

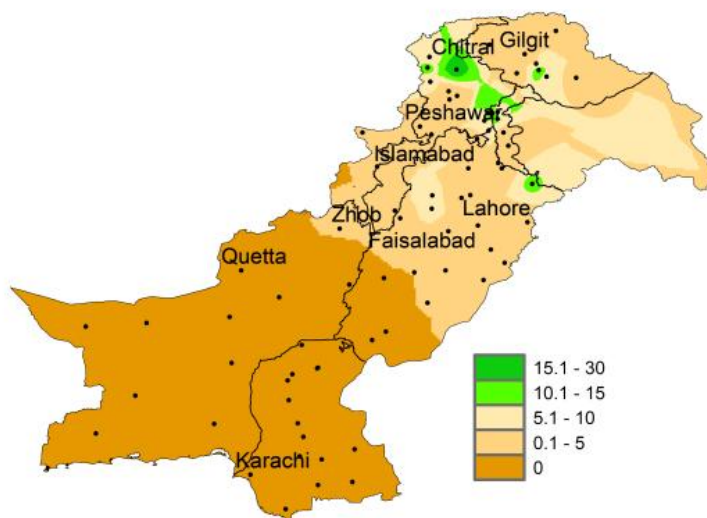
Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous
Week (29th April- 5th May, 2019)**



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Highlights of Past Weather (29th April- 5th May, 2019)

Below normal day time temperatures were observed in Khyber Pakhtunkhwa, Punjab and Gilgit Baltistan while mix trend was observed in Sindh and Balochistan during the last week.

Province wise distribution of rainfall reported as follows during the last week:

1. Light to moderate rainfall observed in Khyber Pakhtunkhwa & Gilgit Baltistan.
2. Light Rainfall observed in Punjab.
3. Dry weather observed over Balochistan and Sindh.

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Editor-in-Chief: Dr M. Afzaal (Director)

Editor: Saeeda Saleh (Assistant Meteorologist)

Past Weather of Provinces (29th April- 5th May, 2019)**Punjab**

Light rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 37.4°C & 21.1°C respectively. For the recent week on average 169.1 growing degree days were accumulated. Average relative humidity recorded as 39% and wind speed in the morning/evening recorded as 4.2/3.3 Knots. During the previous week the highest precipitation was recorded as 11.2 mm at Sialkot while maximum temperature was recorded as 43.8°C at Rahim Yar Khan.

Baluchistan

Dry weather was observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 34.5°C & 19.0°C respectively. For the recent week on average 150.8 growing degree days were accumulated. Average relative humidity recorded as 37% and wind speed in the morning/evening recorded as 2.2/5.7 Knots. During the previous week maximum temperature was recorded as 43°C at Lasbella.

Khyber Pakhtunkhwa

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 28.2°C & 12.4°C respectively. For the recent week on average 105.7 growing degree days were accumulated. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 1.7/2.3 Knots. During the previous week the highest precipitation recorded as 19.0 mm at Kalam while maximum temperature was recorded as 40.5°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 24.9°C & 11.1°C respectively. For the recent week

on average 87.6 growing degree days were accumulated. Average relative humidity recorded as 44% and wind speed in the morning/evening recorded as 2.4/7.5 Knots. The highest precipitation recorded as 21.5 mm at Muzafarabad while maximum temperature was recorded as 36.1°C at Kotli.

Sindh

Dry weather was observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 42.1°C & 23.8°C respectively. For the recent week, on average 195.3 growing degree days were accumulated. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 1.8/6.4 Knots. The maximum temperature was recorded as 46.5°C at Nawabshah.

Past Weather for Major Agricultural Plains (29th**April- 5th May, 2019)****Rawalpindi (Potohar region)**

1.0 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.4/2.3 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 33.9°C & for the recent week 143.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/1.1 Knots.

Faisalabad (Central Punjab)

0.01 mm (Trace) rainfall was reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.9/1.9 Oktas while, average relative humidity observed as 30%. Mean day time temperature recorded as 39.1°C & for the recent week 178.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.7/1.0 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, clear skies observed in the morning/evening while, average relative humidity observed as 46%. Mean day time temperature recorded as 41.3°C & for the recent week 183.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.1/1.6 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, clear skies observed in the morning/evening while, average relative humidity observed as 26%. Mean day time temperature recorded as 42.9°C & for the recent week 199.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.8/1.1 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.8/1.3 Oktas while, average relative humidity observed as 25%. Mean day time temperature recorded as 38.0°C & for the recent week 93.8 growing degree days accumulated. Wind

speed recorded in the morning/evening as 2/3.3 Knots.

