

# Decadal Agromet Bulletin of Pakistan



## Highlights....

- ❖ Light to moderate reported in the agricultural plains of K.P, G.B & Kashmir. Light rainfall reported in the agricultural plains of Punjab & Balochistan and Dry weather in Sindh during the last decade.
- ❖ Highest amount of rainfall reported 118.4 mm at Parachinar during the last decade.
- ❖ Highest Maximum temperature recorded 45.6°C at Dadu during the last decade.
- ❖ Mainly dry weather is expected in most parts of the country however light to moderate rainfall is expected in most of the country from 21<sup>st</sup> to 22<sup>nd</sup> of the decade.
- ❖ Wheat crop is in different maturity stages in most of the agricultural plains of the country. Farmers are advised to stop irrigation the crops by keeping in view the expected rain in the agricultural plains of the country.
- ❖ Farmers of irrigated/barani areas are advised to remove weeds from the fields, so that the present soil moisture may fully be utilized.
- ❖ Farmers of southern Punjab & Sindh are advised to prepare land for cotton in time so that best grains conditions may be fully utilized during the whole crop life.
- ❖ Farmers are advised to start harvesting of mature crop keeping the expected weather in mind.

**NATIONAL AGROMET CENTRE (NAMC)  
PAKISTAN METEOROLOGICAL DEPARTMENT  
SECTOR H-8/2, ISLAMABAD**

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

Editor-in-Chief: *Muhammad Aslam, Director*

Editor: *Asma Jawad Hashmi, Deputy Director*

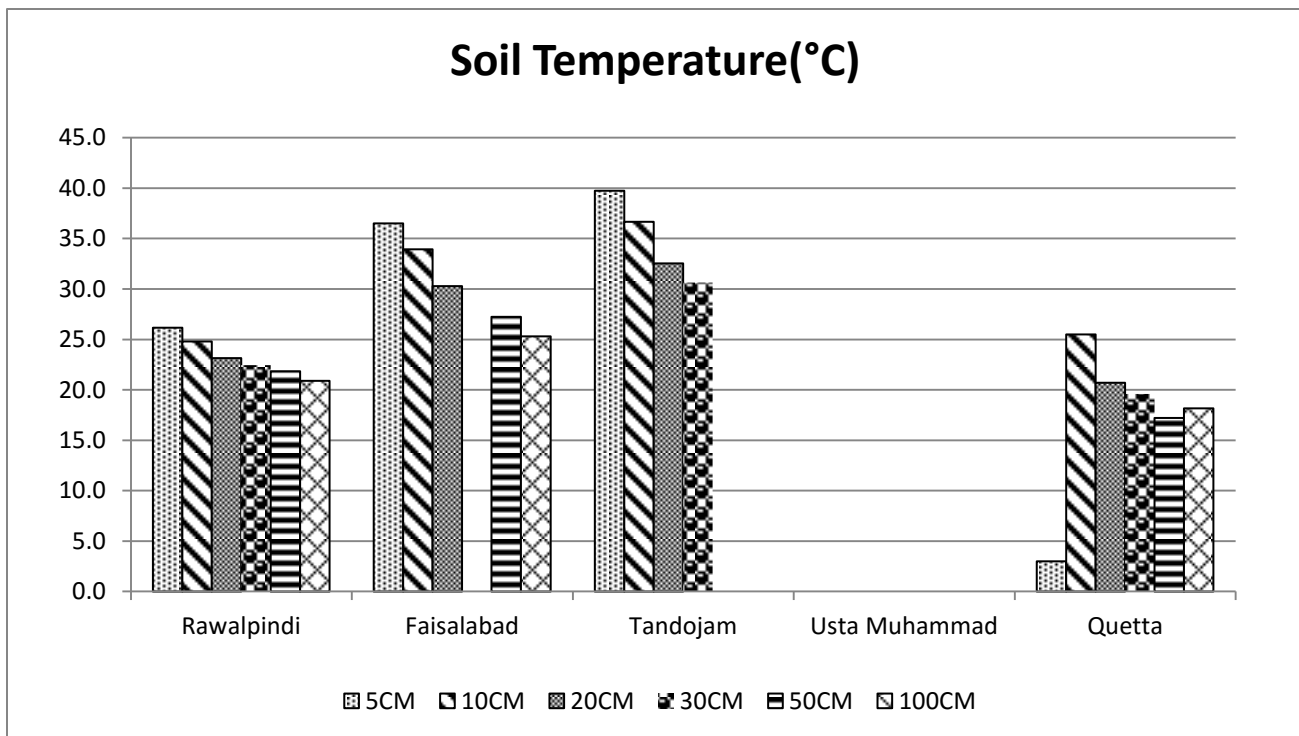
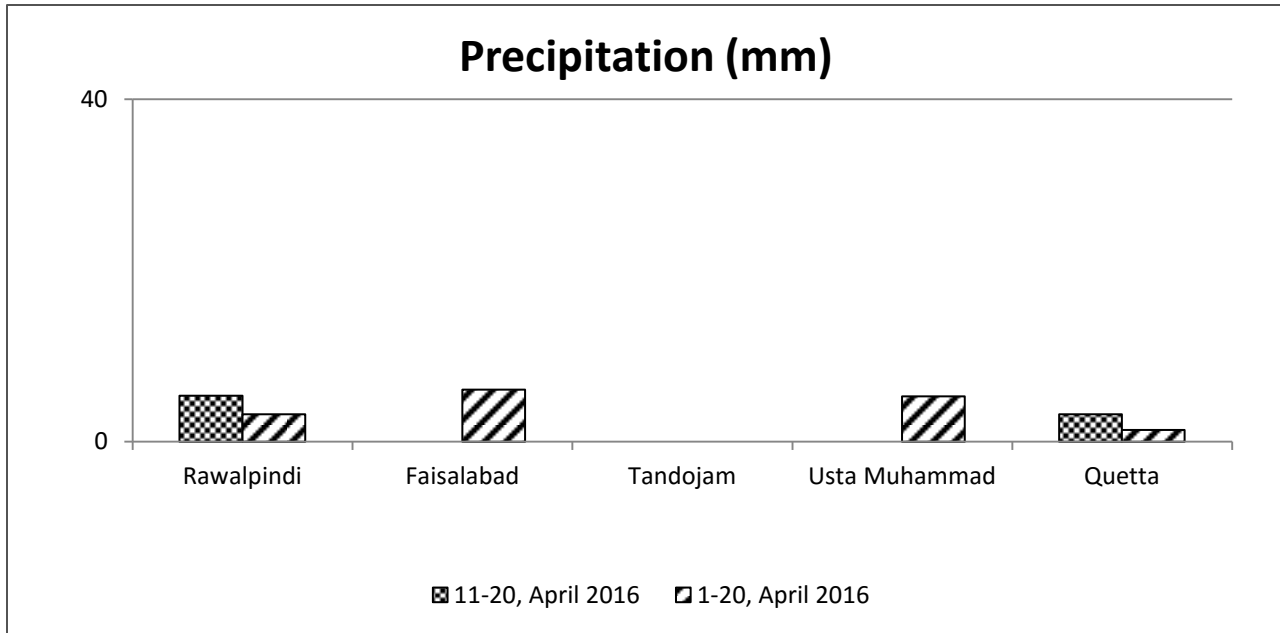
Phone: [+92-51-9250592](tel:+92-51-9250592) Email: [info@namc.pmd.gov.pk](mailto:info@namc.pmd.gov.pk)

