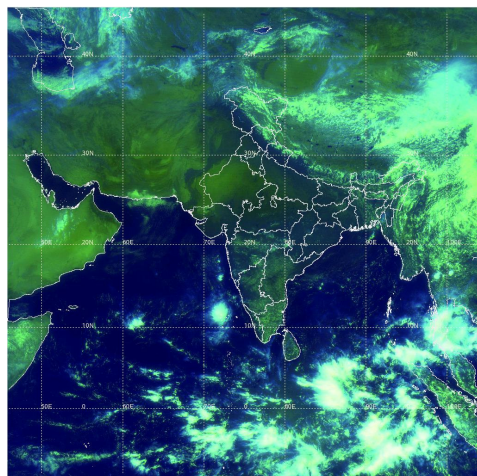




National Agromet Advisory Bulletin

Wednesday, 8th October, 2008

(For the period 8th to 12th October, 2008)



**Satellite image of 5 UTC
on 10th October, 08**

As the prevailing weather condition is favourable, this is proper time for sowing of *rabi* jowar in Pune, Solapur, Kolhapur and Ahmednagar in Maharashtra, *rabi* groundnut in Assam, wheat, brown sarson, pea and lentil in Kashmir Division, pre-*rabi* crops like green gram, black gram and *rabi* sesame, castor, groundnut in Orissa, *rabi* jowar and safflower (til October 15th), rainfed wheat (til October 15th), irrigated wheat (October 15th to November 15th) and Bengal gram (October and November) in Bidar region of Karnataka, Bengal gram, jowar and safflower during *rabi* season in Raichur, Bijapur, Chitradurga and Shimoga districts of Karnataka and green gram (var: LGG 450, 460, 407, ML 267 and Pusa 105) and black gram (LBG 623, 20 and T 9) in plain lands of Andhra Pradesh.

Weather condition is favourable to harvest already matured *kharif* crops of rice in Haryana, rice, pulses, maize, green gram, black gram and fodder crops in Orissa, groundnut, jowar, bajra, maize, ragi and maize crops in Srikakulam region and ragi in high altitude area of Andhra Pradesh, soybean in Kolhapur, Pune, Aurangabad, Latur and Amravati divisions, green gram and black gram in all divisions and harvesting of matured groundnut & bajra in Kolhapur and Pune divisions of Maharashtra, maize and bajra in Gujarat and *virippu* rice in Kerala.



Issued by

**National Agrometeorological Advisory Service Centre,
Agricultural Meteorology Division,
India Meteorological Department, Shivajinagar, Pune.**

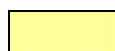
The bulletin is also displayed in the website (<http://www.imdagrimet.org>) of the Division

Comparison of weekly rainfall distribution (in % dep.) in different Met. Sub-divisions during past 5 weeks					
Sub-division	Cumulative Rainfall (% Dep.) for the period				
	10 th September	17 th September	24 th September	1 st October	8 th October
A & N Islands	5	63	-74	-58	-95
Arunachal Pradesh	-13	-88	-59	-59	-39
Assam and Meghalaya	-13	-55	-24	-20	-3
NNMT	-23	-26	93	13	45
SH West Bengal & Sikkim	17	-67	-43	-55	3
Gangetic West Bengal	8	13	50	16	-40
Orissa	11	160	125	-67	-56
Jharkhand	-4	6	58	-52	-58
Bihar	15	-81	-51	38	-16
East Uttar Pradesh	20	-89	242	-70	-52
West Uttar Pradesh	14	-34	128	-97	-82
Uttaranchal	-5	-81	289	-94	-5
Haryana, Chandigarh and Delhi	5	-75	530	-99	-90
Punjab	26	-97	119	-100	-86
Himachal Pradesh	-10	-93	397	-99	-53
J & K	11	-64	-69	-95	46
West Rajasthan	8	9	116	-100	-97
East Rajasthan	-10	88	193	-94	-93
West M. P.	-23	-21	21	-90	15
East M. P.	-13	-74	110	-98	-29
Gujarat region	-14	234	218	-100	19
Saurashtra & Kutch	-25	893	291	-99	1
Konkan and Goa	0	323	66	-98	-15
Madhya Maharashtra	-1	263	16	-97	43
Marathwada	-25	206	-13	-99	-18
Vidarbha	-19	12	-23	-96	-28
Chhattisgarh	-12	-46	100	-86	-69
Coastal A. P.	14	63	-69	-80	-78
Telangana	8	95	-68	-90	-82
Rayalseema	29	-86	-84	-63	7
TamilNadu & Pondicherry	33	-85	-78	-72	-48
Coastal Karnataka	-17	141	-28	-98	-74
N. I. Karnataka	0	-10	-60	-75	-9
S. I. Karnataka	25	-17	-62	-93	-6
Kerala	-22	92	-20	-99	-99
Lakshadweep	7	-92	-93	-94	-98

The sub divisions like Arunachal Pradesh, TamilNadu & Pondicherry, Kerala, Lakshdweep received scanty / deficient rain in 4 out of last 5 weeks; Andaman Nicobar Island, Assam & Meghalaya, Jammu & Kashmir, Sub-Himlayan West Bengal & Sikkim, Uttar Pradesh, Punjab, Haryana, Delhi, Himachal Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Andhra Pradesh, Coastal Karnataka, received scanty / deficient rain in 3 out of last 5 weeks. Other subdivisions received normal or excess rain for at least 3 weeks out of last 5 weeks.



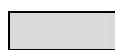
(20% or more excess rainfall)



(-60 to -99 % scanty rainfall)



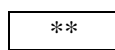
(-19 to +19% normal rainfall)



(-100% no rainfall)



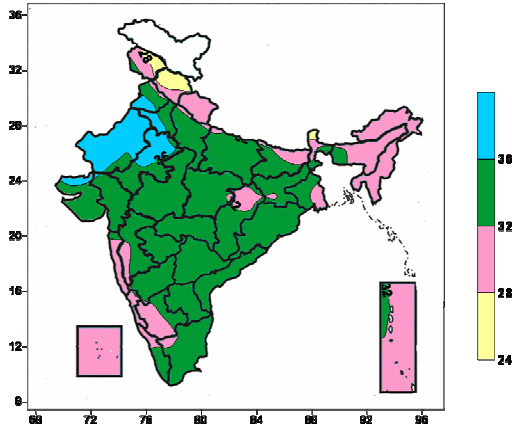
(-20 to -59% deficient rainfall)



** (Data not available)

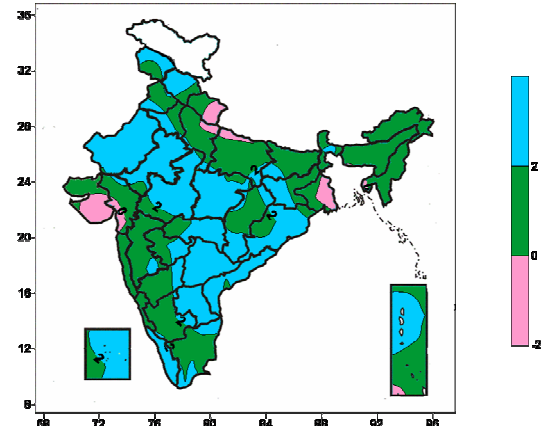
Contour maps for the week ending 7.10.08

Maximum Temperature ($^{\circ}\text{C}$) in India for the week ending 7.10.08



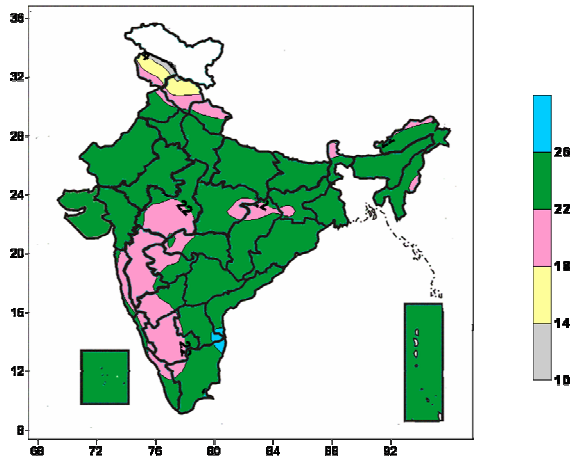
Actual Mean Maximum Temperature ranges between 36 to 40°C in some parts of Punjab, Haryana, East Rajasthan and North Saurashtra & Kutch, most parts of West Rajasthan, 28 to 32°C over some parts of Jammu & Kashmir, Himachal Pradesh, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Madhya Maharashtra, Kerala, Tamil Nadu, South Interior Karnataka, most parts of Uttarakhand, North East India, Konkan & Goa, Coastal Karnataka, Andaman Nicobar and Lakshdweep Island, 24 to 28°C in some parts of Jammu & Kashmir, Himachal Pradesh and Sikkim 32 to 36°C in remaining part of the country.

Maximum Temperature anomaly($^{\circ}\text{C}$) in India for the week ending 7.10.08



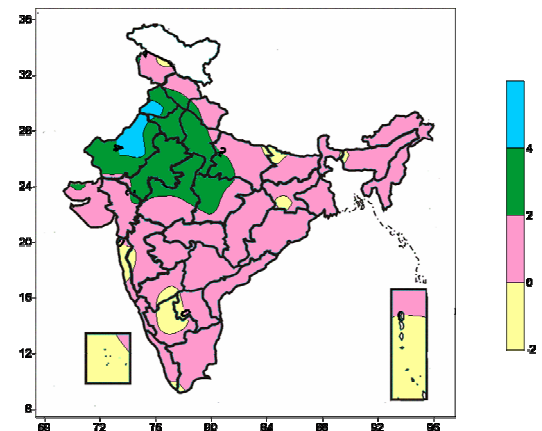
Maximum Temperature anomaly ranges between 2 to 4°C over some parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Sub Himalayan West Bengal, Bihar, Jharkhand, Chhattisgarh, Gujarat, Madhya Maharashtra, Marathwada, Tamil Nadu, Interior Karnataka, Andaman Nicobar Island, most parts of Rajasthan, Madhya Pradesh, Vidarbha, Orissa, Andhra Pradesh, Kerala, Lakshdweep, -2 to 0°C in some parts of Uttarakhand, Uttar Pradesh, Gangetic West Bengal, Gujarat, Andaman Nicobar Island and 0 to 2°C in remaining parts of the country.

Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 7.10.08



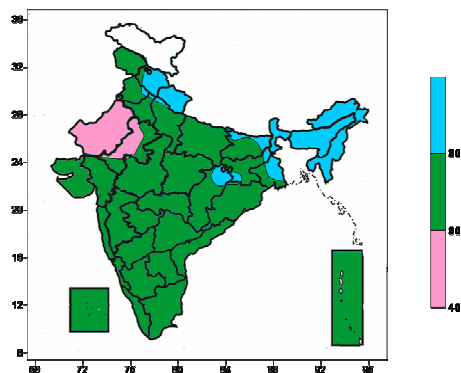
Actual Mean Minimum Temperature ranges between 26 to 30°C over some parts of Coastal Andhra Pradesh, Rayalseema, TamilNadu, 18 to 22°C in some parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Uttarakhand, Jharkhand, Sikkim, Arunachal Pradesh, Manipur, Madhya Pradesh, Chhattisgarh, Marathwada, Vidarbha, Kerala most parts of Madhya Maharashtra, Konkan & Goa, Karnataka, 14 to 18°C over Jammu & Kashmir and Himachal Pradesh and 22 to 26°C in remaining parts of the country.

Minimum Temperature anomaly ($^{\circ}\text{C}$) in India for the week ending 7.10.08



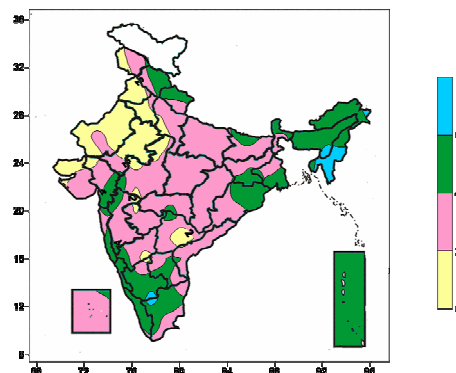
Minimum Temperature anomaly ranges between 4 to 6°C over some parts of Punjab, West Rajasthan, 2 to 4°C over some parts of Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Gujarat, most parts of West Uttar Pradesh, Rajasthan, Madhya Pradesh, Punjab, Haryana, Delhi -2 to 0°C over some parts of Jammu & Kashmir, East Uttar Pradesh, Bihar, Jharkhand, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Interior Karnataka, Kerala, Tamil Nadu, most parts of Lakshdweep & Andaman Nicobar Island, 0 to 2°C over remaining parts of the country.

Relative Humidity (%) in India for the week ending 7.10.08



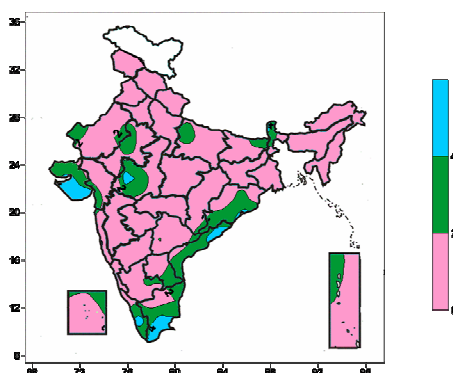
Relative humidity ranges from 80 to 100% over some parts of Punjab, Uttar Pradesh, Bihar, Jharkhand, Chattisgarh, most parts of Himachal Pradesh, Uttarakhand, North East India, West Bengal & Sikkim, 40 to 60% over some parts of East Rajasthan most parts of West Rajasthan and 60 to 80% in remaining part of the country.

Cloud amounts (okta) in India for the week ending 7.10.08



Cloud amount ranges between 6 upto 8 okta in some parts of North East India, South interior Karnataka, Tamil Nadu and 4 to 6 okta over some parts of Himachal Pradesh, Uttarakhand, Bihar, Jharkhand, West Bengal, Orissa, Gujarat, Madhya Maharashtra, Vidarbha, Andhra Pradesh, Interior Karnataka, Tamil Nadu, Lakshadweep most parts of Konkan & Goa, Coastal Karnataka, Kerala, North East India, Andaman Nicobar Island, 0 to 2 okta in some parts of Jammu & Kashmir, West Uttar Pradesh, Gujarat, West Madhya Pradesh, Marathwada, Telengana, Interior Karnataka, most parts over Punjab, Haryana, Rajasthan, and 2 to 4 okta in remaining part of the country.

Wind speed(knots) in India for the week ending 7.10.08



Wind speed ranges between 4 to 6 knots over some parts of Gujarat, West Madhya Pradesh, Coastal Andhra Pradesh, Kerala, Tamil Nadu, 2 to 4 knots over some parts of Rajasthan, Gujarat, West Madhya Pradesh, East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Orissa, Chattisgarh, Andhra Pradesh, Tamil Nadu Kerala, Lakshadweep, Andaman Nicobar Island and 0 to 2 knots over remaining parts of the country.

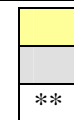
Districts experiencing stress condition

*** Most Stress					
Districts	10/09/08	17/09/08	24/09/08	01/10/08	07/10/08
Arunachal Pradesh					
East Kameng	75	-83	-100	-100	-69
East Slang	-81	-100	-91	-71	-78
Lower Subansiri	-50	-85	-67	-97	-100
Tirap	-49	-26	-32	-20	-51
Assam					
East Garo Hills	-81	-43	-100	-48	-84
Karimganj	-79	-85	-67	-93	-20
Lakhimpur	-61	-36	-40	-62	-33
Tinsukia	-51	-55	-22	-24	-55
Punjab					
Amritsar	33	-100	-51	-100	-97
Faridkot	-100	-100	-100	-100	-100
Fatehgarh Sahib	-75	-100	-76	-100	-100
Ferozpur	-68	-100	-71	-100	-100
Gurdaspur	-64	-100	-76	-100	-65
Hoshiarpur	4	-100	-78	-100	-100
Jalandhar	-62	-100	-72	-100	-36
Kapurthala	-100	-100	-22	-100	-100
Moga	-100	-100	-100	-100	-100
Haryana					
Sirsa	37	-100	-21	-100	-100
Madhya Pradesh					
East Madhya Pradesh					
Rewa	-88	-87	-23	-88	-93
Tikamgarh	-100	-41	-31	-100	-100
West Madhya Pradesh					
Badwani	119	-71	-55	-100	-100
Dewas	9	-92	-34	-100	-61
Harda	-82	-100	-32	-100	-87
Mandsaur	45	-20	-38	-96	-62
Rajgarh	-16	-20	-76	-100	-100
Rajasthan					
West Rajasthan					
Barmer	-100	-31	-100	-100	-100
Sri Ganganagar	136	-100	-42	-100	-100
Maharashtra					
Vidarbha					
Gadchiroli	10	-47	-58	-100	-89
Nagpur	7	-43	-65	-75	-47

*** Most Stress					
Orissa	10/09/08	17/09/08	24/09/08	01/10/08	07/10/08
Malkangiri	-22	-55	-52	-100	-28
Karnataka					
North Interior Karnataka					
Bijapur	322	-66	-54	-72	-41
Koppal	477	-92	-38	-85	-52
Raichur	263	-85	-77	-65	-20
South Interior Karnataka					
Bellary	341	-92	-84	-82	-39
Davangere	210	-64	-82	-98	-30
Mandya	242	-98	-97	-100	-46
Mysore	54	-81	-93	-100	-59
Tumkur	156	-92	-73	-89	-35
Kerala					
Alappuzha	-3	-100	-83	-100	-71
Kannur	174	-95	-100	-100	-93
Ernakulam	52	-93	-100	-99	-91
Idukki	103	-100	-100	-99	-55
Kasaragod	673	-98	-100	-100	-100
Kollam	189	-100	-100	-100	-53
Kottayam	111	-100	-37	-96	-92
Kozhikode	3	-90	-100	-100	-99
Malappuram	139	-97	-100	-100	-100
Palakkad	150	-93	-100	-98	-100
Thiruvananthapuram	-32	-100	-100	-100	-100
Thrissur	76	-100	-100	-100	-64
Andhra Pradesh					
Coastal Andhra Pradesh					
Guntur	-10	-69	-54	-74	-88
Nellore	-29	-76	-47	-56	-82
Prakasam	104	-83	-90	-56	-78
Telangana					
Mehabubnagar	85	-23	-55	-78	-43
Rayalaseema					
Cuddapah	252	-95	-80	-88	-37



(20% or more excess rainfall)
 (-19 to +19% normal rainfall)
 (-20 to -59% deficient rainfall)



(-60 to -99 % scanty rainfall)
 (-100% no rainfall)
 ** (Data not available)

*** Most stress (more than 3 weeks continuously deficient to no rain)

**More stress (3 weeks continuously deficient to no rain)

*Stress (2 weeks continuously deficient to no rain.

