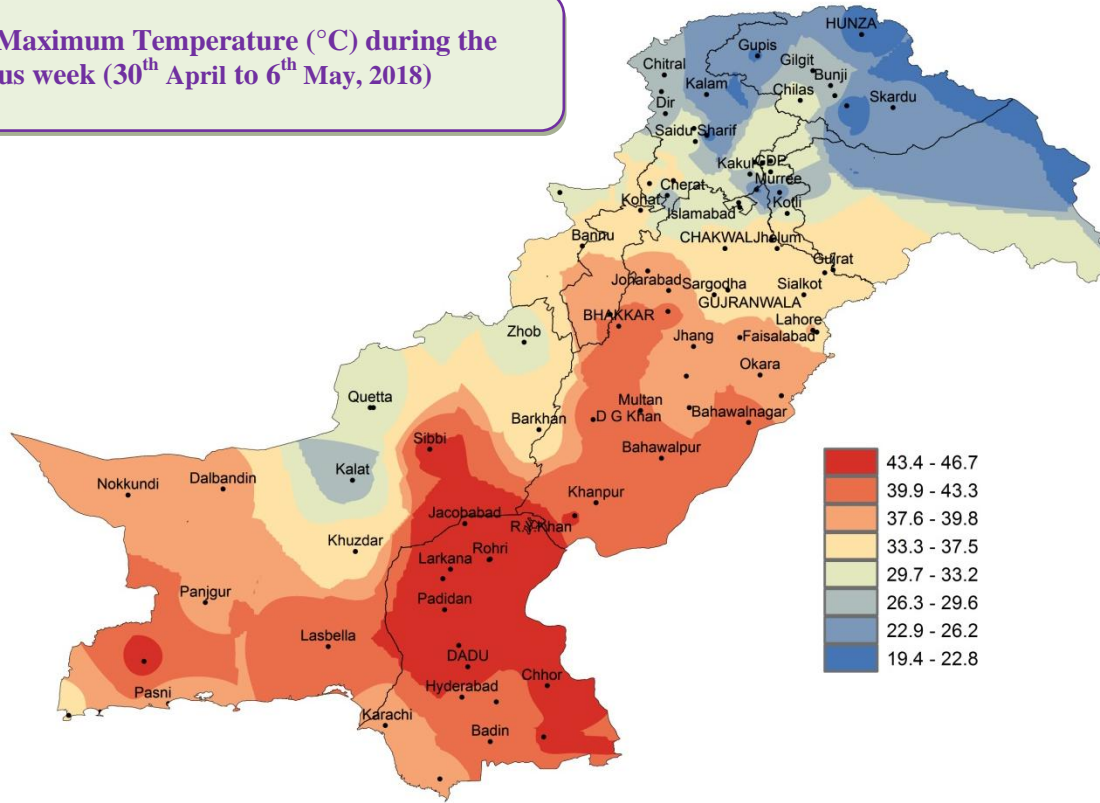
Northern Baluchistan (Quetta)

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

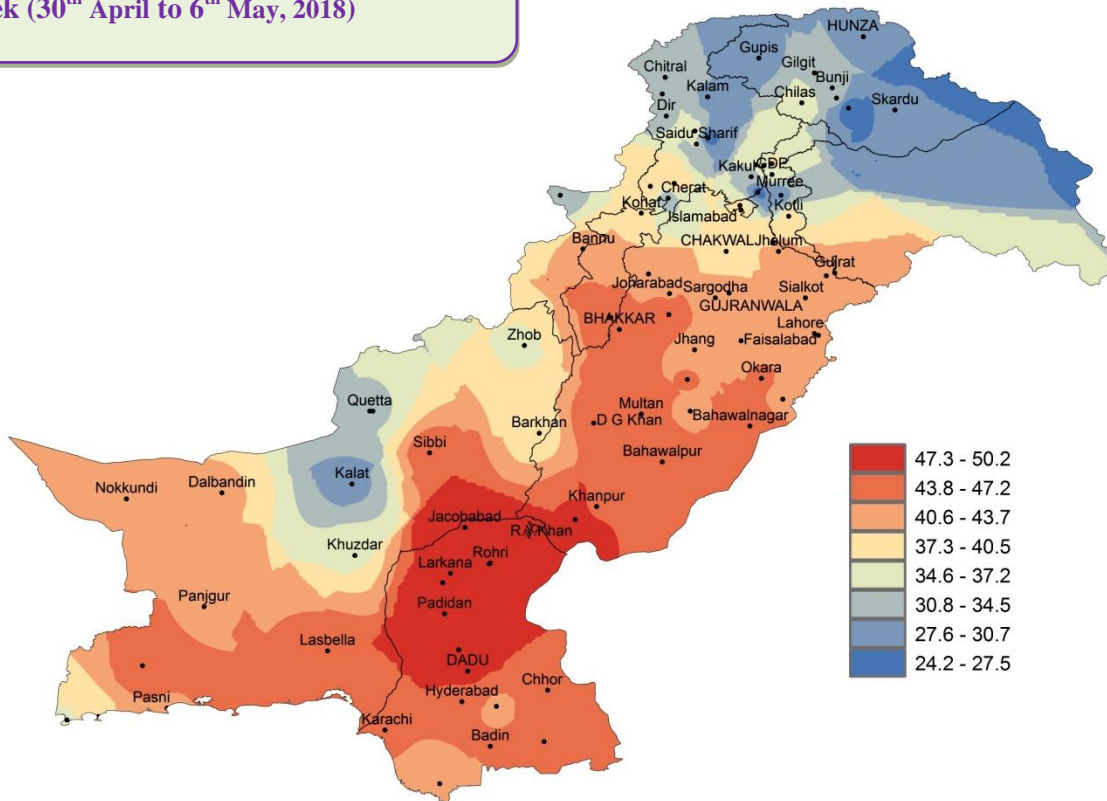
Eastern Baluchistan (Usta Muhammad)

