

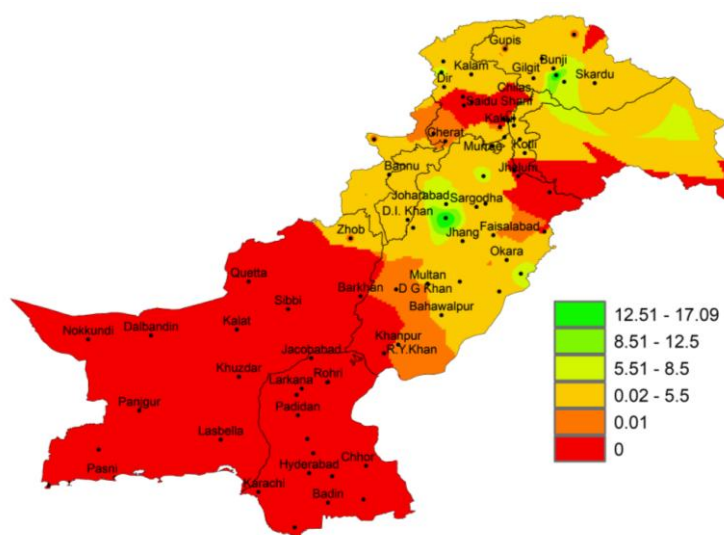
# Weekly Weather and Crop Bulletin for Pakistan

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**Rainfall Distribution (mm) during the Previous  
Week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)**



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## Highlights of Past Weather (1<sup>st</sup> April to 7<sup>th</sup> April, 2019)

Above normal day time temperatures were observed all over the country during the last week.

Province wise distribution of rainfall reported as follows:

- Light to moderate rainfall observed in the upper half of the country.
- While dry weather prevailed over Sindh and Baluchistan.

**Patron-in-Chief: Muhammad Riaz ( Director General)**

**Editor-in-Chief: Dr M. Afzaal Karori (Director)**

**Editor: Saeeda Saleh (Assistant Meteorologist)**

**Past Weather of Provinces (1<sup>st</sup> April to 7<sup>th</sup> April, 2019)****Punjab**

Light to moderate rainfall observed in Punjab during the week. Weekly maximum and minimum temperatures recorded as 35.8°C & 18.1°C respectively. For the recent week on average 153.6 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 42% and wind speed in the morning/evening recorded as 1.4/3.4 Knots. During the previous the highest precipitation was recorded as 16.2 mm at Noorpur Thal while the highest maximum temperature was recorded as 43.2°C at Rahim Yar Khan.

**Baluchistan**

Dry weather observed in Baluchistan during the week. Weekly maximum and minimum temperatures recorded as 35.2°C & 18.7°C respectively. For the recent week on average 151.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 34% and wind speed in the morning/evening recorded as 1.9/3.1 Knots. During the previous week the highest maximum temperature was recorded as 44.0°C at Lasbella.

**Khyber Pakhtunkhwa**

Light to moderate rainfall observed in Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 28.7°C & 10.8°C respectively. For the recent week on average 103.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 65% and wind speed in the morning/evening recorded as 1.4/1.6 Knots. During the previous week the highest precipitation recorded as 17.09 mm at Mirkhani while the highest maximum temperature was recorded as 39.0°C at D I Khan.

**Gilgit-Baltistan and Azad Jammu & Kashmir**

Light to moderate rainfall observed in Gilgit-Baltistan & Kashmir during the week. Weekly maximum and minimum temperatures recorded as 25.1°C & 8.8°C respectively. For the recent week on average 80.0 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 46% and wind speed in the morning/evening recorded as 0.8/1.9 Knots. During the previous week the highest precipitation recorded as 5.2 mm at Astore while the highest maximum temperature was recorded as 33.9°C at Kotli.

**Sindh**

Dry weather observed in Sindh during the week. Weekly maximum and minimum temperatures recorded as 41.7°C & 21.8°C respectively. For the recent week, on average 185.5 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 41% and wind speed in the morning/evening recorded as 1.5/2.3 Knots. During the previous week highest maximum temperature was recorded as 46.5°C at Nawabshah.

### **Past Weather for Major Agricultural Plains (1<sup>st</sup> April to 7<sup>th</sup> April, 2019)**

#### **Rawalpindi (Potohar region)**

0.01 mm rainfall reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.6/0.9 Oktas while, average relative humidity observed as 48%. Mean day time temperature recorded as 33.7°C & for the recent week 131.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.9 Knots.

#### **Faisalabad (Central Punjab)**

0.01mm rainfall reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 1.9/2.6 Oktas while, average relative humidity observed as 50%. Mean day time temperature recorded as 36.0°C & for the recent week 156.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/0.6 Knots.

#### **Tandojam (Lower Sindh)**

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.6 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 42.5°C & for the recent week 184.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/1.2 Knots.

#### **Usta Muhammad (Eastern Baluchistan)**

2.00mm rainfall reported from Usta Muhammad during the week; however, cloudiness in the morning/evening recorded as 0.5/0.5 Oktas while, average relative humidity observed as 56%. Mean day time temperature recorded as 41.4°C & for the recent week 185.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.2/0.5 Knots.

#### **Quetta (Northern Baluchistan)**

0.01mm rainfall reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 2.9/3.7 Oktas while, average relative humidity observed as 22%. Mean day time temperature recorded as 26.6°C & for the recent

week 103.7 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.8/3.6 Knots.

### **Past Weather for Sub-Regional Agricultural Plains (1<sup>st</sup> April to 7<sup>th</sup> April, 2019)**

#### **Multan**

0.01mm rainfall reported from Multan during the week; however, cloudiness in the morning/evening recorded as 4.0/2.6 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 37.3°C & for the recent week 171.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 4.0/4.8 Knots.

