

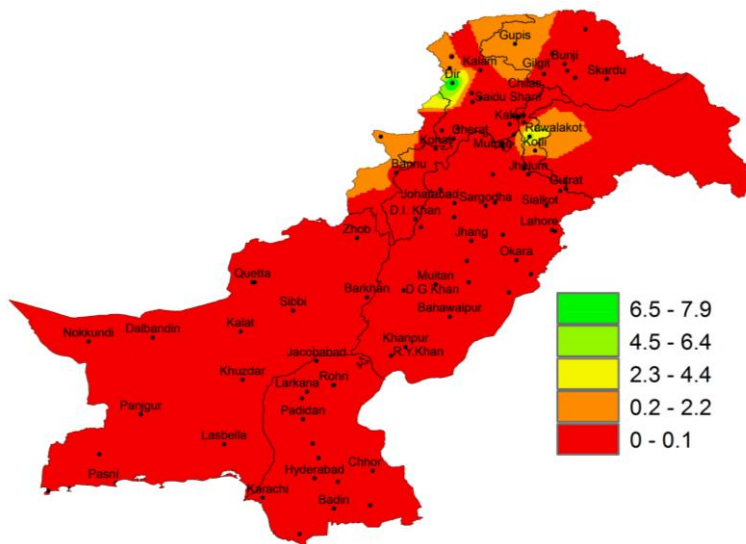
Weekly Weather and Crop Bulletin for Pakistan

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PAKISTAN METEOROLOGICAL
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Rainfall Distribution (mm) during the previous
Week (9th to 15th October, 2017)



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Highlights of Past Weather (9th to 15th October, 2017)

Above normal day time temperatures reported from most parts of the country.

Province wise distribution of rainfall reported as follows:

- Dry weather reported from Punjab, Sindh and Baluchistan during this week.
- Light rainfall reported from isolated places of Gilgit-Baltistan, Kashmir, Malakand division (KP) and FATA.

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

Editor-in-Chief: Dr. Khalid M. Malik (Director)

Editor:Dr.Dildar H. Kazmi (Meteorologist)

Past Weather of Provinces (9th to 15th October, 2017)

Punjab

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 35.6°C & 20.2°C respectively. For the recent week on average 160.2 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 60% and wind speed in the morning/evening recorded as 0.7/1.4 knots. During the previous week highest maximum temperature was recorded as 41.0°C at Bahawalnagar.

Balochistan

Dry weather reported from Balochistan province during the week. Weekly maximum and minimum temperatures recorded as 34.9°C & 17.6°C respectively. For the recent week on average 147.7 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 38% and wind speed in the morning/evening recorded as 1.3/4.7 knots. During the previous week highest maximum temperature was recorded as 43.0°C at Lasbella.

Khyber Pakhtunkhwa

Light rainfall reported from single place (Dir) of Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 30.8°C & 14.0°C respectively. For the recent week on average 121.7 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 0.6/2.0 knots. During the previous week the highest amount of rainfall was recorded as 8.0 mm at Dir & highest maximum temperature was recorded as 38.0°C at D.I.Khan.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall reported from a few places in Gilgit-Baltistan while at single place Kashmir during the week. Weekly maximum and minimum temperatures recorded as 26.5°C & 10.9°C respectively. For the recent week on average 92.4 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 0.8/3.1 knots. During the previous week the highest amount of rainfall was recorded as 5.01 mm at Rawalakot & highest maximum temperature was recorded as 35.1°C at Kotli.

Sindh

Dry weather reported from Sindh province during the week. Weekly maximum and minimum temperatures recorded as 39.5°C & 22.0°C respectively. For the recent week, on average 185.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 52% and wind speed in the morning/evening recorded as 1.1/3.4 knots. Highest maximum temperature was recorded as 43.8°C at Chhor.

Past Weather for Major Agricultural Plains (9th to 15th October, 2017)

Rawalpindi (Potohar region)

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 63%. Mean day time temperature recorded as 34.5°C & for the recent week 145.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.1 knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 60%. Mean day time temperature recorded as 35.9°C & for the recent week 161.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/0.7 knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 39.1°C & for the recent week 169.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded 0.0/0.0 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 37.2°C & for the recent week 167.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.3 knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 18%. Mean day time temperature recorded as 26.9°C & for the recent

week 83.3 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 (9th to 15th October, 2017)

Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 36.3°C & for the recent week 169.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/2.3 knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.3/0.3 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 34.9°C & for the recent week 165.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.0 knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 30.9°C & for the recent week 125.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.9/5.7 knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/0.7 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 23.4°C & for the recent week 94.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/1.0 knots.

