

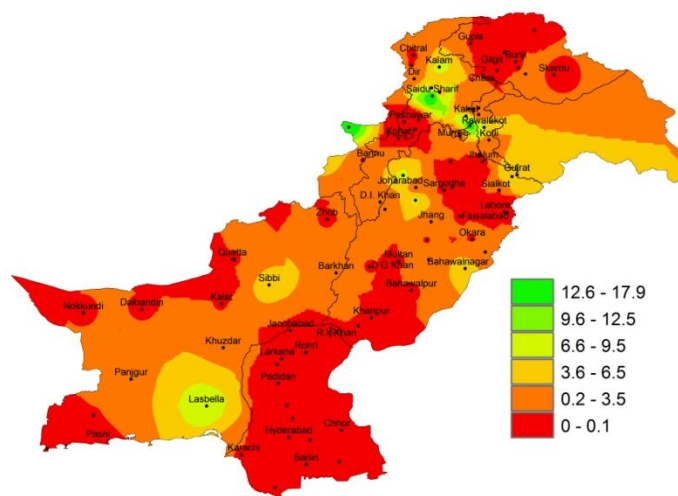
Weekly Weather and Crop Bulletin for Pakistan

**NATIONAL AGROMET CENTRE
PAKISTAN METEOROLOGICAL
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**Rainfall Distribution (mm) during the
Previous Week (from 22nd May to 28th May, 2017)**



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Highlights of Past Weather (from 22nd May to 28th May, 2017)

Above normal day temperatures reported from most parts of the country.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall reported from most places of Punjab, Khyber Pakhtunkhwa (KP), Gilgit-Baltistan and Azad Kashmir.
- Light rainfall reported from isolated places of Balochistan.
- Dry weather reported from Sindh

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

Editor: Dr. Dildar Kazmi (Meteorologist)

Past Weather of Provinces (from 22nd May to 28th May, 2017)**Punjab**

Light to moderate rainfall reported from most places of Punjab during the week. Weekly maximum and minimum temperatures recorded as 41.4°C & 25.6°C respectively. For the recent week on average 199.8 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 40% and wind speed in the morning/evening recorded as 2.3/3.1 Knots. During the previous week the highest amount of rainfall was recorded as 15mm at Murree & highest maximum temperature was recorded as 48.5°C at Bhakkar.

Balochistan

Light rainfall reported from isolated places of Balochistan during the week. Weekly maximum and minimum temperatures recorded as 40.3°C & 23.6°C respectively. For the recent week on average 186.5 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 1.5/6.3 Knots. During the previous week the highest amount of rainfall was recorded as 8.0 mm at Lasbella & highest maximum temperature was recorded as 54.0°C at Turbat.

Khyber Pakhtunkhwa

Light to moderate rainfall reported from most of the places in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 36.1°C & 19.5°C respectively. For the recent week on average 159.5 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 44% and wind speed in the morning/evening recorded as 1.0/3.8 Knots. During the previous week the highest amount of rainfall was recorded as 18.0 mm at Saidu Sharif & highest maximum temperature was recorded as 46.5°C at Risalpur.

Gilgit-Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall reported from few places of Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 32.7°C & 16.6°C respectively. For the recent week on average 136.9 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 1.0/2.9 Knots. During the previous week the highest amount of rainfall was recorded as 6.71 mm at Rawalakot & highest maximum temperature was recorded as 40.5°C at Garhidupatta.

Sindh

Light to moderate rainfall reported from isolated places of Sindh during the week. Weekly maximum and minimum temperatures recorded as 43.0°C & 27.6°C respectively. For the recent week, on average 212.7 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 5.2/6.5 Knots. During the previous week the highest amount of rainfall was recorded as nil, highest maximum temperature was recorded as 51.0°C at Jacobabad.

**Past Weather for Major Agricultural Plains
(from 22nd May to 28th May, 2017)****Rawalpindi (Potohar region)**

Rainfall reported as 3.4 mm from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 2.3/2.6 Oktas while, average relative humidity observed as 45%. Mean day time temperature recorded as 39.6°C & for the recent week 186.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.1/1.4 Knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.1/0.3 Oktas while, average relative humidity observed as 39%. Mean day time temperature recorded as 41.9°C & for the recent week 202.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.6/0.9 Knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.4/0.0 Oktas while, average relative humidity observed as 58%. Mean day time temperature recorded as 35.3°C & for the recent week 178.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.5/4.0 Knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded 1.1/0.9 Oktas while, average relative humidity observed as 37%. Mean day time temperature recorded as 46.6°C & for the recent week 231.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/3.4 Knots.

