

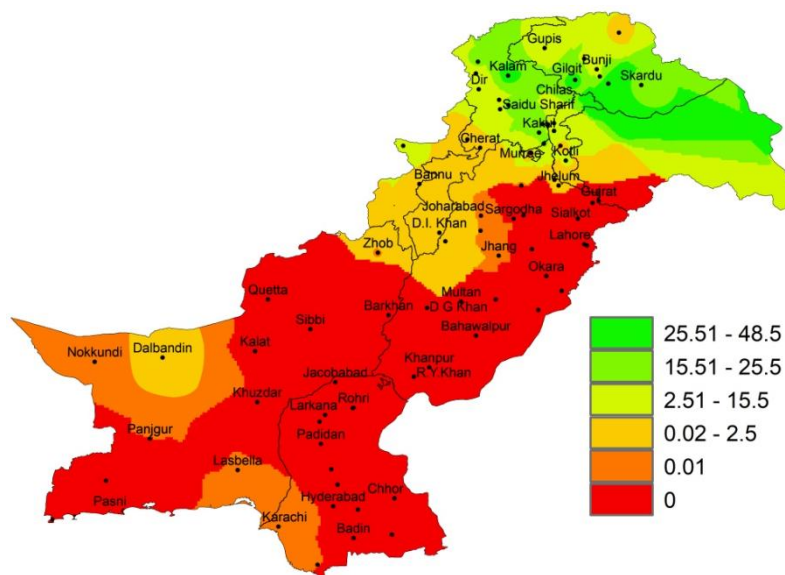
Weekly Weather and Crop Bulletin for Pakistan

**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 (25th March to 31st March, 2019)**



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
AgMIP findings	12

Highlights of Past Weather (25th March to 31st March, 2019)

Above normal night time temperature were observed all over the country during the last week.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed at scattered places in Gilgit-Baltistan, Azad Jammu & Kashmir and Khyber Pakhtunkhwa during the previous week.
- Light rainfall observed at isolated places in Punjab, Balochistan and Sindh during the previous week.

Patron-in-Chief: Riaz Khan (Director General)

Editor-in-Chief: Dr. Muhammad Afzaal (Director)

Editor: Khalida Noureen (Meteorologist)

Past Weather of Provinces (25th March to 31st March, 2019)**Punjab**

Light rainfall observed at isolated places in Punjab during the week. Weekly maximum and minimum temperatures recorded as 31.6°C & 16.0°C respectively. For the recent week on average 131.4 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 59% and wind speed in the morning/evening recorded as 1.6/3.1 Knots. During the previous the highest precipitation was recorded as 17.0 mm at Murree while the lowest minimum temperature was recorded as 5.0°C at Murree.

Baluchistan

Light rainfall observed at a single station in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 30.4°C & 16.0°C respectively. For the recent week on average 125.7 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 2.2/3.6 Knots. During the previous week the highest precipitation recorded as 0.02 mm at Dalbandin while the lowest minimum temperature was recorded as 6.0°C at Kalat.

Khyber Pakhtunkhwa

Light to moderate rainfall observed at scattered places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 23.8°C & 8.5°C respectively. For the recent week on average 78.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 59% and wind speed in the morning/evening recorded as 1.2/1.2 Knots. During the previous week the highest precipitation recorded as 29.0 mm at Kalam while the lowest minimum temperature was recorded as -4.0°C at Kalam.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall observed at scattered places in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 20.8°C & 7.0°C respectively. For the recent week on average 62.5 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 50% and wind speed in the morning/evening recorded as 1.2/2.4 Knots. During the previous week the highest precipitation recorded as 48.3 mm at Astore while the lowest minimum temperature was recorded as -2.5°C at Astore.

Sindh

Light rainfall observed at a single station in Sindh during the week. Weekly maximum and minimum temperatures recorded as 37.6°C & 20.1°C respectively. For the recent week, on average 165.6 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 47% and wind speed in the morning/evening recorded as 1.6/2.6 Knots. During the previous week the highest precipitation recorded as 0.01 mm at Karachi while lowest minimum temperature was recorded as 14.0°C at Padidan.

Past Weather for Major Agricultural Plains (25th March to 31st March, 2019)

Rawalpindi (Potohar region)

2.0 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 3.4/2.6 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 11.4°C & for the recent week 109.2 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)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.6/2.4 Oktas while, average relative humidity observed as 56%. Mean night time temperature recorded as 16.5°C & for the recent week 133.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/1.6 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.4/0.4 Oktas while, average relative humidity observed as 49%. Mean night time temperature recorded as 17.6°C & for the recent week 161.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.5/0.8 Knots.

Usta Muhammad (Eastern Baluchistan)

1.00 mm rainfall reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 1.4/0.7 Oktas while, average relative humidity observed as 63%. Mean night time temperature recorded as 18.5°C & for the recent week 148.3 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)

Trace (not measureable) rainfall reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 3.7/3.9 Oktas while, average relative humidity observed as 32%. Mean night time temperature recorded as 10.5°C & for the

recent week 81.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 5.7/6.1 Knots.

