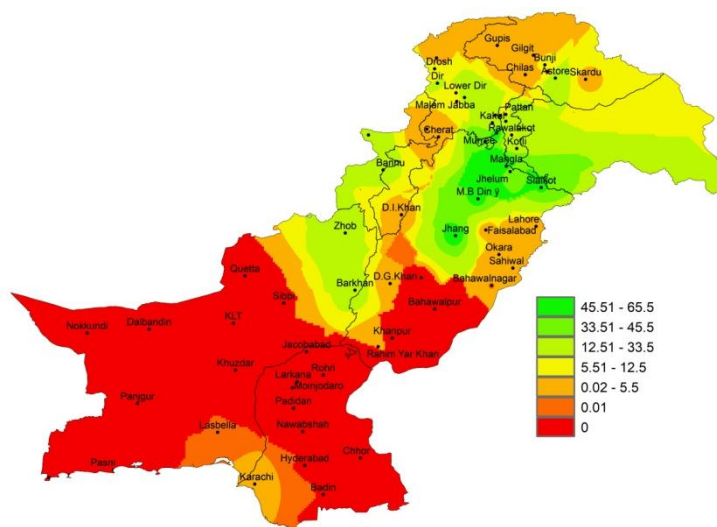# Weekly Weather and Crop Bulletin for Pakistan

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

**Phone: +92-51-9250299
Email: dirnamc@yahoo.com**

45.51 - 65.5	
33.51 - 45.5	
12.51 - 33.5	
5.51 - 12.5	
0.02 - 5.5	
0.01	
0	

Rainfall Distribution (mm) during the Previous Week (10th September to 16th September, 2018)

Contents

Patron-in-Chief: Dr. Ghulam Rasul (Director General)

Editor-in-Chief: Asma Jawad Hashmi (Depty Director)

Editor: Saeeda Saleh (Assistant Meteorologist)

Highlights of Past Weather (10th September to 16th September, 2018)

Normal to below normal day temperature was observed all over the country.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed in Punjab, Gilgit-Baltistan, Azad Jammu & Kashmir , Khyber Pakhtunkhwa and Baluchistan during the previous week.

- Light rainfall observed in Sindh during the previous week.

Past Weather of Provinces (10th September to 16th September, 2018)

Punjab

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 35.0°C & 24.1°C respectively. For the recent week on average 171.9 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 67% and wind speed in the morning/evening recorded as 2.8/3.0 Knots. During the previous week the highest amount of rainfall was recorded as 65.50 mm at Mangla & highest maximum temperature was recorded as 42.5°C at Bhakkar.

Sindh

Light rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 36.4°C & 24.9°C respectively. For the recent week, on average 179.0 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 66% and wind speed in the morning/evening recorded as 4.6/6.6 Knots. During the previous week the highest amount of rainfall was recorded as 0.02mm at Karachi and Badin & highest maximum temperature was recorded as 42.5°C at Nawabshah.

Khyber Pakhtunkhwa

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 31.9°C & 19.0°C respectively. For the recent week on average 146.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 60% and wind speed in the morning/evening recorded as 1.2/3.2 Knots. During the previous week the highest amount of rainfall was recorded as 27.01mm at Kohat & highest maximum temperature was recorded as 41.0°C at Bannu.

Baluchistan

Light to moderate rainfall observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 35.7°C & 21.0°C respectively. For the recent week on average 161.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 47% and wind speed in the morning/evening recorded as 1.6/5.5 Knots. During the previous week the highest amount of rainfall was recorded as 18.00 mm Barkhan & highest maximum temperature was recorded as 44.0°C at Sibbi.

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 29.0°C & 15.8°C respectively. For the recent week on average 115.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 55% and wind speed in the morning/evening recorded as 0.9/2.2 Knots. During the previous week the highest amount of rainfall was recorded as 35.50 mm at Garhi dopatta & highest maximum temperature was recorded as 40.0°C at Chillas.

Past Weather for Major Agricultural Plains (10th September to 16th September, 2018)

Rawalpindi (Potohar region)

Rainfall reported as 48 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 4.1/3.4 Oktas while, average relative humidity observed as 75%. Mean day time temperature recorded as 33.6°C & for the recent week 155.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/0.8 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.4/1.7 Oktas while, while, average relative humidity observed as 62%. Mean day time temperature recorded as 36.6°C & for the recent week 181.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.8/1.8 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness recorded in the morning/evening as 0.0/0.3 Oktas while, average relative humidity observed as 67%. Mean day time temperature recorded as 34.9°C & for the recent week 166.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.2/5.6 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, no cloudiness were recorded while, average relative humidity observed as 72%. Mean day time temperature recorded as 36.1°C & for the recent week 179.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/2.6 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 17%. Mean day time temperature recorded as 32.4°C & for the recent week 137.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.2/3.6 Knots.

Past Weather for Sub-Regional Agricultural Plains (10th September to 16th September, 2018)

Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 1.0/1.9 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 35.2°C & for the recent week 183.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 6.6/8.3 Knots.

Lahore

Rainfall reported as 0.01mm (trace) from Lahore during the week; however, cloudiness in the morning/evening recorded as 2.3/3.4 Oktas while, average relative humidity observed as 65%. Mean day time temperature recorded as 34.7°C & for the recent week 173.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening 2.3/3.1 Knots.

