

# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the  
Previous Week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)**



## Contents

Highlights of past weather (General)	1-2
Past weather for Agri Plains	3-4
Crop progress	4
Max 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 (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)

Slightly below normal day time temperature was reported in most parts of the country during the week.

Province wise distribution of rainfall reported as follows:

Light rainfall reported only at single station (Drosh=2.6mm) in Khyber Pakhtunkhwa and dry weather was reported in remaining parts of the country.

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

**Editor-in-Chief: Dr. Azmat Hayat Khan (Director)**

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**Past Weather of Provinces (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)****Punjab**

Dry weather was reported in Punjab during the week. Weekly maximum and minimum temperatures recorded as 30.6°C & 13.6°C respectively. For the present season on average 132.1 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 0.4/0.9 Knots. During the previous week the highest maximum temperature was recorded as 36.2°C at Rahim Yar Khan.

**Sindh**

Dry weather was reported in Sindh during the week. Weekly maximum and minimum temperatures recorded as 35.6°C & 19.1°C respectively. For the present season, on average 156.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 57% and wind speed in the morning/evening recorded as 1.0/2.7 Knots. During the previous week the highest maximum temperature recorded as 38.2°C at Nawabshah.

**Khyber Pakhtunkhwa**

Light rainfall reported only at single station (Drosh = 2.6mm) in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 27°C & 10.2°C respectively. For the present season on average 95.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 51% and wind speed in the morning/evening recorded as 0.6/2.4 Knots. During the previous week the highest maximum temperature recorded as 34.5°C at D.I. Khan.

**Balochistan**

Dry weather was reported in Balochistan during the week. Weekly maximum and minimum temperatures recorded as 30.6°C & 13.6°C respectively. For the present season on average 119.6 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 2.3/5.1 Knots. During the previous week the highest maximum temperature was recorded as 38.5°C at Turbat.

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

Dry weather was reported in Gilgit-Baltistan & Kashmir regions during the week. Weekly maximum and minimum temperatures recorded as 23.6°C & 7.0°C respectively. For the present season on average 72.1 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 49% and wind speed in the morning/evening recorded as 0.5/1.0 Knots. During the previous week the highest maximum temperature recorded as 31.1°C at Kotli.

**Past Weather for Major Agricultural Plains  
(from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)****Rawalpindi (Potohar region)**

Dry weather was reported during the week; cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 62.9%. Mean day time temperature recorded as 29.8°C & for the present season 113.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.2 Knots.

**Faisalabad (Central Punjab)**

Dry weather was reported during the week; however cloudiness in the morning/evening recorded as 0.0/0.3 Oktas while, average relative humidity observed as 65%. Mean day time temperature recorded as 33.1°C & for the present season 140.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 Knots.

**Tandojam (Lower Sindh)**

Dry weather was reported during the week; however cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 64%. Mean day time temperature recorded as 36.3°C & for the present season 156.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.5/1.4 Knots.

**Quetta (Northern Baluchistan)**

Dry weather was reported during the week; however cloudiness in the morning/evening recorded as 0.0/0.1 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 22.6°C & for the present season 69.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.5/3.1 Knots.

**Usta Muhammad (Eastern Balochistan)**

Dry weather was reported during the week; however cloudiness in the morning/evening recorded 0.0/0.0 Oktas while, average relative humidity observed as 51%. Mean day time temperature recorded as 35.3°C & for the present season 141.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/0.6 Knots.

**Past Weather for Sub-Regional Agricultural  
Plains (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)****Multan**

Dry weather was reported during the week; however cloudiness in the morning/evening recorded as 0.4/0.4 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 32.9°C & for the present season 143.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.1 Knots.

**Lahore**

Dry weather was reported during the week; cloudiness in the morning/evening recorded as 0.0/0.7 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 31.5°C & for the present season 135.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 Knots.

**Zhob**

Dry weather was reported during the week; however cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 27.0°C & for the present season 104.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.9/5.4 Knots.

**D.I. Khan**

Dry weather was reported during the week; cloudiness in the morning/evening recorded as 0.9/0.6 Oktas while, average relative humidity observed as 62%. Mean day time temperature recorded as 33.3°C & for the present season 137.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.3 Knots.

**Peshawar**

Dry weather was reported during the week; cloudiness in the morning/evening recorded as 0.7/1.4 Oktas while, average relative humidity observed as 59%. Mean day time temperature recorded as 30.4°C & for the present season 120.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 Knots.

**Murree**

Dry weather was reported during the week; cloudiness in the morning/evening recorded as 0.6/0.7 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 20.0°C & for the present season 70.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/0.9 Knots.

**Kalam**

Dry weather was reported during the week, cloudiness in the morning/evening recorded as 0.3/3.4 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 20.8°C & for the present season 45.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.7 Knots.

**Gilgit**

Dry weather was reported during the week, cloudiness in the morning/evening recorded as 2.3/5.0 Oktas while, average relative humidity observed as 65%. Mean day time 63.8 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 was reported during the week; cloudiness in the morning/evening recorded as 0.9/3.9 Oktas while, average relative humidity observed as 52%. Mean day time temperature recorded as 18.0°C & for the present season 30.3 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 one crop (irrigated condition) grown in the fields of RAMC Rawalpindi.

