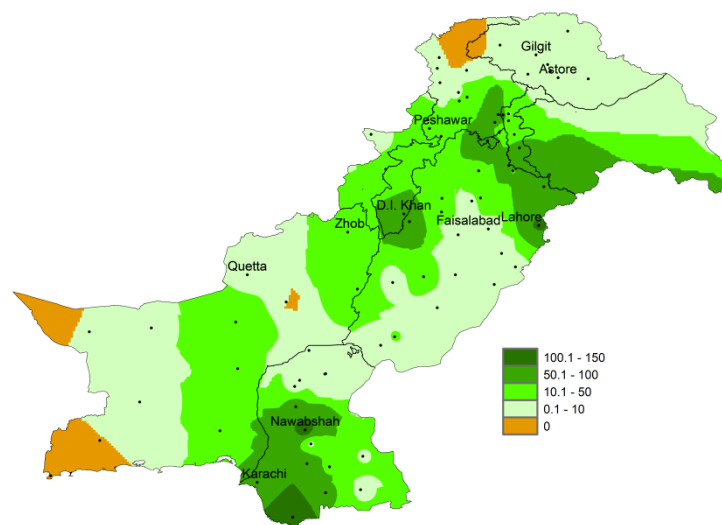# Weekly Weather and Crop Bulletin for Pakistan

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

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Rainfall Distribution (mm) during the Previous Week (29th July -4th August, 2019)

Contents

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Highlights of Past Weather (29th July-4th August, 2019)

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

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

1. Light to moderate rainfall observed in Baluchistan.

2. Moderate to high rainfall observed in Punjab, Khyber Pakhtunkhwa, Sindh and Gilgit Baltistan & Azad Jammu Kashmir.

Past Weather of Provinces (29th July-4th August, 2019)

Punjab

Moderate to high rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 35.0°C & 26.4°C respectively. For the recent week on average 180.2 growing degree days were accumulated. Average relative humidity recorded as 79% and wind speed in the morning/evening recorded as 2.3/2.8 Knots. During the previous week the highest precipitation was recorded as 102.11 mm at Lahore while maximum temperature was recorded as 43.2°C at Rahim Yar Khan.

Baluchistan

Light to moderate rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 37.4°C & 24.5°C respectively. For the recent week on average 182.3 growing degree days were accumulated. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 0.7/5.2 Knots. During the previous week the highest precipitation was recorded as 44.00 mm at Kalat while maximum temperature was recorded as 46.0°C at Nokkundi.

Khyber Pakhtunkhwa

Moderate to high rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 33.8°C & 21.7°C respectively. For the recent week on average 157.2 growing degree days were accumulated. Average relative humidity recorded as 76% and wind speed in the morning/evening recorded as 1.2/2.8 Knots. During the previous week the highest precipitation recorded as 66.00 mm at Balakot while maximum temperature was recorded as 43.0°C at Pattan.

Gilgit-Baltistan and Azad Jammu & Kashmir

Moderate to high rainfall observed in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 34.3°C & 20.4°C respectively. For the recent week on average 145.6 growing degree days were accumulated. Average relative humidity recorded as 60% and wind speed in the morning/evening recorded as 1.9/3.6 Knots. During the previous week the highest precipitation recorded as 87.00 mm at Muzafarabad while maximum temperature was recorded as 43.3°C at Chilas.

Sindh

Moderate to high rainfall was observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 37.4°C & 27.4°C respectively. For the recent week, on average 193.1 growing degree days were accumulated. Average relative humidity recorded as 66% and wind speed in the morning/evening recorded as 3.3/4.3 Knots. During the previous week the highest precipitation recorded as 147.00 at Thatta while maximum temperature was recorded as 43.5°C at Sukkur.

Past Weather for Major Agricultural Plains (29th July-4th August, 2019)

Rawalpindi (Potohar region)
82.60 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 6.1/4.6 Oktas while, average relative humidity observed as 78%. Mean day time temperature recorded 33.7°C & for the recent week 171.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/1.1 Knots.

Faisalabad (Central Punjab)
1.00 mm rainfall reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 3.6/5.9 Oktas while, average relative humidity observed as 69%. Mean day time temperature recorded as 35.9°C & for the recent week 191.9 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/0.9 Knots.