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

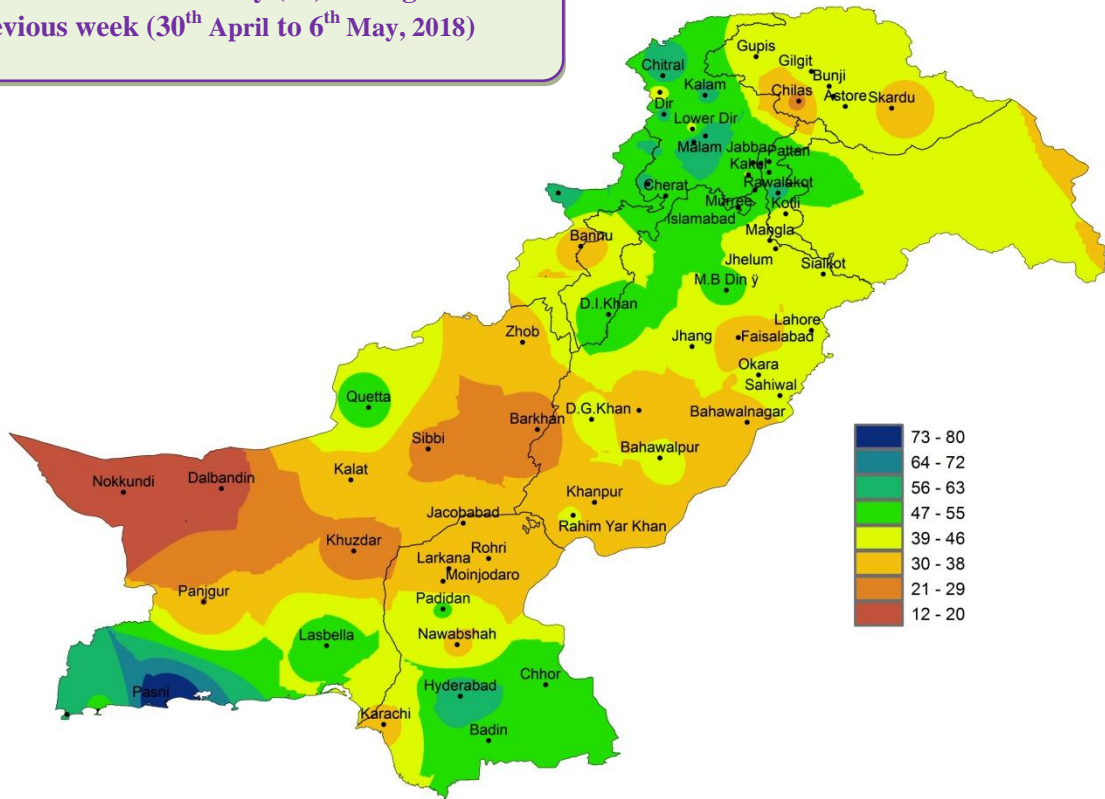
Mean Maximum Temperature (°C) during the Previous week (30th April to 6th May, 2018)