**Maize:** Good condition at *full maturity* stage.

**Central Punjab (Faisalabad)**

There is presently one crop (irrigated condition) grown in the fields of RAMC Faisalabad.

**Cotton:** Very good condition *Maturity* stage completed.

**Lower Sindh (Tandojam)**

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

Land has been prepared for new crop.

**Northern Balochistan (Quetta)**

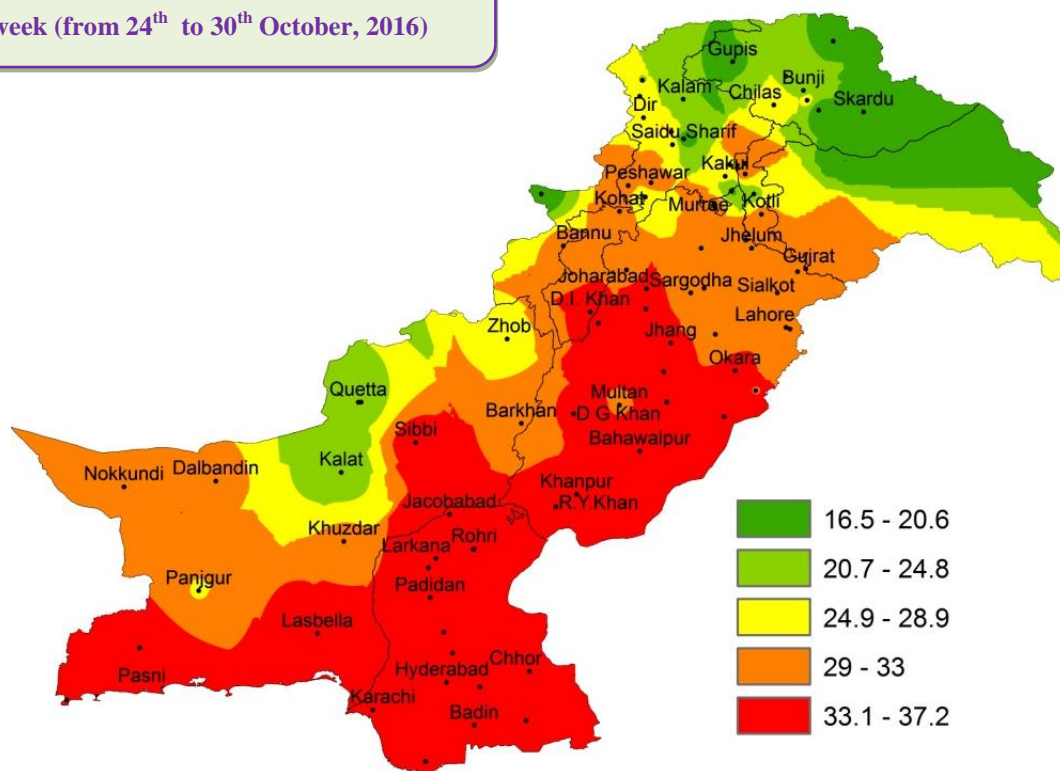
There is presently no crop grown in the fields of RAMC Quetta.

**Eastern Balochistan (Usta Muhammad)**

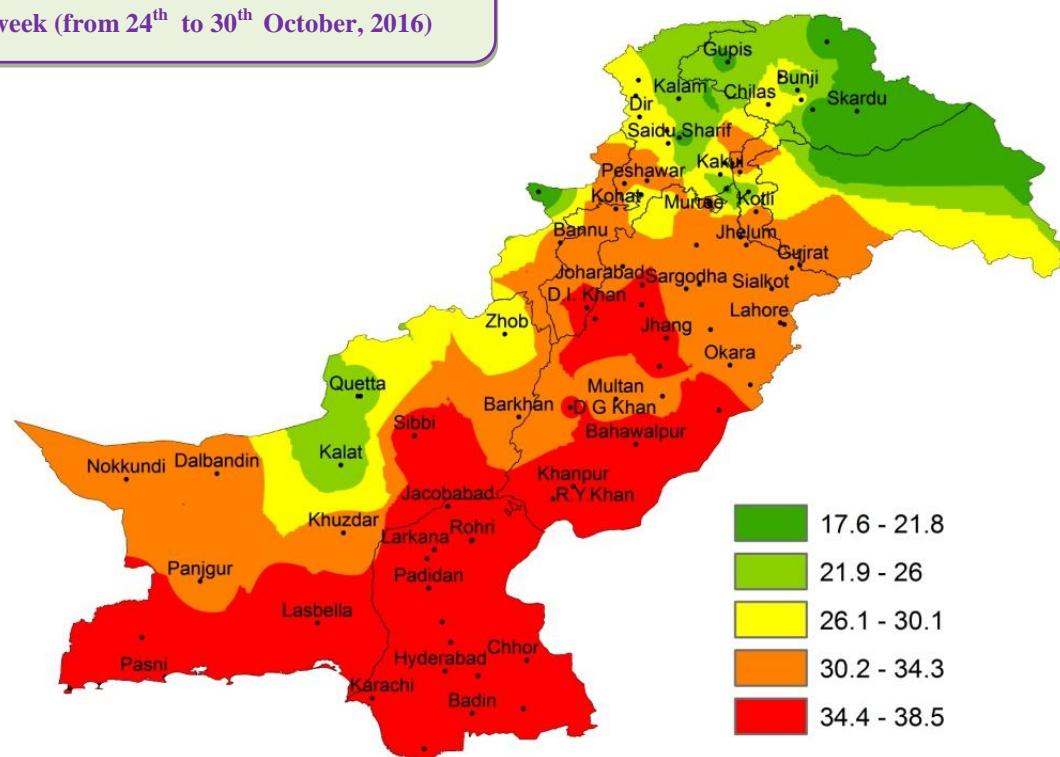
There is presently one crop (irrigated condition) grown in the fields of RAMC Usta Muhammad.

