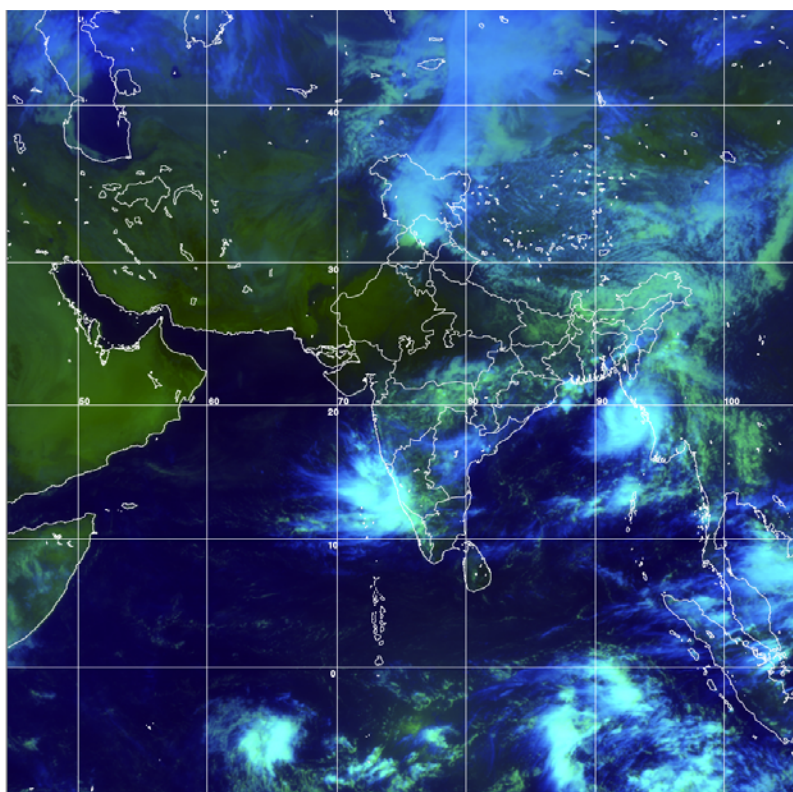




National Agromet Advisory Bulletin

Thursday, 21st October, 2010

(For the period 21st October to 25th October, 2010)



Satellite image 0600 UTC Dated
22nd October, 2010



Issued by
National Agrometeorological Advisory Service Centre
Agricultural Meteorology Division
India Meteorological Department
Shivajinagar
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The bulletin is also displayed in the website (<http://www.imdagrimet.gov.in>) of the Division

Executive Summary

During last week rain occurred in many districts of Konkan and Goa, Madhya Maharashtra, Marathwada, Vidarbha, Orissa, West Bengal, Coastal Karnataka, North Interior Karnataka, Kerala and Telengana and some districts of the States Chattishgarh, East Uttar Pradesh, Bihar, Jharkhand, south Interior Karnataka, Tamil Nadu, Coastal Andhra Pradesh and Rayal seema.

Utilising the recent rainfall and residual soil moisture farmers are advised to raise nurseries of *rabi* vegetables in Andhra Pradesh, gram, safflower, *rabi* sorghum, sunflower and wheat in Karnataka, new planting of coconut, black pepper, cocoa, cashew, nutmeg, mangosteen and rambutan in South Zone of Kerala and transplanting of *mundakan* rice in some places of Northern Zone of Kerala and sowing of Sorghum, cotton, pearl millet and pulses and transplanting of chilli seedlings in Southern Zone of Tamil Nadu.

Farmers in eastern and northeastern parts of the country are advised to undertake sowing of potato, maize, gram, lentil, peas, oilseeds crop like mustard, sarson and vegetables like radish, carrot, spanich, khnol khol, turnip, beet etc. and transplanting of seedlings of tomato, cauliflower and cabbage in Bihar and Jharkhand, sowing of potato, mustard, pulses like gram, lentil etc. and transplanting of vegetables like cabbage, cauliflower, chilli, tomato etc. in West Bengal, sowing of groundnut, mustard, sunflower, nursery sowing of vegetables like garden pea, carrot, radish etc. and nursery sowing and transplanting of vegetables like tomato, brinjal, cabbage, cauliflower etc. in Orissa, niger, potato, vegetables, rapeseed and mustard in Assam and transplanting of vegetables in Arunachal Pradesh.

Farmers in northwestern parts of the country are advised to sow the *rabi* crops like toria, potato in Uttar Pradesh, mustard, rai, toria, vegetable pea, potato, berseem, lentil and horsegram in Uttarakhand, flower crops like lilium in Himachal Pradesh, mustard, gram, field pea, wheat and barley in Jammu, gram, raya, barseem, sugarcane and transplanting of vegetables in Punjab, mustard and berseem in Haryana, sarson, early pea, carrot, potato, cauliflower, cabbage, onion and broccoli in Delhi and taramira and rapeseed in Rajasthan.

Farmers in western and central parts of the country are advised to undertake sowing of jowar, gram, sunflower, linseed, safflower and rainfed wheat in Maharashtra, sowing of mustard crop in Gird zone of Madhya Pradesh, sowing of castor, niger, kulthi and toria crops in upland region of Bastar Plateau Zone in Chhattisgarh utilizing the residual soil moisture and also recently occurred and expected rainfall.

Dry weather conditions prevailed over most of the states in northwest and western parts of the country. As there is less possibility of rain during next five days and bright sunshine is likely to prevail, farmers are advised to utilize favourable dry weather condition for harvesting of rice, maize, urd, moong, til, soybean, groundnut, jowar and bajra in Uttar Pradesh, late transplanted rice, potato, apple etc. in Himachal Pradesh, cotton, rice, moong and mash in Punjab. In view of occurrence of rain at many places in Konkan and Goa and Coastal Karnataka, harvesting of matured rice and other *kharif* crops may be postponed.

No major pest incidence is reported during this week from different parts of the country.

Kharif crop production is likely to be quite good during this year. As there was good rain during later part of the monsoon season, there is also possibility of good prospect of *rabi* crops due to good residual soil moisture status.

Distribution of rainfall (% departure from normal) for the districts of East Uttar Pradesh, Bihar, Jharkhand, Orissa, West Bengal, Maharashtra, Chattisgarh, Karnataka, Kerala, Tamil Nadu and Andhra Pradesh during last five Weeks

