

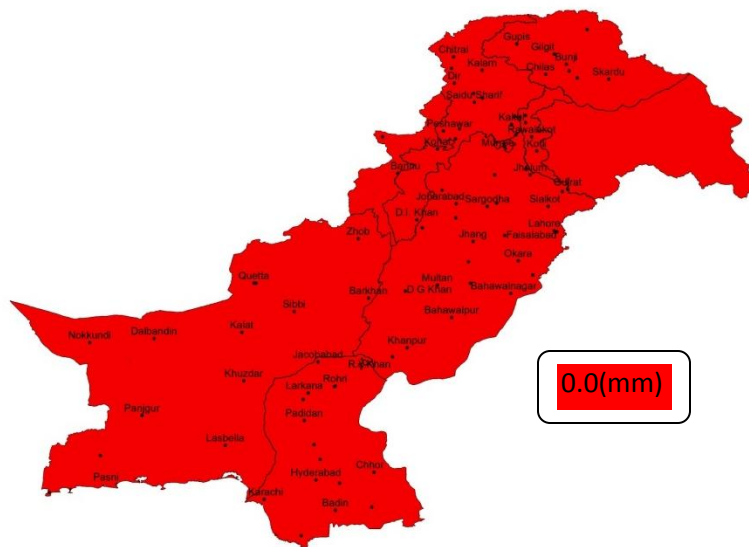
Weekly Weather and Crop Bulletin for Pakistan

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PAKISTAN METEOROLOGICAL
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**Rainfall Distribution (mm) during the
Previous Week (10th April to 16th April, 2017)**



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Highlights of Past Weather (from 10th April to 16th April, 2017)

Slightly above normal day temperatures reported from most parts of the country.

Province wise distribution of rainfall reported as follows:

- Dry weather was reported from all parts of the country.

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

Editor-in-Chief: Dr. Khalid M. Malik (Director)

Editor: Dr. Dildar Kazmi (Meteorologist)

Past Weather of Provinces (from 10th April to 16th April, 2017)**Punjab**

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 38.9°C & 18.5°C respectively. For the recent week on average 169.5 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 36% and wind speed in the morning/evening recorded as 1.0/2.8 Knots. During the previous week the highest maximum temperature was recorded as 47.2°C at Rahim Yar Khan.

Sindh

Dry weather reported from Sindh during the week. Weekly maximum and minimum temperatures recorded as 43.3°C & 21.8°C respectively. For the recent week, on average 193.6 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 33% and wind speed in the morning/evening recorded as 1.5/4.9 Knots. During the previous week the highest maximum temperature was recorded as 48.0°C at Larkana.

Khyber Pakhtunkhwa

Dry weather reported from Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 31.2°C & 12.4°C respectively. For the recent week on average 117.5 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 2.5/3.9 Knots. During the previous week the highest maximum temperature was recorded as 44.5°C at D.I.Khan.

Balochistan

Dry weather reported from Balochistan during the week. Weekly maximum and minimum temperatures recorded as 36.5°C & 18.7°C respectively. For the recent week on average 156.7 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 2.9/4.6 Knots. During the previous week the highest maximum temperature was recorded as 47.0°C at Sibbi.

Gilgit-Baltistan and Azad Jammu & Kashmir

Dry weather reported from Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 25.7°C & 8.2°C respectively. For the recent week on average 84.5 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 39% and wind speed in the morning/evening recorded as 0.9/1.3 Knots. During the previous week the highest maximum temperature was recorded as 37.8°C at Kotli.

Past Weather for Major Agricultural Plains (from 10th April to 16th April, 2017)

Rawalpindi (Potohar region)

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 34.9°C & for the recent week 138.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/2.3 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.1/0.0 Oktas while, average relative humidity observed as 41%. Mean day time temperature recorded as 39.7°C & for the recent week 167.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/0.7 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 43.6°C & for the recent week 179.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/1.4 Knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded 0.6/1.1 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 42.5°C & for the recent week 188.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/5.4 Knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.7/1.6 Oktas while, average relative humidity observed as 20%. Mean day time temperature recorded as 28.8°C at the end of last week. Wind speed recorded in the morning/evening as 1.1/3.3 Knots.

