

Decadal Agromet Bulletin of Pakistan



Highlights....

- ❖ Dry weather reported in the agricultural plains of country during the last decade.
- ❖ Lowest minimum temperature recorded -6.5°C at Skardu during the last decade.
- ❖ Mainly cold and dry weather is expected in most parts of the country however, partly cloudy weather conditions with light to moderate rain (with light snowfall over the hills) is expected at K.P, G.B & Kashmir.
- ❖ Farmers are advised to cultivate winter vegetables in time so that present soil moisture may fully be utilized.
- ❖ Wheat cultivation is in progress in most of the irrigated areas. Farmers of irrigated areas should irrigate the crop as per requirement due to dry weather prevailing in most of the irrigated agricultural plains of the country. Normally first irrigation is given 20-25 days after sowing.
- ❖ Wheat cultivation has been completed in most of the barani areas of the country. Farmers of barani areas are advised to remove weeds from the fields, so that the present soil moisture may fully be utilized.
- ❖ Farmers of wheat growing areas are advised to sow their crops in time to get the optimum yield. The best suitable time for wheat cultivation is 1st November to 20th November.
- ❖ Farmers of cotton crop areas are advised to prepare their field for incoming rabi crops and complete sowing in time.

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

Patron-in-Chief: *Hazrat Mir, Director General*

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

Editor: *Khalida Noureen, Meteorologist*

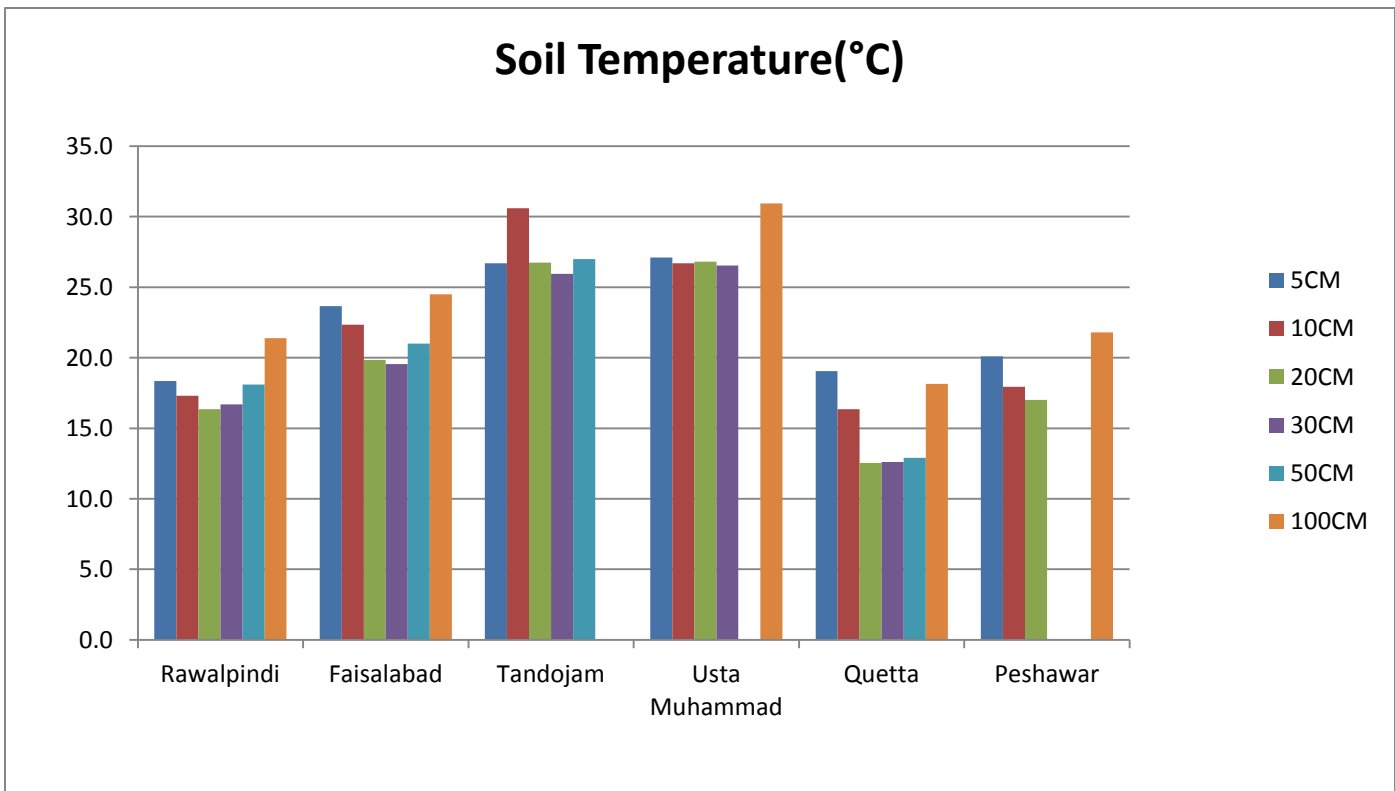
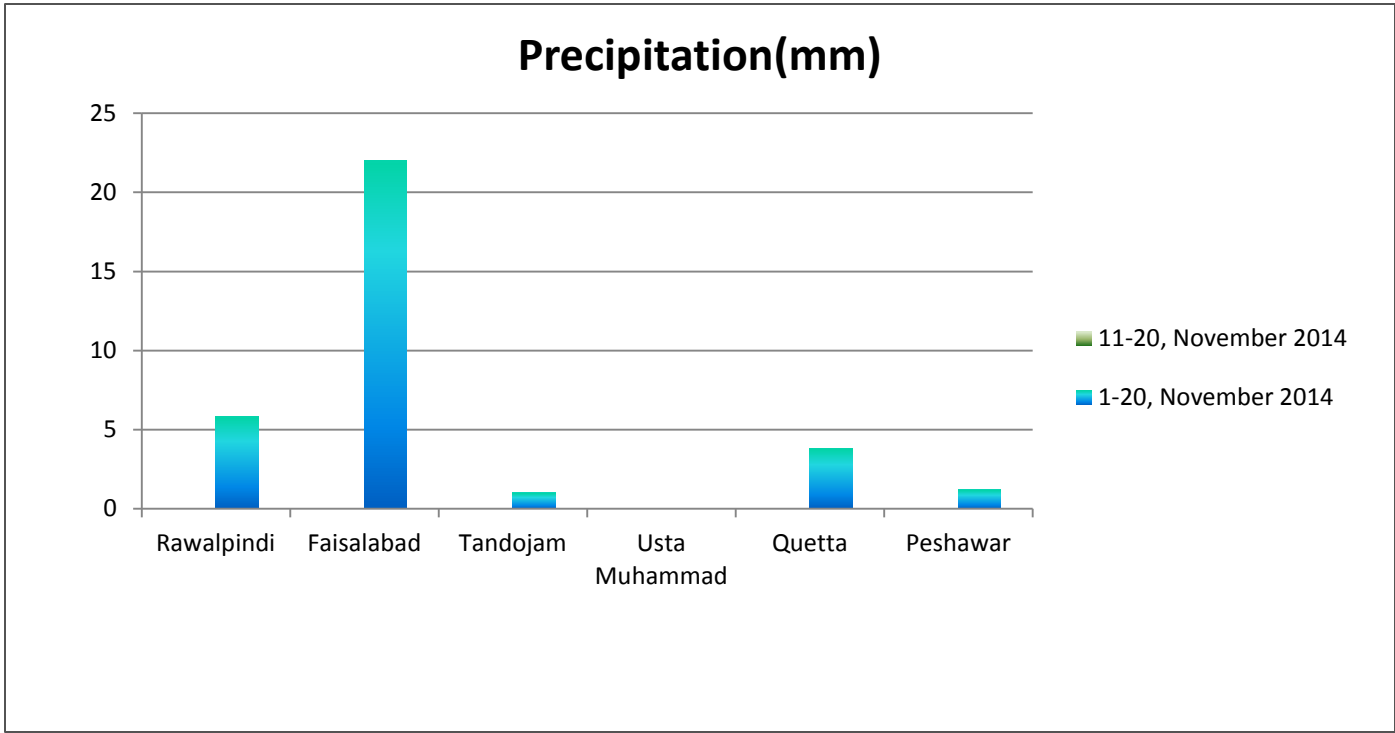
Phone: [+92-51-9250592](tel:+92-51-9250592) Email: info@namc.pmd.gov.pk