Zhob

Rainfall reported as 17.00 mm from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.6/0.9 Oktas while, average relative humidity observed as 46%. Mean day time temperature recorded as 34.6°C & for the recent week 160.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.3/6.6 Knots.

Murree

Rainfall reported as 53.70 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 4.1/5.4 Oktas while, average relative humidity observed as 78%. Mean day time temperature recorded as 21.8°C & for the recent week 90.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/0.9 Knots.

D.I. Khan

Rainfall reported as 0.01 mm (trace) from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.9/1.1 Oktas while,

average relative humidity observed as 64%. Mean day time temperature recorded as 38.1°C & for the recent week 186.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/1.4 Knots.

Peshawar

Rainfall reported as 2.01 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.1/2.0 Oktas while, average relative humidity observed as 64%. Mean day time temperature recorded as 34.6°C & for the recent week 169.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/2.0 Knots.

Kalam

Rainfall reported as 17.00 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.0/3.4 Oktas while, average relative humidity observed as 63%. Mean day time temperature recorded as 24.4°C by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

Gilgit

Rainfall reported as 3.20 mm from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.9/5.0 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 30.6°C & for the recent week 114.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.9 Knots.

Skardu

Rainfall reported as 3.03 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 4.7/4.9 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 25.0°C & for the recent week 88.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.1 Knots.

Crop Situation for Major Agricultural Plains (Based on data from Regional Agro met Centers)

Potohar Region (Rawalpindi)

Presently maize crop is sown in the fields of RAMC Rawalpindi.
Maize; *Very Good ,9th leaf* stage**.**

Central Punjab (Faisalabad)

Presently cotton crop is sown in the fields of RAMC Faisalabad.
Cotton; *Very Good,* *Boll opening stage.*

Lower Sindh (Tandojam)

There is presently cotton crop in the fields of RAMC Tandojam.
Cotton (CIM 602)*; Good,* *Maturity* stage**.**
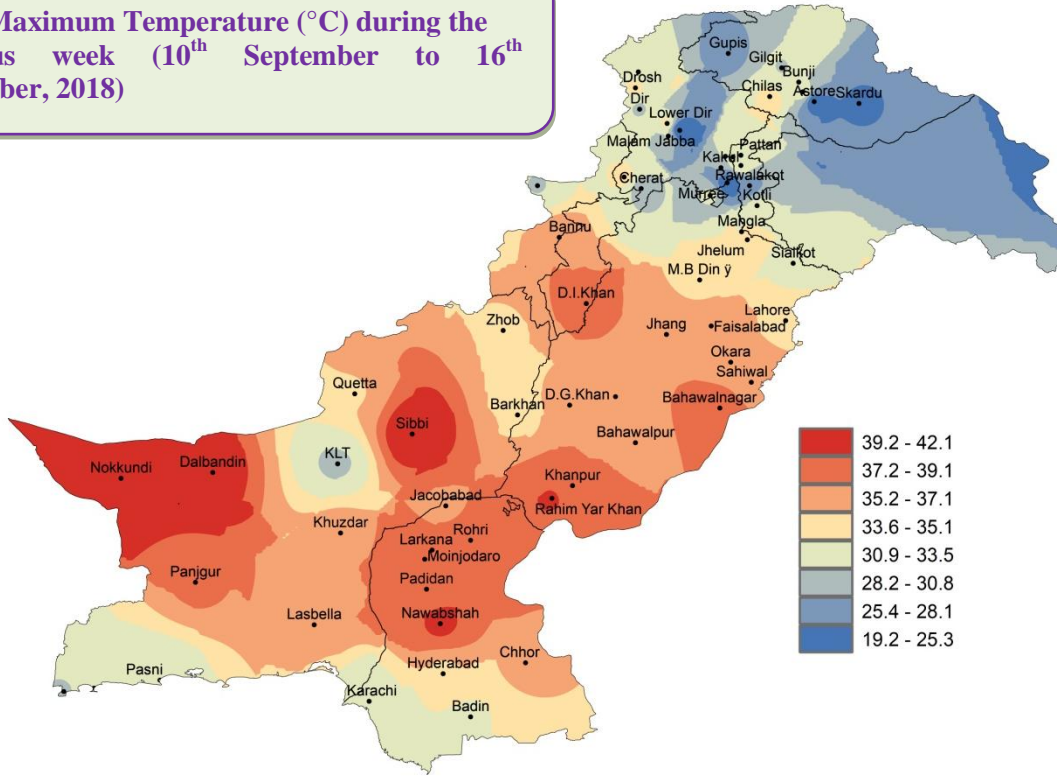
Northern Baluchistan (Quetta)

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

Eastern Baluchistan (Usta Muhammad)

There is presently rice crop in the fields of RAMC Usta Muhammad.
Rice; *Flowering* stage.