Quetta (Northern Baluchistan)

Rainfall reported as trace from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.9/1.3 Oktas while, average relative humidity observed as 20%. Mean day time temperature recorded as 34.4°C & for the recent

week 148.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.6/4.2 Knots.

**Past Weather for Sub-Regional Agricultural
Plains (from 22nd May to 28th May, 2017)****Multan**

Rainfall reported as 0.01 mm from Multan during the week; however, cloudiness in the morning/evening recorded as 0.9/1.1 Oktas while, average relative humidity observed as 32%. Mean day time temperature recorded as 43°C & for the recent week 220.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 7.0/4.3 Knots.

Lahore

Rainfall reported as 0.01 mm from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.9/1.3 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 40.4°C & for the recent week 199.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/2.3 Knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/0.7 Oktas while, average relative humidity observed as 35%. Mean day time temperature recorded as 37.9°C & for the recent week 173.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/5.7 Knots.

Murree

Rainfall reported as 15 mm from Murree during the week; however, cloudiness in the morning/evening recorded as 1.6/3.1 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 26.2°C & for the recent week 108.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/1.7 Knots.

D.I. Khan

Rainfall reported as 1.0 mm from D.I. Khan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.4 Oktas while, average relative humidity observed as 44%. Mean day time temperature recorded as 43.1°C & for the recent week 206.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/0.6 Knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 1.3/0.9 Oktas while, average relative humidity observed as 38%. Mean day time temperature recorded as 41.4°C & for the recent week 195.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.1/2.0 Knots.

Kalam

Rainfall reported as 7.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.6/3.6 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 27.9°C & for the recent week 96.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.6 Knots.

Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.0/4.7 Oktas while, average relative humidity observed as 42%. Mean day time temperature recorded as 35.1°C & for the recent week 141.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/6.9 Knots.

Skardu

Dry weather reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 2.0/3.9 Oktas while, average relative humidity observed as 34%. Mean day time temperature recorded as 29.7°C & for the recent week 110.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.3 Knots.

Crop Situation for Major Agricultural Plains
(Based on data from Regional Agromet 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: Good condition, *Germination* stage.

Lower Sindh (Tandojam)

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

Cotton (HH-906): Good condition, *3rd leaf* stage.

Northern Balochistan (Quetta)

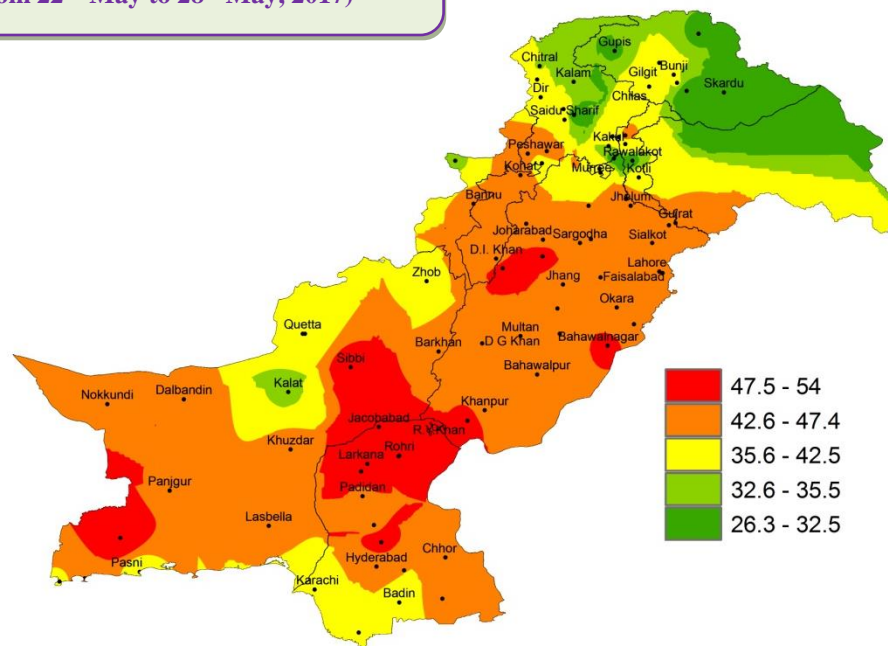
There is presently one crop (irrigated conditions) grown in the fields of RAMC Quetta.

Wheat (Local white): Good condition, *Full Maturity* stage.

