

DECADAL AGROMET BULLETIN OF PAKISTAN



1st Decade July, 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 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	0.7	0.0	-0.7	0.6	-0.7	32.5	36.9	37.3	35.4	34.2	33.8	31.2	102.0	9.1	61	6.8
2	SAKRAND ☆	1.7	0.0	-1.7	-0.9	3.1	34.9	46.7	45.5	46.3	37.9	38.1	34.2	108.8	11.7	43	8.8
3	ROHRI	0.0	0.0	0.0	-1.2	2.0	36.3	48.5	44.1	38.8	37.6	36.4	35.0	104.0	5.5	39	7.1
4	USTA MUHAMMAD	1.8	0.0	-1.8	-0.2	3.1	37.5	46.0	42.5	40.1	39.1	32.7	37.7	***	5.1	33	7.5
5	QUETTA	0.0	0.0	0.0	-3.1	-3.0	25.1	32.2	33.9	29.4	22.0	26.9	26.2	108.7	6.3	18	6.3
6	KHANPUR	0.5	0.0	-0.5	-0.7	0.2	35.0	40.6	39.7	39.1	38.9	38.9	36.2	93.2	5.7	48	6.6
7	MULTAN	1.0	0.0	-1.0	0.3	0.2	35.7	***	***	***	***	***	***	86.8	7.1	45	6.9
8	LAHORE	2.2	TR	-2.2	0.4	4.2	35.2	43.2	40.0	35.6	34.3	***	30.5	102.5	3.9	38	6.3
9	FAISALABAD	1.9	7.4	5.5	1.2	2.2	34.7	42.5	39.8	36.5	34.8	33.6	31.1	81.6	6.8	44	6.7
10	SARGODHA	3.3	10.9	7.6	0.4	2.2	35.4	42.9	39.8	37.0	36.1	36.1	33.1	81.9	3.5	43	5.9
11	JHELUM	4.2	0.6	-3.6	1.1	4.8	35.7	46.7	43.2	39.0	37.4	36.8	***	93.1	4.9	30	6.7
12	RAWALPINDI	5.4	9.0	3.6	-2.2	4.6	32.0	39.6	37.1	34.0	32.9	31.8	28.9	102.7	2.5	27	5.5
13	DI KHAN	0.8	3.3	2.5	1.2	1.9	34.8	***	***	***	***	***	***	104.1	4.6	41	6.7
14	PESHAWAR	1.3	0.0	-1.3	-1.6	2.1	33.6	35.9	33.4	32.0	31.2	29.2	27.6	86.4	2.6	36	5.5
15	SKARDU	0.4	0.6	0.2	-0.9	-3.2	20.4	***	***	***	***	***	***	70.8	9.3	37	5.5
16	GILGIT	0.7	4.8	4.1	0.6	-2.3	24.3	***	***	***	***	***	***	63.6	6.0	45	5.1

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 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 no 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 Sialkot, Noorpur thal and Murree (Fig. 1.a). Decadal maximum temperature and minimum temperature both dropped above normal by 2.6 & 0.1°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 4.9 km/hr, 39 %, and 6.4 mm/day respectively (Fig 3-4).

1.2 Sindh

Norainfall reported during the decade. Decadal maximum temperature raised above normal by 1.5°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 8.8 km/hr, 48 %, and 7.6 mm/day respectively.

1.3 Khyber Pakhtoon Khawa (KPK)

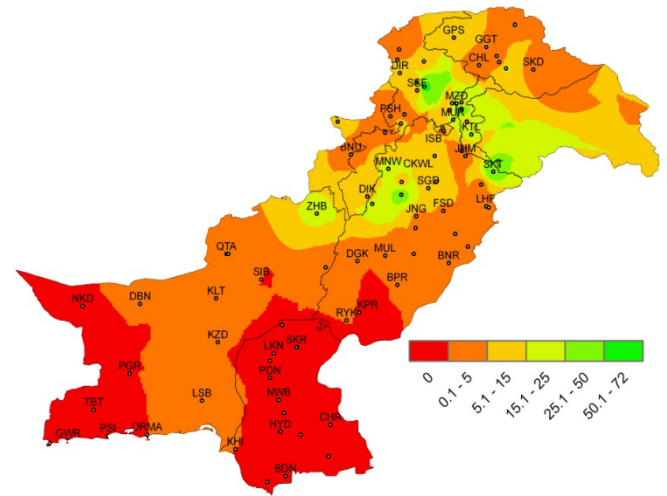
Light to moderate rainfall reported from most of the agricultural plains of KPK; chief amount received at Malam Jabba, Dir and Parachinar etc. Decadal maximum temperature raised above normal by 2.0°C and minimum temperature dropped below normal by 0.2°C respectively, in the province. Mean values of wind speed, relative humidity and ETo were recorded as 3.6 km/hr, 39 %, and 6.1 mm/day respectively.

