

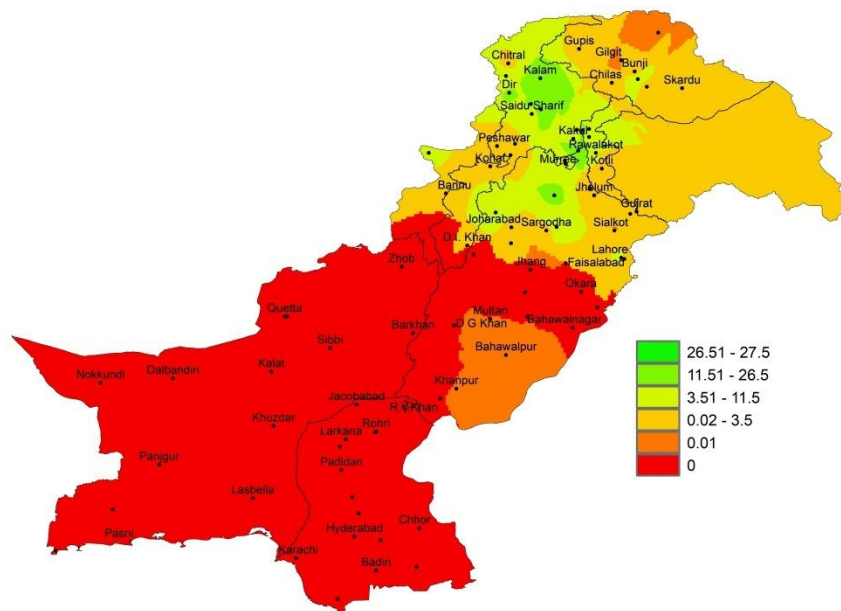
Weekly Weather and Crop Bulletin for Pakistan

**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 (1st October to 7th October, 2018)**



Contents

Highlights of past weather (General)	1-2
Past weather for Agri Plains	3-4
Crop progress	4
Min Temperature maps	5
R.H and GDD	6
Wind speed maps	7
Cloudiness maps	8
Farmers advisory	9
Weather Outlook	10
National data for selected stations	11-13
AgMIP findings	14

Highlights of Past Weather (1st October to 7th October, 2018)

Above normal night time temperatures were observed in the country.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed at scattered places in Punjab, Khyber Pakhtunkhwa, Gilgit-Baltistan, Azad Jammu and Kashmir during the previous week.
- Dry weather observed in Sindh and Baluchistan during the previous week.

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

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

Editor: Khalida Noureen (Meteorologist)

Past Weather of Provinces (1st October to 7th October, 2018)

Punjab

Light to moderate rainfall observed at scattered places in Punjab during the week. Weekly maximum and minimum temperatures recorded as 34.4°C & 20.5°C respectively. For the recent week on average 157.2 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 55% and wind speed in the morning/evening recorded as 2.0/2.0 Knots. During the previous week the highest amount of rainfall was recorded as 27.2 mm at Murree & lowest minimum temperature was recorded as 09°C at Murree.

Sindh

Dry weather observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 38.1°C & 22.8°C respectively. For the recent week, on average 178.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 59% and wind speed in the morning/evening recorded as 1.8/3.9 Knots. During the previous week the lowest minimum temperature was recorded as 18.0°C at Moin-jo-Daro.

Khyber Pakhtunkhwa

Light to moderate rainfall observed at scattered places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 28.4°C & 13.5°C respectively. For the recent week on average 111.7 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 59% and wind speed in the morning/evening recorded as 0.9/2.5 Knots. During the previous week the highest amount of rainfall was recorded as 18.00 mm at Kalam & lowest minimum temperature was recorded as 2.0°C at Kalam.

Baluchistan

Dry weather observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 33.3°C & 17.2°C respectively. For the recent week on average 141.8 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 1.2/4.4 Knots. During the previous week the lowest minimum temperature was recorded as 5.0°C at Kalat.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall observed at scattered places in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 26.2°C & 11.6°C respectively. For the recent week on average 97.9 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 53% and wind speed in the morning/evening recorded as 0.8/2.3 Knots. During the previous week the highest amount of rainfall was recorded as 22.00 mm at Muzaffarabad & lowest minimum temperature was recorded as 4.8°C at Skardu.

Past Weather for Major Agricultural Plains (1st October to 7th October, 2018)

Rawalpindi (Potohar region)

Rainfall reported as 4.0 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 3.4/2.9 Oktas while, average relative humidity observed as 64%. Mean might time temperature recorded as 17.4°C & for the recent week 136.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/0.6 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, while, average relative humidity observed as 61%. Mean might time temperature recorded as 21.7°C & for the recent week 163.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.8/0.3 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, clear weather was recorded in the morning/evening while, average relative humidity observed as 66%. Mean might time temperature recorded as 20.4°C & for the recent week 177.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.2/1.7 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, clear weather was recorded in the morning/evening while, average relative humidity observed as 69%. Mean might time temperature recorded as 24.3°C & for the recent week 168.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.5/3.7 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.6/1.0 Oktas while, average relative humidity observed as 21%. Mean might time temperature recorded as 11.0°C & for the recent week 99.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.2/4.1 Knots.

