

Decadal Agromet Bulletin of Pakistan



Highlights....

- ❖ Light rainfall reported in the agricultural plains of Punjab, G.B, Sindh, and Balochistan however moderate to heavy rainfall reported in the agricultural plains of KP during the last decade.
- ❖ Highest amount of rainfall reported 81.7 mm at Parachinar during the last decade.
- ❖ Highest Maximum temperature recorded 47.0°C at Kot Addu during the last decade.
- ❖ Mainly hot and dry weather is expected in most parts of the country however rain-thunderstorm with strong gusty winds are expected at scattered places during the decade.
- ❖ Farmers should stop harvesting/threshing of wheat crop keeping the present forecast in mind for the area.
- ❖ Sowing of Kharif crops should be completed as soon as possible to fully utilize the soil moisture after these rains.

**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*

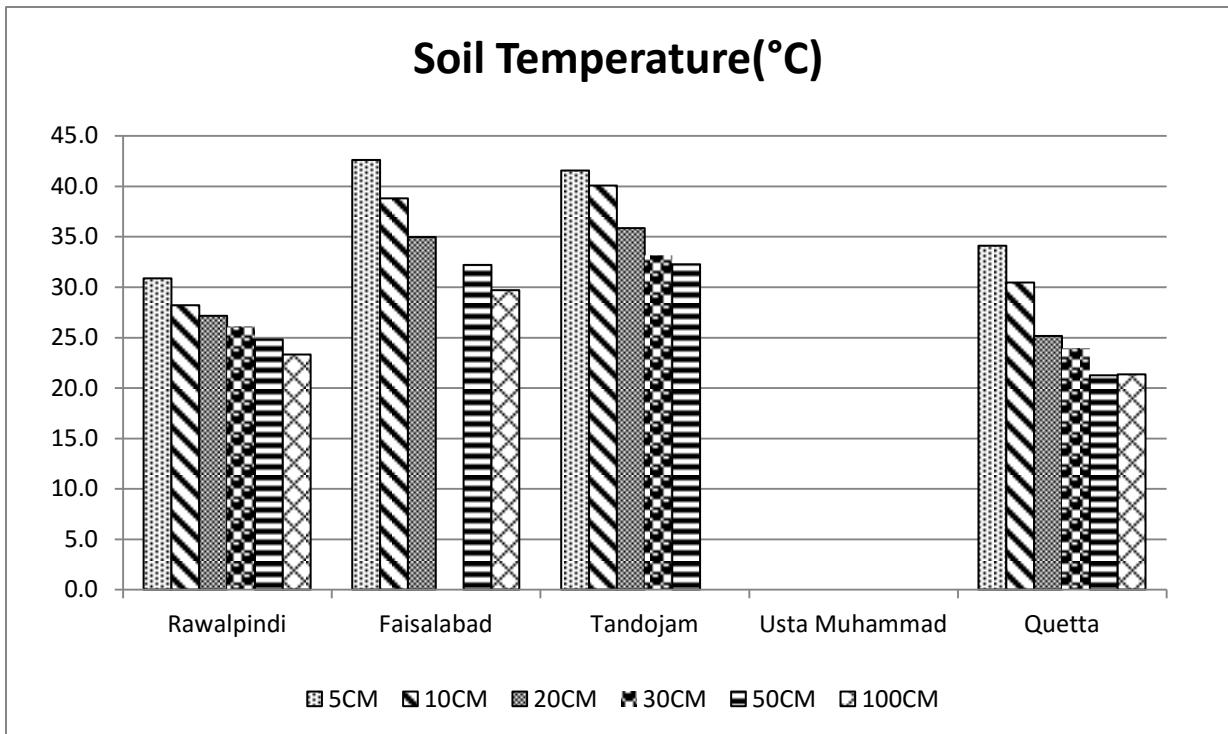
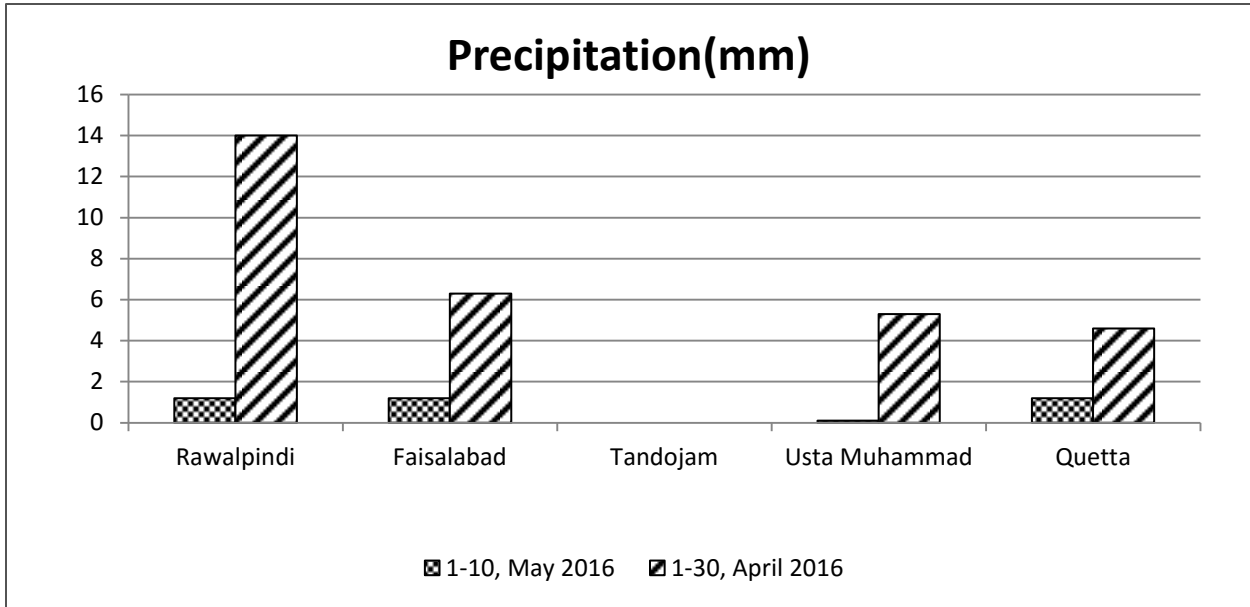
Phone: [+92-51-9250592](tel:+92-51-9250592) Email: info@namc.pmd.gov.pk