Past Weather for Sub-Regional Agricultural Plains (from 10th April to 16th April, 2017)

Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 1.1/0.4 Oktas while, average relative humidity observed as 29%. Mean day time temperature recorded as 41°C & for the recent week 185.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.1 Knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.4/0.0 Oktas while, average relative humidity observed as 28%. Mean day time temperature recorded as 38.6°C & for the recent week 174.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/5.4 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, average relative humidity observed as 28%. Mean day time temperature recorded as 33.1°C & for the recent week 143.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.6/7.3 Knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 26%. Mean day time temperature recorded as 23.6°C by the end of last week. Wind speed recorded in the morning/evening as 3.4/2.0 Knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.4/0.0 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 40.9°C & for the recent week 176.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.7/1.6 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 36.9°C & for the recent week 150.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/2.9 Knots.

Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.9/0.3 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 24.1°C & for the recent week 61.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 13.6/18.4 Knots.

Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 1.7/3.7 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 25.3°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 0.0/2.6 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.0/3.0 Oktas while, average relative humidity observed as 42%. Mean day time temperature recorded as 17.8°C & for the recent week 46.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 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 (irrigated conditions) grown in the fields of RAMC Faisalabad.

Wheat: Very good condition, *Full Maturity* stage.

Lower Sindh (Tandojam)

Land has been prepared for new crop.

Northern Balochistan (Quetta)

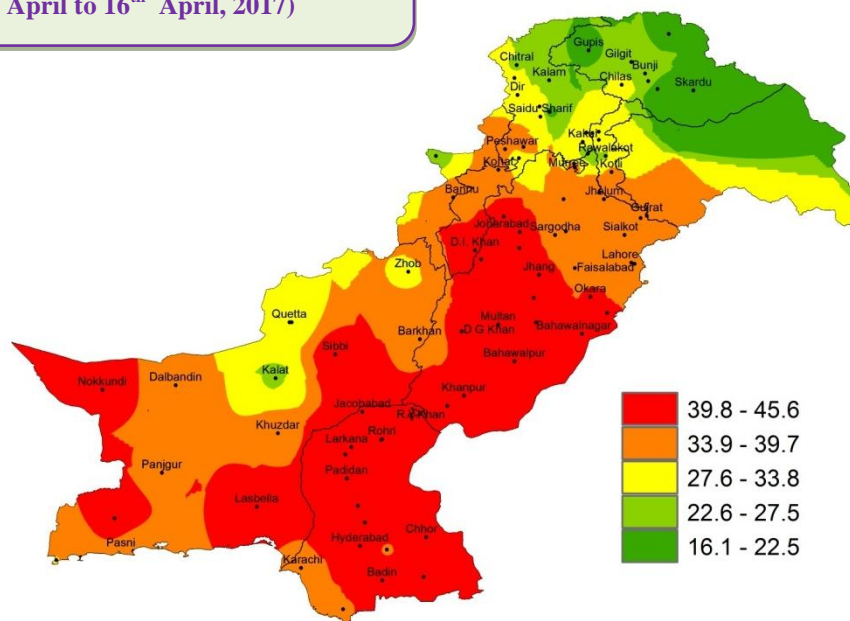
There is presently one crop (irrigated conditions) grown in the fields of RAMC Quetta.

Wheat (Local white): Good condition, *Flowering* stage.

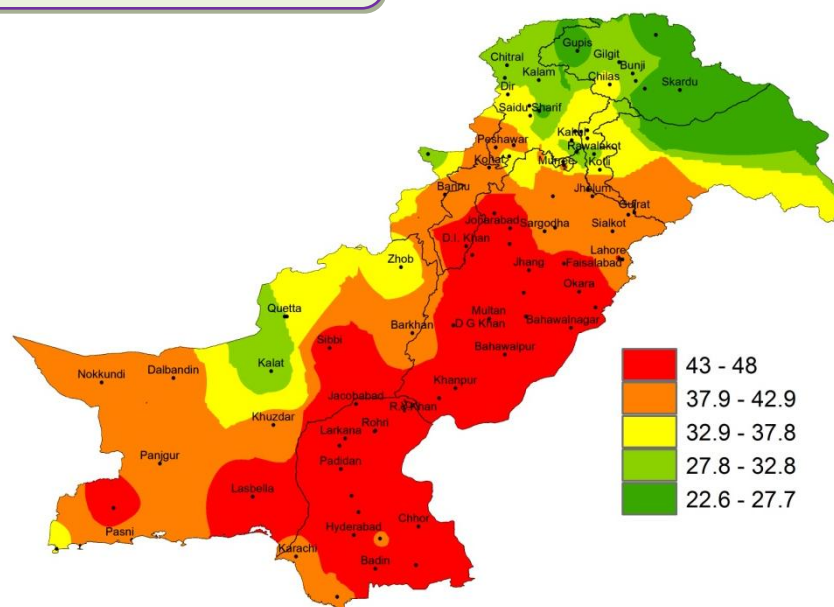
Eastern Balochistan (Usta Muhammad)

