

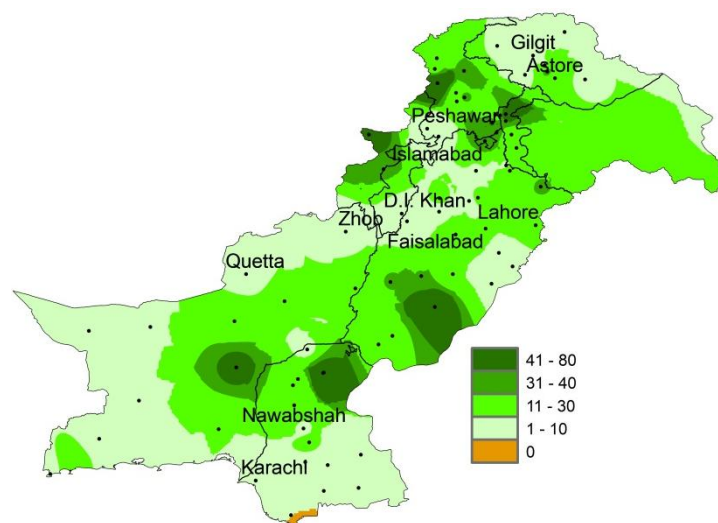
Weekly Weather and Crop Bulletin for Pakistan

**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 (30th September-6th October,
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 (30th September-6th October, 2019)

- Below normal day time temperatures were observed in Punjab.
- Mix trend was observed in Sindh, Baluchistan Khyber Pakhtunkhwa, Gilgit-Baltistan and Azad Kashmir during the last week.
- Light to moderate rainfall observed all over the country during the last week.

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

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

Editor: Saeeda Saleh (Assistant Meteorologist)

Past Weather of Provinces (30th September- 6th October, 2019)**Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 30.8°C & 20.5°C respectively. For the recent week on average 144.7 growing degree days were accumulated. Average relative humidity recorded as 71% and wind speed in the morning/evening recorded as 2.6/2.8 Knots. During the previous week the highest precipitation was recorded as 66.20 mm at Bahawalpur City while maximum temperature was recorded as 37.2°C at Khanpur.

Baluchistan

Light to moderate rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 32.4°C & 20.2°C respectively. For the recent week on average 149.7 growing degree days were accumulated. Average relative humidity recorded as 53% and wind speed in the morning/evening recorded as 2.0/4.9 Knots. During the previous week the highest precipitation was recorded as 46.20 mm at Khuzdar while maximum temperature was recorded as 41.0°C at Nokkundi.

Khyber Pakhtunkhwa

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 25.4°C & 14.1°C respectively. For the recent week on average 101.6 growing degree days were accumulated. Average relative humidity recorded as 74% and wind speed in the morning/evening recorded as 1.4/2.7 Knots. During the previous week the highest precipitation recorded as 79.00 mm at Dir while maximum temperature was recorded as 34.0°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

24.2°C & 12.5°C respectively. For the recent week on average 90.5 growing degree days were accumulated. Average relative humidity recorded as 65% and wind speed in the morning/evening recorded as 0.6/3.6 Knots. During the previous week the highest precipitation recorded as 38.7 mm at Garhi Dupatta while maximum temperature was recorded as 35.0°C at Chilas.

Sindh

Light to moderate rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 35.0°C & 24.7°C respectively. For the recent week, on average 177.0 growing degree days were accumulated. Average relative humidity recorded as 69% and wind speed in the morning/evening recorded as 1.8/2.9 Knots. During the previous week the highest precipitation recorded as 52.00 mm at Rohri while maximum temperature was recorded as 40.5°C at Nawabshah.

Past Weather for Major Agricultural Plains (30th September- 6th October, 2019)

Rawalpindi (Potohar region)

44.00 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.4/2.0 Oktas while, average relative humidity observed as 80%. Mean day time temperature recorded 28.7°C & for the recent week 143.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.5 Knots.

