

DECADAL AGROMET BULLETIN OF PAKISTAN



3rd Decade April, 2012



Regional Agromet Centre, Tandojam, located in lower Sindh

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

[http://www.pmd.gov.pk/WFF/weather for farmers](http://www.pmd.gov.pk/WFF/weather%20for%20farmers)

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Meteorological conditions during 2nd decade of April, 2012

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						Sunshine Duration (hours)	Wind Speed (km/hr)	R.H (%)	ET _o (mm/day)
		Normal	Actual	Dep	Tmin Dep	Tmax Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm				
1	TANDOJAM	0.0	3.0	3.0	1.7	-5.3	30.0	34.6	34.0	32.3	30.3	29.5	26.9	88.4	5.5	48	5.6
2	SAKRAND ☆	0.0	0.0	0.0	0.5	-3.5	28.8	39.5	38.0	39.8	31.9	31.9	28.9	94.3	8.9	40	6.5
3	ROHRI	0.0	10.0	10.0	-0.1	-4.4	29.8	40.8	36.9	32.2	31.3	29.5	28.6	90.6	7.5	39	6.1
4	USTA MUHAMMAD	0.0	8.0	8.0	-2.1	-4.1	27.0	35.9	35.7	30.9	30.9	29.4	29.3	***	4.0	55	5.8
5	QUETTA	0.4	66.8	66.4	-1.8	-3.7	15.5	22.4	21.1	18.1	11.4	16.7	16.9	75.2	4.9	50	3.8
6	KHANPUR	0.0	18.8	18.8	-1.4	-4.7	27.4	30.4	29.4	29.6	29.8	30.0	28.6	81.2	7.2	57	5.3
7	MULTAN	0.6	9.3	8.7	-1.2	-3.8	26.7	***	***	***	***	***	***	78.2	5.9	48	5.0
8	LAHORE	0.2	35.5	35.3	-3.0	-3.5	25.4	30.5	28.8	26.2	24.8	***	23.4	85.9	3.7	49	4.5
9	FAISALABAD	0.4	24.0	23.6	-0.3	-4.3	25.6	34.9	32.5	28.9	27.0	26.3	24.2	79.3	5.5	49	4.8
10	SARGODHA	0.5	3.8	3.3	-1.4	-4.4	25.4	32.4	29.8	27.5	26.8	26.8	24.9	68.6	4.1	53	4.2
11	JHELUM	0.8	9.6	8.8	-1.1	-2.0	25.5	32.4	29.9	26.8	25.4	25.4	***	79.0	5.1	48	4.6
12	RAWALPINDI	0.6	7.6	7.0	-0.4	-1.7	23.0	27.7	25.7	23.6	23.2	22.5	20.9	65.6	2.1	48	3.6
13	D I KHAN	0.8	57.7	56.9	-1.3	-7.3	22.8	***	***	***	***	***	***	81.0	4.4	53	4.1
14	PESHAWAR	2.6	31.8	29.2	-1.6	-1.3	23.4	27.7	25.3	23.9	23.3	21.8	21.9	63.7	2.4	57	3.6
15	SKARDU	0.8	1.4	0.6	-0.6	-1.5	12.1	***	***	***	***	***	***	56.1	5.4	34	3.4
16	GILGIT	0.6	4.1	3.5	-1.4	-0.6	16.3	***	***	***	***	***	***	61.3	6.6	42	4.0

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. ET_o stands for reference crop evapotranspiration. *** stands for no data and (☆) indicates the station with five years climatic (normal) data for computing departures.

Past Weather (11th to 20th April, 2012):

Light to moderate rain for most of the days is 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, Sialkot, Bahawalpur and Lahore etc (Fig. 1.a). Decadal maximum temperature and minimum temperature both dropped below normal by 3.5°C and 1.3°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.8 km/hr, 50 %, and 4.6 mm/day respectively (Fig 3-4).

1.2 Sindh

Light rainfall reported from most of the agricultural plains of of the province during the decade chief amount received at Dadu, Badin and Hyderabad etc. Decadal maximum temperature dropped below normal by 4.4°C and minimum temperature raised above normal by 0.7°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 7.3 km/hr, 42 %, and 6.1 mm/day respectively.

