

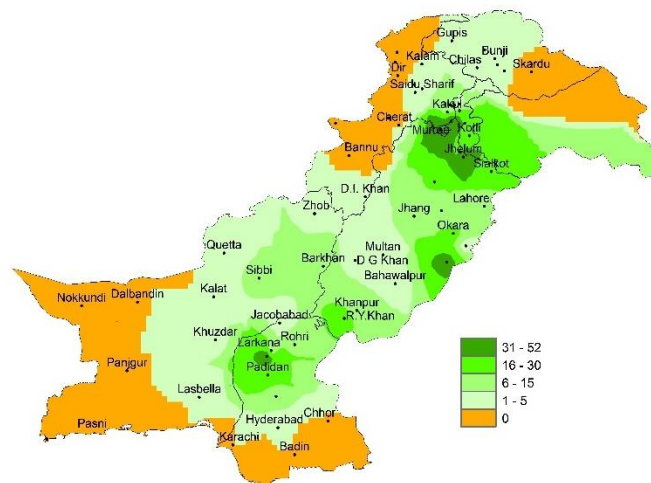
Weekly Weather and Crop Bulletin for Pakistan

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

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Rainfall Distribution (mm) during the Previous Week (31st May - 6th June, 2021)

Contents

Highlights of past weather	1-2
Past weather for Agri Plains	3-4
Crop progress	4
Agro meteorological 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 (31st May – 6th June, 2021)

Below normal day time temperatures were observed almost all over the country during the last week.

Rainfall reported as follows during the last week:

1. Light to moderate rainfall reported from a few stations in Sindh.
2. Light rainfall reported from a few stations in Punjab, Khyber Pakhtunkhwa, Baluchistan and Kashmir.

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

Editor-in-Chief: Dr Muhammad Afzaal (Director)

Editor: Ruqiya Mehmood (Assistant Meteorologist)

Past Weather of Provinces (31st May – 6th May, 2021)**Punjab**

Light rainfall reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 37.3°C & 24.5°C respectively. For the recent week on average 181.5 growing degree days were accumulated. Average relative humidity recorded as 54% and wind speed in the morning/evening recorded as 2.4/3.3 Knots. During the previous week the highest precipitation was observed as 58.1 mm at Islamabad while the highest maximum temperature was recorded as 45.0°C at Noorpur Thal.

Baluchistan

Light rainfall reported from a few stations in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 39.0°C & 25.0°C respectively. For the recent week on average 188.8 growing degree days were accumulated. Average relative humidity recorded as 43% and wind speed in the morning/evening recorded as 1.7/6.4 Knots. During the previous week the highest precipitation was observed as 13.0 mm at Barkhan while the highest maximum temperature was recorded as 49.0°C at Sibbi.

Khyber Pakhtunkhwa

Light rainfall reported from a few stations in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 35.4°C & 20.5°C respectively. For the recent week on average 160.5 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 0.7/2.7 Knots. During the previous week the highest precipitation was observed as 15.0 mm at Balakot while the highest maximum temperature was recorded as 43.0°C at Pattan.

Sindh

Light rainfall reported from a few stations in Sindh during the week. Weekly maximum and minimum temperatures recorded as 41.1°C & 28.30°C

respectively. For the recent week, on average 206.8 growing degree days were accumulated. Average relative humidity recorded as 54% and wind speed in the morning/evening recorded as 4.6/6.5 Knots. During the previous week the highest precipitation was observed as 45.0 mm at Moenjodaro while the highest maximum temperature was recorded as 48.0°C at Padidan.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall reported from a few stations in Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 32.9°C & 16.5°C respectively. For the recent week on average 137.7 growing degree days were accumulated. Average relative humidity recorded as 43% and wind speed in the morning/evening recorded as 1.7/5.0 Knots. During the previous week the highest precipitation was observed as 28.2 mm at Rawalakot while the highest maximum temperature was recorded as 42.5°C at Chillas.

