

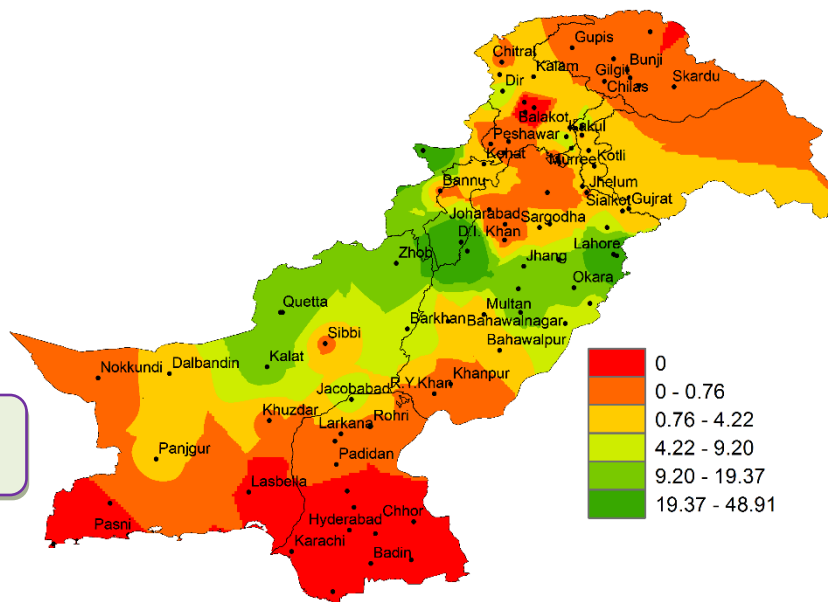
Weekly Weather and Crop Bulletin for Pakistan

**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 (26th March to 1st April, 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 (26th March to 1st April, 2018)

Above normal night temperatures were observed all over the country.

Province wise rainfall distribution reported as follows:

- Light to moderate rainfall observed at scattered places in GB and Azad Kashmir during the previous week.
- Light rainfall observed at scattered places in KP during the previous week.
- Rainfall reported as trace (Not Measureable) at a single station in Punjab.
- Dry weather was observed in Sindh and Balochistan.

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

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

Editor: Khalida Noureen (Meteorologist)

Past Weather of Provinces (26th March to 1st April, 2018)

Punjab

Rainfall reported as trace (Not Measureable) at a single station in Punjab during the previous week. Weekly maximum and minimum temperatures recorded as 35.8°C & 17.3°C respectively. For the recent week on average 151.3 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 43% and wind speed in the morning/evening recorded as 1.5/3.1 knots. During the previous week highest amount of rainfall was reported as trace (Not Measureable) at Islamabad & lowest minimum temperature was recorded as 10.5°C at Murree.

Balochistan

Dry weather reported from Balochistan during the previous week. Weekly maximum and minimum temperatures recorded as 34.6°C & 16.3°C respectively. For the recent week on average 139.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 35% and wind speed in the morning/evening recorded as 1.7/6.2 knots. During the previous week lowest minimum temperature was recorded as 4.0°C at Kalat.

Khyber Pakhtunkhwa

Light rainfall was observed at scattered places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 30.1°C & 12.5°C respectively. For the recent week on average 117.1 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 2.1/3.1 knots. During the previous week highest amount of rainfall was reported as 2 mm at Kalam & lowest minimum temperature was recorded as 1.8°C at Kalam.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall observed at scattered places in Gilgit-Baltistan and Azad Jammu & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 26.4°C & 8.8°C respectively. For the recent week on average 108.3 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 1.4/3.4 knots. During the previous week highest amount of rainfall was reported as 10.4 mm at Astore and lowest minimum temperature was recorded as 1.8°C at Skardu.

Sindh

Dry weather reported from Sindh during the previous week. Weekly maximum and minimum temperatures recorded as 41.7°C & 19.9°C respectively. For the recent week, on average 178.6 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 1.4/4.9 knots. During the previous week lowest minimum temperature was recorded as 12°C at Badin.

Past Weather for Major Agricultural Plains**(26th March to 1st April, 2018)****Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while average relative humidity observed as 50%. Mean night time temperature recorded as 14.4°C & for the recent week 132.1 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 0.0/1.1 Oktas while average relative humidity observed as 41%. Mean night time temperature recorded as 17.4°C & for the recent week 152.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.8/1.7 knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while average relative humidity observed as 47%. Mean night time temperature recorded as 17.1°C & for the recent week 169.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.8/1.4 knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded 0.0/0.0 Oktas while average relative humidity observed as 60%. Mean night time temperature recorded as 19.3°C & for the recent week 173.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.1 knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.4/0.5 Oktas while average relative humidity observed as 19%. Mean night time temperature recorded as 11.7°C & for the recent

week 103.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.5/3.3 knots.

Past Weather for Sub-Regional Agricultural Plains (26th March to 1st April, 2018)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.3/0.7 Oktas while average relative humidity observed as 34%. Mean night time temperature recorded as 20.2°C & for the recent week 168.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/5.3 knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.0/1.5 Oktas while average relative humidity observed as 41%. Mean night time temperature recorded as 20.7°C & for the recent week 157.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/3.7 knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.3/1.3 Oktas while average relative humidity observed as 23%. Mean night time temperature recorded as 15.4°C & for the recent week 128.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.7/5.0 knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/1.0 Oktas while average relative humidity observed as 45%. Mean night time temperature recorded as 11.3°C & for the recent week 84.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.7/0.7 knots.

D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.4/0.5 Oktas while average relative

humidity observed as 56% Mean night time temperature recorded as 19.3°C & for the recent week 162.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/1.3 knots.

Peshawar

Rainfall reported as Trace (Not Measureable) from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.0/2.8 Oktas while average relative humidity observed as 62%. Mean night time temperature recorded as 14.7°C & for the recent week 135.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.0/6.3 knots.

Kalam

Rainfall reported as 2.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.0/3.8 Oktas while average relative humidity observed as 44%. Mean night time temperature recorded as 3.3°C & for the recent week 67.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/1.7 knots.

Gilgit

Rainfall reported as 2.0mm from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.1/4.2 Oktas while average relative humidity observed as 39%. Mean night time temperature recorded as 6.1°C & for the recent week 81.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.3 knots.

