

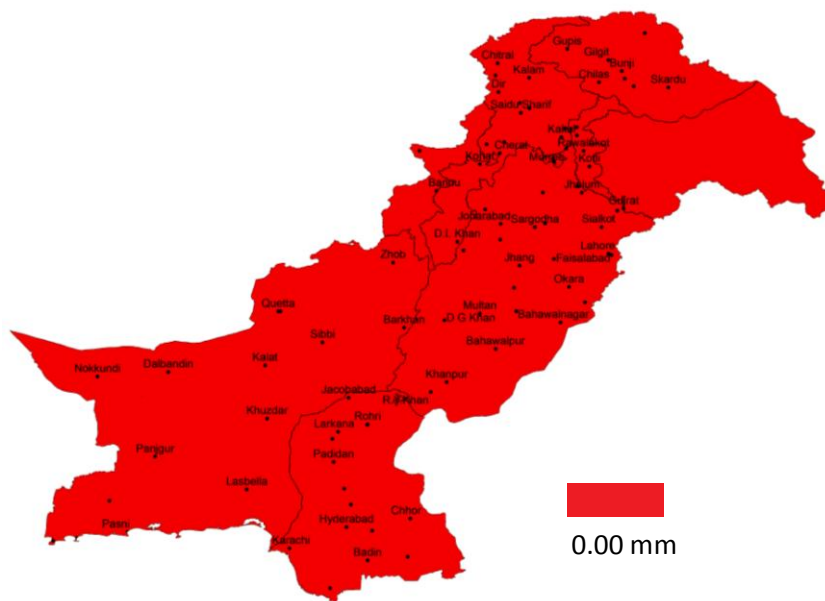
Weekly Weather and Crop Bulletin for Pakistan

**NATIONAL AGROMET CENTRE
PAKISTAN METEOROLOGICAL
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**Rainfall Distribution (mm) during the previous
Week (30th October to 05th November, 2017)**



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Highlights of Past Weather (30th October to 05th November, 2017)

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

Distribution of rainfall reported as follows:

- Dry weather (no rainfall) reported from any part of the country during this week.

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 (30th October to 05th November, 2017)

Punjab

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 27.2°C & 15.2°C respectively. For the recent week on average 113.6 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 71% and wind speed in the morning/evening recorded as 0.6/0.6 knots. During the previous lowest minimum temperature was recorded as 9°C at Murree.

Balochistan

Dry weather reported from Balochistan province during the week. Weekly maximum and minimum temperatures recorded as 30.8°C & 13.8°C respectively. For the recent week on average 119.6 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 43% and wind speed in the morning/evening recorded as 1.3/4.7 knots. During the previous week lowest minimum temperature was recorded as 2.0°C at Kalat.

Khyber Pakhtunkhwa

Dry weather reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 25.2°C & 9.3°C respectively. For the recent week on average 85.6 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 0.4/1.7 knots. During the previous week the lowest minimum temperature was recorded as 1.0°C at Kalam.

Gilgit-Baltistan and Azad Jammu & Kashmir

Dry weather reported from Kashmir and Gilgit-Baltistan during the week. Weekly maximum and minimum temperatures recorded as 23.6°C & 5.8°C respectively. For the recent week on average 63.9 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 0.4/0.7 knots. During the previous week the lowest minimum temperature was recorded as -3.2°C at Skardu.

Sindh

Dry weather reported from Sindh province during the week. Weekly maximum and minimum temperatures recorded as 35.9°C & 18.4°C respectively. For the recent week, on average 155.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 54% and wind speed in the morning/evening recorded as 0.6/2.3 knots. During the previous week, lowest minimum temperature was recorded as 14.2°C at Mithi.

Past Weather for Major Agricultural Plains **(30th October to 05th November, 2017)**

Rawalpindi (Potohar region)

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while average relative humidity observed as 77%. Mean night time temperature recorded as 12.1°C & for the recent week 102.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.0 knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while average relative humidity observed as 82%. Mean night time temperature recorded as 16.1°C & for the recent week 110.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/0.2 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 59%. Mean night time temperature recorded as 16.4°C & for the recent week 147.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/1.1 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 79%. Mean night time temperature recorded as 17.4°C & for the recent week 135.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/1.1 knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while average relative humidity observed as 19%. Mean night time temperature recorded as 7.1°C & for the recent

week 77.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.8/2.2 knots.

Past Weather for Sub-Regional Agricultural Plains (30th October to 05th November, 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 60%. Mean night time temperature recorded as 17.5°C & for the recent week 120.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.6 knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 1.3/0.0 Oktas while average relative humidity observed as 80%. Mean night time temperature recorded as 15.1°C & for the recent week 116.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.4/0.0 knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as **/0.0 Oktas while average relative humidity observed as 25%. Mean night time temperature recorded as 8.9°C & for the recent week 93.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as **/5.0 knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while average relative humidity observed as 57%. Mean night time temperature recorded as 9.5°C & for the recent week 64.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.1/0.3 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 83%. Mean night time temperature recorded as 16.2°C & for the recent week 117.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.3 knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while average relative humidity observed as 82%. Mean night time temperature recorded as 13.4°C & for the recent week 102.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 knots.

Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.9 Oktas while average relative humidity observed as 49%. Mean night time temperature recorded as 1.8°C & for the recent week 46.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.9 knots.

Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 0.6/1.4 Oktas while average relative humidity observed as 60%. Mean night time temperature recorded as 0.6°C & for the recent week 55.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 knots.

Skardu

Dry weather reported from Skardu during the week; However, cloudiness in the morning/evening recorded as 0.9/1.4 Oktas while average relative humidity observed as 55%. Mean night time temperature recorded as -2.6°C & for the recent week 23 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 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)

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

Cotton: Very Good condition, *Maturity Completed.*

Lower Sindh (Tandojam)

There is presently no crop in the fields of RAMC Tandojam. However, land is being prepared for new crop.