State/Districts	21.09.10	29.09.10	06.10.10	13.10.10	20.10.10
Chattisgarh					
Bastar	70	-50	-53	-47	517
Bilaspur	-8	-100	-98	-99	123
Dantewara	138	-91	-45	-94	-63
Dhamtari	19	-100	30	-81	124
Durg	289	-94	-97	-93	-51
Janjgir	61	-100	-33	-100	-12
Jashpurnagar	320	-91	-23	-96	-16
Kanker	169	-86	-26	-100	408
Korba	58	-100	-30	-100	-72
Koriya	183	-100	-55	-83	-100
Kowardna	**	-85	-100	-84	57
Mahasumund	228	-100	-100	-100	4
Raigarh	48	-94	-56	-100	-35
Raipur	-34	-97	-69	-50	-40
Rajandgaon	310	-91	-89	-100	116
Surguja	124	-92	-43	-61	-55
East Uttar Pradesh					
Allahabad	157	-100	-100	-100	-78
Ambedkar Nagar	180	-100	-100	-100	74
Azamgarh	562	-100	-100	-100	-91
Bahraich	69	-100	-100	-91	-79
Ballia	93	-68	-100	-89	122
Balrampur	256	-95	-100	-100	-100
Banda	229	-100	-100	-100	-20
Barabanki	46	-98	-100	-100	31
Basti	546	-100	-100	-100	323
Deoria	80	-41	-100	-100	400
Faizabad	114	-100	-100	-100	611
Farrukhabad	104	-83	-100	-100	-100
Fatehpur	237	-100	-100	-100	-63
Gazipur	43	-100	-100	-82	-55
Gonda	51	-100	-100	-100	-100
Gorakhpur	111	-99	-100	-100	-38
Hardoi	305	-96	-100	-100	-100
Jaunpur	245	-100	-100	-100	-100
Kanpur City	32	-94	-100	-88	-32
Kanpur Dehat	-40	-100	-100	-33	127
Kheri	120	-100	-100	-100	-100
Kushi nagar	285	-94	-100	-99	115
Lucknow	58	-99	-100	-96	-100
Maharajan	209	-100	-100	-100	-20
Mau	51	-100	-100	-100	40
Mirzapur	78	-100	-100	-100	-100
Pratapgarh	92	-100	-100	-100	-47
RaiBareilly	126	-100	-100	-100	-90
Sant Ravidas Nagar	325	-100	-100	-100	655
Shrawasti	333	-90	-100	-98	-100
Sidharthnagar	-22	-100	-100	-90	-100
Sitapur	40	-92	-100	-90	-100
Sonbhadra	409	-100	-100	-98	-81
Sultanpur	184	-100	-100	-100	342
Unnao	64	-100	-100	-92	-42
Varanasi	172	-100	-97	-85	208
Bihar					
Araria	207	-16	-61	-74	-79
Aurangabad	147	-90	-47	-97	121
Begusarai	-16	338	-100	-100	**
Bhabua	133	-100	-100	-100	-67
Bhagalpur	2	-98	-90	-96	-75
Bhojpur	-32	-88	-75	-100	54
Buxar	125	-99	-100	15	-40

State/Districts	21.09.10	29.09.10	06.10.10	13.10.10	20.10.10
Darbhanga	89	-90	-95	-18	-1
East Champaran	50	7	-82	-40	299
Gaya	-50	-83	-52	-99	168
Gopalganj	81	-80	-100	-100	518
Jahanabad	-66	-86	-45	-100	423
Jamui	37	-91	-58	-100	-50
Kathihar	85	-38	-46	-92	-97
Khagadia	49	-57	-75	-88	-18
Kishanganj	6	-34	-100	**	**
Madhepura	132	-88	-100	**	**
Madhubani	36	-77	-100	-72	-54
Monghyar	233	97	-98	-100	566
Muzaffarpur	-32	-87	-98	55	213
Nalanda	11	30	-58	-100	104
Patna	-37	-17	-32	-17	471
Purnea	91	-58	-87	-1	-93
Rohtas	137	-98	-45	-93	-32
Saharsha	118	-51	-100	104	-21
Samstipur	-58	-30	-76	-72	198
Saran	-1	-96	-81	-100	174
Sitamarhi	-27	-100	-100	179	13
Siwan	231	-9	-100	-73	544
Supaul	59	-85	-100	-1	-73
Vaishali	-56	84	-100	**	-100
West Champaran	169	-39	-100	-30	271
Jharkhand					
Bokaro	235	-77	-54	-42	63
Chatra	-17	-97	140	-67	**
Dhanbad	69	-45	-99	-10	-27
East Singbhum	113	-78	-5	-100	-19
Giridih	42	2	-73	-69	105
Godda	-13	-34	-100	**	**
Gumla	73	-100	3	-67	291
Hazaribagh	28	-75	-57	-85	11
Koderna	-28	-22	**	**	**
Lohardagga	4	-100	102	-80	**
Pakur	216	-91	-100	**	**
Palamau	115	-99	-82	-100	-59
Ranchi	64	-97	12	-79	39
Sahebganj	421	-55	-100	**	**
West Singbhum	41	-97	-100	-100	130
Maharashtra					
Konkan & Goa					
Goa	-46	88	68	22	483
Mumbai	128	-98	-95	28	114
Raigad	143	-45	9	-34	277
Ratnagiri	27	-36	159	-62	351
Sindhudurg	54	71	111	-51	607
Thane	176	-61	-44	-42	254
Madhya Maharashtra					
Ahmednagar	17	46	-84	-99	86
Dhule	-86	-49	-68	-95	98
Jalgaon	-76	-91	-79	-97	-34
Kolhapur	-33	117	207	-99	76
Nandurbar	-46	-98	-57	-97	208
Nasik	-2	-45	-5	-44	82
Pune	-11	12	58	-100	247
Sangli	-24	34	73	-100	114
Satara	-29	60	137	-100	195
Solapur	-16	-30	64	-100	103
Marathwada					
Aurangabad	-75	-34	-46	-91	-45
Beed	48	-27	0	-100	189
Hingoli	3	-30	-86	-100	278

State/Districts	21.09.10	29.09.10	06.10.10	13.10.10	20.10.10
Jalna	-77	-26	-34	-86	156
Latur	93	-35	-91	-100	142
Nanded	71	-56	-85	-81	121
Usmanabad	41	-31	54	-97	10
Parbhani	-75	21	-84	-100	19
Vidarbha					
Akola	-86	-60	-67	-99	225
Amraoti	-69	-72	-88	-84	79
Bhandara	114	-100	-29	-82	267
Buldhana	-83	-43	-72	-76	103
Chandrapur	120	-83	-91	-100	311
Gadchiroli	106	-87	-48	-98	257
Gondia	125	-100	-98	-56	41
Nagpur	125	-63	-91	-90	-88
Wardha	69	-21	-8	-91	26
Washim	-99	-20	-66	-100	111
Yeotmal	21	-90	-57	-100	386
Orissa					
Angul	6	-75	-44	-42	-21
Balasore	199	-31	-66	71	56
Bargarh	67	-100	-54	-100	12
Bhadrak	135	-63	-32	80	83
Bolangir	271	-89	-89	-58	41
Boudh	37	-100	-46	2	57
Cuttack	50	-54	-73	83	62
Deogarh	-44	-74	-85	-100	-53
Dhenkanal	44	-85	-92	-5	58
Gajapati	36	-68	-36	-18	159
Ganjam	21	-85	-23	51	87
Jagatsingpur	88	-73	-14	285	205
Jajpur	60	-45	-66	30	74
Jharsuguda	140	-100	-66	-100	-50
Kalahandi	87	-100	-83	69	631
Kandhamal	177	-92	-93	-23	382
Kendrapara	62	-78	3	292	35
Keonjhar	78	-90	-74	9	51
Khurda	25	-71	-13	3	56
Koraput	34	-97	-79	0	144
Malkangiri	-36	-100	-95	-93	168
Mayurbhanj	134	-81	-72	-28	-4
Nawapara	40	-100	-100	-44	759
Nawarangpur	273	-65	-90	10	604
Nayagarh	37	-94	1	-26	145
Puri	182	-80	-18	124	74
Rayagada	-8	-94	-92	-44	176
Sambalpur	39	-94	-69	-76	44
Sonepur	11	-100	-100	-33	6
Sundargarh	61	-100	-44	-96	-2
West Bengal					
GWB					
Bankura	1	9	-25	-59	2
Birbhum	91	-68	-97	100	61
Burdwan	123	-23	-82	-32	36
Hooghly	121	-38	-73	-24	89
Howrah	93	-56	-50	17	244
East Midnapore	-4	-82	-45	68	95
Murshidabad	181	-38	-96	49	41
Nadia	47	-19	-11	13	47
24 Pargana (N)	53	-76	-62	42	142
Purulia	48	-45	-71	-61	7
24 Pargana (S)	83	-80	-56	75	-24
West Midnapore	100	-49	-52	-25	3
SHWB					
Coochbehar	69	-55	-90	-34	-83
Darjeeling	59	-40	-75	69	37
Jalpaiguri	45	-17	-99	-28	-2
Malda	-8	-20	-86	65	7
Dinajpur (N)	127	-18	-65	-5	-74
Dinajpur (S)	140	-84	-98	84	-97
North Sikkim	52	30	-93	-31	-74

