

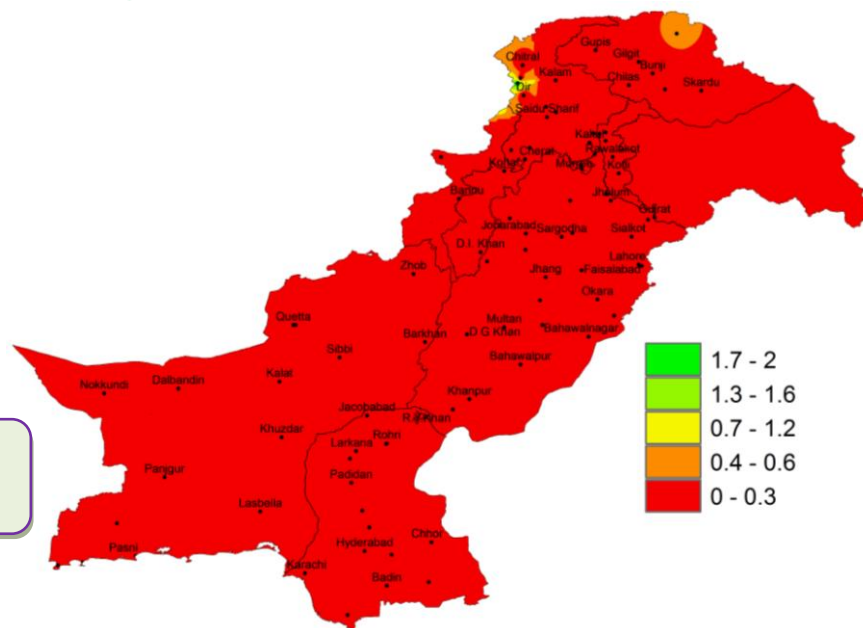
Weekly Weather and Crop Bulletin for Pakistan

**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 (23rd to 29th October, 2017)**



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 (23rd to 29th October, 2017)

Below normal night time temperatures reported from Punjab, Sindh, KP, Kashmir and Gilgit-Baltistan while mix trend observed in terms of night time temperatures in Baluchistan.

Province wise distribution of rainfall reported as follows:

- Dry weather reported from Punjab, Sindh, Baluchistan and Kashmir during this week.
- Light rainfall (including *traces*) reported from isolated places of Gilgit Baltistan while a single station of KP (Malakand Division) during the last week.

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

Editor-in-Chief: Dr. Khalid M. Malik (Director)

Editor: Dr. Dildar H. Kazmi (Meteorologist)

Past Weather of Provinces (23rd to 29th October, 2017)

Punjab

Dry weather reported from Punjab during the week. Weekly maximum and minimum temperatures recorded as 31.9°C & 15.5°C respectively. For the recent week on average 130.8 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 0.9/2.0 knots. During the previous lowest minimum temperature was recorded as 6°C at Murree.

Balochistan

Dry weather reported from Balochistan province during the week. Weekly maximum and minimum temperatures recorded as 31.6°C & 14.8°C respectively. For the recent week on average 125.9 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 1.5/5.4 knots. During the previous week lowest minimum temperature was recorded as 1.0°C at Kalat.

Khyber Pakhtunkhwa

Light rainfall reported from single place (Mirkhani) of Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 27.3°C & 10.0°C respectively. For the recent week on average 95.5 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 1.3/2.6 knots. During the previous week the highest amount of rainfall was recorded as 2.0 mm at Mirkhani (Malakand division) & lowest minimum temperature was recorded as 0.5°C at Kalam.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light rainfall reported from isolated places of Gilgit-Baltistan while Kashmir reported as dry during the week. Weekly maximum and minimum temperatures recorded as 23.6°C & 6.9°C respectively. For the recent week on average 68.2 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 0.7/1.4 knots. During the previous week the highest amount of rainfall was recorded as trace (0.4 mm) at Hunza & lowest minimum temperature was recorded as - 2.0°C at Skardu.

Sindh

Dry weather reported from Sindh province during the week. Weekly maximum and minimum temperatures recorded as 36.4°C & 19.9°C respectively. For the recent week, on average 166.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 56% and wind speed in the morning/evening recorded as 1.2/2.6 knots. During the previous week, lowest minimum temperature was recorded as 16.0°C at Moin-Jo-Daro.

Past Weather for Major Agricultural Plains
(23rd to 29th October, 2017)**Rawalpindi (Potohar region)**

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while average relative humidity observed as 70%. Mean night time temperature recorded as 12.4°C & for the recent week 111.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.0 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 61%. Mean night time temperature recorded as 16.2°C & for the recent week 121.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/0.2 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 62%. Mean night time temperature recorded as 18.3°C & for the recent week 161.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.5/1.4 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 75%. Mean night time temperature recorded as 18.6°C & for the recent week 155.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.2 knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while average relative humidity observed as 20%. Mean night time temperature recorded as 6.1°C & for the recent

week 60.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.5/2.1 knots.

