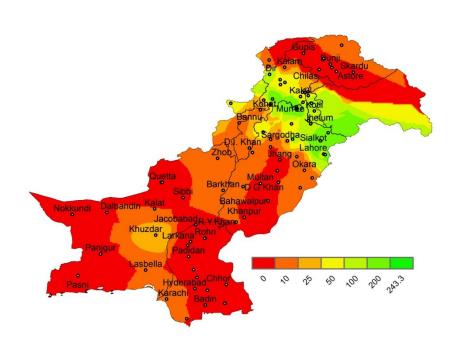
Weekly Weather and Crop Bulletin for Pakistan

NATIONAL AGROMET CENTRE PAKISTAN METEOROLOGICAL **DEPARTMENT SECTOR H-8/2, ISLAMABAD**

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Rainfall distribution (mm) during the last week (from 15^{th} to 21^{st} July, 2013)



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

Highlights of Past Weather (from 15th to 21st July,2013)

Light to Moderate rainfall with isolated heavy spells reporterd from most of places in the Punjab, Khyber Pakhtunkhwa Provinces and Gilgit Baltistan Region. However, light rainfall reported only from a few places place in the Balochistan and Sindh Provinces.

Punjab

Light to moderate rainfall with isolated heavy spells reporterd from most of places in the Punjab province during the week. Weekly maximum temperature and minimum temperature recorded as 36.8 °C & 27.0°C respectively. For the present season on average 188.8 growing degree days accumulated by the end of last week. Average relative humidity recorded as 71 % and wind speed in the morning/evenening recorded as 4.0/4.7 Knots. During the previus week highest amount of rainfall reported at Islamabad (Saidpur) as 288.0 mm and exteme maximum temperature recorded as 43.3 °C at the Bhakkar.

Sindh

Light rainfall reported only from a single place "Karachi" as 3.4 mm from the Sindh province during the week. Weekly maximum temperature and minimum temperature recorded as 38.3 °C & 27.5°C respectively. For the present season on average 193.8 growing degree days accumulated by the end of last week. Average relative humidity recorded as 63% and wind speed in the morning/evenening recorded as 4.8/6.1 Knots. During the previous week exteme maximum temperature recorded as 44.1°C at Dadu.

Khyber Pakhtunkhwa

Light to moderate rainfall with isolated heavy spells reporterd from most of places in the Khyber Pakhtunkhwa Province during the week. Weekly maximum temperature and minimum temperature recorded as 33.6°C & 22.4°C respectively. For the present season on average 167.0 growing degree days accumulated by the end of last week. Average relative humidity recorded as 63 % and wind speed in the morning/evenening recorded as 0.8/3.8 Knots. During the previous week the highest rainfall recorded at Risalpur as 178.1 mm

and exteme maximum temperature recorded as 42.0 °C at D.I Khan.

Balochistan

Light rainfall reported only from a few places from the Balochistan province during the week. Weekly maximum temperature and minimum temperature recorded as 38.3°C & 25.0 °C respectively. For the present season on average 198.2 growing degree days accumulated by the end of last week. Average relative humidity recorded as 46% and wind speed in the morning/evenening recorded as 2.0/6.7 Knots. During the previous week highest amount of rainfall reported at Khuzadar as 10.0 mm Extreme maximum temperature recorded as 47.0 °C at Dalbandin.

Gilgit Baltistan and Azad Jammu & Kashmir

Light to moderate rainfall reported from a few places in the Gilgit Baltistan & Kashmir regions during the week. Weekly maximum temperature and minimum temperature recorded as 35.0°C & 21.8°C respectively. For the present season on average 163.7 growing degree days accumulated by the end of last week. Average relative humidity recorded as 51 % and wind speed in the morning/evenening recorded as 1.0/1.8 Knots. During the previus week the highest rainfall recorded at Rawalakot as 120.0 mm and exteme maximum temperature recorded as 43.0°C at Gilgit.

