

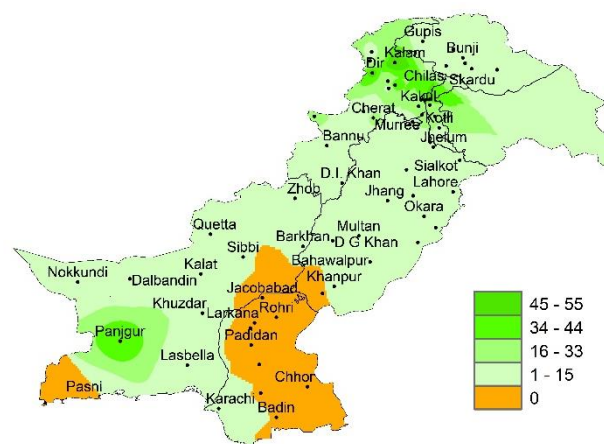
Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous
Week (07th November – 13th November, 2022)**



Highlights of Past Weather (07th November – 13th November, 2022)

Slightly above normal temperature was recorded in Punjab, Sindh, Baluchistan whereas below normal temperature recorded in KPK, GB and Kashmir.

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

1. Light rainfall reported from the Punjab.
2. Light rainfall reported from most parts of Khyber Pakhtunkhwa with moderate rainfall in upper KPK.
3. Dry weather reported from Sindh except light rainfall in southern parts of province.
4. Light rainfall reported from Baluchistan.
5. Light rainfall reported from GB and Kashmir.

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Past Weather of Provinces (07th November – 13th November, 2022)

Punjab

Light rainfall reported from the Punjab. Weekly maximum and minimum temperatures recorded as 26.4°C & 14.0°C respectively. For the recent week on average 106.2 growing degree days were accumulated. Average relative humidity recorded as 64% and wind speed in the morning/evening recorded as 1.4/1.0 Knots. During the previous week the while the lowest minimum temperature was recorded as 5.0°C at Murree. Highest rainfall reported as 30.0 mm at Bhakkar.

Baluchistan

Light rainfall reported from Baluchistan. Weekly maximum and minimum temperatures recorded as 27.0°C & 13.7°C respectively. For the recent week on average 107.4 growing degree days were accumulated. Average relative humidity recorded as 53% and wind speed in the morning/evening recorded as 1.5/4.7 Knots. During the previous week the lowest minimum temperature was recorded as 1.0°C at Kalat and Zhob. Highest rainfall reported as 44 mm at Panjgur.

Khyber Pakhtunkhwa

Light rainfall reported from most parts of Khyber Pakhtunkhwa with moderate rainfall in upper KPK. Weekly maximum and minimum temperatures recorded as 19.2°C & 07.8°C respectively. For the recent week on average 59.3 growing degree days were accumulated. Average relative humidity recorded as 77% and wind speed in the morning/evening recorded as 1.2/1.0 Knots. During the previous week the lowest minimum temperature was recorded as -5.0°C at Kalam. Highest rainfall reported as 56.0 mm at Pattan.

Sindh

Dry weather reported from Sindh except light rainfall in southern parts of province. Weekly maximum and minimum temperatures recorded as

31.2°C & 18.6°C respectively. For the recent week, on average 139.5 growing degree days were accumulated. Average relative humidity recorded as 65% and wind speed in the morning/evening recorded as 1.4/2.5 Knots. Lowest minimum temperature was recorded as 14.0°C at Mithi. Highest rainfall reported as 2.6 mm at Karachi.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall reported from GB and Kashmir. Weekly maximum and minimum temperatures recorded as 15.6°C & 4.6°C respectively. For the recent week on average 36.0 growing degree days were accumulated. Average relative humidity recorded as 67% and wind speed in the morning/evening recorded as 0.2/1.0 Knots. During the previous week the lowest minimum temperature was recorded as -5.0°C at Skardu. Highest rainfall reported as 38.0 mm at Muzaffarabad.

