

F. No. 3-1/ 2019-20-CFCC-ES
GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE, COOPERATION AND FARMERS WELFARE
(CROP FORECAST COORDINATION CENTRE)

Room No. 344-A
Krishi Bhawan, New Delhi
Dated: 16.08.2019

**SUBJECT: MINUTES OF THE MEETING OF THE CROP WEATHER WATCH GROUP HELD ON
09.08.2019.**

Summary observations of the Group on Agenda Items

- *The All-India level rainfall during the week i.e. 01st August, 2019 – 07th August, 2019 has been 28% higher than Long Period Average (LPA). Rainfall in the four broad geographical divisions of the country during the above period have been higher than LPA by 88% in South Peninsula, by 63% in Central India and lower than LPA by 44% in East & North East India & by 10% in North West India.*
- *The cumulative rainfall in the country during the monsoon season i.e. 01st June, 2019 to 07th August, 2019 has been 5% lower than Long Period Average (LPA). Rainfall in the four broad geographical divisions of the country during the above period have been higher than LPA by 5% in Central India but lower than the LPA in 13% in East & North East India, 8% in North West India and 7% in South Peninsula.*
- *For monsoon season 01.06.2019 to 07.08.2019 out of 36 met sub-divisions, 4 met sub-divisions constituting 11% of the total area of the country has received large excess/excess rainfall, 22 met sub-divisions constituting 66% of the total area of the country has received normal rainfall and 10 met sub-divisions constituting 23% of the total area of the country has received deficient rainfall.*
- *Central Water Commission monitors 103 major reservoirs in the country which have total live capacity of 164.36 Billion Cubic Meter (BCM) at Full Reservoir Level (FRL). Out of these, 86 reservoirs with FRL capacity of 122.51 BCM have irrigation potential. Live storage in the 103 major reservoirs as on 08th August, 2019 has been 76.85 BCM as against 77.40 BCM on 08.08.2018 (last year) and 79.47 BCM of normal (average of the last 10 years) storage. Current year's storage is 99% of last year's storage and nearly 97% of average of last 10 year's storage.*
- *All-India progressive procurement of Rice as on 08.08.2019 for 2018-19 was at 439.86 lakh tonnes against the procurement of 363.68 lakh tonnes in the corresponding period of last year. The procurement of wheat as on 05.07.2019 for the Rabi Marketing Season (RMS) 2019-20 was 341.33 lakh tonnes against the procurement of 353.69 lakh tonnes in the corresponding period of RMS 2018-19.*

1. Monsoon Season (June – September) during the week ending 07th August, 2019

➤ Sub-Division wise Weekly Rainfall Forecast is shown in Table-1.1

- **Rainfall during the week (01st August, 2019 to 07th August, 2019)** Rainfall was large excess/excess in 13 met sub-divisions, normal in 8 met sub-divisions and deficient/large deficient in 15 sub-divisions out of 36 meteorological sub-divisions.
- **Cumulative rainfall (01st June, 2019 to 07th August, 2019)** Rainfall was large excess/excess in 4 met sub-divisions, normal in 22 met sub-divisions and deficient in 10 sub-divisions out of 36 meteorological sub-divisions.

Table - 1.2: Weekly and Cumulative Rainfall in four regions of the country¹

Region	Week Ending (07.08.2019)				Cumulative (01.06.19 to 07.08.19)			
	(in mm)		Devi- ation (%)	Cate- gory	(in mm)		Devi- ation (%)	Cate- gory
	Actual	Normal			Actual	Normal		
North-West India	46.2	51.1	-10	N	311.4	338.6	-8	N
Central India	131.0	80.3	63	LE	598.8	572.3	5	N
South Peninsular India	86.3	45.9	88	LE	393.0	422.8	-7	N
East & North-East India	43.4	77.8	-44	D	741.3	856.9	-13	N
Country as a whole	82.2	64.2	28	E	492.7	516.4	-5	N