Past Weather for Major Agricultural Plains (from 15th to 21st July, 2013)

Rawalpindi (Potohar region)

Rainfall reported as 37.6 mm during the week however cloudiness in the morning/evening 6.0/4.6 Oktas while average relative humidity observed as 78 %. Mean day time temperature recorded as 34.6 °C & for the present season 160.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.5/3.0 Km/h.

Faisalabad (Central Punjab)

Rainfall reported as 10.2 mm during the week however cloudiness in the morning/evening as 2.9/3.0 Oktas while average relative humidity observed as 59%. Mean day time temperature recorded as 38.4 °C & for the present season 201.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.6/2.7 Km/h.

Tandojam (Lower Sindh)

No rainfall reported during the week, however cloudiness in the morning/evening as 3.2/1.1 Oktas while average relative humidity observed as 65%. Mean day time temperature recorded as 35.7 °C & for the present season 183.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 6.6/7.4 Km/h.

Quetta (Northern Balochistan)

No rainfall reported during the week however cloudiness in the morning/evening as 3.1/6.6 Oktas while average relative humidity observed as 38%. Mean day time temperature observed as 38.0°C & for the present season 171.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.3/2.4 Km/h.

Usta Muhammad (Eastern Balochistan)

No rainfall reported during the week, however cloudiness in the morning/evening as 2.1/2.6 Oktas while average relative humidity observed as 54%.

Mean day time temperature recorded as 41.3°C & for the present season 215.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/0.2 Km/h.

Past Weather for sub regional Agri-cultural Plains (from 15th to 21st July, 2013)

Rohri

No rainfall reported during the week, however cloudiness in the morning/evening as 2.1/0.3 Oktas while average relative humidity observed as 55 %. Mean day temperature recorded as 40.8°C C & for the present season 205.3 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 3.4/4.0 Knots.

Multan

No rainfall reported during the week, however cloudiness in the morning/evening as 1.7/1.4 Oktas while average relative humidity observed as 57%. Mean day time temperature recorded as 39.8°C & for the present season 211.4 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 11.1/8.0 Knots

Lahore

Rainfall reported as 151.0 mm during the week however, cloudiness in the morning/evening as 4.3/4.7 Oktas while average relative humidity observed as 80%. Mean day time temperature recorded as 33.9°C & for the present season 171.2 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 2.6/4.4 Knots.

Zhob

Rainfall reported as 2.0 mm during the week however, cloudiness in the morning/evening as 0.9/3.3 Oktas while average relative humidity observed as 58%. Mean day temperature recorded as 38.8°C & for the present season 194.6 growing degree days accumulated by the end of last week. Wind recorded in the morning/evening as 4.3/9.6 Knots.

D.I. Khan

Rainfall reported as 0.2 mm during the week however cloudiness in the morning/evening as 3.0/2.1 Oktas while average relative humidity observed as 66%. Mean day temperature 39.8°C & for the present season 202.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.1/1.1 Knots.

Peshawar

Rainfall reported as 16.1 mm during the week however cloudiness in the morning/evening as 5.9/2.6 Oktas while average relative humidity observed as 71%. Mean day temperature recorded as 35.6°C & for the present season 181.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.0/2.3 Knots.

Murree

Rainfall reported as 65.0 mm during the week however cloudiness in the morning/evening as 7.9/6.6 Oktas while average relative humidity observed as 90%. Mean day temperature recorded as 22.5°C & for the present season 98.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/0.6 Knots.

Kalam

No rainfall reported during the week, however cloudiness in the morning/evening as 4.7/4.7 Oktas while average relative humidity observed as 66%. Mean day temperature recorded as 27.5°C & for the present season 131.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.7 Knots.

Gilgit

No rainfall reported during the week, however cloudiness in the morning/evening as 2.9/4.9 Oktas while average relative humidity observed as 52%. Mean day temperature recorded as 39.9°C & for the present season 167.1 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening 0.0/2.3 Knots.

Skardu

No rainfall reported during the week, however cloudiness in the morning/evening as 3.3/4.4 Oktas while average relative humidity observed as 34%. Mean day temperature recorded as 35.1°C & for the present season 147.2 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/1.7 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 stage completed.

Cotton: Very Good condition, Flowering stage Completed.