Meteorological conditions during 2nd decade of November, 2014

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	0.5	0.0	-0.5	0.7	-3.9	15.2	18.4	17.3	16.4	16.7	18.1	21.4	51	92.8	0.5	1.3
2	FAISALABAD	0.1	0.0	-0.1	0.8	-2.4	18.1	23.7	22.4	19.9	19.6	21.0	24.5	52	86.5	1.1	1.7
3	JHELUM	0.5	0.0	-0.5	0.8	-2.9	18.0	19.1	18.1	17.3	17.8	19.5	***	58	88.7	0.4	1.5
4	LAHORE	0.2	0.0	-0.2	-0.5	-3.2	19.1	19.7	18.9	18.7	19.1	***	23.5	59	74.9	1.2	1.7
5	SARGODHA	0.4	0.0	-0.4	1.6	-1.2	19.6	21.7	20.0	19.1	19.8	21.7	24.0	57	71.3	0.0	1.4
6	MULTAN	0.0	0.0	0.0	0.3	-1.5	19.4	***	***	***	***	***	***	47	90.2	1.4	2.0
7	KHANPUR	0.0	0.0	0.0	2.3	-2.7	20.1	***	22.4	23.0	23.9	25.2	27.1	47	87.8	1.5	2.2
8	TANDOJAM	0.0	0.0	0.0	0.8	-0.3	23.0	26.7	30.6	26.8	26.0	27.0	***	43	85.6	3.2	3.2
9	SAKRAND ☆	0.0	0.0	0.0	1.9	-5.0	19.2	31.6	26.9	***	***	***	30.7	53	96.2	0.0	1.9
10	ROHRI	0.0	0.0	0.0	1.2	-1.4	22.0	29.1	27.2	24.9	26.5	26.0	30.6	42	104.0	1.8	2.5
11	DI KHAN	0.4	0.0	-0.4	1.8	-4.4	17.8	***	***	***	***	***	***	49	91.5	***	3.6
12	PESHAWAR	0.7	0.0	-0.7	1.6	-2.8	17.0	20.1	18.0	17.0	***	***	21.8	55	87.0	0.8	1.4
13	USTA MUHAMMAD	0.0	0.0	0.0	1.4	-5.0	21.4	27.1	26.7	26.8	26.6	***	31.0	47	***	***	4.1
14	QUETTA	1.8	0.0	-1.8	-0.4	-0.3	9.9	19.1	16.4	12.6	12.6	12.9	18.2	24	97.7	3.7	2.3
15	SKARDU	0.1	0.0	-0.1	-0.5	-2.9	4.0	***	***	***	***	***	***	49	76.0	0.2	0.9
16	GILGIT	0.1	0.0	-0.1	0.6	-2.3	8.8	***	***	***	***	***	***	52	65.4	3.7	1.8

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 November, 2014



Past Weather (11th to 20th November, 2014)

Dry weather reported in the agricultural plains of country during the last decade.

1.1 Punjab

Dry weather reported in the agricultural plains of Punjab. Decadal maximum raised above normal by 0.9°C & minimum temperature dropped below normal by 2.5°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 53%, 84.6hrs, 0.9km/hr and 1.7mm/day respectively.

1.2 Sindh

Dry weather reported in the agricultural plains of Sindh. Decadal maximum raised above normal by 1.3°C & minimum temperature dropped below normal by 2.2°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 46%, 95.3hrs, 1.7km/hr and 2.5mm/day respectively.

1.3 Khyber Pakhtunkhwa (KP)

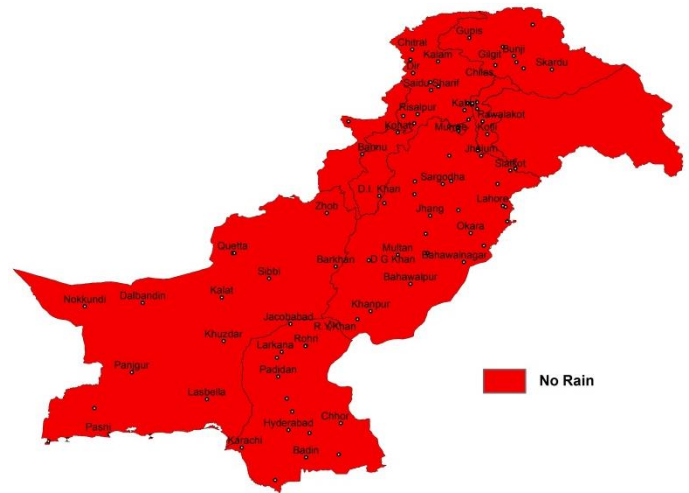
Dry weather reported in the agricultural plains of KP. Decadal maximum raised above normal by 1.7°C & minimum temperature dropped below normal by 3.6°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 52%, 89.3hrs, 0.8km/hr and 2.5mm/day respectively.

