

F. No. 3-1/ 2015-16-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: 01.03.2016

SUBJECT: MINUTES OF THE MEETING OF THE CROP WEATHER WATCH GROUP HELD ON 26.02.2016.

Summary observations of the Group on Agenda Items

- **Details of the mean maximum and minimum temperature during the week 18th February, 2016 to 24th February, 2016 were as under:-**

Maximum Temperature

- *Above normal by 4 to 6^oC over Mizoram, many parts of Jharkhand, Himachal Pradesh, Gangetic West Bengal, Tripura, Odisha, Chhattisgarh, Marathwada, some parts of East Uttar Pradesh, Bihar, Manipur, Telangana and isolated pockets of Jammu & Kashmir, Assam, Madhya Pradesh, Vidarbha and North Interior Karnataka and by 2 to 4^oC over rest of country except Sikkim, many parts of Tamil Nadu, Kerala, Arunachal Pradesh, West Rajasthan, Lakshadweep, Andaman & Nicobar Islands, some parts of West Uttar Pradesh, Andhra Pradesh, Gujarat and isolated pockets of East Rajasthan, Punjab, Haryana, Sub-Himalayan West Bengal, Assam, Nagaland, Konkan & Goa, Interior Karnataka where it was normal to near normal.*

Minimum Temperature

- *Above normal by 4 to 6^oC over Nagaland, Manipur, Mizoram, Tripura, many parts of Himachal Pradesh, Uttarakhand, Jharkhand, some parts of West Uttar Pradesh, Gangetic West Bengal, Assam & Meghalaya, Madhya Maharashtra and isolated pockets of Bihar, Chhattisgarh, West Madhya Pradesh, Gujarat region, North Interior Karnataka and Andaman & Nicobar Islands and by 2 to 4^oC over rest of the country except many parts of Lakshadweep, Jammu & Kashmir, Telangana, Andhra Pradesh, Tamil Nadu, South Interior Karnataka, some parts of West Rajasthan, Odisha, Konkan, Kerala, North Interior Karnataka and isolated pockets of Punjab, East Rajasthan, West Madhya Pradesh, Coastal Karnataka, Chhattisgarh where it was normal to near normal.*
- *In the winter season, weekly Rainfall for the country as a whole during the week 18th February, 2016 to 24th February, 2016 was 40% lower than Long Period Average (LPA). Rainfall (% departure from LPA) in the four broad geographical divisions of the country during the above period was lower by 10% in East & North East India, 38% in North West India, 97% in Central India and 94% in South Peninsula.*
- *The cumulative rainfall in the country during the winter season i.e. 01st January, 2016 to 24th February, 2016 was 59% lower than Long Period Average (LPA). Rainfall (% departure from LPA) in the four broad geographical divisions of the country during the above period was lower by 34% in East & North East India, 65% in North West India, 69% in Central India and 68% in South Peninsula.*

- *Out of 36 met sub-divisions, 05 met sub-divisions constituting 07% of the total area of the country has received excess/normal rainfall, 26 met sub-divisions constituting 80% of the total area of the country has received deficient/scanty rainfall and 05 met sub-divisions constituting 13% 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 BCM at Full Reservoir Level (FRL). Current live storage in these reservoirs as on 25th February, 2016 was 51.20 BCM as against 66.35 BCM on 25.02.2015 (last year) and 67.80 BCM of normal (average storage of the last 10 years) storage. Current year's storage is 77% of the last year's storage and 76% of the normal storage.*
- *All-India progressive procurement of Rice as on 26.02.2016 for the marketing season 2015-16 was 278.34 lakh tonnes against the procurement of 230.56 lakh tonnes upto the corresponding period of last year.*
- *Availability position of seeds and fertilizers has been found satisfactory.*

1. Winter Season (January – February) during the week ending on 24th February, 2016

Sub-division-wise daily distribution of rainfall and minimum temperature are shown in Table-1.1

- **Rainfall during the week (18th February, 2016 to 24th February, 2016)** Rainfall was excess/normal in 04, deficient/scanty in 16 and no rain in 16 out of 36 meteorological sub-divisions.
- **Cumulative rainfall (01st January, 2016 to 24th February, 2016)** Rainfall was excess/normal in 05, deficient/scanty in 26 and no rain in 05 out of 36 meteorological sub-division.