Past Weather for Major Agricultural Plains (07th November – 13th November, 2022)

Rawalpindi (Potohar region)

Rainfall reported as 4.84mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.4/3.6 Oktas while, average relative humidity observed as 77%. Mean night time temperature recorded 8.1°C & for the recent week 69.5 growing degree days were accumulated. Wind speed recorded in the morning/evening as 0.0/0.2 Knots.

Faisalabad (Central Punjab)

Rainfall reported as 3.0mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.9/1.1 Oktas while, average relative humidity observed as 66%. Mean night time temperature recorded as 14.3°C & for the recent week 115.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.3 Knots.

Tandojam (Lower Sindh)

Rainfall reported as 3.0mm from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.9/0.6 Oktas, average relative humidity observed as 66%. Mean night time temperature recorded as 16.1°C & for the recent week 131.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.5/0.8 Knots.

Quetta (Northern Baluchistan)

Rainfall reported as 4.0mm from Quetta during the week; however, cloudiness in the morning/evening recorded as 2.2/3.6 Oktas while, average relative humidity observed as 52%. Mean night time temperature recorded as 5.6°C & for the recent week 49.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.1/3.1 Knots.

Past Weather for Sub-Regional Agricultural Plains (24th October – 30th October, 2022)

Multan

Rainfall reported as 2.20 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 0.9/1.4 Oktas. Average relative humidity observed as 69%. Mean

night time temperature recorded as 16.0°C & for the recent week 117.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.4 Knots

Lahore

Rainfall reported as 1.2mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 2.1/2.6 Oktas, average relative humidity observed as 63%. Mean night time temperature recorded as 16.1°C & for the recent week 117.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

Zhob

Rainfall reported as 10.0mm from Zhob during the week; however, cloudiness in the morning/evening recorded as 2.6/3.4 Oktas while, average relative humidity observed as 32%. Mean night time temperature recorded as 7.9°C & for the recent week 69.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.0/3.3 Knots.

Murree

Rainfall reported as 21.5mm from Murree during the week; however, cloudiness in the morning/evening recorded as 3.1/4.3 Oktas while, average relative humidity observed as 60%. Mean night time temperature recorded as 5.9°C & for the recent week 33.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.1/0.9 Knots.

D.I. Khan

Rainfall reported as 8.0mm from DI Khan during the week; however, cloudiness in the morning/evening recorded as 2.1/1.6 Oktas, average relative humidity observed as 74%. Mean night time temperature recorded as 15.3°C & for the recent week 110.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.0/2.0.

Peshawar

Rainfall reported as 6.02mm during the week; however, cloudiness in the morning/evening recorded as 2.4/3.6 Oktas while, average relative humidity observed as 78%. Mean night time temperature recorded as 10.8°C & for the recent week 83.6 growing degree days accumulated.

Wind speed recorded in the morning/evening as 0.6/0.6 Knots.

Kalam

Rainfall reported as 52.6mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 3.6/4.7 Oktas while, average relative humidity observed as 53%. Mean night time temperature recorded as -2.8°C & for the recent week no growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.0 Knots.

Gilgit

Rainfall reported as 4.51mm from Gilgit during the week, cloudiness in the morning/evening recorded as 4.6/5.3 Oktas while, average relative humidity observed as 69%. Mean night time temperature recorded as 4.4°C & for the recent week 37.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.0 Knots.

Skardu

Rainfall reported as 2.4 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 4.6/4.4 Oktas while, average relative humidity observed as 53%. Mean night time temperature recorded as 0.3°C & for the recent week 10.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.0 Knots.

Crop Situation 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)

Wheat crop.

Irrigated, very good, sowing on 10-11-2022.

Lower Sindh (Tandojam)

Wheat (TJ 83) Sowing on 09-11-2022.