**Rice:** Good condition at *Wax maturity* stage.

Mean Maximum Temperature (°C) during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)

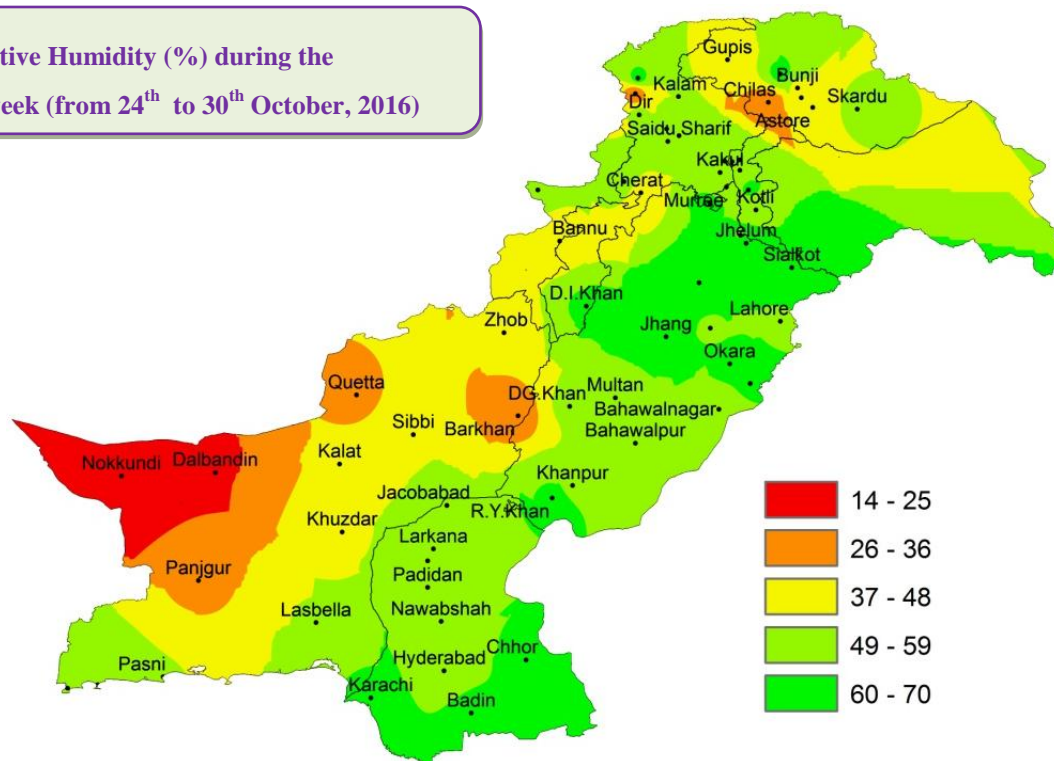


Highest Maximum Temperature (°C) during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)