Past Weather for Major Agricultural Plains**(31st May – 6th June, 2021)****Rawalpindi (Potohar region)**

Rainfall reported as 40.2 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.6/2.0 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 36.7°C & for the recent week 176.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.2/1.8 Knots.

Faisalabad (Central Punjab)

Rainfall reported as 10.8 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.4/0.7 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 37.9°C & for the recent week 183.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.3/0.8 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 1.4/0.0 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 39.6°C & for the recent week 196.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.2/6.5 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 1.0/0.0 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 47.7°C & for the recent week 232.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.2/2.8 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/1.0 Oktas while, average relative humidity observed as 28%. Mean day time temperature recorded as 35.5°C & for the recent week 155.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.0/3.9 Knots.

Past Weather for Sub-Regional Agricultural Plains (31st May – 6th June, 2021)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.7/1.9 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 38.5°C & for the recent week 195.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.9/6.0 Knots.

Lahore

Rainfall reported as 6.2 mm from Lahore during the week; cloudiness in the morning/evening recorded as 2.9/2.6 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 36.4°C & for the recent week 182.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.1 Knots.

Zhob

Rainfall reported as 3.0 mm from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/2.0 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 35.9°C & for the recent week 170.0 growing degree days accumulated. cloudiness in the morning/evening recorded as 4.6/5.1 Oktas.

Murree

Rainfall reported as 53.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 3.4/4.1 Oktas while, average relative humidity observed as 64%. Mean day time temperature recorded as 23.3°C & for the recent week 95.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/2.9 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.1/0.0 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 40.1°C & for the recent week 200.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/1.4 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.1/1.0 Oktas while, average relative humidity observed as 48%. Mean day time temperature recorded as 39.1°C & for the recent week 190.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/2.0 Knots.

Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.0/3.7 Oktas while, average relative humidity observed as 25%. Mean day time temperature recorded as 26.4°C & for the recent week 87.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.3 Knots.

Gilgit

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 1.1/3.9 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 35.7°C & for the recent week 145.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.7 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.3/4.4 Oktas while, average relative humidity observed as 25%. Mean day time temperature recorded as 30.2°C & for the recent week 110.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/5.3 Knots.

**Crop Condition for Major Agricultural Plains
(Based on data from Regional Agromet Centers)****Potohar Region (Rawalpindi)**

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

Central Punjab (Faisalabad)

Presently Cotton crop is grown in the fields of RAMC Faisalabad.

Cotton: Very Good, Emergence Stage Completed.

Lower Sindh (Tandojam)

Presently Cotton crop is grown in the fields of RAMC Tandojam.

Cotton: Crop Variety (Sindh-1), Third True Leaf Stage.

Northern Baluchistan (Quetta)

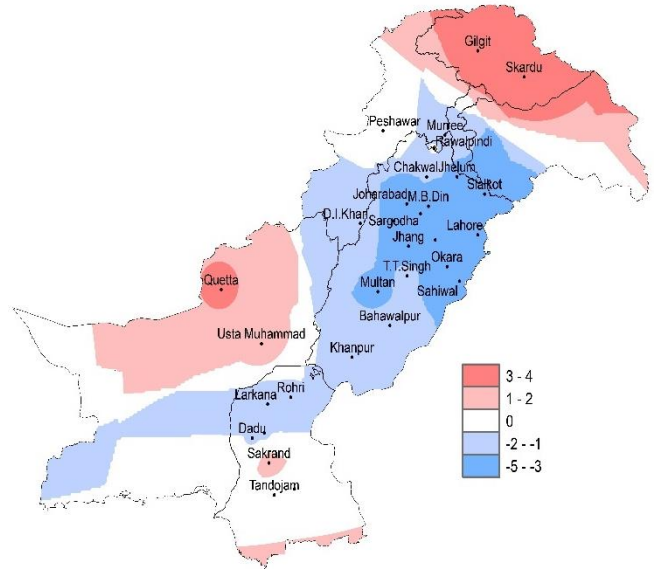
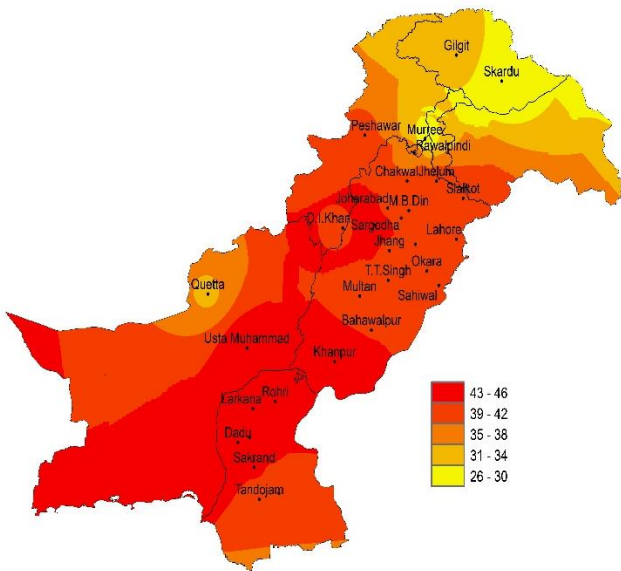
Presently wheat crop is grown in the fields of RAMC Quetta.