Northern Baluchistan (Quetta)

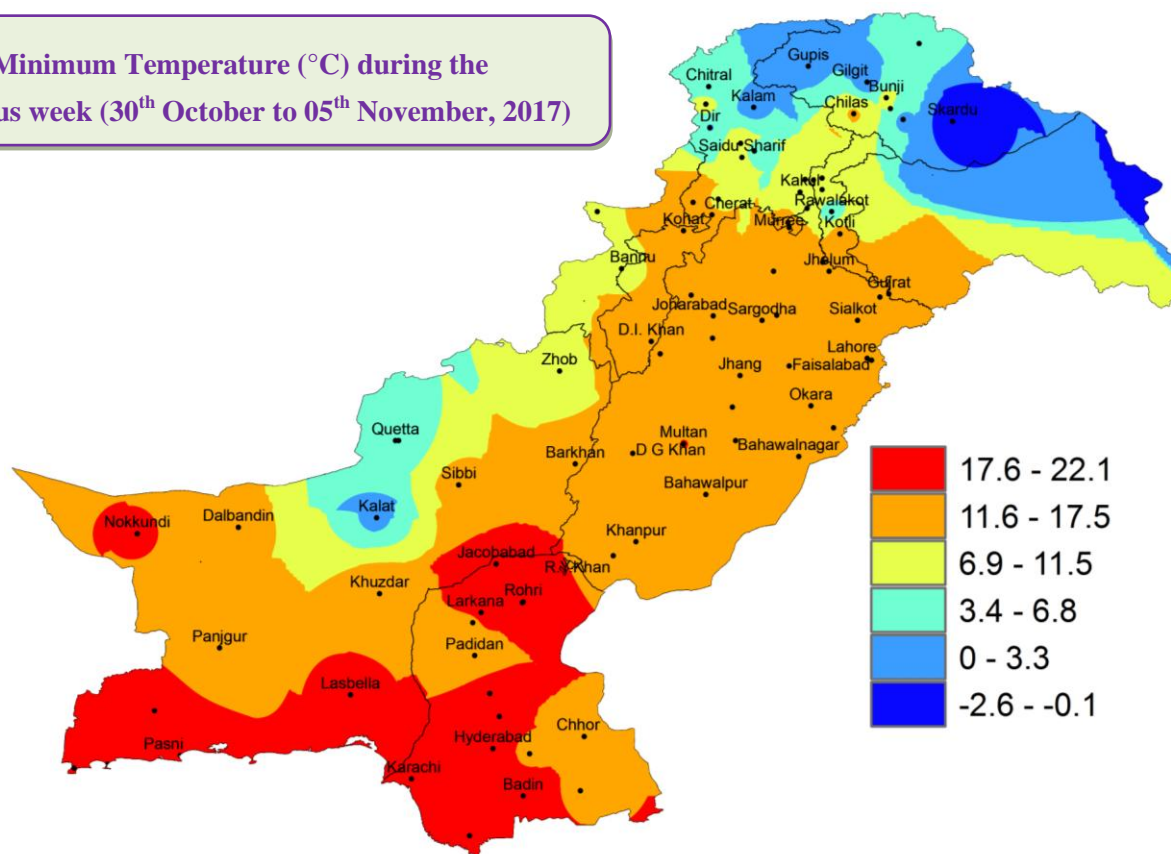
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

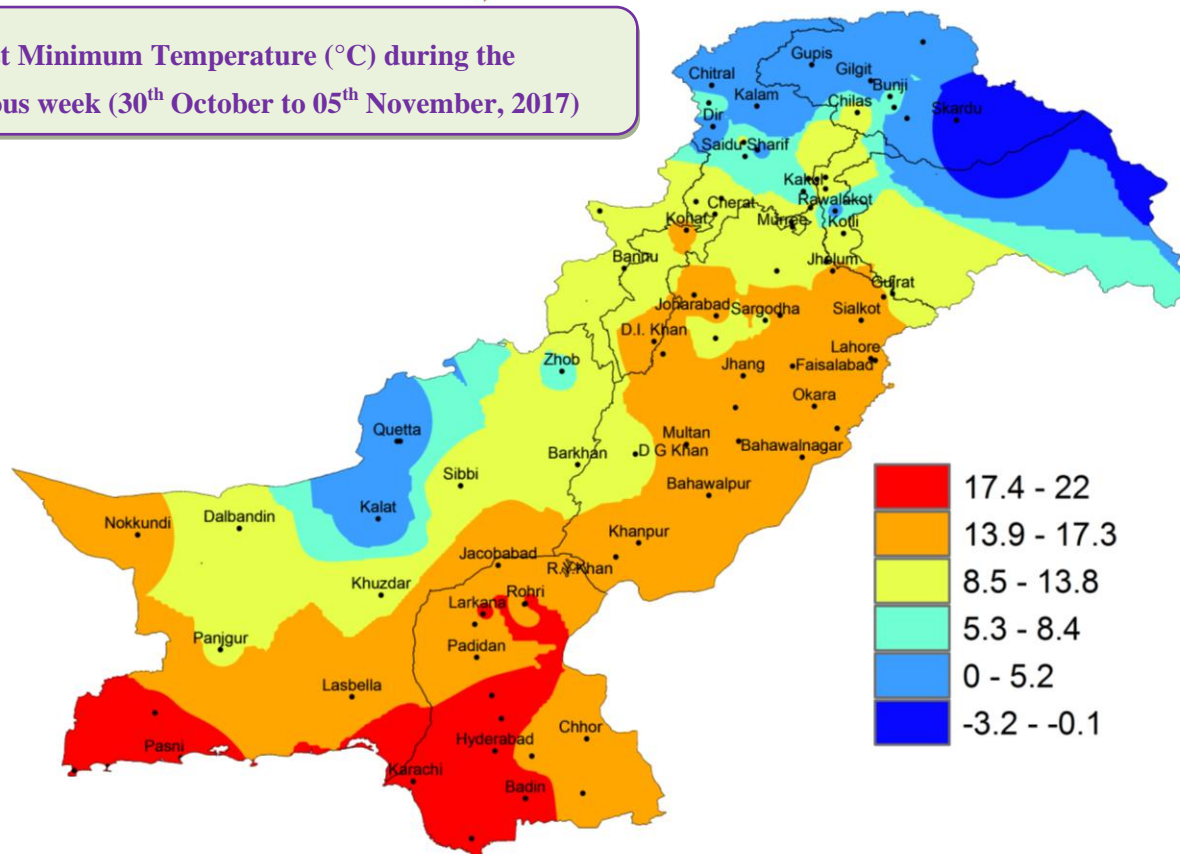
There is presently one crop (irrigated conditions) grown in the fields of RAMC Usta Muhammad.