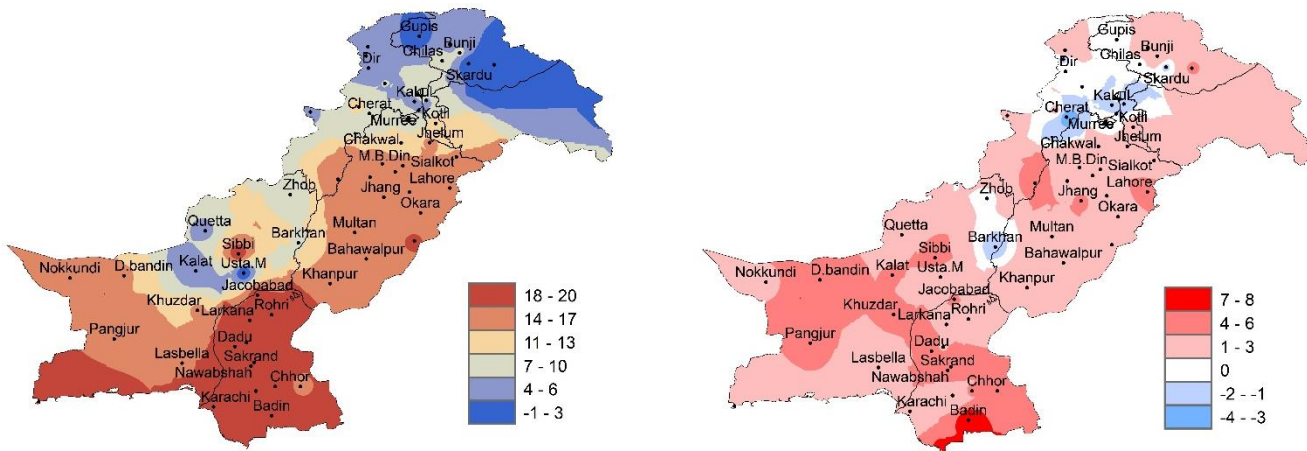
Northern Baluchistan (Quetta)

No Crop grown presently. Wheat crop harvested on 24-05-2022 at RAMC Quetta. At present no crop grown in the fields.

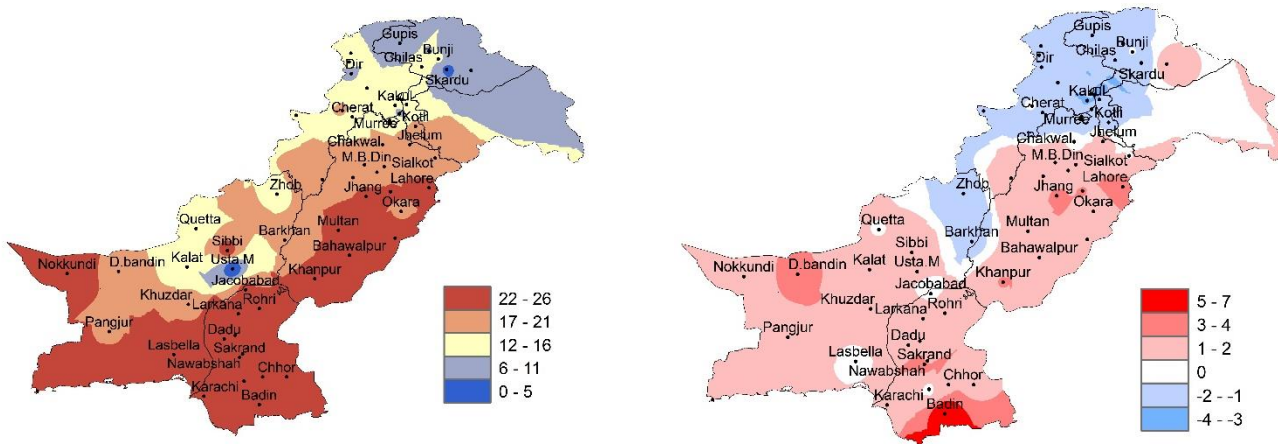
Eastern Baluchistan (Usta Muhammad)

