

F. No. 3-1/ 2016-17-CFCC-E&S
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: 01.11.2016

SUBJECT: MINUTES OF THE MEETING OF THE CROP WEATHER WATCH GROUP HELD ON 28.10.2016.

Summary observations of the Group on Agenda Items

- **Details of the mean maximum and minimum temperature during the week 20th October, 2016 to 26th October, 2016 were as under:-**

Maximum Temperature

- *Above normal by 4 to 6^oC over some parts of Rayalaseema and isolated pockets of Coastal Andhra Pradesh and Tamil Nadu and by 2 to 4^oC over Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, many parts of Himachal Pradesh, Assam & Meghalaya Rayalaseema, South Interior Karnataka, Tamil Nadu, some parts of Punjab, Coastal Andhra Pradesh, Kerala and isolated pockets of Haryana & Delhi, West Uttar Pradesh, East Rajasthan, West Madhya Pradesh and Telangana.*
- *Normal to near normal over rest of the country except some parts of Saurashtra, where it was below normal by 2 to 4^oC.*

Minimum Temperature

- *Above normal by 4 to 6^oC over isolated pocket of West Rajasthan and by 2 to 4^oC over some parts of West Rajasthan and isolated pockets of West Uttar Pradesh, East Rajasthan, West Madhya Pradesh and Andaman & Nicobar Islands.*
- *Normal to near normal over rest of the country except many parts of Odisha, Vidarbha, Marathwada, North Interior Karnataka, Telangana, Coastal Andhra Pradesh, some parts of Madhya Pradesh, Chhattisgarh, Jharkhand, Madhya Maharashtra, South Interior Karnataka, Rayalaseema, where it was below normal by 2 to 4^oC and isolated pockets of Madhya Maharashtra, Marathwada, North Interior Karnataka, Telangana and Coastal Andhra Pradesh, where it was below normal by 4 to 6^oC.*
- *In the post monsoon season, at all-India level, the rainfall during the week (20th – 26th October, 2016) has been 91% lower than the Long Period Average (LPA). Rainfall in the four broad geographical divisions of the country during the above period has been lower than LPA by 100% in Central India, 97% in North West India, 95% in East & North East India and 85% in South Peninsula.*
- *The cumulative rainfall in the country during the post monsoon season i.e. 01st October to 26th October, 2016 has been 31% lower than the Long Period Average (LPA). Rainfall in the four broad geographical divisions of the country during the above period has been higher than LPA by 19% in Central India and lower by 65% in South Peninsula, 49% in North West India and 23% in East & North East India .*

- *Out of 36 met sub-divisions, 17 met sub-divisions constituting 54% of the total area of the country has received excess/normal rainfall, 19 met sub-divisions constituting 46% of the total area of the country has received deficient/scanty rainfall.*
- *Central Water Commission monitors 91 major reservoirs in the country which have total live capacity of 157.80 Billion Cubic Meter (BCM) at Full Reservoir Level (FRL). Out of these, 76 reservoirs with FRL capacity of 116.25 BCM have irrigation potential. Live storage in the 91 major reservoirs as on 27th October, 2016 has been 115.46 BCM as against 89.06 BCM on 27.10.2015 (last year) and 116.33 BCM of normal (average of the last 10 years) storage. Current year's storage is 130% of last year's storage and 99% of the average of last 10 years.*
- *Availability position of seeds and fertilizers has been found satisfactory.*

1. Post Monsoon Season (October–December) during the week ending on 26th October, 2016

➤ Sub-division-wise weekly rainfall forecast & weather warning is shown in Table-1.1

- - **Rainfall during the week (20th October, 2016 to 26th October, 2016)** Rainfall was excess in 01, deficient/scanty in 10 and no rain in 25 out of 36 meteorological sub-divisions.
 - **Cumulative rainfall (01st October, 2016 to 26th October, 2016)** Rainfall was excess/normal in 17 and deficient/scanty in 19 out of 36 meteorological sub-division.