D.I. Khan

Dry weather reported from D.I.Khan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 36.5°C & for the recent week 167.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.7 knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.0/3.2 Oktas while, average relative humidity observed as 61%. Mean day time temperature recorded as 34.1°C & for the recent week 143.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.3 knots.

Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.7/4.8 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 22.4°C & for the recent week 60.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.7 knots.

Gilgit

Rainfall reported as trace (0.02 mm) from Gilgit during the week; However, cloudiness in the morning/evening recorded as 3.1/6.2 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 26.1°C & for the recent week 82.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.9/2.7 knots.

Skardu

Dry weather reported from Skardu during the week; However, cloudiness in the morning/evening recorded as 3.9/5.8 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded as 21.1°C & for the recent week 54.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.7 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)

There is presently one crop (irrigated conditions) grown in the fields of RAMC Faisalabad.

Cotton: Very Good condition, *Maturity Complete*.

Lower Sindh (Tandojam)

There is presently no crop in the fields of RAMC Tandojam.

Cotton (HH-906): *Crop harvested*

Northern Baluchistan (Quetta)

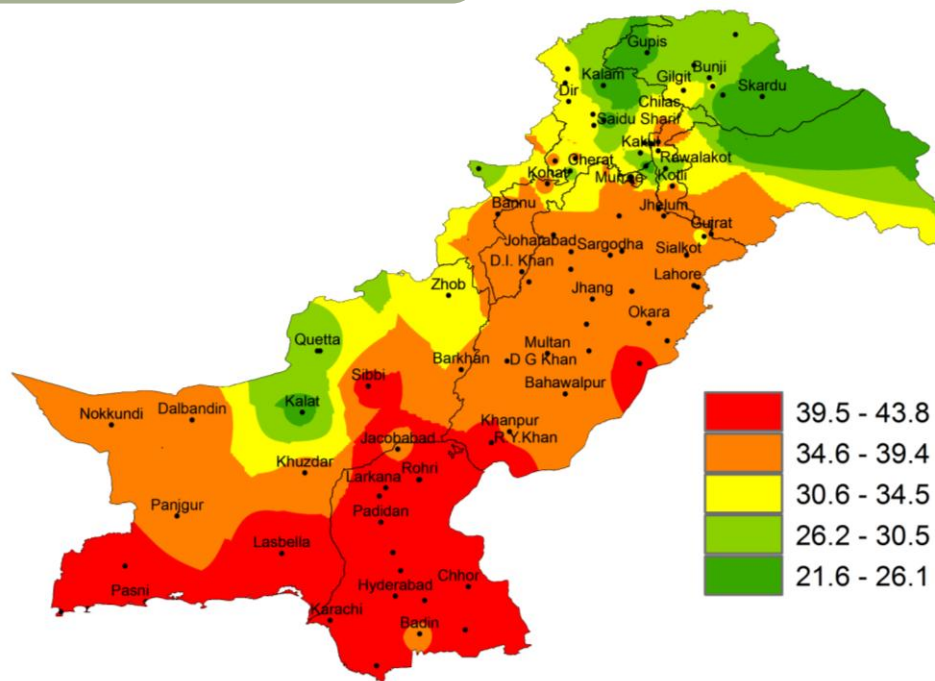
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