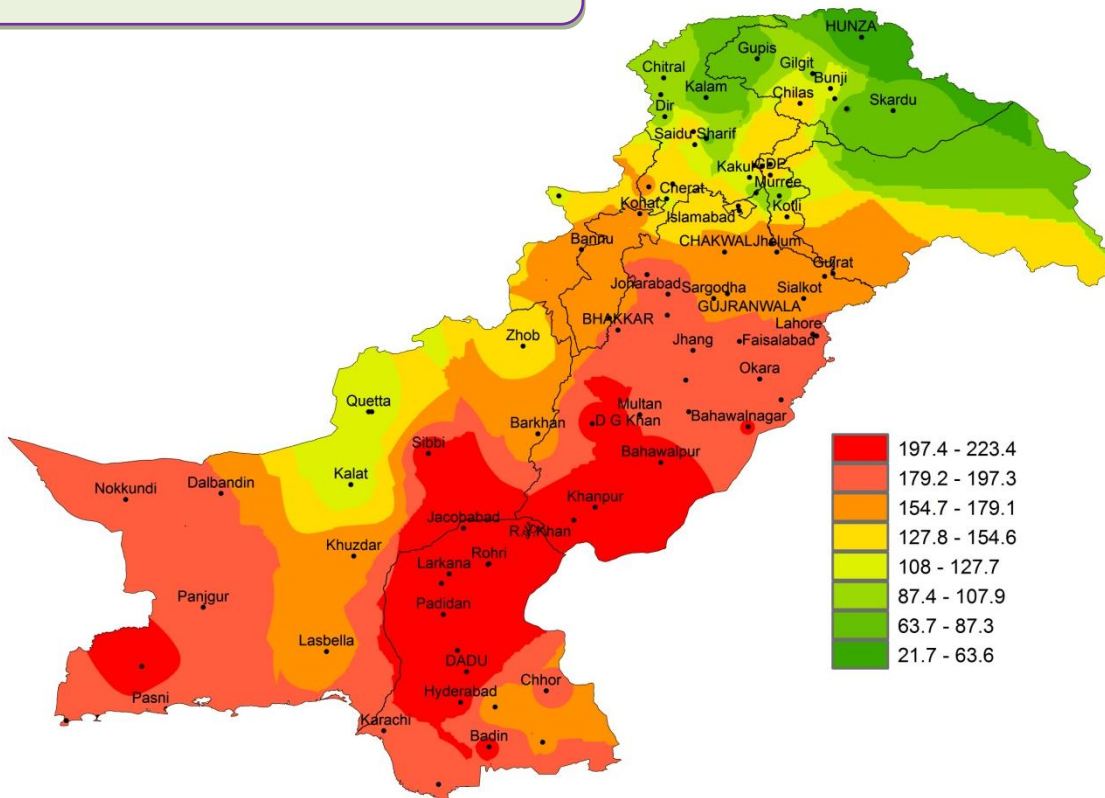
Highest maximum Temperature (°C) during the Previous week (30th April to 6th May, 2018)



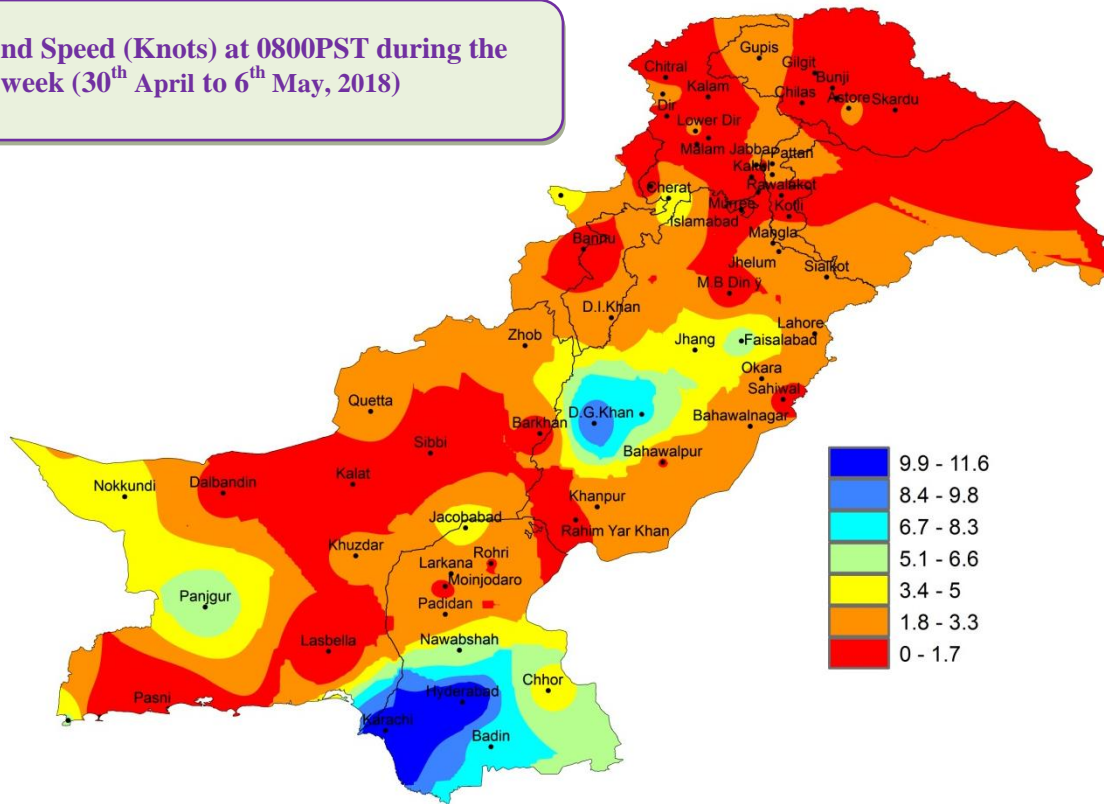
Mean Relative Humidity (%) during the Previous week (30th April to 6th May, 2018)