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

Region	Week Ending (24.02.2016)				Cumulative (01.01.16 to 24.02.16)			
	(in mm)		Devi- ation (%)	Cat.	(in mm)		Devi- ation (%)	Cate- gory
	Actual	Normal			Actual	Normal		
North-West India	6.8	10.9	-38	D	24.7	69.7	-65	S
Central India	0.1	1.7	-97	S	4.6	14.7	-69	S
South Peninsular India	0.2	2.8	-94	S	4.5	14.0	-68	S
East & North-East India	9.8	10.9	-10	N	33.3	50.3	-34	D
Country as a whole	3.7	6.2	-40	D	15.3	37.5	-59	S

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 January to

No. of Sub-Divisions with rainfall	<i>For the period from 1st January to</i>					
	23 FEB 2011	22 FEB 2012	27 FEB 2013	26 FEB 2014	25 FEB 2015	24 FEB 2016
Excess	07	09	24	11	09	02
Normal	04	04	05	07	10	03
Total	11	13	29	18	19	05
Deficient	09	09	02	11	10	10
Scanty	15	11	05	06	07	16
No rain	01	03	00	01	00	05
Total	25	23	07	18	17	31
Data Inadequate	00	00	00	00	00	00
TOTAL	36	36	36	36	36	36
All-India % Rainfall Deviation	(-) 23%	5%	26%	4%	(-) 13%	(-) 59%

Source: IMD

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 DAILY DISTRIBUTION OF RAINFALL & MINIMUM TEMPERATURE-2016																	
S.No	SUB-DIVISIONS	RAINFALL							MINIMUM TEMPERATURE								
		18 FEB	19 FEB	20 FEB	21 FEB	22 FEB	23 FEB	24 FEB	18 FEB	19 FEB	20 FEB	21 FEB	22 FEB	23 FEB	24 FEB		
1	ANDAMAN & NICOBAR ISLANDS	ISOL	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AN	DRY	AN	DRY	DRY	DRY	
2	ARUNACHAL PRADESH	DRY	DRY	DRY	FWS	FWS	FWS	SCT	AN	AN	AAN	DRY	DRY	DRY	DRY	DRY	
3	ASSAM & MEGHALAYA	DRY	DRY	DRY	ISOL	SCT	ISOL	ISOL	AN	AN	AAN	DRY	DRY	DRY	DRY	DRY	
4	NAGA.MAN.MIZO.TRIPURA	DRY	DRY	DRY	DRY	ISOL	DRY	FWS	AN	AN	MAN	MAN	DRY	DRY	MAN	DRY	
5	SUB-HIMA.WEST BEN. & SIKKIM	DRY	DRY	DRY	DRY	DRY	DRY	ISOL	AAN	AAN	DRY	MAN	AAN	DRY	DRY	DRY	
6	GANGETIC WEST BENGAL	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AAN	AAN	DRY	MAN	AN	DRY	DRY	DRY	
7	ODISHA	DRY	DRY	DRY	DRY	DRY	DRY	ISOL	AN	AN	DRY	DRY	DRY	AAN	DRY	DRY	
8	JHARKHAND	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AAN	AAN	MAN	MAN	DRY	DRY	DRY	DRY	
9	BIHAR	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AAN	MAN	MAN	AN	DRY	DRY	DRY	
10	EAST UTTAR PRADESH	DRY	DRY	DRY	ISOL	DRY	DRY	DRY	DRY	MAN	MAN	DRY	DRY	DRY	DRY	DRY	
11	WEST UTTAR PRADESH	DRY	DRY	DRY	ISOL	DRY	DRY	DRY	AAN	MAN	MAN	DRY	DRY	DRY	DRY	DRY	
12	UTTARAKHAND	DRY	DRY	SCT	FWS	DRY	DRY	DRY	MAN	MAN	MAN	DRY	DRY	DRY	DRY	DRY	
13	HARYANA CHAND. & DELHI	ISOL	DRY	ISOL	ISOL	DRY	DRY	DRY	DRY	MAN	MAN	DRY	DRY	DRY	DRY	DRY	
14	PUNJAB	DRY	ISOL	SCT	ISOL	DRY	DRY	DRY	DRY	DRY	MAN	DRY	DRY	DRY	DRY	DRY	
15	HIMACHAL PRADESH	DRY	ISOL	FWS	SCT	DRY	DRY	DRY	DRY	MAN	MAN	DRY	DRY	DRY	DRY	DRY	
16	JAMMU & KASHMIR	DRY	DRY	WDS	ISOL	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AAN	DRY	DRY	DRY	
17	WEST RAJASTHAN	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY	AN	AAN	MAN	DRY	DRY	DRY	DRY	DRY	
18	EAST RAJASTHAN	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY	DRY	MAN	MAN	DRY	DRY	DRY	DRY	DRY	
19	WEST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MAN	MAN	DRY	DRY	DRY	DRY	
20	EAST MADHYA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AAN	AAN	DRY	MAN	AAN	DRY	DRY	DRY	
21	GUJARAT REGION D.D. & N.H.	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MAN	MAN	DRY	DRY	DRY	DRY	DRY	
22	SAURASTRA KUTCH & DIU	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MAN	DRY	DRY	DRY	DRY	DRY	DRY	
23	KONKAN & GOA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AN	AN	AN	DRY	DRY	DRY	DRY	DRY	
24	MADHYA MAHARASHTRA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	MAN	MAN	AN	DRY	DRY	DRY	
25	MARATHAWADA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
26	VIDARBHA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AAN	AAN	DRY	MAN	DRY	DRY	DRY	
27	CHHATTISGARH	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AN	AAN	DRY	DRY	DRY	DRY	DRY	DRY	
28	COASTAL ANDHRA PRADESH	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	BN	DRY	DRY	DRY	DRY	DRY	DRY	
29	TELANGANA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AN	DRY	DRY	DRY	DRY	
30	RAYALASEEMA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
31	TAMILNADU & PUDUCHERRY	ISOL	ISOL	ISOL	ISOL	DRY	DRY	DRY	DRY	DRY	AN	DRY	DRY	DRY	DRY	DRY	
32	COASTAL KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	AN	DRY	DRY	DRY	AN	DRY	DRY	
33	NORTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
34	SOUTH INTERIOR KARNATAKA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
35	KERALA	DRY	DRY	DRY	ISOL	ISOL	DRY	ISOL	DRY	AN	AN	AN	DRY	DRY	DRY	DRY	
36	LAKSHADWEEP	DRY	ISOL	DRY	DRY	DRY	DRY	DRY	DRY	AN	DRY	DRY	DRY	DRY	DRY	DRY	