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

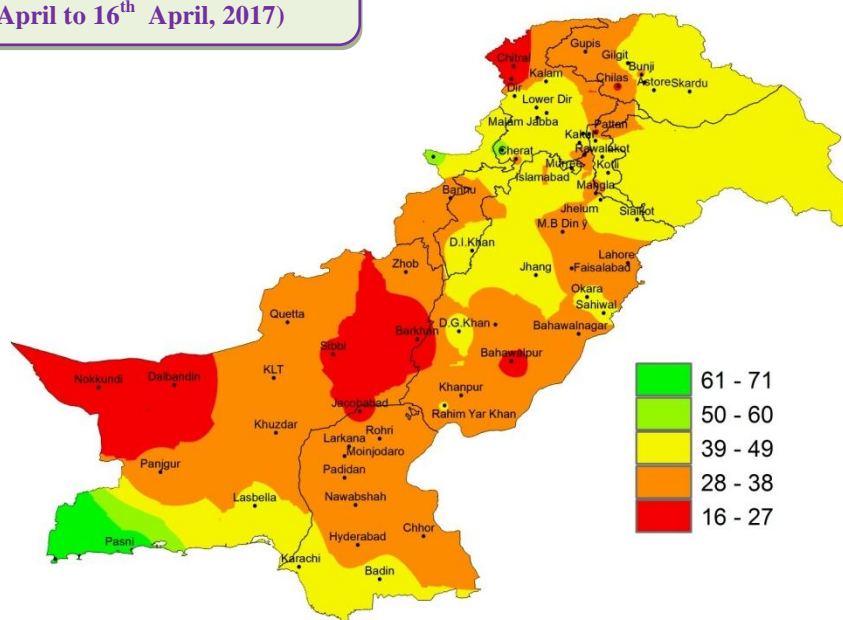
Mean Maximum Temperature (°C) during the
Previous week (10th April to 16th April, 2017)



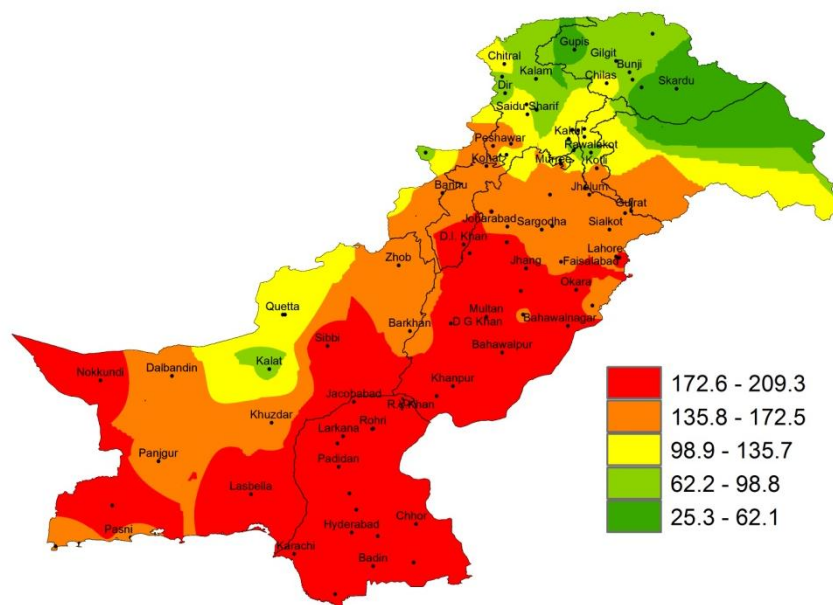
Highest maximum Temperature (°C) during the
Previous week (10th April to 16th April, 2017)