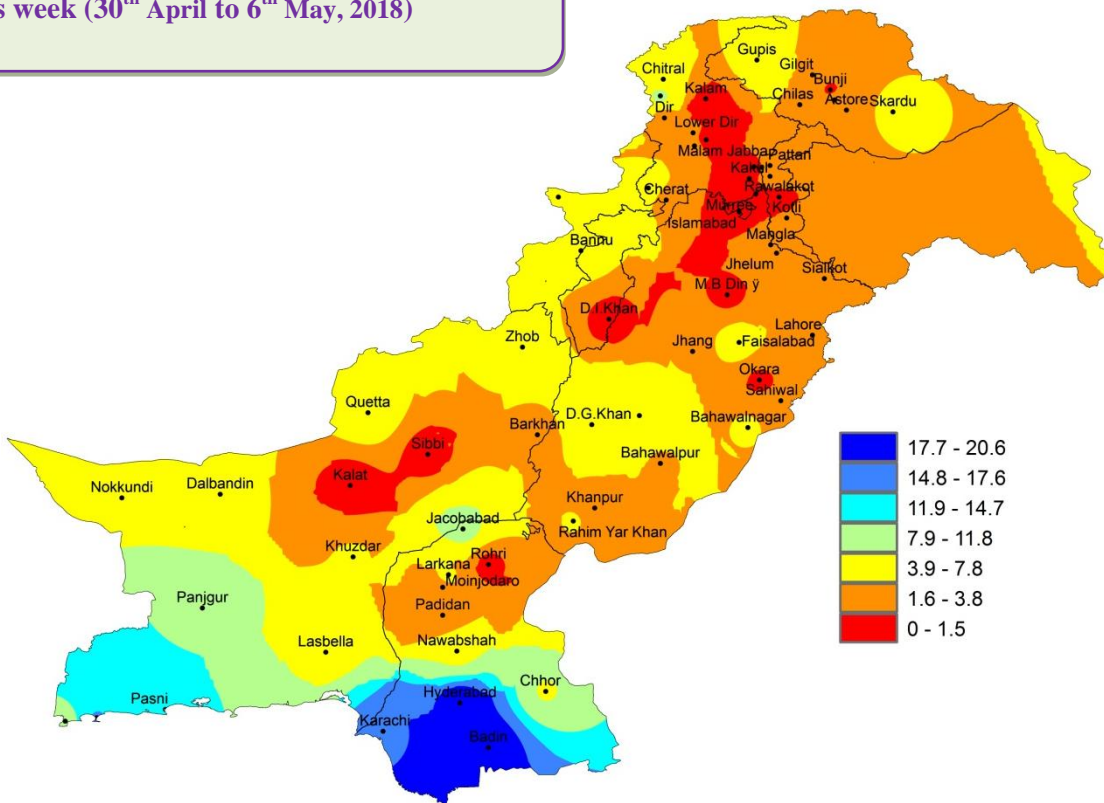
Total Growing Degree Days accumulated during the Previous week (30th April to 6th May, 2018)