1.4 Balochistan

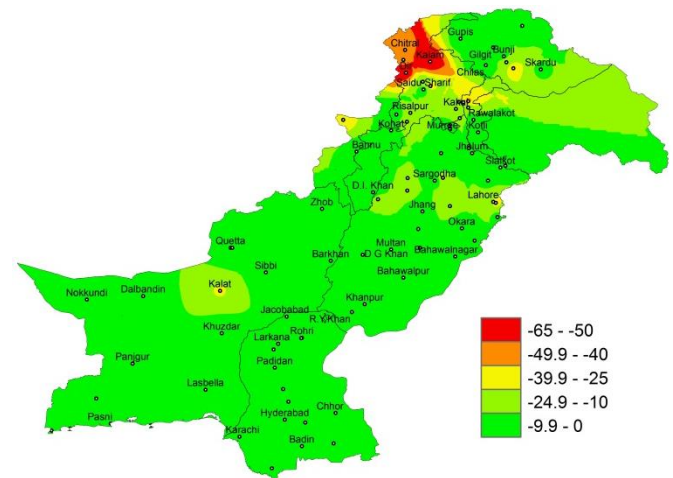
Dry weather reported in the agricultural plains of Balochistan. Decadal maximum raised above normal by 0.5°C & minimum temperature dropped below normal by 2.7°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 36%, 97.7hrs, 3.7km/hr and 3.2mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir

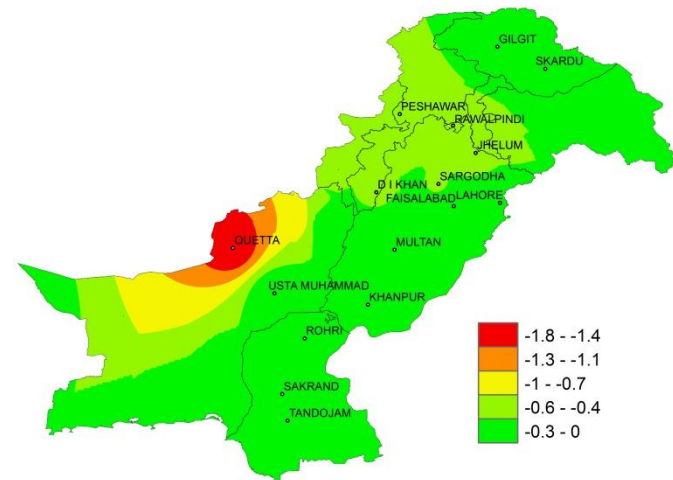
Dry weather reported in the agricultural plains of GB & Kashmir. Decadal maximum raised above normal by 0.1°C & minimum temperature dropped below normal by 2.6°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 51%, 70.7hrs, 2.0km/hr and 1.4mm/day 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
(11th to 20th November, 2014)**

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

Dry weather reported during the decade however weather remained cloudy for 01day. Average relative humidity recorded as 51%. Mean day temperature was 26°C while night temperature recorded as 5°C with 92.0hours bright sunshine duration. Wind speed recorded as 0.5km/hr with mean wind direction *westerly*.

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

Dry weather reported during the decade however weather remained cloudy for 03days. Average relative humidity recorded as 52%. Mean day temperature was 28°C while night temperature recorded as 9°C with 86.5hours bright sunshine duration. Wind speed recorded as 1.1km/hr with mean wind direction *north westerly*.

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

Dry weather reported during the decade however weather remained cloudy for 04days. Average relative humidity recorded as 43%. Mean day temperature was 32°C while night temperature recorded as 14°C with 85.6hours bright sunshine duration. Wind speed recorded as 3.2km/hr with mean wind direction *north easterly*.