LEGENDS FOR RAINFALL:							
WS	WIDE SPREAD / MOST PLACES (76-100%)	FWS	FAIRLY WIDE SPREAD / MANY PLACES (51-75%)	SCT	SCATTERED / FEW PLACES (26-50%)	ISOL	ISOLATED / One or two places (UP TO 25%)
DRY	NO STATION REPORTED RAINFALL	RAINFALL ACTIVITY	* ACTIVE (RF 1 st - 4 times the normal & two stations should be 5 Cm./3 Cm. with WS/PWS)	**	VIGOROUS (RF More than 4 times & two stations should be 8 Cm./5 Cm. with WS/PWS)		

LEGENDS FOR TEMPERATURE:							
N	NORMAL (-1.5 to +1.5)°C	BN	BELOW NORMAL (-1.5 to 3.0)°C	ABN	APRECIABLY BELOW NORMAL (-3.1 to -5.0)°C	MBN	MARKEDLY BELOW NORMAL (-5.0 °C or less)
AN	ABOVE NORMAL (+1.5 to 3.0)°C	AAN	APRECIABLY ABOVE NORMAL (+3.1 to 5.0)°C	MAN	MARKEDLY ABOVE NORMAL (+5.0 °C or more)		
*	Cold wave conditions (Min.Temp.Dep.is -4.5 to -6.5)°C	**	Severe Cold wave conditions (Min.Temp.Dep.is -6.4 °C or more)	*	Cold day conditions (Max.Temp.Dep.is -4.5 to -6.5)°C	**	Severe Cold day conditions (Max.Temp.Dep.is -6.5°C or less)