Past Weather for Sub-Regional Agricultural Plains (23rd to 29th October, 2017)**Multan**

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.3/0.0 Oktas while average relative humidity observed as 58%. Mean night time temperature recorded as 17.1°C & for the recent week 140.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.7/0.0 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 58%. Mean night time temperature recorded as 16.5°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 0.7/0.0 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 32%. Mean night time temperature recorded as 10.6°C & for the recent week 108.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 5.0/5.7 knots.

Murree

Dry weather reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while average relative humidity observed as 48%. Mean night time temperature recorded as 9.3°C & for the recent week 66.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/1.0 knots.

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 61%. Mean night time temperature recorded as 16.8°C & for the recent week 136.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/1.0 knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.7/0.0 Oktas while average relative humidity observed as 64%. Mean night time temperature recorded as 16.1°C & for the recent week 125.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 8.3/0.3 knots.

Kalam

Dry weather reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while average relative humidity observed as 26%. Mean night time temperature recorded as 1.9°C & for the recent week 43.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/5.3 knots.

Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.3/3.0 Oktas while average relative humidity observed as 56%. Mean night time temperature recorded as 3.2°C & for the recent week 63.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.3 knots.

Skardu

Dry weather reported from Skardu during the week; However, cloudiness in the morning/evening recorded as 2.0/3.8 Oktas while average relative humidity observed as 51%. Mean night time temperature recorded as -0.6°C & for the recent week 26.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.0 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)

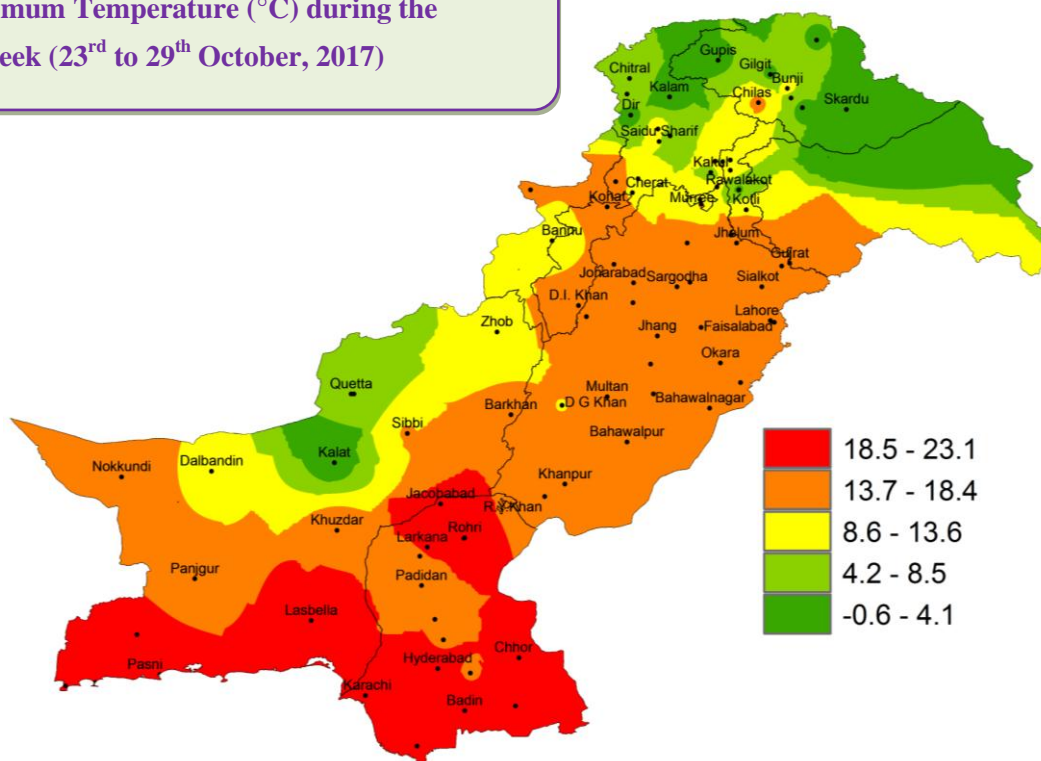
There is presently no crop grown in the fields of RAMC Quetta.

Eastern Baluchistan (Usta Muhammad)

