

Weekly Weather and Crop Bulletin for Pakistan

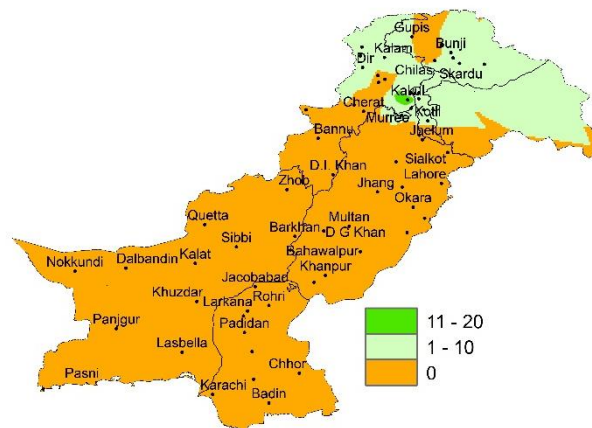
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Rainfall Distribution (mm) during the Previous Week (21st – 27th March, 2022)



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Highlights of Past Weather (21st – 27th March, 2022)

Above normal night time temperatures were observed all over the country during the last week.

Rainfall reported as follows during the last week:

1. Light to moderate rainfall reported from upper Khyber Pakhtunkhwa.
2. Light rainfall reported from a few stations in Kashmir and Gilgit-Baltistan.
3. Dry weather prevailed over Sindh, Baluchistan, Lower Khyber Pakhtunkhwa and Punjab.

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Past Weather of Provinces (21st – 27th March, 2022)**Punjab**

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 34.9°C & 18.2°C respectively. For the recent week on average 151.0 growing degree days were accumulated. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 1.2/3.5 Knots. During the previous week the lowest minimum temperature was recorded as 11.0°C at Murree.

Baluchistan

Dry weather reported from Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 32.7°C & 15.8°C respectively. For the recent week on average 134.8 growing degree days were accumulated. Average relative humidity recorded as 36% and wind speed in the morning/evening recorded as 1.1/5.4 Knots. During the previous week the lowest minimum temperature was recorded as 4.0°C at Kalat.

Khyber Pakhtunkhwa

Light to moderate rainfall reported from upper Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 28.2°C & 12.1°C respectively. For the recent week on average 105.9 growing degree days were accumulated. Average relative humidity recorded as 56% and wind speed in the morning/evening recorded as 1.3/2.6 Knots. During the previous week the highest precipitation was observed as 20.0 mm at Kakul & Pattan while the lowest minimum temperature was recorded as 1.0°C at Kalam.

Sindh

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 39.1°C & 19.8°C respectively. For the recent week, on average 170.9 growing degree days were accumulated. Average relative humidity recorded as 47% and wind speed in the

morning/evening recorded as 1.7/3.3 Knots. During the lowest minimum temperature was recorded as 15.0°C at Padidan.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall reported from a few stations in Gilgit-Baltistan and Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 25.0°C & 9.1°C respectively. For the recent week on average 84.4 growing degree days were accumulated. Average relative humidity recorded as 44% and wind speed in the morning/evening recorded as 0.8/2.4 Knots. During the previous week the highest precipitation was observed as 10.0 mm at Muzaffarabad while the lowest minimum temperature was recorded as 2.4°C at Skardu.

Past Weather for Major Agricultural Plains**(21st – 27th March, 2022)****Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.0/0.9 Oktas while, average relative humidity observed as 50%. Mean night time temperature recorded as 14.0°C & for the recent week 131.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.2 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.6/0.4 Oktas while, average relative humidity observed as 47%. Mean night time temperature recorded as 19.3°C & for the recent week 156.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.2 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 59%. Mean night time temperature recorded as 16.0°C & for the recent week 153.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.2/1.4 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 48%. Mean night time temperature recorded as 19.1°C & for the recent week 167.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/1.2 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 19%. Mean night time temperature recorded as 8.5°C & for the recent week 82.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.9/2.8 Knots.