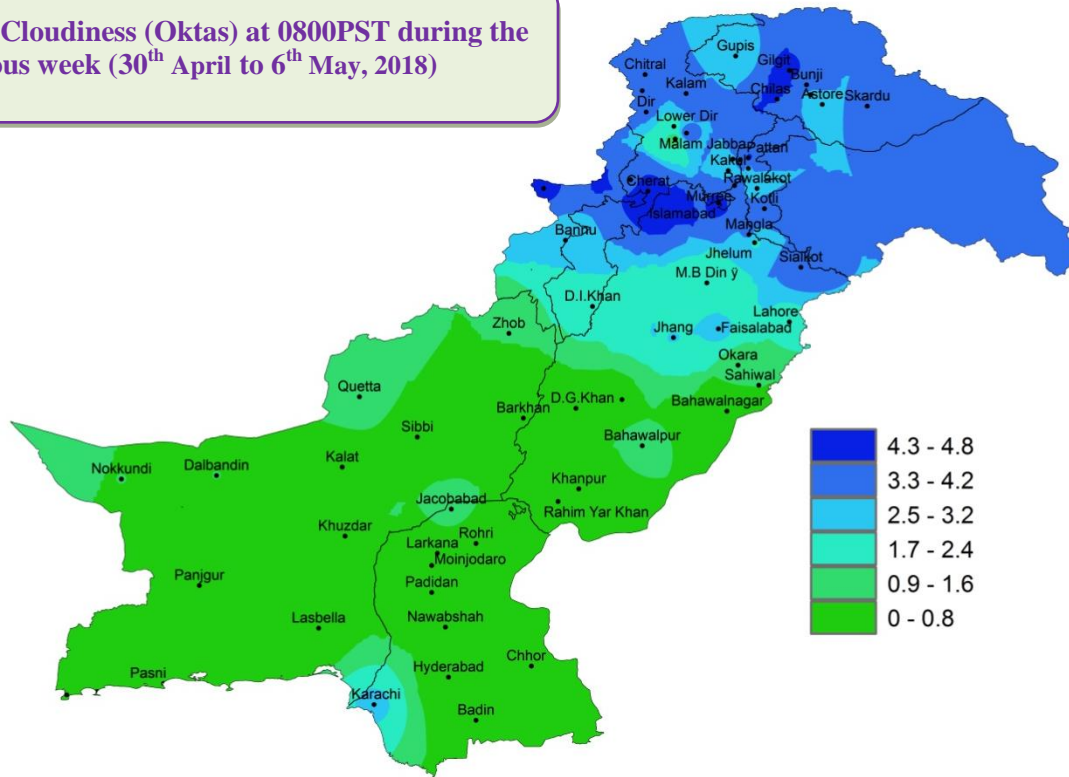
Mean Wind Speed (Knots) at 0800PST during the Previous week (30th April to 6th May, 2018)



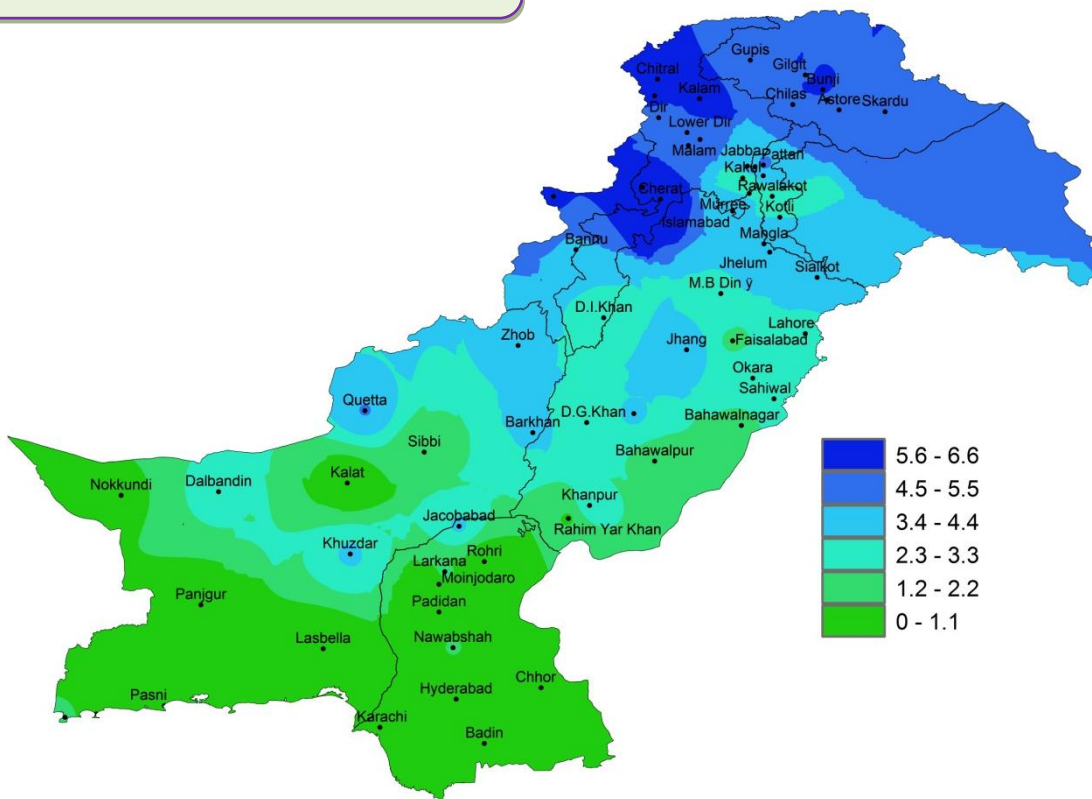
Mean Wind Speed (Knots) at 1700PST during the Previous week (30th April to 6th May, 2018)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (30th April to 6th May, 2018)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (30th April to 6th May, 2018)



