

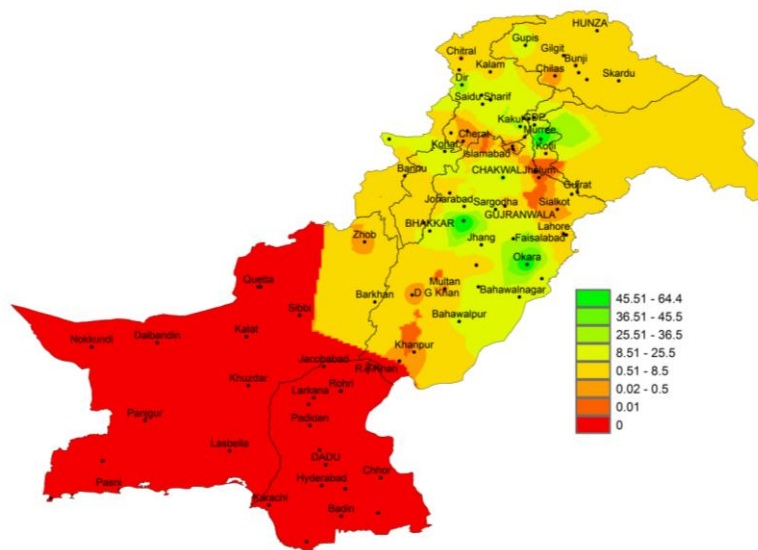
Weekly Weather and Crop Bulletin for Pakistan

**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 (18th June to 24th June, 2018)**



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Highlights of Past Weather (18th June to 24th June, 2018)

Above normal day temperature was observed in Baluchistan however normal to below normal temperature was observed in Punjab, KP, Sindh, Gilgit-Baltistan and Azad Jammu & Kashmir.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed in Punjab, Khyber Pakhtunkhwa, Gilgit-Baltistan and Azad Jammu & Kashmir during the previous week.
- Light rainfall observed from a single station in Baluchistan during the previous week.
- Dry weather observed in Sindh 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 (18th June to 24th June, 2018)

Punjab

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 39.1°C & 25.7°C respectively. For the recent week on average 191.6 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 37% and wind speed in the morning/evening recorded as 1.9/3.9 Knots. During the previous week the highest amount of rainfall was recorded as 61.0 mm at Nurpur Thal & highest maximum temperature was recorded as 45.2°C at Rahim Yar Khan.

Sindh

Dry weather observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 41.1°C & 27.8°C respectively. For the recent week, on average 207.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 4.6/6.4 Knots. During the previous week highest maximum temperature was recorded as 47.8°C at Dadu.

Khyber Pakhtunkhwa

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 34.4°C & 20.0°C respectively. For the recent week on average 155.5 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 0.9/4.1 Knots. During the previous week the highest amount of rainfall was recorded as 30.7 mm at Dir & highest maximum temperature was recorded as 41.5°C at D.I.Khan.

Baluchistan

Light rainfall observed from a single station in Balochistan during the week. Weekly maximum and minimum temperatures recorded as 39.5°C & 25.4°C respectively. For the recent week on average 190.7 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 1.9/6.2 Knots. During the previous week the highest amount of rainfall was recorded as 8.01 mm at Barkhan & highest maximum temperature was recorded as 50.0°C at Turbat.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall observed in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 29.9°C & 16.8°C respectively. For the recent week on average 121.7 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 0.8/3.5 Knots. During the previous week the highest amount of rainfall was recorded as 64.4 mm at Rawalakot & highest maximum temperature was recorded as 39.7°C at Kotli.

Past Weather for Major Agricultural Plains (18th June to 24th June, 2018)

Rawalpindi (Potohar region)

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 3.3/2.0 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 37.9°C & for the recent week 177.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.9 Knots.

Faisalabad (Central Punjab)

Rainfall reported as 22.8 mm from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 3.0/2.0 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 38.9°C & for the recent week 187.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.1/1.7 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness recorded in the morning/evening as 0.6/0.0 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 39.3°C & for the recent week 191.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.8/4.9 Knots.

Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.8 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 47.9°C & for the recent week 235.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/3.4 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.3/1.0 Oktas while, average relative humidity observed as 24%. Mean day time temperature recorded as 34.4°C & for the recent week 159.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.8/3.8 Knots.

Past Weather for Sub-Regional Agricultural Plains (18th June to 24th June, 2018)

Multan

Rainfall reported as 0.01 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 2.7/2.7 Oktas while, average relative humidity observed as 36%. Mean day time temperature recorded as 40.5°C & for the recent week 205.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.3/6.6 Knots.

Lahore

Rainfall reported as 2.10 mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 1.7/1.3 Oktas while, average relative humidity observed as 35%. Mean day time temperature recorded as 38.9°C & for the recent week 195.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/2.6 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/3.0 Oktas while, average relative humidity observed as 26%. Mean day time temperature recorded as 36.4°C & for the recent week 173.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.3/10.4 Knots.

Murree

Rainfall reported as 3.60 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 3.9/2.6 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 24.4°C & for the recent week 103.4 growing degree days

accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/0.9 Knots.

D.I. Khan

Rainfall reported as 6.01 mm from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 2.6/4.4 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 39.6°C & for the recent week 194.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/4.6 Knots.

Peshawar

Rainfall reported as 1.00 mm from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.7/3.5 Oktas while, average relative humidity observed as 46%. Mean day time temperature recorded as 38.6°C & for the recent week 183.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/2.0 Knots.

Kalam

Rainfall reported as 5.00 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.0/6.0 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 24.4°C & for the recent week 86.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.9 Knots.

