

DECADAL AGROMET BULLETIN OF PAKISTAN



1st Decade May, 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 3rd 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	0.1	4.0	3.9	-0.2	-3.0	29.8	36.2	35.6	32.7	31.0	30.1	27.6	106.6	3.4	48	5.6
2	SAKRAND ☆	0.0	TR	0.0	-2.5	-4.5	28.6	40.4	39.5	***	32.2	32.4	30.0	113.9	6.5	40	6.5
3	ROHRI	0.0	4.0	4.0	-2.2	-5.0	30.5	41.9	38.4	33.6	31.4	29.8	29.3	104.0	2.0	34	5.0
4	USTA MUHAMMAD	0.2	0.0	-0.2	-1.8	-6.0	29.0	37.3	36.1	30.6	31.3	29.8	29.4	***	5.2	56	5.8
5	QUETTA	0.3	13.8	13.5	-4.0	-8.1	14.3	21.8	20.3	16.7	10.4	15.1	16.1	88.6	6.3	46	4.2
6	KHANPUR	0.1	3.5	3.4	-2.6	-4.9	28.5	33.3	32.1	31.4	31.2	31.3	29.4	107.5	5.2	49	5.9
7	MULTAN	0.2	11.3	11.1	-3.1	-5.0	27.4	***	***	***	***	***	***	91.7	4.4	43	5.1
8	LAHORE	0.3	14.4	14.1	-4.4	-4.4	26.2	31.8	29.1	27.5	25.9	***	24.2	83.2	3.7	46	4.7
9	FAISALABAD	0.5	9.5	9.0	-2.5	-5.3	26.0	34.2	32.2	29.3	27.3	26.5	25.0	75.1	5.0	48	4.8
10	SARGODHA	0.7	8.3	7.6	-2.7	-5.2	26.3	34.4	31.6	28.6	27.5	27.4	25.5	82.7	3.9	51	4.6
11	JHELUM	1.0	5.5	4.5	-1.5	-3.9	26.3	34.7	32.1	28.8	27.3	27.1	***	79.3	4.8	45	4.8
12	RAWALPINDI	1.9	16.7	14.8	3.2	-4.5	25.0	27.2	25.5	23.9	23.4	22.9	21.8	66.4	2.3	46	3.9
13	D I KHAN	0.3	10.7	10.4	-2.8	-5.4	25.3	***	***	***	***	***	***	99.9	4.2	47	5.0
14	PESHAWAR	1.0	6.0	5.0	-3.0	-5.5	22.5	28.3	25.3	24.2	23.4	22.5	21.3	55.8	3.2	63	3.6
15	SKARDU	0.7	0.6	-0.1	1.0	1.5	15.4	***	***	***	***	***	***	66.3	3.9	29	3.7
16	GILGIT	0.7	6.0	5.3	1.2	-3.1	17.8	***	***	***	***	***	***	41.6	7.1	48	3.9

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 (21st to 30th 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, Gujranwala, Noorpur thal and Islamabad (Fig. 1.a). Decadal maximum temperature raised above normal by 4.7°C and minimum temperature dropped below normal by 1.9°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.2 km/hr, 47 %, and 4.8 mm/day respectively (Fig 3-4).

1.2 Sindh

Light rainfall reported during the decade from few of the agricultural plains of upper and coastal parts of Sindh province, except Dadu where 15 mm rain occurred. Decadal maximum temperature raised above normal by 4.2°C and minimum temperature dropped below normal by 1.6°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.0 km/hr, 41 %, and 5.7 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 Parachinar, Kakul, Malamjabba and Balakot etc. Decadal maximum temperature raised above normal by 5.5°C and minimum temperature dropped below normal by 2.9°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 3.7 km/hr, 55 %, and 4.3 mm/day respectively.

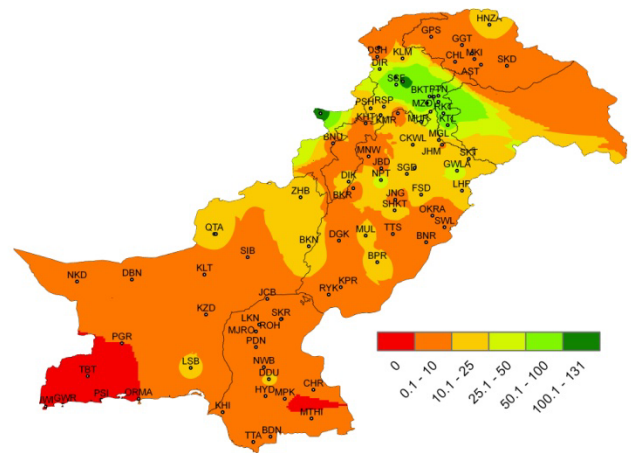
1.4 Balochistan

Light to moderate rainfall reported from most of the agricultural plains of Balochistan; chief amount received at Barkhan, Samungli, and Khuzdar etc. In the northern Balochistan decadal maximum temperature and minimum temperature both dropped below normal by 7.1 & 2.9°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 5.8 km/hr, 51 %, and 5.0 mm/day respectively.

