

# 1. Seasonal Conditions

Weather was favorable for the mustard crop during the crop season 2019-20. Good rains were received during monsoon in the month of September at almost all the centres.

## Zone I

The extremely low temperature -1.1 and 0.7°C was reported at Bajaura centre in the month of December, 2019 and January 2020, where as maximum temperature ranged from 14.2 to 27.3°C Good rains were received from October to April 2019-20 at Bajaura centre.

Table: 1.1 Weather conditions during crop season in Zone I

Centre	Sep. 19	Oct. 19	Nov. 19	Dec. 19	Jan. 20	Feb. 20	Mar. 20	Apr. 20
<b>Max. Temp. (°C)</b>								
BJR	-	27.3	20.2	16.1	14.2	21.4	22.2	25.5
<b>Min. Temp. (°C)</b>								
BJR	-	7.3	4.5	-1.1	0.7	1.7	4.4	8.4
<b>Rainfall (mm) (rainy days)</b>								
BJR	-	16.2(4)	53.2(6)	68.8(7)	71.8(11)	11.2(1)	119.0(17)	74.5(10)
<b>Max. R.H. (%)</b>								
BJR	-	91.3	91.8	91.0	91.0	90.0	91.4	78.3
<b>Min. R.H. (%)</b>								
BJR	-	54.5	55.3	50.8	47.8	30.7	38.2	42.0

## Zone II

The mean maximum temperature ranged from 16.2°C at Chatha in December, 2019 to 38.6°C at Sriganganagar in the month of September 2019. The minimum temperature 5.7°C reported by Bawal centre during January 2020. Good rains were received during crop season at all the centers. High morning humidity was observed at Bawal (94.3%) in the month of December, 2019. In New Delhi, crop experienced unusual higher number of rainy days and rainfall along with two spells of hailstorms during crop season.

Table: 1.2 Weather conditions during crop season in Zone II

Centre	Sep. 19	Oct. 19	Nov. 19	Dec. 19	Jan. 20	Feb. 20	Mar. 20	Apr. 20
<b>Max. Temp. (°C)</b>								
BAW	-	33.1	31.5	17.3	18.7	22.7	27.5	35.7
SGN	38.6	34.1	25.5	16.3	17.3	24.6	26.5	35.8
CHT	33.0	29.4	24.0	16.2	16.6	21.7	24.0	31.2
NDH	34.0	31.7	27.4	17.8	18.3	22.9	27.0	34.8
<b>Min. Temp. (°C)</b>								
BAW	-	18.6	14.1	6.2	5.7	6.5	12.1	17.8
SGN	26.9	19.7	13.3	6.8	6.3	7.4	13.4	20.1
CHT	24.6	17.2	13.0	7.2	6.4	8.0	12.1	16.7
NDH	25.6	18.3	13.8	6.5	7.2	8.3	13.9	19.1
<b>Rainfall (mm) (rainy days)</b>								
BAW	-	9.2(2)	5.0 (1)	13.9(1.0)	7.0(3)	11.4(2)	68.8(6)	19.7(7)
SGN	21.4(2)	NIL	15.3(2)	17.7(1)	21.9(2)	24.7(2)	29.8(3)	6.6(2)

CHT	168.2 (7))	30.6(3)	77.4(3)	83.8 (2)	81.6 (5)	29.2(2)	135.6(8)	25.8(3)
NDH	17.6(3)	41.0(1)	7.4(2)	66.0(1)	47.7(5)	NIL	174.6(8)	8.8 (7)
<b>Max. R.H. (%)</b>								
BAW	-	84.5	86.4	94.3	92.0	89.5	88.4	66.0
SGN	79.6	77.6	83.8	92.7	92.7	88.9	86.8	63.8
CHT	89.0	87.0	90.0	92.0	91.0	92.0	85.0	72.0
NDH	87.8	87.7	88.6	87.2	89.8	89.0	87.3	67.0
<b>Min. R.H. (%)</b>								
BAW	-	36.3	41.4	67.5	57.3	40.0	42.4	33.0
SGN	55.2	49.5	62.6	76.5	70.2	53.4	56.1	36.0
CHT	66.0	53.0	50.0	67.0	63.0	51.0	57.0	41.0
NDH	63.1	50.2	49.2	60.4	60.2	48.0	48.4	30.5
<b>Sunshine (hours/day)</b>								
BAW	-	7.0	3.8	3.1	4.4	7.2	6.1	7.4
SGN	7.7	7.0	5.8	3.6	4.9	5.5	6.6	8.5
CHT	5.2	7.0	4.2	3.3	4.0	6.0	5.3	7.8
NDH	4.3	6.2	3.4	2.3	3.8	6.1	7.0	8.5

### Zone III

Light rains were received during crop season in Kota and Banda. Maximum temperature ranged from 17.3<sup>o</sup>C at Bharatpur in December 2019 to 39.1<sup>o</sup>C at Kota in April 2020. Dholi centre reported 100% morning humidity during January and February, 2020.

