

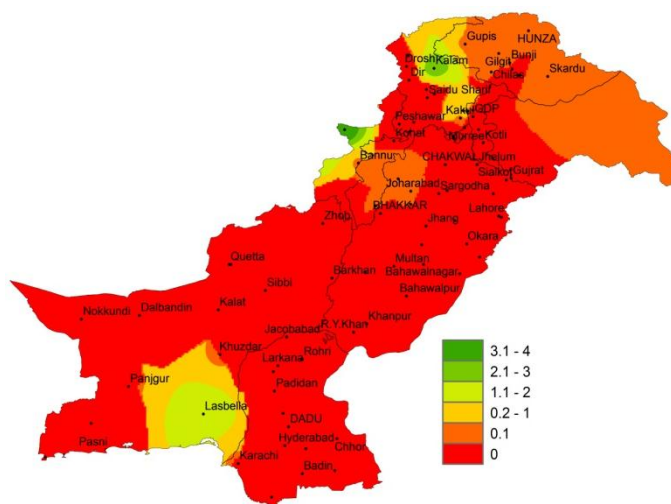
Weekly Weather and Crop Bulletin for Pakistan

**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 (23rd to 29th April, 2018)**



Highlights of Past Weather (23rd April to 29th April, 2018)

Slightly above normal day temperatures observed in all parts of the country.

Province wise distribution of rainfall reported as follows:

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

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

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

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

Editor: Saeeda Saleh (Assistant Meteorologist)

Past Weather of Provinces (23rd April to 29th April, 2018)

Punjab

Light rainfall observed at some places in Punjab during the week. Weekly maximum and minimum temperatures recorded as 40.0°C & 21.1°C respectively. For the recent week on average 178.6 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 35% and wind speed in the morning/evening recorded as 1.3/3.2 Knots. During the previous week the highest amount of rainfall was recorded as 0.01mm (trace) at Mianwali & highest maximum temperature was recorded as 47°C at Rahim Yar Khan.

Sindh

No rainfall observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 42.9°C & 23.5°C respectively. For the recent week, on average 199.9 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 37% and wind speed in the morning/evening recorded as 3.5/6.5 Knots. During the previous week the highest maximum temperature was recorded as 48.4°C at Dadu.

Khyber Pakhtunkhwa

Light rainfall observed at scattered places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 32.5°C & 14.4°C respectively. For the recent week on average 132.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 44% and wind speed in the morning/evening recorded as 1.1/3.4 Knots. During the previous week the highest amount of rainfall was recorded as 4mm at Parachinar & highest maximum temperature was recorded as 43°C at D.I.Khan.

Balochistan

Light rainfall observed at scattered places in Balochistan during the week. Weekly maximum and minimum temperatures recorded as 36.2°C & 20.1°C respectively. For the recent week on average 161.3 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 1.3/5.8 Knots. During the previous week the highest amount of rainfall was recorded as 2 mm at Lasbella & highest maximum temperature was recorded as 47°C at Sibbi.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall observed at some places in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 29.1°C & 12.1°C respectively. For the recent week on average 130.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 36% and wind speed in the morning/evening recorded as 1.0/2.9 Knots. During the previous week the highest amount of rainfall was recorded as 0.01 mm(trace) at Hunza & highest maximum temperature was recorded as 37.5°C at Garhi Dupatta.

Past Weather for Major Agricultural Plains (23rd**April to 29th April, 2018)****Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.1/1.0 Oktas while, average relative humidity observed as 43.1%. Mean day time temperature recorded as 36.6°C & for the recent week 151.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.6/0.7 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 41.0°C & for the recent week 187.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.1/1.1 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, no cloudiness recorded in the morning/evening while, average relative humidity observed as 51%. Mean day time temperature recorded as 42.5°C & for the recent week 184.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/3.8 Knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from from Usta Muhammad during the week; however, no cloudiness recorded in the morning/evening while, average relative humidity observed as 25%. Mean day time temperature recorded as 44.7°C & for the recent week 203.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/3.1 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 1.6/2.0 Oktas while, average relative humidity observed as 21%. Mean day time temperature recorded as 28.4°C & for the recent week 114.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.6/3.6 Knots.

Past Weather for Sub-Regional Agricultural Plains (23rd April to 29th April, 2018)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.7 Oktas while, average relative humidity observed as 28%. Mean day time temperature recorded as 41.8°C & for the recent week 196.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.0/6.0 Knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.5/0.6 Oktas while, average relative humidity observed as 31%. Mean day time temperature recorded as 40.0°C & for the recent week 190 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/3.6 Knots.

Zhob

Dry weather reported from during the week; however, cloudiness in the morning/evening recorded as 0.0/1.3 Oktas while, average relative humidity observed as 23%. Mean day time temperature recorded as 34.4°C & for the recent week 141.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.7/4.9 Knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/1.3 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 24.3°C & for the recent week 100.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.7/1.1 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, no cloudiness recorded in the morning/evening while, average relative humidity observed as 46%. Mean day time temperature recorded as 41.3 & for the recent week 182.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/14.4 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.7/1.9 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 36.7°C & for the recent week 166 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.7/1.4 Knots.

Kalam

Rainfall reported as 3 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.0/3.3 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 27.1°C & for the recent week 74 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

Gilgit

Rainfall reported as 0.01(trace) mm from Gilgit during the week; However, cloudiness in the morning/evening recorded as 0.7/4.4 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 30.1°C & for the recent week 106.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.4 Knots.