Past Weather for Sub-Regional Agricultural**Plains (21st – 27th March, 2022)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.3/0.0 Oktas while, average relative humidity observed as 41%. Mean night time temperature recorded as 18.9°C & for the recent week 158.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/5.7 Knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.0/1.3 Oktas while, average relative humidity observed as 44%. Mean night time temperature recorded as 20.9°C & for the recent week 159.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.0/3.5 Knots.

Zhob

Dry weather reported from Zhob during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 25%. Mean night time temperature recorded as 15.1°C & for the recent week 126.8 growing degree days accumulated. cloudiness in the morning/evening recorded as 3.0/5.0 Oktas.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 33%. Mean night time temperature recorded as 11.9°C & for the recent week 86.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.1 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 53%. Mean night time temperature recorded as 19.6°C & for the recent week 161.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.1 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.0/2.3 Oktas while, average relative humidity observed as 56%. Mean night time temperature recorded as 16.1°C & for the recent week 140.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.0 Knots.

Kalam

Rainfall reported as 5.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 1.0/4.9 Oktas while, average relative humidity observed as 36%. Mean night time temperature recorded as 2.0°C & for the recent week 44.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.1 Knots.

Gilgit

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 2.7/4.3 Oktas while, average relative humidity observed as 38%. Mean night time temperature recorded as 7.1°C & for the recent week 79.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/5.7 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 1.6/1.3 Oktas while, average relative humidity observed as 36%. Mean night time temperature recorded as 3.6°C & for the recent week 45.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.1 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 wheat crop is standing in the fields of RAMC Faisalabad.

Wheat: Very Good, Milk Maturity Stage Completed.

Lower Sindh (Tandojam)

Wheat crop harvested on 20-03-02022 at RAMC Tandojam.

Wheat (TD-I): Good, Harvested.

Northern Baluchistan (Quetta)

Presently Wheat crop is standing in the fields of RAMC Quetta.

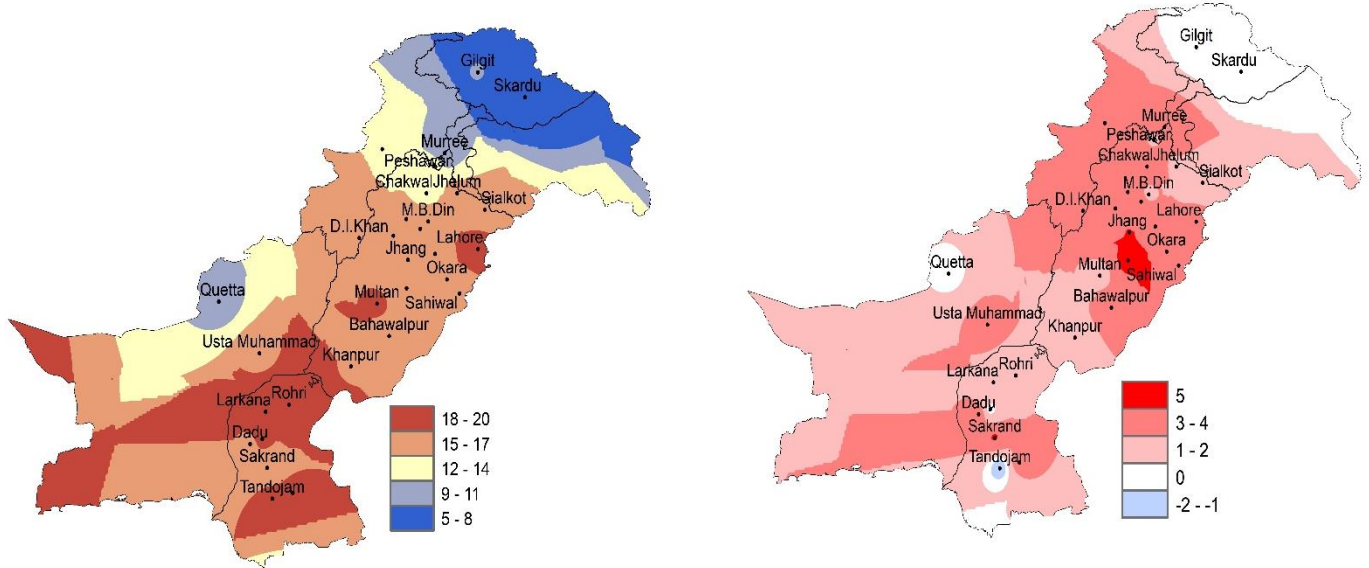
Wheat: Good, Shooting Stage.

