



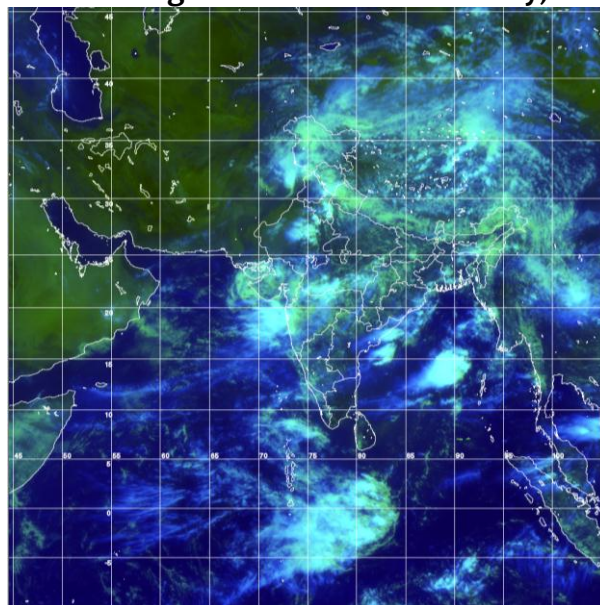
National Agromet Advisory Bulletin

Thursday, 07th July, 2011

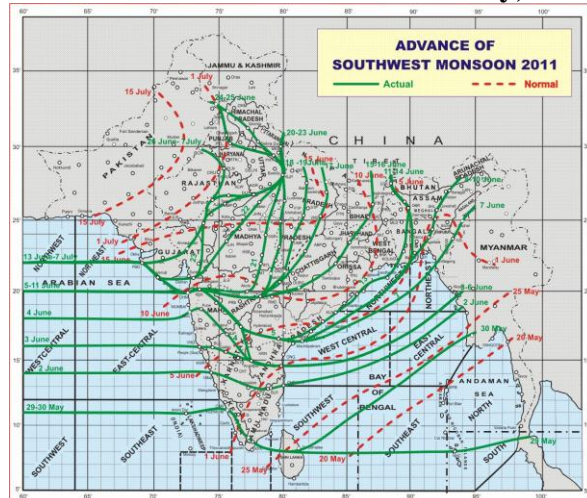
(For the period 07th to 11th July, 2011)



Satellite image 0600 UTC Dated 8th July, 2011



Northern limits of monsoon on 7th July, 2011



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.gov.in>) of the Division

Executive Summary

Upto last week, rainfall was deficient / scanty in most of the districts in West Rajasthan, north Gujarat, Saurashtra, Kutch & Diu, Telengana and Rayalaseema region for 3-4 weeks, Coastal Andhra Pradesh for two weeks, most parts of Madhya Maharashtra, Marathwada and North Interior Karnataka for two weeks. Due to occurrence of good rainfall in Karnataka and Andhra Pradesh, already sown crops, suffering from moisture stress due to prolonged dry spell, are likely to recover from moisture stress situation. As the regions like West Rajasthan, north Gujarat, Saurashtra, Kutch & Diu, parts of Madhya Maharashtra and Marathwada are likely to get good rainfall during next few days, farmers in these regions are advised to undertake sowing of *kharif* crops utilizing the monsoon rain.

Wide spread / fairly wide spread rain occurred in most of the districts in Arunachal Pradesh, Assam, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Uttarakhand, Orissa, West Bengal, Bihar, Jharkhand, Konkan & Goa, Karnataka, Kerala, Tamil Nadu and Andhra Pradesh during last week. Farmers are advised to continue sowing of *kharif* crops in these states utilizing the rainfall.

Widespread / fairly widespread rain / thundershowers would occur over west coast, northeastern states, West Bengal & Sikkim, West Uttar Pradesh, western Himalayan region, East Rajasthan, West Madhya Pradesh. Farmers are advised to postpone irrigation, intercultural operation and application of plant protection measures and fertilizers to the already sown crops. Isolated heavy rainfall would occur over East Rajasthan, Gujarat region, Konkan & Goa and Coastal Karnataka during next 48 hours and over Marathwada, Madhya Maharashtra and West Madhya Pradesh during next 24 hours. Farmers in these States are advised to arrange adequate drainage facilities in the already sown crop fields to avoid water stagnation.

Statewise Advisories issued to the Farmers are given below.

Kerala: Continue wet seeding of rice and planting of black pepper, ginger, turmeric and vegetable crops.

Karnataka: Farmers in South Interior Karnataka are advised to continue sowing of cotton, nursery sowing of rice, sowing of hybrid jowar, maize, ragi, sugarcane, sunflower, groundnut, red gram and horticultural crops. Farmers in North Interior Karnataka are advised to undertake nursery sowing of rice, sowing of *kharif* crops such as green gram, black gram, pigeon pea, jowar, soybean, maize, Bt. cotton and hybrid cotton, red gram, bajra, sesamum and groundnut. Farmers in Coastal Zone of Karnataka are advised to undertake transplanting of rice and prepare nursery for new planting of cashew, mango, papaya and coconut.

Andhra Pradesh: Good rainfall was received in most of the districts in Andhra Pradesh during last week. As cut off dates for sowing of *kharif* crops are still there in the state, farmers are advised to undertake sowing of crops. Already sown crops suffering from moisture stress due to prolonged dry spell have also recovered with this rainfall.

Maharashtra: Farmers in Konkan and Kolhapur Divisions and also east Vidarbha region are advised to undertake transplanting of 20 to 22 days old rice seedlings. Farmers of Madhya Maharashtra and Marathwada are advised to undertake sowing of *kharif* jowar, groundnut, cotton, red gram, green gram and soybean with the help of monsoon showers likely to occur.

Gujarat: As conditions are favourable for advance of monsoon over north Gujarat and chances for good rainfall in the remaining parts of Gujarat, farmers are advised to prepare the land and undertake sowing of groundnut, green gram, cowpea etc. after achieving sufficient soil moisture.

Madhya Pradesh: Farmers in Kymore Plateau and Satpura Hill Zone in Madhya Pradesh are advised to undertake sowing of *kharif* crops like soybean, paddy, moong, urd etc and nursery sowing of rice. Farmers in Jhabua Hill Zone are advised to sow early maturing varieties of maize, soybean or short duration crops *i.e.* urd and moong. Farmers in Vindya Plateau Zone are advised to sow maize, moong, arhar and soybean.

Chhattisgarh: Undertake land preparation and nursery sowing of rice, tomato, brinjal, chilli, planting of turmeric and ginger and sowing of maize, soybean, groundnut, sesame, pigeon pea, urd, kodo in uplands. Weather conditions are suitable for sowing of *kharif* vegetables in Chattisgarh Plain Zone.

Jharkhand: Undertake sowing of *kharif* crops like rice, maize, groundnut, urd, arhar, sowing / transplanting of *kharif* vegetables like bhindi, bean, tomato, French bean, cauliflower, cabbage etc.

West Bengal: Farmers are advised to undertake sowing of maize, direct sowing of *aus* rice and wet seed bed preparation of *aman* rice.

Orissa: Farmers are advised to continue nursery sowing of rice, sowing of maize, arhar, vegetables like okra, bitter gourd, cluster bean, cow pea, ridge gourd, lady's finger, brinjal, tomato and chillies.

Bihar: Farmers are advised to undertake sowing of maize and transplanting of vegetable crops like tomato, brinjal and chilli and scented rice.

Sikkim: Continue nursery sowing of rice.

Uttar Pradesh: Undertake nursery sowing of rice and sowing of maize, groundnut, jowar, bajra, moong, arhar and til.

Himachal Pradesh: Farmers in Kangra and Sirmour districts are advised to undertake direct sowing of rice, sowing of kulthi, hybrid chari, direct sowing of khira bitter gourd, sowing of ginger, arbi and amaranthus and planting of mango, litchi and guava etc. Farmers in the remaining districts are advised to undertake land preparation and keep the inputs ready as soon as sufficient rainfall is received.

Punjab and Haryana: Farmers in Faridkot and Ropar districts in Punjab and Jhajhar and Yamunanagar districts in Haryana are advised to complete transplanting of rice and undertake sowing of bhindi. Farmers in the above districts in Haryana are also advised to prepare the field and undertake sowing of bajra and guar. Farmers in the remaining districts are advised to undertake land preparation and keep the inputs ready as soon as sufficient rainfall is received.

Delhi: Farmers are advised for sowing of guar, bajra, cluster bean, spinach, amaranths, ladies finger, maize, fodder sorghum, fodder lobia and cucurbitaceous crops. Farmers are also advised to undertake preparation of nursery for tomato, chilli, brinjal and early cauliflower.

Rajasthan: Undertake sowing of pearl millet, sorghum, maize, soybean, chilli and cluster bean as fairly widespread rain is likely in East Rajasthan during next three days. Farmers in West Rajasthan are advised to undertake land preparation for sowing of *kharif* crops so that timely sowing can be done with the likely occurrence of monsoon rain.

Uttarakhand: Undertake nursery sowing of rice, soyabean and finger millet and undertake transplanting of chilli and Simla mirch.

Jammu & Kashmir: Farmers in Jammu and Kathua districts are advised to undertake direct sowing of rice, sowing of maize, til, pulses, groundnut, bajra, nursery sowing of chilli, tomato, brinjal and capsicum in Jammu region. Farmers in the remaining districts are advised to undertake land preparation and keep the inputs ready for sowing as soon as sufficient rainfall is received.

Northeastern States: Continue nursery sowing of *sali* rice, sowing of pigeon pea, vegetables, sesame and arrange for drainage facilities in ginger and turmeric fields in Assam.

Advisories for Pests and Diseases: Due to favourable weather conditions, there are incidences of brown plant hopper, stem borer and gall midge in rice, bud rot, eriophid mite and stem bleeding in coconut, mahali disease in areca nut, fungal diseases in pepper, pseudostem weevil, bunchy top, kokkan and sigatoka diseases in banana in Kerala, fruit and shoot borer in brinjal / bhindi in Andhra Pradesh, Karnataka and Orissa, fruit fly in gourds and leaf blight in tomato and chilli and sucking pests in khasi mandarin and pseudostem weevil and wilt in banana in Assam. Farmers are advised to undertake appropriate plant protection measures to control the pests and diseases.

*****The Summary is prepared in consultation with AMFUs & Departments of Agriculture of Different States (Through SAMC) and also the bulletins issued from AMFUs & SAMCs.**

Distribution of rainfall (% departure from normal) of the districts in West Rajasthan, Gujarat Region, Saurashtra, Kutch & Diu region and Maharashtra for last five weeks

State/ Districts	08.06.11	15.06.11	22.06.11	29.06.11	06.07.11
More than 3 weeks continuously deficient to no rain					
West Rajasthan					
Barmer	-83	-100	-100	-100	-99
Bikaner	-7	-100	-27	-63	-90
Jaisalmer	70	-100	-100	-100	-100
Jalore	-100	-100	-100	-100	-92
Jodhpur	-100	-100	-48	-60	-54
Sri Ganganagar	-100	-61	-33	-54	-82
Gujarat Region					
Ahmedabad	-84	-87	-99	-100	-99
Anand	-100	-100	-100	-99	-98
Banaskantha	-100	-100	-100	-100	-100
Baroda	-76	-100	-99	-100	-93
Broach	-19	-98	-93	-100	-90
Dahod	-39	-100	-100	-95	-81
Dangs	-67	-93	-68	-73	-98
Gandhinagar	58	-100	-89	-100	-97
Kheda	-67	-100	-99	-100	-96
Mehsana	-98	-100	-100	-99	-99
Narmada	-8	-100	-67	-98	-86
Panchmahal	-97	-100	-100	-99	-93
Patan	-100	-100	-100	-100	-93
Sabarkantha	-94	-100	-97	-96	-89
Tapi	-90	-100	-66	-100	-86
Valsad	-8	-73	-77	-84	-77
Saurashtra, Kutch & Diu region					
Amreli	-46	-97	-100	-100	-88
Bhavnagar	-93	-100	-100	-100	-80
Kutch	-100	-81	-100	-99	-98
Surendranagar	-25	-100	-100	-100	-94
Maharashtra					
Madhya Maharashtra					
Jalgaon	8	-87	-90	-89	-80
Nasik	50	-56	-60	-48	-73
Marathwada					
Aurangabad	66	-67	-97	-86	-56
Jalna	-26	-83	-97	-60	-45
Usmanabad	-14	-77	-75	-76	-24
Parbhani	-27	-33	-73	-69	-56
Vidarbha					
Buldhana	190	-77	-95	-67	-69
Washim	68	-37	-42	-35	-57
3 weeks continuously deficient to no rain					
Saurashtra, Kutch & Diu region					
Jamnagar	-42	66	-99	-99	-72
Junagarh	38	403	-93	-93	-93
Kutch	-100	-81	-100	-99	-98
Porbandar	403	463	-98	-99	-93
Rajkot	-53	74	-99	-100	-85
Maharashtra					
Konkan & Goa					
Mumbai	81	195	-72	-86	-81
Madhya Maharashtra					
Dhule	-42	-7	-99	-93	-51
Nandurbar	17	27	-66	-96	-47
Pune	165	119	-23	-41	-86

