

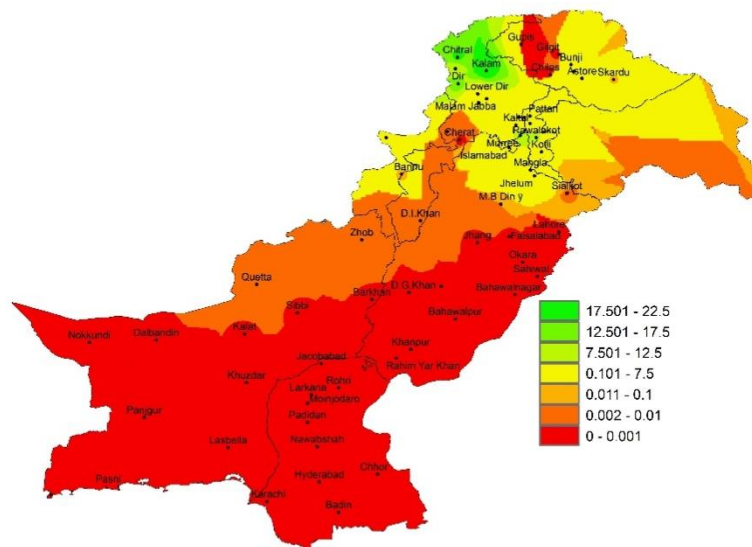
Weekly Weather and Crop Bulletin for Pakistan

**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 (29th January to 4th February, 2018)**



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Highlights of Past Weather (29th January to 4th February, 2018)

Below normal night time temperatures were observed all over the country.

Province wise rainfall distribution reported as follows:

- Light rainfall observed at scattered places in Punjab, Balochistan, Khyber Pakhtunkhwa, Gilgit-Baltistan and Azad Kashmir during the previous week.
- Dry weather reported from Sindh during the previous week.

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

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

Editor: Khalida Noureen (Meteorologist)

Past Weather of Provinces (29th January to 4th February, 2018)

Punjab

Light rainfall observed at scattered places in Punjab during the previous week. Weekly maximum and minimum temperatures recorded as 22.7°C & 6.3°C respectively. For the recent week on average 66.2 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 58% and wind speed in the morning/evening recorded as 1.0/2.1 knots. During the previous week highest amount of rainfall was reported as 11.0 mm at Murree, lowest minimum temperature was recorded as -2.0°C at Murree.

Balochistan

Light rainfall observed at scattered places in Balochistan during the week. Weekly maximum and minimum temperatures recorded as 21.8°C & 5.5°C respectively. For the recent week on average 58.1 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 1.7/5.6 knots. During the previous week highest amount of rainfall was reported as 0.5 mm at Quetta, lowest minimum temperature was recorded as -9.5°C at Quetta.

Khyber Pakhtunkhwa

Light rainfall observed at scattered places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 16.5°C & 2.8°C respectively. For the recent week on average 35.3 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 1.0/2.1 knots. During the previous week highest amount of rainfall was reported as 23.0 mm at Kalam & lowest minimum temperature was recorded as -7.0°C at Kalam.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall observed at scattered places in Gilgit-Baltistan and Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 13.9°C & 1.2°C respectively. For the recent week on average 35.1 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 1.2/1.9 knots. During the previous week highest amount of rainfall was reported as 8.6 mm at Rawalakot and lowest minimum temperature was recorded as -7.5°C at Skardu.

Sindh

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 27.2°C & 10.6°C respectively. For the recent week, on average 96.9 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 1.0/4.8 knots. During the previous week lowest minimum temperature was recorded as 3.5°C at Moin-jo-Daro.

**Past Weather for Major Agricultural Plains
(29th January to 4th February, 2018)****Rawalpindi (Potohar region)**

Rainfall reported as 1.2 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.0/2.4 Oktas while average relative humidity observed as 69.5%. Mean night time temperature recorded as 3.6°C & for the recent week 55 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.6 knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.9/2.4 Oktas while average relative humidity observed as 58.5%. Mean night time temperature recorded as 5.9°C & for the recent week 69.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.6 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 58.5%. Mean night time temperature recorded as 10.6°C & for the recent week 96 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.8 knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.8/1.4 Oktas while average relative humidity observed as 71.5%. Mean night time temperature recorded as 7.4°C & for the recent week 73.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/1.1 knots.

Quetta (Northern Baluchistan)

Rainfall reported as trace from Quetta during the week; however, cloudiness in the morning/evening recorded as 2.6/2.1 Oktas while average relative humidity observed as 34%. Mean night time temperature recorded as 0.7°C & for the recent

week 14.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.5/0.5 knots.

**Past Weather for Sub-Regional Agricultural
Plains (29th January to 4th February, 2018)****Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 2.0/1.9 Oktas while average relative humidity observed as 56%. Mean night time temperature recorded as 7.5°C & for the recent week 70.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/4.0 knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 1.3/1.7 Oktas while average relative humidity observed as 55%. Mean night time temperature recorded as 9.4°C & for the recent week 77.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.3/3.4 knots.

Zhob

Rainfall reported as Trace (not measureable) from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.6/1.0 Oktas while average relative humidity observed as 32%. Mean night time temperature recorded as 1.5°C & for the recent week 31.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.0/5.6 knots.

Murree

Rainfall reported as 11.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 2.7/2.1 Oktas while average relative humidity observed as 54%. Mean night time temperature recorded as -0.4°C & for the recent week 2.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/0.6 knots.

D.I. Khan

Rainfall reported as Trace (not measureable) from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.2/1.1 Oktas

while average relative humidity observed as 57%. Mean night time temperature recorded as 6.3°C & for the recent week 71.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.4/0.9 knots.

Peshawar

Rainfall reported as Trace (not measureable) from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.0/1.0 Oktas while average relative humidity observed as 56%. Mean night time temperature recorded as 5.7°C & for the recent week 62.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.0 knots.