Faisalabad (Central Punjab)

11.40 mm rainfall reported from Faisalabad during the week; however, however, cloudiness in the morning/evening recorded as 3.4/3.9 Oktas while, average relative humidity observed as 72%. Mean day time temperature recorded as 32.5°C & for the recent week 164.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.0/1.4 Knots.

Tandojam (Lower Sindh)

9.00 mm rainfall reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.3/3.0 Oktas while, average relative humidity observed as 77%. Mean day time temperature recorded as 35.7°C & for the recent week 179.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.2/2.2 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 1.7/3.0 Oktas while, average relative humidity observed as 71%. Mean day time temperature recorded as 33.1°C & for the recent week 143.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.2/0.5 Knots.

Quetta (Northern Baluchistan)

2.40 mm rainfall reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 3.4/4.9 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 25.6°C & for the recent week 124.7 growing degree days accumulated.

Wind speed recorded in the morning/evening as 3.3/3.6 Knots.

Past Weather for Sub-Regional Agricultural Plains (30th September- 6th October, 2019)

Multan

30.50 mm rainfall reported from Multan during the week; however, cloudiness in the morning/evening recorded as 3.6/2.7 Oktas while, average relative humidity observed as 68%. Mean day time temperature recorded as 31.5°C & for the recent week 152.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.0/3.4 Knots.

Lahore

16.42 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 3.7/3.0 Oktas while, average relative humidity observed as 74%. Mean day time temperature recorded as 30.4°C & for the recent week 144.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/2.9 Knots.

Zhob

Dry weather reported from reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 4.1/4.4 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 29.5°C & for the recent week 134.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 5.0/4.3 Knots.

Murree

34.80 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 2.4/6.4 Oktas while, average relative humidity observed as 72%. Mean day time temperature recorded as 20.0°C & for the recent week 73.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.9/2.0 Knots.

D.I. Khan

1.01 mm rainfall reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 3.9/5.0 Oktas while, average relative humidity observed as 73%. Mean day time temperature recorded as 32.2°C & for the recent week 152.3 growing degree days

accumulated. Wind speed recorded in the morning/evening as 1.1/2.0 Knots.

Peshawar

3.01 mm rainfall reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 5.7/6.7 Oktas while, average relative humidity observed as 69%. Mean day time temperature recorded as 29.5°C & for the recent week 110.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.3/1.7 Knots.

Kalam

34.30 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 3.1/5.3 Oktas while, average relative humidity observed as 79%. Mean day time temperature recorded as 17.9°C & for the recent 48.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.7 Knots.

Gilgit

1.05 mm rainfall reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 4.7/5.7 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 25.4°C & for the recent week 95.3 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/2.6 Knots.

Skardu

4.21 mm rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 6.1/6.3 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 21.3°C & for the recent week 68.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/5.0 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: V.Good, Maturity Stage.

Lower Sindh (Tandojam)

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

Cotton (Shahbaz 95): Good, First picking.

Northern Baluchistan (Quetta)

