

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: 16.03.2017

SUBJECT: MINUTES OF THE MEETING OF THE CROP WEATHER WATCH GROUP HELD ON 10.03.2017.

Summary observations of the Group on Agenda Items

- Details of the mean maximum and minimum temperature during the week 02nd March, 2017 to 08th March, 2017 were as under:-

Maximum Temperature

- *Above normal by 2 to 4^oC over Himachal Pradesh, Sikkim, many parts of Uttarakhand, Punjab, Bihar, West Bengal, Jharkhand, East Madhya Pradesh, some parts of Jammu & Kashmir, East Uttar Pradesh, Assam, Chhattisgarh, Odisha and isolated pockets of Haryana & Delhi, Arunachal Pradesh, West Uttar Pradesh, Saurashtra & Kutch, West Madhya Pradesh, Madhya Maharashtra, Marathwada and Vidarbha.*
- *Normal to near normal over rest of the country except at isolated pockets of Arunachal Pradesh where it was below normal between 2 to 4^oC.*

Minimum Temperature

- *Above normal by 2 to 4^oC over many parts of Andaman & Nicobar Islands, Saurashtra & Kutch, Tamil Nadu, some parts of Gangetic West Bengal, Rayalaseema, Kerala and isolated Pockets of Rajasthan, Jharkhand, Chhattisgarh, Odisha, Gujarat Region, Telangana and South Interior Karnataka.*
- *Normal to near normal over rest of the country except at isolated pockets of Odisha and Telangana where it was below normal by 2 to 4^oC.*
- *In the Pre Monsoon season, at All-India level, the rainfall during the week (02nd March, 2017 – 08th March, 2017) has been 3% 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 142% in South Peninsula, 45% in East & North East India and lower by 53% in North West India, 17% in Central India.*
- *The cumulative rainfall in the country during the Pre monsoon season i.e. 01st March to 08th March, 2017 has been 10% 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 127% in South Peninsula, 31% in East & North East India and lower by 50% in North West India, 28% in Central.*

- *Out of 36 met sub-divisions, 07 met subdivisions constituting 13% of the total area of the country has received large excess/excess rainfall, 04 met sub-divisions constituting 14% of the total area of the country has received normal rainfall, 06 met sub-divisions constituting 24% of the total area of the country has received deficient, 12 met sub-divisions constituting 34% of the total area of the country has received large deficient rainfall and 07 met subdivisions constituting 15% 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 09th March, 2017 has been 60.91 BCM as against 46.27 BCM on 09.03.2016 (last year) and 60.57 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 10.03.2017 for the Kharif marketing season 2016-17 was 312.51 lakh tonnes against the procurement of 289.92 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 08th March, 2017

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

- **Rainfall during the week (02nd March, 2017 to 08th March, 2017)** Rainfall was large excess/excess in 07 subdivision, normal in 06, deficient/large deficient in 16 and no rain in 07 subdivisions out of 36 meteorological sub-divisions.
- **Cumulative rainfall (01st March, 2017 to 08th March, 2017)** Rainfall was large excess/excess in 07, normal in 04, deficient/large deficient in 18 and no rain in 07 out of 36 meteorological sub-divisions.

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

Region	Week Ending (08.03.2017)				Cumulative (01.03.17 to 08.03.17)			
	(in mm)		Devi- ation (%)	Cat.	(in mm)		Devi- ation (%)	Cate- gory
	Actual	Normal			Actual	Normal		
North-West India	4.7	9.9	-53	D	5.6	11.3	-50	D
Central India	1.8	2.1	-17	N	1.7	2.4	-28	D
South Peninsular India	6.5	2.7	142	LE	6.6	2.9	127	LE
East & North-East India	16.8	11.6	45	E	16.8	12.8	31	E
Country as a whole	6.0	6.2	-3	N	6.3	7.0	-10	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 March to

