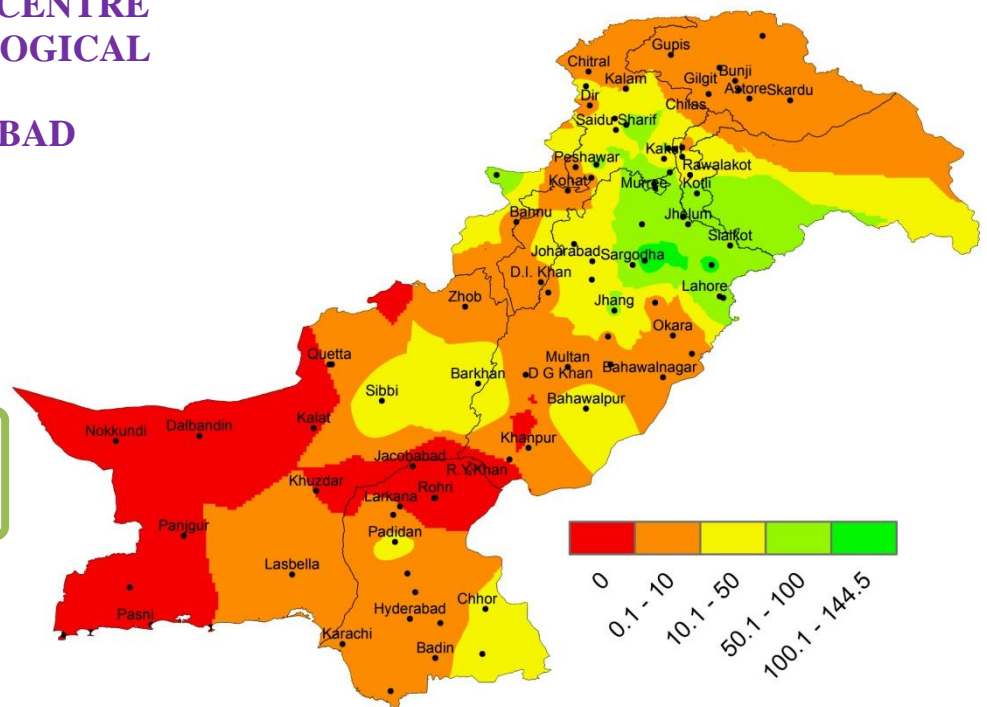


Weekly Weather and Crop Bulletin for Pakistan

**NATIONAL AGROMET CENTRE
PAKISTAN METEOROLOGICAL
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**Rainfall distribution (mm) during the
Last week (from 8th to 14th July, 2013)**



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Highlights of Past Weather 8th to 14th July, 2013)

Light to moderate rainfall reported from most of the places in Punjab, Khyber Pakhtunkhwa, Sindh Provinces and Northern Areas & Gilgit Baltistan region, with a couple of heavy spells at a few places. Whereas light rainfall reported from few places of Balochistan Province.

Patron-in-Chief: Arif Mahmood (Director General)
Chief Editor: Dr. Khalid Mehmood Malik (Director)
Editor: Dildar Hussain Kazmi (Meteorologist)

Punjab

Light to moderate rainfall reported from most of the places with a couple of heavy spells at a few places in the province during the week. Weekly maximum temperature and minimum temperature recorded as 36.5 °C & 27.9°C respectively. For the present season on average 189.1 growing degree days accumulated by the end of last week. Average relative humidity recorded as 67% and wind speed in the morning/evening recorded as 4.0/3.1 Knots. During the previous week the highest amount of rainfall reported from Mindi Bahu Din as 161.0 mm and extreme maximum temperature recorded as 44.2 °C at the Rahim Yar Khan.

Sindh

Light to moderate rainfall reported from most of the places in the province during the week. Weekly maximum temperature and minimum temperature recorded as 38.7°C & 28.2°C respectively. For the present season on average 198.0 growing degree days accumulated by the end of last week. Average relative humidity recorded as 62% and wind speed in the morning/evening recorded as 5.0/7.2 Knots. During the previous week the highest amount of rainfall reported from Mithi as 20.0 mm and extreme maximum temperature recorded as 44.4°C at Dadu.

Khyber Pakhtunkhwa

Light to moderate rainfall reported from most of the agricultural plains of the province during the week. Weekly maximum temperature and minimum temperature recorded as 33.1°C & 20.8°C respectively. For the present season on average 154.5 growing degree days accumulated by the end of last week. Average relative humidity recorded as 60% and wind speed in the morning/evening recorded as 2.9/4.4 Knots. During the previous week the highest rainfall recorded at Malam Jabba as 133.0 mm and

extreme maximum temperature recorded as 39.5 °C at D.I.Khan.

Balochistan

Light to moderate rainfall reported from a few places of the province during the week. Weekly maximum temperature and minimum temperature recorded as 37.5°C & 24.4°C respectively. For the present season on average 187.0 growing degree days accumulated by the end of last week. Average relative humidity recorded as 45% and wind speed in the morning/evening recorded as 3.4/7.0 Knots. During the previous week highest amount of rainfall reported at Barkhan as 28.0 mm and extreme maximum temperature recorded as 45.5 °C at Nokkundi.