Rice: *Harvesting in progress.*

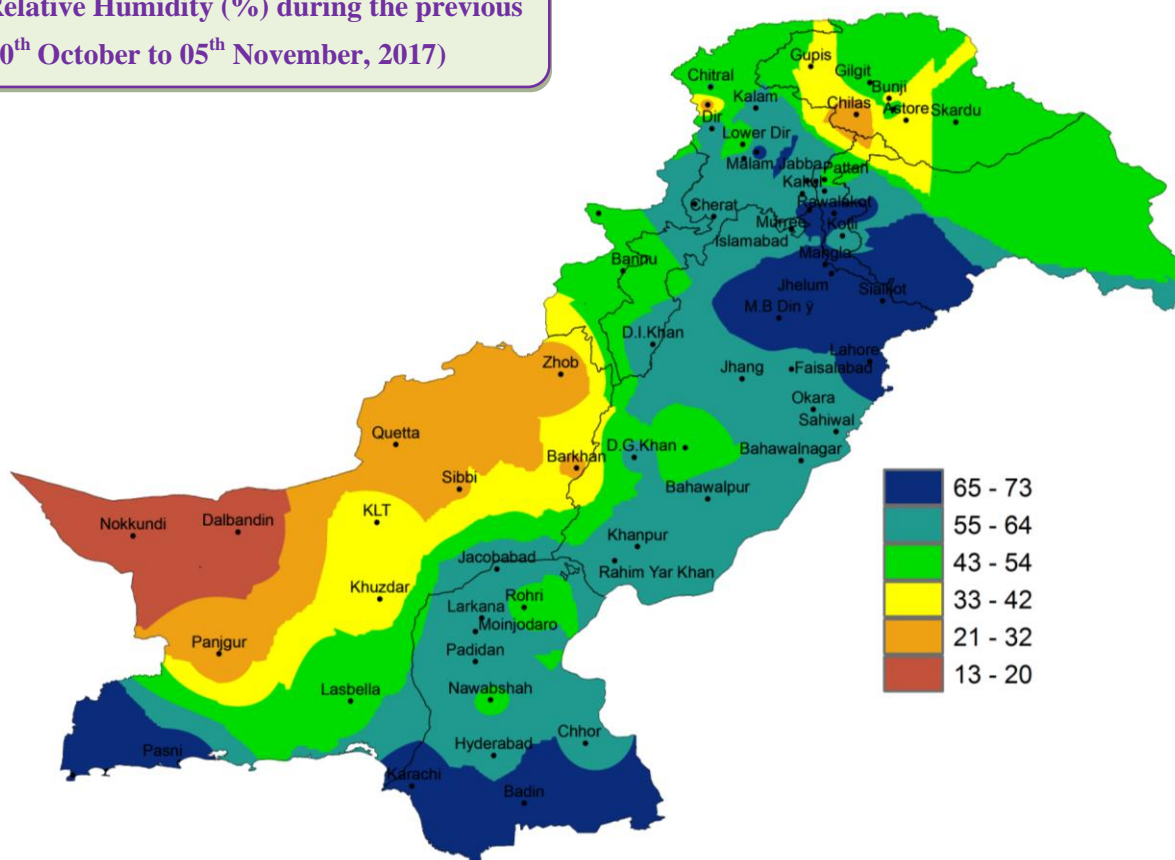
**Mean Minimum Temperature (°C) during the
Previous week (30th October to 05th November, 2017)**