1.3 Khyber Pakhtoon Khawa (KPK)

Rainfall in favourable amount reported from most of the agricultural plains of KPK; chief amount received at Kakul Balakot, Malamjabba and Parachinar etc. Decadal maximum temperature and minimum temperature both dropped below normal by 4.3°C and 1.5°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 3.4 km/hr, 59 %, and 3.9 mm/day respectively.

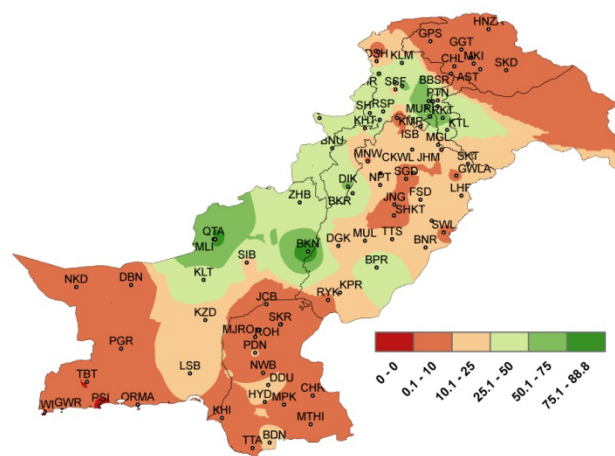
1.4 Balochistan

Light to moderate rainfall reported from most of the agricultural plains of the province except the coastal belt. Rainfall in considerable amount occurred at Barkhan, Quetta and Kallat etc. In the northern Balochistan decadal maximum temperature and minimum temperature both dropped below normal by 3.9°C and 2.0°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 4.5 km/hr, 53 %, and 4.8 mm/day respectively.

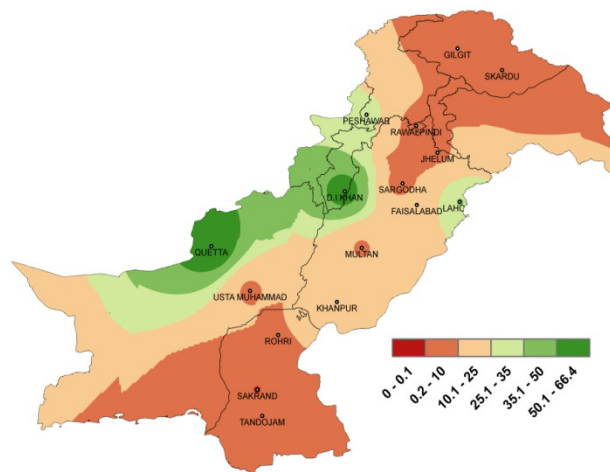
1.5 Gilgit Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Garhi Dopatta Muzaffarabad and Rawalakot etc. In Gilgit Baltistan region; decadal maximum temperature and minimum temperature both dropped below normal by 1.1°C and 1.0°C respectively. Whereas mean values of wind speed, relative humidity and

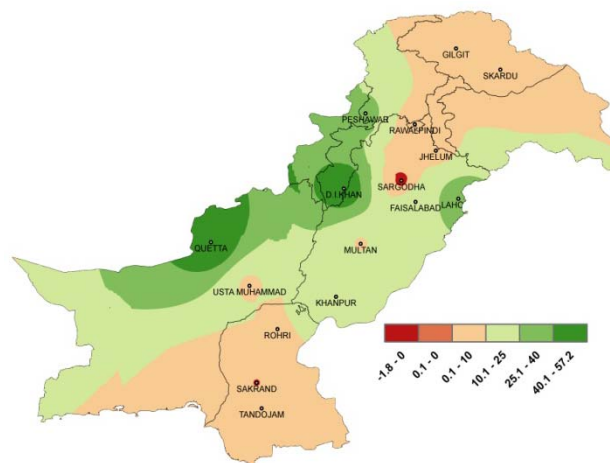
ETo were recorded as 6.2 km/hr, 38 %, and 3.7 mm/day respectively.



