

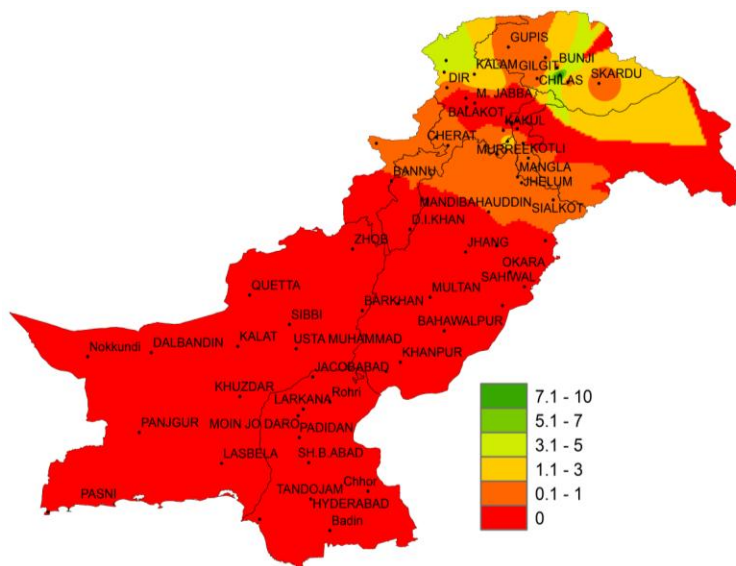
Weekly Weather and Crop Bulletin for Pakistan

**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 (21st May to 27th May, 2018)**



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Highlights of Past Weather (21st May to 27th May, 2018)

Above normal day temperatures were observed in Punjab, GB, Azad Kashmir, Sindh and KP, whereas mix trend was observed in Balochistan.

Province wise distribution of rainfall reported as follows:

- Light rainfall observed at few places in Punjab and Khyber Pakhtunkhwa while light rainfall observed at a single station at Gilgit-Baltistan, Azad Jammu & Kashmir during the previous week.
- Dry weather observed at Sindh and Baluchistan during the previous week.

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

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

Editor: Saeeda Saleh (Assistant Meteorologist)

Past Weather of Provinces (21st May to 27th May, 2018)**Punjab**

Light rainfall observed at few places in Punjab during the week. Weekly maximum and minimum temperatures recorded as 41.5°C & 23.8°C respectively. For the recent week on average 193.4 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 27% and wind speed in the morning/evening recorded as 1.9/3.1 Knots. During the previous week the highest amount of rainfall was recorded as 1.7 mm at Muree & highest maximum temperature was recorded as 47°C at Rahim Yar Khan.

Sindh

Dry weather observed at Sindh during the week. Weekly maximum and minimum temperatures recorded as 44.4°C & 26°C respectively. For the recent week, on average 212.4 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 31% and wind speed in the morning/evening recorded as 3.9/4.9 Knots. During the previous week the highest maximum temperature was recorded as 48°C at Dhadu.

Khyber Pakhtunkhwa

Light rainfall observed at few places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 32.9°C & 16.6°C respectively. For the recent week on average 139.1 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 41% and wind speed in the morning/evening recorded as 1.2/2.7 Knots. During the previous week the highest amount of rainfall was recorded as 10.2 mm at Mirkhani & highest maximum temperature was recorded as 44°C at D.I.Khan.

Balochistan

Dry weather observed in Balochistan during the week. Weekly maximum and minimum temperatures recorded as 36.5°C & 20.8°C respectively. For the recent week on average 166.5 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 34% and wind speed in the morning/evening recorded as 1.9/6.0 Knots. During the previous week the highest maximum temperature was recorded as 47.5°C at Lasbella.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall observed at a single station in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 29.7°C & 13.5°C respectively. For the recent week on average 110.7 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 34% and wind speed in the morning/evening recorded as 1.1/4.0 Knots. During the previous week the highest amount of rainfall was recorded as 0.3 mm at Gilgit & highest maximum temperature was recorded as 40°C at Kotli.

Past Weather for Major Agricultural Plains (21st May to 27th May, 2018)**Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.6/1.1 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 38.7°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 0.5/0.5 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.7/0.0 Oktas while, average relative humidity observed as 26%. Mean day time temperature recorded as 42.6°C & for the recent week 201 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.4/0.0 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 39%. Mean day time temperature recorded as 42.9°C & for the recent week 193.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.2/2.3 Knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.3/0.0 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 46.9°C & for the recent week 233.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/5.4 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.3/1.1 Oktas while, average relative humidity observed as 12%. Mean day time temperature recorded as 28.5°C & for the recent week 115.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.9/4.1 Knots.

Past Weather for Sub-Regional Agricultural Plains (21st May to 27th May, 2018)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 1.9/0.3 Oktas while, average relative humidity observed as 24%. Mean day time temperature recorded as 41.8°C & for the recent week 203.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.0/4.7 Knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.0/0.9 Oktas while, average relative humidity observed as 23%. Mean day time temperature recorded as 42.3°C & for the recent week 205.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/3.4 Knots.

Zhob

Dry weather reported from during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 32.7°C & for the recent week 153.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.1/4.7 Knots.

Murree

Rainfall reported as 1.70 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/1.9 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 25.1°C & for the recent week 103.8 growing degree days

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

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, no cloudiness in the morning/evening recorded while, average relative humidity observed as 29%. Mean day time temperature recorded as 42.4°C & for the recent week 206.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.3/0.6 Knots.