Gilgit

Rainfall reported as 2.03 mm from Gilgit during the week; However, cloudiness in the morning/evening recorded as 5.1/6.7 Oktas while, average relative humidity observed as 33%. Mean day time temperature recorded as 30.2°C & for the recent week 131.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/6.0 Knots.

Skardu

Rainfall reported as 2.61 mm from Skardu during the week; however, cloudiness in the morning/evening recorded as 5.7/6.7 Oktas while, average relative humidity observed as 33%. Mean day time temperature recorded as 27.5°C & for the recent week 104.3 growing degree days

accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/5.9 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)

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

Cotton ; Very Good, Budding stage completed.

Lower Sindh (Tandojam)

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

Cotton (CIM 6.2); Good, Budding stage .

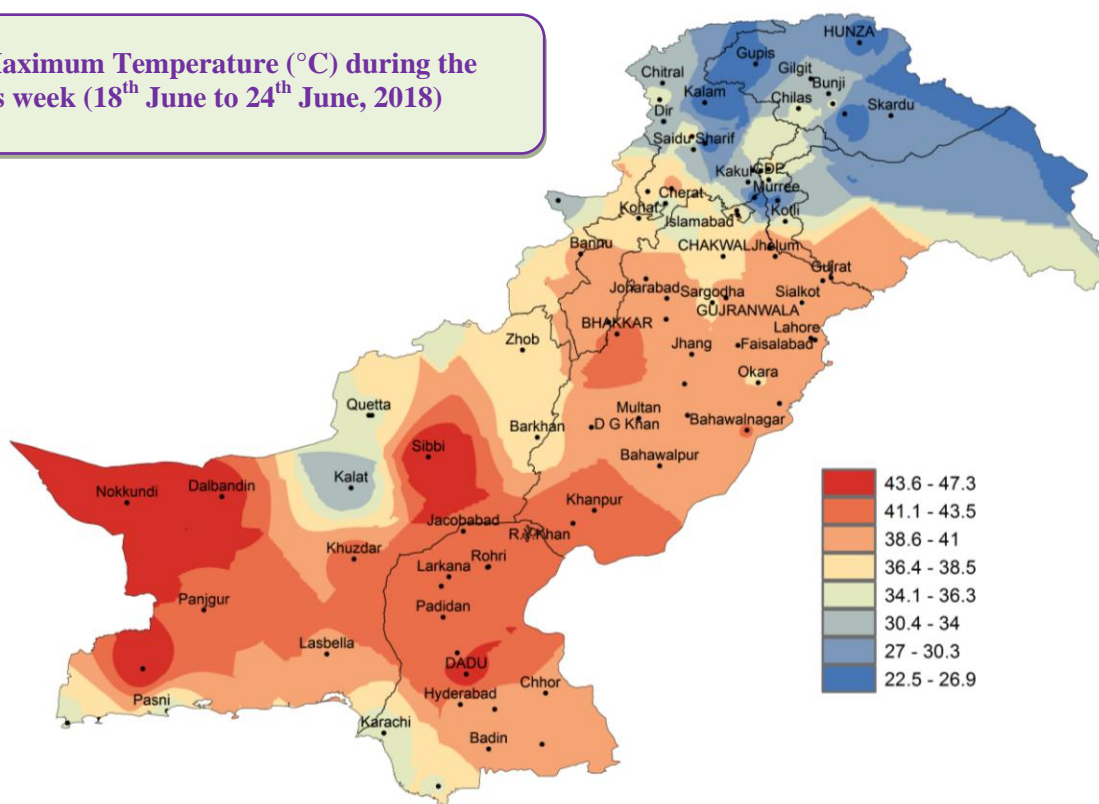
Northern Baluchistan (Quetta)

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

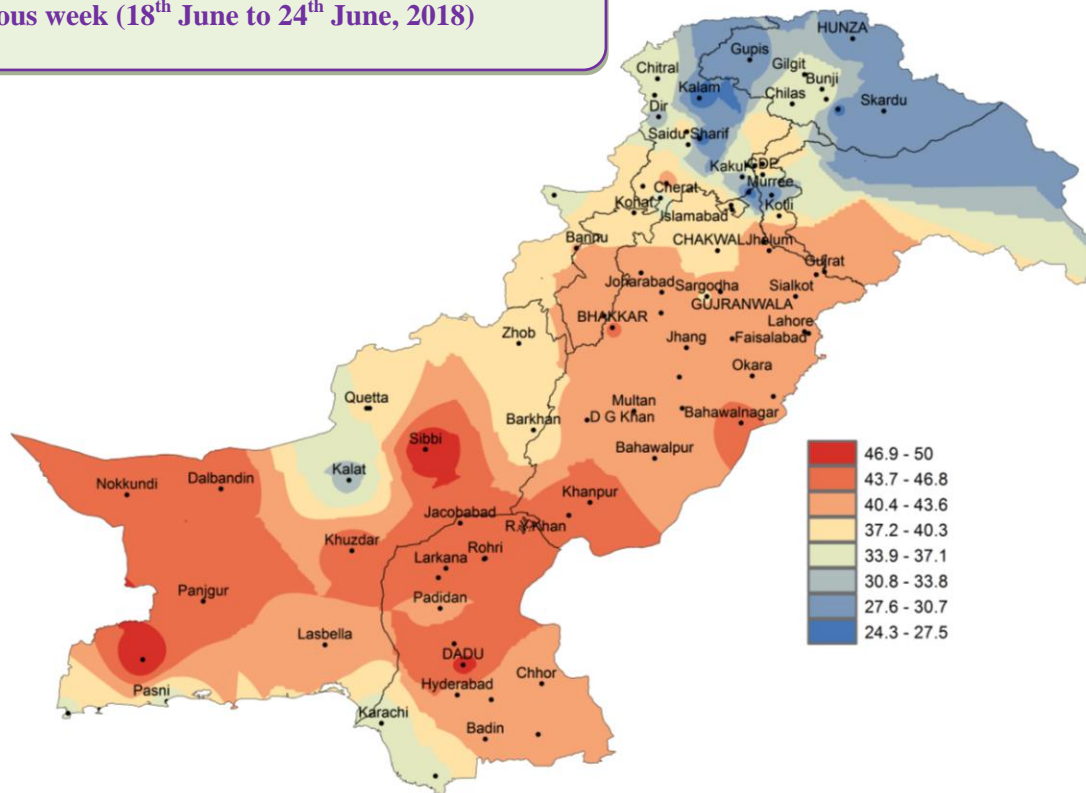
Eastern Baluchistan (Usta Muhammad)