State/ Districts	08.06.11	15.06.11	22.06.11	29.06.11	06.07.11
Marathwada					
Nanded	7	12	-28	-81	-50
Vidarbha					
Akola	184	51	-78	-43	-71
Amraoti	73	86	-70	-25	-56
Nagpur	65	18	-35	-46	-64
2 weeks continuously deficient to no rain					
Maharashtra					
Konkan & Goa					
Raigad	157	220	-14	-59	-82
Ratnagiri	102	133	33	-38	-56
Sindhudurg	59	104	19	-34	-39
Thane	98	71	-18	-64	-77
Madhya Maharashtra					
Sangli	6	0	44	-70	-46
Marathwada					
Hingoli	42	-41	10	-47	-62
Vidarbha					
Bhandara	111	358	-8	-27	-73
Distribution of rainfall for remaining districts of the state for last five weeks					
West Rajasthan					
Churu	64	-100	199	770	76
Hanumangarh	-43	-86	230	-4	-56
Nagaur	-98	0	25	125	-59
Pali	-100	-96	-95	-3	-96
Gujarat Region					
DNH	**	-93	-72	-77	**
Daman	**	-89	-75	-76	**
Maharashtra					
Konkan & Goa					
Goa	53	61	25	-17	-28
Madhya Maharashtra					
Ahmednagar	42	-44	-99	-76	26
Kolhapur	110	195	-1	34	-52
Satara	56	157	167	8	-70
Solapur	-24	-90	-76	-63	173
Marathwada					
Beed	-12	-35	-69	-56	111
Latur	-42	-42	-92	-89	22
Vidarbha					
Chandrapur	108	54	-41	14	-82
Gadchiroli	56	-44	-52	10	-76
Gondia	113	-8	1	16	-92
Wardha	33	9	-67	-17	-62
Yeotmal	42	44	-51	3	-12

LEGEND

- EXCESS 20% OR MORE
- NORMAL +19% TO - 19%
- DEFICIENT - 20% TO - 59%
- SCANTY - 60% TO - 99%
- NO RAIN - 100%
- ** DATA NOT AVAILABLE

Distribution of rainfall for remaining states of the country during last week

State/Districts	Actual	06.07.11			
Arunachal Pradesh			Ferozpur	17.1	-13
Changlang	69.2	-38	Gurdaspur	24.1	-47
East Kameng	66.4	-31	Hoshiarpur	16.1	-67
East Siang	245.1	19	Jalandhar	17.7	-48
Lohit	94.4	-33	Kapurthala	0.0	-100
Lower Subansiri	20.0	-59	Ludhiana	3.5	-91
Papumpara	175.5	-12	Mansa	7.5	-58
Tawang	108.0	-42	Moga	16.2	-37
Tirap	157.0	-22	Muktesar	18.8	-9
Upper Siang	128.0	-27	Nawashahar	6.5	-88
Upper Subansiri	41.0	-38	Patiala	2.4	-94
West Kameng	109.1	-41	Ropar	34.0	-20
West Siang	122.2	-6	Sangrur	14.8	-63
Assam			Mohali	10.7	-73
Barpeta	102.8	-57	TarnTaran	6.5	-81
Bongaigaon	58.4	-75	Haryana		
Cachar	131.2	9	Ambala	9.2	-83
Darrang	**	**	Bhiwani	18.8	-10
Dhubri	55.2	-46	Chandigarh	0.1	-99
Dibrugarh	169	46	Faridabad	23.5	4
East Garo Hills	**	**	Fatehabad	26.8	35
East Khasi Hills	**	**	Gurgaon	14.3	-48
Goalpara	114.6	-22	Hissar	10.5	-53
Golghat	43.9	-39	Jhajar	70.6	161
Hailakandi	46.8	-47	Jind	4.8	-85
Jaintia Hills	**	**	Katihai	19.3	-28
Jorhat	40.5	-55	Karnal	21.1	-41
Kamrup	132.9	55	Kurukshetra	12.7	-55
Karbi Analog	23.3	-50	Mahendragarh	10.1	-55
Karimganj	173.4	1	Palwal	20.4	-9
Kokrajhar	281.5	2	Panchkkula	24.4	-58
Lakhimpur	222.5	40	Panipat	18.8	-8
Morigaon	124	41	Rewari	2.6	-88
N.C.Hills	58.7	-20	Rohtak	3.6	-90
Nowgong	57.2	-9	Sirsa	33.8	138
Nalbari	32.8	-76	Sonepat	21.6	-13
Sonitpur	170.4	67	Yamunanagar	90.1	46
Sibsagar	82.7	-17	New Delhi	39.6	17
Tinsukia	139.4	33	Jammu & Kashmir		
Himachal Pradesh			Anantnag	11.6	-41
Bilaspur	15.8	-69	Badgam	0.0	-100
Chamba	25.9	-47	Doda	5.8	-72
Hamirpur	25.9	-62	Jammu	54.1	15
Kangra	30.7	-64	Kathua	31.2	-43
Kinnaur	4.7	-62	Kupwara	32.0	109
Kullu	19.5	-49	Ladakh(Leh)	0.0	-100
Lahaul and Spiti	2.5	-92	Pulwama	2.4	-79
Mandi	32.3	-48	Srinagar	0.0	-100
Shimla	24.1	-45	Udhampur	23.4	-66
Sirmaur	50.8	-45	East Madhya Pradesh		
Solan	35.9	-47	Anuppur	20.9	-74
Una	16.3	-69	Balaghat	39.2	-57
Punjab			Chhatarpur	46.3	-27
Amritsar	9.6	-71	Chindwara	2.1	-97
Barnala	1.5	-96	Damoh	39.0	-45
Bhatinda	23.3	-8	Dindori	35.7	-59
Faridkot	69.3	174	Jabalpur	33.7	-54
Fatehgarh Saheb	0.3	-99	Katni	35.0	-52
			Mandla	69.8	-25
			Narsingpur	50.4	-28
			Panna	30.8	-58
			Rewa	30.6	-51
			Sagar	34.7	-51
			Satna	22.5	-68
			Seoni	34.7	-53
			Shahdol	6.5	-90
			Sidhi	25.4	-62
			Singrauli	22.4	-57
			Tikamgarh	108.5	99
			Umaria	34.4	-51
			West Madhya Pradesh		
			Alirajpur	12.1	-74
			Asoknagar	58.8	-1
			Badwani	15.3	-57
			Betul	1.9	-97
			Bhind	56.4	74
			Bhopal	29.9	-54
			Burhanpur	17.8	-61
			Datia	30.8	-20
			Dewas	17.0	-69
			Dhar	17.0	-62
			Guna	58.2	-9
			Gwalior	53.3	50
			Harda	0.8	-99
			Hosangabad	28.9	-65
			Indore	24.3	-51
			Jhabua	55.7	29
			Khandwa	35.0	-28
			Khargone	44.9	8
			Mandsaur	27.7	-39
			Morena	19.0	-42
			Neemuch	9.7	-79
			Raisen	45.3	-37
			Rajgarh	33.5	-31
			Ratlam	23.0	-50
			Sehore	106.1	102
			Shajapur	9.4	-82
			Sheopur Kalani	22.0	-46
			Shivpuri	33.3	-29
			Ujjain	26.8	-48
			Vidisha	62.4	-3
			Chattisgarh		
			Bastar	48.2	-38
			Bijapur	34.0	-59
			Bilaspur	57.9	-28
			Dantewara	29.7	-59
			Dhamtari	11.4	-86
			Durg	23.0	-72
			Janjgir	28.1	-68
			Jashpurnagar	55.6	-43
			Kanker	50.2	-37
			Korba	51.0	-48
			Koriya	22.8	-73
			Kowardna	29.0	-51
			Mahasumund	44.3	-39
			Naraynpur	52.6	-28
			Raigarh	56.1	-35
			Raipur	34.3	-59

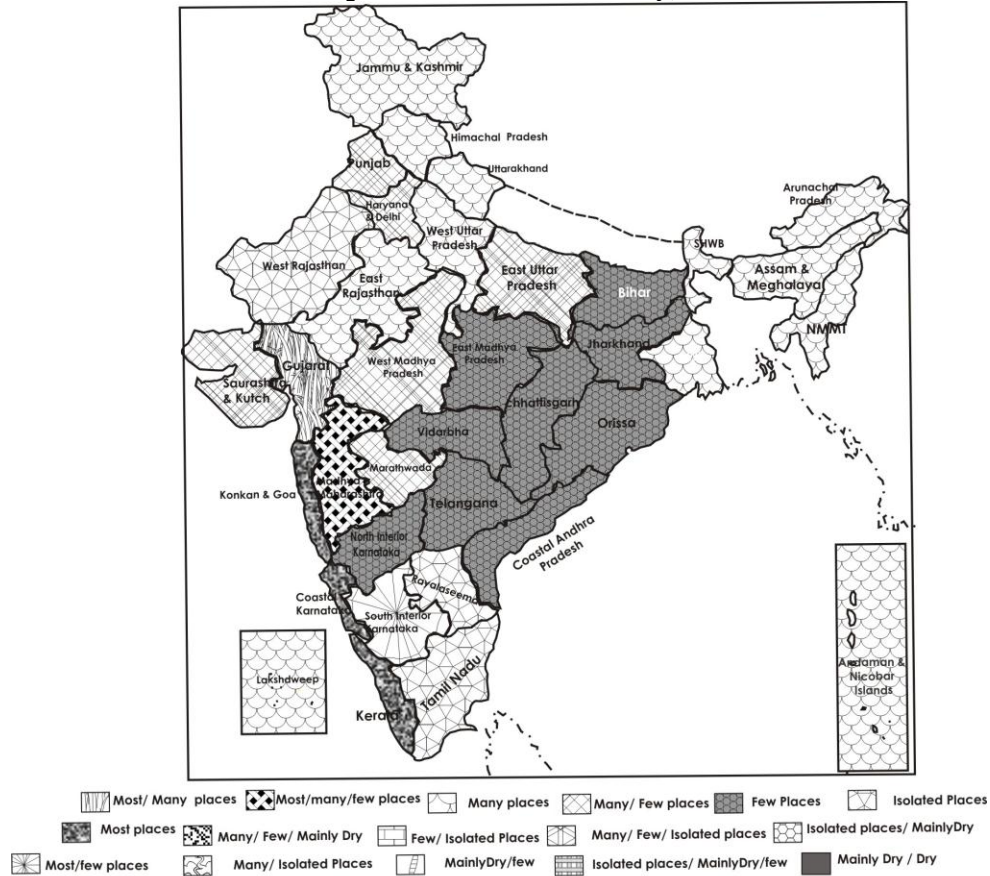
Rajandgaon	11.8	-84	Kanshiramnagar	115.2	212	Siwan	36.9	-42
Surguja	32.2	-56	Lalitpur	178.0	172	Supaul	145.0	106
East Uttar Pradesh			Mahamaya Nagar	46.2	45	Vaishali	118.7	85
Allahabad	22.4	-55	Mahoba	35.0	-28	West Champaran	257.6	192
Ambedkar Nagar	82.3	49	Mainpuri	21.7	-45	Jharkhand		
Azamgarh	86.9	40	Mathura	20.0	-32	Bokaro	49.8	-31
Bahraich	95.7	62	Meerut	16.1	-61	Chatra	21.0	-70
Ballia	69.2	28	Moradabad	47.8	-3	Deoghar	36.9	-49
Balrampur	104.0	76	Muzzaffarnagar	45.3	9	Dhanbad	94.1	20
Banda	49.3	-12	Pilibhit	35.6	-36	Dumka	21.5	-75
Barabanki	136.3	167	Rampur	52.0	-6	East Singbhum	53.8	-31
Basti	86.0	40	Saharanpur	31.3	-28	Garhwa	0.0	-100
Chandauli	21.0	-55	Shahjahanpur	84.3	87	Giridih	49.9	-34
Deoria	97.3	68	UttaraKhand			Godda	34.5	-46
Faizabad	123.7	135	Almora	60.2	28	Gumla	55.1	-43
Farrukhabad	43.7	7	Bageshwar	106.0	125	Hazaribagh	5.2	-93
Fatehpur	91.6	67	Chamoli	68.0	44	Jamtara	87.6	7
Gazipur	56.6	10	Champawat	124.0	58	Khunti	30.5	-56
Gonda	113.4	103	Dehradun	152.1	43	Koderna	43.0	-41
Gorakhpur	179.3	211	Garhwal Pauri	57.0	-26	Latehar	0.0	-100
Hardoi	52.6	9	Garhwal Tehri	87.0	54	Lohardagga	8.7	-85
Jaunpur	53.2	-17	Haridwar	17.6	-68	Pakur	105.0	28
Kannauj	87.0	110	Nainital	133.3	40	Palamau	24.4	-64
Kanpur City	93.2	131	Pithorgarh	119.2	17	Ramgarh	19.4	-74
Kanpur Dehat	101.4	176	Rudraprayag	77.0	-29	Ranchi	18.6	-73
Kaushambi	51.2	0	Udham Sing Nagar	80.8	9	Sahebganj	127.0	52
Kheri	72.6	19	Uttarkashi	78.1	19	Seraikela	38.0	-46
Kushi nagar	137.5	97	Bihar			Simdega	26.7	-73
Lucknow	120.8	178	Araria	210.9	87	West Singbhum	52.3	-34
Maharajganj	89.0	9	Arwal	64.0	27	East Rajasthan		
Mau	61.8	19	Aurangabad	0.0	-100	Ajmer	1.1	-96
Mirzapur	23.7	-53	Banka	15.9	-78	Alwar	9.1	-65
Pratapgarh	63.9	1	Begusarai	149.0	131	Banswara	15.1	-68
RaiBareilly	54.0	1	Bhabua	31.7	-47	Baran	16.7	-62
Sahuji			Bhagalpur	91.0	13	Bharatpur	53.4	122
Maharajnagar	8.5	-88	Bhojpur	22.9	-60	Bhilwara	6.2	-85
Sant Kabirnnagar	99.0	85	Buxar	67.2	16	Bundi	8.2	-78
Sant Ravidas Nagar	45.0	-4	Darbhanga	141.7	106	Chittorgarh	4.5	-89
Shrawasti	119.1	101	East Champaran	264.1	314	Dausa	0.0	-100
Sidharthnagar	141.0	128	Gaya	32.3	-49	Dholpur	24.4	-31
Sitapur	128.7	150	Gopalganj	235.3	257	Dungarpur	8.3	-82
Sonbhadra	36.9	-41	Jahanabad	25.7	-57	Jaipur	6.3	-74
Sultanpur	74.4	33	Jamui	38.9	-52	Jhalawar	32.1	-38
Unnao	99.0	136	Kathihar	90.0	5	Jhunjhunu	16.2	-20
Varanasi	39.5	-28	Khagadia	96.2	39	Karauli	6.1	-77
West Uttar Pradesh			Kishanganj	359.8	183	Kota	19.0	-56
Agra	21.6	-52	Lakhisarai	60.9	-19	Pratapgarh	22.0	-56
Aligarh	37.7	27	Madhepura	94.2	-3	Rajsamand	2.4	-93
Auraiya	75.0	132	Madhubani	109.1	39	Sawai Madhopur	19.1	-47
Badaun	66.0	68	Monghyar	**	**	Sikar	23.6	10
Baghpat	0.0	-100	Muzaffarpur	150.6	102	Sirohi	8.5	-86
Bareilly	135.8	179	Nalanda	47.0	-23	Tonk	7.3	-75
Bijnor	41.8	-12	Nawada	31.3	-55	Udaipur	7.7	-83
Bulandsahar	49.0	68	Patna	54.2	-3	Orissa		
Etah	35.5	-4	Purnea	247.4	179	Angul	41.8	-28
Etawah	16.2	-57	Rohtas	5.0	-91	Balasore	41.7	-35
Firozabad	36.2	-18	Saharsha	188.9	169	Bargarh	66.5	-14
GBNagar	9.0	-77	Samstipur	115.9	81	Bhadrak	44.2	-27
Ghaziabad	21.5	-34	Saran	170.8	148	Bolangir	55.1	-31
Hamirpur	108.2	167	Sheikpura	45.2	-30	Boudh	22.1	-65
Jalaun	72.5	79	Sheohar	135.8	44	Cuttack	39.6	-42
Jhansi	31.2	-39	Sitamarhi	147.3	56	Deogarh	94.1	-3
Jotirba Phule Nagar	46.0	5				Dhenkanal	42.9	-33