LE: Large Excess, E: Excess, N: Normal, D: Deficient, LD: Large Deficient, NR: No Rain.
Source: India Meteorological Department, New Delhi

Table -1.3: Category wise comparative distribution of Sub-division (cumulative rainfall) and All-India Percentage Rainfall Departure for the last five years since: 1st June, 2019 to 07th Aug., 2019

No. of Sub-Divisions with rainfall	<i>For the period from 1st June to</i>					
	06 AUG 2014	05 AUG 2015	10 AUG 2016	09 AUG 2017	08 AUG 2018	07 AUG 2019
Large Excess	-	-	-	01	00	01
Excess	01	07	10	03	00	03
Normal	19	14	21	25	28	22
Total	20	21	31	29	28	26
Deficient	16	15	05	07	08	10
Large Deficient	-	-	-	00	00	00
Scanty	00	00	00	-	-	-
No rain	00	00	00	00	00	00
Total	16	15	05	07	08	10
Data Inadequate	00	00	00	00	00	00
TOTAL	36	36	36	36	36	36
All-India % Rainfall Deviation	(-) 18	(-) 6%	3%	(-) 3%	(-) 10%	(-) 5%

Source: IMD

- Sub-division-wise 5 days rainfall forecast from 09th Aug., 2019 to 13th Aug., 2019 is shown in Table 1.4
- Forecast for next two weeks at Annex-III

1. North-west India - Uttar Pradesh, Rajasthan, Haryana, Chandigarh and Delhi, Punjab, Uttarakhand, Himachal Pradesh, and Jammu and Kashmir.
Central India - Madhya Pradesh, Chhattisgarh, Maharashtra, Odisha, Goa and Gujarat.
South Peninsula - Andhra Pradesh & Telangana, Karnataka, Tamil Nadu & Puducherry, Kerala, A & N islands and Lakshadweep.
East & North East India - Bihar, Jharkhand, West Bengal, Sikkim, Assam, Arunachal Pradesh, Meghalaya, Nagaland, Manipur, Mizoram and Tripura.