Wheat: Good, Crop Variety (Seriab-92), Full Maturity Stage.

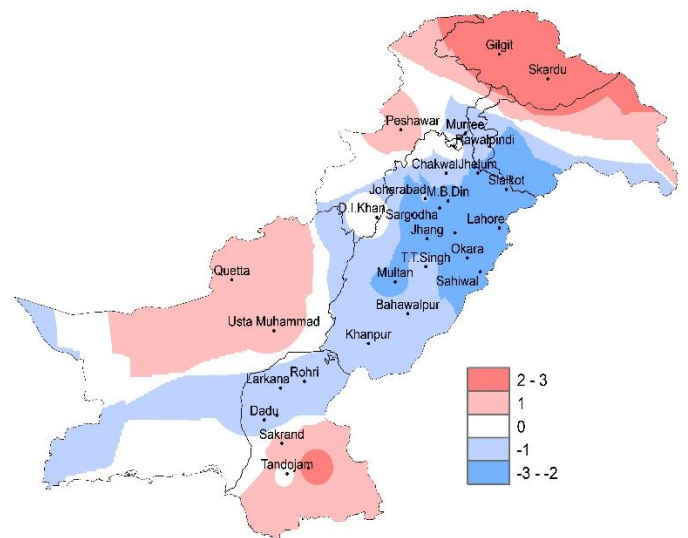
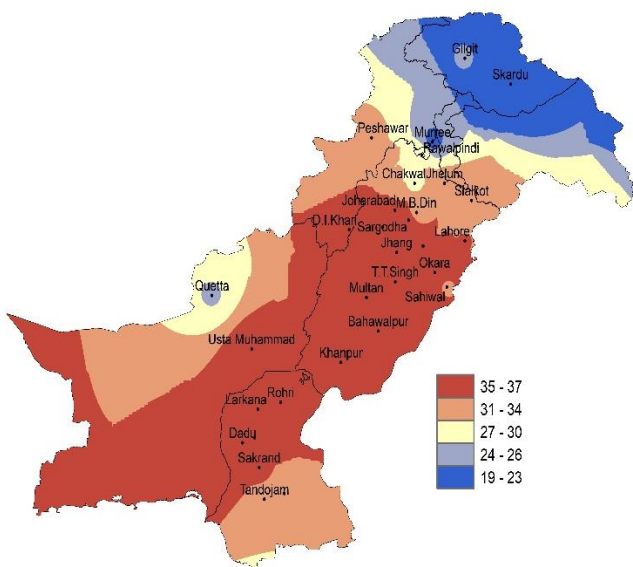
Eastern Baluchistan (Usta Muhammad)

Field is being prepared for next crop at RAMC Usta Muhammad.

