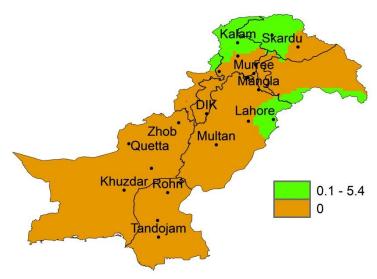
# Weekly Weather and Crop Bulletin for Pakistan

NATIONAL AGROMET CENTRE PAKISTAN METEOROLOGICAL DEPARTMENT SECTOR H-8/2, ISLAMABAD

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**Rainfall Distribution (mm) during the Previous Week (21<sup>st</sup> - 27<sup>th</sup> October, 2019)** 



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# <u>Highlights of Past Weather (21<sup>st</sup> - 27<sup>th</sup> October,</u> <u>2019</u>)

Below normal day time temperatures were observed in Sindh and Balochistan, while mix trend was observed in Khyber Pakhtunkhwa, Punjab and Gilgit Baltistan during the last week.

Province wise distribution of rainfall reported as follows during the last week:

- Light rainfall observed in Punjab, Khyber Pakhtunkhwa and Gilgit Baltistan.
- 2. Dry weather observed over Balochistan and Sindh.

# Past Weather of Provinces (21<sup>st</sup> - 27<sup>th</sup> October, 2019) Punjab

Light rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 31.4°C & 16.7°C respectively. For the recent week on average 134.6 growing degree days were accumulated. Average relative humidity recorded as 55% and wind speed in the morning/evening recorded as 0.8/2.2 Knots. During the previous week the highest precipitation was recorded as 0.40 mm at Gujranwala while minimum temperature was recorded as 8.0°C at Islamabad (ZP).

#### **Baluchistan**

Dry weather was observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 30.9°C & 14.7°C respectively. For the recent week on average 122.4 growing degree days were accumulated. Average relative humidity recorded as 38% and wind speed in the morning/evening recorded as 0.9/4.2 Knots. During the previous week the minimum temperature was recorded as 1.5°C at Kalat.

#### <u>Khyber Pakhtunkhwa</u>

Light rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 25.5°C & 10.1°C respectively. For the recent week on average 113.7 growing degree days were accumulated. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 1.3/1.5 Knots. During the previous week the highest precipitation recorded as 5.40 mm at Chitral while minimum temperature was recorded as -1.0°C at D.I. Kalam.

#### Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall observed in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 21.7°C & 7.0°C respectively. For the recent week on average 95.2 growing degree days were accumulated. Average relative humidity recorded as 56% and

wind speed in the morning/evening recorded as 0.6/1.1 Knots. During the previous week the highest precipitation recorded as 0.40 mm at Gupis while minimum temperature was recorded as 0.4°C at Skardu.

### <u>Sindh</u>

Dry weather was observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 35.4°C & 20.6°C respectively. For the recent week, on average 159.2 growing degree days were accumulated. Average relative humidity recorded as 58% and wind speed in the morning/evening recorded as 2.3/2.8 Knots. During the previous week the minimum 17.0°C temperature was recorded as at Moinjodaro.

### <u>Past Weather for Major Agricultural Plains</u> (21<sup>st</sup> - 27<sup>th</sup> October, 2019)

#### Rawalpindi (Potohar region)

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.6/2.0 Oktas while, average relative humidity observed as 74%. Mean night time temperature recorded 13.9°C & for the recent week 133.4 growing degree days accumulated. 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 0.0/0.4 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 17.1°C & for the recent week 151.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.0/0.8 Knots.

#### Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, clear sky was observed in the morning/evening while, average relative humidity observed as 61%. Mean night time temperature recorded as 18.4°C & for the recent week 161.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.9/1.1 Knots.

#### Usta Muhammad (Eastern Baluchistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.1/0.0 Oktas while, average relative humidity observed as 67%. Mean night time temperature recorded as 19.3°C & for the recent week 133.4 growing degree days accumulated. Calm wind speed was observed in the morning/evening.

#### Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/0.7 Oktas while, average relative humidity observed as 24%. Mean night time temperature recorded as  $7.9^{\circ}$ C & for the recent week 96.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.1/3.1 Knots.

### Past Weather for Sub-Regional Agricultural Plains (21<sup>st</sup> - 27<sup>th</sup> October, 2019)

#### Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.6/0.7 Oktas while, average relative humidity observed as 53%. Mean night time temperature recorded as 19.6°C & for the recent week 144.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 2.6/3.1 Knots.

