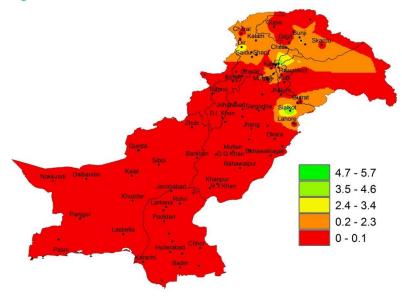
Weekly Weather and Crop Bulletin for Pakistan

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

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Rainfall Distribution (mm) during the previous Week (25th September to 1st October, 2017)



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Highlights of Past Weather (25th September to 1st October, 2017)

Above normal day time temperatures reported from most parts of the country, however below normal was observed in Baluchistan.

Province wise distribution of rainfall reported as follows:

- Light rainfall reported from few places of Khyber Pakhtunkhwa and Punjab.
- Light rainfall reported at a single station in Gilgit-Baltistan (Skardu).
- Dry weather reported from Sindh and Azad Jammu & Kashmir.

Patron-in-Chief: Dr. Ghulam Rasul (Director General)

Editor-in-Chief: Dr. Khalid M. Malik (Director) **Editor:** Ms. Khalida Noureen (Meteorologist)

Past Weather of Provinces (25th September to 1st **October**, 2017)

Punjab

Light rainfall reported from few places of Punjab during the week. Weekly maximum and minimum temperatures recorded as 36.7°C & 22.7°C respectively. For the recent week on average 173.2 growing degree days were accumulated by the end of the last week. Average relative humidity recorded as 61% and wind speed in the morning/evening recorded as 1.5/2.7 knots. During the previous week the highest amount of rainfall was recorded as 4.5 mm at Gujranwala & highest maximum temperature was recorded as 41.5°C at Bakkar.

Balochistan

Dry weather reported from Balochistan province during the week. Weekly maximum and minimum temperatures recorded as 34.9°C & 18.9°C respectively. For the recent week on average 150.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 43% and wind speed in the morning/evening recorded as 1.5/5.7 knots. During the previous week highest maximum temperature was recorded as 41.5°C at Turbat.

Khyber Pakhtunkhwa

Light rainfall reported from few places of Khyber Pakhtunkhwa during the week. Weekly maximum and minimum temperatures recorded as 32.8°C & 17.0°C respectively. For the recent week on average 139.2 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 55% and wind speed in the morning/evening recorded as 0.5/2.7 knots. During the previous week the highest amount of rainfall was recorded as 6.0 mm at Pattan & highest maximum temperature was recorded as 40.0°C at D.I.Khan.

Gilgit-Baltistan and Azad Jammu & Kashmir

Dry weather reported Kashmir while light rainfall occurred at a single station in Gilgit-Baltistan during the week. Weekly maximum and minimum temperatures recorded as 30.5°C &14.3°C respectively. For the recent week on average 115.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 47% and wind speed in the morning/evening recorded as 0.7/1.9 knots. During the previous week the highest amount of rainfall was recorded as & 0.01mm at Skardu highest maximum temperature was recorded as 36.5°C at Chilas.

Sindh

Dry weather reported from Sindh province during the week. Weekly maximum and minimum temperatures recorded as 36.7°C & 23.6°C respectively. For the recent week, on average 174.8 growing degree days were accumulated by the end of last week. Average relative humidity recorded as 59% and wind speed in the morning/evening recorded as 2.5/4.1 knots. Highest maximum temperature was recorded as 41.0°C at Sukkar.

Past Weather for Major Agricultural Plains (25th September to 1st October, 2017)

Rawalpindi (Potohar region)

Dry weather reported from Rawalpindi during the week; however, cloudiness in the morning/evening recorded as 0.3/0.0 Oktas while, average relative humidity observed as 64%. Mean day time temperature recorded as 35.6°C & for the recent week 163.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/0.8 knots.

Faisalabad (Central Punjab)

Dry weather reported from Faisalabad during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 55%. Mean day time temperature recorded as 38.0°C & for the recent week 174.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.3 knots.

Tandojam (Lower Sindh)

Dry weather reported from Tandojam during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 67%. Mean day time temperature recorded as 37.0°C & for the recent week 171.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.2/2.9 knots.

Usta Muhammad (Eastern Balochistan)

Dry weather reported from Usta Muhammad during week; however, cloudiness the morning/evening recorded 0.0/0.0 Oktas while, average relative humidity observed as 83%. Mean day time temperature recorded as 37.5°C & for the recent week growing degree 180.6 accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/3.4 knots.