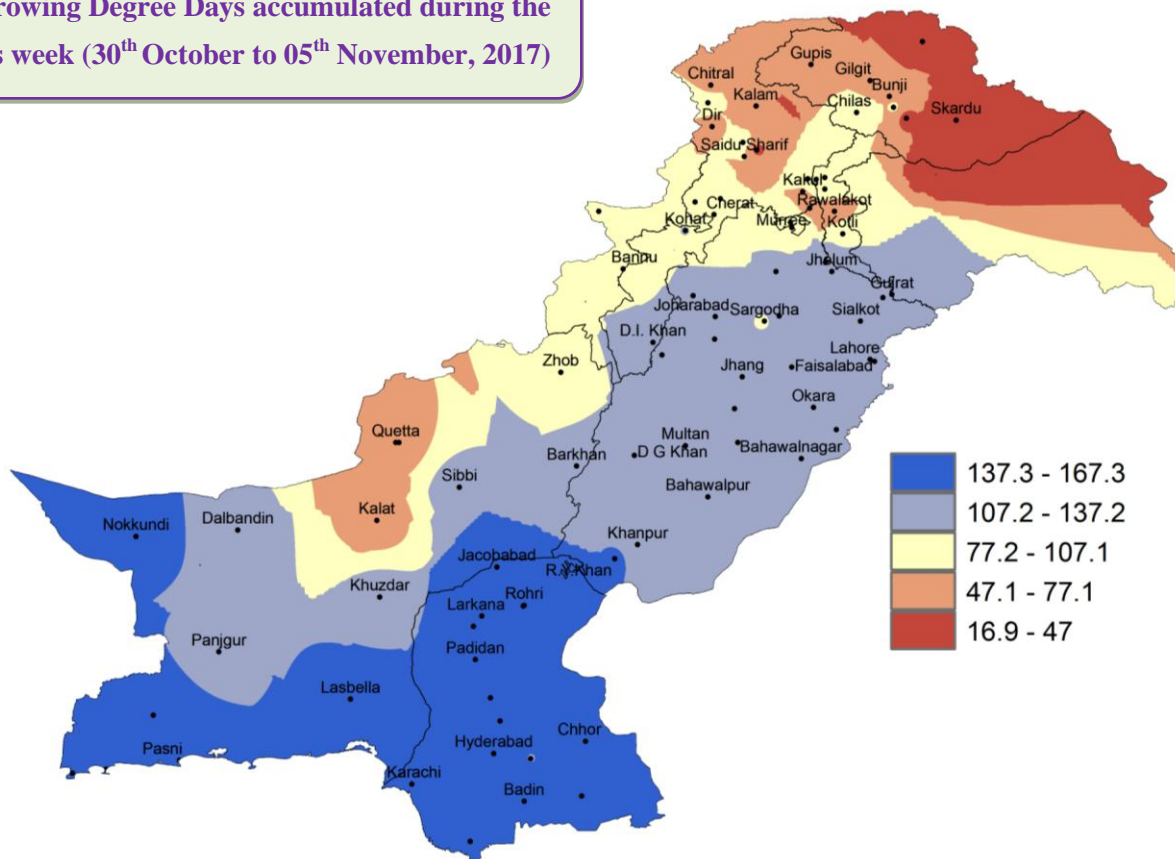
**Lowest Minimum Temperature (°C) during the
Previous week (30th October to 05th November, 2017)**



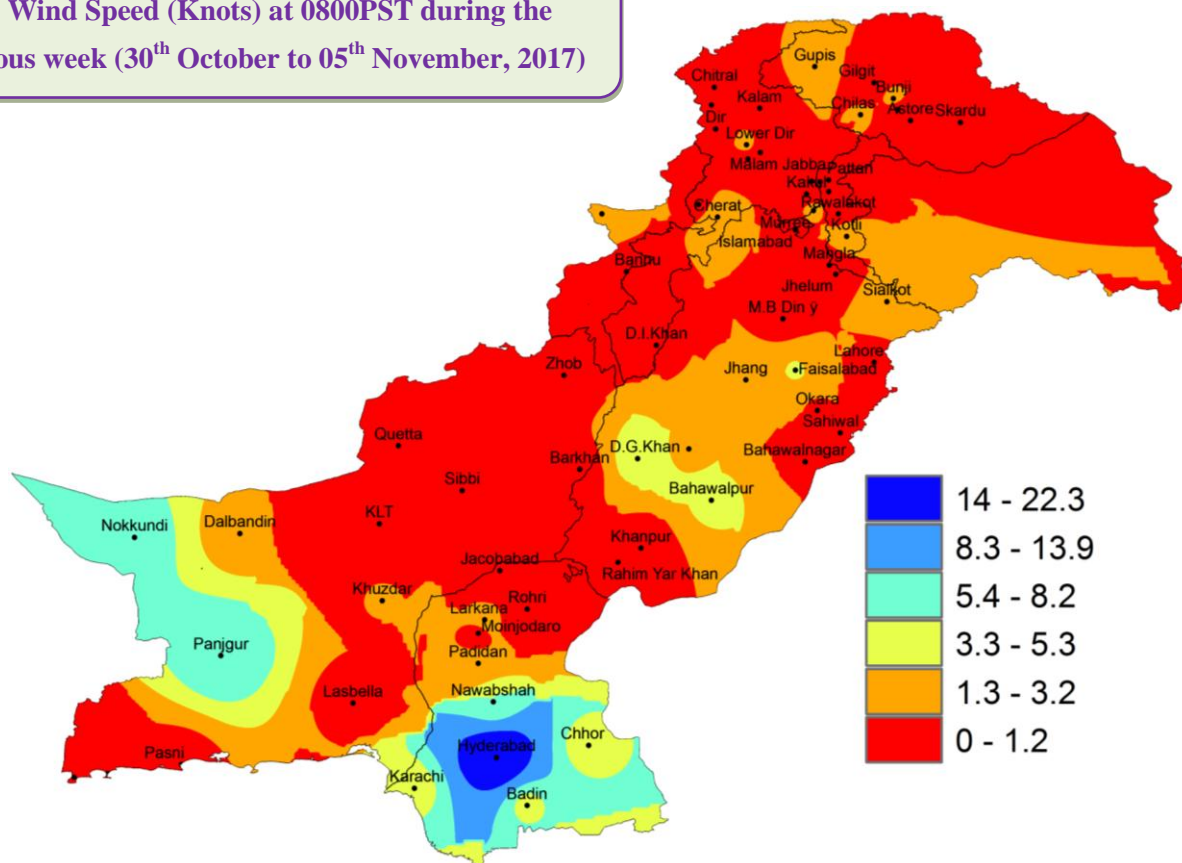
Mean Relative Humidity (%) during the previous week (30th October to 05th November, 2017)



