

# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous  
Week 23<sup>rd</sup> – 29<sup>th</sup> December, 2019)**

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## Highlights of Past Weather (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)

Below normal night time temperatures were observed in Sindh, Baluchistan, Khyber Pakhtunkhwa, Punjab, Gilgit Baltistan and Kashmir during the last week.

Rainfall reported as follows during the last week:

1. Dry weather prevailed over most parts of the country.

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**Past Weather of Provinces (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)****Punjab**

Dry weather reported in Punjab during the week. Weekly maximum and minimum temperatures recorded as 11.2°C & 3.9°C respectively. For the recent week on average 18.1 growing degree days were accumulated. Average relative humidity recorded as 72% and wind speed in the morning/evening recorded as 0.9/1.3 Knots. During the previous week the lowest minimum temperature was recorded as -4.5°C at Chakwal.

**Baluchistan**

Dry weather reported in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 20.7°C & 3.7°C respectively. For the recent week on average 49.1 growing degree days were accumulated. Average relative humidity recorded as 41% and wind speed in the morning/evening recorded as 1.4/4.2 Knots. During the previous week the lowest minimum temperature was recorded as -8.0°C at Kalat.

**Khyber Pakhtunkhwa**

Dry weather reported in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 14.3°C & 0.0°C respectively. For the recent week on average 15.0 growing degree days were accumulated. Average relative humidity recorded as 79% and wind speed in the morning/evening recorded as 1.1/1.2 Knots. During the previous week the lowest minimum temperature was recorded as -6.5°C at Kalam.

**Gilgit-Baltistan and Azad Jammu & Kashmir**

Dry weather reported in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 9.9°C & -4.7°C respectively. Average relative humidity recorded as 71% and wind speed in the morning/evening recorded as 0.5/0.4 Knots. During the previous week the lowest minimum temperature was recorded as -20.7°C at Skardu.

**Sindh**

Dry weather reported in Sindh during the week. Weekly maximum and minimum temperatures recorded as 21.9°C & 7.1°C respectively. For the recent week, on average 65.6 growing degree days were accumulated. Average relative humidity recorded as 68% and wind speed in the morning/evening recorded as 2.5/3.6 Knots. During the previous week the lowest minimum temperature was recorded as 1.5°C at Moenjodaro.

**Past Weather for Major Agricultural Plains****(23<sup>rd</sup> – 29<sup>th</sup> December, 2019)****Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however clear sky observed in the morning/evening while, average relative humidity observed as 85%. Mean night time temperature recorded 3.2°C & for the recent week 25.0 growing degree days accumulated. Calm wind observed in the morning/evening.

**Faisalabad (Central Punjab)**

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 6.0/3.6 Oktas while, average relative humidity observed as 86%. Mean night time temperature recorded as 4.5°C & for the recent week 13.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/0.5 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 66%. Mean night time temperature recorded as 5.8°C & for the recent week 63.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.9 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 77. Mean night time temperature recorded as 5.5°C & for the recent week 51.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.2 Knots.

**Quetta (Northern Baluchistan)**

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.3/0.0 Oktas while, average relative humidity observed as 38%. Mean night time temperature recorded as -1.7°C & for the recent week 7.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.8 Knots.

**Past Weather for Sub-Regional Agricultural****Plains (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 8.0/1.4 Oktas while, average relative humidity observed as 87%. Mean night time temperature recorded as 4.7°C & for the recent week 19.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/2.3 Knots.

**Lahore**

Dry weather reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 3.7/1.1 Oktas while, average relative humidity observed as 82%. Mean night time temperature recorded as 6.3°C & for the recent week 27.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/0.9 Knots.

**Zhob**

Dry weather reported from Zhob during the week; however, clear sky observed in the morning/evening while, average relative humidity observed as 50%. Mean night time temperature recorded as 0.1°C & for the recent week 25.1 growing degree days accumulated. Wind speed recorded in the morning/evening as 3.6/5.0Knots.

**Murree**

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.3/0.9 Oktas while, average relative humidity observed as 49%. Mean night time temperature recorded as 0.0°C & for the recent week 7.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/0.6 Knots.

**D.I. Khan**

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 8.0/1.4 Oktas while, average relative humidity observed as 89%. Mean night time temperature recorded as 3.9°C & for the recent week 12.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/2.3 Knots.