Kalam

Rainfall reported as 23.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 5.7/5.7 Oktas while average relative humidity observed as 81%. Mean night time temperature recorded as -3.6°C. Wind speed recorded in the morning/evening as 0.0/0.3 knots.

Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 5.5/6.3 Oktas while average relative humidity observed as 57%. Mean night time temperature recorded as -0.4°C & for the recent week 11.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.6 knots.

Skardu

Rainfall reported as 0.02 mm from Skardu during the week; However, cloudiness in the morning/evening recorded as 0.6/1.0 Oktas while average relative humidity observed as 32%. Mean night time temperature recorded as -4.0°C. Wind speed recorded in the morning/evening as 1.0/5.6 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 in the fields of RAMC Faisalabad.

Wheat (*Galaxy*); Very Good, Tillering completed in irrigated Conditions.

Lower Sindh (Tandojam)

There is presently one crop in the fields of RAMC Tandojam.

Wheat (*Sindh*); Good, at flowering stage.

Northern Baluchistan (Quetta)

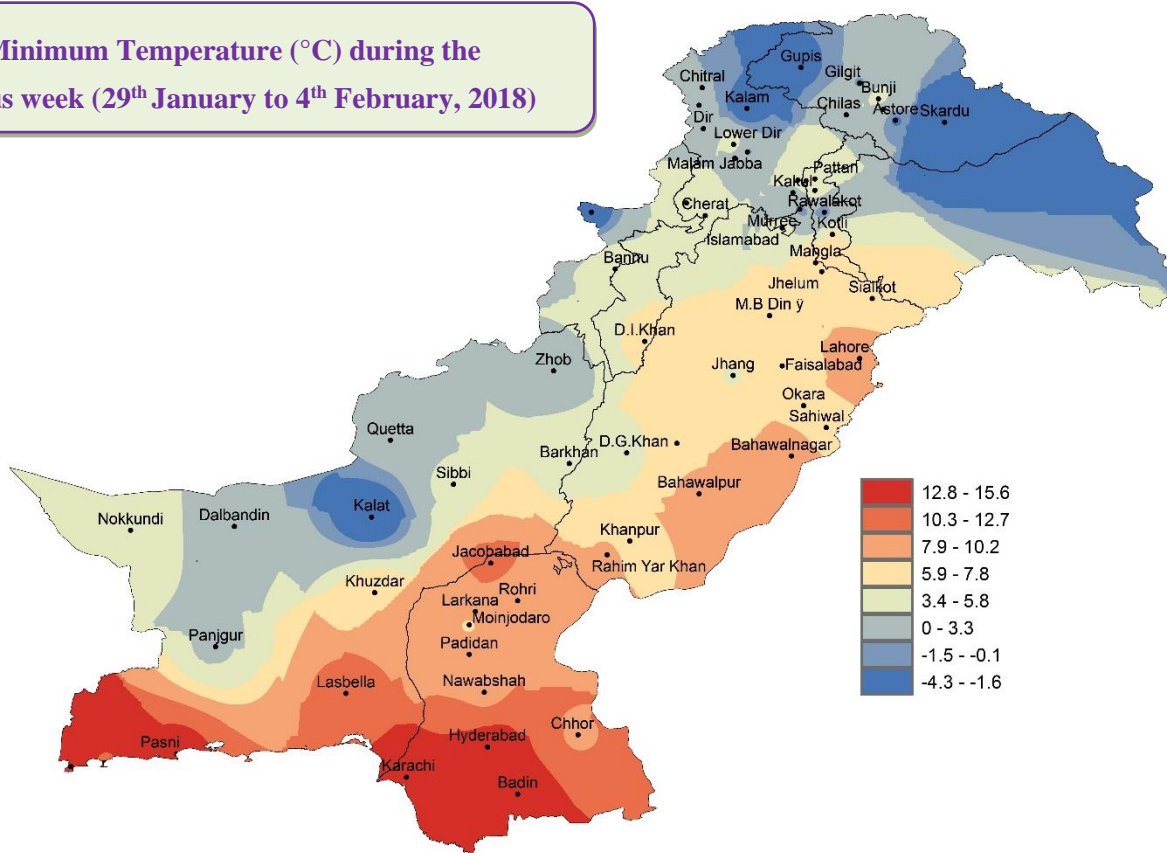
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