Table: 1.3 Weather conditions during crop season in Zone III

Centre	Sep. 19	Oct. 19	Nov. 19	Dec. 19	Jan. 20	Feb. 20	Mar. 20	Apr. 20
<b>Max. Temp. (°C)</b>								
PNT	31.6	30.9	28.0	24.0	17.6	22.1	26.9	33.6
KPR	31.2	31.5	28.8	18.8	19.4	23.8	28.4	35.4
BPR	31.2	32.9	28.1	17.3	18.9	24.6	28.8	36.8
KOT	-	32.3	30.8	24.7	22.9	26.1	28.5	39.1
DOL	30.7	30.0	29.1	21.1	19.1	23.8	28.3	33.3
BND	-	31.7	25.9	20.1	19.6	21.9	26.2	-
MOR	32.2	32.2	28.4	20.5	20.5	27.0	27.5	-
<b>Min. Temp. (°C)</b>								
PNT	24.3	18.6	13.4	8.5	8.1	8.1	17.9	17.2
KPR	25.2	19.9	15.1	8.8	9.2	10.5	15.6	21.7
BPR	25.8	20.1	15.6	7.0	6.8	7.9	15.5	23.2
KOT	-	20.6	17.1	11.5	8.4	13.3	15.5	18.2
DOL	25.5	21.9	15.6	9.8	9.1	9.5	15.5	18.5
BND	-	20.8	15.5	9.4	9.6	14.1	16.0	-
MOR	24.4	20.7	14.9	8.5	8.9	12.0	16.6	
<b>Rainfall (mm) (rainydays)</b>								
PNT	290.6 (7)	NIL	29.2 (1)	79.8 (2)	118.2(7)	23.2 (2)	46.1(4)	70.8 (1)
KPR	245.3 (13)	23.6 (2)	3.0(1)	10.0(1)	81.2(4)	1.8 (0)	25.6(4)	31.8 (2)
BPR	138.5(7)	1.0(1)	11.6(1)	18.6(2)	17.8(3)	NIL	34.0(8)	6.7(3)

KOT	-	NIL	NIL	NIL	NIL	NIL	19.0(2)	NIL
DOL	315.6(8)	NIL	NIL	16.4(1)	NIL	NIL	72.2(4)	174.4(7)
BND	-	NIL	NIL	NIL	2.7	5.5	0.0	-
MOR	164.5	30.5	NIL	22.0	33.9	7.5	24.0	-
<b>Max. R.H. (%)</b>								
PNT	89.0	89.0	90.0	95.0	94.0	95.0	88.0	68.0
KPR	90.8	88.1	86.8	91.1	92.8	86.1	84.6	66.4
BPR	91.2	82.4	87.3	91.5	91.3	87.8	89.4	74.4
KOT	-	83.0	87.7	84.0	85.0	77.3	60.2	30.3
DOL	97.4	98.1	99.4	99.7	100.0	100.0	99.8	96.4
BND	-	61.4	60.4	65.1	73.6	67.4	51.2	-
MOR	88.5	65.6	60.6	73.4	72.6	68.5	61.8	-
<b>Min. R.H. (%)</b>								
PNT	67.0	51.0	48.0	66.0	72.0	56.0	47.0	33.0
KPR	75.5	49.3	43.5	62.5	62.8	47.8	44.4	30.8
BPR	84.5	70.0	73.6	79.7	77.4	74.8	79.1	68.5
KOT	-	-	-	-	-	-	-	-
DOL	86.1	82.8	84.4	94.7	95.6	89.3	88.9	74.8
BND	-	-	-	-	-	-	-	-
MOR	66.7	45.0	42.9	59.2	53.6	39.6	43.6	-
<b>Sunshine (hours/day)</b>								
PNT	5.9	6.7	5.1	4.1	3.5	6.7	8.2	8.3
KPR	3.4	5.9	0.8	1.3	3.6	7.8	5.8	8.4
BPR	4.1	6.7	3.3	3.4	4.8	7.7	6.8	8.7
KOT	-	-	-	-	-	-	-	-
DOL	-	-	-	-	-	-	-	-
BND	-	-	-	-	-	-	-	-
MOR	-	-	-	-	-	-	-	-

#### Zone IV

The minimum and maximum temperature ranged from 3.4<sup>o</sup>C in the month of December at Jobner and 34.7<sup>o</sup>C in the month of March 2020 at S.K. Nagar. The maximum 90.3% humidity was reported by Nagpur during the month of September, 2019. Bright sunshine hours ranged from 1.1 to 10.1 were observed during crop season.

