

DECADAL AGROMET BULLETIN OF PAKISTAN



1st Decade June, 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 May, 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	0.0	0.0	0.3	1.2	34.1	37.9	37.6	35.4	33.9	33.1	30.1	114.3	6.7	50	7.3
2	SAKRAND ☆	0.0	0.0	0.0	-1.6	-0.6	34.5	44.5	42.8	44.5	35.2	35.2	31.8	127.9	6.7	41	7.9
3	ROHRI	0.0	0.0	0.0	-0.1	-0.2	36.7	45.4	42.6	36.8	35.4	34.1	32.5	108.0	6.3	26	7.6
4	USTA MUHAMMAD	0.0	0.0	0.0	-4.1	-1.8	35.4	46.4	43.4	41.8	41.4	34.4	33.3	***	4.0	45	7.5
5	QUETTA	0.3	0.2	-0.1	-2.0	-2.2	22.1	22.5	29.1	25.3	18.0	22.6	21.9	115.9	6.4	19	6.1
6	KHANPUR	0.0	0.0	0.0	-0.7	0.6	34.6	39.0	37.9	35.4	36.8	36.6	33.9	110.4	9.1	34	8.4
7	MULTAN	0.5	2.0	1.5	-0.1	1.8	35.1	***	***	***	***	***	***	111.2	4.6	28	6.8
8	LAHORE	1.3	TR	-1.3	1.0	3.1	34.9	40.2	36.6	32.1	30.9	***	27.5	121.5	4.5	21	6.9
9	FAISALABAD	0.8	TR	-0.8	0.7	2.2	33.7	44.7	40.3	35.6	33.4	32.1	29.3	110.2	4.8	26	6.6
10	SARGODHA	2.1	0.0	-2.1	0.4	2.6	34.4	41.8	38.3	35.0	33.5	32.9	29.8	104.0	3.0	34	5.9
11	JHELM	0.8	0.4	-0.4	-0.7	2.9	33.4	42.7	39.0	35.4	33.3	32.7	***	105.5	5.3	23	6.7
12	RAWALPINDI	0.6	5.0	4.4	-0.7	0.7	29.7	36.4	34.0	30.6	28.9	27.6	25.8	98.1	3.0	29	5.4
13	D I KHAN	0.3	TR	-0.3	2.4	5.3	36.2	***	***	***	***	***	***	122.9	3.7	31	6.9
14	PESHAWAR	0.4	12.0	11.6	-2.7	0.7	29.9	33.1	30.3	29.0	28.3	26.0	24.7	99.5	2.0	37	5.2
15	SKARDU	0.4	4.0	3.6	0.0	0.6	18.3	***	***	***	***	***	***	70.1	8.3	37	5.0
16	GILGIT	1.1	6.1	5.0	-0.3	-3.1	20.3	***	***	***	***	***	***	63.9	6.6	57	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; 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 31st May, 2012):

Light to moderate rain reported from most of the agricultural plains of Punjab, KPK, Northern Balochistan, Gilgit Baltistan & Kashmir during the decade. However dry weather 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 Murree, Noorpur thal and Joharabad (Fig. 1.a). Decadal maximum temperature and minimum temperature both dropped above normal by 2.0 & 0.0°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.9 km/hr, 28 %, and 6.7 mm/day respectively (Fig 3-4).

1.2 Sindh

Norainfall reported during the decade. Decadal maximum temperature raised above normal by 0.1°C and minimum temperature dropped below normal by 0.5°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 6.6 km/hr, 39 %, and 7.6 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 Kalam, Peshawar and Drosh etc. Decadal maximum temperature raised above normal by 3.0°C and minimum temperature dropped below normal by 0.1°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 2.9 km/hr, 34 %, and 6.1 mm/day respectively.