Skardu

Dry weather reported from Skardu during the week; However, cloudiness in the morning/evening recorded as 2.9/3.7 Oktas while average relative humidity observed as 31%. Mean night time temperature recorded as 2.4°C. Wind speed recorded in the morning/evening as 0.0/3.7 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)

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

Wheat (*Galaxy*); Very Good, Wax Maturity stage completed in irrigated Conditions.

Lower Sindh (Tandojam)

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

Wheat (*Sindhu*); Crop has been harvested.

Northern Baluchistan (Quetta)

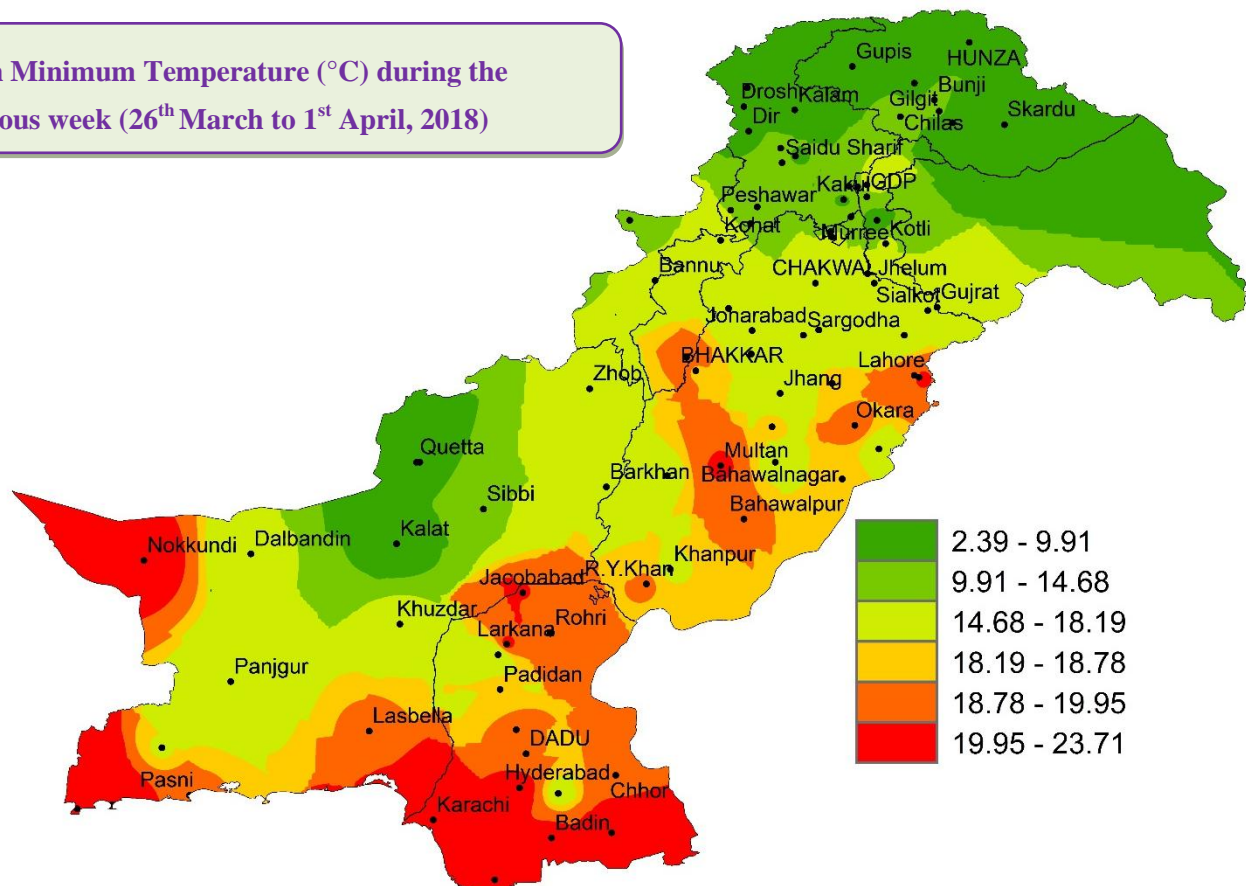
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

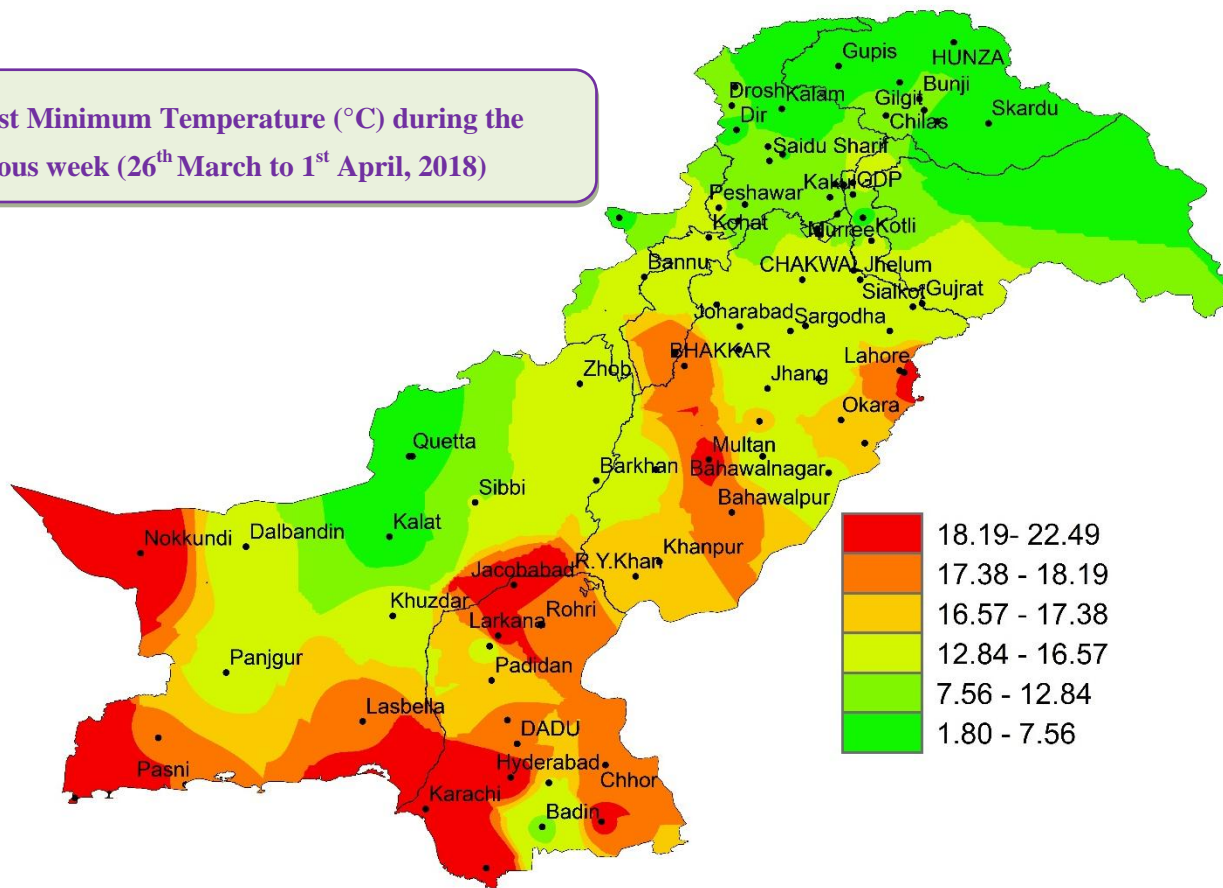
There is presently no crop grown in the fields of RAMC Usta Muhammad.