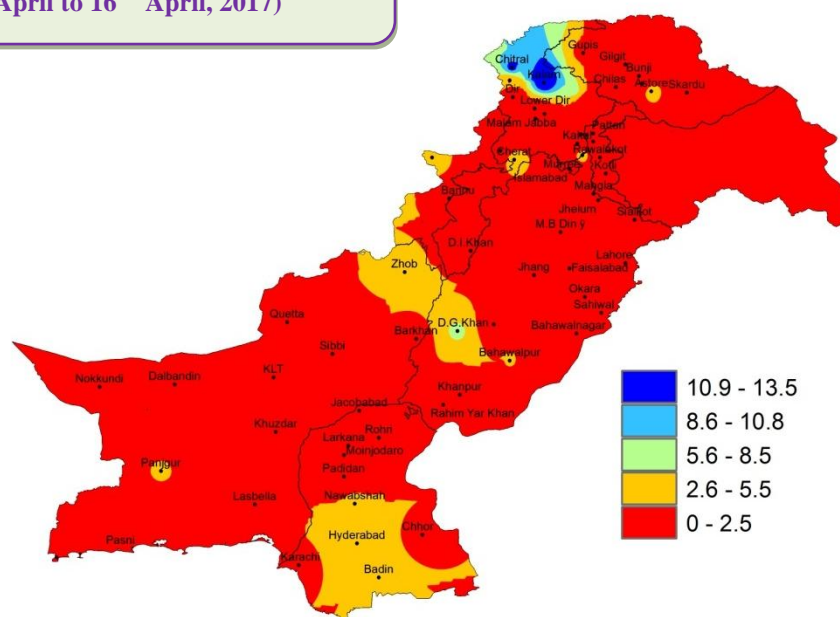
Mean Relative Humidity (%) during the
Previous week (10th April to 16th April, 2017)



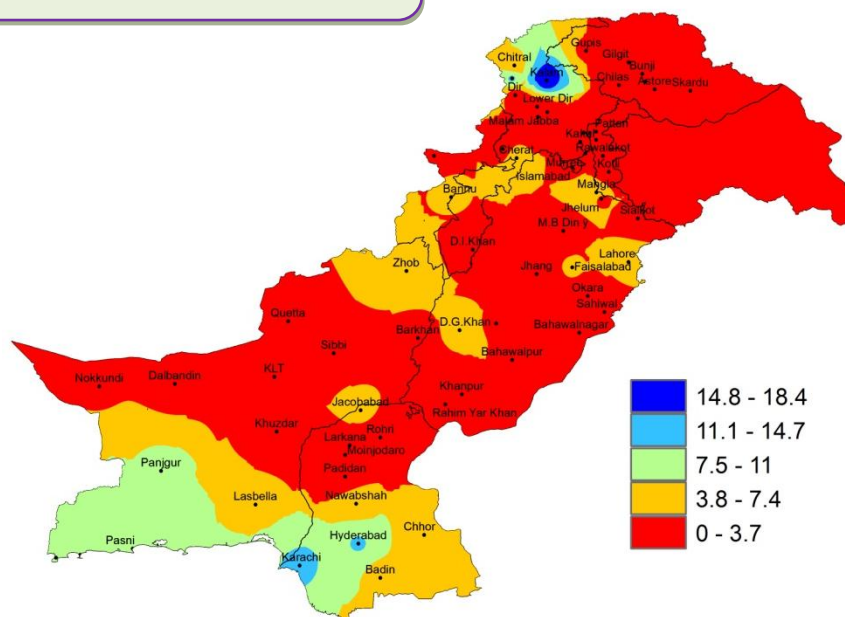
Total Growing Degree Days accumulated during the
Previous week (10th April to 16th April, 2017)