Weekly Weather Advisory for Farmers**(7th to 13th May, 2018)**

A westerly wave is affecting upper and central parts of the country and likely to persist till Tuesday.

MONDAY**07-05-2018**

Rain-thundershower with gusty winds is expected at scattered places in Malakand, Hazara, Rawalpindi divisions, FATA, Islamabad, Kashmir and Gilgit-Baltistan. While dust-thundershower/rain is also expected at isolated places in Quetta, Zhob, Gujranwala, Sargodha, Sahiwal, Faisalabad, Lahore, D.G. Khan, Kohat, Mardan, Bannu, D.I khan, Peshawar divisions.

TUESDAY**08-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm with gusty winds is expected at isolated places in Malakand, Hazara, Rawalpindi, Sargodha, Gujranwala, Faisalabad, Sahiwal divisions, Islamabad, Kashmir and Gilgit-Baltistan.

WEDNESDAY**09-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm with gusty winds is expected at isolated places in Kashmir and its adjoining hilly areas.

THURSDAY**10-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at a few places in upper FATA.

FRIDAY**11-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm is

expected at a few places in Malakand division and upper FATA.

SATURDAY**12-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in upper KP, upper Punjab, FATA, Islamabad, Zhob division, Kashmir and Gilgit-Baltistan.

SUNDAY**13-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in Malakand, Hazara, Rawalpindi divisions, FATA, Islamabad, Kashmir and Gilgit-Baltistan.

ADVISES FOR FARMERS

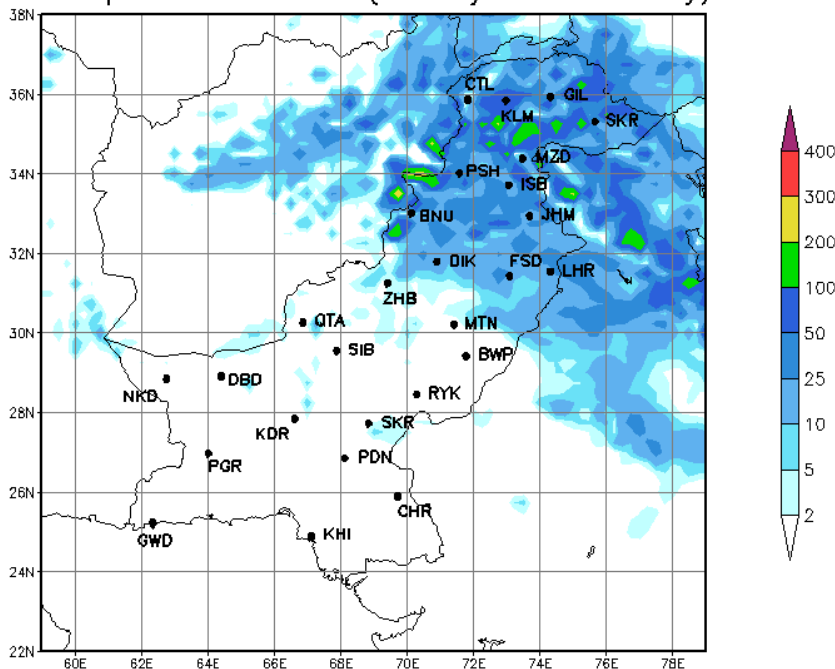
During the last week, light to moderate rainfall occurred in upper half of the country while hot and dry weather prevailed in the rest of the country. Light to moderate rainfall is expected in the upper half of the country. Keeping in view the expected weather conditions following advises are suggested for farming community.

- Farmers of Punjab and southern KP may schedule the harvesting of wheat crop in accordance with the prevailing weather conditions.
- Dust/sand storm may occur in areas of matured wheat crop; accordingly measures may be taken to preserve the grains and residue after harvesting.
- Farmers of irrigated areas may irrigate the rest of crops as per requirement in accordance with the expected weather conditions.