Wheat (*Galaxy*); Crop has been harvested.

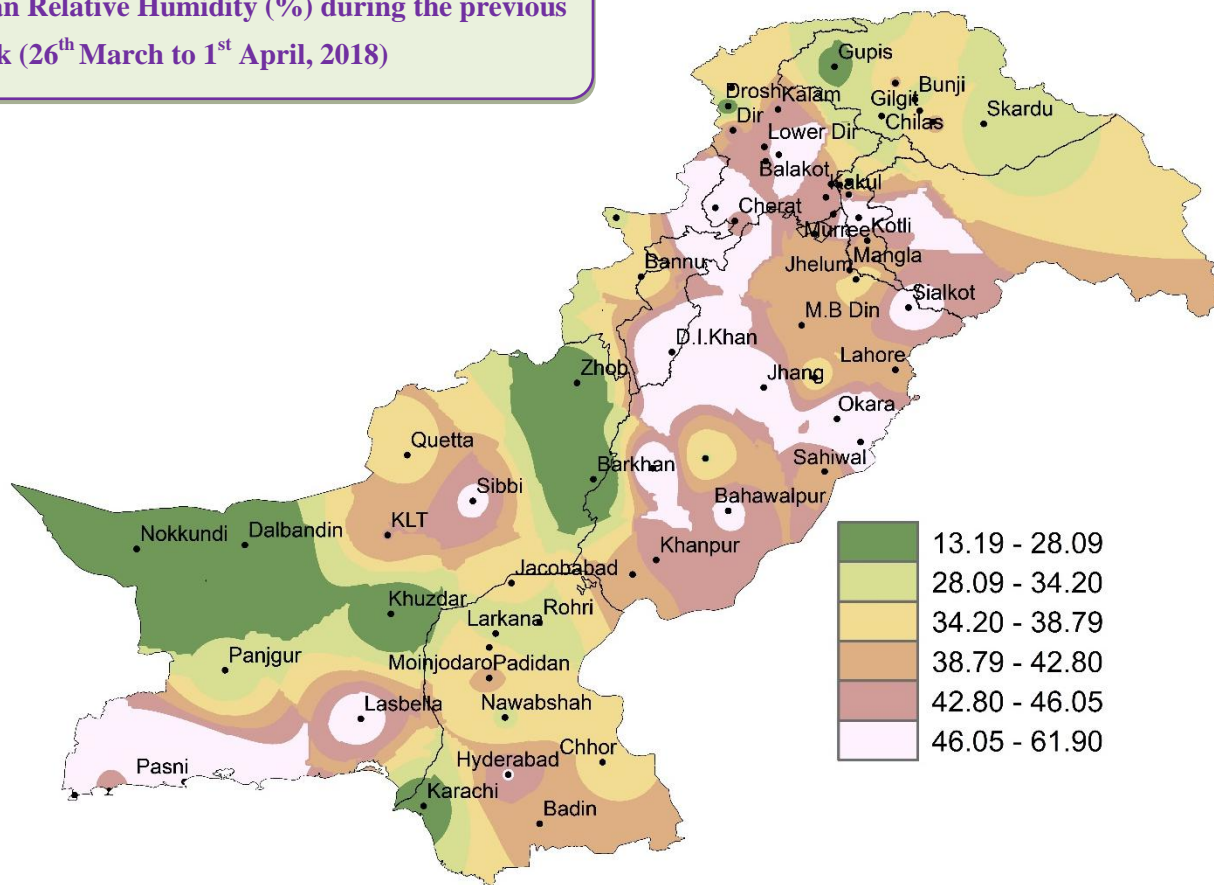
Mean Minimum Temperature (°C) during the Previous week (26th March to 1st April, 2018)