Meteorological conditions during 2<sup>nd</sup> decade of April, 2016

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						R.H (%)	Sunshine Duration(hours)	Wind Speed (km/hr)	ETo (mm/day)
		Normal	Actual	Dep	Tmax Dep	Tmin Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm				
1	RAWALPINDI	0.6	5.4	4.8	0.0	1.7	24.9	26.2	24.8	23.2	22.5	21.9	20.9	46	90.2	6.0	5.4
2	FAISALABAD	0.4	0.1	-0.3	0.0	1.8	28.8	36.5	34.0	30.3	***	27.3	25.3	39	101.9	2.6	5.0
3	JHELUM	0.8	5.8	5.0	0.4	-0.5	27.0	31.5	28.7	25.9	24.3	24.0	***	41	89.8	3.9	5.2
4	LAHORE	0.2	0.6	0.4	1.1	-0.2	29.1	32.7	30.7	27.7	26.6	***	25.4	37	88.2	4.4	5.5
5	SARGODHA	0.5	7.7	7.2	-0.7	0.9	28.4	31.7	29.7	26.9	26.3	23.8	23.1	60	81.7	1.9	4.4
6	MULTAN	0.6	3.2	2.6	-15.9	20.4	31.4	***	***	***	***	***	***	0	4.3	NE	5.5
7	KHANPUR	0.0	0.0	0.0	-0.5	1.7	31.0	***	31.4	31.2	31.1	30.9	28.9	37	95.0	5.7	5.4
8	TANDOJAM	0.0	0.0	0.0	-3.4	0.6	30.4	39.8	36.7	32.6	30.7	0.0	***	46	92.7	9.6	7.6
9	SAKRAND ☆	0.0	0.0	0.0	-0.2	3.3	31.9	47.4	38.7	***	***	***	30.2	37	95.5	7.0	7.1
11	DI KHAN	0.8	1.0	0.2	1.2	1.4	28.4	***	***	***	***	***	***	50	80.2	***	5.9
11	PESHAWAR	2.6	6.0	3.4	0.9	-0.1	25.2	30.4	26.3	24.6	***	***	***	56	68.9	3.0	4.1
12	USTA MUHAMMAD	0.0	0.0	0.0	0.6	0.6	30.7	***	***	***	***	***	***	35	***	6.2	7.1
13	QUETTA	0.4	3.2	0.4	0.4	0.9	18.9	3.0	25.5	20.7	19.6	17.2	18.2	33	98.3	5.9	5.1
14	SKARDU	0.8	10.1	9.3	-6.3	-3.2	8.4	***	***	***	***	***	***	47	40.1	2.3	2.4
15	GILGIT	0.6	0.1	-0.5	-0.4	0.0	17.1	***	***	***	***	***	***	8	63.8	3.2	3.8

Table-1: Meteorological parameters for selected station of Pakistan. "Dep" in the table stands for difference from climatic normal, i.e. actual value minus normal. And "% Dep" is calculated by the formula;  $\text{Dep} \div \text{Normal} \times 100$ . Tmin & Tmax stands for minimum and maximum temperatures respectively. ETo stands for reference crop evapotranspiration. \*\*\* stands for no data and (☆) indicates the station with five years climatic (normal) data for computing departures.

## Graph at RAMC's during April, 2016



**1. Past Weather (11<sup>th</sup> to 20<sup>th</sup> April, 2016)**

Light to moderate rainfall reported in the agricultural plains of K.P, G.B & Kashmir however light rainfall reported in the agricultural plains Punjab & Balochistan and dry weather reported in Sindh during the last decade.

**1.1 Punjab**

Light rainfall reported in the agricultural plains of Punjab. Chief amount of rainfall received in Sargodha, Murree, & Kot addu. Decadal maximum dropped below normal by - 2.2°C & minimum temperature raised above normal by 3.7°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 37%, 78.7 hrs, 4.1km/hr and 5.2mm/day respectively.

**1.2 Sindh**

Light rainfall reported in the agricultural plains of Sindh. Chief amount of rainfall received Jacobabad, Larkana Dadu. Decadal maximum dropped below normal by 0.7°C & minimum temperature raised above normal by 1.2°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 28%, 53.4hrs, 4.6km/hr and 7.4 mm/day respectively.

**1.3 Khyber Pakhtunkhwa (KP)**

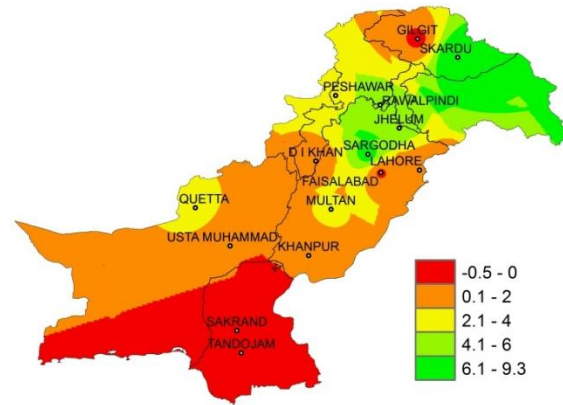
Heavy rainfall reported in the agricultural plains of KP. Chief amount of rainfall received in Malam Jabba, Pattan & Parachinar. Decadal maximum dropped below normal by 2.5°C & minimum temperature raised above normal by 0.5°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 63%, 44.5hrs, 3.3km/hr and 5.0 mm/day respectively.