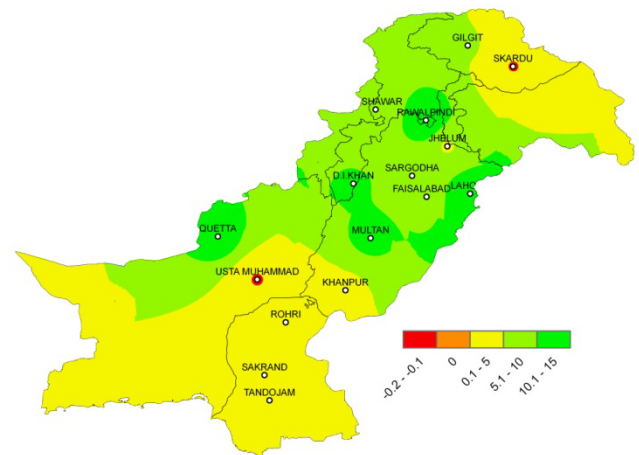
1.5 Gilgit Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Garhi Dopatta, Rawalakot, Kotli and Muzaffarabad etc. In Gilgit Baltistan region; decadal maximum temperature dropped below normal by 0.8°C while decadal minimum temperature raised above normal by 1.1°C. Whereas mean values of wind speed,

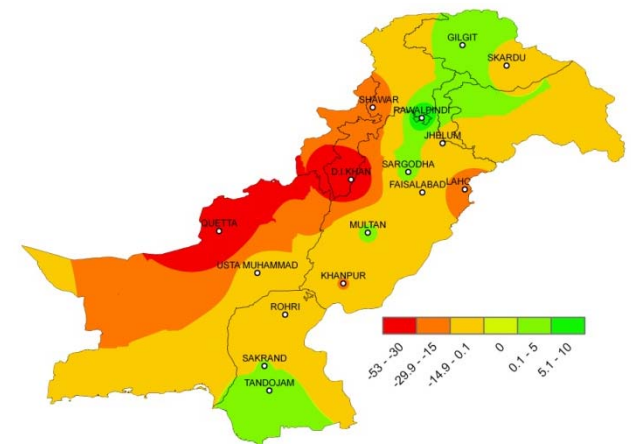
relative humidity and ETo were recorded as 5.5 km/hr, 39 %, and 3.8 mm/day respectively.



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 (21st to 30th April, 2012) as per Table-1

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 16.7 mm during the decade, weather remained cloudy for 10 days and average relative humidity recorded as 46%. Mean night temperature was 20.9°C while day temperature recorded as 29.1°C with 66.4 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 Milk Maturity stage

2.2 RAMC, Tandojam (Lower Sindh)

Rainfall reported as 4.0 mm during the decade, weather remained cloudy for 2 days average relative humidity recorded as 48%. Mean night temperature was 21.9°C while day temperature recorded as 37.6°C with 106.6 hours bright sunshine duration. Wind speed recorded as 3.4 Km/hr with mean direction southerly. Presently no crop is grown.

2.3 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 9.5 mm during the decade, weather remained cloudy for 10 days and average relative humidity recorded as 48%. Mean night temperature was 19.1°C while day temperature recorded as 32.9°C with 75.1 hours bright sunshine duration. Wind speed recorded as 5.0 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: Very Good condition, Tillering stage completed.

2.4 RAMC, Quetta (Northern Balochistan)

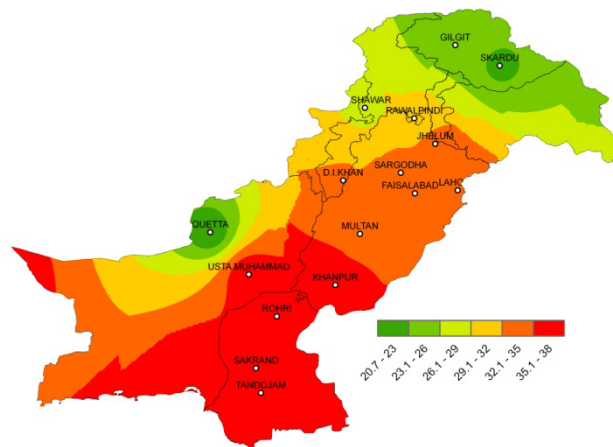
Rainfall reported as 13.8 mm during the decade, weather remained cloudy for 05 days and average relative humidity recorded as 46%. Mean night temperature was 7.9 °C while day temperature recorded as 20.7°C with 88.6 hours bright sunshine duration and wind speed recorded as 6.3 Km/hr with mean direction *north-westerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