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

Region	Week Ending (26.10.2016)				Cumulative (01.10.16 to 26.10.16)			
	(in mm)		Devi- ation (%)	Cat.	(in mm)		Devi- ation (%)	Cate- gory
	Actual	Normal			Actual	Normal		
North-West India	0.1	2.6	-97	S	14.9	29.0	-49	D
Central India	0.0	8.6	-100	NR	65.3	54.7	19	N
South Peninsular India	5.0	33.9	-85	S	47.6	134.7	-65	S
East & North-East India	0.9	18.1	-95	S	94.0	121.8	-23	D
Country as a whole	1.1	13.3	-91	S	50.9	73.4	-31	D

E: Excess, N: Normal, D: Deficient, S: Scanty, 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 October to

No. of Sub-Divisions with rainfall	<i>For the period from 1st October to</i>					
	26 OCT 2011	24 OCT 2012	23 OCT 2013	29 OCT 2014	28 OCT 2015	26 OCT 2016
Excess	00	03	21	06	01	08
Normal	04	11	04	08	05	09
Total	04	14	25	14	06	17
Deficient	09	09	11	10	08	07
Scanty	21	13	00	12	22	12
No rain	02	00	00	00	00	00
Total	32	22	11	22	30	19
Data Inadequate	00	00	00	00	00	00
TOTAL	36	36	36	36	36	36
All-India % Rainfall Deviation	(-) 57%	(-) 21%	46%	(-) 24%	(-) 52%	(-) 31%

Source: IMD

➤ Sub-division-wise 5 days rainfall forecast from 28th Oct., 2016 to 01st Nov., 2016 is shown in Table 1.4

1. North-West India - Uttar Pradesh, Rajasthan, Haryana, Chandigarh and Delhi, Punjab, Uttaranchal, Himachal Pradesh, and Jammu and Kashmir.
Central India - Madhya Pradesh, Chhattisgarh, Maharashtra and Gujarat

South Peninsula - Andhra Pradesh, Karnataka, Tamil Nadu & Pondicherry, Kerala and Lakshadweep.

North-East India - Bihar, Jharkhand, Orissa, West Bengal, Sikkim, Assam, Arunachal Pradesh, Meghalaya, Nagaland, Manipur, Mizoram, Tripura, and Andaman and Nicobar Islands.

Table: 1.1

METEOROLOGICAL SUB-DIVISIONWISE WEEKLY RAINFALL FORECAST & WEATHER WARNINGS (27 OCT-02 NOV 2016)								
S.No	SUB-DIVISIONS	27 OCT	28 OCT	29 OCT	30 OCT	31 OCT	01 NOV	02 NOV
1	ANDAMAN & NICO.ISLANDS	ISOL	ISOL	ISOL	FWS	FWS	FWS	FWS
2	ARUNACHAL PRADESH	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
3	ASSAM & MEGHALAYA	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY
4	NAGA.MANI.MIZO.& TRIPURA	SCT	SCT	ISOL	SCT	SCT	ISOL	ISOL
5	SUB-HIM.W. BENG. & SIKKIM	DRY	DRY	DRY	DRY	DRY	DRY	DRY
6	GANGETIC WEST BENGAL	ISOL	ISOL	ISOL	ISOL	ISOL	DRY	DRY
7	ODISHA	SCT	SCT	SCT	ISOL	ISOL	ISOL	ISOL
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
10	EAST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
11	WEST UTTAR PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
12	UTTARAKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY
13	HARYANA CHD. & DELHI	DRY	DRY	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	DRY	DRY	DRY	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
16	JAMMU & KASHMIR	DRY	DRY	DRY	DRY	DRY	DRY	DRY
17	WEST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
18	EAST RAJASTHAN	DRY	DRY	DRY	DRY	DRY	DRY	DRY
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY
21	GUJARAT REGION D.D. & N.H.	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASTRA KUTCH & DIU	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	ISOL	ISOL	ISOL
25	MARATHAWADA	DRY	DRY	DRY	DRY	ISOL	ISOL	DRY
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	DRY	DRY	ISOL	ISOL	DRY	ISOL	ISOL
28	COASTAL ANDHRA PRADESH	SCT	FWS*	FWS*	FWS*	FWS	ISOL	SCT
29	TELANGANA	DRY	DRY	ISOL	ISOL	ISOL	ISOL	ISOL
30	RAYALASEEMA	DRY	ISOL	SCT	SCT	ISOL	ISOL	ISOL
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	SCT	FWS	FWS*	FWS	FWS
32	COASTAL KARNATAKA	DRY	DRY	DRY	SCT	SCT	SCT	SCT
33	NORTH INT.KARNATAKA	DRY	DRY	DRY	ISOL	ISOL	ISOL	ISOL
34	SOUTH INT.KARNATAKA	DRY	DRY	ISOL	ISOL	SCT*	SCT	SCT
35	KERALA	SCT	ISOL	SCT	FWS	WS*	FWS*	SCT
36	LAKSHADWEEP	ISOL	ISOL	ISOL	ISOL	ISOL	SCT	SCT
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%)	DRY	NO STATION REPORTED 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)			