Eastern Baluchistan (Usta Muhammad)

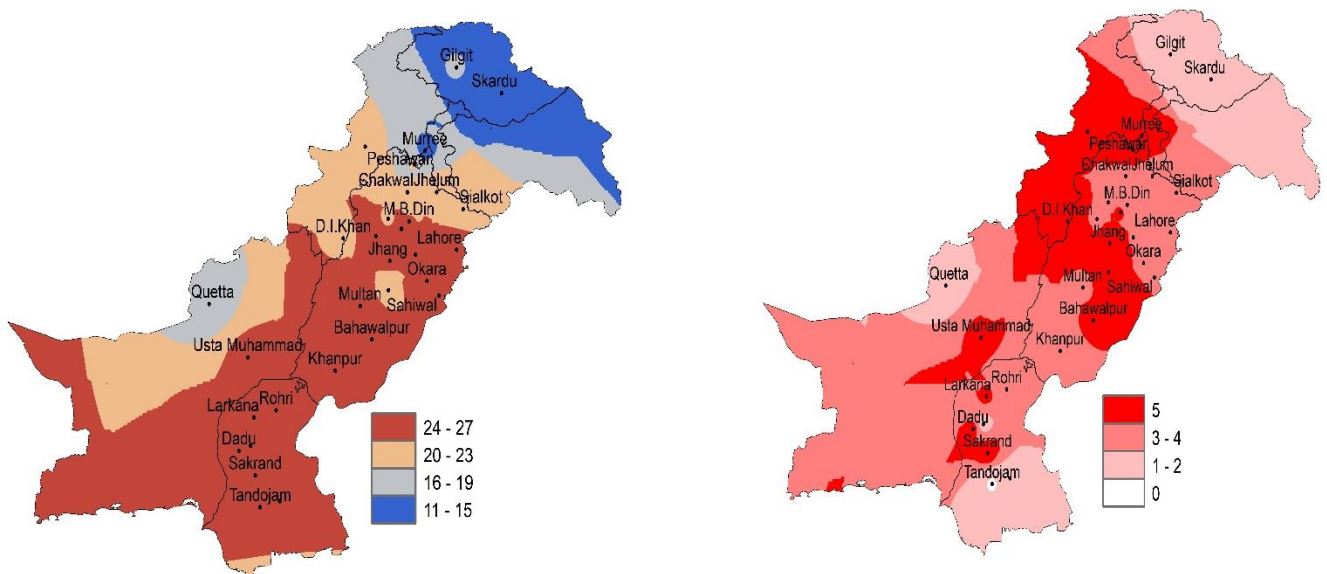
Presently wheat crop is standing in the fields of RAMC Usta Muhammad.

Wheat: Good, Milk Maturity Stage.