1.4 Balochistan

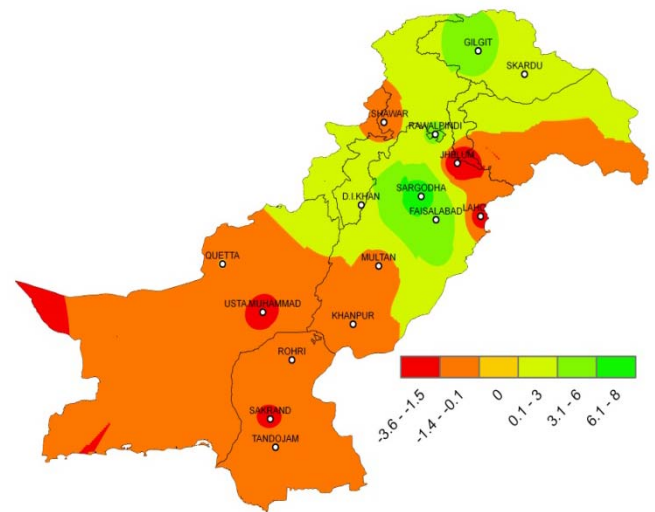
Light to moderate rainfall reported from few agricultural plains of Balochistan; chief amount received at Zhob and Lasbella. In the northern Balochistan, decadal maximum temperature raised above normal by 0.1°C and minimum temperature dropped below normal by 1.7°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded 5.7 km/hr, 26 %, and 6.9 mm/day respectively.

1.5 Gilgit Baltistan and Azad Jammu & Kashmir

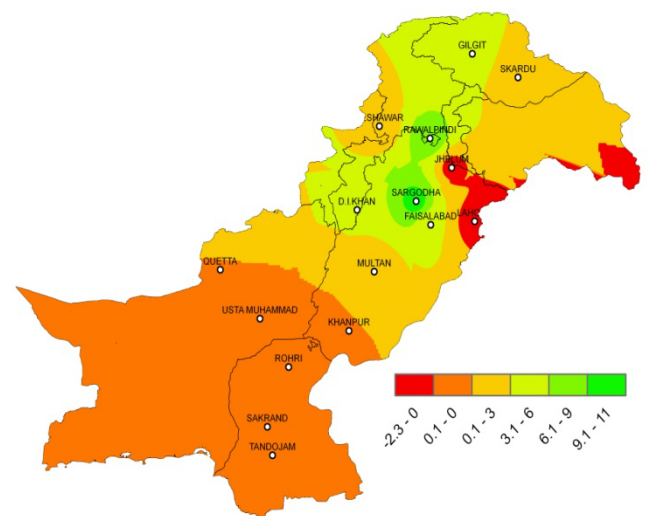
Light to moderate rainfall reported from most of the agricultural plains of Gilgit Baltistan and Azad Jammu & Kashmir; chief amount received at Garhi Dopatta, Muzaffarabad and Kotli etc. In Gilgit Baltistan region; decadal maximum temperature and minimum temperature both dropped below normal by 2.8 & 0.2°C respectively. Whereas mean values of wind speed, relative humidity and ETo were recorded as 7.7 km/hr, 41 %, 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 (21st to 30th June, 2012) as per Table-1

2.1 RAMC, Rawalpindi (Potohar region)

Rainfall reported as 9.0 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 27%. Mean night temperature was 22.0°C while day temperature recorded as 42.0°C with 102.7 hours bright sunshine duration. Wind speed recorded as 2.5 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 2 days and average relative humidity recorded as 61%. Mean night temperature was 27.5°C while day temperature recorded as 37.5°C with 102.0 hours bright sunshine duration. Wind speed recorded as 9.1 Km/hr with mean direction *southerly*. 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 7.4 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 44%. Mean night temperature was 28.2°C while day temperature recorded as 41.2°C with 82.0 hours bright sunshine duration. Wind speed recorded as 6.8 Km/hr with mean direction *south westerly*. Presently one crop (irrigated conditions) is grown at the station as detailed below:

Sugarcane: Very Good condition, Tillering stage completed.
Cotton: Very Good condition, Budding stage.