Lower Sindh (Tandojam)

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

Cotton(BT-3701): Good condition at Boll Opening stage.

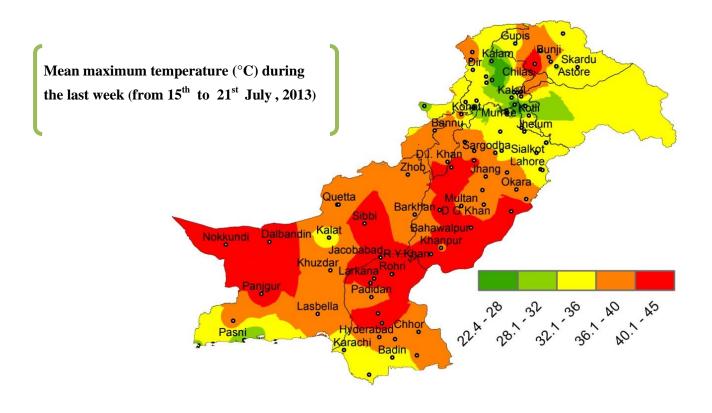
Northern Balochistan (Quetta)

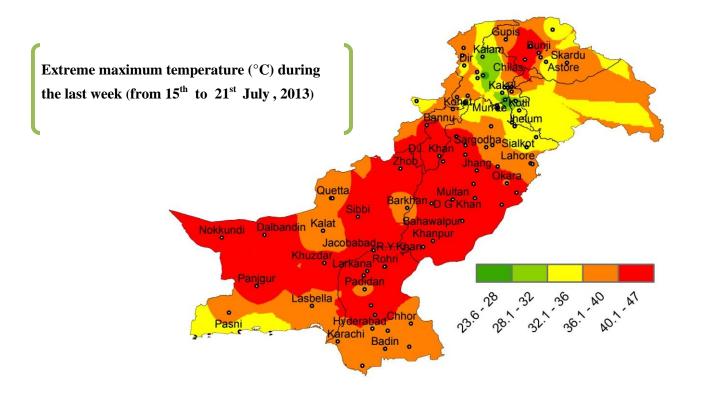
There is presently no crop in the fields.

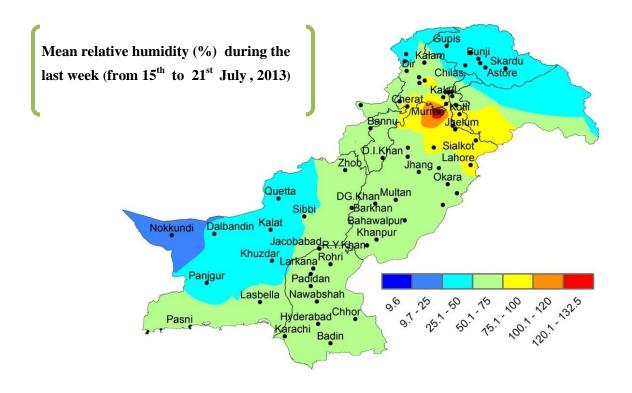
Eastern Balochistan (Usta Muhammad)

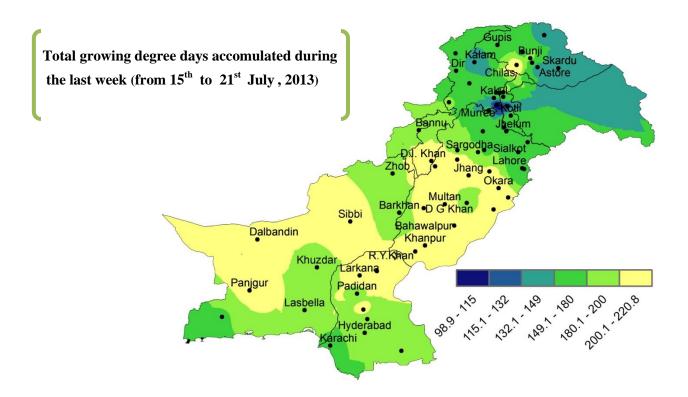
There is only one crop (irrigated conditions) grown in the fields as detailed below.