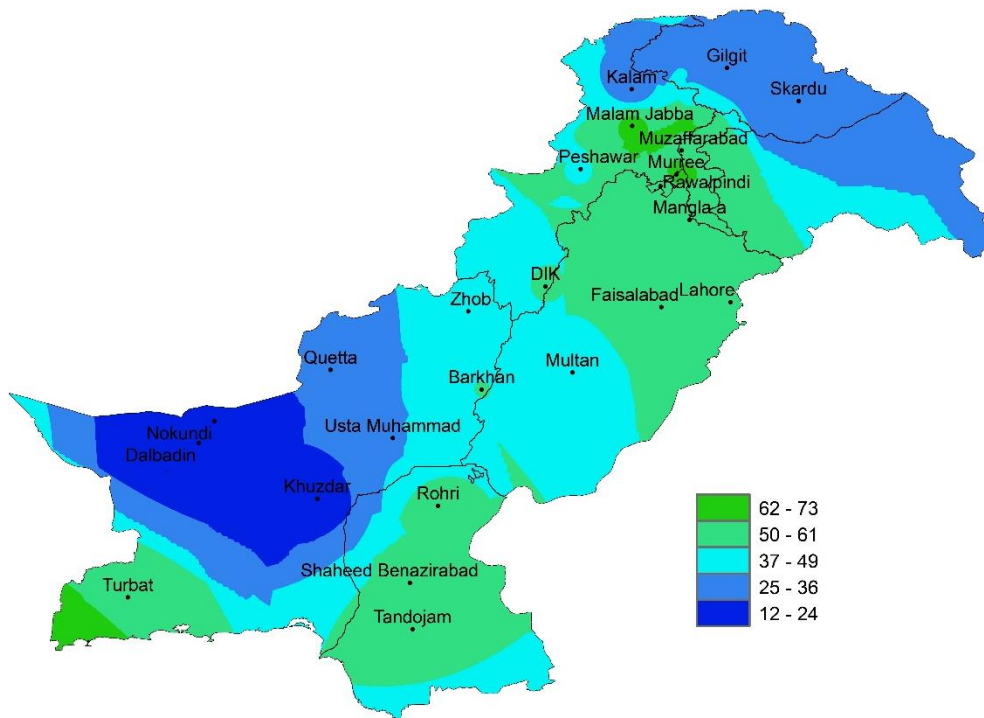
Normal & Departure of Maximum temperature (°C) for the previous week (31st May – 6th June, 2021)



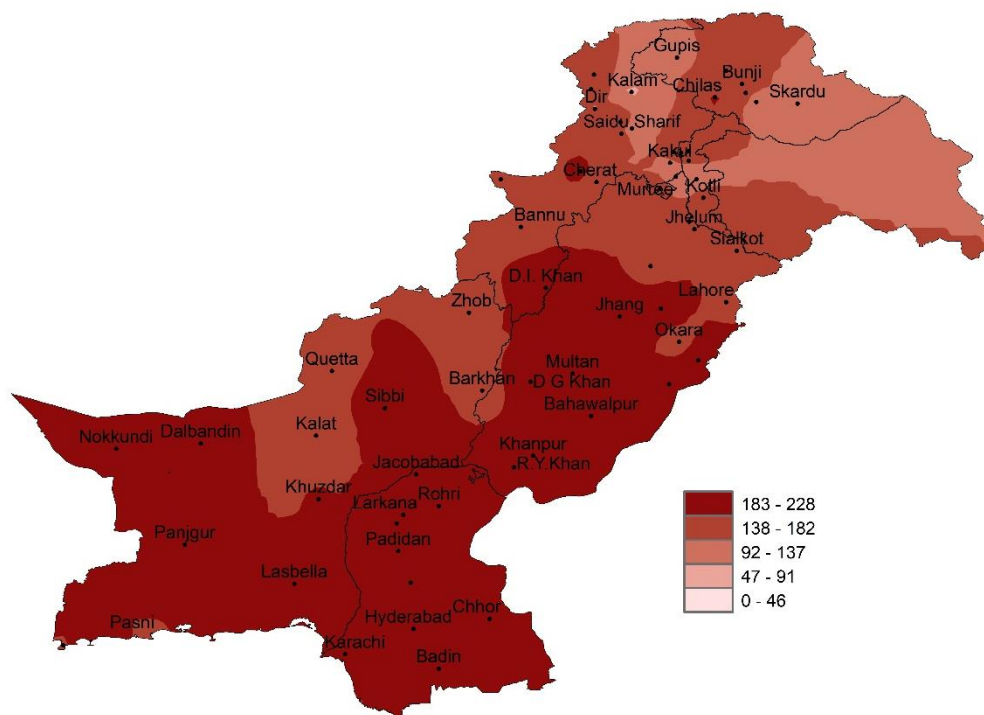
Normal & Departure of Mean temperature (°C) for the previous week (31st May – 6th June, 2021)



