

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: 28.03.2017

SUBJECT: MINUTES OF THE MEETING OF THE CROP WEATHER WATCH GROUP HELD ON 24.03.2017.

Summary observations of the Group on Agenda Items

- *In the Pre Monsoon season, at All-India level, the rainfall during the week (16th March, 2017 – 22nd March, 2017) has been 31% lower than the Long Period Average (LPA). Rainfall in the four broad geographical divisions of the country during the above period have been higher by 295% in South Peninsula and lower by 76% in North West India, 18% in Central India, 9% in East & North East India.*
- *The cumulative rainfall in the country during the Pre monsoon season i.e. 01st March to 22nd March, 2017 has been 14% higher than the Long Period Average (LPA). Rainfall in the four broad geographical divisions of the country during the above period have been higher by 177% in South Peninsula, 44% in East & North East India and lower by 22% in North West India, 7% in Central India.*
- *Out of 36 met sub-divisions, 16 met subdivisions constituting 45% of the total area of the country has received large excess/excess rainfall, 06 met sub-divisions constituting 10% of the total area of the country has received normal rainfall, 08 met sub-divisions constituting 28% of the total area of the country has received deficient, 03 met sub-divisions constituting 10% of the total area of the country has received large deficient rainfall and 03 met subdivisions constituting 07% of the total area of the country has received No Rain.*
- *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 23rd March, 2017 has been 54.96 BCM as against 41.70 BCM on 23.03.2016 (last year) and 54.35 BCM of normal (average of the last 10 years) storage. Current year's storage is 132% of last year's storage and 101% of the average of last 10 year's storage.*
- *All-India progressive procurement of Rice as on 23.03.2017 for the Kharif marketing season 2016-17 was 320.82 lakh tonnes against the procurement of 300.73 lakh tonnes in the corresponding period of last year.*
- *Availability position of seeds and fertilizers has been found satisfactory.*

1. **Pre Monsoon Season (March–May) during the week ending on 22nd March, 2017**

➤ **Sub-division-wise weekly rainfall & minimum temperature is shown in Table-1.1**

- **Rainfall during the week (16th March, 2017 to 22nd March, 2017)** Rainfall was large excess/excess in 15 subdivision, normal in 03, deficient/large deficient in 15 and no rain in 03 subdivisions out of 36 meteorological sub-divisions.
- **Cumulative rainfall (01st March, 2017 to 22nd March, 2017)** Rainfall was large excess/excess in 16, normal in 06, deficient/large deficient in 11 and no rain in 03 out of 36 meteorological sub-divisions.

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

Region	Week Ending (22.03.2017)				Cumulative (01.03.17 to 22.03.17)			
	(in mm)		Devi- ation (%)	Cat.	(in mm)		Devi- ation (%)	Cate- gory
	Actual	Normal			Actual	Normal		
North-West India	3.1	13.1	-76	LD	27.2	34.7	-22	D
Central India	1.4	1.7	-18	N	5.9	6.4	-7	N
South Peninsular India	7.5	1.9	295	LE	21.1	7.6	177	LE
East & North-East India	13.6	14.9	-9	N	58.8	40.8	44	E
Country as a whole	5.1	7.4	-31	D	23.9	20.9	14	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 Mar. to 22nd Mar, 2017

No. of Sub-Divisions with rainfall	<i>For the period from 1st March to</i>					
	21 MAR 2012	20 MAR 2013	19 MAR 2014	25 MAR 2015	23 MAR 2016	22 MAR 2017
Large Excess	-	-	-	-	-	13
Excess	00	10	23	25	18	03
Normal	04	00	04	01	03	06
Total	04	10	27	26	21	22
Deficient	06	07	05	04	10	08
Large Deficient	-	-	-	-	-	03
Scanty	14	16	02	05	03	-
No rain	12	03	02	01	02	03
Total	32	26	09	10	15	14
Data Inadequate	00	00	00	00	00	00
TOTAL	36	36	36	36	36	36
All-India % Rainfall Deviation	(-) 57%	(-) 61%	55%	105%	13%	14%

Source: IMD

➤ Sub-division-wise 5 days rainfall forecast from 27th Mar.,2017 to 31st March,2017 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.

