# Weekly Weather and Crop Bulletin for Pakistan

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

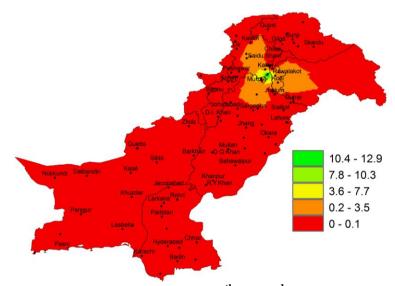
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**Rainfall Distribution (mm) during the previous** Week (16<sup>th</sup> to 22<sup>nd</sup> October, 2017)

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### Highlights of Past Weather (16<sup>th</sup> to 22<sup>nd</sup> October, <u>2017)</u>

Above normal day time temperatures reported from Punjab, Sindh and Baluchistan while below normal day time temperatures were observed in KP and slightly below in Gilgit-Baltistan and Kashmir.

Province wise distribution of rainfall reported as follows:

- Dry weather reported from Sindh, Baluchistan and Gilgit Baltistan during this week.
- Light rainfall (including traces) reported from isolated place of Rawalpindi division (Punjab), KP and Kashmir during this week.

#### Past Weather of Provinces (16<sup>th</sup> to 22<sup>nd</sup> October,

#### 2017)

#### Punjab

Light rainfall reported from Punjab (Rawalpindi division) during the week. Weekly maximum and minimum temperatures recorded as 34.7°C & 18.0°C respectively. For the recent week on average 149.7 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 0.7/1.4 knots. During the previous week highest amount of rainfall was recorded as 13.0 mm at Murree & lowest minimum temperature was recorded as 11°C at Murree.

#### Balochistan

Dry weather reported from Balochistan province during the week. Weekly maximum and minimum temperatures recorded as 33.8°C & 17.0°C respectively. For the recent week on average 143.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 38% and wind speed in the morning/evening recorded as 1.3/5.2 knots. During the previous week lowest minimum temperature was recorded as 2.0°C at Kalat.

#### Khyber Pakhtunkhwa

Light rainfall reported from isolated places of Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 30.2°C & 12.3°C respectively. For the recent week on average 114.4 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 48% and wind speed in the morning/evening recorded as 0.5/2.5 knots. During the previous week the highest amount of rainfall was recorded as 3.0 mm at Malam Jabba & lowest minimum temperature was recorded as 3.0°C at Kalam.

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

Light rainfall reported from isolated places of Kashmir while Gilgit-Baltistan reported as dry during the week. Weekly maximum and minimum temperatures recorded as 26.6°C & 8.8°C respectively. For the recent week on average 88.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 46% and wind speed in the morning/evening recorded as 0.4/1.7 knots. During the previous week the highest amount of rainfall was recorded as 3.2 mm at Rawalakot & lowest minimum temperature was recorded as 0.6°C at Skardu.

#### Sindh

Dry weather reported from Sindh province during the week. Weekly maximum and minimum temperatures recorded as 37.7°C & 21.0°C respectively. For the recent week, on average 173.3 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 58% and wind speed in the morning/evening recorded as 0.8/2.9 knots. During the previous week, lowest minimum temperature was recorded as 17.0°C at Moinjodaro.

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#### **Past Weather for Major Agricultural Plains** (16<sup>th</sup> to 22<sup>nd</sup> October, 2017)

#### **Rawalpindi** (Potohar region)

Light rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.3/0.9 Oktas while, average relative humidity observed as 61%. Mean night time temperature recorded as 14.5°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 0.4/1.4 knots.

#### Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 60%. Mean night time temperature recorded as 18.4°C & for the recent week 153.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.4/0.0 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 56%. Mean night time temperature recorded as 19.5°C & for the recent week 170.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.6 knots.

#### Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during week: however, cloudiness in the the morning/evening recorded 0.0/0.0 Oktas while, average relative humidity observed as 55%. Mean night time temperature recorded as 18.6°C & for the recent week 159.0 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 0.0/0.0 Oktas while, average relative humidity observed as 17%. Mean night time temperature recorded as 5.6°C & for the recent week 76.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.8/3.0 knots.

#### Past Weather for Sub-Regional Agricultural Plains (16<sup>th</sup> to 22<sup>nd</sup> October, 2017)

#### Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 54%. Mean night time temperature recorded as 20.1°C & for the recent week 158.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.7/1.6 knots.

#### Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 52%. Mean night time temperature recorded as 20.5°C & for the recent week 157.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.0 knots.

#### Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 33%. Mean night time temperature recorded as 15.4°C & for the recent week 129.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.0/5.0 knots.

#### Murree

Light rainfall reported as 13.0 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 0.6/1.6 Oktas while, average relative humidity observed as 43%. Mean night time temperature recorded as 13.1°C & for the recent week 93.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/0.8 knots.

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#### D.I. Khan

Dry weather reported from D.I.Khan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 60%. Mean night time temperature recorded as 18.9°C & for the recent week 156.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.7/0.0 knots.

#### Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, average relative humidity observed as 64%. Mean night time temperature recorded as 15.3°C & for the recent week 133.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.4 knots.

#### Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.8/2.6 Oktas while, average relative humidity observed as 48%. Mean night time temperature recorded as 3.9°C & for the recent week 61.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.4 knots.

#### Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 1.7/3.6 Oktas while, average relative humidity observed as 62%. Mean night time temperature recorded as 1.7°C & for the recent week 78.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 knots.

#### Skardu

Dry weather reported from Skardu during the week; However, cloudiness in the morning/evening recorded as 1.0/2.0 Oktas while, average relative humidity observed as 54%. Mean night time temperature recorded as 1.7°C & for the recent week 45.1 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 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 (irrigated conditions) grown in the fields of RAMC Faisalabad. Cotton: Very Good condition, Maturity Completed.

#### Lower Sindh (Tandojam)

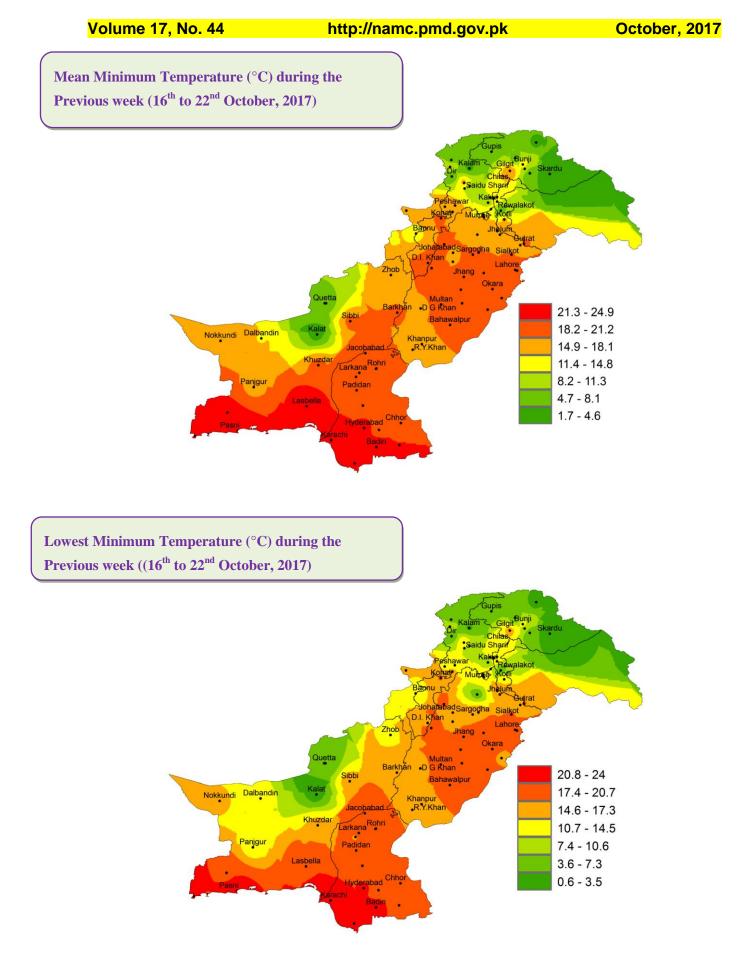
There is presently no crop in the fields of RAMC Tandojam.