1.4 Balochistan

Light rainfall reported from most of the agricultural plains of Balochistan; chief amount received at Barkhan and Zhob etc. In the northern Balochistan decadal maximum temperature and minimum temperature both dropped below normal by 2.0 & 3.1°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 5.2 km/hr, 32 %, and 6.8 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 Gupis, Muzaffarabad and Astore etc. In Gilgit Baltistan region; decadal maximum temperature and minimum temperature both dropped below normal by 1.3 & 0.2°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded as 7.5 km/hr, 47 %, and 4.9 mm/day respectively.

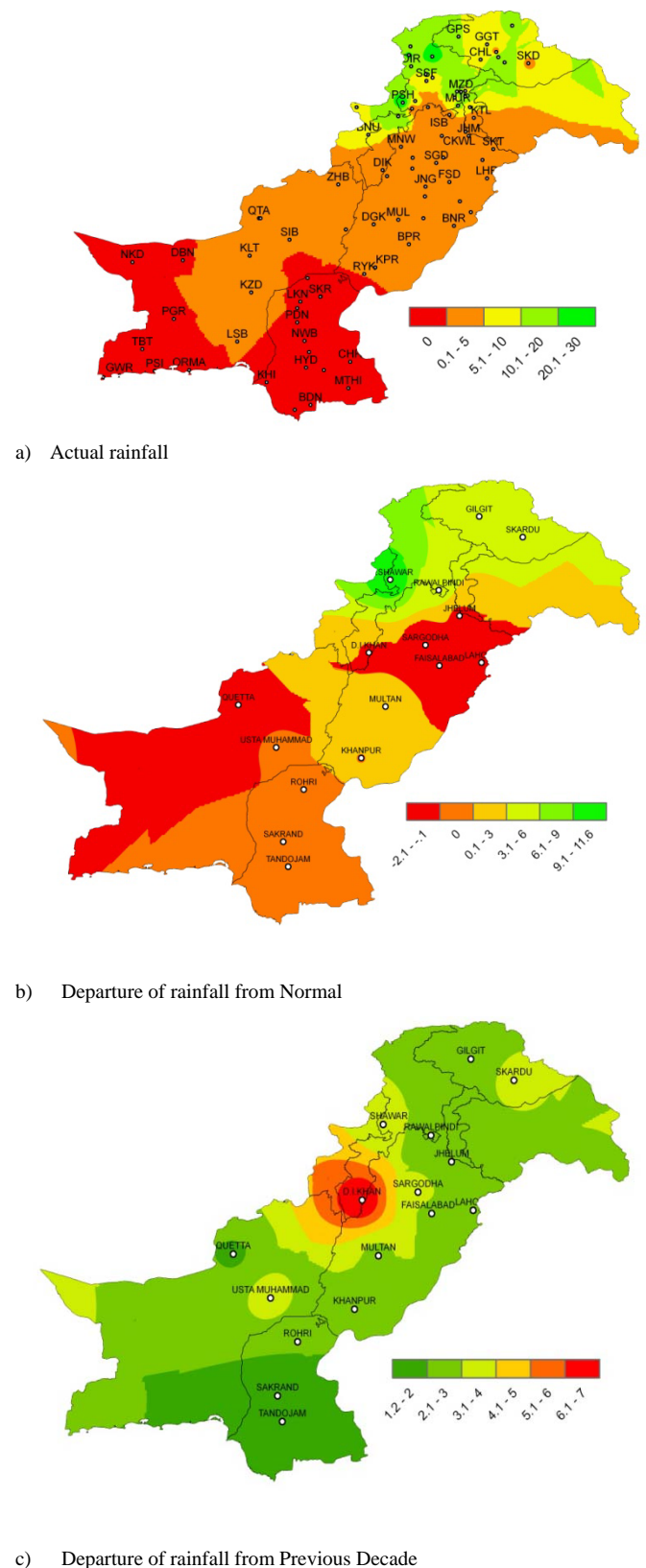


Figure.1: Rainfall distribution during previous decade in “mm”

2 (a) Past Weather for Major Agricultural Plains (21st to 31st May, 2012) as per Table-1