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) Past Weather for Major Agricultural Plains (11th to 20th April, 2012) as per Table-1

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 7.6 mm during the decade, weather remained cloudy for the whole period and average relative humidity recorded as 48%. Mean night temperature was 15.8°C while day temperature recorded as 30.2°C with 65.6 hours bright sunshine duration. Wind speed recorded as 2.1 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 *Milk-Maturity* stage

2.2 RAMC, Tandojam (Lower Sindh)

Rainfall reported as 3.0 mm during the decade, weather remained cloudy for the whole period and average relative humidity recorded as 48%. Mean night temperature was 22.7°C while day temperature recorded as 37.2°C with 88.4 hours bright sunshine duration. Wind speed recorded as 5.5 Km/hr with mean direction *south-westerly*. Presently no crop is there but the fields are being prepared for new crop.

2.3 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 24.0 mm during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 49%. Mean night temperature was 19.2°C while day temperature recorded as 31.9°C with 79.3 hours bright sunshine duration. Wind speed recorded as 5.5 Km/hr with mean direction *south-easterly*. Presently two crops (irrigated conditions) are grown at the station as detailed below.

Wheat: Very good condition, *Wax-Maturity* stage completed.
Sugarcane: Good condition, *Tillering* stage completed.

.4 RAMC, Quetta (Northern Balochistan)

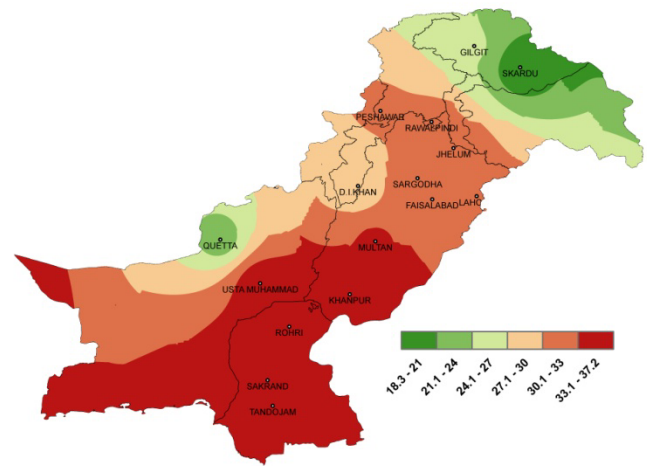
Rainfall reported as 66.8 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 50%. Mean night temperature was 8.7 °C while day temperature recorded as 22.3°C with 75.2 hours bright sunshine duration and wind speed recorded as 4.9 Km/hr with mean direction *southerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

Wheat (Local): Good condition at *Heading* stage.

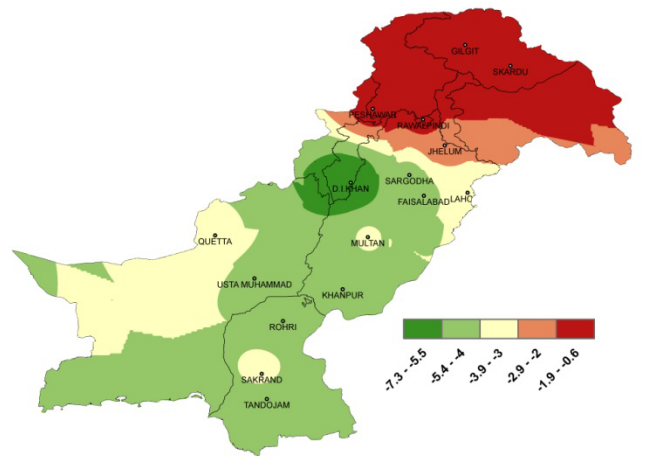
2.5 RAMC, Usta Muhammad (Eastern Balochistan)

Rainfall reported as 8.0 mm during the decade, weather remained cloudy for 7 days and average relative humidity recorded as 55%. Mean night temperature was 18.8°C while day temperature recorded as 35.2°C. Wind speed recorded as 4.0 Km/hr with mean direction *easterly*. Presently one crop (irrigated conditions) is grown at the station as detailed below.