Mean Maximum Temperature (°C) during the Previous week (10th September to 16th September, 2018)

	39.2 - 42.1
	37.2 - 39.1
	35.2 - 37.1
	33.6 - 35.1
	30.9 - 33.5
	28.2 - 30.8
	25.4 - 28.1
	19.2 - 25.3

Highest maximum Temperature (°C) during the Previous week (10th September to 16th September, 2018)

	41.2 - 44
	38.3 - 41.1
	35.4 - 38.2
	32.5 - 35.3
	29.6 - 32.4
	26.7 - 29.5
	23.6 - 26.6
	20.8 - 23.5
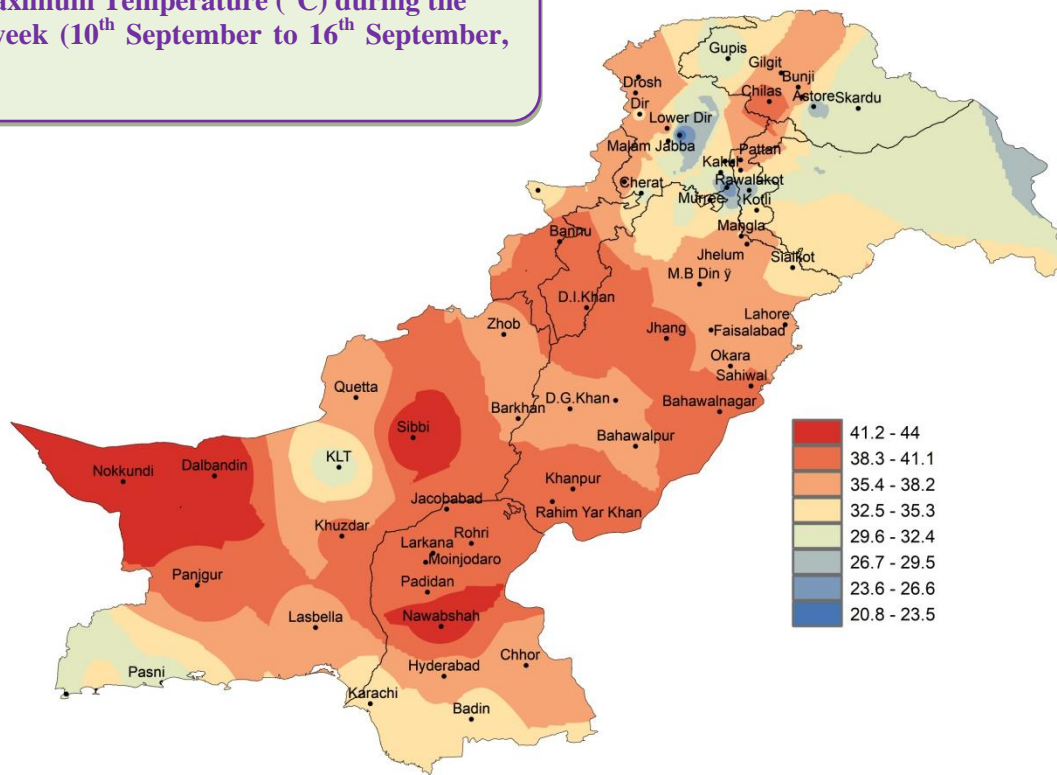
Mean Relative Humidity (%) during the Previous week (10th September to 16th September, 2018)

Legend:
- 72 - 81
- 63 - 71
- 56 - 62
- 47 - 55
- 38 - 46
- 27 - 37
- 18 - 26
- 11 - 17
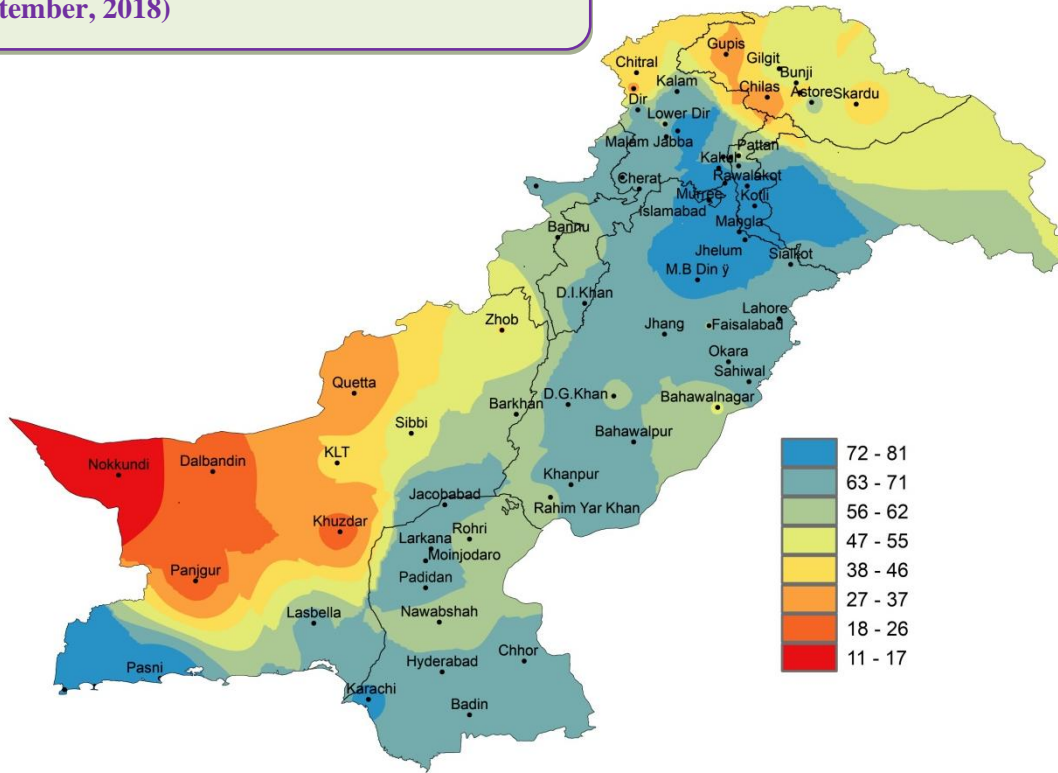
Total Growing Degree Days accumulated during the Previous week (10th September to 16th September, 2018)