State/Districts	21.09.10	29.09.10	06.10.10	13.10.10	20.10.10
South Sikkim	67	-62	-88	-43	48
Karnataka					
Coastal Karnataka					
Dakshin Kannada	-26	98	56	-34	22
Udupi	-33	46	45	-50	159
Uttar Kannada	52	58	60	-21	187
North Interior Karnataka					
Bagalkote	-66	-24	-62	-99	87
Belgaum	2	79	57	-96	54
Bidar	13	-41	-77	-99	100
Bijapur	-53	-18	-42	-100	164
Dharwad	-2	42	70	-35	-23
Gadag	-46	-1	-16	-91	44
Gulbarga	-12	-51	-51	-93	287
Haveri	-40	143	165	-51	-61
Koppal	-33	-47	-77	-92	-32
Raichur	-39	-36	-67	-100	6
South Interior Karnataka					
Bangalore Rural	-92	89	-61	-56	23
Bangalore Urban	-80	137	-48	-16	9
Bellary	-84	5	-36	-92	58
Chamarajinagar	-48	18	82	-41	-78
Chickmagalur	21	108	232	-69	-23
Chitradurga	-40	-5	30	-73	21
Davangere	26	48	120	-66	-20
Hassan	19	156	151	-45	-53
Kodagu	-10	63	56	-40	-42
Kolar	-64	6	-84	-96	-43
Mandya	-58	27	-5	-61	-53
Mysore	-59	-22	52	-50	-75
Shimoga	45	280	190	-1	-23
Tumkur	-41	61	74	-62	-12
Kerala					
Alappuzha	-48	54	208	127	44
Kannur	-17	-24	-6	34	112
Ernakulam	25	163	89	148	68
Idukki	-3	-5	32	40	-25
Kasaragod	-35	15	-14	-79	8
Kollam	-33	106	420	102	-26
Kottayam	-2	113	191	120	32
Kozhikode	-22	-42	73	8	6
Malappuram	-24	25	149	-3	-30
Palakkad	-23	25	125	28	5
Pathanamthitta	-36	64	301	36	-10
Thiruvananthapuram	-21	-9	548	147	-77
Thrissur	7	66	66	239	78
Wyanad	-33	-24	39	-28	-76
Tamil Nadu					
Chennai	-99	-58	-24	-96	-44
Coimbatore	96	102	153	-93	-99
Cuddalore	-80	-65	-29	-85	-79
Dharmapuri	-100	-83	-78	-59	-13
Dindigul	21	101	280	-6	-83
Erode	57	62	64	-81	-93
Kanchipuram	-68	-45	19	-26	-91
Kanyakumari	-68	103	874	250	-92
Karur	-51	40	-57	-84	-90
Krishnagiri	-68	-74	-30	-52	-24
Madurai	-24	126	67	-22	-74
Nagapattinam	-8	-30	37	-79	-74
Namakkal	-46	-38	-27	-65	-72
Nilgiris	-11	89	139	38	-71
Perambalur	-99	-14	-39	-58	-17
Pondicherry	99	-65	72	-81	-48
Pudukottai	6	3	-29	-42	-37
Ramanathapuram	21	279	300	-29	-92
Salem	-39	-7	-2	-71	-54
Sivaganga	50	270	76	30	-73
Thanjavur	23	63	41	30	-35

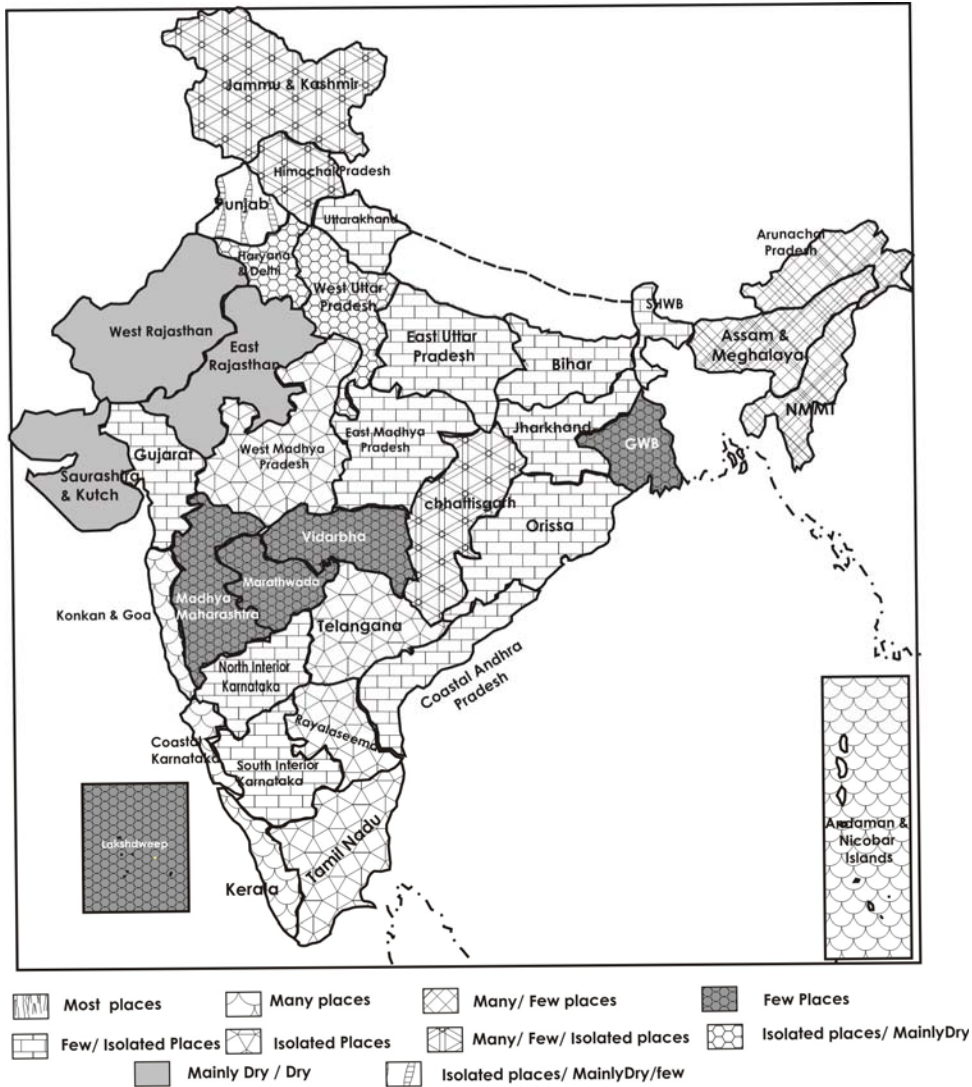
State/Districts	21.09.10	29.09.10	06.10.10	13.10.10	20.10.10
Theni	48	146	169	-63	-93
Tirunelveli	145	410	459	-18	-99
Tiruvallur	-82	8	-12	-85	-85
Tiruvannamalai	-93	-33	-59	-56	-67
Tiruvarur	35	56	107	-98	-67
Tuticorin	-12	209	182	-92	-94
Trichy	-39	41	-49	-21	-56
Vellore	-81	-23	-71	-53	-26
Villupuram	-94	-74	-42	-71	-57
Virudhunagar	80	97	28	-77	-91
Andhra Pradesh					
Coastal Andhra Pradesh					
East Godavari	-62	-59	-28	-67	-68
Guntur	53	-52	-34	-44	-36
Krishna	3	-6	11	-62	-34
Nellore	-56	-3	-24	-92	-91
Prakasam	-83	-57	35	-59	-61
Sirkakulam	8	-38	-16	35	77
Visakhapatnam	21	-66	-5	-23	-67

