

DECADAL AGROMET BULLETIN OF PAKISTAN



3rd 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 2nd decade of June, 2012

Sr. No.	Station	Precipitation (mm)			Air Temperature (°C)			Soil Temperatures (°C)						Sunshine Duration (hours)	Wind Speed (km/hr)	R.H (%)	ETo (mm/day)
		Normal	Actual	Dep	Tmin Dep	Tmax Dep	Mean	5cm	10cm	20cm	30cm	50cm	100cm				
1	TANDOJAM	0.0	0.0	0.0	0.6	0.2	33.4	37.4	37.3	35.5	34.2	33.5	30.9	102.3	7.2	56	5.0
2	SAKRAND ☆	0.0	0.0	0.0	-0.8	1.5	34.8	46.5	43.7	46.0	37.0	37.4	34.3	109.3	8.3	44	7.9
3	ROHRI	0.3	0.0	-0.3	0.5	0.4	36.8	48.9	44.5	38.6	37.3	36.1	34.4	109.0	4.9	39	7.1
4	USTA MUHAMMAD	0.0	0.0	0.0	-0.4	1.3	36.6	47.7	42.6	38.3	37.6	34.2	32.5	***	3.7	29	6.9
5	QUETTA	0.0	0.0	0.0	-2.2	-2.0	24.5	35.3	32.2	28.4	21.0	25.9	25.2	107.3	6.0	19	6.1
6	KHANPUR	0.2	0.0	-0.2	0.2	0.3	35.3	40.7	39.6	39.1	38.6	38.8	35.7	97.6	7.0	44	7.2
7	MULTAN	0.4	0.0	-0.4	0.7	2.0	36.6	***	***	***	***	***	***	98.7	6.5	35	7.4
8	LAHORE	3.5	2.4	-1.1	1.0	4.1	35.8	44.0	38.8	34.7	33.2	***	29.5	112.4	3.8	28	6.5
9	FAISALABAD	2.7	4.0	1.3	0.1	3.4	34.3	41.6	38.6	35.5	33.4	32.2	30.4	104.5	5.7	36	7.0
10	SARGODHA	1.8	TR	-1.8	0.7	4.0	35.9	44.6	40.7	37.2	36.0	35.5	32.1	97.8	3.1	32	6.1
11	JHELUM	2.8	2.2	-0.6	-0.7	4.9	34.9	45.3	41.3	36.9	35.3	35.0	***	101.3	3.6	21	6.2
12	RAWALPINDI	3.5	0.0	-3.5	2.9	1.2	32.3	38.4	36.1	33.4	32.3	31.5	28.7	101.3	3.1	46	5.9
13	DI KHAN	1.5	TR	-1.5	-0.1	2.7	34.2	***	***	***	***	***	***	106.7	3.8	32	6.4
14	PESHAWAR	0.8	0.0	-0.8	-2.6	1.9	31.9	35.8	32.4	29.6	30.1	28.4	26.5	83.0	2.5	35	5.2
15	SKARDU	0.3	TR	-0.3	-2.7	-3.1	18.8	***	***	***	***	***	***	78.0	7.3	34	5.2
16	GILGIT	0.3	0.1	-0.2	-1.4	-0.8	23.7	***	***	***	***	***	***	75.9	3.3	41	5.4

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 (☆) indicates the station with five years climatic (normal) data for computing departures.

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

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

1.1 Punjab

Light to moderate rainfall reported from most of the agricultural plains of the province during the decade, chief amount received at Noorpur Thal, Mandibahudin and Jhang etc (Fig. 1.a). Decadal maximum temperature and minimum temperature both dropped above normal by 2.8 & 0.7°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.7 km/hr, 35 %, and 6.6 mm/day respectively (Fig 3-4).

1.2 Sindh

Light to moderate rainfall reported from two places of the agricultural plains of the province during the decade, chief amount received from Mithi which was 28.0 mm. Decadal maximum temperature and minimum temperature both dropped above normal by 0.7 & 0.1°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 6.8 km/hr, 46 %, and 6.7 mm/day respectively.