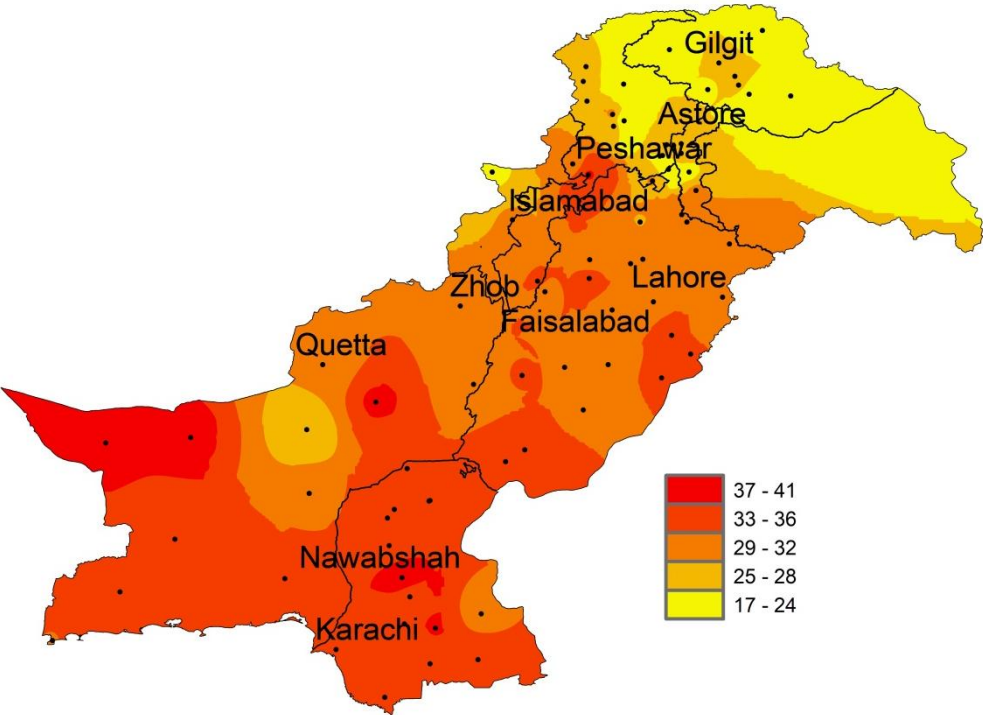
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

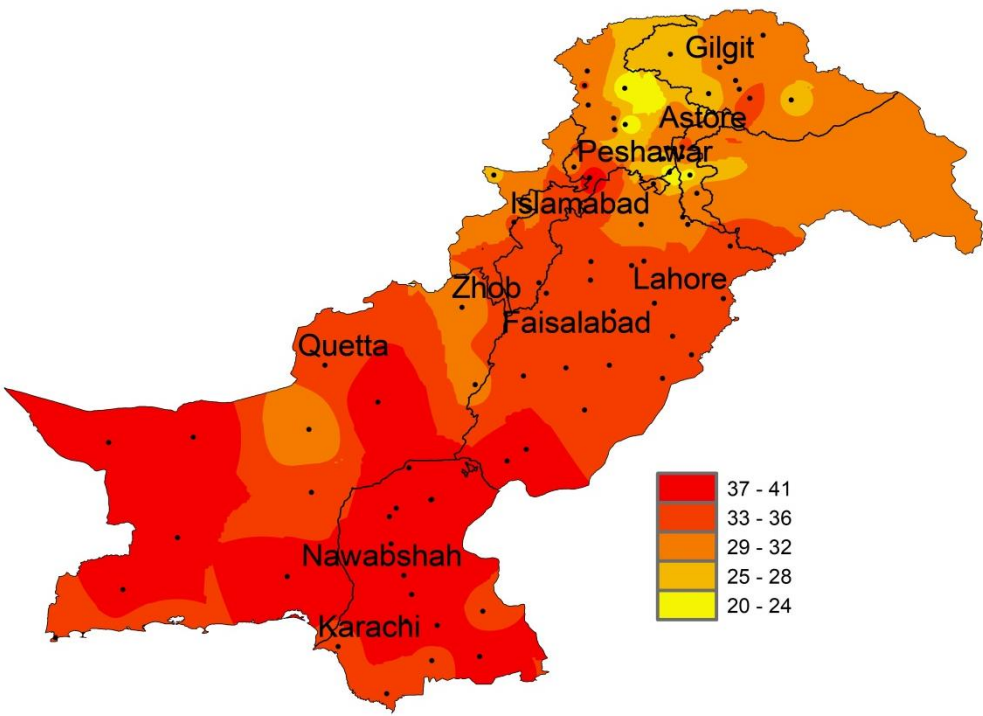
Presently rice crop is sown in the fields of RAMC Usta Muhammad.

Rice: Good, Maturity Stage.