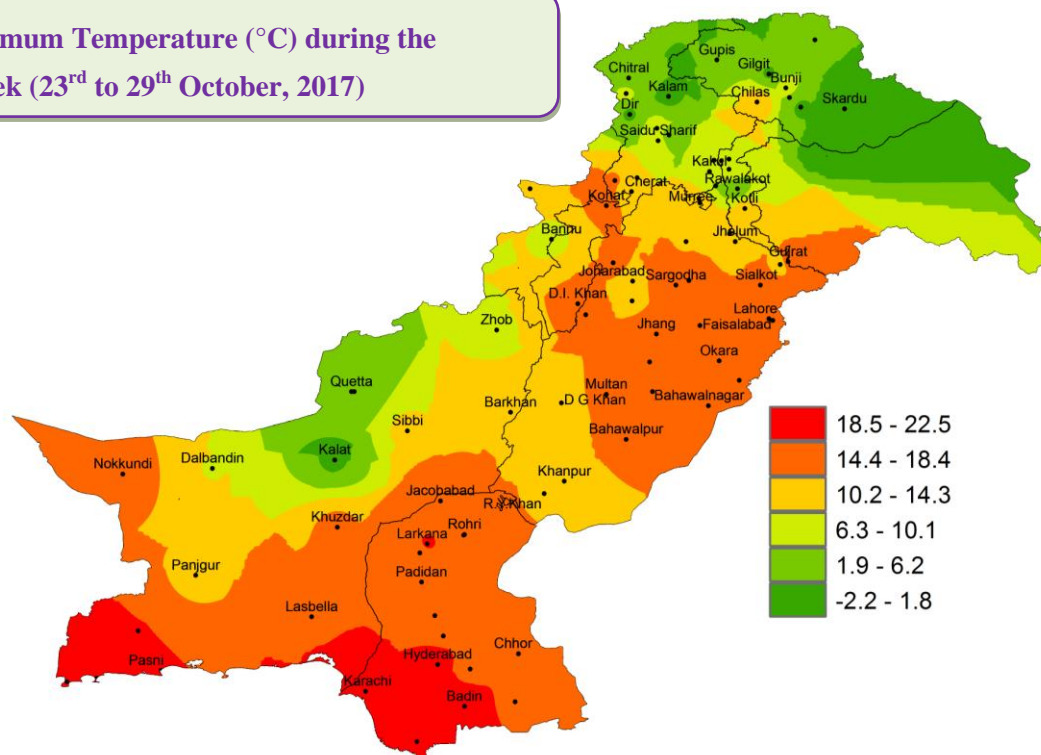
There is presently one crop (irrigated conditions) grown in the fields of RAMC Usta Muhammad.

Rice: *Harvesting in progress*.

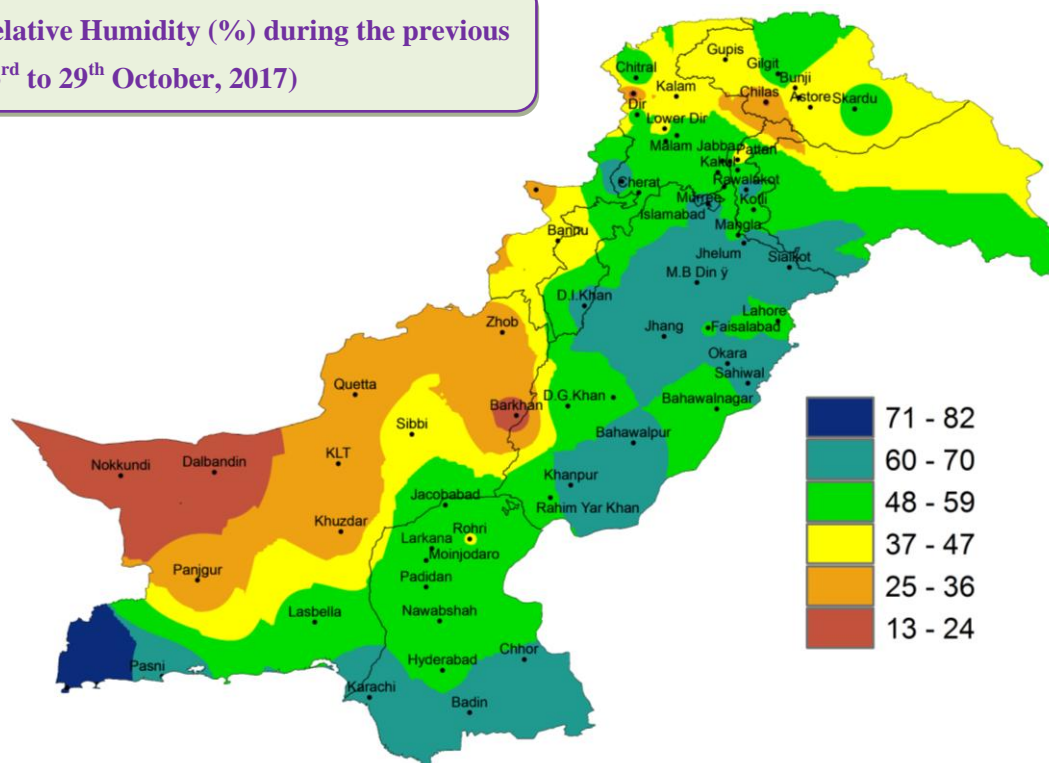
Mean Minimum Temperature (°C) during the
Previous week (23rd to 29th October, 2017)