Past Weather for Sub-Regional Agricultural Plains (25th March to 31st March, 2019)

Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 2.6/3.1 Oktas while, average relative humidity observed as 71%. Mean night time temperature recorded as 18.5°C & for the recent week 146.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.8/3.1 Knots.

Lahore

Dry weather reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 3.6/3.7 Oktas while, average relative humidity observed as 52%. Mean night time temperature recorded as 16.0°C & for the recent week 129.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/4.9 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 2.0/2.9 Oktas while, average relative humidity observed as 38%. Mean night time temperature recorded as 9.9°C & for the recent week 94.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.0/5.9 Knots.

Murree

17.0 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 3.9/3.1 Oktas while, average relative humidity observed as 52%. Mean night time temperature recorded as 6.5°C & for the recent week 54.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.6/1.4 Knots.

D.I. Khan

2.00 mm rainfall reported from D.I. Khan during the week; however, cloudiness in the morning/evening

recorded as 1.6/2.7 Oktas while, average relative humidity observed as 57%. Mean night time temperature recorded as 16.6°C & for the recent week 137.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/1.4 Knots.

Peshawar

0.21 mm rainfall was reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.0/4.9 Oktas while, average relative humidity observed as 51%. Mean night time temperature recorded as 14.4°C & for the recent week 120.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/1.4 Knots.

Kalam

29.0 mm rainfall was reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 5.1/3.6 Oktas while, average relative humidity observed as 70%. Mean night time temperature recorded as -1.4°C & for the recent week 21.7 growing degree days accumulated by the end of last week. Calm weather recorded in the morning/evening.

Gilgit

14.8 mm rainfall was reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 6.0/6.4 Oktas while, average relative humidity observed as 46%. Mean night time temperature recorded as 8.0°C & for the recent week 70.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/2.3 Knots.

Skardu

21.8 mm rainfall was reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 5.9/5.4 Oktas while, average relative humidity observed as 49%. Mean night time temperature recorded as 3.0°C & for the recent week 30.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.1 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 wheat crop is grown in the fields of RAMC Faisalabad.

Wheat: *Very Good, Milk Maturity stage.*

Lower Sindh (Tandojam)

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

Northern Baluchistan (Quetta)

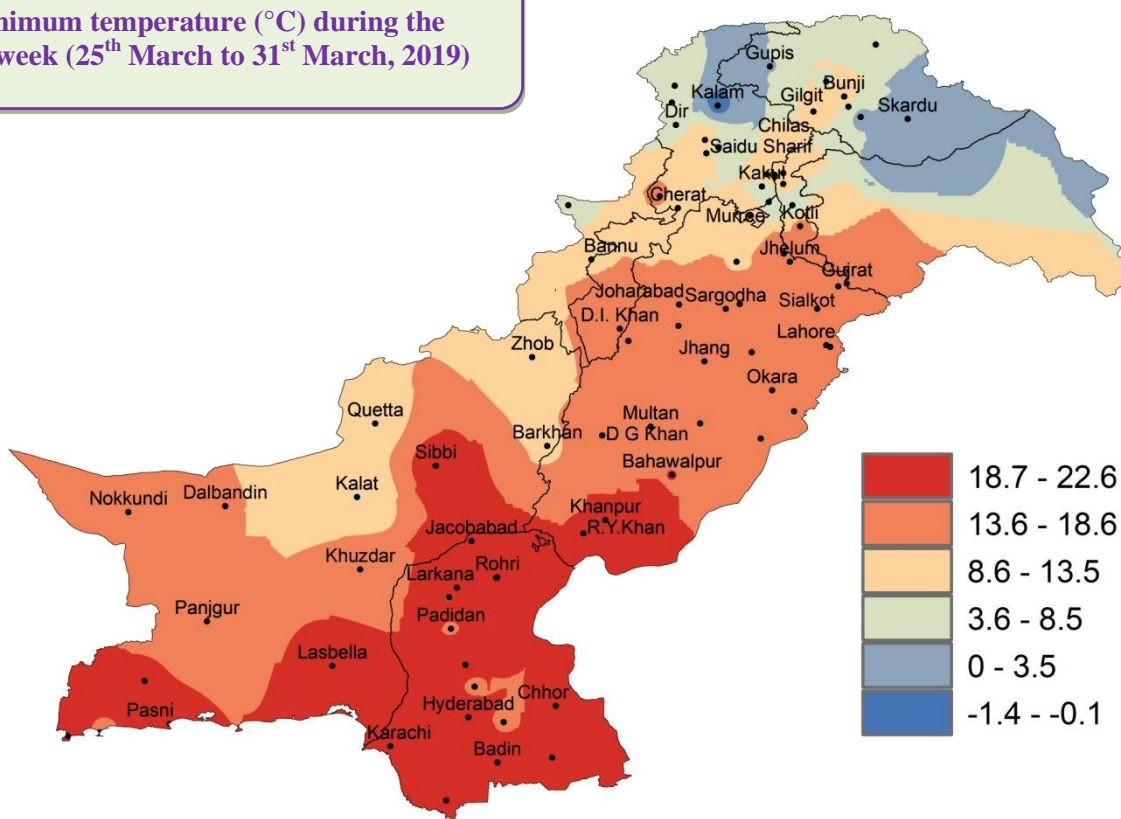
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

