

DECADAL AGROMET BULLETIN OF PAKISTAN



2nd 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 1st decade of June, 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	0.9	0.0	-0.9	0.7	-0.9	32.8	36.6	36.7	35.0	33.8	33.4	30.5	111.3	8.8	59	7.3
2	SAKRAND ☆	0.9	0.0	-0.9	-0.5	0.8	34.0	45.2	44.0	44.9	36.9	37.1	33.4	85.8	6.5	41	5.9
3	ROHRI	0.0	0.0	0.0	-1.3	0.7	35.6	49.1	44.5	38.1	36.6	35.2	33.4	99.6	6.7	40	7.3
4	USTA MUHAMMAD	0.5	0.0	-0.5	-3.6	1.1	35.3	42.0	43.0	40.7	36.4	34.1	33.1	***	3.6	40	7.4
5	QUETTA	0.5	0.0	-0.5	-3.1	-2.0	23.2	32.2	30.1	27.0	19.8	24.5	23.6	97.1	5.6	18	5.7
6	KHANPUR	0.6	1.7	1.1	0.4	1.2	34.8	39.9	38.8	38.1	37.8	37.8	35.0	93.4	8.9	46	7.5
7	MULTAN	0.1	0.0	-0.1	0.6	-0.3	35.4	***	***	***	***	***	***	87.2	6.1	38	6.7
8	LAHORE	1.2	10.8	9.6	0.5	2.1	34.8	41.2	38.3	33.6	32.2	***	28.7	100.6	4.0	31	6.4
9	FAISALABAD	1.1	2.0	0.9	1.5	0.5	34.5	42.2	39.3	35.0	33.3	32.2	30.6	97.4	8.7	42	7.6
10	SARGODHA	0.3	TR	-0.3	0.2	0.8	35.0	43.3	39.8	36.6	35.4	34.8	31.3	92.7	6.3	35	7.1
11	JHELUM	2.1	4.5	2.4	0.1	1.9	34.1	44.2	40.6	36.6	34.9	34.5	***	90.6	5.4	27	6.7
12	RAWALPINDI	1.6	0.0	-1.6	2.6	1.0	32.4	38.2	35.3	32.3	31.7	30.2	28.1	102.4	3.1	40	5.9
13	D I KHAN	0.3	3.9	3.6	0.5	0.4	33.6	***	***	***	***	***	***	101.1	5.6	37	6.8
14	PESHAWAR	0.6	TR	-0.6	-1.2	0.8	32.1	35.0	32.4	30.9	30.0	27.8	25.7	92.7	2.9	30	5.5
15	SKARDU	0.3	2.8	2.5	-1.7	-3.0	17.6	***	***	***	***	***	***	62.7	7.4	34	4.7
16	GILGIT	0.6	1.9	1.3	0.1	-1.7	22.4	***	***	***	***	***	***	76.2	7.4	41	5.5

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 (1st to 10th June, 2012):

Light to moderate rainfall reported from most of the agricultural plains of Punjab, KPK, Northern Balochistan, Gilgit Baltistan & Kashmir during the decade. However light rainfall 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, D G Khan and Islamabad etc (Fig. 1.a). Decadal maximum temperature and minimum temperature both dropped above normal by 1.0 & 0.8°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 6.1 km/hr, 37 %, and 6.8 mm/day respectively (Fig 3-4).

1.2 Sindh

No rainfall reported from most of the agricultural plains of the province during the decade, except from Dadu and Chhor. Decadal maximum temperature raised above normal by 0.2°C and minimum temperature dropped below normal by 0.4°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 7.3 km/hr, 47 %, and 6.8 mm/day respectively.

1.3 Khyber Pakhtoon Khawa (KPK)

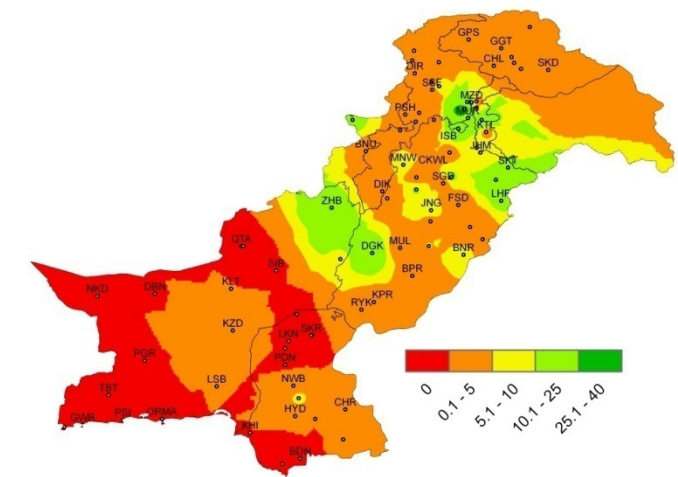
Light to moderate rainfall reported from most of the agricultural plains of KPK; chief amount received at Kakul, Parachinar and Malam Jabba etc. Decadal maximum temperature raised above normal by 0.6°C and minimum temperature dropped below normal by 0.4°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.3 km/hr, 34 %, and 6.2 mm/day respectively.