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

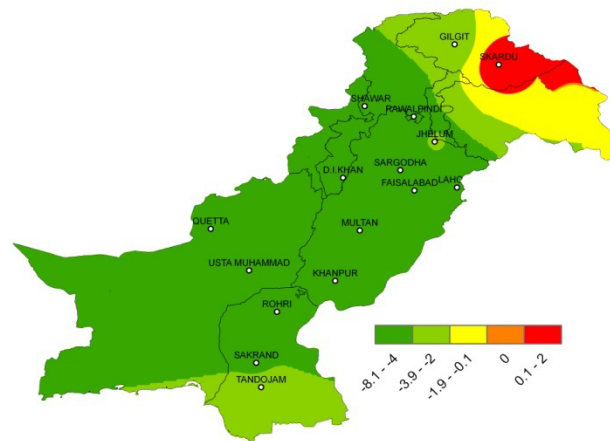
2.5 RAMC, Usta Muhammad (Eastern Balochistan)

No rainfall reported during the decade however weather remained cloudy for 05 days and average relative humidity recorded as 56%. Mean night temperature was 20.8°C while day temperature recorded as 37.2°C. Wind speed recorded as 5.2 Km/hr with mean direction *westerly*. Presently one crop (irrigated conditions) is grown at the station as detailed below.

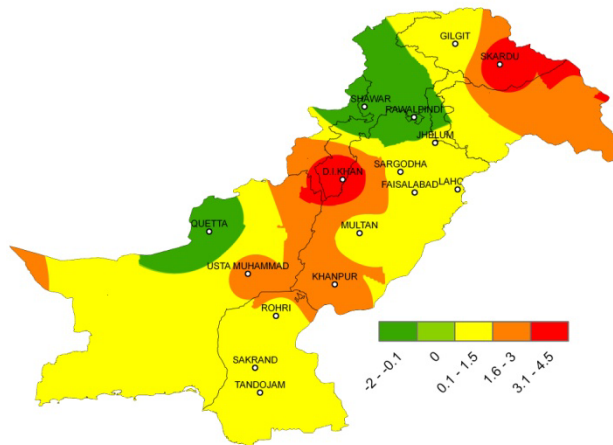
Wheat (Lasani): Good condition at Harvesting/Threshing stage.



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 (21st to 30th April, 2012)

2.6 Rohri

Rainfall reported as 4.0 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 34 %. Mean night temperature was 23.9°C while day temperature recorded as 37.0°C with 104.0 hours bright sunshine duration. Wind speed recorded as 2.0 Km/hr with mean direction *north-easterly*.

2.7 Skardu

Rainfall reported as 0.6 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 29 %. Mean night temperature was 8.4 °C while day temperature recorded as 22.4°C with 66.3 hours bright sunshine duration. Wind speed recorded as 3.9 Km/hr with mean direction *south westerly*.

2.8 Multan

Rainfall reported as 11.3 mm during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 43 %. Mean night temperature was 20.2°C while day temperature recorded as 34.5°C with 91.7 hours bright sunshine duration. Wind speed recorded as 4.4 Km/hr with mean direction *northerly*.

2.9 Lahore

Rainfall reported as 14.4 mm during the decade, weather remained cloudy for 10 days and average relative humidity recorded as 46%. Mean night temperature was 19.7°C while day temperature recorded as 32.7°C with 83.2 hours bright sunshine duration. Wind speed recorded as 3.7 Km/hr with mean direction *south-westerly*.

2.10 Peshawar

Rainfall reported as 6.0 mm during the decade, weather remained cloudy for 10 days and average relative humidity recorded as 63%. Mean night temperature was 16.8 °C while day temperature recorded as 28.2°C with 55.8 hours bright sunshine duration. Wind speed recorded as 3.2 Km/hr with mean direction *north-westerly*.

2.11 Khanpur

Rainfall reported as 3.5 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 49 %. Mean night temperature was 20.5°C while day temperature recorded as 36.4°C with 107.5 hours bright sunshine duration. Wind speed recorded as 5.2 Km/hr with mean direction *northerly*.