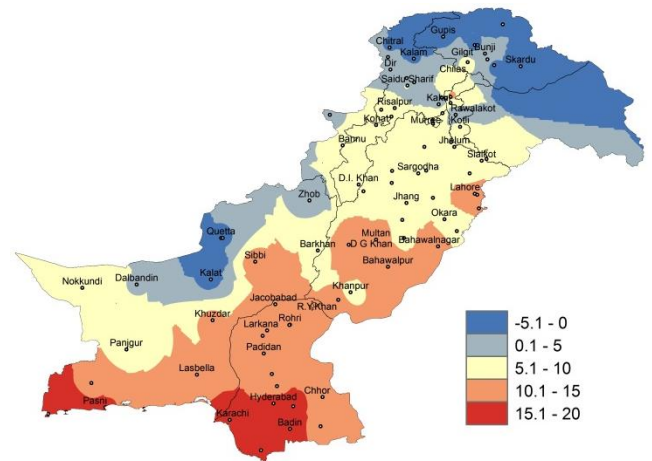
2.4 **RAMC, Usta Muhammad (Eastern Balochistan)**

Dry weather reported during the decade however weather remained cloudy for 04days. Average relative humidity recorded as 47%. Mean day temperature was 31°C while night temperature recorded as 12°C.

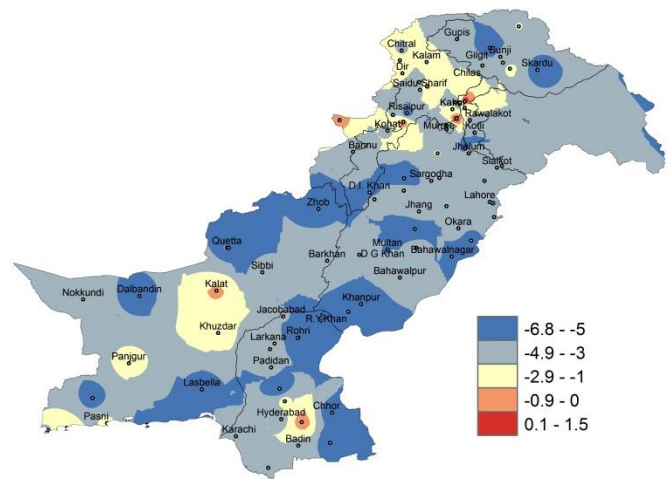
Wheat (Zardana): Good condition, Germination stage

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

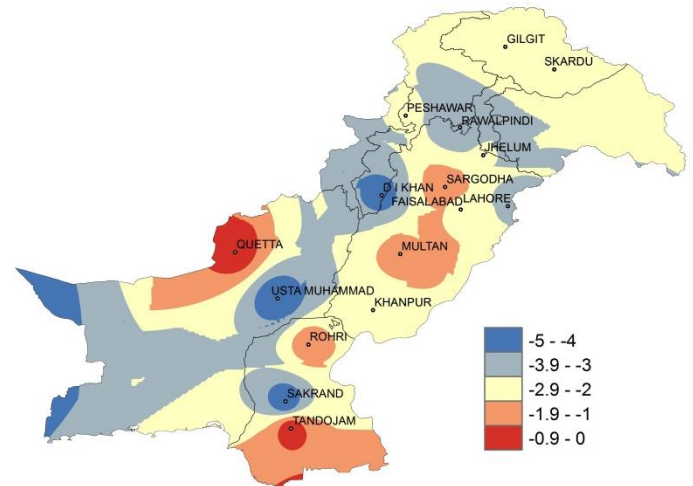
Dry weather reported during the decade however weather remained cloudy for 09days. Average relative humidity recorded as 24%. Mean day temperature was 18°C while night temperature recorded as 2°C with 97.7hours bright sunshine duration and wind speed recorded as 3.9km/hr with mean wind direction *northerly*.



I. Actual min-temp



II. Departure of min-temp from Normal



III. Departure of min-temp from Previous Decade

Figure.2: Minimum Temperature distribution during previous decade in “C”

2(b) **Past Weather for Sub-Regional Agricultural Plains (11th to 20th November, 2014)**

2.6 **Jhelum**

Dry weather reported during the decade however weather remained cloudy for 03days. Average relative humidity recorded as 58%. Mean day temperature was 28°C while night temperature recorded as 8°C with 88.7hours bright sunshine duration. Wind speed recorded 0.4km/hr with mean wind direction *north westerly*.