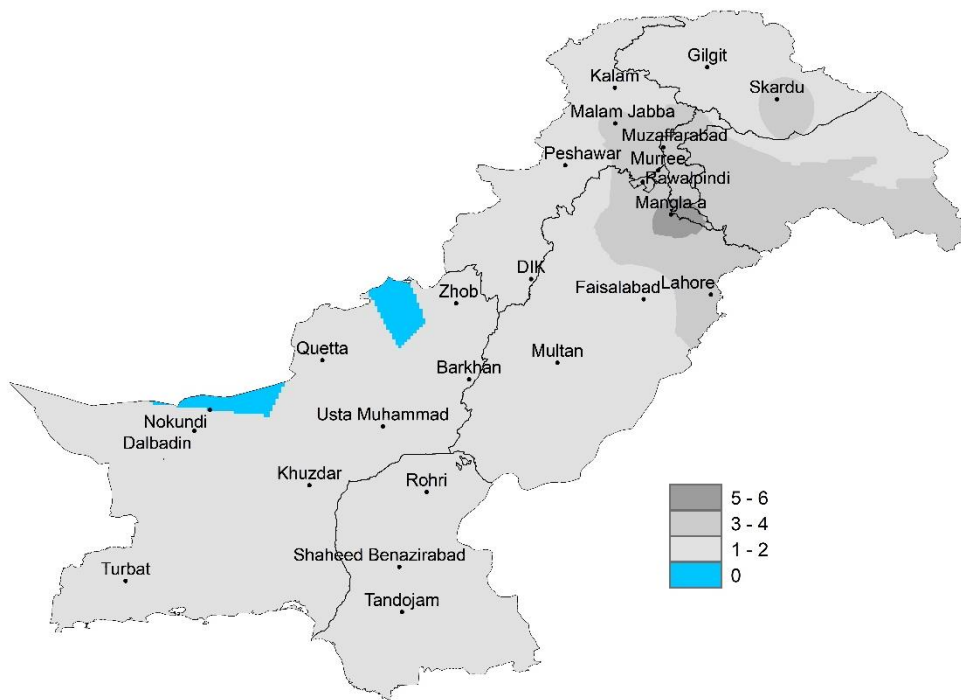
Mean Relative Humidity (%) during the previous week (31st May – 6th June, 2021)