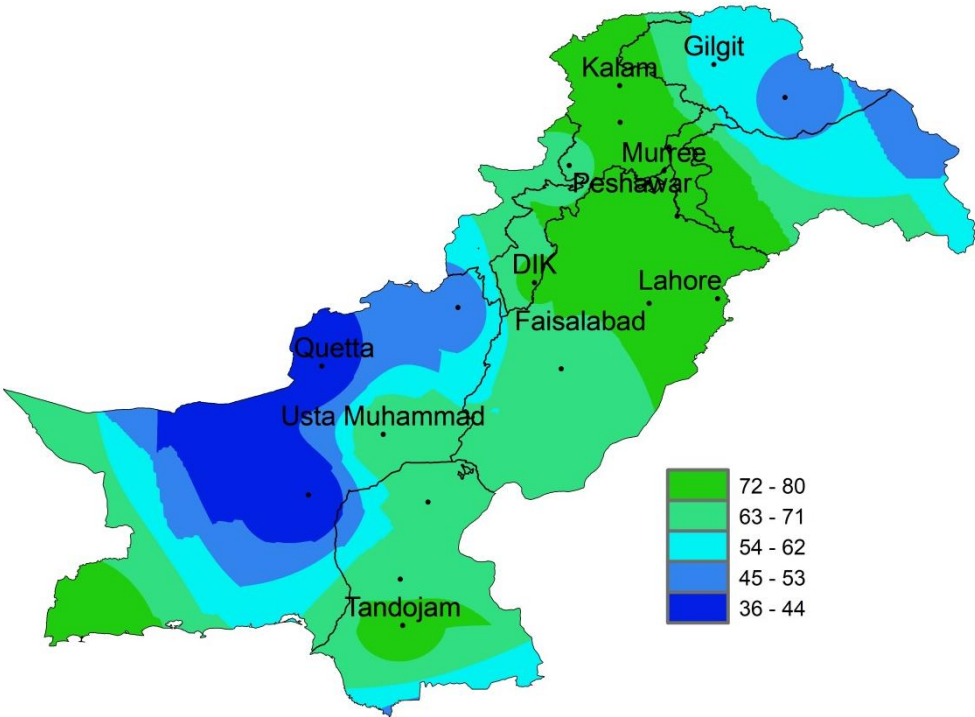
Mean Maximum temperature (°C) during the
Previous week (30th September-6th October, 2019)



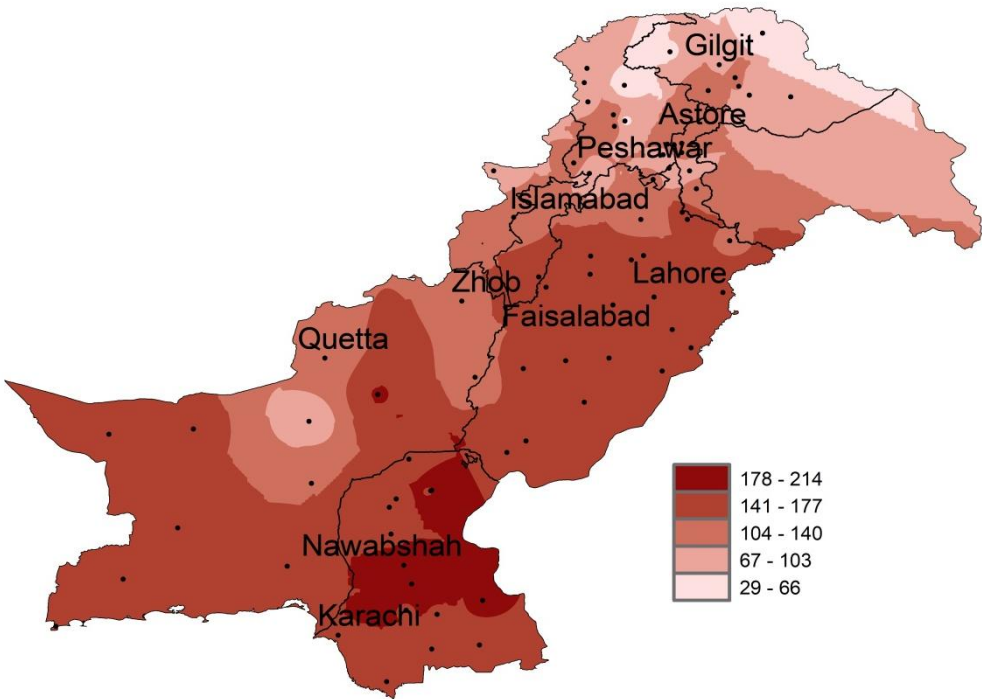
Highest Maximum Temperature (°C) during the
Previous week (30th September-6th October, 2019)