Gajapati	59.3	68
Ganjam	92.6	132
Jagatsingpur	43.9	1
Jajpur	48.2	-13
Jharsuguda	61.0	-24
Kalahandi	59.8	-20
Kandhamal	56.1	-11
Kendrapara	18.7	-70
Keonjhar	55.7	4
Khurda	57.5	3
Koraput	40.4	-54
Malkangiri	6.0	-92
Mayurbhanj	56.0	-5
Nawapara	46.5	-37
Nawarangpur	74.7	-30
Nayagarh	77.5	35
Puri	20.6	-65
Rayagada	45.6	-7
Sambalpur	49.7	-49
Sonepur	53.0	-46
Sundargarh	55.0	-25
West Bengal		
GWB		
Bankura	30.6	-58
Birbhum	85.2	15
Burdwan	62.5	-6
Hooghly	59.2	-22
Howrah	38.9	-49
East Midnapore	83.2	14
Murshidabad	93.9	4
Nadia	57.8	-10
24 Pargana (N)	66.3	-9
Purulia	61.1	-19
24 Pargana (S)	59.8	-46
West Midnapore	50.7	-37
SHWB		
Cooch Behar	141.2	-35
Darjeeling	258.4	70
East Sikkim	214.9	103
Jalpaiguri I	284.4	13
Malda	69.6	-14
North Dinajpur	197.5	150
North Sikkim	88.0	-32
South Dinajpur	122.0	32
South Sikkim	172.0	63
West Sikkim	**	**
Karnataka		
Coastal Karnataka		
Dakshin Kannada	194.5	-36
Udupi	347.6	4
Uttar Kannada	240.2	-5
North Interior Karnataka		
Bagalkote	37.8	278

Belgaum	27.1	-43
Bidar	54.8	45
Bijapur	28.5	126
Dharwad	18.4	-45
Gadag	17.0	46
Gulbarga	40.3	29
Haveri	20.9	-51
Koppal	66.4	664
Raichur	34.5	103
Yadgir	53.4	115
South Interior Karnataka		
Bangalore Rural	34.7	218
Bangalore Urban	17.1	36
Bellary	24.6	109
Chamarajnar	12.4	-12
Chichballapur	42.4	203
Chickmagalur	42.0	-77
Chitradurga	7.7	-19
Davangere	19.5	-4
Hassan	31.5	-39
Kodagu	72.5	-71
Kolar	42.3	285
Mandya	9.6	30
Mysore	14.4	-42
Ramnar	75.4	579
Shimoga	103.9	-37
Tumkur	18.9	89
Kerala		
Alappuzha	70.7	-53
Kannur	101.8	-65
Ernakulam	89.0	-51
Idukki	90.9	-59
Kasaragod	168.2	-40
Kollam	41.1	-62
Kottayam	90.3	-45
Kozhikode	90.5	-65
Malappuram	33.9	-85
Palakkad	34.1	-79
Pathanamthitta	44.3	-70
Thiruvananthapuram	20.5	-69
Thrissur	47.3	-78
Wyanad	38.5	-88
Tamil Nadu		
Chennai	27.1	19
Coimbatore	4.1	-64
Cuddalore	59.3	416
Dharmapuri	28.0	198
Dindigul	4.2	-53
Erode	14.9	165
Kanchipuram	52.4	182
Kanyakumari	14.8	-58
Karur	0.3	-92
Krishnagiri	35.6	283

Madurai	12.8	16
Nagapattinam	31.0	229
Namakkal	15.7	67
Nilgiris	35.8	-48
Perambalur	4.6	-33
Puducherry	37.0	311
Pudukottai	21.9	95
Ramanathapuram	18.8	470
Salem	36.9	125
Sivaganga	68.6	541
Thanjavur	28.6	266
Theni	6.1	0
Tirunelveli	2.8	-72
Tiruvallur	38.9	65
Tiruvannamalai	56.4	341
Tiruvarur	18.2	90
Toothukudi	2.7	35
Trichy	14.1	123
Vellore	73.8	329
Villupuram	68.1	432
Virudhunagar	4.2	-1
Andhra Pradesh		
Coastal Andhra Pradesh		
East Godavari	39.7	-20
Guntur	59.1	89
Krishna	82.5	72
Nellore	13.4	-25
Prakasam	38.8	87
Sirkakulam	51.2	18
Visakhapatnam	54.0	42
Vizianagram	41.2	-6
West Godavari	72.3	38
Telangana		
Adilabad	65.1	1
Hyderabad	46.9	43
Karimnagar	74.9	28
Khammam	63.9	16
Mehabubnagar	23.0	-25
Medak	53.8	24
Nalgonda	41.1	38
Nizamabad	71.4	15
Rangareddy	19.7	-46
Warangal	126.0	123
Rayalaseema		
Anantapur	14.1	64
Chittoor	46.0	176
Cuddapah	17.9	21
Kurnool	20.5	5

Weather Forecast (Valid upto 1430 hours of 10th July, 2011)



Major Feature of Weather Forecast upto 1430 hours IST of 10th July, 2011

- Widespread rain/thundershowers would occur over west coast, Madhya Maharashtra and Gujarat region.
- Fairly widespread rain/thundershowers would occur over northeastern states, West Bengal & Sikkim, Marathawada, west Uttar Pradesh, western Himalayan region, east Rajasthan, west Madhya Pradesh, Lakshadweep and Andaman & Nicobar Islands.
- Scattered rain/thundershowers would occur over remaining parts of the country outside Tamilnadu, Rayalaseema and west Rajasthan where it will be isolated.
- Rainfall activity will decrease over east and central India after next 24 hours.

Weather Warning

- Isolated heavy rainfall would occur over east Rajasthan, Gujarat region, Konkan & Goa and coastal Karnataka during next 48 hours.
- Isolated heavy rainfall would occur over Marathawada, Madhya Maharashtra and west Madhya Pradesh during next 24 hours.

Weather Outlook up to 1430 hours IST of 12th July, 2011

- Fairly widespread rainfall activity would continue over east and northeastern states.
- Scattered rainfall activity would continue over central India.

Zonewise Agromet Advisories

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

- **Realised Rainfall:** Most of the districts of the States of the region received rain during last week.
- **Rainfall Forecast:** Fairly widespread rain / thundershowers would occur over West Bengal and Sikkim and scattered over remaining States of the region.
- **Advisories:**
 - As most of the districts of all the States of the region received rainfall during last week and rain is also likely to occur during the period, postpone irrigation to the standing crops. Also postpone intercultural operation and application of plant protection measures and fertilizers to the standing crops in West Bengal and Sikkim in view of fairly widespread rainfall.
 - In Jharkhand prepare nursery bed for long duration rice varieties utilizing the recent monsoon rain.
 - Farmers in Western Plateau Zone of Jharkhand are advised to continue sowing of *kharif* crops like rice, maize, groundnut, urd, arhar etc. utilizing monsoon rain. Prepare the land for sowing / transplanting of *kharif* vegetables like bhindi, bean, tomato, French bean, cauliflower, cabbage etc.
 - Undertake nursery sowing of rice, sowing of maize, arhar, vegetables like okra, bitter gourd, cluster bean, cow pea, ridge gourd, lady's finger, brinjal, tomato and chillies in Orissa utilizing monsoon rain.
 - Farmers in Khurda district of Orissa are advised to complete the sowing of *arhar* by this week.
 - Farmers in West Bengal are advised to undertake sowing of maize, direct sowing of *aus* rice and wet seed bed preparation of *aman* rice.
 - Farmers in Bihar are advised to undertake sowing of *kharif* maize, *kharif* fodder crops (jowar, Dinanath grass and bajra) and transplanting of fruit trees. Nursery sowing of scented rice is also advised. With widespread rainfall across north Bihar districts during past few days, farmers are also advised to transplant rice seedlings in medium and low land areas.
 - Suitable varieties of the crops for sowing or transplanting are mentioned in Annexure II.
 - To protect maize crop from water logging, farmers are advised to arrange proper drainage facilities.
 - Fruit and shoot borer in brinjal has been found in Cuttack district of Orissa. To control it install Pheromone trap and spray 4 g Sevin WP or 2 ml Malathion in 1 litre water alternatively.
 - Under prevailing weather condition, in Terai Zone of West Bengal, there are chances of incidence of blast and sheath blight in the nursery bed of rice. To manage this disease spray Bavistin @ 1 g / litre of water. There may also be infestation of vine and fruit rot in pointed gourd and *Phytophthora* in betel vine in this region; to manage this diseases, spray Mancozeb 64% + Metalaxyl 8% @ 1.5 g / litre of water.
 - Due to cloudy weather and high humidity in old Alluvial Zone of West Bengal, there is possibility of infestation of collar rot in yam; to manage this disease, spray Carbendazim @ 1 g and Thiram @ 2 g together per litre of water. Due to continuous rainfall, there is also a chance of occurrence of nematodes in tube rose; to manage the infestation spray 3 ml Azadirachtin 1% per litre of water.
 - In Coastal Saline Zone of West Bengal, due to high humidity, *Collectotrichum piperis* (local name chitla) disease symptoms may appear on the leaf blade. Farmers are advised to spray Bordeaux mixture (4:4:50) @ 0.5% or any Copper oxychloride preparation @ 0.3-0.4% at an interval of 15 days.
 - Under prevailing weather condition, cucurbitaceous crops may be infested by fruit fly in Hill Zone of West Bengal. For protection against fruit fly, the crops may be baited with any contact insecticide like Carbaryl with a mixture @ 1 g Carbaryl and 10 g sugar in 100 litres of water.
 - Fruit and shoot borer in brinjal has been found in Cuttack district of Orissa. To control it install Pheromone trap and spray 4 g Sevin WP or 2 ml Malathion in 1 litre water alternatively.
 - Undertake plant protection measures after current spells of rain in the region.
 - Stages of major crops are mentioned in Annexure I.
- **Animal Husbandry**
 - Due to frequent showers for last few days in North Eastern Plateau Zone of Orissa, Coastal Saline Zone of West Bengal and South Eastern Plateau Zone of Jharkhand, there is a chance of fungal diseases in poultry birds. To prevent it poultry litter should be rearranged by mixing lime in the