#### **Lahore**

0.00 mm rainfall was reported from Lahore during the week; however, however, cloudiness in the morning/evening recorded as 3.1/3.2 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 35.5°C & for the recent week 162.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 2.3/4.7 Knots.

#### **Zhob**

2.00 mm rainfall was reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.0/1.1 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 37.0°C & for the recent week 162.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/1.7 Knots.

#### **Murree**

0.01 mm rainfall was reported from Murree during the week; however, cloudiness in the morning/evening recorded as 0.0/1.3 Oktas while, average relative humidity observed as 41%. Mean day time temperature recorded as 22.9° C & for the recent week 8.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.4/0.6 Knots.

#### **D.I. Khan**

2.00 mm rainfall was reported from D.I. Khan during the week; however, cloudiness in the

morning/evening recorded as 0.0/1.1 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 37.0°C & for the recent week 162.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.9/1.7 Knots.

#### **Peshawar**

16.41 mm rainfall was reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 4.4/6.3 Oktas while, average relative humidity observed as 63%. Mean day time temperature recorded as 11.6°C & for the recent week 72.6 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/1.7 Knots.

#### **Kalam**

17.50mm rainfall was reported from Kalam during the week; however, cloudiness in the morning/evening recorded as 2.6/6.4 Oktas while, average relative humidity observed as 75%. Mean day time temperature recorded as -4.6°C by the end of last week. Calm weather recorded in the morning/evening.

#### **Gilgit**

Dry weather was reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 5.1/7.3 Oktas while, average relative humidity observed as 40%. Mean day time temperature recorded as 6.5°C & for the recent week 56.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.6/4.9 Knots.

#### **Skardu**

Dry weather was reported from Skardu during the week; however, cloudiness in the morning/evening recorded as 4.1/6.1 Oktas while, average relative humidity observed as 47%. Mean day time temperature recorded as 1.4°C & for the recent week 137 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/3.7 Knots.

### **Crop Situation for Major Agricultural Plains** **(Based on data from Regional Agro met Centers)**

#### **Potohar Region (Rawalpindi)**

There is presently no crop grown in the fields of RAMC Rawalpindi.

#### **Central Punjab (Faisalabad)**

Presently wheat crop is grown in the fields of RAMC Faisalabad.

**Wheat: *Very Good, Wax maturity stage.***

#### **Lower Sindh (Tandojam)**

There is presently no crop grown in the fields of RAMC Tandojam.

#### **Northern Baluchistan (Quetta)**

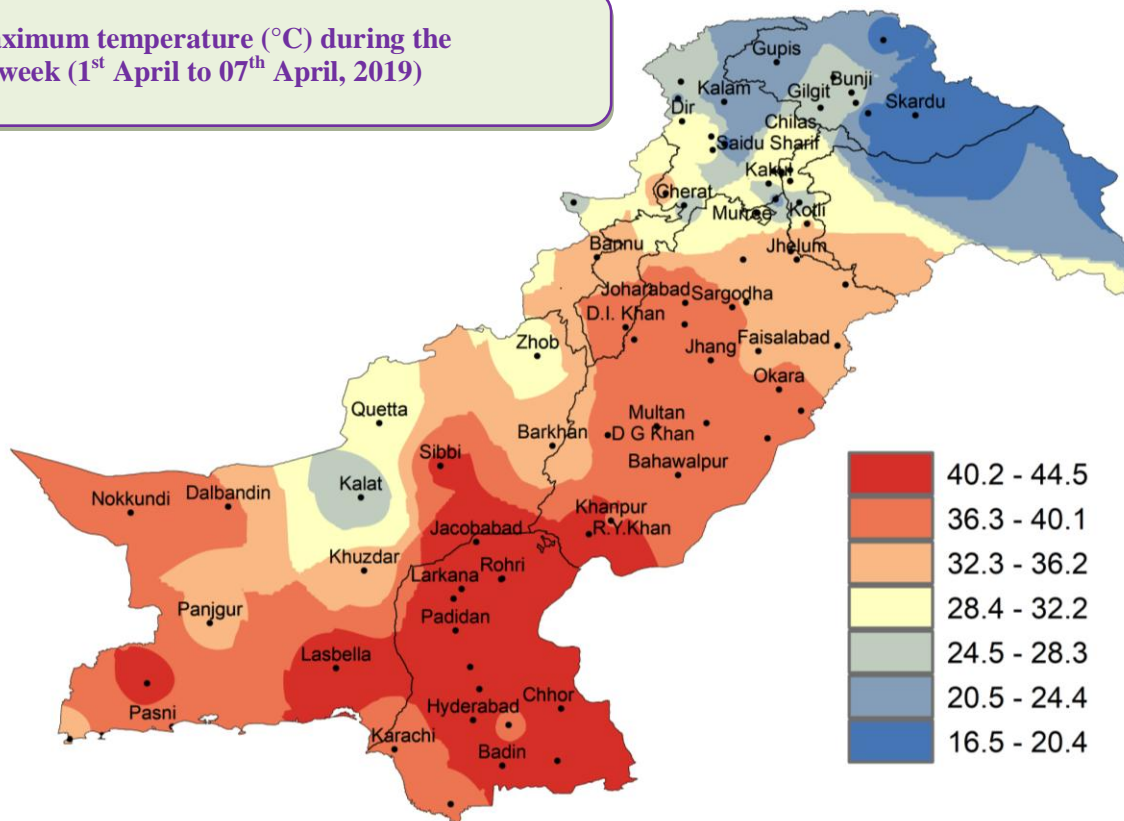
There is presently no crop grown in the fields of RAMC Quetta.