State/Districts	21.09.10	29.09.10	06.10.10	13.10.10	20.10.10
Vizianagram	23	-62	-5	-34	-21
West Godavari	-32	-3	-4	-86	-52
Telangana					
Adilabad	30	-46	-59	-98	375
Hyderabad	77	45	-25	-100	72
Karimnagar	74	-46	-47	-99	263
Khammam	10	-76	-21	-94	54
Mehabubnagar	-15	-48	-68	-75	63
Medak	-56	6	-73	-100	321
Nalgonda	14	-28	-34	-87	-5
Nizamabad	55	-46	-30	-58	556
Rangareddy	54	-38	-39	-98	80
Warangal	-17	-62	-64	-92	95
Rayalaseema					
Anantapur	-58	33	-87	-76	23
Chittoor	-77	47	-58	-96	-25
Cuddapah	-49	-67	-33	-87	-72
Kurnool	-35	-4	-62	-83	-80

LEGEND

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

Weather Forecast (Valid upto 0830 hours of 24th October, 2010)



Weather Warnings

- Isolated heavy rainfall would occur over Jammu & Kashmir during next 48 hours and over Nagaland, Manipur, Mizoram & Tripura after 24 hours.

Weather Outlook (upto 0830 hours IST of 26th October, 2010)

- Scattered rainfall would occur over south Peninsular India and northeastern States.

Zonewise Agromet Advisories

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

- **Realised Rainfall:** East Champaran, Gaya, Gopalganj, Monghyar, Muzaffarpur, Patna, Samstipur, Saran, Siwan and West Champaran districts of Bihar, Giridih, Gumla and West Singhbhum districts of Jharkhand and most of the districts of Orissa, West Bengal and Sikkim received good rain during last week.
- **Rainfall Forecast:** Rain is likely to occur at a few places in West Bengal and Sikkim during the period. Rain is likely to occur at a few places during next 48 hours over Orissa and during next 24 hours over Bihar and decrease thereafter. Rain is likely to occur at isolated places during next 24 hours and increase thereafter.
- **Major Crops:**
 - Early sown rice (grain formation / maturity / harvesting), late sown rice (grain formation), maize (early maturity / maturity), sesamum (early maturity / maturity), groundnut (early maturity / maturity), soybean, green gram (early maturity / maturity), black gram, kulthi (flowering / pod formation), tori (sowing / early vegetative), vegetables like cauliflower, brinjal etc. (sowing / early vegetative / vegetative) in Bihar.
 - Early sown rice (grain formation / maturity / harvesting), late sown rice (grain formation), early sown maize (early maturity / maturity), sesamum (early maturity / maturity), groundnut (early maturity / maturity), urd, green gram, pignon pea, niger and short duration maize (flowering / pod formation), kulthi (flowering / pod formation) and potato, toria and early mustard (sowing / early vegetative), tomato, cabbage and cauliflower (nursery sowing / transplanting / early vegetative), chilli and brinjal (nursery sowing / transplanting) in Jharkhand.
 - Rice (flowering / grain formation / early maturity / maturity / harvesting) and maize (cob formation / maturity / harvesting), *kharif* groundnut (pod formation / maturity / harvesting), pulses, soybean, sesamum and ragi (pod formation / maturity / harvesting), vegetable crops (vegetative / flowering / fruiting), cotton (flowering / boll formation) in Orissa.
 - Sugarcane (cane development), *rabi* vegetable crops (sowing / germination / early vegetative / vegetative), *aus* rice (harvesting), *aman* rice (panicle initiation / flowering / grain formation), pulses (flowering / pod formation / early maturity), arhar (vegetative), sesame (pod formation / maturity) and groundnut (pod formation / early maturity / maturity) in West Bengal.
 - Large cardamom (capsule / grain maturity / harvesting), orange (fruit maturity / harvesting), wheat (sowing / germination / seedling), summer potato (harvesting), ginger (late vegetative / maturity / harvesting), rice (flowering / milk and grain formation / maturity), *rabi* vegetable (transplanting / vegetative) and mustard (sowing & germination) in Sikkim.
- **Advisories:**
 - As East Champaran, Gaya, Gopalganj, Monghyar, Muzaffarpur, Patna, Samstipur, Saran, Siwan and West Champaran districts of Bihar, Giridih, Gumla and West Singhbhum districts of Jharkhand and most of the districts of Orissa, West Bengal and Sikkim received good rain during last week, postpone irrigation to the standing crops in these districts.
 - In West Bengal, farmers are advised to undertake sowing of potato, mustard, pulses like gram, lentil etc., sowing of vegetables like raddish and transplanting of vegetables like cabbage, cauliflower, chilli, tomato etc. taking the advantage of recent rain.
 - Farmers are advised to undertake sowing of *rabi* crops like maize and also sowing of vegetables like tomato, cauliflower and cabbage in North East Alluvial Zone, planting of potato and sowing of maize, gram, lentil, peas, oilseeds crop like mustard, sarson and vegetables like radish, carrot, spanich, khnol khol, turnip, beet etc. and transplanting of seedlings of tomato, cauliflower and cabbage in South Bihar Alluvial Zone and also planting of potato and sowing of maize in North West Alluvial Plain Zone in Bihar.
 - Farmers in Bihar are advised to harvest the matured rice crops immediately. Also harvest matured maize

crop.