Table: 1.1

METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & Wx. WARNINGS-2019								
Sr. No	MET.SUB-DIVISIONS	08 AUG	09 AUG	10 AUG	11 AUG	12 AUG	13 AUG	14 AUG
1	ANDAMAN & NICO.ISLANDS	FWS*	WS**	WS*	WS	FWS	FWS	SCT
2	ARUNACHAL PRADESH	SCT ^{TS}	ISOL	ISOL	SCT	FWS	FWS*	FWS*
3	ASSAM & MEGHALAYA	FWS ^{TS}	SCT	SCT	FWS*	FWS*	FWS*	FWS*
4	NAGA.MANI.MIZO.& TRIPURA	FWS ^{TS}	SCT	SCT	FWS*	WS*	FWS*	FWS*
5	SUB-HIM.W. BENG. & SIKKIM	WS*	FWS	FWS	FWS	WS*	WS***	WS**
6	GANGETIC WEST BENGAL	FWS*	SCT	SCT	SCT	FWS*	FWS	WS
7	ODISHA	FWS*	SCT	SCT	SCT	FWS*	WS*	WS*
8	JHARKHAND	FWS	SCT	SCT	SCT	FWS*	WS	WS
9	BIHAR	SCT	SCT	ISOL	SCT	FWS	FWS*	WS*
10	EAST UTTAR PRADESH	ISOL	ISOL	ISOL	SCT	FWS*	WS*	WS*
11	WEST UTTAR PRADESH	ISOL	ISOL	ISOL	SCT	FWS*	FWS*	FWS
12	UTTARAKHAND	FWS	FWS	FWS	FWS*	WS*	WS**	WS**
13	HARYANA CHD. & DELHI	ISOL*	ISOL	ISOL	ISOL	SCT*	SCT*	SCT
14	PUNJAB	SCT	SCT	ISOL	ISOL	ISOL*	SCT**	SCT
15	HIMACHAL PRADESH	FWS	FWS	FWS	FWS*	FWS*	WS*	WS**
16	JAMMU & KASHMIR	SCT*	FWS*	FWS	SCT	FWS*	FWS**	WS**
17	WEST RAJASTHAN	FWS*	SCT**	SCT*	SCT	SCT	ISOL	ISOL
18	EAST RAJASTHAN	WS**	FWS***	SCT*	SCT	SCT	ISOL	ISOL
19	WEST MADHYA PRADESH	WS***	WS***	FWS*	FWS	SCT	FWS*	FWS*
20	EAST MADHYA PRADESH	WS***	FWS*	SCT*	SCT	SCT	FWS*	WS*
21	GUJARAT REGION D.D. & N.H.	WS***	WS***	WS**	FWS*	SCT	SCT	SCT
22	SAURASTRA KUTCH & DIU	WS**	WS***	WS**	FWS*	SCT	SCT	SCT
23	KONKAN & GOA	WS***	WS**	WS*	WS*	WS*	WS*	WS*
24	MADHYA MAHARASHTRA	WS***	WS***	FWS*	SCT	SCT	SCT	FWS
25	MARATHAWADA	FWS*	SCT	SCT	ISOL	ISOL	ISOL	SCT
26	VIDARBHA	WS***	FWS*	SCT	SCT	SCT	SCT	SCT
27	CHHATTISGARH	WS	FWS	SCT	SCT	SCT	FWS	FWS*
28	COASTAL A. PR. & YANAM	FWS	SCT	SCT	SCT	SCT	SCT	SCT
29	TELANGANA	FWS*	SCT	SCT	SCT	SCT	SCT	SCT
30	RAYALASEEMA	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
31	TAMIL. PUDU. & KARAİKAL	SCT***	ISOL**	ISOL*	ISOL	ISOL	SCT	SCT*
32	COASTAL KARNATAKA	WS***	WS***	WS**	WS*	WS*	WS*	WS**
33	NORTH INT.KARNATAKA	WS***	FWS*	SCT	SCT	SCT	SCT	SCT
34	SOUTH INT.KARNATAKA	WS***	FWS***	FWS*	FWS	SCT	SCT	FWS*
35	KERALA & MAHE	WS***	WS***	WS**	WS*	WS*	WS**	WS**
36	LAKSHADWEEP	WS*	WS	WS*	WS*	WS*	WS	WS
LEGENDS:								
WS	WIDE SPREAD / MOST PLACES (76-100%)			FWS	FAIRLY WIDE SPREAD / MANY PLACES (51% to 75%)			
SCT	SCATTERED / FEW PLACES (26% to 50%)			ISOL	ISOLATED (up to 25%)		D/DRY	NIL RAINFALL
* Heavy Rainfall (64.5-115.5 mm)			** Heavy to Very Heavy Rainfall (115.6-204.4 mm)			*** Extremely Heavy Rainfall (204.5 mm or more)		
• FOG	* SNOWFALL	# HAILSTORM			⚡ HEAT WAVE (+4.5 °C to +6.4 °C)		⚡ SEVERE HEAT WAVE (> +6.4)	
§ THUNDERSTORM WITH SQUALL/GUSTY WIND			DS/TS DUST/THUNDERSTORM		⚡ COLD WAVE (-4.5 °C to -6.4 °C)		⚡ SEVERE COLD WAVE (< -6.4)	