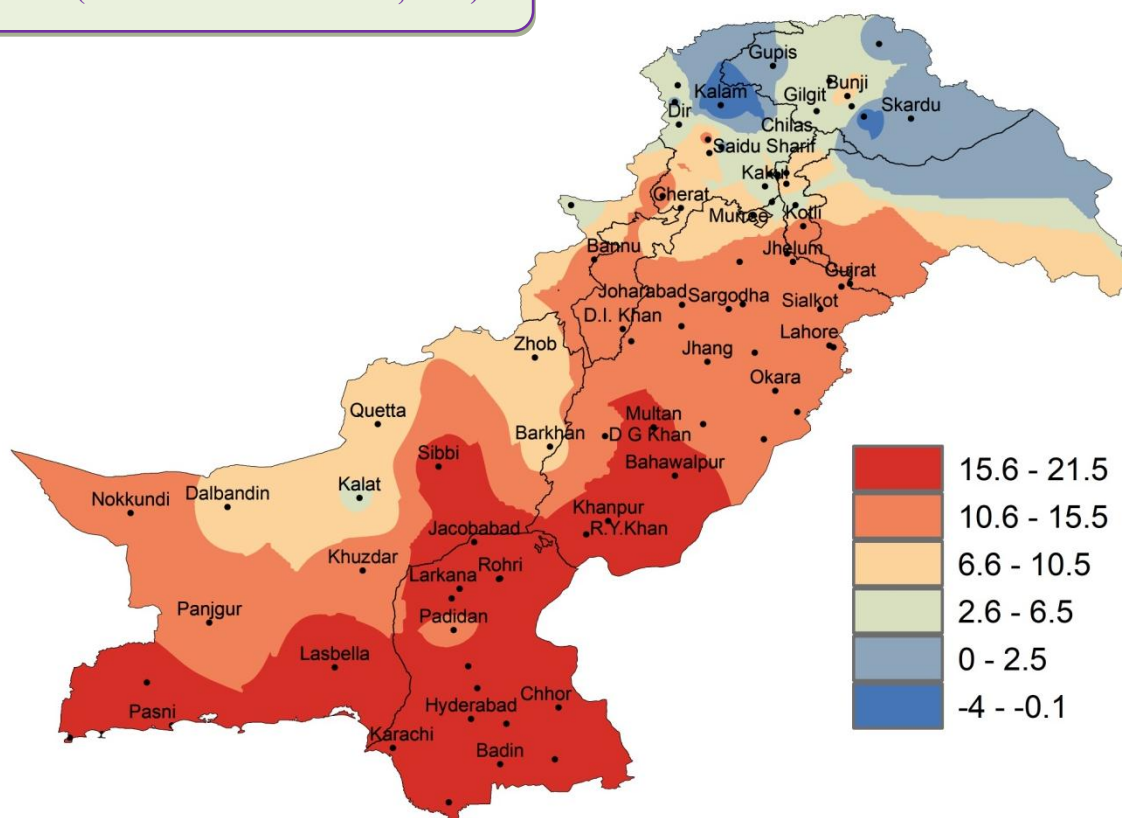
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

Wheat: *Good, Flowering stage.*

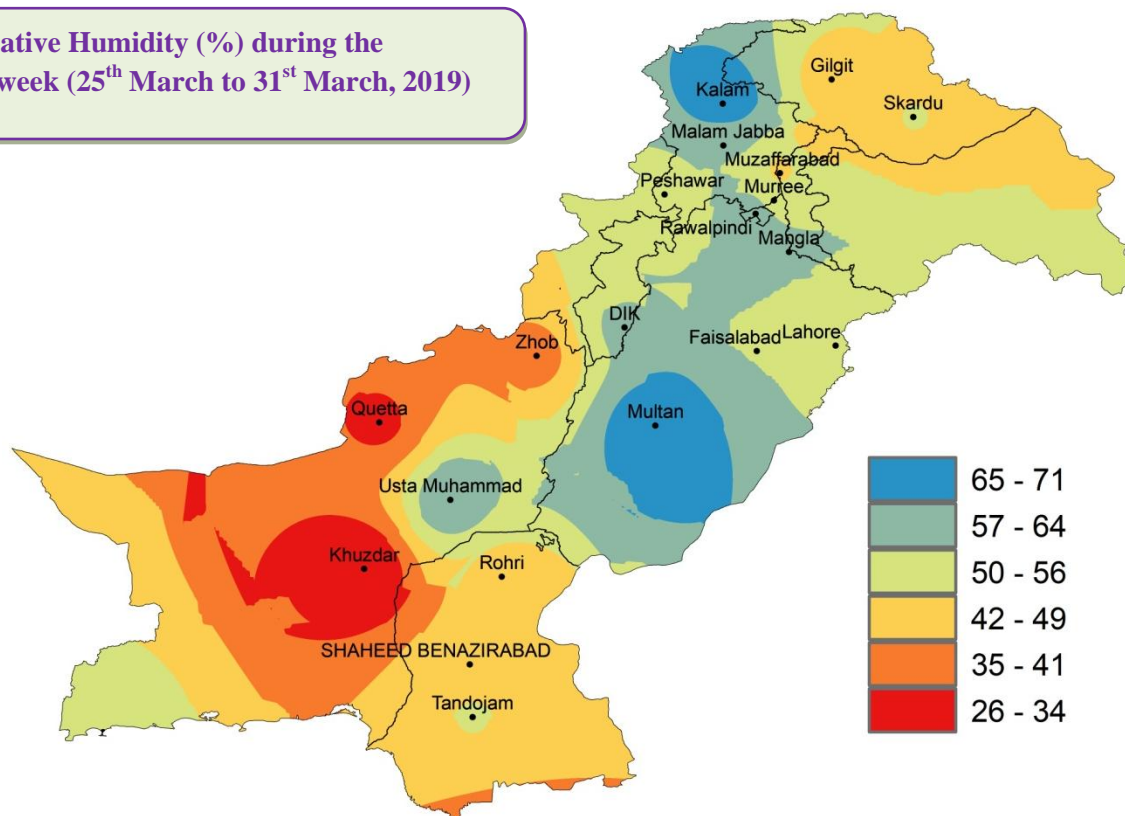
Mean Minimum temperature (°C) during the Previous week (25th March to 31st March, 2019)