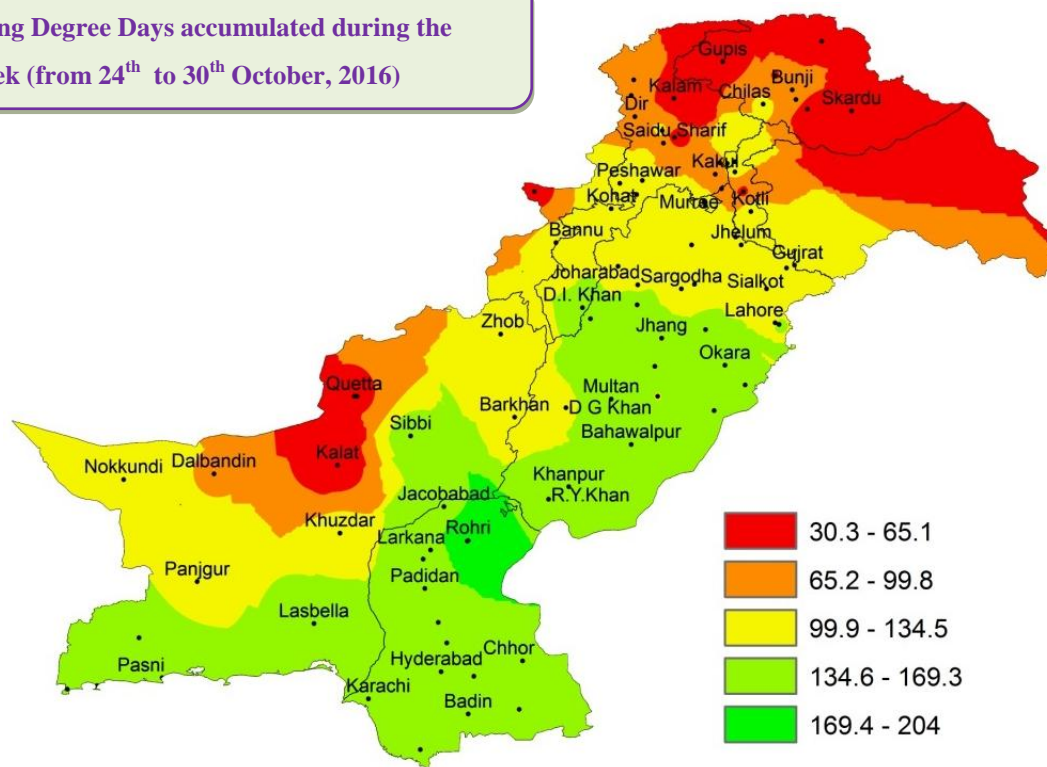




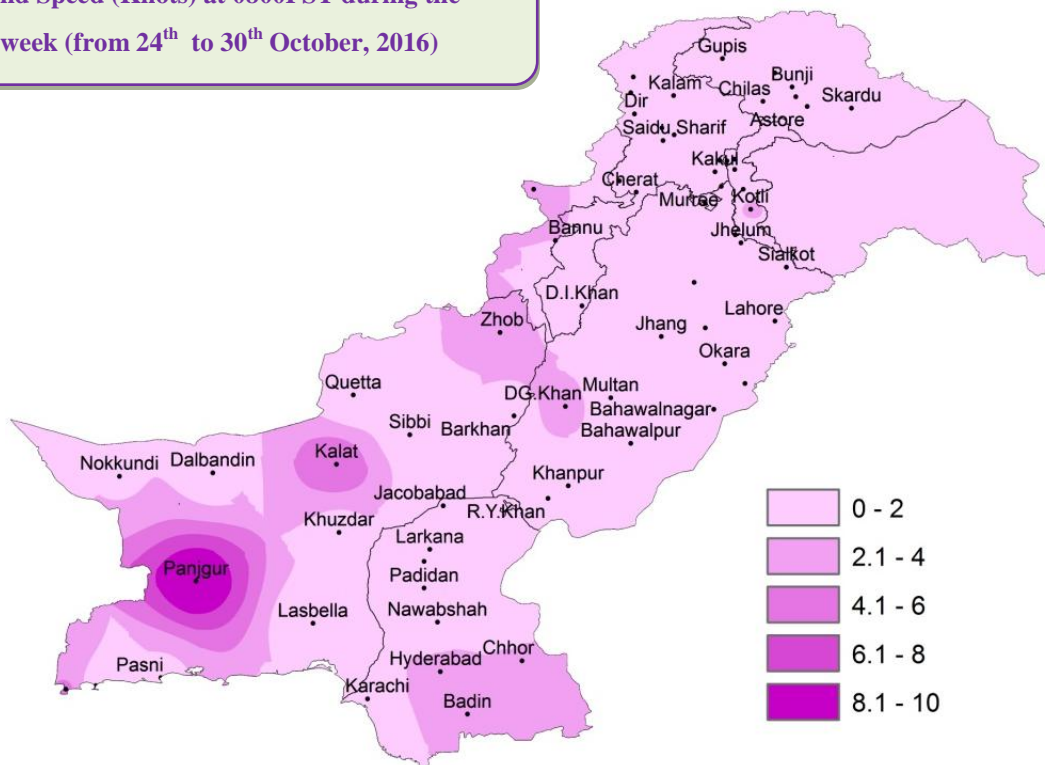
Mean Relative Humidity (%) during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)