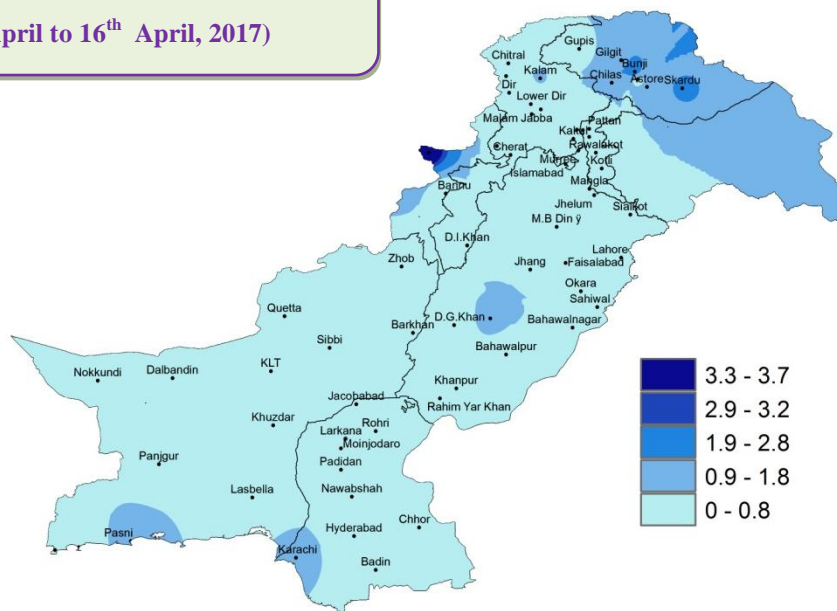
Mean Wind Speed (Knots) at 0800PST during the
Previous week (10th April to 16th April, 2017)



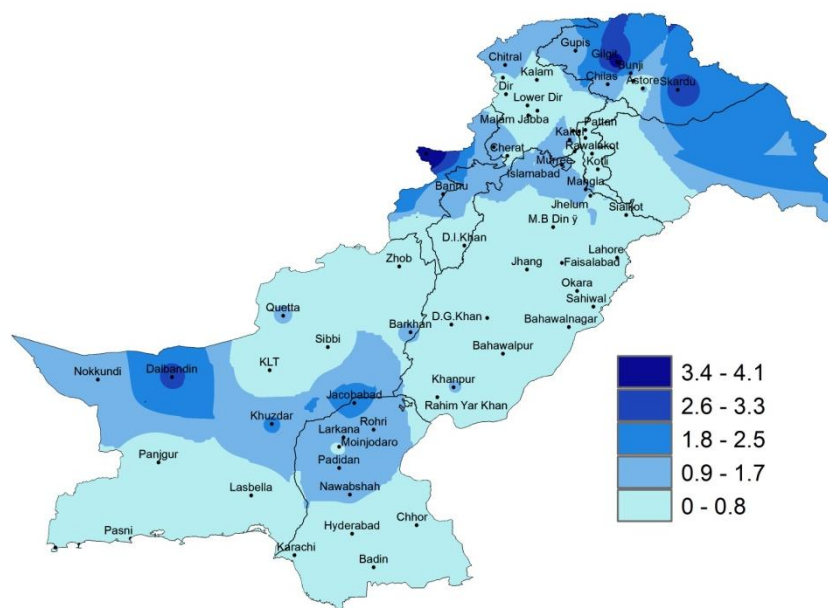
Mean Wind Speed (Knots) at 1700PST during the
Previous week (10th April to 16th April, 2017)



Mean Cloudiness (Oktas) at 0800PST during the
Previous week (10th April to 16th April, 2017)



Mean Cloudiness (Oktas) at 1700PST during the
Previous week (10th April to 16th April, 2017)



Weekly Weather Advisory for Farmers
(from 17th April to 23rd April, 2017)

Continental air is prevailing in most parts of the country. A fresh westerly wave is likely to approach western parts of the country on Thursday.

MONDAY (17-04-2017)

Mainly hot and dry weather is expected in most parts of the country, while very hot weather is expected in Sukkar, Shaheed Benazirabad, Larkana, Hyderabad, Naseerabad, Makran, Sibbi, Multan, Bahawalpur, Sahiwal, Faisalabad, Lahore, Sargodha, D.G Khan, D.I Khan, Bannu and Kohat divisions.

TUESDAY (18-04-2017)

Mainly hot and dry weather is expected in most parts of the country, while very hot weather is expected in Sukkar, Shaheed Benazirabad, Larkana, Hyderabad, Naseerabad, Makran, Sibbi, Multan, Bahawalpur, Sahiwal, Faisalabad, Lahore, Sargodha, D.G Khan, D.I Khan, Bannu and Kohat divisions.

