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2nd Decade May, 2012



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

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Meteorological conditions during 1st 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 | 0.3 | -0.8 | 32.2 | 36.8 | 36.3 | 33.8 | 32.1 | 31.2 | 28.4 | 110.4 | 6.0 | 50 | 6.7 |
| 2 | SAKRAND 🏠 | 0.0 | 0.0 | 0.0 | -1.6 | -1.3 | 32.0 | 43.0 | 41.8 | *** | 34.1 | 34.0 | 30.9 | 110.5 | 4.6 | 31 | 6.4 |
| 3 | ROHRI | 0.0 | 0.0 | 0.0 | -1.3 | -1.1 | 34.2 | 45.9 | 41.0 | 34.9 | 33.3 | 31.5 | 30.4 | 110.8 | 5.6 | 31 | 6.9 |
| 4 | USTA MUHAMMAD | 0.1 | 0.0 | -0.1 | -4.1 | -2.9 | 31.4 | 43.9 | 41.5 | 39.1 | 39.0 | 32.2 | 31.4 | ••• | 3.9 | 37 | 6.3 |
| 5 | QUETTA | 0.3 | 0.2 | -0.1 | -1.9 | -2.1 | 19.6 | 28.7 | 26.3 | 21.3 | 13.9 | 18.2 | 17.8 | 87.9 | 5.5 | 28 | 5.0 |
| 6 | KHANPUR | 0.2 | 4.0 | 3.8 | -0.9 | -1.1 | 31.6 | 35.9 | 34.7 | 33.8 | 33.5 | 33.4 | 30.9 | 91.1 | 7.0 | 32 | 6.7 |
| 7 | MULTAN | 0.4 | TR | -0.4 | 0.1 | -0.6 | 32.4 | *** | *** | *** | *** | *** | *** | 75.2 | 4.4 | 29 | 5.4 |
| 8 | LAHORE | 0.7 | 0.2 | -0.5 | -2.6 | -0.7 | 30.0 | 34.3 | 32.1 | 28.8 | 27.2 | *** | 24.8 | 96.3 | 2.9 | 32 | 5.1 |
| 9 | FAISALABAD | 0.7 | 0.0 | -0.7 | -0.3 | -1.1 | 30.2 | 39.7 | 36.4 | 32.4 | 29.9 | 28.5 | 25.9 | 89.6 | 4.6 | 32 | 5.7 |
| 10 | SARGODHA | 0.5 | 0.3 | -0.2 | -0.7 | -1.2 | 30.5 | 37.7 | 34.5 | 31.2 | 29.9 | 29.4 | 26.8 | 86.9 | 3.9 | 34 | 5.3 |
| 11 | JHELUM | 1.5 | 14.3 | 12.8 | -2.4 | -0.3 | 29.0 | 35.8 | 33.2 | 29.5 | 27.9 | 27.7 | *** | 89.0 | 4.1 | 33 | 5.4 |
| 12 | RAWALPINDI | 1.0 | 9.2 | 8.2 | -2.2 | -1.0 | 25.9 | 30.7 | 28.5 | 26.3 | 25.6 | 24.1 | 22.7 | 91.0 | 2.3 | 41 | 4.6 |
| 13 | DIKHAN | 0.1 | TR | -0.1 | -0.5 | -1.2 | 29.6 | *** | *** | *** | *** | *** | *** | 103.9 | 3.1 | 39 | 5.5 |
| 14 | PESHAWAR | 0.9 | 12.0 | 11.1 | -2.7 | 0.1 | 26.8 | 33.4 | 28.8 | 27.3 | 26.2 | 24.1 | 22.6 | 67.4 | 1.6 | 46 | 4.0 |
| 15 | SKARDU | 1.1 | 0.0 | -1.1 | -0.9 | -1.9 | 15.0 | ** | * | : | : | ** | ** | 65.0 | 7.1 | 32 | 4.3 |
| 16 | GILGIT | 0.8 | TR | -0.8 | -0.4 | -1.6 | 19.4 | *** | *** | ** | * | *** | ** | 65.5 | 4.1 | 40 | 4.3 |

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; 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 (1st to 10th May, 2012):

Light to moderate rain reported from most of the agricultural plains of the Punjab, KPK, Balochistan, Gilgit Baltistan & Kashmir during the decade. However meager rain reported from the agricultural plains of Sindh.