**** More stress**

Districts	10/09/08	17/09/08	24/09/08	01/10/08	07/10/08
Chattisgarh					
Dantewara	-2	11	-88	-92	-100
Rajasthan					
East Rajasthan					
Banswara	-33	-2	-63	-100	-91
Gujarat					
Gujarat region					
Dahod	-41	165	-41	-100	-47
Saurashtra, Kutch & Diu region					
Diu	-100	2743	-89	-100	-100
Junagarh	-93	1420	-74	-100	-41
Porbandara	-100	1370	-64	-100	-100
Maharashtra					
Konkan & Goa					
Mumbai	84	242	-78	-100	-84
Marathwada					
Nanded	-28	177	-60	-100	-96
Usmanabad	369	74	-27	-100	-70
Vidarbha					
Chandrapur	-5	-12	-72	-97	-76
Orissa					
Bhadrak	-26	342	-44	-29	-72
Puri	-28	202	-45	-30	-73
Karnataka					
Coastal Karnataka					
Dakshin Kannada	92	48	-51	-98	-68
Uttar Kannada	26	182	-40	-97	-77
North Interior Karnataka					
Belgaum	234	124	-35	-61	-37
Bidar	215	212	-58	-84	-27
Dharwad	60	-19	-81	-39	-33
South Interior Karnataka					
Hassan	80	31	-94	-99	-21
Kodagu	165	160	-55	-99	-50
Kerala					
Wayad	119	-12	-100	-100	-63

**** More stress**

Andhra Pradesh	10/09/08	17/09/08	24/09/08	01/10/08	07/10/08
Coastal Andhra Pradesh					
East Godavari	-21	45	-80	-92	-76
Krishna	66	5	-79	-93	-87
Sirkakulam	81	217	-54	-85	-96
Visakhapatnam	-11	239	-68	-95	-66
Vizianagram	54	142	-44	-86	-82
West Godavari	10	89	-83	-99	-58
Telangana					
Adilabad	-23	109	-65	-99	-62
Hyderabad	206	52	-53	-100	-44
Karimnagar	30	187	-85	-99	-81
Khammam	74	187	-55	-95	-57
Medak	38	65	-88	-100	-85
Nalgonda	52	56	-69	-68	-80
Nizamabad	-40	228	-65	-100	-83
Warangal	59	132	-55	-99	-65

	(20% or more excess rainfall)		(-60 to -99 % scanty rainfall)
	(-19 to +19% normal rainfall)		(-100% no rainfall)
	(-20 to -59% deficient rainfall)	**	(Data not available)

*** Most stress (more than 3 weeks continuously deficient to no rain)

**More stress (3 weeks continuously deficient to no rain)

*Stress (2 weeks continuously deficient to no rain).

* Stress					
Districts	10/09/08	17/09/08	24/09/08	01/10/08	07/10/08
Assam					
Nowgong	-59	87	14	-41	-43
Himachal Pradesh					
Chamba	26	-91	35	-100	-81
Hamirpur	37	-100	109	-100	-56
Kinnaur	3	-100	1106	-100	-100
Lahaul and Spiti	69	-100	197	-100	-100
Mandi	-55	-77	377	-100	-23
Shimla	-23	-99	955	-100	-68
Sirmaur	-73	-88	688	-100	-100
Solan	-11	-96	966	-100	-100
Una	12	-100	47	-100	-94
Punjab					
Bhatinda	-83	-100	148	-100	-100
Ludhiana	**	-89	148	-100	-91
Muktesar	-78	-100	28	-100	-100
Nawashahar	-26	-89	260	-100	-53
Patiala	1	-96	900	-100	-100
Sangrur	-100	-100	24	-100	-100
Haryana					
Ambala	-48	-100	526	-100	-56
Bhiwani	-14	-100	487	-100	-52
Chandigarh	16	-100	636	-100	-74
Faridabad	-96	-6	747	-100	-100
Fatehabad	-100	-100	445	-100	-100
Gurgaon	-100	-4	780	-100	-100
Hissar	-97	-100	350	-100	-55
Jhajar	-28	-9	648	-100	-100
Jind	-100	-100	597	-100	-100
Katihah	-85	-100	1389	-100	-100
Karnal	-58	-100	400	-99	-100
Kurukshetra	-91	-100	368	-100	-100
Mahendragarh	-64	-5	954	-100	-100
Panchkula	-82	-90	395	-100	-100
Panipat	-99	-95	449	-100	-100
Rewari	-66	-27	1053	-100	-100
Rohtak	-83	-92	389	-100	-100
Sonepat	-85	-27	658	-100	-100
Yamunanagar	-86	-100	272	-100	-89
New Delhi					
Delhi	-15	-73	376	-100	-100

* Stress					
Madhya Pradesh	10/09/08	17/09/08	24/09/08	01/10/08	07/10/08
East Madhya Pradesh					
Balaghat	-27	-56	153	-100	-45
Chhatarpur	-69	-62	132	-100	-71
Damoh	-87	-64	128	-100	-20
Dindori	-63	-100	**	-100	-67
Narsingpur	-92	-54	61	-100	-32
Panna	**	-48	44	-100	-100
Sagar	-56	-79	7	-100	-31
Satna	-90	-85	178	-93	-98
Shahdol	-77	-88	215	-100	-100
Sidhi	-100	-90	56	-100	-100
West Madhya Pradesh					
Bhind	-65	1	156	-100	-100
Bhopal	-69	-31	191	-100	-91
Datia	-90	-30	29	-56	-100
Guna	-41	-33	160	-100	-100
Gwalior	-45	-28	73	-100	-100
Khandwa	9	42	98	-100	-68
Khargone	14	18	**	-99	-100
Morena	-54	8	91	-100	-100
Neemuch	19	-39	14	-27	-93
Raisen	-68	-54	45	-100	-41
Shajapur	47	8	-7	-100	-69
Shivpuri	-77	-22	50	-100	-100
Vidisha	-49	21	142	-100	-30
Chattisgarh					
Bilaspur	-69	-42	279	-63	-92
Dhamtari	-49	-91	103	-100	-42
Durg	-44	-60	179	-59	-100
Janjgir	-48	-93	270	-100	-100
Korba	-74	-72	366	-100	-88
Kowardna	-71	-72	191	-40	-100
Mahasumund	-62	-87	380	-100	-38
Raigarh	-83	-53	321	-95	-70
Raipur	-31	-23	264	-88	-41
Rajandgaon	18	-27	84	-86	-96
Surguja	-91	-64	13	-99	-54
Rajasthan					
East Rajasthan					
Ajmer	-44	187	222	-100	-100
Alwar	4	60	1003	-100	-100

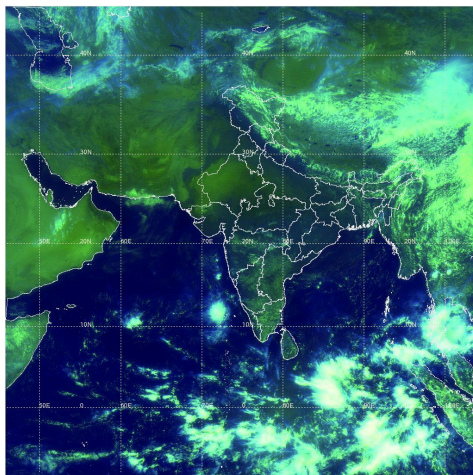
* Stress					
Rajasthan	10/09/08	17/09/08	24/09/08	01/10/08	07/10/08
Baran	-52	127	320	-100	-100
Bharatpur	-64	-25	361	-100	-100
Bhilwara	8	152	74	-100	-100
Bundi	-15	52	179	-100	-81
Chittorgarh	-59	128	111	-54	-100
Dausa	24	89	549	-100	-100
Dholpur	-55	-46	105	-100	-100
Dungarpur	-75	117	-8	-100	-100
Jaipur	28	64	279	-100	-100
Jhalawar	-38	83	110	-100	-100
Jhunjhunu	192	-65	360	-100	-100
Karauli	79	32	368	-100	-100
Kota	-23	6	92	-100	-100
Rajsamand	-59	229	28	-90	-100
Sawai Madhopur	15	57	133	-100	-100
Sikar	73	10	369	-97	-100
Sirohi	-100	76	134	-100	-55
Tonk	-1	122	169	-100	-100
Udaipur	-47	313	40	-85	-20
West Rajasthan					
Bikaner	-12	-27	4	-100	-100
Churu	-24	-100	203	-100	-100
Hanumangarh	100	-100	161	-100	-100
Jaisalmer	-9	-100	94	-100	-100
Jalore	-100	330	176	-100	-53
Jodhpur	-100	42	345	-100	-100
Nagaur	-77	53	210	-100	-100
Pali	-96	101	57	-100	-100
Gujarat					
Anand	-89	252	496	-100	-81
Banaskantha	-100	163	401	-100	-73
Baroda	-63	209	115	-100	-20
Broach	-43	219	146	-100	-72
DNH & Daman	-25	247	117	-100	-79
Gandhinagar	-95	308	18	-100	-100
Kheda	-87	273	249	-100	-100
Mehsana	-100	84	74	-100	-56
Navsari	-28	341	187	-100	-20
Patan	-100	161	985	-100	-100
Sabarkantha	-76	111	36	-100	-20
Valsad	-36	310	107	-100	-42

Saurashtra, Kutch & Diu region		* Stress			
Jamnagar	-100	1416	61	-100	-70
Kutch	-99	492	45	-100	-100
Maharashtra					
Konkan & Goa					
Goa	155	502	58	-92	-87
Ratnagiri	3	308	51	-97	-35
Sindhudurg	149	464	33	-97	-46
Madhya Maharashtra					
Dhule	204	196	12	-100	-43
Satara	116	49	4	-99	-40
Marathwada					
Latur	150	197	106	-100	-86
Vidarbha					
Akola	124	58	66	-100	-48
Bhandara	-76	-97	27	-93	-97
Gondia	-44	-86	70	-97	-22
Orissa					
Angul	-16	159	223	-48	-64
Balasore	-21	83	-12	-69	-86
Bolangir	-20	39	329	-100	-63
Boudh	-26	215	614	-93	-73
Cuttack	71	354	29	-46	-79
Deogarh	-76	-8	172	-89	-97
Dhenkanal	-56	186	49	-31	-88
Gajapati	-5	273	26	-99	-54
Ganjam	-1	263	-6	-80	-75
Jagatsingpur	-23	439	66	-27	-50
Jajpur	-53	515	-4	-29	-99
Kalahandi	-18	259	252	-100	-43
Kandhamal	16	322	370	-84	-44
Keonjhar	-21	159	75	-52	-55
Khurda	-33	170	51	-55	-65
Koraput	160	127	-3	-96	-36
Mayurbhanj	-51	89	81	-41	-63
Nawapara	-65	155	346	-87	-100
Nawarangpur	71	62	40	-36	-100
Nayagarh	10	354	51	-69	-100
Rayagada	16	228	51	-100	-34
Sambalpur	-57	33	367	-97	-40
Sonepur	-82	160	308	-100	-72
West Bengal (GWB)					
Purulia	-26	21	169	-80	-75

Chief Synoptic Feature (Based on 1430 hours IST observations of 8th October, 2008)

- Current Meteorological Analysis and Numerical Weather Prediction models suggest scattered rainfall activity over West Bengal & Sikkim, North Orissa, northeastern states and parts of south peninsula during next 2-3 days.
- Under the influence of western disturbance as an upper air system lying over Pakistan and adjoining Jammu & Kashmir, isolated to scattered precipitation is likely over western Himalayan region during next 48 hours. Subsequently with the eastward movement of western disturbance, temperatures particularly night are likely to exhibit a decreasing trend over northwest and adjoining central India.