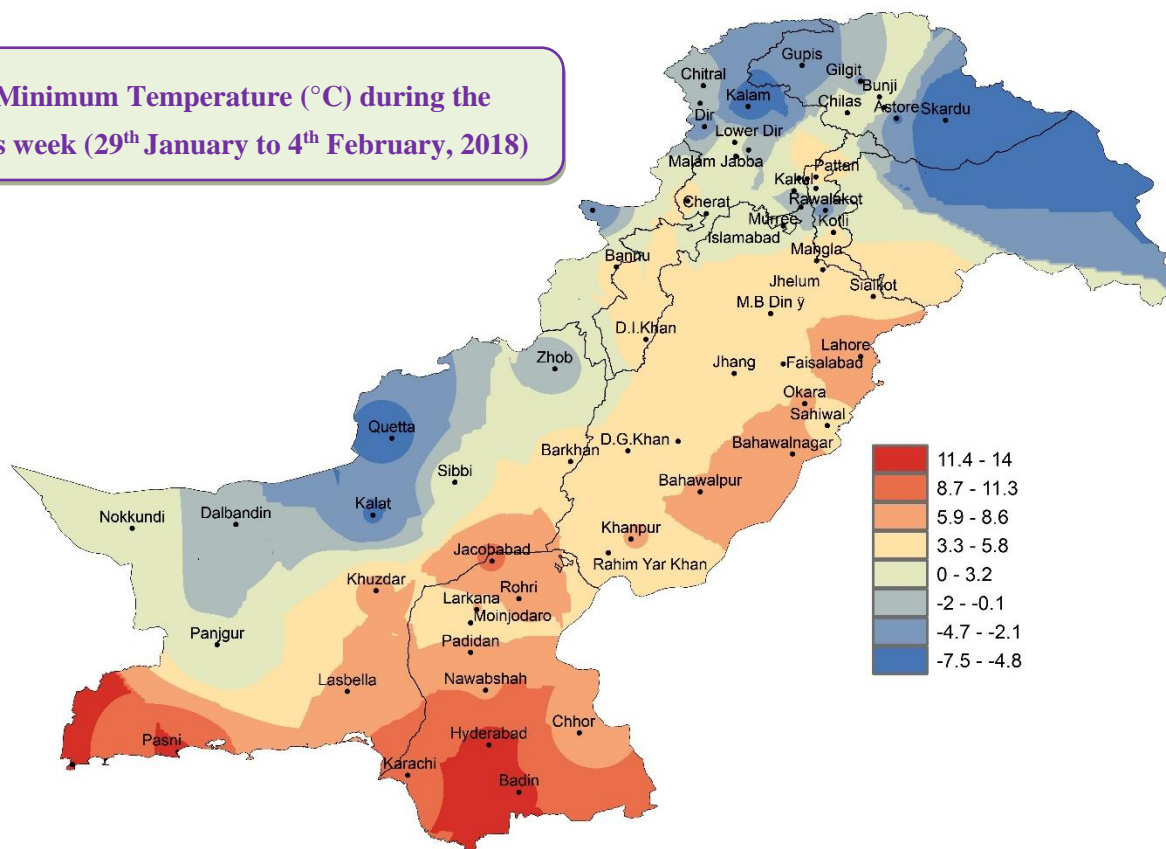
There is presently one crop grown in the fields of RAMC Usta Muhammad.

Wheat (*Galaxy*); Good, at Tillering stage in irrigated Conditions.

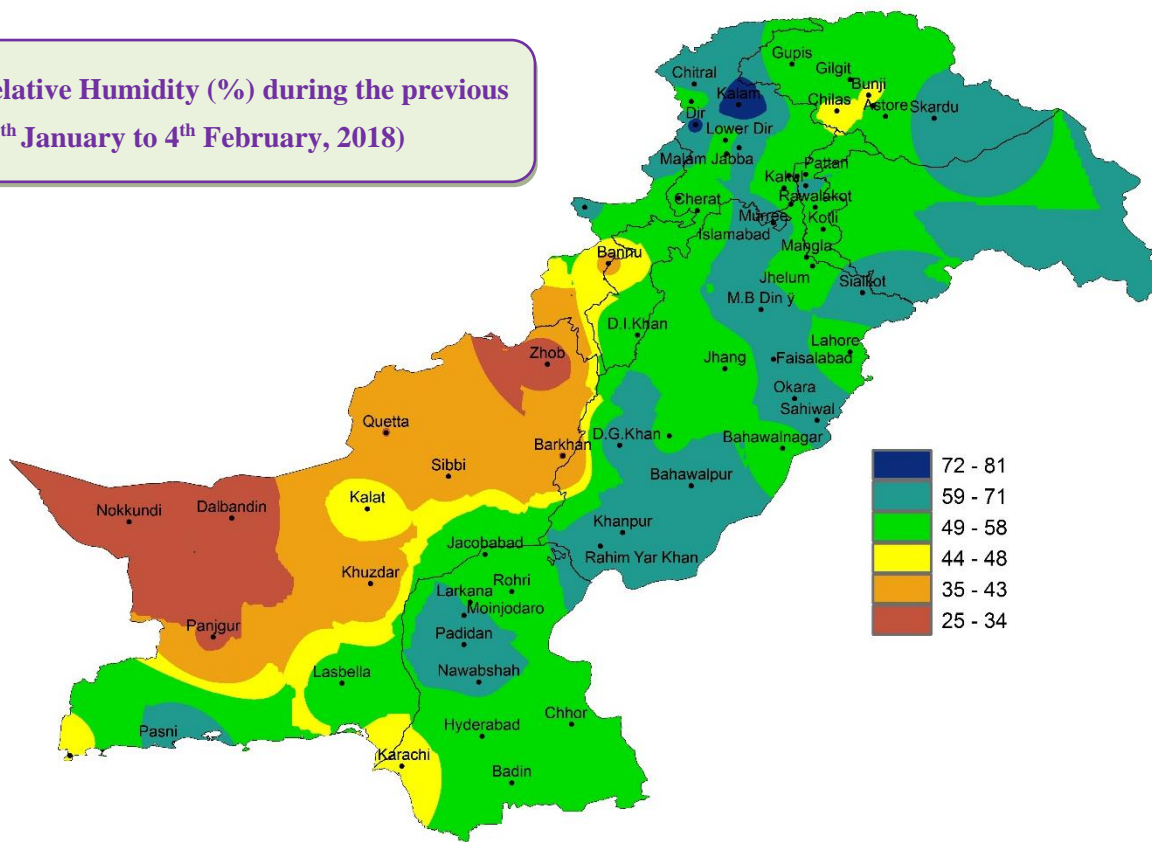
**Mean Minimum Temperature (°C) during the
Previous week (29th January to 4th February, 2018)**