Quetta (Northern Baluchistan)

Dry weather reported from Quetta during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 18%. Mean day time temperature recorded as 29.2°C & for the recent week 99.4 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 1.7/2.6 knots.

Past Weather for Sub-Regional Agricultural Plains (25th September to 1st October, 2017)

Multan

Dry weather reported from Multan during the week; however, cloudiness in the morning/evening recorded as 0.1/0.0 Oktas while, average relative humidity observed as 49%. Mean day time temperature recorded as 37.6°C & for the recent week 182.3 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 3.1/6.3 knots.

Lahore

Dry weather reported from Lahore during the week; however, cloudiness in the morning/evening recorded as 0.0/1.5 Oktas while, average relative humidity observed as 57%. Mean day time temperature recorded as 36.5°C & for the recent week 175.9 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.0 knots.

Zhob

Dry weather reported from Zhob during the week; however, cloudiness in the morning/evening recorded as 0.2/0.0 Oktas while, average relative humidity observed as 21%. Mean day time temperature recorded as 33.5°C & for the recent week 151.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 7.0/5.2knots.

Murree

Rainfall reported as 1.4 mm from Murree during week: however. cloudiness the in morning/evening recorded as 0.0/1.5 Oktas while, average relative humidity observed as 76%. Mean day time temperature recorded as 23.6°C & for the recent week 97.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.0 knots.

D.I. Khan

Dry weather reported from D.I.Khan during the week; however, cloudiness in the morning/evening recorded as 0.0/0.0 Oktas while, average relative humidity observed as 63%. Mean day time temperature recorded as 38.6°C & for the recent week 181.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.3/0.3 knots.

Peshawar

Dry weather reported from Peshawar during the week; however, cloudiness in the morning/evening recorded as 0.0/1.5 Oktas while, average relative humidity observed as 61%. Mean day time temperature recorded as 35.9°C & for the recent week 167.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.7 knots.

Kalam

Rainfall reported as 1.0 mm from Kalam during the week; however, cloudiness in the morning/evening recorded as 0.3/4.3 Oktas while, average relative humidity observed as 54%. Mean day time temperature recorded as 25.8°C & for the recent week 82.5 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.7 knots.

Gilgit

Dry weather reported from Gilgit during the week; However, cloudiness in the morning/evening recorded as 2.3/5.5 Oktas while, average relative humidity observed as 53%. Mean day time temperature recorded as 32.1°C & for the recent week 117.8 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/2.0 knots.

Skardu

Rainfall reported as 0.01 mm from Skardu during week: However. cloudiness morning/evening recorded as 1.9/4.3 Oktas while, average relative humidity observed as 43%. Mean day time temperature recorded as 26.7°C & for the recent week 87.0 growing degree days accumulated by the end of last week. Wind speed recorded in the morning/evening as 0.0/1.3 knots.

Crop Situation for Major Agricultural Plains (Based on data from Regional Agromet Centers)

Potohar Region (Rawalpindi)

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

Central Punjab (Faisalabad)

There is presently one crop (irrigated conditions) grown in the fields of RAMC Faisalabad.

Cotton: Good condition, *Maturity* stage.

Lower Sindh (Tandojam)

There is presently one crop (irrigated conditions) grown in the fields of RAMC Tandojam.

Cotton (HH-906): Good condition, Boll opening stage.

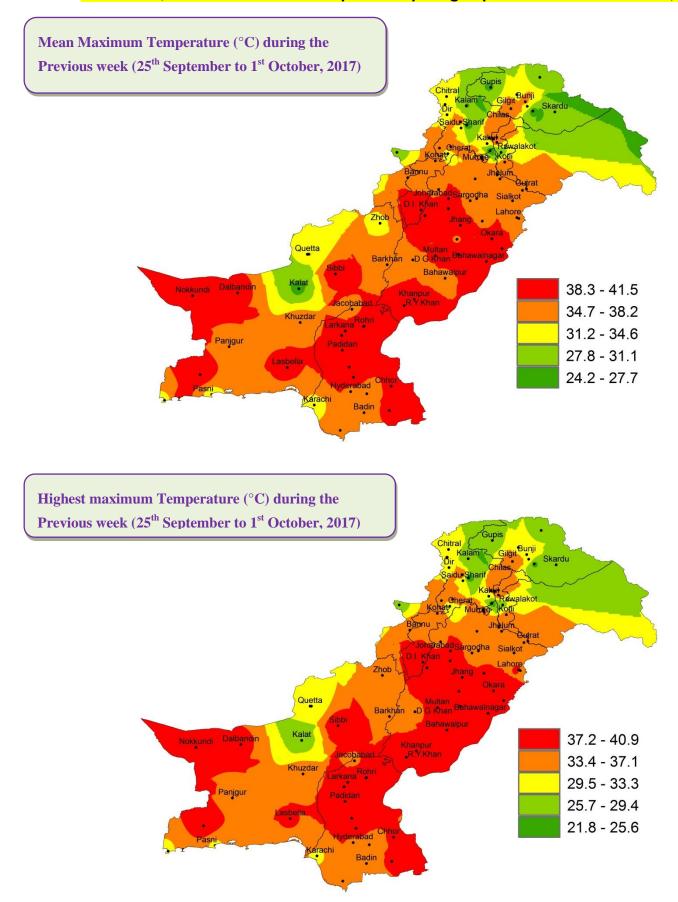
Northern Baluchistan (Quetta)