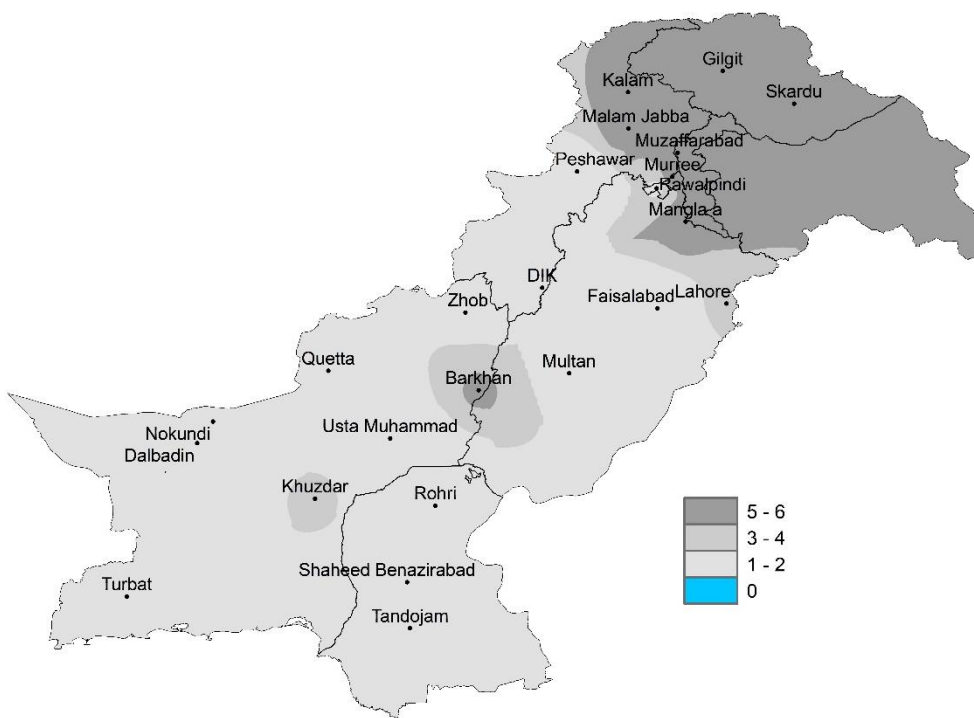
Total Growing Degree Days accumulated during the previous week 31st May – 6th June, 2021)



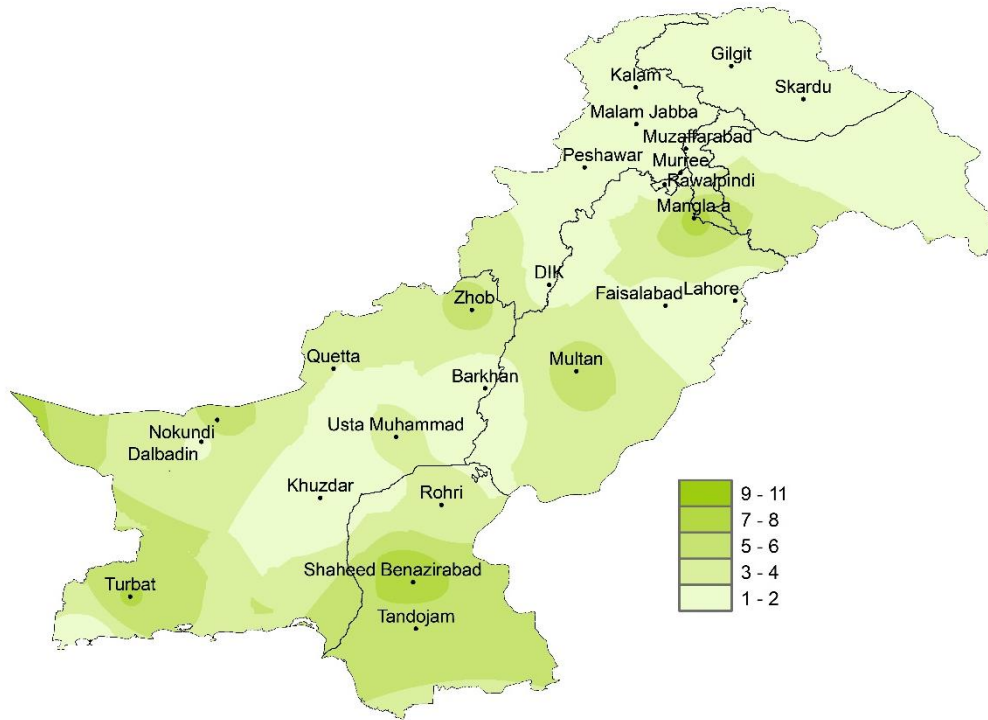
Mean Cloudiness (Oktas) at 0800PST during the previous week (31st May – 6th June, 2021)