Peshawar

Rainfall reported as 0.01 mm (trace) from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.1/3.4 Oktas while, average relative humidity observed as 33%. Mean day time temperature recorded as 38°C & for the recent week 176.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/3.4 Knots.

Kalam

Rainfall reported as 3 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 1.1/5.3 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded as 24.1°C & for the recent week 66.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.3 Knots.

Gilgit

Rainfall reported as 0.3 mm from Gilgit during the week; However, cloudiness in the morning/evening recorded as 1.1/5.9 Oktas while, average relative humidity observed as 32%. Mean day time temperature recorded as 29.6°C & for the recent week 109.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/10.6 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.3/5.0 Oktas while, average relative humidity observed as 23%. Mean day time temperature recorded as 26.4°C & for the recent week 90.2 growing degree days accumulated by the

end of last week. Wind speed recorded in the morning/evening as 0.0/5.3 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)

Presently cotton crop is sown on 24th May in the fields of RAMC Faisalabad.

Lower Sindh (Tandojam)

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

Cotton (CIM 6.2); *Good, Third true leaf* stage in good condition.

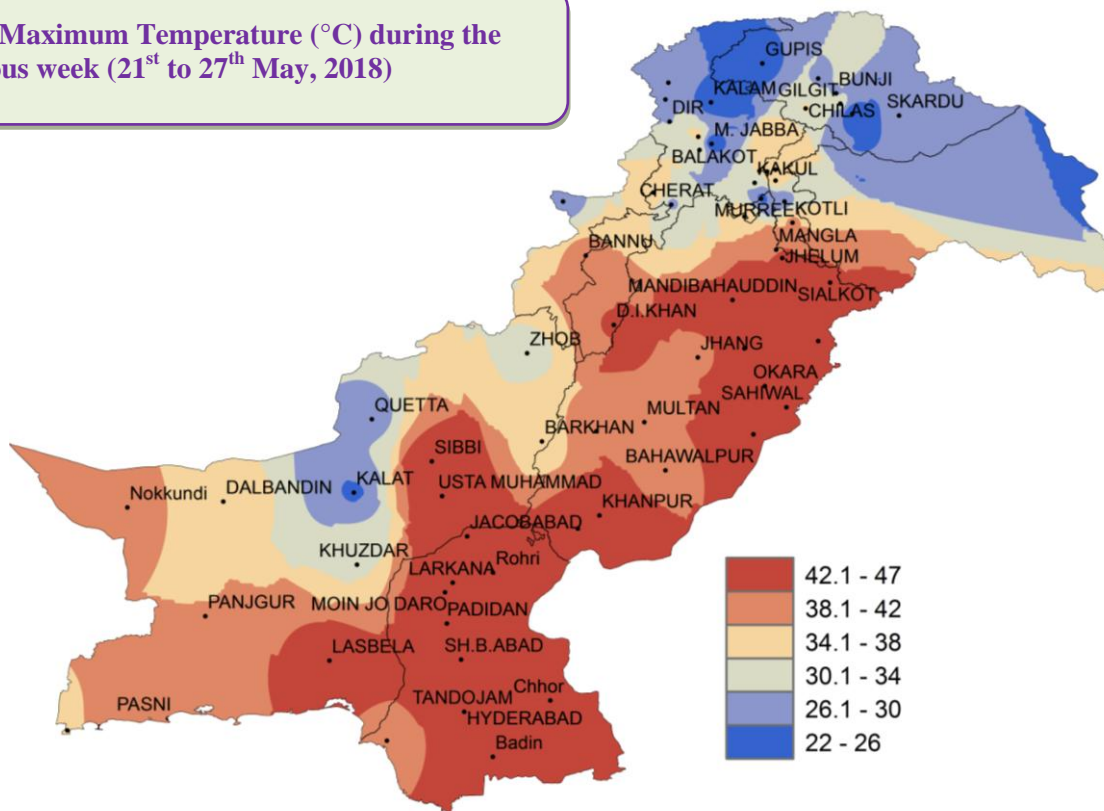
Northern Baluchistan (Quetta)