Tandojam (Lower Sindh)
134.80 mm rainfall reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 4.7/3.1 Oktas while, average relative humidity observed as 68%. Mean day time temperature recorded as 34.7°C & for the recent week 176.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.0/2.6 Knots.

Usta Muhammad (Eastern Baluchistan)
12.00 mm rainfall reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 4.2/2.1 Oktas while, average relative humidity observed as 66%. Mean day time temperature recorded as 39.5°C & for the recent week 178.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.5/0.8 Knots.

Quetta (Northern Baluchistan)
1.00 mm rainfall reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 2.9/4.3 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 35.1°C & for the recent week 181.4 growing degree days accumulated.

Wind speed recorded in the morning/evening as 4.1/3.8 Knots.

Past Weather for Sub-Regional Agricultural Plains (29th July-4th August, 2019)

Multan
38.00 mm rainfall reported from Multan during the week; however, cloudiness in the morning/evening recorded as 6.6/7.7 Oktas while, average relative humidity observed as 88%. Mean day time temperature recorded as 22.1°C & for the recent week 102.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/0.6 Knots.

Lahore
102.11 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 6.0/5.7 Oktas while, average relative humidity observed as 81%. Mean day time temperature recorded as 33.2°C & for the recent week 172.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/2.3 Knots.

Zhob
15.00 mm rainfall reported from reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 3.7/4.3 Oktas while, average relative humidity observed as 61%. Mean day time temperature recorded as 36.0°C & for the recent week 161.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.6/5.4 Knots.

Murree
38.00 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 6.6/7.7 Oktas while, average relative humidity observed as 88%. Mean day time temperature recorded as 22.1°C & for the recent week 102.0 growing degree days accumulated Wind speed recorded in the morning/evening as 0.6/0.6 Knots.

D.I. Khan
61.01 mm rainfall reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 5.3/4.4 Oktas while, average relative humidity observed as 75%. Mean day time temperature recorded as 37.1°C & for the recent week 184.0 growing degree days

accumulated. Wind speed recorded in the morning/evening as 1.1/0.9 Knots.

Peshawar

30.22 mm rainfall reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.9/4.3 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 36.8°C & for the recent week 155.4 growing degree days accumulated. Wind speed recorded in the morning/evening as 4.1/3.8 Knots.

Kalam

0.00 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.9/2.7 Oktas while, average relative humidity observed as 74%. Mean day time temperature recorded as 26.9°C & for the recent 115.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/3.1 Knots.

Gilgit

0.01 mm (Trace) rainfall reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 2.4/4.6 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 37.6°C & for the recent week 168.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.6/4.0 Knots.

Skardu

0.01 mm (Trace) rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 4.1/4.6 Oktas while, average relative humidity observed as 70%. Mean day time temperature recorded as 33.5°C & for the recent week 122.0 growing degree days accumulated. Wind speed recorded in the morning/evening as 5.7/8.0 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**, *Flowering Stage*.

Lower Sindh (Tandojam)

Presently cotton crop is sown in the fields of RAMC Tandojam.
Cotton (Shahbaz 95): **Good**, *Boll opening stage*.
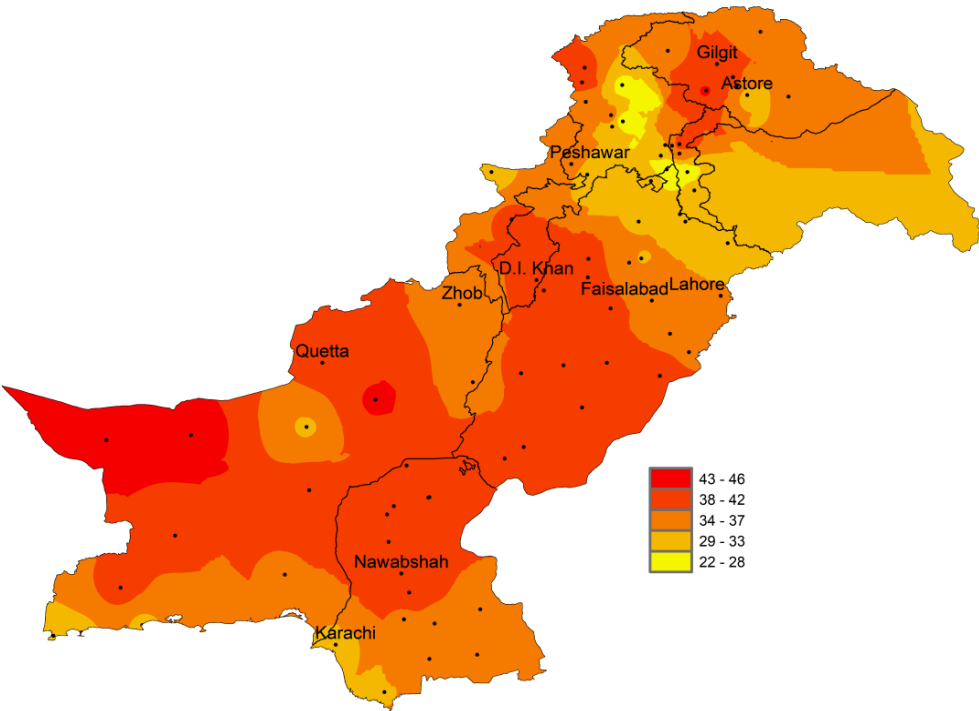
Northern Baluchistan (Quetta)