Past Weather for Sub-Regional Agricultural Plains (1st October to 7th October, 2018)

Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.2/0.9 Oktas while, average relative humidity observed as 49%. Mean might time temperature recorded as 22.6°C & for the recent week 171.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/5.1 Knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.5/0.7 Oktas while, average relative humidity observed as 54%. Mean might time temperature recorded as 23.3°C & for the recent week 165.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.3/1.1 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.3/0.9 Oktas while, average relative humidity observed as 45%. Mean might time temperature recorded as 18.0°C & for the recent week 133.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.2/6.4 Knots.

Murree

Rainfall reported as 27.2 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 2.3/2.4 Oktas while, average relative humidity observed as 52%. Mean might time temperature recorded as 10.6°C & for the recent week 73.1 growing degree days

accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/0.9 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 52%. Mean night time temperature recorded as 21.4°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 0.3/1.7 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.3/4.1 Oktas while, average relative humidity observed as 59%. Mean night time temperature recorded as 18.1°C & for the recent week 143.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.0/0.3 Knots.

Kalam

Rainfall reported as 18.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 3.2/5.9 Oktas while, average relative humidity observed as 69%. Mean night time temperature recorded as 4.4°C & for the recent week 52.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 Knots.

Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 5.3/5.5 Oktas while, average relative humidity observed as 57%. Mean night time temperature recorded as 9.8°C & for the recent week 95.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/3.0 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.3/6.3 Oktas while, average relative humidity observed as 46%. Mean night time temperature recorded as 6.3°C & for the recent week 67.1 growing degree days accumulated by the end of

last week. Wind speed recorded in the morning/evening as 0.0/2.6 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: *Good, tasseling stage.*

Central Punjab (Faisalabad)

Presently cotton crop is sown in the fields of RAMC Faisalabad.

Cotton: *Very Good, Maturity stage completed.*

Lower Sindh (Tandojam)

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

Cotton (CIM 602): *Good, 3rd Picking stage.*

Northern Baluchistan (Quetta)

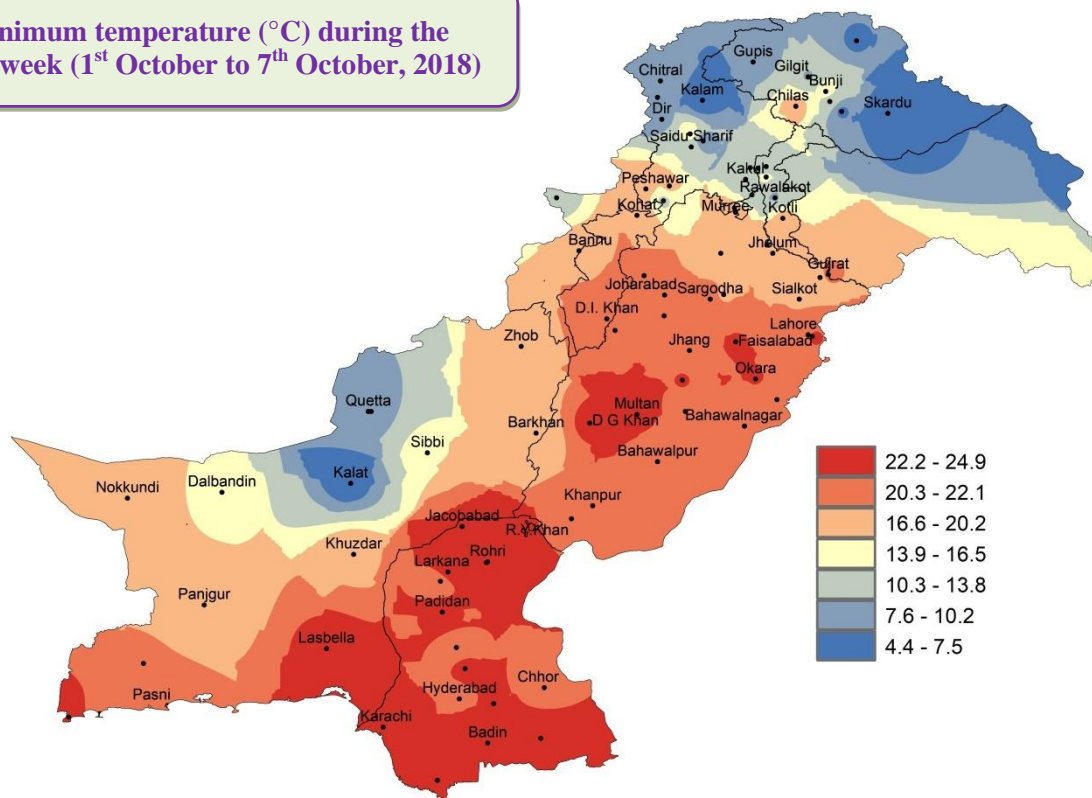
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