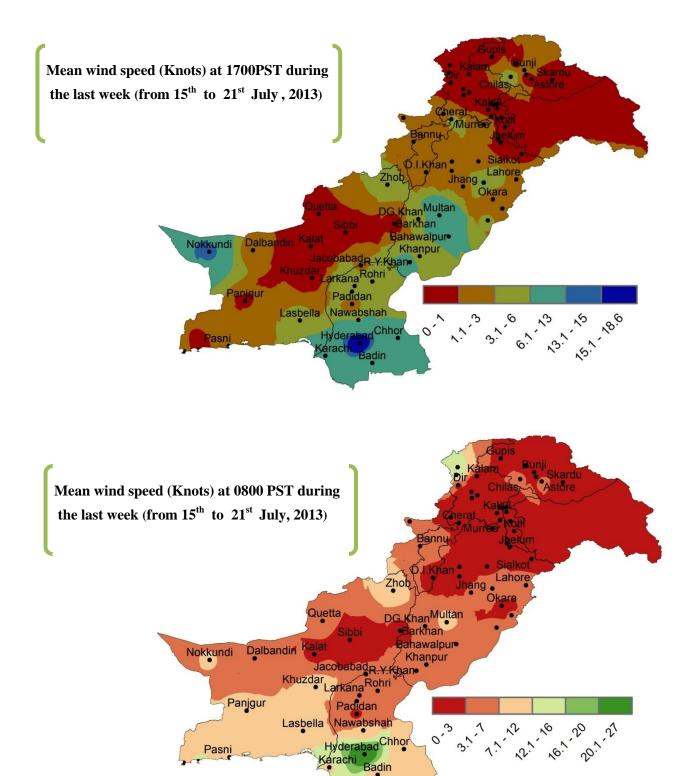
Rice: Good condition at *Flowering* stage.

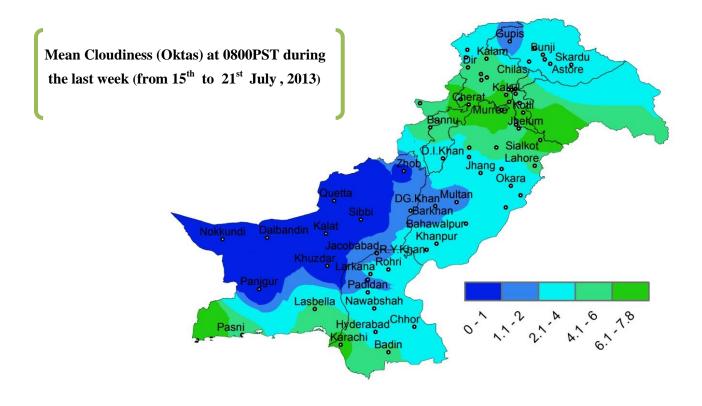


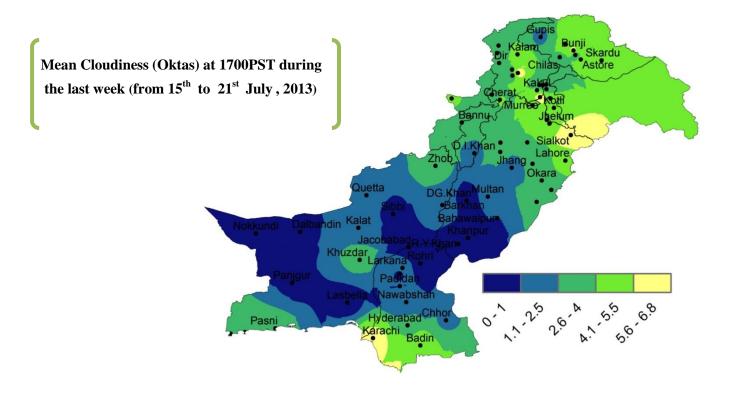












Weekly Weather advisory for Farmers (from 22^{nd} to 28^{th} July, 2013)

Seasonal low lies over northwest Balochistan and adjoining areas. Weak monsoonal currents from the Arabian Sea are reaching upper/central parts of the country and likely to intensify during second half of the week. A low has developed over Northwest Bay of Bengal.