**Peshawar**

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.3/0.0 Oktas while, average relative humidity observed as 38%. Mean night time temperature recorded as 0.3°C & for the recent week 29.2 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/1.8 Knots.

**Kalam**

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.1/1.1 Oktas while, average relative humidity observed as 72%. Mean night time temperature recorded as -5.7°C. Calm wind observed in the morning/evening.

**Gilgit**

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 2.4/1.7 Oktas while, average relative humidity observed as 68%. Mean night time temperature recorded as -5.9°C. Calm wind observed in the morning/evening.

**Skardu**

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.3/3.0 Oktas while, average relative humidity observed as 63%. Mean night time temperature recorded as -16.2°C. Calm wind observed in the morning/evening.

**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 wheat crop is sown in the fields of RAMC Faisalabad.

**Wheat:** V. Good, *Third leaf Stage Completed.*

**Lower Sindh (Tandojam)**

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

**Wheat (Kiran-95):** *Tillering Stage.*

**Northern Baluchistan (Quetta)**

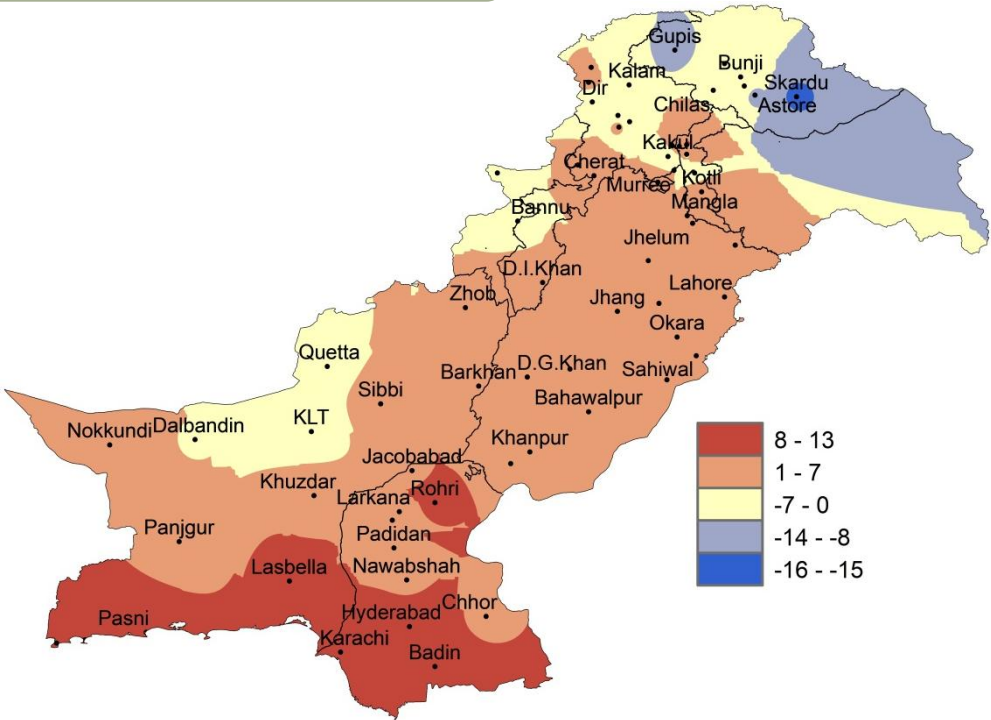
There is presently no crop grown in the fields of RAMC Quetta.