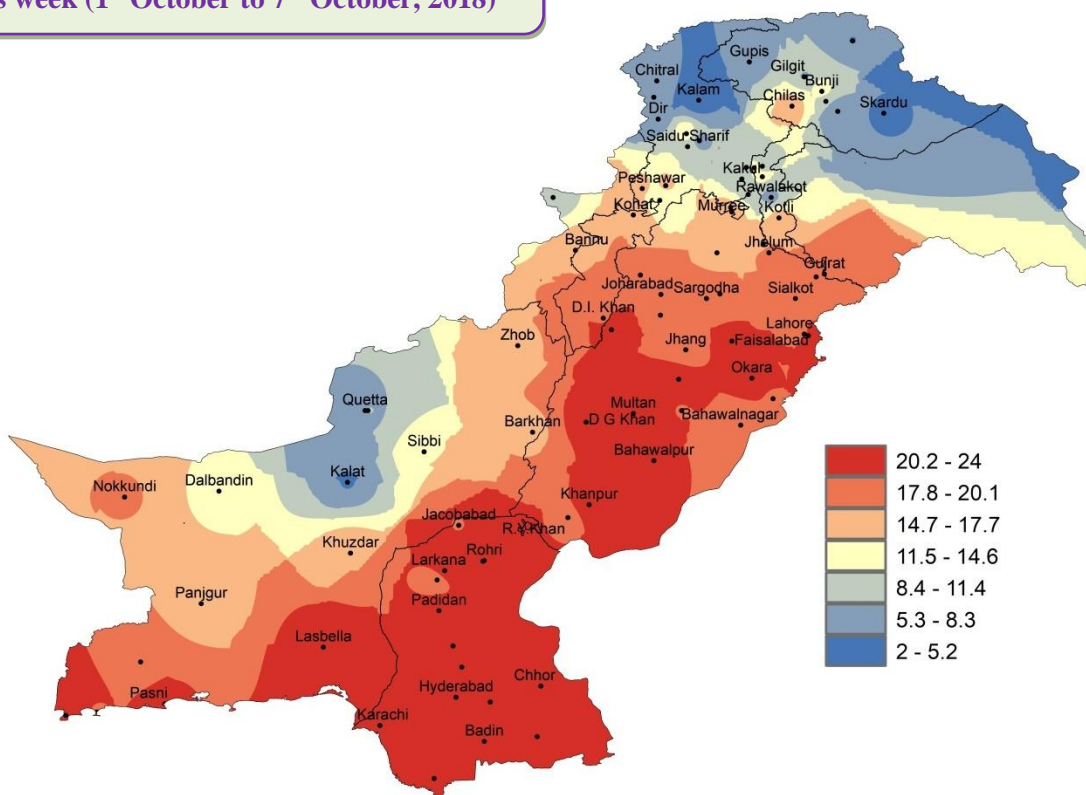
There is presently rice crop in the fields of RAMC Usta Muhammad.

Rice: *Milk maturity stage.*

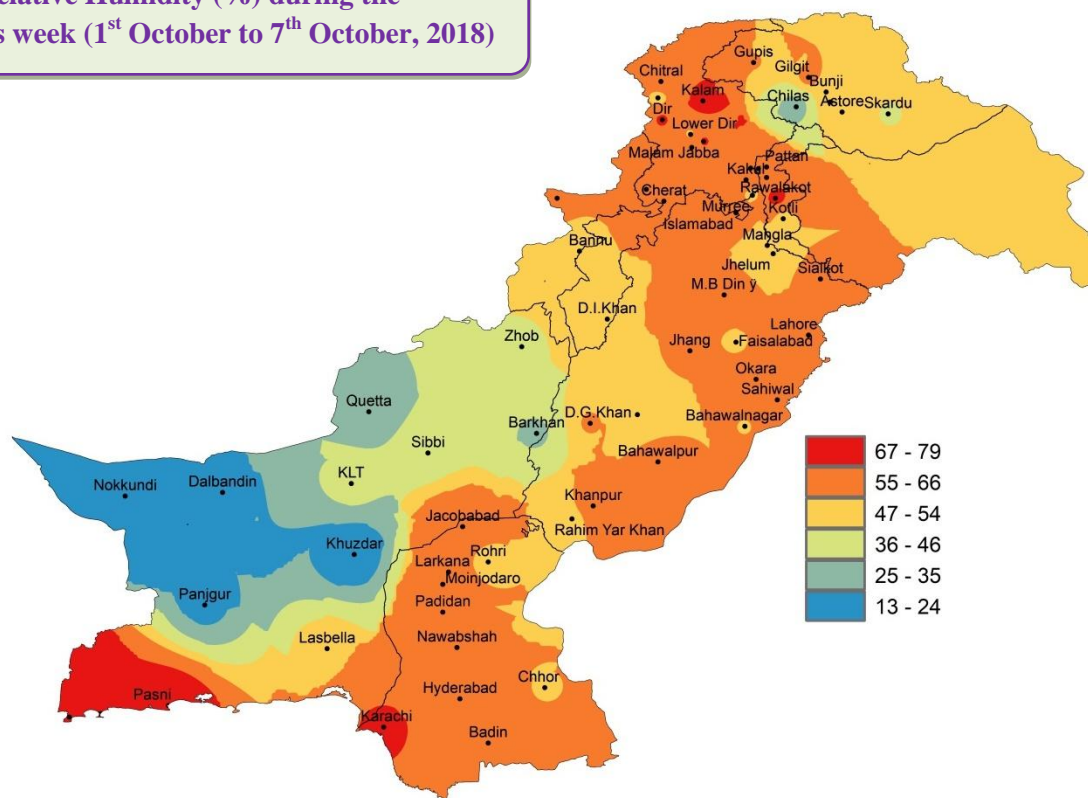
**Mean Minimum temperature (°C) during the
Previous week (1st October to 7th October, 2018)**