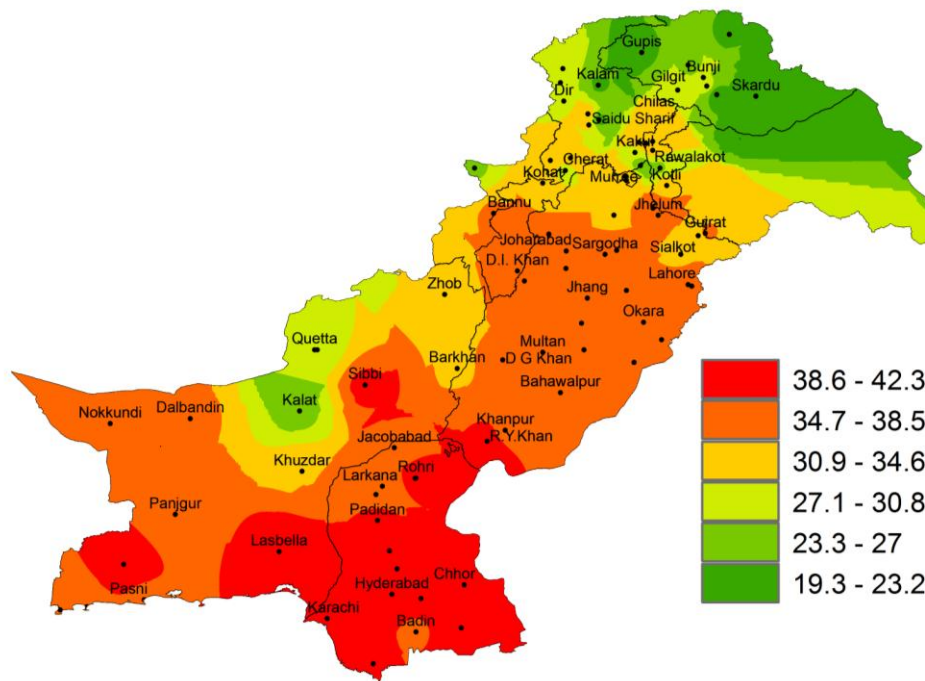
There is presently one crop (irrigated conditions) grown in the fields of RAMC Usta Muhammad.

Rice: Good condition, *Flowering Stage*.

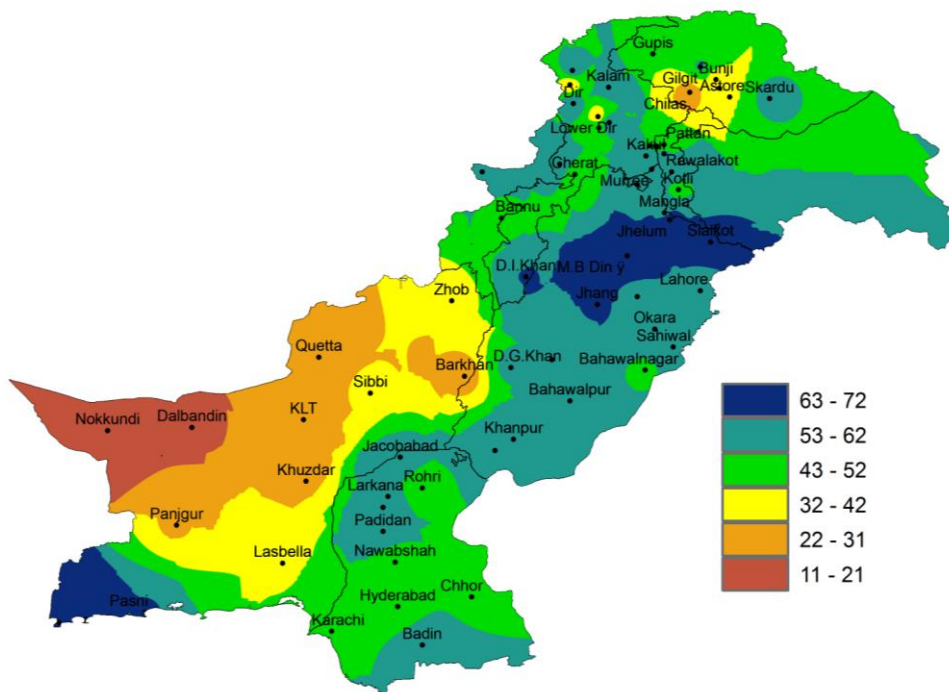
Mean Maximum Temperature (°C) during the Previous week (9th to 15th October, 2017)