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 5.0 mm during the decade, weather remained cloudy for 4 days and average relative humidity recorded as 29%. Mean night temperature was 20.8°C while day temperature recorded as 38.5°C with 98.1 hours bright sunshine duration. Wind speed recorded as 3.0 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 remained cloudy for 1 day average relative humidity recorded as 50%. Mean night temperature was 26.4°C while day temperature recorded as 41.8°C with 114.3 hours bright sunshine duration. Wind speed recorded as 6.7 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 5 days and average relative humidity recorded as 26%. Mean night temperature was 25.3°C while day temperature recorded as 42.0°C with 110.2 hours bright sunshine duration. Wind speed recorded as 4.8 Km/hr with mean direction *south-easterly*. Presently one crop (irrigated conditions) is grown at the station as detailed below.

Sugarcane: Very Good condition, Tillering stage completed.

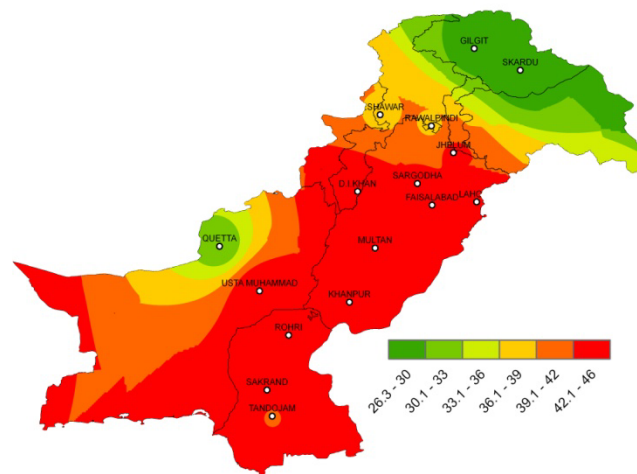
2.4 RAMC, Quetta (Northern Balochistan)

Rainfall reported as 0.2 mm during the decade, weather remained cloudy for 1 days and average relative humidity recorded as 19%. Mean night temperature was 14.0 °C while day temperature recorded as 30.2°C with 115.9 hours bright sunshine duration and wind speed recorded as 6.4 Km/hr with mean direction *north-westerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

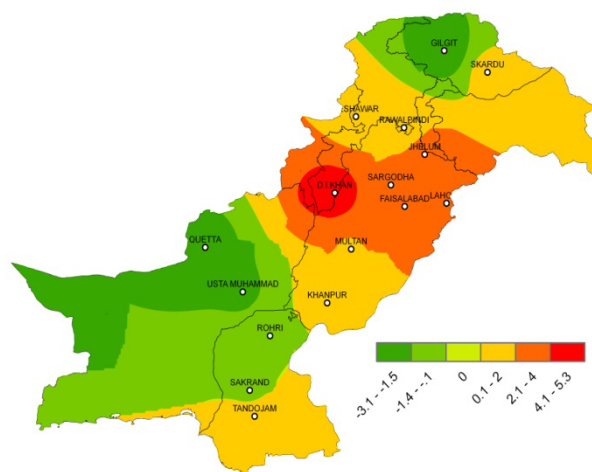
Wheat (Local): Good condition at Max Maturity stage.

2.5 RAMC, Usta Muhammad (Eastern Balochistan)

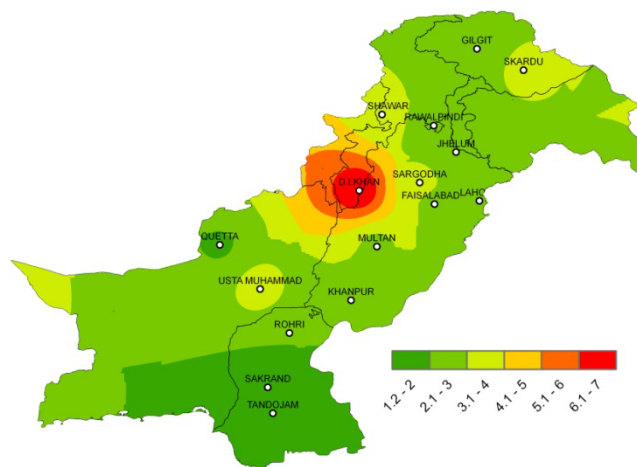
No rainfall and cloudy day reported during the decade, average relative humidity recorded as 45%. Mean night temperature was 24.8°C while day temperature recorded as 46.0°C. Wind speed recorded as 4.0 Km/hr with mean direction *southerly*. Presently no crop is grown, fields being ready for rice & Jawar.