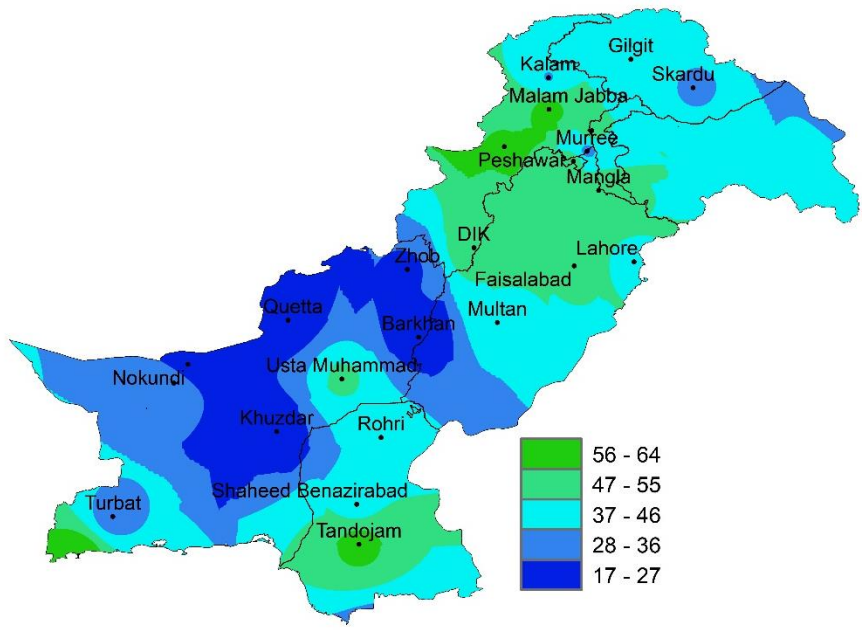
Normal & Departure of Minimum temperature (°C) for the previous week (21st – 27th March, 2022)



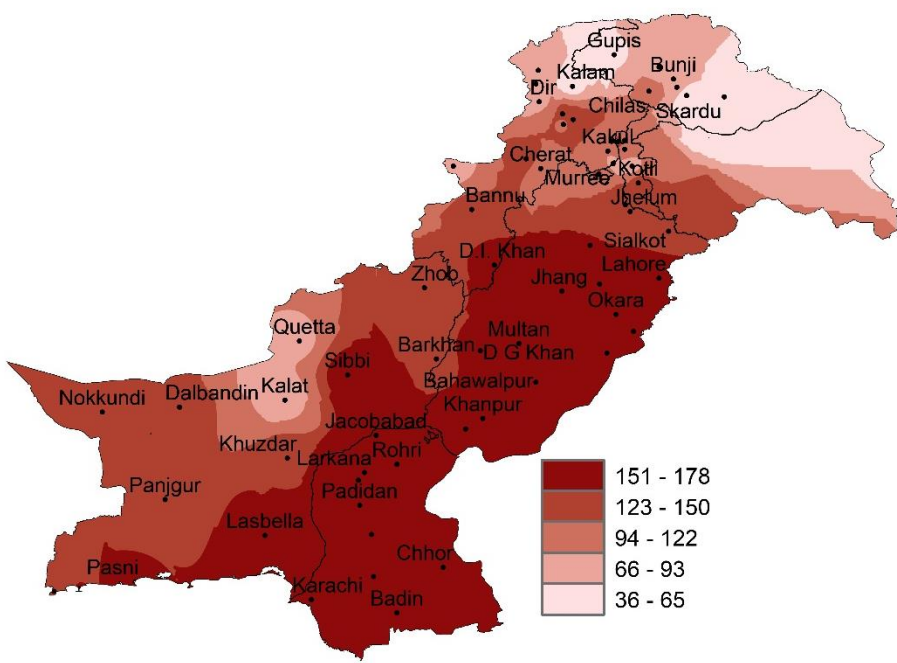
Normal & Departure of Mean temperature (°C) for the previous week (21st – 27th March, 2022)