East & 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 DAILY DISTRIBUTION OF REALISED MAXIMUM TEMPERATURE & RAINFALL -2017															
S.No.	SUB-DIVISIONS	MAXIMUM TEMPERATURE							RAINFALL						
		16 MAR	17 MAR	18 MAR	19 MAR	20 MAR	21 MAR	22 MAR	16 MAR	17 MAR	18 MAR	19 MAR	20 MAR	21 MAR	22 MAR
1	ANDAMAN & NICOBAR ISLANDS	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	ISOL	DRY	DRY
2	ARUNACHAL PRADESH	N	N	N	N	N	N	N	ISOL	SCT	WS	WS	WS	FWS	DRY
3	ASSAM & MEGHALAYA	N	N	N	N	N	N	N	DRY	ISOL	WS	WS	SCT	SCT	DRY
4	NAGA,MANI,MIZO,TRIPURA	N	N	N	N	N	ABN	N	DRY	DRY	ISOL	FWS	SCT	WS	WS
5	SUB-HIMA.WEST BEN. & SIKKIM	N	N	MBN	MBN	ABN	ABN	N	DRY	ISOL	FWS	FWS	ISOL	WS	DRY
6	GANGETIC WEST BENGAL	N	N	N	N	N	ABN	N	DRY	DRY	ISOL	DRY	WS	ISOL	DRY
7	ODISHA	N	N	N	N	N	N	N	DRY	DRY	ISOL	ISOL	SCT	DRY	DRY
8	JHARKHAND	N	N	N	MBN	N	N	N	DRY	DRY	DRY	DRY	SCT	DRY	DRY
9	BIHAR	N	N	N	MBN	BN	N	N	DRY	DRY	ISOL	DRY	ISOL	SCT	DRY
10	EAST UTTAR PRADESH	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	ISOL	DRY	DRY
11	WEST UTTAR PRADESH	N	N	N	N	N	N	N	DRY	DRY	DRY	ISOL	DRY	DRY	DRY
12	UTTARAKHAND	N	N	N	N	N	AAN	AAN	DRY	ISOL	SCT	DRY	ISOL	DRY	DRY
13	HARYANA CHAND. & DELHI	N	N	N	N	N	N	MAN	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY
14	PUNJAB	N	N	N	N	AN	AAN	AAN	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY
15	HIMACHAL PRADESH	N	N	N	AN	N	AAN	MAN	SCT	FWS	ISOL	DRY	ISOL	DRY	ISOL
16	JAMMU & KASHMIR	BN	N	AAN	N	N	N	N	DRY	SCT	ISOL	ISOL	DRY	DRY	FWS
17	WEST RAJASTHAN	N	N	N	N	AN	AAN	AAN	DRY	DRY	DRY	SCT	DRY	DRY	DRY
18	EAST RAJASTHAN	N	N	N	ABN	N	AN	AAN	DRY	DRY	DRY	FWS	ISOL	DRY	DRY
19	WEST MADHYA PRADESH	N	N	N	N	BN	N	N	DRY	ISOL	DRY	ISOL	ISOL	DRY	DRY
20	EAST MADHYA PRADESH	N	N	N	N	BN	N	N	DRY	DRY	DRY	SCT	ISOL	DRY	DRY
21	GUJARAT REGION D.D. & N.H.	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASTRA KUTCH & DIU	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	N	N	N	N	N	N	N	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHAWADA	N	N	N	N	N	N	N	SCT	ISOL	DRY	DRY	DRY	DRY	DRY
26	VIDARBHA	N	BN	N	N	N	BN	N	DRY	ISOL	DRY	DRY	DRY	DRY	DRY
27	CHHATTISGARH	N	BN	N	N	N	N	N	DRY	DRY	DRY	ISOL	ISOL	DRY	DRY
28	COASTAL ANDHRA PRADESH	N	N	N	N	N	N	N	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
29	TELANGANA	N	N	N	N	N	N	N	ISOL	ISOL	ISOL	DRY	DRY	ISOL	DRY
30	RAYALASEEMA	N	N	N	N	N	N	N	ISOL	DRY	DRY	ISOL	DRY	ISOL	DRY
31	TAMILNADU & PUDUCHERRY	N	N	N	N	N	N	N	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL	ISOL
32	COASTAL KARNATAKA	N	N	N	N	N	N	N	SCT	ISOL	DRY	DRY	DRY	DRY	ISOL
33	NORTH INTERIOR KARNATAKA	N	N	N	N	N	N	N	FWS	ISOL	DRY	DRY	DRY	DRY	DRY
34	SOUTH INTERIOR KARNATAKA	N	N	N	AN	N	N	N	SCT	ISOL	ISOL	DRY	DRY	ISOL	SCT
35	KERALA	N	N	N	N	N	N	N	FWS	SCT	ISOL	ISOL	ISOL	SCT	ISOL
36	LAKSHADWEEP	N	N	N	N	N	N	N	WS	FWS	DRY	DRY	DRY	DRY	DRY