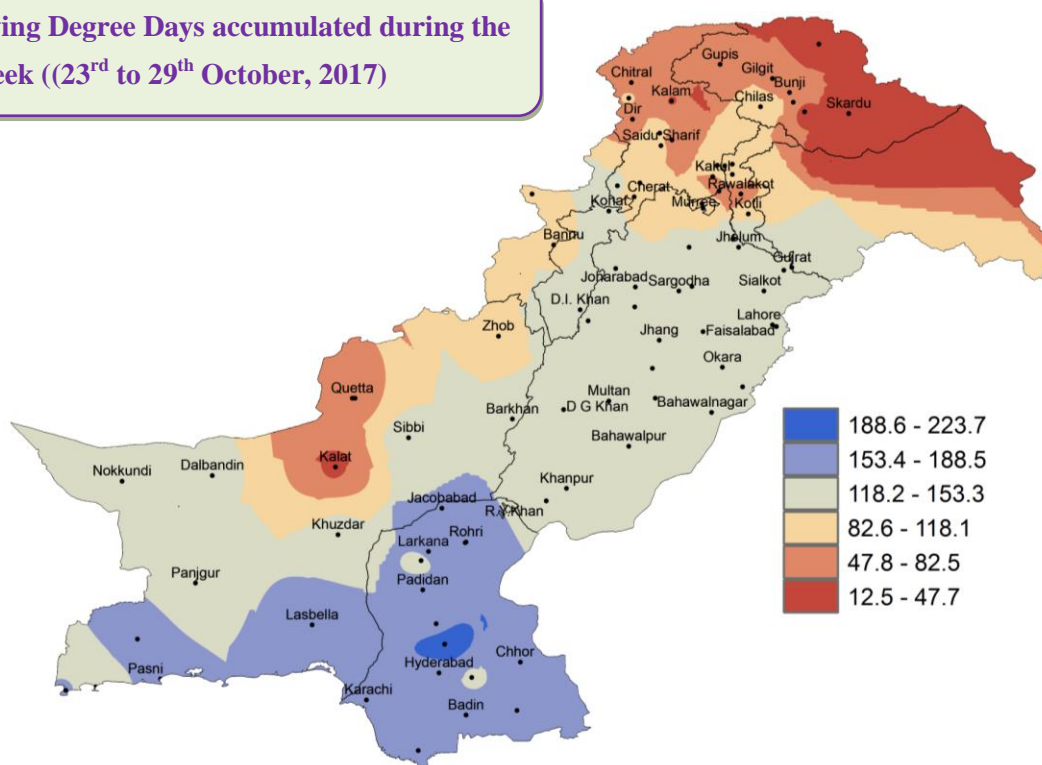
Lowest Minimum Temperature (°C) during the
Previous week (23rd to 29th October, 2017)



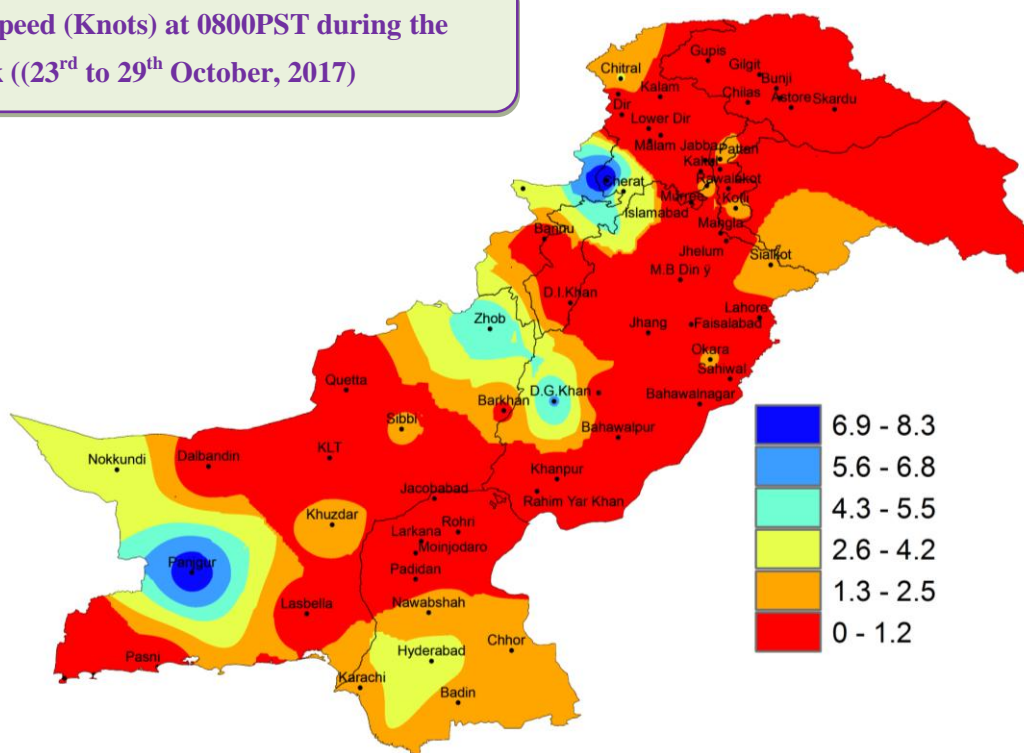
Mean Relative Humidity (%) during the previous week (23rd to 29th October, 2017)