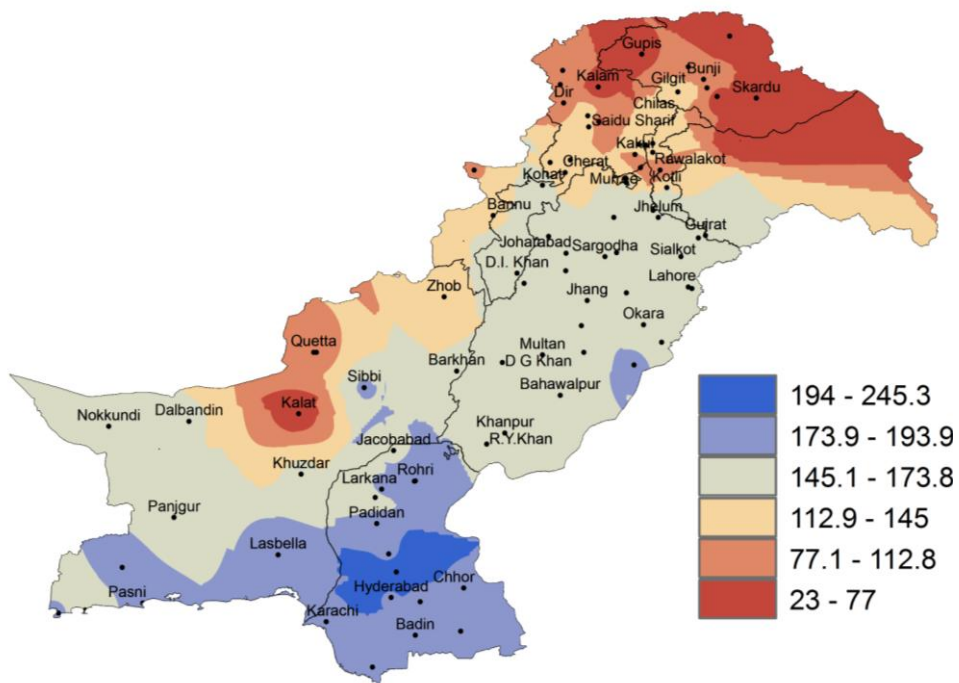
Highest maximum Temperature (°C) during the Previous week (9th to 15th October, 2017)



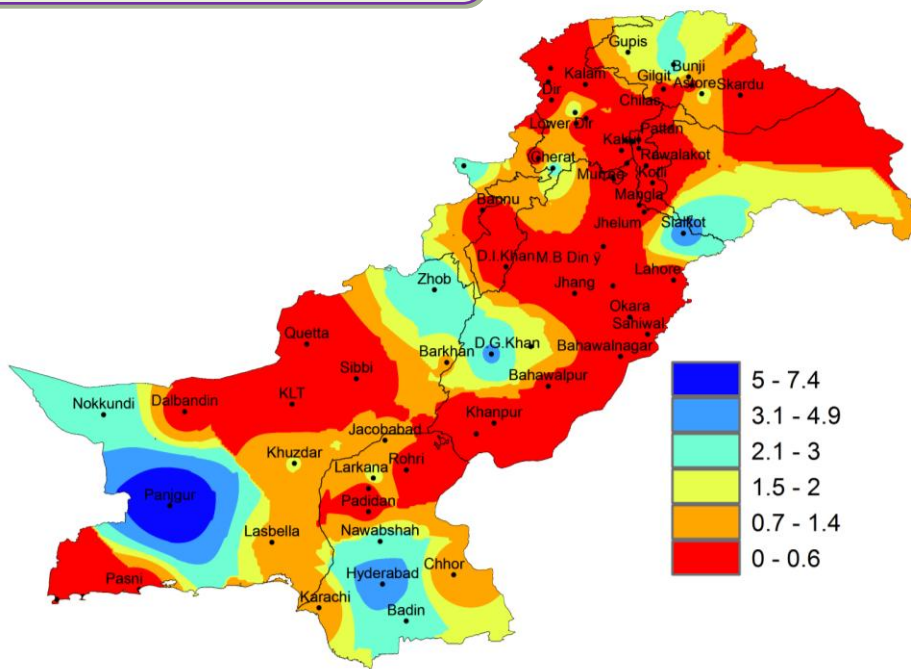
Mean Relative Humidity (%) during the previous week (9th to 15th October, 2017)