- Farmers in Jharkhand are advised to undertake land preparation and sowing of peas and mustard, planting of potato and sowing of vegetables like brinjal, cauliflower and cabbage during this period.
- Farmers in Orissa are advised to undertake sowing of groundnut, mustard, sunflower, green pea, nursery sowing of onion and vegetables like garden pea, carrot, radish etc. and nursery sowing and transplanting of vegetables like tomato, brinjal, cabbage, cauliflower etc.
- Recommended varieties of crops to be sown in different States of the region are mentioned in Annexure I.
- As there is less possibility of rain during next few days over the region, undertake harvesting of crops.
- Under prevailing weather condition, there is possibility of attack of black rot of crucifers in cabbage and cauliflower in New Alluvial Zone of West Bengal. Apply 1 g Streptocycline in 10 litres of water to control the disease.
- Damping off of seedlings may also be observed in the seed-bed due to the cloudy weather in New Alluvial Zone of West Bengal. Drench seedlings with Blitox 50 @ 3 g / litre of water.
- Apply plant protection measures on a non-rainy day.

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

- **Realised Rainfall:** No significant rain occurred over most of the districts of the States of the region during last week.
- **Rainfall Forecast:** Rain is likely to occur at a few places over Arunachal Pradesh during next 48 hours and over rest of the region during next 24 hours and at many places thereafter. Isolated heavy rainfall would occur over Nagaland, Manipur, Mizoram & Tripura after 24 hours.
- **Major Crops:**
 - Vegetables (flowering / fruiting / harvesting), *rabi* vegetables (nursery sowing / transplanting / germination / early vegetative), sugarcane (cane development), maize (maturity), *sali* rice (flowering / grain formation/ maturity / harvesting), *ahu* rice (transplanted summer rice) (maturity), arhar (flowering / pod formation), sesamum (pod formation / maturity) and black gram and green gram (flowering / pod formation) rapeseed and mustard (sowing / seedling) in Assam.
 - Rice (milk / maturity), vegetables (vegetative / flowering / fruiting), *rabi* vegetables like cauliflower, cabbage, tomato etc. (nursery sowing / transplanting), pea and carrot (sowing), maize (cob maturity / harvesting), orange (fruiting) and ginger and turmeric (vegetative) in Arunachal Pradesh.
 - Upland rice (maturity / harvesting), *aman* rice (flowering / grain formation) and vegetables (sowing / germination / transplanting / early vegetative / vegetative / flowering / fruiting) in Tripura.
 - *Sali* rice (flowering / grain formation), potato (planting / early vegetative / vegetative), vegetables (sowing / germination / early vegetative / vegetative / flowering / fruiting), maize (cob maturity) in Meghalaya.
- **Advisory:**
 - As rainfall is likely to occur at many places over the States of this region, postpone irrigation, intercultural operation and application of fertilizer and plant protection measures to the standing crops.
 - Farmers in Assam are advised to undertake sowing of toria in Hills Zone, planting of potato and sowing of rapeseed of mustard and niger in Lower Bramhaputra Valley Zone, sowing of cauliflower and early maturing cabbage, tomato, knolkhol, brinjal and rajmah in Upper Bramhaputra Valley Zone, nursery sowing of tomato, brinjal, cabbage, cauliflower, chili etc. in Barak Valley Zone, sowing of early vegetables like early cauliflower and radish in Central Bramhaputra Valley Zone and sowing of vegetables like cauliflower, cabbage, knolkhol, radish and tomato in North Bank Plain Zone.
 - Farmers in Arunachal Pradesh are advised to undertake nursery sowing and transplanting of hybrid tomato, cauliflower and cabbage and also to undertake sowing of maize, carrot and pea. Farmers are also advised to prepare field for potato and undertake planting.
 - Undertake field preparation and nursery sowing of onion, tomato, cauliflower, cabbage and capicum

and also sowing of pea in Manipur.

- Prepare land and undertake sowing of gram and winter season vegetables like pea, beans, tomato, cabbage, palak etc. and planting of potato in Nagaland.
- Farmers in Tripura are advised to undertake sowing of groundnut. Farmers are also advised to undertake nursery sowing of winter vegetables like cabbage, cauliflower, tomato etc. If the seedlings of these crops are already ready, transplanting may also be undertaken.
- Recommended varieties of major crops to be sown in different States of the region are mentioned in Annexure I.
- Infestation of stem borer and case worm in *Sali* rice and shoot borer in sugarcane is reported in Barak Valley Zone of Assam. Apply the plant protection measures to control the same.
- There is possibility of attack of ear cutting caterpillar in rice in Tripura. Cloudy weather may enhance the attack. Endosulfan @ 2 ml or Malathion @ 1.5 ml per litre of water may be applied to the rice plants and weeds on the bund to control the pests.
- High relative humidity and cloudy weather are favorable for infestation of leaf miner severely both in nursery and in fields of Khasi mandarin in Mizoram; spray imidacloprid @ 0.05% to control the insects.
- Prevailing weather condition is congenial for fruit fly infestation in guava in Mizoram. Farmers are advised to spray Dimethoate @ 0.03%.
- In present weather condition, fruit fly infestation is also likely in cucurbitaceous vegetables in Mizoram. Spray Quinolphos (0.5%) in bottle gourd, sponge gourd pumpkin etc. more effectively.
- Prevailing high relative humidity and low night temperature of 21-23⁰C for few hours favour blast disease in rice in Mizoram. Farmers are advised to spray Benlate or Mancozeb @ 0.25%.
- As there is chance of rain at many places over the region after 24 hours, farmers are advised to apply plant protection measures after current spells of rain.
- In Poultry houses in Mizoram, if there will be any wet and caked litters, due to leakage of roof, rain from faulty design walls / spillage of water on the litter etc. the same must be replaced with well-treated fresh litter materials.

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

- **Realised Rainfall:** Either dry weather or no significant rainfall prevailed / occurred in the region.
- **Rainfall Forecast:** Rainfall is likely at many places in Jammu & Kashmir, at a few places in East Uttar Pradesh, Uttarakhand and Punjab during next 2-3 days. Either mainly dry or dry weather is likely over the remaining parts of region. Isolated heavy rainfall is likely over Jammu & Kashmir during next 48 hours.
- **Major Crops:**
 - Rice (grain formation / development), jowar and maize (grain formation / development), pigeon pea (flowering), vegetable crops (flowering/fruitletting), early mustard and sarson (sowing) in Delhi
 - Rice (grain formation/maturity), apple(harvesting), vegetables (vegetative / flowering) in Himachal Pradesh.
 - Vegetable crops (flowering / fruitletting / harvesting), rice (maturity/harvesting), maize (maturity/harvesting), mung (pod formation/ maturity), sunflower (vegetative / flowering), gobi sarson(early vegetative), toria(vegetative) in Jammu & Kashmir.
 - Sugarcane (grand growth), rice, ragi (maturity/harvesting), toria, mustard (sowing) in Uttarakhand.
 - Sugarcane (vegetative), cotton (boll formation/maturity), rice (maturity), maize(grain formation/maturity), mung, mash (pod formation/maturity) in Punjab.
 - Sugarcane (vegetative), cotton (boll formation/maturity), rice (grain maturity), guar and bajra (harvesting) in Haryana.
 - Rice (grain formation/maturity), maize, urd, moong, til, soybean, groundnut, jowar and bajra(grain formation/maturity), sugarcane (grand growth), vegetable crops (transplanting / vegetative / flowering) in Uttar Pradesh.

- Sugarcane (grand growth), vegetable crops (flowering / fruiting / harvesting), soybean, mung, cluster bean, sesamum and groundnut (grain development / maturity) in Rajasthan.
- This is proper time for land preparation and sowing of *rabi* crops like mustard, taramira and rapeseed in the region.