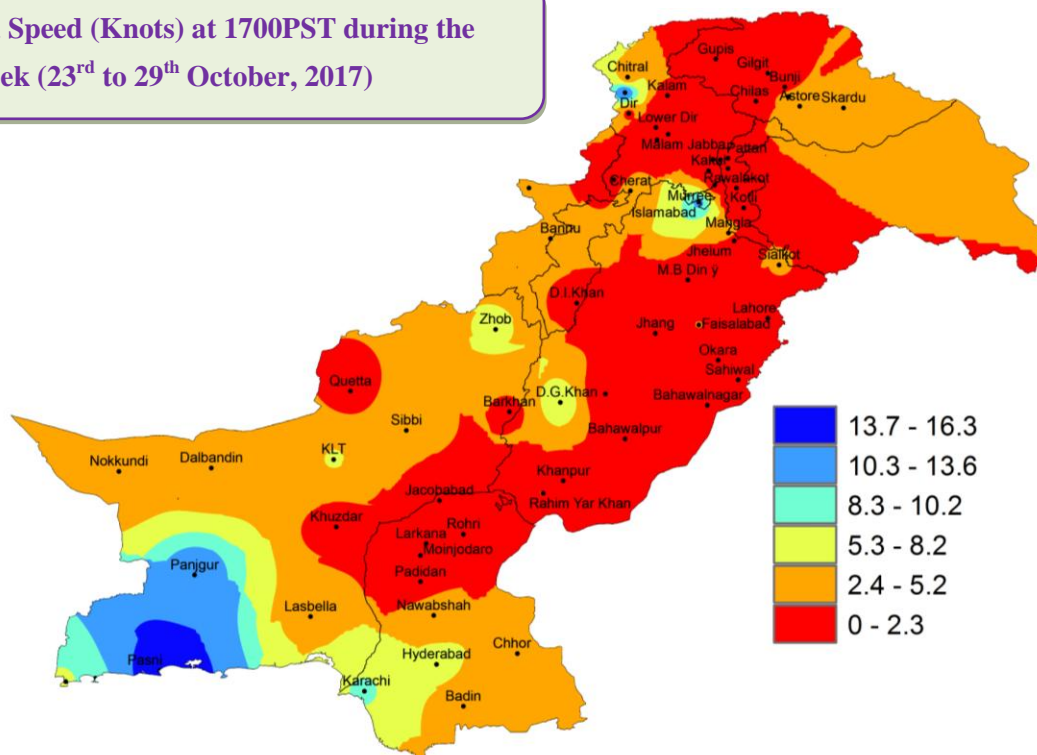
Total Growing Degree Days accumulated during the previous week ((23rd to 29th October, 2017)



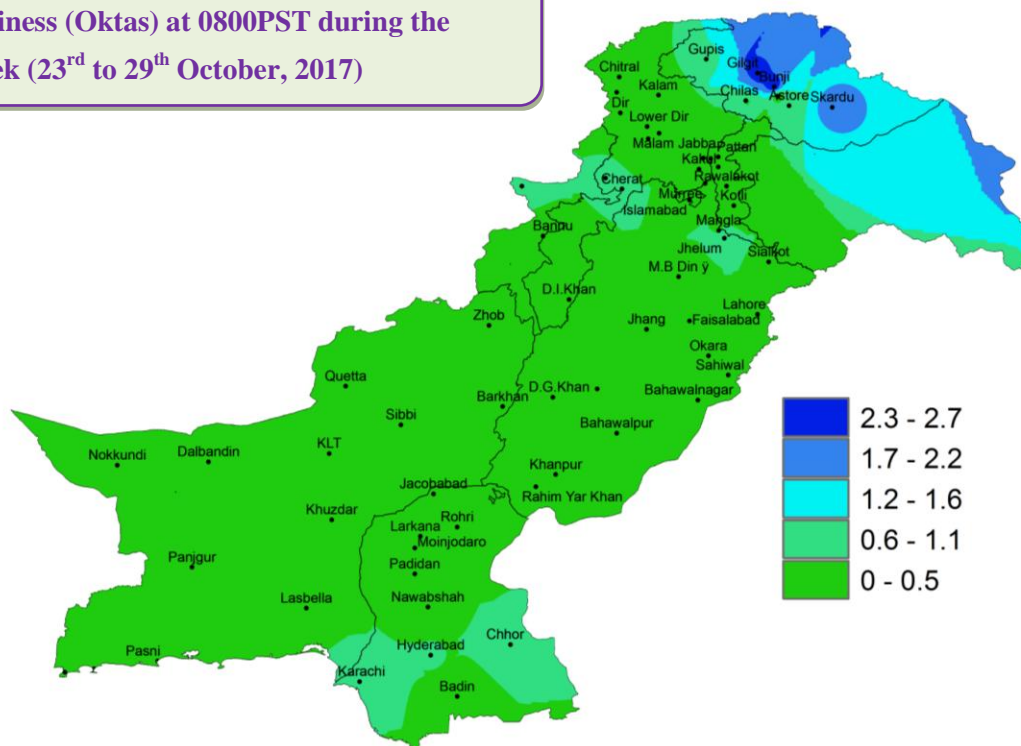
Mean Wind Speed (Knots) at 0800PST during the previous week ((23rd to 29th October, 2017)