Weather Outlook from 7th May to 13th May, 2018

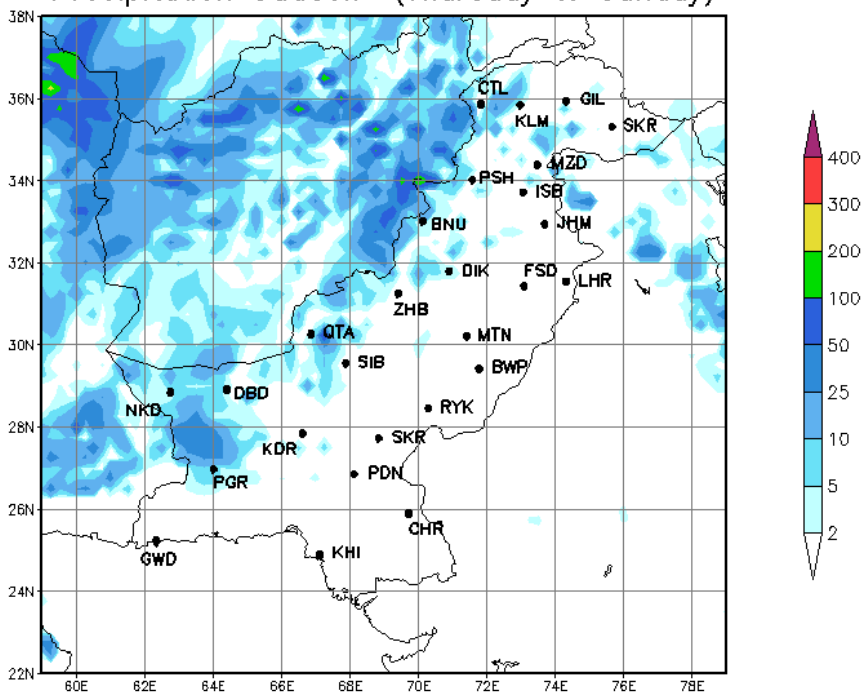
The forecast from 7th to 9th May 2018 shows that moderate to heavy rainfall is expected in KP, GB, Kashmir and upper Punjab. However, dry weather is expected elsewhere.

Precipitation Forecast (Monday to Wednesday)



The outlook from 10th to 13th May, 2018 shows that light to moderate rainfall is expected at scattered places in KP, GB, Kashmir and Baluchistan. However, dry weather may prevail in rest of the country.

Precipitation Outlook (Thursday to Sunday)



National Weather Data of Selected Cities (Weekly Data from 30th April to 6th May, 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	19.3	24.3	59.5	46	11.10	3.0	5.0	2.4	2.6
Badin	41.5	44.0	200.5	52	0.00	0.0	0.0	7.2	20.6
Bahawalnagar	41.6	45.5	198.0	32	0.00	0.0	1.9	2.8	4.3
Bahawalpur	40.7	45.3	201.5	39	0.00	1.0	1.6	1.6	3.4
Balakot	31.1	35.0	131.6	47	26.01	3.0	4.1	2.2	0.7
Bannu	37.5	42.4	177.3	32	11.00	2.4	4.3	0.8	5.7
Barkhan	35.4	38.0	170.5	21	0.00	0.0	3.4	0.8	2.3
Bunji	27.7	32.2	117.3	44	6.71	4.2	6.1	0.4	1.1
Cherat	26.8	32.0	119.0	48	63.00	4.8	5.9	4.8	3.1
Chhor	44.1	45.8	181.5	50	0.00	0.6	0.4	4.4	7.4
Chilas	31.7	36.5	140.8	27	6.40	4.2	5.0	1.6	3.4
Chitral	26.5	33.5	99.2	61	8.12	3.6	5.9	0.8	3.7
D.G.Khan	40.9	46.0	200.3	43	0.00	0.4	2.9	9.6	6.9
D.I.Khan	39.6	44.5	163.8	52	0.01	2.2	2.7	2.0	0.7
Dalbandin	38.6	41.0	179.5	19	0.00	0.8	2.7	1.2	5.1
Dir	28.1	33.5	102.5	56	25.00	3.4	4.7	0.0	2.1
Drosh	28.7	34.5	108.1	41	10.40	3.8	6.0	3.2	9.1
Faisalabad	36.5	43.0	177.9	47	9.00	1.7	1.0	1.7	1.1
Garidopatta	33.4	37.0	145.7	50	14.60	3.0	3.3	2.5	3.1
Gawader	38.3	40.0	191.5	52	0.00	0.0	0.0	0.0	14.9
Gilgit	27.7	34.0	102.8	42	8.81	4.4	5.4	0.4	3.7
Gupis	22.7	27.5	78.5	39	6.00	2.4	4.4	3.2	5.4