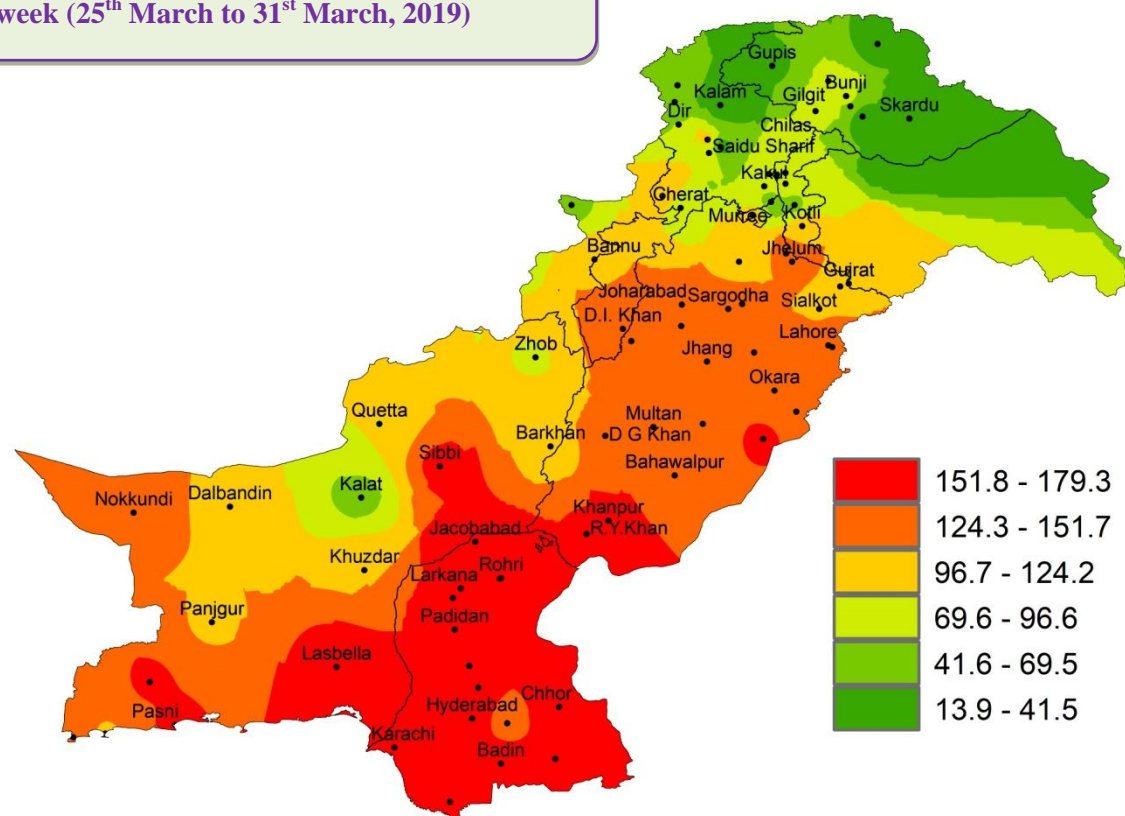
Lowest Minimum Temperature (°C) during the Previous week (25th March to 31st March, 2019)