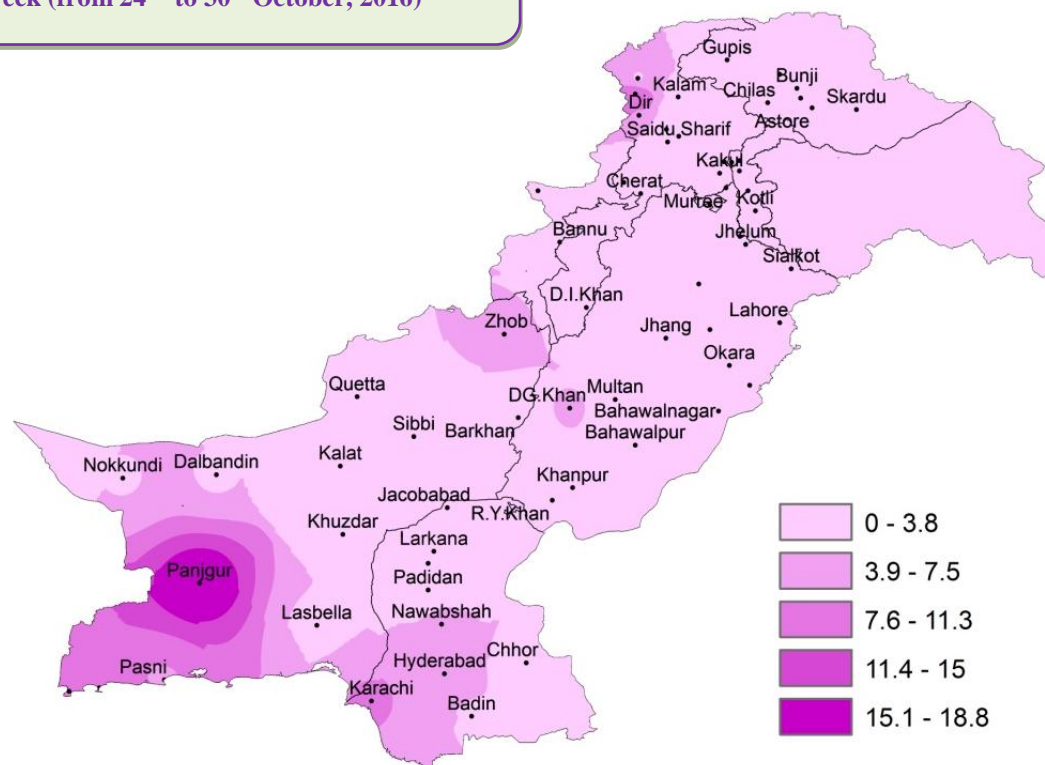
Total Growing Degree Days accumulated during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)



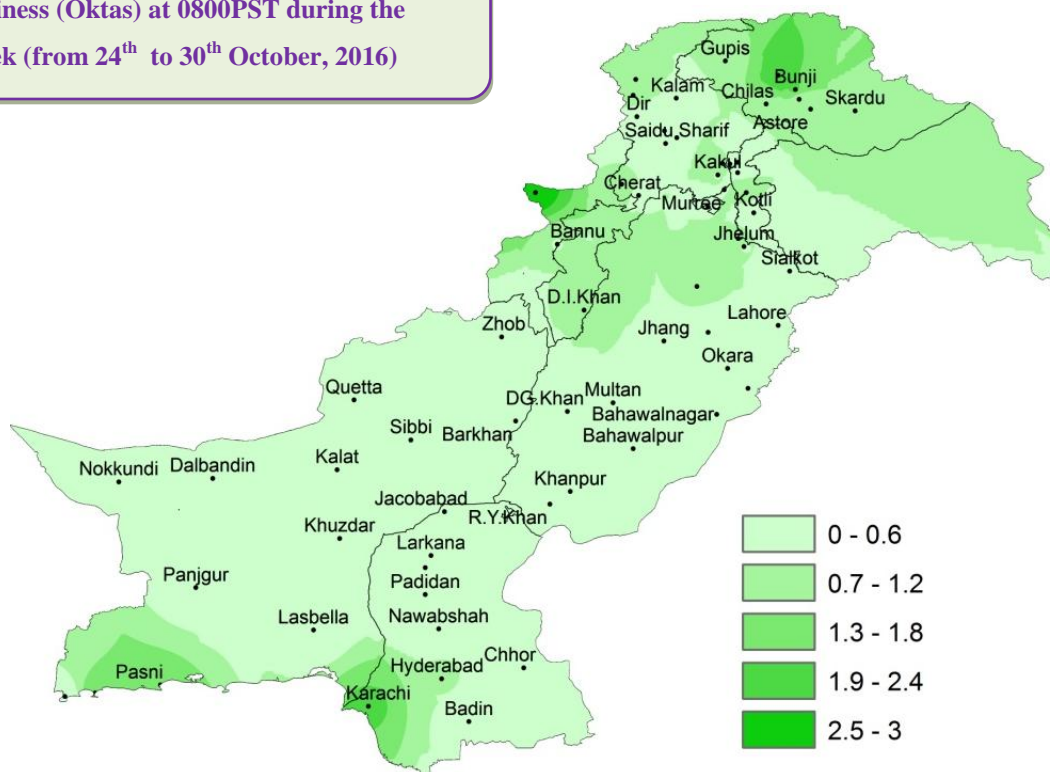
Mean Wind Speed (Knots) at 0800PST during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)



