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3<sup>rd</sup> Decade May, 2012



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

http://www.pmd.gov.pk/WFF/weather for farmers

Phone: +92-51-9250592 email: dirnamc@yahoo.com

# Meteorological conditions during 2nd decade of May, 2012

Sr. No.	Station	Precipitation (mm)			Air Temperature (°c)			Soil Temperatures (°c)						Sunshine	Wind	R.H	ETO
		Normal	Actual	Dep	Tmin Dep	Tmax Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm	Duration (hours)	Speed (km/hr)	(%)	(mm/day)
1	TANDOJAM	0.0	0.0	0.0	0.1	-0.7	33.2	36.9	36.3	34.9	33.2	32.2	29.2	108.5	7.8	51	7.3
2	SAKRAND 🏠	0.0	5.0	5.0	-1.7	-2.0	33.4	45.1	43.5	45.0	35.4	35.4	31.7	112.1	6.8	42	7.4
3	ROHRI	0.0	TR	0.0	0.2	-2.5	35.8	47.2	42.8	36.6	35.0	33.5	31.6	104.0	4.3	33	6.5
4	USTA MUHAMMAD	0.0	0.0	0.0	-2.5	-3.8	33.7	44.7	41.3	39.5	39.3	32.5	31.6	•••	3.8	42	6.6
5	QUETTA	0.1	0.3	0.2	-2.7	-4.2	20.5	29.9	27.9	23.6	16.3	20.9	20.2	100.5	5.7	22	5.4
6	KHANPUR	0.0	0.0	0.0	-1.1	-1.1	33.2	37.7	36.5	35.7	35.5	35.3	32.6	92.9	7.2	38	7.2
7	MULTAN	0.0	0.5	0.5	-0.6	-2.1	33.7	***	***	***	***	***	***	82.3	5.2	29	6.5
8	LAHORE	0.2	TR	-0.2	-0.3	-0.8	32.7	37.2	34.0	30.7	29.4	***	25.3	98.2	4.1	28	6.0
9	FAISALABAD	0.2	TR	-0.2	0.3	-2.0	32.3	42.6	37.9	34.2	32.1	30.9	32.7	97.6	6.6	28	6.8
10	SARGODHA	0.6	2.6	2.0	-0.1	-2.4	32.5	40.3	37.0	33.9	32.2	31.5	28.5	94.2	4.3	39	6.0
11	JHELUM	0.9	4.4	3.5	-0.5	-0.3	32.0	40.1	37.0	33.3	31.5	31.0	***	92.6	6.0	28	6.6
12	RAWALPINDI	1.5	2.0	0.5	-0.4	-1.7	28.4	34.4	32.3	29.5	28.1	26.7	24.5	88.0	2.9	37	5.0
13	DIKHAN	0.4	2.0	1.6	1.5	-2.6	32.2	***	***	***	***	***	***	109.9	7.1	32	7.1
14	PESHAWAR	0.4	7.5	7.1	-3.7	-3.2	27.5	31.2	28.4	27.3	28.9	25.1	23.3	73.6	2.1	48	4.6
15	SKARDU	0.3	TR	-0.3	-1.0	-3.7	16.1	***	***	***	***	***	***	64.5	6.0	30	5.3
16	GILGIT	0.2	12.3	12.1	0.2	-7.3	19.0	***	***	***	***	***	***	54.4	6.9	53	4.4
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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 "96 Dep "is calculated by the formula; Dep divided by Normal multiplied by 100. Tmin & Tmax stands for minimum and maximum temperatures respectively. ETo stands for reference crop evapotranspiration. \*\*\* stands for no data and (\(\frac{\pi}{\pi}\)) indicates the station with five years climatic (normal) data for computing departures.

# Past Weather (11<sup>th</sup> to 20<sup>th</sup> May, 2012):

Light to moderate rain reported from most of the agricultural plains of the country during the decade.

### 1.1 Punjab

Light to moderate rainfall reported from most of the agricultural plains of Punjab during the decade, chief amount received at Murree, Okara and Mianwali (Fig. 1.a). Decadal maximum temperature and minimum temperature both dropped below normal by 1.5 & 0.4°C respectively. Mean values of wind speed, relative humidity and ETo were recorded as 5.2 km/hr, 32 %, and 6.3 mm/day respectively (Fig 3-4).