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

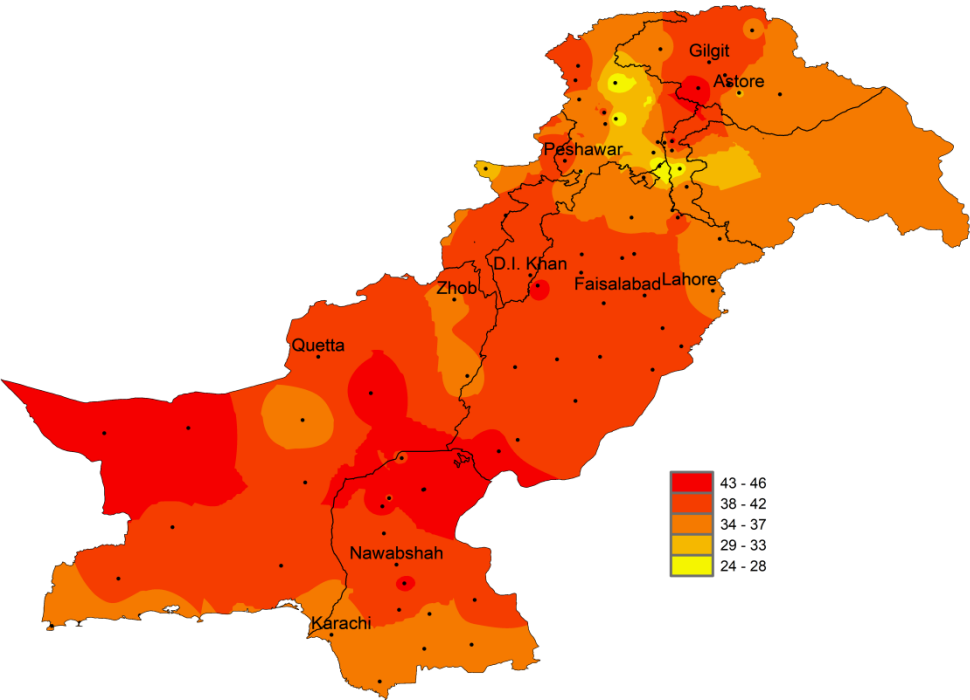### Eastern Baluchistan (Usta Muhammad)