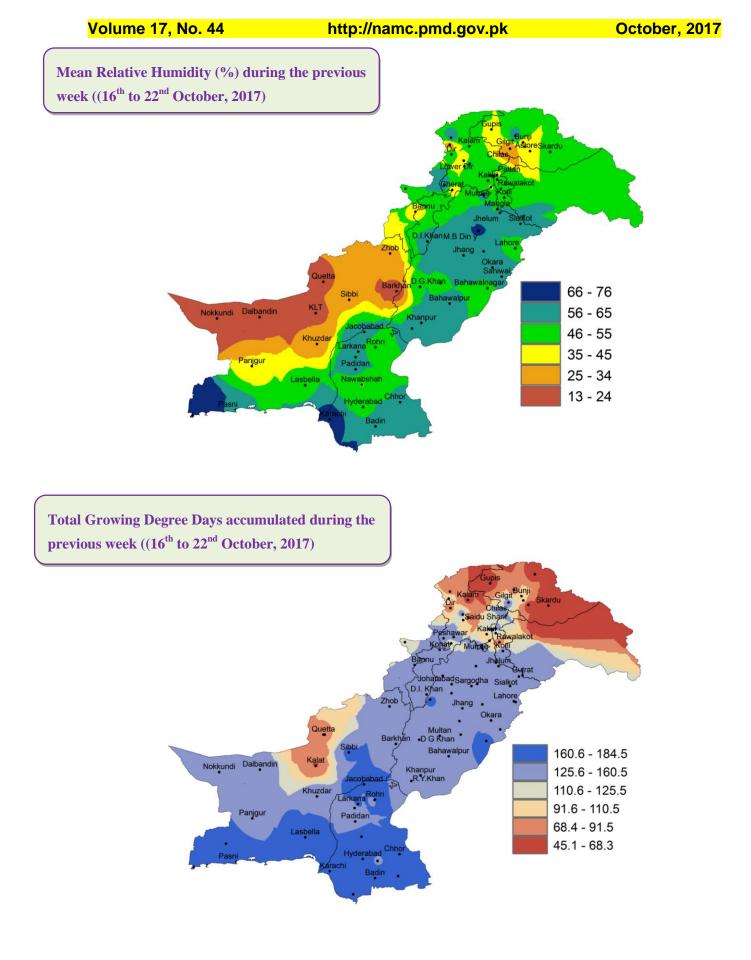
#### Northern Baluchistan (Quetta)

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

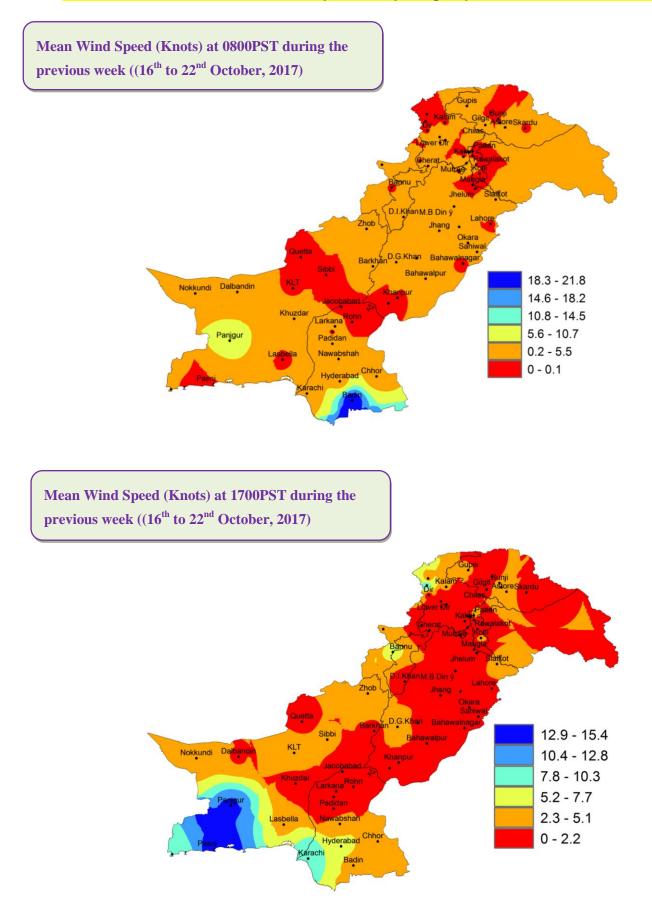
#### Eastern Baluchistan (Usta Muhammad)

There is presently one crop (irrigated conditions) grown in the fields of RAMC Usta Muhammad. Rice: Good condition, Maturity Stage.