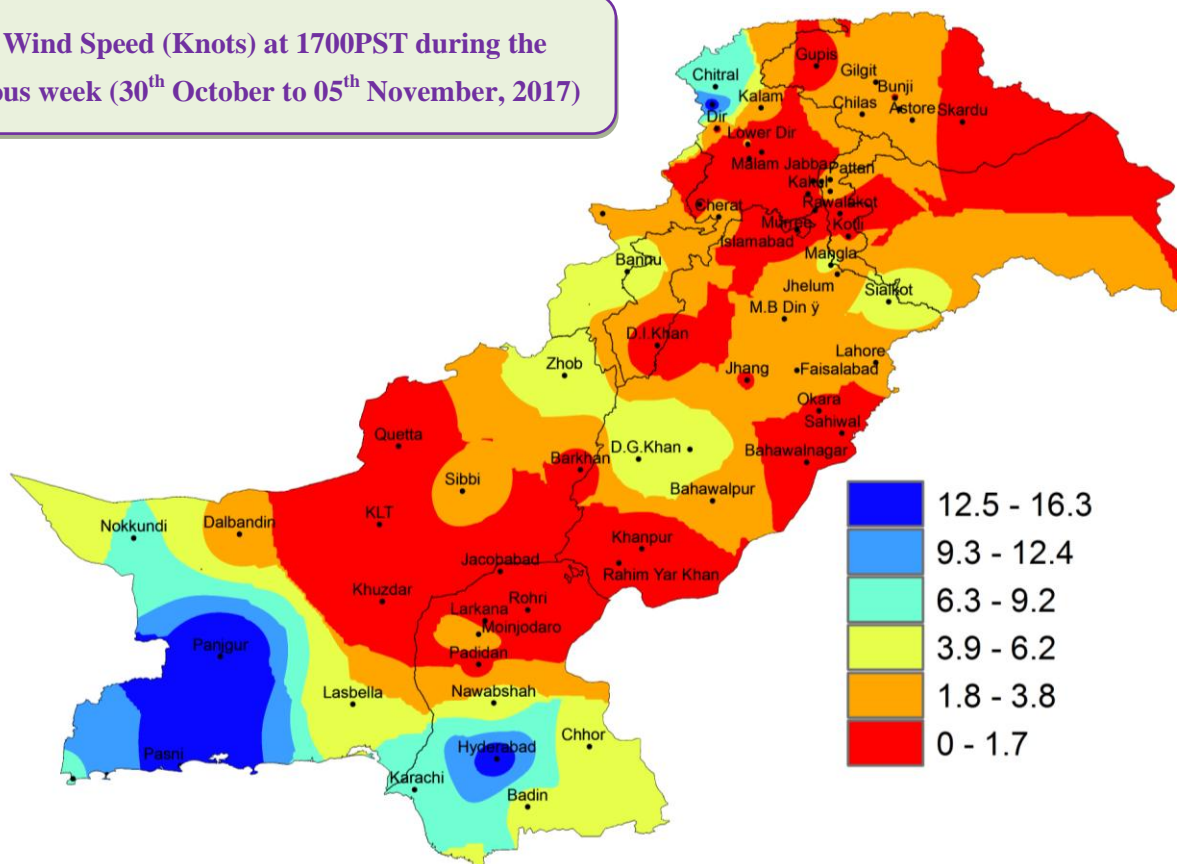
Total Growing Degree Days accumulated during the previous week (30th October to 05th November, 2017)



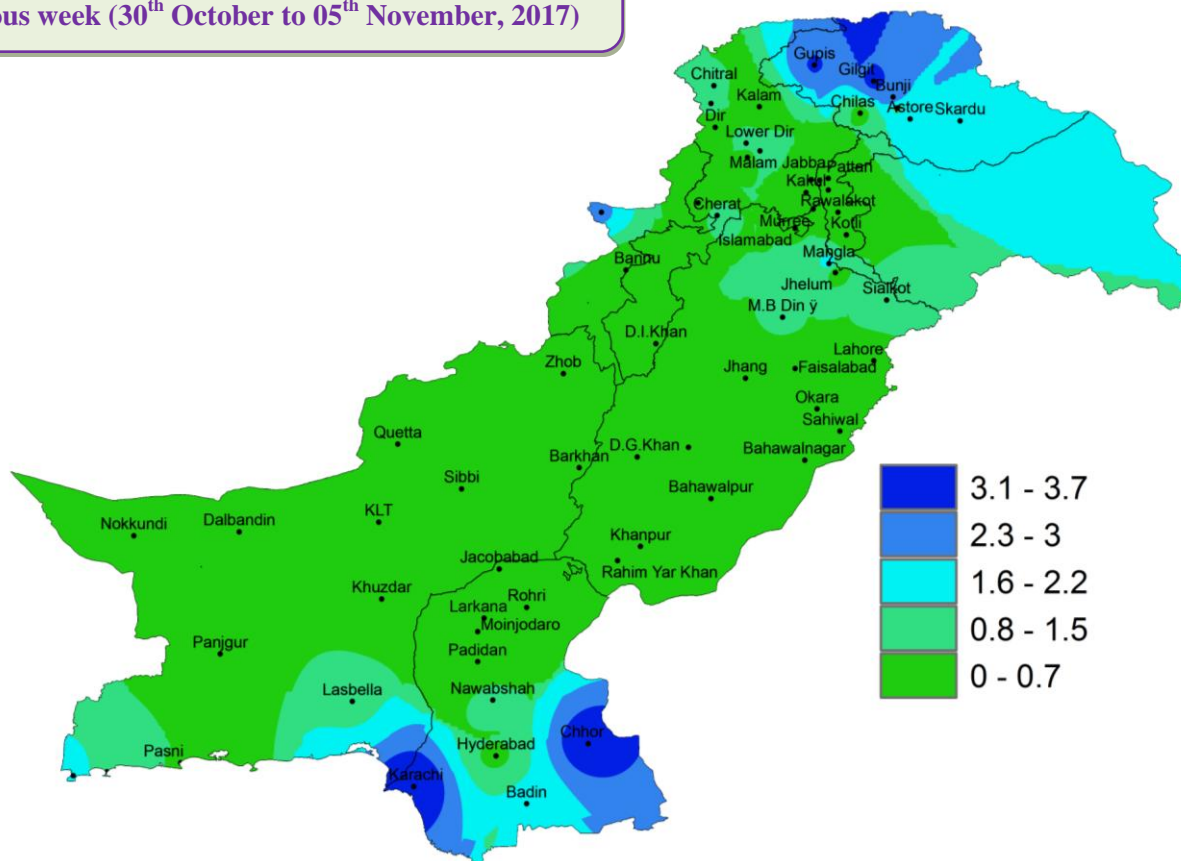
Mean Wind Speed (Knots) at 0800PST during the previous week (30th October to 05th November, 2017)