#### **Eastern Baluchistan (Usta Muhammad)**

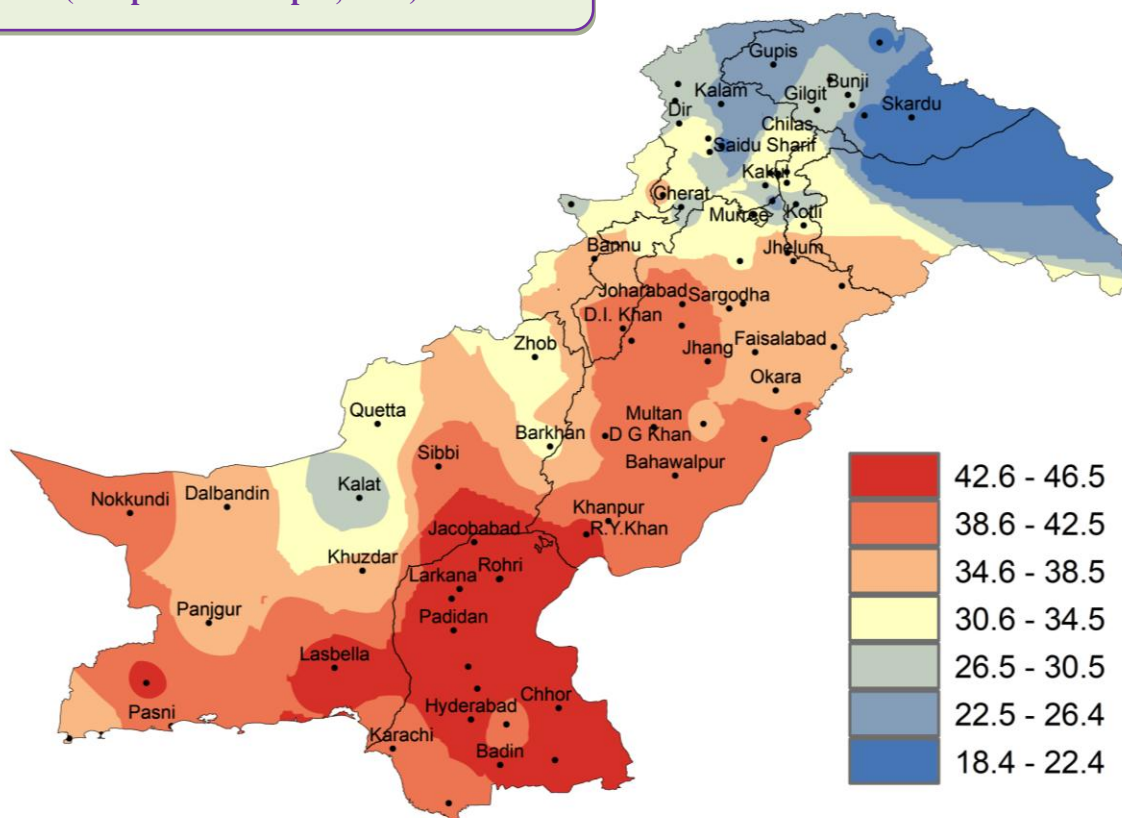
Presently wheat crop is sown in the fields of RAMC Usta Muhammad.

**Wheat: *Good, flowering stage.***

Mean Maximum temperature (°C) during the Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)

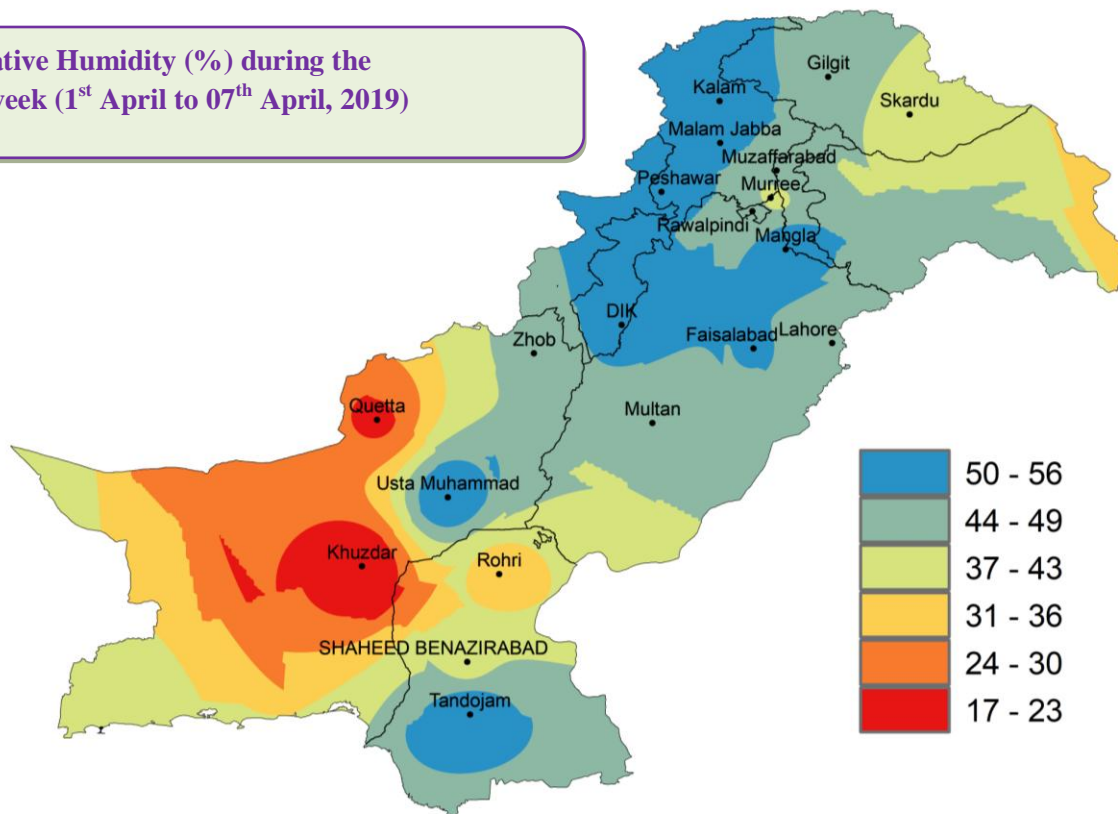


Highest Maximum Temperature (°C) during the Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)