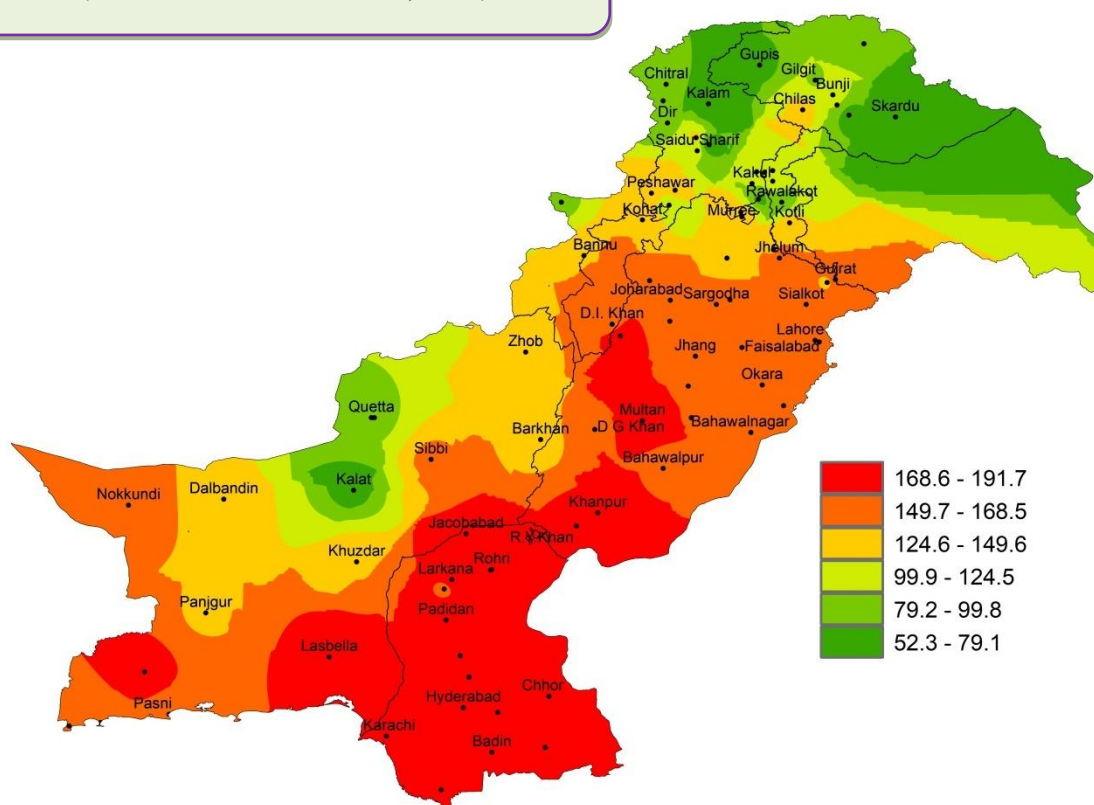
**Lowest Minimum Temperature (°C) during the
Previous week (1st October to 7th October, 2018)**



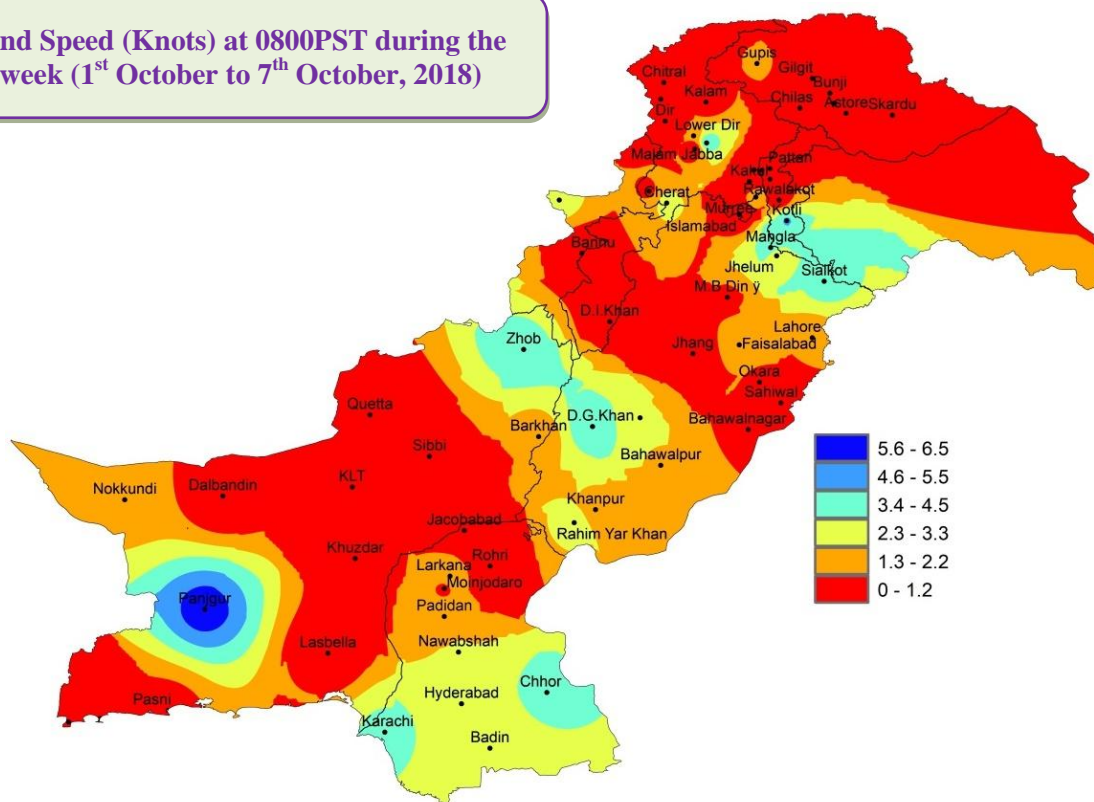
**Mean Relative Humidity (%) during the
Previous week (1st October to 7th October, 2018)**