Table: 1.4 Weather conditions during crop season in Zone IV

Centre	Sep. 19	Oct. 19	Nov. 19	Dec. 19	Jan. 20	Feb. 20	Mar. 20
<b>Max. Temp. (°C)</b>							
SKN	32.7	34.7	31.3	26.8	25.1	31.7	-
NGP	29.5	30.6	30.3	27.0	26.5	30.2	33.9
JOB	34.5	33.3	28.4	22.1	21.4	27.1	29.0
<b>Min. Temp. (°C)</b>							
SKN	24.7	20.3	17.9	10.1	8.2	10.5	-

NGP	24.0	21.9	17.6	13.5	13.3	15.2	19.5
JOB	23.9	17.2	10.0	3.4	5.4	10.3	14.7
<b>Rainfall (mm) (rainy days)</b>							
SKN	160.5 (10)	94(2)	5(1)	4.0 (1)	NIL	NIL	-
NGP	401.8(17)	101.0(4)	NIL	12.6(2)	94.7(4)	7.8(1)	9.0(1)
JOB	18.8(2)	5.3(0)	4.0(1)	3.1(1)	NIL	NIL	2.6(2)
<b>Max. R.H. (%)</b>							
SKN	78.0	65.7	58.6	51.2	49.1	56.9	-
NGP	90.3	79.4	78.0	83.3	80.4	74.8	57.8
JOB	86.0	80.0	86.0	76.0	89.8	82.0	75.8
<b>Min. R.H. (%)</b>							
SKN	74.6	58.7	60.8	39.6	31.6	22.4	-
NGP	75.3	59.4	50.5	60.0	62.4	41.3	27.0
JOB	59.8	37.4	48.8	44.0	41.2	27.0	34.3
<b>Sunshine (hours/day)</b>							
SKN	4.0	7.5	6.9	8.4	8.8	10.1	-
NGP	1.1	4.3	7.0	5.1	4.6	6.7	8.6
JOB	5.5	7.6	4.9	7.0	6.7	8.4	6.7

### Zone V

All three centres have reported weather data. Good rains was received during crop season. The maximum temperature ranged from 21.2°C in the month of January and 36.1°C in month of April, 2020. Bright sunshine hours ranged from 3.7 to 8.1 at Imphal centre. Minimum and maximum humidity were ranged from 34.0% to 98.0% at Jagdalpur during crop season.

Table: 1.5 Weather conditions during crop season in Zone V

Centre	Sep. 19	Oct. 19	Nov. 19	Dec. 19	Jan. 20	Feb. 20	Mar. 20	Apr. 20
<b>Max. Temp. (°C)</b>								
JAG	-	30.3	30.0	27.2	28.5	29.2	33.6	36.1
KNK	30.4	27.8	27.1	23.4	21.5	25.5	30.1	35.5
IMP	29.5	28.4	26.3	22.5	21.2	23.4	23.4	-
<b>Min. Temp. (°C)</b>								
JAG	-	21.4	14.3	11.3	12.4	12.9	17.3	21.0
KNK	23.1	20.5	13.1	7.2	5.0	11.4	16.4	21.9
IMP	21.6	19.3	13.5	6.4	7.5	8.2	8.2	-
<b>Rainfall (mm) (rainy days)</b>								
JAG	-	237.8(11)	0.4(10)	5.8(1)	14.1(2)	32.4(2)	26.0(3)	147.4(8)

KNK	284.3(17)	261.2(8)	NIL	22.8(2)	17.9(4)	15.4(2)	76.6(6)	36.9(2)
IMP	253.7(13)	159.8(8)	38.7(3)	13.6(2)	65.8(5)	13.4(3)	13.4(3)	-
<b>Max. R.H. (%)</b>								
JAG	-	97.0	96.0	98.0	97.0	94.0	88.0	76.0
KNK	84.2	86.8	85.7	85.6	85.8	85.5	85.3	85.5
IMP	90.6	93.8	93.5	92.6	91.4	92.8	83.0	-
<b>Min. R.H. (%)</b>								
JAG	-	56.0	50.0	50.0	42.0	41.0	39.0	34.0
KNK	68.7	68.6	62.1	65.2	68.8	68.3	67.8	67.5
IMP	68.0	67.3	56.2	46.4	50.0	40.8	37.5	-
<b>Sunshine (hours/day)</b>								
JAG	-	5.1	8.2	6.5	6.9	7.0	6.8	6.9
KNK	-	-	-	-	-	-	-	-
IMP	3.7	5.2	7.9	8.1	6.7	6.9	6.9	-