Past Weather for Sub-Regional Agricultural Plains (29th April- 5th May, 2019)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.6/1.1 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 38.9°C & for the recent week 184.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 5.1/5.1 Knots.

Lahore

0.02 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 2.4/0.7 Oktas while, average relative humidity observed as 30%. Mean day time temperature recorded as 38.0°C & for the recent week 181.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.9/3.1 Knots.

Zhob

Dry weather reported was reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.3/1.6 Oktas while, average relative humidity observed as 42%. Mean day time temperature recorded as 30.7°C & for the recent week 130.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.7/5.9 Knots.

Murree

10.00 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 2.9/3.4 Oktas while, average relative humidity observed as 48%. Mean day time temperature recorded as 20.7° C & for the recent week 75.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.6/1.7 Knots.

D.I. Khan

5.02 mm rainfall was reported from D.I. Khan during the week; however, cloudiness in the

morning/evening recorded as 1.1/1.0 Oktas while, average relative humidity observed as 4%. Mean day time temperature recorded as 38.5°C & for the recent week 173.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/0.3 Knots.

Peshawar

0.02 mm rainfall was reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.7/4.1 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 33.9°C & for the recent week 121.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/2.9 Knots.

Kalam

19.00 mm rainfall was reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.4/3.4 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 20.6°C & for the recent 49.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.9 Knots

Gilgit

0.02 mm rainfall was reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 4.9/6.4 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 25.5°C & for the recent week 92.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/12.9 Knots.

Skardu

0.01 mm rainfall was reported from Skardu during the week; however, clear skies observed in the morning/evening while, average relative humidity observed as 45%. Mean day time temperature recorded as 20.3°C & for the recent week 63.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.0/16.9 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 no crop is grown in the fields of RAMC Faisalabad.

Wheat: *Harvested on May 5, 2019.*

Lower Sindh (Tandojam)

Presently cotton crop is sown in the fields of RAMC Tandojam.

Cotton: **Good**, Third true leaf stage.

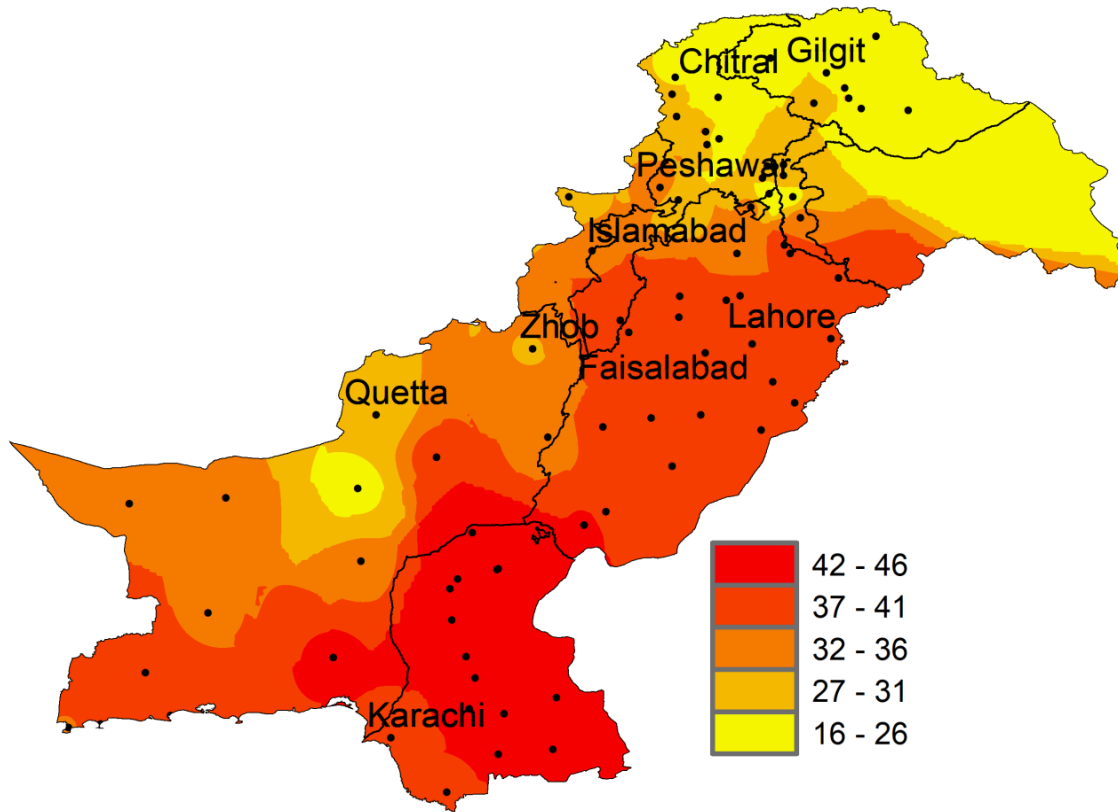
Northern Baluchistan (Quetta)