litter. RD vaccine should be given immediately to the chicks which are 7 days old. To prevent coxidirosis disease spray antibiotic solution named Kohrsolin-TH in the poultry house.

- Due to heavy rainfall in Coastal Saline Zone of West Bengal cattle may be attacked by ulcer in foot and mouth. Wash the wound by Potassium permanganate and keep them in dry condition.
- In Old Alluvial Zone of West Bengal, vaccination against the diseases *viz.* FMD, HS & BQ may be carried out to protect the dairy animals.

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

- **Realised Rainfall:** Most of the districts of Arunachal Pradesh and Assam received rain during last week.
- **Rainfall Forecast:** Fairly widespread rain / thundershowers would occur over the region during the period.
- **Advisory**
 - As fairly widespread rain / thundershowers would occur over the states of this region, farmers are advised to postpone irrigation, intercultural operations and application of fertilizer and plant protection measures to the crops.
 - In Assam, farmers are advised to complete sowing of groundnut, pigeon pea, sesame, arhar and nursery sowing of *sali* rice.
 - Farmers in Mid Tropical Hill Zone in Nagaland are advised to complete sowing of groundnut, soyabean and prepare nurseries for rice crop.
 - Farmers are advised to undertake top dressing of urea in *ahu* rice in Ri-bhoi, Jaintia and Khasi Hill districts of Meghalaya. In view of occurrence of fairly widespread rainfall, also provide adequate drainage to avoid water stagnation in ginger and turmeric.
 - Suitable varieties of the crops for sowing or transplanting are mentioned in Annexure II.
 - In Sub Tropical Hill Zone in Arunachal Pradesh, provide support to summer vegetable crops to climb, as high intensity of rainfall at this stage may damage the plants.
 - In Central Brahamaputra zone in Assam, as pesticide application is not possible due to rainy weather, arrangement of bamboo perch may be made as an effective measure to control the possible infestation of hairy caterpillar and semi-looper in jute through predatory birds.
 - In Mizoram, due to rainfall, infestation of trunk borer is observed in Khasi Mandarin; farmers are advised to monitor and kill larva by inserting a wire inside the tunnel. Also, due to continuous rain, the activity of weevil is high and incidence of pseudo stem weevil is more in banana; farmers are advised to remove unwanted suckers, dry and infected leaves, sheaths and petioles.
 - In Mild Tropical Plain Zone of Tripura, due to the prevailing cloudy and humid weather, chances of attack of stem borer in upland rice is more. Farmers are advised to monitor crop and spray Rogor or Monocrotophos @ 2 ml per litre of water or Carbofuran 3G @ 5 kg per *kani*. There is also more chance of attack of fungal diseases in the vegetables. Farmers are advised to spray Calixin @ 1 ml per litre of water to manage the attack.
 - Due to excessive soil moisture, there is chance of root and stem rot disease in sesame in Mild Tropical Plain Zone of Tripura. Farmers are advised to remove stagnant water and spray Copper Fungicide i.e. Indofil @ 3 g per litre of water.
 - Apply plant protection measures after current spells of rain.
 - Stages of major crops are mentioned in Annexure I.

Animal Husbandry:

- Vaccinate cattle, goat and pigs against foot and mouth disease (FMD) as well as anthrax disease in Meghalaya.
- Immunizations against Brucellosis, FMD, HS, BQ and Anthrax diseases in cattle and buffaloes and swine fever in pigs may be carried out in Upper and Central Bramhaputra Valley Zone in Assam. It is also advised to vaccinate (RDF1) against Ranikhet disease in one week old chicks and against Gamboro disease in two weeks old chicks.
- In Mizoram, due to continuous rainfall and high humidity, there is chance of ring worm in cattle. Hence, keep the animals clean and dry, also protect wounds from flies to avoid infestation of maggots. Also, vaccinate and deworm the pigs from swine fever and internal parasite, respectively.

NORTHWEST INDIA [JAMMU & KASHMIR, HIMACHAL PRADESH, UTTARAKHAND, PUNJAB, HARYANA, DELHI, UTTAR PRADESH & RAJASTHAN]

- **Realised Rainfall:** Most of the districts of Uttarakhand, Uttar Pradesh, few districts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, East Rajasthan received rainfall.
- **Rainfall Forecast:** Fairly widespread rainfall is likely over West Uttar Pradesh, Uttarakhand, Himachal Pradesh, Jammu & Kashmir, East Rajasthan, scattered rain/thundershowers is likely to occur over East Uttar Pradesh, Punjab, Haryana, Chandigarh & Delhi during next 48 hours and at many places thereafter. Isolated rainfall / thundershowers is likely to occur over West Rajasthan.
- **Advisory:**
 - As most of the districts of Uttarakhand, Uttar Pradesh, few districts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, East Rajasthan during last week, postpone irrigation to the crops. As rainfall expected in Jammu & Kashmir, Himachal Pradesh and East Rajasthan during next three days, postpone irrigation to the standing crops. Arrange for drainage facilities in East Rajasthan as isolated heavy rain is likely during next 48 hours.
 - Farmers in Faridkot and Ropar districts in Punjab and Jhajhar and Yamunanagar districts in Haryana are advised to complete transplanting of rice and undertake sowing of bhindi. Farmers in the above districts in Haryana are also advised to prepare the field and undertake sowing of bajra and guar. Farmers in the remaining districts are advised to undertake land preparation and keep the inputs ready as soon as sufficient rainfall is received.
 - Undertake sowing of pearl millet, sorghum, maize, soybean, chilli and cluster bean as fairly widespread rain is likely in East Rajasthan during next three days. Farmers in West Rajasthan are advised to undertake land preparation for sowing of kharif crops so that timely sowing can be done with the likely occurrence of monsoon rain.
 - Farmers in Jammu and Kathua districts are advised to undertake direct sowing of rice, sowing of maize, til, pulses, groundnut, bajra, nursery sowing of chilli, tomato, brinjal and capsicum in Jammu region. Farmers in the remaining districts are advised to undertake land preparation and keep the inputs ready for sowing as soon as sufficient rainfall is received.
 - Farmers in Uttar Pradesh are advised to undertake nursery sowing of rice and sowing of maize, groundnut, jowar, bajra, moong, arhar and til and transplanting of vegetables viz. brinjal, mirch, early cauliflower, lady's finger and fruits viz. mango, litchi, lemon, papaya etc.
 - Farmers in Himachal Pradesh are advised to complete planting of ginger and turmeric and complete transplanting of pepper, tomato, brinjal in the mid hills.
 - Farmers in Uttarakhand, are advised to prepare the field and undertake nursery sowing of rice, soyabean and finger millet and undertake transplanting of chilli and Simla mirch.
 - In Himachal Pradesh weather is conducive for attack of stored grains pests like rice weevil, lesser grain borer and rice moth. In Grain store bins put one pouch of celhpos (3g) or quickphos (12g). In pome fruits to control San Jose scale and eggs of Mite spray TSO (Servo Orchard Spray Oil/ HP Spray Oils) @ 4 liters per 200 liters of water between green tip and tight cluster stage of these fruits.
 - Constant monitoring of lady finger, chilli and cucurbitaceous crop against attack of mite and jassid is advised. Spraying of phosmite @ 1.5 - 2 ml per litre of water is advised to control mite while spraying of Dimethoate 30 EC @ 2 ml/liter of water against jassid is advised.
 - Weather is favourable for attack of blast and brown spot on paddy nurseries. Also there may be attack of fruit fly on cucurbitaceous crops and attack of mite and jassid on ladyfinger crop in Delhi. Farmers are advised to monitor the crop and take proper plant protection measures.
 - Spraying may be undertaken after current spells of rain in Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Punjab, Haryana, Delhi and Uttar Pradesh.
 - Stages of major crops are mentioned in Annexure I.
- **Animal Husbandary**
 - In some parts of Uttar Pradesh and Rajasthan, farmers are advised to keep their animals under trees during the day time. Give them fresh water for drinking and balanced feed with mineral mixture and green fodder.

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

- **Realised Rainfall:** Most of the districts in Andhra Pradesh except Nellore, Rangareddy, Anantpur, Cuddapah and Kurnool, all the districts in Coastal Karnataka, Bagalkote, Bidar, Gulbarga, Koppal, Raichur and Yadgir in North Interior Karnataka, Bangalore Rural, Chickballapur, Chickmagalur, Hassan, Kodagu, Kolar, Ramnagara and Shimoga in South Interior Karnataka, most of the districts in Kerala except Thiruvananthapuram and Cuddalore, Kanchipuram, Krishnagari, Nilgiris, Nagapattinam, Puducherry, Salem, Sivaganga, Tiruvallur, Tiruvannamalai, Vellore and Villupuram in Tamil Nadu received good rainfall. No significant rainfall occurred in the remaining parts of the region.
- **Rainfall Forecast:** Fairly widespread rain is likely at Coastal Karnataka and Kerala. Scattered / isolated rain/thundershowers would occur over the rest of the region.
- **Advisories:**
 - Deficient / scanty rainfall has been received in most of the districts in Telengana and Rayalaseema during last three weeks and in Coastal Andhra Pradesh during last two weeks. As cut off dates for sowing of kharif crops are upto 15th July in Telangana and up to 30th July in remaining parts of the state, famers are advised to start land preparation and keep the inputs ready. Undertake sowing of crops like cotton, jowar, maize, castor, groundnut, pigeon pea, green gram, etc., only after receiving a cumulative rainfall of 60 to 75mm of rainfall which charges soil profile for better germination.
 - Due to receipt of monsoon showers during last week along with forecast rains, farmers are advised to continue wet seeding of rice, new planting of black pepper, ginger, turmeric and vegetable in Kerala, transplanting of Kuruvai rice, kharif vegetables in Tamil Nadu, irrigated cotton, nursery sowing of rice, sowing of hybrid jowar, maize, ragi, sugarcane, sunflower, ground nut, red gram and horticulture crops in Karnataka and sowing of groundnut in Rayalaseema.
 - Farmers in Scarce Rainfall Zone of Andhra Pradesh are advised to take up sowing of rainfed groundnut only after receiving a cumulative rainfall of 25-30 mm for better germination and crop establishment. With the recently received and also expected rains, intercultivation should be practiced in groundnut.
 - Farmers in Northern Zone of Kerala are advised to skip irrigation, since there is a chance for rainfall in the coming days.
 - Farmers in North East Transition Zone of Karnataka are advised to take up sowing of paddy (drill sown), maize, soybean, groundnut, green gram Chilli, Desi cotton, Onion and Hy. cotton and planting of horticultural crops.
 - Farmers in the Cauvery Delta Zone of Tamil Nadu are advised to drain the excess water from the kuruvai nursery and transplanted paddy fields, which was accumulated due to the rain received in the last few days.
 - As the wind speed is expected to increase in the Western Zone of Tamil Nadu, farmers are advised to take up necessary plant protection measures like staking for banana and propping for sugarcane and main field preparations for paddy, as the crop is ready for transplantation from nursery.
 - As there has been rain since the past few weeks and also there is forecast for receiving moderate rainfall for the week ahead, farmers in the High Altitude Hill Zone of Tamil Nadu are advised to ensure good drainage and no water logging in fields. Irrigation can be scheduled accordingly. Spraying of chemicals may be avoided although protective sprays may be given when there are no showers of rain. Planting of medicinal plants, tree saplings and fruit saplings may be done.
 - Stem borer incidences are noticed in the paddy crops in the North Eastern Zone of Tamil Nadu. Farmers are advised to apply suitable insecticides.
 - Farmers in the Western Zone of Tamil Nadu are advised to monitor the incidence of sucking pests in black gram, stem borer in rice, mealy bug in papaya and tapioca and blight disease in turmeric and follow appropriate remedial measures.