Skardu

Trace rainfall reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 1.2/2.7 Oktas while, average relative humidity observed as 27%. Mean day time temperature recorded as 24.2°C by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.3 Knots.

Crop Situation for Major Agricultural Plains**(Based on data from Regional Agromet Centres)****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, Full Maturity stage completed in irrigated Conditions.

Lower Sindh (Tandojam)

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

Land is being prepared for new crop.

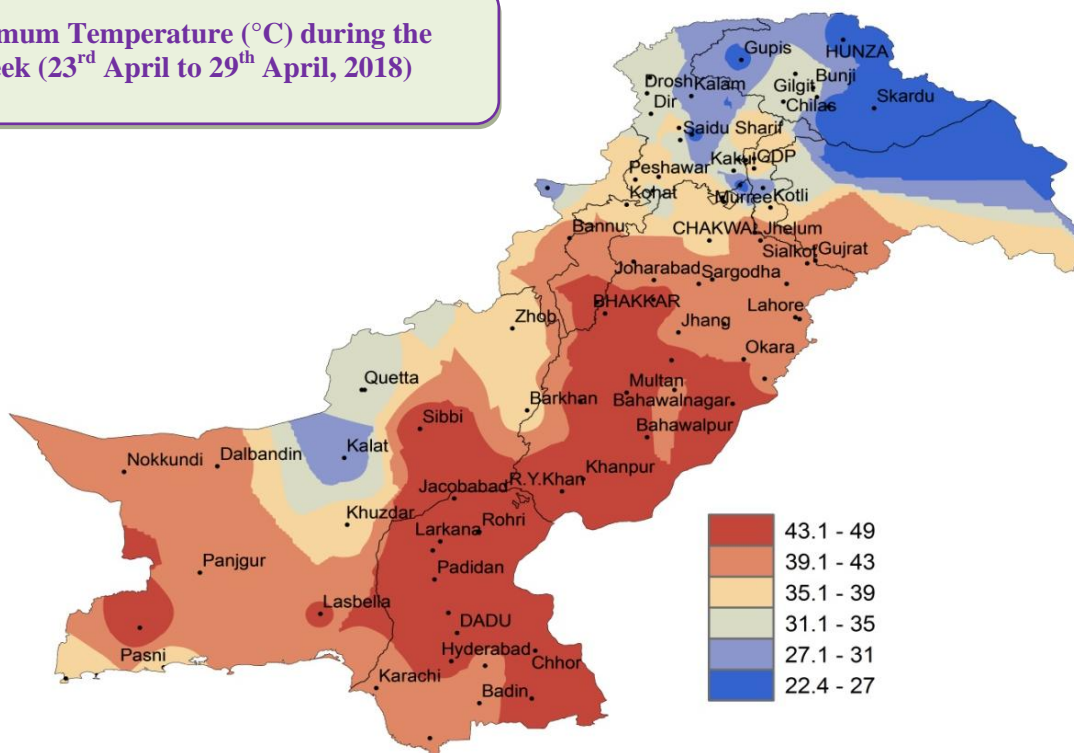
Northern Baluchistan (Quetta)

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

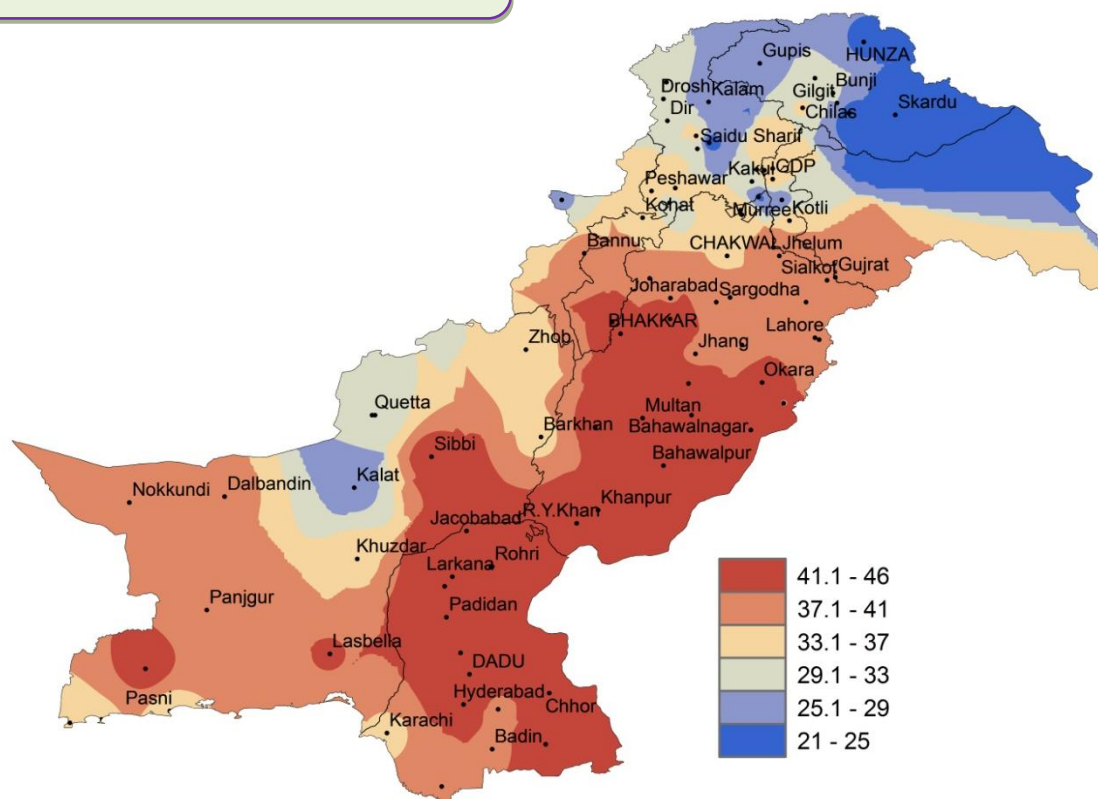
Eastern Baluchistan (Usta Muhammad)