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

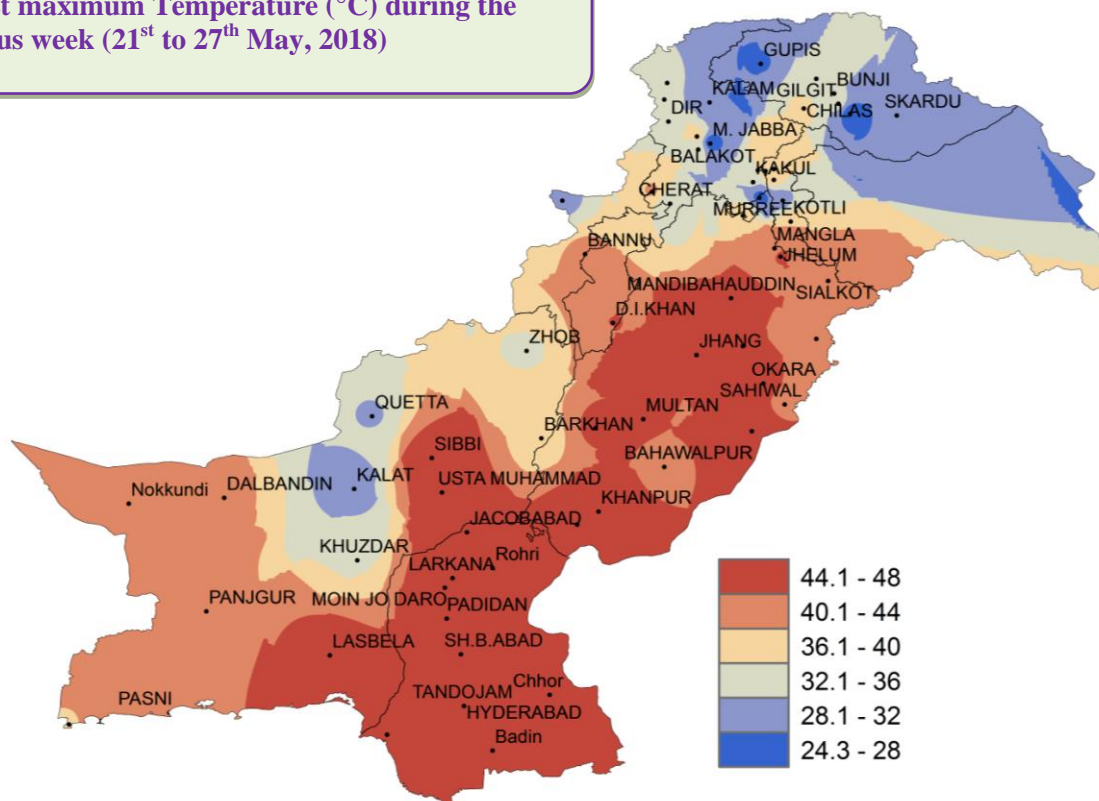
Eastern Baluchistan (Usta Muhammad)

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

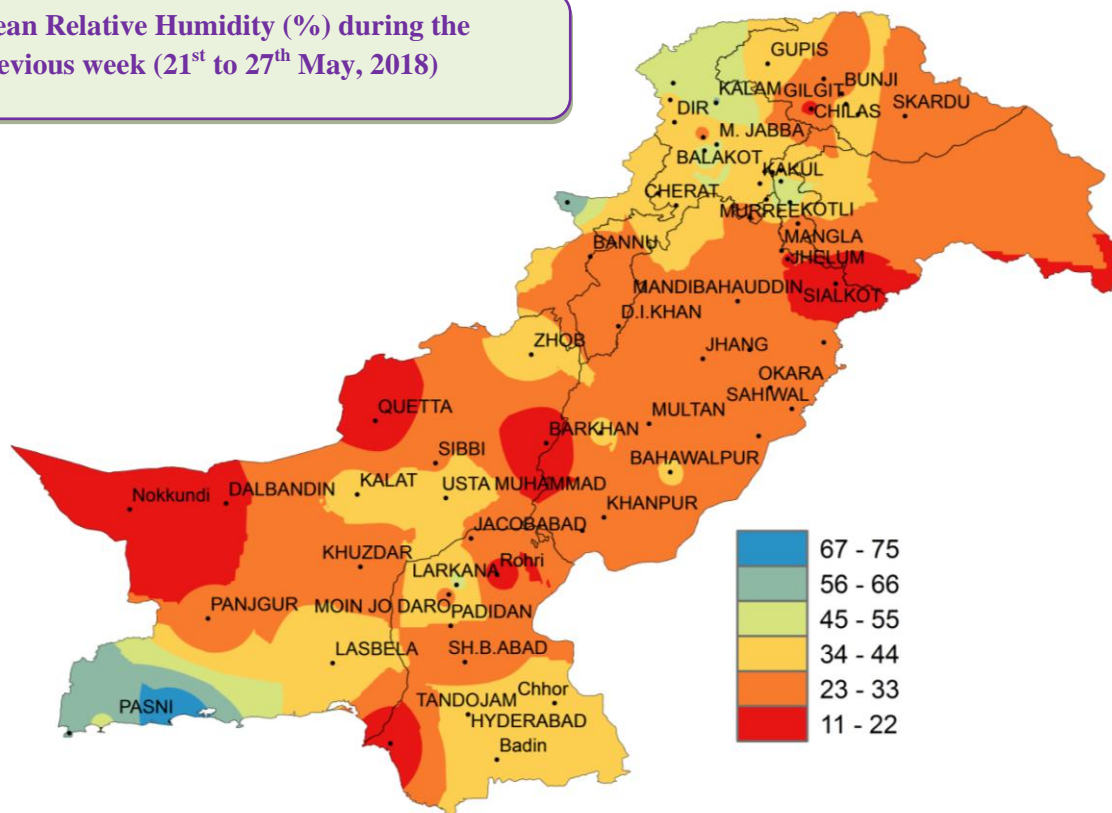
Mean Maximum Temperature (°C) during the
Previous week (21st to 27th May, 2018)