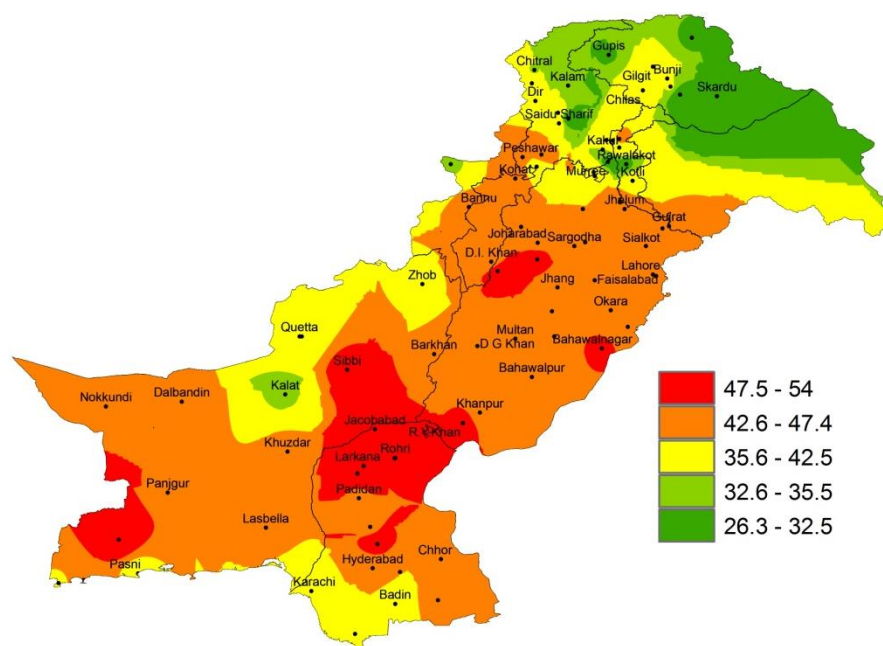
Eastern Balochistan (Usta Muhammad)

Land has been prepared for new crop.

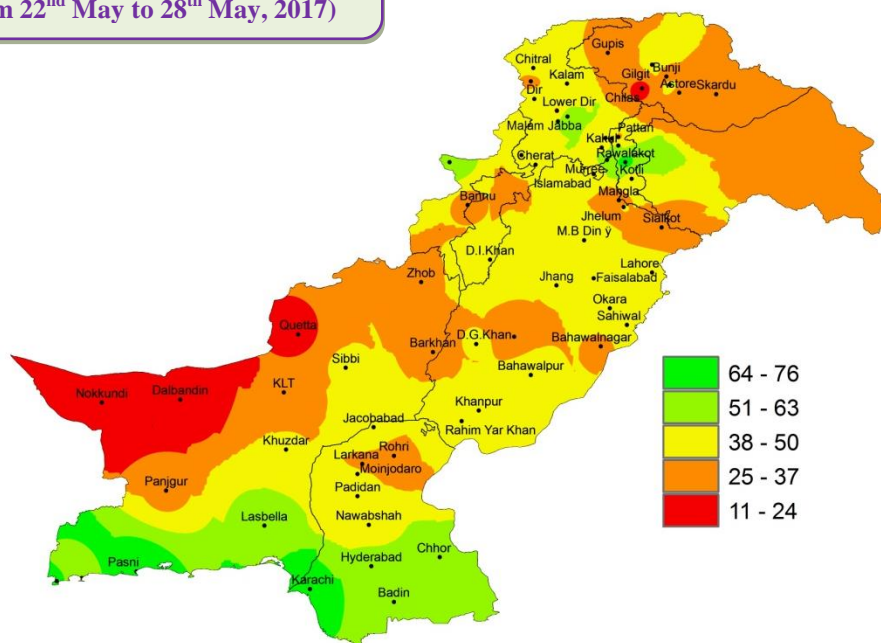
Mean Maximum Temperature (°C) during the
Previous week (from 22nd May to 28th May, 2017)