#### 1.2 Sindh

Light rainfall reported during the decade from few of the agricultural plains of upper Sindh except Dadu where 45 mm rain occurred. Decadal maximum temperature and minimum temperature both dropped below normal by 1.7 & 0.5°C respectively. Mean values of wind speed, relative humidity and ETo were recorded as 6.3 km/hr, 42 %, and 7.1 mm/day respectively.

#### 1.3 Khyber Pakhtoon Khawa (KPK)

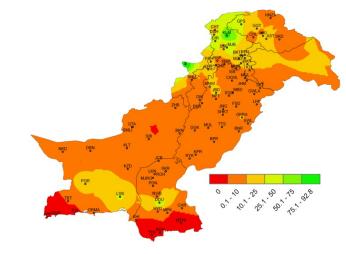
Light to moderate rainfall reported from most of the agricultural plains of KPK; chief amount received at Parachinar, Kalam and Dir etc. Decadal maximum temperature and minimum temperature both dropped below normal by 2.9 & 1.1°C respectively. Mean values of wind speed, relative humidity and ETo were recorded as 4.6 km/hr, 40 %, and 5.9 mm/day respectively.

#### 1.4 Balochistan

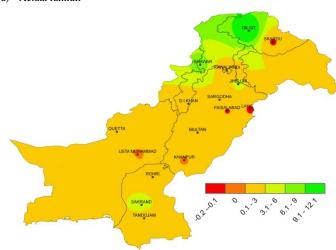
Light to moderate rainfall reported from most of the agricultural plains of Balochistan; chief amount received at Lasbella, Panjgur and Khuzdar etc. Decadal maximum temperature and minimum temperature both dropped below normal by 4.0 & 2.6°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 4.8 km/hr, 32%, and 6.0 mm/day respectively.

# 1.5 Gilgit Baltistan and Azad Jammu & Kashmir

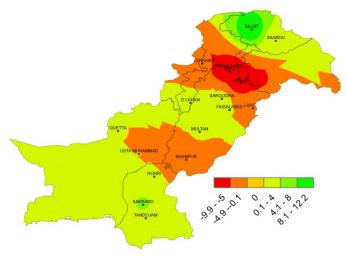
Light to moderate rainfall reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Muzaffarabad, Pattan and Garhi Dopatta etc. In Gilgit Baltistan region; Decadal maximum temperature and minimum temperature both dropped below normal by 5.5 & 0.4°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded as 6.5 km/hr, 42 %, and 4.9 mm/day respectively.



a) Actual rainfall



b) Departure of rainfall from Normal



c) Departure of rainfall from Previous Decade

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

# 2 (a) <u>Past Weather for Major Agricultural Plains</u> (11<sup>th</sup> to 20<sup>th</sup> May, 2012) as per Table-1

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

Rainfall reported as 2.0 mm during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 37%. Mean night temperature was 20.8°C while day temperature recorded as 35.9°C with 88.0 hours bright sunshine duration. Wind speed recorded as 2.9 Km/hr with mean direction *westerly*. Presently no crop is grown at the station.

#### 2.2 RAMC, Tandojam (Lower Sindh)

No rainfall reported during the decade, weather remainded cloudy for 4 days average relative humidity recorded as 51%. Mean night temperature was 25.8°C while day temperature recorded as 40.6°C with 108.5 hours bright sunshine duration. Wind speed recorded as 7.8 Km/hr with mean direction *south westerly*. Presently only one crop (irrigated conditions) is grown at the station as detailed below.

Cotton (BT-886): Good condition at Third Leaf stage.

#### 2.3 RAMC, Faisalabad (Central Punjab)

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 05 days and average relative humidity recorded as 28%. Mean night temperature was 25.3°C while day temperature recorded as 39.2°C with 97.6 hours bright sunshine duration. Wind speed recorded as 6.6 Km/hr with variable wind. Presently one crop (irrigated conditions) are grown at the station as detailed below.