LEGENDS FOR RAINFALL:							
WDS	WIDE SPREAD / MOST PLACES (76-100%)	FWS	FAIRLY WIDE SPREAD / MANY PLACES (51-75%)	SCT	SCATTERED / FEW PLACES (26-50%)	ISOL	ISOLATED (UP TO 25 %)
DRY	NO STATION REPORTED RAINFALL	RAINFALL ACTIVITY		*	ACTIVE (R/F 1 st -4 times the normal)	**	VIGOROUS (R/F More than 4 times)
(ACTIVE R/F 1 st -4 times the normal & WS FWS, at least 2 stations should be 5cm. along west coast & 3 cm. elsewhere)				(VIGOROUS R/F More than 4 times the normal & WS FWS, at least 2 stations should be 8 cm. along west coast & 5 cm. elsewhere)			

LEGENDS FOR TEMPERATURE:							
N	NORMAL (±N±1.5)°C	BN	BELOW NORMAL (N-2)°C	ABN	APRECIABLY BELOW NORMAL (N-3, -4)°C	MBN	MARKEDLY BELOW NORMAL (N-3 AND BELOW) °C
AN	ABOVE NORMAL (N+2)°C	AAN	APRECIABLY ABOVE NORMAL (N+3, +4)°C	MAN	MARKEDLY ABOVE NORMAL (N+3 AND ABOVE) °C		
*	Cold wave conditions (Departure from Normal is) (-4°C to -3°C and -3°C to -2°C)			**	Severe Cold wave conditions (Departure from Normal is) (-2°C or less and -1°C or less)		

Table: 1.4

Met-Sub-Division	27-Mar Today	28Mar Tue	29Mar Wed	30Mar Thu	31Mar Fri
1. Andaman & Nicobar Islands	SCT	SCT	ISOL	ISOL	ISOL
2. Arunachal Pradesh	ISOL	SCT	FWS	WS	SCT
3. Assam & Meghalaya	ISOL	SCT	FWS	WS	FWS
4. N. M. M. & T.	ISOL	ISOL	SCT	FWS	SCT
5. S.H. West Bengal & Sikkim	ISOL	ISOL	SCT	SCT	FWS
6. Gangetic West Bengal	ISOL	ISOL	ISOL	ISOL	DRY
7. Odisha	ISOL	ISOL	DRY	ISOL	DRY
8. Jharkhand	DRY	DRY	ISOL	ISOL	DRY
9. Bihar	ISOL	ISOL	SCT	SCT	ISOL
10. East Uttar Pradesh	DRY	DRY	DRY	DRY	DRY
11. West Uttar Pradesh	DRY	DRY	DRY	DRY	DRY
12. Uttarakhand	DRY	DRY	ISOL	ISOL	DRY
13. Haryana, Chd & Delhi	DRY	DRY	DRY	DRY	DRY
14. Punjab	DRY	DRY	DRY	DRY	DRY
15. Himachal Pradesh	DRY	SCT	SCT	DRY	ISOL
16. Jammu & Kashmir	ISOL	FWS	FWS	SCT	SCT
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	DRY	DRY
24. Madhya Maharashtra	DRY	DRY	DRY	DRY	DRY
25. Marathawada	DRY	DRY	DRY	DRY	DRY
26. Vidharbha	DRY	DRY	DRY	DRY	DRY
27. Chhattisgarh	DRY	DRY	DRY	DRY	DRY
28. Coastal Andhra Pradesh	DRY	DRY	DRY	ISOL	DRY
29. Telangana	DRY	DRY	DRY	DRY	DRY
30. Rayalaseema	DRY	DRY	DRY	DRY	DRY
31. Tamilnadu & Puducherry	DRY	ISOL	ISOL	ISOL	ISOL
32. Coastal Karnataka	DRY	DRY	ISOL	ISOL	DRY
33. North Interior Karnataka	DRY	DRY	DRY	DRY	DRY
34. South Interior Karnataka	DRY	DRY	DRY	DRY	DRY
35. Kerala	DRY	ISOL	ISOL	ISOL	ISOL
36. Lakshadweep	DRY	DRY	DRY	DRY	DRY