1.3 Khyber Pakhtoon Khawa (KPK)

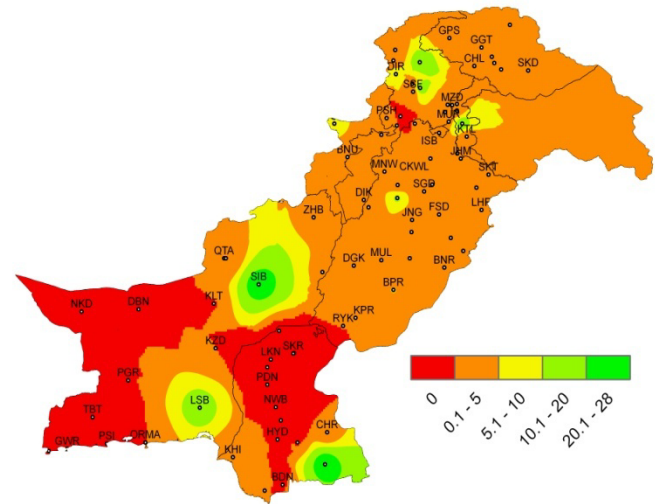
Light to moderate rainfall reported from most of the agricultural plains of province during the decade; chief amount received at Malam Jabba, Kalam and Dir etc. Decadal maximum temperature raised above normal by 2.3°C and minimum temperature dropped below normal by 1.4°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 3.2 km/hr, 34 %, and 5.8 mm/day respectively.

1.4 Balochistan

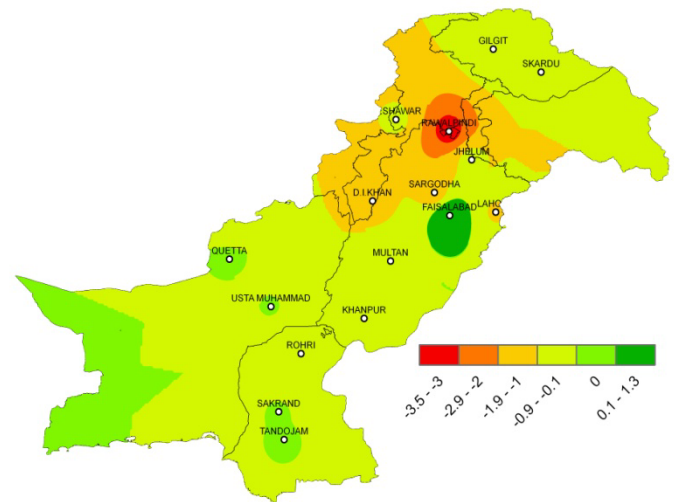
Light to moderate rainfall reported from most of the agricultural plains of the province during the decade, chief amount received at Sibbi, Lasbella and Barkhan etc. In the northern Balochistan decadal maximum temperature and minimum temperature both dropped below normal by 0.3 & 1.3°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 4.9 km/hr, 24 %, and 6.5 mm/day respectively.

1.5 Gilgit Baltistan and Azad Jammu & Kashmir

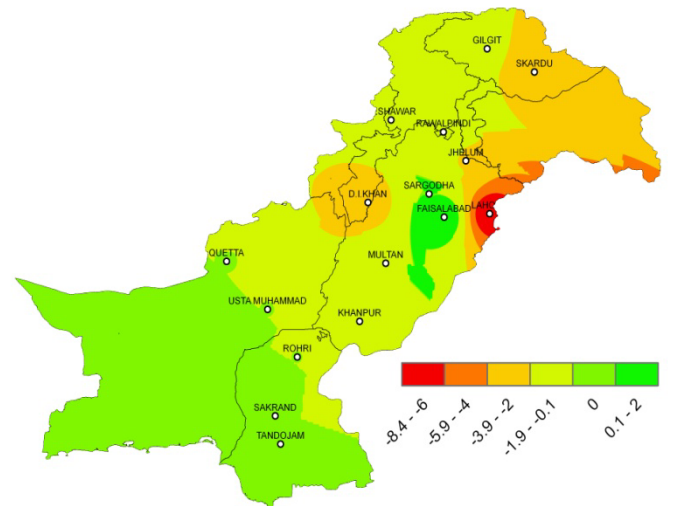
Light to moderate rainfall reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Rawalakot, Pattan and Muzaffarabad etc. In Gilgit Baltistan region; decadal maximum temperature and minimum temperature both dropped below normal by 2.0 & 2.1°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded as 5.3 km/hr, 38 %, and 5.3 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 June, 2012) as per Table-1

2.1 RAMC, Rawalpindi (Potohar region)

No rainfall reported during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 46%. Mean night temperature was 26.0°C while day temperature recorded as 38.5°C with 101.3 hours bright sunshine duration. Wind speed recorded as 3.1 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 3 days and average relative humidity recorded as 56%. Mean night temperature was 27.2°C while day temperature recorded as 39.6°C with 102.3 hours bright sunshine duration. Wind speed recorded as 7.2 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 Budding stage.