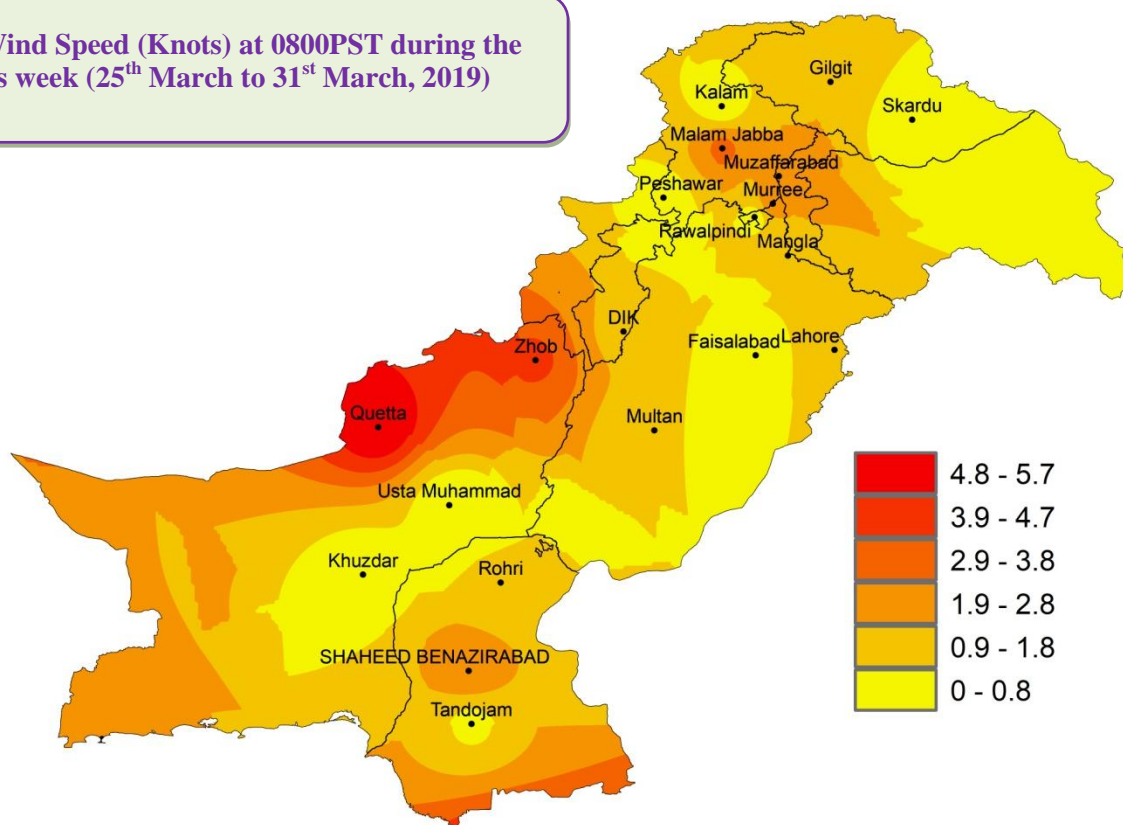
**Mean Relative Humidity (%) during the
Previous week (25th March to 31st March, 2019)**



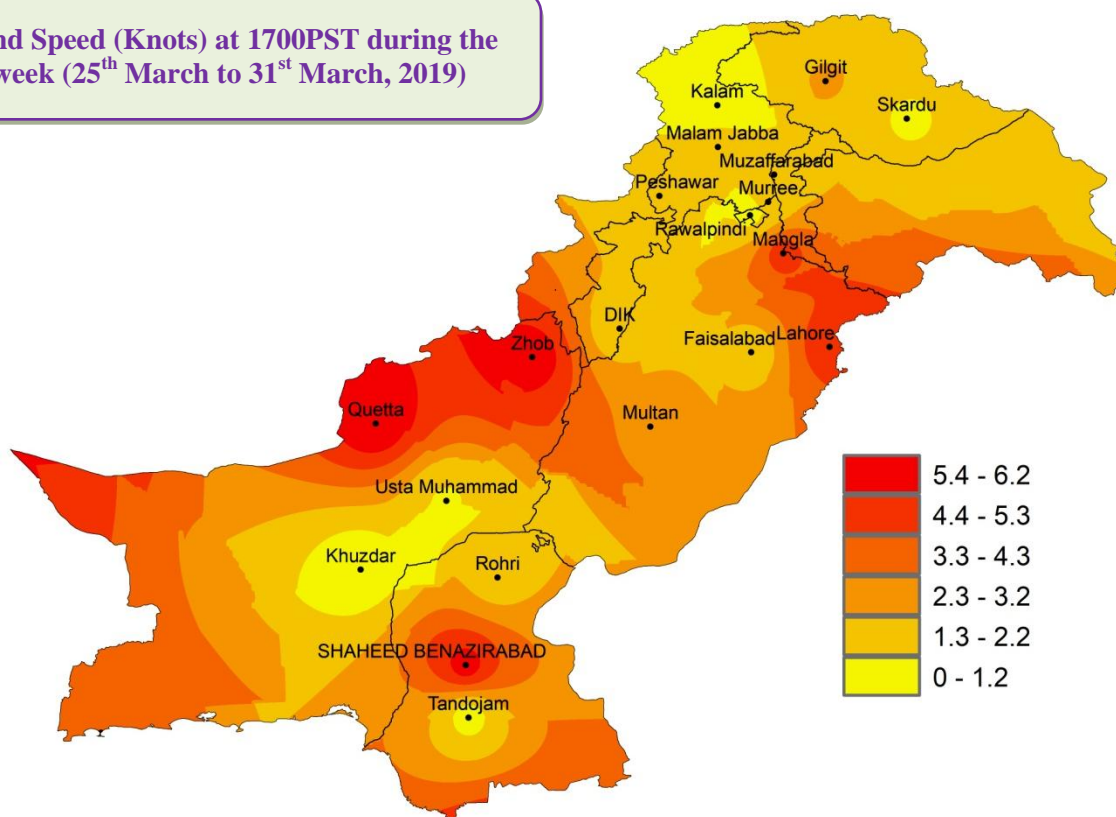
**Total Growing Degree Days accumulated during the
Previous week (25th March to 31st March, 2019)**