#### Lahore

0.01 mm (Trace) rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 1.1/1.6 Oktas while, average relative humidity observed as 65%. Mean night time temperature recorded as 19.0°C & for the recent week 139.6 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.7/2.3 Knots.

#### Zhob

Dry weather reported from reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/0.9 Oktas while, average relative humidity observed as 36%. Mean night time temperature recorded as 11.6°C & for the recent week 98.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/5.4 Knots.

#### Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 2.3/6.1 Oktas while, average relative humidity observed as 72%. Mean night time temperature recorded as 9.7°C & for the recent week 106.4 growing degree days accumulated Wind speed recorded in the morning/evening as 1.4/0.9 Knots.

#### D.I. Khan

Dry weather reported from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 1.0/1.1 Oktas while, average relative humidity observed as 67%. Mean night time temperature recorded as 16.2°C & for the recent week 134.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.4/1.1 Knots.

#### Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 2.3/2.3 Oktas while, average relative humidity observed as 69%. Mean night time temperature recorded as 13.1°C & for the recent week 117.5 growing degree days accumulated. Wind speed recorded in the morning/evening as 1.1/1.7 Knots.

#### Kalam

1.00 mm rainfall reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.7/5.6 Oktas while, average relative humidity observed as 75%. Mean night time temperature recorded as 0.1°C & for the recent 115.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.3 Knots.

#### Gilgit

Dry weather reported from Gilgit during the week. However, cloudiness in the morning/evening recorded as 3.3/4.6 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 6.1°C & for the recent week 64.8 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.9 Knots.

#### Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.7/3.1 Oktas while, average relative humidity observed as 50%. Mean night time temperature recorded as 2.0°C & for the recent week 135.7 growing degree days accumulated. Wind speed recorded in the morning/evening as 0.0/0.6 Knots.

#### <u>Crop Situation for Major Agricultural Plains</u> (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: V.Good**, *Picking Stage*.

#### Lower Sindh (Tandojam)

Presently cotton crop is sown in the fields of RAMC Tandojam. Cotton: *Harvested on 25-10-2019*.

#### Northern Baluchistan (Quetta)

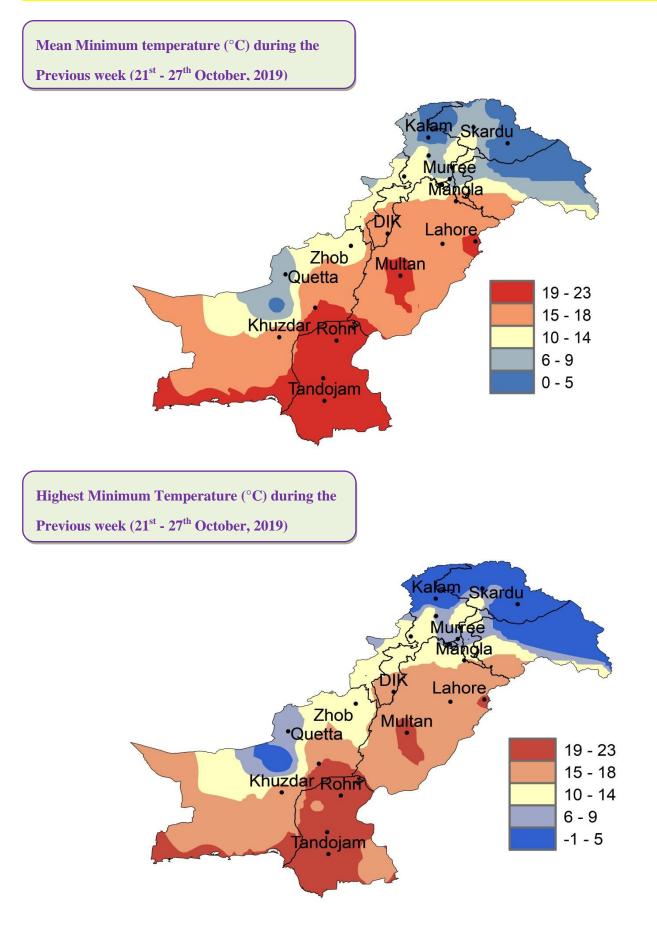
There is presently no crop grown in the fields of RAMC Quetta.