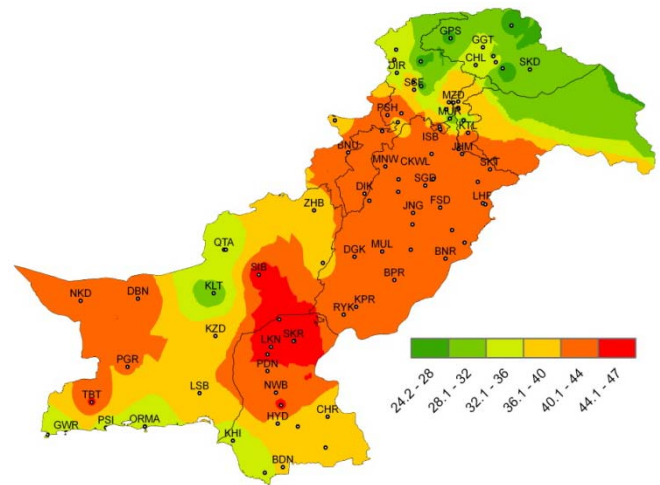
2.4 RAMC, Quetta (Northern Balochistan)

No rainfall reported during the decade, weather remained cloudy for 3 days and average relative humidity recorded as 18%. Mean night temperature was 17.4 °C while day temperature recorded as 32.8°C with 108.7 hours bright sunshine duration and wind speed recorded as 6.3 Km/hr with mean direction *north westerly*. Presently no crop is grown at the station.

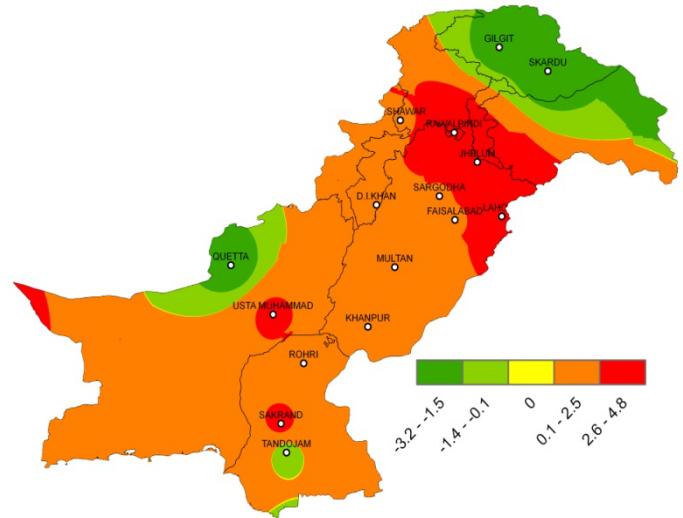
2.5 RAMC, Usta Muhammad (Eastern Balochistan)

No rainfall reported during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 33%. Mean night temperature was 28.8°C while day temperature recorded as 46.1°C. Wind speed recorded as 5.1 Km/hr with mean direction *southerly*. Presently one crop (Irrigated conditions) is grown at the station as detailed below:

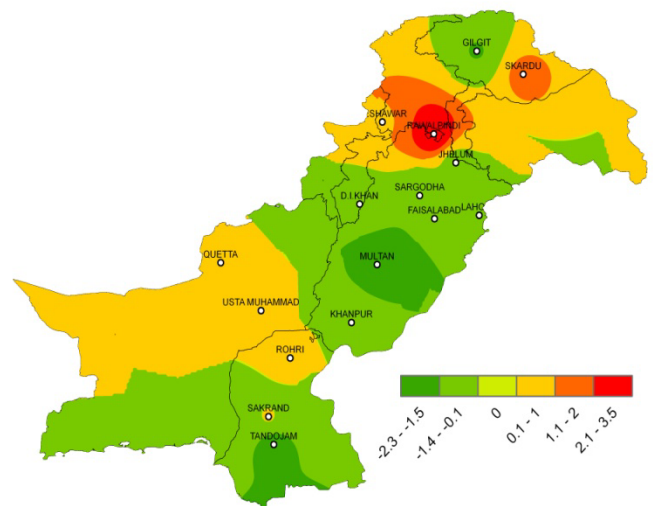
Rice: Emergence stage is nearly completed.