Source: IMD

Table: 1.4

Met-Sub-Division	09-Aug Today	10Aug Sat	11Aug Sun	12Aug Mon	13Aug Tue
1. Andaman & Nicobar Islands	WS	WS	WS	FWS	FWS
2. Arunachal Pradesh	ISOL	ISOL	SCT	FWS	FWS
3. Assam & Meghalaya	SCT	SCT	FWS	FWS	FWS
4. N. M. M. & T.	SCT	SCT	FWS	WS	WS
5. S.H. West Bengal & Sikkim	FWS	FWS	FWS	WS	WS
6. Gangetic West Bengal	SCT	SCT	SCT	FWS	FWS
7. Odisha	SCT	SCT	SCT	FWS	FWS
8. Jharkhand	SCT	SCT	SCT	FWS	FWS
9. Bihar	SCT	ISOL	SCT	FWS	FWS
10. East Uttar Pradesh	ISOL	ISOL	SCT	FWS	FWS
11. West Uttar Pradesh	ISOL	ISOL	SCT	FWS	FWS
12. Uttarakhand	FWS	FWS	FWS	WS	WS
13. Haryana, Chd & Delhi	ISOL	ISOL	ISOL	SCT	SCT
14. Punjab	SCT	ISOL	ISOL	ISOL	ISOL
15. Himachal Pradesh	FWS	FWS	FWS	FWS	FWS
16. Jammu & Kashmir	FWS	FWS	SCT	FWS	FWS
17. West Rajsthan	SCT	SCT	SCT	SCT	SCT
18. East Rajasthan	FWS	SCT	SCT	SCT	SCT
19. West Madhya Pradesh	WS	FWS	FWS	SCT	SCT
20. East Madhya Pradesh	FWS	SCT	SCT	SCT	SCT
21. Gujarat Region	WS	WS	FWS	SCT	SCT
22. Saurashtra & Kutch	WS	WS	FWS	SCT	SCT
23. Konkan & Goa	WS	WS	WS	WS	WS
24. Madhya Maharashtra	WS	FWS	SCT	SCT	SCT
25. Marathawada	SCT	SCT	ISOL	ISOL	ISOL
26. Vidharbha	FWS	SCT	SCT	SCT	SCT
27. Chhattisgarh	FWS	SCT	SCT	SCT	SCT
28. Coastal A. P. & Yanam	SCT	SCT	SCT	SCT	SCT
29. Telangana	SCT	SCT	SCT	SCT	SCT
30. Rayalaseema	ISOL	ISOL	ISOL	ISOL	ISOL
31. T.N.,Puducherry & Karaikal	ISOL	ISOL	ISOL	ISOL	ISOL
32. Coastal Karnataka	WS	WS	WS	WS	WS
33. North Interior Karnataka	FWS	SCT	SCT	SCT	SCT
34. South Interior Karnataka	FWS	FWS	FWS	SCT	SCT
35. Kerala & Mahe	WS	WS	WS	WS	WS
36. Lakshadweep	WS	WS	WS	WS	WS

% Station Reporting Rainfall

% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)
No Rain	Dry		

Source: IMD

2. Reservoir Status (For the week ending on 08.08.2019)

- **The Central Water Commission** monitors the live storage capacity of **103** important/major reservoirs, having capacity at Full Reservoir Level (FRL) of **164.36** Billion Cubic Meters (BCM), which is about 63.75% of total reservoir capacity of 257.81 BCM in the country.
- Live Storage in 103 major reservoirs increased to 76.85 BCM from the previous week's level of 52.11 BCM. Current year's storage position is lower than the last year's storage position of 77.40 BCM and the average of last 10 year's storage position of 79.47 BCM.