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

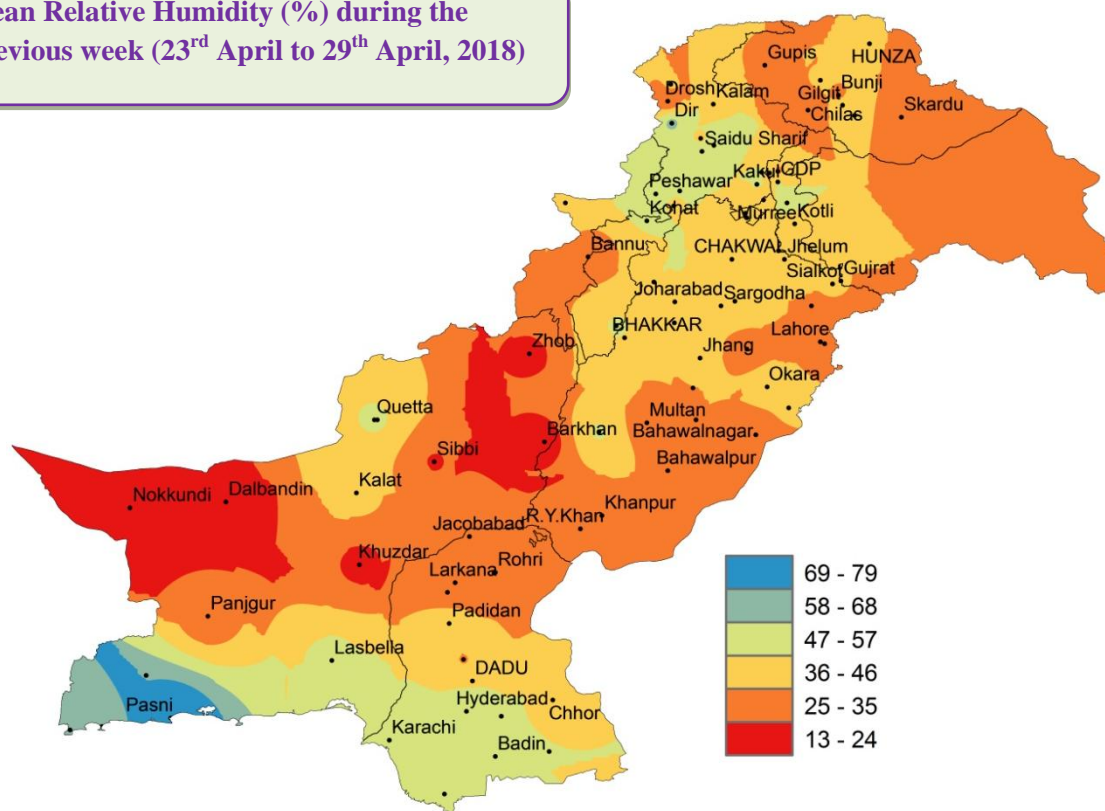
**Mean Maximum Temperature (°C) during the
Previous week (23rd April to 29th April, 2018)**



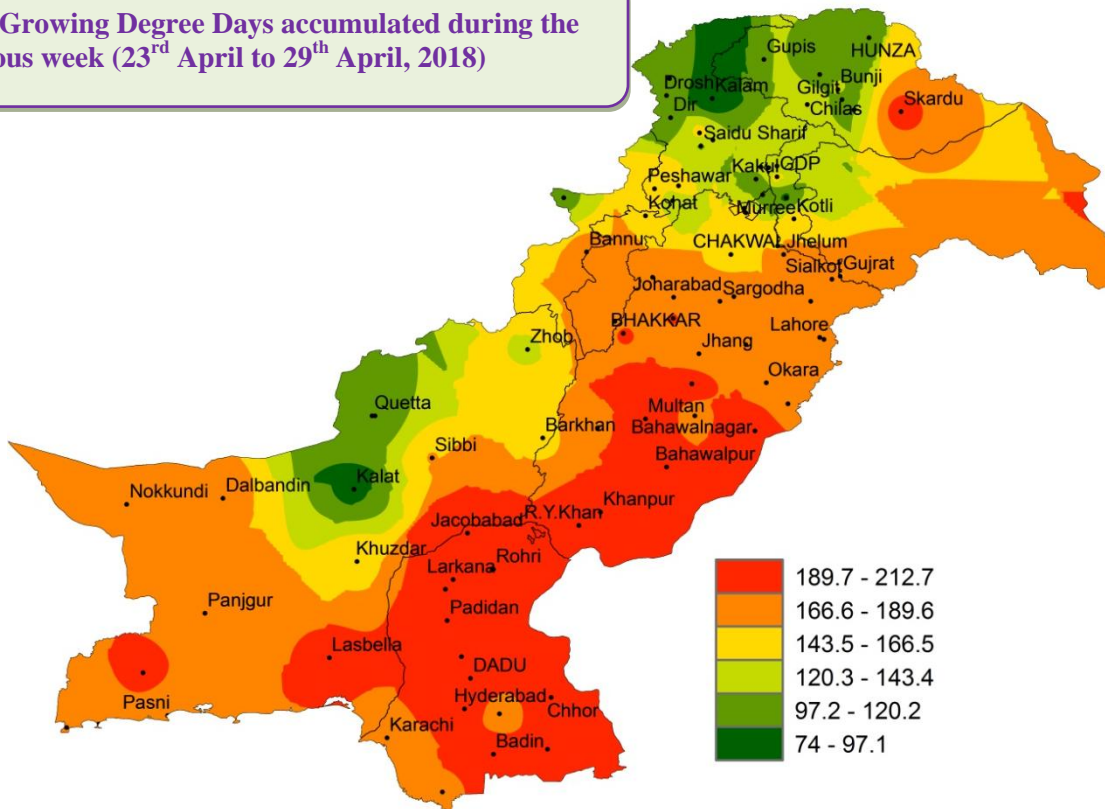
**Highest maximum Temperature (°C) during the
Previous week (23rd April to 29th April, 2018)**