Gilgit Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall reported from most of the agricultural plains of the region during the week. Weekly maximum temperature and minimum temperature recorded as 32.2°C & 26.2°C respectively. For the present season on average 147.8 growing degree days accumulated by the end of last week. Average relative humidity recorded as 53% and wind speed in the morning/evening recorded as 1.2/2.7 Knots. During the previous week the highest rainfall recorded at Kotli as 72.2 mm and extreme maximum temperature recorded as 41.7°C at Chilas.

Past Weather for Major Agricultural Plains (from 8th to 14th July, 2013)

Rawalpindi (Potohar region)

Rainfall reported as 48.8 mm during the week however cloudiness in the morning/evening 3.5/2.7 Oktas while average relative humidity observed as 68%. Mean day time temperature recorded as 35.2 °C & for the present season 171.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/2.1 Km/h.

Faisalabad (Central Punjab)

Rainfall reported as 11.6 mm during the week however cloudiness in the morning/evening as 4.7/2.9 Oktas while average relative humidity observed as 60%. Mean day time temperature recorded as 36.7°C & for the present season 185.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.0/3.1 Km/h.

Tandojam (Lower Sindh)

Rainfall reported as 1.0 mm during the week, however cloudiness in the morning/evening as 0.4/3.8 Oktas while average relative humidity observed as 44%. Mean day time temperature recorded as 36.4 °C & for the present season 188.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.4/3.8 Km/h.

Quetta (Northern Balochistan)

No rainfall reported during the week however cloudiness in the morning/evening as 5.7/5.7 Oktas while average relative humidity observed as 35%. Mean day time temperature observed as 34.9°C & for the present season 163.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 5.7/7.0 Km/h.

Usta Muhammad (Eastern Balochistan)

No rainfall reported during the week, however cloudiness in the morning/evening as 1.0/0.9 Oktas

while average relative humidity observed as 55%. Mean day time temperature recorded as 41.9°C & for the present season 221.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.2/4.2 Km/h.

Past Weather for sub regional Agri-cultural Plains (from 8th to 14th July, 2013)

Rohri

No rainfall reported during the week however cloudiness in the morning/evening as 2.0/1.7 Oktas while average relative humidity observed as 53%. Mean day temperature recorded as 41.0°C & for the present season 213.4 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 4.0/3.4 Knots.

Multan

No rainfall reported during the week however cloudiness in the morning/evening as 1.3/3.1 Oktas while average relative humidity observed as 54%. Mean day temperature recorded as 39.3°C & for the present season 214.3 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 7.1/7.7 Knots.

Lahore

Rainfall reported as 90.1 mm during the week however cloudiness in the morning/evening as 5.3/3.0 Oktas while average relative humidity observed as 78%. Mean day time temperature recorded as 34.2°C & for the present season 172.3 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 5.0/1.4 Knots.

Zhob

No rainfall reported during the week however cloudiness in the morning/evening as 1.5/1.9 Oktas while average relative humidity observed as 37%. Mean day temperature recorded as 37.2°C & for the present season 181.1 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 5.0/9.9 Knots.

D.I. Khan

Rainfall reported as 2.0 mm during the week however cloudiness in the morning/evening as 3.7/5.4 Oktas while average relative humidity observed as 68%. Mean day temperature 36.5 °C & for the present season 183.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/2.0 Knots.

Peshawar

Rainfall reported as 0.3 mm during the week however cloudiness in the morning/evening as 4.4/2.9 Oktas while average relative humidity observed as 61%. Mean day temperature recorded as 36.8°C & for the present season 199.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.6/2.3 Knots.

Murree

Rainfall reported as 53.0 mm during the week however cloudiness in the morning/evening as 5.5/5.9 Oktas while average relative humidity observed as 84%. Mean day temperature recorded as 23.8 °C & for the present season 107.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.0/0.7 Knots.

Kalam

Rainfall reported as 9.0 mm during the week however cloudiness in the morning/evening as 1.8/4.1 Oktas while average relative humidity observed as 60%. Mean day temperature recorded as 24.7°C. Wind speed recorded in the morning/evening 3.0/1.7 Knots.

Gilgit

Rainfall reported as 0.1 mm during the week, however cloudiness in the morning/evening as 2.3/6.0 Oktas while average relative humidity observed as 45%. Mean day temperature recorded as 34.6°C & for the present season 150.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening 2.3/6.4 Knots.

Skardu

Rainfall reported as 0.1 mm during the week however cloudiness in the morning/evening as 3.7/3.7 Oktas while average relative humidity observed as 33%. Mean day temperature recorded as 31.3 °C & for the present season 128.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/4.0 Knots.

Crop Situation for major agricultural plains (based on data from Regional Agromet Centres)

Potohar Region (Rawalpindi)

There is presently no crop in the fields.