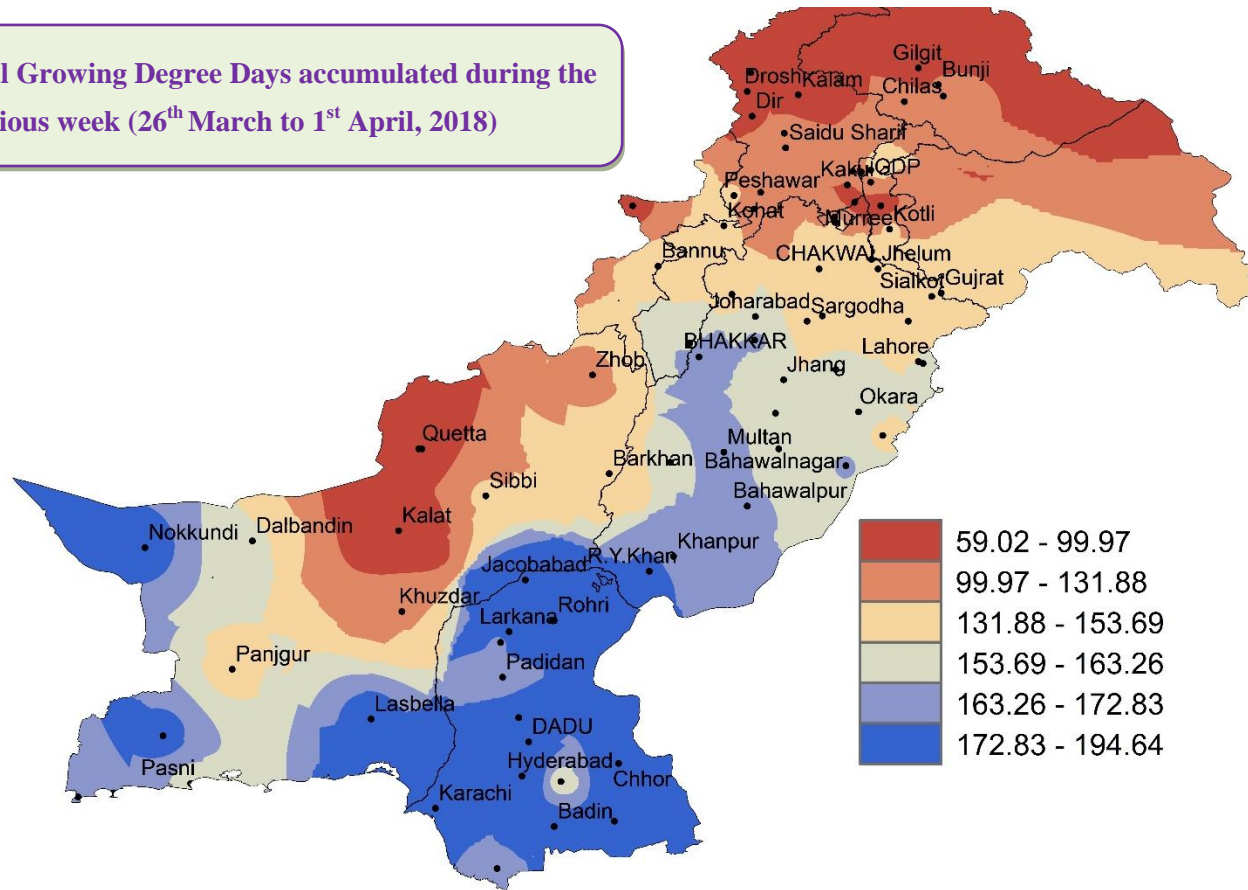
Lowest Minimum Temperature (°C) during the Previous week (26th March to 1st April, 2018)



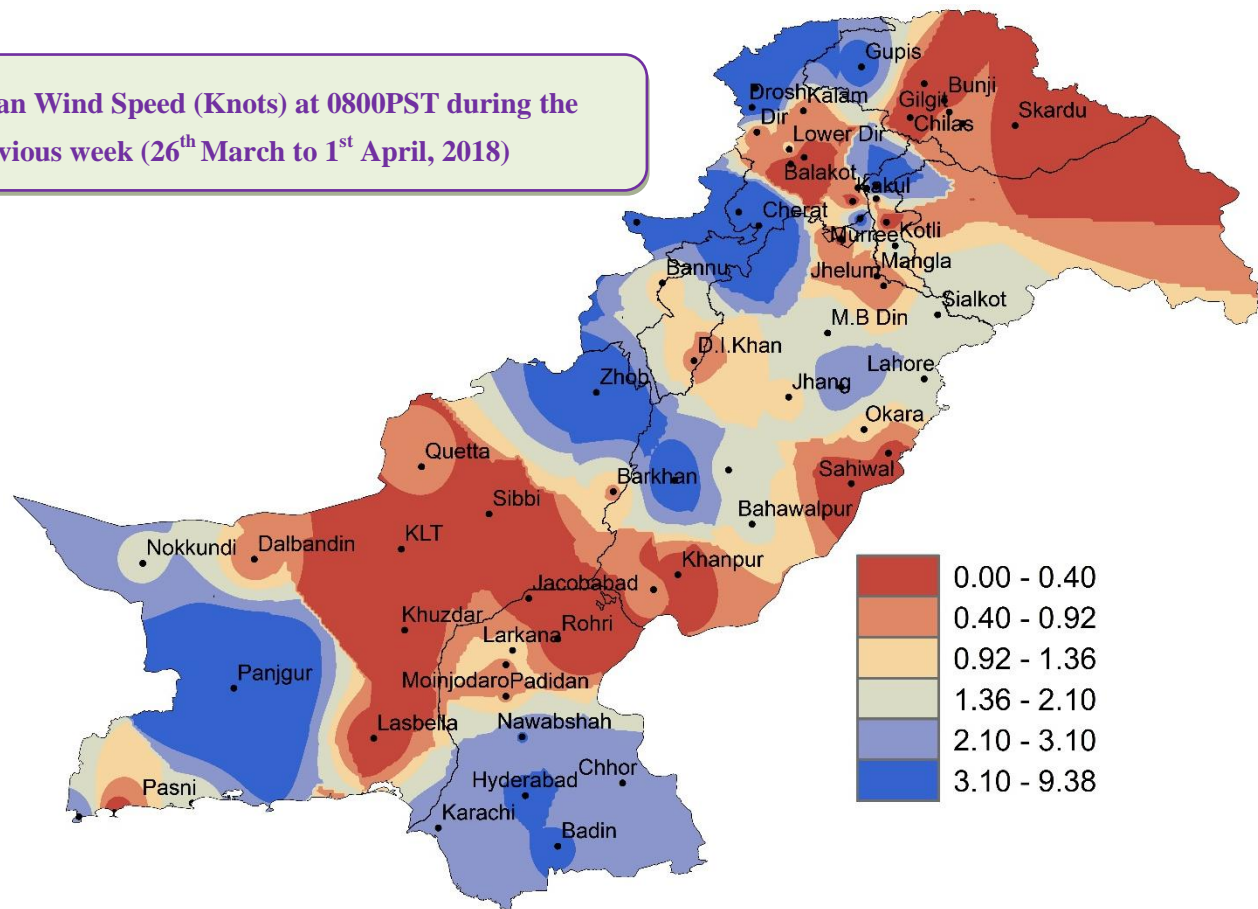
Mean Relative Humidity (%) during the previous week (26th March to 1st April, 2018)