Punjab including Islamabad:

Mainly hot & humid weather with chances of rainthundershower is expected at isolated places of upper Punjab (Islamabad/Rawalpindi, Gujranwala, Lahore and Sargodha divisions) during the first half of the week with occasional gaps.

Rain-thundershower (with isolated moderate to heavy falls) associated with gusty winds is expected at scattered places of upper Punjab including Islamabad during second half of the week with occasional gaps. Day temperatures are likely to remain below normal in upper parts of the province during the current week.

Khyber Pakhtunkhwa:

Mainly hot & humid weather with chances of rain thundershower is expected at isolate places of upper/central KP (Hazza, Malakand, Peshawar & Kohat divisions) during the first half of the week with occasional gaps.

Rain-thundershower (with few moderate to heavy falls) associated with gusty winds is expected at scattered places of upper KP (Malakand, Hazara, Kohat and Peshawar divisions) during second half of the week with occasional gaps. 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-thunderstorm is expected at isolated places of eastern Balochistan (Kalat division) on

Monday/Tuesday and at few places during the mid week.

Sindh:

Mainly Hot & Humid weather is expected in most parts of the province during the week. However, rain-thundershower is likely at isolated places of south/southeastern Sindh during the mid week..

Kashmir:

Rain-thundershower associated with gusty winds is expected at scattered places of Kashmir during the first half of the week.

Widespread rain-thundershower (with isolated heavy falls) associated with gusty winds is expected in Kashmir during second half of the week. Day temperatures are likely to remain below normal during the week.

Gilgit-Baltistan:

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

Advises for Crops:

Sugarcane: 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 execess of weeds after recent rains especially in upper half of the country.

National Weather Data of Selected Cities (Weekly Data from 15th to 21st July, 2013)

| Stations | Maximum/Day Temperature (°C) | | Growing Deg. Days | Relative Humidity (%) | Rainfall (mm) | Cloudiness Oktas (0800PST) | Cloudiness Oktas (1700PST) | Wind Speed (Knots), | Wind Speed (Knots), |
|--------------|------------------------------------|---------|-------------------------|-----------------------------|------------------|----------------------------------|----------------------------------|---------------------------|---------------------------|
| | Mean | Heighst | | | | | | 0800PST | 1700PST |
| Astore | 30.9 | 32.5 | 132.4 | 41 | 0.0 | 2.6 | 4.4 | 0.9 | 3.7 |
| Badin | 35.0 | 36.0 | **** | 66 | 0.0 | 4.4 | 5.3 | 6.0 | 6.9 |
| Bahawalnagar | 41.3 | 42.5 | 216.9 | 52 | 5.0 | 2.9 | 3.7 | 3.4 | 3.4 |
| Bahawalpur | 40.7 | 41.5 | 215.4 | 53 | 0.0 | 2.9 | 1.0 | 6.0 | 4.0 |
| Balakot | 31.4 | 33.4 | 153.0 | 73 | 18.2 | 5.7 | 2.9 | 0.0 | 1.3 |
| Bannu | 37.8 | 41.0 | 192.7 | 59 | 0.0 | 4.9 | 3.1 | 1.7 | 6.9 |
| Barkhan | 37.2 | 39.0 | 179.5 | 51 | 6.0 | 1.4 | 2.3 | 0.0 | 1.7 |
| Bunji | 38.6 | 41.7 | 197.4 | 40 | 0.0 | 3.4 | 6.1 | 3.4 | 1.1 |
| Cherat | 28.2 | 30.5 | *** | 81 | 18.0 | 7.4 | 4.3 | 3.4 | 2.9 |
| Chhor | 37.1 | 38.0 | *** | 69 | 0.0 | 2.4 | 2.2 | 6.3 | 8.3 |
| Chilas | 41.8 | 44.0 | 215.7 | 26 | 0.0 | 3.0 | 3.4 | 4.6 | 3.7 |
| Chitral | 37.0 | 38.5 | 171.7 | 45 | 0.0 | 2.6 | 3.3 | 0.0 | 14.0 |
| DG.Khan | 40.8 | 42.5 | 215.6 | 55 | 0.0 | 1.9 | 0.3 | 4.6 | 5.1 |
| D.I.Khan | 39.3 | 42.0 | 202.3 | 66 | 0.2 | 3.0 | 2.1 | 1.1 | 1.1 |
| Dalbandin | 45.0 | 47.0 | 213.0 | 26 | 0.0 | 0.0 | 0.3 | 1.4 | 3.1 |
| Dir | 32.3 | 35.0 | 155.3 | 71 | 79.0 | 5.1 | 3.7 | 0.0 | 2.0 |
| Drosh | 37.6 | 39.6 | *** | 39 | 0.0 | 3.1 | 2.9 | 0.6 | 14.3 |
| Faisalabad | 38.6 | 40.0 | 203.7 | 60 | 0.0 | 3.1 | 3.0 | 6.3 | 7.0 |
| Garidopatta | 35.6 | 39.4 | 165.7 | 64 | 53.0 | 4.3 | 3.7 | 0.0 | 1.1 |