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

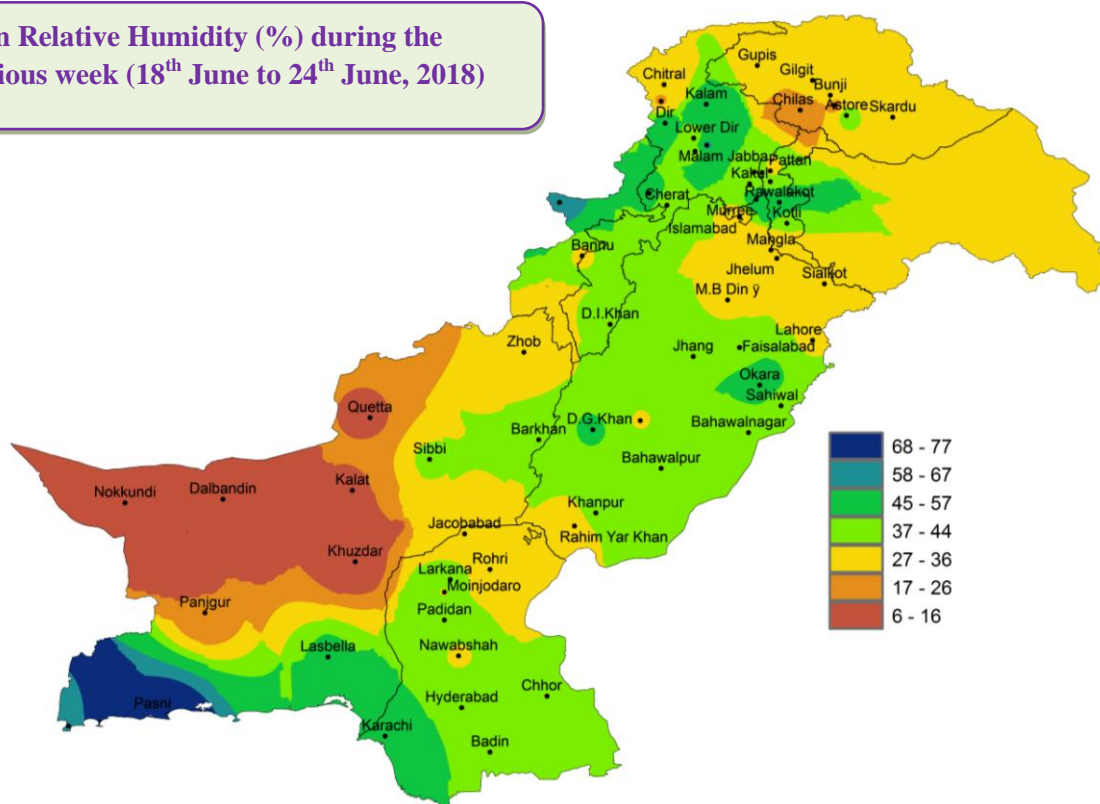
**Mean Maximum Temperature (°C) during the
Previous week (18th June to 24th June, 2018)**



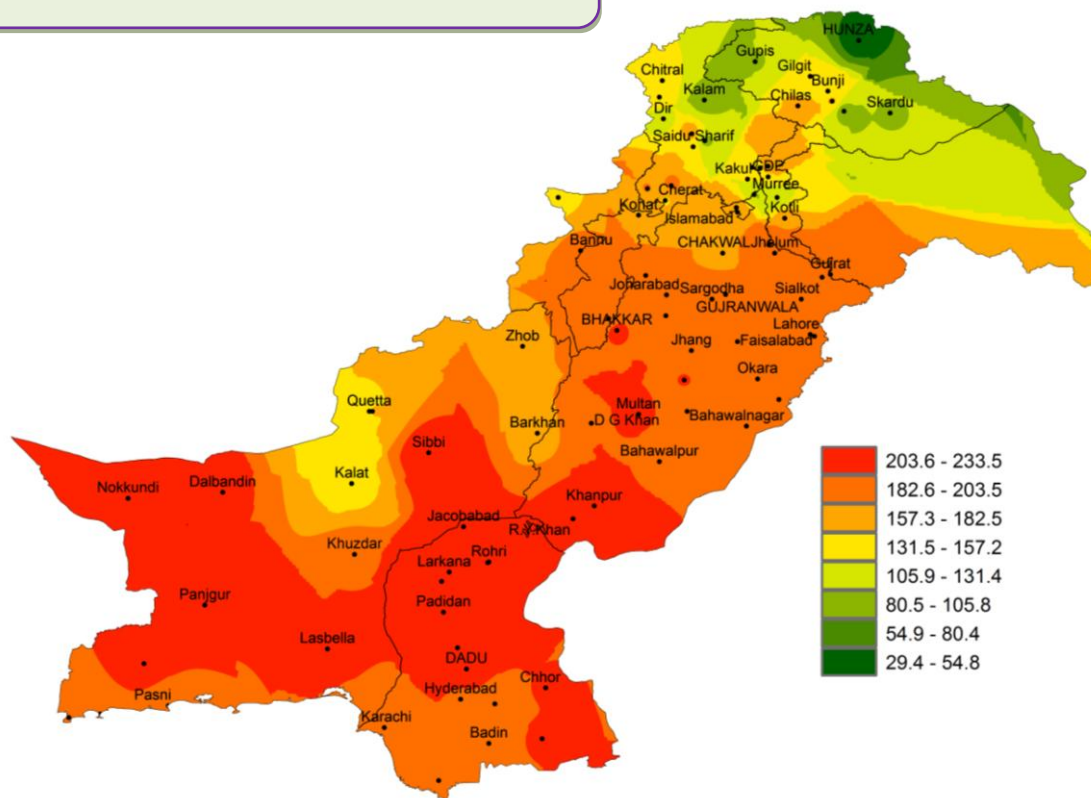
**Highest maximum Temperature (°C) during the
Previous week (18th June to 24th June, 2018)**