**1.4 Balochistan**

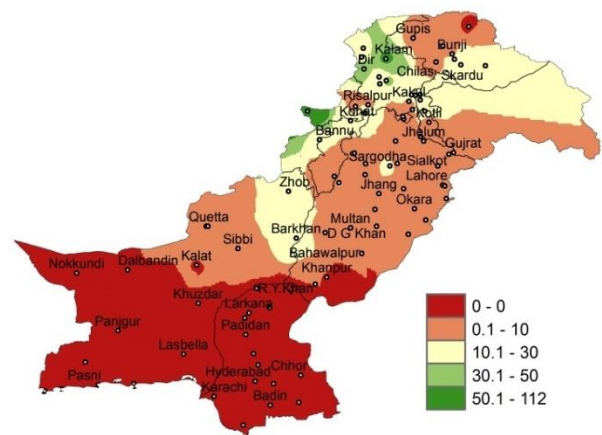
Light to moderate rainfall reported in the agricultural plains of Balochistan. Chief amount of rainfall received in Zhob, Barkhan & Sibbi. Decadal maximum dropped below normal by 1.9°C & minimum temperature raised above normal by 1.0°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 42%, 64.1hrs, 8.0km/hr and 6.1 mm/day respectively.

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

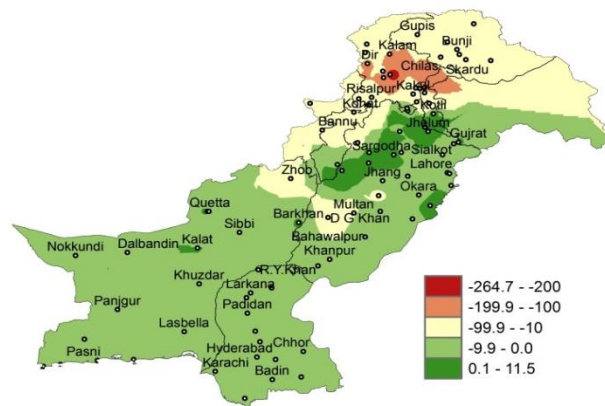
Heavy rainfall reported in the agricultural plains of GB & Kashmir. Chief amount of rainfall received in Astore, Chilas & Gilgit. Decadal maximum dropped below normal by 3.2°C & minimum temperature raised above normal by 0.3°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 65%, 26.8hrs, 2.6km/hr and 3.1mm/day respectively.



I. Actual rainfall



II. Departure of rainfall from Normal



III. Departure of rainfall from Previous Decade

Figure.1: Rainfall distribution during previous decade in "mm"



2(a) **Past Weather for Major Agricultural Plains  
(11<sup>th</sup> to 20<sup>th</sup> April, 2016)**

2.1 **RAMC, Rawalpindi (Potohar region)**

Rainfall reported as 5.4mm during the decade however weather remained cloudy for 09days. Average relative humidity recorded as 46%. Mean day temperature was 31.9°C while night temperature recorded as 17.9°C with 55.6hours bright sunshine duration. Wind speed recorded as 6.0km/hr with mean wind direction *westerly*.

**Wheat (Chakwal-97):** Good condition, Flowering stage.

2.2 **RAMC, Faisalabad (Central Punjab)**

Rainfall reported as Trace(non measureable) during the decade however weather remained cloudy for 08days. Average relative humidity recorded as 39%. Mean day temperature was 36.2°C while night temperature recorded as 21.3°C with 101.9 hours bright sunshine duration. Wind speed recorded as 2.6 km/hr with mean wind direction *westerly*.

**Wheat:** Very Good condition, maturity completed.

2.3 **RAMC, Tandojam (Lower Sindh)**

Dry weather reported during the decade however weather remained cloudy for 04days. Average relative humidity recorded as 46%. Mean day temperature was 39.1°C while night temperature recorded as 21.6°C with 92.7hours bright sunshine duration. Wind speed recorded as 9.6km/hr with mean wind direction *south westerly*.