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

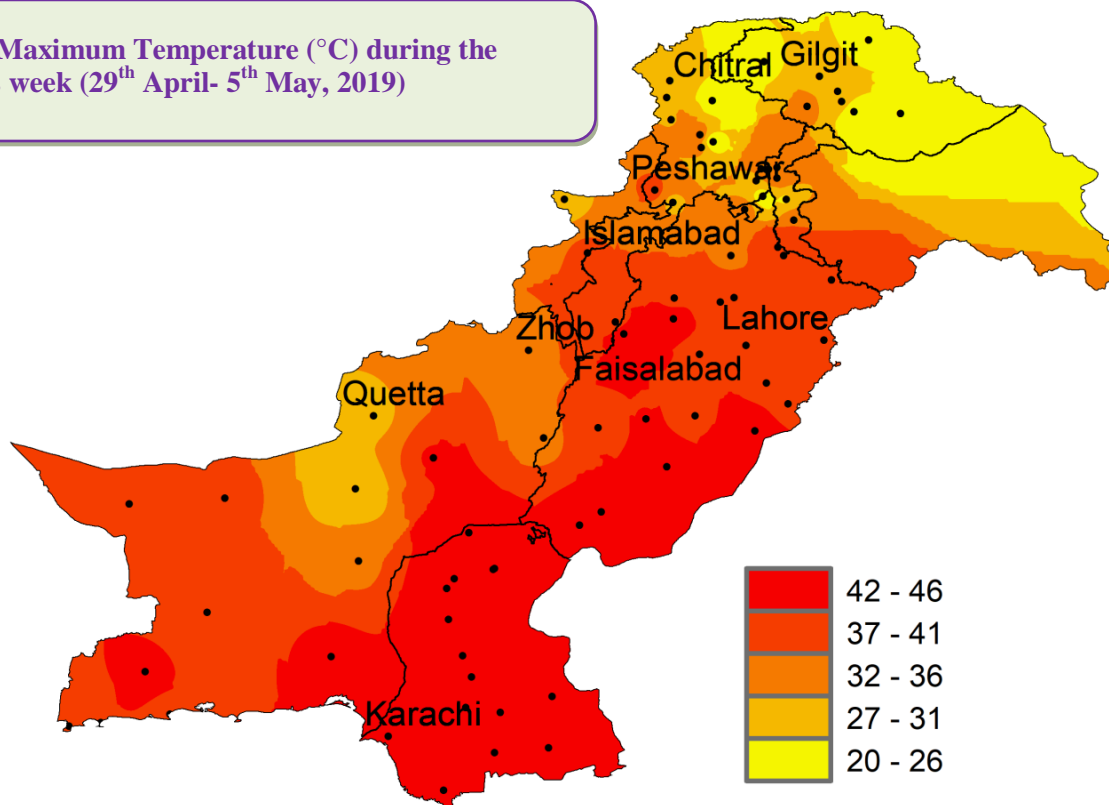
Eastern Baluchistan (Usta Muhammad)