**Eastern Baluchistan (Usta Muhammad)**

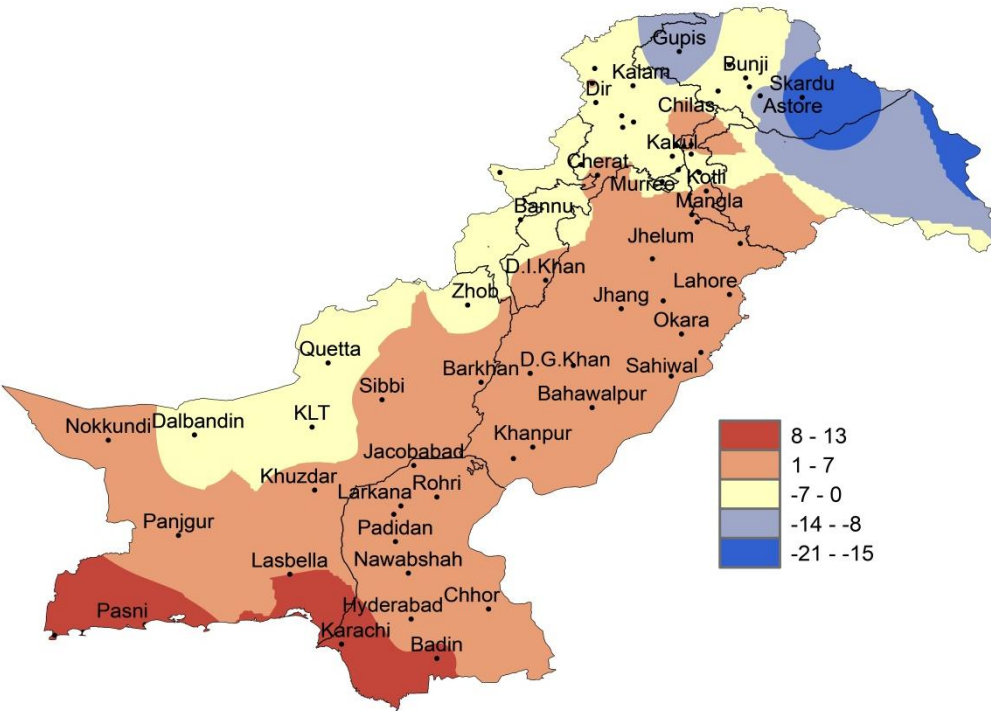
Presently Wheat crop is sown in the fields of RAMC Usta Muhammad.

**Wheat:** Good, *Emergence Stage.*

Mean Minimum temperature (°C) during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)

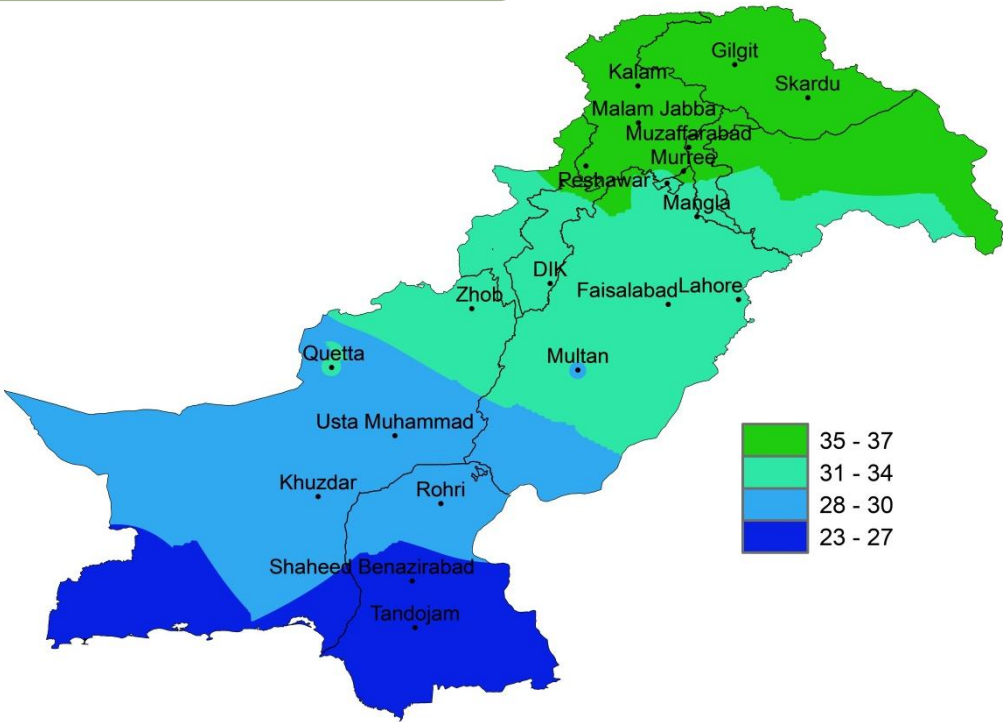


Lowest Minimum Temperature (°C) during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)