Meteorological conditions during 1st decade of May, 2016

Sr. No.	Station	Precipitation (mm)			Air Temperature (°c)			Soil Temperatures (°c)						R.H (%)	Sunshine Duration(hours)	Wind Speed (km/hr)	ET ₀ (mm/day)
		Normal	Actual	Dep	Tmax Dep	Tmin Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm				
1	RAWALPINDI	1.0	1.2	0.2	1.1	2.7	29.4	30.9	28.2	27.2	26.1	24.8	23.3	41	87.7	4.7	5.8
2	FAISALABAD	0.7	1.2	0.5	1.8	1.7	32.7	42.6	38.8	35.0	***	32.2	29.7	38	83.5	3.6	5.8
3	JHELUM	1.5	10.2	8.7	0.8	-0.5	30.5	33.6	31.8	29.3	27.6	27.3	***	41	73.6	4.1	5.5
4	LAHORE	0.7	0.1	-0.6	1.4	0.0	32.3	35.9	34.0	30.2	30.2	***	26.6	33	64.6	2.9	5.0
5	SARGODHA	0.5	4.4	3.9	0.4	2.2	32.7	36.9	35.0	31.5	30.4	28.6	26.4	49	71.8	3.7	5.4
6	MULTAN	0.4	1.1	0.7	0.6	2.7	34.3	***	***	***	***	***	***	33	89.9	5.7	7.0
7	KHANPUR	0.2	14.2	14.0	1.1	1.1	33.7	***	35.3	34.9	34.8	34.7	31.9	40	89.4	5.1	6.6
8	TANDOJAM	0.0	0.0	0.0	-0.5	-0.3	32.1	41.6	40.1	35.9	33.2	32.3	***	46	103.6	13.1	9.1
9	SAKRAND ☆	0.0	20.0	20.0	-0.6	0.7	33.5	48.1	39.8	***	***	***	32.4	39	103.3	6.4	5.6
11	DI KHAN	0.1	0.1	0.0	2.3	1.5	32.4	***	***	***	***	***	***	41	71.7	***	7.2
11	PESHAWAR	0.9	2.0	1.1	1.5	0.8	29.3	34.2	30.8	29.6	***	***	***	52	71.0	2.5	4.7
12	USTA MUHAMMAD	0.1	0.1	0.0	-0.8	-1.8	33.6	***	***	***	***	***	***	38	***	9.2	9.2
13	QUETTA	0.3	1.2	0.9	0.6	3.0	23.4	34.1	30.5	25.2	24.0	21.3	21.4	33	87.2	5.3	5.5
14	SKARDU	1.1	0.1	-1.0	2.9	0.8	18.2	***	***	***	***	***	***	32	84.4	4.5	4.7
15	GILGIT	0.8	5.2	4.4	-0.7	0.3	20.2	***	***	***	***	***	***	43	86.3	2.5	4.7