2.7 **Lahore**

Dry weather reported during the decade however weather remained cloudy for 03days. Average relative humidity recorded as 59%. Mean day temperature was 27°C while night temperature recorded as 12°C with 74.9hours bright sunshine duration. Wind speed recorded as 1.2km/hr with mean wind direction *north westerly*.

2.8 **Sargodha**

Dry weather reported during the decade however weather remained cloudy for 02days. Average relative humidity recorded as 57%. Mean day temperature was 28°C while night temperature recorded as 11°C with 71.3hours bright sunshine duration. Wind speed remains *Calm*.

2.9 **Multan**

Dry weather reported during the decade however weather remained cloudy for 07days. Average relative humidity recorded as 47%. Mean day temperature was 28°C while night temperature recorded as 11°C with 90.2hours bright sunshine duration. Wind speed recorded 1.4km/hr with mean wind direction *south westerly*.

2.10 **Khanpur**

Dry weather reported during the decade however weather remained cloudy for 02days. Average relative humidity recorded as 47%. Mean day temperature was 30°C while night temperature recorded as 10°C with 87.8hours bright sunshine duration. Wind speed recorded 1.5km/hr with mean wind direction *westerly*.

2.11 **Sakrand**

Dry weather reported during the decade however weather remained cloudy for 02days. Average relative humidity recorded as 53%. Mean day temperature was 31°C while night temperature recorded as 8°C with 96.2hours bright sunshine duration. Wind speed remains *Calm*.

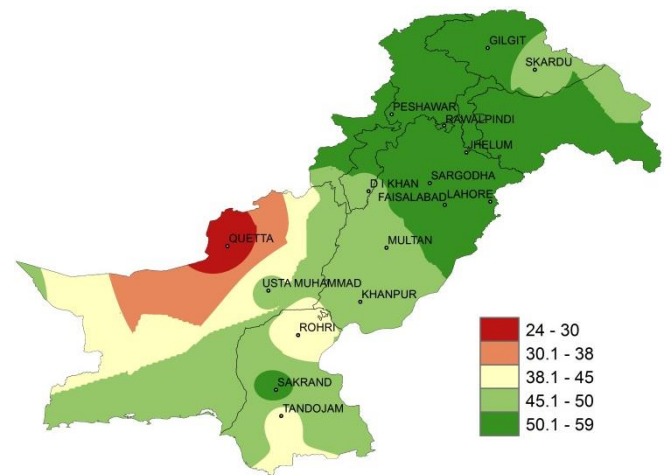


Figure.3: Relative Humidity in percentage (%)

