

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. 443
Krishi Bhawan, New Delhi
Dated: 04.02.2020

**SUBJECT: MINUTES OF THE MEETING OF THE CROP WEATHER WATCH GROUP
HELD ON 31.01.2020.**

Summary observations of the Group on Agenda Items

- *The All-India level rainfall during the week i.e. 23rd January, 2020 – 29th January, 2020 has been 29% lower than Long Period Average (LPA). Rainfall in the four broad geographical divisions of the country during the above period have been lower than LPA by 97% in South Peninsula, by 74% in Central India, by 48% in East & North East India and by 13% in North West India.*
- *The cumulative rainfall in the country during the winter season i.e. 1st January, 2020 to 29th January, 2020 has been by 71% 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 95% in Central India, by 82% in North West India and by 61% in East & North East India but lower than LPA by 18% in South Peninsula.*
- *For winter season 1st January, 2020 to 29th January, 2020 out of 36 met sub-divisions, 18 met sub-divisions constituting 57% of the total area of the country has received large excess/excess rainfall, 05 met sub-divisions constituting 15% of the total area of the country has received normal rainfall, 10 met sub-divisions constituting 24% of the total area of the country has received deficient/large deficient rainfall and 03 met sub-divisions constituting 4% of the total area of the country has received no rainfall.*
- *Central Water Commission monitors 123 major reservoirs in the country which have total live capacity of 171.09 Billion Cubic Meter (BCM) at Full Reservoir Level (FRL). Out of these, 99 reservoirs with FRL capacity of 126.45 BCM have irrigation potential. Live storage in 123 major reservoirs as on 30th January, 2020 has been 119.43 BCM as against 76.74 BCM on 30.01.2019 (last year) and 82.89 BCM of normal (average of the last 10 years) storage. Current year's storage is 156% of last year's storage and 144% of average of last 10 year's storage.*
- *As per latest information available on sowing of Rabi crops, around 105% of the normal area under Rabi crops has been sown upto 31.01.2020. Area sown under all rabi crops taken together has been reported 662.13 lakh hectares at All India level as compared to 604.52 lakh hectares in the corresponding period of last year and 613.91 lakh ha. normal area as on date.*
- *All-India progressive procurement of Rice as on 31.01.2020 for Kharif Marketing Season (KMS) 2019-20 is 336.10 lakh tonnes against the procurement of 323.70 lakh tonnes in the corresponding period of last year.*

1. **Winter Season (Jan. – Feb.) during the week ending 29th January, 2020**

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

- **Rainfall during the week (23rd January, 2020 to 29th January, 2020)** Rainfall was large excess/excess in 07 sub-divisions, normal in 01 sub division, deficient/large deficient in 16 and no rain in 12 met sub-division out of 36 meteorological sub-divisions.
- **Cumulative rainfall (01st January, 2020 to 29th January, 2020)** Rainfall was large excess/excess in 18 met sub-divisions, normal in 05 met sub-divisions, deficient/large deficient in 10 sub-divisions and no rain in 03 met sub-division out of 36 meteorological sub-divisions.

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

Region	Week Ending (29.01.2020)				Cumulative (01.01.20 to 29.01.20)			
	(in mm)		Devi- ation (%)	Cate- gory	(in mm)		Devi- ation (%)	Cate- gory
	Actual	Normal			Actual	Normal		
North-West India	8.8	10.1	-13	N	56.7	31.2	82	LE
Central India	0.5	1.8	-74	LD	13.4	6.9	95	LE
South Peninsular India	0.0	0.8	-97	LD	6.4	7.8	-18	N
East & North-East India	2.8	5.3	-48	D	26.3	16.4	61	LE
Country as a whole	3.3	4.7	-29	D	27.4	16.0	71	LE

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 Jan., 2020 to 29th January, 2020