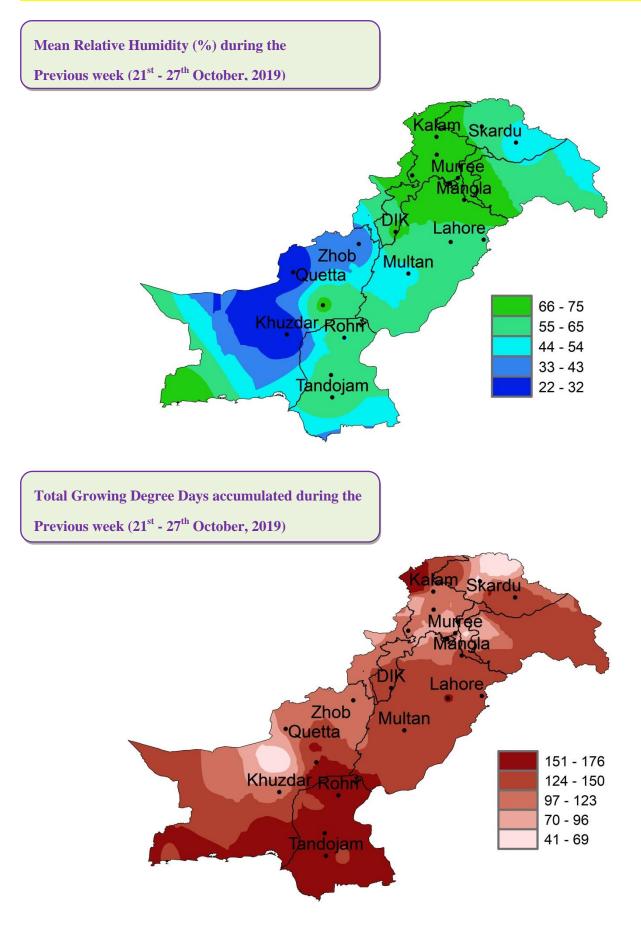
#### Eastern Baluchistan (Usta Muhammad)

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

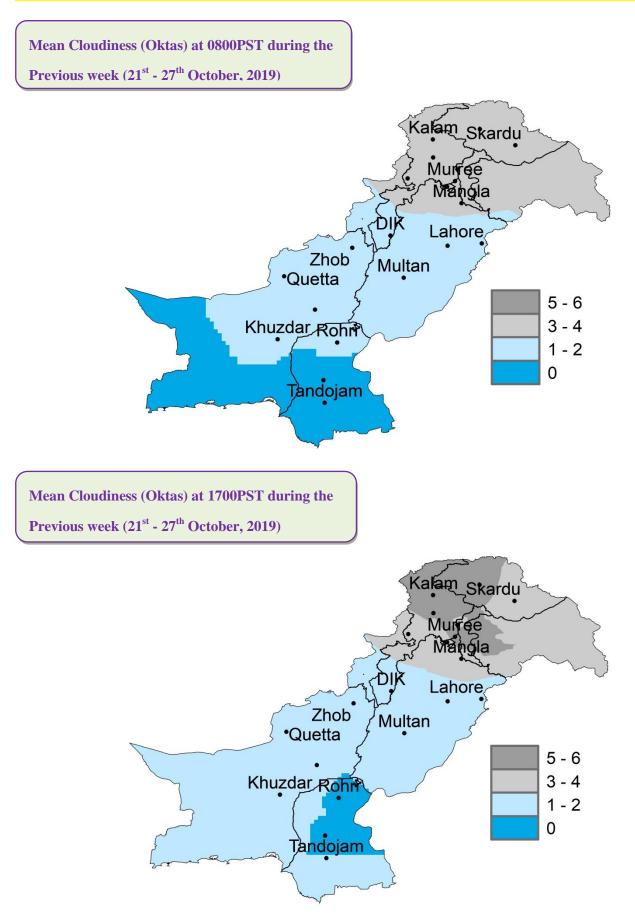
Rice: Good, Wax Maturity Stage.

