

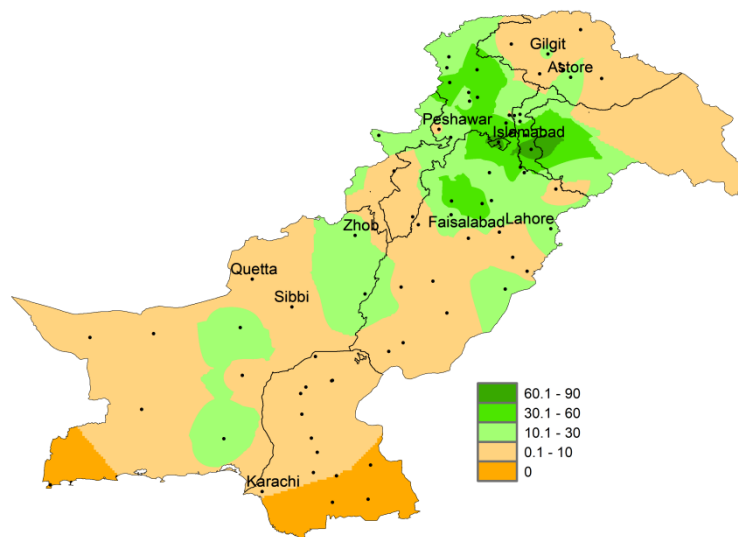
Weekly Weather and Crop Bulletin for Pakistan

**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 (20th May-26th May, 2019)**



Contents

Highlights of past weather	1-2
Past weather for Agri Plains	3-4
Crop progress	4
Agrometeorological parameters	
• Temperature	5
• R.H and GDD	6
• Wind speed	7
• Cloudiness	8
Advisory for Farmers	9
Weather Outlook	10
National data for selected stations	11
AgMIP project findings	12

Highlights of Past Weather (20th May-26th 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 Punjab, Balochistan, Khyber Pakhtunkhwa & Gilgit Baltistan.
2. Light rainfall observed in Sindh.

Patron-in-Chief: Muhammad Riaz (Director General)

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

Editor: Saeeda Saleh (Assistant Meteorologist)

Past Weather of Provinces (20^h May-26th May, 2019)**Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 37.0°C & 22.1°C respectively. For the recent week on average 171.0 growing degree days were accumulated. Average relative humidity recorded as 49% and wind speed in the morning/evening recorded as 2.4/3.9 Knots. During the previous week the highest precipitation was recorded as 63.8 mm at Islamabad while maximum temperature was recorded as 43°C at Rahim Yar Khan.

Baluchistan

Light to moderate rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 34.7°C & 21.0°C respectively. For the recent week on average 158.6 growing degree days were accumulated. Average relative humidity recorded as 48% and wind speed in the morning/evening recorded as 1.6/8.1 Knots. During the previous week the highest precipitation was recorded as 26.0 mm at Barkhan while maximum temperature was recorded as 46°C at Sibbi.

Khyber Pakhtunkhwa

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 28.3°C & 13.5°C respectively. For the recent week on average 109.2 growing degree days were accumulated. Average relative humidity recorded as 56% and wind speed in the morning/evening recorded as 0.7/1.1 Knots. During the previous week the highest precipitation recorded as 62.0 mm at Kakul while maximum temperature was recorded as 40°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 27.0°C & 13.3°C respectively. For the recent week on average 101.3 growing degree days were accumulated. Average relative humidity recorded as 46% and wind speed in the morning/evening recorded as 1.8/5.0 Knots. The highest precipitation recorded as 80.0 mm at Kotli while maximum temperature was recorded as 38.1°C at Kotli.

Sindh

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 41.3°C & 26.0°C respectively. For the recent week, on average 200.0 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 2.3/3.4 Knots. The highest precipitation recorded as 10.00 mm at Larkana while maximum temperature was recorded as 47.5°C at Jacobabad.

Past Weather for Major Agricultural Plains (20^h May-26th May, 2019)

Rawalpindi (Potohar region)

48.0 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.1 /2.6 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded 34.6°C & for the recent week 147.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0/0.9 Knots.

Faisalabad (Central Punjab)

8.5 mm rainfall was reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.7/0.9 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 37.6°C & for the recent week 175.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.8/1.2 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0/1.1 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 40.9°C & for the recent week 201.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.6/1.8 Knots.

Usta Muhammad (Eastern Baluchistan)

2.0 mm rainfall was reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 1.8/1.2 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 42.1°C & for the recent week 204.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0/0.5 Knots.

Quetta (Northern Baluchistan)

18.2 mm rainfall was reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 3.9/3.9 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 26.2°C & for the recent week 108.6 growing degree days

accumulated. Wind speed recorded in the morning/evening as 1.8/3.1 Knots.