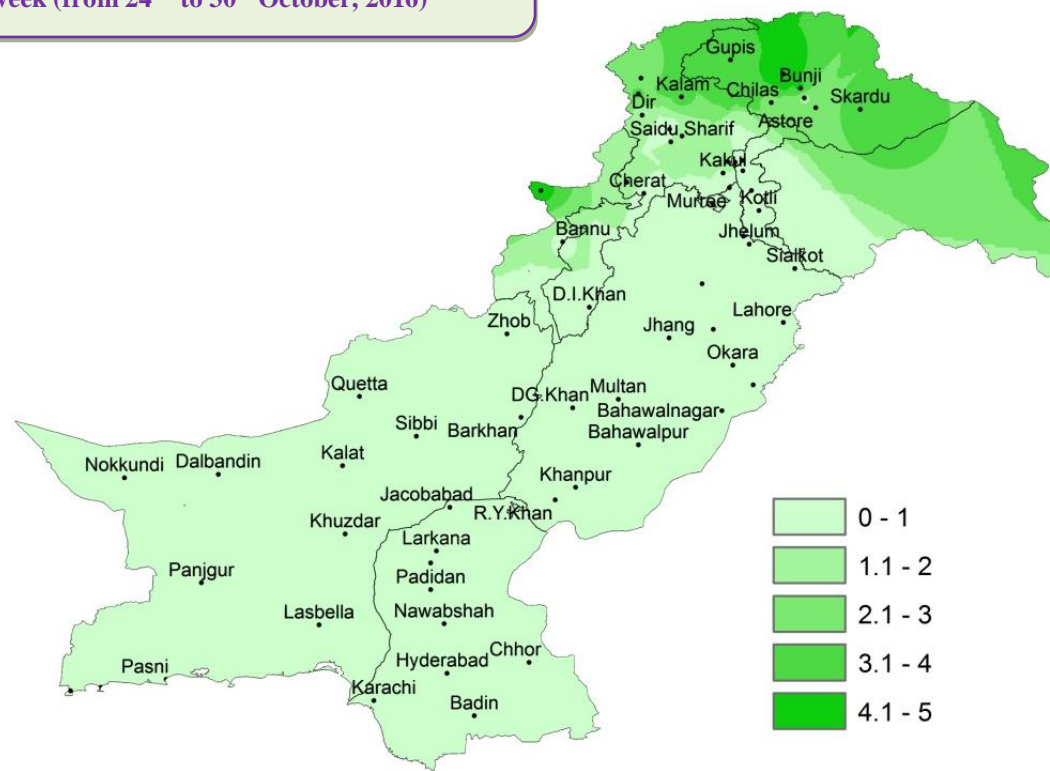
Mean Wind Speed (Knots) at 1200PST during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)



Mean Cloudiness (Oktas) at 0800PST during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)



Mean Cloudiness (Oktas) at 1200 PST during the  
Previous week (from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)





**Weekly Weather Advisory for Farmers**  
**(From 31<sup>st</sup> October to 6<sup>th</sup> November, 2016)**

Continental air is prevailing over most parts of the country. A westerly wave is expected to affect upper parts of the country on Thursday (evening/night) and likely to persist during next 24 to 36 hours.

**MONDAY**  
**31-10-2016**

Mainly dry weather is expected in most parts of the country. However, Partly cloudy weather conditions expected in Malakand division & Gilgit- Baltistan.

**TUESDAY**  
**01-11-2016**

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

**WEDNESDAY**  
**02-11-2016**

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

**THURSDAY**  
**03-11-2016**

Mainly dry weather is expected in most parts of the country. However, light rain-thunderstorm may occur at a few places in Malakand division and Gilgit-Baltistan.

**FRIDAY**  
**04-11-2016**

Partly cloudy weather conditions is expected in most upper parts of the country. However rain-thunderstorm is expected at few places of Malakand, Hazara, Rawalpindi divisions, Gilgit- Baltistan and Kashmir. Weather will remain dry elsewhere in the country.

**SATURDAY**  
**05-11-2016**

Mainly dry weather is expected in most parts of the country. However, Partly cloudy weather conditions expected in Malakand division & Gilgit- Baltistan.

**SUNDAY**  
**06-11-2016**

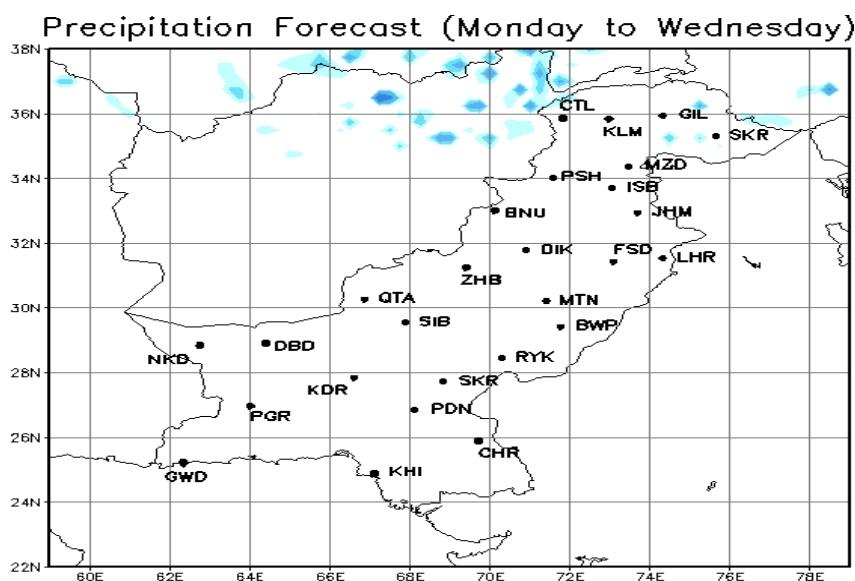
Mainly dry weather is expected in most parts of the country. However, Partly cloudy weather conditions with few chances of rain is expected in Malakand, Hazara divisions & Gilgit- Baltistan.