No. of Sub-Divisions with rainfall	<i>For the period from 1st March to</i>					
	07 MAR 2012	13 MAR 2013	12 MAR 2014	11 MAR 2015	09 MAR 2016	08 MAR 2017
Large Excess	-	-	-	-	-	07
Excess	04	07	26	26	15	00
Normal	02	01	04	03	02	04
Total	06	08	30	29	17	11
Deficient	01	02	01	02	08	06
Large Deficient	-	-	-	-	-	12
Scanty	09	09	03	04	08	-
No rain	20	17	02	01	03	07
Total	30	28	06	07	19	25
Data Inadequate	00	00	00	00	00	00
TOTAL	36	36	36	36	36	36
All-India % Rainfall Deviation	(-) 18%	(-) 80%	115%	237%	(-) 30%	(-) 10%

Source: IMD

➤ Sub-division-wise 5 days rainfall forecast from 14th Mar.,2017 to 18th 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							
		02 MAR	03 MAR	04 MAR	05 MAR	06 MAR	07 MAR	08 MAR	02 MAR	03 MAR	04 MAR	05 MAR	06 MAR	07 MAR	08 MAR	
1	ANDAMAN & NICOBAR ISLANDS	AN	N	N	N	N	N	N	ISOL	SCT	DRY	DRY	ISOL	DRY	DRY	
2	ARUNACHAL PRADESH	N	MBN	N	MBN	N	N	N	FWS	WS	FWS	FWS	WS	FWS	ISOL	
3	ASSAM & MEGHALAYA	N	N	N	N	N	AN	N	ISOL	ISOL	ISOL	ISOL	SCT	ISOL	DRY	
4	NAGA,MANI,MIZO,TRIPURA	AN	N	N	N	N	N	N	DRY	DRY	DRY	ISOL	WS	ISOL	ISOL	
5	SUB-HIMA.WEST BEN. & SIKKIM	N	N	N	AAN	N	N	N	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY	
6	GANGETIC WEST BENGAL	N	N	N	N	N	N	MBN	DRY	DRY	ISOL	ISOL	ISOL	DRY	ISOL	
7	ODISHA	N	AAN	N	N	N	N	MBN	DRY	DRY	DRY	DRY	ISOL	ISOL	FWS	
8	JHARKHAND	N	N	N	N	N	N	N	DRY	DRY	ISOL	ISOL	DRY	DRY	DRY	
9	BIHAR	AAN	N	N	AN	N	N	N	DRY	ISOL	ISOL	ISOL	DRY	DRY	DRY	
10	EAST UTTAR PRADESH	AN	AN	N	N	N	N	N	DRY	ISOL	DRY	DRY	DRY	DRY	DRY	
11	WEST UTTAR PRADESH	N	AN	N	N	AN	N	N	SCT	ISOL	DRY	DRY	DRY	DRY	DRY	
12	UTTARAKHAND	N	AN	N	AN	AN	AN	N	WS	ISOL	DRY	DRY	DRY	DRY	SCT	
13	HARYANA CHAND. & DELHI	AN	N	N	N	AN	N	N	ISOL	DRY	DRY	DRY	DRY	DRY	ISOL	
14	PUNJAB	AN	N	N	N	AN	AN	N	ISOL	DRY	DRY	DRY	DRY	DRY	SCT	
15	HIMACHAL PRADESH	N	N	N	N	AAN	N	N	FWS	ISOL	DRY	DRY	DRY	DRY	WS	
16	JAMMU & KASHMIR	N	N	N	AAN	N	N	MBN	WS	SCT	DRY	DRY	DRY	DRY	WS	
17	WEST RAJASTHAN	N	N	N	N	AAN	N	N	DRY	DRY	DRY	DRY	DRY	DRY	SCT	
18	EAST RAJASTHAN	N	BN	N	N	N	N	N	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY	
19	WEST MADHYA PRADESH	N	N	N	N	N	N	N	DRY	ISOL	DRY	DRY	DRY	DRY	DRY	
20	EAST MADHYA PRADESH	N	N	N	N	N	N	N	DRY	DRY	ISOL	DRY	DRY	DRY	ISOL	
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	AN	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
23	KONKAN & GOA	AN	BN	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
24	MADHYA MAHARASHTRA	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
25	MARATHAWADA	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
26	VIDARBHA	N	AN	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	SCT	
27	CHHATTISGARH	N	N	N	N	N	N	N	DRY	DRY	ISOL	DRY	DRY	DRY	SCT	
28	COASTAL ANDHRA PRADESH	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	ISOL	DRY	
29	TELANGANA	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	ISOL	DRY	
30	RAYALASEEMA	N	N	N	AN	AAN	AN	N	DRY	DRY	DRY	DRY	DRY	ISOL	DRY	
31	TAMILNADU & PUDUCHERRY	N	N	N	N	AN	N	N	ISOL	ISOL	SCT	SCT	ISOL	ISOL	DRY	
32	COASTAL KARNATAKA	AN	AN	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
33	NORTH INTERIOR KARNATAKA	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
34	SOUTH INTERIOR KARNATAKA	N	N	N	N	N	N	N	DRY	DRY	DRY	DRY	ISOL	SCT	SCT	
35	KERALA	AN	AN	N	N	N	N	N	DRY	ISOL	ISOL	ISOL	SCT	SCT	SCT	
36	LAKSHADWEEP	N	N	N	N	N	N	N	DRY	SCT	DRY	SCT	ISOL	SCT	SCT	
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 5 cm. 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,N-1) ^o C	BN	BELOW NORMAL (N-2) ^o C				ABN	APRECIABLY BELOW NORMAL (N-3, -4) ^o C			MBN	MARKEDLY BELOW NORMAL (N-5 AND BELOW) ^o C				
AN	ABOVE NORMAL (N+2) ^o C	AAN	APRECIABLY ABOVE NORMAL (N+3,+4) ^o C				MAN	MARKEDLY ABOVE NORMAL (N+5 AND ABOVE) ^o C								
*	Cold wave conditions (Departure from Normal is/ -4 ^o C to -5 ^o C and -5 ^o C to -6 ^o C)					**	Severe Cold wave conditions (Departure from Normal is/ -6 ^o C or less and -7 ^o C or less)									