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 31st May, 2012)

2.6 Rohri

No rainfall reported during the decade, weather remained cloudy for 1 day and average relative humidity recorded as 26 %. Mean night temperature was 29.0°C while day temperature recorded as 44.4°C with 108.0 hours bright sunshine duration. Wind speed recorded as 6.3 Km/hr with mean direction *southerly*.

2.7 Skardu

Rainfall reported as 4.0 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 37 %. Mean night temperature was 10.2 °C while day temperature recorded as 26.3°C with 70.1 hours bright sunshine duration. Wind speed recorded as 8.3 Km/hr with mean direction *north easterly*.

2.8 Multan

Rainfall reported as 2.0 mm during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 28 %. Mean night temperature was 26.7°C while day temperature recorded as 43.5°C with 111.2 hours bright sunshine duration. Wind speed recorded as 4.6 Km/hr with mean direction *southerly*.

2.9 Lahore

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 5 days and average relative humidity recorded as 21%. Mean night temperature was 27.5°C while day temperature recorded as 42.2°C with 121.5 hours bright sunshine duration. Wind speed recorded as 4.5 Km/hr with mean direction *north-westerly*.

2.10 Peshawar

Rainfall reported as 12.0 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 37%. Mean night temperature was 21.3 °C while day temperature recorded as 38.5°C with 99.5 hours bright sunshine duration. Wind speed recorded as 2.0 Km/hr with mean direction *north-westerly*.

2.11 Khanpur

No rainfall and cloudy day reported during the decade, average relative humidity recorded as 34 %. Mean night temperature was 26.1°C while day temperature recorded as 43.0°C with 110.4 hours bright sunshine duration. Wind speed recorded as 9.1 Km/hr with mean direction *south westerly*.

2.12 Sargodha

No rainfall reported during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 34 %. Mean night temperature was 26.1°C while day temperature recorded as 42.7°C with 104.0 hours bright

sunshine duration. Wind speed recorded as 3.0 Km/hr with mean direction *north easterly*.