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

Eastern Baluchistan (Usta Muhammad)

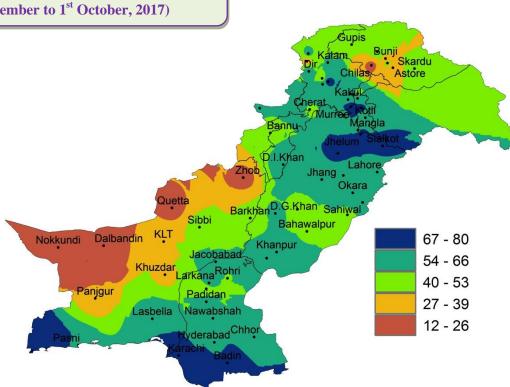
There is presently one crop (irrigated conditions) grown in the fields of RAMC Usta Muhammad.

Rice: Good condition, Tillering stage.

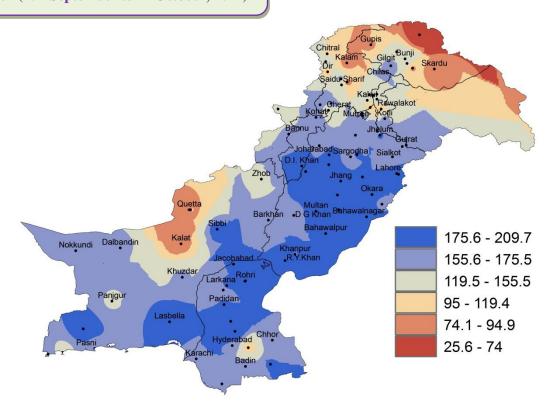


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Mean Relative Humidity (%) during the previous week (25th September to 1st October, 2017)

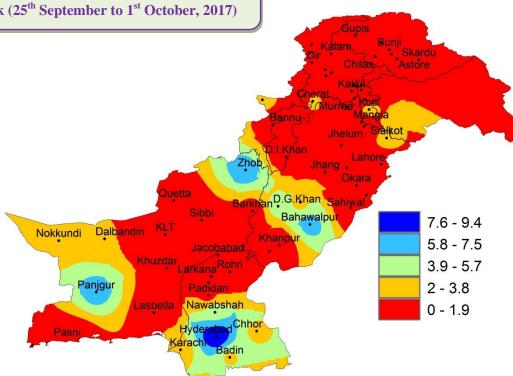


Total Growing Degree Days accumulated during the previous week (25th September to 1st October, 2017)

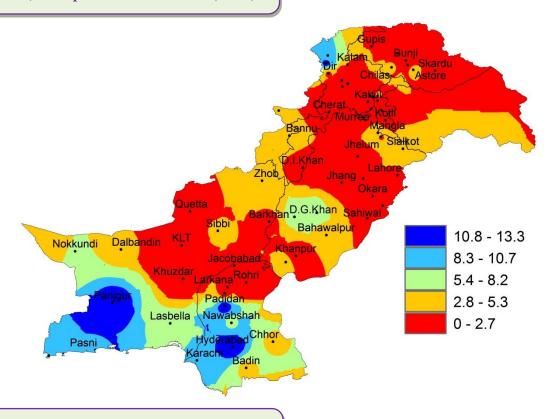


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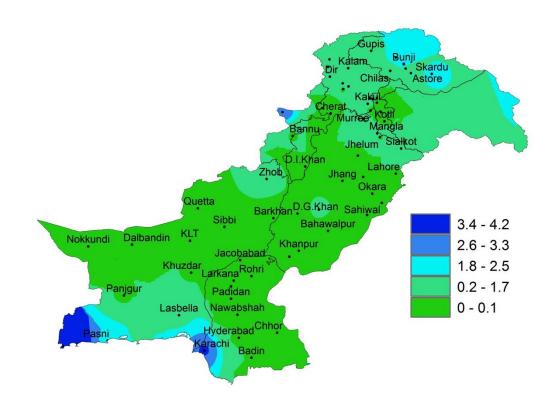