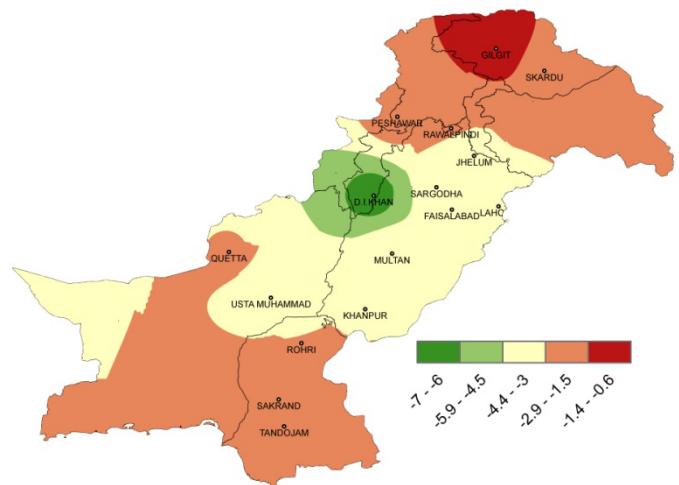
Wheat (Lasani): Good condition, harvesting in progress.



a) Actual max-temp



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 (11th to 20th April, 2012)

2.6 Rohri

Rainfall reported as 10.0 mm during the decade, weather remained cloudy for the whole period and average relative humidity recorded as 39%. Mean night temperature was 23.9°C while day temperature recorded as 35.6°C with 90.6 hours bright sunshine duration. Wind speed recorded as 7.5 Km/hr with mean direction *north-easterly*.

2.7 Skardu

Rainfall reported as 1.4 mm during the decade, weather remained cloudy for 7 days and average relative humidity recorded as 34%. Mean night temperature was 5.8 °C while day temperature recorded as 18.3°C with 56.1 hours bright sunshine duration. Wind speed recorded as 5.4 Km/hr with mean direction *north-westerly*.

2.8 Multan

Rainfall reported as 9.3 mm during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 48%. Mean night temperature was 19.7°C while day temperature recorded as 33.6°C with 78.2 hours bright sunshine duration. Wind speed recorded as 5.9 Km/hr with mean direction *southerly*.

2.9 Lahore

Rainfall reported as 35.5 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 49%. Mean night temperature was 19.1°C while day temperature recorded as 31.7°C with 85.9 hours bright sunshine duration. Wind speed recorded as 3.7 Km/hr with mean direction *north-easterly*.

2.10 Peshawar

Rainfall reported as 31.8 mm during the decade, weather remained cloudy for the entire period and average relative humidity recorded as 57%. Mean night temperature was 16.5 °C while day temperature recorded as 30.2°C with 63.7 hours bright sunshine duration. Wind speed recorded as 2.4 Km/hr with mean direction *north-westerly*.

2.11 Khanpur

Rainfall reported as 18.8 mm during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 57%. Mean night temperature was 20.1°C while day temperature recorded as 34.6°C with 81.2 hours bright sunshine duration. Wind speed recorded as 7.2 Km/hr with mean direction *north-easterly*.

2.12 Sargodha

Rainfall reported as 3.8 during the decade, however weather remained cloudy for 9 days and average relative humidity recorded as 53%. Mean night temperature was 19.1°C while day temperature recorded as 31.6°C with 68.6 hours bright

sunshine duration. Wind speed recorded as 4.1 Km/hr with mean direction *north-easterly*.