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

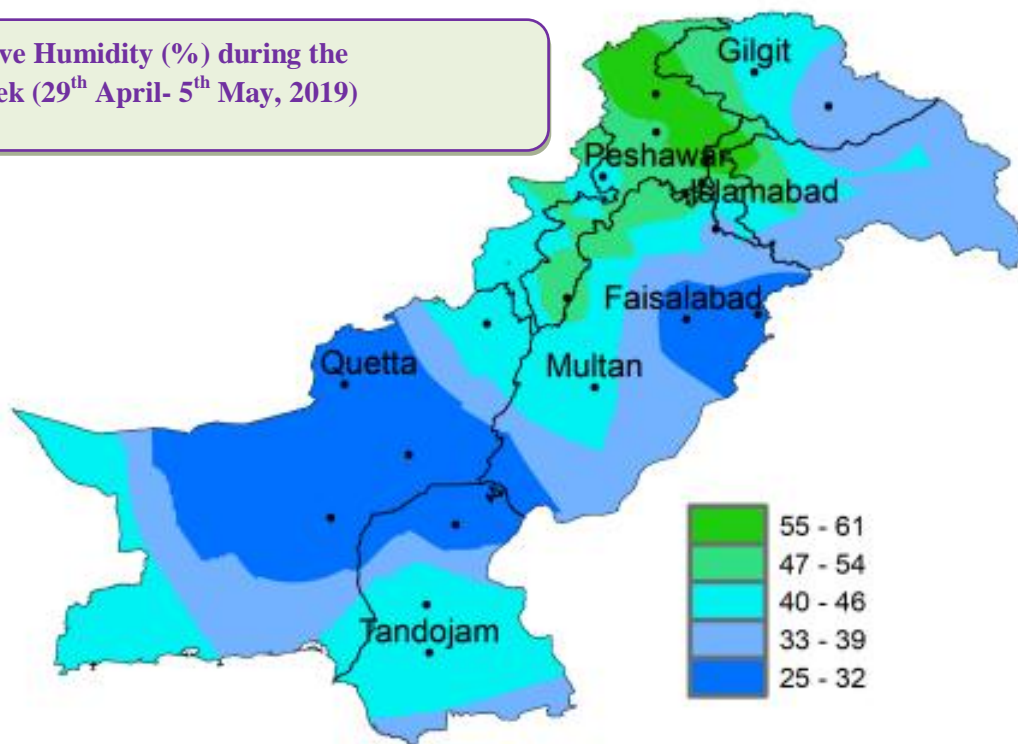
Mean Maximum temperature (°C) during the
Previous week (29th April- 5th May, 2019)



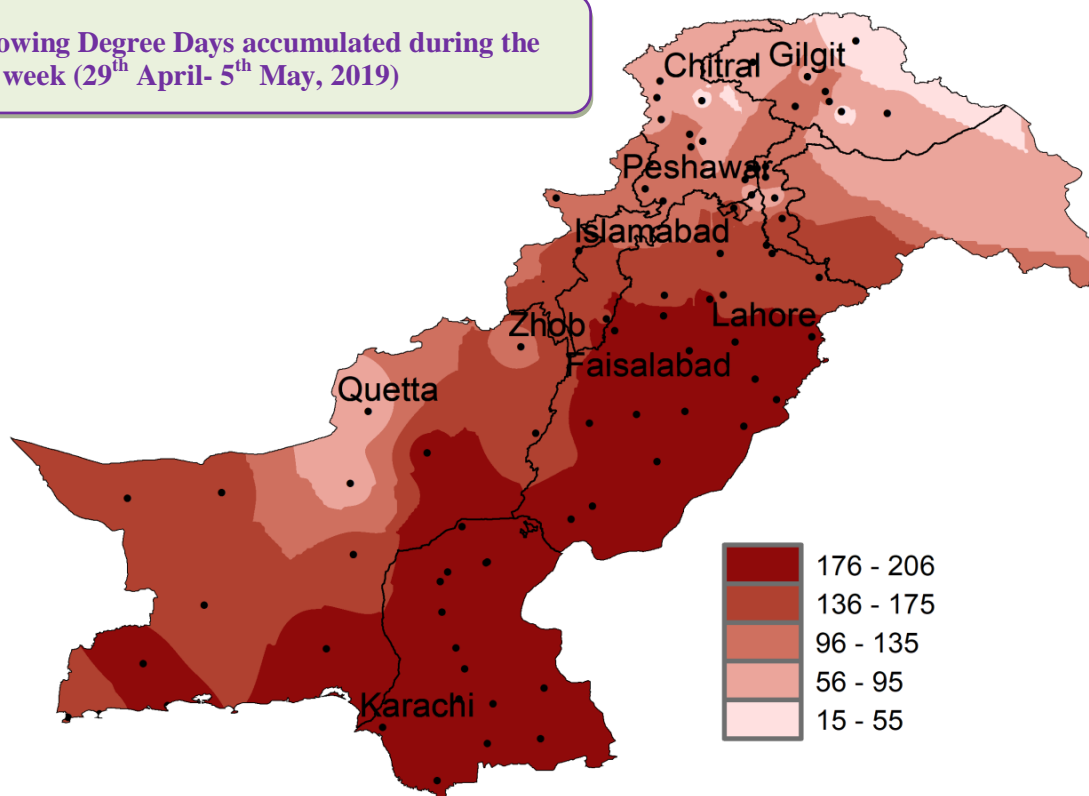
Highest Maximum Temperature (°C) during the
Previous week (29th April- 5th May, 2019)