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_0 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 May, 2016



1. Past Weather (1st to 10th May 2016)

Light rainfall reported in the agricultural plains of Punjab, G.B, Sindh, and Balochistan however moderate to heavy rainfall reported in the agricultural plains of KP during the last decade.

1.1 Punjab

Light rainfall reported in the agricultural plains of Punjab. Chief amount of rainfall received in Bahawalpur, Khanpur, & Sialkot. Decadal maximum & Minimum both raised above normal by 1.0°C & 1.4°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 39%, 80.1hrs, 4.3km/hr and 5.9mm/day respectively.

1.2 Sindh

Light rainfall reported in the agricultural plains of Sindh. Chief amount of rainfall received in Padidan, Dadu & Shaheed Benazirabad. Decadal maximum dropped below normal by 0.4°C & minimum temperature raised above normal by 0.1°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 28%, 69.0 hrs, 6.5 km/hr and 7.4mm/day respectively.

1.3 Khyber Pakhtunkhwa (KP)

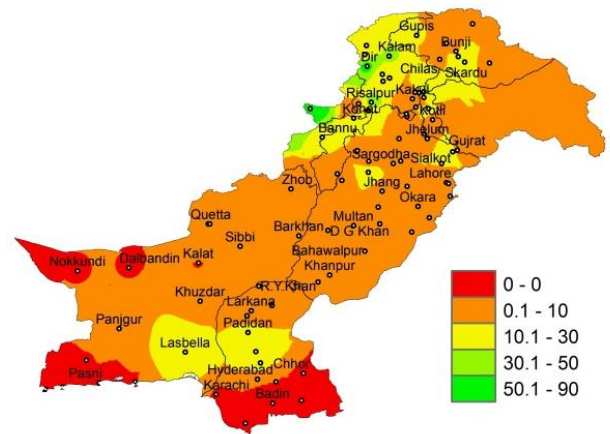
Moderate to heavy rainfall reported in the agricultural plains of KP. Chief amount of rainfall received in Parachinar, Pattan & Kalam. Decadal maximum & Minimum both raised above normal by 1.9°C & 1.2°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETO were recorded as 41%, 87.2hrs, 2.5km/hr and 6.0mm/day respectively.

1.4 Balochistan

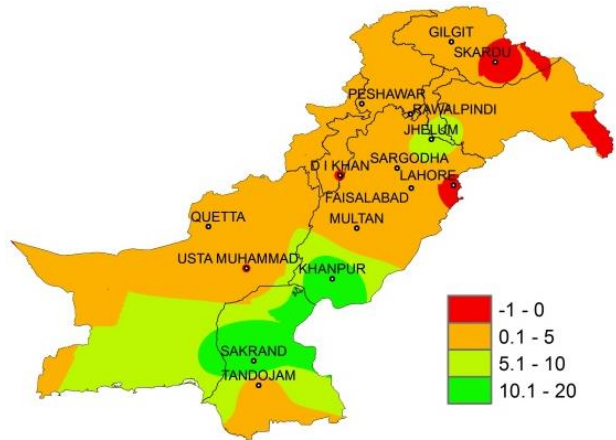
Light rainfall reported in the agricultural plains of Balochistan. Chief amount of rainfall received in Lasbella, Quetta & Zhob. Decadal maximum dropped below normal by 0.1°C & Decadal minimum raised above normal by 0.6°C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETo were recorded as 36%, 87.2hrs, 7.3 km/hr and 7.4mm/day respectively.