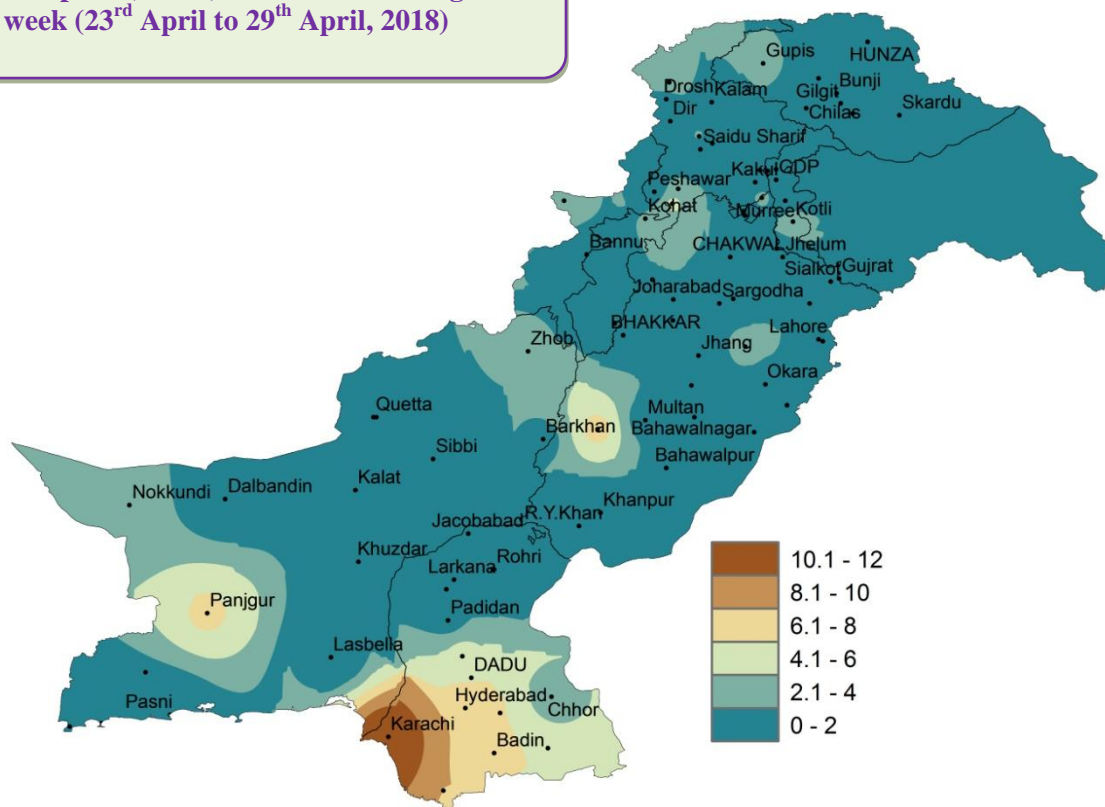
**Mean Relative Humidity (%) during the
Previous week (23rd April to 29th April, 2018)**