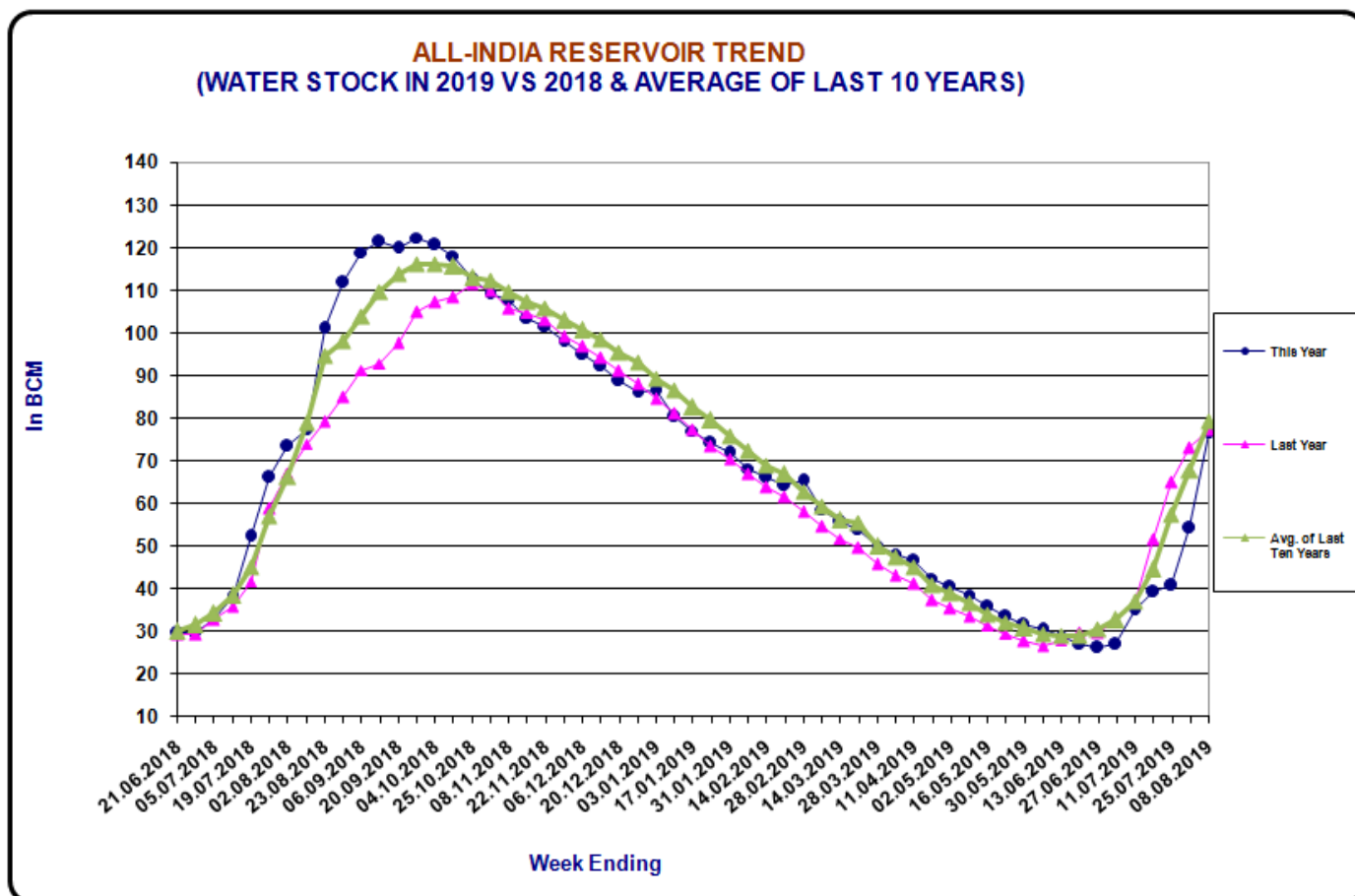
Table – 2.1 : For 100 major reservoirs of the country

<u>Period</u>	Storage as % of FRL	Storage as % of last year	Storage as % of 10 year's average level
Current Week	47	99	97
Last Week	32	71	76

The percentage to live capacity at FRL was 44% on 08/08/2018, 41% on 08/08/2017, 45% on 04/08/2016 and 50% on 06/08/2015.

Source: CWC

There were 50 reservoirs having storage more than 80% of normal storage, 19 reservoirs having storage between 51% to 80%, 20 reservoirs having storage between 31% to 50% and 14 reservoirs having storage upto 30% of Normal Storage out of these 3 reservoirs having no live storage.