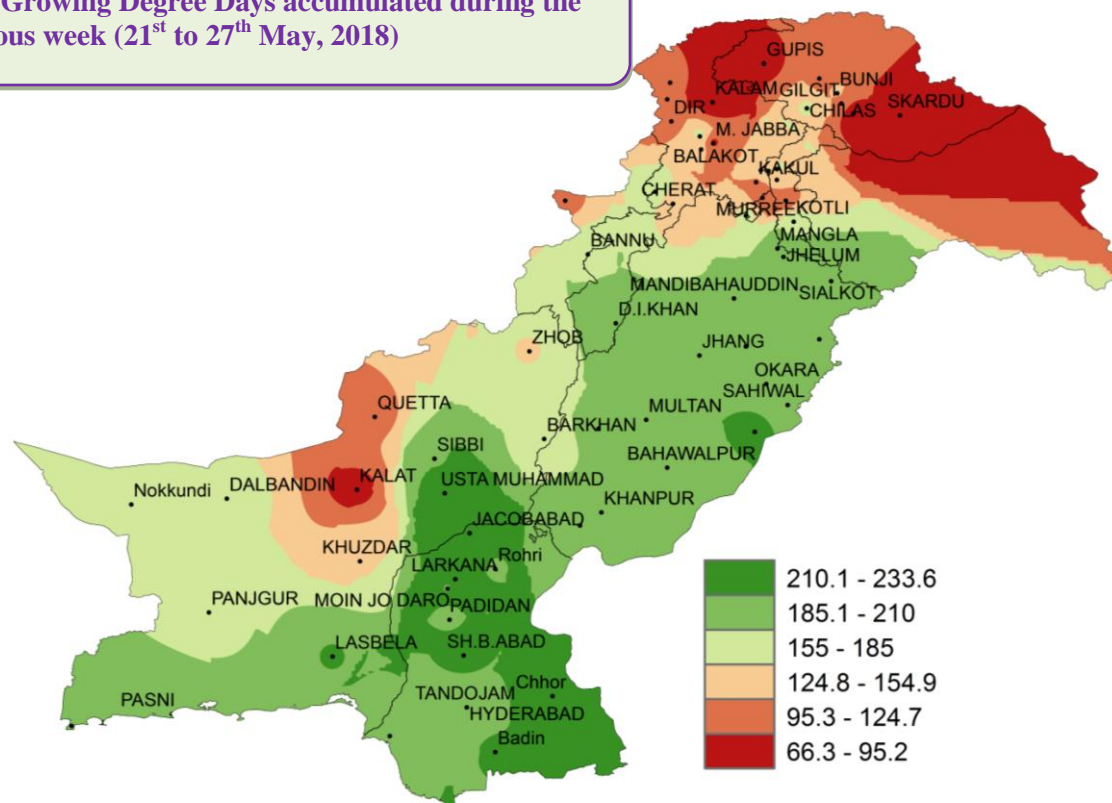
Highest maximum Temperature (°C) during the
Previous week (21st to 27th May, 2018)



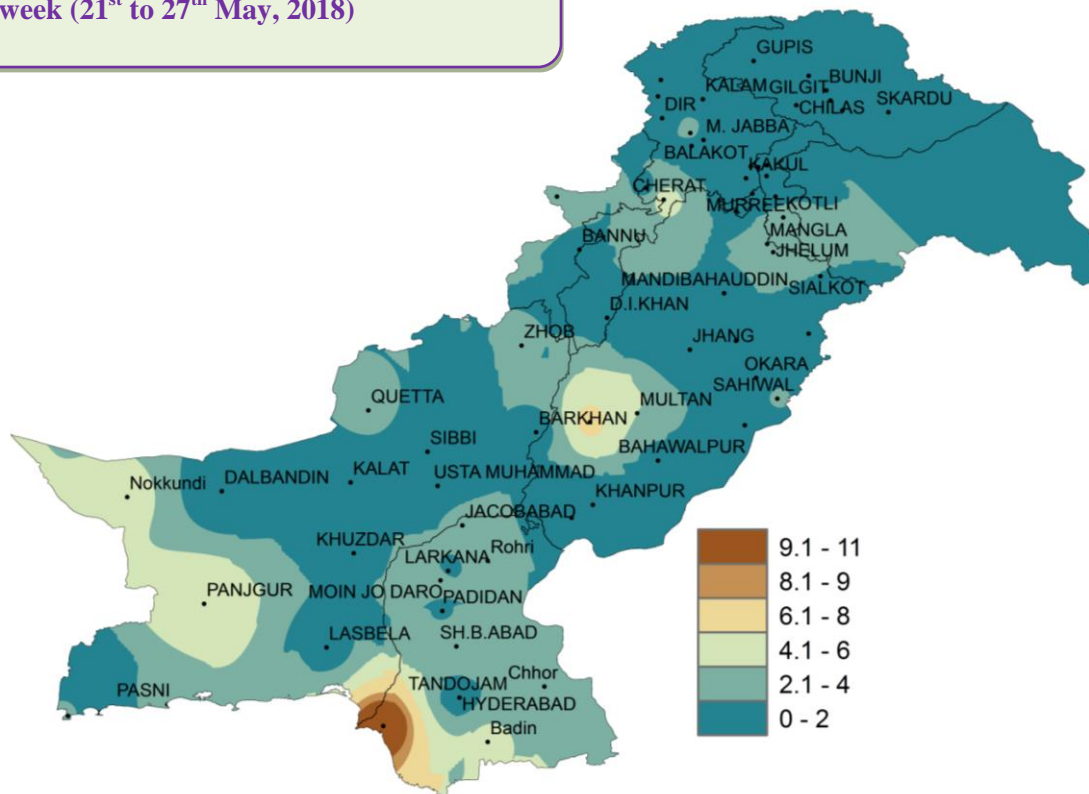
Mean Relative Humidity (%) during the
Previous week (21st to 27th May, 2018)