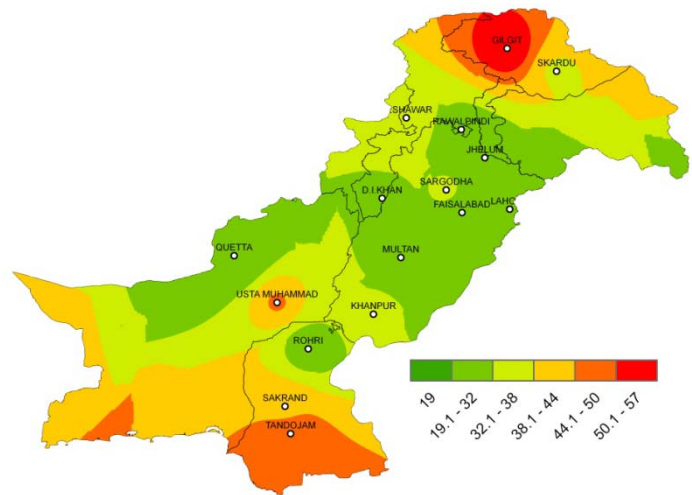


Figure.3: Relative Humidity in percentage

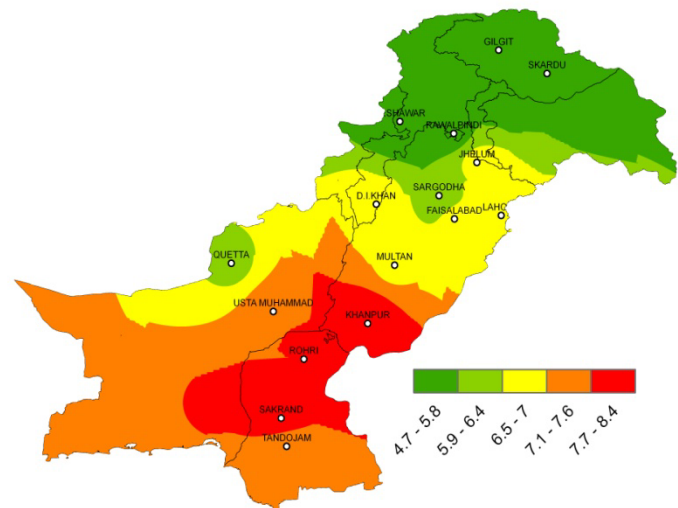


Figure.4: Reference Crop Evapotranspiration “ETo” in mm/day

2.13 Gilgit.

Rainfall reported as 6.1 mm during the decade however weather remained cloudy for 11 days and average relative humidity recorded as 57 %. Mean night temperature was 12.2°C while day temperature recorded as 28.3 °C with 63.9 hours bright sunshine. Wind speed recorded as 6.6 Km/hr with mean direction *weasterly*.

2.14 Jhelum

Rainfall reported as 0.4 mm during the decade however weather remained cloudy for 7 days and average relative humidity recorded as 23 %. Mean night temperature was 24.4°C while day temperature recorded as 42.4°C with 105.5 hours bright sunshine duration. Wind speed recorded as 5.3 Km/hr with variable direction.

2.15 D.I. Khan

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 31%. 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

No rainfall reported during the decade however weather remained cloudy for 1 day average relative humidity recorded as 41%. Mean night temperature was 26.8°C while day temperature recorded as 45.6°C with 122.9 hours bright sunshine duration. Wind speed recorded as 3.8 Km/hr with mean direction *north easterly*.

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

3.1 Temperature Forecast:

Day time temperatures expected to drop gradually during first half and reach to normal during 6th to 8th June and may rise upto end of the decade in the country.

3.2 Rain Forecast:

- ❖ **Punjab:** Mainly very hot & dry weather is expected during 1st half of decade. However light rain/thunderstorm is expected at isolated places in the agricultural plains of central & upper parts on 6th to 8th June during evening/night time.
- ❖ **Khyber Pakhtoonkhawa:** Mainly very hot & dry weather is expected during 1st half decade. However light rain/thunderstorm is expected at isolated places in the agricultural plains of upper parts from 6th to 8th June during evening/night time.
- ❖ **Sindh:** Mainly hot & dry weather is expected during the decade.
- ❖ **Balochistan:** Mainly hot & dry weather is expected during the decade. However rain/thunderstorm are expected at isolated places of Northeast Balochistan from 6th to 8th June.
- ❖ **Kashmir & Gilgit-Baltistan:** Mostly partly cloudy with chances of rain/thunderstorm at isolated places during the decade.

3.3 Wind Forecast:

Dust raising wind likely to blow in the country especially in southern and central Punjab, lower KPK, Upper Sindh & Northeastern Balochistan during the decade.

3.4 Advisory for Farmers:

- ❖ Harvesting/Threshing of wheat crop has been completed in the major agriculture areas of Sindh, Punjab & KPK. Due to rising day time temperatures and expected dry weather in coming days farmers should complete sowing of cotton and irrigate the standing cotton/sugarcane crops properly so that growth of these crops may not suffer due to shortage of water at early growing stages.
- ❖ Farmers are advised to keep control on post-harvesting losses due to pests/insects & hot/moist monsoon season. Wheat grains should be placed under hygienic conditions in godowns. Use of powdered Neem leaves in wheat bags beside other chemicals may be useful to protect grains from the attacks of rodents, insects & fungi.
- ❖ Expected rise in day time temperature and heat waves during most of the days in the decade may increase water discharge in the river and canals of the country. Which may ultimately rise canal water for standing Kharif crops in the coming days.