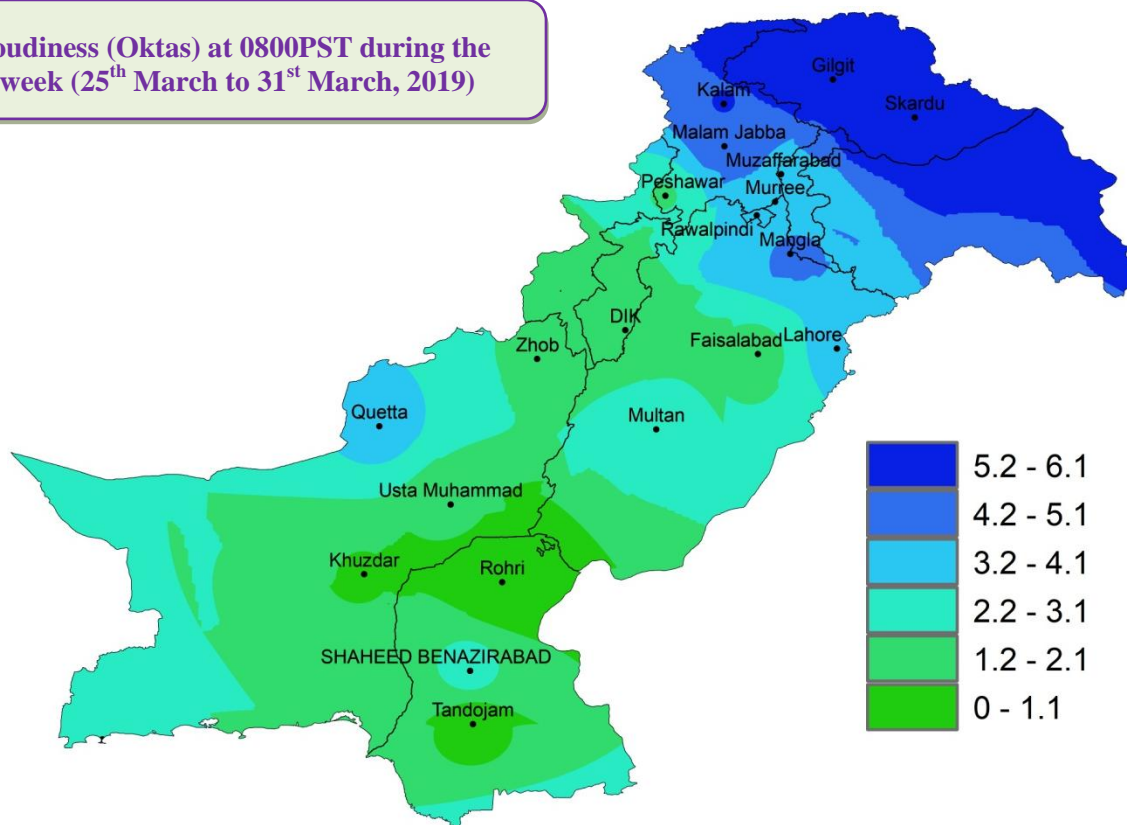
Mean Wind Speed (Knots) at 0800PST during the Previous week (25th March to 31st March, 2019)