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

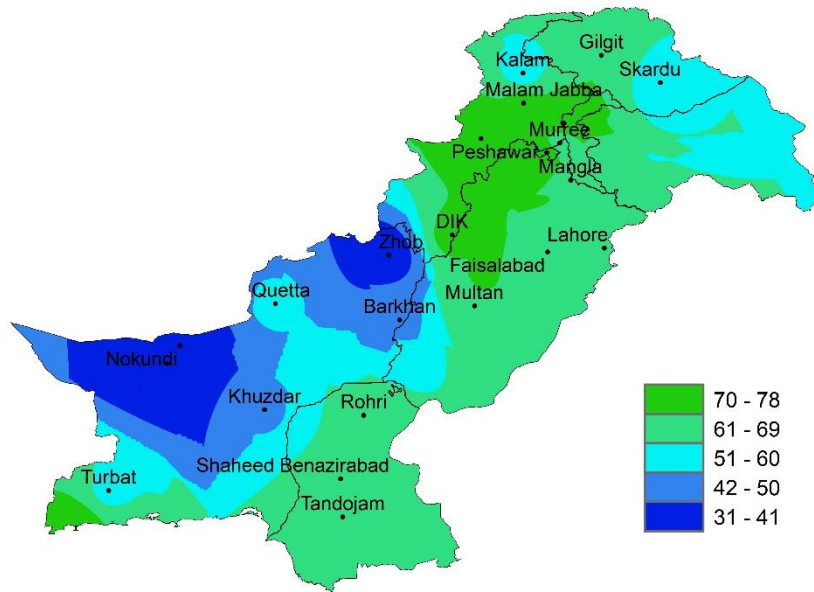
Actual & Departure of Minimum temperature (°C) for the Previous week (07th November – 13th November, 2022)



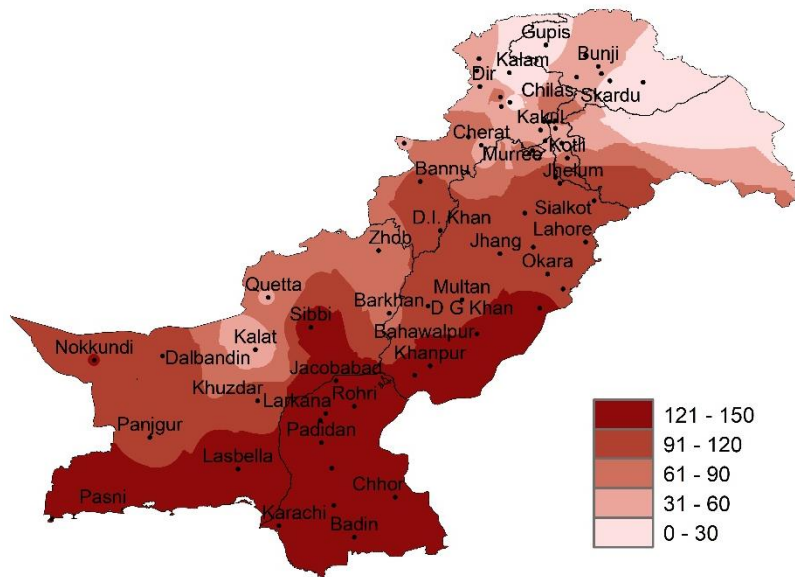
Actual & Departure of Mean temperature (°C) for the Previous week (07th November – 13th November, 2022)