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|-------------------|------|------|---------|----------|-----------|------------|-----|------|------|
| Gawader | 32.7 | 33.0 | 167.8 | 68 | 0.0 | 7.7 | 3.4 | 0.0 | 12.9 |
| Gilgit | 39.9 | 43.0 | 167.1 | 52 | 0.0 | 2.9 | 4.9 | 0.0 | 2.3 |
| Gupis | 34.9 | 37.5 | 160.9 | 32 | 0.0 | 1.0 | 2.1 | 0.6 | 2.3 |
| Hyderabad | 36.6 | 38.0 | 185.6 | 65 | 0.0 | 2.9 | 3.3 | 18.6 | 27.0 |
| Islamabad | 32.3 | 34.5 | 158.6 | 133 | 288.0 | 7.4 | 4.0 | 3.1 | 1.7 |
| Jacobabad | 40.1 | 42.0 | *** | 59 | 0.0 | 1.6 | 0.1 | 2.6 | 3.4 |
| Jhang | 39.4 | 40.5 | 203.8 | 60 | 0.0 | 2.1 | 1.4 | 2.0 | 3.1 |
| Jhelum | 33.7 | 36.0 | 168.6 | 79 | 72.0 | 5.9 | 5.0 | 0.9 | 2.3 |
| Joharabad | 36.9 | 40.0 | 195.0 | 76 | 0.0 | 4.4 | 3.0 | 2.3 | 2.6 |
| Kakul | 30.5 | 32.3 | 146.8 | 75 | 59.0 | 6.0 | 4.4 | 0.0 | 0.9 |
| Kalam | 27.3 | 29.0 | 131.7 | 66 | 0.0 | 4.7 | 4.7 | 0.0 | 1.7 |
| Kalat | 35.0 | 36.0 | *** | 28 | 0.0 | 1.0 | 2.0 | 0.3 | 2.3 |
| Karachi | 33.8 | 39.0 | 175.7 | 75 | 2.4 | 6.7 | 6.3 | 8.0 | 11.7 |
| Khanpur | 39.8 | 40.7 | 206.7 | 59 | 0.0 | 2.1 | 0.0 | 3.1 | 3.4 |
| Khuzdar | 39.6 | 41.5 | 192.1 | 31 | 20.4 | 0.0 | 3.1 | 0.0 | 9.1 |
| Kotli | 32.4 | 34.4 | 161.1 | 80 | 44.1 | 7.4 | 4.4 | 0.3 | 1.3 |
| Lahore | 34.0 | 38.2 | 171.2 | 80 | 90.0 | 4.3 | 4.7 | 2.6 | 4.4 |
| Larkana | 40.7 | 42.0 | 208.6 | 64 | 0.0 | 3.0 | 2.0 | 5.7 | 6.9 |
| Lasbella | 39.1 | 39.5 | 198.0 | 58 | 0.0 | 4.3 | 0.0 | 0.9 | 10.0 |
| Lower Dir | 35.9 | 38.5 | *** | 67 | 28.0 | 5.5 | 3.6 | 0.7 | 2.3 |
| Malam Jabba | 22.1 | 23.5 | *** | 79 | 52.0 | 4.7 | 6.9 | 0.0 | 0.3 |
| M.B Din | 33.5 | 36.5 | 168.7 | 79 | 79.0 | 5.9 | 3.7 | 1.4 | 1.4 |
| Mangla | 33.3 | 35.3 | 164.8 | 80 | 74.0 | 5.7 | 5.1 | 0.9 | 2.9 |
| Mir Khani | 37.7 | 38.4 | 158.4 | 29 | 0.0 | 1.7 | 2.9 | 0.0 | 2.4 |