1.5 Gilgit-Baltistan and Azad Jammu & Kashmir

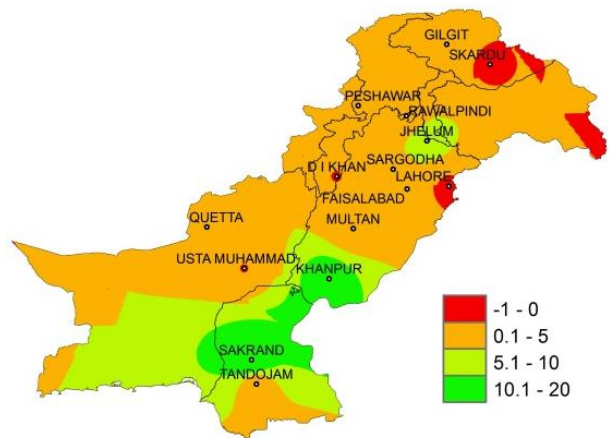
Light rainfall reported in the agricultural plains of GB & Kashmir. Chief amount of rainfall received in Astore, Gupis & Chillas. Decadal maximum & minimum temperature both raised above normal by 1.0 °C & 0.6 °C, in the province. Whereas mean values of relative humidity, sunshine hour, wind speed & ETO were recorded as 38%, 85.4hrs, 3.5 km/hr and 4.7mm/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**
(1st to 10th May, 2016)

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

Rainfall reported as 1.2 mm during the decade however weather remained cloudy for 07 days. Average relative humidity recorded as 41 %. Mean day temperature was 36.4°C while night temperature recorded as 22.3°C with 87.7 hours bright sunshine duration. Wind speed recorded as 4.7 km/hr with mean wind direction *south southeasterly*.

Wheat (Chakwal-97): Good condition, Milk Maturity.

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

Rainfall reported as 1.2mm during the decade however weather remained cloudy for 07 days. Average relative humidity recorded as 38%. Mean day temperature was 40.7°C while night temperature recorded as 24.6°C with 83.8 hours bright sunshine duration. Wind speed recorded as 3.6 km/hr with mean wind direction southerly.

Cotton: Good condition, Sowing.

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

Dry weather was reported during the decade however weather remained cloudy for 02 days. Average relative humidity recorded as 46%. Mean day temperature was 40.6°C while night temperature recorded as 23.5°C with 103.6 hours bright sunshine duration. Wind speed recorded as 13.1 km/h with mean wind direction *south westerly*.

Cotton: Sowing

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

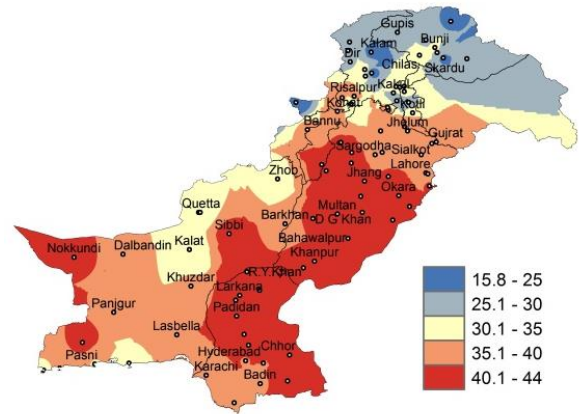
Dry weather reported as Trace (Non measureable) during the decade. Weather remained cloudy for 02 days. Average relative humidity recorded as 38%. Mean day temperature was 43.3°C while night temperature recorded as 23.8°C. Wind speed recorded as 9.2 km/hr with mean wind direction *south westerly*.

Wheat (Zardana): Harvested.

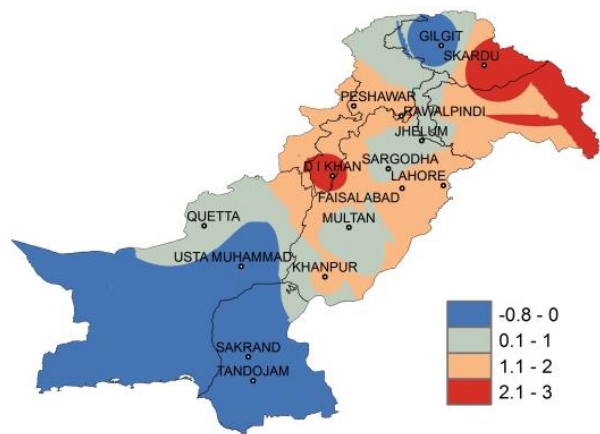
2.5 **RAMC, Quetta (Northern Balochistan)**

Dry weather reported as 1.2 mm during the decade however weather remained cloudy for 10 days. Average relative humidity recorded as 33%. Mean day temperature was 30.4°C while night temperature recorded as 16.4°C with 87.2 hours bright sunshine duration. Wind speed recorded as 5.3 km/hr with mean wind direction *North westerly*.