Past Weather for Sub-Regional Agricultural Plains (20^h May-26th May, 2019)

Multan

1.01 mm rainfall reported from Multan during the week; however, cloudiness in the morning/evening recorded as 3.8/1.6 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 38.0°C & for the recent week 186.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.0/5.4 Knots.

Lahore

17.00 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 2.4/1.9 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 36.8°C & for the recent week 175.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/3.7 Knots.

Zhob

12.00 mm rainfall reported was reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 1.0/4.0 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 31.3°C & for the recent week 132.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.7/9.9 Knots.

Murree

42.90 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 60%. Mean day time temperature recorded as 21.4° C & for the recent week 81.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.7/2.6 Knots.

D.I. Khan

2.00 mm rainfall was reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.4/3.3 Oktas while,

average relative humidity observed as 47%. Mean day time temperature recorded as 37.9 °C & for the recent week 176.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/0.9 Knots.

Peshawar

7.50 mm rainfall reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.8/4.9 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 34.3 °C & for the recent week 127.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.7/1.1 Knots.

Kalam

49.20 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.3/5.4 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 20.6°C & for the recent 57.0 growing degree days accumulated. Calm weather recorded in the morning/evening.

Gilgit

11.10 mm rainfall was reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 4.9/6.6 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 27.7°C & for the recent week 104.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/4.9 Knots.

Skardu

0.03 mm rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 4.4/6.3 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 23.6°C & for the recent week 83.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.7 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 cotton crop is sown in the fields of RAMC Faisalabad.

Cotton: Good, Emergence stage.

Lower Sindh (Tandojam)

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

Cotton: Good, Third true leaf stage.

Northern Baluchistan (Quetta)

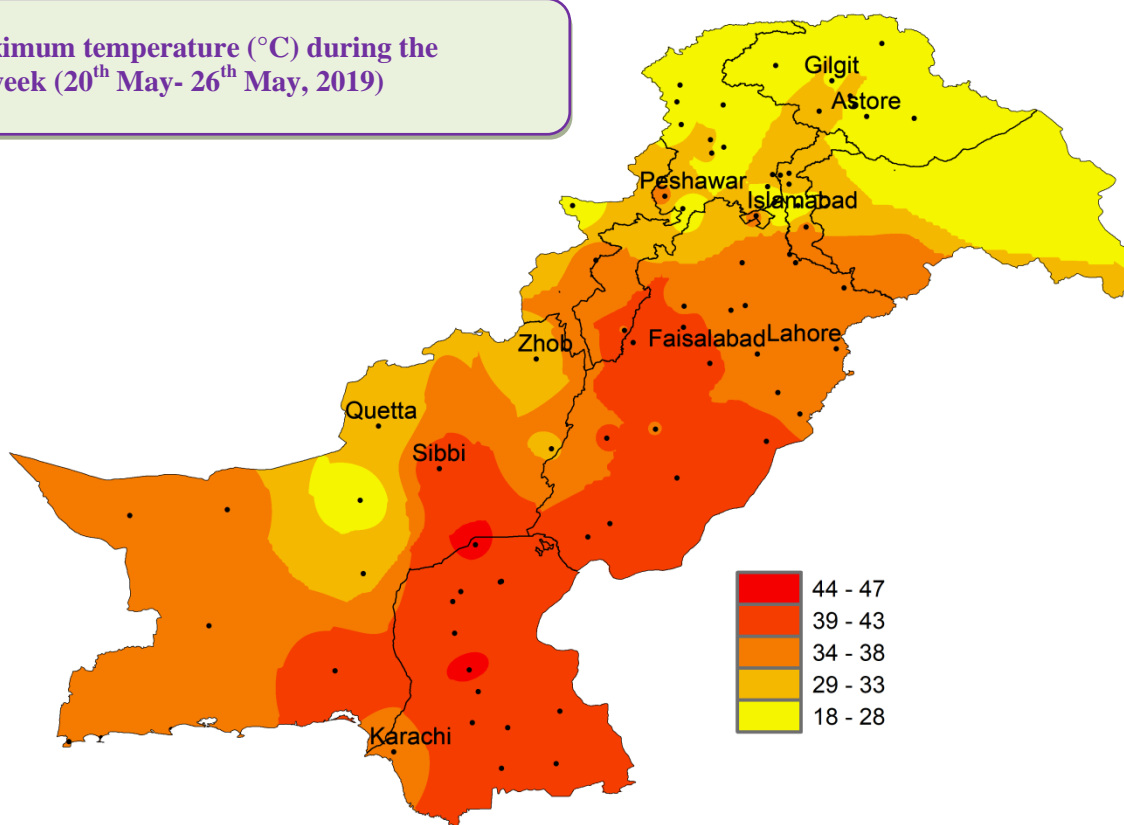
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