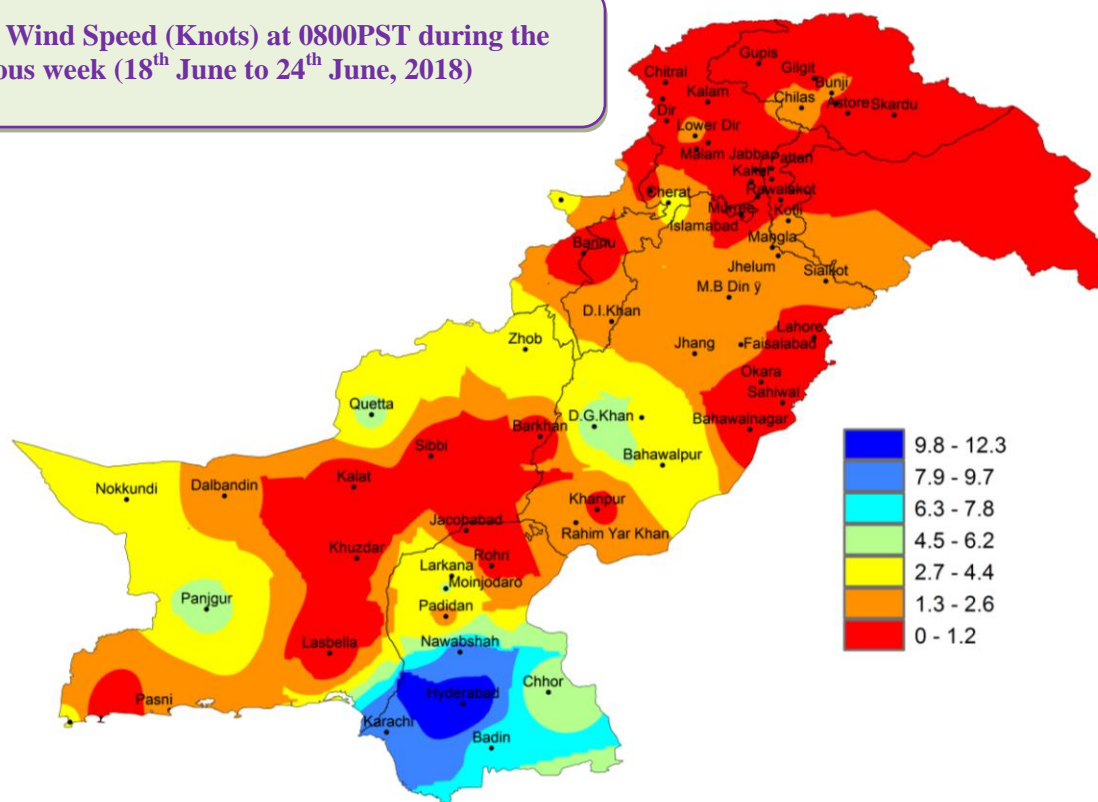
Mean Relative Humidity (%) during the
Previous week (18th June to 24th June, 2018)