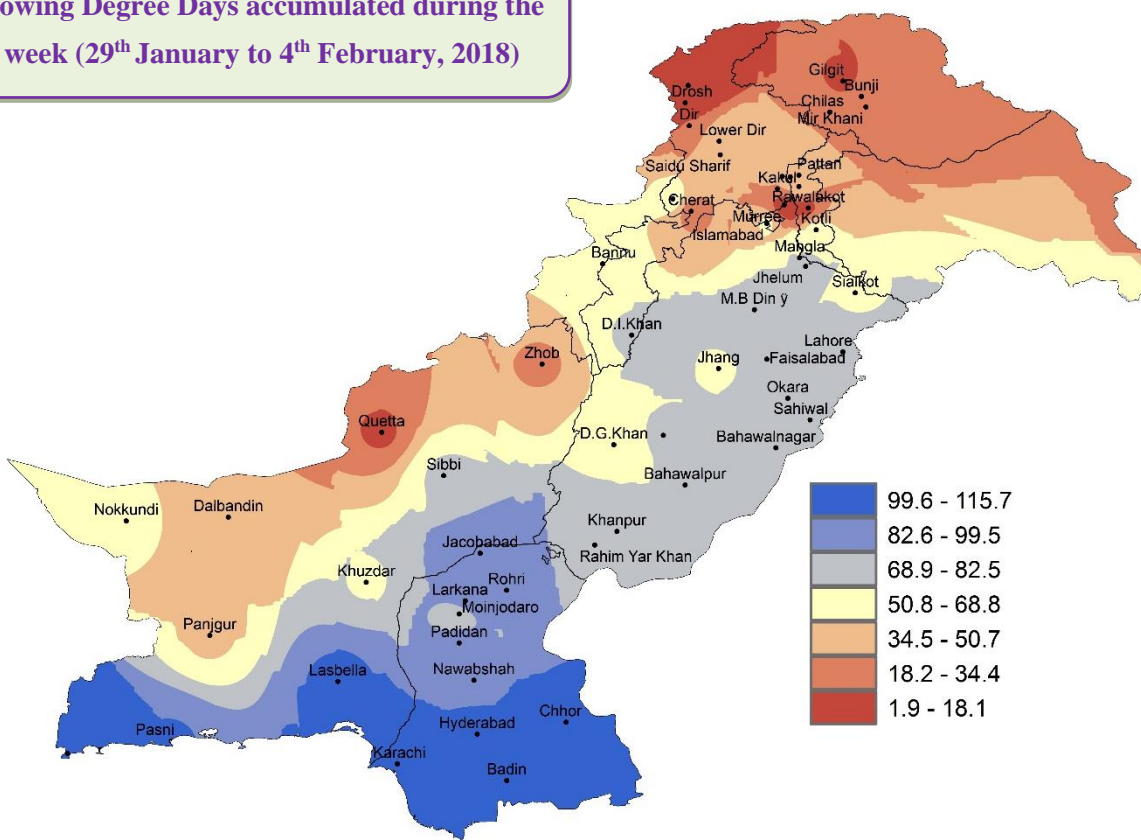
**Lowest Minimum Temperature (°C) during the
Previous week (29th January to 4th February, 2018)**



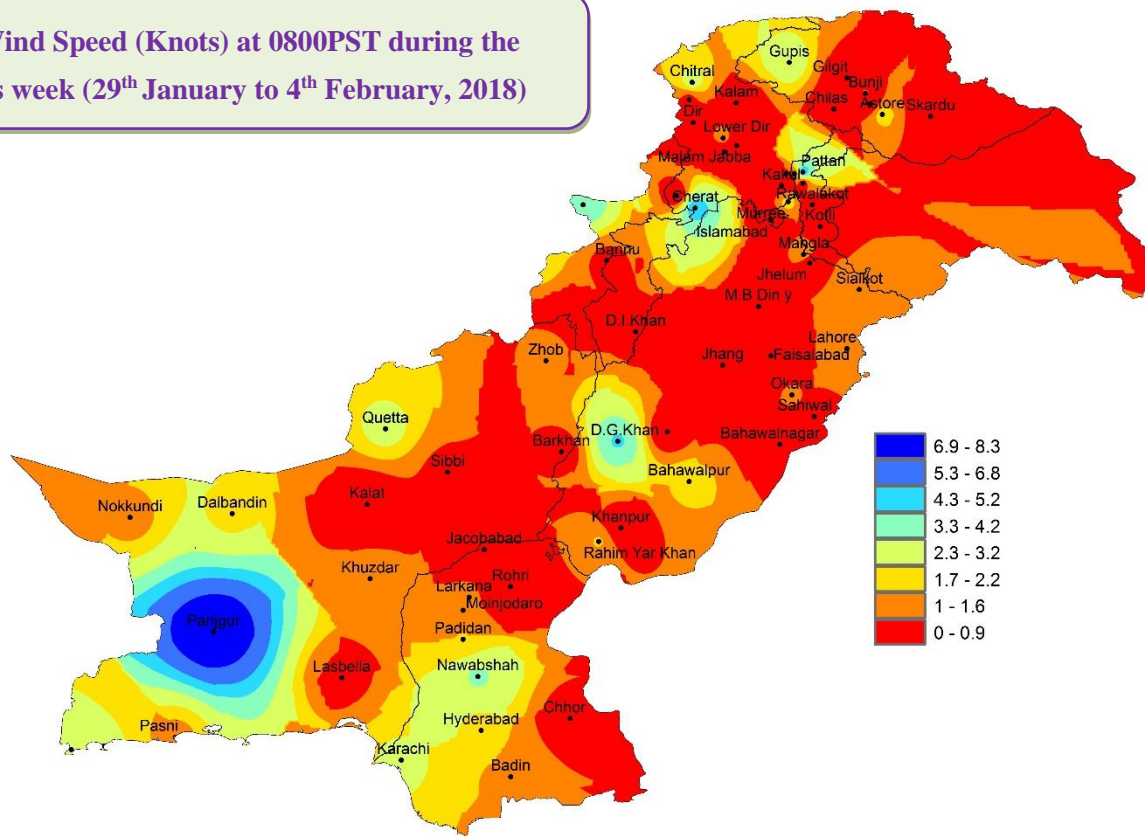
Mean Relative Humidity (%) during the previous week (29th January to 4th February, 2018)