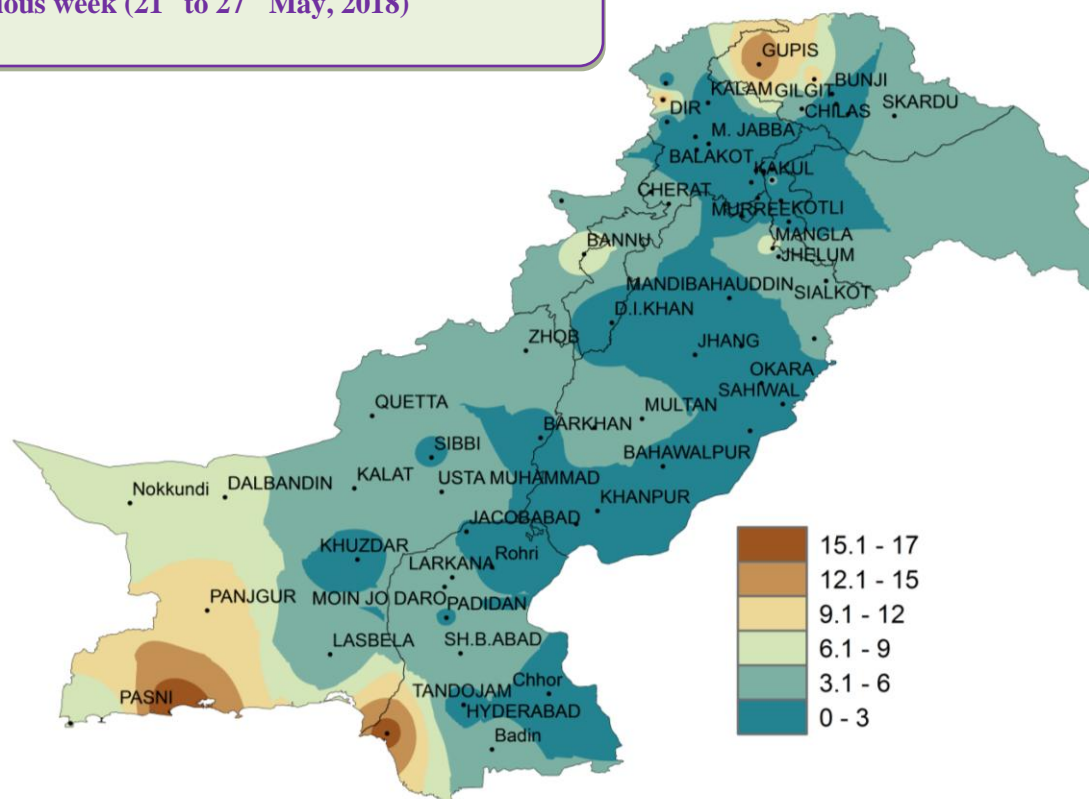
Total Growing Degree Days accumulated during the
Previous week (21st to 27th May, 2018)



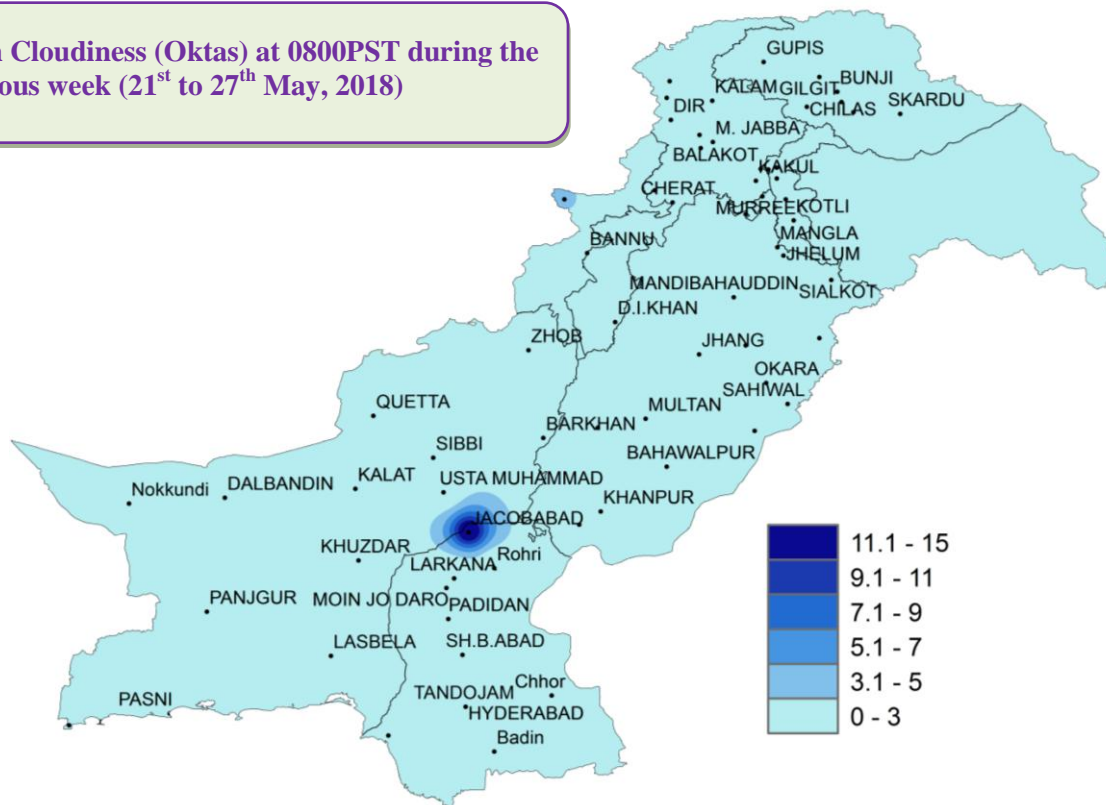
Mean Wind Speed (Knots) at 0800PST during the Previous week (21st to 27th May, 2018)