**Note:** Fields are being prepared for new crop.

2.4 **RAMC, Usta Muhammad (Eastern Balochistan)**

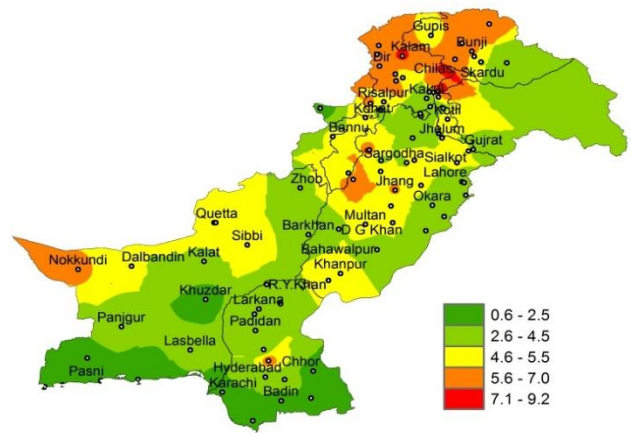
Dry weather reported during the decade however weather remained cloudy for 04days. Average relative humidity recorded as 35%. Mean day temperature was 39.9°C while night temperature recorded as 21.5°C. Wind speed recorded as 6.2km/hr with mean wind direction *south easterly*.

**Wheat (Zardana):** Harvested.

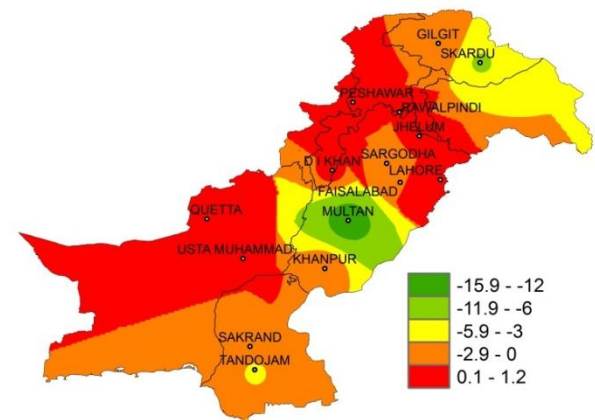
2.5 **RAMC, Quetta (Northern Balochistan)**

Rainfall reported as 3.2 mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 33%. Mean day temperature was 26.4°C while night temperature recorded as 11.4°C with 98.5hours bright sunshine duration. Wind speed recorded as 5.9 km/hr with mean wind direction *southerly*.

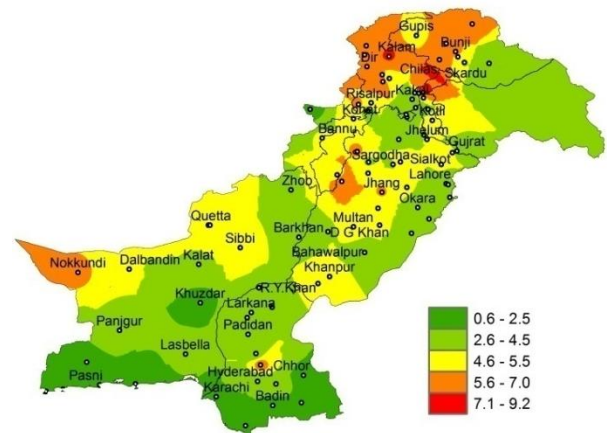
**Wheat:** Good condition, flowering stage.



I. Actual max-temp



II. Departure of max-temp from Normal



III. Departure of max-temp from Previous Decade

**Figure.2: Maximum Temperature distribution during previous decade in °C**

2(b) **Past Weather for Sub-Regional Agricultural Plains (11<sup>th</sup> to 20<sup>th</sup> April, 2016)**

2.6 **Jhelum**

Rainfall reported as 5.8 mm during the decade however weather remained cloudy for 08days. Average relative humidity recorded as 41%. Mean day temperature was 35.3°C while night temperature recorded as 18.6°C with 89.8 hours bright sunshine duration. Wind speed recorded 3.9km/hr with wind direction *north westerly*.