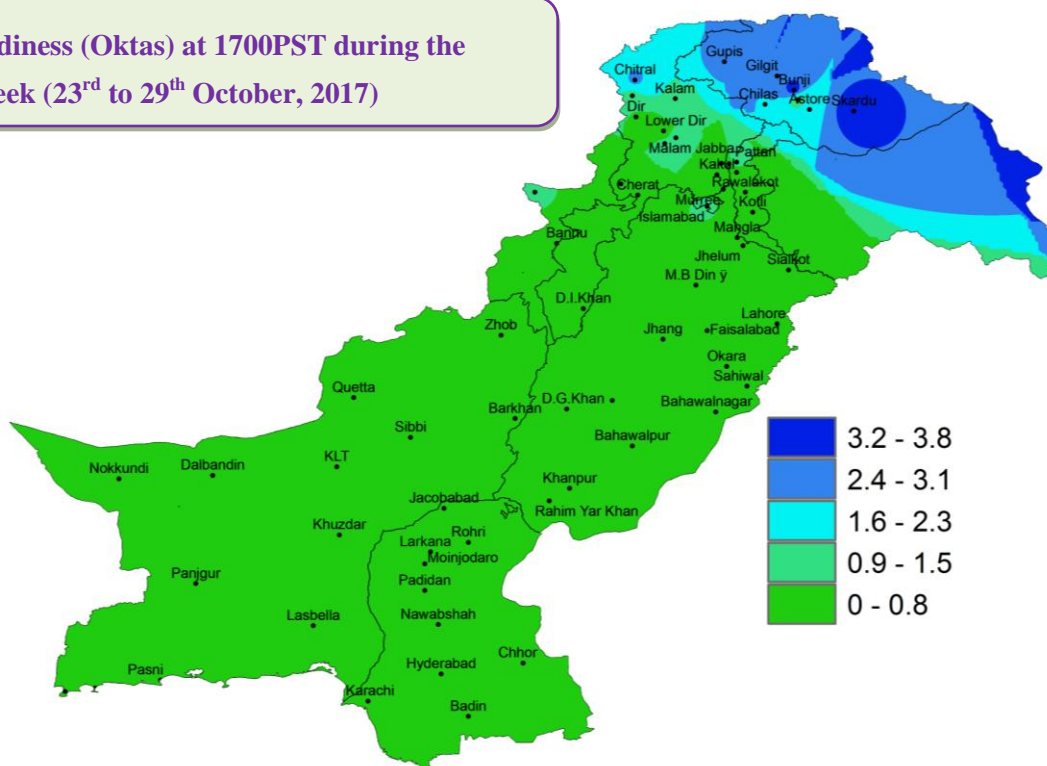
Mean Wind Speed (Knots) at 1700PST during the previous week (23rd to 29th October, 2017)



Mean Cloudiness (Oktas) at 0800PST during the previous week (23rd to 29th October, 2017)



Mean Cloudiness (Oktas) at 1700PST during the previous week (23rd to 29th October, 2017)



Weekly Weather Advisory for Farmers
(30th October to 05th November, 2017)

Continental air is prevailing over most parts of the country.

MONDAY
30-10-2017

Mainly dry weather is expected in most parts of the country. Shallow foggy/misty weather conditions are likely over plain areas of Punjab and upper Sindh during morning hours.

TUESDAY
31-10-2017

Mainly dry weather is expected in most plain areas of the country. Shallow foggy/misty weather conditions are expected over plain areas of Punjab and upper Sindh during morning hours.

WEDNESDAY
01-11-2017

Mainly dry weather is expected in most plain areas of the country. Shallow foggy/misty weather conditions are expected over plain areas of Punjab and upper Sindh during morning hours.

THURSDAY
02-11-2017

Mainly dry weather is expected in most plain areas of the country. Shallow foggy/misty weather conditions are expected over plain areas of Punjab and upper Sindh during morning hours.

FRIDAY
03-11-2017

Mainly dry weather is expected in most plain areas of the country. Shallow foggy/misty weather

conditions are expected over plain areas of Punjab and upper Sindh during morning hours.

SATURDAY
04-11-2017

Mainly dry weather is expected in most plain areas of the country. Shallow foggy/misty weather conditions are expected over plain areas of Punjab and upper Sindh during morning hours.

SUNDAY
05-11-2017

Mainly dry weather is expected in most parts of the country. Shallow foggy/misty weather conditions are likely over plain areas of Punjab and upper Sindh during morning hours