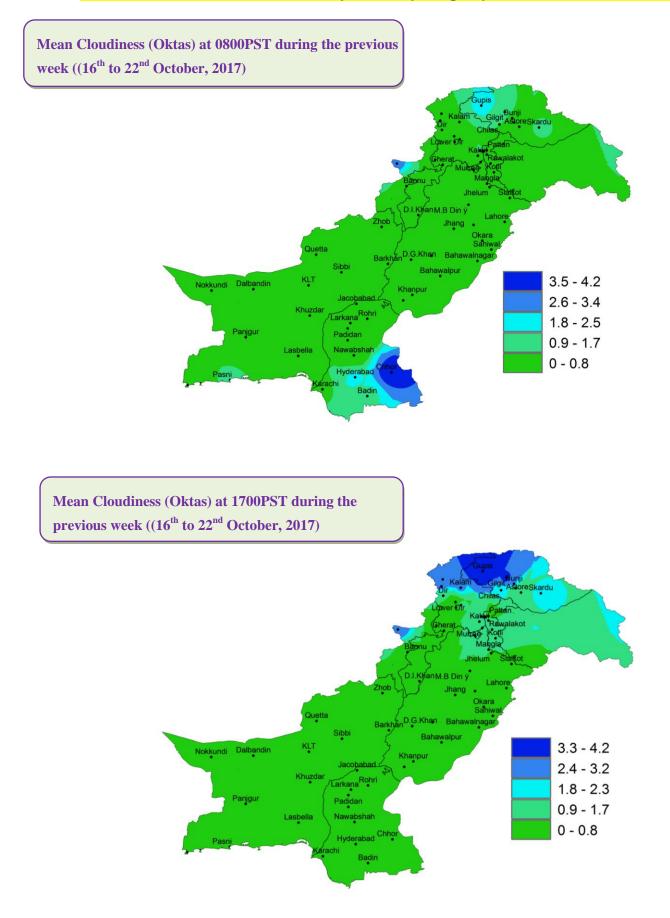




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#### Weekly Weather Advisory for Farmers (23<sup>th</sup> to 29<sup>th</sup> October, 2017)

Continental air is prevailing over most parts of the country. However, a shallow westerly wave is affecting extreme northern parts of the country.

#### MONDAY 23-10-2017

Mainly hot and dry weather is expected in most plain areas of the country. However, rainthunderstorm may occur at a few places in Malakand. Hazara. Rawalpindi division. Islamabad, upper FATA, Kashmir & Gilgit-Baltistan.

### TUESDAY

#### 24-10-2017

Mainly hot and dry weather is expected in most plain areas of the country. However, rainthunderstorm may occur at a few places in division, upper FATA & Gilgit-Malakand Baltistan.

### **WEDNESDAY**

#### 25-10-2017

Mainly hot and dry weather is expected in most parts of the country.

### THURSDAY

### 26-10-2017

Mainly hot and dry weather is expected in most parts of the country.

### FRIDAY

#### 27-10-2017

Mainly hot and dry weather is expected in most parts of the country.

#### SATURDAY 28-10-2017

#### Mainly hot and dry weather is expected in most parts of the country.

#### **SUNDAY**

#### 29-10-2017

Mainly dry weather is expected in most plain areas of the country.

#### **ADVISES FOR FARMERS**

During the last week, mainly dry weather occurred in most parts of the agricultural plains of the country. In the coming days, dry weather is expected in most parts of the country. Keeping in view the expected weather conditions following advises are suggested for the farming community.

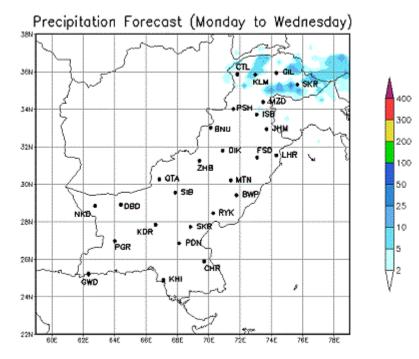
- The fields became fallow after cotton or other Kharif crops may be ploughed well and Suhaga may better be applied to preserve the soil moisture for the upcoming Rabi crops.
- Farmers of irrigated areas may irrigate the standing crops as per requirement in accordance with the expected weather and crop conditions.