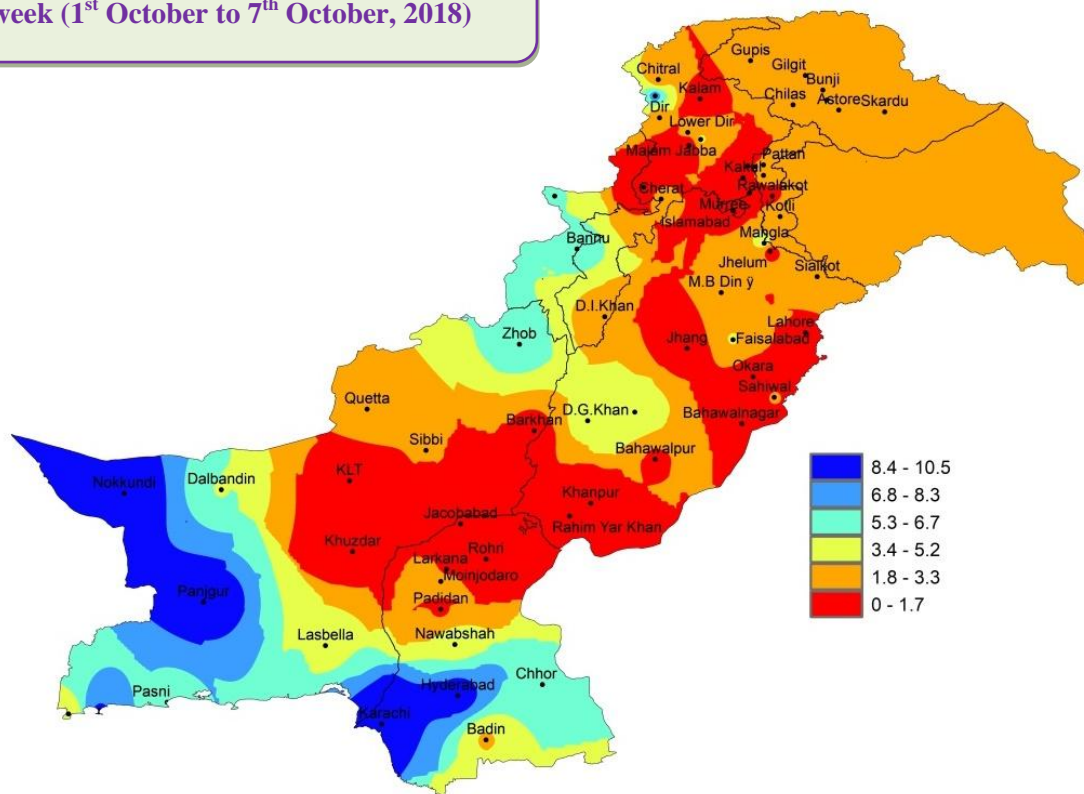
**Total Growing Degree Days accumulated during the
Previous week (1st October to 7th October, 2018)**



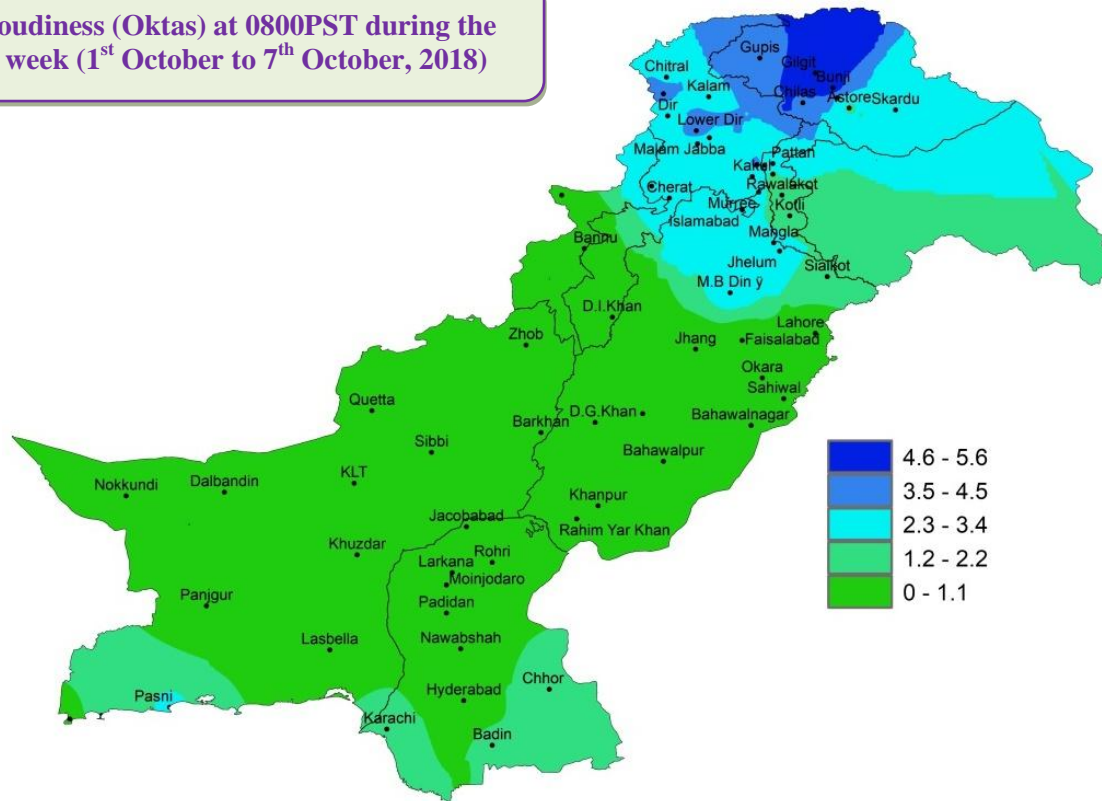
Mean Wind Speed (Knots) at 0800PST during the Previous week (1st October to 7th October, 2018)