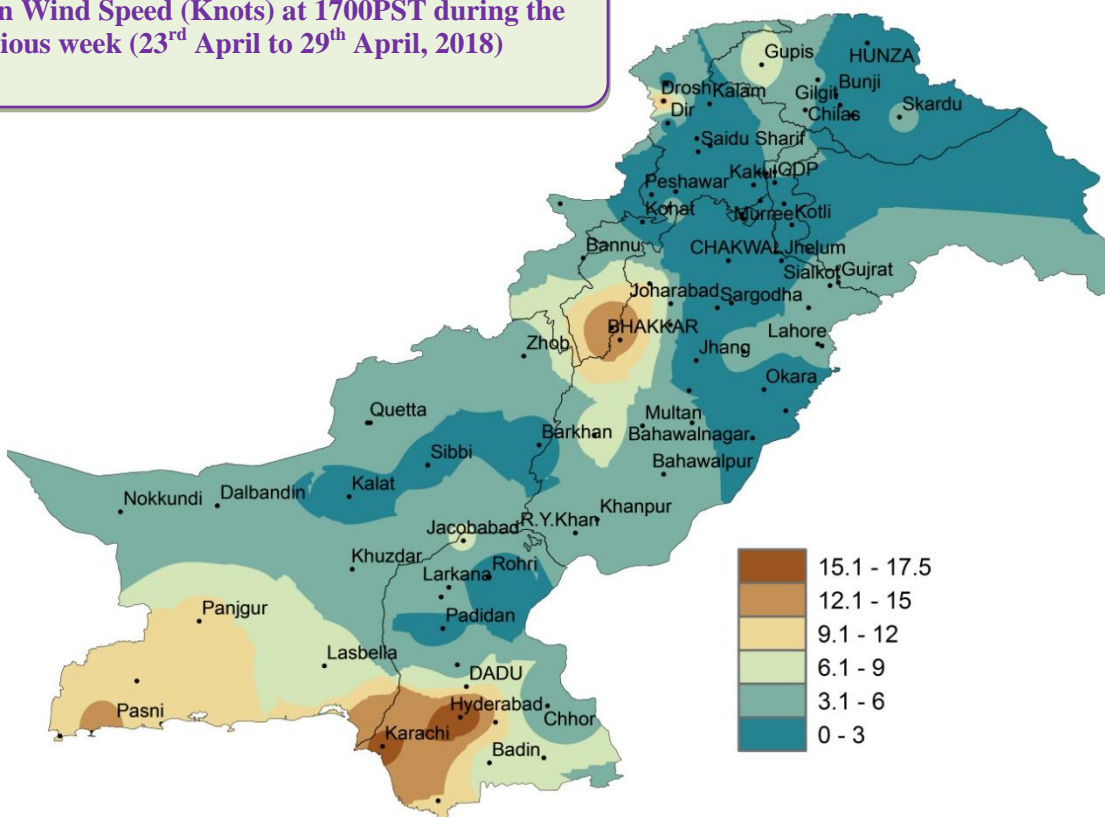
**Total Growing Degree Days accumulated during the
Previous week (23rd April to 29th April, 2018)**



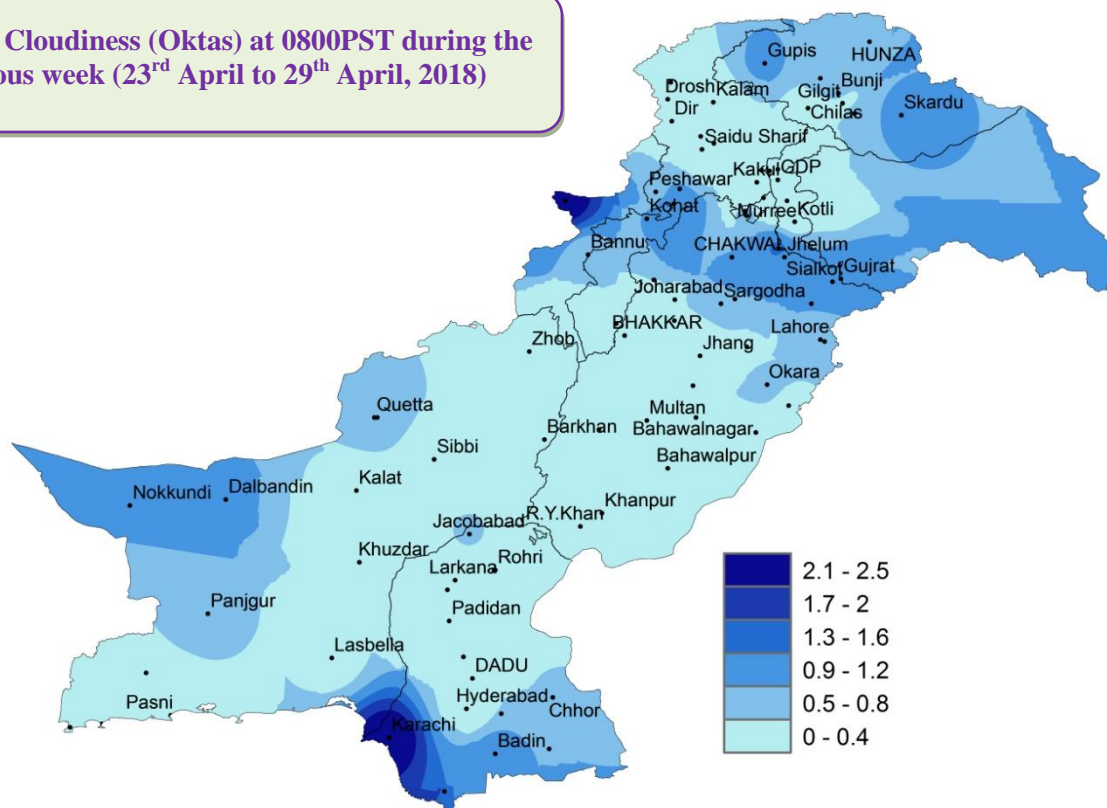
Mean Wind Speed (Knots) at 0800PST during the Previous week (23rd April to 29th April, 2018)