Table: 1.4

Met-Sub-Division	14-Mar Today	15Mar Wed	16Mar Thu	17Mar Fri	18Mar Sat
1. Andaman & Nicobar Islands	DRY	DRY	DRY	DRY	DRY
2. Arunachal Pradesh	SCT	ISOL	ISOL	FWS	FWS
3. Assam & Meghalaya	ISOL	DRY	ISOL	ISOL	SCT
4. N. M. M. & T.	DRY	DRY	DRY	ISOL	SCT
5. S.H. West Bengal & Sikkim	DRY	DRY	ISOL	ISOL	SCT
6. Gangetic West Bengal	DRY	DRY	ISOL	ISOL	SCT
7. Odisha	DRY	ISOL	ISOL	SCT	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	ISOL	ISOL	DRY
13. Haryana, Chd & Delhi	DRY	DRY	DRY	DRY	DRY
14. Punjab	DRY	DRY	DRY	DRY	DRY
15. Himachal Pradesh	DRY	ISOL	SCT	ISOL	ISOL
16. Jammu & Kashmir	DRY	SCT	SCT	ISOL	ISOL
17. West Rajsthan	DRY	DRY	DRY	DRY	DRY
18. East Rajasthan	DRY	DRY	DRY	DRY	DRY
19. West Madhya Pradesh	DRY	ISOL	DRY	DRY	DRY
20. East Madhya Pradesh	DRY	DRY	ISOL	ISOL	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	ISOL	ISOL	DRY	DRY	DRY
25. Marathawada	ISOL	ISOL	ISOL	DRY	DRY
26. Vidharbha	DRY	ISOL	SCT	ISOL	DRY
27. Chhattisgarh	ISOL	ISOL	ISOL	ISOL	DRY
28. Coastal Andhra Pradesh	ISOL	ISOL	ISOL	DRY	DRY
29. Telangana	ISOL	ISOL	ISOL	ISOL	DRY
30. Rayalaseema	ISOL	ISOL	DRY	DRY	DRY
31. Tamilnadu & Puducherry	SCT	SCT	ISOL	ISOL	ISOL
32. Coastal Karnataka	DRY	ISOL	ISOL	DRY	DRY
33. North Interior Karnataka	ISOL	ISOL	ISOL	DRY	DRY
34. South Interior Karnataka	ISOL	ISOL	ISOL	SCT	ISOL
35. Kerala	FWS	FWS	FWS	ISOL	ISOL
36. Lakshadweep	ISOL	ISOL	WS	FWS	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		