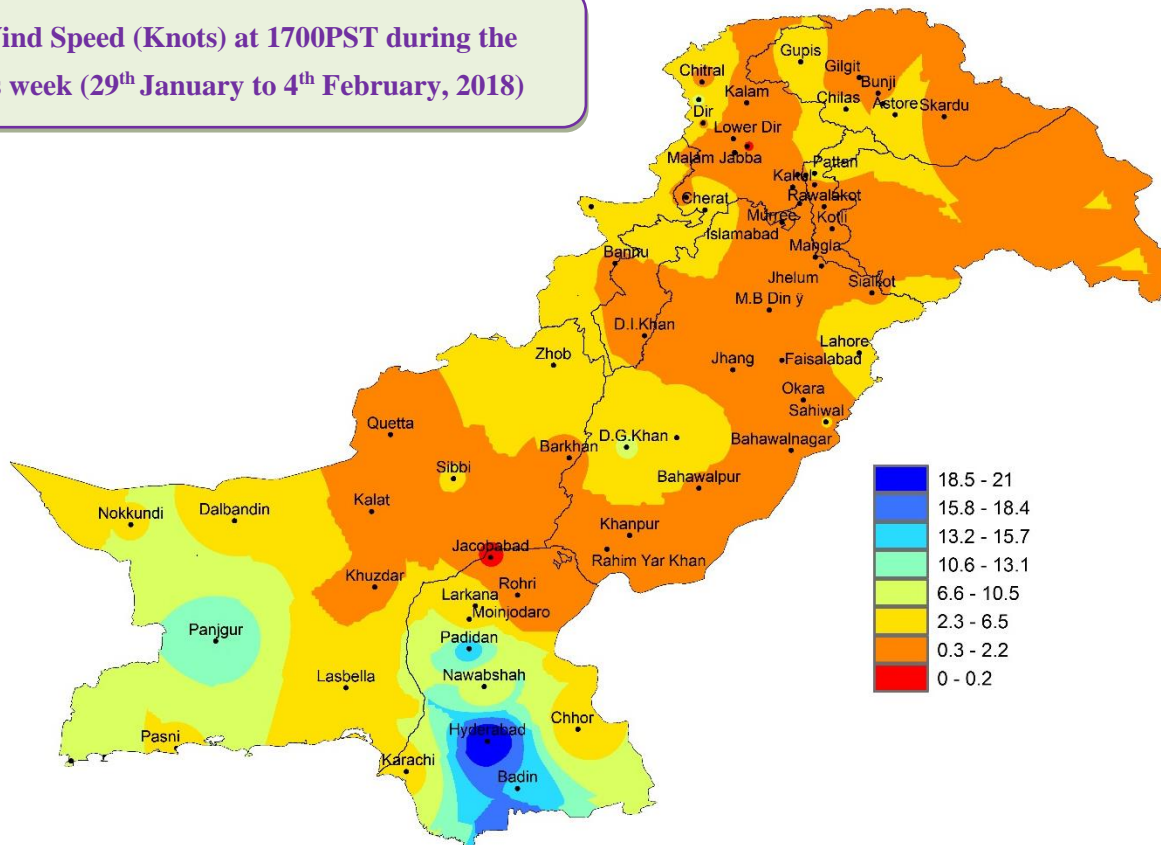
Total Growing Degree Days accumulated during the previous week (29th January to 4th February, 2018)



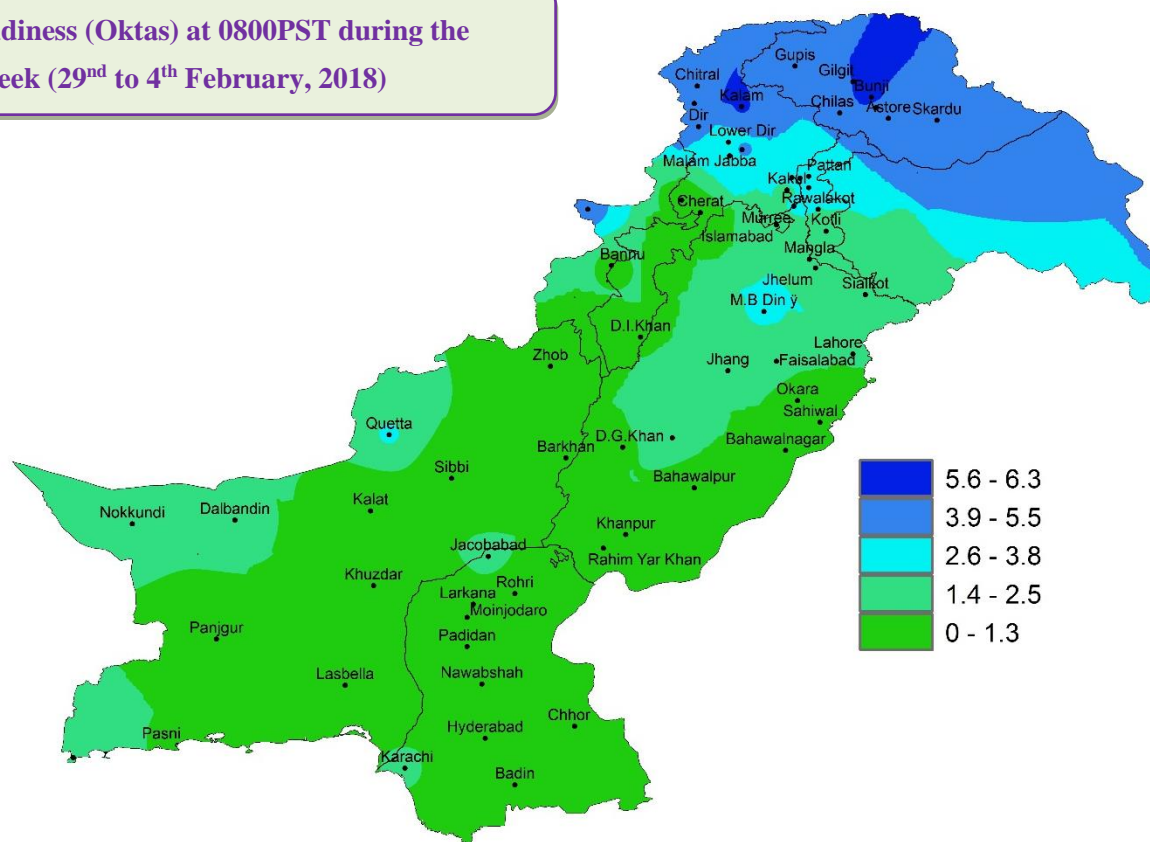
Mean Wind Speed (Knots) at 0800PST during the previous week (29th January to 4th February, 2018)