No. of Sub-Divisions with rainfall	For the period from 1 st October to					
	28 JAN 2015	27 JAN 2016	01 FEB 2017	31 JAN 2018	30 JAN 2019	29 JAN 2020
Large Excess	-	-	07	01	05	15
Excess	16	04	05	00	04	03
Normal	06	08	02	00	06	05
Total	25	12	14	01	15	23
Deficient	06	03	04	03	03	06
Large Deficient	-	-	12	16	12	04
Scanty	05	16	-	-	-	-
No rain	00	05	06	16	06	03
Total	11	24	22	35	18	13
Data Inadequate	00	00	00	00	00	00
TOTAL	36	36	36	36	36	36
All-India % Rainfall Deviation	(-) 6%	(-) 60%	36%	(-) 85%	(-) 3%	71%

Source: IMD

- Sub-division-wise 5 days rainfall forecast from 31st Jan., 2020 to 04th Feb., 2020 is shown in Table 1.4.
- Forecast for next two weeks at Annex-I

Table: 1.1

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.

Source: IMD

METEOROLOGICAL SUB-DIVISIONWISE DISTRIBUTION OF REALISED RAINFALL-2020

S.No.	MET.SUB-DIVISIONS	23 JAN	24 JAN	25 JAN	26 JAN	27 JAN	28 JAN	29 JAN
1	ANDAMAN & NICO.ISLANDS	D	ISOL	D	D	D	D	D
2	ARUNACHAL PRADESH	SCT	FWS	D	D	D	D	D
3	ASSAM & MEGHALAYA	ISOL	ISOL	ISOL	D	D	D	D
4	NAGA.MANI.MIZO.& TRIPURA	D	ISOL	D	D	ISOL	D	ISOL
5	SUB-HIM.W. BENG. & SIKKIM	ISOL	ISOL	ISOL	D	D	D	ISOL
6	GANGETIC WEST BENGAL	ISOL	D	D	D	D	D	WS
7	ODISHA	ISOL	D	D	D	D	D	ISOL
8	JHARKHAND	ISOL	D	D	D	D	D	FWS
9	BIHAR	D	D	D	D	D	ISOL	ISOL
10	EAST UTTAR PRADESH	D	D	D	D	D	ISOL	ISOL
11	WEST UTTAR PRADESH	D	D	D	D	D	ISOL	FWS
12	UTTARAKHAND	D	D	D	D	ISOL	WS	WS
13	HARYANA CHD. & DELHI	D	D	D	D	D	WS	FWS
14	PUNJAB	D	D	D	ISOL	ISOL	WS	WS
15	HIMACHAL PRADESH	D	D	D	ISOL	ISOL	WS	WS
16	JAMMU & KASHMIR	ISOL	D	D	ISOL	ISOL	FWS	WS
17	WEST RAJASTHAN	D	D	D	ISOL	ISOL	SCT	ISOL
18	EAST RAJASTHAN	D	D	D	D	D	ISOL	ISOL
19	WEST MADHYA PRADESH	ISOL	D	D	D	D	D	ISOL
20	EAST MADHYA PRADESH	ISOL	D	D	D	D	ISOL	ISOL
21	GUJARAT REGION D.D. & N.H.	D	D	D	D	D	D	D
22	SAURASTRA KUTCH & DIU	D	D	D	D	D	ISOL	D
23	KONKAN & GOA	D	D	D	D	D	D	D
24	MADHYA MAHARASHTRA	D	D	D	D	D	D	D
25	MARATHAWADA	D	D	D	D	D	D	D
26	VIDARBHA	D	D	D	D	D	ISOL	D
27	CHHATTISGARH	ISOL	D	D	D	D	D	ISOL
28	COASTAL A. PR. & YANAM	D	D	D	D	D	D	D
29	TELANGANA	D	D	D	D	D	D	D
30	RAYALASEEMA	D	D	D	D	D	D	D
31	TAMIL. PUDU. & KARAIKAL	ISOL	ISOL	D	D	D	D	D
32	COASTAL KARNATAKA	D	D	D	D	D	D	D
33	NORTH INT.KARNATAKA	D	D	D	D	D	D	D
34	SOUTH INT.KARNATAKA	D	D	D	D	D	D	D
35	KERALA & MAHE	D	D	D	D	D	D	D
36	LAKSHADWEEP	D	D	D	D	D	D	D