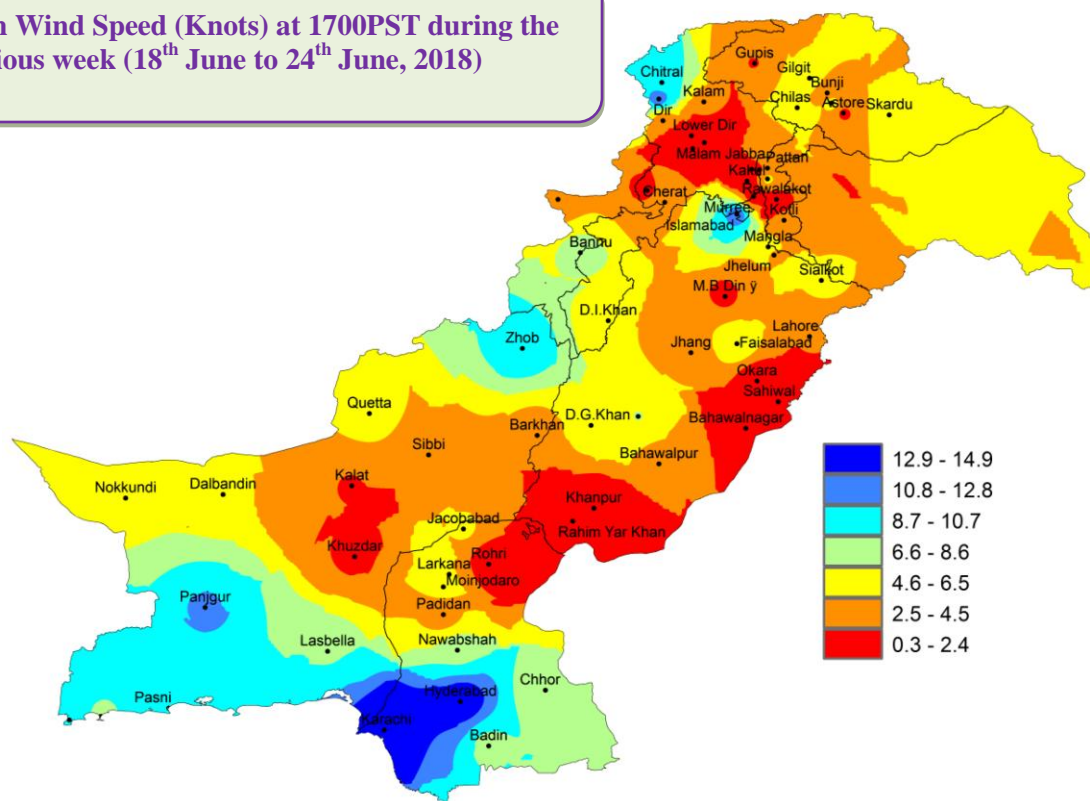
Total Growing Degree Days accumulated during the
Previous week (18th June to 24th June, 2018)



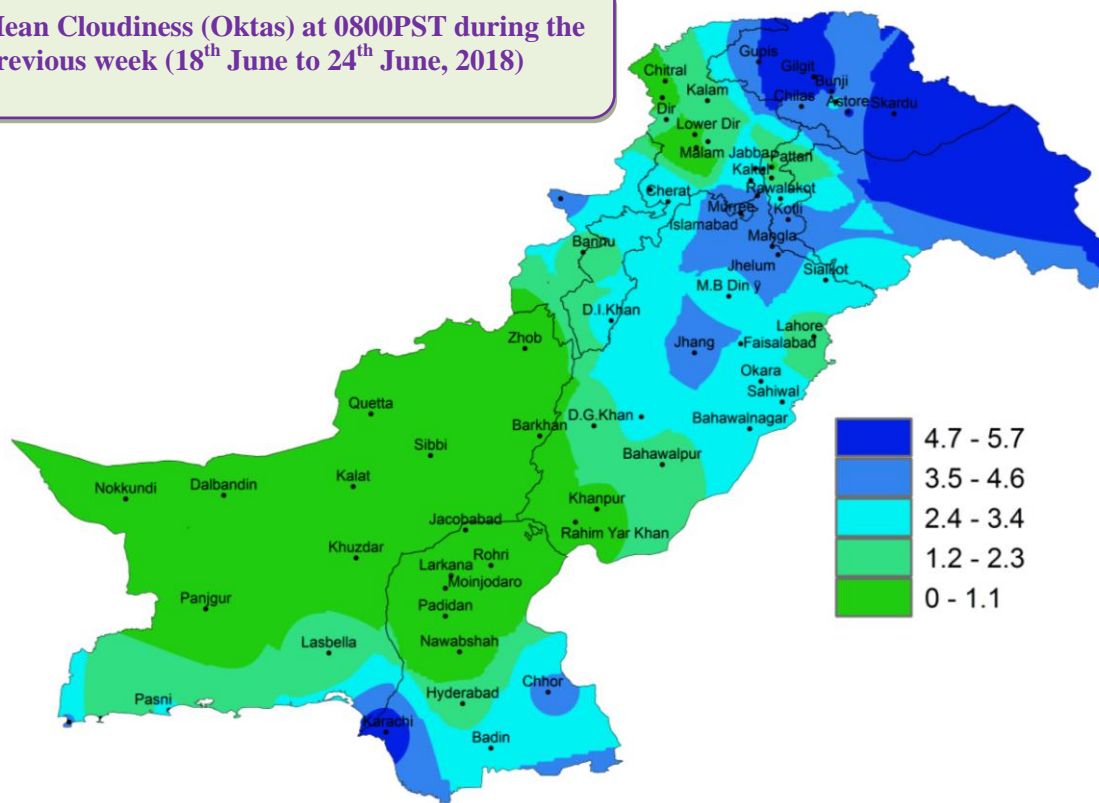
Mean Wind Speed (Knots) at 0800PST during the Previous week (18th June to 24th June, 2018)