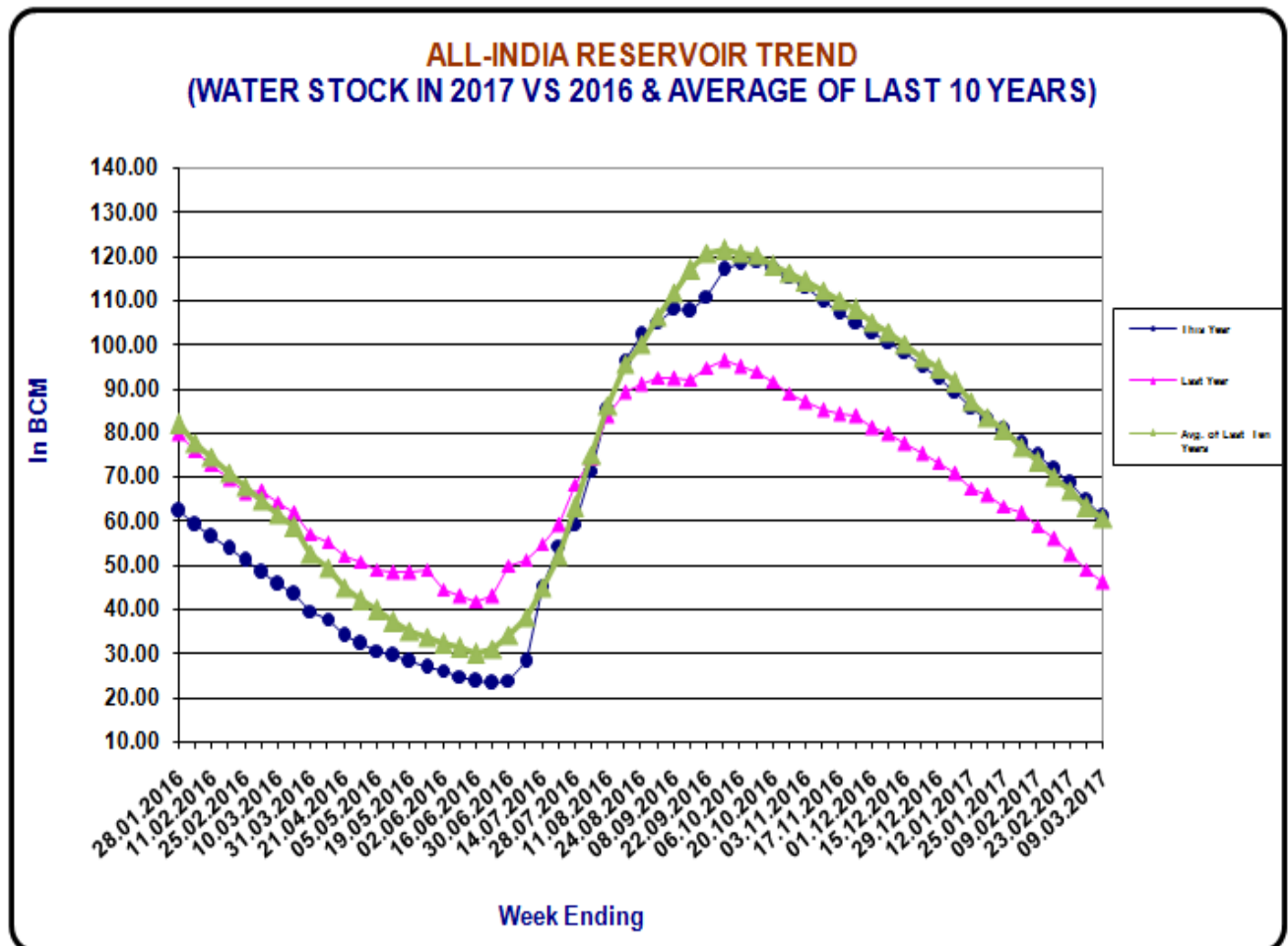
2. Reservoir Status (For the week ending on 09.03.2017)

- **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 60.91 BCM from the previous week's level of 64.55 BCM. Current storage is higher than the last year's position of 46.27 BCM and the average of last 10 year's storage of 60.57 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	39	132	101
Last Week	41	132	102
The percentage to live capacity at FRL was 29% on 09/03/2016, 39% on 09/03/2015, 48% on 09/03/2014 and 39% on 09/03/2013.			
<i>Source: CWC</i>			