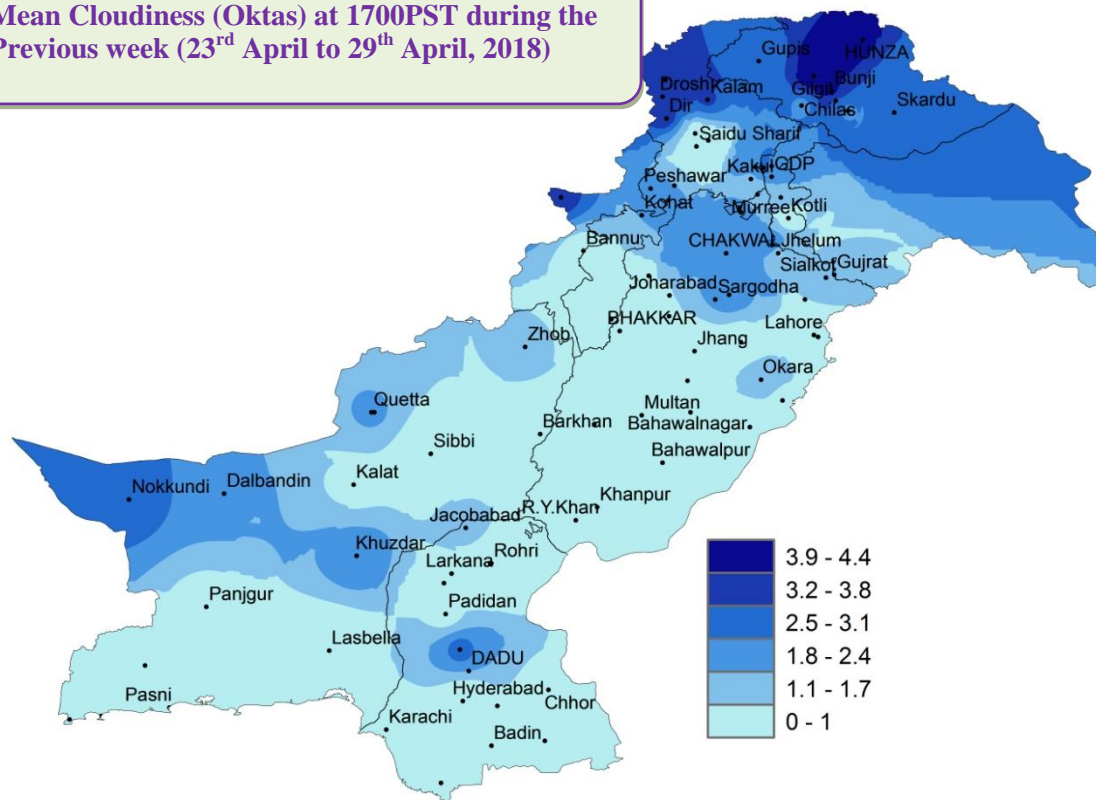
Mean Wind Speed (Knots) at 1700PST during the Previous week (23rd April to 29th April, 2018)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (23rd April to 29th April, 2018)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (23rd April to 29th April, 2018)



Weekly Weather Advisory for Farmers**(30th April to 6th May, 2018)**

Continental air is prevailing over most parts of the country. However, a shallow westerly wave is affecting western parts of the country. A fresh westerly wave is likely to enter upper parts of the country on Wednesday and likely to persist till Saturday.

MONDAY**30-04-2018**

Mainly hot and dry weather is expected in most parts of the country. However, light rain-thunderstorm is expected at a few places in Kalat, Zhob divisions and FATA.

TUESDAY**01-05-2018**

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

WEDNESDAY**02-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm with gusty winds is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Bannu, Sargodha, Gujranwala, Faisalabad, Lahore, Rawalpindi divisions, Islamabad, FATA, Gilgit-Baltistan and Kashmir. Dust storm is also expected in Multan, Bahawalpur, D.G Khan and Sahiwal divisions.

THURSDAY**03-05-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm with gusty winds is expected at scattered places in Malakand, Hazara divisions and Kashmir while at isolated places in Peshawar, Kohat, Bannu, Sargodha, Gujranwala, Faisalabad, Lahore, Rawalpindi divisions, Islamabad, FATA and Gilgit-Baltistan. Dust storm is also expected in Multan, Bahawalpur, D.G Khan and Sahiwal divisions.

FRIDAY**04-05-2018**

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

SATURDAY**05-05-2018**

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

SUNDAY**06-05-2018**

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

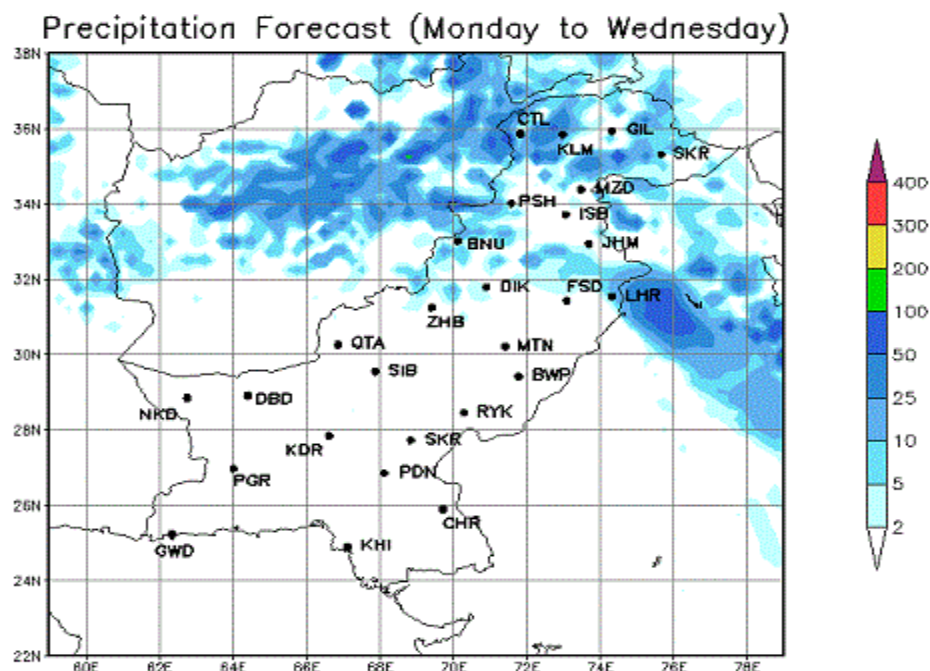
ADVISES FOR FARMERS

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.