Mean Relative Humidity (%) during the
Previous week (30th September-6th October, 2019)



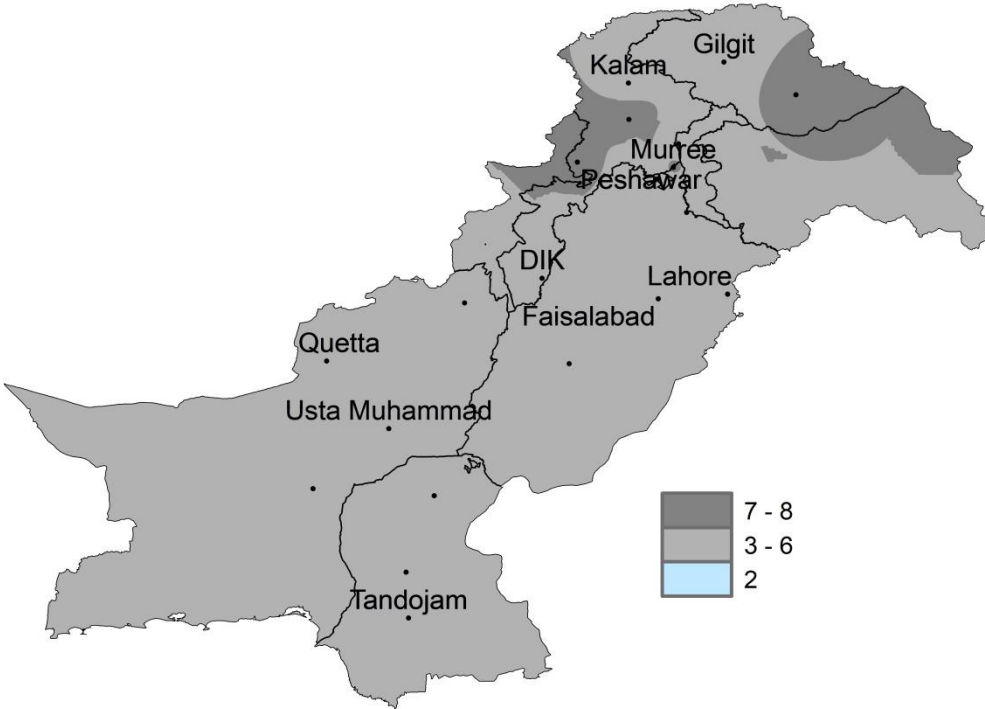
Total Growing Degree Days accumulated during the
Previous week (30th September-6th October, 2019)