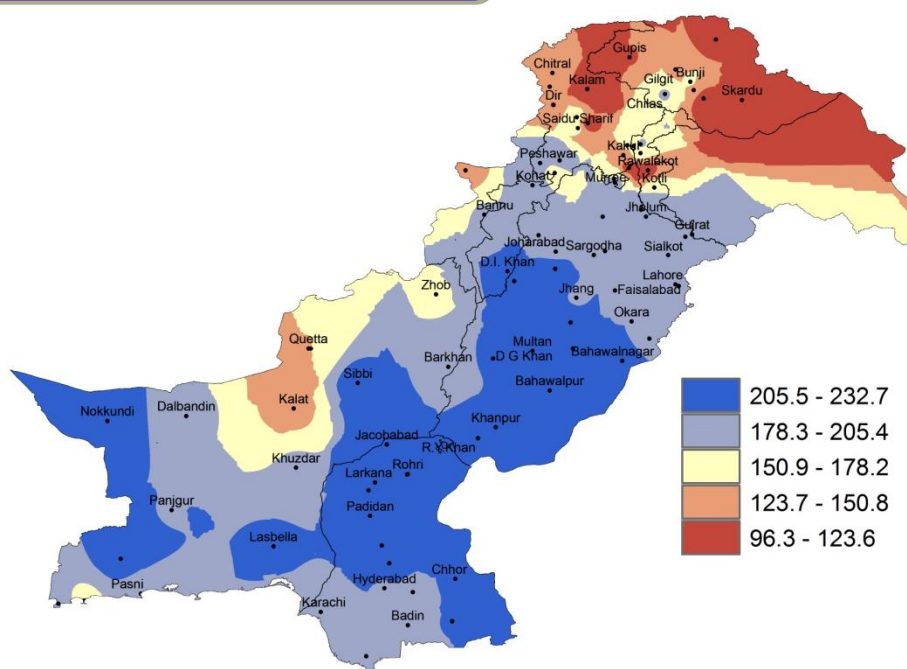
Highest maximum Temperature (°C) during the
Previous week (from 22nd May to 28th May, 2017)



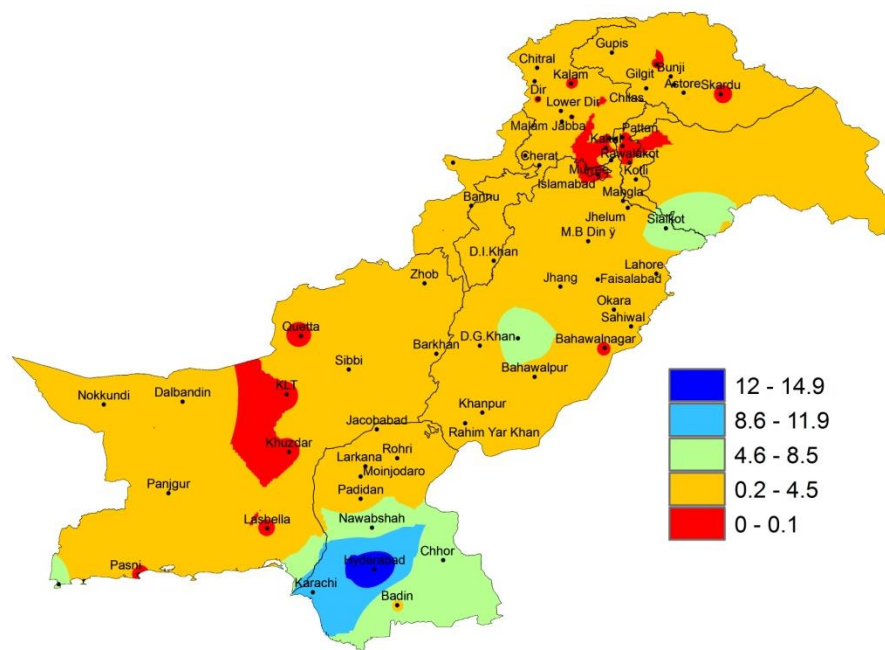
Mean Relative Humidity (%) during the
Previous week (from 22nd May to 28th May, 2017)



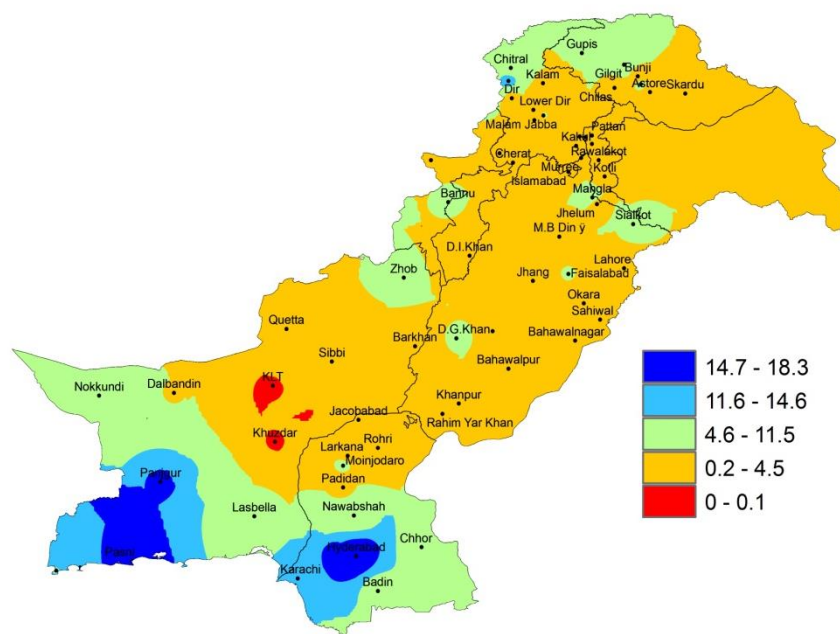
Total Growing Degree Days accumulated during the
Previous week (from 22nd May to 28th May, 2017)