Mean Wind Speed (Knots) at 1700PST during the previous week (25th September to 1st October, 2017)

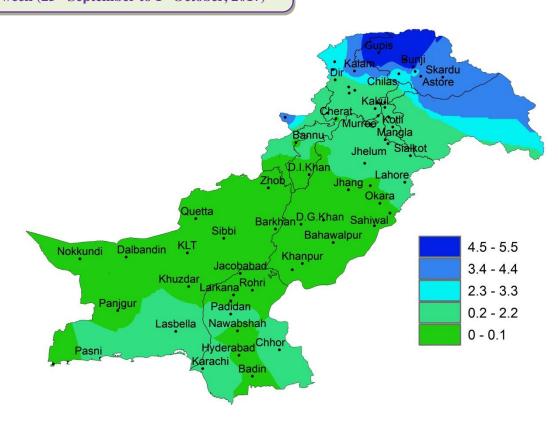


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Mean Cloudiness (Oktas) at 0800PST during the previous week (25th September to 1st October, 2017)



Mean Cloudiness (Oktas) at 1700PST during the previous week (25th September to 1st October, 2017)



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Weekly Weather Advisory for Farmers (2nd October to 8th October, 2017)

Weak seasonal low lies over North Balochistan. A weak trough of westerly wave is present over extreme northern parts of the country.

MONDAY 02-10-2017

Mainly hot and dry weather is expected in most parts of the country. However, light rainthunderstorm is expected at few places in Malakand division and Gilgit-Baltistan.

TUESDAY 03-10-2017

Mainly hot and dry weather is expected in most parts of the country.

WEDNESDAY 04-10-2017

Mainly hot and dry weather is expected in most part of the country.

THURSDAY 05-10-2017

Mainly hot and dry weather is expected in most parts of the country.

FRIDAY 06-10-2017

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm may occur at isolated places in Malakand division and Gilgit-Baltistan.

SATURDAY 07-10-2017

Mainly hot and dry weather is expected in most parts of the country. However, rain-thunderstorm may occur at isolated places in Malakand division and Gilgit-Baltistan.

SUNDAY 08-10-2017

Mainly hot and dry weather is expected in most parts of the country.

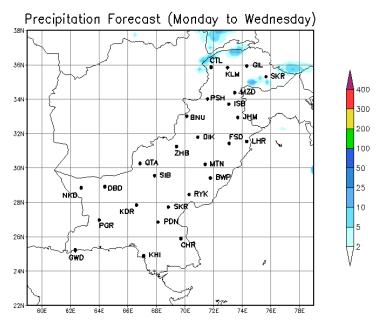
ADVISES FOR FARMERS

During the last week, mainly dry weather occurred in most parts of the agricultural plains of the country. In the coming days, hot and dry weather is expected in most parts of the country. Keeping in view the expected weather conditions following advises are suggested for farming community.

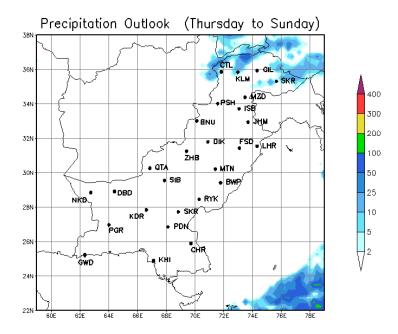
- Farmers of irrigated areas may irrigate the standing crops as per requirement in accordance with the expected weather and crop conditions.
- · Pest/viral attacks and more weeds growth are expected in standing crops in the particular areas, during this season. Farmers are therefore advised to do regular pest scouting and take in time precautionary measures accordingly.

Weather Outlook from 25th September to 1st October, 2017

The outlook from 2nd to 4th October, 2017 shows that dry weather is expected at most parts of the country, however light rainfall is expected at isolated places in upper KP and GB.