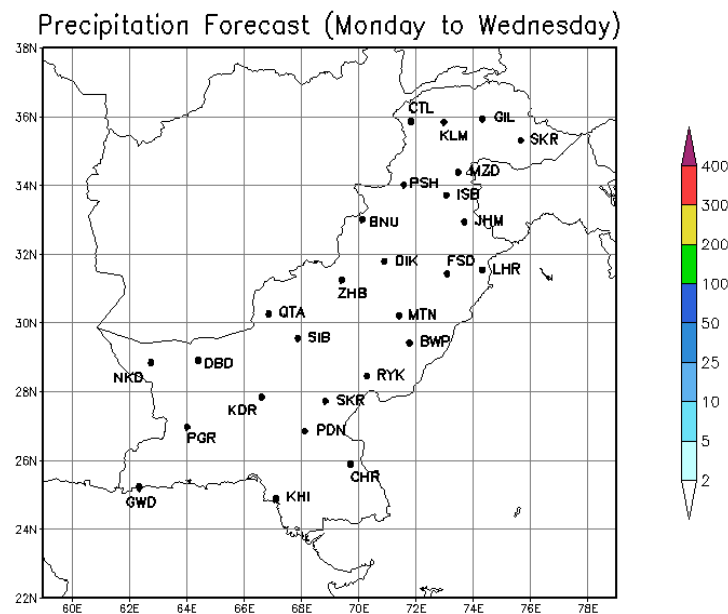
ADVISES FOR FARMERS

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

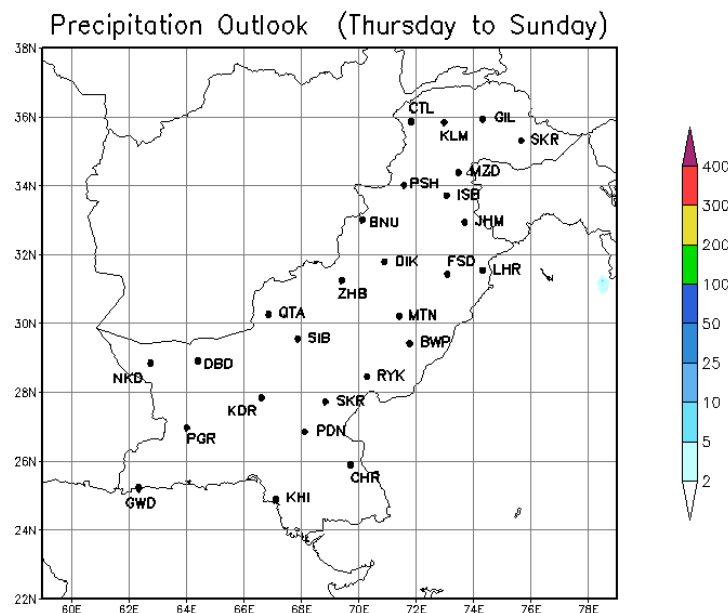
- The fields became fallow after cotton or other Kharif crops may be ploughed well and *Suhaga* may better be applied to preserve the soil moisture for the upcoming Rabi crops.
- Farmers of irrigated areas may irrigate the standing crops as per requirement in accordance with the expected weather and crop conditions.
- Due to expected foggy/misty weather conditions over the plains of Punjab and upper Sindh, precautionary measures may be taken to preserve the crops and livestock.

Weather Outlook from 30th October to 05th November, 2017

The outlook for the period 30th October to 1st November, 2017 shows that dry weather is expected at most parts of the country.



The outlook for the period 2nd to 5th November, 2017 shows that dry weather is expected to prevail in most parts of the country.



National Weather Data of Selected Cities (23rd to 29th 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 PST	Wind Speed (Knots) 1700 PST
	Mean	highest							
Astore	1.9	0.0	28.0	37	0.00	1.0	2.3	0.7	2.7
Badin	23.2	22.5	170.1	65	0.00	0.0	0.0	2.0	3.0
Bahawalnagar	17.3	16.0	148.5	51	0.00	0.0	0.0	0.0	0.0
Bahawalpur	16.2	14.7	141.6	61	0.00	0.0	0.0	0.0	0.0
Balakot	9.2	8.2	98.1	57	0.00	0.0	0.5	0.0	0.0
Bannu	10.4	9.0	109.9	39	0.00	0.0	0.0	0.7	4.0
Barkhan	14.9	13.0	123.0	20	0.00	0.0	0.0	1.0	1.7
Bunji	10.2	8.3	79.3	46	0.00	2.8	3.7	0.8	0.3
Cherat	13.3	11.5	95.8	48	0.00	0.6	0.0	2.8	4.0
Chhor	20.6	18.0	171.1	59	0.00	1.0	0.3	1.3	3.7
Chilas	14.4	13.5	110.5	23	0.00	0.5	2.2	0.3	1.0
Chitral	4.6	3.0	70.3	60	0.00	0.0	2.5	2.7	3.0
D.G.Khan	13.5	12.4	132.0	56	0.00	0.3	0.0	5.7	7.0
D.I.Khan	16.8	16.0	136.5	61	0.00	0.0	0.0	0.3	1.0
Dalbandin	11.9	10.0	126.3	20	0.00	0.0	0.0	0.0	2.3
Dir	2.3	1.0	61.7	51	0.00	0.0	0.7	0.0	1.7
Drosh	8.7	7.8	86.4	20	0.00	0.0	1.3	0.7	13.0
Faisalabad	16.2	15.2	121.9	70	0.00	0.0	0.0	0.0	0.2
Gari dopatta	10.2	9.5	105.1	54	0.00	0.0	0.0	0.0	1.0
Gawader	20.9	20.0	133.0	74	0.00	0.0	0.5	0.0	10.0
Gilgit	3.2	1.0	63.5	56	0.00	2.3	3.0	0.0	2.3
Gupis	3.3	2.0	49.3	42	0.00	1.0	2.5	1.0	1.0