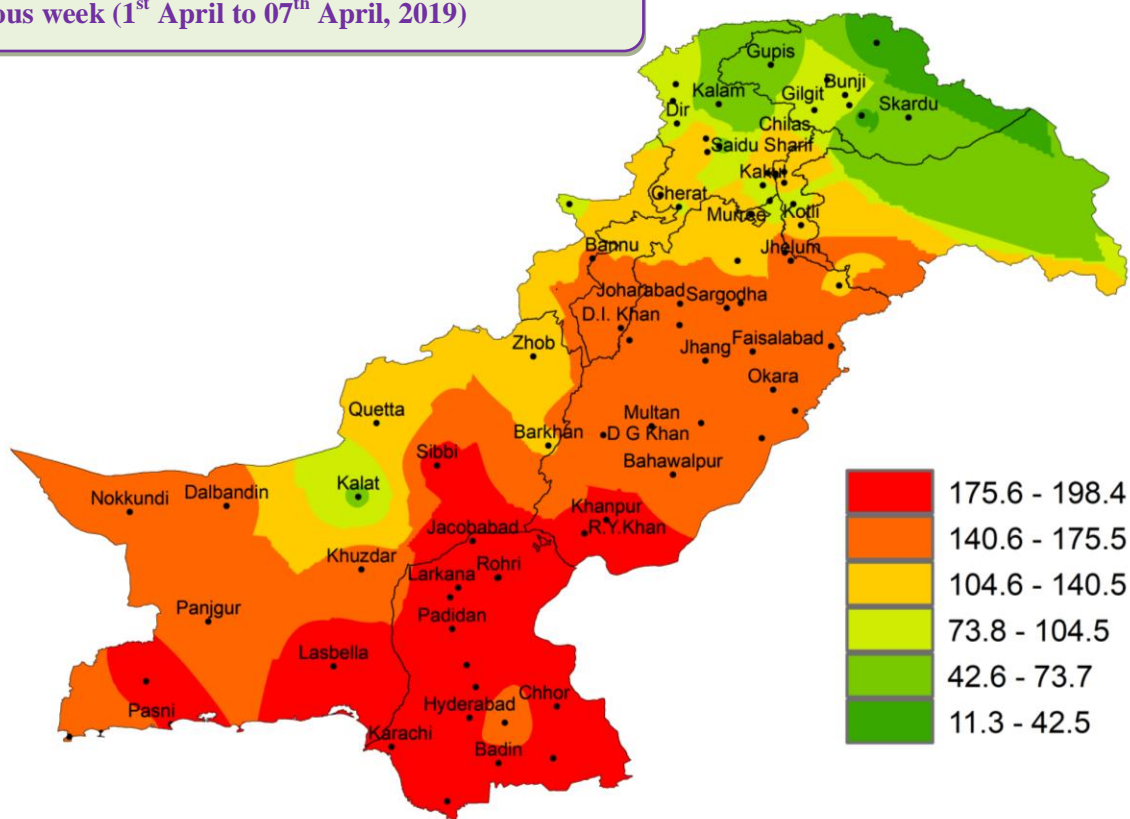




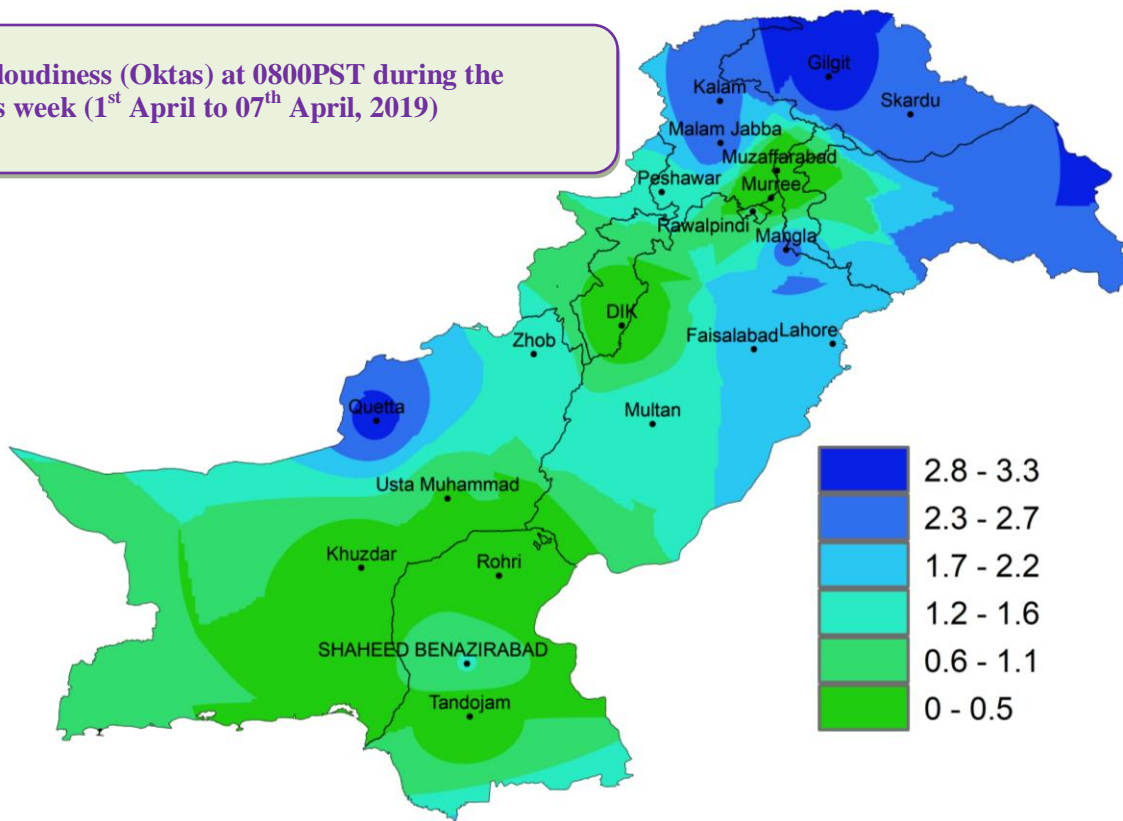
Mean Relative Humidity (%) during the  
Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)