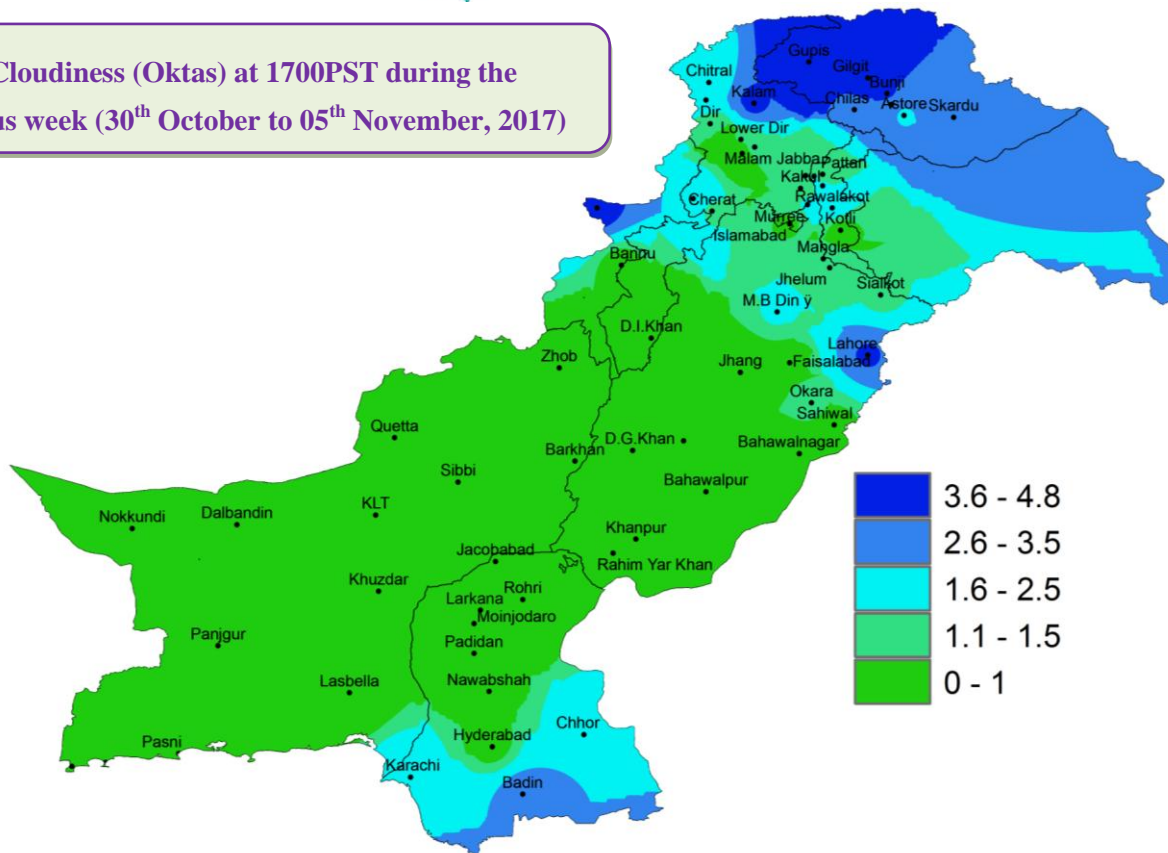
Mean Wind Speed (Knots) at 1700PST during the previous week (30th October to 05th November, 2017)



Mean Cloudiness (Oktas) at 0800PST during the previous week (30th October to 05th November, 2017)



Mean Cloudiness (Oktas) at 1700PST during the previous week (30th October to 05th November, 2017)



Weekly Weather Advisory for Farmers
(06th to 12th November, 2017)

Continental air is prevailing over most parts of the country.

MONDAY
06-11-2017

Mainly dry weather is expected in most parts of the country. Dense foggy/smoggy conditions are likely to continue over plain areas of Punjab, central and lower Khyber Pakhtunkhwa and upper Sindh.

TUESDAY
07-11-2017

Mainly dry weather is expected in most parts of the country. Dense foggy/smoggy conditions are expected over plain areas of Punjab, central and lower Khyber Pakhtunkhwa and upper Sindh.

WEDNESDAY
08-11-2017

Mainly dry weather is expected in most parts of the country. Dense foggy/smoggy conditions are expected over plain areas of Punjab, central and lower Khyber Pakhtunkhwa and upper Sindh. Light rain is expected at a few places in Gilgit-Baltistan.

THURSDAY
09-11-2017

Mainly dry weather is expected in most parts of the country. Dense foggy/smoggy conditions are expected over plain areas of Punjab, central and lower Khyber Pakhtunkhwa and upper Sindh. Light rain is expected at a few places in Gilgit-Baltistan.

FRIDAY
10-11-2017

Mainly dry weather is expected in most parts of the country. Dense foggy/smoggy conditions are expected over plain areas of Punjab, central and lower Khyber Pakhtunkhwa and upper

Sindh. However, light rain is expected at a few places in Malakand division and Gilgit-Baltistan.

SATURDAY
11-11-2017

Mainly dry weather is expected in most parts of the country. Dense foggy/smoggy conditions are expected over plain areas of Punjab, central and lower Khyber Pakhtunkhwa and upper Sindh. However, light rain is expected at a few places in Malakand division and Gilgit-Baltistan.

SUNDAY
12-11-2017

Mainly dry weather is expected in most parts of the country. Dense foggy/smoggy conditions are expected over plain areas of Punjab, central and lower Khyber Pakhtunkhwa and upper Sindh. Light rain is expected at a few places in Gilgit-Baltistan.