% 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		

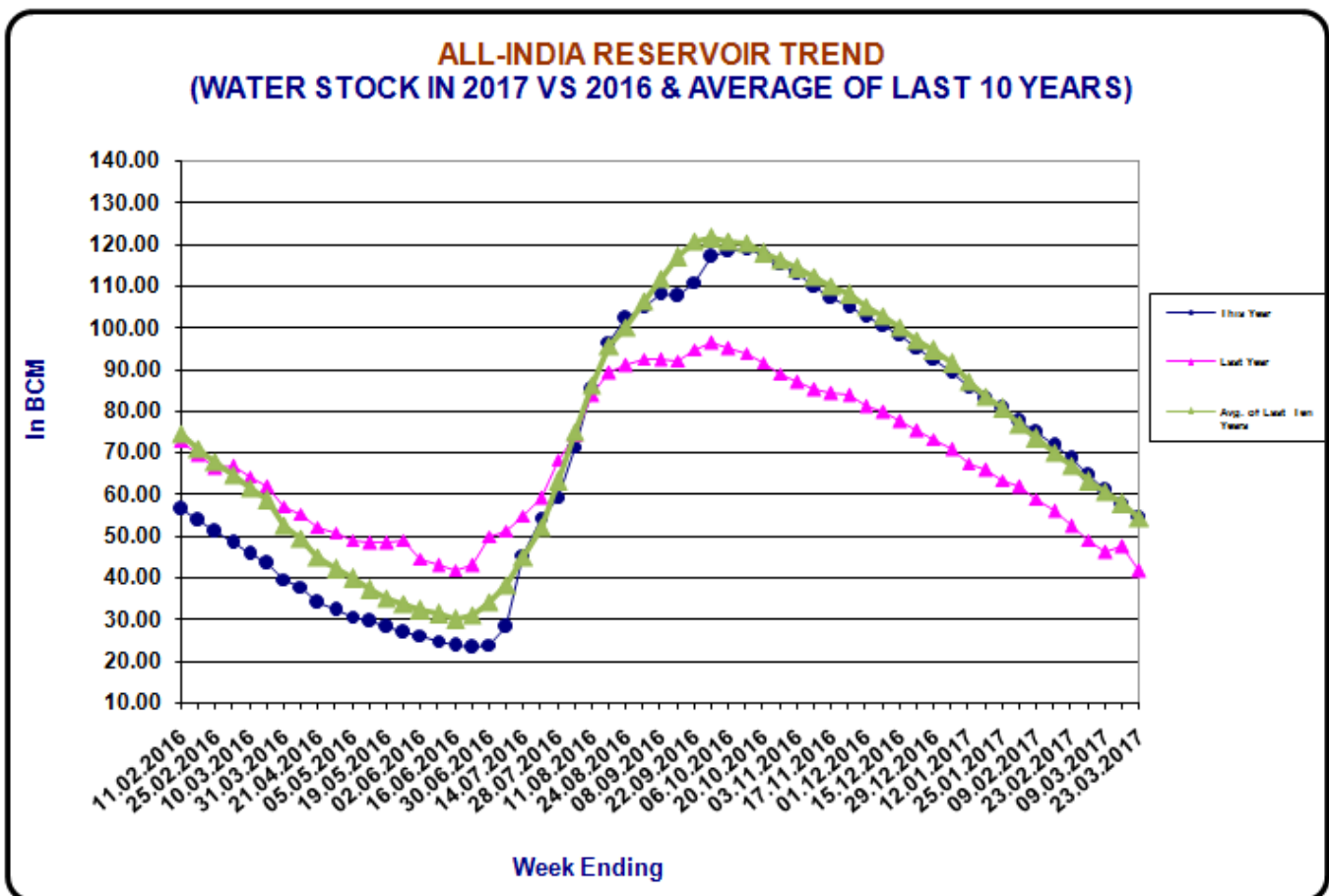
2. Reservoir Status (For the week ending on 23.03.2017)