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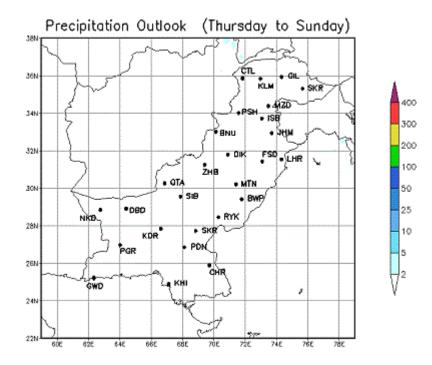
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## Weather Outlook from 23<sup>th</sup> to 29<sup>th</sup> October, 2017

The outlook for the period 23<sup>th</sup> to 25<sup>th</sup> October, 2017 shows that dry weather is expected at most parts of the country however light rainfall is expected at a few places in, upper KP, Kashmir and Gilgit Baltistan.



The outlook for the period 26<sup>th</sup> to 29<sup>th</sup> October, 2017 shows that dry weather is expected to prevail in most parts of the country.



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### National Weather Data of Selected Cities (16<sup>th</sup> to 22<sup>nd</sup> October, 2017)

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	Wind Speed (Knots) 1700
	Mean	highest				151	151	PST	PST
Astore	4.1	3.5	46.8	37	0.00	0.5	1.4	2.0	3.6
Badin	24.6	23.0	180.1	64	0.00	1.2	0.0	21.8	4.0
Bahawalnagar	19.6	19.0	163.5	52	0.00	0.0	0.0	0.0	0.0
Bahawalpur	19.0	18.8	157.9	56	0.00	0.0	0.0	1.0	0.4
Balakot	11.1	10.6	116.1	50	0.00	1.2	1.4	0.0	0.4
Bannu	14.0	12.2	133.7	42	0.00	0.0	0.0	0.0	6.0
Barkhan	18.4	16.5	145.3	16	0.00	0.0	0.0	0.4	1.2
Bunji	13.2	11.7	104.9	40	0.00	0.4	2.6	0.0	2.4
Cherat	15.6	15.0	114.6	40	0.00	0.0	0.0	2.0	1.2
Chhor	20.8	18.6	180.2	58	0.00	4.2	0.0	1.6	3.2
Chilas	16.9	15.5	130.5	24	0.00	0.8	1.8	0.3	1.2
Chitral	6.8	6.1	85.0	67	0.00	0.3	2.8	0.0	4.0
D.G.Khan	16.9	15.7	151.0	55	0.00	0.0	0.0	3.0	4.8
D.I.Khan	18.9	17.0	156.6	60	0.00	0.0	0.0	0.7	0.0
Dalbandin	14.7	11.5	137.0	17	0.00	0.0	0.0	1.7	1.8
Dir	4.8	4.0	84.2	54	0.00	0.5	1.0	0.0	1.2
Drosh	11.2	10.0	105.4	25	0.00	0.0	2.6	0.0	10.2
Faisalabad	18.4	17.0	156.3	60	0.00	0.0	0.0	0.4	0.0
Gari dopatta	12.1	11.5	119.9	52	0.00	0.0	1.4	0.0	0.4
Gawader	21.7	20.5	174.3	72	0.00	0.8	0.0	0.0	10.0
Gilgit	5.7	4.0	78.6	62	0.00	1.7	3.6	0.0	0.0
Gupis	5.6	5.0	59.3	43	0.00	2.0	4.2	2.0	2.4