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 June, 2012)

2.6 Rohri

No rainfall reported during the decade, weather remained cloudy for 2 days and average relative humidity recorded as 39 %. Mean night temperature was 28.6°C while day temperature recorded as 43.9°C with 110.4 hours bright sunshine duration. Wind speed recorded as 5.5 Km/hr with mean direction *southerly*.

2.7 Skardu

Rainfall reported as 0.6 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 37 %. Mean night temperature was 12.9 °C while day temperature recorded as 27.8°C with 70.8 hours bright sunshine duration. Wind speed recorded as 9.3 Km/hr with mean direction *north westerly*.

2.8 Multan

No rainfall reported during the decade, weather remained cloudy for 9 days and average relative humidity recorded as 45 %. Mean night temperature was 30.2°C while day temperature recorded as 41.2°C with 86.8 hours bright sunshine duration. Wind speed recorded as 7.1 Km/hr with mean direction *southerly*.

2.9 Lahore

Rainfall reported as Trace (amount not measurable) during the decade, weather remained cloudy for 4 days and average relative humidity recorded as 38%. Mean night temperature was 28.8°C while day temperature recorded as 41.5°C with 102.5 hours bright sunshine duration. Wind speed recorded as 3.9 Km/hr with mean direction *south westerly*.

2.10 Peshawar

No rainfall reported during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 36%. Mean night temperature was 25.5 °C while day temperature recorded as 41.6°C with 86.4 hours bright sunshine duration. Wind speed recorded as 2.6 Km/hr with mean direction *north westerly*.

2.11 Khanpur

No rainfall reported during the decade, weather remained cloudy for 1 day and average relative humidity recorded as 48 %. Mean night temperature was 28.3°C while day temperature recorded as 41.7°C with 93.2 hours bright sunshine duration. Wind speed recorded as 5.7 Km/hr with mean direction *south westerly*.

2.12 Sargodha

Rainfall reported as 10.9 mm during the decade, weather remained cloudy for 8 days and average relative humidity recorded as 43 %. Mean night temperature was 28.4°C while day temperature recorded as 42.4°C with 81.9 hours bright

sunshine duration. Wind speed recorded as 3.5 Km/hr with mean direction *south easterly*.