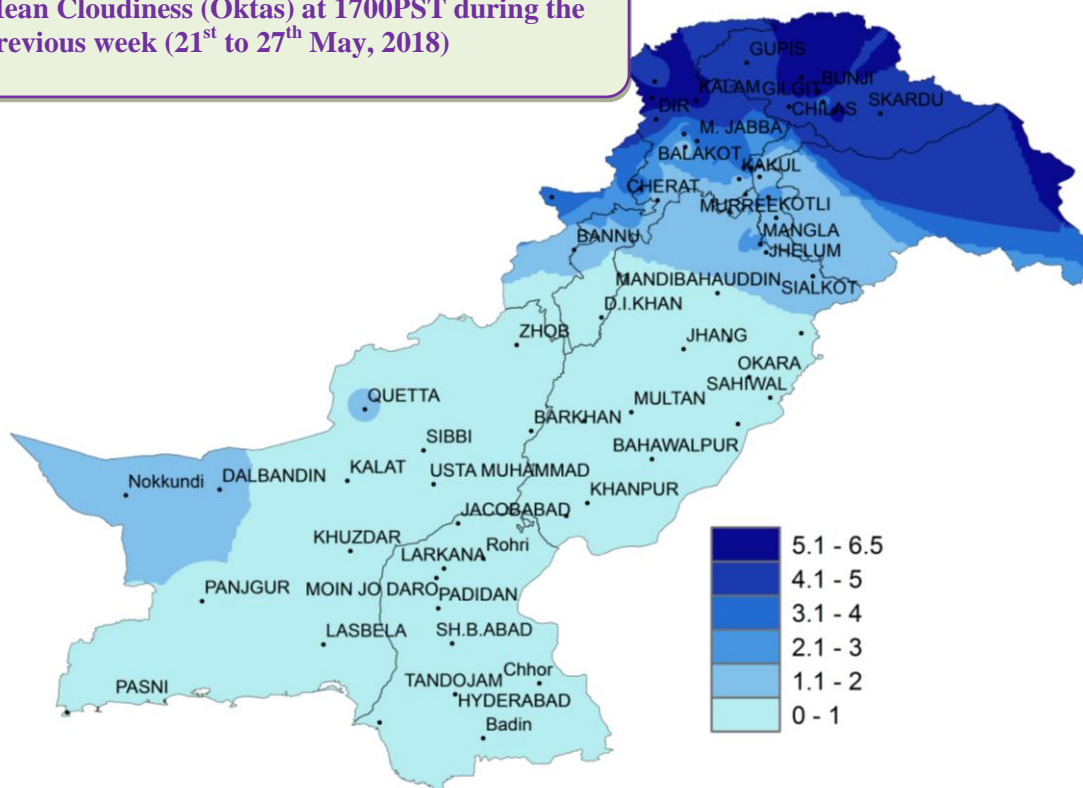
Mean Wind Speed (Knots) at 1700PST during the Previous week (21st to 27th May, 2018)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (21st to 27th May, 2018)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (21st to 27th May, 2018)



Weekly Weather Advisory for Farmers**(28th May to 3rd June, 2018)**

Continental air is prevailing over most parts of the country.

MONDAY**28-05-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper & central Sindh, south/central Punjab, D.I.Khan, Sibbi, Makran divisions.

TUESDAY**29-05-2018**

Mainly hot and dry weather is expected in most parts, while very hot in Sindh, south/central Punjab, D.I.Khan, Sibbi, Makran divisions. Rain-thundershower with gusty winds/duststorm is expected at few places in Malakand, Hazara, Rawalpindi, Lahore, Gujranwala divisions, Islamabad, Kashmir and Gilgit-Baltistan.

WEDNESDAY**30-05-2018**

Mainly hot and dry weather is expected in most parts, while very hot in Sindh, south/central Punjab, D.I.Khan, Sibbi, Makran divisions.

THURSDAY**31-05-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper Sindh, south/central Punjab, D.I.Khan, Sibbi, Makran divisions.

FRIDAY**01-06-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper Sindh, Punjab, D.I.Khan, Sibbi, Makran divisions.

SATURDAY**02-06-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper Sindh, Punjab, Islamabad, D.I.Khan, Sibbi, Makran divisions.

SUNDAY**03-06-2018**

Mainly hot and dry weather is expected in most parts, while very hot in upper Sindh, Punjab, Islamabad, D.I.Khan, Sibbi, Makran divisions.