Hyderabad	42.4	44.8	202.1	61	0.00	0.0	0.0	11.6	20.0
Islamabad	32.2	38.0	141.9	49	40.01	4.4	4.1	0.0	0.0
Jacobabad	44.6	48.0	218.3	33	0.00	1.2	3.4	4.0	9.7
Jhang	38.7	42.4	186.4	42	5.00	2.4	4.0	4.4	3.1
Jhelum	36.8	41.5	171.9	38	21.71	2.2	4.0	1.6	2.6
Jiwani	35.7	36.5	185.3	61	0.00	0.8	1.4	5.2	10.6
Kakul	28.6	33.0	111.7	46	15.00	2.8	2.6	0.4	1.4
Kalam	22.9	30.0	65.5	55	29.00	3.7	6.1	0.0	0.6
Kalat	27.7	29.0	112.0	35	0.00	0.0	0.0	0.0	0.3
Karachi	38.0	44.0	193.1	35	0.00	2.6	0.3	10.4	16.9
Khanpur	42.6	47.0	204.9	32	0.00	0.0	2.9	2.4	2.6
Khuzdar	35.9	37.0	173.5	25	0.00	0.8	3.4	2.0	4.0
Kotli	32.4	38.3	152.4	40	20.01	4.2	3.3	1.6	1.7
Lahore	37.4	41.2	185.4	39	5.81	2.0	2.7	2.0	2.9
Larkana	45.3	49.0	217.0	31	0.01	0.4	1.3	2.8	4.0
Lasbella	42.5	46.2	174.9	50	0.00	0.0	0.0	0.0	6.3
Lower Dir	33.5	37.5	153.3	43	17.00	2.0	5.0	2.4	2.0
M.B Din	36.3	41.0	170.8	50	8.00	1.6	3.0	0.8	0.9
Malam Jabba	20.0	24.0	73.0	60	36.00	4.2	5.1	0.0	0.0
Mangla	35.3	40.2	163.3	38	13.41	3.4	4.0	3.2	3.7
Mir Khani	29.2	33.0	109.1	45	17.20	2.8	4.3	0.0	2.3
Moinjodaro	45.5	48.5	215.6	32	0.00	0.0	0.6	1.2	3.7
Multan(PBO)	39.9	45.1	196.8	30	3.00	0.6	3.4	6.8	7.4
Murree	22.3	25.8	91.5	51	39.62	3.8	3.3	0.8	0.0
Muzaffarabad	32.1	36.5	136.9	51	38.00	3.6	3.3	0.8	1.3
Nawabshah	46.7	50.2	223.4	34	0.00	0.8	1.1	6.0	6.3

Nokkundi	38.6	41.5	186.8	12	0.00	0.8	0.9	3.6	7.7
Okara	38.9	44.0	187.0	40	7.30	1.2	2.9	2.8	1.1
Padidan	45.1	49.0	218.0	48	0.00	0.0	0.6	2.0	1.7
Panjgur	39.3	43.0	186.5	29	0.00	0.0	0.4	6.0	10.3
Parachinar	29.8	31.0	125.1	59	58.00	4.4	5.6	4.2	3.9
Pasni	37.6	43.5	185.8	80	0.00	0.0	0.0	0.0	13.6
Pattan	31.0	37.5	125.0	49	25.00	4.4	5.0	3.4	3.9
Peshawar	34.6	39.5	160.8	55	42.02	4.0	6.6	0.8	4.9
Quetta	29.6	32.5	126.9	25	0.00	3.3	3.1	3.2	4.1
R. Y. Khan	43.3	48.0	210.4	39	0.00	0.0	1.0	1.2	4.0
Rawalakot	24.2	28.5	87.8	58	34.21	2.5	2.9	0.0	0.9
Rawalpindi	32.3	37.5	143.5	54	26.50	2.4	3.9	0.0	0.2
Rohri	44.5	48.0	214.0	31	0.00	0.0	0.0	1.6	0.6
Sahiwal	38.0	43.0	181.6	40	0.02	0.8	2.9	1.2	1.7
Saidu Sharif	31.4	35.0	126.8	59	3.00	1.0	4.6	0.0	2.9
Sialkot	30.7	33.5	127.0	41	0.00	4.0	4.3	3.2	3.4
Sibbi	36.6	41.5	178.3	26	21.01	0.0	1.1	0.0	0.6
Skardu	23.9	28.1	77.3	34	0.00	3.6	5.1	0.0	4.6
Tandojam	41.4	43.0	192.5	52	0.00	0.0	1.3	2.9	4.5
Usta M.	45.8	47.5	214.9	35	0.00	0.4	0.4	2.2	2.0
Zhob	31.4	36.5	142.5	36	6.00	0.8	3.7	3.0	6.1

*** 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)