**ADVISES FOR CROPS**

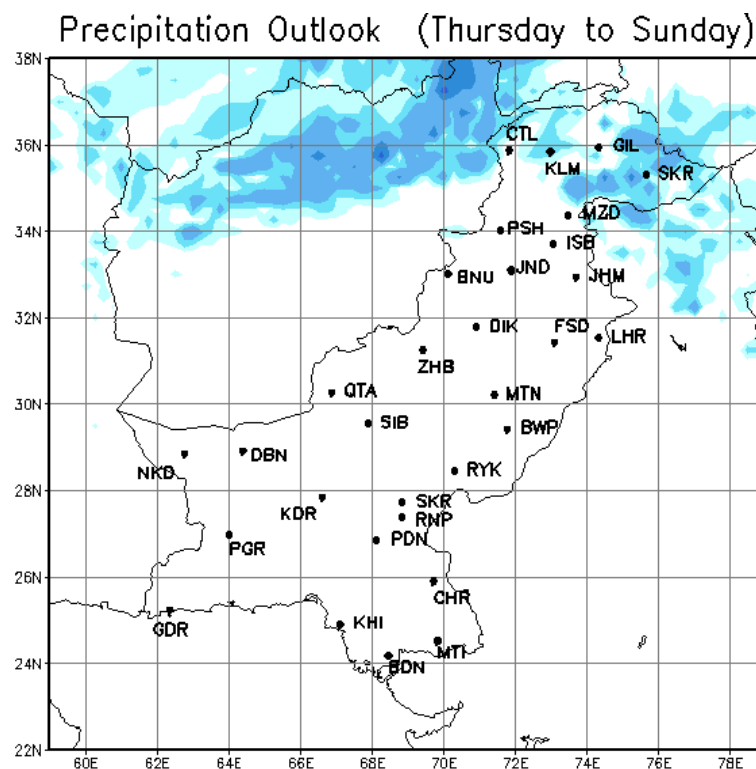
- ❖ Farmers of rainfed areas obtaining water through tube wells and irrigated areas in upper parts are advised to schedule the irrigation according to the expected weather mentioned during the decade.
- ❖ Rainfall/gusty winds after irrigation cause water logging of standing crops like maize, sugarcane and cotton. Farmers should be very careful in this regard.
- ❖ Farmers are advised to cultivate winter vegetables in time so that present soil moisture may fully be utilized.
- ❖ Farmers are advised to take in time precautionary measures to protect their crops, livestock and other property from any expected rain.
- ❖ Farmers of cotton crop areas are advised to prepare their field for incoming rabi crops and complete sowing in time.
- ❖ Farmers of rainfed areas are advised to sow their rabi crops during the period 15<sup>th</sup> Oct to 15<sup>th</sup> Nov. After this time yield of wheat crop decreases gradually.
- ❖ Farmers of irrigated areas of Punjab, Sindh and KPK are advised to complete sowing of wheat crop in the month of November. Late varieties may be cultivated in December.
- ❖ Farmers of rainfed areas of K.P & Punjab are advised to complete cultivation of Rabi crops as soon as possible. The status of soil moisture is very suitable after recent rains in these areas.

## Weather Outlook from 31<sup>st</sup> October to 6<sup>th</sup> November, 2016

The outlook from 31<sup>st</sup> October to 2<sup>nd</sup> November 2016 shows that mostly dry weather is expected in all parts of the country.



The outlook from 3<sup>rd</sup> to 6<sup>th</sup> November, 2016 shows that light to moderate rainfall is expected in the upper parts of the country whereas weather will remain dry elsewhere in the country.



**National Weather Data of Selected Cities**  
**(Weekly Data from 24<sup>th</sup> to 30<sup>th</sup> October, 2016)**

Stations	Maximum/Day time Temperature (°C)		Growing Degree Days	Relative Humidity (%)	Rainfall (mm)	Cloudiness (Oktas) 0800PST	Cloudiness (Oktas) 1700PST	Wind Speed (Knots) 0800PST	Wind Speed (Knots) 1700PST
	Mean	Highest							
Astore	16.7	17.5	32.6	36	0	1.1	2.3	0.0	2.3
Badin	34.6	36.0	164.5	61	0	0.0	0.3	2.0	3.4
Bahawalnagar	35.0	36.0	148.5	51	0	0.0	0.0	0.0	1.7
Bahawalpur	34.9	36.0	148.5	56	0	0.0	0.0	0.0	0.0
Balakot	28.2	29.0	94.7	60	0	1.0	1.9	0.0	0.0
Bannu	30.8	31.8	111.2	38	0	0.6	0.9	2.0	2.3
Barkhan	29.9	31.5	122.0	29	0	0.0	0.1	1.1	0.6
Bunji	23.4	25.0	79.2	44	0	2.0	4.3	1.1	1.1
Cherat	24.4	25.5	98.7	36	0	0.6	0.7	2.0	1.7
Chhor	35.7	38.0	156.4	60	0	0.4	0.0	2.0	2.0
Chilas	26.6	27.0	104.8	25	0	0.9	2.7	0.3	0.3
Chitral	24.6	26.0	70.4	65	0	0.9	2.7	1.7	3.1
D.I.Khan	33.3	34.5	137.1	62	0	0.9	0.6	0.0	0.3
Dalbandin	29.9	32.5	97.7	24	0	0.0	0.0	0.6	3.1
DG.Khan	33.8	34.5	133.8	52	0	0.0	0.0	3.1	4.6
Dir	26.7	28.0	70.0	53	0	0.0	1.6	0.0	7.3
Drosh	26.8	27.3	91.4	23	2.6	1.1	3.1	0.0	10.9
Faisalabad	33.1	33.6	140.1	65	0	0.0	0.3	0.0	0.0
Garidopatta	29.2	30.0	103.9	59	0	0.6	0.9	0.0	1.1
Gawader	34.7	36.5	164.3	59	0	1.7	0.4	1.0	10.6
Gilgit	24.6	26.0	63.8	65	0	2.3	5.0	0.0	0.0