Sugarcane: Very Good condition, Tillering stage completed.

# 2.4 RAMC, Quetta (Northern Balochistan)

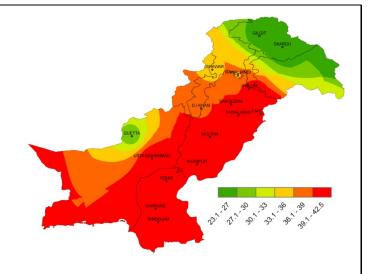
Rainfall reported as 0.3 mm during the decade, weather remained cloudy for 02 days and average relative humidity recorded as 22%. Mean night temperature was 12.7 °C while day temperature recorded as 28.3 °C with 100.5 hours bright sunshine duration and wind speed recorded as 5.7 Km/hr with mean direction *nort westerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

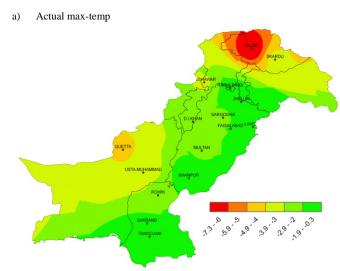
Wheat (Local White): Good condition at Wax Maturity stage.

## 2.5 RAMC, Usta Muhammad (Eastern Balochistan)

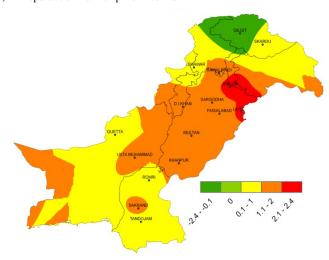
No rainfall reported during the decade however weather remained cloudy for 02 days and average relative humidity recorded as 42%. Mean night temperature was 24.8°C while day temperature recorded as 42.5°C. Wind speed recorded as 3.8 Km/hr with mean direction *easterly*. Presently one crop (irrigated conditions) is grown at the station as detailed below.

Wheat (Lasani): At Threshing stage.





b) Departure of max-temp from Normal



c) 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> May, 2012)

#### 2.6 Rohr

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 33 %. Mean night temperature was 29.1°C while day temperature recorded as 42.4°C with 110.4 hours bright sunshine duration. Wind speed recorded 4.3 Km/hr with mean direction *south westerly*.

#### 2.7 Skardu

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 30 %. Mean night temperature was 9.0 °C while day temperature recorded as 23.1 °C with 64.5 hours bright sunshine duration. Wind speed recorded as 6.0 Km/hr with mean direction *north westerly*.

#### 2.8 Multan

Rainfall reported as 0.5 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 29 %. Mean night temperature was 26.5°C while day temperature recorded as 40.8°C with 82.3 hours bright sunshine duration. Wind speed recorded as 5.2 Km/hr with mean direction *southerly*.

#### 2.9 Lahore

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 28%. Mean night temperature was 25.9°C while day temperature recorded as 39.4°C with 98.2 hours bright sunshine duration. Wind speed recorded as 4.1Km/hr with mean direction *north-westerly*.

#### 2.10 Peshawar

Rainfall reported as 7.5 mm during the decade, weather remained cloudy for 10 days and average relative humidity recorded as 48%. Mean night temperature was 19.9 °C while day temperature recorded as 35.1 °C with 73.6 hours bright sunshine duration. Wind speed recorded as 2.1 Km/hr with mean direction *north westerly*.

#### 2.11 Khanpur

No rainfall reported during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 38 %. Mean night temperature was 25.3°C while day temperature recorded as 41.0°C with 92.9 hours bright sunshine duration. Wind speed recorded as 7.2 Km/hr with mean direction *south westerly*.

#### 2.12 Sargodha

Rainfall reported as 2.6 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 39 %. Mean night temperature was 25.5°C while day temperature recorded as 39.4°C with 68.5 hours bright

sunshine duration. Wind speed recorded as 4.3 Km/hr with mean direction *north easterly*.