Presently rice crop is sown in the fields of RAMC Usta Muhammad.
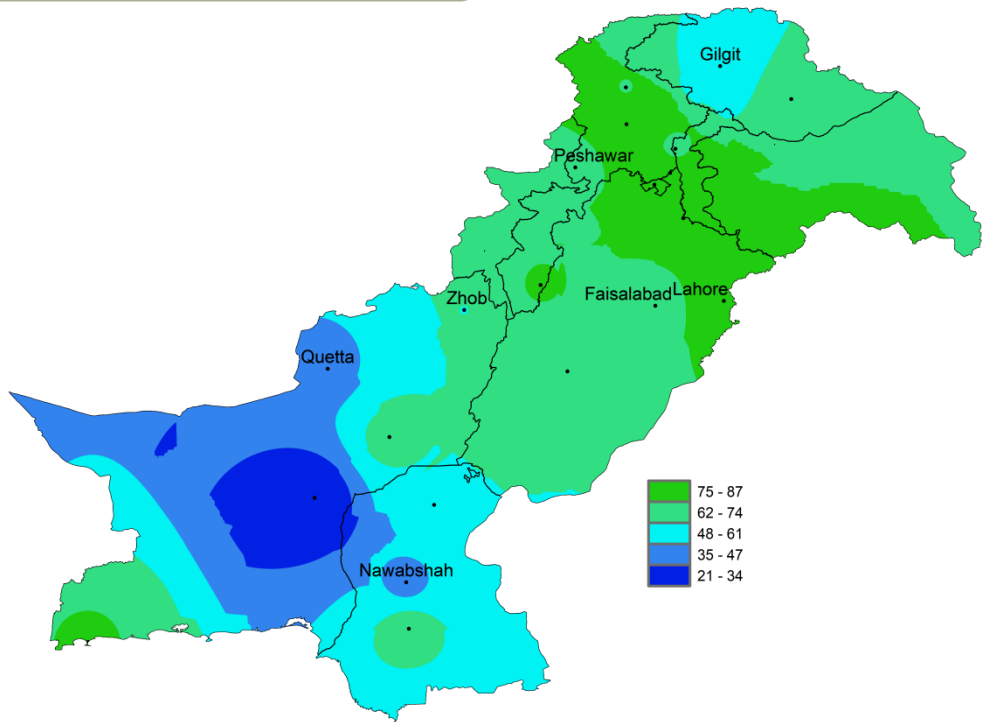**Rice: Good**, *Third Leaf Stage.*

Mean Maximum temperature (°C) during the Previous week (29ᵗʰ July-4ᵗʰ August, 2019)
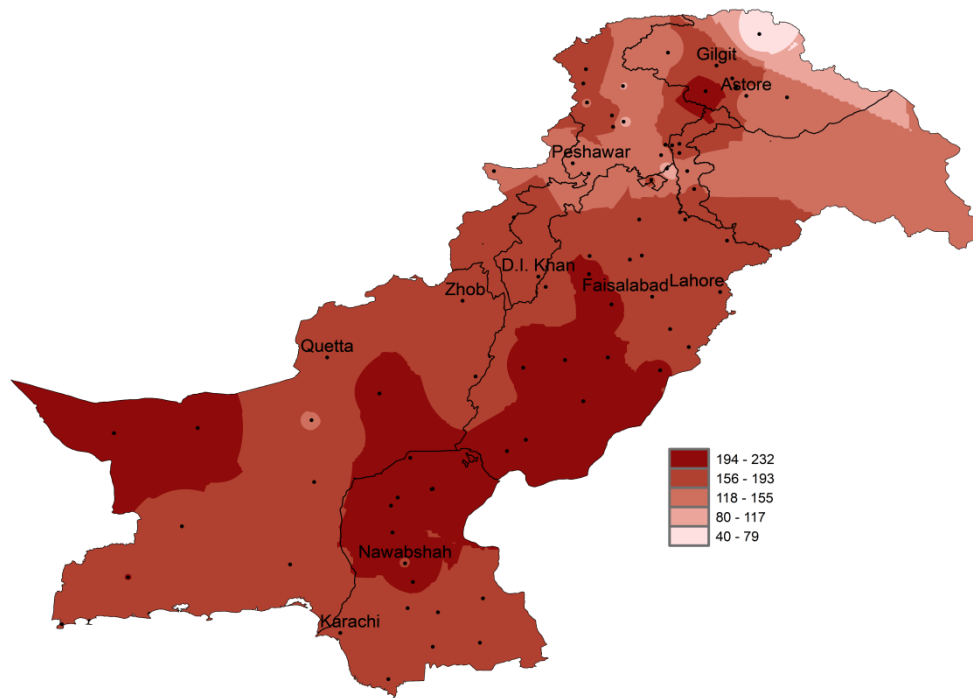