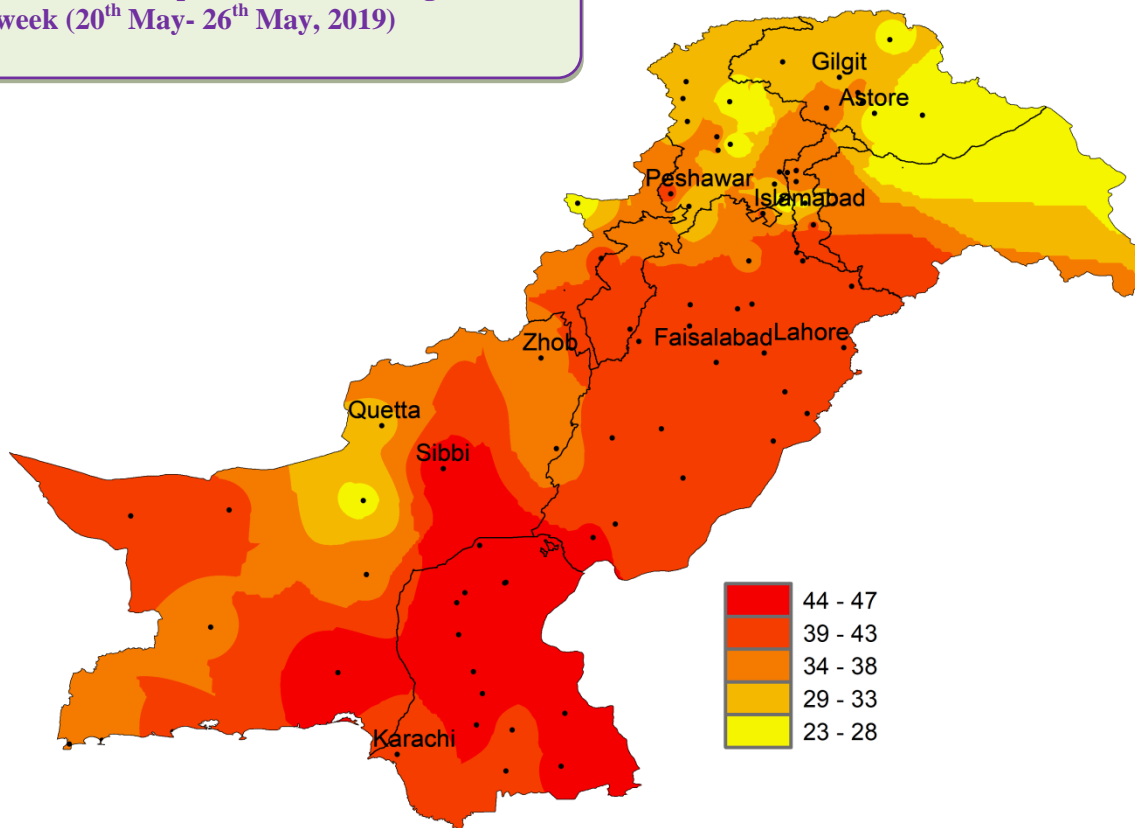
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

Wheat: Good, *Harvesting.*

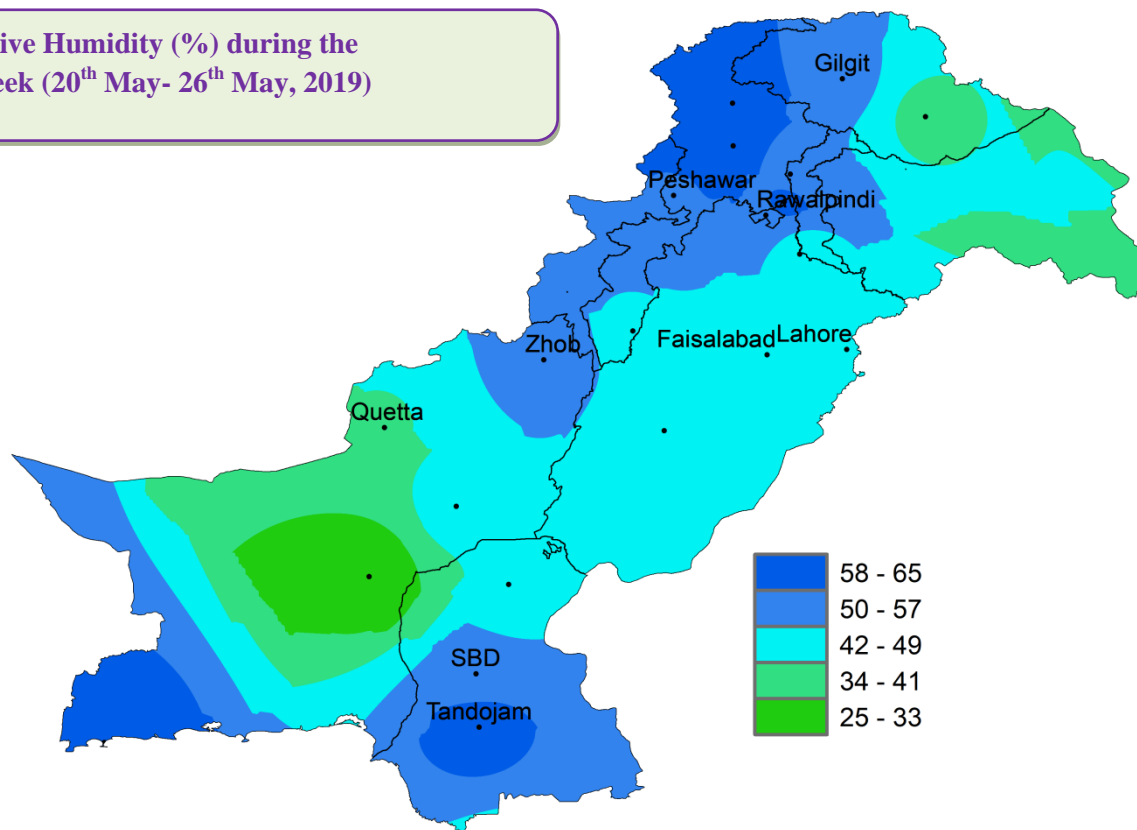
Mean Maximum temperature (°C) during the
Previous week (20th May- 26th May, 2019)



