

# Decadal Agromet Bulletin of Pakistan



## Highlights....

- ❖ Light to moderate rainfall reported in the agricultural plains of the country during the last decade.
- ❖ Highest amount of rainfall reported as 149.7mm at Sialkot during the last decade.
- ❖ Highest maximum temperature recorded 42.5°C at Shaheed Benzairabad during the last decade.
- ❖ Light to moderate rainfall expected in the agricultural plains of the Punjab, K.P, Balochistan, G.B & Kashmir & light rainfall reported in Sindh is expected during the decade.
- ❖ Wheat crop is in different maturity stages. Farmers are advised to irrigate the crops keeping the expected rain in the agricultural plains of the country.
- ❖ Weeds are expected to shoot in excess after recent rains. Farmers should control weeds growth soon after rains.
- ❖ Farmers are advised to control further weeds growth at the present growing stages to stop any negative impact over the crops. Weeds removing practices should be started soon after expected rains in the mentioned areas.
- ❖ Farmers of upper half and northwest Balochistan should be careful about irrigation and spraying chemicals on the crops during or before expected rains during the decade.

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

Patron-in-Chief: *Iftikhar Ahmed Mir, Director General*

Editor-in-Chief: *Dr. Khalid M. Malik, Director*

Editor: *Khalida Noureen, Meteorologist*

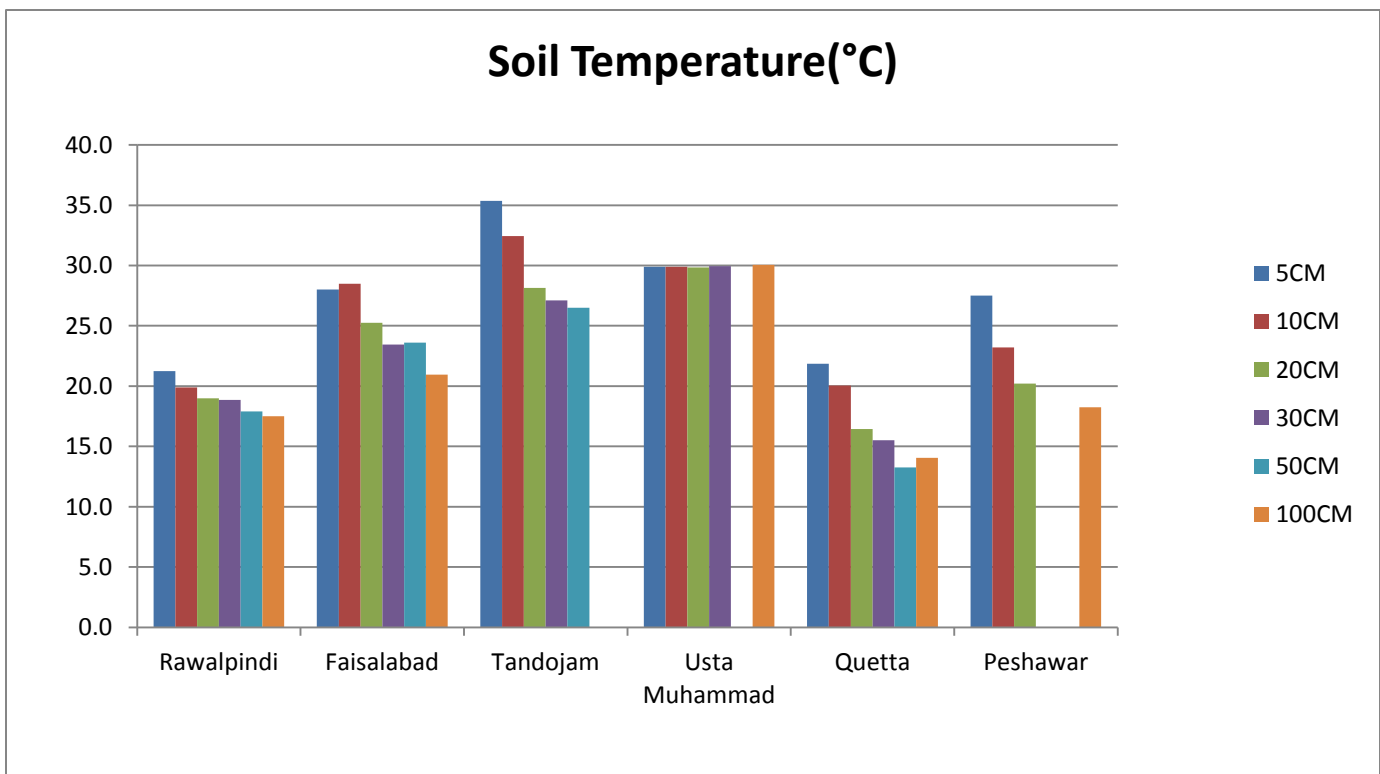
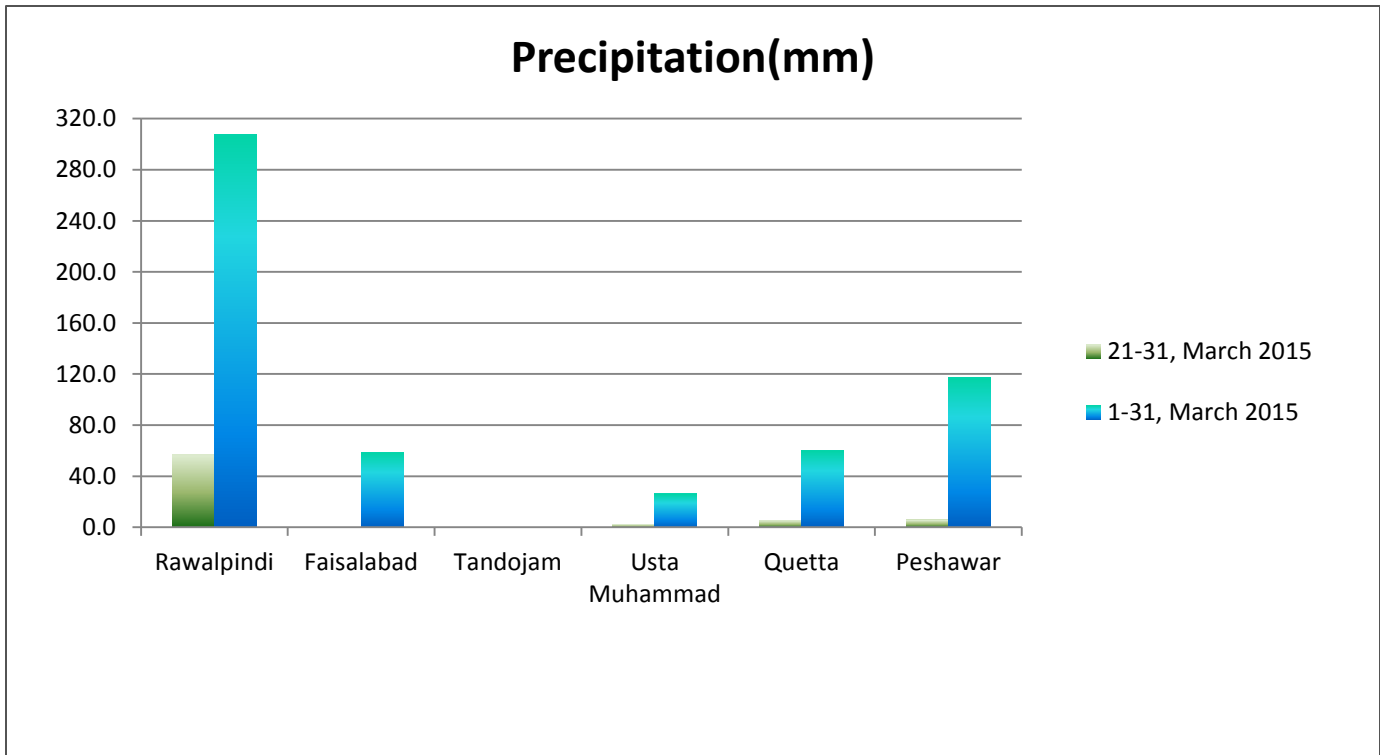
Phone: [+92-51-9250592](tel:+92-51-9250592) Email: [info@namc.pmd.gov.pk](mailto:info@namc.pmd.gov.pk)