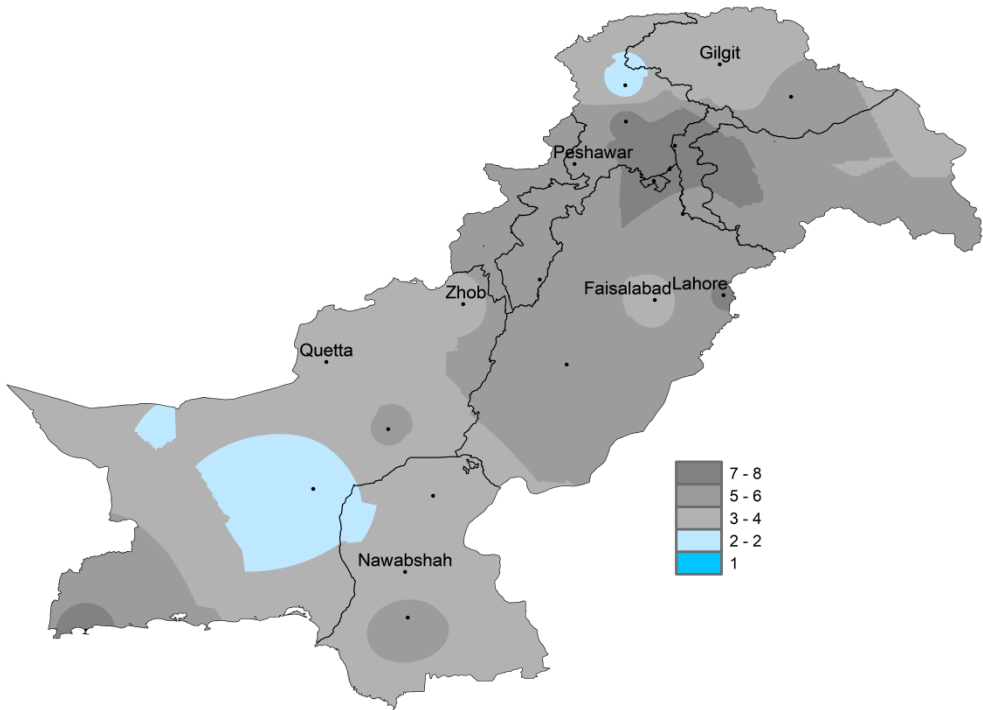**Highest Maximum Temperature (°C) during the Previous week (29ᵗʰ July-4ᵗʰ August, 2019)**

Mean Relative Humidity (%) during the

Previous week (29th July-4th August, 2019)

Total Growing Degree Days accumulated during the

Previous week (29th July-4th August, 2019)