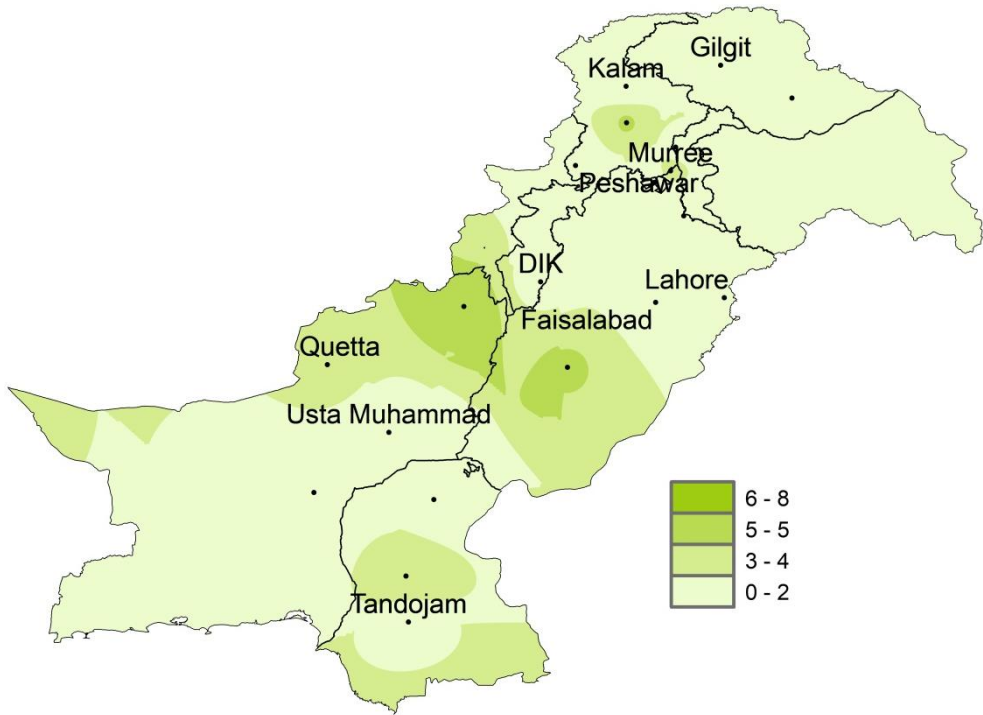
Mean Cloudiness (Oktas) at 0800PST during the Previous week (30th September-6th October, 2019)



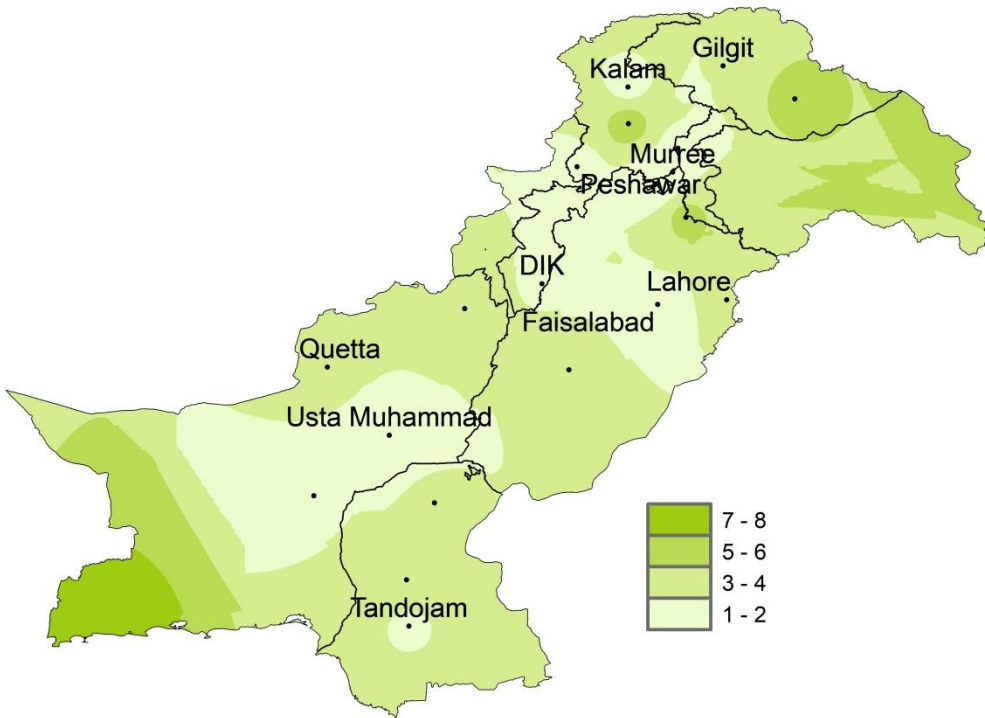
Mean Cloudiness (Oktas) at 1700PST during the Previous week (30th September-6th October, 2019)