Gupis	19.6	21.5	49.0	38	0	0.7	3.4	1.7	3.4
Hyderabad	36.0	38.0	162.0	55	0	0.7	0.0	2.3	6.0
Islamabad	30.4	30.8	110.8	63	0	0.6	0.7	0.0	1.4
Jacobabad	35.4	36.0	152.7	52	0	0.0	0.0	0.0	0.0
Jhang	33.5	34.5	137.2	66	0	0.4	0.4	0.0	0.0
Jhelum	32.2	33.0	128.7	68	0	0.6	0.4	0.0	0.0
Jiwani	34.7	37.0	166.8	51	0	0.0	0.0	4.3	8.0
Kakul	25.7	26.0	84.1	55	0	0.6	0.9	0.0	0.3
Kalam	20.8	23.0	45.1	49	0	0.3	3.4	0.0	1.7
Kalat	20.7	23.0	37.8	37	0	0.1	0.0	5.7	2.3
Karachi	34.1	36.5	159.2	62	0	2.0	0.3	1.7	8.0
Khanpur	34.7	35.3	141.4	58	0	0.0	0.0	0.0	0.6
Khuzdar	29.8	31.5	111.4	44	0	0.0	0.0	1.1	2.0
Kotli	30.4	31.1	119.7	54	0	0.0	0.7	2.6	1.1
Lahore	31.5	32.2	135.0	57	0	0.0	0.7	0.0	0.0
Larkana	35.8	37.0	157.7	55	0	0.0	0.0	1.1	1.1
Lasbella	37.2	38.2	158.2	49	0	0.0	0.0	0.0	2.6
Lower Dir	29.8	31.0	107.4	50	0	0.1	0.4	0.6	1.4
M.B Din	31.6	32.5	132.8	70	0	0.7	0.9	0.6	0.0
Malam Jabba	16.3	17.5	41.4	54	0	0.6	1.9	0.0	0.0
Mangla	31.7	32.5	124.5	58	0	0.9	1.0	0.0	1.7
Mir Khani	26.7	28.0	94.7	47	0	0.6	1.6	0.0	4.0
Moinjodaro	35.2	36.5	144.1	55	0	0.0	0.0	0.0	1.4
Multan	32.9	33.5	143.2	54	0	0.4	0.4	0.0	1.1
Murree	20.0	21.0	70.6	49	0	0.6	0.7	1.4	0.9
Muzaffarabad	29.1	30.3	102.6	54	0	0.4	0.7	0.0	0.0



Nawabshah	37.1	38.2	163.1	59	0	0.4	0.0	1.6	4.9
Nokkundi	30.5	32.0	118.0	14	0	0.0	0.0	1.7	3.4
Okara	33.3	34.0	145.4	62	0	0.0	0.4	0.0	0.0
Padidan	36.0	38.0	153.3	57	0	0.0	0.0	0.3	2.0
Panjgur	28.8	33.0	112.4	33	0	0.0	0.0	10.0	18.9
Parachinar	16.6	18.0	50.9	53	0	3.0	4.3	3.0	3.0
Pasni	35.8	37.0	161.4	48	0	1.4	0.4	1.3	7.1
Pattan	30.9	32.0	114.0	52	0	0.0	0.3	0.0	0.0
Peshawar	30.4	31.5	120.8	59	0	0.7	1.4	0.0	0.0
Quetta	22.6	25.0	69.2	37	0	0.0	0.1	1.5	3.1
R.Y.Khan	35.3	36.2	145.9	61	0	0.0	0.1	1.1	1.7
Rawalakot	23.3	24.2	60.2	60	0	1.0	0.9	0.0	1.4
Rawalpindi	29.8	30.6	113.9	63	0	0.0	0.4	0.0	0.2
Sahiwal	33.0	33.4	134.3	61	0	0.3	0.3	0.0	0.0
Saidu Sharif	28.3	29.0	99.9	56	0	0.0	1.0	0.0	0.0
Sialkot	30.2	30.9	124.1	70	0	0.0	0.9	0.0	0.3
Sibbi	36.8	38.0	160.7	45	0	0.0	0.3	0.9	1.4
Skardu	18.0	19.1	30.3	52	0	0.9	3.9	0.0	0.0
Tandojam	36.3	37.5	156.3	64	0	0.0	0.0	1.5	1.4
Usta.M	35.3	36.5	141.4	51	0	0.0	0.0	1.7	0.6
Zhob	27.0	28.0	104.5	38	0	0.0	0.6	2.9	5.4

\*\*\* 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)