Meteorological conditions during 3<sup>rd</sup> decade of March, 2015

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	2.7	56.8	54.1	-0.1	2.3	21.5	21.3	19.9	19.0	18.9	17.9	17.5	56	73.0	5.3	3.9
2	FAISALABAD	0.6	0.1	-0.5	0.1	1.2	23.9	28.0	28.5	25.3	23.5	23.6	21.0	57	81.5	3.0	3.9
3	JHELUM	1.6	29.6	28.0	0.2	0.6	23.1	25.4	23.8	22.9	20.7	20.7	***	60	75.6	2.9	3.6
4	LAHORE	1.7	48.2	46.5	0.3	-0.2	24.4	27.1	26.1	23.6	22.1	***	19.9	60	79.8	4.3	4.1
5	SARGODHA	1.0	36.5	35.5	-0.7	1.5	24.2	26.2	25.3	22.3	22.0	21.3	19.9	64	77.0	3.1	3.8
6	MULTAN	1.2	0.6	-0.6	0.0	2.5	25.7	***	***	***	***	***	***	53	79.1	4.3	4.4
7	KHANPUR	0.5	0.0	-0.5	-0.2	2.9	26.7	***	27.9	27.6	27.3	26.8	24.9	54	90.1	5.8	5.1
8	TANDOJAM	0.0	0.0	0.0	2.0	1.2	28.8	35.4	32.5	28.2	27.1	26.5	***	40	104.1	1.6	4.5
9	SAKRAND ☆	0.1	0.0	-0.1	1.7	-0.9	26.6	41.9	34.6	***	***	***	26.9	47	116.6	3.3	5.3
10	ROHRI	0.6	0.1	-0.5	3.7	2.6	30.7	37.1	33.2	29.1	28.2	26.2	26.2	44	102.0	5.3	6.0
11	DI KHAN	0.8	14.8	14.0	0.5	0.2	23.1	***	***	***	***	***	***	62	81.1	***	4.5
12	PESHAWAR	2.4	6.0	3.6	1.5	0.1	21.9	27.5	23.2	20.2	***	***	18.3	68	49.1	2.2	2.9
13	USTA MUHAMMAD	0.5	2.6	2.1	-0.3	1.5	26.4	29.9	29.9	29.9	30.0	***	30.1	46	***	***	5.8
14	QUETTA	0.9	5.6	4.7	0.2	3.2	16.5	21.9	20.1	16.5	15.5	13.3	14.1	42	79.1	6.1	4.1
15	SKARDU	0.5	22.8	22.3	0.0	0.7	10.7	***	***	***	***	***	***	44	55.1	2.1	2.5
16	GILGIT	0.2	5.5	5.3	0.9	0.0	15.0	***	***	***	***	***	***	40	57.6	3.6	3.3

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. ET 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 March, 2015



**Past Weather (20<sup>th</sup> to 31<sup>st</sup> March, 2015)**

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

**1.1 Punjab**

Light to moderate rainfall reported in the agricultural plains of Punjab. Chief amount of rainfall received in Sialkot, Murree & Lahore. Decadal maximum dropped below normal by 0.1°C & minimum temperature departure raised above normal by 1.5°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETO were recorded as 58%, 79.4hrs, 4.1km/hr and 4.1mm/day respectively.

**1.2 Sindh**

Light rainfall reported in the agricultural plains of Sindh. Chief amount of rainfall received in Jacobabad, Larkana & Sukkur. Decadal maximum & minimum temperature departure both raised above normal by 2.5°C & 1.0°C respectively, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETO were recorded as 44%, 107.6hrs, 3.4km/hr and 5.3mm/day respectively.

**1.3 Khyber Pakhtunkhwa (KP)**

Light to moderate rainfall reported in the agricultural plains of KP. Chief amount of rainfall received in Kalam, Pattan & Parachinar. Decadal maximum & minimum temperature departure both raised above normal by 1.0°C & 0.1°C respectively, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETO were recorded as 65%, 65.1hrs, 2.2km/hr and 3.2mm/day respectively.