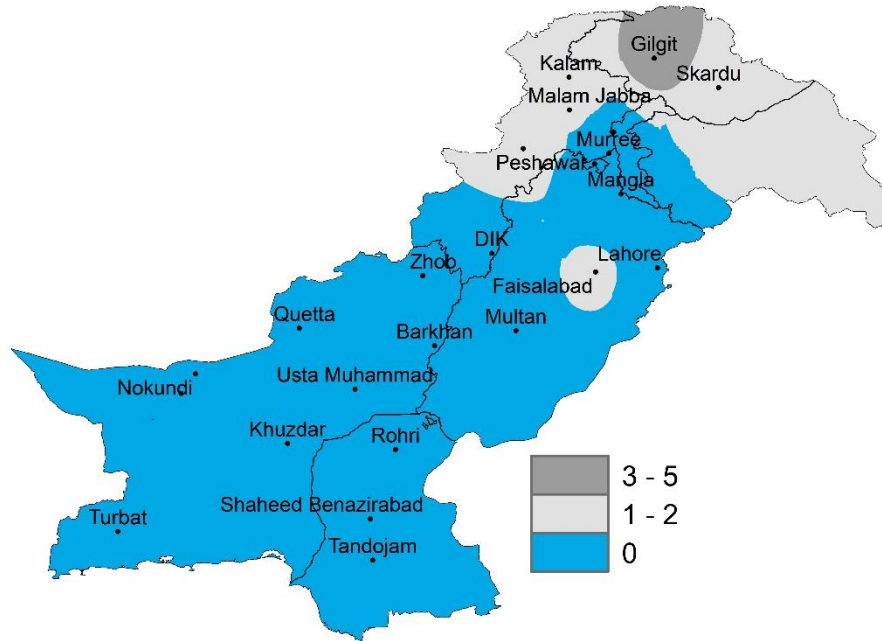
Mean Relative Humidity (%) during the previous week (21st – 27th March, 2022)



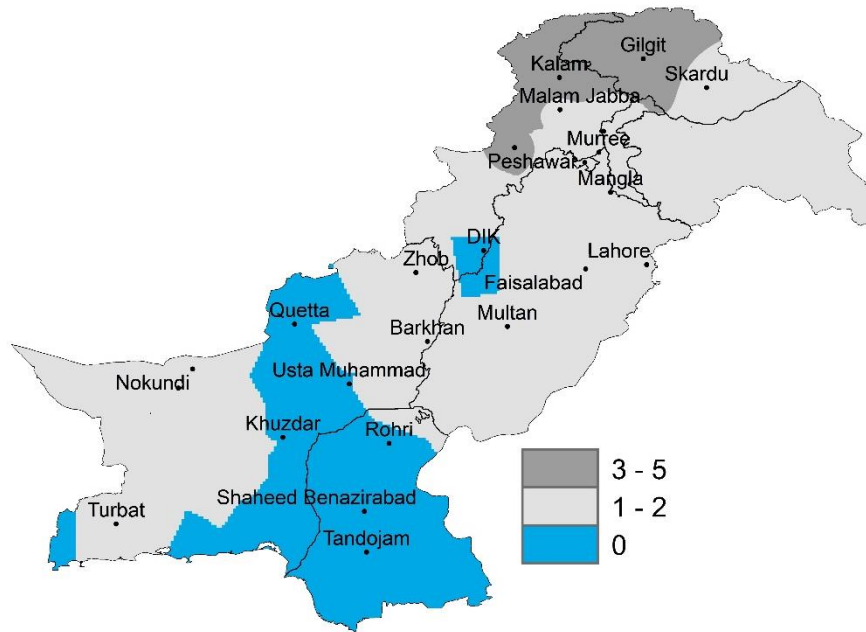
Total Growing Degree Days accumulated during the previous week (21st – 27th March, 2022)