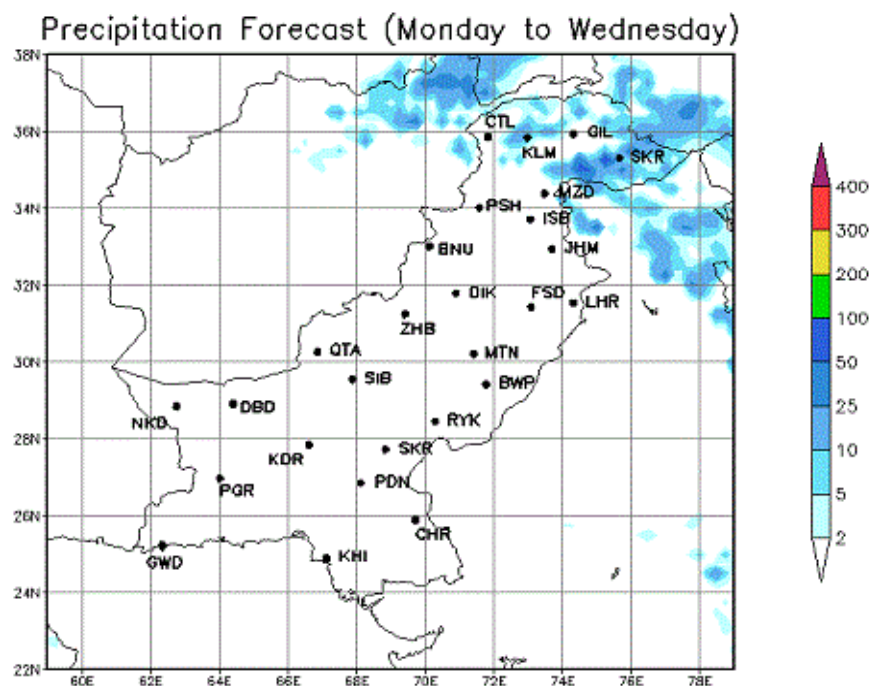
ADVISES FOR FARMERS

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.

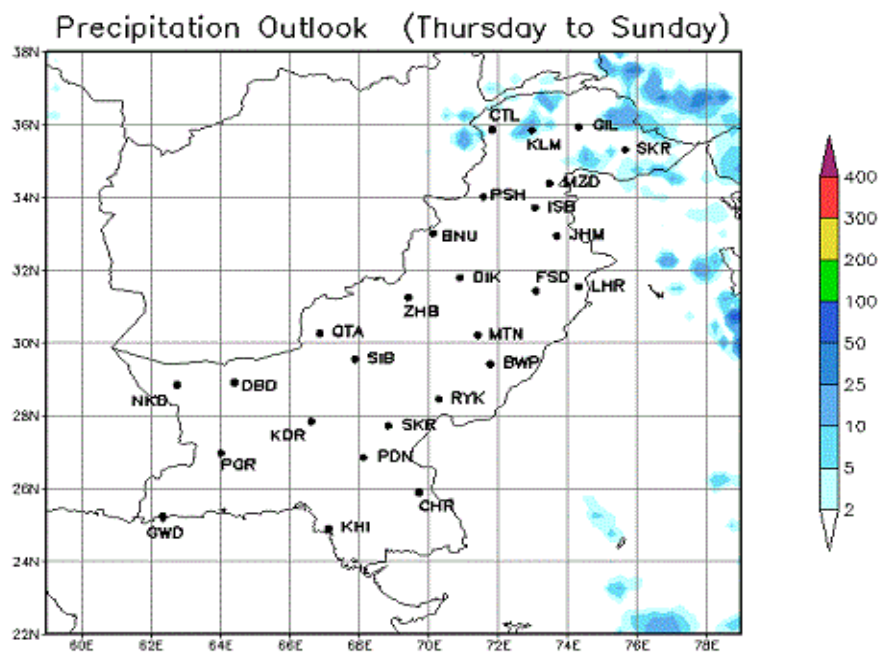
- Rice growers are advised to sow the crop “paneeri” in accordance with the recommendations by the agriculture experts.
- Farmers of southern Punjab and Sindh are advised to complete the sowing of cotton and other Kharif crops to utilize the maximum soil moisture.
- In the upper half of the country where the fields which are just vacated after the recent wheat crops, the fields may be ploughed and “Suhaga” applied to conserve the soil moisture for the upcoming Kharif crops.
- Farmers of upper Sindh and southern Punjab are advised to complete the sowing of cotton crop.

Weather Outlook from 28th May to 3rd June, 2018

The forecast from 28th to 30th May, 2018 shows that light rainfall is expected at isolated places in upper KP, GB and Kashmir, whereas dry weather may prevail in rest of the country.



The outlook from 31st May to 3rd June, 2018 shows that light to moderate rainfall is expected at few places in upper KP and GB. However, dry weather may prevail in rest of the country.



National Weather Data of Selected Cities (Weekly Data from 21st to 27th May, 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	22.2	24.3	68.1	35	0.00	1.4	5.3	2.0	2.6
Badin	43.8	46.0	212.0	42	0.00	0.0	0.6	4.6	3.7
Bahawalnagar	44.3	47.0	214.0	24	0.00	0.6	0.6	0.0	2.6
Bahawalpur	41.3	43.3	195.1	33	0.00	0.4	0.0	1.1	1.4
Balakot	34.5	36.0	145.4	33	0.00	0.0	3.6	0.3	1.4
Bannu	39.6	41.5	185.0	22	0.00	0.6	1.0	1.7	7.1
Barkhan	35.1	37.0	166.3	12	0.00	0.3	0.0	1.1	2.0
Bunji	29.6	32.2	129.1	27	0.00	0.9	6.6	2.0	1.7
Cherat	29.5	32.0	135.5	42	0.00	0.7	1.2	4.9	3.7
Chhor	46.3	47.2	225.0	33	0.00	0.0	0.3	2.7	2.3
Chilas	34.1	37.0	158.5	21	0.00	0.3	4.4	0.6	3.1
Chitral	28.5	32.5	100.9	55	4.70	1.3	4.9	1.1	1.7
D.G.Khan	41.7	45.0	195.3	35	0.00	1.1	0.3	6.6	5.7
D.I.Khan	42.4	44.0	206.5	29	0.00	0.0	0.0	1.3	0.6
Dalbandin	37.4	41.5	175.3	22	0.00	0.6	1.1	0.0	7.1
Dir	29.9	32.5	105.3	41	0.00	1.3	4.9	0.0	1.7
Drosh	28.6	33.6	101.5	41	3.00	1.9	5.3	0.0	12.9
Faisalabad	42.6	44.0	200.9	26	0.00	0.7	0.0	0.4	0.0
Garidopatta	35.5	37.5	145.6	50	0.00	0.0	0.9	0.3	3.7
Gawader	38.9	42.5	185.8	53	0.00	0.9	0.3	0.0	7.3
Gilgit	29.6	33.5	109.9	32	0.30	1.1	5.9	0.9	10.6
Gupis	23.6	27.5	80.5	40	0.00	2.1	4.1	1.1	13.6