Hyderabad	21.1	20.0	169.5	56	0.00	0.7	0.3	3.3	6.3
Islamabad	10.9	10.0	104.8	64	0.00	0.3	1.0	0.0	10.8
Jacobabad	18.5	17.5	153.5	55	0.00	0.0	0.0	0.0	0.0
Jhang	16.3	15.5	138.0	66	0.00	0.0	0.0	0.3	0.7
Jhelum	14.7	13.9	126.0	67	0.00	0.8	0.3	0.3	0.7
Jiwani	22.9	22.5	155.5	82	0.00	0.0	0.3	0.0	7.7
Kakul	7.6	7.0	80.3	51	0.00	0.0	0.3	0.0	0.7
Kalam	1.4	0.5	46.5	39	0.00	0.0	1.3	0.0	0.7
Kalat	1.9	1.0	43.5	26	0.00	0.0	0.0	0.0	5.3
Karachi	22.8	20.5	167.2	68	0.00	1.0	0.3	2.4	8.3
Khanpur	14.7	13.7	137.4	61	0.00	0.0	0.0	0.0	0.3
Khuzdar	16.9	15.5	130.0	32	0.00	0.0	0.0	1.7	1.3
Kotli	13.8	13.0	119.1	52	0.00	0.0	0.0	1.7	1.0
Lahore	16.5	15.5	137.0	58	0.00	0.0	0.0	0.7	0.0
Larkana	19.6	19.0	159.1	50	0.00	0.0	0.0	1.0	1.0
Lasbella	21.8	18.0	176.0	53	0.00	0.0	0.0	0.3	4.3
Lower Dir	10.4	8.5	109.3	44	0.00	0.0	0.5	0.7	2.0
M.B Din	16.0	15.5	130.1	70	0.00	0.0	0.0	0.0	0.3
Malam Jabba	6.3	4.5	45.3	56	0.00	0.0	1.0	0.0	0.0
Mangla	14.0	13.3	122.1	55	0.00	0.5	0.0	0.0	3.6
Mir Khani	7.4	6.0	84.7	39	2.00	0.0	0.7	0.5	4.3
Moinjodaro	17.3	16.0	149.7	57	0.00	0.0	0.0	0.0	1.3
Multan(PBO)	17.1	15.5	140.1	58	0.00	0.3	0.0	0.7	0.0
Murree	9.3	6.0	66.9	48	0.00	0.0	0.0	2.0	1.0
Muzaffarabad	10.7	10.2	100.7	48	0.00	0.2	0.5	0.5	1.3
Nawabshah	18.2	16.5	164.7	49	0.00	0.0	0.0	2.0	4.0

Nokkundi	18.1	16.5	148.8	13	0.00	0.0	0.0	3.0	2.7
Okara	18.0	17.5	142.5	59	0.00	0.0	0.0	1.3	0.3
Padidan	16.9	16.0	155.8	57	0.00	0.0	0.0	0.8	1.0
Panjgur	14.7	13.0	131.3	29	0.00	0.0	0.0	7.3	11.7
Parachinar	14.4	12.5	103.5	32	0.00	1.0	1.0	3.0	3.0
Pasni	22.4	18.5	160.3	65	0.00	0.0	0.0	0.3	16.3
Pattan	10.6	10.0	111.0	44	0.00	0.0	1.3	2.3	1.5
Peshawar	16.1	15.0	125.3	64	0.00	0.7	0.0	8.3	0.3
Quetta	6.1	4.5	60.9	20	0.00	0.0	0.4	1.5	2.1
Rahim Yar Khan	15.3	13.8	140.9	58	0.00	0.0	0.0	1.0	2.3
Rawalakot	3.4	3.0	56.0	63	0.00	0.0	0.3	0.0	0.0
Rawalpindi	12.4	11.4	111.9	70	0.00	0.0	0.0	0.0	0.0
Rohri	20.4	18.5	163.3	47	0.00	0.0	0.0	0.0	0.0
Sahiwal	16.5	15.0	137.7	61	0.00	0.0	0.0	0.7	0.0
Saidu Sharif	8.6	7.0	94.0	49	0.00	0.0	0.8	0.0	0.7
Sialkot	15.1	14.0	123.8	59	0.00	0.3	0.0	2.5	2.5
Sibbi	13.9	11.5	143.1	44	0.00	0.0	0.0	1.3	4.0
Skardu	-0.6	-2.2	26.5	51	0.00	2.0	3.8	0.0	3.0
Tandojam	18.3	17.5	161.0	62	0.00	0.0	0.0	0.5	1.4
Usta. M	18.6	17.5	155.5	75	0.00	0.0	0.0	0.0	0.2
Zhob	10.6	9.0	108.3	32	0.00	0.0	0.0	5.0	5.7

*** 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 2014-2012)