- Red Spider Mite is seen in tapioca plant in the North Western Zone of Tamil Nadu. Spray 2.5 ml of Omag per litre of water. Coconut tree is found to shed its flowers and also to be seen affected with lean coconuts. To rectify these problems, mix Borax (200 grams per tree) well with farm yard manure + soil and place this medicine mixed soil in a round furrow around the affected coconut tree. Irrigate the tree and this will be rectifying the defects.
- There is a problem of leaf spot in jasmine in the Coastal Zone of Karnataka, due to rainfall. Hence, the farmers are advised to take up spraying of DM-45@ 2.5 g/lit of water to control it. Due to prevalence of higher relative humidity, arecanut crop is likely to be infested with koleroga. Farmers are advised to go for spraying of 1% Bordeaux mixture to control it.
- Brinjal crops are affected by shoot and fruit borer in Southern Dry Zone of Karnataka. To control, spray carbaril @ 4 gm/lit. of water or endosulphen @ 2 ml/lit. of water.
- Undertake plant protection measures after spells of rain in Kerala, Coastal Karnataka and on anon rainy day in remaining region.
- Varieties are mentioned in Annexure II.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

- **Realised rainfall:** All districts of Konkan, Yeotmal district in Vidarbha, Kolhapur, Ahmednagar, Nandurbar and Solapur districts of Madhya Maharashtra, Beed and Latur districts of Marathwada received significant rain during last week. Valsad district of Gujarat region received significant rain during last week.
- **Rainfall forecast:** Widespread rain is likely to occur over Konkan and Goa, Madhya Maharashtra and Gujarat region, widespread over Marathwada and scattered over Vidarbha and Saurashtra and Kutch during the period. Isolated heavy rainfall would occur over Gujarat region and Konkan & Goa during next 48 hours and over Marathawada and Madhya Maharashtra during next 24 hours.

Advisory:

- Farmers in Konkan and Goa, Madhya Maharashtra, Gujarat region and Marathwada are advised to postpone irrigation, intercultural operation and application of fertilizer and plant protection measures to the standing crops as widespread / fairly widespread rain is likely to occur over the region. Farmers of these regions are also advised to drain out excess water from the fields of already sown crops in view of occurrence of isolated heavy rainfall.
- Farmers in Konkan and also Kolhapur Divisions of Madhya Maharashtra are advised to undertake transplanting of 20 to 22 days old rice seedlings having 12 to 15 cm height and 6 leaves keeping 15 cm X 15 cm distance in early maturing variety and 20cm X 15cm distance in mid late and late maturing varieties.
- Farmers of East Vidarbha are advised to undertake transplanting of 20 – 22 days old seedling of *kharif* rice at 20 cm x15 cm distance and plant 2-3 seedlings per hill.
- As widespread / fairly widespread rain is expected over Madhya Maharashtra and Marathwada region during next 2-3 days, farmers are advised to undertake sowing of *kharif* jowar, groundnut, cotton, red gram, green gram and soybean. Also complete preparatory tillage in view of planting of adsali sugarcane after 15th July.
- This is the proper time of planting of all fruit crops in Konkan and Kolhapur division.
- Farmers in South Gujarat Heavy Rainfall Zone are advised to prepare the land and undertake transplanting of rice wherever seedlings are ready.
- Farmers in South Gujarat Heavy Rainfall Zone and North Gujarat Zone are advised to undertake sowing of groundnut, green gram, cowpea etc. utilising the rainfall likely to occur.
- Farmers in Middle Gujarat Zone are advised to carry out sowing of *kharif* groundnut and transplanting of rice and vegetables. Avoid irrigation in already sown cotton in view of likely occurrence of rainfall.
- Farmers in Bhal and Coastal Zone are advised to undertake sowing of *kharif* crops along with green gram, pigeon pea, guar as intercrop for getting more income.

- Farmers in North Saurashtra Zone of Gujarat are advised to prepare land and undertake sowing of *kharif* crops like *kharif* groundnut, *kharif* bajra, pulses, sesame, B.T.Cotton etc. after achieving adequate moisture in the soil.
 - Farmers in South Saurashtra Zone of Gujarat are advised to prepare land and undertake sowing of *kharif* crops after achieving adequate moisture in the soil.
 - Suitable varieties of the crops for sowing or transplanting are mentioned in Annexure II.
 - Due to prevailing weather there may be incidence of blast in rice in South Konkan; spray Carbendazim @ 10 g or Copper oxychloride @ 25 g / 10 liters of water.
 - Due to cloudy weather there is chance of infestation of white fly, thrips and jassids in early sown cotton in Western Maharashtra Scarcity Zone; spray Neemoil @ 50 ml in 10 liters water.
 - Due to cloudy weather in South Gujarat Zone, there are chances of incidence of sucking pests in cotton. Farmers are advised to spray 1.7 ml Roger or 1.5 ml Metasystox + 2.5 ml Dicofof per liter of water to control the pests and diseases.
 - Undertake plant protection measures after current spells of rain in Konkan and Goa, Madhya Maharashtra, Gujarat region and Marathwada and on a non-rainy day in Vidarbha and Saurashtra and Kutch.
 - Stages of major crops are mentioned in Annexure I.
- Animal Husbandry**
- Due to rainfall forecast in Gujarat during the period keep animals in herd during night and follow up proper vaccination programme.

CENTRAL INDIA [M.P., CHHATTISGARH]

- **Realised Rainfall:** Rain occurred most of the districts in Madhya Pradesh and Chattisgarh.
- **Rainfall Forecast:** Widespread rain/thundershowers would occur over Chhattisgarh and west Madhya Pradesh. Fairly widespread rain/thundershowers would occur over east Madhya Pradesh. Isolated heavy rainfall would occur over west Madhya Pradesh during next 48 hours.

Advisory:

- As monsoon has advanced in Madhya Pradesh and there was good rainfall received during last week, farmers are advised to undertake land preparation and nursery sowing of rice and sowing of moong, urad, maize, groundnut, pigeon pea, *kharif* onion, brinjal, tomato and chilli. Farmers in Chhattisgarh are advised to undertake land preparation and nursery sowing of rice, vegetables and planting of turmeric and ginger.
- There is possibility of light to medium rainfall and partly cloudy sky during next five days, hence farmers are advised to keep watch of onion nursery plants and remove excess water and do weeding in the seed bed. Farmers are advised to do sowing of the *kharif* vegetables like- ladyfinger, cucurbits during this week. Farmers are advised to start the transplant of rainy seasonal flower to main field, in end of this week.
- Farmers in Satpura Plateau Zone in Madhya Pradesh are advised to complete sowing of maize, soyabean and Arhar. Also undertake transplanting of vegetables like brinjal, tomato, cauliflower and chilli.
- As sufficient rainfall was received in last week in Kymore Plateau and Satpura Hill Zone in Madhya Pradesh, farmers are advised for sowing of different *kharif* crops like soybean, paddy, moong, urd etc. at earliest and at optimum soil moisture in field. Also there is forecast of rain in coming days, raise rice nursery in irrigated conditions with recommended varieties of the region.
- The farmers in Jhabua Hill Zone are advised that sow early mature varieties of Maize- JVM 421, Soybean – JS 9560 or short duration crops i.e. urd, moong. Before sowing of crops seed treatment should be done with 2.0 gm thiram and 1.0 gm carbendazim per kg of seed after that treated with 5 gm of azetobacter / Rhizobium culture and 5 gm of PSB culture per kg of seed.
- Farmers in Gird Zone of Madhya Pradesh are advised to prepare paddy nursery for transplanted paddy cultivation and collect seeds and fertilizers for *kharif* crops sowing. Also farmers in Central Narmada Valley Zone are advised to sow til, jowar and maize.

- Farmers in Northern Hill Zone of Chattisgarh are advised to prepare land and undertake sowing for groundnut, arhar, maize and for planting of turmeric and ginger.
- Farmers in Chattisgarh Plain Zone are advised for field preparation and sowing of rice for nursery raising/direct seeding. The weather conditions are favourable for proper germination of maize, soyabean, groundnut, sesame, pigeon pea, urd, kodo in uplands. Weather conditions are suitable for sowing of Kharif vegetables and nursery raising of tomato, brinjal, chilli etc in Chattisgarh Plain Zone
- During monsoon period the chances of soil and seed borne diseases may increase due to higher soil moisture and temperature. Hence, farmers are advised for seed treatment with Thiram or Bavistine @ 3 g per kg of seed to protect the crop at early stage.
- Stages of major crops are mentioned in Annexure I.
- Weather is congenial for sucking pests in bhindi and other vegetables, spray Metasystox or Dimethoate 1 ml per litre of water.
- Spray chemicals after spells of rain.
- **Animal Husbandry & Poultry**
- There is possibility of rainfall (Hot and Humid weather conditions) during next five days in Bundelkhand Zone of Madhya Pradesh hence farmers are advised to protect the animals from wetting in rain other wise they may be chance of infection of the disease.
- Because of cloudy weather in Kymore Plateau and Satpura Hill Zone in Madhya Pradesh, increase light intensity in poultry house and make arrangements for proper aeration. Also arrange for vaccination for Foot and Mouth disease. Use potassium permanganate @ 5 ml per liter of water for infected animals.
- Due to rains at this period, farmers should vaccinate their animals for Khurpaka-Muhpaka and Galgotu disease in Jhabua Hill Zone.
- During early monsoon period, FMD is commonly noticed in cattles. Hence, it is advised for vaccination of the cattles in Chattisgarh Plain Zone.

Annexure I Major Crops

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

- Sugarcane (early vegetative / vegetative), rice, *kharif* maize, *kharif* arhar, til, sorghum, jowar, lobia for green fodder (sowing) and fruit trees (transplanting) in Bihar.
- Sugarcane (early vegetative / vegetative), mango and litchi (harvesting), papaya (transplanting), turmeric, ginger, elephant foot yam (planting / vegetative), rice (nursery sowing / transplanting), rainy season vegetables like bhindi, bean, tomato, French bean, cauliflower, cabbage etc. (sowing), maize, pigeon pea, urd, moong bean, groundnut (land preparation / sowing), sweet potato (nursery preparation), marua (transplanting) in Jharkhand.
- Arhar (sowing), maize (sowing / early vegetative), mango, papaya, marigold, tuberose (planting), cowpea (sowing / early vegetative), *kharif* vegetables (sowing / vegetative), sugarcane (vegetative), *kharif* rice (transplanting), groundnut (sowing), chrysanthemum, ragi (sowing), turmeric and ginger (planting), yam (sowing), sesamum, green gram, black gram, niger (sowing), cashewnut (planting) in Orissa.
- *Aman* rice (nursery preparation), *aus* rice (direct sowing), *kharif* maize (sowing), jute (early vegetative / vegetative), mango, coconut, guava, banana (planting) and *kharif* vegetables (sowing / planting / vegetative) in West Bengal.
- Large cardamom (secondary flowering / capsule formation), *kharif* vegetables (vegetative / flowering / fruiting), orange (flowering / early fruiting.), ginger (germination / early vegetative), rice (transplanting / early tillering), maize (tasseling / silking / cob formation / cob maturity), seed potato (tuberization) in Sikkim.