Legend:
- 183.6 - 196.9
- 170.6 - 183.5
- 150.6 - 170.5
- 135.7 - 150.5
- 119.6 - 135.6
- 105.6 - 119.5
- 88.6 - 105.5
- 73 - 88.5

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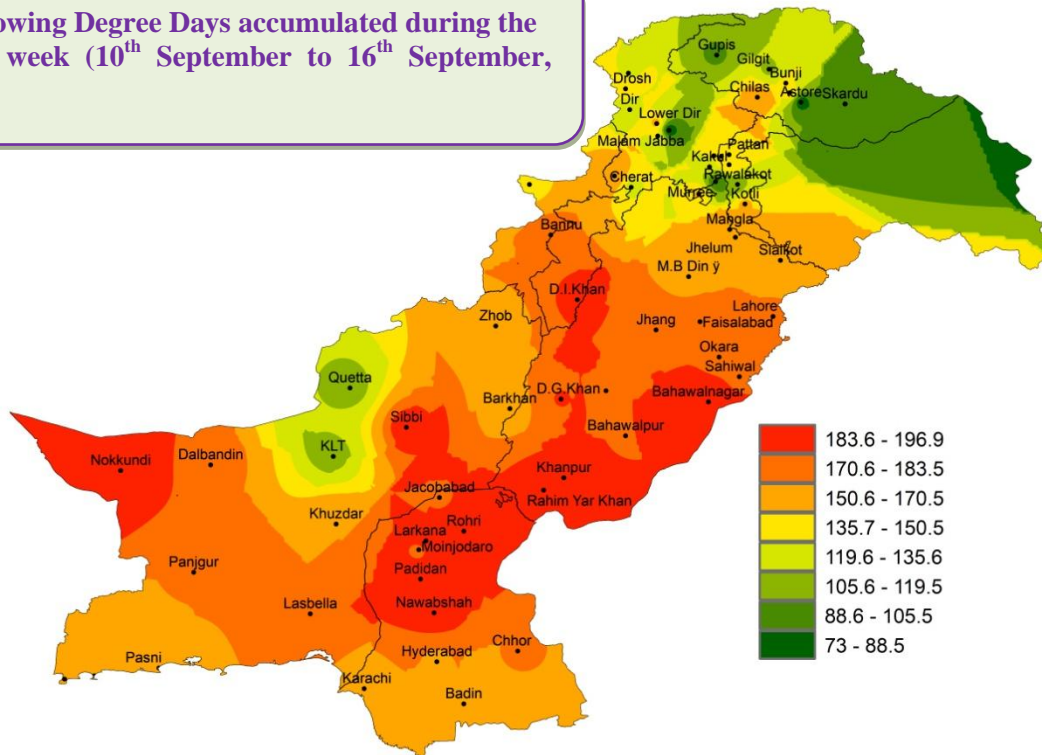
Mean Wind Speed (Knots) at 0800PST during the Previous week (10th September to 16th September, 2018)

	9.3 - 10.9
	7.3 - 9.2
	4.6 - 7.2
	2.2 - 4.5
	0.9 - 2.1
	0 - 0.8
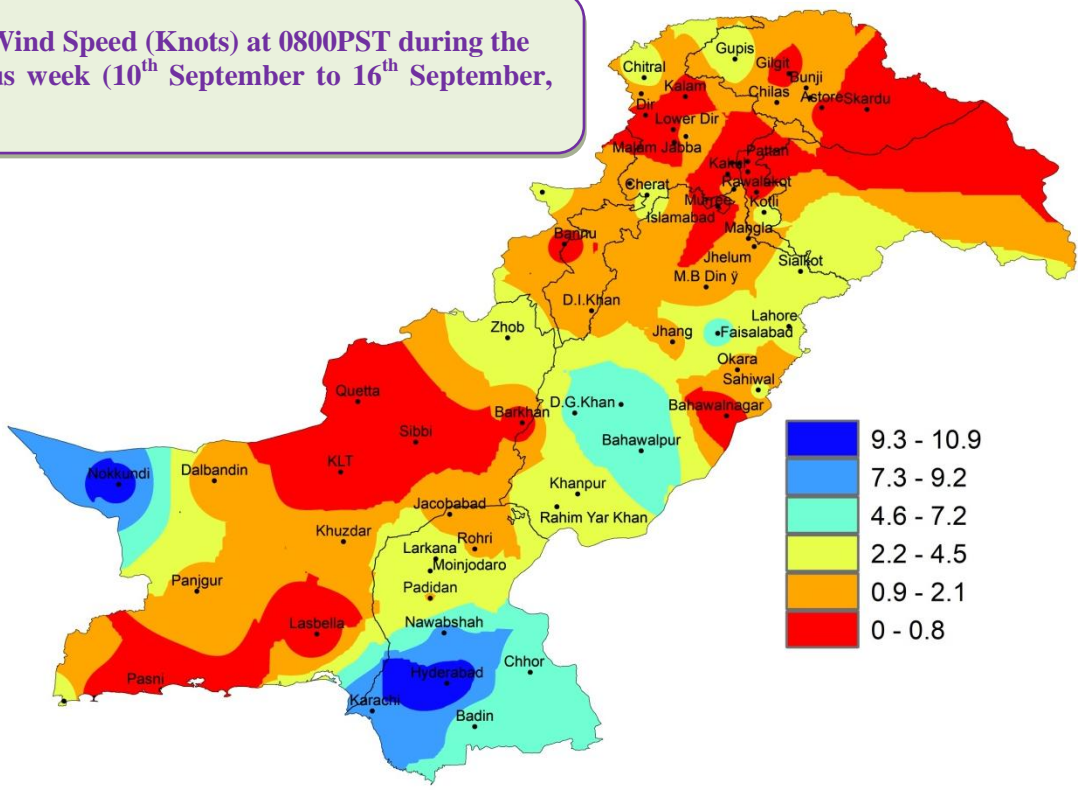
Mean Wind Speed (Knots) at 1700PST during the Previous week (10th September to 16th September, 2018)