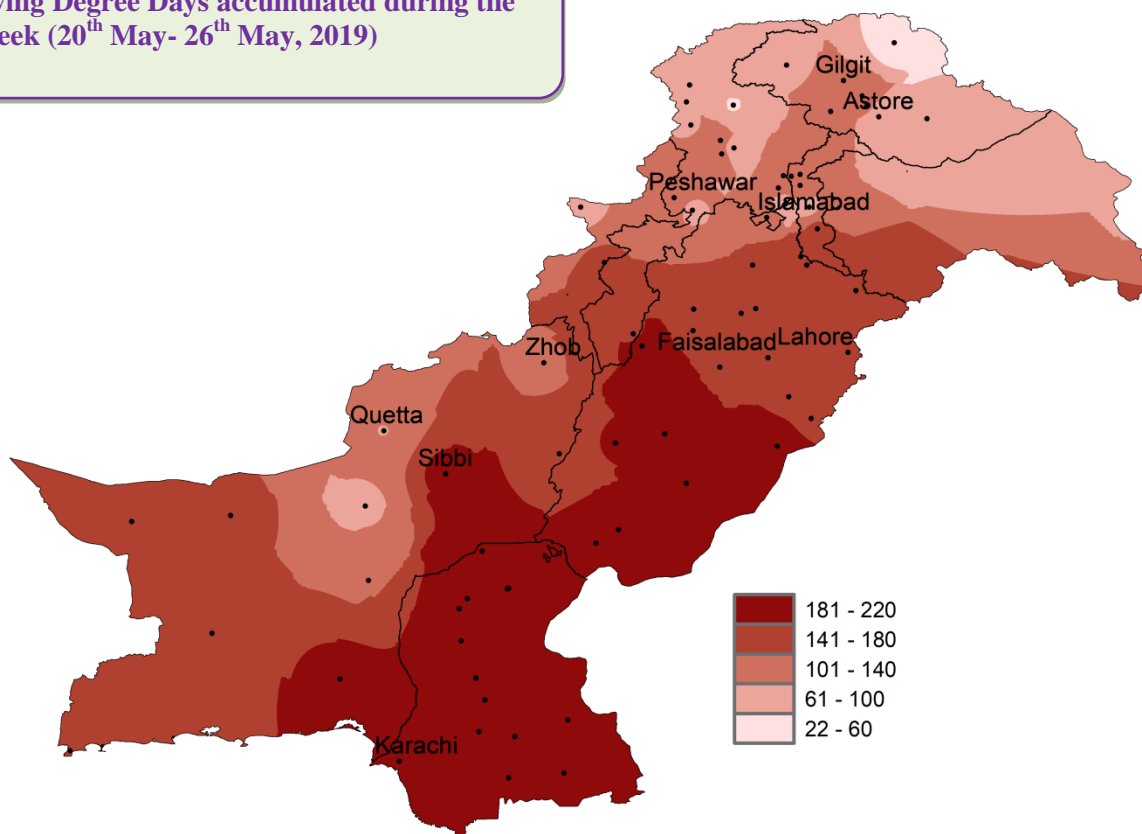
Highest Maximum Temperature (°C) during the
Previous week (20th May- 26th May, 2019)