2.3 RAMC, Faisalabad (Central Punjab)

Rainfall reported as 4.0 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 36%. Mean night temperature was 26.0°C while day temperature recorded as 42.5°C with 104.8 hours bright sunshine duration. Wind speed recorded as 5.7 Km/hr with mean direction *south easterly*. Presently two crops (irrigated conditions) is grown at the station as detailed below.

Sugarcane: Very Good condition, Tillering stage completed.
Cotton: Very Good condition, Third Leaf Completed.

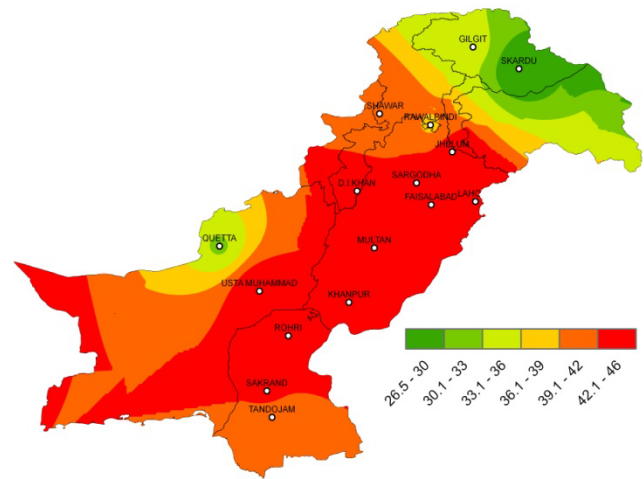
2.4 RAMC, Quetta (Northern Balochistan)

No rainfall reported during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 19%. Mean night temperature was 16.3°C while day temperature recorded as 32.6°C with 107.3 hours bright sunshine duration and wind speed recorded as 6.0 Km/hr with mean direction *north westerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

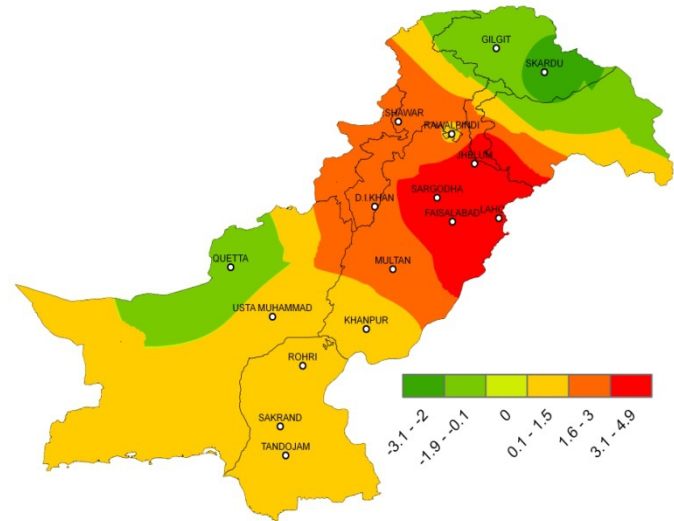
Wheat (Local White): Harvesting in process.