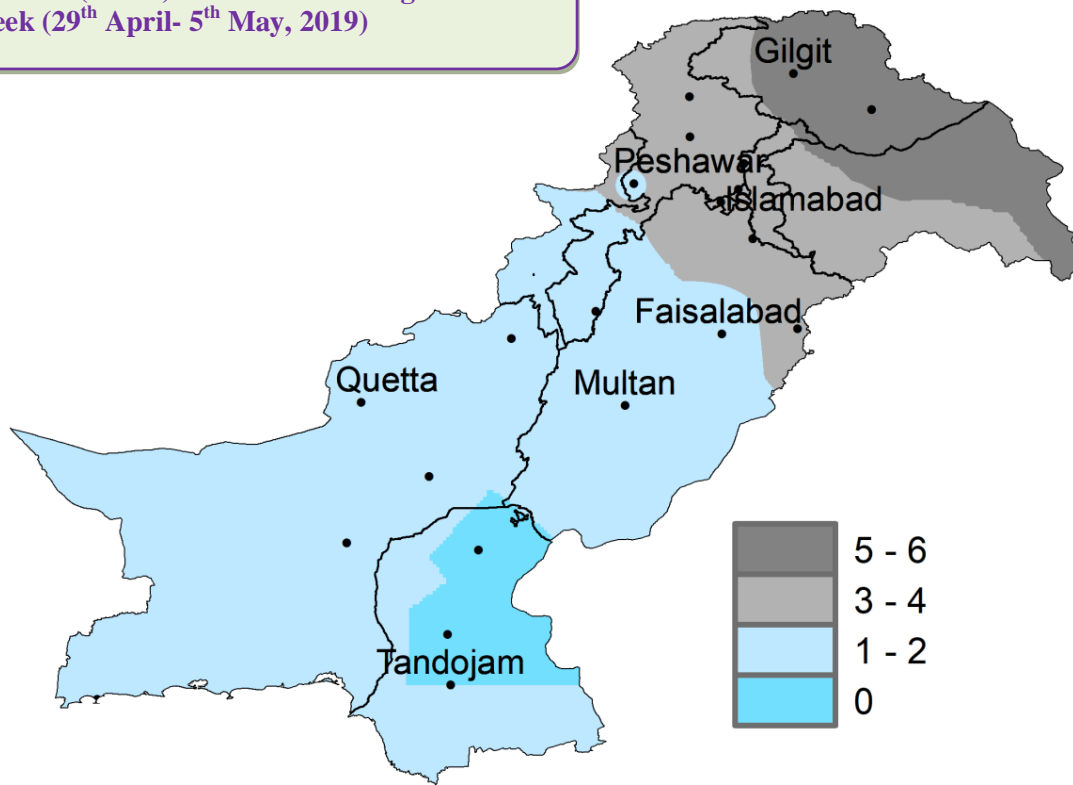
Mean Relative Humidity (%) during the
Previous week (29th April- 5th May, 2019)



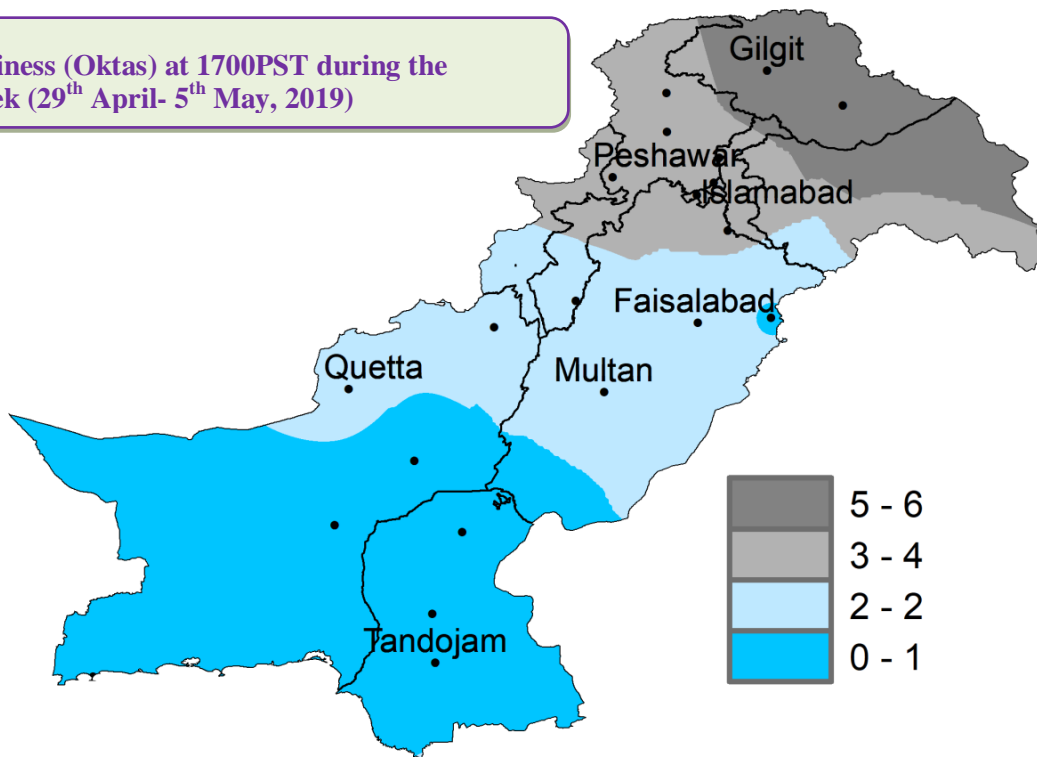
Total Growing Degree Days accumulated during the
Previous week (29th April- 5th May, 2019)