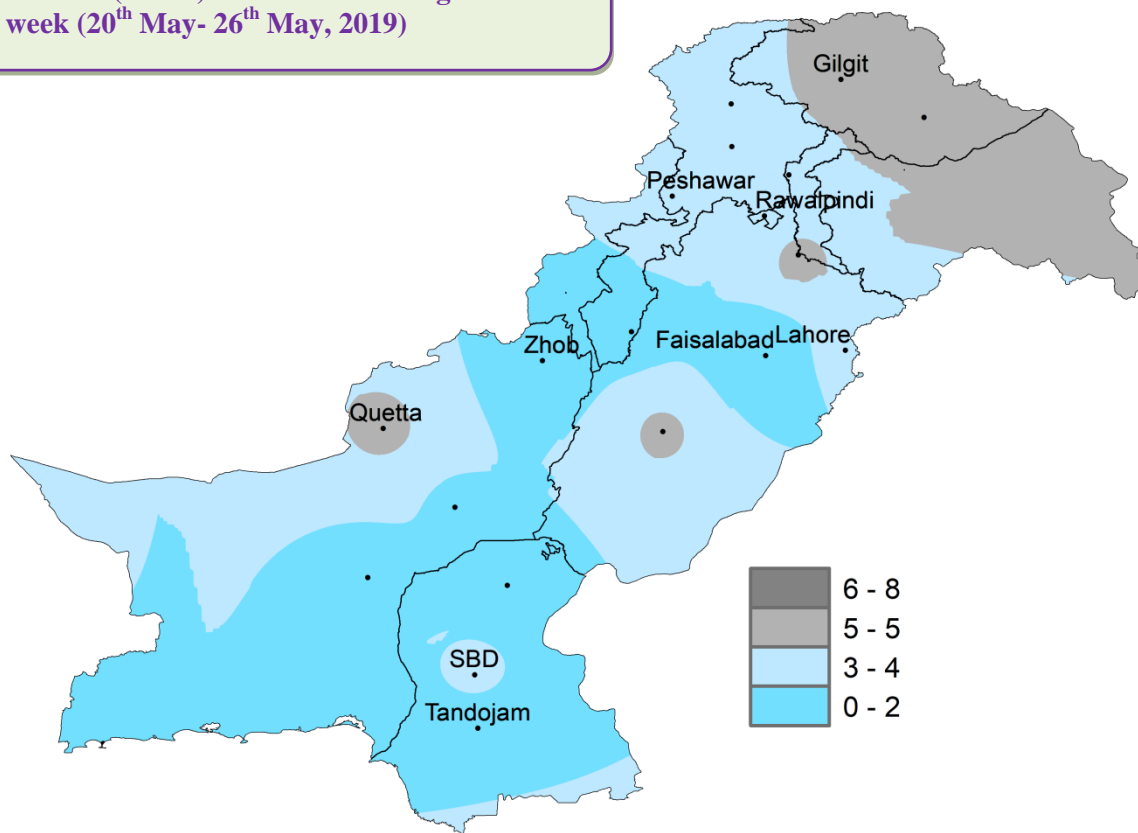
Mean Relative Humidity (%) during the
Previous week (20th May- 26th May, 2019)



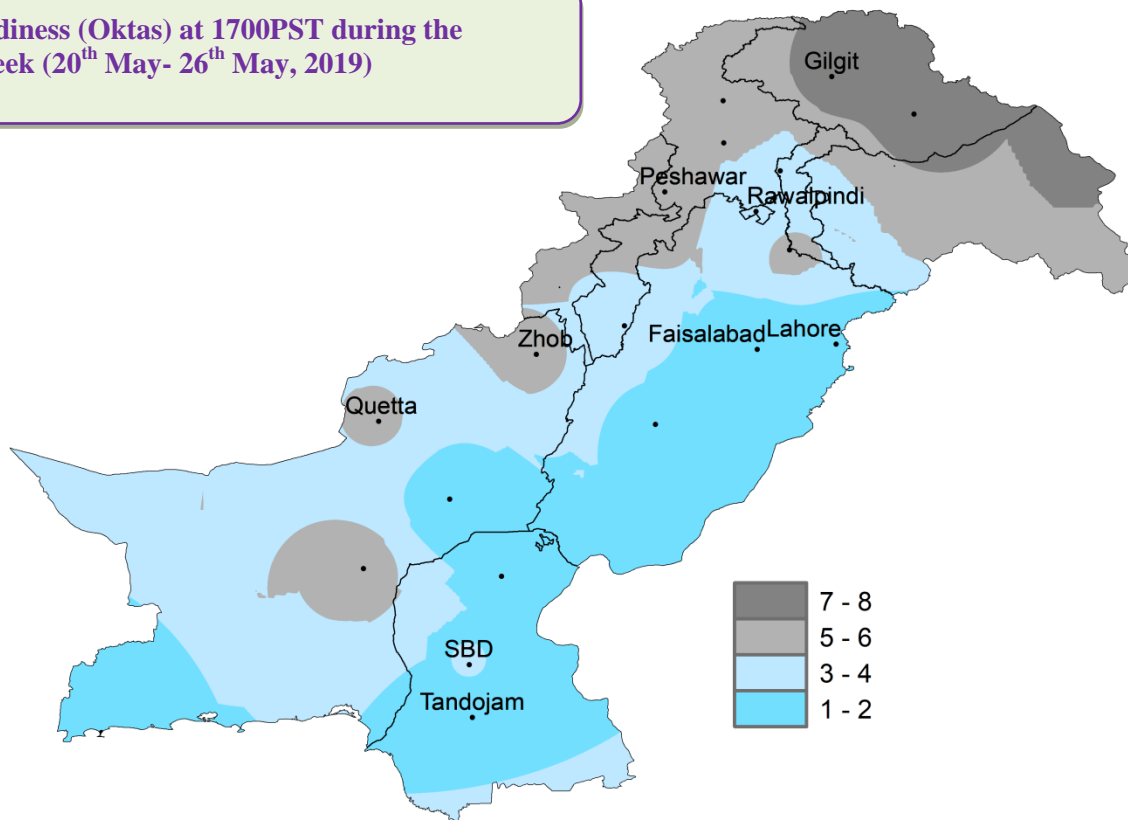
Total Growing Degree Days accumulated during the
Previous week (20th May- 26th May, 2019)