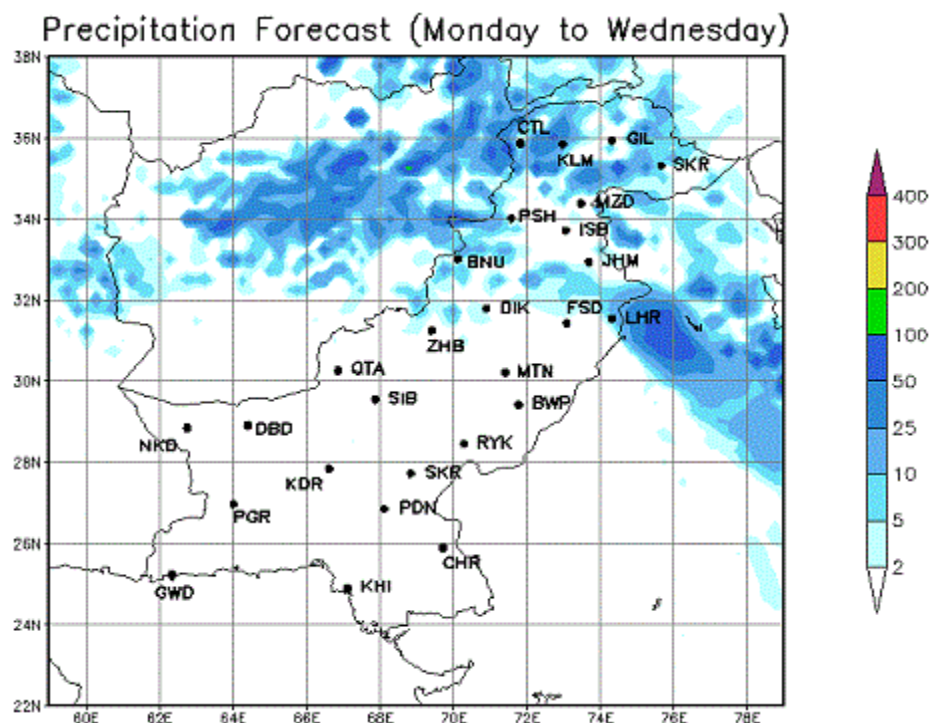
- Dust/sand storm may occur in areas of matured wheat crop, accordingly measures may be taken to preserve the grains and residue after harvesting.
- Farmers of Punjab and southern KP may schedule the harvesting of wheat crop in accordance with the prevailing weather conditions.
- Farmers of irrigated areas may irrigate the rest of crops as per requirement in accordance with the expected weather conditions.

Weather Outlook from 30th April to 6th May, 2018

The forecast from 30th April to 2nd May 2018 shows that moderate to heavy rainfall is expected in KP, GB, Kashmir and upper Punjab. However, dry weather is expected elsewhere.



The outlook from 3rd to 6th April, 2018 shows that moderate to heavy rainfall is expected in KP, GB, Kashmir, upper & central Punjab and northern Balochistan. However, dry weather may prevail in rest of the country.



National Weather Data of Selected Cities (Weekly Data from 23rd April to 29th April, 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	20.9	22.3	***	36	0.00	0.7	2.1	1.5	0.6
Badin	40.5	42.0	197.3	47	0.00	1.2	0.0	6.3	7.7
Bahawalnagar	43.6	45.5	199.3	28	0.00	0.3	0.3	0.0	2.3
Bahawalpur	41.5	43.0	190.1	33	0.00	0.0	0.3	1.0	3.1
Balakot	33.1	34.5	128.7	46	0.60	0.0	2.0	0.0	1.1
Bannu	39.0	41.2	176.9	29	0.00	0.5	0.4	0.7	4.9
Barkhan	35.8	37.5	160.8	19	0.00	0.0	0.6	1.3	1.7
Bunji	30.0	32.2	125.9	32	0.00	0.7	4.1	0.3	0.9
Cherat	29.2	31.5	122.3	44	0.00	1.2	1.9	4.3	3.4
Chhor	43.5	45.5	199.5	43	0.00	0.5	0.7	3.3	3.7
Chilas	33.4	35.0	143.3	24	0.00	0.0	2.1	1.0	3.7
Chitral	29.5	32.0	102.9	36	0.00	0.0	3.6	4.0	1.4
D.G.Khan	42.7	44.5	188.1	47	0.00	0.2	0.3	6.7	6.9
D.I.Khan	41.3	43.0	182.5	46	0.00	0.0	0.0	0.0	14.4
Dalbandin	38.8	41.0	174.0	18	0.00	1.0	2.0	0.3	3.1
Dir	30.3	33.5	103.3	59	0.00	0.0	3.3	0.0	2.1
Drosh	30.3	33.3	111.2	26	0.00	0.0	3.6	1.0	12.9
Faisalabad	41.0	42.5	187.8	40	0.00	0.6	0.7	1.1	1.1
Garidopatta	35.3	37.5	145.6	47	0.00	0.0	1.7	0.0	0.9
Gawader	36.3	38.0	175.5	64	0.00	0.0	0.0	0.0	13.1
Gilgit	30.1	32.5	106.3	37	0.01	0.7	4.4	0.0	3.4
Gupis	25.1	26.5	***	33	0.00	1.0	2.4	2.7	7.1