Central Punjab (Faisalabad)

There are two crops (irrigated conditions) grown in the fields as detailed below.

Sugarcane: Very Good condition, *Tillering* completed.

Cotton: Very Good condition at *flowering* completed.

Lower Sindh (Tandojam)

There is only one crop (irrigated condition) grown in the fields as detailed below.

Cotton(BT-3701): Good condition at *boll formation* stage.

Northern Balochistan (Quetta)

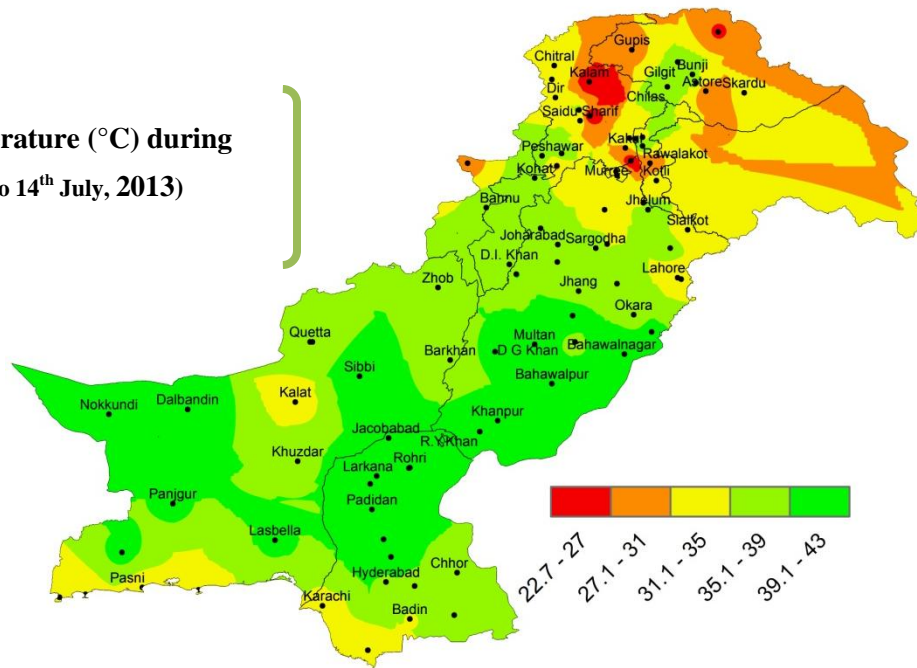
There is presently no crop in the fields.

Eastern Balochistan (Usta Muhammad)

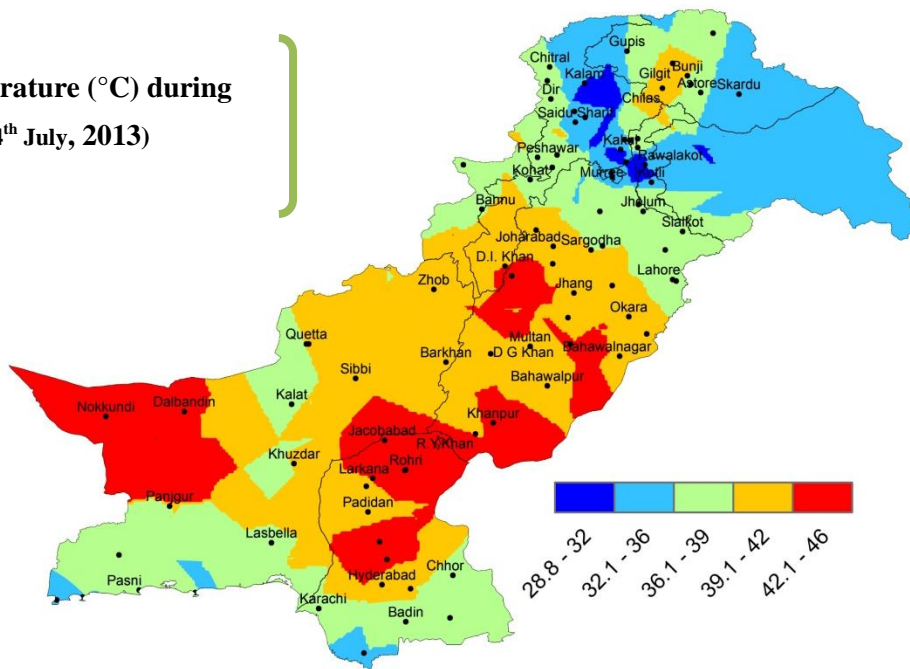
There is only one crop (irrigated condition) grown in the fields as detailed below.

Rice : Good condition ,*Third Leaf* completed.