2. Reservoir Status (For the week ending on 25.02.2016)

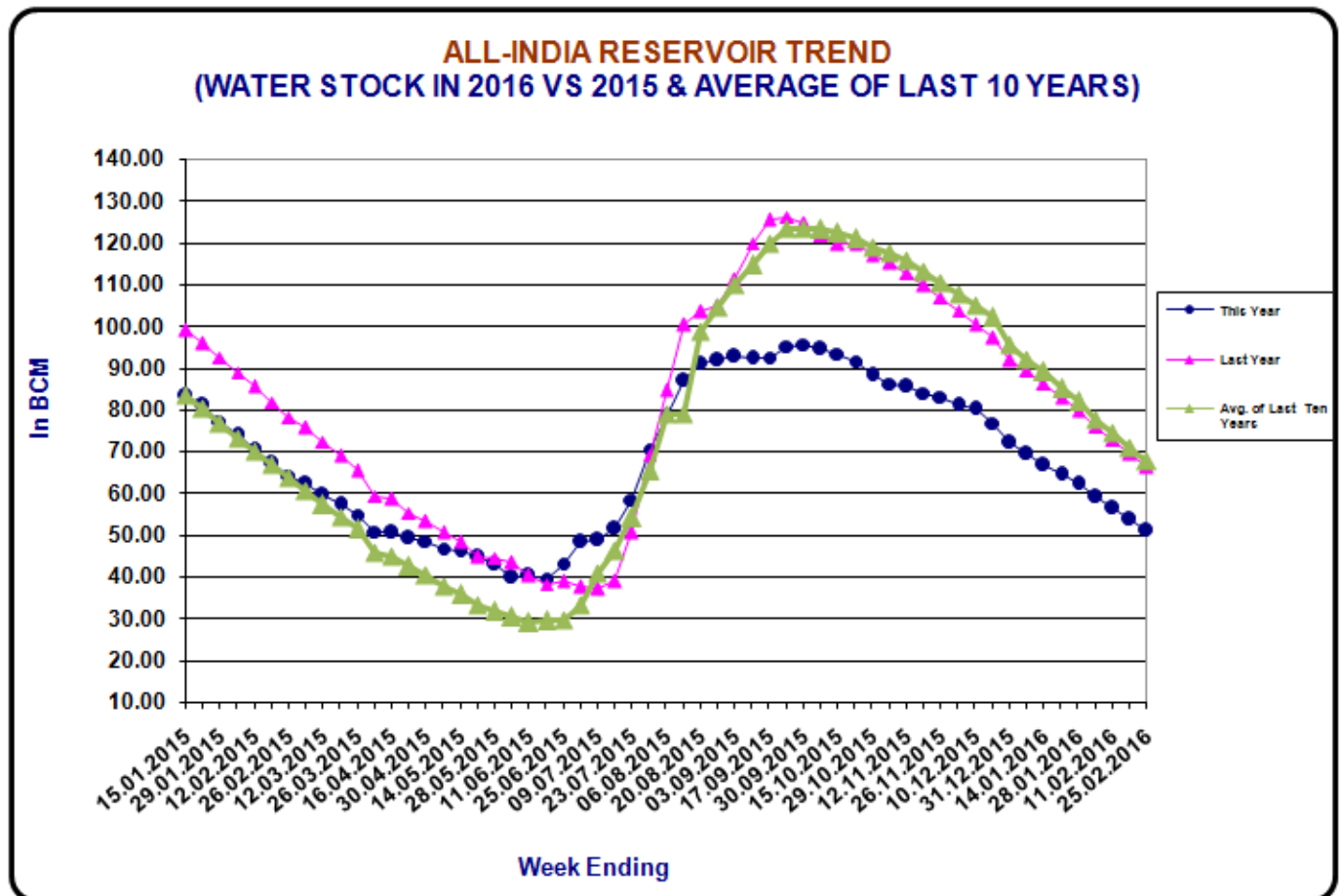
- **The Central Water Commission** monitors the live storage of **91** important/major reservoirs, having capacity at Full Reservoir Level (FRL) of **157.80** billion cubic meters (BCM), which is about 62% of total reservoir capacity in the country.
- Water stock in 91 major reservoirs **decreased to** 51.20 BCM from the previous week's level of 53.73 BCM. Current storage is **lower** than the last year's position of 66.35 BCM and the average of last 10 year's storage of 67.80 BCM.

Table – 2.1 : For 91 major reservoirs of the country

Period	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	32	77	76
Last Week	34	77	76
The percentage to live capacity at FRL was 42% on 25/02/2015, 47% on 25/02/2014, 42% on 25/02/2013 and 44% on 25/02/2012.			
* <i>Live storage as % to Full Reservoir Level (FRL) of 157.80 Billion Cub. Mts.(BCM)</i>			

Source: CWC

There were 31 reservoirs having storage more than 80%, 34 reservoirs having storage between 50% to 80% of Normal Storage, 14 reservoir having storage between 30% to 50%, 12 reservoir having storage 30% of Normal Storage and 03 reservoir having no live 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 2015-16 (As on 25.02.2016)