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	NO STATION REPORTED RAINFALL
* ACTIVE (R/F $1\frac{1}{2}$ - 4 times the normal with WS/FWS, at least 2 stations should be 5 cm. along west coast & 3 cm. elsewhere)					
** VIGOROUS (R/F More than 4 times the normal with WS/FWS, at least 2 stations should be 8 cm. along west coast & 5 cm. elsewhere)					

Table: 1.4

Met-Sub-Division	31-Jan Today	01Feb Sat	02Feb Sun	03Feb Mon	04Feb Tue
1. Andaman & Nicobar Islands	ISOL	ISOL	ISOL	ISOL	ISOL
2. Arunachal Pradesh	SCT	SCT	ISOL	ISOL	ISOL
3. Assam & Meghalaya	ISOL	ISOL	DRY	DRY	DRY
4. N. M. M. & T.	ISOL	DRY	DRY	DRY	DRY
5. S.H. West Bengal & Sikkim	ISOL	ISOL	ISOL	DRY	DRY
6. Gangetic West Bengal	DRY	DRY	DRY	DRY	DRY
7. Odisha	DRY	ISOL	ISOL	DRY	ISOL
8. Jharkhand	DRY	DRY	DRY	DRY	DRY
9. Bihar	DRY	DRY	DRY	DRY	DRY
10. East Uttar Pradesh	DRY	DRY	DRY	DRY	DRY
11. West Uttar Pradesh	DRY	DRY	DRY	DRY	DRY
12. Uttarakhand	DRY	DRY	DRY	DRY	DRY
13. Haryana, Chd & Delhi	DRY	DRY	DRY	DRY	DRY
14. Punjab	DRY	DRY	DRY	DRY	DRY
15. Himachal Pradesh	ISOL	DRY	DRY	DRY	ISOL
16. Jammu & Kashmir	ISOL	DRY	DRY	ISOL	ISOL
17. West Rajsthan	DRY	DRY	DRY	DRY	DRY
18. East Rajasthan	DRY	DRY	DRY	DRY	DRY
19. West Madhya Pradesh	DRY	DRY	DRY	ISOL	ISOL
20. East Madhya Pradesh	DRY	DRY	DRY	ISOL	ISOL
21. Gujarat Region	DRY	DRY	DRY	DRY	DRY
22. Saurashtra & Kutch	DRY	DRY	DRY	DRY	DRY
23. Konkan & Goa	DRY	DRY	DRY	DRY	DRY
24. Madhya Maharashtra	DRY	DRY	DRY	DRY	DRY
25. Marathawada	DRY	DRY	DRY	DRY	DRY
26. Vidharbha	DRY	ISOL	DRY	ISOL	ISOL
27. Chhattisgarh	DRY	ISOL	ISOL	DRY	ISOL
28. Coastal A. P. & Yanam	DRY	ISOL	ISOL	DRY	DRY
29. Telangana	DRY	DRY	DRY	DRY	DRY
30. Rayalaseema	DRY	DRY	DRY	DRY	DRY
31. T.N., Puducherry & Karaikal	DRY	DRY	DRY	DRY	DRY
32. Coastal Karnataka	DRY	DRY	DRY	DRY	DRY
33. North Interior Karnataka	DRY	DRY	DRY	DRY	DRY
34. South Interior Karnataka	DRY	DRY	DRY	DRY	DRY
35. Kerala & Mahe	DRY	DRY	DRY	DRY	DRY
36. Lakshadweep	DRY	DRY	DRY	DRY	DRY

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

2. Reservoir Status (For the week ending on 30.01.2020)

- The Central Water Commission monitors the live storage capacity of 123 important/major reservoirs, having capacity at Full Reservoir Level (FRL) of 171.09 Billion Cubic Meters (BCM), which is about 66.36% of total reservoir capacity of 257.81 BCM in the country.
- Live Storage in 123 major reservoirs decreased to 119.43 BCM from the previous week's level of 123.41 BCM. Current year's storage position is higher than the last year's storage position of 76.74 BCM and the average of last 10 year's storage position of 82.89 BCM.