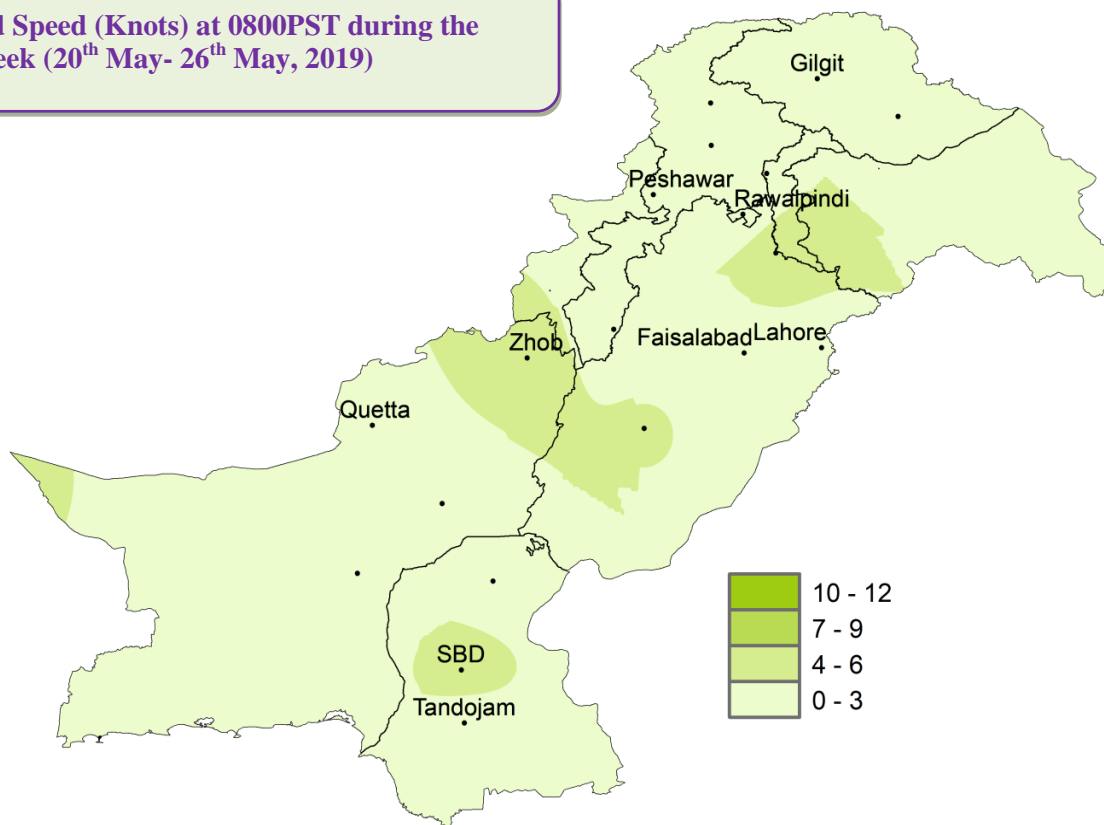
Mean Cloudiness (Oktas) at 0800PST during the
Previous week (20th May- 26th May, 2019)