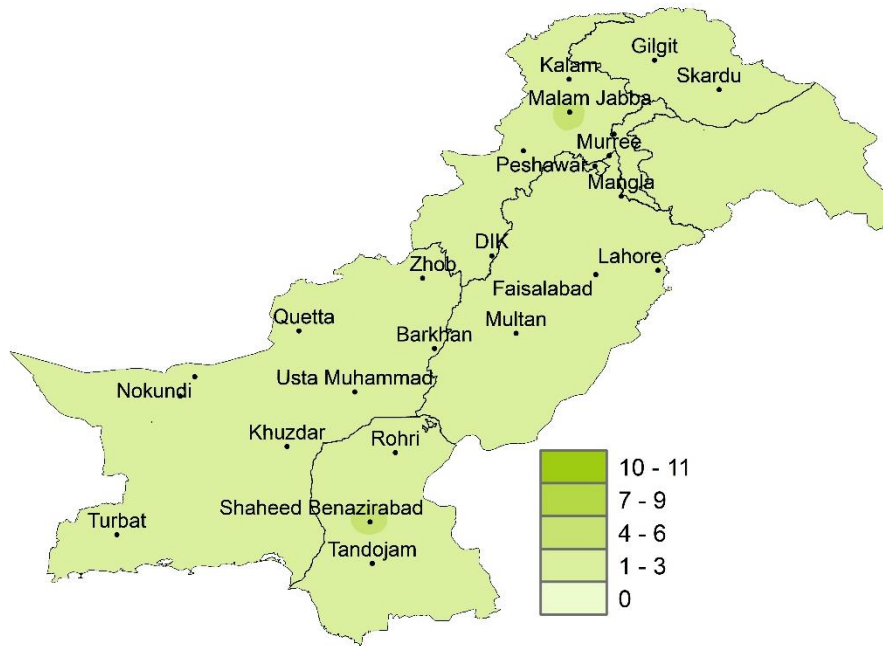
Mean Cloudiness (Oktas) at 0800PST during the previous week (21st – 27th March, 2022)



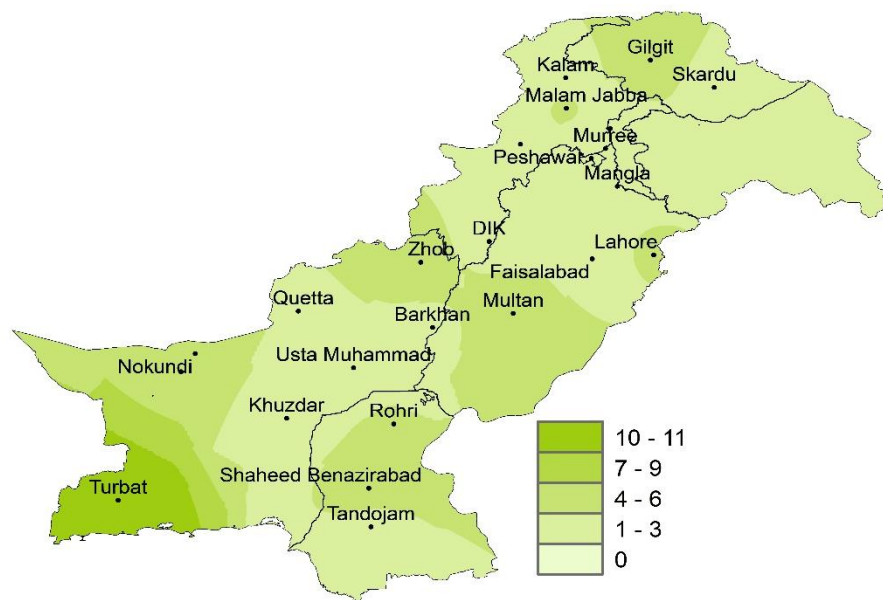
Mean Cloudiness (Oktas) at 1700PST during the previous week (21st – 27th March, 2022)



Mean Wind Speed (Knots) at 0800PST during the previous week (21st – 27th March, 2022)



Mean Wind Speed (Knots) at 1700PST during the previous week (21st – 27th March, 2022)



Weekly Weather Advisory for Farmers**(28th March – 3rd April, 2022)**

Continental air is prevailing over most parts of the country. A shallow westerly wave is present over northern parts of the country.

MONDAY**28-03-2022**

Mainly hot and dry weather is expected in most parts of the country. However, partly cloudy weather with rain-wind/thunderstorm is likely at isolated places in upper Khyber Pakhtunkhwa and Gilgit Baltistan during evening/night. Hot weather with dust raising/gusty winds are likely in Sindh, Balochistan and south Punjab during the period.