WEDNESDAY (19-04-2017)

Mainly hot and dry weather is expected in most parts of the country. However, light rain-thunderstorm along with gusty winds is expected at a few places in Malakand division, upper FATA and Gilgit-Baltistan. Very hot weather is expected in Sukkar, Shaheed Benazirabad, Larkana, Hyderabad, Naseerabad, Makran, Sibbi, Multan, Bahawalpur, Sahiwal, Sargodha, Faisalabad, D.G Khan and D.I Khan divisions.

THURSDAY (20-04-2017)

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

FRIDAY (21-04-2017)

Mainly hot and dry weather is expected in most parts of the country. However rain-thunderstorm

along with gusty winds is expected at isolated places in Malakand, Hazara, D.I Khan, Quetta, Kalat, Rawalpindi divisions, FATA, Gilgit-Baltistan and Kashmir.

SATURDAY (22-04-2017)

Mainly hot and dry weather is expected in most parts of the country. However rain-thunderstorm along with gusty winds is expected at scattered places in Malakand, Hazara divisions, FATA and Gilgit-Baltistan; while at isolated places of Islamabad, Rawalpindi, Gujranwala, Sargodha, Lahore, Peshawar, Mardan, Bannu, Kohat, D.I Khan, Quetta divisions and Kashmir.

SUNDAY (23-04-2017)

Mainly hot and dry weather is expected in most parts of the country. However rain-thunderstorm along with gusty winds is expected at isolated places in Rawalpindi, Gujranwala, Sargodha, Lahore, Malakand, Hazara, Peshawar, Mardan, Bannu, Kohat, D.I Khan, Quetta, Zhob divisions, Islamabad, FATA, Gilgit-Baltistan and Kashmir.

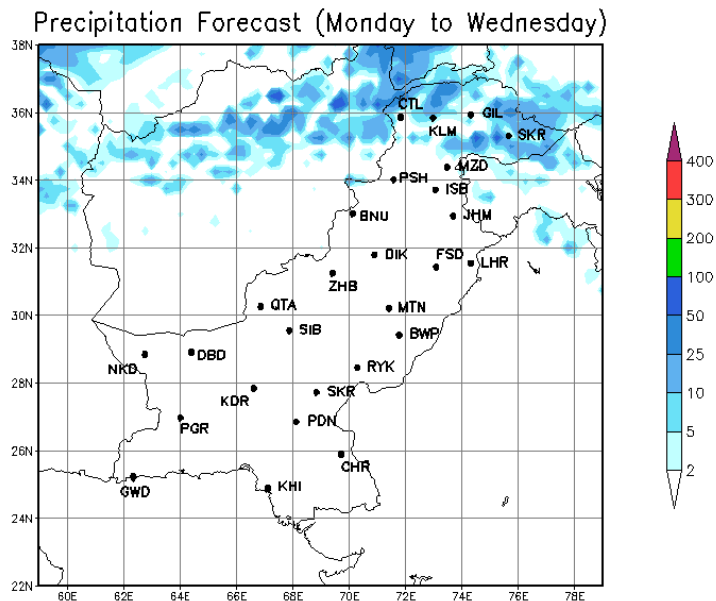
ADVISES FOR FARMERS

During the last week, hot and dry weather prevailed all over the country. This may continue in the same manner in coming days in lower half of the country. Keeping in view the expected weather conditions following advises are suggested for farming community.