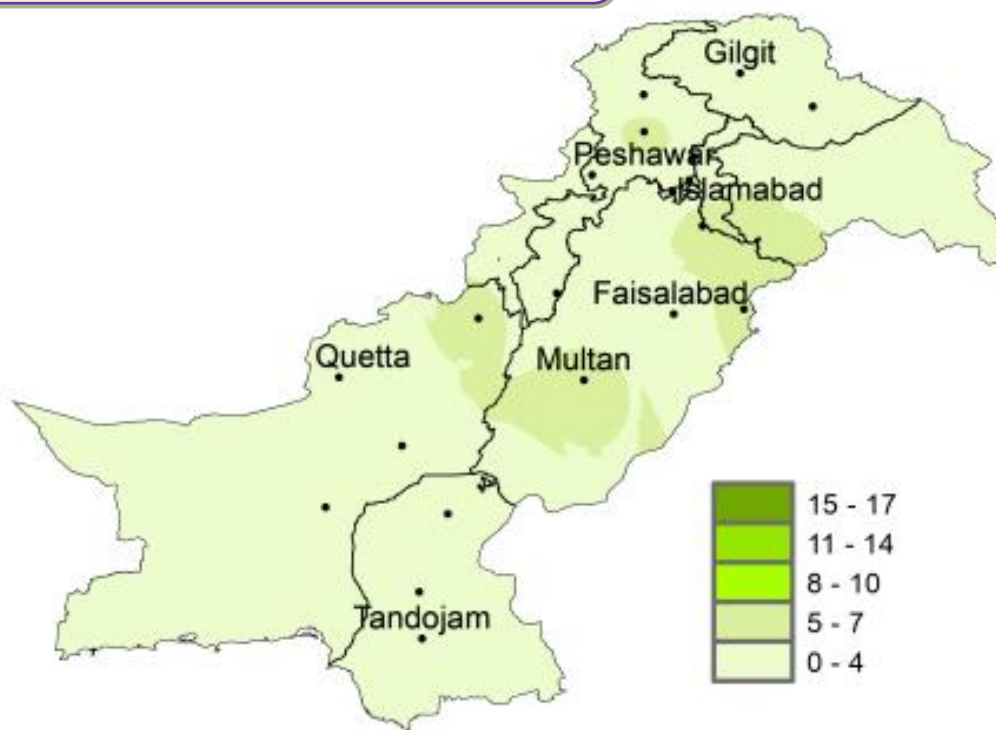
Mean Cloudiness (Oktas) at 0800PST during the
Previous week (29th April- 5th May, 2019)