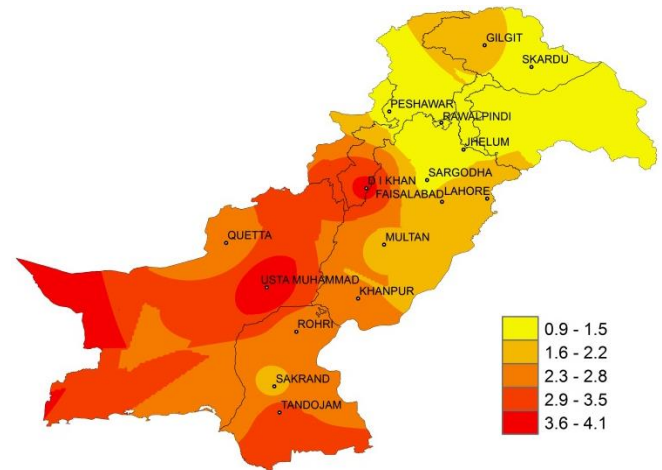


Figure.4: Reference Crop Evapotranspiration “ETo” in mm/day

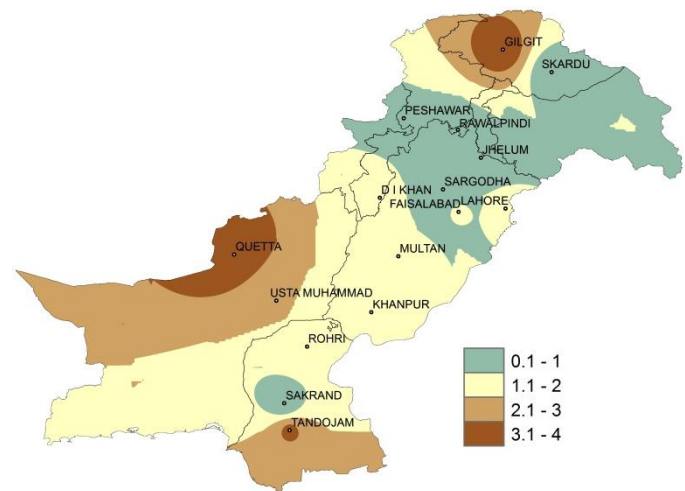


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 Rohri

Dry weather reported during the decade however weather remained cloudy for 02days. Average relative humidity recorded as 42%. Mean day temperature was 30°C while night temperature recorded as 14°C with 104.0hours bright sunshine duration. Wind speed recorded as 1.8km/hr with mean wind direction *north easterly*.

2.13 D.I. Khan

Dry weather reported during the decade however weather remained cloudy for 02days. Average relative humidity recorded as 49%. Mean day temperature was 29°C while night temperature recorded as 7°C with 91.5hours bright sunshine duration.

2.14 Peshawar

Dry weather reported during the decade however weather remained cloudy for 01day. Average relative humidity recorded as 55%. Mean day temperature was 26°C while night temperature recorded as 8°C with 67.0hours bright sunshine duration. Wind speed recorded as 6.8km/hr with mean wind direction *south westerly*.

2.15 Skardu

Dry weather reported during the decade however weather remained cloudy for 01day. Average relative humidity recorded as 49%. Mean day temperature was 13°C while night temperature recorded as -5.0°C with 76.0hours bright sunshine duration. Wind speed recorded as 0.2km/hr with mean wind direction *north easterly*.

2.16 Gilgit

Dry weather reported during the decade however weather remained cloudy for 06days. Average relative humidity recorded as 52%. Mean day temperature was 19°C while night temperature recorded as -2°C with 65.4hours bright sunshine duration. Wind speed recorded as 3.7km/hr with mean wind direction *southerly*.

3. Ten Days Weather Advisory for Farmers (21st to 30th November, 2014)

3.1 Temperature Forecast

Day temperatures are expected to be normal but night temperature falls 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:** Mostly cold and dry weather is expected during the decade.
- ❖ **Khyber Pakhtunkhwa:** Mainly cold and dry weather is expected in the province. However light rainfall (with light snowfall over the hills) is expected over few parts mid of this decade.
- ❖ **Sindh:** Dry weather expected in most of the parts of Sindh during the decade.
- ❖ **Balochistan:** Mainly cold and dry weather is expected in the province. However light rainfall is expected at Ziarat on 25th November.
- ❖ **Gilgit Baltistan:** Mainly cold and dry weather is expected in most parts of the G.B however, partly cloudy weather conditions with light to moderate rain (with light snowfall over the hills) is expected in 2nd half of decade.
- ❖ **Kashmir:** Mainly cold and dry weather is expected in most parts of the Kashmir however partly cloudy weather conditions with light to moderate rain (with light snowfall over the hills) is expected in 2nd half of decade.

3.4 Advisory for Farmers

- ❖ Farmers are advised to cultivate winter vegetables in time so that present soil moisture may fully be utilized.
- ❖ Wheat cultivation is in progress in most of the irrigated areas. Farmers of irrigated areas should irrigate the crop as per requirement due to dry weather prevailing in most of the irrigated agricultural plains of the country. Normally first irrigation is given 20-25 days after sowing.
- ❖ Wheat cultivation has been completed in most of the barani areas of the country. Farmers of barani areas are advised to remove weeds from the fields, so that the present soil moisture may fully be utilized.
- ❖ Farmers of wheat growing areas are advised to sow their crops in time to get the optimum yield. The best suitable time for wheat cultivation is 1st November to 20th November.
- ❖ Farmers of rainfed areas are advised to sow their rabi crops during the period 15th October to 15th November. After this time the yield of wheat crop decreases gradually.
- ❖ Farmers of cotton crop areas are advised to prepare their field for incoming rabi crops and complete sowing in time.
- ❖ Farmers of irrigated plains of Punjab, Sindh & K.P are advised to complete sowing of wheat crop before 15th December to get maximum yield. In case of late sowing, the recommended varieties should be cultivated to minimize the loss in yield.