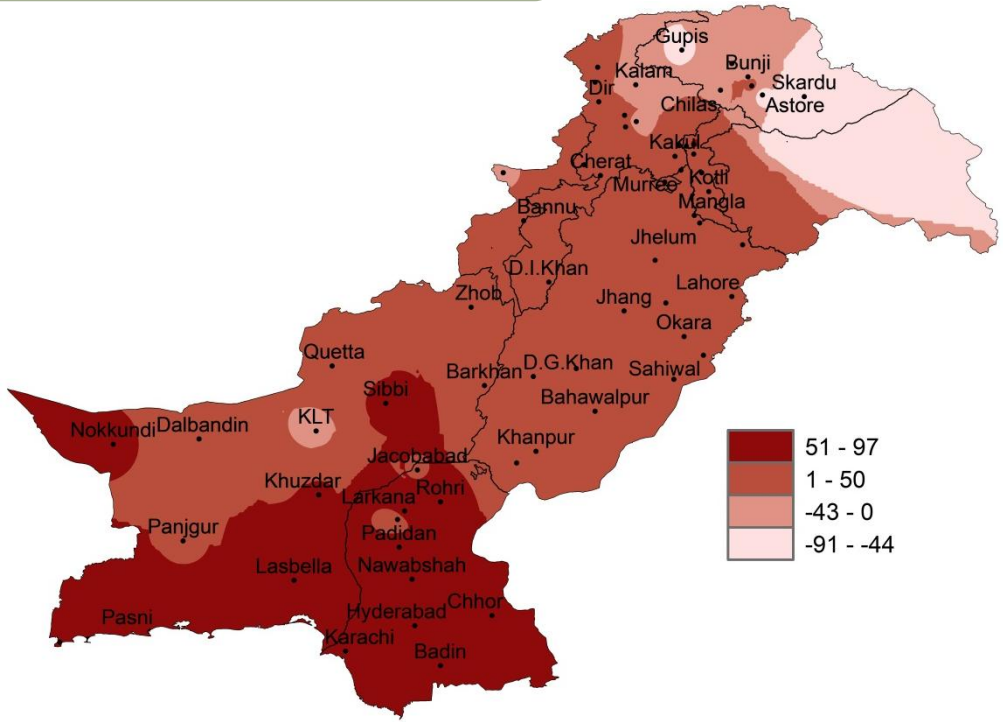




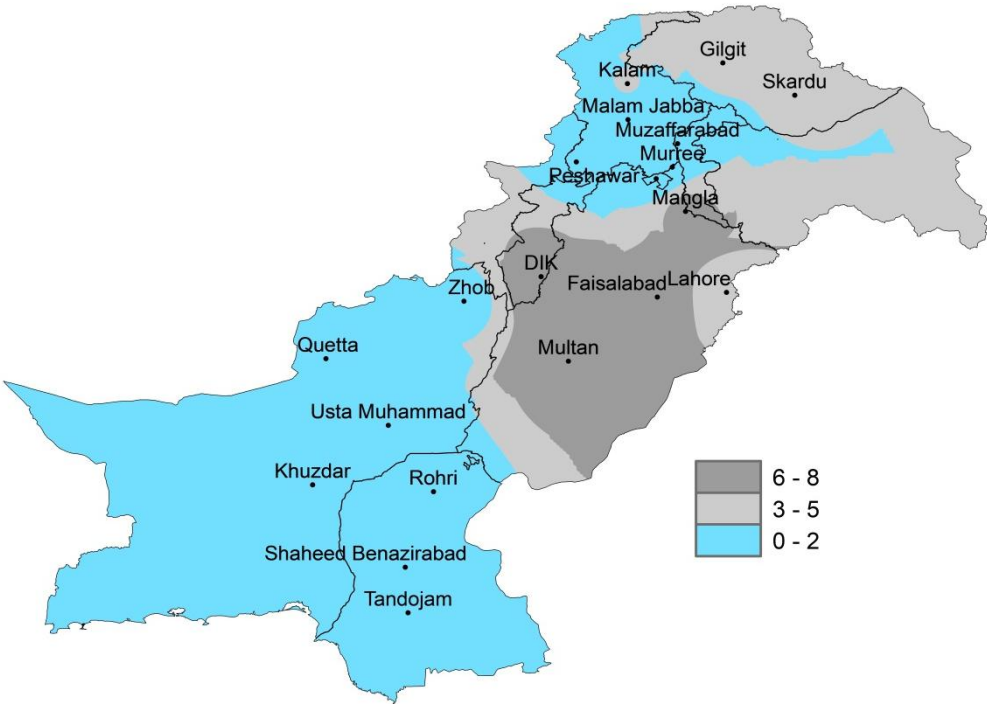
Mean Relative Humidity (%) during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)