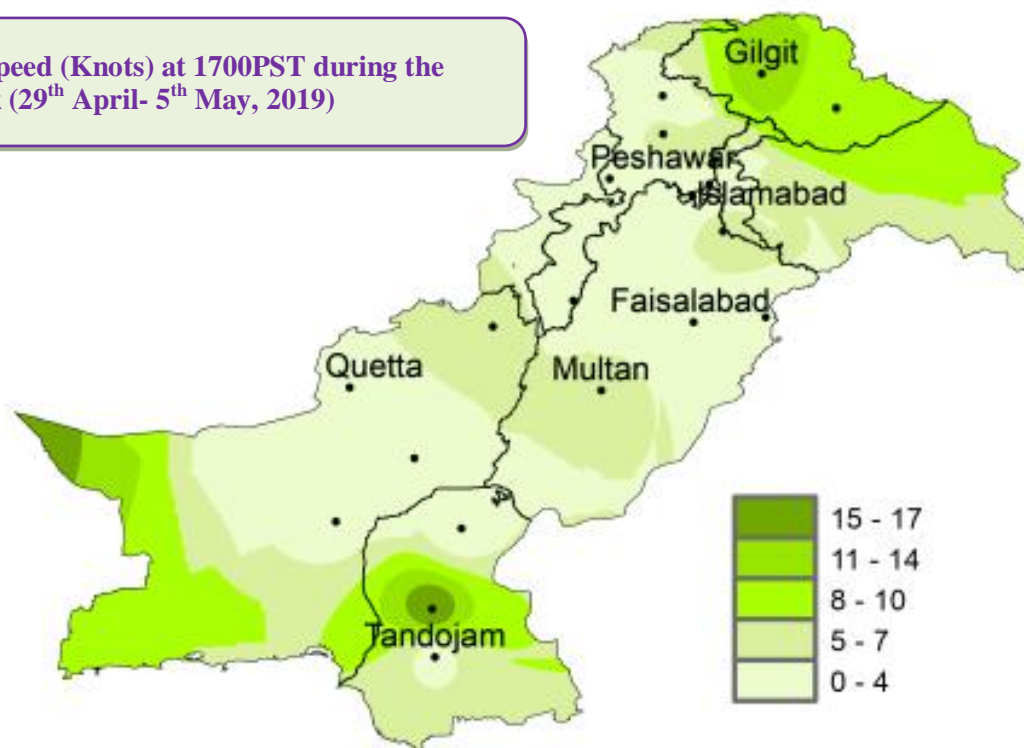
Mean Cloudiness (Oktas) at 1700PST during the
Previous week (29th April- 5th May, 2019)



Mean Wind Speed (Knots) at 0800PST during the
Previous week (29th April- 5th May, 2019)



Mean Wind Speed (Knots) at 1700PST during the
Previous week (29th April- 5th May, 2019)



Weekly Weather Advisory for Farmers
(6th to 12th May, 2019)

Continental air is prevailing over most parts of the country. A shallow westerly wave is likely to enter upper parts of the country from Thursday.

MONDAY
06-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in south Punjab and Sindh. Dust raising winds/gusty winds are expected in South Punjab in afternoon.

TUESDAY
07-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in south Punjab and Sindh. Dust raising winds/gusty winds are expected in South Punjab in afternoon.

WEDNESDAY
08-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in south Punjab and Sindh. However dust thunderstorm/rain is expected at isolated places in Kalat division.

THURSDAY
09-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in south Punjab and Sindh. However dust thunderstorm/rain is expected at isolated places in Hazara, Kohat, Kalat divisions and Kashmir.

FRIDAY
10-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in south Punjab and Sindh. However dust thunderstorm/rain is

expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Rawalpindi, Sargodha divisions, Islamabad, Gilgit Baltistan and Kashmir.

SATURDAY
11-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in south Punjab and Sindh. However dust thunderstorm/rain is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Rawalpindi, Gujranwala, Lahore, Faisalabad, Sargodha divisions, Islamabad, Gilgit Baltistan and Kashmir.

SUNDAY
12-05-2019

Mainly hot and dry weather is expected in most parts of the country. However dust thunderstorm/rain is expected at isolated places in Quetta, Kalat, D.I.Khan, D.G.Khan, Multan and Bahawalpur divisions.

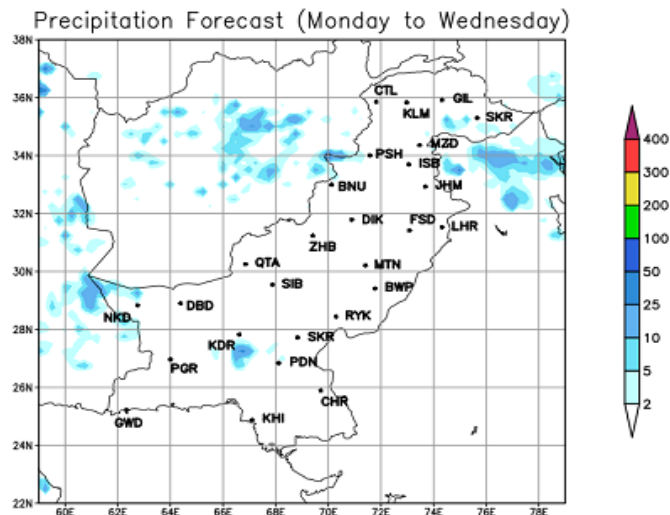
ADVISORY FOR FARMERS

During the last week, light to moderate rainfall occurred at scattered places in GB and KPK, while light rainfall observed over Punjab. Dry weather prevailed over Sindh and Balochistan. Keeping in view the above expected weather conditions following advisories are suggested for farming community.