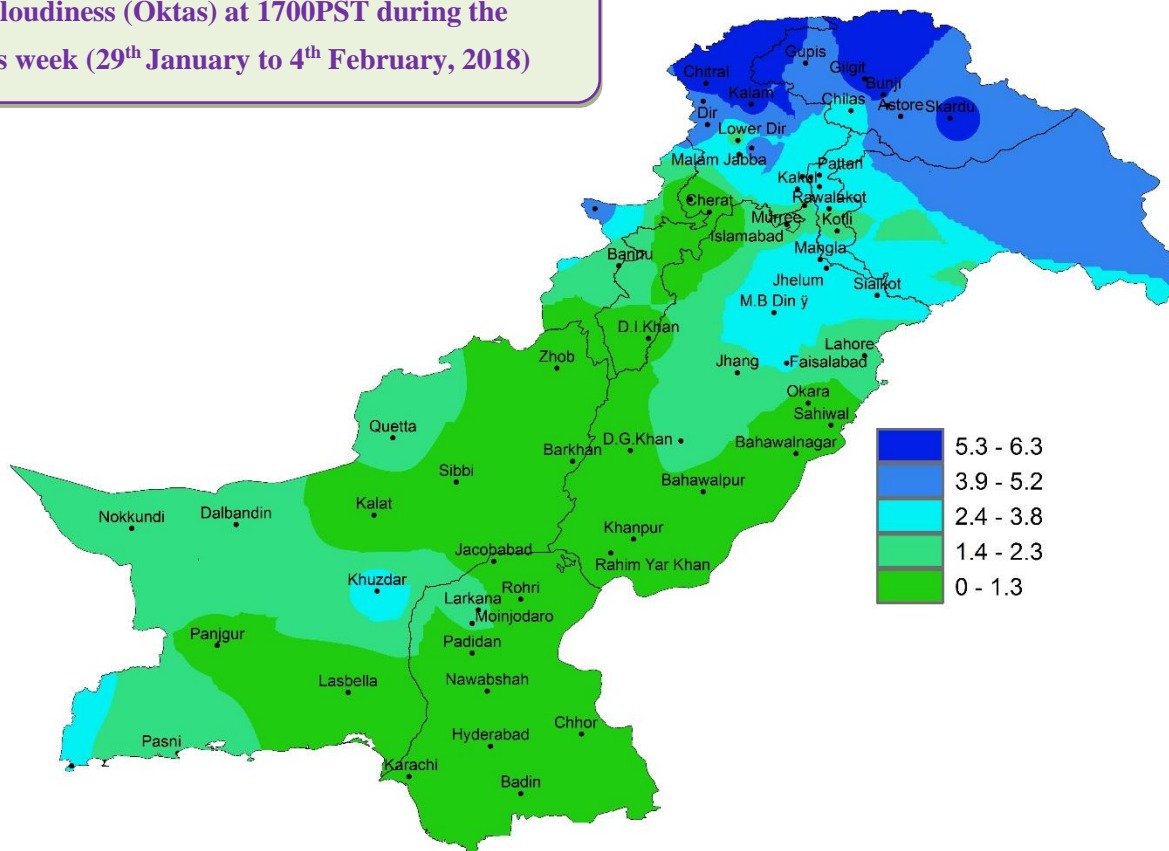
Mean Wind Speed (Knots) at 1700PST during the previous week (29th January to 4th February, 2018)



Mean Cloudiness (Oktas) at 0800PST during the previous week (29nd to 4th February, 2018)



Mean Cloudiness (Oktas) at 1700PST during the previous week (29th January to 4th February, 2018)



Weekly Weather Advisory for Farmers
(5th February to 11th February, 2018)

Continental air is prevailing over most parts of the country. A fresh westerly system is likely to approach western parts of the country on Saturday.

TUESDAY (06-02-2018)

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

WEDNESDAY (07-02-2018)

Mainly cold and dry weather is expected in most parts of the country. However, light rain (with light snowfall over the hills) is expected at few places in Gilgit-Baltistan.

THURSDAY (08-02-2018)

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

FRIDAY (09-02-2018)

Mainly cold and dry weather is expected in most parts of the country. However, light rain (with snowfall over the hills) is expected at isolated places in Quetta, Zhob divisions and FATA during night.

SATURDAY (10-02-2018)

Mainly cold and dry weather is expected in most parts of the country. However, light rain (with snowfall over the hills) is expected at isolated places in Malakand, Quetta, Zhob divisions, FATA, Kashmir and Gilgit-Baltistan.

SUNDAY (11-02-2018)

Rain (with snowfall over the hills) is expected at scattered places in Malakand Hazara, Peshawar, Bannu, Kohat, Quetta, Zhob divisions, FATA, Kashmir and Gilgit-Baltistan, while at isolated places in Rawalpindi, Sargodha divisions and Islamabad. Cold and dry weather elsewhere in the country.