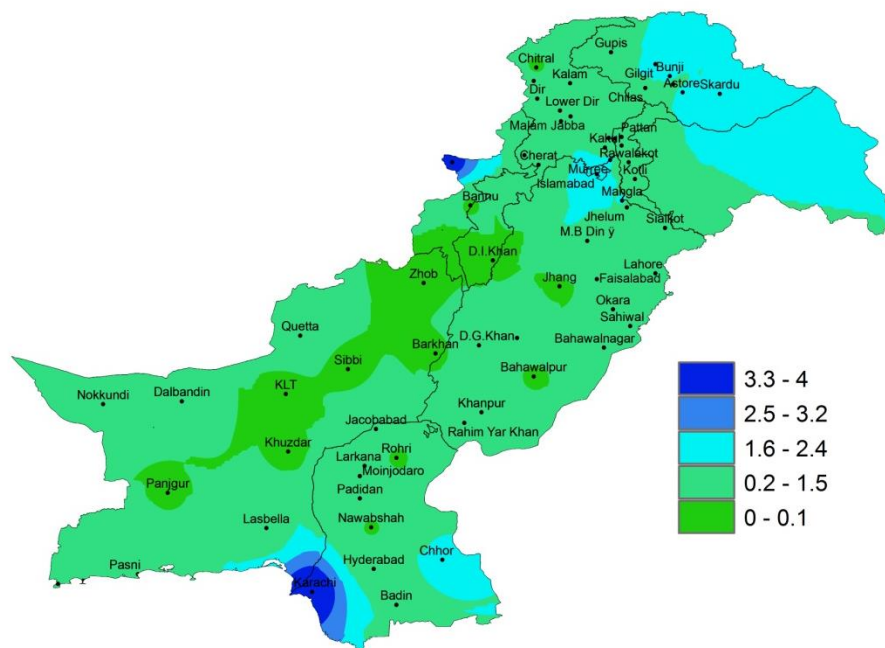
Mean Wind Speed (Knots) at 0800PST during the
Previous week (from 22nd May to 28th May, 2017)



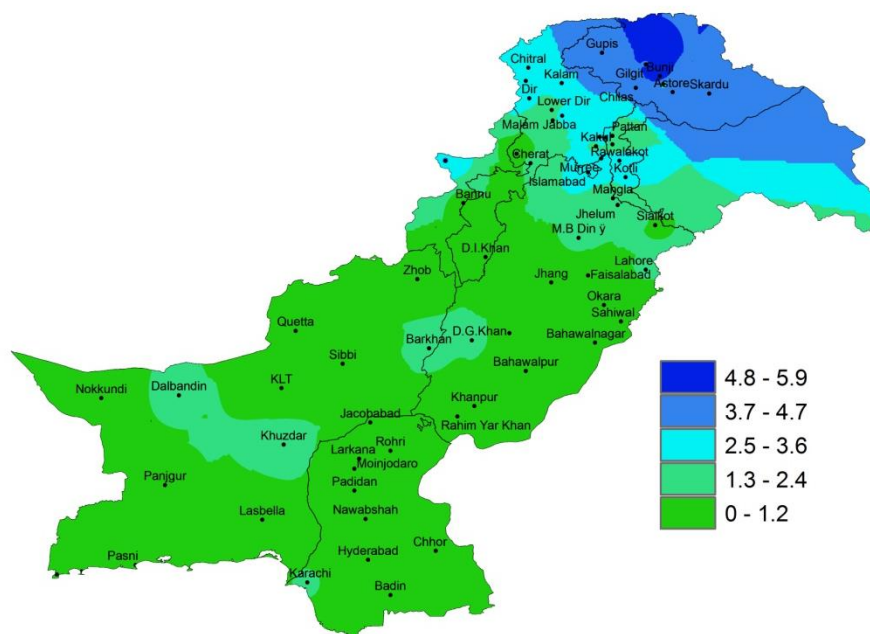
Mean Wind Speed (Knots) at 1700PST during the
Previous week (from 22nd May to 28th May, 2017)



Mean Cloudiness (Oktas) at 0800PST during the
Previous week (from 22nd May to 28th May, 2017)



Mean Cloudiness (Oktas) at 1700PST during the
Previous week (from 22nd May to 28th May, 2017)



Weekly Weather Advisory for Farmers**(from 22nd May to 28th May, 2017)**

Continental air would prevail over most parts of the country during next 03-04 days. A shallow westerly wave is likely to enter upper parts of the country on Wednesday.