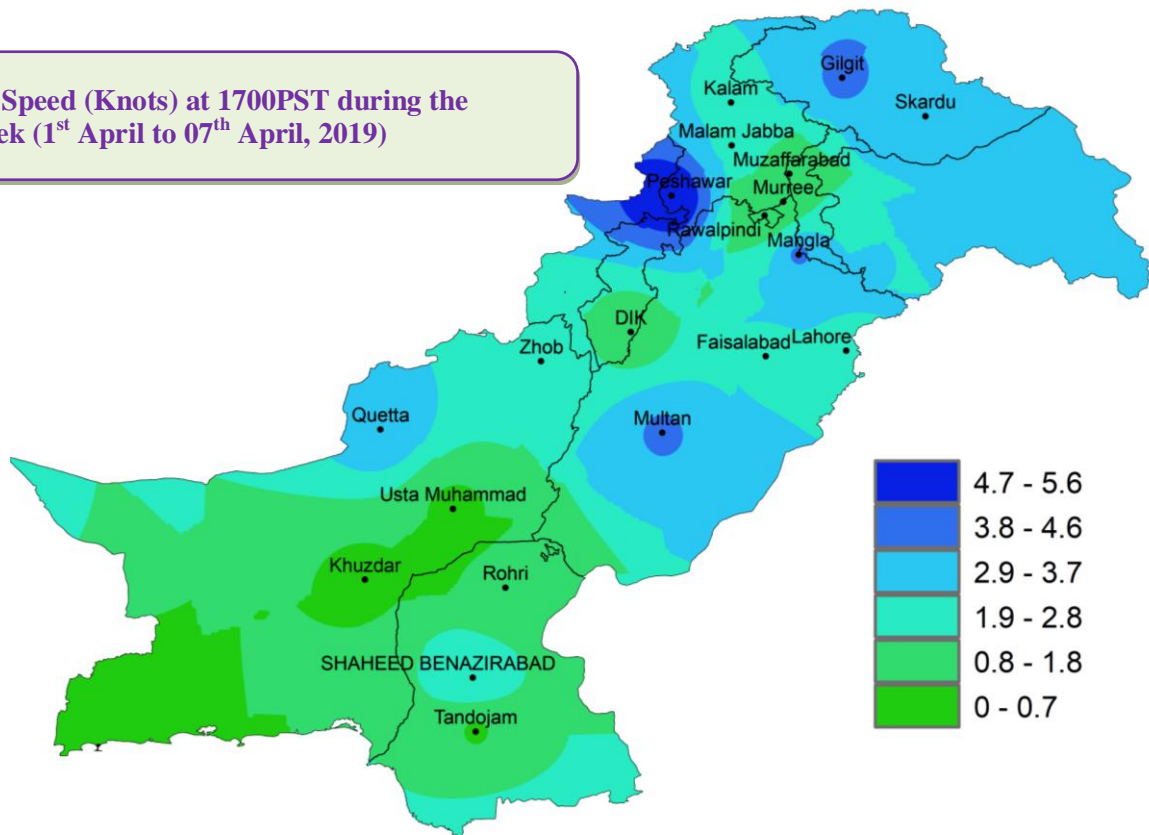
Total Growing Degree Days accumulated during the  
Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)



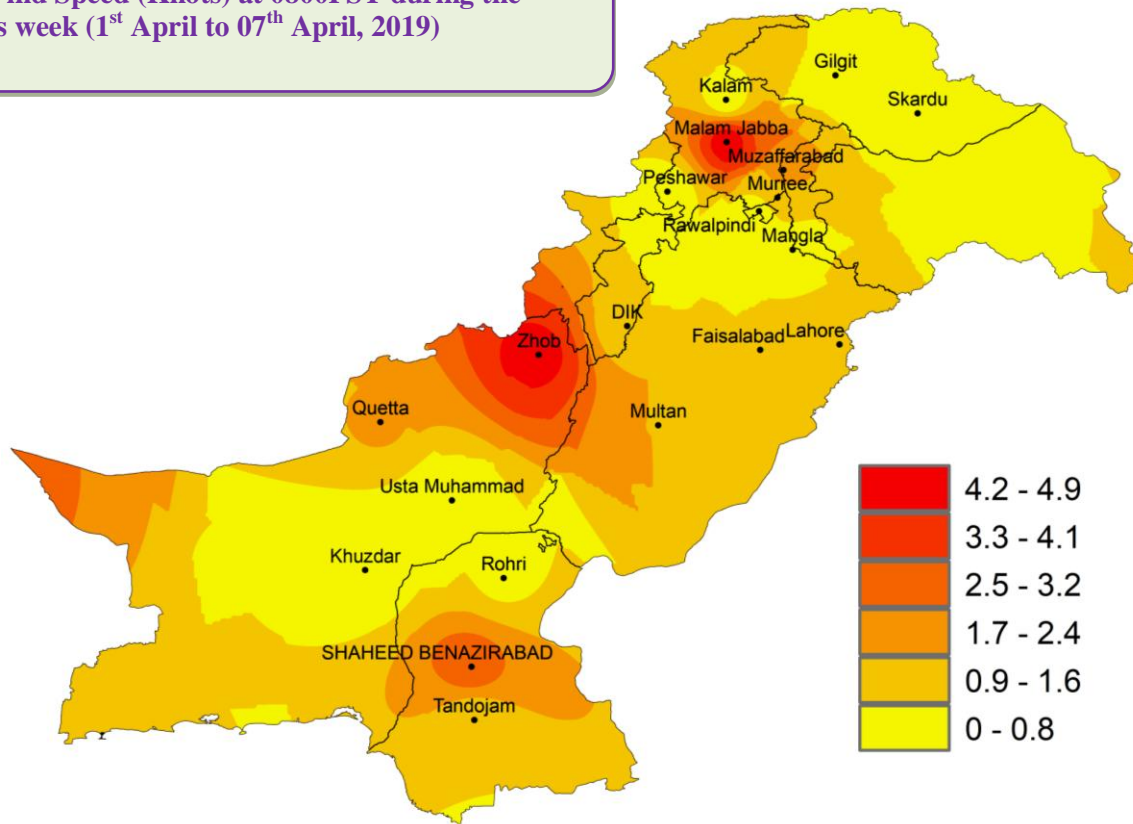
Mean Cloudiness (Oktas) at 0800PST during the Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)