2.5 RAMC, Usta Muhammad (Eastern Balochistan)

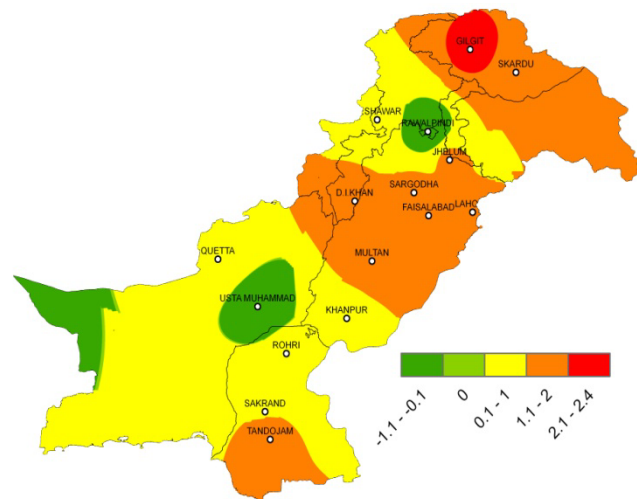
No rainfall and cloudy day reported during the decade, average relative humidity recorded as 29%. Mean night temperature was 27.4°C while day temperature recorded as 45.7°C. Wind speed recorded as 3.7 Km/hr with mean direction *southerly*. Presently no crop is grown, fields are ready for upcoming crops; 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 (11th to 20th June, 2012)

2.6 Rohri

No rainfall reported during the decade, weather remained cloudy for 1 day and average relative humidity recorded as 39%. Mean night temperature was 29.9°C while day temperature recorded as 43.6°C with 109.0 hours bright sunshine duration. Wind speed recorded as 4.9 Km/hr with mean direction *south westerly*.

2.7 Skardu

Trace (amount not measurable) during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 34%. Mean night temperature was 11.0 °C while day temperature recorded as 26.5°C with 78.0 hours bright sunshine duration. Wind speed recorded as 7.3 Km/hr with mean direction *north westerly*.

2.8 Multan

No rainfall reported during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 35%. Mean night temperature was 29.6°C while day temperature recorded as 43.5°C with 98.7 hours bright sunshine duration. Wind speed recorded as 6.5 Km/hr with mean direction *south westerly*.

2.9 Lahore

Rainfall reported as 2.4 mm during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 28%. Mean night temperature was 29.0°C while day temperature recorded as 42.5°C with 112.4 hours bright sunshine duration. Wind speed recorded as 3.8 Km/hr with mean direction *south westerly*.

2.10 Peshawar

No rainfall reported during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 35%. Mean night temperature was 23.1°C while day temperature recorded as 40.7°C with 83.0 hours bright sunshine duration. Wind speed recorded as 2.5 Km/hr with mean direction *northerly*.

2.11 Khanpur

No rainfall reported during the decade, weather remained cloudy for 1 day and average relative humidity recorded as 44%. Mean night temperature was 28.2°C while day temperature recorded as 42.3°C with 97.6 hours bright sunshine duration. Wind speed recorded as 7.0 Km/hr with mean direction *south westerly*.

2.12 Sargodha

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 32%. Mean night temperature was 27.8°C while day temperature recorded as 43.9°C with

97.8 hours bright sunshine duration. Wind speed recorded as 3.1 Km/hr with variable direction.