- **Advisory:**

- Dry weather conditions prevailed in the region during last week and likely to prevail during next three days. Utilizing this favourable weather condition, farmers are advised to complete harvesting of kharif crops and undertake post-harvesting operations. Land preparation and sowing of rabi crops like toria, potato, mustard, rai, vegetable pea, potato, berseem, gram and sarson may also be undertaken utilizing the residual soil moisture.
- Farmers in North Eastern Plain Zone, Central Plain Zone, Bundelkhand and Western Plain Zone in Uttar Pradesh are advised to undertake field preparation and sowing of toria and early *rabi* vegetables utilizing the residual soil moisture.
- Farmers in Delhi region are advised to undertake sowing of gram, sarson, early pea, carrot, potato in Delhi. Transplanting of mature seedlings of carrot may also be done.
- Farmers in Uttarakhand are advised to undertake sowing of mustard, rai, early vegetable pea, potato, onion, berseem, lentil and horsegram.
- Farmers in sub tropical zone (Jammu, Kathua and Reasi district) are advised to undertake sowing of mustard, gram, field pea and also sowing of wheat under rainfed conditions. Undertake sowing of brown sarson, lentil and wheat in Kashmir valley zone (Anantanag, Badgam, Kupwara and Srinagar districts) Harvest the matured crops of rice, maize and early sown bajra under the present weather conditions.
- Farmers in Flood Prone Eastern Plain Zone (Alwar, Bharatpur, Dholpur, Karauli, Sawai, Madhopur), Sub humid Southern Plain and Aravalli hill zone and Irrigated North Western Plain Zone (Sriganganagar, Hanumangarh) in Rajasthan are advised to undertake sowing of mustard, taramira, toria, rapeseed, potato and carrot utilizing the residual soil moisture and undertake land preparation for sowing of wheat and gram.
- Farmers in Semi Arid Eastern Plain Zone (Dausa, Ajmer, Tonk, Jaipur districts) in Rajasthan are advised to undertake sowing of rainfed mustard and gram and also undertake sowing of pea.
- Farmers in Eastern zone (Bhiwani, Fatehabad, Hissar, Jhajjar, Mahendgarh, Mewat, Rewari, Rohtak and Sirsa districts) in Haryana are advised to undertake land preparation and sowing of raya, mustard and barseem.
- Farmers in Western Plain Zone (Firozpur and Faridkot districts), Western zone (Bathinda, Moga, Muktsar, Mansa, Sangrur districts) and Central Plain Zone (Amritsar, Kapurthala, Fatehgarh Sahib, Ludhiana, Jalandhar) of Punjab are advised to undertake sowing of raya, gram and complete planting of sugarcane with intercropping of wheat, raya, toria, gobhi sarson, pea, gram and potato etc. transplanting of cabbage, mid season cauliflower, mid season pea for green pods and *Mithi Phali* (edible pod) utilizing the residual soil moisture.
- Farmers are advised to undertake sowing of wheat, barley and oat, raddish, coriander, cabbage, broccoli, parsley, lettuce, fennel and cauliflower, onion and peas in Mid Hills Sub-Humid (Nauni, Solan, Shimla, Sirmaur districts) and High Hills Temperate (Kukumsheri, Lahaul and Spiti districts) and Sub-Montane & Low Hills Sub-Tropical Zone (Palampur, Hamirpur, Kangra and Una Chamba).

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

- **Realised Rainfall:** All the districts in Kerala except Wyanad and Thiruvanthapuram districts, coastal Karnataka, many districts in North and South Interior Karnataka, Dharmapuri, Perambalur and Pudukottai districts in Tamil Nadu, all districts in Coastal Andhra Pradesh and Telanagana.
- **Rainfall Forecast:** Rain is likely to occur at a few / many places in Coastal Karnataka and Kerala and at isolated / a few places over remaining region during next three days.

- **Major Crops:**

- Rice (maturity / harvesting), pepper (maturity), arecanut (nut development), coconut, black pepper, cocoa, cashew, nutmeg, mangosteen, rambutan etc. (new planting), *mundakan* rice (transplanting) in Kerala.
- *Kuruvai* rice (grain maturity / harvesting), groundnut (pod development / maturity), sugarcane (cane development), banana (fruit bearing), sorghum, cotton, pearl millet and pulses (sowing), *late samba / thaladi* rice and chilli (transplanting) in Tamil Nadu.
- *Kharif* crops viz., maize (maturity / harvesting), rice (grain formation / development), groundnut (pod formation / development) and *rabi* vegetables (nursery sowing) in Andhra Pradesh.
- *Kharif* crops viz., green gram and black gram (harvesting), pigeon pea (flowering / grain formation), sugarcane (cane development), gram, safflower, *rabi* sorghum, sunflower and wheat (sowing) in Karnataka.

- **Advisories:**

- Due to continuous rains in North Coastal Zone during September 2010, water logging is reported in sugarcane and maize crops fields. There are also chances of rain in next three days. Hence harvesting of crops may be undertaken after spells of rain with proper storage facilities for the grains.
- Rain is likely to occur at a few / many places in Coastal Karnataka, Kerala, Coastal Andhra Pradesh and North Interior Karnataka during next three days; farmers are advised to postpone intercultural operations, application of fertilizers and pesticides and irrigation to plantation crops and vegetable crops.
- Farmers in Southern Zone of Andhra Pradesh are advised to continue sowing of rice and black gram. Farmers in Kurnool are advised to undertake land preparation and sowing of gram utilizing residual soil moisture.
- As there is sufficient moisture in the soil in North Dry Zone (Bijapur) in Karnataka with a possibility of rainfall during next three days, farmers are advised to continue sowing of sunflower, desi cotton (Jayadhar and Suyodhar), and start sowing of rabi sorghum, safflower and intercropping systems like Safflower + Chickpea (2:4) and Wheat + Chickpea (3:1). Complete harvesting of bajra. Farmers in North Transition Zone (Dharwad, Haveri, Belgaum) are advised to undertake sowing of rabi sorghum, wheat, Bengal gram and safflower from authorized dealers.
- Farmers in Hill zone (Devangere, Chitradurg and Tumkur) of Karnataka are advised to complete sowing of ragi, jowar and Bengal gram (varieties are given in Annexure I)
- Farmers in Problem Areas Zone (Kottayam) of Kerala are advised to undertake sowing of bitter gourd, snake gourd, ash gourd, pumpkin and planting of banana
- Farmers in Southern, Central and Northern Zones of Kerala are advised to undertake transplanting of mundakan rice and new planting of coconut, black pepper, cocoa, cashew, nutmeg, mangosteen and rambutan in South Zone of Kerala.
- Farmers in Southern Zone of Tamil Nadu are advised to undertake sowing of sorghum, cotton, pearl millet and pulse crops and transplanting of chilli. Transplanting of *late samba / thaladi* rice may also be undertaken in Cauvery Delta Zone of Tamil Nadu.
- Prevailing weather conditions are congenial for the incidence of BPH, sheath blight and sheath rot in rice, jassid and mealy bug in cotton in Southern Telangana region. Farmers are advised to undertake plant protection measures to control the pests and diseases.
- Present weather condition may favourable for incidence of bud rot diseases in coconut in Problem Areas Zone of Kerala. Farmers are advised to undertake plant protection measures to control the pests and diseases.
- Present weather condition in western Zone of Tamil nadu is congenial for the incidence of brown spot and stem borer of rice. Farmers are advised to undertake plant protection measures to control the pests and diseases.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