There were 53 reservoirs having storage more than 80% of normal storage, 18 reservoirs having storage between 50% to 80%, 06 reservoir having storage between 30% to 50%, 14 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 09.03.2017)

(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 09.03.2017	14612	7754	1467	4606	1958
Sales upto 09.03.2017	12778	6619	1289	3282	1716
Closing Stock upto 09.03.2017	1834	1135	178	1323	242

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

4. Pest & Diseases:

- Incidence of Aphid on Mustard crops has been reported in **low to moderate** intensity in Lucknow, Raebareli, Pratapgarh, Allahabad, Sultanpur, Amethi and Barabanki districts of Uttar Pradesh.
- Incidence of Black aphid on Wheat crops has been reported in **low to moderate** intensity in Lucknow, Raebareli, Pratapgarh, Allahabad, Sultanpur, Amethi and Barabanki districts of Uttar Pradesh.
- Incidence of Yellow rust on Wheat crop has been reported in **traces** intensity in few places in Solan, Unna, Sirmaur, Kangra and Bilaspur districts of Himachal Pradesh State.
- Incidence of Yellow rust on Wheat crop has been reported in **traces to low** intensity in few fields in Rajbagh Tehsil of Kathua district of Jammu and Kashmir State.
- Incidence of Yellow rust on Wheat crop has been reported in **traces to low** intensity in few places in Kurukshetra and Karnal districts of Haryana State.
- Incidence of Yellow rust on Wheat crop has been reported in **trace to low** intensity in few places in Adheli village of Muzaffarabad block of Saharanpur district of Uttar Pradesh State.
- Incidence of Yellow rust on Wheat crop has been reported in **traces to low** intensity in some places in Ropar, Hoshiarpur, Gurdaspur, Pathankot, SBS Nagar, SAS Nagar, Mohali and Ludhiana districts of Punjab State. The crop is at panicle initiation to maturity stage.
- Incidence of Bud necrosis viral disease on Black gram crops has been reported in **moderate to severe** intensity in Guntur, Krishna and West Godavari districts of Andhra Pradesh State. Total affected area is 130000 hectares. The crop is in maturity to harvesting stage.
- Incidence of South American Tomato Pinworm (*Tuta absoluta*) on Tomato crop has been reported in **low** intensity in two Poly-houses with an approximate area of 500 Sq. M. in Chhajwar village of Sundernagar block of Mandi district of Himachal Pradesh State. The crop is in fruiting stage.
- Incidence of new exotic, invasive and destructive pest, Rugose spiralling whitefly (RSW), *Aleurodicus rugioperculatus* Martin, on Coconut palm reported by ICAR-NBARI, Bangalore, in Pollachi, Coimbatore, and Anaimalai Tamil Nadu, State. The infestation has been reported in moderate intensity covering 3000 to 4000 ha.area.
- Incidence of new exotic, invasive and destructive pest, Rugose spiralling whitefly (RSW), *Aleurodicus rugioperculatus* Martin on Coconut crop has been reported in **traces to moderate** intensity in Kolinjeparai block of Palakkad district of Kerala state.
- No shortage of Chemical / Bio-pesticides was reported from any State / UT.

5. Progressive procurement of Kharif Rice as on 10.03.2017 (lakh tonnes)

Table: 5.1

State	Total procurement in marketing season 2015-16 (Oct. – Sept.)	Progressive Procurement as on 10.03.2017	
		In Marketing season 2016-2017	In Marketing season 2015-2016
Andhra Pradesh	43.36	24.60	27.87
Telangana	15.79	11.02	10.16
Chhattisgarh	34.42	46.62	39.72
Haryana	28.61	35.70	28.61
Kerala	3.82	1.54	1.69
Madhya Pradesh	8.49	13.14	8.41
Maharashtra	2.30	2.29	1.43
Odisha	33.69	21.38	19.81
Punjab	93.50	110.44	93.49
Tamil Nadu	11.92	1.12	7.52
Uttar Pradesh	29.10	20.63	29.10
Uttrakhand	5.98	7.06	5.97
West Bengal	15.68	8.56	7.95
All-India	342.18	312.51	289.92