2.7 **Lahore**

Rainfall reported as 0.6mm during the decade however weather remained cloudy for 06days. Average relative humidity recorded as 37%. Mean day temperature was 36.3°C while night temperature recorded as 21.9°C with 88.2 hours bright sunshine duration. Wind speed recorded as 4.4km/hr with mean wind direction *north westerly*.

2.8 **Sargodha**

Rainfall reported as 7.7 mm during the decade however weather remained cloudy for 09days. Average relative humidity recorded as 60%. Mean day temperature was 35.3°C while night temperature recorded as 21.4°C with 81.7 hours bright sunshine duration. Wind speed recorded 1.9km/hr with mean wind direction *northly*.

2.9 **Multan**

Rainfall reported as 3.2 mm during the decade however weather remained cloudy for 09 days. Average relative humidity recorded as 40 %. Mean day temperature was 36.4°C while night temperature recorded as 21.5°C with 86.7 hours bright sunshine duration. Wind speed recorded 4.3 km/hr with mean wind direction *North easterly*.

2.10 **Khanpur**

Dry weather reported during the decade. However sky remained cloudy for 09days. Average relative humidity recorded as 37%. Mean day temperature was 38.8°C while night temperature recorded as 23.2°C with 95.0 hours bright sunshine duration. Wind speed recorded 5.7km/hr with mean wind direction *North easterly*.

2.11 **Skrand**

Dry weather reported during the decade however weather remains cloudy for 07days. Average relative humidity recorded as 37%. Mean day temperature was 39.8°C while night temperature recorded as 23.9°C with 95.5hours bright sunshine duration. Wind speed recorded 7.0 km/hr with wind direction *southwesterly*.

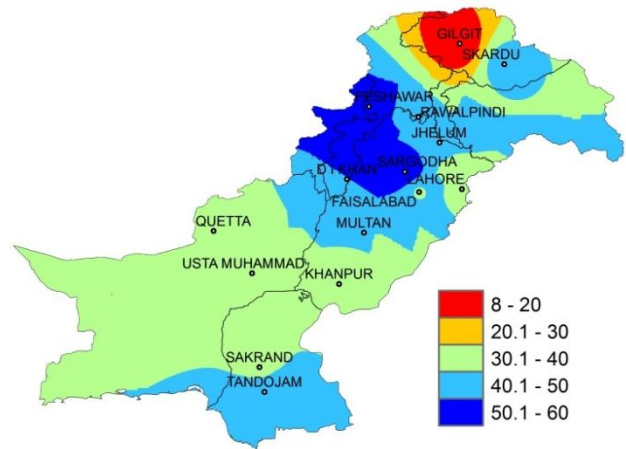


Figure.3: Relative Humidity in Percentage (%)