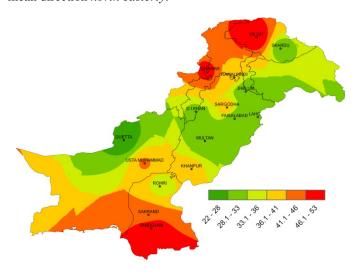


Figure.3: Relative Humidity in percentage

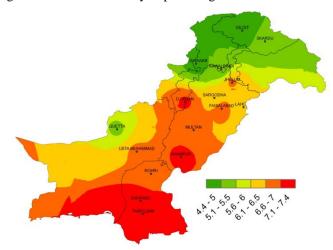


Figure.4: Reference Crop Evapotranspiration "ETo" in mm/day

# **2.13** Gilgit.

Rainfall reported as 12.3 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 53 %. Mean night temperature was 12.1°C while day temperature recorded as 25.8 °C with 54.4 hours bright sunshine. Wind speed recorded as 6.9 Km/hr with mean direction westerly.

#### 2.14 Jhelum

Rainfall reported as 4.4 mm during the decade however weather remained cloudy for 9 days and average relative humidity recorded as 28 %. Mean night temperature was 24.0°C while day temperature recorded as 40.0°C with 92.6 hours bright sunshine duration. Wind speed recorded as 6.0 Km/hr with variable direction.

## 2.15 D.I. Khan

Rainfall reported as 2.0 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 32%. Mean night temperature was 25.7°C while day temperature recorded as 38.6°C with 109.9 hours bright sunshine duration. Wind speed recorded as 7.1 Km/hr with mean direction *north easterly*.

#### 2.16 Sakrand

Rainfall reported as 5.0 mm during the decade however weather remainded cloudy for 5 days average relative humidity recorded as 42%. Mean night temperature was 24.2°C while day temperature recorded as 42.5°C with 112.1 hours bright sunshine duration. Wind speed recorded as 6.8 Km/hr with mean direction *south easterly*.

# 3. <u>Ten days Weather advisory for Farmers</u> (21<sup>st</sup> to 31<sup>st</sup> May, 2012)

#### 3.1 Temperature Forecast:

Seasonal increase in temperature may continue and daily temperatures may rise in the agricultural plains of the country during the decade especially in Sindh, Southern and Central Punjab, Lower KPK & Southern and Eastern Balochistan.

#### 3.2 Rain Forecast:

- ❖ Punjab: Mainly dry weather is expected during the decade. However light rain/thunderstorm is expected at isolated places of the agricultural plains of the province during first two days of 1<sup>st</sup> & 2<sup>nd</sup> half of the decade.
- ❖ Khyber Pakhtoonkhawa: Mainly dry weather is expected during the decade. However light rain/thunderstorm is expected at isolated places of the agricultural plains of the province during first two days of 1<sup>st</sup> & 2<sup>nd</sup> half of the decade.
- Sindh: Mainly dry weather is expected during the decade.
- ❖ Balochistan: Mainly dry weather is expected during the decade. However light rain/thunderstorm is expected at isolated places in the agricultural plains of the province especially in northern Balochistan during last two days in 1<sup>st</sup> half of the decade.
- Kashmir & Gilgit-Baltistan: Light to moderate rain/thunderstorm is expected at isolated places of Gilgit-Baltistan & Kashmir during the decade.

#### 3.3 Wind Forecast:

Windy conditions likely to prevail in most of the upper agricultural plains of the country during the decade and dust raising wind likely to blow in central and southern parts of the country especially in Sindh, Southern and Central Punjab, Lower KPK & Southern and Eastern Balochistan.

#### 3.4 Advisory for Farmers:

- ❖ Harvesting/Threshing of wheat crop is in progress in most of the agriculture areas of Punjab, KPK & Balochistan, whereas in Sindh threshing of wheat has been completed. Early growth of Cotton & Sugarcane is in progress. Farmers are advised to complete harvesting/threshing of wheat so that in time sowing of cotton may be possible.
- ❖ In Sindh and its adjoining areas, due to rising day time temperatures and expected dry weather in coming days farmers should irrigate Cotton & Sugarcane crops properly so that growth of the crops may not suffer due to shortage of water at early growing stages.