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

- Sugarcane (cane development / active vegetative), early *ahu* rice (panicle emergence / flowering / grain filling), *sali* rice (nursery sowing / sowing / seedling/ transplanting), olitorius jute (early vegetative / vegetative), summer vegetables (vegetative / flowering / fruiting / harvesting), maize (tasseling / silking / cob formation / cob maturity), groundnut (land preparation / sowing), arhar (sowing), ginger / turmeric (vegetative), pigeon pea (sowing), sesame (land preparation / sowing) and banana (planting) in Assam.
- Rice (nursery preparation / transplanting / vegetative), French bean, okra (flowering / fruiting / maturity), maize (tasseling / silking / cob formation / maturity) and ginger / turmeric (planting / vegetative), summer vegetables, millet (vegetative / flowering / fruiting / maturity) in Arunachal Pradesh.
- Soyabean, groundnut (sowing / vegetative), *kharif* rice, rice bean and black gram (land preparation / sowing), ginger and turmeric (vegetative), cowpea (sowing) in Manipur.
- Rice (nursery preparation / transplanting), *kharif* maize (vegetative / knee high stage), groundnut, soyabean (sowing / vegetative), okra (sowing / Vegetative), other summer crops (vegetative / flowering / pod formation), ginger and turmeric (planting / vegetative), *khasi* mandarin (fruit bearing), banana (vegetative / fruiting / maturity), cucurbits (sowing / vegetative) in Mizoram.
- *Aus* or *kharif* rice (sowing / tillering), vegetables (vegetables / flowering / fruiting), maize (tasseling / silking / cob formation), sesame (vegetative / flowering / pod formation) and groundnut (sowing / vegetative) in Tripura.
- *Ahu* rice (panicle initiation / flowering / grain filling), *Kharif* maize (heading), sugarcane (vegetative), vegetables (vegetative / flowering / fruiting), *sali* rice (nursery sowing / sowing / seedling/ transplanting), ginger and turmeric (vegetative) in Meghalaya.
- Soyabean, groundnut (land preparation / sowing), okra (flowering / fruiting), tomato (planting) and banana (fruiting), rice (nursery preparation) in Nagaland.

NORTHWEST INDIA [JAMMU & KASHMIR, HIMACHAL PRADESH, UTTARAKHAND, PUNJAB, HARYANA, DELHI, UTTAR PRADESH & RAJASTHAN]

- Tomato, chilli (transplanting), brinjal & cucurbits crops (flowering/fruiting), lentil (pod formation), maize, hybrid cluster bean, baby corn, Pigeon pea (sowing/ vegetative), green gram and black gram, cotton (sowing), Sugarcane(sowing) in Delhi.
- Vegetables (flowering / fruiting / harvesting), garlic, ginger (planting), bhindi, (transplanting), cucurbits (transplanting), Khira, summer squash, bitter gourd, tur, brinjal, Shimla mirch, pepper and tomato (transplanting), Apple (fruit development), pomegranate (flowering), ginger, arbi, amaranthus, turmeric, rice, maize (sowing) in Himachal Pradesh.
- Berseem (vegetative), cucurbits (vegetative / flowering/maturity), onion (vegetative), capsicum, chilli, brinjal (nursery sowing / transplanting), *kharif* fodder viz. maize, jowar, bajra, cowpea (sowing), early sown maize (vegetative), *kharif* pulses, moong, mash (sowing), rice (nursery sowing / transplanting), *Kharif* oilseed like sunflower, summer brassica etc. (sowing) in Jammu & Kashmir.
- Chilli, capsicum (transplanting), tomato (sowing / early vegetative) and lahi (flowering / fruiting), sugarcane (planting), rice (nursery sowing/transplanting), mango, litchi (fruiting / pre-maturity / maturity), foxtail millet, maize, okra, bottle gourd, bitter gourd, ginger, turmeric, soyabean (sowing / planting), sorghum, pigeon pea and pearl millets(sowing) in Uttarakhand.
- Spring sugarcane (sprouting), berseem (vegetative), vegetables, sugarcane (sowing/ germination), pulses, cotton, okra (sowing), rice (nursery sowing) in Punjab.
- Sugarcane (spring season) (planting/emergence/early vegetative), barseem (vegetative), pulses, moong, mash, pigeon pea (sowing) in Haryana.
- Rice (land preparation for raising nursery / transplanting), winter sugarcane (vegetative growth), summer sugarcane (initial growth), cucurbits like gourd, bitter gourd, cucumber, etc. and other vegetables like lady's finger, tomato, brinjal, chilli etc. (flowering / fruiting/maturity), black gram, baby corn/ maize / fodder maize, vegetables (vegetative/flowering/fruiting), groundnut, jowar, bajra, arhar, til (sowing) in Uttar Pradesh.
- Rice (nursery sowing/transplanting), pearl millet, sorghum, maize, soybean, chilli and cluster bean (sowing) in Rajasthan.

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

- Kuruvai rice (tillering), cotton (boll formation), vegetables (nursery / transplanting/ fruiting), sugarcane (vegetative/ grand growth), groundnut(vegetative/ pod formation), maize(vegetative/harvesting) in Tamil Nadu.
- Sugarcane (ratooning/vegetative), mango (fruiting / harvesting), hybrid jowar, maize, ragi, sugarcane, sunflower, groundnut, red gram and horticulture crops (sowing) in Karnataka. Early sown crops are at early vegetative stage.
- Maize (Sowing to seedling stage), jowar, cotton, sugar-cane and pulse crops like green gram (sowing), rice (transplanting) in Andhra Pradesh.
- *Virippu* rice (tillering) and black pepper, ginger, turmeric and vegetable crops (sowing / planting) in Kerala.
- Early sown crops are at early vegetative / vegetative stage.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

- Sugarcane (*adsali*) (active tillering), sugarcane (pre-seasonal) (vegetative), sugarcane (*suru*) (early vegetative), *Kharif* rice (seedling / transplanting in Konkan, Kolhapur, Pune, Nashik Division and germination / seedling in East Vidarbha), jowar, soyabean, groundnut (sowing / germination / early vegetative in Kolhapur Division and sowing / germination in other Divisions), cotton (sowing / germination), red gram, green gram (sowing / germination).
- *Kharif* bajra (sowing), brinjal and tomato (sowing / transplanting), sugarcane (vegetative), groundnut (seedling / early vegetative / vegetative), *kharif* pulses (sowing), cotton (germination / seedling / vegetative), rice (sowing / seedling) in Gujarat.

CENTRAL INDIA [M.P., CHHATTISGARH]

- Sugarcane (vegetative), vegetables (flowering and fruiting), moong, urad, maize, soybean, sesame, groundnut, jowar, groundnut, pigeon pea, *kharif* onion, brinjal, tomato and chilli etc (sowing) in Madhya Pradesh
- Rice (seedling / tillering), sugarcane (planting), maize, groundnut, arhar, green gram and sesame (sowing), ginger and turmeric (planting) in Chhattisgarh.

Annexure II List of Varieties

Orissa

Arhar :

Early duration- Prabhat, Upas-120, ICPL-86012, ICPL-87.

Medium duration - Asha, Visakha, DA-11, C-11 etc.

Papaya: Honey Dew, Kurg Honey Dew, Co-1, Co-2, Pusa Delicious, Pusa Majestic, Pusa Dwarf and Pusa Giant.

Cow pea

Bush type - PusaPhalguni, PusaKomal, SEB-2, PusaBarsati.

Runner type - American Long and Banarasi Long.

Other improved varieties - Russian Giant, EC-4316, NP-3, C-152, UPC-286, UPC-5286 and IGFI-450.

Okra:

Improved high yielding varieties - UtkalGourav, ArkaAnamika, Uphar, ParvaniKranti.

Hybrid varieties - Varsa, Vijay, Vishal, Tara, Adhunik, Atyadhunik and Supriy.

Bitter gourd: PusaDomousumi, Coimbatore Long Green and ArkaHarit.

Ridge gourd: PusaNajdar, Jaypur Long and any local variety.

Cluster bean: PusaNaubahar.

Ginger: Suprava, Suruchi, Surabhi.

Turmeric: Roma, Surama, Rang, Rashmi etc.

Maize: Navjot, Shakti, Decan-107, Decan-109.

Rice:

Extra early - Kaling-3.

Early - Khandagiri, Bandana, Pathara, Parijat, Annada, Jogesh, Siddant.

Medium - Pratikshya, Manaswini, Tapaswini MAS, Konark, Kharavela, Naveen, Abhisek, Lalat, MAS MTU-1001, MTU-1010, Konark, Gajapati, Surendra, Lalat.

Late - CR-1009, CR-1018, Swarna (MTU-7029), Indravati, Mahanadi, Puja, Ramachandi, Kanchana, Sarala, Lunishree, Ranidhan, Mrinalini, RGL-2837, Ketakijoha, Moti, Padmini, Kanchana, Mahanadi, Jagabandhu.

Fine - CR-1014, BPT-5204.

Flash flood areas - Swarna Sub-1.

Yam: Shreekirti, Shreerupa, Hatikhoj, Shreeshilpi; small yam – Shreelata, Shreekala.

White yam: Shreesubhra, Shreepriya, Shreedhanya.

Groundnut: Ak-12-24, TG-3, TG- 38, TMV 2, ICGS -11, JL-24 and Smruti for oil.

Ragi: Divyasingh, AKP-2, AKP-3, AKP-7, Godavari, Neelachal, Bhairavi, Shubhra and Chilika.

Chrysanthemum:

Yellow - Chandrama, Kiku, Biory, Super Giant and Evening Star.

White - Snow Ball, Inoscence and Premier.

Red - Brave, Rustic, Alfred and Wilson.

Sesamum: Kanaka, Kalika, Vinayak, Uma, Prachi, Tilotama, Nilima.

Greengram: K-851, PDM-11, PDM-54, OUM-11-5.

Blackgram: T-9, Pant U-11, Pant U-19, Pant U-30.

Niger: Deomali, Niger-1.

CashewNut : BPP-4, Bhubaneswar-1, VRI-2, Hybrid 2-17.

West Bengal

Aman Rice: Kshitish, Sasyashree, IR-42, Swarna, Mashuri, IET-8002, 4094, 2233, Ratna, Bikash.

Rice:

Upland situation (110-120 days) - Rasi, Khitish, Bhupen, CST-7-1, PNR-519, Kunti, Ajaya, CSR-6.

Shallow low land (130-140 days) - Manassarovar, MTU-7029 (swarnamasuri), MTU-1001, MTU-1010, Naveen, IET-5656.

Semi deep water (150-160 days) - Jogen, Sabita, Purnendu, lunshri, Amulya, CR-1009, CR-1018, Sarala.

Banana: Mortoman, Chapa, Kathali, Singapuri

Jharkhand

Turmeric: RajendraSona.

Ginger: Burdwan and Nadia.

Elephant foot yam: Gajendra.

Maize: Birsa-1, Birsa Vikas-1, Suhan-1, Suwan Composite 1 (100 days) and hybrid variety - HQPM 1 (100 days), composite variety – Birsa Makka 1 (80-85 days) and hybrid variety - Kanchan (80-85 days), Birsa Vikash Makka 2 (70-80 Days).

Rice: Swarna (MTU 7029), Rajshree, BPT 5204 (Sambha Mahsuri), Birsamati and for hybrid rice - Proagro or Arize 6444; for medium land rice - IR 36, 64, Lalat, Naveen, Sahbhagi, BR 10, Kanak, Rajendra Dhan 202, Sughanda, Birsa Vikash Sugandh Dhan 2, Birsa Vikash Dhan 203 and Birsamati.

Urd bean: T 9, Pant U 19, 30, 35 and Birsa Urd 1.

Moong bean: Pusa Vishal, SML 668, K 885, PS 16, Pant Moong 2 and PDM 11.

Pigeon pea: Birsa Arhar (210 days), Bahar (240 days) and ICPH 2671 (210 days).

Finger millet: Birsa Marua 2, A 404 and GPU 45, 47.

Groundnut: AK 12-24, Birsa Moongfali 1, 2, 3 and bold type – Birsa Bold (BAU 13).

Bihar

Rice: Mansuri, Rajendra Mansuri, Nata Mansuri, Rajendra Sweta, Santosh, Rajshree, Satyam, Pankaj, Swarna (MTU 7029), Sita, Kank and IR-36.

Kharif maize: Shaktiman 2, Shaktiman 3 Shaktiman 4, and Deoki.

Scented rice: Sugandha, Kamani, Rajendra Suwasani and Rajendra Kasturi.

Assam

Sali rice:

High yielding varieties: Ranjit, Bahadur, Satyaranjan, Mahsuri, Peoli, Moniram, Pankaj, Kushal, Basundhara, Ketekijoha, Aghoni.

Medium duration: Satya and Basundhara.

Banana:

Medium tall varieties: Chenichampa, Mulbhog.

Tall varieties: Bhimkal, Purakal, Manohar.

Arhar : T-21

Groundnut : TG-1A, DL-24.

Sesame : AST-1, Madhabi, Binayak, Punjab Til -1, Gouri.

Manipur

Soyabean : J.S.335

Cowpea: Yard Long Bean and Pusa Barsati.

Delhi

Hybrid cluster bean: Pusa Komal, Pusa Sukamol,

Kharif maize: Hybrids: AH-421, AH-58

Baby corn: HM-4.

Sugarcane: Karan-1, Karan-2, Co-64, and Co-1496.

Late varieties of Cotton: H-777, H-974, H-1098.