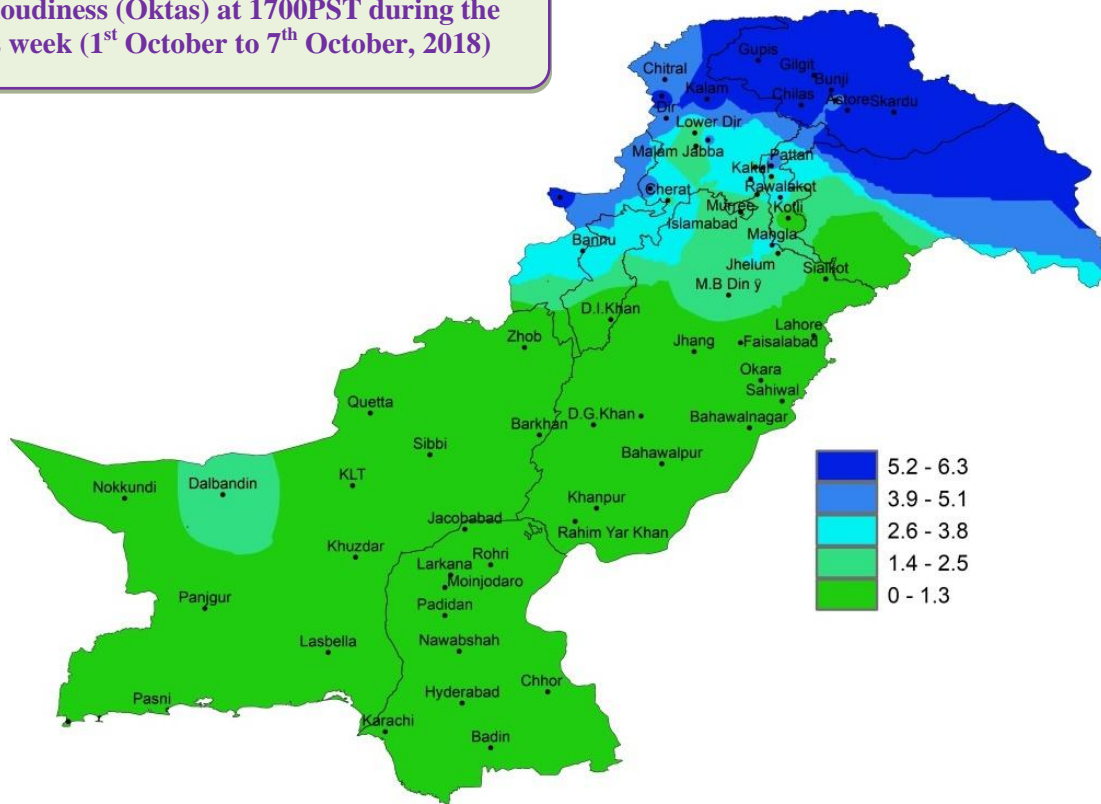
Mean Wind Speed (Knots) at 1700PST during the Previous week (1st October to 7th October, 2018)



Mean Cloudiness (Oktas) at 0800PST during the
Previous week (1st October to 7th October, 2018)



Mean Cloudiness (Oktas) at 1700PST during the
Previous week (1st October to 7th October, 2018)



Weekly Weather Advisory for Farmers
(8th October to 14th October, 2018)

Continental air is prevailing over most parts of the country. A fresh westerly wave is likely to approach upper parts of the country on Monday evening and likely to persist till Wednesday.

MONDAY
08-10-2018

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Rawalpindi, Gujranwala, Sargodha divisions, Islamabad, Kashmir and Gilgit-Baltistan during (evening/night).

TUESDAY
09-10-2018

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Rawalpindi, Gujranwala, Lahore divisions, Islamabad, Kashmir and Gilgit-Baltistan.

WEDNESDAY
10-10-2018

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in Malakand, Hazara divisions, Kashmir and Gilgit-Baltistan.

THURSDAY
11-10-2018

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at isolated places in Kashmir and Gilgit-Baltistan.