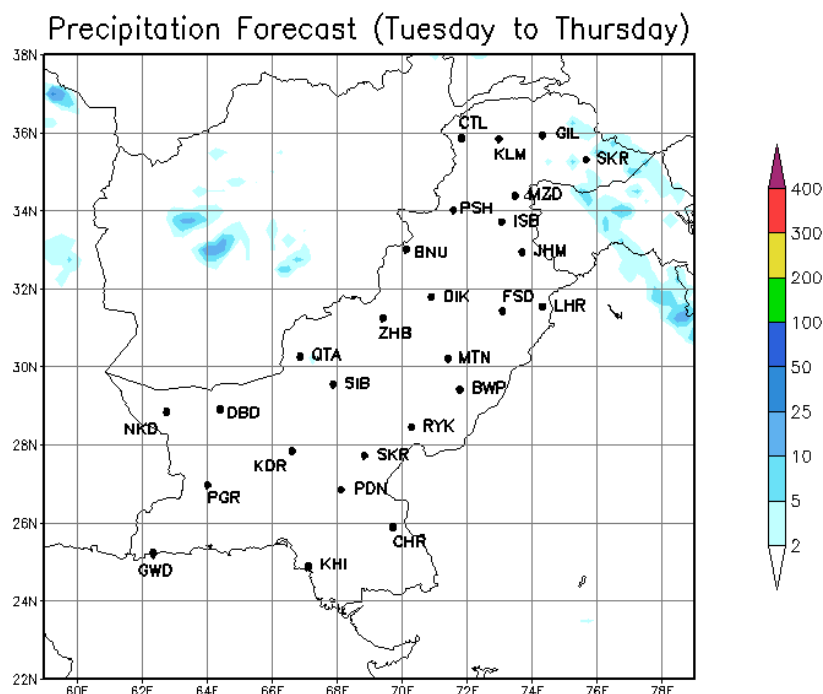
ADVISES FOR FARMERS

During the last week, dry weather was observed in most of the agricultural plains of the country. In the next week as well dry weather is likely to prevail in most parts of the country. Accordingly, following advises are suggested for the farming community.

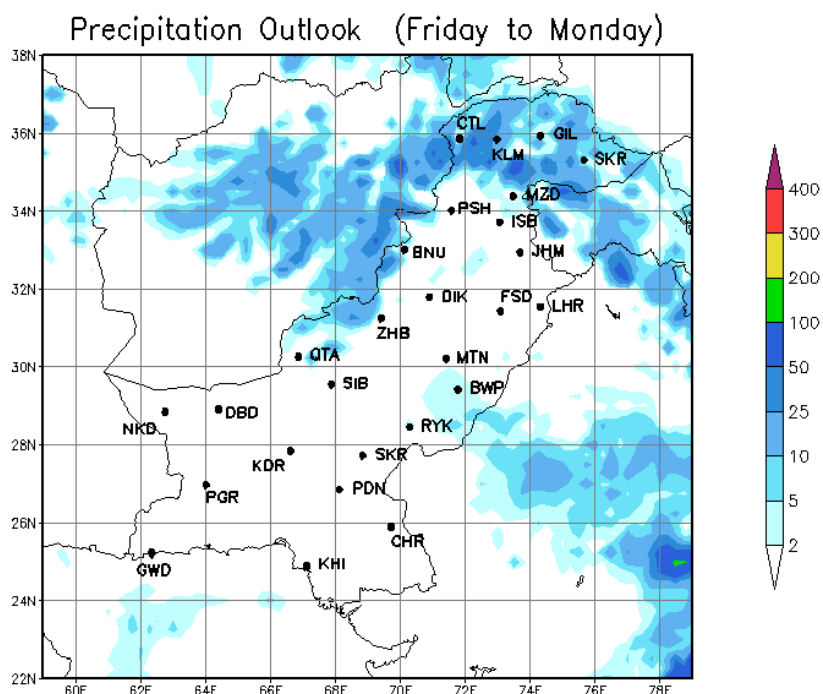
- Farmers of irrigated areas should irrigate the crop as per requirement keeping expected weather in mind.
- Measures should be taken to preserve the crops and livestock from the expected frost during clear nights in high elevated agricultural plains.
- Removing weeds from the standing crops is very important as weeds utilize moisture and food which may be utilized by the crop. As a result considerable loss in yield occurs every year. However operations against weeds should be started using weedicides or manually when the crop completely covers the fields.

Weather Outlook from 6th to 11th February, 2018

The outlook for the period 6th to 8th February, 2018 shows that dry weather may prevail in most parts of the country, however light rainfall is expected in GB and Azad Kashmir.



The outlook for the period 9th to 11th February, 2018 shows that dry weather is expected to prevail in most parts of the country, however light to moderate rainfall is expected in Gilgit-Baltistan and Azad Kashmir and northern parts of Baluchistan and KPK.



National Weather Data of Selected Cities (29th January to 4th February, 2018)

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	Lowest							
Astore	-2.1	-5.5	***	55	0.0	4.2	4.9	2.0	4.1
Badin	14.1	11.5	115.8	52	0.0	0.0	0.4	1.3	15.6
Bahawalnagar	8.7	6.9	80.3	55	0.0	0.0	0.6	0.3	0.6
Bahawalpur	8.3	6.0	71.8	63	0.0	0.3	0.9	2.0	1.7
Balakot	5.3	3.1	51.1	47	7.0	3.3	3.4	0.8	0.7
Bannu	5.7	4.0	63.5	42	0.0	1.0	1.4	0.7	2.0
Barkhan	5.2	4.5	51.3	34	0.0	0.3	0.9	0.3	1.1
Bunji	5.1	2.8	31.4	45	0.0	6.3	5.3	1.0	1.1
Cherat	3.5	2.5	23.8	55	0.0	1.0	0.6	5.0	3.4
Chhor	9.9	7.5	108.2	53	0.0	0.2	0.3	0.3	3.3
Chilas	3.1	2.0	30.3	47	0.0	4.2	2.6	0.3	2.9
Chitral	0.1	-1.3	1.8	62	19.2	5.5	5.6	2.7	1.1
D.G.Khan	5.0	3.5	60.4	63	0.0	1.2	0.7	4.3	6.9
D.I.Khan	6.3	4.0	71.9	57	0.0	1.2	1.1	0.4	0.9
Dalbandin	1.6	-2.0	36.3	29	0.0	1.7	2.1	2.0	5.4
Dir	1.4	-3.0	19.5	75	15.0	4.0	4.4	0.0	2.0
Drosh	0.2	-1.3	4.0	48	7.4	5.2	5.0	0.7	7.4
Faisalabad	5.9	5.0	69.3	59	0.0	1.9	2.4	0.0	1.6
Garidopatta	4.2	2.5	49.7	63	2.4	3.3	3.1	0.3	0.9
Gawader	12.4	9.5	103.8	48	0.0	1.3	1.7	2.3	7.4
Gilgit	-0.4	-2.5	11.5	57	0.0	5.5	6.3	0.0	0.6
Gupis	-2.6	-4.0	***	50	0.0	4.0	5.1	2.8	2.9
Hyderabad	13.9	12.0	109.0	52	0.0	0.7	0.5	2.0	21.0