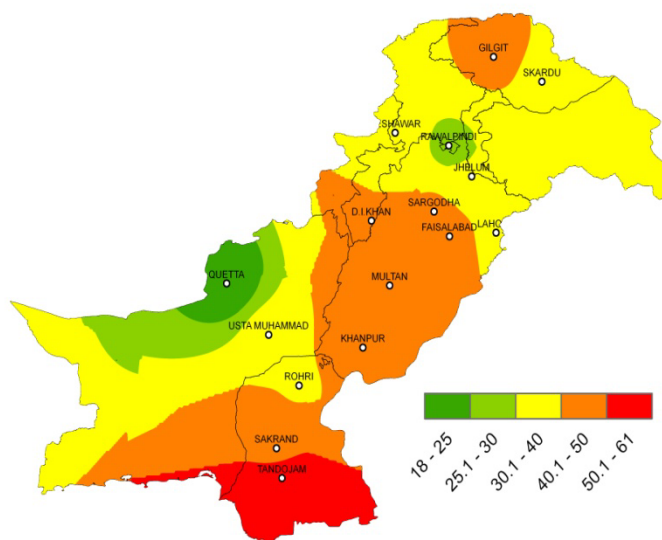


Figure.3: Relative Humidity in percentage

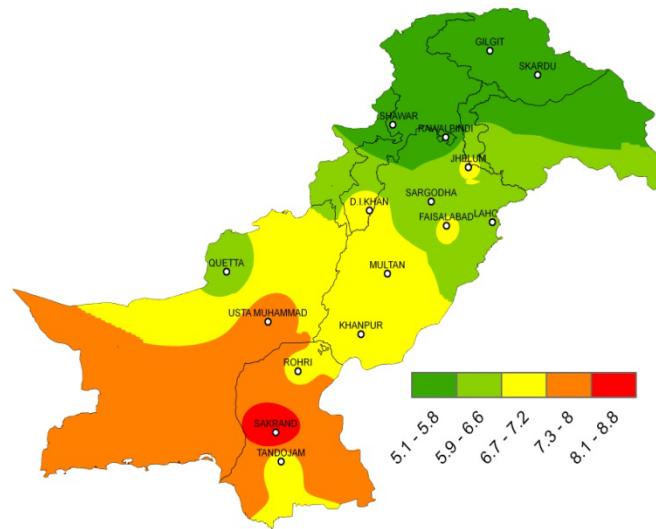


Figure.4: Reference Crop Evapotranspiration “ETo” in mm/day

2.13 Gilgit.

Rainfall reported as 4.8 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 45 %. Mean night temperature was 16.2°C while day temperature recorded as 32.3 °C with 63.6 hours bright sunshine. Wind speed recorded as 6.0 Km/hr with mean direction *easterly*.

2.14 Jhelum

Rainfall reported as 0.6 mm during the decade however weather remained cloudy for 10 days and average relative humidity recorded as 30 %. Mean night temperature was 28.1°C while day temperature recorded as 43.2°C with 93.1 hours bright sunshine duration. Wind speed recorded as 4.9 Km/hr with mean direction *south easterly*.

2.15 D.I. Khan

Rainfall reported as 3.3 mm during the decade, weather remained cloudy for 6 days and average relative humidity recorded as 41%. Mean night temperature was 27.3°C while day temperature recorded as 42.3°C with 104.1 hours bright sunshine duration. Wind speed recorded as 4.6 Km/hr with mean direction *north easterly*.

2.16 Sakrand

No rainfall reported during the decade however weather remained cloudy for 2 days average relative humidity recorded as 43%. Mean night temperature was 26.3°C while day temperature recorded as 43.5°C with 108.8 hours bright sunshine duration. Wind speed recorded as 11.7 Km/hr with mean direction *south westerly*.

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

3.1 Temperature Forecast:

Day time temperatures expected to rise during first half over central & upper parts of Punjab, Southern KPK and Eastern Balochistan and approach to normal/below normal during 2nd half in most of the agricultural plains of the country.

3.2 Rain Forecast:

- ❖ **Punjab:** Mainly dry weather is expected during the 1st half of decade. However isolated to scattered rain/thundershower is expected in upper & central agricultural plains of the province during the 2nd half of the decade.
- ❖ **Khyber Pakhtoonkhawa:** Mainly dry weather is expected during the 1st half of decade. However isolated to scattered rain/thundershower is expected in upper & central agricultural plains of the province during the 2nd half of the decade.
- ❖ **Sindh:** Mainly dry weather is expected during the decade. However light rain/dust thunderstorm is expected in coastal areas of Sindh during 5th to 7th June & in whole Sindh on 8th / 9th June.
- ❖ **Balochistan:** Mainly dry weather is expected during the decade. However rain/dust-thunderstorm is expected at isolated places of Northern & Eastern Balochistan from 8th to 10th June.
- ❖ **Kashmir & Gilgit-Baltistan:** Mainly dry weather is expected during the 1st half of decade. However rain/thundershower is expected at Gilgit-Baltistan & Kashmir from 5th to 10th June.

3.3 Wind Forecast:

Gusty winds may prevail occasionally in the monsoon belt and adjoining areas in the upper half of the country mostly during the 2nd half of the decade.

3.4 Advisory for Farmers:

- ❖ Farmers are advised to take in time necessary precautionary measures to protect their crops, livestock and other property during the monsoon season.
- ❖ Due to hot & dry weather expected in southern half of the country, farmers are advised to irrigate the crops as per requirement.
- ❖ Farmers of cotton belt are advised to stop irrigation practices due to predicted monsoon rains during the decade.
- ❖ 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.