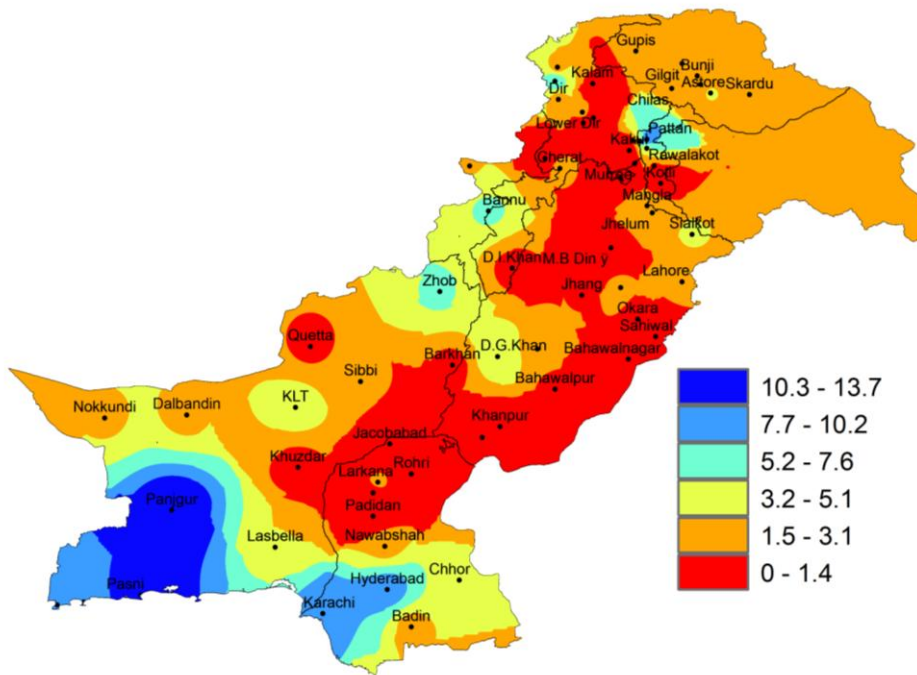
Total Growing Degree Days accumulated during the previous week (9th to 15th October, 2017)



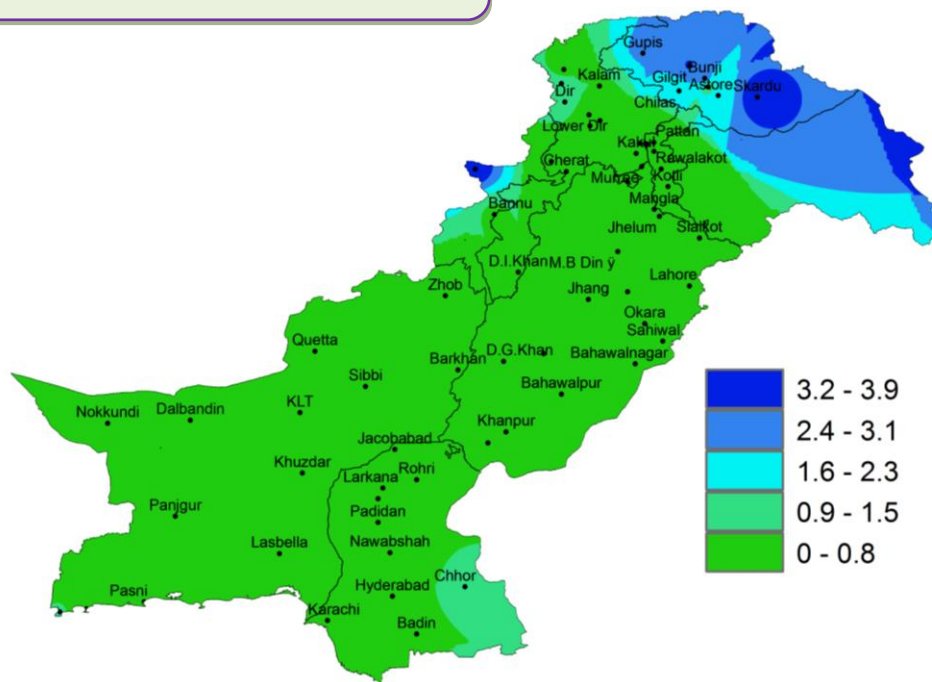
Mean Wind Speed (Knots) at 0800PST during the previous week (9th to 15th October, 2017)