Islamabad	4.5	2.5	54.8	64	1.0	1.7	2.0	0.0	0.3
Jacobabad	10.8	9.0	89.4	54	0.0	1.5	1.1	0.3	0.0
Jhang	5.8	4.8	68.4	54	0.0	1.5	2.1	0.0	1.4
Jhelum	6.6	4.2	71.2	58	0.2	2.3	3.3	0.3	1.7
Jiwani	15.6	14.0	110.7	45	0.0	2.5	3.6	2.3	6.9
Kakul	1.8	-0.5	29.5	56	3.0	2.2	2.9	0.0	1.1
Kalam	-3.6	-7.0	***	81	23.0	5.7	5.7	0.0	0.3
Kalat	-4.3	-5.0	***	47	0.0	0.0	0.0	0.0	2.0
Karachi	13.4	11.0	113.5	44	0.0	1.3	0.9	2.3	4.9
Khanpur	7.5	6.0	79.0	61	0.0	0.8	0.7	0.0	1.4
Khuzdar	7.8	6.5	67.0	38	0.0	0.3	2.7	1.3	2.0
Kotli	6.3	4.0	61.2	51	0.0	2.2	2.0	0.7	0.9
Lahore	9.4	8.0	77.7	55	0.0	1.3	1.7	1.3	3.4
Larkana	9.9	6.0	88.6	56	0.0	1.0	1.4	1.0	3.4
Lasbella	11.3	6.0	106.8	50	0.0	0.7	0.4	0.7	2.6
Lower Dir	4.3	1.5	46.8	51	0.0	3.0	1.6	1.3	1.7
M.B Din	7.2	5.6	71.6	61	0.0	2.7	2.7	0.0	1.4
Malam Jabba	-0.5	-2.0	***	64	3.0	4.0	4.7	0.0	0.0
Mangla	6.2	4.4	68.8	53	0.8	2.5	3.3	1.3	1.1
Mir Khani	1.2	0.5	19.4	48	7.0	4.7	4.9	0.0	2.4
Moinjodaro	7.4	3.5	77.7	63	0.0	0.5	1.3	1.0	4.6
Multan(PBO)	7.5	5.4	70.9	56	0.0	2.0	1.9	0.0	4.0
Murree	-0.4	-2.0	2.2	54	11.0	2.7	2.1	2.0	0.6
Muzaffarabad	4.1	3.5	49.7	56	4.0	2.7	2.7	0.3	1.7
Nawabshah	9.8	8.5	93.5	59	0.0	0.8	0.7	3.3	6.6
Nokkundi	5.1	1.5	55.5	25	0.0	1.5	1.4	1.3	6.4

Okara	7.4	6.0	71.5	61	0.0	0.7	0.9	1.0	0.4
Padidan	8.8	7.5	84.5	61	0.0	1.2	0.9	1.7	15.3
Panjgur	2.9	0.0	45.3	33	0.0	0.5	1.1	8.3	12.9
Parachinar	-3.2	-4.5	***	60	5.0	4.3	4.3	4.0	5.3
Pasni	13.9	11.5	102.3	67	0.0	1.0	1.9	1.3	5.9
Pattan	4.7	4.0	43.0	55	6.0	2.5	3.7	5.5	4.7
Peshawar	5.7	3.7	62.9	56	0.0	1.0	1.0	0.0	2.0
Quetta	0.7	-5.6	14.4	34	TR	2.6	2.1	2.5	0.5
Rahim Yar Khan	8.0	4.5	80.7	63	0.0	0.0	0.3	1.7	0.9
Rawalakot	-0.7	-3.4	12.1	53	8.6	2.5	2.3	0.0	0.9
Rawalpindi	3.6	2.5	55.0	70	1.2	2.0	2.4	0.3	0.6
Rohri	8.7	6.2	84.6	54	0.0	0.7	0.0	0.0	0.6
Sahiwal	7.1	5.0	68.7	59	0.0	0.3	1.1	0.7	2.3
Saidu Sharif	3.3	1.8	39.1	57	0.0	3.2	3.3	0.0	0.9
Sialkot	6.2	5.2	66.6	61	0.0	1.8	2.4	1.5	2.1
Sibbi	4.6	1.5	73.0	41	0.0	0.0	0.6	0.7	2.3
Skardu	-4.0	-7.5	***	64	0.0	4.7	5.3	0.0	0.9
Tandojam	10.6	9.5	96.0	59	0.0	0.0	0.0	0.0	1.8
Usta.M	7.4	6.5	73.3	72	0.0	0.8	1.4	0.6	1.1
Zhob	1.5	-1.0	31.0	32	0.0	0.6	1.0	1.0	5.6

*** Shows that data was not available.

*Trace shows not-measurable data

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)