Pigeonpea - Pusa 2001, Pusa991, Pusa992, Paras manak, UPAS 120.

Cucurbits: Bottle Gourd- Pusa Naveen, Pusa Sandesh; **Bitter Gourd-** Pusa Visesh, Pusa-2 mosumi; **Pumpkin-** Pusa Visvash; **Ridge Gourd-** Pusa Chikni, Pusa Supriya.

Himachal Pradesh

Cauliflower: Sweta, Madhuri

Cabbage: Golden Acre, Varun

Tomato: 7711, Him sona, Him 1

Capsicum green: California wonder, Mahabharat, Capsicum yellow : US 616

Cucumber: Kiyam

Summer squash: hybrid green

Lettuce: Iceberg

Brinjal : Arka Nidhi, PPC

Ageti bhindi : P-8, Prabhini kranti, Arka anamika

Frenchbean : Contender

Pepper : Surjmukhi

Broccoli: Palam Samridhi

Rajmash : Triloki, Jwala, baspa Kailash

Jammu & Kashmir

Rice : Jaya, RR-8585, IET-1410, Ratna, PC-19, GS-2, mansar, trikuta, C-5 and C-8

Direct sowing : Jaya, RR-8585, PC-19, IET-1410 and Ratna

Brinjal : PPL, PPC & PPR

Chillies : NP-46A, Pusa jawala

Maize : var. GS-2, mansard, trikuta, C-5 and C-8, GS-2, Super composite, Mansar, C-6, C-8 and Local

Pulses: Mash: Pant U-19, Moong: PDM-54, ML-131 and ML-818.

Groundnut: Punjab no.1, M-13 and JL-24,

Bajra: WCC-75, ICMS-7703 and Hybrid M.H.B-110,

Til: Punjab Til-1.

Punjab

Paddy : PAU 201, PR 120, PR 118, PR 116, PR 114, PR 113, PR 111, PR 115 etc

Okra : Punjab 7 / Punjab 8

Radish : Punjab Ageti, Pusa Chetk

Haryana

Baisakhi Mung: K851 and Type 44 and Muskan

Pigeon pea: UPAS 120, T-21.

Uttar Pradesh

Black Gram(Urad): Narendra Urad-1, Pant Urad-30,

Green gram (moong): Samrat, Narendra moong-1,

Groundnut: TG37A, Koshal

Til : Ta-4, Ta-78, Bhokhar, Pragati

Jowar: Bundela CSV-13, CSV-15, CSV-17, S.B.P.-1388, Vijeta, Mau Ta-2, Varsha, C.S.B.-15, C.S.H.-5, C.S.H.-9, C.S.H.-14 and C.S.H.-16, C.S.H.-13, C.S.H.-23

Bajra: WCC-75, Raj-171,

Hybrid var.- H.H.B.-60, 67, M.H.179, Pusa-332, Pusa-23, I.C.M.H.-451

Composite var.- H.C.-4, I.C.M.B.-8440, WCC-75, I.C.M.V.-155, W.C.C.-75, I.C.T.P.-8203, Raj-171 Desi-Mainpuri

Arhar: Type-21, Manak, Paras, Pusa-992. Vkb1&2, Pusa-6, I.C.P.L.-151

short duration varieties - Prabhat, U.P.A.S.-120, long duration varieties- Bahar, Azad, Narendra Arhar-1, Malaviya Arhar-15.

Soyabean: PK-472, JS-335, P.S.-1024, MAUS-47, N.R.C.-37, Lobia (UPS-4200),

Summer Sugarcane: K.S. 97264, K.S.-8432, K.S.-767, K.S.-92423, K.S.-95268, K.S.-98268, K.S.-96275, K.S.-95270

Maize : Azad Uttam, Azad Kamal, Kanchan, Sweta, Megha, Hybrid varieties : Ganga-2, Ganga-5, Ganga-11, Sartaj, Prakash, Pusa Hybrid-1, Pusa Hybrid-2 and Gourav, Tarun, Navin, Kanchan, D-765, Amar, Azad, Duccan-107, Duncan-103, Prakash, Shaktiman-2 (Protein), Pusa early Hybrid-1 and 2, Prabhat, Desi-Meerut Peeli.

Rice : for Sugandhit var. – Kasturi, Pusa Basmati-1, Ta-3, Basmati-370 and Haryana Basmati-

early maturing var. : Narendra-97, Pant Dhan-12, Ashwini, Saket-4, Ratna, Pant Dhan-12, Narendra-80, Malviya Dhan-3022.

Mid-time maturing var. Pant dhan-10, Narendra-359, Sarju-52, Kranti

Hybrid var: Narendra-2, Pant Hybrid Dhan-1, PHB-71, Pro-Agro-6201, Pro-Agro-6444, PRH-10, DRRS-2

Gourd: Kalyanpur Lambi Hari, Pusa Meghdoot,

Pumpkin : Azad pumpkin-1, Narendra pumpkin-1,

Taroi- Kalyanpur Chikni, Pusa Chikni,

Bitter gourd: Baramasi, Narendra Baramasi,

Cucumber – Kalyanpur Hara

Lady's finger – Azad Bhindi-1,2, Parmani, Kranti, Pusa Sawani, Vaishali, Selection-1

Brinjal : Azad-1 type-3, Pusa purple log, Azad Baingan gol, Kranti

Mango : **early maturing var. :** Mumbai Hara, Mumbai Peela, **mid-maturing var.:** Dashhari, Lagada, Safeda Lucknow, **late maturing var.-**Amrapali, Mallika, Chousa, Fazali.

Uttarakhand :

Maize : Ganga-2, Ganga-7, African Tall, Ganga-5, Pusa Hybrid-1, Pusa Hybrid-2 and Composite varieties like Gaurav, Amar or Surya, Him, Ganga Makka-9, Ganga Makka-11

Lobia : Russian Joint, EC-4216, UPC-5286 etc.

Okra : VL Bhindi-1

Soyabean : Brag, PK-262, VL Soya-2, VL Soya 21, VL Soya-47, pant soya-1042, 1092 and PRS-1

Gahat : VLG-1

Ugal : VL-7, PRB-1

Rajasthan

Rice : JC152(90 to 95 days), JC5(100 to 110 days), JC10(100 to 120 days), RC9(80 to 85 days), RC19(60 days), BK79, Jaya Basmati 370, Kasturi(IET8580), Tarawari Basmati, Mahi Sugandha, PHB 171, Pusa Sugandha-4, Pusa Sugandha-5, Impusa Basmati.

P.R. 106, B.K. 190, Mahi Sugandha (Basmati) Jaya, RR-8585, PC-19, IET-1410 and Ratna.

JC-152 (90 days), JC5(100 to 110 days), JC10(100 to 120 days), JC9(80 to 85) and RC19(60 days)

Chilli : Pusa Jwala, N.P.46-A, PantC-2, Pusa Sadabahar, G-3, G-5 and RCH-1.

Shimla Mirch : yellow wonder, California wonder, Bulnose and Arka Mohini.

Maize: Him – 129, Aravali Makka, PEHM-1, PEHM- 2, Pratap Makka-1, Pratap Makka-3, Pratap Makka-5, GS-2, mansar, trikuta, C-5 and C-8 etc.

Kharif crops like (Gwar (Cluster bean) : R.G.C. 938, R.G.C. 986, R.G.C. 1002, H.G. 365

Til : R.T. 46, TC 25, C50(Pratap) RT 46, 103 and 125

Moong : RMG-268, RMG-492, Pusa Baisakhi, K-851, RMG-62, ML131, 267, Ganga-1(Jamunothri), Ganga-8 (Gangothri), SML668, SUM-2.

Moth : R.M.O. 40, IPCMO-912 (Vikash)

Urd : Krishna, T-9, pant U19, Pant U 31, RBU 38, Barka, KU 96-3.

Arhar: Prabhat, Gwalior-3, UPAS 120 ICPL 87, 151, ICPH-8.

Pearl millet: Pusa 334, Pusa 383, HHB 67, HHB 94, Raj 171, ICMH 356, ICTP 8201 and RHB 121, R.H.B-121, H.H.B.-67(I), I.C.T.P.-8203, H.H.B.-60, Raj.- 171, G.H.B.-538, R.H.B.-90 and I.C.M.H.-356, MH-169, RHB 90, RHB121, CZP 9802, ICMH356, Pusa-334, HHB-67, HHB-94. Raj 171, H.H.B. 67 Raj-171, RHB-121,RHB-173, ICTP-8203, ICMH-356, RHB-121, HHB-67, RCB-2, WCC-75, RHB-30, HHB-60.

Sorghum: CSV 15, CSH 14, CSH 16, CSV-17, CSH-6, CSH-9, CSV-10, CSV-15, Pratap Makka-1. Pratap Makka-3, Pratap Makka-5, CSH-5-6, A 9, SPV 245, 346,475, 96,CSV-15, HG 365, Jowar 1430 etc.

Cleaster bean: RGC 936, RGC 986, RGC 1002,RGC 1003, RGC 1017, M83, HG365.

Sesamum: GG2, GG7, HNG10, Prakash, M13.

Green fodder: Sorghum Chari-1, SPV-837, Rajasthan Chari 1-2, SSG-59-3 and MP-Chari.

Maize: Ageti-76, Bassi Selected, Mahi Kanchan

Him – 129, Aravali Makka, PEHM-1, PEHM- 2, Pratap Makka-1, Pratap Makka-3, Pratap Makka-5, Bassi selected (80-85 days), Mahi Kanchan (75-80 days) & Ageti-76 (85-95 days), etc.

Green gram: K851, RMG-62, RMG-268. RMG-492 & RMG-344

Cowpea: C-52, RS-9, FS-68, RC-19, RC-101

Groundnut :RSB 87, RS 138, JL 24 and G 14, M-13, GG-20, TG-37A, TG-39, GG-2, J-38, TG-37-A, Pratap mungphali-1, Pratap mungphali-2.

Soyabean : MACS 58, 450, JS 80-21 335, 93-05, PS 16, PK 472, NRC 12, 37, Pratap Soya-1 and 2, RKS24, S-335, MACS-13, PK – 472, MACS-58, PS – 16, JS – 71 – 05, Pratap Soya-1.

Andhra Pradesh

Blackgram: LBG-20, LBG-623, T-9, Madira-307 and LBG-752

Greengram: LGG-407, LGG-430, LGG-460 warangal-2

Redgram: LRG-30, LRG-38, LRG-41, ICPL-8863, ICPL-87117

Groundnut: TAG-24, JL-24, K-6, K-9, Narayani, ICGV-91114

Sesame: Gauri, Madhavi,YLN-11,YLH-17,YLH-66

Paddy:

MTU-7029 (Swarna),MTU-2067 (Chaitanya), MTU-2077, Krishnaveni, BPT-5204 (sambamashuri), BPT-1768(Bapatlasannalu), MTU-1061 (Indra), NLR-T-145 (Swarnamukhi), NLR-34449 (Nelluri mashuri), NLR-9674 (kothamolakolukulu),NLR- 28523 (Sriranga), NLR-3BPT-5204 (sambamashuri), Pushkala(RGL-2624), IR-64 and MTU-9993,MTO-1010, MTU-1001, Vasundhara,Swarna and Srikakulam sannalu

Karnataka.

Green gram : Selection – 4, BGS-9

Black gram : TAU – 1, DU – 1, T-9

Soybean : JS - 335

Jowar : DSV – 2

Upland paddy: Amrut or Prasanna

Paddy: Jaya, Mandya Vijay, IR-20,MAS-26.

Ragi: Indaf-8, MR-1, 2 and 6.

Redgram:TTB-7,BRG-1, 2, ICP-7035

Maize: Ganga-11, Deccan-103,NAC-1137

Tur Var,: (Medium to Long Duration)PT-221,GS-1,ICP-8863(Maruti),ICPL-87119(Asha)WRP-1, ,& Short Duration Var: like ICPL-87(Pragati), Selection-31(Zone 2 irrigated areas),GCS-11-39 (Zone-2)

Cowpea : C-152, PKB-4

Groundnut : DH-3-30 ,PRI-2

Gujarat

Rice:GR-12, GR-104, GR-9, GR-8, Dandi, GR-7, Gurjari, NAUR-1, GNR-2, Sukhvel-20, GR-3, 4, 6, 7 (early maturing cultivars), GR-101, 102, 103, 104, Narmada and Masuri (late maturing cultivar).

Irrigated groundnut: GG-20 (North Saurashtra Zone).

Kharif groundnut: GG-2, GG-5, TG-26, TPG-41, TAG-37 for bunch and GG-20 for semi spreading groundnut (North Gujarat Zone), GG-11, GG-12, GG-13, GG-20 (South Saurashtra Zone), GG-7.