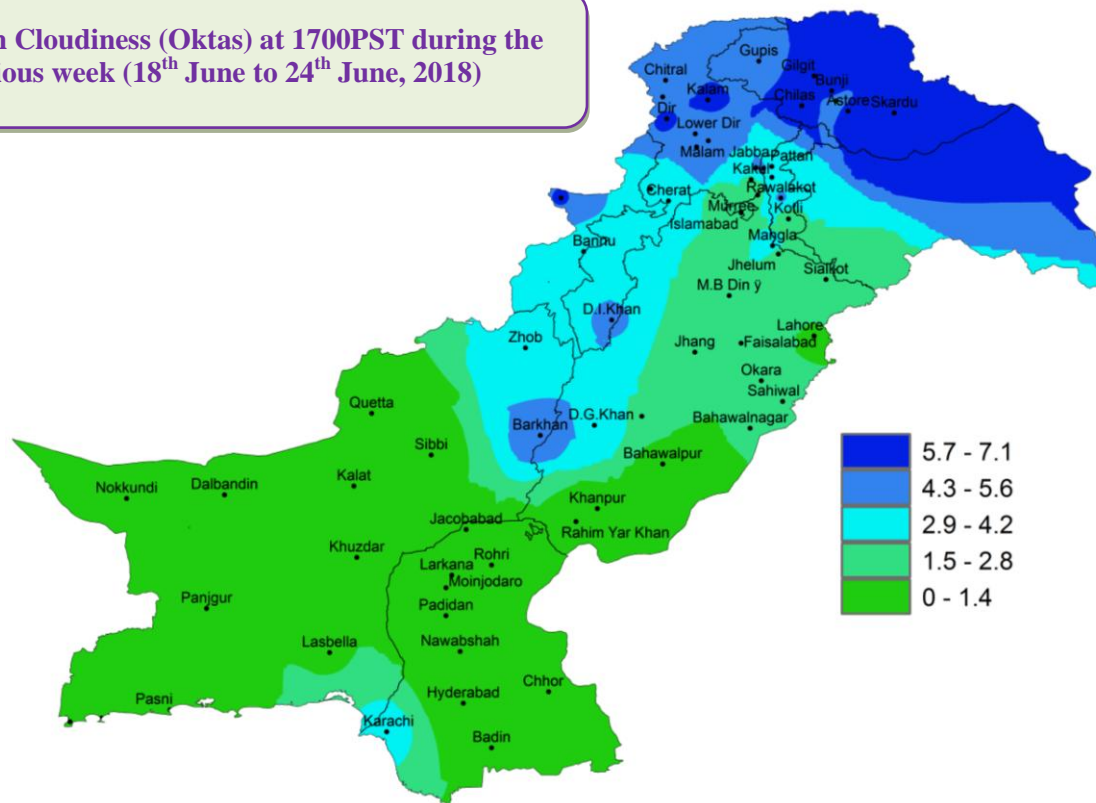
Mean Wind Speed (Knots) at 1700PST during the Previous week (18th June to 24th June, 2018)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (18th June to 24th June, 2018)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (18th June to 24th June, 2018)



Weekly Weather Advisory for Farmers**(25th June to 1st July, 2018)**

Seasonal Low lies over North Balochistan. A shallow westerly wave is still affecting upper parts of the country.

MONDAY**25-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds is expected at isolated places in Malakand, Hazara, Bannu, D.I.Khan, D.G.Khan, Zhob divisions, Kashmir and Gilgit-Baltistan

TUESDAY**26-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds is expected at isolated places in Bannu, D.I.Khan, Quetta, Zhob, Kalat, Sukkur, Multan, D.G.Khan, Bahawalpur, Sahiwal, Sargodha divisions, Kashmir and Gilgit-Baltistan.

WEDNESDAY**27-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds is expected at isolated places in Malakand, Hazara, D.I.Khan, Lahore, Multan, Bahawalpur, Sahiwal, Karachi, Hyderabad, Quetta, Zhob, Kalat divisions, FATA, Kashmir and Gilgit-Baltistan.

THURSDAY**28-06-2018**

Mainly hot and dry weather is expected in most parts of the country. However, rain-thundershower with gusty winds is expected at isolated places in Zhob, Kalat, Sukkur, Rawalpindi, Gujranwala, Lahore, Sahiwal, Bahawalpur divisions, upper Khyber-Pakhtunkhwa, FATA, Islamabad, Kashmir and Gilgit-Baltistan.

FRIDAY**29-06-2018**

Rain-thundershower with gusty winds is expected at

scattered places in Bahawalpur, Kalat, Makran divisions, while at isolated places in Zhob, D.G.Khan, Multan, Sahiwal divisions, upper Punjab, upper Khyber-Pakhtunkhwa, FATA, Islamabad, Kashmir and Gilgit-Baltistan. Hot and dry weather is expected elsewhere in the country.

SATURDAY**30-06-2018**

Rain-thundershower with gusty winds is expected at scattered places in Bahawalpur, Multan, Sahiwal, Gujranwala divisions and Kashmir, while at isolated places in Rawalpindi, Zhob, D.I.Khan divisions, Sindh-Makran coast, upper Sindh, upper Khyber-Pakhtunkhwa, upper FATA, Islamabad and Gilgit-Baltistan. Hot and dry weather is expected elsewhere in the country.

SUNDAY**1-07-2018**

Rain-thundershower with gusty winds is expected at scattered places in Makran, Kalat, Bahawalpur, Multan, Sahiwal divisions, upper Sindh and Kashmir, while at isolated places in Rawalpindi, Faisalabad, Sargodha, D.G.Khan, Hazara, Bannu, D.I.Khan, Zhob divisions, lower Sindh, Islamabad and Gilgit-Baltistan. Hot and dry weather is expected elsewhere in the country