Satellite image of 5 UTC on 10th October 08



Zone-wise Forecast

NORTHWEST INDIA [J & K, H. P., UTTARAKHAND, PUNJAB, HARYANA, DELHI, WEST UP] (Forecast valid upto 1430 hours IST of 11th October, 2008)

- Rain/thundershowers are likely at a few places over Jammu & Kashmir during next 24 hours and decrease thereafter.
- Isolated rain/thundershowers are likely over Uttarakhand and Himachal Pradesh.
- Mainly dry weather is likely over the rest region.

Quantitative District Weather Forecast for next five days:

- There is no chance of occurrence of rain in Haryana, Punjab & Delhi and light rainfall will occur over the region.

EAST INDIA [EAST UP, JHARKHAND, BIHAR, ORISSA, WEST BENGAL & SIKKIM] (Forecast valid upto 1430 hours IST of 11th October, 2008)

- Rain/thundershowers are likely at a few places over West Bengal & Sikkim and north coastal Orissa during next 48 hours and decrease thereafter.
- Isolated rain/thundershowers are likely over the rest region.

Quantitative District Weather Forecast for next five days:

- Light rainfall will occur over the region.

NORTHEAST INDIA [Arunachal Pradesh, NMM & T, Assam, Meghalaya] (Forecast valid upto 1430 hours IST of 11th October, 2008)

- Rain/thundershowers are likely **at a few places** over the region.

Quantitative District Weather Forecast for next five days:

- Light rain will occur over the region.

SOUTH INDIA [TN, AP, KERALA, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS] (Forecast valid upto 1430 hours IST of 11th October, 2008)

- Rain/thundershowers are likely at a few places over coastal and south interior Karnataka, Kerala and Lakshadweep.
- Isolated rain/thundershowers are likely over the rest region.

Quantitative District Weather Forecast for next five days:

- Light rainfall will occur over the region.

WEST INDIA [GOA, MAHARASHTRA (OTHER THAN VIDARBHA), GUJARAT, RAJASTHAN] (Forecast valid upto 1430 hours IST of 11th October, 2008)

- Isolated rain/thundershowers are likely over Gujarat region, Konkan & Goa, Madhya Maharashtra and Marathawada.
- Mainly dry weather is likely over the rest region.

Quantitative District Weather Forecast for next five days:

- There is no chance of rain over Rajasthan and light rain will occur in remaining part of the region.

CENTRAL INDIA [M.P., CHHATTISGARH, VIDARBHA] (Forecast valid upto 1430 hours IST of 11th October, 2008)

- Isolated rain/thundershowers are likely over Madhya Pradesh, Chhattisgarh and Vidarbha

Quantitative District Weather Forecast for next five days:

- Light rainfall will occur over the region.

Weather Outlook from 1430 IST of 11^h to 1430 IST of 13th October, 2008 (Based on numerical weather products):

- Increase in rainfall activity is likely over extreme south peninsula.
- Further withdrawal of southwest monsoon is likely from some more parts of northwest and adjoining east and central India.

Zonewise Agromet Advisories

NORTH WEST INDIA [J & K, H. P., UTTARAKHAND, PUNJAB, HARYANA, DELHI, WEST UP]

Himachal Pradesh

- **Major Standing crops:** Vegetables (vegetative / flowering / fruiting / harvesting), Maize (cob maturity / harvesting), Rice (grain formation / maturity), Apple (fruit development / maturity / harvesting), Tea (plucking), new planting of evergreen fruit plants.
- As there is no chance of rain during next five days, weather condition is favourable to undertake intercultural operation to keep the field weed free.
- Nursery sowing of cabbage (Snow ball K-1, Palam uphar, golden acre), Knol khol (White Bina), broccoli (Palam kanchan, Palam vichitra and Palam samridhi), parsley, lettuce, fennel and cauliflower (Pride of India) may be done with irrigation facilities and rainfall received during earlier weeks.
- As prevailing weather condition is favourable, undertake nursery sowing of early pea, cauliflower, cabbage, knoll khol and broccoli in low hills. Select varieties from Snow ball K-1, Palam Uphar, Golden Acre for cabbage, White Viena for Knol khol, Palm Kanchan, Palam Vichitra and Palam Samridhi for broccoli and Pride of India for cauliflower and Mater ageta-6 for peas.
- It is optimum time for planting of evergreen plants like Mango, litchi, guava, citrus, loquat and amla in Sub-mountain & Low hills Sub tropical zone.

Plant Protection:

- The weather conditions are favourable for blister blight in the tea orchards, for control spray Tilt (Propiconazol) @1 ml per or cantaf @1 ml litre of water and repeat the spray at 15 days interval.

Animal Husbandry:

- Weather is conducive for spread of foot and mouth disease (FMD) and galgotu in animals. Farmers are advised for vaccination of animals against FMD.

Uttarakhand

- **Major Standing Crops:** Sugarcane (vegetative), Maize, groundnut and vegetables (vegetative/ flowering / early maturity), Rice (grain formation/early maturity in Nainital district), Urd, soybean (pod formation/maturity).
- As there was sufficient rain in most of the districts of the State during earlier weeks, postpone irrigation to the crop.
- Farmers are advised to undertake sowing of potato varieties like Kufri Jyoti, Kufri Asokh and Kufri Anand, pea varieties like Arkil, Pant Ageta, VL-7, Pant Sabjee Mater-3, Ajad Matar-3, VL Mater-3 and garlic varieties like Jamuna Safed & Jamuna Safed-3 etc. in valleys (at 5000 ft. height) of Nainital District and sowing of mustard varieties PR-8988, Kranti and Krishna and vegetable pea varieties like Arkle, Pant Sabjee Mater-3, Akja Mater-1 in Udam Singh Nagar districts utilizing the stored soil moisture and undertake transplanting of cabbage variety Pacheti snowball.
- Application of fertilizers and intercultural operation in early sown crops may be carried out.
- Maintain 3 – 5 cm of water in rice the field.

Punjab

- **Major Standing Crops:** Rice (grain formation/early maturity), Horticultural crops (vegetative), Sugarcane (vegetative), Early sown cotton (boll formation stage), maize, groundnut (late vegetative), and Sunflower (flowering).
- As most of the districts received no rain during last two weeks and mainly dry weather is likely over the State, farmers are advised to apply irrigation.
- Sowing of berseem and toria can be undertaken using recommended varieties i.e PBT 37/TL 159(toria) by utilizing the stored soil moisture.

- Farmers are advised to continue sowing of desi varieties of radish, peas, potato, palak and late season varieties of cauliflower and planting of fruits crops like sweet orange, lime mango and guava in irrigated areas.
- As there is chance of occurrence of thrips and pyrilla in sugarcane, farmers are advised to monitor the crop and need to undertake control measures as the weather is favourable for spraying.

Haryana

- **Major Standing Crops:** Rice (grain formation/early maturity), Sugarcane (vegetative), Horticulture crops (vegetative), Sunflower (flowering), Early sown cotton(boll formation stage) and Bajra(vegetative).
- As most of the districts received no rain during last two weeks and mainly dry weather is likely over the State, farmers are advised to apply irrigation.
- Farmers are advised to continue sowing of desi varieties of radish, peas, potato, palak and late season varieties of cauliflower and planting of fruits crops like sweet orange, lime mango and guava utilizing the rainfall with available irrigation facilities.
- As there is chance of occurrence of thrips and pyrilla in sugarcane, farmers are advised to monitor the crop and need to undertake control measures as the weather is favourable for spraying.

Delhi

- **Major Standing crops:** Maize (cob formation / cob maturity), arhar (seed formation / maturity), bajra (grain formation / maturity) and fodder sorghum (vegetative), Sugarcane (vegetative), *Kharif* rice (milk / dough / maturity).
- As there is no chance of rain during next five days, farmers are advised to undertake intercultural operation to keep the crop fields weed free.
- Wherever *kharif* rice is at milk / dough stage, apply irrigation to maintain 3 – 5 cm of standing water.
- Remove water from the fields of *kharif* rice 10 – 15 days before harvesting of the crops. Weather condition is favourable to harvest already matured crops of rice.
- As the weather condition is favourable, farmers are advised to prepare land and undertake sowing of mustard and toria, gram and early varieties potato. Select varieties from Pusa Jaikisan, Varuna etc. for sowing mustard.
- Prevailing weather condition is favourable to prepare land and sow raddish, turnip, carrot, broccoli, and pea and also to prepare nurseries for tomato and late maturing varieties of cauliflower. Select varieties from Hill Queen, Pusa Deshi, Pusa Rashim etc. for raddish, Pusa Sweta, Pusa Kanchan etc. for turnip, Pusa Kesar, Pusa Mighali etc. for carrot and Pusa Broccoli [KTS-1], Palam Vichitra, Kanchan for broccoli for sowing. Select varieties from Pusa Snowball K1, Pusa Himjyoti and Pusa Rohini for nursery sowing of cauliflower.
- If flower or fruit drop is noticed in chilli, farmers are advised to apply Planofix @ 100 ml mixed in 500 litres of water for one ha of land as dry condition is likely to prevail for next five days.

Uttar Pradesh

- **Major Standing Crops:** Summer sugarcane (vegetative), Mango trees (fruit setting), *Kharif* Rice (grain formation/maturity), *Kharif* pulses and maize (flowering/pod formation/early maturity).
- Sowing one of early varieties of Potatoes Kufri Chandrmukhi, medium and late varieties Kufri Badshah, Kufri Bahar, Kufri Sindoori and Kufri Lalima may be undertaken utilizing the rainfall received during earlier weeks.
- As there was sufficient rain in most of the districts during earlier weeks, postpone irrigation to sugarcane and early sown *kharif* crops.
- Undertake weeding, intercultural operations, application of fertilizers and pesticides on a non rainy day in early sown crops like maize, til and urd.
- Prepare field and undertake sowing of toria utilizing the rainfall received during earlier weeks.
- Undertake transplanting of brinjal, tomato and chillies (plains) and cauliflower in hilly region.