The outlook from 5th to 8th October, 2017 shows that light rainfall is expected at scattered places in upper KP and GB. However, dry weather may prevail in rest of the country.



National Weather Data of Selected Cities (25th September to 1st October, 2017)

Stations	Maximum/Night time Temperature (°C)		Growing Degree Days	Relative Humidity (%)	Rainfall (mm)	Cloudiness (Oktas) 0800	Cloudiness (Oktas) 1700	Wind Speed (Knots)	Wind Speed (Knots)
	Mean	highest				PST	PST	0800 PST	1700 PST
Astore	24.3	25.5	88.3	35	0.00	1.7	3.8	1.4	3.3
Badin	34.2	35.0	173.2	69	0.00	0.0	0.0	3.4	4.3
Bahawalnagar	38.9	40.5	189.8	50	0.00	0.0	0.0	0.0	1.3
Bahawalpur	37.5	37.8	176.3	52	0.00	0.0	0.0	6.6	4.0
Balakot	33.9	35.0	138.3	59	0.00	0.4	1.7	0.0	0.0
Bannu	36.8	37.6	159.5	49	0.00	0.0	0.0	0.0	5.0
Barkhan	35.6	36.0	156.3	42	0.00	0.0	0.0	0.3	1.3
Bunji	32.9	36.1	144.1	36	0.00	2.7	5.0	0.9	1.0
Cherat	29.8	32.5	132.5	50	0.00	0.0	0.0	2.6	1.6
Chhor	37.4	38.8	175.5	64	0.00	0.0	0.3	3.3	4.7
Chilas	35.7	36.5	168.5	22	0.00	0.1	2.7	1.1	3.0
Chitral	31.1	32.0	117.0	58	0.00	0.6	2.8	0.0	8.3
D.G.Khan	36.8	38.0	170.2	56	0.00	0.0	0.0	4.9	6.7
D.I.Khan	38.6	40.0	181.5	63	0.00	0.0	0.0	0.3	0.3
Dalbandin	37.9	39.5	160.5	14	0.00	0.0	0.0	2.0	3.5
Dir	31.2	33.0	109.5	62	3.00	0.4	1.8	0.0	2.0
Drosh	33.5	34.0	138.9	29	0.00	0.3	3.0	0.0	12.0
Faisalabad	38.0	38.5	174.4	55	0.00	0.0	0.0	0.3	0.3
Garidopatta	34.3	35.2	145.7	57	0.00	0.0	0.3	0.0	0.7
Gawader	34.5	39.5	141.8	80	0.00	4.2	0.0	0.0	10.4
Gilgit	32.1	33.5	117.8	53	0.00	2.3	5.5	0.0	2.0
Gupis	25.9	27.5	91.3	42	0.00	1.6	5.0	0.6	2.7

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Hyderabad	36.4	37.6	174.6	66	0.00	0.0	0.0	9.4	13.3
Islamabad	34.0	35.0	154.1	62	0.00	0.4	0.7	0.0	0.7
Jacobabad	36.5	37.0	176.3	54	0.00	0.0	0.0	0.3	2.3
Jhang	38.5	39.3	179.4	60	0.00	0.0	0.0	1.7	1.0
Jhelum	36.7	37.8	176.6	72	0.00	0.0	0.0	0.0	2.3
Jiwani	32.0	33.0	167.0	78	0.00	3.9	0.0	1.1	8.3
Kakul	30.8	32.5	124.1	60	0.00	0.3	0.7	0.0	0.7
Kalam	25.8	27.5	82.5	54	1.00	0.3	4.3	0.0	2.7
Kalat	26.4	27.0	80.0	39	0.00	0.0	0.0	0.0	0.0
Karachi	33.1	34.0	169.4	71	0.00	3.4	1.8	2.6	8.3
Khanpur	37.9	38.3	175.3	64	0.00	0.0	0.0	0.0	0.7
Khuzdar	35.6	37.0	160.8	37	0.00	0.0	0.0	0.3	0.0
Kotli	34.9	36.1	161.4	55	0.00	0.0	0.7	3.1	1.3
Lahore	36.5	37.3	175.9	57	0.00	0.0	1.5	0.0	2.0
Larkana	37.9	39.0	184.3	62	0.00	0.0	0.0	1.4	1.7
Lasbella	37.4	38.8	188.2	65	0.00	1.5	0.5	0.0	6.0
Lower Dir	37.3	38.5	167.0	42	2.00	0.4	0.5	1.4	1.7
M.B Din	36.6	38.0	176.5	72	0.00	0.0	0.5	0.6	1.0
Malam Jabba	21.5	24.0	74.8	75	0.00	0.4	2.3	0.0	0.0
Mangla	36.4	37.5	172.9	64	0.00	0.7	1.2	0.0	4.7
Mir Khani	33.0	33.2	134.2	41	3.00	0.6	2.5	0.0	2.0
Moinjodaro	37.9	38.5	155.3	38	0.00	0.0	0.0	1.3	0.8
Multan(PBO)	37.6	38.3	182.3	49	0.00	0.1	0.0	3.1	6.3
Murree	23.6	25.0	97.5	76	1.40	0.0	1.5	0.3	0.0
Muzaffarabad	33.9	35.5	140.6	57	0.00	0.3	0.7	0.6	1.3
Nawabshah	39.1	41.0	192.3	54	0.00	0.0	0.0	5.1	7.3