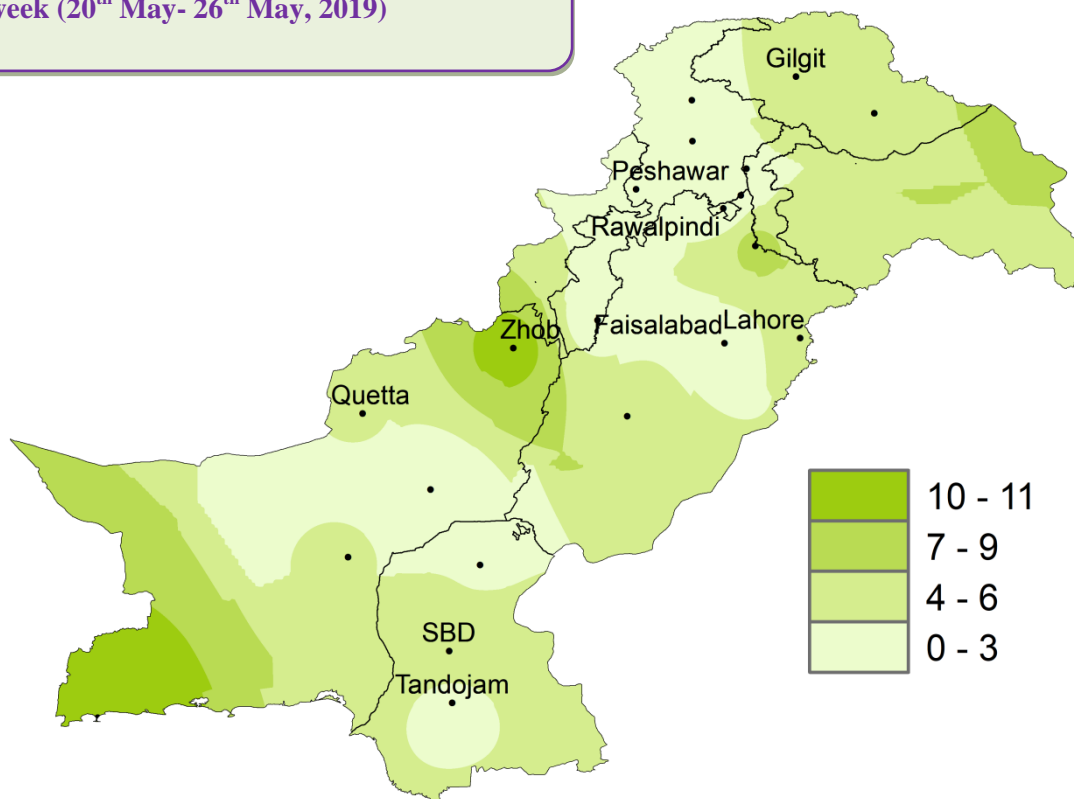
Mean Cloudiness (Oktas) at 1700PST during the
Previous week (20th May- 26th May, 2019)



Mean Wind Speed (Knots) at 0800PST during the Previous week (20th May- 26th May, 2019)



Mean Wind Speed (Knots) at 1700PST during the Previous week (20th May- 26th May, 2019)



Weekly Weather Advisory for Farmers
(27th May to 2nd June, 2019)

Continental air is prevailing over most parts of the country. A westerly wave is expected to affect upper parts of the country from Friday.

MONDAY
27-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in Sindh. However, rain-thunderstorm is expected at one or two places in Kashmir.

TUESDAY
28-05-2019

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

WEDNESDAY
29-05-2019

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

THURSDAY
30-05-2019

Mainly hot and dry weather is expected in most parts of the country, while very hot in plain areas of Punjab, Khyber Pakhtunkhwa and Sindh.

FRIDAY
31-05-2019

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

thunderstorm is expected at isolated places in Gilgit Baltistan and Kashmir.

SATURDAY
01-06-2019

Mainly very hot and dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in Gilgit Baltistan and Kashmir.

SUNDAY
02-06-2019

Mainly very hot and dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in Malakand division, Gilgit Baltistan and Kashmir.

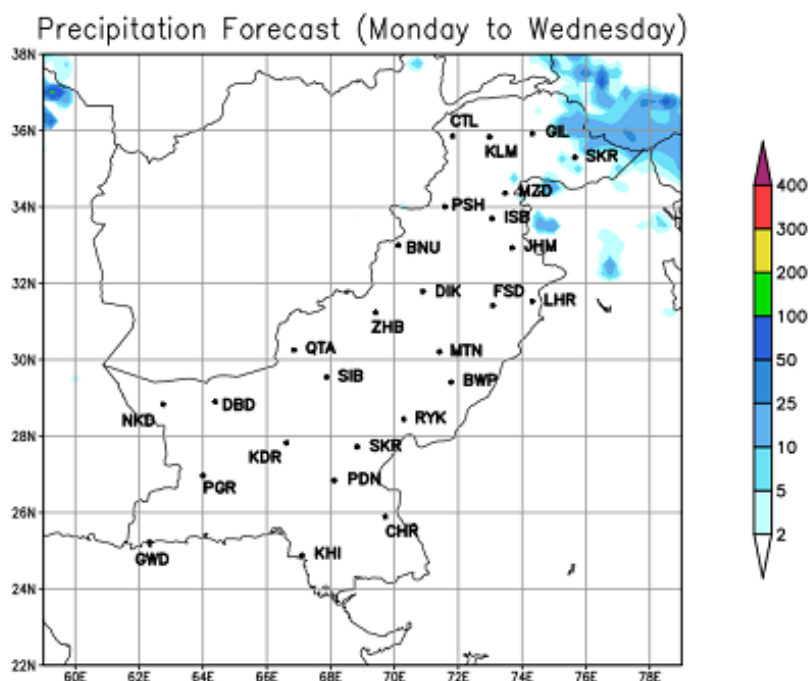
ADVISORY FOR FARMERS

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.