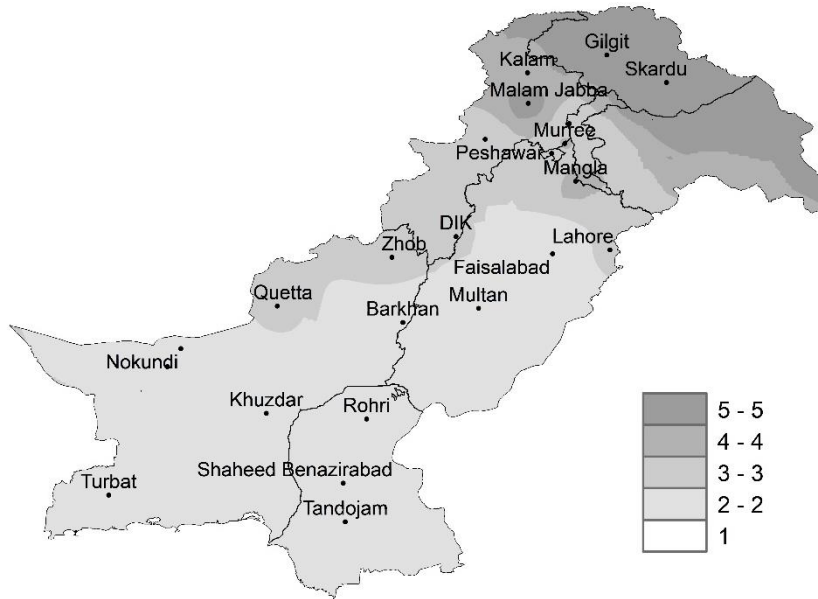
**Mean Relative Humidity (%) during the
Previous week (07th November – 13th November, 2022)**



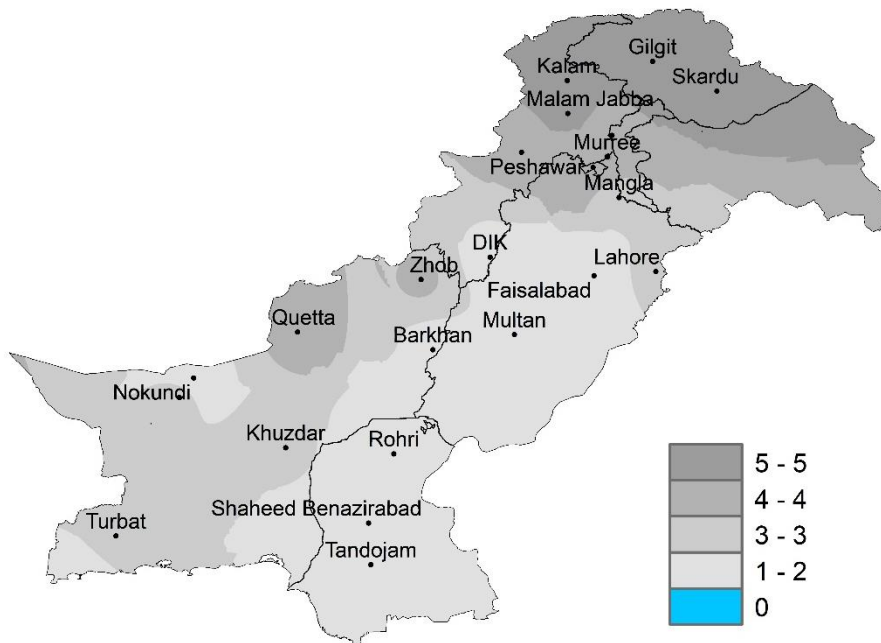
**Total Growing Degree Days accumulated during the
Previous week (07th November – 13th November, 2022)**