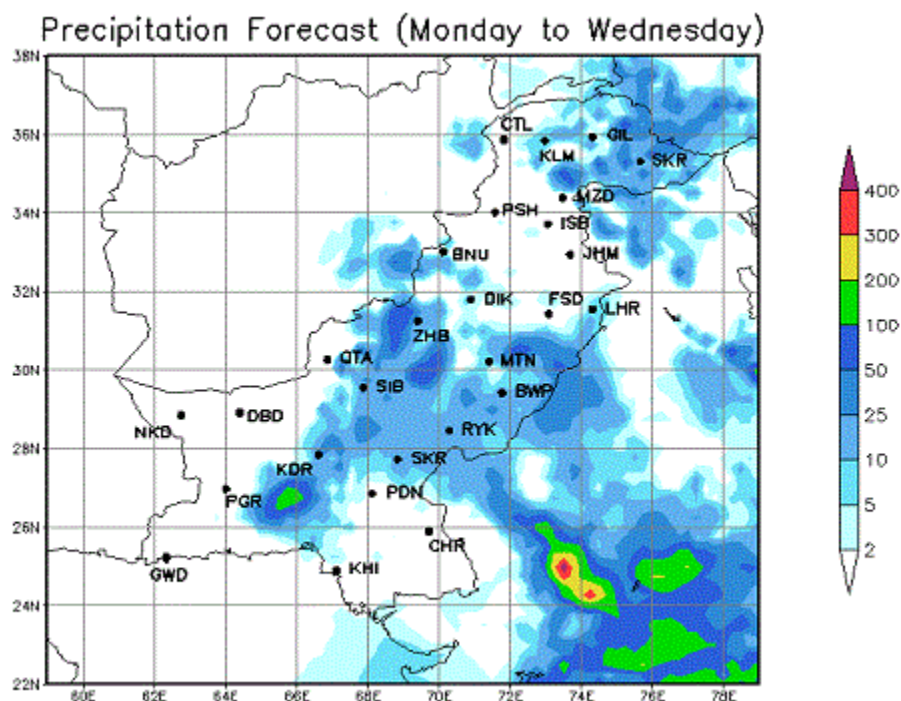
ADVISES FOR FARMERS

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.

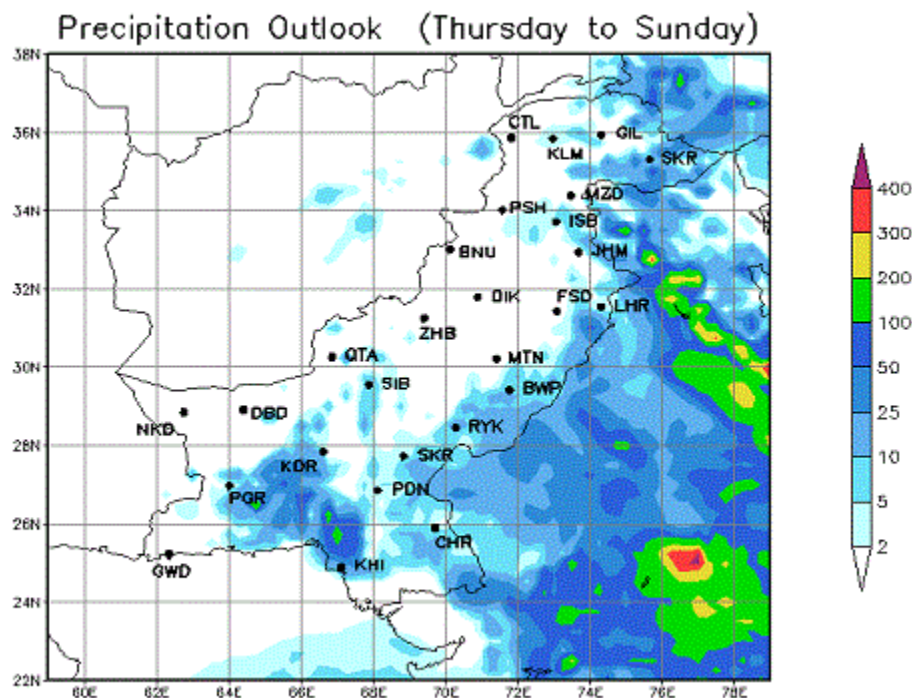
- Farmers of southern Punjab and Sindh are advised to complete the sowing of cotton and other Kharif crops to utilize the maximum soil moisture.
- Farmers of upper regions are advised to complete the cultivation of millet and sorghum in the upper regions because of the moisture availability in field.

Weather Outlook from 25th June to 1st July, 2018

The forecast from 25th June to 27th June, 2018 shows that light to moderate rainfall is expected in GB, Kashmir, northern and southern belts of KP, southern Punjab, eastern Baluchistan and few places in upper Sindh. Heavy rainfall is expected south eastern Baluchistan.



The outlook from 28th June to 1st July, 2018 shows that light to moderate rainfall is expected at scattered places in the eastern side of the country and over the coast of Sindh and Makran.



National Weather Data of Selected Cities (Weekly Data from 18th to 24th June, 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	22.5	26.0	83.6	7.61	4.7	6.4	0.9	2.0	41
Badin	39.3	41.0	196.8	0.00	3.4	0.7	6.3	8.0	42
Bahawalnagar	41.1	45.0	195.0	20.00	3.3	1.4	0.6	0.9	37
Bahawalpur	40.1	41.9	200.1	9.00	1.7	0.1	4.3	3.1	43
Balakot	33.4	35.0	151.0	23.01	2.7	4.4	0.4	2.3	38
Bannu	39.0	40.4	191.3	1.00	1.9	3.1	0.3	7.4	35
Barkhan	36.4	38.0	171.3	8.01	0.4	4.9	0.3	2.6	41
Bunji	31.0	33.9	145.3	0.03	4.9	7.1	2.1	2.3	34
Cherat	33.5	35.0	153.5	0.00	3.4	3.3	3.4	4.0	43
Chhor	40.9	41.8	205.6	0.00	3.6	0.1	5.1	6.6	39
Chilas	34.4	37.0	163.5	0.05	4.4	6.6	1.7	5.1	18
Chitral	33.8	36.0	142.5	0.01	1.1	4.3	0.3	9.7	28
D.G.Khan	40.6	42.5	202.7	0.01	1.9	4.1	5.1	6.3	45
D.I.Khan	39.6	41.5	194.5	6.01	2.6	4.4	2.0	4.6	40
Dalbandin	44.1	45.5	211.0	0.00	0.3	0.9	1.4	4.9	8
Dir	30.0	32.5	115.6	30.70	1.3	6.0	0.3	2.4	53
Drosh	34.9	36.6	147.1	1.40	1.0	4.6	0.0	12.0	24
Faisalabad	38.9	41.5	187.0	22.80	3.0	2.0	1.1	1.7	56
Garidopatta	33.7	36.7	150.1	28.00	2.0	3.4	0.6	4.9	42
Gawader	37.0	38.0	190.0	0.00	1.1	0.0	0.0	8.3	73
Gilgit	30.2	34.0	131.2	2.03	5.1	6.7	0.6	6.0	33
Gupis	25.8	28.5	102.8	10.00	4.6	4.5	0.9	2.3	32