1.1 Punjab

Light to moderate rainfall reported from most of the agricultural plains of Punjab during the decade, chief amount received at Mianwali, Jhelum and Islamabad (Fig. 1.a). Decadal maximum temperature and minimum temperature both dropped below normal by 0.9 & 1.3°C respectively. Mean values of wind speed, relative humidity and ETo were recorded as 4.2 km/hr, 33 %, and 5.5 mm/day respectively (Fig 3-4).

1.2 Sindh

Meager rain reported during the decade from few of the agricultural plains of upper Sindh province. Decadal maximum temperature and minimum temperature both dropped below normal by 1.1 & 0.9°C respectively. Mean values of wind speed, relative humidity and ETo were recorded as 5.4 km/hr, 37 %, and 6.7 mm/day respectively.

1.3 Khyber Pakhtoon Khawa (KPK)

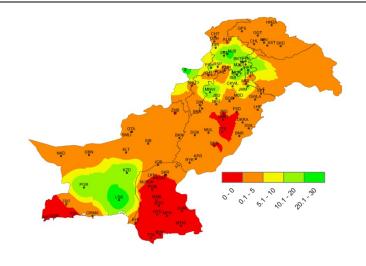
Light to moderate rainfall reported from most of the agricultural plains of KPK; chief amount received at Malamjabba, Parachinar, and Saidusharif etc. Decadal maximum temperature and minimum temperature both dropped below normal by 0.5 & 1.6°C respectively. Mean values of wind speed, relative humidity and ETo were recorded as 2.4 km/hr, 43 %, and 4.8 mm/day respectively.

1.4 Balochistan

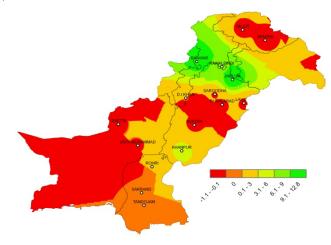
Light to moderate rainfall reported from most of the agricultural plains of Balochistan; chief amount received at Kalat, Panjgur and Samungli etc. Decadal maximum temperature and minimum temperature both dropped below normal by 2.5 & 3.0°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 4.7 km/hr, 33 %, and 5.7 mm/day respectively.

1.5 Gilgit Baltistan and Azad Jammu & Kashmir

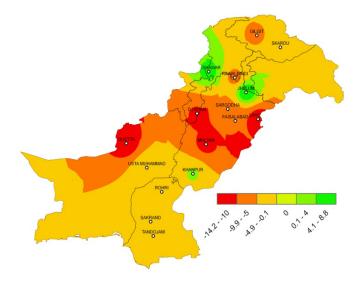
Light to moderate rainfall reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Rawalakot, Muzaffarabad and Pattan etc. In Gilgit Baltistan region; Decadal maximum temperature and minimum temperature both dropped below normal by 1.8 & 0.7°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded as 5.6 km/hr, 36 %, and 4.3 mm/day respectively.







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> (1st to 10th May, 2012) as per Table-1

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 9.2 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 41%. Mean night temperature was 17.4°C while day temperature recorded as 34.3°C with 91.0 hours bright sunshine duration. Wind speed recorded as 2.3 Km/hr with mean direction *westerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

Wheat (Chakwal-97): Good condition at Full Maturity stage.