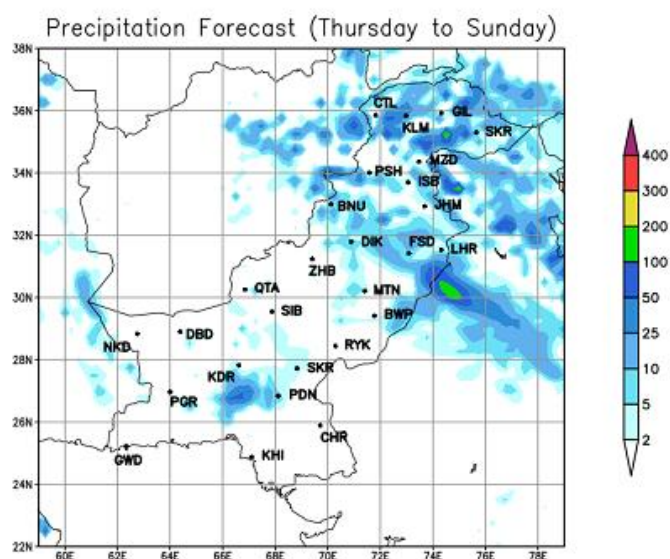
1. Farmers are advised to apply deep ploughing in the fields after harvested the Wheat crops.
2. To obtain the possible yield of wheat crop, weather forecast should be considered before harvesting.

Precipitation Outlook from 6th to 12th May, 2019

The outlook from 6th May to 8th May, 2019 shows that light to moderate rainfall is expected in isolated places of western and northeastern Balochistan and Azad Kashmir. Dry weather may prevail over rest of the country.



The outlook from 9th May to 12th May, 2019 shows that light to moderate rainfall is expected at scattered places of upper half part of the country while isolated places of northwestern Sindh and adjoining areas..



National Weather Data of Selected Cities Weekly Data from (29th April to 5th May, 2019)

Stations	Minimum/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							
D.I.Khan	38.5	40.5	173.5	48	5.02	1.1	1.0	0.6	0.3
Faisalabad	39.1	40.5	178.4	30	0.01	0.9	1.9	1.7	1
Gawader	38.2	41.0	169.3	44	0.00	0.0	0.3	0.9	9.1
Gilgit	25.5	29.5	92.5	45	0.02	4.9	6.4	0.0	12.9
Kalam	20.6	23.0	49.8	57	19.00	2.4	3.4	0.0	1.9
Khuzdar	32.1	34.0	145.3	25	0.00	1.3	0.4	1.1	2.0
Lahore	38.0	39.5	181.9	30	0.02	2.4	0.7	4.9	3.1
Malam Jabba	17.3	20.0	52.3	53	4.00	2.7	3.1	5.7	4.0
Mangla	36.2	38.2	160.1	37	1.50	2.6	2.3	6.3	5.1
Multan (PBO)	38.9	41.3	184.6	39	0.00	0.6	1.1	5.1	5.1
Murree	20.7	22.5	75.7	48	10.00	2.9	3.4	2.6	1.7
Muzaffarabad	29.9	33.5	117.3	61	21.50	3.1	3.9	2.9	4.4
Nawabshah	43.4	46.5	196.8	33	0.00	4.9	5.9	0.6	7.6
Peshawar	33.9	38.0	121.9	45	0.02	1.7	4.1	0.6	2.9
Quetta	38.0	28.0	93.8	25	0.00	0.8	1.3	2	3.3
Rawalpindi	33.9	35.7	143.5	50	1.00	2.4	2.3	0.3	1.1
Rohri	41.7	44.5	201.3	29	0.00	0.0	0.0	1.4	0.9
Skardu	20.3	24.4	63.9	45	0.01	0.0	0.0	4.0	16.9
Tandojam	41.3	43.0	183.8	46	0.00	0	0	0.1	1.6
Usta.M	42.9	44.5	199.3	26	0.00	0	2.8	1.1	1.1
Zhob	30.7	33.5	130.8	42	0.00	0.3	1.6	4.7	5.9

*** 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 (بذر یعنی 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)