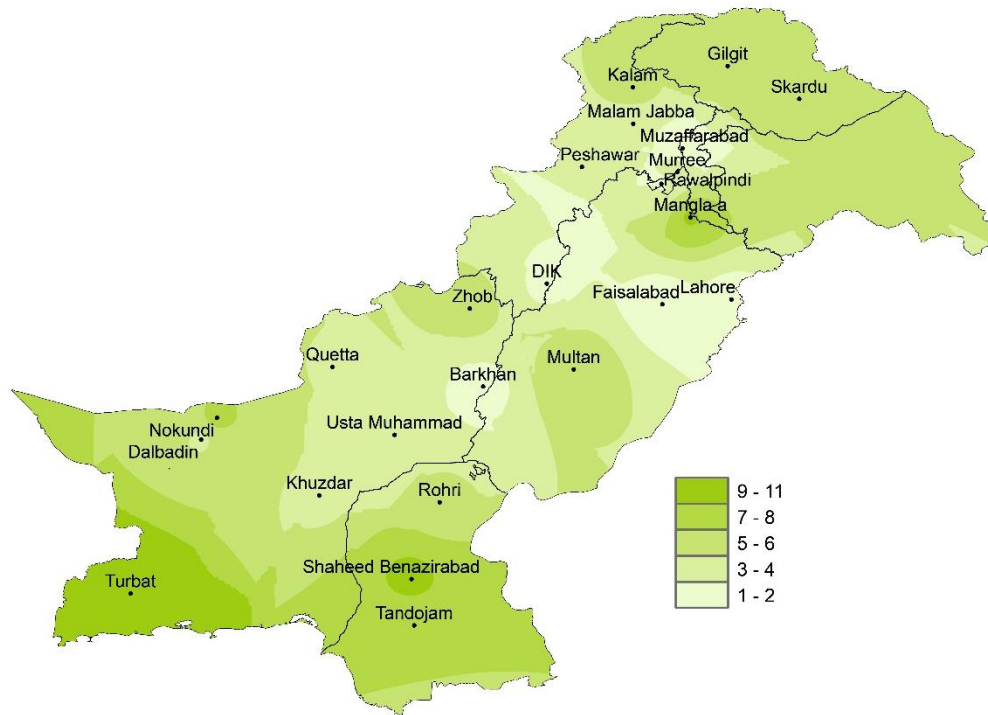
Mean Cloudiness (Oktas) at 1700PST during the previous week (31st May – 6th June, 2021)



Mean Wind Speed (Knots) at 0800PST during the previous week (31st May – 6th June, 2021)



Mean Wind Speed (Knots) at 1700PST during the previous week (31st May – 6th June, 2021)



Weekly Weather Advisory for Farmers**(7th – 13th June, 2021)**

Seasonal low lies over north west of Balochistan and its adjoining areas. Continental air is likely to prevail over most parts of the country during next 04 to 05 days. Moist currents will likely to penetrate in Kashmir and northeastern parts of the Punjab from Thursday night.

MONDAY**07-06-2021**

Hot and dry weather is expected in most parts of the country. While, very hot in plain areas.

TUESDAY**08-06-2021**

Hot and dry weather is expected in most parts of the country. While, very hot in plain areas.

WEDNESDAY**09-06-2021**

Mainly very hot and dry weather is expected in most parts of the country. Heat wave conditions is likely to prevail in plain areas of the country. However, isolated rain-wind-thunderstorm expected in Kashmir. Partly cloudy weather/drizzle is also expected in coastal areas of Sindh.

THURSDAY**10-06-2021**

Mainly very hot and dry weather is expected in plain areas of the country. However, isolated rain-wind-thunderstorm is expected in Kashmir and Gilgit-Baltistan.