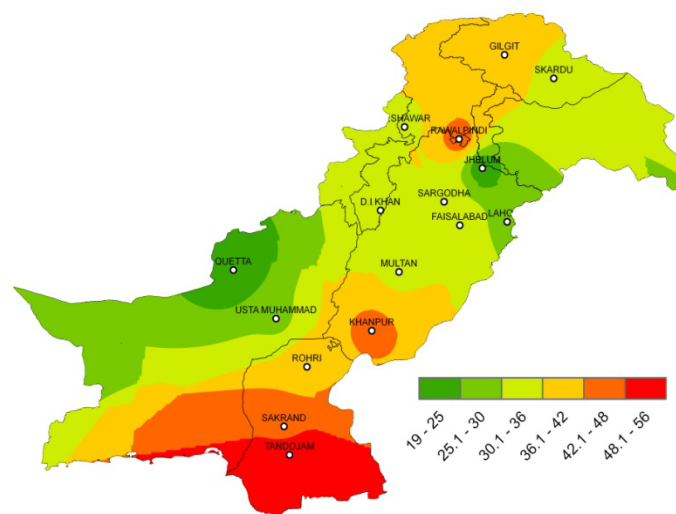


Figure.3: Relative Humidity in percentage

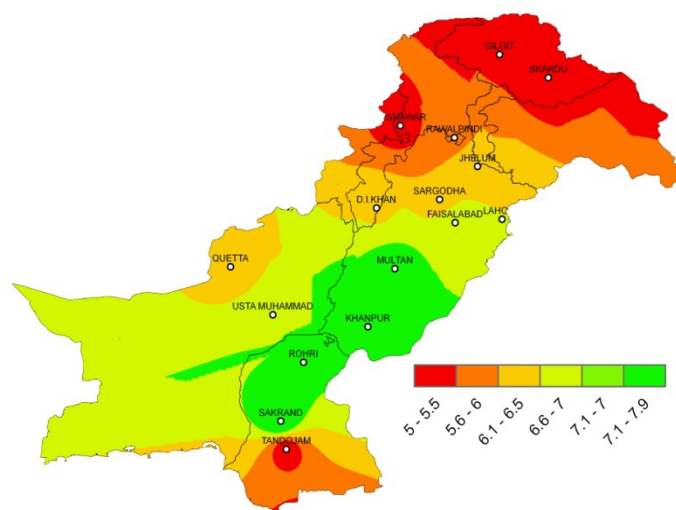


Figure.4: Reference Crop Evapotranspiration "ET₀" in mm/day

2.13 Gilgit.

Rainfall reported as 0.1 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 41%. Mean night temperature was 13.4°C while day temperature recorded as 33.9 °C with 75.9 hours bright sunshine. Wind speed recorded as 5.3 Km/hr with mean direction *easterly*.

2.14 Jhelum

Rainfall reported as 2.2 mm during the decade however weather remained cloudy for 8 days and average relative humidity recorded as 21%. Mean night temperature was 25.9°C while day temperature recorded as 43.8°C with 101.3 hours bright sunshine duration. Wind speed recorded as 3.6 Km/hr with mean direction *south westerly*.

2.15 D.I. Khan

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 3 days and average relative humidity recorded as 32%. Mean night temperature was 25.3°C while day temperature recorded as 43.1°C with 106.7 hours bright sunshine duration. Wind speed recorded as 3.8 Km/hr with mean direction *south easterly*.

2.16 Sakrand

No rainfall reported during the decade however weather remained cloudy for 6 day average relative humidity recorded as 44%. Mean night temperature was 26.1°C while day temperature recorded as 43.4°C with 109.3 hours bright sunshine duration. Wind speed recorded as 8.3 Km/hr with mean direction *south easterly*.

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

3.1 Temperature Forecast:

Day time temperatures expected to rise during 1st half and approach to normal/below normal during 2nd half in most of the agricultural plains of the country.

3.2 Rain Forecast:

- ❖ **Punjab:** Mainly hot & dry weather is expected during the 1st half of decade. However significant rain over scattered places is expected in upper half including Lahore, Faisalabad, Sargodha, Gujranwala, Gujrat and Pothar region during 27th to 29th June.
- ❖ **Khyber Pakhtoonkhawa:** Mainly hot & dry weather is expected during the 1st half of decade. However rain/dust-thunderstorm is expected at isolated places in the agricultural plains of KPK from 26th to 28th June.
- ❖ **Sindh:** Mainly very hot & dry weather is expected during the decade. However light rain is expected in coastal belt of Sindh during 2nd half of the decade.
- ❖ **Balochistan:** Mainly hot & dry weather is expected during the decade. However rain/dust-thunderstorm is expected at isolated places of Northern Balochistan from 24th to 26th June.
- ❖ **Kashmir & Gilgit-Baltistan:** Mainly dry weather is expected during the 1st half of decade. However rain/thunderstorm is expected at Gilgit-Baltistan & Kashmir from 26th to 29th June.

3.3 Wind Forecast:

Dust raising winds likely to blow in the country especially in southern and central Punjab, lower KPK, Upper Sindh & southeastern Balochistan during the 1st half of the decade and in southern Punjab, Upper Sindh & Southeastern Balochistan during 2nd half of the country.

3.4 Advisory for Farmers:

- ❖ Pre-monsoon rains are expected over Northern & Central Punjab and Kashmir from 27th to 29th June & onset of monsoon is expected in the 1st week of July.
- ❖ Farmers are advised to take in time necessary precautionary measures to protect their crops, livestock and other property before the onset of monsoon rains.
- ❖ Due to hot & dry weather expected for most of the days during the decade, farmers are advised to irrigate the crops as per requirement.
- ❖ Farmers of rainfed areas, obtaining crop water through tube wells are also advised to schedule the irrigation according to the expected weather mentioned above during the decade.