J & K

- **Major Standing Crops:** Pulses (maturity/harvest), Rice (maturity/harvest), Maize (harvesting) in Kashmir division.
- Undertake sowing of vegetable crops like potato (var. K.Badshah, K.Sindhuri, K.Chipsona & K.Jyoti), radish (var. Pusa Chetki, Japanese white & Pusa Reshmi), carrot (var. Pusa Kesar), turnip (var. PTWG), garlic (var. local, large segmented), spinach (prickly seeded) and methi (P.E.B.K.methi) with a possibility of light rains during next five days in Jammu division. Also undertake sowing of *rabi* crops like toria, mustard, gobhi sarson and gram
- Undertake sowing of spinach, methi and coriander with a possibility of light rains during next five days in Kashmir divisions. Also start sowing *rabi* crops like wheat, brown sarson, pea and lentil.
- Undertake harvesting of crops like rice, pulses, maize and fodder crops and vegetable crops like tomato, cucurbit and capsicum due to favourable weather conditions in Kashmir division.
- Undertake sowing of toria and gobhi sarson in Rajouri and winter vegetable crops like potato, radish, carrot, turnip, garlic, spinach and methi in Leh division.
- **Plant Protection:** In Jammu, weather is congenial for incidences of
- Downy mildew and smut in bajra. Rogue out downy mildew and smut affected bajra plants and destroy completely to prevent further spread.
- White flies and thrips attack in chillies crop. Spray Malathion @ 0.05% or Endosulfan 35EC @ 0.07%.
- Canker in citrus. Monitor the citrus trees and collect and destroy the affected fruits and spray Terramycin @ 1 g/10 litre of water to control the disease.
- Blister beetle in maize in Rajouri. Collect and destroy mechanically. Spray Endosulfan @ 0.7%, if required.

EAST INDIA [EAST UP, JHARKHAND, BIHAR, ORISSA, WEST BENGAL & SIKKIM]

Bihar

- **Major Standing Crops:** Sugarcane (vegetative), *Kharif* rice (panicle initiation/flowering in north bihar and booting/panicle initiation in south bihar), Maize (vegetative), Pulses(vegetative).
- As rain is not likely to occur during next five days, apply irrigation to the rice and other standing crops. As Araria, Darbhanga, East Champaran, Kathihar, Madhubani, Muzaffarpur, Patna, Purnea, Saharsha, Samstipur, Vaishali and West Champaran district received sufficient rainfall during earlier weeks, farmers are advised not to apply irrigation to the crops in the above mentioned districts.
- Due to receding of flood water in some areas, crop situation in North Bihar is improving. Deposition of silt in the crop fields is observed and likely to improve the fertility of the soil. Provide drainage facilities in the already sown crops and regular agricultural operations may be continued in flood affected districts. In areas, where flood water recedes, farmers may go for sowing of early potato, wheat and lentil. In upland areas with irrigation water available, vegetables, *rabi* maize, potato, onion, sweat potato, mustard etc. can be taken up.
- **North west alluvial plain zone:** Farmers are advised to plough the fields and continue sowing of toria in the upland.
- Those farmers who could not top dress urea in the standing paddy crop are advised to apply urea@20 kg per hectare in the crop before flowering stage.
- **Flood affected North East alluvial plain zone:**
 - Preparation field and sowing of *rabi* crops like toria, *rabi* maize, potato, sunflower, lentil and rapeseed may be done utilizing the rainfall during earlier weeks.
 - Undertake sowing of lentil, vicia-faba, khasari and linseed (tisi) as a para crop in rice.
 - In rain fed areas, undertake sowing of rai, toria and mustard to fulfill oilfield requirements.
 - Weather conditions are favourable for infestation of gundhi bug. Dust the crop with Folidol 5% dust @ 20-25kg/ha early in the morning to control the pest. Weather conditions are also favourable for infestation of pests like stem borer, brown plant hopper, leaf roller and swarming caterpillar and disease like blast, bacterial leaf blight and sheath blight. If there is damage of such

insects and diseases beyond economic threshold level, apply Carbofuron in the wet soil @ 25kg/hectare. To control the blast disease, spray bavistin @ 1-2gm/liter water.

- Undertake intercultural operations, spraying and application of fertilizers in rice, maize, vegetables and pulse crops in north east alluvial zone on a non rainy day.
- **South Bihar:** Farmers are advised to prepare field for sowing of toria, short duration sunflower and early potato in south Bihar by taking advantage of realized rainfall during earlier weeks.

Jharkhand

- **Major Standing Crops:** *Kharif* rice (flowering), arhar and Early sown maize (early vegetative).
- Farmers are advised to undertake sowing of potato varieties Kufri Chandramukhi, K.Jyoti, K.lalima and O.N.2236 etc. and pea variety Arkel utilising the residual soil moisture.
- Farmers are advised to undertake transplanting of brinjal, tomato, cauliflower with application of organic manure in the fallow upland field as early vegetable crop.
- Undertake intercultural operations, spraying and application of fertilisers in early sown maize, arhar, urd and vegetables.
- To control the attack of gundhi bug in flowering stage of rice, spray Chlorpyrifos dust 10 kg per acre.

Orissa

- **Major Standing crops:** *Kharif* Rice (vegetative/panicle initiation stage and early sown crop is flowering to soft dough stage.), Sugarcane (vegetative), Maize (vegetative), cotton (early vegetative), Early sown Jute (early vegetative).
- As there was insufficient rainfall in most of the districts during last two weeks, apply irrigation to the standing crops.

Coastal Orissa:

- In flood affected uplands and up-medium lands, where completely crop damaged (more than 50% population) due to flood, sowing of pre-*rabi* crops like green gram, black gram and *rabi* sesame, castor, groundnut varieties like AK-12-24, Smruty and JI-24 and vegetables may be done. Complete sowing of pre-*rabi* crops such as niger. Also undertake sowing of mustard varieties M-27, TS-29, Anuradha and Parvati under rainfed condition.
- As early sown green gram, black gram and ground nut crops are at maturity stage, continue harvesting by picking up pods in case of green-gram and black-gram.

Interior Orissa:

- Undertake sowing of mustard varieties like M-27, PT-303, T-9, Anuradha and Parvati may be as pre-*rabi* crop.
- There is incidence of bacterial leaf blight in paddy in central plateau zone. Farmers are advised to spray Plantomycin @ 2 g plus Blitox-50 in per litre of water.

West Bengal

- **Major Standing Crops:** Sugarcane (vegetative) and *aman* rice (flowering / milk / dough).
- As rain occurred in most of the districts of the State during last couple of weeks except in Bankura, Midnapore, Purulia and South Dinajpur, postpone irrigation to the crops. Apply irrigation in the above districts as there was deficient/scanty rainfall during last week.
- As rain is likely to occur at a few places, undertake intercultural operation on a non rainy day to keep the fields weed free.
- After harvesting of *aus* rice and jute, using stored soil moisture due to rainfall during last couple of weeks, the farmers are advised to sow seeds of rainfed *toria* and mustard. Sow early varieties of *toria* like Agrani, Panchali etc. and white-mustard like Binoy, Subinoy etc.
- Prepare land and undertake transplanting of seedlings, sowing of seeds of winter vegetables like radish, spinach and broccoli etc. and planting of improved varieties of gladiolus bulb utilizing recent rain.

Plant Protection:

- Due to cloudy weather and rainfall for last few days there is a chance of enhanced attack of brown spot and blast disease in *aman* rice under the prevailing weather condition in New Alluvial Zone. Apply 2 gm Mancozeb per litre of water to control brown spot disease. To control blast disease, apply 1 ml Hinosan or 1 gm Carbendazim per litre of water. Spray chemicals on a non rainy day.
- Under the prevailing weather condition, there is a chance of attack of black rot of crucifer in cabbage and cauliflower in New Alluvial Zone. This causes rotting of leaves and blackening of head. Apply 1 gm Streptocycline in 10 litres of water on a non rainy day and spray thoroughly.
- Under the prevailing weather condition, there is a chance of attack of green leaf hopper in *aman* rice in Coastal Saline Zone. Control measure should be taken when 10-20 insects per hill are found. Spray any one of the insecticides like Imidaclopride 17.8 SL @ 3 ml / litre or Acephate 75 WP @ 1 g / litre of water on a non rainy day and at 7-10 days interval.

Sikkim

- **Major Standing Crops:** Orange (fruiting/harvesting), large cardamom (capsule maturity/ harvesting), ginger (rhizome formation), maize (harvesting), rice (active tillering). This is proper time for sowing of *rabi* vegetable crops.
- As rain/thundershower are likely at a few places over the State during next 48 hours and decrease thereafter, apply irrigation to orange, large cardamom, ginger and vegetable crops.
- Undertake land preparation and sowing of *rabi* vegetable crops like cabbage, cauliflower, carrot, Chinese cabbage, knol-khol, garden peas radish, turnip, lettuce, celery, spinach, etc in medium and low hills with a possibility of light to moderate rains during next five days. Undertake land preparation and sowing of the vegetable crops in the nursery when the temperature is in the range of 15-20°C. Also undertake planting of *rabi* potato in medium and low hills.
- **Plant Protection:** Regular inspections may be carried out to observe caterpillar/ shoot borer/shoot fly incidence if any and may be hand picked and destroyed mechanically. 1% Bordeaux mixture or copper oxychloride @ 3gm/ltr of water may be sprayed to the cardamom plants to protect from fungal diseases.
- Weather conditions are congenial for mild incidences of fruit fly in orange. Monitor the trees and apply Sevin baits to control the pest.
- Monitor ginger for bacterial wilt in Medium and High hills and collect and destroy the affected plants completely to prevent further spread of the disease.