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Hyderabad	22.5	21.5	181.4	50	0.00	2.0	0.4	3.0	6.4
Islamabad	13.0	11.8	125.2	57	7.00	0.0	1.2	0.0	1.6
Jacobabad	20.4	19.0	164.3	59	0.00	0.0	0.0	0.0	0.0
Jhang	18.7	17.8	156.0	62	0.00	0.0	0.0	0.3	1.2
Jhelum	16.6	16.0	146.3	66	0.00	0.0	0.4	0.0	0.4
Jiwani	24.9	24.0	174.0	76	0.00	0.0	0.0	0.4	8.0
Kakul	9.5	9.0	99.5	48	2.00	0.0	1.2	0.0	0.4
Kalam	3.9	3.0	61.6	48	0.00	0.8	2.6	0.0	2.4
Kalat	3.6	2.0	67.8	22	0.00	0.0	0.0	0.0	4.8
Karachi	23.8	22.5	177.8	72	0.00	0.6	0.0	0.8	10.0
Khanpur	17.0	16.0	151.7	64	0.00	0.0	0.0	0.0	0.8
Khuzdar	19.0	16.0	147.8	27	0.00	0.0	0.0	1.0	0.8
Kotli	15.4	14.1	138.8	45	1.00	0.7	1.6	0.0	2.4
Lahore	20.5	19.5	157.7	52	0.00	0.0	0.0	0.0	2.0
Larkana	21.0	19.0	162.4	57	0.00	0.0	0.0	0.4	0.8
Lasbella	23.4	20.5	184.5	52	0.00	0.0	0.0	0.0	4.8
Lower Dir	16.2	14.0	140.3	32	0.00	0.0	0.0	2.0	2.0
M.B Din	18.2	17.0	149.5	66	0.00	0.0	0.6	0.7	0.0
Malam Jabba	8.6	8.0	58.9	59	3.00	0.3	1.2	0.0	0.0
Mangla	16.1	15.0	142.1	52	0.01	0.0	1.4	0.0	2.0
Mir Khani	10.6	10.1	103.5	41	0.00	0.0	0.8	0.0	5.2
Moinjodaro	18.8	17.0	157.0	59	0.00	0.0	0.0	0.0	1.6
Multan(PBO)	20.1	19.8	158.5	54	0.00	0.0	0.0	0.7	1.6
Murree	13.1	11.0	93.5	43	13.00	0.7	1.6	2.3	0.8
Muzaffarabad	12.7	12.4	119.6	48	0.00	0.7	1.4	0.3	1.0
Nawabshah	19.7	17.5	171.3	44	0.00	0.0	0.0	1.3	4.4

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Nokkundi	17.7	15.0	148.0	13	0.00	0.0	0.0	3.0	3.2
Okara	19.8	19.0	156.9	60	0.00	0.0	0.0	0.3	0.8
Padidan	19.0	18.0	153.4	58	0.00	0.0	0.0	1.0	0.0
Panjgur	17.2	13.0	144.8	36	0.00	0.0	0.0	8.3	13.2
Parachinar	15.5	15.0	111.5	54	0.00	3.0	3.2	3.0	3.0
Pasni	24.6	24.0	173.8	61	0.00	1.0	0.0	0.0	15.4
Pattan	11.7	11.0	129.9	41	0.00	0.3	0.0	0.0	3.8
Peshawar	15.3	14.0	133.0	64	0.00	0.0	0.6	0.0	0.4
Quetta	5.6	3.5	76.0	17	0.00	0.0	0.0	1.8	3.0
Rahim Yar Khan	17.5	16.5	156.4	57	0.00	0.0	0.0	0.0	2.0
Rawalakot	5.3	4.5	75.7	54	3.20	0.0	1.6	0.0	1.2
Rawalpindi	14.3	13.5	132.1	61	4.60	0.3	0.9	0.4	1.4
Rohri	21.6	20.0	170.6	49	0.00	0.0	0.0	0.0	0.0
Sahiwal	18.2	16.5	152.4	59	0.00	0.0	0.0	0.7	0.4
Saidu Sharif	11.1	10.5	112.4	44	0.00	0.0	0.6	0.0	1.2
Sialkot	17.1	16.3	140.7	56	0.00	0.0	0.6	2.3	3.0
Sibbi	18.9	17.0	166.8	32	0.00	0.0	0.0	0.0	2.8
Skardu	1.7	0.6	45.1	54	0.00	1.0	2.0	0.0	0.0
Tandojam	19.5	18.0	170.0	56	0.00	0.0	0.0	0.3	0.6
Usta. M	18.6	18.0	159.0	55	0.00	0.0	0.0	0.0	1.1
Zhob	15.4	14.0	129.8	33	0.00	0.0	0.0	3.0	5.0

\*\*\* 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).
- 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۔ سال69-2040 کے دوران درجہ حرارت میں قابل ذکراضافہ ہوسکتا ہے۔ جو کہ دن کے وقت °2.8 اور رات کو ک° 2.2 تک ہوگا۔
  - 2۔ گرمیوں کی بارش میں 25 فیصد اضافہ اور سر دیوں کی بارش میں 12 فیصد تک کمی کا امکان ہے۔
  - 3۔ مندرجہ بالاموسی تغیرات کی دجہ سے دھان 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 سدِّ باب(بذریعہ نٹی ٹیکنالوجی کا استعال ادر بہترنظم ونسق) سے غربت میں کمی ادر کسانوں کی زندگی میں خوشحالی لائی جاسکتی ہے۔

(ايگمي يا كتان 2012-2014)