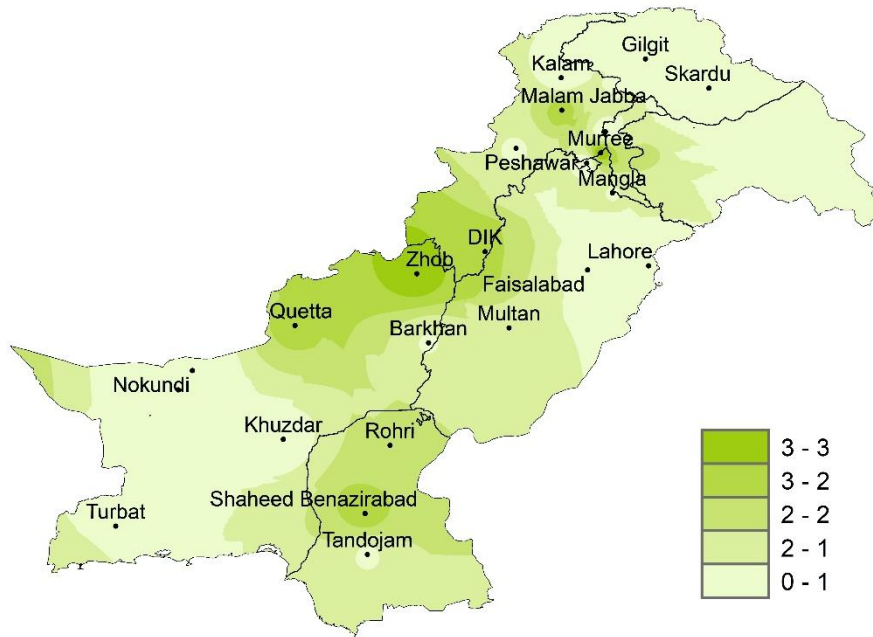
Mean Cloudiness (Oktas) at 0800PST during the
Previous week (07th November – 13th November, 2022)



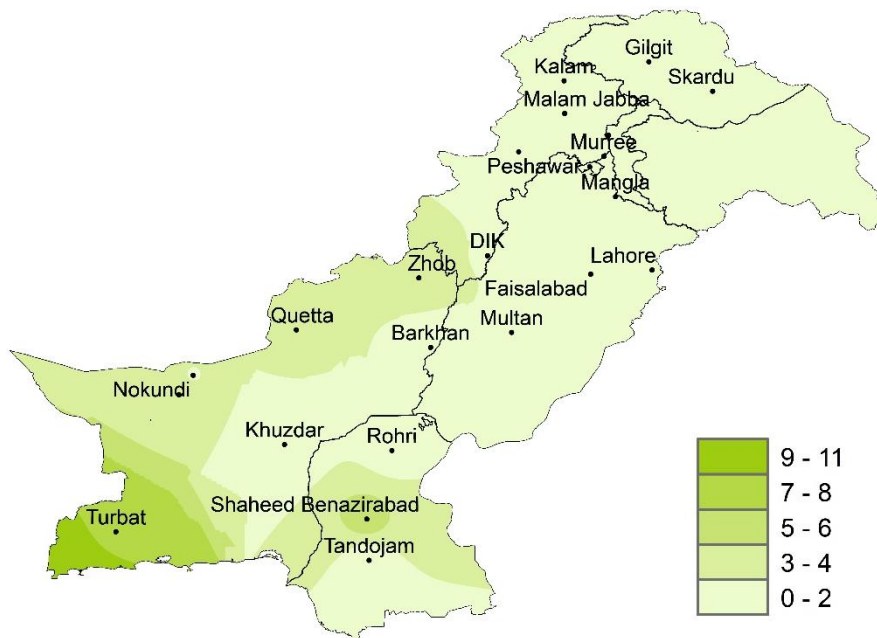
Mean Cloudiness (Oktas) at 1700PST during the
Previous week (07th November – 13th November,



**Mean Wind Speed (Knots) at 0800PST during the
Previous week (07th November – 13th November, 2022)**



**Mean Wind Speed (Knots) at 1700PST during the
Previous week (07th November – 13th November, 2022)**



Weekly Weather Advisory for Farmers**(13th November – 19th November, 2022)**

A westerly wave is present over western and upper parts of the country and likely to move eastward during next 12-18 hours.

MONDAY**14-11-2022**

Rain-wind/thunderstorm (snow over the hills) is expected in Khyber Pakhtunkhwa, Islamabad, northeastern/south Punjab, Gilgit-Baltistan and Kashmir. Dry weather is likely in other parts of the country.