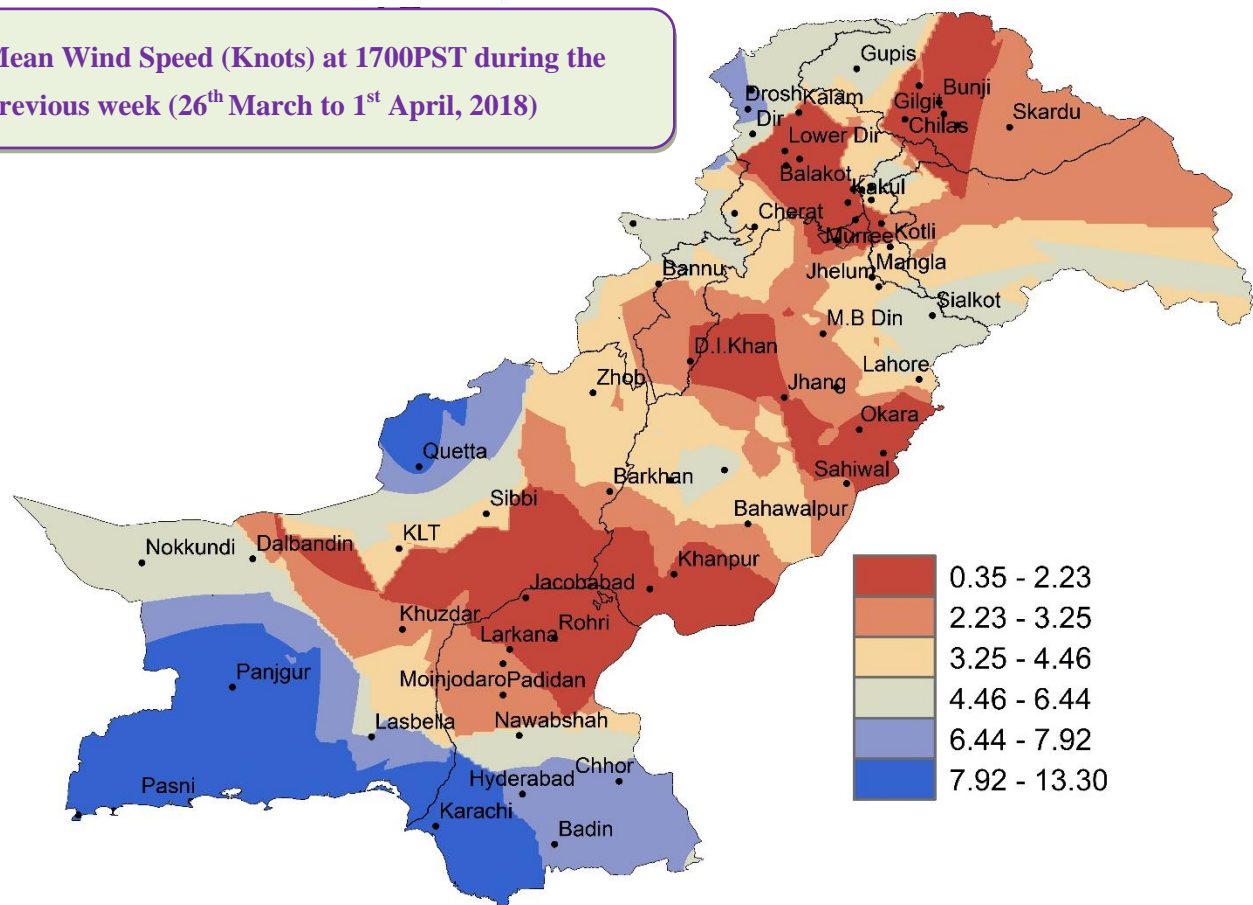
Total Growing Degree Days accumulated during the previous week (26th March to 1st April, 2018)



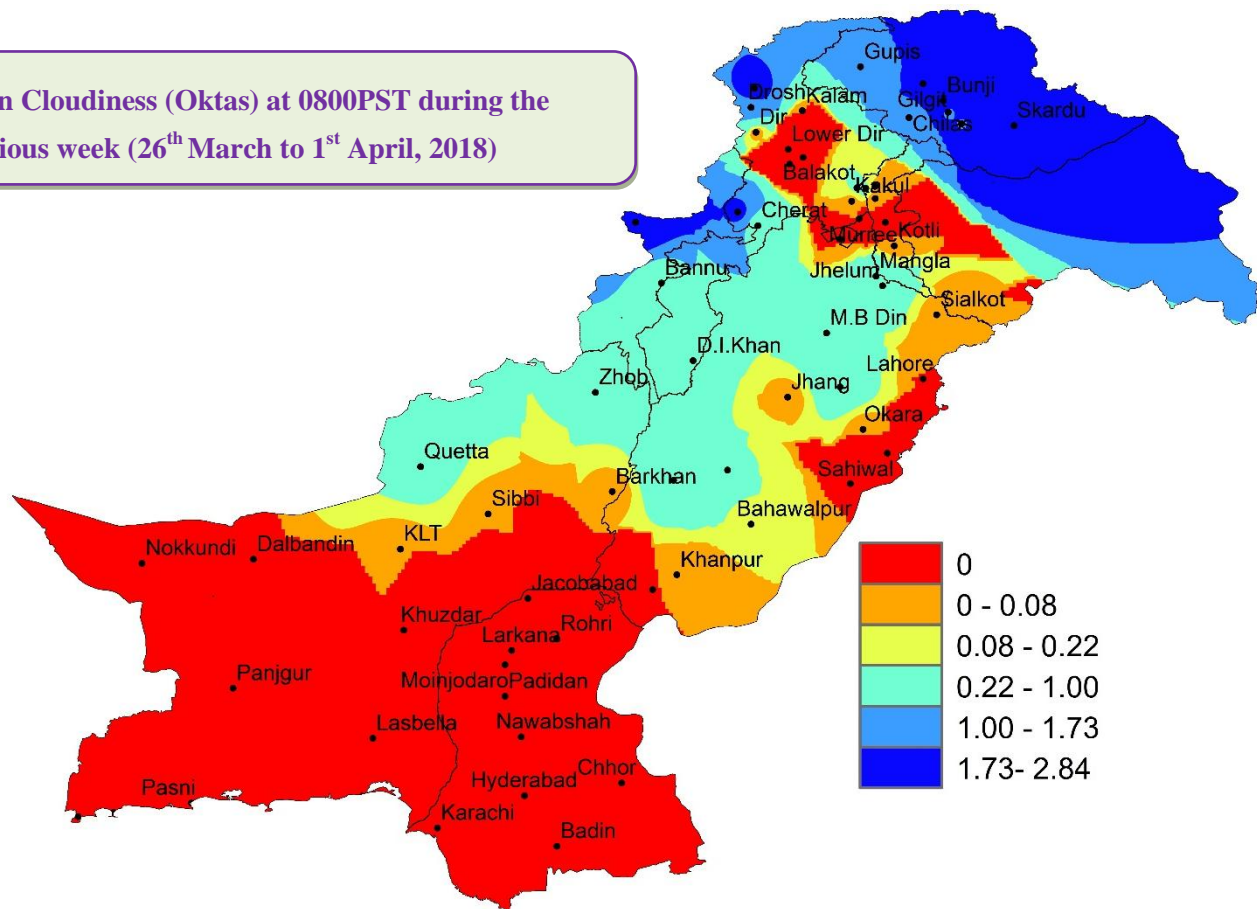
Mean Wind Speed (Knots) at 0800PST during the previous week (26th March to 1st April, 2018)