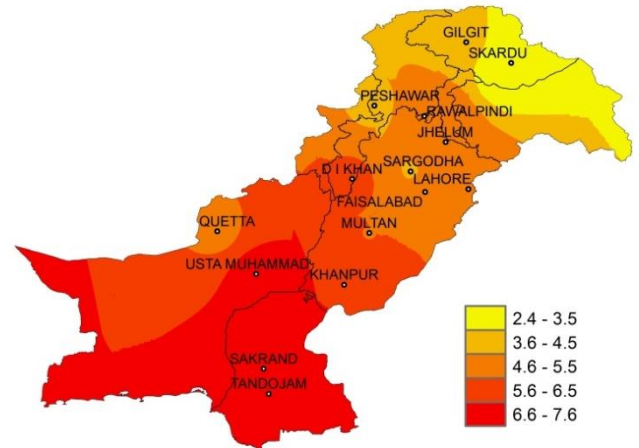


Figure.4: Reference Crop Evapotranspiration “ETo” in mm/day

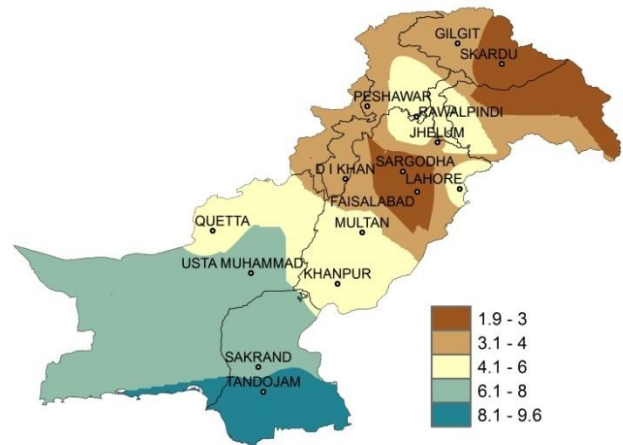


Figure 5: Wind Speed in kilometer per hour (km/h)

**2.12 D.I. Khan**

Rainfall reported as 1.0mm during the decade however weather remained cloudy for 06days. Average relative humidity recorded as 50%. Mean day temperature was 36.1°C while night temperature recorded as 20.7°C with 80.2hours bright sunshine duration.

**2.13 Peshawar**

Rainfall reported as 6.0mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 56%. Mean day temperature was 32.4°C while night temperature recorded as 18.0°C with 68.9 hours bright sunshine duration. Wind speed recorded as 3.0 km/hr with mean wind direction *North westerly*.

**2.14 Skardu**

Rainfall reported as 10.1 mm during the decade however weather remained cloudy for 06days. Average relative humidity recorded as 47%. Mean day temperature was 13.5°C while night temperature recorded as 3.2°C with 40.1hours bright sunshine duration. Wind speed recorded as 2.3km/hr with mean wind direction *East south easterly*.

**2.15 Gilgit**

Rainfall reported as Trace (Non measureable) during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 43%. Mean day temperature was 24.5°C while night temperature recorded as 9.6°C with 63.8hours bright sunshine duration. Wind speed recorded as 3.2 km/hr with mean wind direction *westerly*.

### **3. Ten Days Weather Advisory for Farmers** **(21<sup>st</sup> to 30<sup>th</sup> April, 2016)**

**3.1 Temperature Forecast**

Day time temperature expected normal to slightly above normal in most of the southern parts however day & night temperatures are expected normal in most of the agricultural plains of the country during the decade.

**3.2 Wind Forecast**

Normal wind pattern may prevail in most of the agricultural plains of the country during the decade.

**3.3 Rain Forecast**

❖ **Punjab:** Mainly dry weather is expected in most parts of the province during the decade. However light to moderate rain is expected in upper parts of the province

including Rawalpindi, Murree and Jhelum from 21<sup>st</sup> to 22<sup>nd</sup> of the decade.

❖ **Khyber Pakhtunkhwa:** Mainly dry weather is expected in most parts of the province. However light to moderate rainfall is expected in Bannu, Hazara, & Peshawar division from 21<sup>th</sup> to 22<sup>nd</sup> of the decade.

❖ **Sindh:** Mostly dry weather is expected during the decade.

❖ **Balochistan:** Mostly dry weather is expected in most parts of the Balochistan however light to moderate rain is expected at isolated places of Quetta & Zhob, from 21<sup>st</sup> of the decade.

❖ **Gilgit Baltistan:** Mainly cold and cloudy weather is expected in most parts of the G.B however light to moderate rain is expected Gilgit Skardu & Hunza from 21<sup>th</sup> to 22<sup>nd</sup> during the decade.

❖ **Kashmir:** Mainly cloudy weather is expected in most parts of the Kashmir however light to moderate rain-thunderstorm is expected in most parts of the Kashmir including Muzaffarabad & Rawalakot, from 21<sup>th</sup> to 22<sup>nd</sup> during the decade.

#### ❖ **3.4 Advisory for Farmers**

❖ Wheat crop is in different maturity stages in most of the agricultural plains of the country. Farmers are advised to stop irrigation the crops by keeping in view the expected rain in the agricultural plains of the country.

❖ Farmers of irrigated/barani areas are advised to remove weeds from the fields, so that the present soil moisture may fully be utilized.

❖ Farmers of southern Punjab & Sindh are advised to prepare land for cotton in time so that best grains conditions may be fully utilized during the whole crop life.

❖ Farmers are advised to start harvesting of mature crop keeping the expected weather in mind.