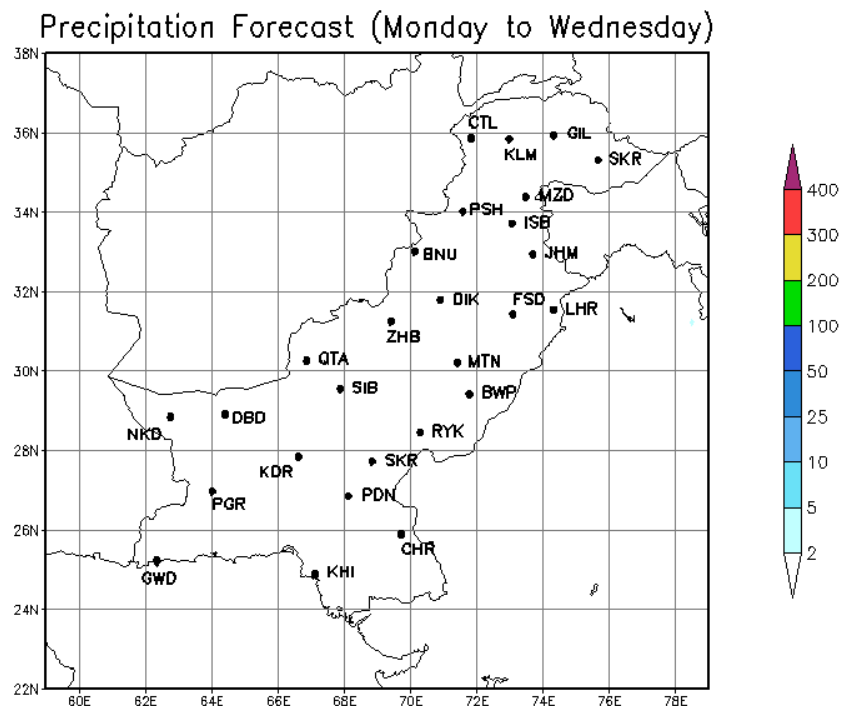
ADVISES FOR FARMERS

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

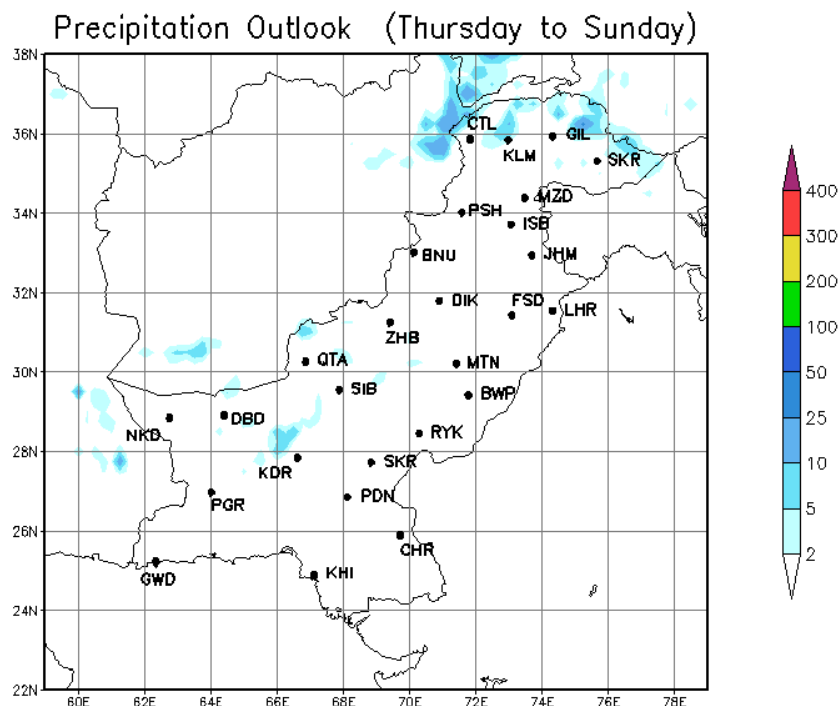
- The fields became fallow after Kharif crops may be ploughed well and *Suhaga* may better be applied to preserve the soil moisture for the upcoming Rabi crops.
- Farmers of irrigated areas may irrigate the standing crops as per requirement in accordance with the expected weather and crop conditions.
- Due to expected foggy/misty weather conditions over the plains of Punjab and upper Sindh, precautionary measures may be taken to preserve the crops and livestock.

Weather Outlook from 6th to 12th November, 2017

The outlook for the period 6th to 8th November, 2017 shows that dry weather is expected at most parts of the country.



The outlook for the period 9th to 12th November, 2017 shows that dry weather is expected to prevail in most parts of the country however light rainfall is expected at isolated places in upper KP, Baluchistan and Gilgit-Baltistan.



National Weather Data of Selected Cities (30th October to 05th November, 2017)