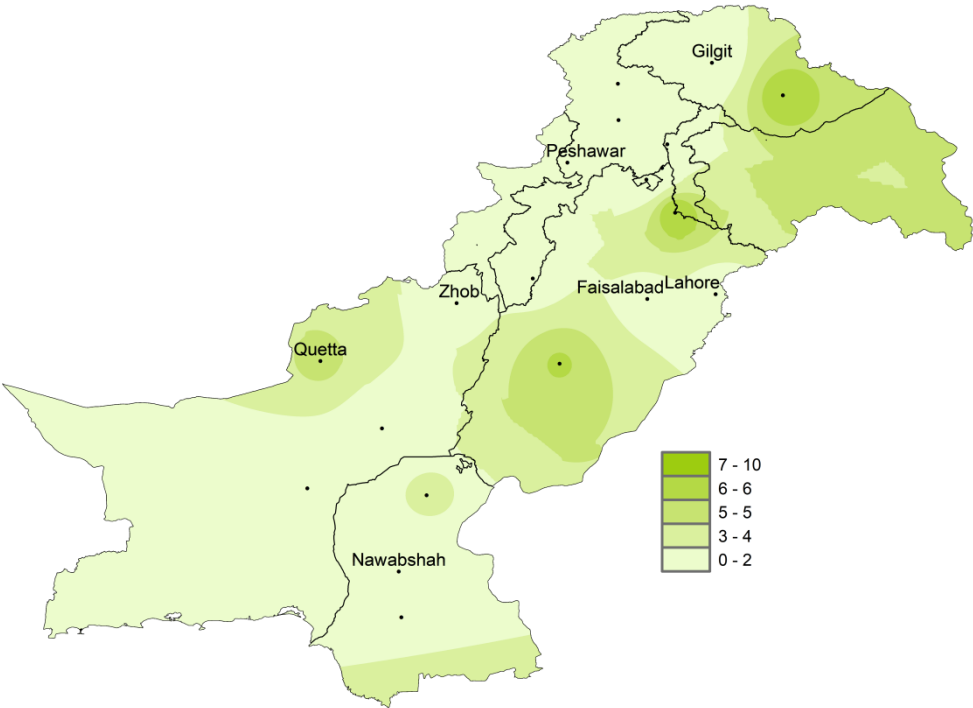**Mean Cloudiness (Oktas) at 0800PST during the Previous week (29th July-4th August, 2019)**
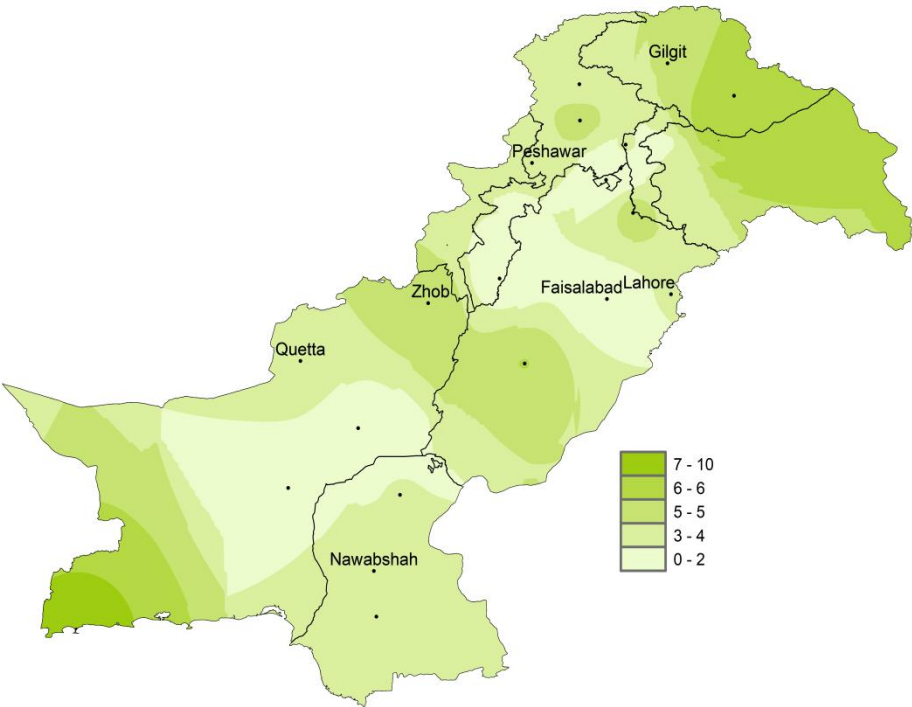
Mean Cloudiness (Oktas) at 1700PST during the Previous week (29th July-4th August, 2019)

Mean Wind Speed (Knots) at 0800PST during the Previous week (29th July-4th August, 2019)

Mean Wind Speed (Knots) at 1700PST during the Previous week (29th July-4th August, 2019)

Weekly Weather Advisory for Farmers
(5th August to 11th August, 2019)

Weak monsoon currents from Arabian Sea are penetrating upper parts of the country. Strong monsoon currents from Bay of Bengal are expected to reach upper and central parts of the country from Thursday.

MONDAY
05-08-2019

Mainly hot and humid weather is expected in most parts of the country during day time. However, rain/wind-thunderstorm is expected at isolated places in Hazara, Rawalpindi, Gujranwala, Lahore divisions, Islamabad and Kashmir during evening/night.

TUESDAY
06-08-2019

Mainly hot and humid weather is expected in most parts of the country during day time. However, rain/wind-thunderstorm with a few heavy falls is expected at isolated places in Hazara, Rawalpindi, Gujranwala, Lahore divisions, Islamabad and Kashmir.

WEDNESDAY
07-08-2019

Mainly hot and humid weather is expected in most parts of the country. However, rain/wind-thunderstorm is expected at isolated places in Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad, Sahiwal, D.G.Khan, Zhob, Hazara, Peshawar divisions, Islamabad and Kashmir.

THURSDAY
08-08-2019

Rain/wind-thunderstorm is expected at scattered places in Rawalpindi, Gujranwala, Lahore, Sargodha, Faisalabad, D.G khan, Sahiwal, D.I khan divisions, Islamabad, Kashmir, while at isolated places in Peshawar, Hazara, Multan and Bahawalpur divisions. Hot and humid weather is expected elsewhere in the country.