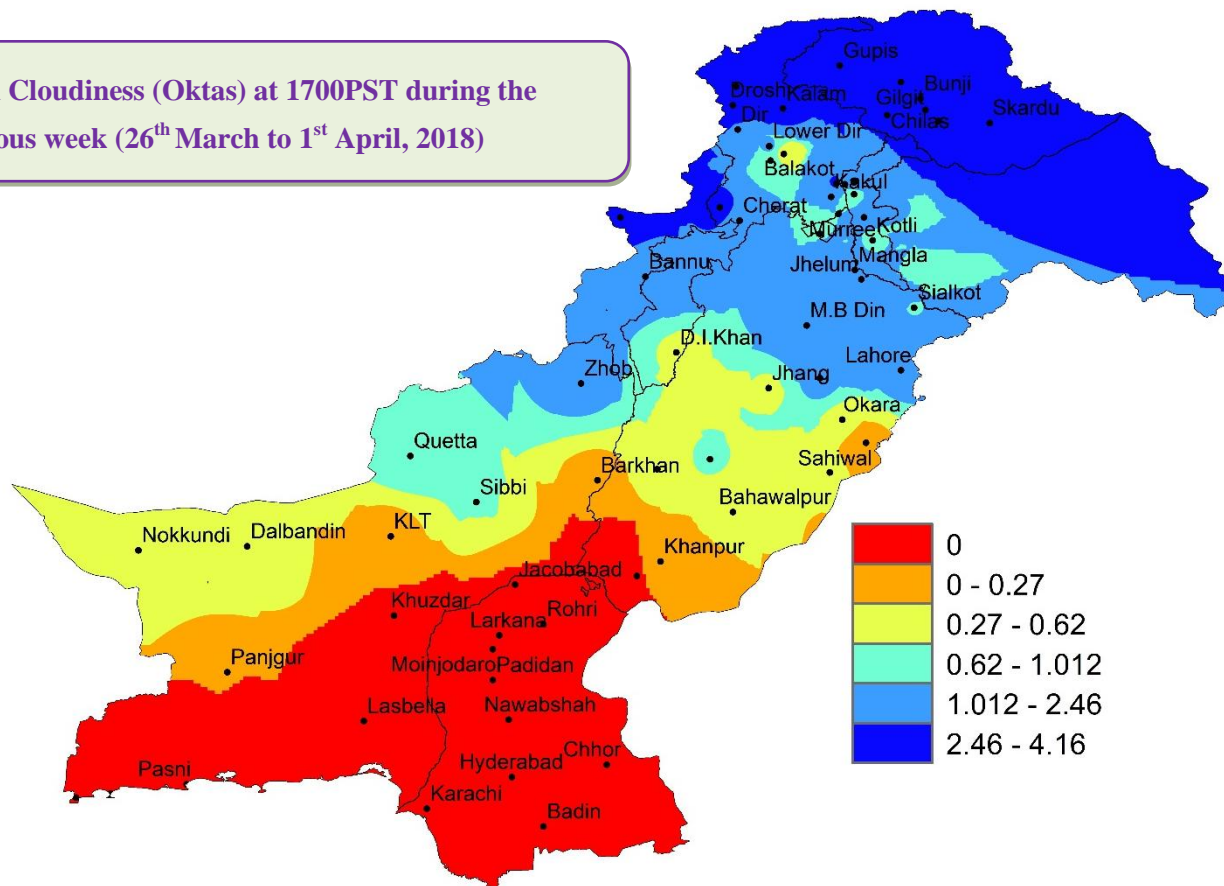
Mean Wind Speed (Knots) at 1700PST during the previous week (26th March to 1st April, 2018)



Mean Cloudiness (Oktas) at 0800PST during the previous week (26th March to 1st April, 2018)



Mean Cloudiness (Oktas) at 1700PST during the previous week (26th March to 1st April, 2018)



Weekly Weather Advisory for Farmers
(2nd April to 8th April, 2018)

A westerly wave is likely to affect western parts of the country on Monday.

MONDAY (02-04-2018)

Mainly dry weather is expected in most parts while hot and partly cloudy weather in central and southern parts of the country. However, light rain-thunderstorm is expected at a few places in Malakand division, upper FATA, Kashmir and its adjoining areas.

TUESDAY (03-04-2018)

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

WEDNESDAY (04-04-2018)

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

THURSDAY (05-04-2018)

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at few places in Quetta, Zhob D.I khan divisions, upper FATA, Kashmir and its adjoining hilly areas.

FRIDAY (06-04-2018)

Mainly dry weather is expected in most parts of the country. However, rain-thunderstorm is expected at few places in Quetta, Zhob, Kalat, Hazara, Malakand divisions, upper FATA, Kashmir and its adjoining hilly areas.