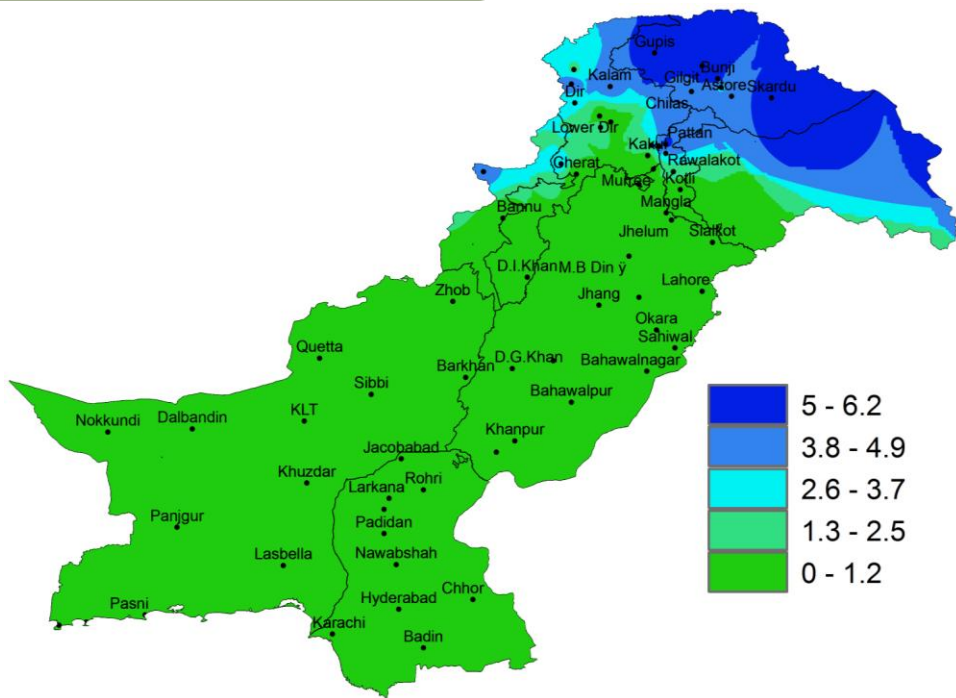
Mean Wind Speed (Knots) at 1700PST during the previous week (9th to 15th October, 2017)



Mean Cloudiness (Oktas) at 0800PST during the previous week (9th to 15th October, 2017)



Mean Cloudiness (Oktas) at 1700PST during the previous week (9th to 15th October, 2017)



Weekly Weather Advisory for Farmers
(16th to 22nd October, 2017)

Dry continental air is prevailing over most parts of the country.

MONDAY
16-10-2017

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at a few places in Malakand division and Gilgit-Baltistan.

TUESDAY
17-10-2017

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

WEDNESDAY
18-10-2017

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

THURSDAY
19-10-2017

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

FRIDAY
20-10-2017

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

SATURDAY
21-10-2017

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

SUNDAY
22-10-2017

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

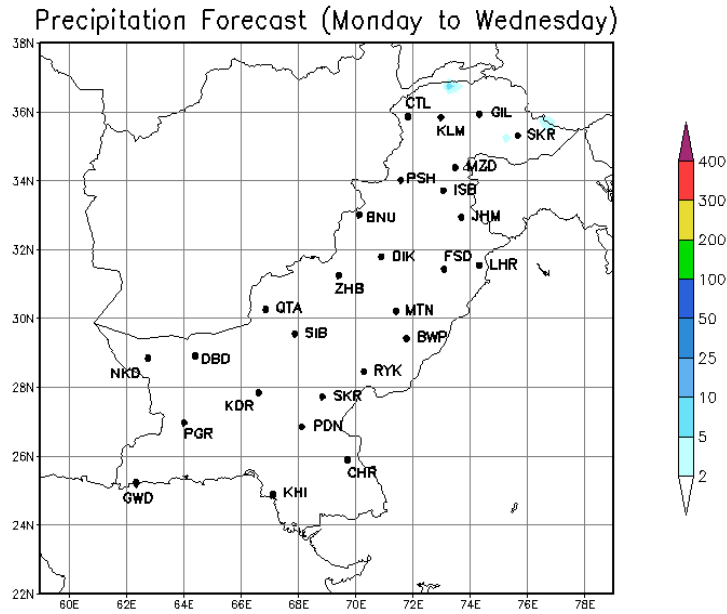
ADVISES FOR FARMERS

During the last week, mainly dry weather occurred in most parts of the agricultural plains of the country. In the coming days, dry weather is expected in most parts of the country. Keeping in view the expected weather conditions following advises are suggested for farming community.