Table: 1.4

Met-Sub-Division	28-Oct Today	29Oct Sat	30Oct Sun	31Oct Mon	01Nov Tue
1. Andaman & Nicobar Islands	ISOL	ISOL	FWS	FWS	FWS
2. Arunachal Pradesh	DRY	DRY	DRY	DRY	DRY
3. Assam & Meghalaya	ISOL	ISOL	ISOL	ISOL	ISOL
4. N. M. M. & T.	SCT	ISOL	SCT	SCT	ISOL
5. S.H. West Bengal & Sikkim	DRY	DRY	DRY	DRY	DRY
6. Gangetic West Bengal	ISOL	ISOL	ISOL	ISOL	DRY
7. Odisha	SCT	SCT	ISOL	ISOL	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	DRY	DRY	DRY	DRY	DRY
16. Jammu & Kashmir	DRY	DRY	DRY	DRY	DRY
17. West Rajsthan	DRY	DRY	DRY	DRY	DRY
18. East Rajasthan	DRY	DRY	DRY	DRY	DRY
19. West Madhya Pradesh	DRY	DRY	DRY	DRY	DRY
20. East Madhya Pradesh	DRY	DRY	DRY	DRY	DRY
21. Gujarat Region	DRY	DRY	DRY	DRY	DRY
22. Saurashtra & Kutch	DRY	DRY	DRY	DRY	DRY
23. Konkan & Goa	DRY	DRY	DRY	ISOL	ISOL
24. Madhya Maharashtra	DRY	DRY	DRY	ISOL	ISOL
25. Marathawada	DRY	DRY	DRY	ISOL	ISOL
26. Vidharbha	DRY	DRY	DRY	DRY	DRY
27. Chhattisgarh	DRY	ISOL	ISOL	DRY	DRY
28. Coastal Andhra Pradesh	FWS	FWS	FWS	FWS	SCT
29. Telangana	DRY	ISOL	ISOL	ISOL	ISOL
30. Rayalaseema	ISOL	SCT	SCT	ISOL	ISOL
31. Tamilnadu & Puducherry	ISOL	SCT	FWS	FWS	FWS
32. Coastal Karnataka	DRY	DRY	SCT	SCT	FWS
33. North Interior Karnataka	DRY	DRY	ISOL	ISOL	ISOL
34. South Interior Karnataka	DRY	ISOL	ISOL	FWS	SCT
35. Kerala	ISOL	SCT	FWS	WS	WS
36. Lakshadweep	ISOL	ISOL	ISOL	ISOL	ISOL