Irrigated hybrid cotton and B.T. cotton: G. Cot. 6, 8, 10 and Govt. approved varieties of B.T. cotton.

Pulses:

Green gram: GM-3, GM-4, K-851.

Black gram: T-9, GU-1.

Cowpea: Gujarat Cowpea -1, 2, 3, 4, Pusa Falguni.

Pegion pea: BDN-2, GT-100, GTH-1 (North Saurashtra Zone).

Kharif bajra: GHB-558, 577, 538, 719, 732, 744.

Sesame: GT-2 or GT-3.

Maharashtra

Cotton variety for Central Vidarbha region: AKA-5, AKA-7, AKA-8; hybrid variety PKV DH-1; American variety like AKH-081, PKV-Rajat, AKH-8828.

Kharif bajra: Sradha, Saburi, Phule Shanti and improved varieties from ICTP-8203, ICMV-155.

Groundnut: SB-11, Phule Pragati, Phule Vyas, Phule Unap, TPG-41, TG-26.

Red gram: ICPL-87, Vipulla, BSMR-853, 736 for Madhya Maharashtra, ICPL-87119 (Asha), C-11 for Vidarbha.

Moong: Jalgaon-781, S-8, Phule M-2.

Sunflower: EC-68414, SS-56, Bhanu.

Soyabean: JS-335, 93-05, Phule Kalyani (DS-228), MACS-58, 450 for Madhya Maharashtra, TAMS-37, 98-21, 71, 81 and JS-335 for Vidarbha, MAUS-71, 81, 158, 47, 61, 61-2 and JS-335 for Marathwada.

Cotton: AKA-5, AKA-7, AKA-8, PKV DH-1, AKH-081, PKV-Rajat, AKH-8828 for Central Vidarbha.

Adsali Sugarcane: CO-86032 (Neera), COM-88121, COM-0265 (Phule-265).

Madhya Pradesh

Maize- JM 12, JVM 421, JM 13, JM 216; **Hybrid varieties:** HPQM-1, Payonior 30R77, Sinzenta NK 30, Monsento Allrounder, Bioseed 9681;

Soybean: JS 9560 (85 days), JS 9305 (90-95 days), JS 335 (110 days);

Urd: JU 86, JU 3, T- 9 etc

Moong: K851, Jowar moong-721, Pant moong-4, TJM-3,

Urd:Oant U-30, RBU-38, Jowar Urd-3, RJU-88.

Arhar: Laxmi, Pragti, Asha, Jagrati, JKM-7 and JKM-189

Mango: Kesar, Aamrapali, Dasahri, Mallika, Guava: seedless, Sardar, Allahabadi safeda,

Amla:chakaiya, NA 3, NA 7, **Pomegranet:** Ganesh, Mradula.

Paddy for direct sowing in Jabalpur:

Medium: IR-36, IR-64, Pusa sugandha-5, MTU-1001

Late: Mahsuri, Safari-17, Syamla, Swarna

Chattisgarh

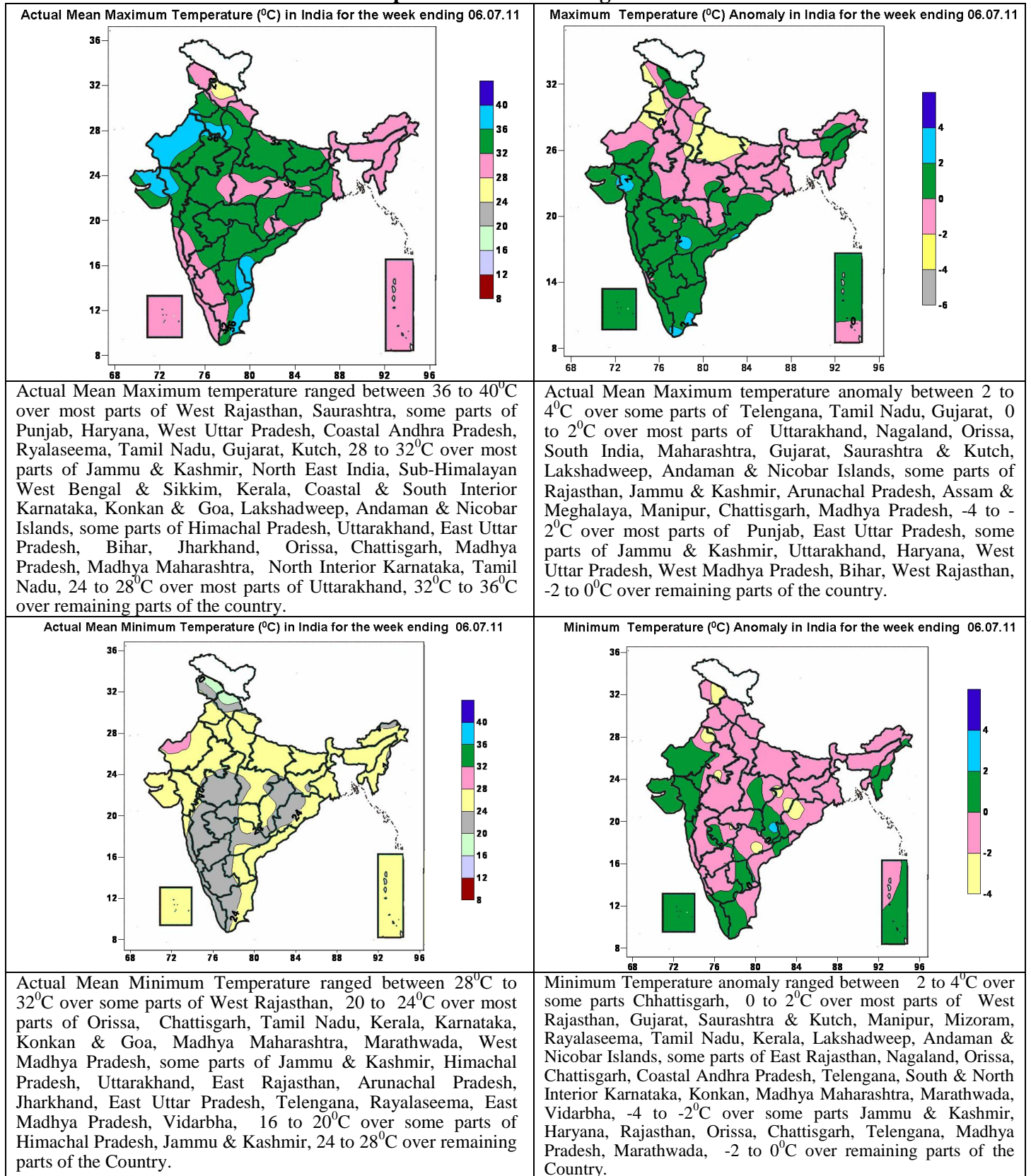
Paddy: MTU-1001, MTU-1010, IR-64, IR-36, Poornima, Annada, Mahamaya, Karma, Mahsuri,

Bamleshwari, Swarna

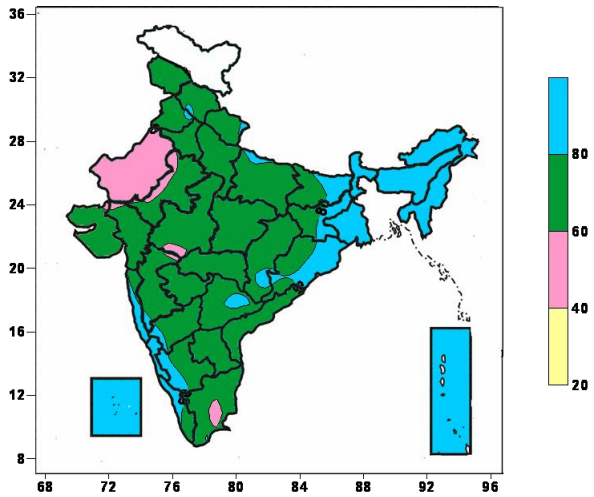
Soyabean: JS 335, Indira Soya-09, JS 93-05

Annexure III

Contour maps for the week ending 06.07.2011

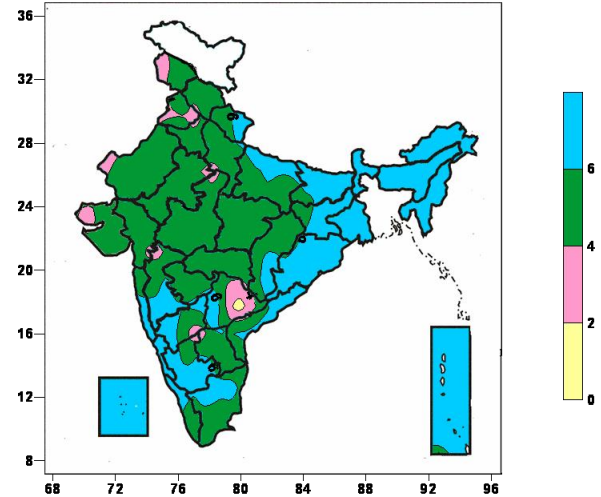


Relative Humidity (%) over India for the week ending 06.07.11



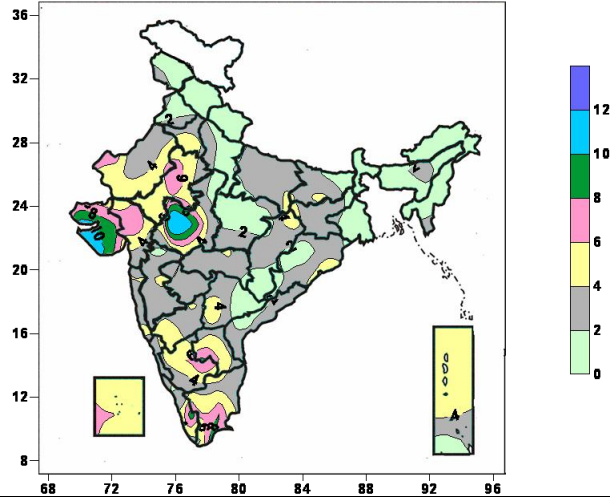
Relative humidity between 80% and above over most parts of North East India, West Bengal, Orissa, Coastal Karnataka, Konkan & Goa, Lakshadweep, Andaman & Nicobar Islands, some parts of Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Bihar, Jharkhand, Orissa, Chattisgarh, Telengana, Kerala, North & South interior Karnataka, Madhya Maharashtra, , 40 to 60% over most parts of West Rajasthan, Tamil Nadu, some parts of Gujarat, Saurashtra, Andhra Pradesh, 60 to 80% over remaining parts of the country.

Cloud amount (okta) over India for the week ending 06.07.11



Cloud amount 4 to 6 okta over most parts of East India, North East India, Coastal Karnataka, South Interior Karnataka, Konkan & Goa, Lakshdweep and Andaman & Nicobar Islands, some parts of Uttarakhand, East Uttar Pradesh, Chattisgarh, Andhra Pradesh, Tamil Nadu, Kerala, North Interior Karnataka, Madhya Maharashtra, 2 to 4 okta over some parts of Jammu & Kashmir, Punjab, Rajasthan, West Uttar Pradesh, Andhra Pradesh, North & south Interior Karnataka, Madhya Maharashtra, Gujarat, Saurashtra & Kutch, 6 okta and above over remaining parts of the country.

Wind speed (knots) over India for the week ending 06.07.11



Wind speed ranged between above 10 to 12 knots over some parts of Saurashtra & Kutch, West Madhya Pradesh, 8 to 10 knots over most parts of Saurashtra & Kutch, some parts of West Madhya Pradesh, Kerala, Tamil Nadu, 6 to 8 knots over most parts of Gujarat, some parts of Rajasthan, Saurashtra & Kutch, West Madhya Pradesh, South Interior Karnataka, Rayalaseema, Kerala, Tamil Nadu, Lakshdweep Islands, 4 to 6 knots over most parts of Haryana, Rajasthan, North & South Interior Karnataka, Rayalaseema, Lakshdweep, Andaman & Nicobar Islands, some parts of East Uttar Pradesh, Bihar, Jharkhand, Orissa, Chhattisgarh, West Madhya Pradesh, Gujarat, Saurashtra & Kutch, Vidarbha, Madhya Maharashtra, Konkan & Goa, Telengana, Coastal Karnataka, Kerala, Tamil Nadu, 0 to 2 knots over most parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, West Uttar Pradesh, West Bengal, Sikkim, Northeast India, East Madhya Pradesh, some parts of Est Uttar Pradesh, Bihar, Jharkhand, Orissa, Chhattisgarh, West Madhya Pradesh, Vidarbha, Madhya Maharashtra, Coastal Andhra Pradesh, 2 to 4 knots over remaining parts of the country.