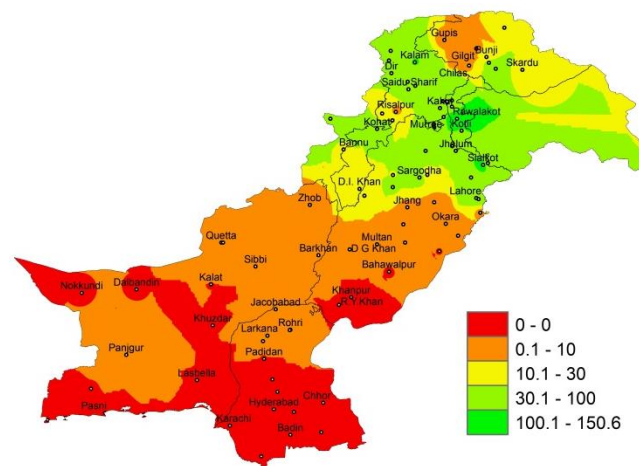
**1.4 Balochistan**

Light rainfall reported in the agricultural plains of Balochistan. Chief amount of rainfall received in Zhob, Quetta & Barkhan. Decadal maximum dropped below normal by 0.1°C & minimum temperature departure raised above normal by 2.4°C, in the province. Whereas mean values relative humidity, sunshine hour, wind speed & ETO were recorded as 44%, 79.1hrs, 6.1km/hr and 5.0mm/day respectively.

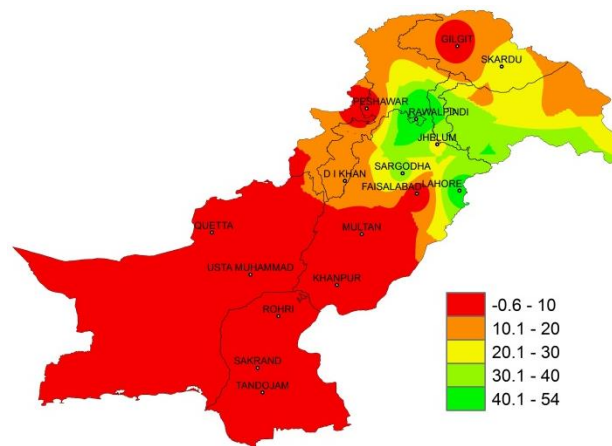
**1.5 Gilgit-Baltistan and Azad Jammu & Kashmir**

Light to moderate rainfall reported in the agricultural plains of GB & Kashmir. Chief amount of rainfall received in Rawalakot, Kotli & Garhidopatta. Decadal maximum & minimum temperature departure both raised above normal by 0.4°C & 0.4°C respectively, in the province. Relative

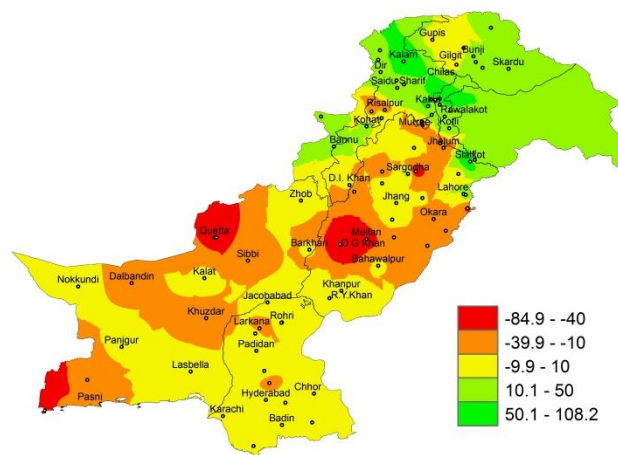
humidity, sunshine hour, wind speed & ETO were recorded as 42%, 56.4hrs, 2.9km/hr and 2.9mm/day respectively.



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 (20<sup>th</sup> to 31<sup>st</sup> March, 2015)**

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

Rainfall reported as 56.8mm during the decade however weather remained cloudy for 08days. Average relative humidity recorded as 56%. Mean day temperature was 27.9°C while night temperature recorded as 15.0°C with 73.0hours bright sunshine duration. Wind speed recorded as 5.3km/hr with mean wind direction *westerly*.