2.2 RAMC, Tandojam (Lower Sindh)

No rainfall reported during the decade, weather remainded cloudy for 5 days average relative humidity recorded as 50%. Mean night temperature was 24.1°C while day temperature recorded as 40.3°C with 110.4 hours bright sunshine duration. Wind speed recorded as 6.0 Km/hr with mean direction *south westerly*. Presently only one crop (irrigated conditions) is grown at the station as detailed below.

Cotton (B-886): Good condition at Emergence stage.

2.3 RAMC, Faisalabad (Central Punjab)

No rainfall reported during the decade, weather remained cloudy for 09 days and average relative humidity recorded as 32%. Mean night temperature was 22.6°C while day temperature recorded as 37.8°C with 89.6 hours bright sunshine duration. Wind speed recorded as 4.6 Km/hr with mean direction *north-easterly*. 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)

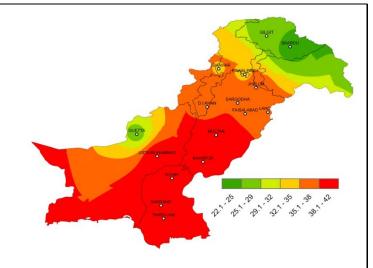
Rainfall reported as 0.2 mm during the decade, weather remained cloudy for 06 days and average relative humidity recorded as 28%. Mean night temperature was 11.5 °C while day temperature recorded as 27.7 °C with 87.9 hours bright sunshine duration and wind speed recorded as 5.5 Km/hr with mean direction *north-westerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

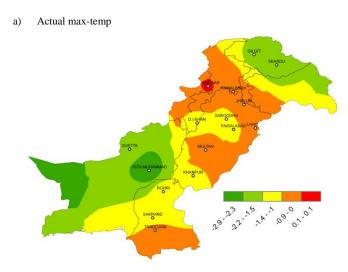
Wheat (Local White): Good condition at Milk Maturity stage.

2.5 RAMC, Usta Muhammad (Eastern Balochistan)

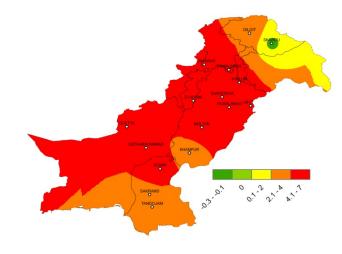
No rainfall reported during the decade however weather remained cloudy for 01 day and average relative humidity recorded as 37%. Mean night temperature was 21.5°C while day temperature recorded as 41.2°C. Wind speed recorded as 3.9 Km/hr with mean direction *easterly*. Presently one crop (irrigated conditions) are grown at the station as detailed below.

Wheat (Lasani): Good condition 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) <u>Past Weather for sub regional Agricultural</u> Plains (1st to 10th May, 2012)

2.6 Rohri

No rainfall reported during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 31 %. Mean night temperature was 26.4°C while day temperature recorded as 41.9°C with 110.8 hours bright sunshine duration. Wind speed recorded 5.6 Km/hr with mean direction *easterly*.

2.7 Skardu

No rainfall reported during the decade, weather remained cloudy for 7 days and average relative humidity recorded as 32 %. Mean night temperature was 7.8 °C while day temperature recorded as 22.1°C with 65.0 hours bright sunshine duration. Wind speed recorded as 7.1 Km/hr with mean direction *north westerly*.

2.8 Multan

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 29 %. Mean night temperature was 25.0°C while day temperature recorded as 39.7°C with 75.2 hours bright sunshine duration. Wind speed recorded as 4.4 Km/hr with mean direction west*erly*.

2.9 Lahore

Rainfall reported as 0.2 mm during the decade, weather remained cloudy for 7 days and average relative humidity recorded as 32%. Mean night temperature was 22.6°C while day temperature recorded as 37.3°C with 96.3 hours bright sunshine duration. Wind speed recorded as 2.9 Km/hr with mean direction *north-westerly*.