0.0

0.6

0.7

5.1

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63

Moinjodaro

40.4

41.0

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|-------------------|------|------|---------|----------|-----------|------------|-----|------|------|
| Multan | 39.8 | 41.0 | 211.4 | 57 | 0.0 | 1.7 | 1.4 | 11.1 | 8.0 |
| Murree | 22.7 | 23.5 | 98.6 | 90 | 33.0 | 7.9 | 6.6 | 0.9 | 0.6 |
| Muzaffarabad | 35.2 | 37.5 | 170.9 | 69 | 31.0 | 6.9 | 4.0 | 0.0 | 0.0 |
| Nokkundi | 43.9 | 46.0 | *** | 10 | 0.0 | 0.0 | 0.0 | 13.7 | 7.1 |
| Noorpurthal | 40.7 | 43.5 | 207.4 | 61 | 0.0 | 2.7 | 3.3 | 2.3 | 2.3 |
| Okara | 39.4 | 39.9 | 204.1 | 66 | 6.0 | 2.0 | 3.1 | 0.9 | 2.0 |
| Padidan | 38.2 | 39.0 | 195.3 | 68 | 0.0 | 2.4 | 1.0 | 1.4 | 2.3 |
| Panjgur | 41.4 | 42.5 | 209.5 | 36 | 0.0 | 0.0 | 0.4 | 0.9 | 8.0 |
| Parachinar | 31.2 | 32.0 | *** | 54 | 50.0 | 4.0 | 4.3 | 3.0 | 3.6 |
| Pasni | 28.3 | 33.0 | *** | 75 | 0.0 | 4.6 | 3.3 | 2.6 | 10.9 |
| Pattan | 37.7 | 39.5 | 191.5 | 50 | 0.0 | 5.1 | 3.1 | 0.3 | 1.4 |
| Peshawar | 36.0 | 38.5 | *** | 71 | 16.1 | 5.9 | 2.6 | 2.0 | 2.3 |
| Quetta | 38.6 | 39.5 | *** | 29 | 0.0 | 0.9 | 1.6 | 0.9 | 5.1 |
| R.Y.Khan | 41.4 | 42.3 | 211.8 | 62 | 0.0 | 3.7 | 0.3 | 8.0 | 6.9 |
| Rawalakot | 27.4 | 29.6 | 123.0 | 70 | 113.0 | 4.6 | 4.6 | 0.0 | 1.4 |
| Rohri | 40.8 | 42.0 | *** | 55 | 0.0 | 2.1 | 0.3 | 3.4 | 4.0 |
| Sahiwal | 40.0 | 41.5 | 203.1 | 62 | 1.1 | 2.9 | 3.3 | 2.0 | 3.1 |
| Saidu Sharif | 33.1 | 35.5 | 162.8 | 72 | 26.3 | 5.1 | 3.0 | 0.0 | 1.1 |
| Sialkot | 32.0 | 35.4 | 163.6 | 82 | 137.1 | 7.0 | 6.4 | 0.6 | 1.7 |
| Sibbi | 42.6 | 43.0 | 216.0 | 51 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 |
| Skardu | 35.0 | 38.0 | 147.2 | 34 | 0.0 | 3.3 | 4.4 | 0.9 | 1.7 |

38.6

40.5

194.6

Zhob

2.0

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58

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9.6

3.3

^{***} Data not available