Hyderabad	44.2	46.5	212.0	48	0.00	0.0	0.0	7.7	6.9
Islamabad	38.0	40.0	162.1	26	0.01	0.3	1.9	1.7	2.0
Jacobabad	44.9	47.5	216.8	32	0.00	14.6	0.3	2.9	2.9
Jhang	41.8	44.0	192.4	29	0.00	1.0	0.0	0.6	1.7
Jhelum	43.0	44.5	198.1	21	0.01	0.9	1.9	2.3	3.1
Jiwani	36.8	39.5	188.8	60	0.00	1.3	0.4	2.3	8.6
Kakul	31.4	33.0	122.2	39	0.00	0.0	1.7	0.0	0.9
Kalam	24.1	28.0	66.3	55	3.00	1.1	5.3	0.0	0.3
Kalat	25.7	29.0	85.0	37	0.00	0.0	0.0	0.0	4.0
Karachi	40.9	44.0	205.2	13	0.00	0.4	0.1	10.6	15.7
Khanpur	43.6	46.0	199.9	28	0.00	0.7	0.0	1.4	0.9
Khuzdar	33.6	35.5	151.0	24	0.00	0.0	0.0	1.7	2.3
Kotli	38.7	40.0	178.6	28	0.00	0.0	1.1	4.0	1.4
Lahore	42.3	43.2	205.3	23	0.00	0.0	0.9	0.6	3.4
Larkana	44.9	47.5	216.5	50	0.00	0.3	0.6	1.4	3.7
Lasbella	45.1	47.5	211.0	44	0.00	0.0	0.0	1.1	4.0
Lower Dir	35.8	38.5	164.5	27	0.00	1.4	3.1	3.4	2.0
M.B Din	42.4	44.5	200.2	24	0.00	1.1	0.9	1.7	1.1
Malam Jabba	21.7	24.0	88.0	45	0.00	0.9	3.9	0.0	0.0
Mangla	41.2	42.5	187.3	23	1.00	0.6	2.1	2.3	8.0
Mir Khani	32.4	35.0	120.5	40	10.20	0.7	2.9	0.0	2.0
Moinjodaro	45.0	47.0	209.5	28	0.00	0.0	0.0	3.1	6.0
Multan(PBO)	41.8	44.2	203.5	24	0.00	1.9	0.3	4.0	4.7
Murree	25.1	26.0	103.8	44	1.70	0.0	1.9	0.9	0.9
Muzaffarabad	34.6	37.4	138.2	41	0.00	0.0	3.6	0.9	1.1
Nawabshah	45.4	47.5	215.5	28	0.00	0.0	0.3	3.7	5.7

Nokkundi	38.3	42.5	180.8	11	0.00	1.0	1.7	4.6	8.3
Okara	42.9	44.5	205.4	29	0.00	0.4	0.4	0.3	0.0
Padidan	44.5	46.0	209.0	33	0.00	0.0	0.0	1.7	2.6
Panjgur	38.0	41.0	172.0	23	0.00	0.0	0.9	6.0	10.3
Parachinar	27.3	30.0	112.8	61	0.00	3.6	3.9	3.0	3.0
Pasni	39.4	43.5	204.3	75	0.00	1.0	0.0	3.2	17.0
Pattan	35.6	37.0	160.8	32	0.00	0.6	1.7	0.0	0.0
Peshawar	38.0	40.7	176.5	33	0.01	1.1	3.4	1.4	3.4
Quetta	28.5	31.6	115.1	12	0.00	0.3	1.1	2.9	4.1
R. Y. Khan	44.4	47.0	204.0	25	0.00	0.4	0.0	0.0	1.0
Rawalakot	27.8	29.5	101.3	47	0.00	0.2	2.6	0.0	1.1
Rawalpindi	38.7	40	169.8	37.5	0	0.6	1.1	0.5	0.5
Rohri	44.9	47.0	209.3	17	0.00	0.1	0.0	2.9	2.0
Sahiwal	42.1	43.2	200.7	26	0.00	0.6	0.3	2.3	2.9
Saidu Sharif	32.4	34.8	130.2	50	0.00	0.0	1.0	0.6	0.0
Sialkot	42.1	43.7	189.9	20	0.00	0.4	1.4	2.0	4.9
Sibbi	45.0	47.0	206.8	32	0.00	0.0	0.0	0.0	2.6
Skardu	26.4	29.4	90.2	23	0.00	2.3	5.0	0.0	5.3
Tandojam	42.9	45.5	193.8	39	0	0	0	1.2	2.3
Usta muhamad	46.9	48	233.6	37	0	0.3	0	0	5.4
Zhob	32.7	35.5	153.8	36	0.00	0.0	0.3	2.1	4.7

*** 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)