MONDAY**29-05-2017**

Mainly very hot and dry weather is expected in plain areas of the country during day time. However, rain-thunderstorm is expected at a few places in Rawalpindi, Gujranwala, Lahore divisions and Kashmir during (evening/night).

TUESDAY**30-05-2017**

Mainly very hot and dry weather is expected in plain areas of the country during day time. However, rain-thunderstorm with gusty winds is expected at a few places in Malakand, Hazara, Mardan, Peshawar, Bannu, Kohat, Sargodha, Faisalabad, Gujranwala, Lahore, Rawalpindi divisions, Islamabad, FATA, Gilgit-Baltistan & Kashmir.

WEDNESDAY**31-05-2017**

Mainly hot and dry weather is expected in plain areas of the country during day time. However, rain-thunderstorm with gusty winds is expected at a few places in Malakand, Hazara, Mardan, Peshawar, Kohat, Sargodha, Faisalabad, Sahiwal, Gujranwala, Lahore, Rawalpindi divisions, Islamabad, FATA, Gilgit-Baltistan & Kashmir.

THURSDAY**01-06-2017**

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

FRIDAY**02-06-2017**

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

SATURDAY**03-06-2017**

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

SUNDAY**04-06-2017**

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

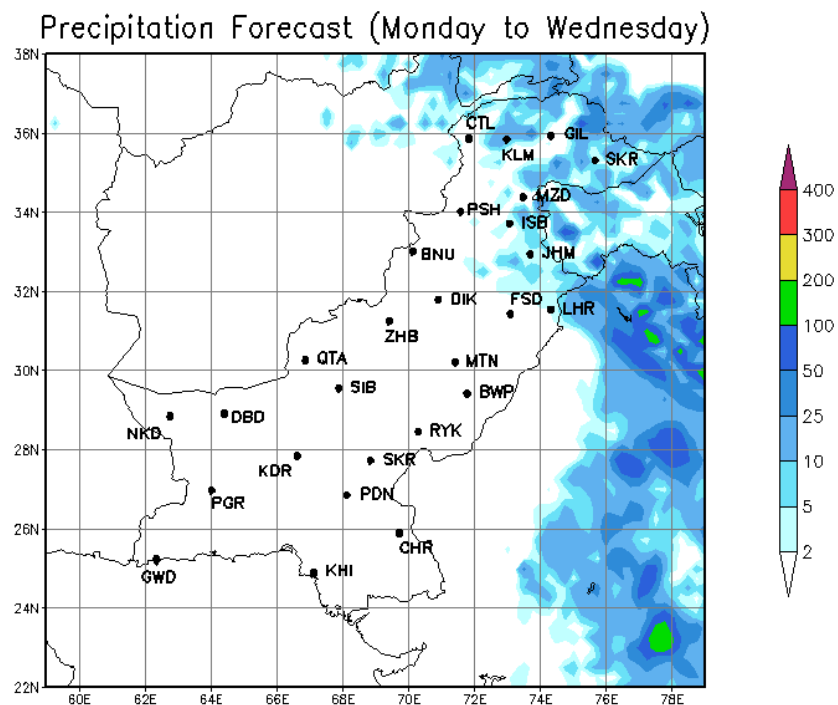
ADVISES FOR FARMERS

During the last week, light to moderate rainfall occurred mainly in upper half of the country except Sindh where dry and hot weather recorded. This may continue with almost the same pattern over northern parts of the country in coming days as well. Keeping in view the expected weather conditions following advises are suggested for farming community.