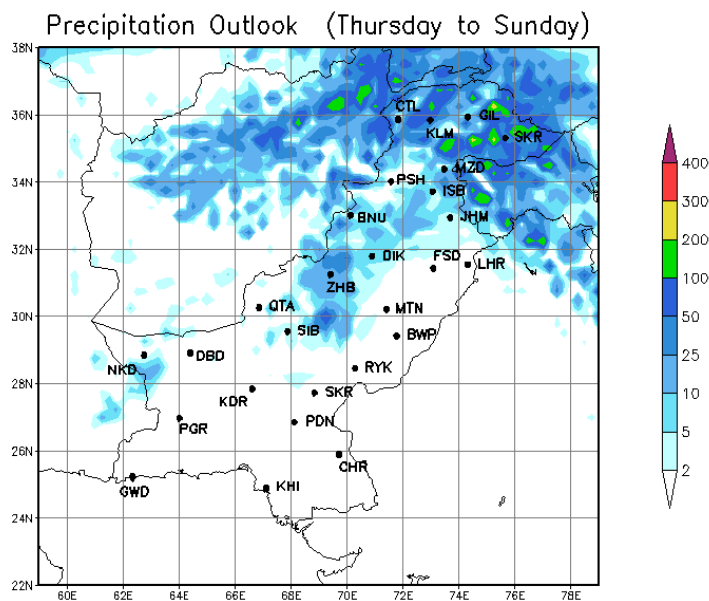
- Farmers of Punjab and southern KP may schedule the harvesting of wheat crop in accordance with the prevailing weather conditions.
- Farmers of irrigated areas may irrigate the crops as per requirement in accordance with the expected weather conditions.
- Removing weeds from the standing crops is very important as weeds utilize moisture and food which may be utilized by the crop. As a result considerable loss in yield occurs every year.

Weather Outlook from 17th to 23rd April, 2017

The forecast from 17th to 19th April, 2017 shows that light rainfall is expected at particular places in upper KP, GB and Kashmir. However, dry weather may prevail in rest of the country.



The outlook from 20th to 23rd April, 2017 shows that light to moderate rainfall is expected in KP, GB, Kashmir, besides at particular places in northern Balochistan and Punjab.



National Weather Data of Selected Cities
(Weekly Data from to 10th April to 16th April, 2017)

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	16.0	22.5	24.5	47	0.0	1.0	0.9	3.4	2.3
Badin	42.6	44.0	185.3	45	0.0	0.0	0.4	3.0	5.7
Bahawalnagar	42.0	45.5	189.5	34	0.0	0.0	0.0	0.0	0.9
Bahawalpur	42.8	45.0	190.7	26	0.0	0.3	0.6	2.6	3.1
Balakot	31.6	35.5	118.5	46	0.0	0.0	0.7	0.0	0.6
Bannu	37.9	40.4	151.7	28	0.0	0.0	1.1	2.0	4.3
Barkhan	35.9	38.5	165.3	18	0.0	0.4	0.9	0.9	1.1
Bunji	25.2	30.0	94.0	37	0.0	2.6	1.9	0.3	0.3
Cherat	28.4	34.0	116.5	37	0.0	0.0	0.7	3.4	4.9
Chhor	45.1	46.8	196.3	31	0.0	0.0	0.3	1.7	4.6
Chilas	28.6	34.5	109.8	26	0.0	1.0	1.1	0.6	2.0
Chitral	27.3	31.4	103.0	26	0.0	0.6	1.6	12.0	4.0
D.G.Khan	41.1	45.5	175.8	43	0.0	0.1	0.4	6.0	5.4
D.I.Khan	40.9	44.5	176.8	45	0.0	0.4	0.0	0.0	0.9
Dalbandin	39.0	40.0	142.3	19	0.0	0.4	2.6	0.0	2.3
Dir	30.4	34.0	91.0	45	0.0	0.0	0.6	0.3	1.7
Drosh	27.6	31.6	97.7	18	0.0	0.4	0.6	2.3	12.0
Faisalabad	39.7	43.5	167.5	41	0.0	0.1	0.0	0.6	0.7
Garidopatta	32.6	37.2	117.5	46	0.0	0.0	0.0	0.0	0.0
Gawader	35.7	38.5	162.8	64	0.0	0.0	0.3	0.0	10.0
Gilgit	25.3	31.5	73.3	40	0.0	1.7	3.7	0.0	2.6
Gupis	21.1	26.0	55.3	32	0.0	0.4	1.4	2.0	2.9