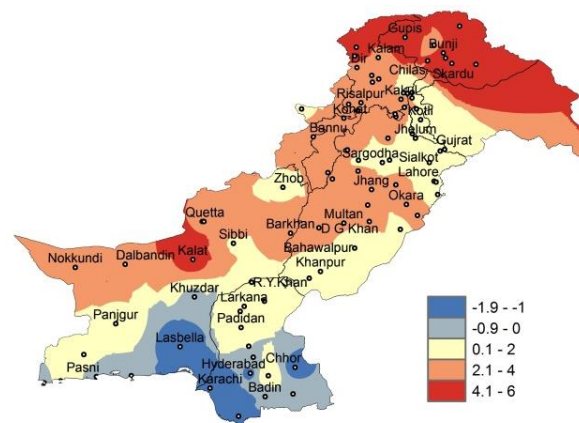
Wheat: Good condition, Wax maturity.



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 (1st to 10th May, 2016)**

2.6 **Jhelum**

Rainfall reported as 10.2 mm during the decade however weather remained cloudy for 08 days. Average relative humidity recorded as 41%. Mean day temperature was 38.7°C while night temperature recorded as 22.2°C with 73.6 hours bright sunshine duration. Wind speed recorded 4.1 km/hr with wind direction *South easterly*.

2.7 **Lahore**

Rainfall reported as Trace (Non measureable) during the decade however weather remained cloudy for 07 days. Average relative humidity recorded as 33%. Mean day temperature was 39.4°C while night temperature recorded as 25.2°C with 64.6 hours bright sunshine duration. Wind speed recorded as 2.9 km/hr with mean wind direction *northwesterly*.

2.8 **Sargodha**

Rainfall reported as 4.4 mm during the decade however weather remained cloudy for 08 days. Average relative humidity recorded as 49%. Mean day temperature was 39.5°C while night temperature recorded as 25.9°C with 71.8 hours bright sunshine duration. Wind speed recorded 3.7 km/hr with mean wind direction *variable*.

2.9 **Multan**

Rainfall reported as 1.1 mm during the decade however weather remained cloudy for 08 days. Average relative humidity recorded as 33%. Mean day temperature was 40.9°C while night temperature recorded as 27.6°C with 89.9 hours bright sunshine duration. Wind speed recorded 5.7 km/hr with mean wind direction *southerly*.

2.10 **Khanpur**

Rainfall reported as 14.2 mm during the decade. However sky remained cloudy for 08 days. Average relative humidity recorded as 40%. Mean day temperature was 41.6°C while night temperature recorded as 25.7°C with 89.4 hours bright sunshine duration. Wind speed recorded 5.1 km/hr with mean wind direction *southwesterly*.

2.11 **Skrand**

Rainfall reported as 20.0 mm during the decade however weather remains cloudy for 04 days. Average relative humidity recorded as 39%. Mean day temperature was 41.9°C while night temperature recorded as 25.1°C with 105.1 hours bright sunshine duration. Wind speed recorded 11.8 km/hr with wind direction *south easterly*.

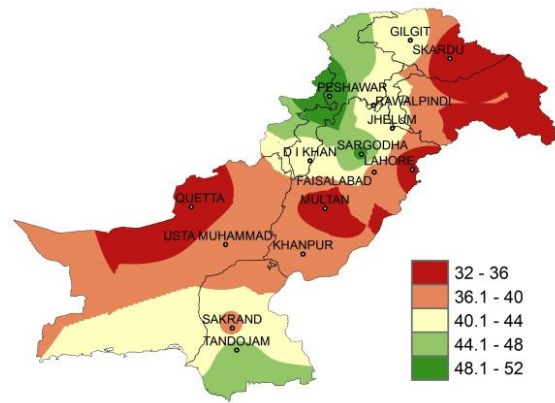


Figure.3: Relative Humidity in Percentage (%)