- **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 54.96 BCM from the previous week's level of 58.03 BCM. Current storage is higher than the last year's position of 41.70 BCM and the average of last 10 year's storage of 54.35 BCM.

Table – 2.1 : For 91 major reservoirs of the country

Period	Storage as % of FRL	Storage as % of last year	Storage as % of 10 year's average level
Current Week	35	132	101
Last Week	37	132	100
The percentage to live capacity at FRL was 26% on 23/03/2016, 36% on 23/03/2015, 46% on 23/03/2014 and 36% on 23/03/2013.			
<i>Source: CWC</i>			

There were 50 reservoirs having storage more than 80% of normal storage, 19 reservoirs having storage between 50% to 80%, 10 reservoir having storage between 30% to 50%, 12 reservoirs 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 24.03.2017)

(in '000 Tonnes)

Availability / Sale / Closing Stock	Urea	DAP	MOP	Complex	SSP
Opening Stock as on 01.10.2016	1509	1308	231	1056	212
Requirement for Rabi, 2016-17	14568	4973	1703	4961	3338
Requirement upto March, 2017	1226	434	200	583	308
Availability upto 24.03.2017	15588	7914	1479	4781	2130
Sales upto 24.03.2017	13385	6773	1378	3378	1788
Closing Stock upto 24.03.2017	2204	1141	101	1403	343

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

4. Pest & Diseases:

- Incidence of yellow rust on wheat crop has been reported in **traces** in few places in Sriganganagar district of Rajasthan; Solan, Unna, Sirmaur, Kangra and Bilaspur districts of Himachal Pradesh and Rajbagh Tehsil of Kathua district of Jammu and Kashmir States. The crop is at panicle initiation to maturity stage.
- Incidence of yellow rust on wheat crop has been reported in **traces to low** in few places in Kurukshetra and Karnal districts of Haryana; Adheli village of Muzaffarabad block of Saharanpur district of Uttar Pradesh and Ropar, Hoshiarpur, Gurdaspur, Pathankot, SBS Nagar, SAS Nagar, Mohali and Ludhiana districts of Punjab States. The crop is at panicle initiation to maturity stage.
- Incidence of aphid on mustard crops has been reported in **moderate** in Hisar and Bhiwani districts of Haryana State.
- Incidence of aphid on wheat crops has been reported in **moderate** in Hisar and Bhiwani districts of Haryana State
- No shortage of Chemical / Bio-pesticides was reported from any State / UT.

5. Progressive procurement of Kharif Rice as on 23.03.2017 (lakh tonnes)

Table: 5.1

State	Total procurement in marketing season 2015-16 (Oct. – Sept.)	Progressive Procurement as on 23.03.2017	
		In Marketing season 2016-2017	In Marketing season 2015-2016
Andhra Pradesh	43.36	25.55	28.74
Telangana	15.79	11.02	10.16
Chhattisgarh	34.42	46.62	39.72
Haryana	28.61	35.70	28.61
Kerala	3.82	1.82	2.14
Madhya Pradesh	8.49	13.14	8.41
Maharashtra	2.30	2.38	1.52
Odisha	33.69	22.92	23.63
Punjab	93.50	110.47	93.50
Tamil Nadu	11.92	1.32	8.43
Uttar Pradesh	29.10	23.54	29.10
Uttrakhand	5.98	7.06	5.97
West Bengal	15.68	8.63	9.90
All-India	342.18	320.82	300.73