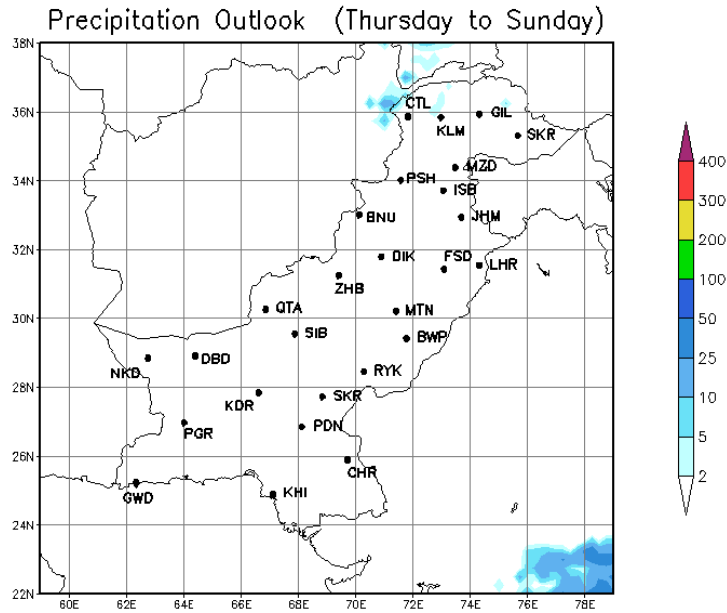
- The fields became fallow after cotton or other Kharif crops may be ploughed well and *Suhaga* may better be applied to preserve the soil moisture for the upcoming Rabi crops.
- Farmers of irrigated areas may irrigate the standing crops as per requirement in accordance with the expected weather and crop conditions.

Weather Outlook from 16th to 22nd October, 2017

The outlook for the period 16th to 18th October, 2017 shows that dry weather is expected at most parts of the country.



The outlook for the period 19th to 22nd October, 2017 shows that dry weather is expected to prevail in most parts of the country.



National Weather Data of Selected Cities (9th to 15th October, 2017)

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	19.3	21.5	53.5	41	0.00	53.5	2.0	4.7	1.7
Badin	37.6	38.5	183.3	59	0.00	183.3	0.7	0.0	2.3
Bahawalnagar	38.6	41.0	178.3	49	0.00	178.3	0.0	0.0	0.0
Bahawalpur	37.7	38.1	171.0	59	0.00	171.0	0.0	0.0	0.3
Balakot	32.6	33.5	124.5	51	0.00	124.5	0.0	1.8	0.4
Bannu	35.5	36.4	142.5	47	0.00	142.5	0.6	0.0	0.3
Barkhan	33.9	34.5	146.8	26	0.00	146.8	0.0	0.0	1.3
Bunji	26.8	30.0	113.1	36	0.00	113.1	2.9	5.5	1.4
Cherat	28.5	29.0	125.8	44	0.00	125.8	0.0	0.0	2.3
Chhor	42.2	43.8	187.7	50	0.00	187.7	1.2	0.5	0.7
Chilas	30.2	32.0	136.8	27	0.00	136.8	1.6	4.0	0.3
Chitral	28.8	31.0	96.2	59	0.00	96.2	0.6	2.2	0.0
D.G.Khan	36.1	36.6	159.9	55	0.00	159.9	0.0	0.3	3.1
D.I.Khan	36.5	38.0	167.9	62	0.00	167.9	0.0	0.0	0.0
Dalbandin	36.4	37.5	147.5	20	0.00	147.5	0.0	0.0	0.0
Dir	28.6	32.0	87.0	62	8.00	87.0	1.1	2.7	0.0
Drosh	29.9	31.7	110.8	30	0.00	110.8	1.0	4.8	0.0
Faisalabad	35.9	36.6	161.4	60	0.00	161.4	0.0	0.3	0.2
Gari dopatta	32.4	33.5	129.5	55	0.00	129.5	0.0	3.3	0.0
Gawader	36.6	40.0	147.0	66	0.00	147.0	0.0	0.0	0.0
Gilgit	26.1	28.5	82.5	53	0.02	82.5	3.1	6.2	2.9
Gupis	21.2	25.5	65.0	43	1.00	65.0	2.4	5.5	1.4