- **Realised Rainfall:** Most of the districts of Maharashtra and Dangs district of Gujarat received good rain during last week.
- **Rainfall Forecast:** Rain is likely to occur at many places in Konkan and Goa and at a few places in Madhya Maharashtra, Marathwada and Vidarbha during the period. Rain is likely to occur at a few places during next 24 hours and decrease thereafter. Mainly dry weather is likely to prevail in Saurashtra and Kutch region during the period.
- **Major Crops:**
 - *Kharif* rice (grain formation / maturity in East Vidarbha and grain formation in late variety and grain maturity / harvesting in early and medium maturing variety in Konkan, Kolhapur, Nashik & Pune (western parts) divisions), *kharif* jowar (grain maturity), soyabean (harvesting in final stage), cotton (boll formation / maturity), sunflower (seed maturity / harvesting), groundnut (pod maturity / harvesting), red gram (secondary branching / flowering) and irrigated cotton (boll formation / boll maturity / picking) in Maharashtra.
 - Rice (grain formation / early maturity / maturity), groundnut (early maturity / maturity), cotton (boll formation), maize (early maturity / maturity), bajra (early maturity / maturity), pigeon pea (flowering / pod formation), sesamum (early maturity / maturity), soybean, green gram and black gram (early maturity / maturity) and castor (spike formation) in Gujarat.
- **Advisory:**
 - As most of the districts of Konkan, Madhya Maharashtra, Marathwada and Vidarbha received sufficient rain during last week, postpone irrigation to the standing crops in these districts. As there is possibility of rain at many places in Konkan and Goa during the period, postpone intercultural operation and application of fertilizer and plant protection measures in this region.
 - As most of the districts of Gujarat region and Saurashtra and Kutch did not receive sufficient rain during last week, apply irrigation to the standing crops in these districts.
 - Continue harvesting of already matured crops like *Kharif* rice (in Konkan, Kolhapur, Nashik & Pune (western parts) divisions), *kharif* jowar, soyabean, sunflower and groundnut in Madhya Maharashtra, Marathwada and Vidarbha as there is possibility less rain during the period. In view of rain likely at many places, postpone harvesting of crops in Konkan and Goa region.
 - As soil moisture status is favourable, undertake sowing of *rabi* jowar, sunflower, gram, safflower and rainfed wheat and also planting of sugarcane in Maharashtra.
 - As there is possibility of clear sky during the period, farmers of Gujarat State are advised to harvest *kharif* crops like rice, groundnut, maize, bajra, green gram, black gram and sesamum.
 - Undertake sowing of crops like rapeseed, garlic, wheat, gram and vegetables like carrot, onion, raddish, brinjal and transplanting of vegetables like cauliflower and cabbage in Gujarat State during this period.
 - Prevailing weather is favorable for attack of blast in rice in Pune division of Maharashtra; spray Copper oxychloride 1250 g + Streptocyclin 75 g per ha in 500 liters of water.
 - The incidence of rice leaf folder is noticed on rice in some part of the Nagpur division of Maharashtra; spray the crop with Carbaryl 50 WP @ 20 g / 10 litres of water and Monocrotophos 36 WSC @ 11 ml / 10 litres of water.
 - There may be possibility of incidence of rice ear head bug on maturing grains in Konkan of Maharashtra due to congenial weather condition; dusting of 2% Methyl Parathion @ 20 kg / ha may be carried out.
 - Apply plant protection measures on a non-rainy day in Konkan and Goa and after current spells of rain in Madhya Maharashtra, Marathwada and Vidarbha.

CENTRAL INDIA [M.P., CHHATTISGARH]

- **Realised Rainfall:** Sidhi and Guna districts of Madhya Pradesh and Bastar, Dhamtari and Kanker districts of Chattishgarh received good rain during the period.
- **Rainfall Forecast:** Rain is likely to occur at a few places in Chattishgarh and East Madhya Pradesh and at isolated places in West Madhya Pradesh during the period.
- **Major Crops:**
 - *Kharif* crops like soyabean, maize, sorghum, sesame (maturity / harvesting), green gram and black gram (maturity) in Madhya Pradesh.
 - *Kharif* crops like soyabean, maize, green gram etc (maturity), and sugarcane (cane development) in Chhattisgarh.
 - This is proper time for sowing of *rabi* crops.
- **Advisory:**
 - Farmers in Bundekhand Zone of Madhya Pradesh are advised to complete harvesting of mature *kharif* crops and undertake land preparation for sowing of *rabi* crops like wheat, *rabi* vegetables, mustard and wheat.
 - Farmers in Gird zone of Madhya Pradesh are advised to undertake land preparation and sowing of *rabi* crop utilizing residual soil moisture.
 - Farmers in Kymore Plateau and Satpura Hill Zones of Madhya Pradesh are advised to prepare nursery for medium duration crop of cauliflower and cabbage and transplanting of seedling in mainfield at optimum moisture level in the field. Farmers are also advised to sow the crops like gram, mustard, linseed and lentil.
 - Farmers in Central Narmada Valley Zone of Madhya Pradesh are advised to start preparation of sowing of lentil, gram and mustard and planting of sugarcane.
 - Prepare nursery for onion and garlic in Vindhya Plateau Zone of Madhya Pradesh.
 - Farmers in Chattisgarh Plain Zone are advised to undertake transplanting of vegetables viz, tomato, brinjal, chilli, cole crops etc in the afternoon hours and sowing of leafy vegetables viz, palak, methi, dhaniya etc.
 - Farmers in upland region of Bastar Plateau Zone are advised to undertake sowing of castor, niger, kulthi and toria crops (varieties given in Annexure I).
 - Present weather conditions viz, high humidity and clear weather, are favourable for the incidence of blast in rice in Chattisgarh Plain Zone; spray hinosan @ 1.0 m.l. per liter water or Tricyclozol @ 6g per 10 liter water solution.
 - Apply plant protection measures on a non-rainy day in East Madhya Pradesh and Chattishgarh.

Annexure I List of Varieties

Assam

Cauliflower: Improved Japanese, Pusa Synthetic, Pusa Snowhall etc.

Cabbage: Golden Acar, Pride of India, Pusa Mukta etc.

Raddish: Pusa Desi, Pusa Chetki and Pusa Himani.

Brinjal: Pusa Kranti, Cluster, JC-1, Kuchia, Pusa Purple Long, Pusa Purple Round, Pusa Vairab, JC-2, BWR-12 etc.

Knolkhol: White Vienna.

Toria: TS -27, TS- 29 etc.

Potato: Kufri Jyoti, Kufri Chandramukhi, Kufri Sindhuri, Kufri Megha etc.

Rapeseed: TS-38, M-27, TS-29, TS-36 etc.

Mustard: TM-2, TM-4, Varuna etc.

Tomato: Punjab Chhuhara, Arka Alok, Pusa Rubi, Sioux, Punjab Keshri, Arka Abhijit, BT-1 etc.

Bihar

Potato: Kufri Lalima, Kufri Kuber and Kufri Alankar

Tori: RAUTS-17, PT-303, Bhawani and Panchali.