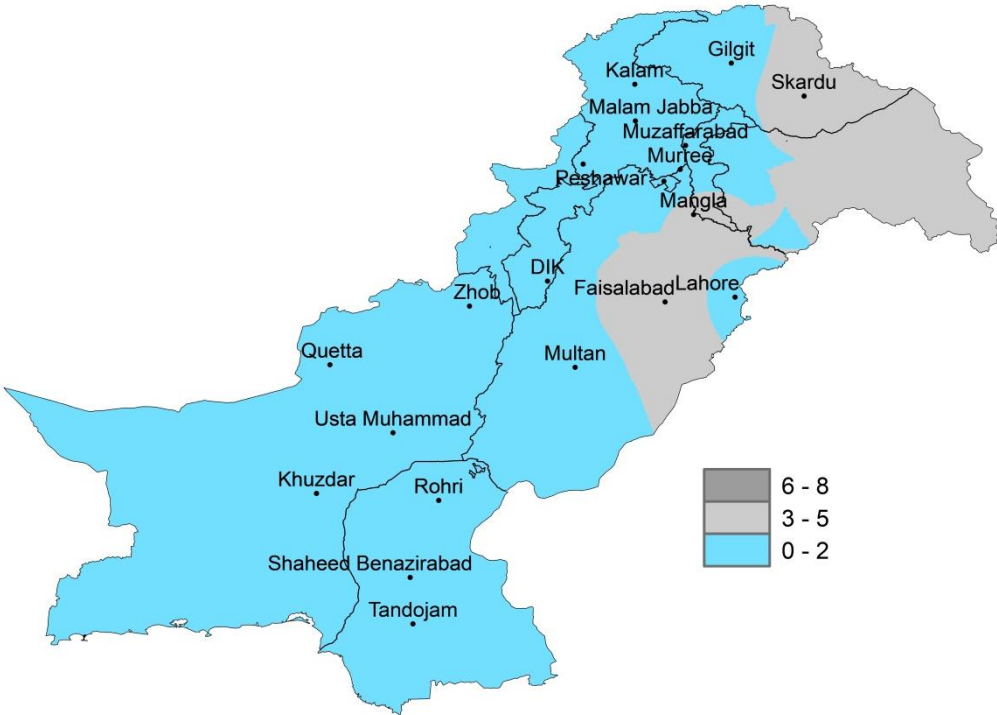
Total Growing Degree Days accumulated during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)



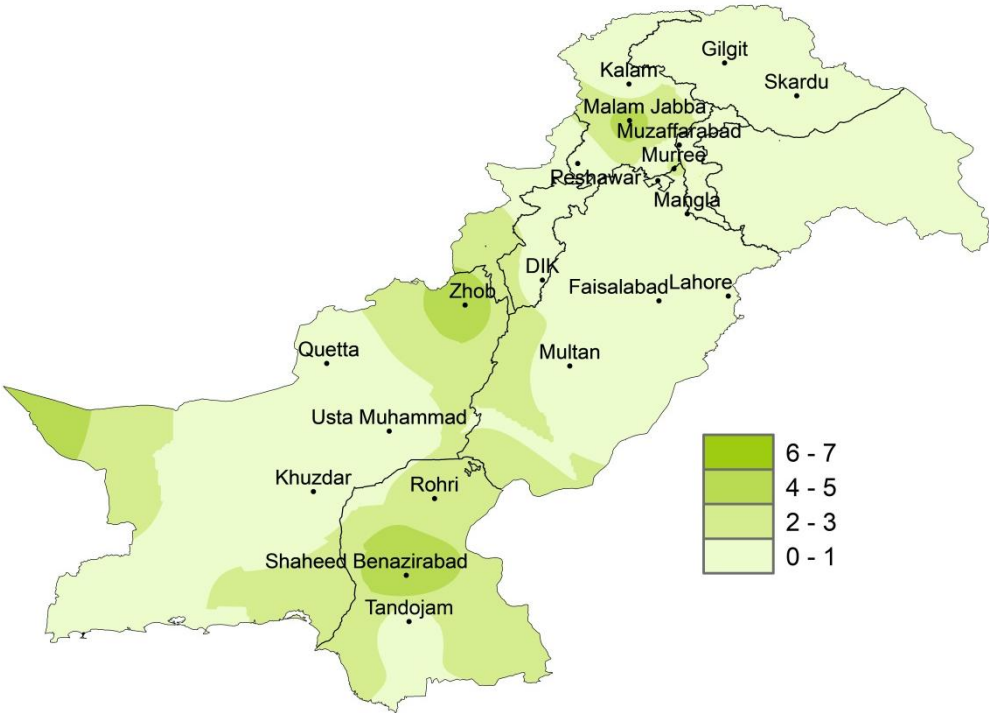
Mean Cloudiness (Oktas) at 0800PST during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)