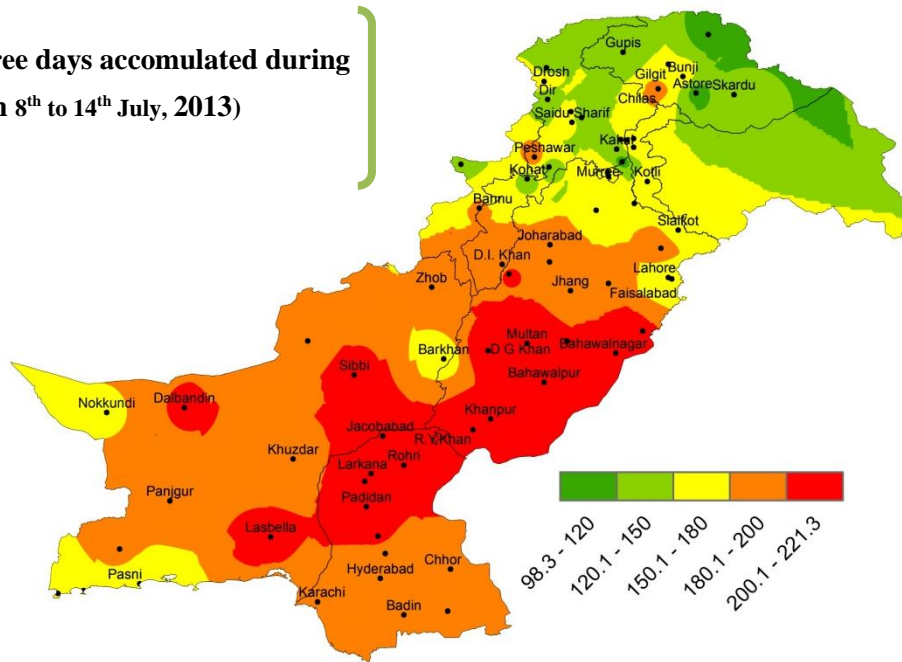
Mean maximum temperature (°C) during the last week (from 8th to 14th July, 2013)



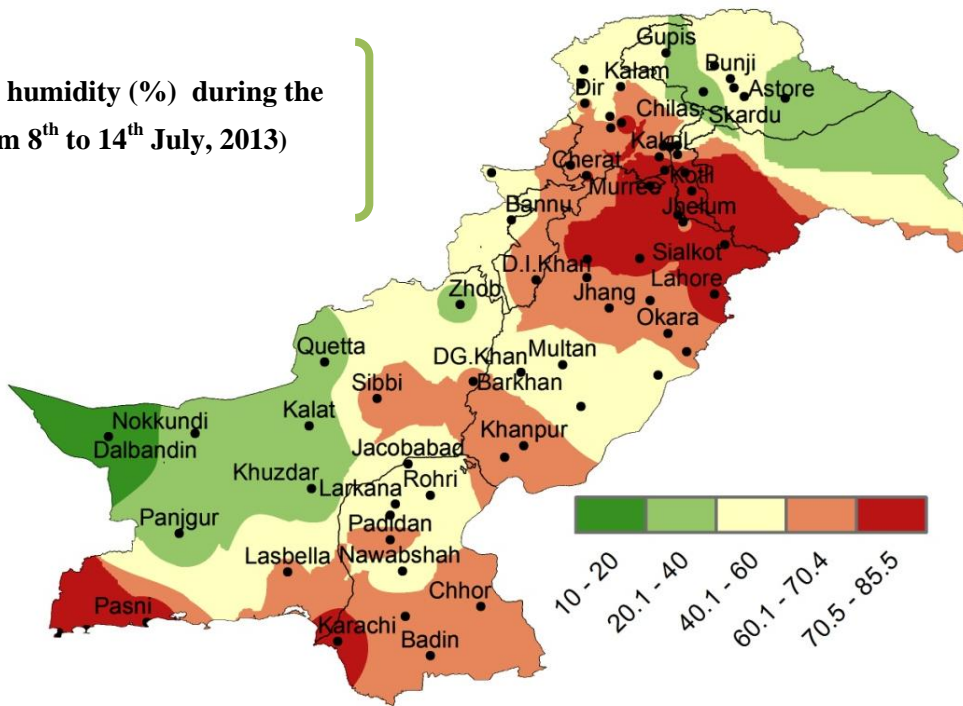
Extreme maximum temperature (°C) during the last week (from 8th to 14th July, 2013)



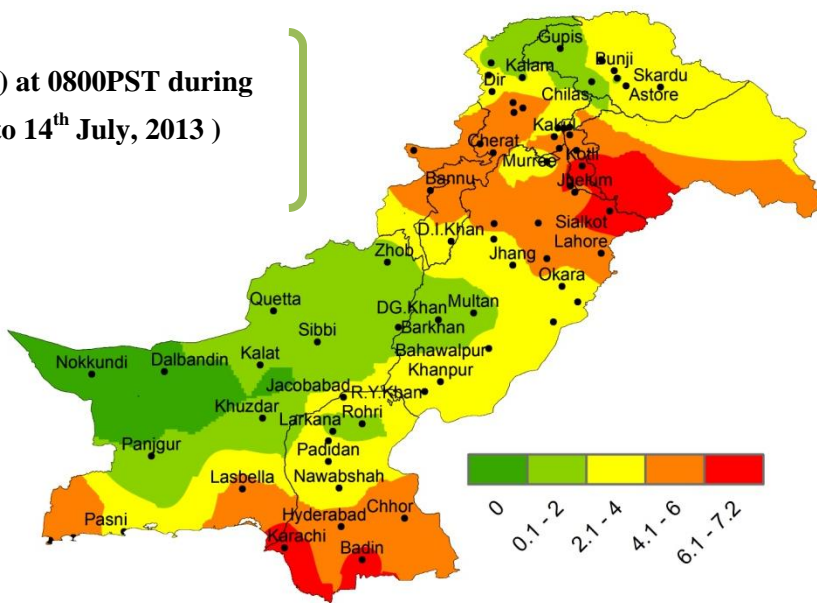
Total growing degree days accumulated during the last week (from 8th to 14th July, 2013)