(in '000 Tonnes)

Availability / Sale / Closing Stock	Urea	DAP	MOP	Complex	SSP
Opening Stock as on 01.10.2015	289	930	260	840	340
Requirement for Rabi, 2015-16	15885	5141	1777	5316	3248
Requirement upto Feb., 2016	1634	392	220	693	358
Availability upto 25.02.2016	14307	4416	1156	4320	1630
Sales upto 25.02.2016	12287	2911	836	3043	1510
Closing Stock upto 25.02.2016	2020	1505	320	1277	119

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

4. Pest & Diseases:

- During the survey, incidence of aphids in Mustard crop has been reported in trace to moderate intensity in some villages of Sitapur district of Uttar Pradesh.
- Incidence of yellow rust in wheat crop has been reported in trace intensity in patches in some villages of Roopnagar, SBS Nagar, Nawasahar, Gurdaspur & Hoshiarpur of Punjab; Bilaspur, Una, Mandi & Kullu districts of Himachal Pradesh; Jammu, Samba & Kathua districts (covering 1460 Hectares area) of Jammu & Kashmir; Nainital & Udham Singh Nagar districts (covering 6 Acres area) of Uttarakhand; and Yamunanagar, Ambala, Kurukshetra, Panchkula & Karnal districts (covering 106 Acres area) of Haryana.
- Advisories have been issued to state Governments and CIPMCs for continuous monitoring of yellow rust diseases on Wheat crop and to take appropriate control measures in wheat growing areas of Haryana, Punjab, Jammu & Kashmir, Himachal Pradesh, Rajasthan and Uttar Pradesh along with the monitoring of aphids and white rust on mustard crop.
- No shortage of Chemical / Bio-pesticides was reported from any State / UT.

5. All India Crop Situations

Table: 5.1

All India Rabi Crop Situation - 2nd Advance Estimates 2015-16					
(Area in lakh hectares)					
Crop Name	Normal Area	Area sown			
		2nd Adv. Estimates 2015-16	% of Normal of Whole Season	Final Estimates 2014-15	Absolute Change
Wheat	301.75	290.89	96.4	314.66	-23.8
Rice	43.01	39.44	91.7	42.82	-3.4
Jowar	38.26	36.57	95.6	38.93	-2.4
Maize	15.02	13.30	88.6	16.22	-2.9
Barley	6.85	6.98	101.9	7.08	-0.1
Total Coarse Cereals	60.13	56.85	94.6	62.22	-5.4
Total Cereals	404.89	387.18	95.6	419.69	-32.5
Gram	88.37	84.74	95.9	82.51	2.2
Urad	7.54	9.18	121.8	7.61	1.6
Moong	8.65	10.49	121.3	9.94	0.5
Others	33.65	32.57	96.8	35.55	-3.0
Total Pulses	138.21	136.98	99.1	135.62	1.4
Total Foodgrains	543.09	524.16	96.5	555.31	-31.2
Rapeseed & Mustard	63.20	58.14	92.0	57.99	0.2
Groundnut	8.46	7.41	87.5	7.55	-0.1
Safflower	2.06	1.69	82.1	1.75	-0.1
Sunflower	4.85	3.73	77.0	3.85	-0.1
Linseed	3.11	2.69	86.3	2.86	-0.2
Total Oilseeds (Nine)	81.69	73.66	90.2	73.99	-0.3
All- Crops	624.78	597.82	95.7	629.31	-31.5
Normal Area - Average of 5 years area (2010-11 to 2014-15).					

Table – 6: Progressive procurement of Rice as on 26.02.2016 (lakh tonnes)

State	Total procurement in marketing season 2014-15 (Oct. – Sept.)	Progressive Procurement as on 26.02.2016	
		In Marketing season 2015-2016	In Marketing season 2014-2015
Andhra Pradesh	35.96	26.44	15.01
Telangana	35.04	10.16	15.38
Chhattisgarh	34.23	39.72	33.54
Haryana	20.15	28.60	20.15
Kerala	3.74	1.46	1.28
Madhya Pradesh	8.07	8.49	7.57
Maharashtra	1.99	1.29	1.16
Odisha	33.57	19.10	17.96
Punjab	77.86	93.50	77.81
Tamil Nadu	10.51	6.07	5.92
Uttar Pradesh	16.98	26.45	14.15
Uttaranchal	4.65	5.97	4.29
West Bengal	20.32	5.37	9.79
All-India	320.40	278.34	230.56