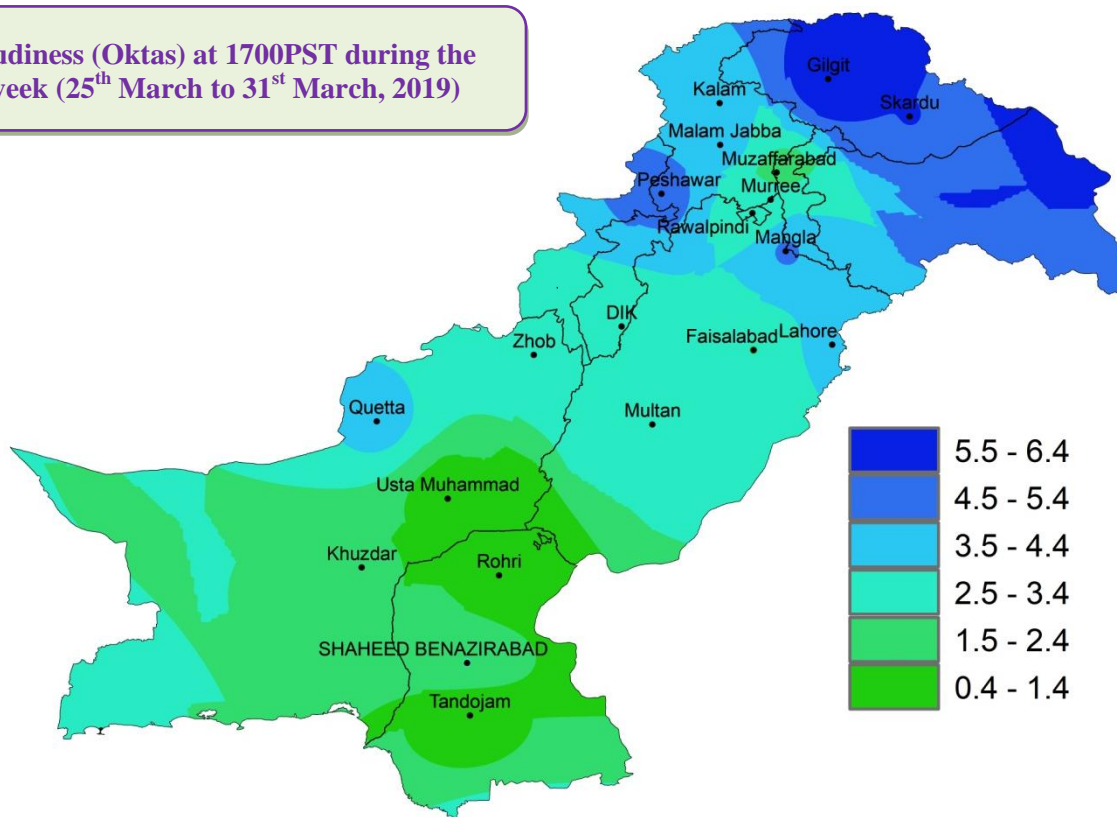
Mean Wind Speed (Knots) at 1700PST during the Previous week (25th March to 31st March, 2019)



Mean Cloudiness (Oktas) at 0800PST during the Previous week (25th March to 31st March, 2019)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (25th March to 31st March, 2019)



Weekly Weather Advisory for Farmers
(1st April to 7th April, 2019)

Continental air is prevailing over most parts of the country.

MONDAY

01-04-2019

Mainly dry weather is expected in most parts of the country and hot in Sindh. While dust raising winds also expected in Sindh in afternoon.

TUESDAY

02-04-2019

Mainly dry weather is expected in most parts of the country and hot in Sindh. While dust raising winds also expected in Sindh in afternoon.

WEDNESDAY

03-04-2019

Mainly dry weather is expected in most parts of the country. Hot weather is likely in south Punjab and Sindh.

THURSDAY

04-04-2019

Mainly dry weather is expected in most parts of the country. Hot weather is likely in south Punjab and Sindh. However, rain-thunderstorm is expected at isolated places in Malakand division and Gilgit Baltistan.

FRIDAY

05-04-2019

Mainly dry weather is expected in most parts of the country. Hot weather is likely in south Punjab and

Sindh. However, rain-thunderstorm is expected at isolated places in Malakand, Hazara divisions, Kashmir and Gilgit Baltistan.

SATURDAY

06-04-2019

Mainly dry weather is expected in most parts of the country. Hot weather is likely in south Punjab and Sindh. However, rain-thunderstorm is expected at isolated places in Kashmir and its adjoining hilly areas.

SUNDAY

07-04-2019

Mainly dry weather is expected in most parts of the country. Hot weather is likely in south Punjab and Sindh. However, rain-thunderstorm is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Sargodha, Rawalpindi divisions, Kashmir and Gilgit Baltistan.

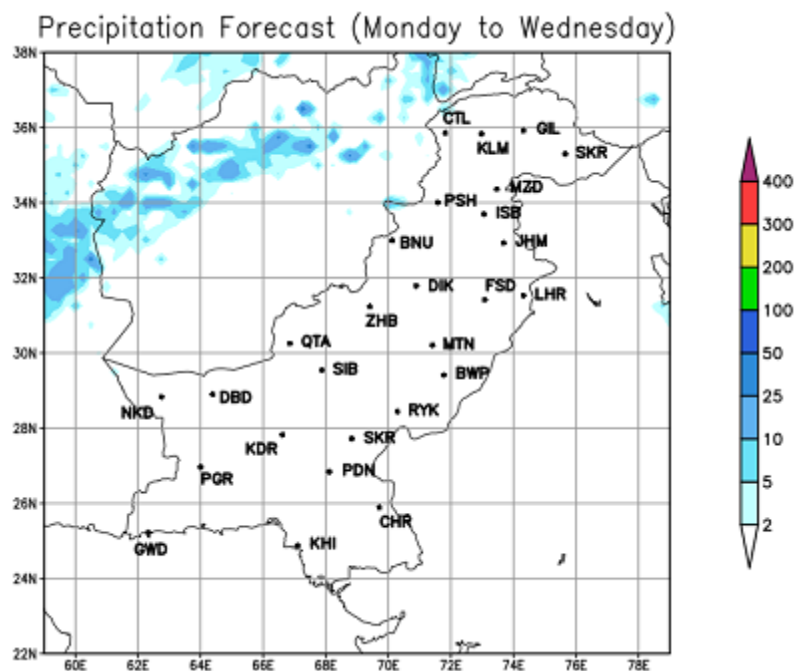
ADVISES FOR FARMERS

During the last week, light to moderate rainfall observed at isolated places in most of the agricultural plains of the country. However, dry weather is expected during the next week. Keeping in view the expected weather conditions following advises are suggested for farming community.