NORTHEAST INDIA [ARUNACHAL PRADESH, NMM & T, ASSAM, MEGHALAYA]

Assam

- **Major Standing crops:** Sugarcane (vegetative), arhar (vegetative), already transplanted *sali* rice (tillering), vegetables (sowing / vegetative / flowering / fruiting).
- Recent flood in Assam caused substantial losses of crops in 16 districts especially *ahu* and *sali* rice, vegetables, jute etc. Kamrup, Dhubri, Goalpara, Dibrugarh, Sonitpur, Nalbari, Barpeta, Lakhimpur, Dhemaji, Morigaon, Nogaon and Dibrugarh are the worst affected districts in the wave of flood.
- As there was sufficient rainfall in most of the districts during last week, postpone irrigation to the crops. Apply irrigation in East Garo Hills, Tinsukia and Nawgang districts as these districts received insufficient rainfall during last few weeks. Provide adequate drainage facilities in Cachar, Golghat, Hailakandi and Kokrajhar districts due to excess rainfall during last week.

- Seeds of black gram varieties like T-9, Pant U-19, Saonimah (SB-121) and green gram varieties like T-44, Pratap, AAU-39 may be sown in the field where *sali* rice is completely damaged during recent flood.
- This is also proper time for sowing of black gram and green gram in other areas.
- As there is chance of rainfall at a few places over the State during next three days, farmers are advised for weeding and topdressing of urea fertilizer on a non rainy day in *Sali* rice at maximum tillering stage. For top dressing, apply 3 kg urea per bigha for high yielding and 1.5 kg per bigha for local tall varieties.
- Prepare land and sow cauliflower, cabbage, raddish, brinjal, tomato, knolkhol etc.
- As this is proper time, prepare upland for sowing of early varieties of *rabi* groundnut. The seeds can be sown up to mid October.
- Prepare land and undertake planting of toria, mustard, lentil, pea and early varieties of potato.
- Details of crop varieties are mentioned in Annexure I.

Plant protection:

- Farmers are advised to apply plant protection measures on a non rainy day.
- Present weather is favourable for occurrence of blast disease in *sali* rice in Upper Bramhaputra Valley Zone. To control the disease spray Kitazin @ 1 ml / litre of water.
- There is chance of infestation of gall midge and stem borer in the *sali* rice fields in Central Bramhaputra Valley Zone due to favourable weather condition. Light trap during night hours may help to control this pest at initial stage. Holding fires around the *sali* rice field are very effective. Already affected crops should be sprayed with Monocrotophos @ 1.5 ml / litre or Ekalux @ 2 ml / litre of water.

Animal Husbandry:

- After flood, Cholera, Chabaka, Anthrax, Galphula etc. diseases may occur in the animals. The deceased animals due to these diseases should be buried in the soil to avoid further spreading of the diseases. For worm related problem the animal should be fed with the medicine ‘Piperzine’ three times in a month.

Arunachal Pradesh

- **Major Standing crops:** Ginger (rhizome formation), Vegetables (harvesting), Wet seeded rice (flowering/grain formation), *Jhum* rice (maturity/harvesting), Millets (grain formation/harvesting) and maize (maturity).
- As there was no significant rainfall in most of the districts except in Changlang, Papumpara and West Kameng districts during last week, apply irrigation to the standing crops. As there was excess rainfall in the above mentioned districts during last week, postpone irrigation to standing millet (cob formation stage) and ginger crops.
- Farmers are advised to continue land preparation and sowing of rapeseed and mustard, pea and winter cole vegetables and also undertake field preparation for sowing of potato and wheat by utilizing the realized rainfall during earlier weeks and also rainfall is likely over the State.

SOUTH INDIA [TN, AP, KERALA, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS]

Andhra Pradesh

- **Major Standing Crops:** Groundnut, Jowar, Bajra, Ragi and Maize (all harvesting), Sugarcane (grand growth), Rice (vegetative), Chillies (vegetative)
- As rain/thundershower are likely at isolated places over the State, apply irrigation to the standing crops like sugarcane and chillies.

Coastal AP

Plain Land

- Farmers in Srikakulam are advised to continue harvesting groundnut, jowar, bajra, maize, ragi and maize crops as conducive weather prevails during these days.
- Farmers in upland areas of West Godavari, Krishna, Guntur and Praskasam districts are advised to undertake *rabi* sowing of green gram (var: LGG 450, 460, 407, ML 267 and Pusa 105) and black gram (LBG 623, 20 and T 9) with a possibility of moderate rains during next five days. Also undertake sowing of soyabean (JS 335 and PK 1029) upto October 15th.
- Farmers in the remaining districts are advised to undertake intercultural operations in *khairf* crops.
- **Plant Protection:** Weather conditions are congenial for moderate attack of blast and sheath blight in rice in Srikakulam, Vijayanagaram and Visakappattinam districts; undertake plant protection measures to control the diseases.
- whitefly, red rot and wilt in sugarcane in Krishna district; undertake plant protection measures to control the pests and diseases.
- thrips in cotton and transplanted/direct sown chillies in West Godavari, Krishna, Guntur and Praskasam districts; spray Monocrotophos @ 1.6 ml/litre of water to control the pest. Control of thrips will also prevent spread of tobacco streak virus in cotton.

High Altitude Areas

- Farmers in high altitude regions of Srikakulam, East Godavari, Vijayanagaram, Visakappattinam and Khammam are advised to undertake intercultural operations and application of fertilizers and pesticides in *khairf* crops.
- Farmers are advised to continue harvesting ragi due to favourable weather conditions.
- Complete sowing of wheat and mustard with a possibility of moderate rains during next five days.
- **Plant Protection:** Weather conditions are congenial for leaf folder, gall midge and blast in paddy; undertake plant protection measures to control the pest and diseases.

Rayalaseema

- Farmers in Cuddappah are advised to continue transplanting of rice with a possibility of moderate rains during next five days.
- **Plant Protection:** Weather conditions are favourable for mild incidences of leaf spot in groundnut in Chittoor district; undertake plant protection measures to control the disease.
- stem borer in rice in Nellore district; undertake plant protection measures to control the pest
- stem borer and brown plant hopper in paddy, leaf spot and rust in groundnut, *Heliothis* in tomato and sucking pests in cotton in Cuddappah district; undertake plant protection measures to control the pests and diseases.

Telangana

- Farmers in Karimnagar, Nizamabad and Adilabad districts are advised to apply supplementary irrigation to red gram and turmeric as dry spell condition prevails in the districts for 10-15 days.
- **Plant Protection:** Weather conditions are favourable for mild incidences of stem borer in rice. Spray Carbofuran @ 10 kg/acre to control the pest.
- *Spodaptera* in soyabean in Adilabad; undertake plant protection measures.
- leaf folder in red gram, *Spodaptera* in groundnut, leaf spot in turmeric, powdery mildew, phyllody and Bihar hairy caterpillar in sesamum and sucking pests in cotton in Karimnagar, Nizamabad, Warranag and Medak districts; undertake plant protection measures to control the pests and diseases.

Karnataka

- **Major Standing Crops:** Annual sugarcane (grand growth), Early sown *Kharif* crops (flowering/grain formation/development). This is proper time for sowing of *rabi* crops.
- As there was no significant rainfall during last week and rain/thundershower are likely at a few places over Coastal and South Interior Karnataka and at isolated places over North Interior Karnataka, apply irrigation to the standing crops.

Coastal Karnataka

- Farmers in Udupi and Dakshin Kannada districts are advised to undertake intercultural operations in rice, arecanut, coconut, cashew and banana on a non rainy day.

Plant Protection: Due to cloudy weather, leaf folder and case worm may attack rice. Monitor the crop for the pests and undertake plant protection measures on a non rainy day.

- Due to high humidity in Udupi, Uttar Kannada and Dakshin Kannada districts, Colerago may attack arecanut. Monitor the crop and spray Bordeaux mixture @ 1% on a non rainy day. Also attack of stem borer in ginger, turmeric and cardamom in Uttar Kannada; undertake plant protection measures on a non rainy day to control the pests and diseases.

North Interior Karnataka

- Due to receipt of good amount of rains in Bellary, Bijapur, Bagalkot and Koppal districts during last week, farmers are advised to undertake intercultural operations, application of fertilizers and pesticides on a non rainy day in early sown sunflower and cotton.
- Farmers in Bidar region are advised to undertake sowing of *rabi* jowar and safflower (til October 15th), rainfed wheat (October 1st – 15th), irrigated wheat (October 15th to November 15th) and Bengal gram (October and November) with realized rainfall during last week. Also undertake planting of sugarcane during October and November and sowing of vegetable crops like brinjal, tomato, cabbage and cauliflower in the nursery.
- Due to receipt of good amount of rains during last week, farmers in Dharwad are advised to undertake sowing of wheat, chickpea, safflower, sorghum and sunflower during these days.
- Farmers in Bijapur, Chitradurga and Shimoga are advised to undertake sowing of jowar, Bengal gram and safflower during *rabi* season. Select among A1 and GBS 964 for Bengal gram and A1, S-144 for safflower.
- Farmers in Raichur are advised to continue sowing of sunflower with realized rainfall during last week. Also undertake sowing of Bengal gram and safflower during *rabi* season.

Plant Protection: Due to cold and cloudy weather conditions, attack of sucking pests in cotton is reported in Dharwad district. Also necrosis is noticed in sunflower. Spray Dimethoate @ 1.7 ml to control sucking pests in cotton, To control sunflower necrosis, spray Imidachloprid 17.8 S.L @ 0.25 ml or Oxidematon 25 EC @ 1.5 ml per liter of water.

- Due to dry conditions, attack of sucking pests in cotton and Maruca in red gram is reported in Raichur; undertake plant protection measures to control the pests.
- Weather conditions are favourable for mild incidences of:
- citrus canker in Bijapur; spray Streptomycin Sulphate (0.5 g) + Copper oxi-chloride (2g)/liter of water.
- sucking pests in early sown Bt cotton in Gulbarga; undertake plant protection measures to control the pests.

South Interior Karnataka

- Farmers in Bangalore, Kolar and Tumkur are advised to undertake intercultural operations and application of fertilizers in early sown crops on a non rainy day.
- Farmers in Mysore and Tumkur districts are advised to undertake transplanting of rice (Thella, Hamza, KRH 1, Mangala, Mukthi, Bilimukthi and Rasi) and planting of sugarcane (CO varieties – 419, 62175, 7804, 8371 and 86032) with the canal water.