FRIDAY
12-10-2018

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

SATURDAY
13-10-2018

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

SUNDAY
14-10-2018

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

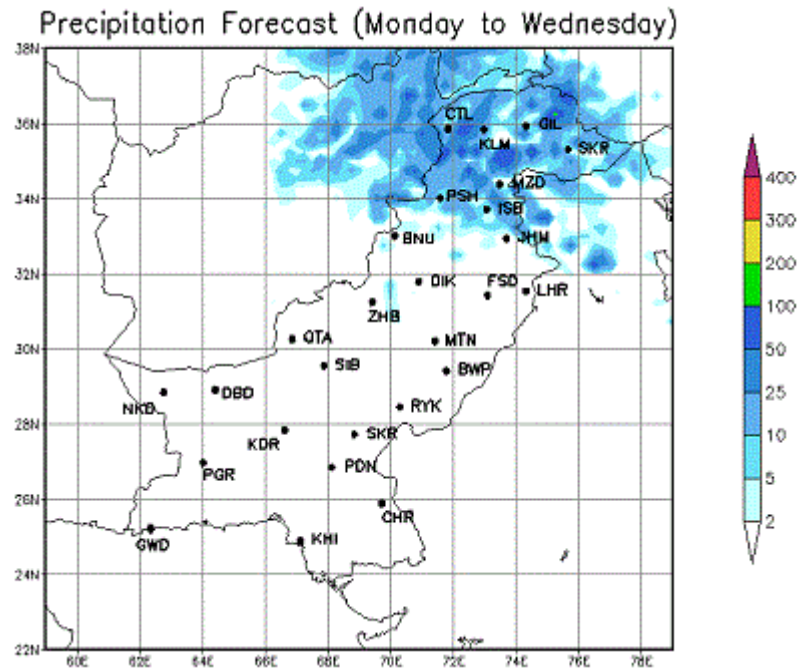
ADVISES FOR FARMERS

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.

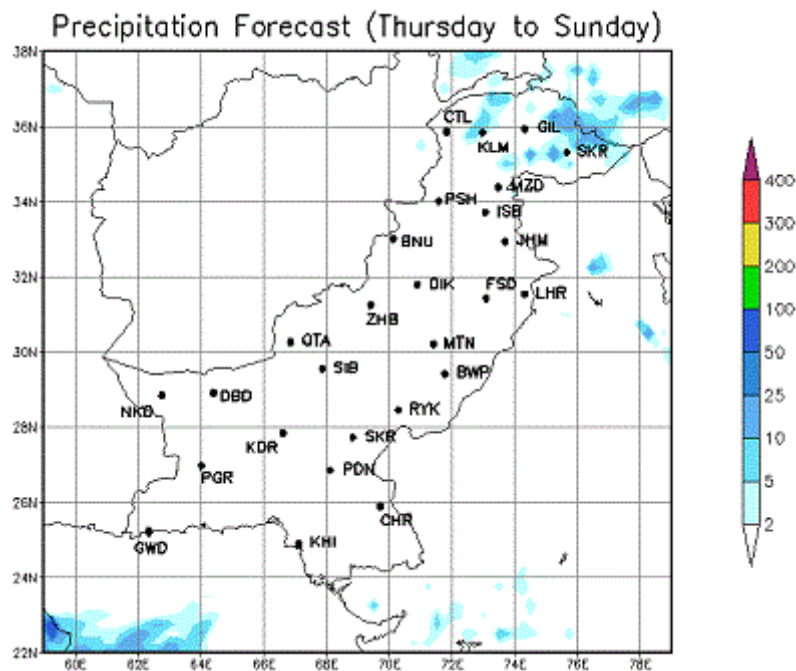
- Use proper precautions during picking of cotton because the cost of good and clean quality cotton is high than that of the filthy one.
- Use pesticides to avoid the attack from pests on the crops as advised by the agriculture department.

Weather Outlook from (8th October to 14th October, 2018)

The outlook from 8th October to 10th October, 2018 shows that light to moderate rainfall is expected in upper Khyber Pakhtunkhwa, Gilgit-Baltistan, Kashmir and FATA. However, dry weather may prevail in rest of the country.



The outlook from 11th October to 14th October, 2018 shows that light rainfall is expected at isolated places of FATA, northern KP and GB. However, dry weather may prevail in rest of the country.



National Weather Data of Selected Cities (Weekly Data from 1st October to 7th October, 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	6.6	5.0	59.8	51	0.40	2.0	5.7	0.0	2.6
Badin	24.9	24.0	181.8	62	0.00	1.3	0.0	2.3	3.1
Bahawalnagar	20.6	19.0	168.0	54	0.00	0.0	0.5	1.0	1.7
Bahawalpur	21.0	20.5	167.1	57	0.01	0.5	0.0	2.0	1.4
Balakot	12.5	10.6	110.3	65	2.00	3.7	2.0	0.0	0.0
Bannu	19.1	17.0	149.2	51	0.00	0.0	3.1	0.0	6.0
Barkhan	17.4	17.0	138.8	33	0.00	0.0	0.6	1.3	0.9
Bunji	16.1	13.9	118.9	46	0.02	5.7	6.3	0.3	1.7
Cherat	13.0	12.0	100.5	57	3.00	2.8	2.4	2.7	2.3
Chhor	21.6	20.5	181.7	54	0.00	2.2	0.0	3.7	6.0
Chilas	17.6	16.5	133.0	30	0.02	4.3	5.1	1.0	2.6
Chitral	10.1	6.5	90.0	65	1.22	3.3	4.0	0.0	1.7
D.I.Khan	22.8	21.3	167.3	55	0.00	0.0	0.4	4.3	4.0
Dalbandin	21.4	20.0	166.5	52	0.00	0.0	0.4	0.3	1.7
D.G.Khan	15.2	13.5	142.0	22	0.00	0.0	2.3	0.0	5.1
Dir	8.4	5.5	85.5	67	12.00	3.0	5.0	0.0	2.0
Drosh	9.8	6.0	87.4	50	7.70	3.5	5.4	0.0	7.4
Faisalabad	21.7	20.2	163.7	61	0.00	0.0	0.6	0.8	0.3
Garidopatta	14.2	12.0	118.1	61	8.00	2.0	2.1	1.0	2.0
Gawader	21.4	20.0	159.5	79	0.00	1.7	0.0	0.0	8.6
Gilgit	9.8	8.0	95.5	57	0.00	5.3	5.5	0.3	3.0
Gupis	8.1	6.0	68.8	54	1.00	4.0	5.7	1.3	3.1