Hyderabad	40.7	42.2	189.6	45	0.00	189.6	0.0	0.0	4.0
Islamabad	33.2	33.7	136.7	57	0.00	136.7	0.1	0.7	0.0
Jacobabad	37.6	39.0	171.3	57	0.00	171.3	0.0	0.0	0.9
Jhang	36.5	38.0	164.3	63	0.00	164.3	0.0	0.0	0.0
Jhelum	35.6	37.0	160.6	68	0.00	160.6	0.1	0.5	0.6
Jiwani	35.8	39.5	177.9	71	0.00	177.9	0.9	0.0	0.6
Kakul	29.3	29.5	110.0	55	0.00	110.0	0.0	0.8	0.0
Kalam	22.4	24.0	60.3	57	0.00	60.3	0.7	4.8	0.0
Kalat	24.6	25.0	59.5	23	0.00	59.5	0.0	0.0	0.0
Karachi	39.7	41.8	184.4	49	0.00	184.4	0.5	1.0	0.7
Khanpur	37.9	39.0	163.1	60	0.00	163.1	0.0	0.0	0.0
Khuzdar	34.3	35.5	151.3	30	0.00	151.3	0.0	0.0	1.4
Kotli	34.3	35.1	147.9	48	0.00	147.9	0.0	0.0	0.6
Lahore	34.9	36.0	165.4	58	0.00	165.4	0.3	0.3	0.0
Larkana	37.4	41.0	177.3	53	0.00	177.3	0.0	0.0	2.0
Lasbella	41.7	43.0	188.3	41	0.00	188.3	0.0	0.0	1.2
Lower Dir	34.6	35.0	148.3	33	0.00	148.3	0.3	1.0	2.3
M.B Din	35.2	36.5	161.0	72	0.00	161.0	0.0	0.3	0.6
Malam Jabba	19.9	21.5	65.8	60	0.00	65.8	0.3	1.0	0.0
Mangla	34.6	35.4	153.1	59	0.00	153.1	0.1	0.8	0.0
Mir Khani	30.0	31.6	110.7	42	0.00	110.7	1.0	3.3	0.0
Moinjodaro	37.2	40.0	167.8	58	0.00	167.8	0.0	0.0	0.0
Multan(PBO)	36.3	37.2	169.0	53	0.00	169.0	0.0	0.0	1.7
Murree	23.4	24.2	94.2	58	0.00	94.2	0.0	0.7	0.6
Muzaffarabad	32.0	33.5	130.4	51	0.00	130.4	0.0	3.8	0.0
Nawabshah	41.7	43.0	183.3	45	0.00	183.3	0.0	0.0	2.9

Nokkundi	37.9	39.0	168.5	11	0.00	168.5	0.0	0.0	2.7
Okara	36.1	37.0	168.4	59	0.00	168.4	0.0	0.5	0.6
Padidan	39.6	42.5	177.0	58	0.00	177.0	0.0	0.0	0.3
Panjgur	35.0	36.0	150.0	31	0.00	150.0	0.0	0.0	7.4
Parachinar	25.9	26.5	109.4	61	2.00	109.4	3.7	4.3	3.0
Pasni	37.4	41.0	183.3	62	0.00	183.3	0.0	0.0	0.0
Pattan	34.7	36.0	131.5	44	0.00	131.5	0.0	5.7	0.0
Peshawar	34.1	35.0	143.5	61	0.00	143.5	0.0	3.2	0.3
Quetta	26.9	27.8	83.3	18	0.00	83.3	0.0	0.0	1.2
Rahim Yar Khan	39.4	40.4	171.5	59	0.00	171.5	0.0	0.0	0.0
Rawalakot	26.0	26.5	80.7	58	5.01	80.7	0.0	2.0	0.0
Rawalpindi	34.5	35.0	145.0	63	0.00	145.0	0.0	0.0	0.3
Rohri	39.0	40.0	175.0	46	0.00	175.0	0.0	0.0	0.0
Sahiwal	36.0	37.0	161.9	61	0.00	161.9	0.0	0.0	0.0
Saidu Sharif	32.0	32.8	125.2	50	0.00	125.2	0.6	1.5	0.3
Sialkot	33.6	34.0	154.8	64	0.00	154.8	0.4	0.0	3.6
Sibbi	40.3	41.0	176.5	34	0.00	176.5	0.0	0.0	0.0
Skardu	21.1	23.5	54.3	55	0.00	54.5	3.9	5.8	0.0
Tandojam	39.1	41.5	169.8	62	0.00	169.8	0.0	0.0	0.0
Usta. M	37.2	38.0	167.3	54	0.00	167.3	0.0	0.0	0.0
Zhob	30.9	31.5	125.5	34	0.00	125.5	0.0	0.0	2.9

*** 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)