Plant Protection: weather conditions are favourable for

- stem borer and leaf roller in rice in Mysore, Mandya and Chamrajnagar districts; undertake plant protection measures on a non rainy day to control the pests.
- Tikka leaf spot in groundnut, sucking pests like thrips, aphids and white fly in cotton, stem borer in maize, blast in rice and rhizome rot and soft rot in ginger in Shimoga. Spray Carbendazim 2.1 g/litre of water on a non rainy day to control rice blast and Tikka leaf spot in groundnut. Spray Emidochloprid @ 0.6gm/ltr of water on a non rainy day to control sucking pests in cotton Spray Ridomil MZ @ 2g/litre and Streptocycline @ 0.5g/litre on a non rainy day to control rhizome rot and soft rot in ginger.

Kerala

- **Major Standing Crops:** *Virippu* rice (harvesting), *Mundakan* rice (nursery) and Plantation crops (Coconut, Arecanut, Pepper and Cashew).
- Rain/thundershowers are likely to occur at a few places for the next three days, farmers are advised to apply irrigation to plantation crops.
- This is proper time for sowing of *mundakan* rice in nursery in Thiruvananthapuram, Thrissur, Malappuram, Kasargod, Kozhikode and Kannur districts with a possibility of moderate rains during next five days. Select among Mangala, Mashurie, H-4 and Karuna (long duration varieties). Select among Matta triveni, Kanjana, Jaya, Athira and Aiswarya (short/medium duration varieties). Start transplanting of seedlings in the mainfield. Complete harvesting of *virippu* rice.
- Farmers in Thrissur district are advised to undertake sowing of bhendi and transplant the tomato seedlings with a possibility of moderate rains during next five days. Transplanted tomato seedlings may be given temporary shade for initial period during hot sunny days. Farmers may select among Arka Anamika, Arka Abhay and Susthira varieties for bhendi which are resistant to the yellow vein mosaic. Also undertake sowing of *Amaranthus* and cowpea as intercrops in plantation crops. Select Co 1 variety for *Amaranthus* as it is resistant for leaf spot.
- Farmers in Thrissur, Malappuram, Kasargod, Kozhikode and Kannur districts are advised to undertake planting of Nendran banana. Undertake intercultural operations and application of fertilizers in plantation crops (coconut, arecanut, pepper and cashew) on a non rainy day.

Plant Protection: Weather conditions are favourable for the attack of

- jassids and white flies in vegetable crops in Kollam; spray Acephate @ 1 g/litre of water on a non rainy day to control the pest.
- gall midge, leaf folder and stem borer in rice nursery in Thrissur; undertake plant protection measures water on a non rainy day to control the pests.
- stem bleeding in coconut and blight in cashew in Malappuram, Kasargod, Kozhikode and Kannur districts. Spray Calyxin @ 5 ml/litre on a non rainy day to control stem bleeding and 1% Bordeaux mixture to control blight. Also stem borer in vegetable crops like tomato, brinjal and chillies. Spray Sevin @ 4 g/litre of water on a non rainy day to control the pest.
- foot rot in black pepper; spray Copper oxy chloride @ 1% on a non rainy day to control the disease.
- mahali disease in arecanut in Thrissur, Malappuram, Kasargod, Kozhikode and Kannur districts; apply 1% Bordeaux mixture on a non rainy day to control the disease.

Tamilnadu

- **Major Standing Crops :** Rice (*Kuruvai*) (grain development), Early, Mid Sugarcane (cane maturity/harvesting stage), Special season sugarcane (grand growth stage), Sorghum (grain formation/development), Cotton (boll maturity/picking stage)
- Apply irrigation to groundnut, sugarcane and pulse crops as there was no significant rainfall during last three weeks except in Chennai, Kanchipuram, Thiruvallur and Villupuram districts and rain/thundershowers are likely to occur at isolated places over the State during next three days. Postpone irrigation in the above districts as there was excess rain fall during last week.
- Undertake sowing of bhindi, Dolichos, chillies and cowpea in Chennai, Cuddalore, Kanchipuram, Thiruvarur, Thiruvannamalai and Villupuram districts with irrigation facilities.
- Farmers in Thirunelveli, Tuticorin and Virudunagar are advised to undertake sowing of chillies in nursery. Also undertake pre-monsoon sowing of cotton in the main field.
- Due to rainy conditions in Chennai, Cuddalore, Kanchipuram, Thiruvallur, Vellore, Villupuram, increase in vector activity resulting in a slight rise in arthropod borne diseases particularly blood protozoans like Anaplasmosis, Theileriosis and Trypanosomiasis and viral disease such as blue tongue amongst farm animals is expected. Undertake vector control for ticks and flies and midges under the guidance of veterinarians. Also avoid stagnation which can allow for fly and midges breeding sites. Also undertake prophylactic drenching with appropriate medication, for fluke infections like amphistomiasis and liveflukes.

Plant Protection: Present weather is conducive for mild incidences of

- stem borer, blast and tungro in paddy in Thiruvallur district. Apply Carbofuran @ 12 kg/acre to control the pests.
- internode borer in sugarcane and fruit borer in bhindi in Kovilpatty, Thirunelveli, Tuticorin and Virudunagar districts. Use *Trichogramma chilonis* @ 1 cc/acre to control the pests.
- seedling rot in chillies nursery in Thirunelveli, Tuticorin and Virudunagar districts. Spray Copper oxy chloride @ 2.5 g/liter of water to control the disease.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT, RAJASTHAN]

Maharashtra

- **Major Standing Crops:** Sugarcane (pre-seasonal & suru) (elongation / cane development), irrigated cotton (boll formation in Nasik, Pune, Latur and Aurangabad division), *kharif* groundnut (pod maturity / harvesting in Kolhapur & Pune, pod formation / pod maturity in other parts of the State), *kharif* cotton (boll formation in Nasik, Pune, Latur, Amravati and Aurangabad divisions and squaring / boll formation in Nagpur division), *kharif* rice (grain formation in Konkan, flowering/ grain formation in Pune, Nashik and Kolhapur divisions and panicle initiation/ flowering in Nagpur division), soybean (pod maturity / harvesting in Kolhapur and pod maturity in other districts), tur (flowering in Pune and Nashik divisions & branching / flowering in Latur, Amravati and Nagpur divisions), sunflower (seed formation), black gram and green gram (pod maturity / picking).
- As rain is not likely to occur during next five days, apply irrigation to maintain 3 – 5 cm water in *kharif* rice field and also apply irrigation to *kharif* groundnut, sunflower, jowar and tur at pod formation / grain formation stage in Satara, Nanded, Osmanabad, Chandrapur, Gadchiroli, Gondia, Nagpur, Wardha, and Yeotmal districts of the State.
- The weather is favourable for carrying out intercultural operation to keep the crop fields weed free.
- As the prevailing weather condition is favourable, this is proper time for sowing of *rabi* jowar in Pune, Solapur, Kolhapur and Ahmednagar. Select varieties from Maldandi 35-1, RSV-833, Selection-3, Phule Yeshodha & Mauli. Mauli variety gives good result in the medium soil. Use 10 kg seeds per hectare for sowing.
- As the prevailing weather condition is favourable, this is proper time for sowing of *rabi* safflower in Madhya Maharashtra & Marathwada & West Vidarbha. For safflower sowing varieties like Bhima, Tara and Girna be chosen. Use 45x25 cm distance between rows of crop. Give seed treatment of Azotobactor before sowing.
- Under prevailing weather condition, this is also proper time for plantation of pre-seasonal sugarcane in all the districts of Madhya Maharashtra.
- Weather condition is favourable to undertake harvesting of matured soybean in Kolhapur, Pune, Aurangabad, Latur and Amravati divisions and picking of matured pods of green gram and black gram in all divisions and harvesting of matured groundnut & bajra in Kolhapur and Pune divisions.

Plant protection

- Infestation of tobacco caterpillar in soybean is continued in Nagpur, Wardha, Bhandara, Chandrapur and Gadchiroli districts of Vidarbha. Soybean crop in 6.48 lakh ha area in Nagpur division has been affected due to tobacco caterpillar infestation. The intensity of infestation is reducing gradually. Monitor the crop for the pest and spray Chlorpyrifos @ 2 litres / ha.
- There is chance of infestation of Red leaf on BT Cotton in Central Maharashtra Plateau Zone & o Cotton in Central Vidarbha Zone. For control spray 80 % water soluble Sulphur @ 25 gm or Bavistin @ 10 gm in 10 liters of water.
- Red gram is likely to be infested by leaf folder. For the control of Leaf folder, spray 5 % Neem extract or if infestation exceeds economic threshold level, spray Dimethoate @ 10 ml or 50 % Carbaril water soluble powder @ 40 gm or Monocrotophos @ 15 ml in 10 liters water. Spray 500 liters solution per hectare.

Gujarat

- **Major Standing Crops:** Sugarcane (cane development), *Kharif* groundnut (pod formation / early maturity), *Kharif* cotton (boll development), *Kharif* rice (flowering / milk), Maize (cob formation / maturity), Bajra (grain formation / maturity) and other *kharif* crops (flowering).
- As there is no possibility of rain, farmers are advised to undertake intercultural operation to keep the crop fields weed free.
- Prevailing weather is conducive to start harvesting of already matured crops of maize and bajra.
- Prepare land and undertake sowing of mustard and *rabi* castor utilizing residual soil moisture due to rain during earlier weeks in North Gujarat region. For sowing select the certified high yielding varieties of mustard viz., Guj – Mustard-1, 2, 3 and castor like GCH – 5.
- As weather condition is favourable, prepare land and undertake sowing of wheat and chickpea in Bhal and Coastal zone. Sowing of wheat and chickpea should be done during October. Select varieties like Arnej – 206, GW-1 & 2 for wheat and Gujarat Chickpea – 1 & 2 for chickpea for sowing. Seed rate for chickpea crop sowing is 50 to 60 kg ha⁻¹.
- Undertake land preparation and sowing of coriander in Anand, Dahod, Kheda, Panchmahal and Vadodara districts upto October 15th. Delayed sowing will lead to the attack of aphids.
- Undertake sowing of mustard and vegetable crops like carrot in Banaskantha, Gandhinagar, Patan, Sabarkantha districts by utilizing rains during last couple of weeks.