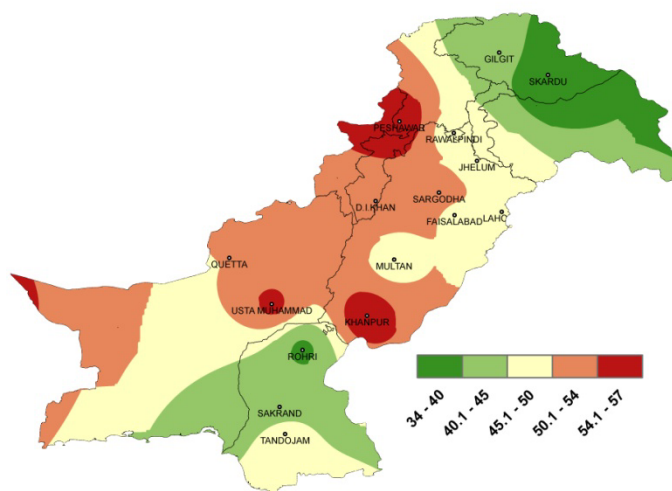


Figure.3: Relative Humidity in percentage

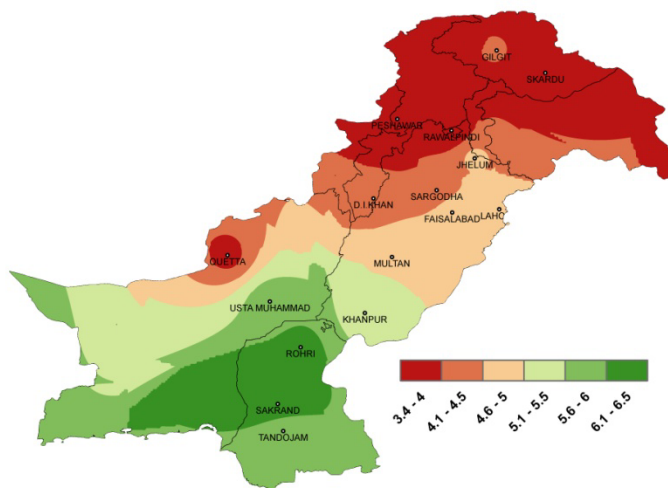


Figure.4: Reference Crop Evapotranspiration "ET₀" in mm/day

2.13 Gilgit.

Rainfall reported as 4.1 mm during the decade however weather remained cloudy for 9 days and average relative humidity recorded as 42 %. Mean night temperature was 8.2°C while day temperature recorded as 24.3 °C with 61.3 hours bright sunshine. Wind speed recorded as 6.6 Km/hr with mean direction *easterly*.

2.14 Jhelum

During the decade 9.6 mm rainfall occurred however weather remained cloudy for the entire period and average relative humidity recorded as 48%. Mean night temperature was 18.0°C while day temperature recorded as 32.9°C with 79.0 hours bright sunshine duration. Wind speed recorded as 5.1 Km/hr with mean direction *south-easterly*.

2.15 D.I. Khan

Rainfall reported as 57.7 mm during the decade, weather remained cloudy for 7 days and average relative humidity recorded as 53%. Mean night temperature was 18.0°C while day temperature recorded as 27.6°C with 81.0 hours bright sunshine duration. Wind speed recorded as 4.4 Km/hr with mean direction *north-easterly*.

2.16 Sakrand

During the decade no rainfall occurred at the station however weather remained cloudy for 9 days and average relative humidity recorded as 40 %. Mean night temperature was 21.1°C while day temperature recorded as 36.5°C with 94.3 hours bright sunshine duration. Wind speed recorded as 8.9 Km/hr with mean direction *south-westerly*.

3. Ten days Weather advisory for Farmers (21st to 30th April, 2012)

3.1 Temperature Forecast:

Temperatures are likely to be normal/slightly above normal in most of the agricultural plains of the country during the 1st half & may rise (1-2°C) during the 2nd half of the decade mostly in southern Punjab, central and southern Balochistan and Sindh.

3.2 Rain Forecast:

- ❖ **Punjab:** Light to moderate rain with thunderstorm is expected in intervals during the decade in the Potohar and adjoining plains of the province. However light rain in intervals for 2-3 days is expected mostly during 1st half of the decade in central and southern agricultural plains of the province.
- ❖ **Khyber Pakhtoonkhawa:** Light to moderate rain with thunderstorm is expected in the upper agricultural plains during the decade and light to moderate rain during first 2-3 days of the decade in the lower half of the province including agricultural plains of D.I Khan and Bannu.
- ❖ **Sindh:** Mainly dry weather is expected during the decade. However light rain for 1-2 days is expected in first half of the decade. Whereas dry weather/dust storm is expected during the 2nd half of the decade.
- ❖ **Balochistan:** Light to moderate rain with thunderstorm is expected in most of the agricultural plains during 1st half and mostly dry weather is expected during the 2nd half of the decade.
- ❖ **Kashmir & Gilgit-Baltistan:** Light rain with thunderstorm is expected in Gilgit-Baltistan & Kashmir during the decade.

3.3 Wind Forecast:

Windy conditions likely to prevail in most of the upper half agricultural plains of the country during the decade and the same conditions are expected in the lower half of the country during the first half of the decade.

3.4 Advisory for Farmers:

- ❖ Wheat crop is growing in wax to full maturity in the agriculture plains of KP, Punjab and Balochistan. Whereas harvesting/threshing of wheat crop has been completed in agricultural plains of Sindh. Farmers are therefore, advised to start harvesting keeping the above forecast in mind. Farmers are also advised to harvest the full matured crop so that in time cultivation of the coming cotton crop may be possible in time.