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Nokkundi	38.1	40.0	174.3	12	0.00	0.0	0.0	2.9	5.3
Okara	37.4	38.5	179.4	60	0.00	0.0	0.0	0.9	1.7
Padidan	38.2	39.5	178.8	61	0.00	0.0	0.3	1.3	13.0
Panjgur	36.0	37.0	153.0	28	0.00	0.0	0.0	6.6	12.7
Parachinar	27.2	28.5	120.2	54	0.00	3.3	4.0	3.0	2.8
Pasni	32.6	33.0	166.3	64	0.00	2.1	0.3	0.0	10.3
Pattan	35.9	36.5	156.0	50	6.00	0.0	1.3	0.0	3.7
Peshawar	35.9	36.8	167.8	61	0.00	0.0	1.5	0.0	0.7
Quetta	29.2	30.2	99.4	18	0.00	0.0	0.0	1.7	2.6
Rahim Yar Khan	39.6	40.5	184.1	59	0.00	0.0	0.0	1.7	4.0
Rawalakot	27.9	29.0	104.1	69	0.00	0.0	2.0	0.0	0.3
Rawalpindi	35.6	36.0	163.3	64	0.00	0.0	0.0	0.0	0.0
Rohri	39.3	40.0	193.2	52	0.00	0.0	0.0	0.6	0.0
Sahiwal	37.5	38.3	172.9	59	0.00	0.0	0.0	0.6	0.7
Saidu Sharif	32.9	33.6	134.6	59	0.00	0.0	0.3	0.0	0.0
Sialkot	34.8	36.3	169.9	70	0.00	0.9	0.2	2.9	5.3
Sibbi	40.7	41.0	187.8	46	0.00	0.0	0.0	0.0	3.3
Skardu	26.7	27.8	87.0	43	0.01	1.9	4.3	0.0	1.3
Tandojam	37.0	37.5	171.3	67	0.00	0.0	0.0	1.2	1.1
Usta.M	37.5	38.5	180.6	83	0.00	0.0	0.0	0.0	3.4
Zhob	33.5	34.0	151.5	21	0.00	0.2	0.0	7.0	5.2

^{***} 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 69-2040 کے دوران درجہ حرارت میں قابل ذکراضافہ ہوسکتا ہے۔ جو کہ دن کے وقت 2.8° دوران درجہ حرارت میں قابل ذکراضافہ ہوسکتا ہے۔ جو کہ دن کے وقت 2.8° دوران درجہ حرارت میں قابل ذکراضافہ ہوسکتا ہے۔ جو کہ دن کے وقت 2.8° دوران درجہ حرارت میں قابل ذکراضافہ ہوسکتا ہے۔
 - 2۔ گرمیوں کی بارش میں 25 فیصد اضا فہ اور سر دیوں کی بارش میں 12 فیصد تک کمی کا امکان ہے۔
 - 3۔ مندرجہ بالاموتی تغیرات کی وجہ سے دھان کی پیداوار میں 17 فیصد اور گندم کی پیداوار میں 14 فیصد تک کمی ہوسکتی ہے۔
 - 4۔ اگرموسی تغیرات کامناسب بندوبست نہ کیا گیا۔تو کسانوں کی اکثریت کومعاشی نقصان کا سامنا کرنا پڑے گا۔
- 5۔ موتی تغیرات کے سدِّ باب (بذریعینی ٹیکنالوجی کااستعال اور بہترنظم ونسق) سے غربت میں کمی اور کسانوں کی زندگی میں خوشحالی لائی جاسکتی ہے۔

(اللَّمبِ ما كتان 2012-2014)