Hyderabad	21.9	21.0	179.6	59	0.00	0.0	0.0	2.7	9.7
Islamabad	16.4	14.5	130.0	59	6.01	2.8	1.6	0.0	0.9
Jacobabad	22.5	20.0	169.8	63	0.00	0.0	0.0	0.0	0.6
Jhang	21.2	18.7	166.5	55	0.00	0.0	0.7	0.0	0.3
Jhelum	20.1	18.3	157.2	53	1.40	2.5	2.1	2.3	0.9
Jiwani	23.3	22.0	164.8	76	0.00	0.7	0.3	0.7	3.7
Kakul	11.9	9.0	102.1	57	8.00	2.5	3.7	0.0	0.9
Kalam	4.4	2.0	52.3	69	18.00	3.2	5.9	0.0	0.0
Karachi	5.7	5.0	70.0	40	0.00	0.0	0.0	0.0	0.3
Khanpur	23.6	21.5	175.3	67	0.00	1.8	0.0	3.7	9.7
Khuzdar	21.6	21.0	172.3	57	0.00	0.0	0.0	1.7	0.6
Kalat	19.5	17.5	147.3	13	0.00	0.0	0.4	0.4	0.6
Kotli	18.0	16.6	138.1	51	0.00	1.3	0.4	4.7	2.8
Lahore	23.3	22.0	165.7	54	0.00	0.5	0.7	1.3	1.1
Larkana	24.3	22.5	177.8	60	0.00	0.0	0.0	2.0	1.4
Lasbella	23.1	22.0	184.2	54	0.00	0.0	0.0	0.0	4.9
Lower Dir	16.7	14.0	133.3	53	12.00	3.8	1.6	1.3	2.0
M.B Din	19.8	18.0	154.5	58	9.01	3.0	2.3	1.0	1.7
Malam Jabba	7.6	6.5	51.0	68	17.00	3.3	4.3	4.7	3.7
Mangla	19.2	17.2	147.6	49	0.61	2.7	3.0	4.3	4.3
Mir Khani	12.0	8.5	100.2	55	10.00	3.2	4.4	0.5	3.6
Moinjodaro	20.1	18.0	164.3	61	0.00	0.0	0.0	1.0	2.3
Multan (PBO)	22.6	21.7	171.5	49	0.00	0.2	0.9	2.3	5.1
Murree	10.6	9.0	73.1	52	27.20	2.3	2.4	2.0	0.9
Muzaffarabad	14.1	12.4	118.7	59	22.00	2.8	3.6	0.7	2.0
Nawabshah	21.5	21.0	180.5	55	0.00	0.0	0.0	2.3	4.6

Nokkundi	19.6	18.0	158.8	13	0.00	0.7	0.0	1.7	10.0
Okara	22.2	21.0	166.5	60	0.00	0.0	0.0	1.0	0.6
Padidan	23.0	21.5	183.5	58	0.00	0.0	0.0	1.7	1.4
Panjgur	17.5	16.0	145.8	21	0.00	0.0	0.4	6.0	9.4
Parachinar	11.1	8.5	89.1	55	5.00	1.0	5.3	2.8	5.3
Pasni	22.1	21.0	160.0	76	0.00	2.3	0.0	0.7	5.7
Pattan	12.1	10.5	120.0	56	4.00	3.0	4.4	0.0	1.9
Peshawar	18.1	15.0	143.2	59	0.00	2.3	4.1	1.0	0.3
Quetta	11.0	7.2	99.9	21	0.00	0.6	1.0	2.2	4.1
Rahim Y. Khan	21.8	19.5	176.4	53	0.00	0.0	0.5	2.7	0.0
Rawalakot	9.8	7.0	80.3	70	3.52	2.0	3.0	0.0	1.4
Rawalpindi	17.4	14.5	136.1	64	4.00	3.4	2.9	0.2	0.6
Rohri	24.2	23.0	179.0	51	0.00	0.0	0.0	0.0	0.6
Sahiwal	21.3	20.0	165.1	58	0.00	0.0	0.4	1.0	1.7
Saidu Sharif	11.6	10.0	108.0	56	7.60	2.7	1.3	0.0	0.0
Sialkot	20.1	17.8	148.5	57	0.00	1.5	0.7	4.0	3.3
Sibbi	16.4	14.5	159.3	42	0.00	0.0	0.0	0.0	1.7
Skardu	6.3	4.8	67.1	46	0.00	2.3	6.3	0.0	2.6
Tandojam	20.4	16.0	177.3	66	0.00	0.0	0.0	1.2	1.7
Usta.M	24.3	24.0	168.9	69	0.00	0.0	0.0	0.5	3.7
Zhob	18.0	17.0	133.0	45	0.00	0.3	0.9	4.2	6.4

*** 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 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)