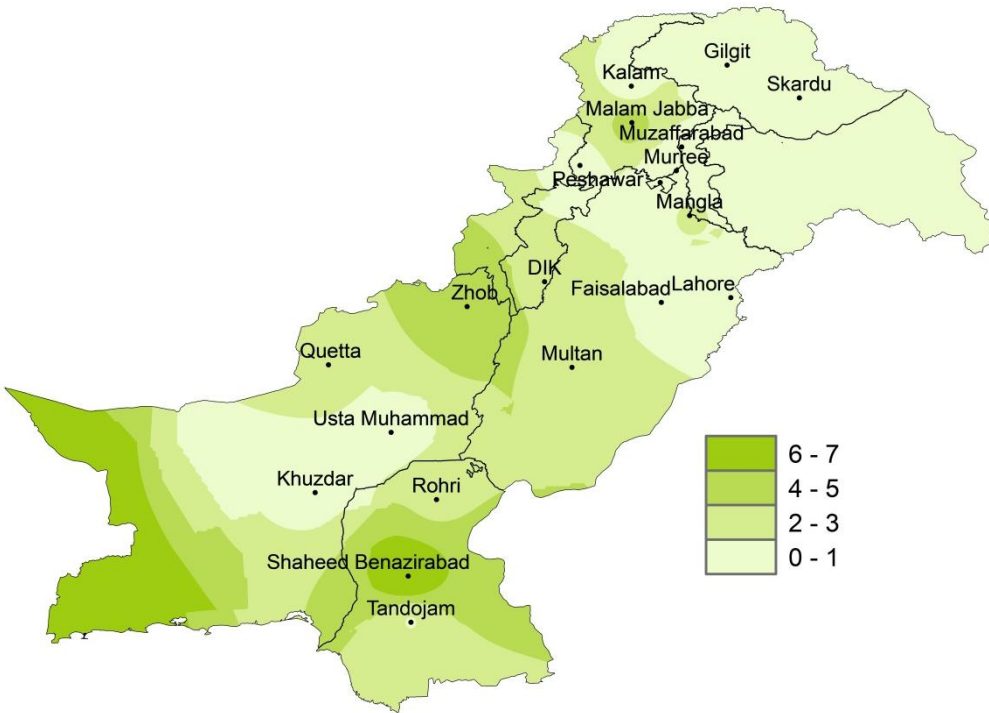
Mean Cloudiness (Oktas) at 1700PST during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)



Mean Wind Speed (Knots) at 0800PST during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)



Mean Wind Speed (Knots) at 1700PST during the  
Previous week (23<sup>rd</sup> – 29<sup>th</sup> December, 2019)





**Weekly Weather Advisory for Farmers****(30<sup>th</sup> December- 5<sup>th</sup> January, 2019)**

Continental air is prevailing over most parts of the country. A shallow westerly wave is likely to affect western and upper parts of the country from Tuesday.

**MONDAY****30-12-2019**

Dense fog is likely to prevail in most plain areas of Punjab and upper Sindh while in few districts of Khyber Pakhtunkhwa during night hours. Cold and dry weather is expected elsewhere in the country while very cold in upper areas.

**TUESDAY****31-12-2019**

Dense fog is likely to prevail in most plain areas of Punjab and upper Sindh while in few districts of Khyber Pakhtunkhwa during morning and night hours. Mainly cold and dry weather is expected in most parts of the country while very cold with cloudy weather condition in upper areas.

**WEDNESDAY****01-01-2019**

Rain-thunderstorm (with snowfall over hills) is expected at isolated places in Northeast Balochistan (Quetta, Qila Abdullah, Pishin), districts of Chaghi and Gawadar, districts of upper Khyber Pakhtunkhwa, Gilgit Baltistan. Fog is likely to prevail in plain areas of Punjab and upper Sindh. Cold and dry weather is expected elsewhere in the country while very cold in upper areas.