% 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		

2. Reservoir Status (For the week ending on 27.10.2016)

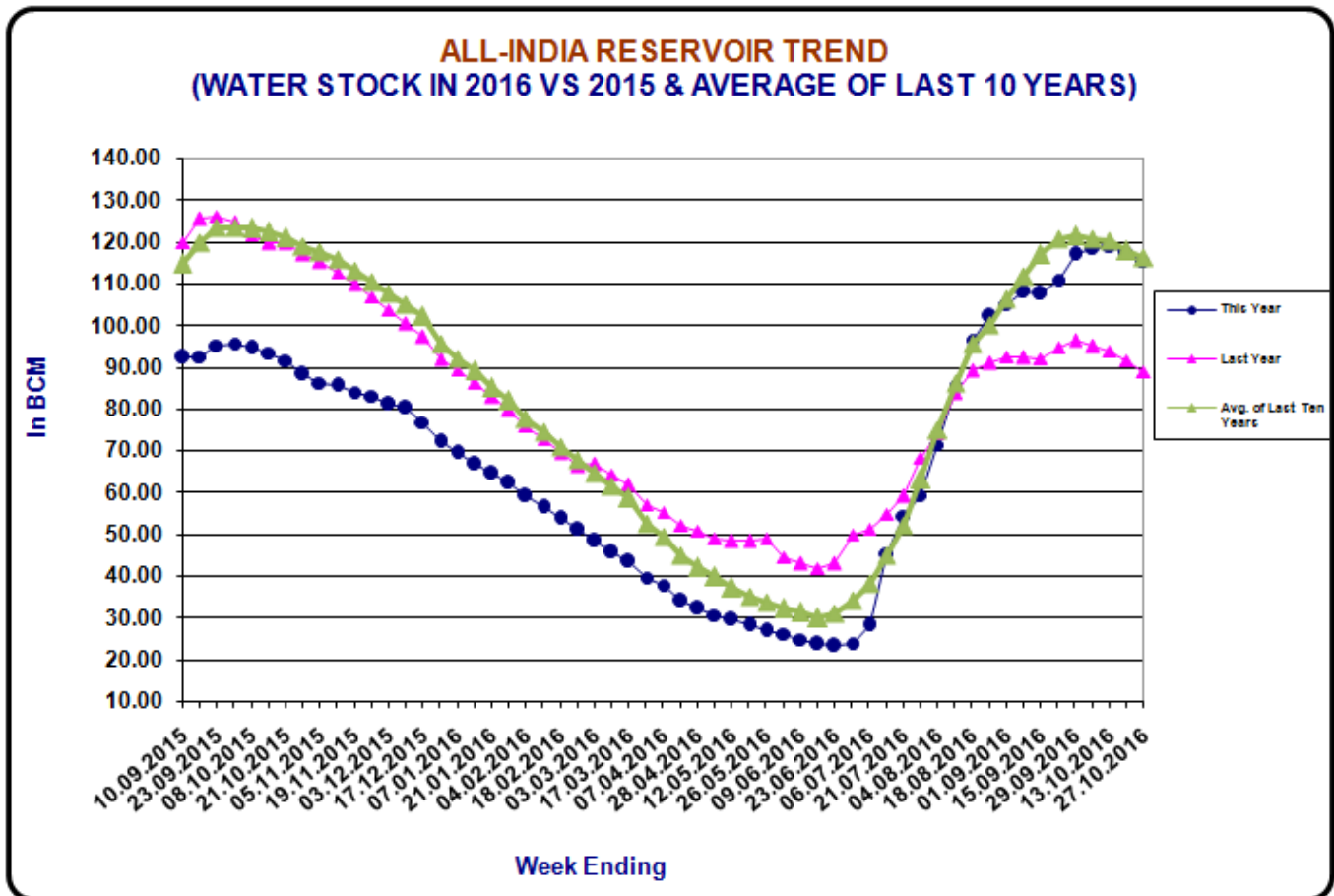
- **The Central Water Commission** monitors the live storage of **91** important/major reservoirs, having capacity at Full Reservoir Level (FRL) of **157.80** billion cubic meters (BCM), which is about 62% of total reservoir capacity in the country.
- Water stock in 91 major reservoirs **decreased** to 115.46 BCM from the previous week's level of 117.73 BCM. Current storage is higher than the last year's position of 89.06 BCM and lower than the average of last 10 year's storage of 116.33 BCM.

Table – 2.1 : For 91 major reservoirs of the country

<u>Period</u>	Current Year's Storage as % of FRL*	Current Year's storage as % of last year	Current year as a % of 10 years average level
Current Week	73	130	99
Last Week	75	128	100
The percentage to live capacity at FRL was 56% on 27/10/2015, 74% on 27/10/2014, 86% on 27/10/2013 and 72% on 27/10/2012.			
* Live storage as % to Full Reservoir Level (FRL) of 157.80 Billion Cub. Mts.(BCM)			

Source: CWC

There were 60 reservoirs having storage more than 80%, 15 reservoirs having storage between 50% to 80% of Normal Storage, 07 reservoir having storage between 30% to 50%, 09 reservoir having storage upto 30% of Normal Storage.



Source: Central Water Commission

3. Fertilizer Position:

Table – 3.1: Requirement, Availability, Sales and Stock position of Major Fertilizers Urea, DAP, MOP, Complex and SSP during Rabi 2016-17 (As on 28.10.2016)

(in '000 Tonnes)

Availability / Sale / Closing Stock	Urea	DAP	MOP	Complex	SSP
Opening Stock as on 01.10.2016	1698	1535	271	1200	211
Requirement for Rabi, 2016-17	15136	5245	1841	5370	3357
Requirement upto October, 2016	2837	1543	360	1114	690
Availability upto 28.10.2016	3545	2375	534	1570	527
Sales upto 28.10.2016	705	336	113	280	148
Closing Stock upto 28.10.2016	2840	2039	421	1290	379

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

4. Pest & Diseases:

- Incidence of Eryophid mite & Black headed hairy caterpillar on Coconut have been reported in **trace to moderate** intensity in Brahmagiri block of Puri district of Odisha State.
- No shortage of Chemical / Bio-pesticides was reported from any State / UT.