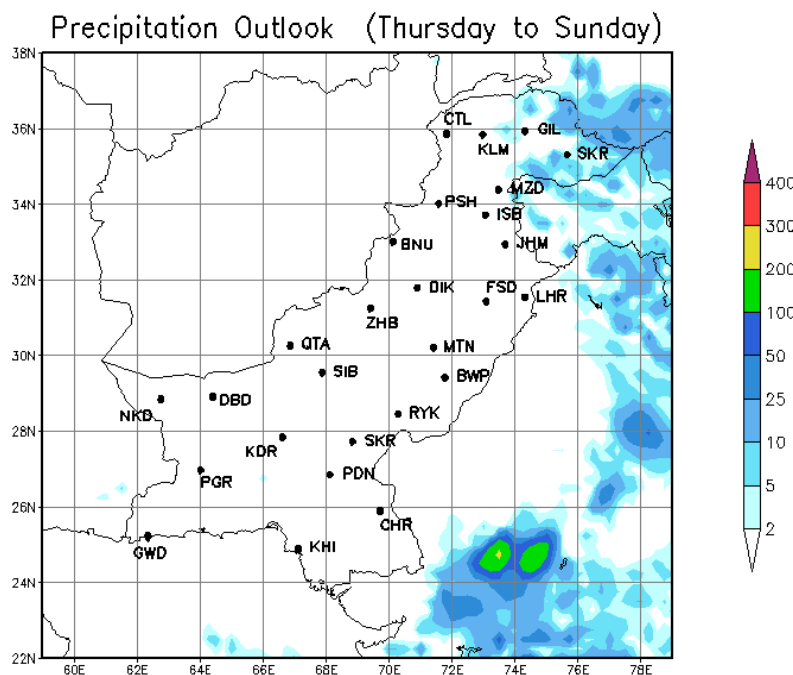
- Farmers of irrigated areas may irrigate the standing crops as per requirement in accordance with the expected weather conditions.
- Farmers of peanut growing areas may sow this crop if the appropriate moisture is available in the fields.

Weather Outlook from 29th May to 4th June, 2017

The forecast from 29th to 31st May, 2017 shows that light rainfall is expected at scattered places of upper parts of KP, northeastern Punjab, GB and Kashmir.



The outlook from 1st June to 4th June, 2017 shows that dry weather is expected in most parts of the country. However, light rainfall is expected at scattered places in GB and Kashmir.



National Weather Data of Selected Cities
(Weekly Data from 22nd May to 28th May, 2017)

Stations	Maximum/Nighttime 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	25.81	27.50	95.85	36.07	0.60	2.00	4.29	2.00	2.86
Badin	39.50	40.50	198.00	57.57	0.00	1.29	0.00	4.29	9.43
Bahawalnagar	44.29	48.00	214.75	34.36	5.00	0.57	0.00	0.00	1.00
Bahawalpur	42.81	44.50	213.15	42.79	0.00	0.00	0.29	3.71	2.57
Balakot	35.86	39.00	155.90	43.57	0.00	1.14	3.00	0.00	1.00
Bannu	41.37	44.60	181.50	32.79	0.00	0.00	0.86	1.43	5.14
Barkhan	39.14	42.50	182.00	32.00	3.00	0.00	1.43	0.29	2.00
Bunji	34.03	36.10	156.30	33.71	0.00	2.29	6.00	0.57	2.86
Cherat	34.14	37.00	156.00	37.00	0.00	0.86	1.29	2.57	2.57
Chhor	42.54	44.40	210.70	55.57	0.00	1.71	0.00	6.57	9.43
Chilas	37.86	40.00	180.75	20.71	0.00	1.00	3.71	2.00	3.43
Chitral	33.97	35.40	140.70	49.93	0.00	0.00	3.14	2.00	6.57
D.G.Khan	43.30	46.50	212.10	38.50	0.00	0.57	1.29	1.71	4.86
D.I.Khan	43.14	46.00	206.50	44.00	1.00	0.00	0.43	0.57	0.57
Dalbandin	45.71	47.00	186.00	14.29	0.00	0.30	1.43	0.29	4.29
Dir	33.81	37.00	122.35	48.29	2.00	0.57	2.71	0.00	2.00
Drosh	34.86	36.00	147.90	29.07	0.00	0.43	2.86	1.43	14.57
Faisalabad	41.90	45.00	202.30	39.00	0.00	0.10	0.30	1.60	0.90
Garidopatta	37.07	40.50	163.65	52.07	2.20	1.00	1.43	0.00	2.00
Gawader	39.14	45.00	166.50	58.43	0.00	1.29	0.00	2.29	14.57
Gilgit	35.07	37.50	141.00	41.86	0.00	2.00	4.71	0.00	6.86
Gupis	30.29	32.00	120.75	30.21	0.00	0.29	4.57	2.86	5.14