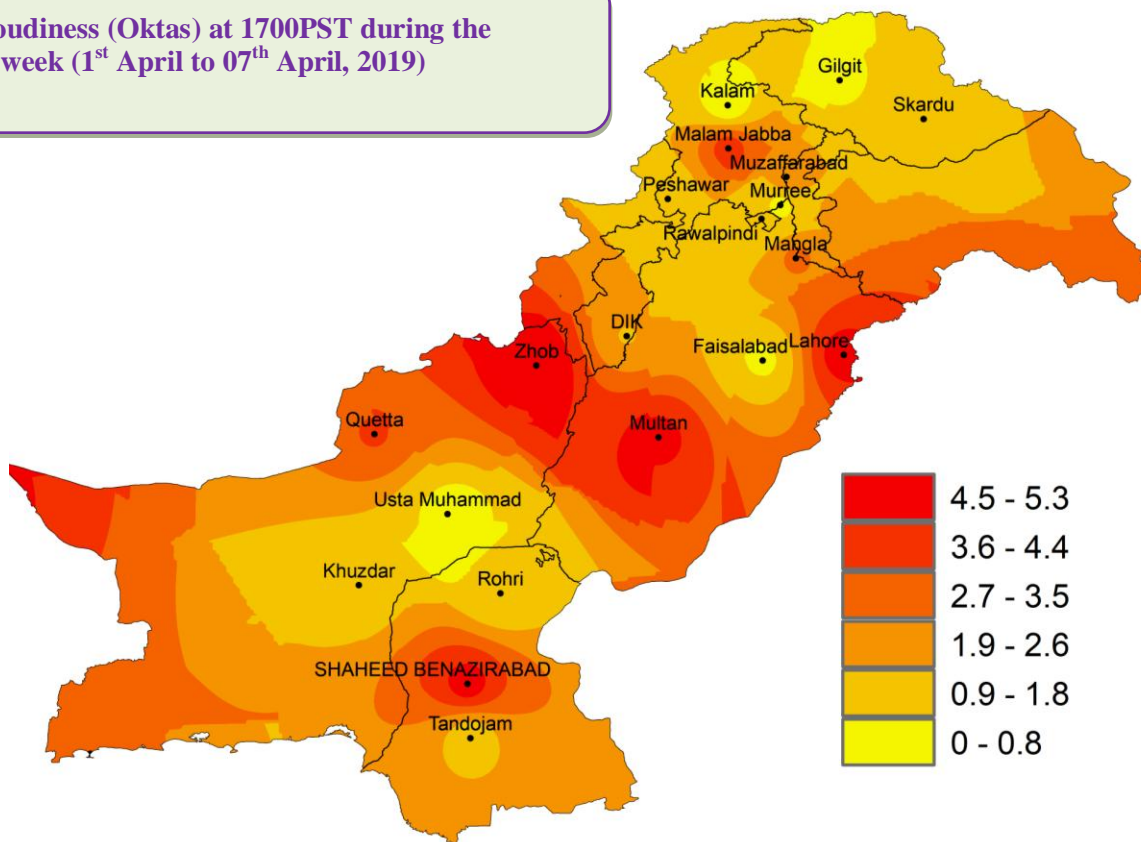
Mean Wind Speed (Knots) at 1700PST during the Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)



Mean Wind Speed (Knots) at 0800PST during the Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)



Mean Cloudiness (Oktas) at 1700PST during the Previous week (1<sup>st</sup> April to 07<sup>th</sup> April, 2019)





**Weekly Weather Advisory for Farmers**  
**(8<sup>th</sup> April to 14<sup>th</sup> April, 2019)**

Continental air is prevailing over most parts of the country. A westerly wave with varying intensity is likely to affect different parts of the country from Tuesday.

**MONDAY**

**08-04-2019**

Mainly hot and dry weather is expected in most parts of the country, while very hot in South Punjab and Sindh. However, rain-thunderstorm with gusty winds is expected at isolated places in Kashmir and its adjoining during evening/night. Dust raising/gusty winds are also expected in coastal areas of Sindh and Makran in afternoon.

**TUESDAY**

**09-04-2019**

Mainly hot and dry weather is expected in most parts of the country, while very hot in South Punjab and Sindh. However, dust-thunderstorm/rain is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Bannu, D.I.Khan, Quetta, Zhob, Rawalpindi, Gujranwala, Sargodha, D.G.Khan, Multan, Bahawalpur divisions, Islamabad and Kashmir during evening/night.

**WEDNESDAY**

**10-04-2019**

Mainly hot and dry weather is expected in most parts of the country, while very hot in South Punjab and Sindh. However, dust-thunderstorm/rain is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan, Bannu, D.I.Khan, Rawalpindi, Gujranwala, Sargodha divisions, Islamabad and Kashmir during evening/night.