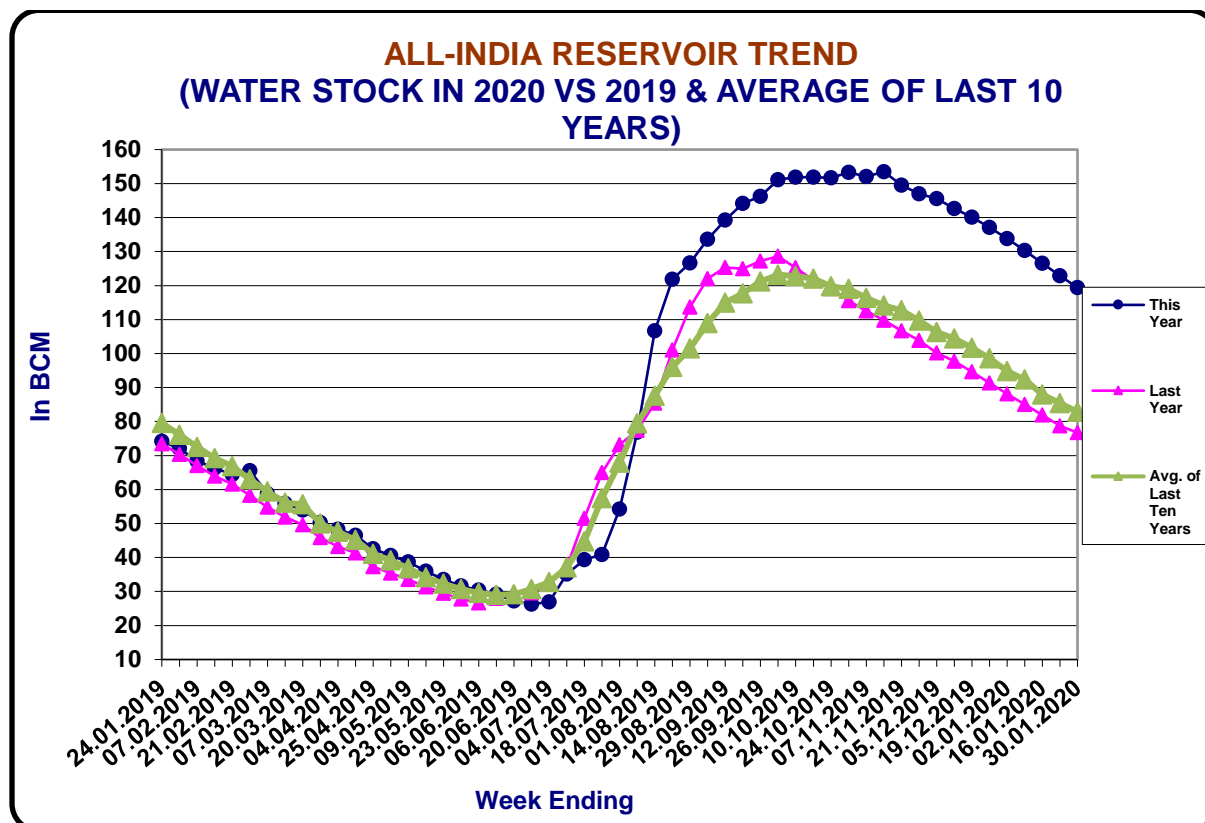
Table – 2.1 : For 120 major reservoirs of the country

<u>Period</u>	Storage as % of FRL	Storage as % of last year	Storage as % of 10 year's average level
Current Week	70	156	144
Last Week	72	156	144

The percentage to live capacity at FRL was 45% on 30/01/2019, 45% on 30/01/2018, 50% on 30/01/2017 and 38% on 30/01/2016.