**THURSDAY****02-01-2019**

Rain-thunderstorm (with snowfall over hills) is expected at isolated places in Northeast Balochistan (Quetta, Qila Abdullah, Pishin, Zhob), districts of Chaghi, Gawadar, Kalat, districts of upper Khyber Pakhtunkhwa, Gilgit Baltistan and Kashmir. Fog is likely to prevail in plain areas of Punjab and upper Sindh. Cold and dry weather is expected elsewhere in the country while very cold in upper areas.

**FRIDAY****03-01-2019**

Rain (with snowfall over hills) is expected at a few places in upper Khyber Pakhtunkhwa, Gilgit Baltistan, Kashmir, Rawalpindi and Islamabad. Fog is likely to prevail in plain

areas of Punjab and upper Sindh. Cold and dry weather is expected elsewhere in the country while very cold in upper areas.

**SATURDAY****04-01-2019**

Rain (with snowfall over hills) is expected at a few places in upper Khyber Pakhtunkhwa, North East Punjab, Islamabad, Kashmir and Gilgit Baltistan. Fog is likely to prevail in plain areas of Punjab and upper Sindh. Cold and dry weather is expected elsewhere in the country while very cold in upper areas.

**SUNDAY****05-01-2019**

Mainly cold and dry weather is expected in most parts of the country while very cold in upper parts. However rain (with snowfall over hills) is expected at isolated places in Gilgit Baltistan and Kashmir. Fog is likely to prevail in plain areas of Punjab, few districts of KPK and upper Sindh.

**ADVISORY FOR FARMERS**

During the last week, dry weather prevailed over most parts of the country. Keeping in view the expected weather conditions following advisories are suggested for farming community.

1. Farmers are advised to protect the nurseries and vegetables from extreme cold weather conditions e.g. Frost etc.
2. Use of pesticides and irrigation application may be suspended, as good rainfalls are expected in the 2<sup>nd</sup> week of January.

**National Weather Data of Selected Cities from (23<sup>rd</sup> - 29<sup>th</sup> December, 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	Minimum							
D.I. Khan	3.9	1.5	12.4	89	0.00	8.0	1.4	0.9	2.3
Faisalabad	4.5	2.5	13.1	86	0.00	6.0	3.6	1.1	0.5
Gawadar	10.9	10.0	82.5	44	0.00	0.0	0.4	0.6	7.4
Gilgit	-5.9	-8.0	-18.3	68	0.00	2.4	1.7	0.0	0.0
Kalam	-5.7	-6.5	-23.7	72	0.00	2.1	1.1	0.0	0.0
Khuzdar	5.4	4.5	55.0	29	0.00	0.0	0.0	0.0	0.3
Lahore	6.3	5.5	27.2	82	0.00	3.7	1.1	0.3	0.9
Malam Jabba	-2.4	-4.0	-21.5	79	0.00	1.1	1.9	4.0	4.0
Mangla	3.3	1.6	13.2	86	0.00	7.4	3.4	0.9	1.1
Multan (PBO)	4.7	3.2	19.4	87	0.00	8.0	1.4	0.9	2.3
Murree	0.0	-0.8	7.7	49	0.00	0.3	0.9	1.4	0.6
Muzaffarabad	1.1	-0.5	27.4	67	0.00	0.0	0.0	1.1	0.3
Nawabshah	6.3	5.0	62.0	75	0.00	0.6	0.3	0.0	0.3
Peshawar	0.3	-1.0	29.2	38	0.00	0.3	0.0	0.6	1.8
Quetta	-1.7	-2.2	7.7	85	0.00	0.0	0.0	0.0	0.0
Rawalpindi	3.2	2.4	25.0	73	0.00	0.0	0.0	2.3	2.6
Rohri	7.6	5.5	54.8	65	0.00	0.3	0.4	4.9	7.4
Skardu	-16.2	-20.7	-91.4	63	0.00	2.3	3.0	0.0	0.0
Tandojam	5.8	4.0	63.0	66	0.00	0.0	0.0	0.3	0.9
Usta. M	5.5	5.0	51.5	77	0.00	0.0	0.0	0.2	0.2
Zhob	0.1	-1.0	25.1	50	0.00	0.0	0.0	3.6	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 سبب 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)