Source: Central Water Commission

3. Fertilizer Position:

Table – 3.1: Requirement, Receipt, Availability, Sales and Stock position of Major Fertilizers UREA, DAP, MOP, Complex and SSP during Kharif 2018-19 (As on 08.08.2019)

(in '000 tonnes)

Availability/Sale/Closing Stock	Urea	DAP	MOP	Complex	SSP
Opening Stock as on 01.04.2019	613	833	265	1281	128
Requirement for Kharif 2019	15672	5121	2038	5297	2505
Estimated Requirement during August, 2019	3158	950	391	1078	474
Cumulative Receipt upto 08.08.2019	10063	3986	1132	3264	1590
Cumulative Availability upto 08.08.2019	10676	4819	1397	4545	1718
Cumulative Sales upto 08.08.2019	10096	2830	876	2826	1571
Closing Stock as on 08.08.2019	580	1989	521	1719	147

Source: Fertilizer Division (DAC&FW) / Deptt. of Fertilizer

4. Pest & Diseases:

- Incidence of Apple scab reported at Moderate to Severe intensity on Apple crop in Shimla and Mandi districts of Himachal Pradesh state.
- Overall intensity of pests and diseases remained below Economic Threshold Level (ETL).
- No shortage of Chemical / Bio-pesticides was reported from any State / UT.

5. **Availability position of seeds and fertilizers has been found satisfactory.**

6. All India Crop Situation - Kharif (2019-20) as on 09.08.2019

Table: 6.1

All India Crop Situation - Kharif (2019-20) as on 09.08.2019							
(In lakh hectares)							
Crop Name	Normal Area for whole Kharif Season	Normal Area as on date	Area sown reported			Absolute Change over (+/-)	
			This Year 2019	% of Normal for whole season	Last Year 2018	Normal as on date	Last Year
Rice	396.26	305.60	265.20	66.9	304.18	-40.4	-39.0
Jowar	21.61	16.41	14.06	65.1	15.83	-2.4	-1.8
Bajra	74.39	61.81	60.45	81.3	59.36	-1.4	1.1
Maize	74.66	70.72	72.74	97.4	72.83	2.0	-0.1
Total Coarse Cereals	188.33	157.86	153.92	81.7	155.37	-3.9	-1.5
Total Cereals	584.59	463.46	419.12	71.7	459.55	-44.3	-40.4
Tur	43.00	39.18	40.12	93.3	40.69	0.9	-0.6
Urad	30.77	30.36	32.58	105.9	34.52	2.2	-1.9
Moong	27.50	26.77	28.12	102.3	31.61	1.4	-3.5
Kulthi	2.19	0.35	0.19	8.7	0.36	-0.2	-0.2
Others	16.44	14.49	14.38	87.5	14.21	-0.1	0.2
Total Pulses	119.89	111.16	115.39	96.2	121.39	4.2	-6.0
Total Foodgrains	704.48	574.62	534.51	75.9	580.94	-40.1	-46.4
Groundnut	42.43	35.85	33.08	78.0	35.36	-2.8	-2.3
Soyabean	111.49	106.88	109.84	98.5	110.72	3.0	-0.9
Sunflower	1.91	1.08	0.80	41.9	0.81	-0.3	0.0
Sesamum	17.25	12.82	10.95	63.5	12.67	-1.9	-1.7
Nigerseed	2.51	0.55	0.61	24.3	0.53	0.1	0.1
Castorseed	9.69	3.13	1.89	19.5	2.43	-1.2	-0.5
Total Oilseeds	185.28	160.31	157.17	84.82	162.52	-3.1	-5.3
Cotton	120.97	110.86	118.73	98.2	112.60	7.9	6.1
Sugarcane	48.32	47.74	52.30	108.2	55.45	4.6	-3.2
Jute & Mesta	7.87	7.38	6.83	86.8	7.19	-0.5	-0.4
All- Crops	1066.92	900.90	869.55	81.5	918.70	-31.4	-49.2

Source: Crops & TMOP Divisions, DAC&FW

7. Progressive procurement of Rice as on 08.08.2019

Table: 7.1

(lakh tones)