TUESDAY**29-03-2022**

Mainly hot and dry weather is expected in most parts of the country. However, partly cloudy weather with rain-wind/thunderstorm is likely at isolated places in upper Khyber Pakhtunkhwa and Gilgit Baltistan during evening/night. Hot weather with dust raising/gusty winds are likely in Sindh, Balochistan and south Punjab during the period.

WEDNESDAY**30-03-2022**

Mainly dry weather is expected in most parts while, hot in plain areas of the country. However, isolated rain-wind-thunderstorm is likely in Gilgit Baltistan.

THURSDAY**31-03-2022**

Mainly dry weather is expected in most parts while, hot in plain areas of the country.

FRIDAY**01-04-2022**

Mainly dry weather is expected in most parts while, hot in plain areas of the country.

SATURDAY**02-04-2022**

Mainly dry weather is expected in most parts while, hot in plain areas of the country. However, isolated rain-wind-thunderstorm is likely in upper Khyber Pakhtunkhwa and Gilgit Baltistan.

SUNDAY**03-04-2022**

Mainly dry weather is expected in most parts while, hot in plain areas of the country. However, isolated rain-wind-thunderstorm is likely in upper Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir.

ADVISORY FOR FARMERS

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

- ❖ Farmers of central parts and upper half may be ready to harvest the Wheat crop in the coming weeks.
- ❖ Farmers 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 (21st – 27th March, 2022)

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	Minimum							
Barkhan	17.3	16.0	137.9	20	0.0	0.0	0.3	1.1	2.0
Dalbandin	14.0	11.0	131.8	35	0.0	0.0	0.7	0.6	5.7
D.I. Khan	19.6	18.5	161.3	53	0.0	0.0	0.0	1.1	1.1
Faisalabad	19.3	17.0	156.9	47	0.0	0.6	0.4	0.6	1.2
Gawadar	18.7	18.0	150.3	64	0.0	0.0	0.0	0.0	11.0
Gilgit	7.1	5.0	79.8	38	0.0	2.7	4.3	0.3	5.7
Kalam	2.0	1.0	44.5	36	5.0	1.0	4.9	0.0	1.1
Khuzdar	19.2	18.5	142.5	19	0.0	0.0	0.0	0.3	0.3
Lahore	20.9	19.7	159.6	44	0.0	0.0	1.3	2.0	3.5
Malam Jabba	7.7	6.0	52.3	59	0.0	0.7	1.3	4.0	3.4
Mangla	15.6	14.2	138.7	53	0.0	0.0	1.0	2.3	2.3
Multan (PBO)	18.9	17.8	158.5	41	0.0	0.3	0.0	0.6	5.7
Murree	11.9	11.0	86.4	33	0.0	0.0	0.3	1.1	1.1
Muzaffarabad	13.7	13.3	128.4	49	10.0	0.0	0.4	0.0	0.6
Nokkundi	17.9	15.5	170.5	41	0.0	0.0	0.0	3.4	5.3
Nawabshah	16.7	14.0	146.0	17	0.0	0.0	0.0	2.0	3.7
Peshawar	16.1	14.6	140.5	56	0.0	1.0	2.3	0.0	2.0
Quetta	8.5	6.5	82.9	19	0.0	0.0	0.0	1.9	2.8
Rawalpindi	14.0	12.5	131.8	50	0.0	0.0	0.9	0.0	1.2
Rohri	20.8	19.4	175.3	40	0.0	0.0	0.0	0.6	3.1
Skardu	3.6	2.4	45.0	36	0.0	1.6	1.3	0.6	1.1
Tandojam	16.0	14.5	153.0	59	0.0	0.0	0.0	1.2	1.4
Turbat	20.1	18.5	170.3	31	0.0	0.0	0.0	0.4	11.3
Usta. M	19.1	17.5	167.8	48	0.0	0.0	0.0	0.3	1.2
Zhob	15.1	14.0	126.8	25	0.0	0.0	0.0	3.0	5.0

*** 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 2014-2012)