1.4 Balochistan

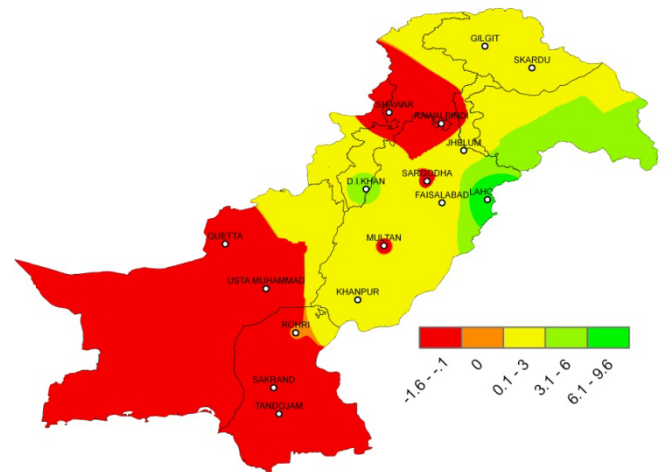
No rainfall reported from most of the agricultural plains of the province during the decade, except from Zhob, Barkhan and Khuzdar. In the northern Balochistan decadal maximum temperature and minimum temperature both dropped below normal by 0.4 & 3.4°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 4.6 km/hr, 29 %, and 6.6 mm/day respectively.

1.5 Gilgit Baltistan and Azad Jammu & Kashmir

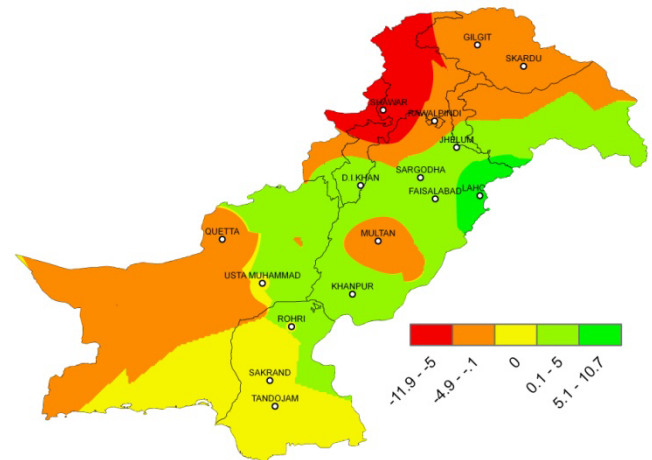
Light to moderate rainfall reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Rawalakot, Muzaffarabad and Astore etc. In Gilgit Baltistan region; decadal maximum temperature and minimum temperature both dropped below normal by 2.4 & 0.8°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded as 7.4 km/hr, 38 %, and 5.1 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 (1st to 10th 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 40%. Mean night temperature was 25.2°C while day temperature recorded as 39.6°C with 102.4 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 59%. Mean night temperature was 27.1°C while day temperature recorded as 38.5°C with 111.3 hours bright sunshine duration. Wind speed recorded as 8.8 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 2.0 mm during the decade, weather remained cloudy for 4 days and average relative humidity recorded as 42%. Mean night temperature was 27.6°C while day temperature recorded as 41.3°C with 97.1 hours bright sunshine duration. Wind speed recorded as 8.7 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, Emergence Completed.

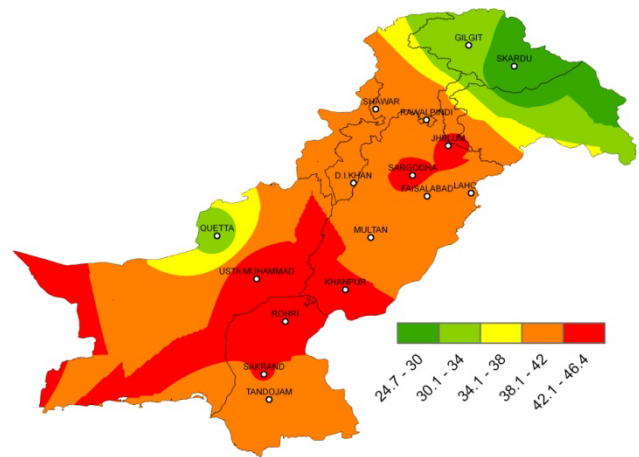
2.4 RAMC, Quetta (Northern Balochistan)

No rainfall reported during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 18%. Mean night temperature was 14.5 °C while day temperature recorded as 31.8°C with 97.1 hours bright sunshine duration and wind speed recorded as 5.6 Km/hr with mean direction *north-westerly*. Presently only one crop (rainfed conditions) is grown at the station as detailed below.