FRIDAY**11-06-2021.**

Mainly very hot and dry weather is expected in most parts of the country. However, rain-wind-thunderstorm is expected in Kashmir, Gilgit-Baltistan, Islamabad, upper Khyber-Pakhtunkhwa, and northeast Punjab.

SATURDAY**12-06-2021**

Mainly very hot and dry weather is expected in most parts of the country. However, rain-wind-thunderstorm is expected in Kashmir, Gilgit-Baltistan, Islamabad, upper Khyber-Pakhtunkhwa and northeast Punjab.

SUNDAY**13-06-2021**

Rain-wind-thunderstorm is expected in Kashmir, Gilgit-Baltistan, Islamabad, Punjab, upper Khyber-Pakhtunkhwa and northeast Baluchistan. While hot and dry weather is elsewhere in the country.

ADVISORY FOR FARMERS

During the last week, light to moderate rainfall reported from a few stations in Sindh. Light rainfall reported from a few stations in Punjab, Khyber Pakhtunkhwa, Baluchistan and Kashmir. Keeping in view the expected weather conditions farmers are advised the following advisories.

- ❖ Farmers of irrigated areas are advised to irrigate the crop according to its need.
- ❖ Pesticides may be applied to avoid any pest attack as per advised by the agriculture department.

National Weather Data of Selected Cities from (31st May – 6th June, 2021)

Stations	Maximum /Day 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	Maximum							
Barkhan	36.2	40.0	170.3	49	13.0	0.0	3.7	0.3	1.1
Dalbandin	44.5	45.5	216.0	17	0.0	0.0	0.0	1.4	3.7
D.I. Khan	40.1	42.5	200.5	49	0.0	0.1	0.0	1.4	1.4
Faisalabad	37.9	42.0	183.6	56	10.8	1.4	0.7	1.3	0.8
Gawadar	35.7	37.5	186.5	73	0.0	1.0	0.0	0.6	10.3
Gilgit	35.7	38.5	145.8	34	0.0	1.1	3.9	0.0	5.7
Kalam	26.4	28.0	87.0	25	0.0	0.0	3.7	0.0	5.3
Khuzdar	38.5	40.5	184.3	18	0.8	0.1	2.7	0.0	3.7
Lahore	36.4	41.0	182.0	52	6.2	2.9	2.6	0.9	1.1
Malam Jabba	21.6	24.1	86.7	66	4.0	2.9	4.4	0.6	2.6
Mangla	35.7	38.3	175.0	52	25.6	4.4	4.7	6.7	8.3
Multan (PBO)	38.5	41.0	195.5	45	0.0	0.7	1.9	4.9	6.0
Murree	23.3	26.0	95.7	64	53.0	3.4	4.1	1.4	2.9
Muzaffarabad	36.7	39.0	159.0	60	5.0	3.0	4.4	0.0	0.9
Nokkundi	42.7	44.0	208.3	50	6.0	0.4	1.0	7.4	8.6
Nawabshah	45.7	47.0	228.0	12	0.0	0.0	0.0	5.4	6.6
Peshawar	39.1	42.4	190.4	48	0.0	0.1	1.0	0.9	2.0
Quetta	35.5	36.2	155.9	28	0.0	0.0	1.0	2.0	3.9
Rawalpindi	36.7	39.0	176.0	52	40.2	2.6	2.0	1.2	1.8
Rohri	42.5	44.5	214.0	51	12.0	0.0	0.0	2.3	4.6
Skardu	30.2	32.6	110.3	25	0.0	2.3	4.4	0.0	5.3
Tandojam	39.6	42.5	196.8	59	0.0	1.4	0.0	4.2	6.5
Turbat	44.1	49.0	222.0	50	0.0	0.4	0.7	6.1	10.7
Usta. M	47.7	48.5	232.8	36	0.0	1.0	0.0	2.2	2.8
Zhob	35.9	37.5	170.0	37	3.0	0.0	2.0	4.6	5.1

*** 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)