http://namc.pmd.gov.pk

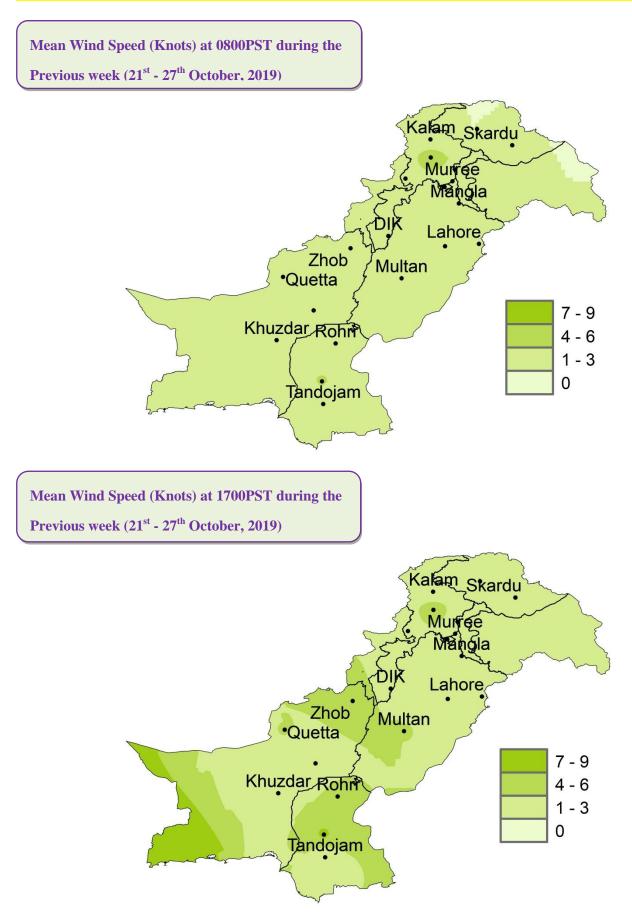




http://namc.pmd.gov.pk



http://namc.pmd.gov.pk



#### <u>Weekly Weather Advisory for Farmers</u> (28<sup>th</sup> October to 3<sup>rd</sup> November, 2019)

Continental air is prevailing over most parts of the country. Due to tropical cyclone KYARR in the Arabian Sea, moist currents are expected to reach southern parts of the country from Wednesday to Friday.

#### MONDAY 28-10-2019

Mainly dry weather is expected in most parts of the country, while cold in northern areas. However, cloudy weather condition with light rain and dust storm is expected at coastal areas (Tharparker, Badin, Thatta districts) of Sindh.

# TUESDAY

# 29-10-2019

Mainly dry weather is expected in most parts of the country, while cold in northern areas. However, cloudy weather condition with light rain and dust storm is expected at coastal areas (Tharparker, Badin, Thatta districts) of Sindh. Cloudy weather condition with light rain is also expected at few places in upper Khyber Pakhtunkhwa (Chitral and Dir districts).

# WEDNESDAY

#### 30-10-2019

Mainly dry weather is expected in most parts of the country, while cold in northern areas. However, rain- wind/thunderstorm is expected at isolated places in districts of Mirpurkhas, Karachi, Thatta, Badin, Makran, Kalat, Malakand, Chitral, Upper Dir, Swat, Abbottabad, Peshawar, Mardan, Islamabad, Gilgit Baltistan and Kashmir.

### THURSDAY

#### 31-10-2019

Scattered rain-wind/thunderstorm is expected in districts of Quetta, Kalat, Sibbi, Naseerabad, Makran, Malakand, Chitral, Hyderabad, Shaheed Benazirabad, Thatta, Badin and Karachi. Dry weather is expected in other parts of the country.

#### FRIDAY 01-11-2019

Mostly cloudy weather is expected at most parts of the country. However, rain-wind/thunderstorm is expected at scattered places in most districts of Khyber Pakhtunkhwa, districts of Balochistan, Lower Sindh, South Punjab while at isolated places in Kashmir and Gilgit Baltistan.

# SATURDAY

# 02-11-2019

Mostly cloudy weather is expected at most parts of the country. However, rain-wind/thunderstorm is expected at islolated places in districts of Khyber Pakhtunkhwa, districts of northeast Balochistan, upper Sindh, south Punjab, Kashmir and Gilgit Baltistan.

#### SUNDAY

#### 03-11-2019

Mainly dry weather is expected in most parts of the country. However, rain- wind/thunderstorm is expected at isolated places in upper Punjab, upper Khyber Pakhtunkhwa, Kashmir and Gilgit Baltistan.