Hyderabad	40.4	42.5	199.4	0.00	1.4	0.0	12.3	14.9	41
Islamabad	36.6	38.7	171.2	0.01	3.9	2.1	0.3	12.4	30
Jacobabad	43.3	45.0	221.0	0.00	0.3	1.3	0.6	4.9	28
Jhang	39.4	41.7	193.6	16.21	3.7	1.6	1.4	3.1	42
Jhelum	40.8	43.0	200.5	0.01	3.7	2.3	2.3	4.3	32
Jiwani	34.9	36.5	184.5	0.00	3.6	0.3	3.1	10.0	59
Kakul	31.4	33.0	132.3	30.00	3.1	2.4	0.3	1.1	41
Kalam	24.4	26.0	86.5	5.00	2.0	6.0	0.0	2.9	52
Kalat	31.6	33.0	135.5	0.00	0.6	0.0	0.0	2.3	14
Karachi	35.3	35.5	189.4	0.00	5.1	3.6	9.1	14.3	53
Khanpur	42.2	44.2	212.0	0.00	1.0	1.1	0.6	0.6	39
Khuzdar	42.1	45.5	199.5	0.00	0.0	0.3	0.6	2.0	6
Kotli	36.5	39.7	176.2	0.00	4.0	2.1	1.7	2.9	38
Lahore	38.9	41.0	195.6	2.10	1.7	1.3	0.3	2.6	35
Larkana	42.6	44.0	217.3	0.00	0.6	0.6	4.3	4.6	40
Lasbella	40.8	42.0	209.6	0.00	1.7	1.3	0.3	8.6	47
Lower Dir	38.0	40.5	176.5	11.00	0.9	4.6	2.6	2.3	38
M.B Din	40.0	42.2	192.8	0.01	3.3	2.4	2.0	2.0	34
Malam Jabba	22.2	24.0	91.0	26.00	2.0	5.1	0.0	0.6	59
Mangla	39.5	41.7	194.0	0.00	3.6	3.4	1.7	5.1	28
Mir Khani	35.7	38.0	163.5	4.00	2.7	3.7	0.0	5.7	20
Moinjodaro	42.7	44.0	215.0	0.00	0.6	1.0	4.6	5.1	36
Multan(PBO)	40.5	43.0	205.4	0.01	2.7	2.7	4.3	6.6	36
Murree	24.4	26.1	103.4	3.60	3.9	2.6	0.6	0.9	51
Muzaffarabad	34.5	37.0	147.0	19.01	3.3	4.4	0.6	1.7	42
Nawabshah	43.1	44.5	211.9	0.00	0.7	0.0	8.6	8.0	35

Nokkundi	45.1	46.5	227.8	0.00	0.3	0.0	3.7	5.7	7
Okara	38.5	41.5	189.5	52.01	2.4	1.7	0.3	0.3	50
Padidan	41.8	43.0	208.8	0.00	1.1	0.9	1.7	3.1	42
Panjgur	43.0	44.0	212.3	0.00	0.0	0.6	4.9	10.9	16
Parachinar	31.8	35.0	145.3	9.00	4.0	5.7	3.0	3.0	65
Pasni	35.1	35.5	184.3	0.00	2.3	0.0	1.3	9.9	77
Pattan	37.8	40.0	180.3	3.00	0.6	3.4	0.0	4.0	32
Peshawar	38.6	40.0	183.6	1.00	2.7	3.5	0.6	2.0	46
Quetta	34.4	35.5	159.3	0.00	0.3	1.0	3.8	3.8	24
R. Y. Khan	43.2	45.2	214.3	0.00	1.1	0.4	2.4	1.9	33
Rawalakot	26.3	28.0	105.1	64.40	3.1	4.4	0.0	1.4	54
Rawalpindi	37.9	39.0	177.8	0.00	3.3	2.0	0.3	0.9	52
Rohri	43.1	45.0	219.8	0.00	0.4	0.4	0.6	0.3	31
Sahiwal	38.8	42.0	190.8	12.52	2.6	1.6	0.6	2.0	40
Saidu Sharif	33.9	35.0	144.3	12.00	0.0	4.6	0.0	1.4	41
Sialkot	39.1	40.9	192.2	0.90	3.0	2.7	1.6	4.9	30
Sibbi	47.3	49.0	233.5	0.00	1.1	0.6	0.3	2.6	39
Skardu	27.5	29.6	104.3	2.61	5.7	6.7	0.0	5.9	33
Tandojam	39.3	41.0	191.5	0.00	0.6	0.0	3.8	4.9	62
Usta muhamad	47.9	49.0	235.0	0.00	0.0	0.8	0.2	3.4	43
Zhob	36.4	38.0	173.3	0.00	0.0	3.0	4.3	10.4	26

*** 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)