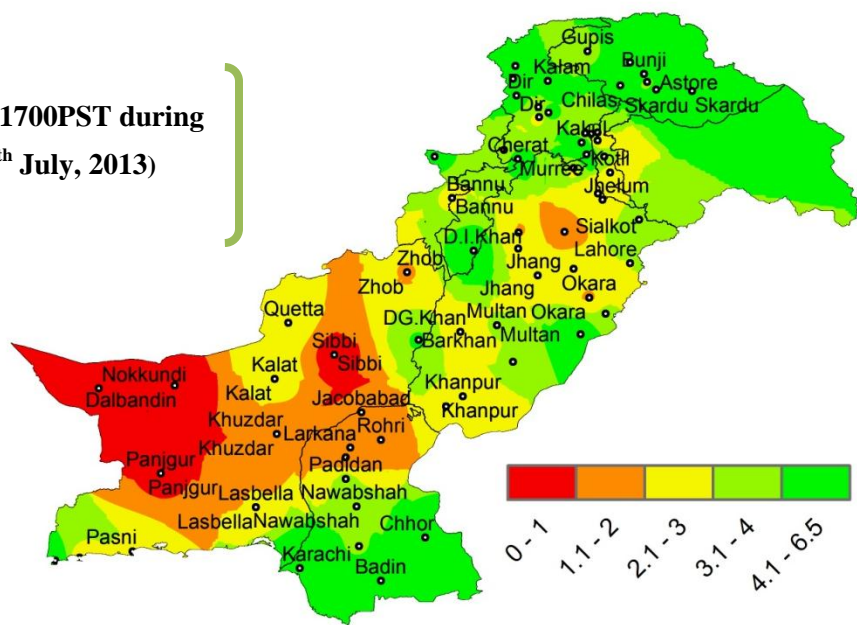
Mean relative humidity (%) during the last week (from 8th to 14th July, 2013)



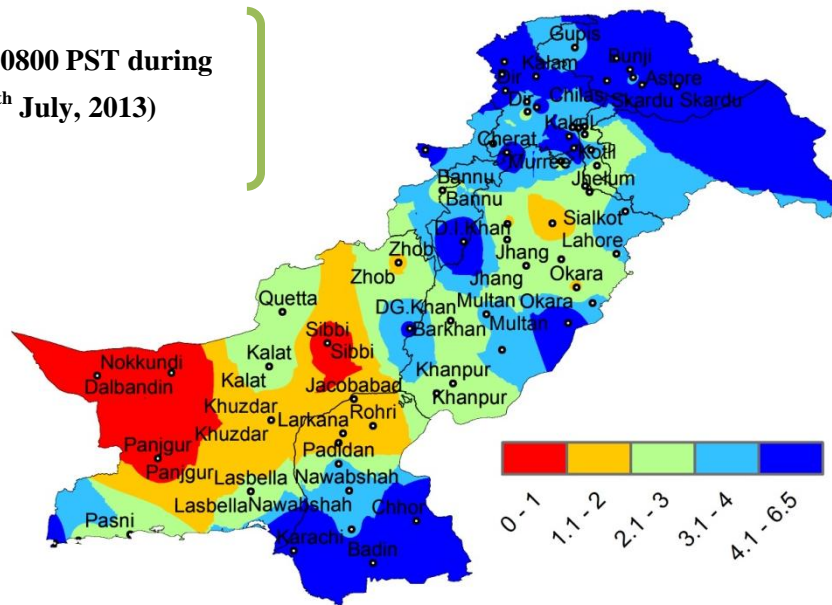
Mean Cloudiness (Oktas) at 0800PST during the last week (from 8th to 14th July, 2013)