**Wheat (Chakwal-97):** Fair condition, teslling stage.

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

Rainfall reported as Trace (not measureable) during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 57%. Mean day temperature was 30.9°C while night temperature recorded as 16.8°C with 81.5hours bright sunshine duration. Wind speed recorded as 3.0km/hr with mean wind direction *north easterly*.

**Wheat:** very good condition, Milk maturity stage.

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

Dry weather reported during the decade however weather remained cloudy for 03days. Average relative humidity recorded as 40%. Mean day temperature was 38.4°C while night temperature recorded as 18.9°Cwith 104.1hours bright sunshine duration. Wind speed recorded as 1.6km/hr with mean wind direction *north easterly*.

**Wheat (TJ-83):** Harvested.

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

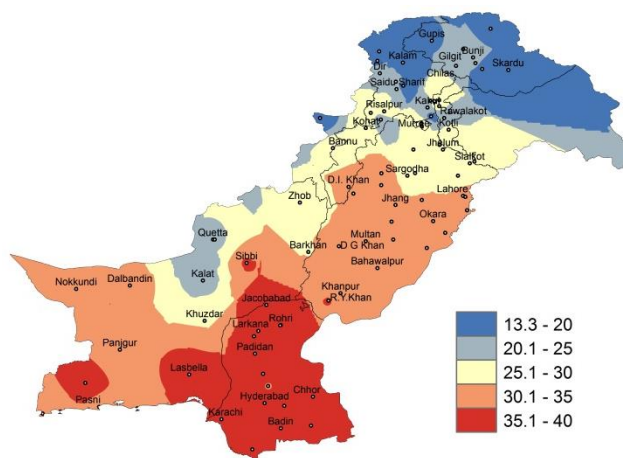
Rainfall reported as 2.6mm during the decade however weather remained cloudy for 06days. Average relative humidity recorded as 46%. Mean day temperature was 34.3°C while night temperature recorded as 18.5°C.

**Wheat (Zardana):** Good condition, wax maturity stage.

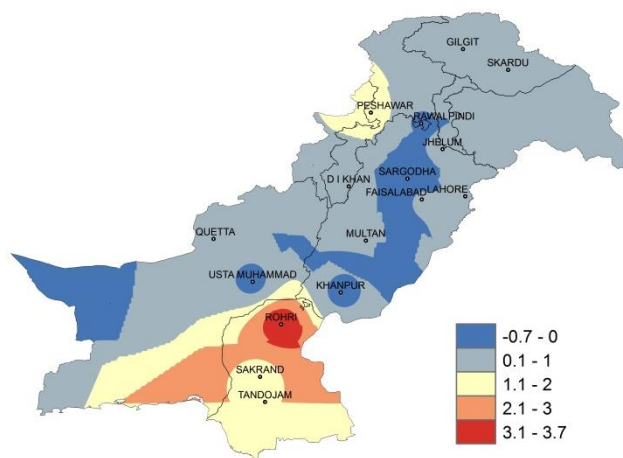
2.5 **RAMC, Quetta (Northern Balochistan)**

Rainfall reported as 5.6mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 42%. Mean day temperature was 22.5°C while night temperature recorded as 10.4°C with 79.1 hours bright sunshine duration and wind speed recorded as 6.1km/hr with mean wind direction *southerly*.

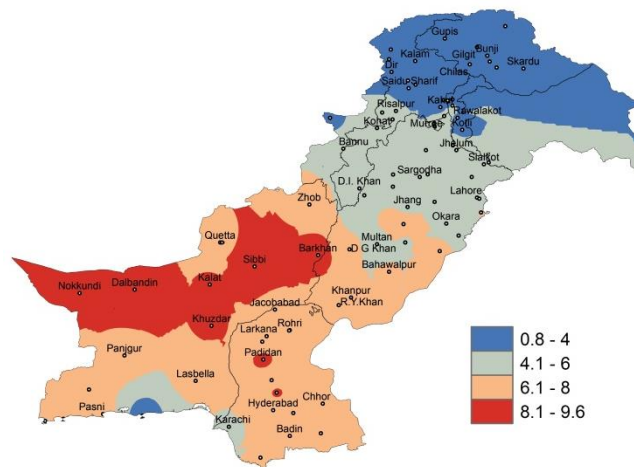
**Wheat:** Good condition, Teslling.