	16.6 - 19.7
	14.2 - 16.5
	11.4 - 14.1
	5.7 - 11.3
	3.3 - 5.6
	1.6 - 3.2
	0 - 1.5
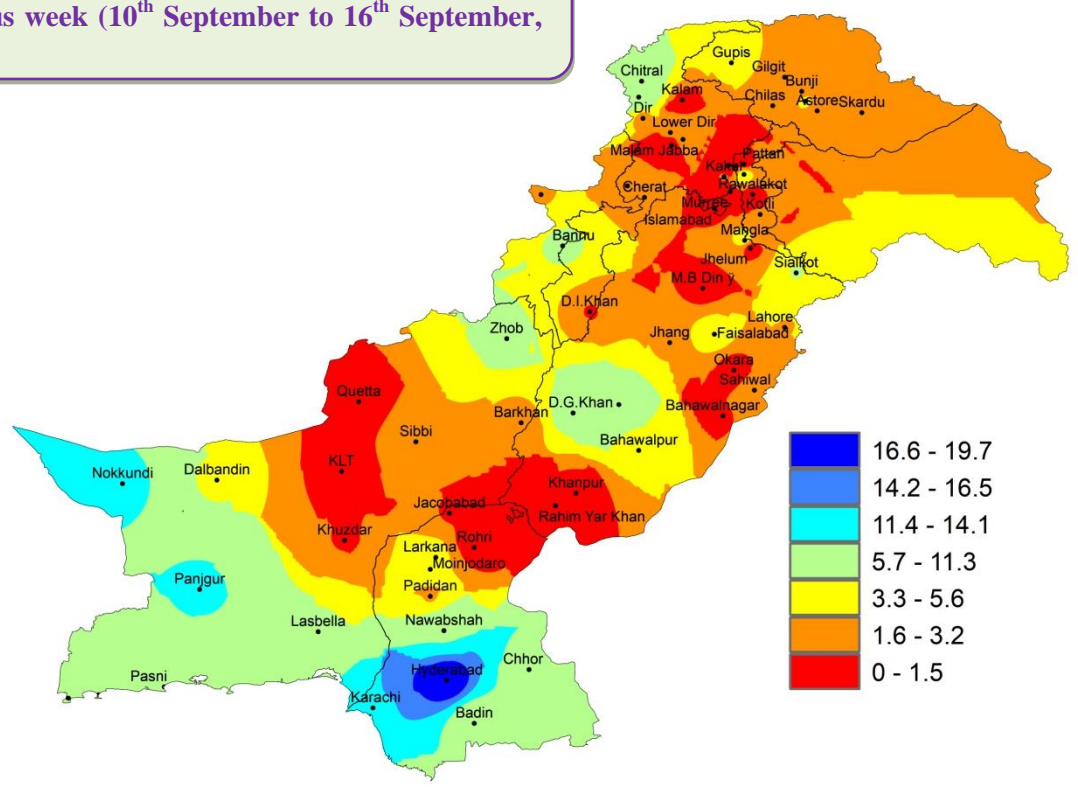
Mean Cloudiness (Oktas) at 0800PST during the Previous week (10th September to 16th September, 2018)