2.10 Peshawar

Rainfall reported as 12.0 mm during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 46%. Mean night temperature was 18.7 °C while day temperature recorded as 34.9 °C with 67.4 hours bright sunshine duration. Wind speed recorded as 1.6 Km/hr with mean direction *north-westerly*.

2.11 Khanpur

Rainfall reported as 4.0 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 32 %. Mean night temperature was 23.7°C while day temperature recorded as 39.4°C with 91.1 hours bright sunshine duration. Wind speed recorded as 7.0 Km/hr with mean direction west*erly*.

2.12 Sargodha

Rainfall reported as 0.3 mm during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 34 %. Mean night temperature was 23.0°C while day temperature recorded as 37.9°C with 86.9 hours bright

sunshine duration. Wind speed recorded as 3.9 Km/hr with mean direction *north easterly*.

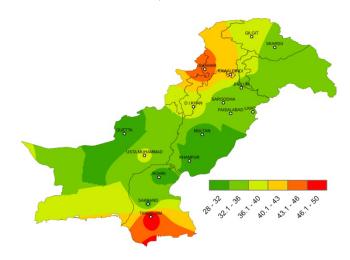


Figure.3: Relative Humidity in percentage

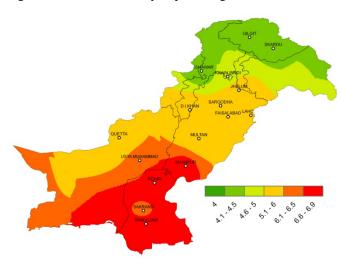


Figure.4: Reference Crop Evapotranspiration "ETo" in mm/day

2.13 Gilgit.

Rainfall reported as Trace (amount not measurable) during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 40 %. Mean night temperature was 10.6°C while day temperature recorded as 28.2 °C with 65.5 hours bright sunshine. Wind speed recorded as 4.1 Km/hr with mean direction *easterly*.

2.14 Jhelum

Rainfall reported as 14.3 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 33 %. Mean night temperature was 20.3°C while day temperature recorded as 37.6°C with 89.0 hours bright sunshine duration. Wind speed recorded as 4.1 Km/hr with variable direction.

2.15 D.I. Khan

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 39%. Mean night temperature was 22.0°C while day temperature recorded as 37.2°C with 103.9 hours bright sunshine duration. Wind speed recorded as 3.1 Km/hr with mean direction *north easterly*.

2.16 Sakrand

No rainfall reported during the decade however weather remainded cloudy for 2 days average relative humidity recorded as 31%. Mean night temperature was 22.8°C while day temperature recorded as 41.2°C with 110.5 hours bright sunshine duration. Wind speed recorded as 4.6 Km/hr with mean direction *southerly*.

3. <u>Ten days Weather advisory for Farmers</u> (11th to 20th 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 mostly in lower half of the country.

3.2 Rain Forecast:

- ❖ Punjab: Mainly dry weather is expected during the decade. However light to moderate rain/thunderstorm is expected at isolated places of the agricultural plains of the province during 1st & 2nd half of the decade.
- ❖ Khyber Pakhtoonkhawa: Mainly dry weather is expected during the decade. However light to moderate rain/thunderstorm is expected at isolated places of the agricultural plains of the province during 1st & 2nd half of the decade.
- Sindh: Mainly dry weather is expected during the decade. However light rain/dust storm is expected at isolated places of upper parts of the province during 1st half of the decade.
- ❖ Balochistan: Mainly dry weather is expected during the decade. However Light to moderate rain with thunderstorm is expected at isolated places of the agricultural plains of the province during 1st half and the 1st two days of the 2nd half of the decade.
- * Kashmir & Gilgit-Baltistan: Light to moderate rain/thunderstorm is expected in Gilgit-Baltistan & Kashmir during the decade.

3.3 Wind Forecast:

Windy conditions likely to prevail in most of the upper hilly agricultural plains of the country during the decade and dust raising wind likely to below at Southern Punjab, Lower KPK, Northeastern Balochistan and Sindh.

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.