FRIDAY
09-08-2019

Widespread rain/wind-thunderstorm with isolated heavy falls is expected in upper Khyber Pakhtunkhwa, upper Punjab, Islamabad, Kashmir, while at scattered places in Kohat, Bannu, D.I.Khan, D.G.Khan, Sahiwal, Bahawalpur, Multan divisions, and at isolated places in Zhob, Kalat, Sibbi, Naseerabad, Sukkur, Mirpurkhas, Hyderabad, Thatta, Karachi divisions.

SATURDAY
10-08-2019

Widespread rain/wind-thunderstorm is expected in Sindh, while at scattered places in Zhob, Sibbi, Naseerabad, Kalat, Peshawar, Kohat, Bannu, D.I.Khan, Rawalpindi, Gujranwala, Multan, Sahiwal, D.G.Khan, Bahawalpur divisions, Islamabad, Kashmir and at isolated places in Sargodha, Faislabad, Lahore, Malakand, Hazara, Mardan divisions. Isolated heavy to very heavy falls are also expected in southeastern Sindh (Mirpurkhas, Hyderabad and Thatta divisions).

SUNDAY
11-08-2019

Rain/wind-thunderstorm is expected at scattered places in Lower Sindh (Mirpurkhas, Hyderabad, Karachi divisions), Hazara, Rawalpindi, Gujranwala, Lahore divisions, Islamabad, Kashmir, while at isolated places in Sargodha, Faisalabad, Sukkur divisions. Hot and humid weather is expected elsewhere in the country.

ADVISORY FOR FARMERS

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

1. Due to higher temperature worm attack is expected on Cotton crop, so farmers are advised to take adoptive measures especially the use of PB ropes in consultancy with plant protection department.
2. After the recent rainfall spell, measures may be taken to flush out the extra water from the fields of Cotton crops and vegetables.
3. Farmers of rainfed areas may complete sowing of Millet/Sorghum etc.

National Weather Data of Selected Cities from (29th July to 4th August, 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	37.1	40.5	184.0	75	61.01	5.3	4.4	1.1	0.9
Faisalabad	35.9	38.5	191.9	69	1.00	3.6	5.9	1.4	0.9
Gawadar	32.4	33.0	173.0	76	0.00	6.0	4.6	0.7	8.9
Gilgit	37.6	38.5	168.5	47	0.01	2.4	4.6	0.6	4.0
Kalam	26.9	27.0	115.8	74	0.00	0.9	2.7	0.0	3.1
Khuzdar	39.3	41.5	176.0	21	21.00	0.7	1.1	0.0	1.4
Lahore	33.2	36.2	172.0	81	102.11	6.0	5.7	1.1	2.3
Malam Jabba	22.6	24.5	100.3	84	37.00	6.7	6.4	2.0	4.6
Mangla	32.4	37.0	166.8	79	63.80	5.1	4.1	6.3	4.9
Multan (PBO)	37.6	40.2	195.2	68	20.80	5.6	3.3	5.1	5.6
Murree	22.1	23.8	102.0	88	38.00	6.6	7.7	0.6	0.6
Muzaffarabad	33.7	35.0	158.0	71	87.00	7.2	3.3	0.8	2.5
Nawabshah	37.9	39.0	192.5	70	126.00	4.7	2.9	1.7	2.6
Peshawar	36.8	40.0	155.4	43	30.22	2.9	4.3	4.1	3.8
Quetta	35.1	37.0	181.4	78	1.00	6.1	4.6	0.0	1.1
Rawalpindi	33.7	37.5	171.5	60	82.60	2.7	2.6	2.3	2.3
Rohri	40.6	42.0	249.5	42	1.00	2.4	4.6	0.0	3.1
Skardu	33.5	34.6	122.0	70	0.01	4.1	4.6	5.7	8.0
Tandojam	34.7	38.0	176.8	68	134.80	4.7	3.1	2.0	2.6
Usta. M	39.5	40.5	178.8	66	12.00	4.2	2.1	0.5	0.8
Zhob	36.0	37.0	161.0	61	15.00	3.7	4.3	1.6	5.4

*** *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 قابلِ ذکر اضافہ ہوسکتا ہے۔ جو کہ دن کے وقت c°2.8 اور رات کو c°2.2 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 سدِّ 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 2014-2012)