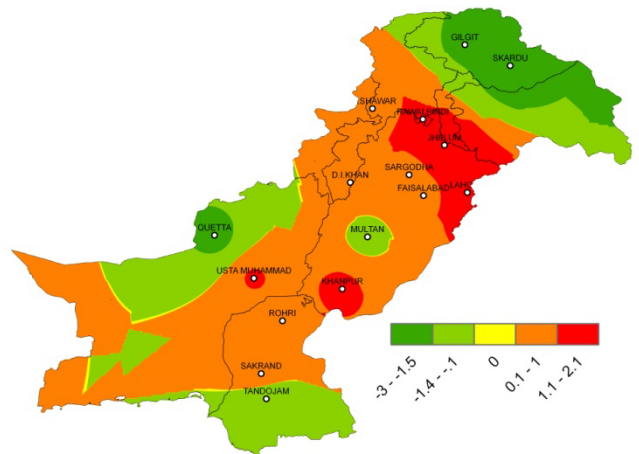
Wheat (Local White): Good condition at Full Maturity stage.

2.5 RAMC, Usta Muhammad (Eastern Balochistan)

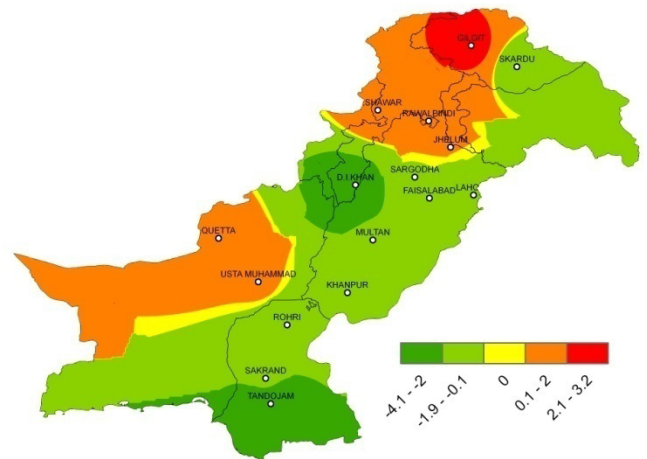
No rainfall and cloudy day reported during the decade, average relative humidity recorded as 40%. Mean night temperature was 24.1°C while day temperature recorded as 46.4°C. Wind speed recorded as 3.6 Km/hr with mean direction *southerly*. Presently no crop is grown, fields are ready for upcoming crops; 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 (1st to 10th June, 2012)

2.6 Rohri

No rainfall reported during the decade, weather remained cloudy for 1 day and average relative humidity recorded as 40 %. Mean night temperature was 27.8°C while day temperature recorded as 43.3°C with 99.6 hours bright sunshine duration. Wind speed recorded as 6.7 Km/hr with mean direction *southerly*.

2.7 Skardu

Rainfall reported as 2.8 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 34 %. Mean night temperature was 10.4 °C while day temperature recorded as 24.7°C with 62.7 hours bright sunshine duration. Wind speed recorded as 7.4 Km/hr with mean direction *north easterly*.

2.8 Multan

No rainfall reported during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 38 %. Mean night temperature was 29.0°C while day temperature recorded as 41.8°C with 87.2 hours bright sunshine duration. Wind speed recorded as 6.1 Km/hr with mean direction *southerly*.

2.9 Lahore

Rainfall reported as 10.8 mm during the decade, weather remained cloudy for 7 days and average relative humidity recorded as 31%. Mean night temperature was 28.2°C while day temperature recorded as 41.3°C with 100.6 hours bright sunshine duration. Wind speed recorded as 4.0 Km/hr with mean direction *north-westerly*.

2.10 Peshawar

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 30%. Mean night temperature was 24.0 °C while day temperature recorded as 40.2°C with 92.7 hours bright sunshine duration. Wind speed recorded as 2.9 Km/hr with mean direction *north-north westerly*.

2.11 Khanpur

Rainfall reported as 1.7 mm during the decade, weather remained cloudy for 3 days and average relative humidity recorded as 46 %. Mean night temperature was 27.5°C while day temperature recorded as 42.0°C with 93.4 hours bright sunshine duration. Wind speed recorded as 8.9 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 35 %. Mean night temperature was 27.5°C while day temperature recorded as 42.5°C with

92.7 hours bright sunshine duration. Wind speed recorded as 6.3 Km/hr with variable direction.