Mean Wind Speed (Knots) at 0800PST during the Previous week (30th September-6th October, 2019)



Mean Wind Speed (Knots) at 1700PST during the Previous week (30th September-6th October, 2019)



Weekly Weather Advisory for Farmers
(7th to 13th October, 2019)

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

MONDAY**07-10-2019**

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorms and is expected at isolated places in Hazara (Mansehra and Abbottabad districts), Gilgit Baltistan and Kashmir.

TUESDAY**08-10-2019**

Mainly dry weather is expected in most parts of the country. However, rain- thunderstorms are expected in isolated places in Gilgit Baltistan and Kashmir.

WEDNESDAY**09-10-2019**

Mainly dry weather is expected in most plain areas while cold in northern areas of the country.

THURSDAY**10-10-2019**

Mainly dry weather is expected in most plain areas while cold in northern areas of the country.

FRIDAY**11-10-2019**

Mainly dry weather is expected in most plain areas while cold in northern areas of the country.

SATURDAY**12-10-2019**

Mainly dry weather is expected in most plain areas while cold in northern areas of the country.

SUNDAY**13-10-2019**

Mainly dry weather is expected in most plain areas while cold in northern areas of the country.

ADVISORY FOR FARMERS

During the last week, light to moderate rainfall occurred all over the country. Keeping in view the above expected weather conditions following advisories are suggested for farming community.

1. Use pesticides to avoid the attack from pests on the crops as advised by the agriculture department.
2. Use proper precautions during picking of cotton because the cost of good and clean quality cotton is high than that of the filthy one.

National Weather Data of Selected Cities from (30th September to 6th October, 2019)

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	Highest							
D.I. Khan	32.2	34.0	152.3	73	1.01	3.9	5.0	1.1	2.0
Faisalabad	32.5	35.0	164.6	72	11.40	3.4	3.9	1.0	1.4
Gawadar	33.3	34.5	168.5	77	23.01	4.0	3.9	0.9	8.3
Gilgit	25.4	30.0	95.3	59	1.05	4.7	5.7	0.0	2.6
Kalam	17.9	22.0	48.5	79	34.30	3.1	5.3	0.0	1.7
Khuzdar	29.8	34.0	139.8	36	46.20	1.4	3.4	0.0	2.0
Lahore	30.4	32.5	144.9	74	16.42	3.7	3.0	0.9	2.9
Malam Jabba	16.5	19.5	51.3	74	33.00	5.1	6.9	4.0	5.4
Mangla	30.7	32.4	141.5	76	8.20	3.4	5.1	0.0	5.1
Multan (PBO)	31.5	33.5	152.5	68	30.50	3.6	2.7	4.0	3.4
Murree	20.0	21.2	73.4	72	34.80	2.4	6.4	2.9	2.0
Muzaffarabad	26.9	30.5	112.9	75	32.01	4.3	5.2	1.1	1.7
Nawabshah	36.6	40.5	179.3	69	7.70	5.7	6.7	0.3	1.7
Peshawar	29.5	31.5	110.3	37	3.01	3.4	4.9	3.3	3.6
Quetta	25.6	30.6	124.7	80	2.40	2.4	2.0	0.0	0.5
Rawalpindi	28.7	30.5	143.6	65	44.00	1.6	2.3	1.1	2.9
Rohri	34.9	39.0	209.0	67	52.00	2.0	3.4	3.1	3.7
Skardu	21.3	27.2	68.6	50	4.21	6.1	6.3	1.1	5.0
Tandojam	35.7	39.0	179.3	77	9.00	0.3	3.0	1.2	2.2
Usta. M	33.1	36.0	143.6	71	0.00	1.7	3.0	0.2	0.5
Zhob	29.5	32.0	134.0	47	0.00	4.1	4.4	5.0	4.3

*** 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)