2.12 Sargodha

Rainfall reported as 8.3 mm during the decade, weather remained cloudy for 10 days and average relative humidity recorded as 51 %. Mean night temperature was 19.6°C while day temperature recorded as 32.9°C with 82.7 hours bright

sunshine duration. Wind speed recorded as 3.9 Km/hr with variable direction.

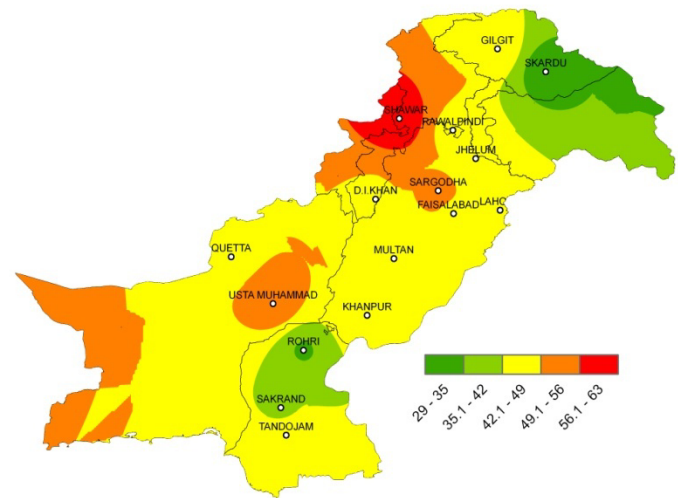


Figure.3: Relative Humidity in percentage

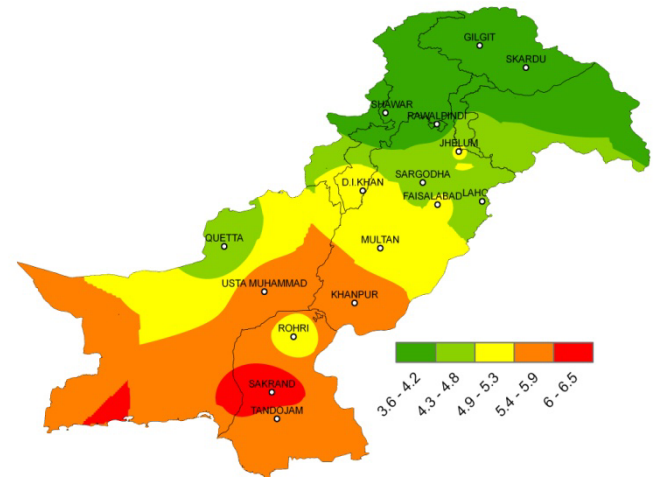


Figure.4: Reference Crop Evapotranspiration “ET₀” in mm/day

2.13 Gilgit.

Rainfall reported as 6.0 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 48 %. Mean night temperature was 10.8°C while day temperature recorded as 24.7 °C with 41.6 hours bright sunshine. Wind speed recorded as 7.1 Km/hr with mean direction *easterly*.

2.14 Jhelum

Rainfall reported as 5.5 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 45 %. Mean night temperature was 19.4°C while day temperature recorded as 33.1°C with 79.3 hours bright sunshine duration. Wind speed recorded as 4.8 Km/hr with variable direction.

2.15 D.I. Khan

Rainfall reported as 10.7 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 47%. Mean night temperature was 18.5°C while day temperature recorded as 32.1°C with 99.9 hours bright sunshine duration. Wind speed recorded as 4.2 Km/hr with mean direction *north easterly*.

2.16 Sakrand

Rainfall reported as TRACE (amount not measurable) during the decade however weather remained cloudy for 5 days average relative humidity recorded as 40%. Mean night temperature was 19.9°C while day temperature recorded as 37.3°C with 113.9 hours bright sunshine duration. Wind speed recorded as 6.5 Km/hr with mean direction *south westerly*.

3. Ten days Weather advisory for Farmers (1st to 10th May, 2012)

3.1 Temperature Forecast:

Temperatures are likely to be above normal (1-3°C) 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 rain/thunderstorm is expected in the upper parts of the province during 2nd half of the decade.
- ❖ **Khyber Pakhtoonkhawa:** Mainly dry weather is expected during the decade. However light rain/thunderstorm is expected in northern parts of the province during 2nd half of the decade.
- ❖ **Sindh:** Mainly dry weather is expected during the decade.
- ❖ **Balochistan:** Mainly dry weather is expected during the decade. However Light to moderate rain with thunderstorm is expected in most of the agricultural plains during 2nd half of the decade.
- ❖ **Kashmir & Gilgit-Baltistan:** Light 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 the same conditions with dust storm is expected in the lower half of the country during the 2nd half of the decade.

3.4 Advisory for Farmers:

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