Hyderabad	41.14	44.50	202.00	58.14	0.00	1.00	0.00	14.86	18.29
Islamabad	38.53	41.50	175.85	39.43	2.00	2.00	2.71	0.00	2.57
Jacobabad	47.14	51.00	232.50	47.07	0.00	0.67	0.43	2.33	0.29
Jhang	42.14	45.50	203.75	38.21	1.50	0.00	0.00	1.71	1.71
Jhelum	41.50	44.50	199.30	37.36	0.01	1.29	1.43	1.43	1.71
Jiwani	36.64	41.50	190.25	64.00	0.00	0.57	0.00	6.29	11.43
Kakul	32.74	35.20	138.30	47.50	8.00	1.29	2.00	0.00	1.14
Kalam	27.93	33.50	96.25	47.36	7.00	0.57	3.57	0.00	2.57
Kalat	31.86	34.00	133.50	24.29	0.00	0.00	0.00	0.00	0.00
Karachi	35.70	36.50	189.30	69.57	0.00	4.00	1.29	8.86	13.43
Khanpur	44.43	46.50	219.15	43.29	0.00	1.00	0.00	1.14	3.14
Khuzdar	40.79	45.00	183.00	39.86	3.00	0.00	2.14	0.00	0.00
Kotli	37.53	40.30	177.85	44.21	2.00	1.14	2.71	2.57	2.29
Lahore	40.36	43.70	199.45	39.71	0.01	0.86	1.29	1.43	2.29
Larkana	46.64	50.00	232.75	34.42	0.00	1.00	0.43	3.33	4.00
Lasbella	42.17	45.00	210.30	58.93	8.00	1.00	0.00	0.00	6.57
Lower Dir	39.50	42.50	173.75	35.21	5.00	1.29	1.29	2.29	2.00
M.B Din	41.46	45.00	197.75	41.14	0.01	1.43	1.57	0.86	1.14
Malam Jabba	23.29	26.00	97.00	56.86	4.00	1.43	3.29	0.00	4.86
Mangla	40.31	43.50	192.35	33.64	0.02	1.57	2.00	2.86	8.00
Mir Khani	34.79	36.50	146.90	38.79	0.00	0.29	3.14	0.00	5.43
Moinjodaro	45.76	48.50	222.65	38.43	0.00	0.29	0.00	4.00	4.86
Multan(PBO)	42.96	46.20	220.05	31.93	0.01	0.90	1.14	7.00	4.29
Murree	26.21	29.50	108.00	56.29	15.00	1.57	3.14	0.29	1.71
Muzaffarabad	35.80	39.20	154.70	52.50	1.01	1.00	3.43	0.57	2.43
Nawabshah	45.00	46.50	219.75	41.79	0.00	0.00	0.00	8.14	9.71

Nokkundi	45.50	47.00	226.50	10.86	0.00	0.43	0.70	2.57	5.70
Okara	42.43	46.00	205.50	45.64	0.00	0.43	0.00	0.29	0.29
Padidan	44.64	46.50	214.25	42.29	0.00	1.29	0.29	2.86	3.14
Panjgur	43.07	46.00	204.50	31.86	3.00	0.00	0.71	2.57	14.86
Parachinar	28.99	34.20	127.95	62.06	15.00	3.57	3.57	3.29	3.57
Pasni	35.29	38.50	181.25	76.21	0.00	1.29	0.00	0.00	16.14
Pattan	39.43	45.00	186.75	32.43	0.00	0.86	1.86	0.00	0.29
Peshawar	41.40	45.30	195.60	37.71	0.00	1.29	0.86	1.14	2.00
Quetta	34.40	36.00	148.60	20.00	0.01	0.90	1.30	2.60	4.20
Rahim Yar Khan	45.59	48.20	217.90	46.93	0.00	0.57	0.00	1.43	2.29
Rawalakot	28.20	30.50	103.75	68.00	6.71	0.43	3.14	0.00	0.57
Rawalpindi	39.60	41.70	186.40	45.00	3.40	2.30	2.60	1.10	1.40
Rohri	44.79	47.00	225.75	32.21	0.00	0.00	0.00	1.14	1.14
Sahiwal	42.06	45.50	198.80	43.07	2.00	0.57	0.00	2.57	1.71
Saidu Sharif	35.86	38.50	157.75	51.14	18.00	1.14	1.71	0.00	2.29
Sialkot	39.67	43.00	189.95	34.07	6.20	1.00	1.14	7.00	6.00
Sibbi	47.71	52.00	230.25	41.07	5.00	0.00	0.00	2.57	2.57
Skardu	29.74	31.60	110.40	34.00	0.00	2.00	3.86	0.00	3.29
Tandojam	35.30	44.00	178.50	58.00	0.00	0.40	0.00	1.50	4.00
Usta.M	46.60	48.00	23.1.8	37.00	0.00	1.10	0.90	2.30	3.40
Zhob	37.86	40.50	173.25	35.21	0.00	0.00	0.71	1.43	5.71

*** 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)