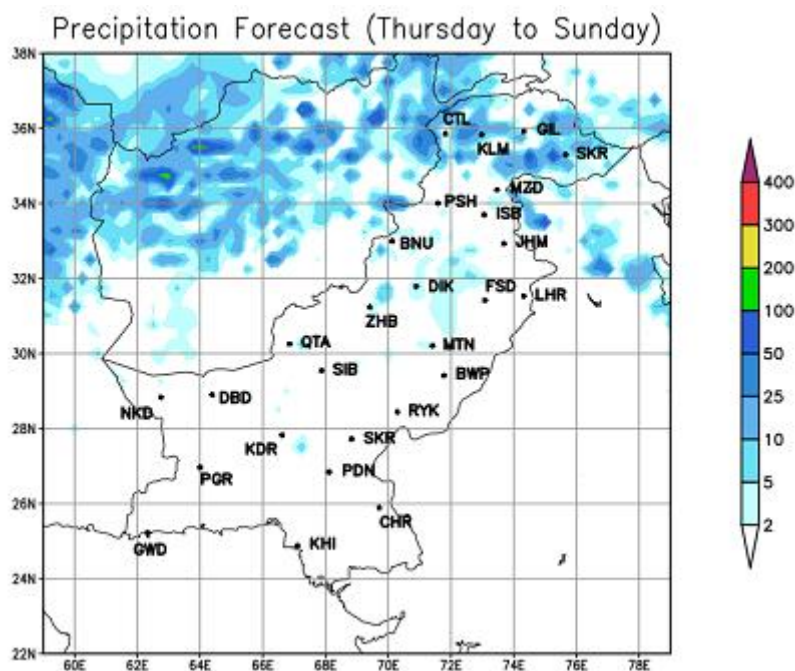
- ❖ Crops/Nurseries may be irrigated according to the rainfall prediction.
- ❖ Removal of weeds from the fields may be ensured.

Weather Outlook from 1st April to 7th April, 2019

The outlook from 1st to 3rd April, 2019 shows that dry weather is expected in the country.



The outlook from 4th April to 7th April, 2019 shows that light to moderate rainfall is expected at isolated places of upper KP, GB, Kashmir, parts of central Punjab and lower KP. While dry weather may prevail over rest of the country.



National Weather Data of Selected Cities Weekly Data from 25th March to 31st March, 2019

Stations	Minimum/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	lowest							
D.I.Khan	16.6	14.5	137.0	57	2.00	1.6	2.7	1.4	1.4
Faisalabad	16.5	14.0	133.9	56	0.00	1.6	2.4	0.3	1.6
Gawadar	18.4	17.0	120.5	53	0.00	2.7	2.7	2.6	4.3
Gilgit	8.0	5.0	70.0	46	14.80	6.0	6.4	1.7	2.3
Kalam	-1.4	-4.0	21.7	70	29.00	5.1	3.6	0.0	0.0
Khuzdar	16.6	13.0	123.0	26	0.00	1.0	1.7	0.0	0.6
Lahore	16.0	12.7	129.5	52	0.00	3.6	3.7	1.4	4.9
Malam Jabba	2.4	0.5	20.5	56	20.00	4.7	4.0	3.1	2.0
Mangla	14.4	12.8	124.7	56	0.00	4.3	4.6	1.1	4.9
Multan (PBO)	18.5	15.8	146.5	71	0.00	2.6	3.1	0.8	3.1
Murree	6.5	5.0	54.5	52	17.00	3.9	3.1	2.6	1.4
Muzaffarabad	7.9	5.5	87.3	48	6.50	4.0	2.0	2.0	1.4
Peshawar	14.4	12.5	120.0	51	0.21	2.0	4.9	0.3	1.4
Quetta	10.5	7.5	81.9	32	0.01	3.7	3.9	5.7	6.1
Rawalpindi	11.4	9.5	109.2	61	2.00	3.4	2.6	0.3	0.9
Rohri	20.5	17.0	163.0	46	0.00	0.0	0.7	0.9	1.7
Sh. Benazirabad	20.1	18.7	172.9	46	0.00	2.7	2.4	2.7	5.7
Skardu	3.0	1.1	30.4	49	21.80	5.9	5.4	0.0	1.1
Tandojam	17.6	16.5	161.3	49	0.00	0.4	0.4	0.5	0.8
Usta.M	18.5	16.0	148.3	63	1.00	1.4	0.7	0.0	1.1
Zhob	9.9	8.0	94.3	38	0.00	2.0	2.9	4.0	5.9

*** 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)