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	highest							
Astore	1.9	1.0	34.9	29	0.0	0.0	0.7	1.4	2.3
Badin	21.7	21.0	165.3	53	0.0	0.0	0.0	0.6	1.1
Bahawalnagar	16.4	15.0	127.8	72	0.0	3.9	0.0	0.0	0.6
Bahawalpur	16.4	15.3	130.0	62	0.0	2.3	0.0	1.1	0.6
Balakot	8.6	8.3	88.0	66	0.0	0.6	1.0	0.0	0.0
Bannu	9.9	9.0	93.9	66	0.0	0.0	0.0	0.0	0.0
Barkhan	12.9	12.0	110.9	34	0.0	0.0	0.0	1.1	2.0
Bunji	7.6	6.1	72.8	50	0.0	0.6	1.6	1.4	1.4
Cherat	11.6	10.5	83.0	57	0.0	1.0	0.6	2.0	2.6
Chhor	17.1	16.2	167.3	45	0.0	0.0	0.0	0.0	3.1
Chilas	11.9	10.0	102.3	25	0.0	0.0	1.3	0.0	0.0
Chitral	3.5	2.5	70.2	67	0.0	0.7	1.3	0.0	1.1
D.G.Khan	14.7	12.4	120.2	67	0.0	7.0	5.0	4.6	3.7
D.I.Khan	16.2	15.0	117.0	83	0.0	0.0	0.0	0.0	0.3
Dalbandin	12.4	10.0	127.6	22	0.0	0.0	0.0	0.0	2.3
Dir	3.1	2.5	66.9	60	0.0	0.0	1.3	0.0	2.0
Drosh	8.8	8.6	91.3	22	0.0	1.1	1.6	0.0	10.6
Faisalabad	16.1	15.0	110.7	82	0.0	0.0	0.0	0.2	0.2
Gari dopatta	10.2	9.8	96.1	59	0.0	0.0	0.4	0.0	2.3
Gawader	19.6	19.0	147.6	74	0.0	0.0	0.0	0.0	9.7
Gilgit	0.6	0.0	55.1	60	0.0	0.6	1.4	0.0	0.0
Gupis	2.1	2.0	51.9	35	0.0	0.7	0.6	1.4	0.6

Hyderabad	20.1	18.5	161.3	37	0.0	0.0	0.0	0.9	7.4
Islamabad	11.5	11.0	99.2	76	0.0	0.0	0.3	0.0	0.0
Jacobabad	18.9	16.5	146.3	62	0.0	0.0	0.0	1.4	0.0
Jhang	16.8	16.0	109.9	73	0.0	3.9	3.9	0.0	0.3
Jhelum	14.5	14.4	112.6	80	0.0	0.0	2.4	0.0	0.6
Jiwani	22.1	22.0	150.4	78	0.0	0.0	0.4	0.0	8.0
Kakul	6.9	6.0	74.1	58	0.0	0.0	0.0	0.0	0.6
Kalam	1.8	1.0	46.8	49	0.0	0.0	0.9	0.0	0.9
Kalat	2.6	2.0	54.0	27	0.0	0.0	0.0	0.3	2.3
Karachi	19.8	19.0	159.2	41	0.0	0.0	0.0	0.3	5.1
Khanpur	15.7	15.0	129.8	64	0.0	2.3	0.0	0.3	0.0
Khuzdar	15.4	13.5	121.3	31	0.0	0.0	0.0	1.1	1.1
Kotli	13.0	12.6	104.9	68	0.0	0.0	0.0	0.3	0.3
Lahore	15.1	14.5	116.2	80	0.0	1.3	0.0	0.4	0.0
Larkana	19.0	17.8	153.0	58	0.0	0.0	0.0	1.2	0.9
Lasbella	18.6	17.0	153.0	47	0.0	0.0	0.0	0.9	3.1
Lower Dir	9.5	9.0	95.5	63	0.0	0.0	0.0	0.3	2.0
M.B Din	15.6	15.0	112.7	83	0.0	0.0	0.0	0.3	0.3
Malam Jabba	5.5	4.0	37.9	49	0.0	0.0	0.4	0.0	0.0
Mangla	13.8	13.3	109.6	73	0.0	0.0	0.3	0.0	0.6
Mir Khani	7.0	6.0	82.1	42	0.0	1.7	2.1	0.0	3.0
Moinjodaro	16.7	15.5	145.5	61	0.0	0.0	0.0	0.0	1.7
Multan(PBO)	17.5	17.0	120.9	60	0.0	0.0	0.0	0.0	0.6
Murree	9.5	9.0	64.6	57	0.0	0.0	0.0	1.1	0.3
Muzaffarabad	10.4	10.0	91.8	59	0.0	0.0	0.0	0.0	0.0
Nawabshah	18.4	18.0	165.3	44	0.0	0.0	0.0	1.7	4.6

Nokkundi	17.9	15.0	147.6	13	0.0	0.0	0.0	2.9	3.1
Okara	17.4	16.5	117.4	75	0.0	3.9	2.6	0.6	0.3
Padidan	16.1	16.0	150.0	50	0.0	0.0	0.0	0.6	0.6
Panjgur	14.6	13.5	126.0	36	0.0	0.0	0.0	7.7	11.7
Parachinar	11.1	10.0	80.4	32	0.0	0.4	0.9	3.0	3.0
Pasni	19.9	18.5	146.6	71	0.0	0.0	0.0	1.1	11.3
Pattan	11.3	11.0	107.6	52	0.0	0.3	1.0	0.0	0.0
Peshawar	13.4	12.5	102.3	82	0.0	0.0	0.6	0.0	0.0
Quetta	7.1	6.0	77.1	19	0.0	0.0	0.0	1.8	2.8
Rahim Yar Khan	16.5	15.2	139.3	73	0.0	0.0	0.0	0.9	0.0
Rawalakot	4.2	4.0	53.3	71	0.0	0.0	0.6	0.0	0.6
Rawalpindi	12.1	12.0	102.5	77	0.0	0.0	0.3	0.3	0.0
Rohri	18.8	18.0	152.4	56	0.0	0.0	0.0	0.7	0.0
Sahiwal	16.7	16.0	115.2	75	0.0	2.3	0.4	0.3	0.6
Saidu Sharif	7.1	7.0	78.6	57	0.0	0.0	0.0	0.0	0.0
Sialkot	14.7	14.2	111.2	79	0.0	0.0	1.1	1.0	0.6
Sibbi	13.5	13.0	132.8	62	0.0	0.0	0.0	0.9	3.4
Skardu	-2.6	-3.2	23.0	55	0.0	0.9	1.4	0.0	0.0
Tandojam	16.4	15.0	147.3	16	0.0	0.0	0.0	0.2	1.1
Usta. M	17.4	16.7	135.2	80	0.0	0.0	0.0	0.2	1.1
Zhob	8.9	8.0	93.5	25	0.0	***	0.0	***	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 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 2014-2012)