SATURDAY (07-04-2018)

Mainly dry weather is expected in most parts of the country. However, light rain-thunderstorm with gusty winds is expected at a few places in Quetta, Zhob, Kalat, Hazara, Malakand divisions, upper FATA, Kashmir and its adjoining hilly areas.

SUNDAY (08-04-2018)

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

ADVISES FOR FARMERS

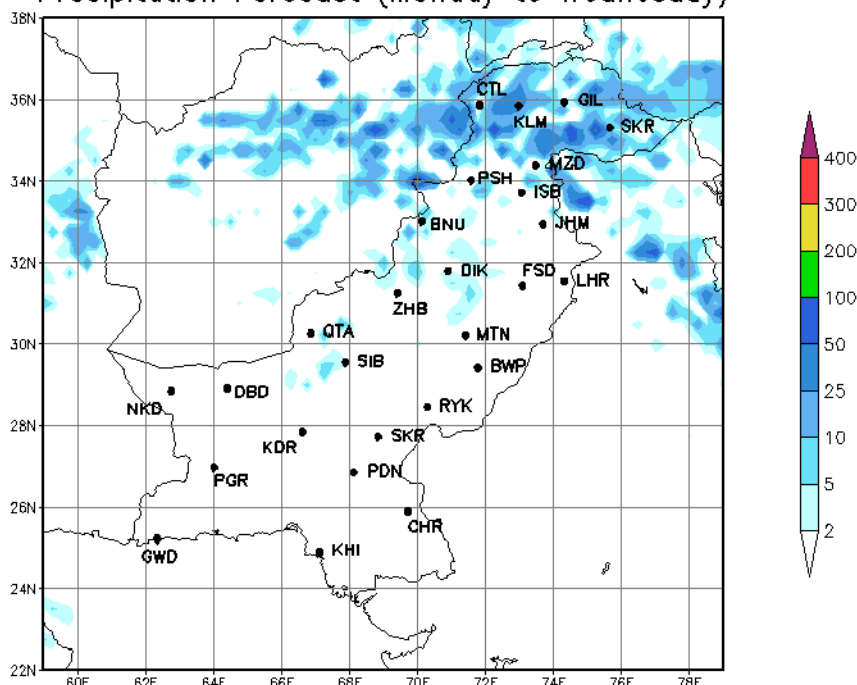
During the last week, dry weather was observed in most of the agricultural plains of the country. In the next week light to moderate rainfall may occur in the agricultural plains of the country. Accordingly, following advises are suggested for the farming community.

- Wheat crop is at heading-maturity stages in the upper half of the country, while has been harvested in Sindh province. Farmers are advised to schedule their harvesting by keeping in view the weather forecast.
- Dust/sand storm may occur in areas of matured wheat crop, accordingly measures may be taken to preserve the grains and residue after harvesting.
- Crops/Nurseries may be irrigated according to the rainfall prediction.
- Removal of weeds from the fields must be ensured.

Weather Outlook from 2nd April to 8th April, 2018

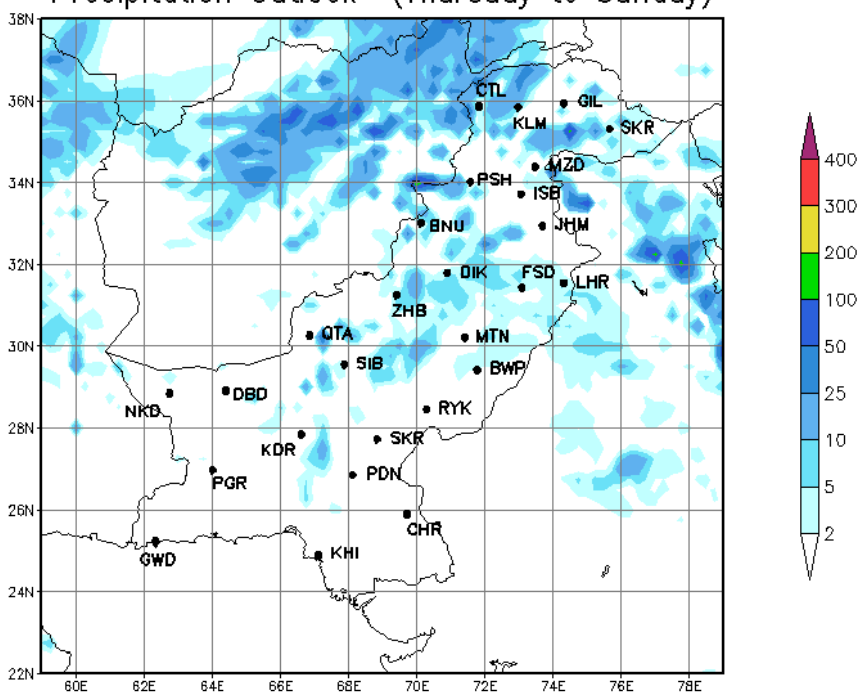
The outlook for the period 2nd April to 4th April, 2018 shows that light to moderate rainfall is expected at scattered places in GB and KP. Light rainfall may occur at isolated places in northern Balochistan. Dry weather is expected in the rest of the country.

Precipitation Forecast (Monday to Wednesday)



The outlook for the period 5th April to 8th April, 2018 shows that light to moderate rainfall at scattered places may occur in GB, KP and light rainfall may occur at isolated places in Balochistan and Punjab.

Precipitation Outlook (Thursday to Sunday)



National Weather Data of Selected Cities (26th March to 1st April, 2018)