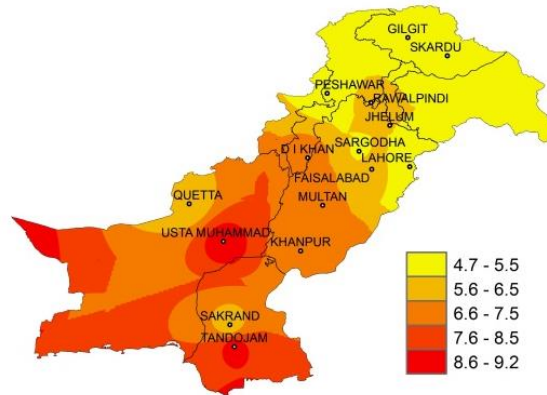


Figure.4: Reference Crop Evapotranspiration “ETo” in mm/day

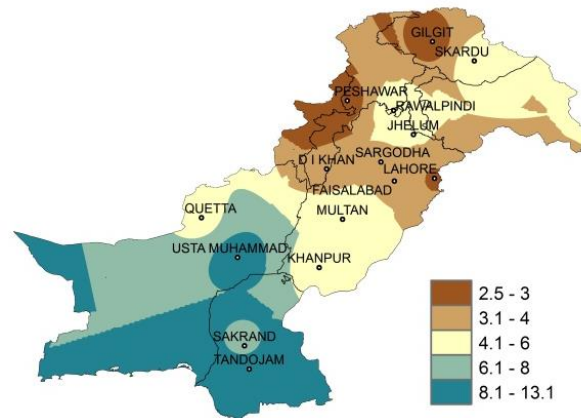


Figure 5: Wind Speed in kilometer per hour (km/h)

2.12 D.I. Khan

Rainfall reported as Trace (Non measureable) during the decade however weather remained cloudy for 05days. Average relative humidity recorded as 41%. Mean day temperature was 40.7°C while night temperature recorded as 24.0°C with 71.7hours bright sunshine duration.

2.13 Peshawar

Rainfall reported as 2.0mmduring the decade however weather remained cloudy for 10days. Average relative humidity recorded as 52%. Mean day temperature was 36.3°C while night temperature recorded as 22.2°C with 71.0 hours bright sunshine duration. Wind speed recorded as 2.5km/hr with mean wind direction *north easterly*.

2.14 Skardu

Rainfall reported as Trace (Non measureable) during the decade however weather remained cloudy for 06days. Average relative humidity recorded as 32%. Mean day temperature was 26.9°C while night temperature recorded as 9.5°C with 84.4hours bright sunshine duration. Wind speed recorded as 4.5 km/hr with mean wind direction *South westerly*.

2.15 Gilgit

Rainfall reported as 5.2 mm during the decade; however weather remained cloudy for 09days. Average relative humidity recorded as 43%. Mean day temperature was 29.1°C while night temperature recorded as 11.3°C with 86.3hours bright sunshine duration. Wind speed recorded as 2.5km/hr with mean wind direction *south easterly*.

**3. TenDays Weather Advisory for Farmers
(11th to 20th May, 2016)****3.1 Temperature Forecast**

Day time temperature expected to remain 2-4°C above normal in most parts of the country & 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 and hot weather is expected during the decade. Rain/thunderstorm with gusty wind at upper Punjab while dust raising winds in the southern Punjab are expected during the first half of the decade.

❖ **Khyber Pakhtunkhwa:** Rain/thunderstorm with gusty wind is expected at upper KP Malakand, Hazara, Peshawar, Mardan divisions at scattered places during the first half of the decade.

❖ **Sindh:** Very hot and dry weather is expected in most parts of Sindh however rain-dust raising winds at upper Sindh (sukkur, Larkana Division) at isolated places are expected during the start of the decade.

❖ **Balochistan:** Very hot and dry weather is expected in most parts of Balochistan however rain-dust storm/thunderstorm with gusty winds at isolated places Quetta, Zhob & Sibbi are expected during the start of the decade.

❖ **Gilgit Baltistan:** Mainly hot and dry weather is expected in most parts of G.B. However rain-thunderstorm with strong gusty winds is expected at isolated places during during the first half of the decade.

❖ **Kashmir:** Mainly hot and dry weather is expected in most parts of Kashmir. However rain-thunderstorm with strong gusty winds is expected at isolated places during the first half of the decade.

3.4 Advisory for Farmers

❖ Farmers should stop harvesting/threshing of wheat crop keeping the present forecast in mind for the area.

❖ Sowing of Kharif crops should be completed as soon as possible to fully utilize the soil moisture after these rains.