TUESDAY**15-11-2022**

Mainly dry and cold weather is expected in most parts of the country. However, isolated rain-wind/thunderstorm (snow over the hills) is likely in Kashmir and Gilgit-Baltistan.

WEDNESDAY**16-11-2022**

Mainly dry weather is expected in most parts of the country. While cold weather likely in upper parts including north Balochistan. Foggy conditions likely to prevail in southern Punjab and upper Sindh.

THURSDAY**17-11-2022**

Mainly dry weather is expected in most parts of the country. While cold weather likely in upper parts including north Balochistan. Foggy conditions likely to prevail in southern Punjab and upper Sindh.

FRIDAY**18-11-2022**

Mainly dry weather is expected in most parts of the country. While cold weather likely in upper parts including north Balochistan. However, partly cloudy weather is expected in upper Khyber Pakhtunkhwa and Gilgit Baltistan .Foggy conditions likely to prevail in southern Punjab and upper Sindh.

SATURDAY**19-11-2022**

Mainly dry weather is expected in most parts of the country. While cold in north Balochistan. However, rain-wind/thunderstorm (snow over the hills) is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan and Kashmir. Foggy conditions likely to prevail in southern Punjab and upper Sindh.

SUNDAY**20-11-2022**

Mainly dry weather is expected in most parts of the country. While cold in north Balochistan. However, rain-wind/thunderstorm (snow over the hills) is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan and Kashmir. Foggy conditions likely to prevail in southern Punjab and upper Sindh.

ADVISORY FOR FARMERS

1. The farmers may continue the routine activities according to the weather forecast.

National Weather Data of Selected Cities from (07th November – 13th November, 2022)

Stations	Minimum/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	Highest							
D.I. Khan	15.29	14.50	110.25	73.79	8.00	2.14	1.57	2.00	2.00
Faisalabad	12.00	14.30	115.50	66.00	3.00	0.90	1.10	0.30	0.30
Gawadar	19.36	19.00	145.50	78.00	0.00	0.86	1.43	1.14	10.57
Gilgit	4.40	-0.60	37.40	68.57	4.51	4.57	5.29	0.29	0.00
Kalam	-2.79	-5.00	-14.00	53.21	52.60	3.57	4.71	0.00	2.00
Khuzdar	13.50	12.50	104.50	48.36	9.40	0.86	2.71	0.29	0.29
Lahore	16.10	14.80	117.30	63.29	1.20	2.14	2.57	0.00	0.86
Malam Jabba	3.21	3.00	4.75	73.79	46.00	4.14	4.43	2.29	1.43
Mangla	12.87	9.50	99.30	67.00	10.61	3.14	2.43	0.57	1.71
Multan (PBO)	16.01	15.10	117.15	68.79	2.20	0.86	1.43	1.14	1.43
Murree	5.94	5.00	33.85	59.71	21.50	3.14	4.29	3.14	0.86
Muzaffarabad	7.80	5.80	57.75	78.24	38.80	2.57	3.67	0.00	0.33
Nawabshah	19.00	17.50	142.75	65.50	0.00	1.14	0.00	2.29	5.43
Peshawar	10.76	8.50	83.55	78.43	6.02	2.43	3.57	0.57	0.57
Quetta	3.50	5.60	49.80	52.00	4.00	2.20	3.60	2.10	3.10
Rawalpindi	6.00	8.10	69.50	77.00	4.80	2.40	3.60	0.00	0.20
Rohri	18.50	17.50	136.10	63.36	0.00	1.43	0.00	1.43	1.14
Skardu	0.34	-5.00	10.60	53.21	2.40	4.57	4.43	0.00	2.00
Tandojam	15.00	16.10	131.00	66.00	0.00	0.90	0.60	0.50	0.80
Usta. M				#DIV/0!		0.00	0.00	0.00	0.00
Zhob	7.93	1.00	69.00	32.00	10.00	2.57	3.43	3.00	3.29

*** 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)