Source: CWC

- There were 118 reservoirs having storage more than 80% of normal storage, 2 reservoirs having storage between 51% to 80%, 01 reservoir having storage between 31% to 50% and 02 reservoirs having storage upto 30% of Normal 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 Rabi 2019-20 (As on 31.01.2020)

(in '000 tonnes)

Availability/Sale/Closing Stock	Urea	DAP	MOP	Complex	SSP
Opening Stock as on 01.10.2019	365	1377	377	1269	140
Requirement for Oct,2019 to March, 2020	17904	5208	1773	5186	2567
Estimated Requirement during Jan, 2020	3298	490	263	818	377
Cumulative Receipt upto 31.01.2020	13095	3590	771	3593	1396
Cumulative Availability upto 31.01.2020	13460	4967	1148	4862	1536
Cumulative Sales upto 31.01.2020	12866	3629	801	3464	1383
Closing Stock as on 31.01.2020	594	1338	347	1398	153

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

4. Pest & Diseases:

- Overall intensity of pests and diseases remained below Economic Threshold Level (ETL).
- Fall Army Worm reported above ETL in 3,580 hectares on Rabi Maize and in 28,000 hectares on Rabi Sorghum in Maharashtra. FAW also reported at Trace to Moderate intensity in 45 hectares on Maize in Munger district of Bihar.
- Pod borer and wilt reported above ETL in 60,000 ha on Chick pea in Maharashtra.
- No shortage of Chemical / Bio-pesticides was reported for any State / UT.

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

6. All India Crop Situations - Rabi (2019-20) as on 31.01.2020

Table: 6.1

(Area in lakh hectares)							
Crop Name	Normal Area	Average Area as on date	Area sown			Absolute Change over (+/-)	
			This Year	% of Normal	Last Year	Average as on date	Last Year
Wheat	305.58	303.69	336.18	110.0	299.30	32.5	36.9
Rice	42.77	22.70	28.80	67.3	25.31	6.1	3.5
Jowar	35.75	31.64	30.22	84.5	25.03	-1.4	5.2
Maize	17.49	15.22	16.98	97.1	14.78	1.8	2.2
Barley	6.57	7.44	7.82	118.9	7.20	0.4	0.6
Total Coarse Cereals	59.81	55.06	55.69	93.1	47.77	0.6	7.9
Total Cereals	408.17	381.45	420.67	103.1	372.38	39.2	48.3
Gram	93.53	95.38	107.21	114.6	96.19	11.8	11.0
Lentil	14.19	16.09	16.07	113.2	16.91	0.0	-0.8
Peas	9.45	10.33	9.64	102.1	10.46	-0.7	-0.8
Kulthi(Horse Gram)	2.04	4.59	5.15	252.7	5.43	0.6	-0.3
Urad	8.61	8.40	7.63	88.6	7.53	-0.8	0.1
Moong	10.10	6.51	6.19	61.3	6.10	-0.3	0.1
Lathyrus	4.13	3.70	3.31	80.0	3.09	-0.4	0.2
Others	3.94	6.10	5.96	151.3	6.07	-0.1	-0.1
Total Pulses	146.00	151.10	161.17	110.4	151.78	10.1	9.4
Total Foodgrains	554.16	532.55	581.84	105.0	524.16	49.3	57.7
Rapeseed & Mustard	60.48	67.73	69.51	114.9	69.76	1.8	-0.2
Groundnut	7.76	5.95	4.76	61.3	4.59	-1.2	0.2
Safflower	1.41	0.85	0.63	44.4	0.43	-0.2	0.2
Sunflower	2.92	2.14	1.04	35.5	1.13	-1.1	-0.1
Sesamum	3.12	0.76	0.56	17.8	0.71	-0.2	-0.2
Linseed	2.99	3.51	3.46	115.8	3.44	-0.1	0.0
Total Oilseeds (Nine)	78.82	81.36	80.29	101.9	80.36	-1.1	-0.1
All- Crops	632.98	613.91	662.13	104.6	604.52	48.2	57.6