**THURSDAY**

**11-04-2019**

Mainly hot and dry weather is expected in most parts of the country, while very hot in South Punjab and Sindh. However, dust-thunderstorm/rain is expected at isolated places in Malakand, Hazara, Peshawar, Kohat, Mardan,

Bannu, D.I.Khan, Quetta, Zhob, Kalat, Rawalpindi, Gujranwala, Sargodha divisions, Islamabad, Gilgit Baltistan and Kashmir during evening/night.

**FRIDAY**

**12-04-2019**

Rain-thunderstorm with gusty winds expected at isolated places in Quetta, Zhob, Kalat, Bannu, D.I.Khan, D.G.Khan, Multan, Bahawalpur, Rawalpindi, Gujranwala divisions, Islamabad, Kashmir and Gilgit-Baltistan. Hot and dry weather is expected elsewhere in the country.

**SATURDAY**

**13-04-2019**

Rain-thunderstorm with gusty winds expected at scattered places in northeast Balochistan, Khyber Pakhtunkhwa, south Punjab, Rawalpindi, Sargodha divisions and Kashmir. Hot and dry weather is expected elsewhere in the country.

**SUNDAY**

**14-04-2019**

Rain-thunderstorm with gusty winds expected at scattered places in Balochistan, Khyber Pakhtunkhwa, while at isolated places in D.G.Khan and Multan divisions. Hot and dry weather is expected elsewhere in the country.

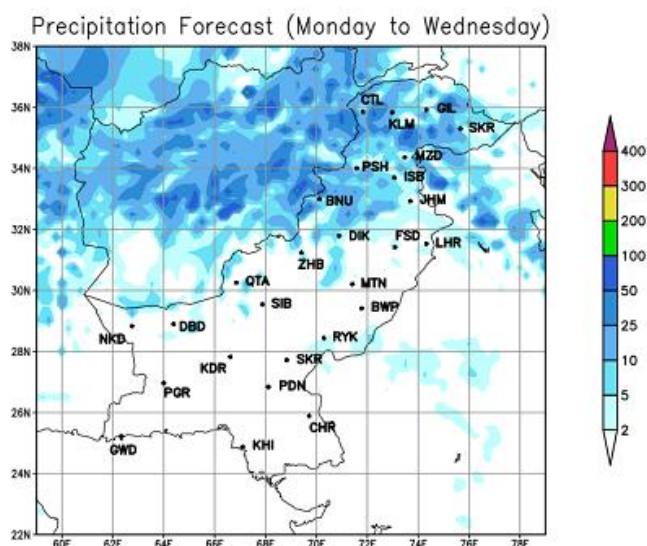
**ADVISES FOR FARMERS**

During the last week, light rainfall occurred at scattered places in GB and upper KP, while cold and dry weather prevailed in rest parts. This may continue with almost the same pattern in coming days as well. Keeping in view the expected weather conditions following advises are suggested for farming community.

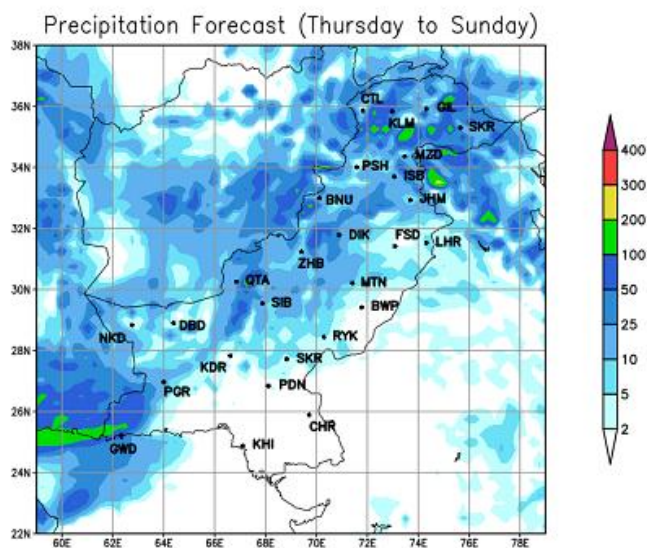
- Farmers are advised to apply deep ploughing in the fields after harvested the Wheat crops.
- Irrigate the crops where needed.
- To obtain the possible yield of wheat crop, weather forecast should be considered before harvesting.

## Precipitation Outlook from 8<sup>th</sup> April to 14<sup>th</sup> April, 2019

The outlook from 8<sup>th</sup> April to 10<sup>th</sup> April, 2019 shows that light to moderate rainfall is expected in the upper half of the country.



The outlook from 11<sup>th</sup> April to 14<sup>th</sup> April, 2019 shows that light to moderate rainfall is expected almost all over the country. However, heavy rainfall is expected in isolated places of Upper KP, Gilgit Baltistan and Azad Kashmir.