Plant protection

- There is chance of infestation of mealy bug in cotton in North Saurashtra region. To control the mealy bug, dusting of methyl parathion 2% or fenvalrate 0.4% dust should be done surrounding the plants and field boundaries. Spray the crop with profenophos 50 EC @ 20 ml in 10 litres of water along with 10 gram washing powder.
- There is chance of infestation of spotted bollworm, *Helicorpa* larva & pink bollworm in Hy. & Bt. Cotton in North Gujarat region. To control spotted bollworm, *Helicorpa* larva & pink bollworm in Hy. & Bt. Cotton, spray Endosulphon 35 EC @ 20 ml or Quinalphos 25 EC @ 20 ml or Profenophos 50 EC @ 10 ml or Polytrin 44 EC @ 10 ml or Indoxacarb 14.5 SC @ 4.5 ml or Spinosade 45 SC @ 1.5 ml in 10 litres of water.
- There is chance of infestation of tikka leaf spot in groundnut in North Gujarat region. To control tikka disease in ground nut spray cabendazim (50%) @ 5 g in 10 liters of water. If necessary, repeat the spraying after 12-15 days.
- There is chance of infestation of leaf roller in rice in Ahmedabad, Anand, Bhavnagar, Dahod, Kheda, Panchmahal and Vadodara districts and stem borer in Ahmedabad and Bhavnagar. Spray Phosphomidan @ 3 ml/litre of water or Monocrotophos @ 3.6 ml/litre of water to control the pests. Also leaf miner in groundnut and flower and shoot borer in bhindi may attack in the above districts except in Ahmedabad and Bhavnagar. Spray DDVP @ 5 ml/litre of water to control leaf miner in groundnut and Endosulfan @ 2 ml/litre of water to control flower and shoot borer in bhindi.

Rajasthan

- **Major Standing Crops:** Groundnut, bajra, jowar, maize, sesame, cluster beans, red gram, cotton, vegetables. All the crops are at grain development/maturity stage. This is proper time for sowing *rabi* crops.
- As there was no significant rainfall during last week in the state and dry weather is likely to prevail for the next three days, apply irrigation to the crops.

East Rajasthan

- This is proper time for sowing of mustard in Alwar, Bharatpur, Dholpur, Karauli and Sawai Madhepur districts. Undertake land preparation and sowing of mustard. Select among Pusa gold, Maya, Vasundhara, PR 15, 45, Bio 902, NRCSB 506, 101 and Varuna.
- This is proper time for sowing of radish (Pusa Rasmi), carrot, mid cauliflower and winter brinjal in Ajmer and Tonk. Undertake land preparation and sowing of the crops. Before sowing treat the seeds with Thiram @ 2.5 gm per kg seeds.

- Undertake field preparation and sowing of rainfed tarapara, toria and pea in Alwar, Tonk, Dausa and Jaipur. Select among Arka, Hara, VL-3, Jawahar Matar-4 and Matar Ageti-6 for pea.
- **Plant Protection:** Weather conditions are favourable for mild incidences of
- white fly and jassids in cotton in Alwar and Dholpur; spray Dimethoate or Methyl Demeton @ 1 litre/ha.
- downy mildew disease in pearl millet crop (at panicle initiation stage) in Alwar, Bharatpur, Karauli, Sawai Modhpur; spray Zineb @ 2.5 kg or Mencozeb @ 2 kg per hectare and 2-3 times at an interval of 3 days.
- sucking pests in vegetable crops in Banswara; spray Dimethoate @ 2 ml/litre of water.

West Rajasthan

- Farmers in Barmer, Churu, Jalore and Jodhpur are advised to undertake sowing of *rabi* crops during these days. Select among Pusa kalyani, T-59, Varuna, Pusa Gold, RH 30A, PR-15, Bio-902, Pusa Jai Kisan for mustard. Farmers in Sriganganagar and Hanumangarh may select among Pusa Gold, RGN 13, RGN-48, Varuna T-59 laxmi and RH 8812 varieties of mustard. Postpone sowing of mustard when temperature is higher.
- Undertake sowing of sweet gourd, cucumber, pumpkin, bitter melon, tindora, tomato and ladies finger in Barmer, Churu, Jalore and Jodhpur.
- Farmers in Sriganganagar and Hanumangarh are advised to undertake sowing of Kharif.

Plant Protection: Weather conditions are favourable for mild incidences of

- leaf eating caterpillar in fruits and vegetable crops in Barmer, Churu, Jalore and Jodhpur; spray Quinalphos @ 1.5 kg or Endosulphos @ 4.25 kg/hectare. Attack of leaf curl virus and bacterial leaf spot in chillies; spray Monocrotophos @ 1 ml/litre of water to control vector and to prevent spread of virus. To control bacterial leaf spot, spray Streptocycline @ 200 mg/litre of water + Copper oxy chloride @ 2.5 g/litre of water.
- pink boll worm in cotton and white fly in sugarcane in Sriganganagar and Hanumangarh; undertake plant protection measures.

CENTRAL INDIA [M.P., CHHATTISGARH]

Madhya Pradesh

- **Major Standing Crops:** Sugarcane (grain growth), soyabean (pod formation), maize (cob formation), cotton (vegetative) and vegetable crops (nursery/transplanting). This is proper time for sowing of *rabi* crops.
- As there was no significant rainfall during last week except in Betul and Hoshangabad and rain/thundershower are likely at isolated places over Madhya Pradesh, apply irrigation to the standing crops. Postpone irrigation in the above districts as there was excess rainfall during last week.
- Prepare land for sowing of *rabi* crops in Gird zone covering Morena, Bhind, Gwalior, Shivpuri Guna Sheopur and Ashoknagar districts.
- Undertake land preparation and planting of vegetables like cauliflower, cabbage, potato and field pea in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts and cauliflower in Bhind, Gwalior, Shivpuri Guna, Sheopur, Ashoknagar.
- Farmers in Indore, Mandsaur, Ratlam, Neemuch, Shajapur, Ujjain and Rajgarh are advised to undertake sowing of mustard, toria, sunflower and safflower. Undertake sowing of potato and pea as early crops if irrigation facilities are available.
- Farmers in Sehore, Bhopal, Damoh, Raisen, Sagar, Vidisha area advised to undertake sowing of *rabi* crops like wheat (Sujata, HW 2004 and HI 1500), gram (J.G 130, J.G 16, J.G 11, Jaki 92-18), chick pea (KAK 2 and J.G.K 1) and lentil (masoor) (J.L.S 1, J.L. 3, I.P.L 81)
- Undertake sowing of potato, berseem, garlic, pea, coriander, spinach and methi in Chhindwara and Betul districts with irrigation facilities at the earliest. Also undertake planting of autumn sugarcane and onion. Under rainfed conditions, undertake sowing of mustard, toria and safflower.
- Farmers in Tikamgarh, Datia and Chattarpur are advised to undertake land preparation and sowing of mustard, chana and alsin. Do seed treatment before sowing. Also undertake sowing of marigold. (Pusa

basanti, full orange). Complete sowing of raddish (Pusa rashim, Pusa white, Desi, Punjab white), carrot (Pusa kesar, meghali), spinach (Pusa jyot, pusa harit, pant composite-1) and methi (kasuri and pusa early). Undertake nursery for cabbage (golden acre, pride of India).

- **Animal Husbandry:** Provide proper ventilation and clean water to cattle and arrange for vaccination to save them from infectious disease in Jabalpur, Katni, Panna, Rewa, Satna, Seoni and Sidhi districts. Create smoke during the night in cattle shed to prevent cattle from mosquitoes and bees.
- Undertake vaccination in cattle against Anthrax, Galgotu, Black quarter and FMD in Indore, Mandsaur, Ratlam, Neemuch, Shajapur, Ujjain and Rajgarh. Also undertake deworming.

Plant Protection: Weather conditions are favourable for

- Sucking pests in fruits and vegetable crops in Jabhua hills zone, spray Methyl Dimethon 25 EC 1 ml/litre. Also fruit borer in tomato; spray Tricophos @ 2 ml/litre of water.
- Leaf eating and sucking pests on Soyabean, black gram and green gram, with grain eating insects in gird zone. For control spray 500 ml of Methyl Parathyon 50 in 500 litre water /ha or sprinkle Methyle Parathyon (2%) powder 15 to 20 Kg /ha.
- Spotted bollworm and leaf eating caterpillar in cotton in Chhindwara and Betul districts. Spray Endosulfan @ 1.5 litres/ha to control the pests.

Chattisgarh

- **Major Standing Crops:** Sugarcane (vegetative), Soybean and black gram (seed formation / early maturity), groundnut (seed formation / early maturity), *kharif* rice (panicle initiation / flowering / milk), pigeon pea, green gram and sesame (flowering / pod formation / early maturity).
- Weather condition is conducive to undertake intercultural operation to keep the field weed free.
- As weather condition is favourable, farmers are advised to apply last dose of Nitrogen through urea fertilizer in medium and late duration varieties of rice, which are presently at panicle initiation stage.
- As prevailing weather condition is favourable, this is proper time to prepare land and transplant tomato, chilli and brinjal if nurseries are ready.
- Present temperature trend is suitable for proper germination of niger and *toria*. Hence, it is advised to prepare the fields well pulverized and complete the sowing of these crops during this month.
- Due to clear weather conditions, undertake harvesting of black gram and groundnut.
- After the harvest of *kharif* crops, undertake ploughing to conserve soil moisture and control weeds. This also favours timely sowing of *rabi* crops.

Plant protection

- Due to hot and humid weather conditions incidence of blast may occur in rice crop. Hence, it is advised to keep watch over the crops and in case of higher incidence spray Tricyclazole @ 6 g/liter of water.
- Present weather conditions may favour the incidences of brown plant hopper in rice. Spray Emidachlorpid @ 100 ml/ha in early and medium duration crops (at grain filling stage) and Carbofuran @ 25 kg/ha in long duration crop (at panicle initiation stage)