Legend:
- 5.7 - 6.7
- 4.6 - 5.6
- 3.5 - 4.5
- 2.3 - 3.4
- 1.2 - 2.2
- 0 - 1.1
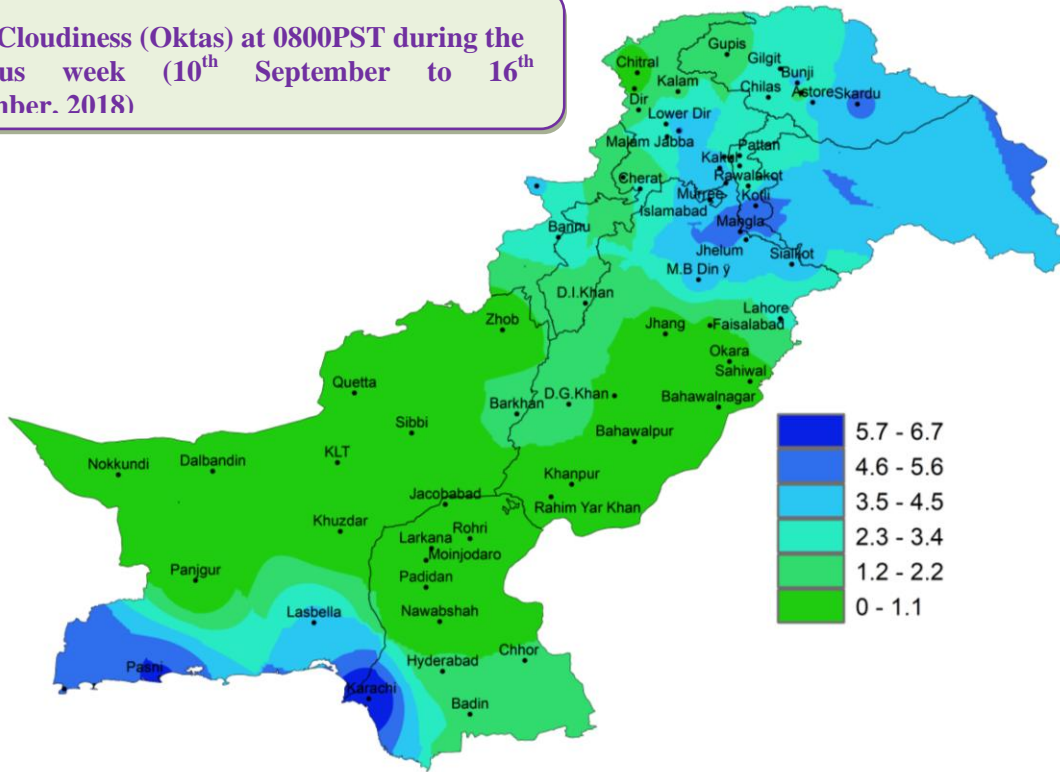
Mean Cloudiness (Oktas) at 1700PST during the Previous week (10th September to 16th September, 2018)

Legend:
- 5.3 - 6.3
- 4.3 - 5.2
- 3.6 - 4.2
- 2.4 - 3.5
- 0.9 - 2.3
- 0 - 0.8
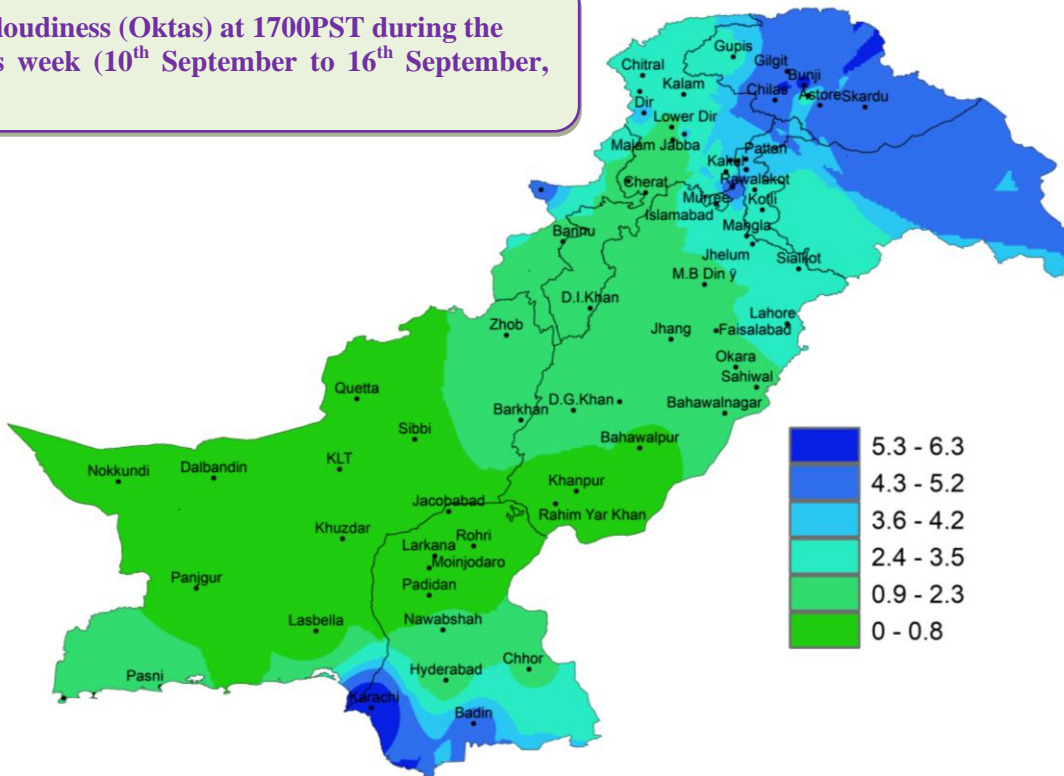
Weekly Weather Advisory for Farmers
(17ᵗʰ September to 23ʳᵈ September, 2018)

Seasonal low lies over northeast Balochistan. Dry continental air is prevailing over most parts of the country.

MONDAY
17-09-2018

Mainly dry weather is expected in most parts of the country. However, rain-thundershower may occur at one or two places in Gilgit Baltistan.

TUESDAY
18-09-2018

Mainly dry weather is expected in most parts of the country.

WEDNESDAY
19-09-2018

Mainly dry weather is expected in most parts of the country.

THURSDAY
20-09-2018

Mainly dry weather is expected in most parts of the country.

FRIDAY
21-09-2018.

Mainly hot and humid weather is expected in most parts of the country. However, rain-thundershower may occur at isolated places in Malakand, Mardan and Kohat divisions.