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 (20<sup>th</sup> to 31<sup>st</sup> March, 2015)**

2.6 **Jhelum**

Rainfall reported as 29.6mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 60%. Mean day temperature was 30.1°C while night temperature recorded as 16.1°C with 73.6 hours bright sunshine duration and wind speed recorded as 2.9km/hr with mean wind direction *north westerly*.

2.7 **Lahore**

Rainfall reported as 48.2mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 60%. Mean day temperature was 30.3°C while night temperature recorded as 18.5°C with 79.8hours bright sunshine duration. Wind speed recorded as 4.3km/hr with mean wind direction *north westerly*.

2.8 **Sargodha**

Rainfall reported as 36.5mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 64%. Mean day temperature was 30.3°C while night temperature recorded as 18.0°C with 77.0hours bright sunshine duration. Wind speed recorded as 3.1km/h with mean wind direction *easterly*.

2.9 **Multan**

Rainfall reported as 0.6mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 53%. Mean day temperature was 32.0°C while night temperature recorded as 19.4°C with 79.1 hours bright sunshine duration. Wind speed recorded 4.3km/hr with mean wind direction *north easterly*.

2.10 **Khanpur**

Dry weather reported during the decade however weather remained cloudy for 08days. Average relative humidity recorded as 54%. Mean day temperature was 33.6°C while night temperature recorded as 19.7°C with 90.1hours bright sunshine duration. Wind speed recorded 5.8km/hr with mean wind direction *north easterly*.

2.11 **Sakrand**

Dry weather reported during the decade however weather remains cloudy for 04days. Average relative humidity recorded as 47%. Mean day temperature was 37.1°C while night temperature recorded as 16.1°C with 116.6hours bright sunshine duration. Wind speed recorded 3.33km/hr with wind direction *northerly*.

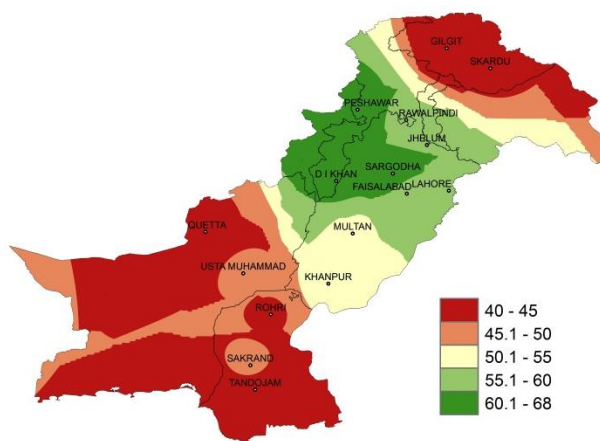


Figure.3: Relative Humidity in percentage (%)