Stations	Minimum Night time Temperature (°C)		Growing Degree Days	Relative Humidity (%)	Rainfall (mm)	Cloudiness (°) 0800 PST	Cloudiness (Oktas) 1700 PST	Wind Speed (Knots) 0800 PST	Wind Speed (Knots) 1700 PST
	Mean	Lowest							
Astore	2.6	2.0	***	40	10.4	1.7	2.7	0.9	2.0
Badin	20.6	12.0	179.0	40	0	0.0	0.0	3.1	5.7
Bahawalnagar	18.6	16.5	164.0	40	0	0.0	0.3	0.0	3.7
Bahawalpur	19.0	18.1	164.0	47	0	0.1	0.3	1.4	2.3
Balakot	11.9	11.1	117.0	45	0	0.3	3.2	0.7	1.0
Bannu	16.4	15.5	147.0	37	0	0.4	1.7	1.1	3.0
Barkhan	17.1	16.0	135.0	16	0	0.0	0.0	0.9	1.6
Bunji	11.9	10.6	102.0	30	0	2.9	4.0	0.0	1.7
Cherat	13.9	10.0	105.0	43	0	0.6	2.0	5.7	4.3
Chhor	19.6	17.8	185.0	38	0	0.0	0.0	2.3	6.0
Chilas	13.1	11.5	114.0	29	0	1.0	2.5	0.3	0.7
Chitral	8.9	7.8	88.0	39	0	2.1	4.0	6.3	4.0
D.G.Khan	17.7	16.2	160.0	53	0	0.6	0.5	4.3	5.3
D.I.Khan	19.3	18.0	163.0	57	0	0.4	0.5	0.9	1.3
Dalbandin	16.4	15.0	155.0	18	0	0.0	0.6	0.6	2.8
Dir	7.9	7.0	93.0	45	0	0.0	2.3	0.4	2.2
Drosh	10.0	8.0	94.0	23	0	1.6	3.2	3.4	13.2
Faisalabad	17.4	15.7	153.0	41	0	0.0	1.1	1.8	1.7
Garidopatta	12.7	11.5	126.0	48	0	0.0	0.5	0.3	1.7
Gawader	23.1	22.5	173.0	43	0	0.0	0.0	0.0	12.0
Gilgit	6.1	4.5	81.0	39	2	2.1	4.2	0.0	3.3
Gupis	6.9	5.0	***	26	4	1.3	3.8	3.7	8.0
Hyderabad	21.1	20.0	195.0	46	0.00	0.0	0.0	3.1	10.7

Islamabad	16.9	14.5	142.0	42	0.01	0.0	1.0	0.3	1.8
Jacobabad	20.0	19.0	183.0	36	0.00	0.0	0.0	0.0	1.0
Jhang	17.1	15.8	154.0	52	0.00	0.0	0.5	1.1	1.0
Jhelum	16.5	15.0	148.0	37	0.00	0.4	1.2	0.9	3.7
Jiwani	23.7	21.5	167.0	52	0.00	0.0	0.0	2.9	9.6
Kakul	9.3	8.0	99.0	45	0.00	0.0	1.0	0.0	1.3
Kalam	3.3	1.8	68.0	44	2.00	0.0	3.8	0.6	1.7
Kalat	5.3	4.0	59.0	43	0.00	0.0	0.0	0.0	0.0
Karachi	22.8	20.8	178.0	24	0.00	0.0	0.0	2.6	15.7
Khanpur	18.0	17.0	170.0	45	0.00	0.0	0.0	0.0	1.3
Khuzdar	17.6	16.0	129.0	21	0.00	0.0	0.0	0.0	4.0
Kotli	15.6	14.0	138.0	41	0.00	0.0	0.7	1.7	2.0
Lahore	20.7	19.6	158.0	41	0.00	0.0	1.5	2.0	3.7
Larkana	20.6	20.0	185.0	31	0.00	0.0	0.0	1.1	2.0
Lasbella	19.1	18.0	178.0	49	0.00	0.0	0.0	0.0	4.3
Lower Dir	12.0	10.0	121.0	45	0.00	0.0	1.2	1.1	2.0
M.B Din	18.2	15.0	152.0	42	0.00	0.4	1.8	2.0	2.0
Malam Jabba	8.7	7.0	***	50	0.00	0.0	0.3	0.0	0.0
Mangla	15.6	13.3	140.0	40	0.00	0.4	2.5	0.6	5.7
Mir Khani	10.8	9.5	106.0	36	1.00	1.6	2.7	0.6	0.7
Moinjodaro	16.1	15.0	170.0	37	0.00	0.0	0.0	0.9	2.7
Multan(PBO)	20.2	18.7	168.0	34	0.00	0.3	0.7	1.7	5.3
Murree	11.3	10.5	84.0	45	0.00	0.0	1.0	3.7	0.7
Muzaffarabad	12.1	11.0	121.0	44	0.00	0.3	0.8	1.7	4.0
Nawabshah	18.9	17.5	182.0	33	0.00	0.0	0.0	3.1	3.3
Nokkundi	21.6	20.5	177.0	13	0.00	0.0	0.5	2.0	4.0

Okara	19.4	17.0	160.0	52	0.00	0.0	0.5	1.1	1.0
Padidan	18.6	17.0	167.0	40	0.00	0.0	0.0	0.9	2.4
Panjgur	16.7	16.0	150.0	30	0.00	0.0	0.0	9.4	14.3
Parachinar	10.9	6.5	91.0	34	0.00	2.7	3.2	5.0	5.5
Pasni	19.3	18.0	159.0	62	0.00	0.0	0.0	1.7	11.3
Pattan	18.4	16.0	146.0	24	0.00	0.0	2.2	6.6	7.7
Peshawar	14.7	13.5	135.0	62	0.01	2.0	2.8	4.0	6.3
Quetta	11.7	9.2	103.0	19	0.00	0.4	0.5	0.5	3.3
Rahim Yar Khan	18.9	17.0	176.0	40	0.00	0.0	0.0	0.6	2.0
Rawalakot	6.8	5.5	77.0	55	0.00	0.0	1.7	0.0	3.2
Rawalpindi	14.4	12.0	132.0	50	0.00	0.0	0.6	0.0	0.9
Rohri	19.0	18.0	180.0	34	0.00	0.0	0.0	0.0	0.0
Sahiwal	17.3	16.6	151.0	50	0.00	0.0	0.0	0.3	0.3
Saidu Sharif	12.8	10.0	118.0	44	0.00	0.0	0.8	0.0	0.0
Sialkot	15.8	14.5	139.0	48	0.00	0.0	1.0	2.0	6.3
Sibbi	13.9	13.0	136.0	47	0.00	0.0	0.7	0.0	1.7
Skardu	2.4	1.8	***	31	0.00	2.9	3.7	0.0	3.7
Tandojam	17.1	15.5	169.0	47	0.00	0.0	0.0	0.8	1.4
Usta.M	19.3	19.0	174.0	60	0.00	0.0	0.0	0.0	1.1
Zhob	15.4	13.0	128.0	23	0.00	0.3	1.3	4.7	5.0

*** Shows that data was not available.

*Trace shows not-measurable data

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)