#### **ADVISORY FOR FARMERS**

During the last week, light rainfall occurred at scattered places in Punjab, GB and KPK, while dry weather prevailed over Sindh and Balochistan. Keeping in view the above expected weather conditions following advisories are suggested for farming community.

- 1. Keeping in view the prevailing weather conditions, farmers are advised to complete harvesting of the cotton crop.
- 2. Farmers of lower parts of the country are advised to start the sowing of wheat crop.

# National Weather Data of Selected Cities from (21<sup>st</sup> to 27<sup>th</sup> October, 2019)

Stations	Minimum/Day Time Temperature (°C)	Growin g	Relative	Rainfal	Cloudines s (Oktas)	Cloudines s (Oktas)	Wind Speed (Knots	Wind Speed (Knots	
	Mean	Minimum	Degree Days	Humidi <del>l</del> y (%)	l (mm)	0800 PST	(Okids) 1700 PST	) 0800 PST	) 1700 PST
D.I. Khan	16.2	15.5	134.5	67	0.00	1.0	1.1	1.4	1.1
Faisalabad	17.1	15.5	151.6	61	0.00	0.0	0.4	1.0	0.8
Gawadar	20.5	19.0	139.5	72	0.00	0.0	1.0	0.0	9.4
Gilgit	6.1	3.5	64.8	61	0.00	3.3	4.6	0.0	0.9
Kalam	0.1	-1.0	115.8	75	1.00	2.7	5.6	0.0	0.3
Khuzdar	16.8	16.0	123.0	22	0.00	0.0	1.0	0.0	0.0
Lahore	19.0	18.0	139.6	65	0.01	1.1	1.6	1.7	2.3
Malam Jabba	6.1	5.0	95.8	67	0.00	3.1	4.0	4.6	4.6
Mangla	14.6	13.6	123.8	70	0.00	1.9	3.7	0.9	2.9
Multan (PBO)	19.6	18.5	144.7	53	0.00	0.6	0.7	2.6	3.1
Murree	9.7	8.2	106.4	72	0.00	2.3	6.1	1.4	0.9
Muzaffaraba d	10.3	9.8	100.2	72	0.00	2.3	3.7	2.7	2.0
Nawabshah	20.1	18.5	165.5	69	0.00	2.3	2.9	1.1	1.7
Peshawar	13.1	12.0	117.5	24	0.00	0.0	0.7	2.1	3.1
Quetta	7.9	6.2	96.8	74	0.00	2.6	2.0	0.0	0.9
Rawalpindi	13.9	13.3	133.4	54	0.00	0.0	0.0	1.4	3.7
Rohri	22.1	21.0	162.0	56	0.00	0.0	0.0	3.1	6.3
Skardu	2.0	0.4	135.7	50	0.00	2.7	3.1	0.0	0.6
Tandojam	18.4	17.0	161.8	61	0.00	0.0	0.0	0.9	1.1
Usta. M	19.3	18.5	133.4	67	0.00	0.1	0.0	0.0	0.0
Zhob	11.6	11.0	98.8	36	0.00	0.0	0.9	1.1	5.4

\*\*\* Shows that data was not available.

# Findings of AgMIP Pakistan, University of Agriculture, Faisalabad

- 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).
- There would be significant variability in rainfall patterns (about 25% increase in summer & 12% decrease in winter during 2040-2069).
- 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 69-2040 کے دوران درجہ حرارت میں قابل ذکر اضافہ ہوسکتا ہے۔ جو کہ دن کے دقت 6°2.8 اور رات کو 6°2.2 تک ہوگا۔

- 2۔ گرمیوں کی بارش میں 25 فیصد اضافہ اور سردیوں کی بارش میں 12 فیصد تک کمی کا امکان ہے۔
- 3۔ مندرجہ بالاموسی تغیرات کی وجہ ہےدھان کی پیداوار میں 17 فیصد اور گندم کی پیداوار میں 14 فیصد تک کمی ہوسکتی ہے۔
  - 4۔ اگرموسی تغیرات کا مناسب بندوبست نہ کیا گیا۔ تو کسانوں کی اکثریت کومعاشی نقصان کا سامنا کرنا پڑے گا۔

5۔ موسی تغیرات کے سبرّ باب (بذریعہ نی ٹیکنالوجی کا استعال اور بہترنظم ونسق) سے غربت میں کمی اور کسانوں کی زندگی میں خوشحالی لائی جاسکتی ہے۔

(ايگمپ پاکستان 2012-2014)