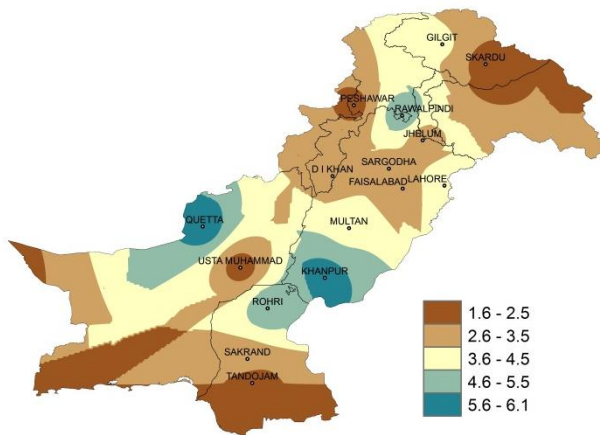


Figure.4: Reference Crop Evapotranspiration “ET<sub>0</sub>” in mm/day

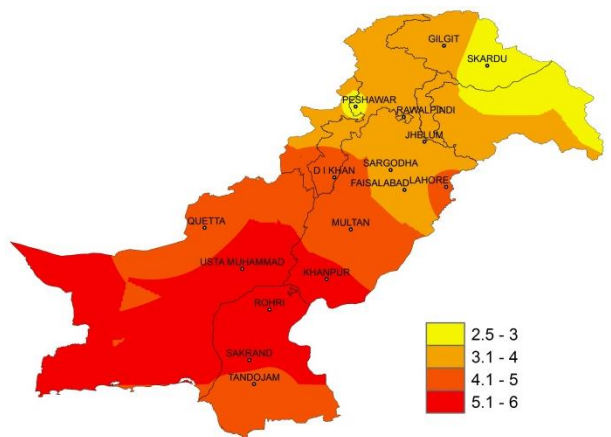


Figure 5: Wind Speed in kilometer per hour (km/h)

**2.12 Rohri**

Rainfall reported as Trace (not measureable) during the decade, however weather remained cloudy for 09days. Average relative humidity recorded as 44%. Mean day temperature was 38.8°C while night temperature recorded as 22.6°C with 102.0hours bright sunshine duration. Wind speed recorded as 5.3km/hr with mean wind direction *north easterly*.

**2.13 D.I. Khan**

Rainfall reported as 14.8mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 62%. Mean day temperature was 30.5°C while night temperature recorded as 15.7°C with 81.1hours bright sunshine duration.

**2.14 Peshawar**

Rainfall reported as 6.0mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 68%. Mean day temperature was 29.0°C while night temperature recorded as 14.7°C with 49.1hours bright sunshine duration. Wind speed recorded as 2.2km/hr with mean wind direction *north westerly*.

**2.15 Skardu**

Rainfall reported as 22.8mm during the decade however weather remained cloudy for 08days. Average relative humidity recorded as 44%. Mean day temperature was 16.9°C while night temperature recorded as 4.4°C with 55.1hours bright sunshine duration. Wind speed recorded as 2.1km/hr with mean wind direction *north easterly*.

**2.16 Gilgit**

Rainfall reported as 5.5mm during the decade however weather remained cloudy for 10days. Average relative humidity recorded as 40%. Mean day temperature was 23.0°C while night temperature recorded as 6.9°C with 57.9hours bright sunshine duration. Wind speed recorded as 3.6km/hr with mean wind direction *westerly*.

**3. Ten Days Weather Advisory for Farmers****(1<sup>st</sup> to 10<sup>th</sup> April, 2015)****3.1 Temperature Forecast**

Day and night temperatures are expected slightly normal in most of the agricultural plains of the country especially in upper parts 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:** Light to moderate rainfall is expected in the province including Rawalpindi, Gujranwala, Lahore, Sargodha, Sahiwal divisions during the decade.
- ❖ **Khyber Pakhtunkhwa:** Mainly cold and cloudy weather is expected in the province. However light to moderate rainfall is expected in during decade.
- ❖ **Sindh:** Mainly dry weather is expected in most parts of the Sindh. However light to moderate rain is expected in few places including Hyderabad division, Karachi division and Mirpur Khas division from 4th and 6th of the decade.
- ❖ **Balochistan:** Mainly cold/dry weather is expected in most parts of the Balochistan however light to moderate rain is expected at few places of the province including Kalat, Khuzdar, Zhob, Quetta during the decade.
- ❖ **Gilgit Baltistan:** Mainly cold and cloudy weather is expected in most parts of the G.B however light to moderate rain (with light snowfall over the hills) is expected during the decade.
- ❖ **Kashmir:** Widespread rain-thunderstorm is expected in most parts of the Kashmir during the decade.

**3.4 Advisory for Farmers**

- ❖ Wheat crop is in different maturity stages. Farmers are advised to irrigate the crops keeping the expected rain in the agricultural plains of the country.
- ❖ Weeds are expected to shoot in excess after recent rains. Farmers should control weeds growth soon after rains.
- ❖ Farmers are advised to control further weeds growth at the present growing stages to stop any negative impact over the crops. Weeds removing practices should be started soon after expected rains in the mentioned areas.
- ❖ Farmers of upper half and northwest Balochistan should be careful about irrigation and spraying chemicals on the crops during or before expected rains during the decade.
- ❖ 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.