State	Target in marketing season 2018-19 (Oct. – Sept.)	Progressive Procurement as on 08.08.2019	
		In Marketing season 2018-2019	In Marketing season 2017-2018
Andhra Pradesh	52.54	47.90	39.67
Telangana	45.00	51.86	36.19
Bihar	8.00	9.49	7.93
Chhattisgarh	40.00	39.71	32.07
Haryana	39.75	39.42	39.92
Jharkhand	2.50	1.53	1.43
Kerala	3.70	4.65	3.25
Madhya Pradesh	13.00	13.95	11.00
Maharashtra	5.50	5.80	1.79
Odisha	37.00	43.83	32.87
Punjab	114.00	113.34	118.39
Tamil Nadu	14.80	12.43	8.84
Uttar Pradesh	33.00	32.33	28.75
Uttrakhand	5.00	4.62	0.38
West Bengal	31.00	17.21	0.61
All-India	448.04	439.86	363.68

8. Progressive procurement of Wheat as on 05.07.2019

Table: 8.1

State	Target in marketing season 2019-20 (April - March)	Progressive Procurement as on 05.07.2019	
		In Marketing season 2019-2020	In Marketing season 2018-2019
Bihar	2.00	0.03	0.15
Haryana	85.00	93.20	87.37
Madhya Pradesh	75.00	67.25	69.67
Punjab	125.00	129.12	126.62
Rajasthan	17.00	14.11	15.32
Uttar Pradesh	50.00	37.00	52.94
Uttrakhand	2.00	0.42	1.10
All-India	357.00	341.33	353.69

Weather systems & associated Precipitation during Week 1(08 to 14 August, 2019) and Week 2 (15 to 21 August, 2019)**Rainfall for week 1: (08 to 14 August, 2019)**

- **The Depression over northeast Madhya Pradesh & neighbourhood is very likely to continue to move west-northwestwards and weaken gradually into a Well Marked Low Pressure Area during next 48 hours.**
- **Under the influence of above system along with active monsoon trough, Fairly widespread to widespread rainfall with isolated heavy to very heavy falls are very likely over Madhya Pradesh, Chhattisgarh, Vidarbha, Konkan & Goa, Madhya Maharashtra, Karnataka and Kerala during next 2 days and over Gujarat during next 3 days and decrease thereafter. However widespread rainfall activity along the west coast very likely to continue to occur during week 1.**
- **Isolated extremely heavy falls are also likely over south Chhattisgarh, Vidarbha and south Madhya Pradesh, Gujarat region, south Konkan & Goa, ghat areas of Madhya Maharashtra, Kerala, Coastal Karnataka and ghat areas of Tamilnadu & Interior Karnataka on 08th August; over southwest Madhya Pradesh, Gujarat, ghat areas of Madhya Maharashtra, East Rajasthan, Kerala, Coastal Karnataka and Ghat areas of South Interior Karnataka on 09th August.**
- **Fairly widespread to widespread rainfall with isolated heavy falls likely over Konkan & Goa, Madhya Maharashtra, Vidarbha and Chhattisgarh during most days of the week 1.**
- **Light/moderate scattered to fairly widespread rainfall activity likely to occur over rest parts of the country outside West Rajasthan, Rayalaseema & Tamilnadu, where light isolated to scattered rainfall very likely to occur during most days of week 1.**
- **Cumulatively, above normal rainfall likely over Gujarat, Maharashtra, southern parts of Madhya Pradesh & Chhattisgarh, Karnataka, Kerala, Lakshadweep and Andaman & Nicobar Islands. It is very likely to be normal to below normal over remaining parts of the country during week 1.**

Rainfall for week 2: (15 to 21 August, 2019)

- **During week 2, above normal rainfall activity likely over northeastern states, Sub Himalayan West Bengal & Sikkim, Kerala and Lakshadweep. It is very likely to be normal to below normal over remaining parts of the country during week 1.**

Source: IMD