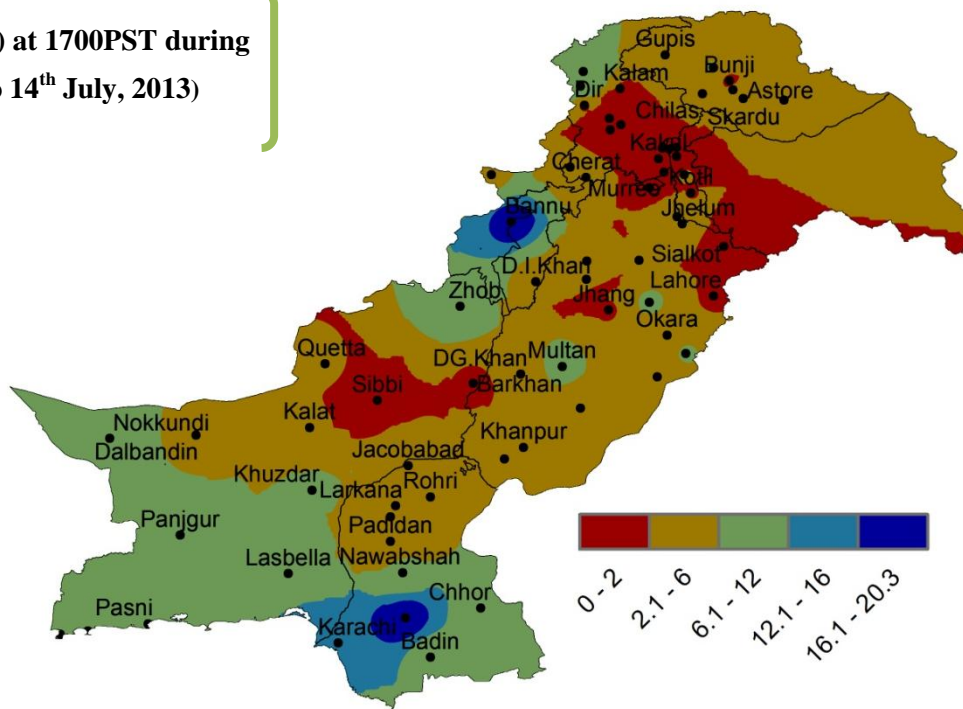
Mean Cloudiness (Oktas) at 1700PST during the last week (from 8th to 14th July, 2013)



Mean wind speed (Knots) at 0800 PST during the last week (from 8th to 14th July, 2013)



Mean wind speed (Knots) at 1700 PST during the last week (from 8th to 14th July, 2013)



Weekly Weather advisory for Farmers (from 15th to 21st July, 2013)

A well marked seasonal low lies over northwest Balochistan and adjoining areas. Monsoonal currents from the Arabian Sea are reaching most parts of the country and likely to continue during the week. A shallow westerly wave is affecting upper parts of the country. A fresh western disturbance is also expected to approach upper parts of the country on Saturday/Sunday.

Punjab including Islamabad:

Scattered rain-thundershower associated with gusty winds is expected in upper Punjab including Islamabad during the current week. Isolated heavy to very heavy falls are also expected in upper Punjab during the weekend. Day temperatures are likely to remain below normal during the current week.

Khyber Pakhtunkhwa:

Rain-thundershower associated with gusty winds is expected at scattered places of upper KP during the current week. Isolated heavy falls are also expected in upper KP during the weekend. Isolated Rain-thundershower is expected in central/Southeastern parts of the province during the second half of the week. Day temperatures are likely to remain below normal during the week.

Balochistan:

Mainly Hot & Humid weather is expected in most parts of the province during the week. However, rain-thundershower associated with gusty winds is expected at isolated places of eastern Balochistan on Tuesday/Wednesday.

Sindh:

Mainly Hot & Humid weather is expected in most part of the province during the week. However, rain-thundershower is likely at isolated places of southeast Sindh on Monday/Tuesday and on the weekend.

Kashmir:

Rain-thundershower associated with gusty winds is expected at scattered places of Kashmir during the current week. Isolated heavy to very heavy falls are also expected during the weekend. Day temperatures are likely to remain below normal during the week.

Gilgit-Baltistan:

Mainly Dry/partly cloudy weather is expected to prevail over most parts of GB during first half of the week, However rain-thunderstorm is likely at isolated places of GB during the second half of the week.

Advises for Crops:

Sugarcane & Rice: Farmers are advised to manage irrigation practices as per weather prediction during the week.

General Information Farmers of rainfed areas, obtaining crop water through tube wells are advised to schedule the irrigation according to the expected weather mentioned above during the week. It is advised to ensure field sanitation and spray prophylactic fungicidal sprays to prevent spread of diseases on vegetables. Farmers should also free the crops from excess of weeds after recent rains especially in upper half of the country.