Source: Crops & TMOP Divisions, DAC&FW

7. Progressive procurement of Rice as on 31.01.2020

Table: 7.1

(lakh tonnes)

State	Target in marketing season 2019-20 (Oct. – Sept.)	Progressive Procurement as on 31.01.2020	
		In Marketing season 2019-2020	In Marketing season 2018-2019
Andhra Pradesh	40.00	21.54	22.60
Telangana	30.00	31.04	26.82
Chhattisgarh	48.00	43.54	39.64
Haryana	40.00	43.03	39.42
Kerala	2.50	1.17	0.62
Madhya Pradesh	14.00	15.35	12.75
Maharashtra	6.00	3.53	2.48
Odisha	34.00	23.79	20.46
Punjab	114.00	108.76	113.34
Tamil Nadu	8.00	1.36	2.62
Uttar Pradesh	33.00	34.21	27.60
Uttrakhand	5.00	6.22	4.52
West Bengal	23.00	0.01	8.77
All-India	416.00	336.10	323.70

Rainfall for next two Weeks

Weather systems and associated Precipitation & temperature pattern during week 1 (31st January – 06th February 2020) and week 2 (7th – 13th February 2020)

Rainfall for week 1: (31st January – 06th February, 2020)

- The present WD which is approaching the Indian sub-continent as a trough is very likely to cause isolated rain / snow over Jammu & Kashmir and Ladakh and over the higher reaches of Himachal Pradesh tomorrow (31st January). Subsequent WD is likely during 4th – 6th February. This might cause isolated to scattered rain / snow over western Himalayan region and isolated rain / thundershowers over the northern plains (mainly over northeast Rajasthan, south Haryana, south Uttar Pradesh) on 4th & 5th February.
- Likely formation of a cyclonic circulation over interior parts of south Peninsula and confluence of moist winds from an anti-cyclone in the lower levels over the Bay of Bengal could result in isolated to scattered rain / thundershowers and isolated Hailstorms over parts of central & eastern India (especially over east Madhya Pradesh, Chhattisgarh, Vidarbha, Odisha and Jharkhand) towards the later part of week-1.
- The westerly wind regime could also cause scattered to fairly widespread rain / thundershowers and snowfall over the higher reaches of Sikkim and Arunachal Pradesh on most of the days and isolated to scattered rain / thundershowers over Assam & Meghalaya and Nagaland during the initial couple of days of week-1.
- Cumulative precipitation is likely to be above normal over Arunachal Pradesh, Assam and Nagaland. Near normal rainfall likely over the rest of the States and union territories outside Jammu & Kashmir, Ladakh, Himachal Pradesh and Uttarakhand where the rain / snow is likely to be below normal.

Rainfall for week 2: (31st January – 06th February, 2020)

- Another WD is likely to affect western Himalayan region during 7th & 8th February and yet another WD during 10th – 12th February.
- Eastward movement of the second WD and allied wind confluence from the likely favourable positioning of the anti-cyclone over the Bay of Bengal could cause isolated rain/thunderstorms over parts of central and eastern India towards the later part of week-2.
- Cumulatively, near normal precipitation is likely over major parts of India, outside Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Arunachal Pradesh and southern most parts of Tamil Nadu and Kerala where the rainfall is likely to be below normal.

Minimum Temperatures for week 1: (31st January – 6th February, 2020)

- Night minimum temperatures are likely to remain below normal during a few days over major parts of India outside coastal & south interior Karnataka, south Andhra Pradesh and interior Tamil Nadu, where normal to above normal night temperatures are likely to prevail on some of the days during the week.

Minimum Temperatures for week 2: (7th – 13th February 2020)

- Week 2 in general is likely to be warmer than week 1. However, near normal to 2-3°C below normal night minimum temperatures are likely to prevail over major parts of India, at least for a few days, outside coastal & south interior Karnataka, Rayalaseema and north Madhya Maharashtra where above normal minimum temperatures are likely to occur during some of the days.