SATURDAY
22-09-2018

Mainly hot and humid weather is expected in most parts of the country. However, rain-thundershower may occur at isolated places in Malakand, Hazara, Rawalpindi, Peshawar Mardan and Kohat divisions.

SUNDAY
23-09-2018

Mainly hot and humid weather is expected in most parts of the country. However, rain-thundershower may occur at isolated places in Malakand, Gujranwala, Lahore, Sahiwal divisions and Kashmir.

ADVISES FOR FARMERS

During the last week, light to moderate rainfall occurred in upper half of the country while hot and dry weather prevailed in rest parts. This may continue with almost the same pattern in coming days as well. Keeping in view the expected weather conditions following advises are suggested for farming community.

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

Weather Outlook from (17th September to 23rd September, 2018)

The outlook from 17th September to 19th September, 2018 shows that dry weather may prevail in all parts of the country.
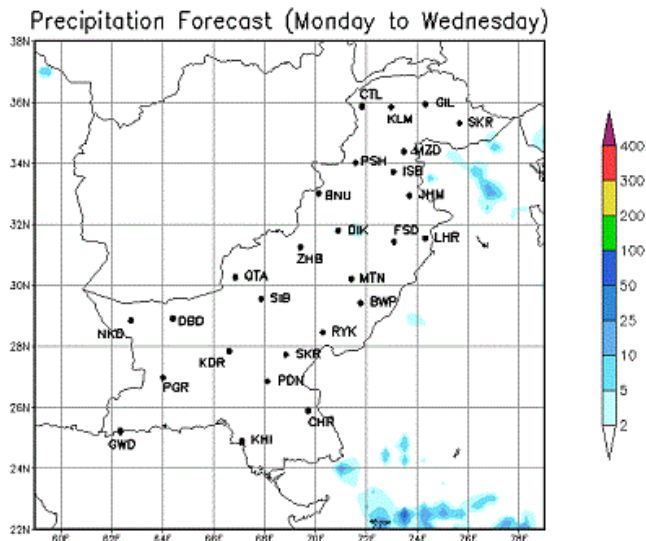
The outlook from 20th September to 23rd September, 2018 shows that light to moderate rainfall is expected in scattered places of Khyber Pakhtunkhwa and northeastern part of the Baluchistan. However, dry weather may prevail in rest of the country.
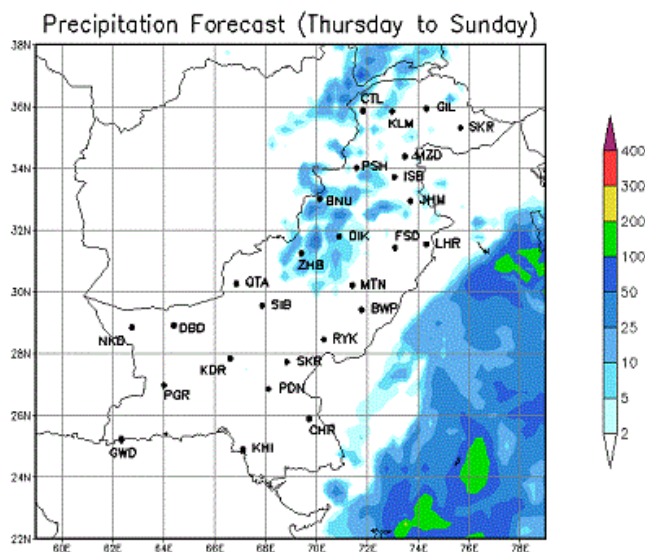
National Weather Data of Selected Cities (Weekly Data from 10th September to 16th September, 2018)

Stations	Maximum/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	highest							
Astore	22.1	27.0	77.0	60	25.80	4.0	5.1	0.0	1.7
Badin	33.1	34.0	168.8	69	0.00	2.0	4.7	5.7	7.1
Bahawalnagar	39.1	41.0	197.0	55	0.00	0.0	1.3	0.0	1.4
Bahawalpur	36.5	37.9	183.3	63	0.00	0.3	0.3	5.7	4.0
Balakot	31.0	34.5	137.4	71	18.80	3.6	4.0	0.0	0.0
Bannu	37.1	41.0	181.3	57	15.00	2.4	1.4	0.6	6.3
Barkhan	34.6	38.0	163.3	59	18.00	1.4	1.7	0.3	1.7
Bunji	30.9	36.1	138.0	50	8.01	4.1	6.1	2.0	1.7
Cherat	29.3	31.5	129.8	68	3.00	2.6	2.3	2.9	2.9
Chhor	35.7	36.4	170.8	65	0.00	1.1	2.1	6.0	9.4
Chilas	34.1	40.0	162.3	31	0.43	2.9	5.1	1.1	1.7
Chitral	32.6	36.5	133.1	40	0.01	1.0	2.4	3.1	7.4
D.I.Khan	38.1	40.5	186.3	64	0.01	1.9	1.1	1.4	1.4
Dalbandin	40.7	43.5	180.8	23	0.00	0.0	0.0	1.1	4.9
D.G.Khan	35.6	37.7	184.0	65	0.00	1.4	1.6	4.9	7.1
Dir	30.3	35.0	121.5	66	13.00	2.0	3.9	0.0	2.0
Drosh	34.1	37.2	147.9	35	11.00	1.0	2.9	1.1	10.9
Faisalabad	36.6	39.0	181.8	62	0.00	0.4	1.7	1.8	1.8
Garidopatta	32.6	35.2	147.5	68	35.30	2.3	4.3	0.3	5.1
Gawader	32.5	33.0	152.8	72	0.00	5.3	2.3	0.0	9.7
Gilgit	30.6	36.5	114.5	54	3.20	2.9	5.0	0.0	2.9
Gupis	26.3	30.5	103.0	34	0.00	1.7	3.3	2.9	4.0