**National Weather Data of Selected Cities
(Weekly Data from 8th to 14th July, 2013)**

| Stations | Maximum/Day Temperature (°C) | | Growing Deg. Days | Relative Humidity (%) | Rainfall (mm) | Cloudiness Oktas 0800PST | Cloudiness Oktas 1700PST | Wind Speed (Knots) 0800PST | Wind Speed (Knots) 1700PST |
|--------------|------------------------------|---------|-------------------|-----------------------|---------------|--------------------------|--------------------------|----------------------------|----------------------------|
| | Mean | Highest | | | | | | | |
| Astore | 26.7 | 31.0 | 107.6 | 45 | 2.0 | 3.0 | 5.0 | 1.3 | 4.0 |
| Badin | 34.9 | 36.0 | 180.5 | 63 | 8.0 | 6.3 | 6.0 | 5.3 | 7.7 |
| Bahawalnagar | 40.6 | 42.5 | 217.6 | 54 | 0.0 | 4.0 | 5.4 | 2.7 | 2.0 |
| Bahawalpur | 40.5 | 41.6 | 216.4 | 55 | 25.0 | 2.7 | 3.1 | 3.3 | 2.6 |
| Balakot | 31.8 | 33.0 | 149.1 | 65 | 64.1 | 2.3 | 2.9 | 0.7 | 1.6 |
| Bannu | 37.2 | 41.0 | 182.7 | 58 | 2.1 | 4.7 | 2.7 | 0.3 | 19.9 |
| Barkhan | 36.0 | 37.5 | 169.5 | 61 | 28.0 | 1.0 | 4.1 | 0.0 | 1.1 |
| Bunji | 35.4 | 39.4 | 166.6 | 50 | 0.1 | 3.2 | 6.6 | 2.3 | 1.1 |
| Cherat | 30.4 | 33.0 | 138.9 | 71 | 0.0 | 4.0 | 4.7 | 2.7 | 3.1 |
| Chhor | 36.2 | 37.2 | 186.7 | 70 | 11.0 | 5.0 | 5.0 | 4.8 | 9.0 |
| Chilas | 37.8 | 42.2 | 187.2 | 25 | 0.3 | 1.3 | 4.9 | 3.3 | 4.0 |
| Chitral | 34.3 | 39.0 | 145.9 | 54 | 0.0 | 1.7 | 4.1 | 0.3 | 12.0 |
| DG.Khan | 40.0 | 42.5 | 215.7 | 59 | 0.0 | 0.5 | 2.1 | 1.7 | 3.4 |
| D.I.Khan | 36.8 | 41.0 | 183.2 | 68 | 2.0 | 3.7 | 5.4 | 2.3 | 2.0 |
| Dalbandin | 42.9 | 46.0 | 202.2 | 24 | 0.0 | 0.0 | 0.0 | 2.3 | 3.4 |
| Dir | 31.4 | 35.0 | 138.1 | 63 | 6.1 | 3.7 | 4.9 | 0.0 | 1.4 |
| Drosh | 34.1 | 38.5 | 161.4 | 44 | 17.3 | 2.3 | 4.3 | 0.0 | 12.4 |
| Faisalabad | 37.0 | 40.8 | 192.4 | 62 | 3.0 | 4.7 | 2.4 | 5.3 | 6.9 |
| Garidopatta | 37.9 | 39.5 | 173.9 | 63 | 21.0 | 5.0 | 2.3 | 0.0 | 0.0 |
| Gawader | 33.2 | 34.0 | 170.9 | 71 | 0.0 | 5.4 | 2.4 | 0.8 | 11.4 |
| Gilgit | 35.3 | 40.0 | 150.0 | 45 | 0.1 | 2.3 | 6.0 | 2.3 | 6.4 |

| | | | | | | | | | |
|---------------|------|------|-------|----|-------|-----|-----|------|------|
| Gupis | 29.0 | 34.0 | 120.4 | 40 | 4.0 | 1.5 | 3.6 | 1.3 | 4.3 |
| Hyderabad | 38.4 | 40.0 | 195.5 | 64 | 0.1 | 4.6 | 3.9 | 14.6 | 20.3 |
| Islamabad | 34.3 | 36.5 | 171.0 | 70 | 92.0 | 3.0 | 2.7 | 16.7 | 1.4 |
| Jacobabad | 41.0 | 43.0 | 216.9 | 55 | 0.0 | 2.2 | 1.1 | 2.8 | 4.6 |
| Jhang | 37.5 | 40.5 | 191.5 | 65 | 54.0 | 3.7 | 2.6 | 0.7 | 1.7 |
| Jhelum | 35.9 | 38.0 | *** | 69 | 79.8 | 5.3 | 2.6 | 3.3 | 2.3 |
| JIWANI | 32.1 | 32.5 | 171.1 | 73 | 0.0 | 6.0 | 5.3 | 2.8 | 8.3 |
| Joharabad | 35.8 | 39.5 | 185.0 | 74 | 24.0 | 4.8 | 1.9 | 4.7 | 2.3 |
| Kakul | 30.6 | 33.0 | 131.6 | 70 | 29.3 | 4.3 | 5.0 | 0.0 | 0.9 |
| Kalam | 24.6 | 28.0 | *** | 60 | 9.0 | 1.8 | 4.1 | 30.0 | 1.7 |
| Kalat | 33.2 | 35.0 | *** | 28 | 0.0 | 0.0 | 2.7 | 0.0 | 2.3 |
| Karachi | 34.3 | 35.5 | 183.3 | 75 | 0.5 | 6.7 | 6.0 | 7.7 | 14.3 |
| Khanpur | 39.5 | 41.0 | 210.8 | 65 | 0.0 | 3.3 | 2.7 | 3.7 | 3.1 |
| Khuzdar | 38.1 | 40.0 | 187.3 | 29 | 0.0 | 0.0 | 1.1 | 2.4 | 6.9 |
| Kotli | 34.1 | 35.0 | 163.7 | 75 | 90.2 | 7.2 | 2.6 | 1.2 | 1.9 |
| Lahore | 34.4 | 38.1 | 172.3 | 78 | 40.1 | 5.3 | 3.0 | 5.0 | 1.4 |
| Larkana | 41.2 | 42.5 | 209.5 | 58 | 0.0 | 1.7 | 1.3 | 4.3 | 6.0 |
| Lasbella | 39.6 | 40.5 | 203.9 | 61 | 4.0 | 4.2 | 2.0 | 0.0 | 10.3 |
| Lower Dir | 36.4 | 39.5 | 155.7 | 52 | 23.0 | 4.7 | 3.7 | 2.0 | 2.0 |
| Malam Jabba | 22.5 | 25.5 | 133.3 | 76 | 70.0 | 4.8 | 4.6 | 0.0 | 0.0 |
| M.B Din | 34.9 | 38.0 | *** | 75 | 146.0 | 6.0 | 1.6 | 2.3 | 2.0 |
| Mangla | 34.7 | 37.5 | 175.7 | 74 | 98.0 | 6.3 | 2.4 | 4.7 | 4.0 |
| Mir Khani | 36.5 | 38.5 | *** | 41 | 11.0 | 1.5 | 2.9 | 0.0 | 2.7 |
| Moinjodaro | 41.1 | 42.3 | 211.5 | 58 | 0.0 | 2.4 | 1.0 | 3.2 | 2.6 |
| Multan | 39.5 | 41.5 | 214.3 | 54 | 0.0 | 1.3 | 3.1 | 7.1 | 7.7 |