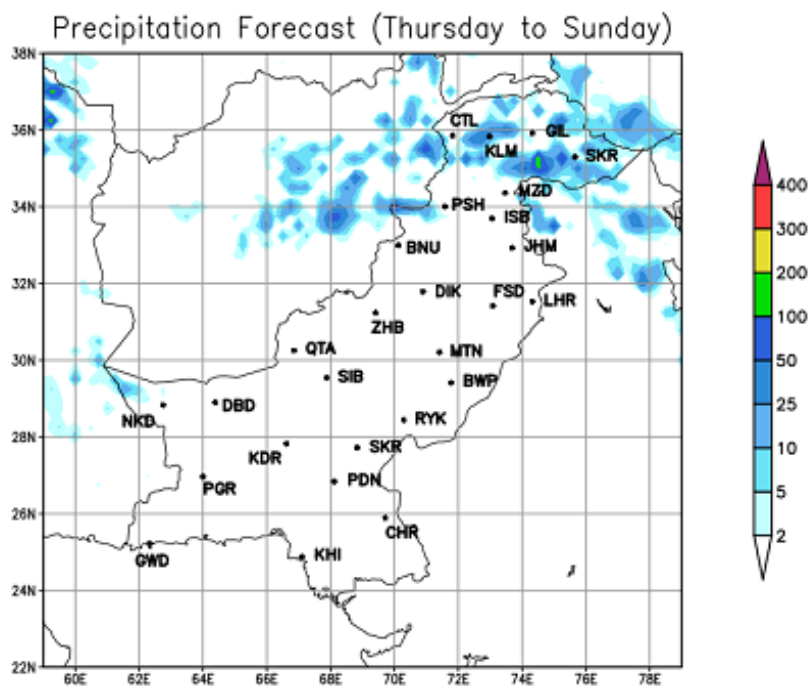
1. Farmers are advised to apply deep ploughing in the fields after harvested the Wheat crops.
2. To obtain the possible yield of wheat crop, weather forecast should be considered before harvesting.

Precipitation Outlook from 27th May to 2nd June, 2019

The outlook from 27th May to 29th May, 2019 shows that dry weather is expected in the country with light rainfall at isolated places in GB and Kashmir.



The outlook from 30th May to 2nd June, 2019 shows that light to moderate rainfall is expected at scattered places in KP, GB and Kashmir. Dry weather may prevail over rest of the country.



National Weather Data of Selected Cities Weekly Data from (20th May to 26th 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	37.9	40.0	176.3	47	2.00	1.4	3.3	0.6	0.9
Faisalabad	37.6	40.5	175.1	44	8.50	0.7	0.9	0.8	1.2
Gawader	35.7	37.5	174.5	65	0.00	1.9	1.6	0.0	11.4
Gilgit	27.7	31.5	104.3	53	11.10	4.9	6.6	0.0	4.9
Kalam	20.6	26.0	57.0	59	49.20	2.3	5.4	0.0	0.0
Khuzdar	32.1	36.0	137.0	25	9.00	1.4	4.3	0.0	3.1
Lahore	36.8	40.2	175.6	43	17.00	2.4	1.9	1.4	3.7
Malam Jabba	18.1	22.5	59.0	61	61.00	2.4	3.9	1.7	2.6
Mangla	36.8	39.5	166.4	42	53.80	4.0	4.0	5.4	6.9
Multan (PBO)	38.0	39.6	186.1	44	1.01	3.8	1.6	3.0	5.4
Murree	21.4	24.8	81.3	60	42.90	2.9	3.4	2.7	2.6
Muzaffarabad	30.4	35.0	125.9	52	11.00	2.3	3.5	1.7	2.7
Nawabshah	43.6	45.5	209.8	51	1.00	2.6	2.4	3.7	5.7
Peshawar	34.3	39.0	127.0	56	7.50	2.8	4.9	0.7	1.1
Quetta	26.2	29.2	108.6	40	18.20	3.9	3.9	1.8	3.1
Rawalpindi	34.6	38.0	147.9	54	48.00	2.1	2.6	0	0.9
Rohri	42.0	44.0	204.0	43	0.00	1.1	2.3	1.7	2.6
Skardu	23.6	27.3	83.6	38	0.03	4.4	6.3	0.0	5.7
Tandojam	40.9	42.0	201.0	62	0.00	0	1.1	1.6	1.8
Usta.M	42.1	44.0	204.0	45	2.00	1.8	1.2	0	0.5
Zhob	31.3	36.5	132.3	53	12.00	1.0	4.0	4.7	9.9

*** 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 سد باب (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)