Hyderabad	43.2	46.2	197.9	32	0.0	0.4	0.3	5.4	11.4
Islamabad	33.9	36.5	126.1	43	0.0	0.0	1.3	0.0	3.4
Jacobabad	44.1	47.0	201.5	26	0.0	0.3	2.0	0.3	5.1
Jhang	40.7	44.0	172.9	44	0.0	0.7	0.0	0.0	0.6
Jhelum	37.5	40.0	152.8	40	0.0	0.7	0.7	0.3	2.9
Jiwani	33.7	35.5	171.5	71	0.0	0.6	0.0	1.7	10.6
Kakul	29.3	33.0	97.5	45	0.0	0.6	1.4	0.0	2.0
Kalam	24.1	30.0	61.5	38	0.0	0.9	0.3	13.6	18.4
Kalat	26.9	29.0	94.0	36	0.0	0.0	0.0	0.0	0.0
Karachi	38.1	42.0	183.1	46	0.0	1.1	0.7	1.4	11.4
Khanpur	43.4	46.0	187.9	34	0.0	0.0	0.9	0.0	0.0
Khuzdar	36.6	39.0	164.8	36	0.0	0.0	1.7	0.0	0.3
Kotli	34.9	37.8	144.4	39	0.0	0.0	0.0	2.3	1.1
Lahore	38.6	42.2	174.9	28	0.0	0.4	0.0	0.6	5.4
Larkana	45.6	48.0	209.3	34	0.0	0.9	1.6	1.7	2.0
Lasbella	42.9	46.5	186.4	39	0.0	0.0	0.3	0.3	6.3
Lower Dir	34.1	37.5	132.5	49	0.0	0.3	0.0	0.0	2.0
M.B Din	38.5	41.5	163.6	37	0.0	0.3	0.3	0.0	2.0
Malam Jabba	18.9	23.0	54.3	47	0.0	0.0	0.0	0.3	0.0
Mangla	36.8	39.3	148.4	36	0.0	0.6	1.1	0.6	6.6
Mir Khani	27.7	31.0	86.2	40	0.0	0.3	0.0	0.3	2.3
Moinjodaro	44.8	47.0	190.3	29	0.0	0.0	0.6	0.6	2.6
Multan(PBO)	41.0	45.1	185.7	29	0.0	1.1	0.4	0.0	3.1
Murree	23.6	27.0	93.7	26	0.0	0.0	0.0	3.4	2.0
Muzaffarabad	33.2	37.0	118.5	44	0.0	0.3	0.6	0.9	0.6
Nawabshah	45.4	46.5	193.8	36	0.0	0.3	0.9	3.1	6.1

Nokkundi	40.6	42.5	187.3	16	0.0	0.3	1.3	2.0	3.4
Okara	39.7	43.5	175.1	39	0.0	0.3	0.0	0.9	1.7
Padidan	44.8	46.0	200.8	36	0.0	0.6	1.2	0.9	1.3
Panjgur	38.1	39.0	163.0	29	0.0	0.4	0.3	2.6	8.6
Parachinar	24.5	29.0	93.3	51	0.0	3.7	4.1	3.0	3.0
Pasni	35.4	39.0	165.5	62	0.0	1.3	0.0	0.3	10.4
Pattan	32.2	37.0	127.8	22	0.0	0.0	0.0	0.0	2.0
Peshawar	36.9	40.4	150.7	51	0.0	0.7	1.6	0.3	2.9
Quetta	28.8	31.5	110.1	20	0.0	0.7	1.6	1.1	3.3
Rahim Yar Khan	44.6	47.2	194.5	38	0.0	0.0	0.6	0.0	0.9
Rawalakot	27.1	31.0	79.7	49	0.0	0.0	0.0	0.0	0.9
Rawalpindi	34.9	39.2	138.2	44	0.0	0.0	0.4	0.3	2.3
Rohri	43.9	45.5	205.5	31	0.0	0.0	0.9	0.0	0.3
Sahiwal	39.7	43.2	168.3	39	0.0	0.4	0.0	0.0	1.1
Saidu Sharif	31.2	35.0	117.1	45	0.0	0.0	0.0	0.0	0.0
Sialkot	36.0	39.5	150.1	44	0.0	0.0	0.7	1.4	2.3
Sibbi	45.4	47.0	206.5	26	0.0	0.0	0.6	0.9	1.7
Skardu	17.8	23.7	46.2	42	0.0	2.0	3.0	0.0	0.0
Tandojam	43.6	46.0	179.5	44	0.0	0.0	0.3	0.2	1.4
Usta.M	42.5	44.0	188.0	34	0.0	0.6	1.1	2.3	5.4
Zhob	33.1	35.5	143.3	28	0.0	0.0	0.6	3.6	7.3

*** 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 سبب باب (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)