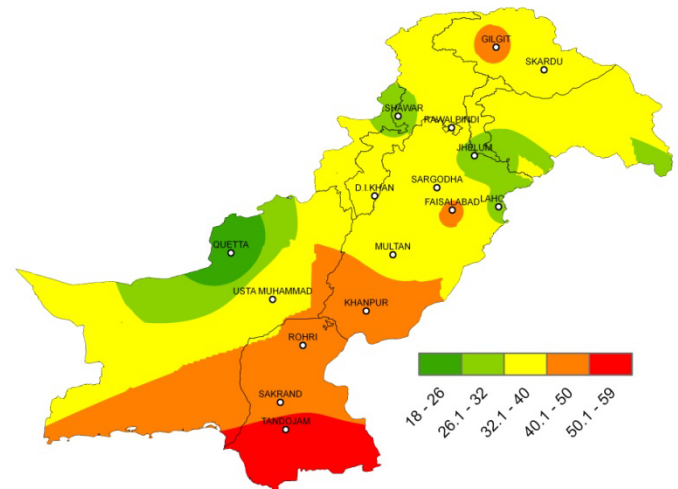


Figure.3: Relative Humidity in percentage

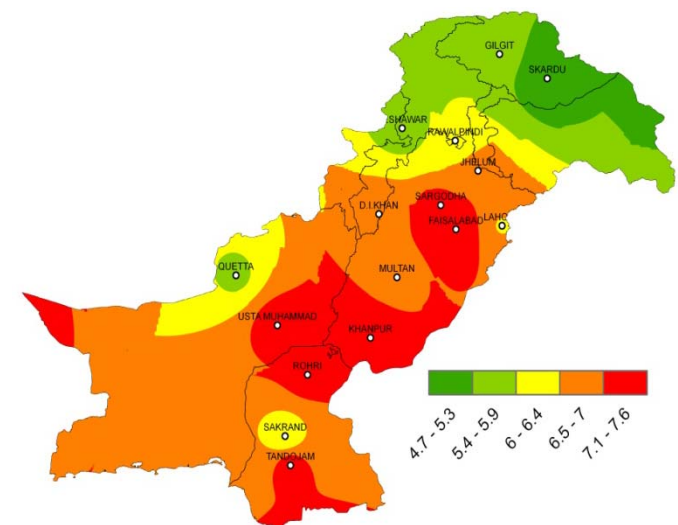


Figure.4: Reference Crop Evapotranspiration “ETo” in mm/day

2.13 Gilgit.

Rainfall reported as 1.9 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 41 %. Mean night temperature was 13.3°C while day temperature recorded as 31.5 °C with 76.2 hours bright sunshine. Wind speed recorded as 7.4 Km/hr with mean direction *easterly*.

2.14 Jhelum

Rainfall reported as 4.5 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 27 %. Mean night temperature was 25.7°C while day temperature recorded as 42.5°C with 90.6 hours bright sunshine duration. Wind speed recorded as 5.4 Km/hr with mean direction *south weasterly*.

2.15 D.I. Khan

Rainfall reported as 3.9 mm during the decade, weather remained cloudy for 4 days and average relative humidity recorded as 37%. Mean night temperature was 25.7°C while day temperature recorded as 41.5°C with 101.1 hours bright sunshine duration. Wind speed recorded as 5.6 Km/hr with mean direction *north easterly*.

2.16 Sakrand

No rainfall reported during the decade however weather remained cloudy for 4 day average relative humidity recorded as 41%. Mean night temperature was 25.5°C while day temperature recorded as 42.4°C with 85.8 hours bright sunshine duration. Wind speed recorded as 6.5 Km/hr with mean direction *south westerly*.

3. Ten days Weather advisory for Farmers (11th to 20th June, 2012)

3.1 Temperature Forecast:

Day time temperatures expected to drop gradually during first half and reach to normal during 14th to 16th June and may raise upto end of the decade in the country.

3.2 Rain Forecast:

- ❖ **Punjab:** Mainly very hot & dry weather is expected during the decade. However light rain/dust-thunderstorm is expected at isolated places in the agricultural plains of upper & central parts from 11th to 13th and 18th to 19th June.
- ❖ **Khyber Pakhtoonkhawa:** Mainly very hot & dry weather is expected during the decade. However light rain/dust-thunderstorm is expected at isolated places in the agricultural plains of KPK from 11th to 14th and 18th to 19th June.
- ❖ **Sindh:** Mainly hot & dry weather is expected during the decade.
- ❖ **Balochistan:** Mainly hot & dry weather is expected during the decade. However light rain/thunderstorm is expected at isolated places of Northern Balochistan from 12th to 14th June.
- ❖ **Kashmir & Gilgit-Baltistan:** Mainly dry weather is expected during the decade. However light rain/thunderstorm is expected at isolated places of Gilgit-Baltistan & Kashmir from 11th to 15th June and 18th to 20th June.

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:

- ❖ Pre-monsoon currents are expected in the last week of this month.
- ❖ 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.