| | | | | | | | | | |
|--------------|------|------|-------|----|------|-----|-----|------|------|
| Murree | 23.8 | 24.7 | 107.6 | 84 | 60.0 | 5.5 | 5.9 | 1.0 | 0.7 |
| Muzaffarabad | 35.8 | 37.3 | 165.2 | 62 | 23.0 | 5.2 | 4.3 | 0.0 | 2.7 |
| Nokkundi | 42.9 | 46.0 | 176.5 | 10 | 0.0 | 0.0 | 0.0 | 22.7 | 10.3 |
| Noorpurthal | 38.7 | 43.0 | 199.1 | 65 | 48.0 | 3.2 | 2.9 | 2.0 | 2.0 |
| Okara | 38.3 | 41.5 | *** | 61 | 1.0 | 3.2 | 1.9 | 3.3 | 2.9 |
| Padidan | 39.1 | 41.0 | 204.6 | 63 | 14.1 | 3.5 | 3.4 | 1.7 | 2.6 |
| Panjgur | 39.3 | 40.5 | 197.4 | 29 | 0.0 | 0.0 | 0.6 | 3.6 | 10.3 |
| Parachinar | 29.2 | 34.2 | 139.9 | 54 | 82.0 | 4.2 | 4.6 | 2.8 | 3.6 |
| Pasni | 33.0 | 33.5 | 149.8 | 76 | 0.0 | 2.8 | 2.9 | 1.2 | 8.0 |
| Pattan | 33.9 | 38.0 | 162.1 | 56 | 0.0 | 3.0 | 2.9 | 0.4 | 0.6 |
| Peshawar | 36.9 | 39.5 | 184.6 | 61 | 0.3 | 4.4 | 2.9 | 1.6 | 2.3 |
| Quetta | 37.2 | 39.0 | *** | 35 | 0.0 | 1.0 | 3.0 | 0.5 | 2.3 |
| R.Y.Khan | 41.8 | 44.2 | 221.3 | 65 | 0.0 | 3.5 | 2.9 | 5.7 | 5.1 |
| Rawalakot | 27.2 | 29.0 | *** | 86 | 21.6 | 5.0 | 3.4 | 0.0 | 2.3 |
| Rohri | 41.1 | 42.0 | 213.4 | 53 | 0.0 | 2.0 | 1.7 | 4.0 | 3.4 |
| Sahiwal | 39.3 | 40.8 | 201.8 | 61 | 2.1 | 3.3 | 3.1 | 2.3 | 6.6 |
| Saidu Sharif | 33.0 | 36.0 | 155.4 | 68 | 34.6 | 4.5 | 2.4 | 0.0 | 0.3 |
| Sialkot | 34.2 | 36.4 | 170.7 | 77 | 61.8 | 7.0 | 3.6 | 1.3 | 0.6 |
| Sibbi | 42.4 | 44.0 | 208.0 | 68 | 20.0 | 0.0 | 0.4 | 0.0 | 0.3 |
| Skardu | 31.5 | 34.6 | 131.1 | 34 | 0.0 | 2.8 | 5.1 | 1.3 | 2.9 |
| Zhob | 41.9 | 42.5 | 181.1 | 37 | 0.0 | 1.5 | 1.9 | 5.0 | 9.9 |

*** Data not available