**National Weather Data of Selected Cities Weekly Data from (1<sup>st</sup> April to 7<sup>th</sup> April, 2019)**

| Stations     | Minimum/Night<br>time Temperature<br>(°C) |         | Growing<br>Degree<br>Days | Relative<br>Humidity<br>(%) | Rainfall<br>(mm) | Cloudiness<br>(Oktas)<br>0800<br>PST | Cloudiness<br>(Oktas)<br>1700<br>PST | Wind<br>Speed<br>(Knots)<br>0800<br>PST | Wind<br>Speed<br>(Knots)<br>1700<br>PST |
|--------------|-------------------------------------------|---------|---------------------------|-----------------------------|------------------|--------------------------------------|--------------------------------------|-----------------------------------------|-----------------------------------------|
|              | Mean                                      | highest |                           |                             |                  |                                      |                                      |                                         |                                         |
| D.I.Khan     | 37.0                                      | 39.0    | 162.0                     | 53                          | 2.00             | 0.0                                  | 1.1                                  | 0.9                                     | 1.7                                     |
| Faisalabad   | 36.0                                      | 37.5    | 156.7                     | 50                          | 0.01             | 1.9                                  | 2.6                                  | 0.9                                     | 0.6                                     |
| Gawader      | 36.3                                      | 37.0    | 141.0                     | 41                          | 0.00             | 0.7                                  | 0.0                                  | 1.1                                     | 2.9                                     |
| Gilgit       | 25.8                                      | 28.0    | 82.5                      | 46                          | 0.81             | 3.3                                  | 3.9                                  | 0.6                                     | 0.6                                     |
| Kalam        | 22.7                                      | 25.0    | 49.3                      | 54                          | 0.20             | 2.3                                  | 2.4                                  | 0.0                                     | 0.0                                     |
| Khuzdar      | 33.6                                      | 35.0    | 156.5                     | 17                          | 0.00             | 0.0                                  | 0.4                                  | 0.0                                     | 1.1                                     |
| Lahore       | 35.3                                      | 36.4    | 162.0                     | 43                          | 0.00             | 2.0                                  | 2.6                                  | 1.1                                     | 4.9                                     |
| Malam Jabba  | 17.4                                      | 18.5    | 51.8                      | 102                         | 0.00             | 2.6                                  | 2.6                                  | 4.9                                     | 4.0                                     |
| Mangla       | 34.4                                      | 36.0    | 140.0                     | 54                          | 0.00             | 2.4                                  | 3.9                                  | 0.6                                     | 2.9                                     |
| Multan (PBO) | 37.3                                      | 40.1    | 171.2                     | 43                          | 0.01             | 1.6                                  | 3.8                                  | 1.6                                     | 4.7                                     |
| Murree       | 22.9                                      | 24.8    | 84.0                      | 41                          | 0.01             | 0.0                                  | 1.3                                  | 1.4                                     | 0.6                                     |
| Muzaffarabad | 31.1                                      | 32.5    | 111.8                     | 45                          | 0.00             | 0.0                                  | 1.4                                  | 2.0                                     | 2.6                                     |
| Nawabshah    | 37.1                                      | 39.5    | 170.3                     | 50                          | 0.00             | 1.1                                  | 5.6                                  | 0.0                                     | 0.9                                     |
| Peshawar     | 26.6                                      | 29.0    | 103.7                     | 22                          | 0.01             | 2.9                                  | 3.7                                  | 1.8                                     | 3.6                                     |
| Quetta       | 33.7                                      | 21.9    | 131.0                     | 48                          | 0.01             | 0.6                                  | 0.9                                  | 0.3                                     | 0.9                                     |
| Rawalakot    | 41.8                                      | 43.0    | 180.8                     | 33                          | 0.00             | 0.0                                  | 0.9                                  | 0.6                                     | 0.9                                     |
| Rawalpindi   | 19.5                                      | 21.6    | 49.7                      | 40                          | 0.00             | 2.4                                  | 3.4                                  | 0.0                                     | 1.7                                     |
| Rohri        | 43.9                                      | 46.5    | 194.8                     | 40                          | 0.00             | 1.1                                  | 2.7                                  | 3.1                                     | 4.9                                     |
| Skardu       | 42.5                                      | 43.5    | 184.0                     | 56                          | 0.00             | 0.0                                  | 0.6                                  | 0.9                                     | 1.2                                     |
| Tandojam     | 41.4                                      | 43.0    | 185.3                     | 56                          | 2.00             | 0.5                                  | 0.5                                  | 0.2                                     | 0.5                                     |
| Usta.M       | 30.9                                      | 33.0    | 122.0                     | 44                          | 0.00             | 1.6                                  | 2.4                                  | 4.6                                     | 5.3                                     |
| Zhob         | 37.0                                      | 39.0    | 162.0                     | 53                          | 2.00             | 0.0                                  | 1.1                                  | 0.9                                     | 1.7                                     |

\*\*\* Shows that data was not available.

## Findings of AgMIP Pakistan, University of Agriculture, Faisalabad

1. There would be significant increase in temperature i.e., 2.8°C in day and 2.2°C in the night during mid-century (2040-2069).
2. There would be significant variability in rainfall patterns (about 25% increase in summer & 12% decrease in winter during 2040-2069).
3. Climate Change will affect the crop yields negatively (about 17% for rice and 14% for wheat).
4. If there will be no adaptation to Climate Change, majority of farmers would be the economic losers.
5. With Adaptation to Climate Change (through technology and management), there would be significant decrease in poverty and improvement in the livelihood of farming community.

*(Agricultural Model Inter-comparison and Improvement Project (AgMIP) Pakistan 2012-2014)*

- 1۔ سال 2040-69 کے دوران درجہ حرارت میں قابل ذکر اضافہ ہو سکتا ہے۔ جو کہ دن کے وقت 2.8°C اور رات کو 2.2°C تک ہوگا۔
- 2۔ گرمیوں کی بارش میں 25 فیصد اضافہ اور سردیوں کی بارش میں 12 فیصد تک کمی کا امکان ہے۔
- 3۔ مندرجہ بالا موسمی تغیرات کی وجہ سے دھان کی پیداوار میں 17 فیصد اور گندم کی پیداوار میں 14 فیصد تک کمی ہو سکتی ہے۔
- 4۔ اگر موسمی تغیرات کا مناسب بندوبست نہ کیا گیا۔ تو کسانوں کی اکثریت کو معاشی نقصان کا سامنا کرنا پڑے گا۔
- 5۔ موسمی تغیرات کے سدباب (بذریعہ نئی ٹیکنالوجی کا استعمال اور بہتر نظم و نسق) سے غربت میں کمی اور کسانوں کی زندگی میں خوشحالی لائی جاسکتی ہے۔

(ایگمپ پاکستان 2012-2014)