Hyderabad	42.7	43.5	197.5	54	0.00	0.0	0.3	7.7	17.4
Islamabad	35.3	38.0	141.9	39	0.00	0.5	2.0	0.0	1.7
Jacobabad	44.9	48.0	209.5	28	0.00	0.5	1.4	1.0	6.6
Jhang	40.6	42.0	182.6	37	0.00	0.0	0.3	0.0	1.4
Jhelum	39.4	41.0	172.7	36	0.00	1.2	0.9	0.8	1.7
Jiwani	34.4	36.5	175.5	66	0.00	0.3	0.4	1.3	9.4
Kakul	30.5	31.5	108.8	46	0.00	0.0	1.4	0.0	0.6
Kalam	27.1	29.0	74.0	43	3.00	0.0	3.3	0.0	0.9
Kalat	26.1	28.0	92.0	39	0.00	0.0	0.7	0.0	2.3
Karachi	36.3	40.0	181.9	52	0.00	2.5	0.3	12.0	15.1
Khanpur	44.2	46.0	197.5	28	0.00	0.2	0.3	0.0	4.0
Khuzdar	35.4	36.5	158.0	22	0.00	0.0	2.3	0.0	4.9
Kotli	36.1	37.2	159.7	35	0.00	0.0	0.6	3.0	1.4
Lahore	40.0	41.4	190.0	31	0.00	0.5	0.6	1.7	3.6
Larkana	45.0	47.5	209.5	26	0.00	0.0	0.7	1.0	3.4
Lasbella	41.3	43.2	195.3	49	2.00	0.0	0.0	0.0	7.3
Lower Dir	35.0	37.5	151.0	43	0.00	0.0	1.0	2.3	2.0
M.B Din	39.1	40.2	173.3	43	0.00	0.8	2.3	1.0	1.1
Malam Jabba	21.4	23.5	***	55	0.00	0.0	0.9	0.0	0.0
Mangla	38.1	39.5	165.0	38	0.00	1.3	2.7	1.7	3.1
Mir Khani	29.1	31.6	107.2	43	0.00	0.0	3.0	0.0	1.6
Moinjodaro	44.7	47.5	198.3	30	0.00	0.3	0.9	1.0	3.7
Multan(PBO)	41.8	43.3	196.9	28	0.00	0.0	0.7	1.0	6.0
Murree	24.3	25.0	100.1	38	0.00	0.0	1.3	2.7	1.1
Muzaffarabad	34.1	34.8	138.1	43	0.00	0.2	2.9	1.0	3.0
Nawabshah	45.2	47.5	204.6	34	0.00	0.0	2.7	5.0	4.9

Nokkundi	39.2	42.5	186.8	13	0.00	0.8	3.0	2.7	3.4
Okara	41.5	43.0	185.3	38	0.00	0.5	1.4	1.3	0.6
Padidan	44.9	47.5	212.8	43	0.00	0.3	0.6	1.3	2.0
Panjgur	38.6	42.0	176.0	28	0.00	0.7	0.6	6.3	9.7
Parachinar	28.2	29.5	112.5	40	4.00	2.5	3.6	3.3	3.6
Pasni	34.6	36.0	171.5	79	0.00	0.0	0.0	0.0	11.3
Pattan	34.9	37.0	137.5	32	0.00	0.0	2.3	1.5	5.1
Peshawar	36.7	39.0	166.0	54	0.00	0.7	1.9	0.7	1.4
Quetta	28.4	30.5	114.8	21	0.00	1.6	2.0	2.6	3.6
R. Y. Khan	44.9	47.0	203.3	27	0.00	0.0	0.0	0.5	3.9
Rawalakot	26.7	28.0	93.8	53	0.00	0.0	1.4	0.0	2.3
Rawalpindi	36.6	38.0	151.2	43	0.00	0.1	1.0	0.0	0.9
Rohri	44.9	47.0	210.5	26	0.00	0.0	0.0	0.3	1.3
Sahiwal	41.0	42.5	183.5	36	0.00	0.3	0.9	1.0	2.0
Saidu Sharif	31.8	34.0	118.0	55	0.00	0.0	0.0	0.0	0.0
Sialkot	38.5	40.0	167.3	35	0.00	1.2	1.3	0.7	5.1
Sibbi	44.4	47.0	199.5	23	0.00	0.0	0.0	0.0	2.6
Skardu	24.2	26.2	***	27	0.01	1.2	2.7	0.0	3.3
Tandojam	42.5	43.0	184.3	51	0.00	0.0	0.0	1.7	3.1
Usta muhamad	28.4	30.5	114.8	21	0.00	1.6	2.0	2.6	3.6
Zhob	34.4	36.0	141.3	23	0.00	0.0	1.3	2.7	4.9

*** 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)