Hyderabad	34.6	36.5	168.4	65	0.00	1.4	1.6	10.9	19.7
Islamabad	31.9	34.5	153.0	71	45.01	4.1	2.4	0.0	0.9
Jacobabad	36.4	39.0	182.0	68	0.00	0.3	0.3	1.4	1.4
Jhang	36.0	39.0	177.2	66	51.60	0.3	1.6	1.7	2.6
Jhelum	34.4	36.5	166.4	74	32.40	3.4	2.3	1.7	0.3
Jiwani	30.6	31.5	156.3	76	0.00	4.7	1.6	3.1	8.0
Kakul	28.4	30.5	125.5	72	14.01	4.0	2.6	0.3	1.7
Kalam	24.4	28.0	***	63	17.00	2.0	3.4	0.0	0.9
Karachi	31.4	33.0	164.9	71	0.02	6.7	6.3	9.1	13.7
Khanpur	37.3	39.0	185.5	64	0.00	0.6	0.0	4.0	0.6
Khuzdar	36.6	39.0	169.8	23	0.00	0.0	0.6	1.4	1.4
KLT	30.1	31.0	114.0	39	0.00	0.0	0.0	0.0	0.9
Kotli	32.2	34.4	153.8	72	30.40	5.4	2.9	2.9	1.7
Lahore	34.7	36.0	173.6	65	0.01	2.3	3.4	2.3	3.1
Larkana	37.6	40.0	186.8	67	0.00	0.0	0.4	3.4	3.7
Lasbella	36.3	37.5	183.3	63	0.00	3.4	0.0	0.0	6.3
Lower Dir	34.9	38.5	158.0	60	12.00	3.3	1.7	0.3	2.0
M.B Din	34.6	36.5	164.4	76	49.00	3.9	1.9	0.9	0.6
Malam Jabba	18.9	20.5	71.5	82	18.00	4.7	4.0	2.3	2.9
Mangla	33.4	35.2	159.3	72	65.50	5.7	3.4	0.9	4.6
Mir Khani	33.7	38.2	148.7	36	3.00	1.0	1.9	1.9	4.0
Moinjodaro	38.0	39.5	182.5	65	0.00	0.4	0.0	3.1	4.0
Multan(PBO)	35.2	38.1	183.1	62	0.00	1.0	1.9	6.6	8.3
Murree	21.8	24.2	90.5	78	53.70	4.1	5.4	1.7	0.9
Muzaffarabad	32.4	34.5	148.4	64	12.20	2.1	3.1	0.3	1.4
Nawabshah	39.7	42.5	191.0	56	0.00	0.0	1.1	7.7	10.9

Nokkundi	40.3	43.5	191.0	11	0.00	0.0	0.0	9.7	12.3
Okara	35.4	37.5	178.0	69	1.00	1.0	1.9	1.1	0.3
Padidan	37.9	41.0	185.3	65	0.00	0.6	0.6	2.0	2.9
Panjgur	37.8	40.0	175.0	22	0.00	0.0	0.0	1.7	12.0
Parachinar	30.6	33.0	141.4	64	17.00	3.4	4.6	3.0	3.0
Pasni	31.3	31.5	156.8	81	0.00	5.7	1.1	0.3	6.7
Pattan	33.0	37.0	150.3	53	8.00	2.6	4.0	0.0	0.0
Peshawar	34.6	38.5	169.3	64	2.01	1.1	2.0	0.9	2.0
Quetta	32.4	34.6	137.5	17	0.00	0.0	0.3	1.2	3.6
Rahim Y. Khan	39.3	40.5	192.3	61	0.00	0.1	0.0	2.6	1.1
Rawalakot	25.7	28.0	108.0	77	9.70	2.9	3.0	0.0	0.6
Rawalpindi	33.6	35.9	155.0	75	48.00	4.1	3.1	0.6	0.8
Rohri	39.1	40.5	193.5	57	0.00	0.0	0.0	2.0	0.3
Sahiwal	35.9	38.5	181.2	65	0.00	0.9	2.0	2.3	2.9
Saidu Sharif	31.1	34.5	138.8	64	6.00	2.3	0.7	0.0	0.0
Sialkot	32.6	34.5	159.4	70	46.90	3.6	3.1	4.3	5.7
Sibbi	42.1	44.0	193.0	53	0.00	0.0	0.6	0.0	2.6
Skardu	25.0	30.0	88.4	45	3.03	4.7	4.9	0.0	3.1
Tandojam	34.9	37.0	166.5	67	0.00	0.0	0.3	4.2	5.6
Usta.M	36.1	36.5	179.1	72	0.00	0.0	0.0	0.9	2.6
Zhob	34.6	37.5	160.5	46	17.00	0.6	0.9	3.3	6.6

*** *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 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 جا سکتی ہے۔

(ایگمپ پاکستان 2014-2012)