Cauliflower: Kuwari, Patna Early, Pusa Katki, Pusa Deepali and Hajipur Agat.

Brinjal: Rajendra Baigan-2, Rajendra Annapura, Pant Rituraj, Pant Samrat, Swarn Pratibha and Arka Navnit.

Jharkhand

Mustard: Shivani, Varuna, Pusa Bold, Kranti etc.

Vegetable pea: Arkel, Azad Pea-1.

Potato: Kufri Chandramukhi, Kufri Ashoka, Kufri Kanchan.

Peas: Arkel, Azad Pea etc.

Brinjal: Pusa Purple Long, Swarn Pratibha, Pusa Hybrid-5, Pusa Hybrid-6, Swarn Shakti.

Cabbage: Late Drumhead.

Cauliflower: Snowball-6, Pusa Snowball-21.

West Bengal

Radish: Contayl Lal, Red Bombai, Japanese White.

White mustard: Binoy, Subinoy etc.

Mustard: Sita, vagirathi, baruna, Agrani, Panchali, Sarama etc.

Orissa

Groundnut: Smruti, TAG-27, TAG – 24 and JL-24 etc.

Green pea: Rachana, Arkel and T -163 etc.

Mustard: Parbhathi, Anuradha, PT-303, PT 507, TS-29 & M-27 etc.

Onion: Nasik Red, Patna Red, Pune Red, Bellary Red, Pusa Ratnar, Pusa Madhavi, Arka Niketan, Arka Pragati, Agrifound Light Red, Agrifound Dark, Punjab Selection, Patna White, Bombay White, Pusa White Round etc.

Jammu & Kashmir

Barseem: mascavi, pusa giant, BL-1

Mustard: RLM-514, RLM-619, Kranti, Varuna and RH -30

Gram: C-235, K-468, Gourav and PBG-1

Field pea: T-163, PG-2, Rachna, HFP-3

Rajasthan**Radish:** Pusa Rasmi**Carrot:** Pusa Keshar**Early pea:** Arkil, Hara bona, VL-3, Jawahar Matar-4, Matar Ageti-6**Mustard:** Early sown(irrigated) (15Sep-10Oct) : EJ17, Pusa Mahak, Kanti,**Normal sown (irrigated) (October):** Maya, Rohini, Pusa Jai Kisan, Varuna, RGN 13, RGN73, NRCDR-2, NRCHB 506(hybrid)**Normal sown (rainfed):** Arawali, RGN48, Geeta, PBR 97**Late sown (irrigated) (November sowing):** NRCHB101, SwarnaJyoti, Ashirwad, Vardan**Saline sodic soils:** CS-52, CS-54, CS-56, Narendra Rai 1**Taramira:** Karan Tara, Narendra Tara, T-27, RTM-314**Yellow Sarson:** NRCYS-05-02, YSH-40 Beej Pakhwara**Rapeseed- mustard:** Rohini, Pusa Jaikisan, Maya, NRCDR-2, Lakhmi, NRCHB 101 and hybrid NRCHB506**Potato:** Kufri-Ashok and Chandramukhi for early sowing, Kufri-Anand, Chipsona-1, 2, Jyoti and Pukhraj, for mid sowing and Kufri-Lalima, Sinduri and Satluj for late sown conditions.**Toria :** T-9, Sangam, TL-15**Uttarakhand****Vegetable pea:** VL Ageti Mater-7, Vivel Mater-10, Pant Subjee Mater-3, Azad Mater-3 and Arkel**Garlic:** VL-Garlic or DARL-52**Toria:** Toria 303, Pant toria-507**Mustard:** Rohini, Kranti, Krashna, Vardan**Potato:** Kufri Jyoti, Kufri Ashok or Kufri Anand**New Delhi****Carrot:** Pusa Rudhira and Pusa Kesar.**Early pea:** Pusa Pragati, Arkel.**Sarson:** Sarson saag, Pusa saag-1;**Radish** Pusa chatki, Versa kee Rani, summer long, long chetaki;**Spinach:** All green;**Coriander:** Pant Haritama, hybrids;**Turnip:** Pusa swati, local red variety.**Early mustard:** Pusa Agrni, Pusa Taraka, Pusa Mahak**Gram:** Kabuli type - Pusa 267, Pusa 1003, Pusa Chamatkar; local type – C235, Pusa 246, P.B.G. 1, Pusa 372**Haryana****Barseem:** Mescavi.**Raya:** PBR-210 and PBR 91**Gram:**PDG 3 and PDG 4**Punjab****Raya:** PBR-210, RLM-619, PBR-91 under irrigated conditions and PBR-97 under rainfed conditions**Himachal Pradesh****Wheat:** HPW-89,147 VL-738 and HS-240**Barley:** HBL-316 and Dolma and oat (Palampur-1)

Karnataka**Jowar:** variety M-35-1 and Hybrid CSH-10**Bengal gram:** A-1, JG-11, KAK-2 and Vishal.**Ragi:** GPU-45,48 and 26**Maharashtra****Rabi jowar:** Selection -3, Phule Mauli, Phule Anuradha etc. for low fertile soil, Phule Chitra, Phule Mauli, Maldandi 35 - 1 etc. for medium fertile soil & Phule Vasudha, Phule Yashoda, CSV-22 etc. for black soil.**Sunflower:** Modern, Bhanu, EC-68414, Phule Raviraj, K.B.S.H.-1, K.B.S.H.-44 and M.S.F.H.-17.**Safflower:** Bhima, Phule Kusuma, Girna, Nari-6, Sharada, Nari-NH-1 and DSH-129.**Gram:** Vishwas, Phule G-12, Vijay, Vishal, Dig Vijay.**Sugarcane:** COM -88121, CO-0265 (Phule-265), CO -8014, CO -86032 and CO 94012.**Gujarat****Rapeseed:** Guj. Rapeseed-1 or 2.**Garlic:** Guj. Garlic 1 & 2.**Cabbage:** Kranti, Golden Acaire, Pride of India, Coppen Market etc.**Cauliflower:** Pusa sythetic, Early Snowball, Jyayant Snowball, Pusa Snowball, Super Snowball, Snowball-13 etc.**Carrot:** Pusa Kesar, Pusa Yamadgani & Hissar Gairic etc.**Onion:** Pusa Red, Nashik Lal, N 53 & H 48 etc.**Reddish:** Pusa Hemadri, White ICL, Japanees White, Pusa Rashmi , Pusa Chetaki etc.**Brinjal:** Guj. Brinjal – 6, P.L.R. 1, Junagadh Lambagoal, Mahicco – 11, 16 etc.**Madhya Pradesh****Gram:** JG-14, JG-06, JG-63, JG-11, JG-11, JG-130, JG-16, JG-322 and JG-01.**Mustard:** Pusa Mahak, Pusa Agrani, Pusa Jaikisan, Pusa Bold, Jaggannath etc.**Linseed:** PKDL-21.**Lentil:** JLS-03.**Sugarcane:** Ko. 86032, Ko-J-N 86600 or 86141.**Onion:** Udaipur 102, Pusa White, Nasik Red, Nasik Roja etc.**Garlic:** G 283, G 1, G 41 and G 323.**Wheat:** Amar, Amrita, Harshita and gram JG 130, JG 226, Vshal, Vijay etc.**Chhattisgarh****Niger:** JNC-1, JNC-6, JNC-9, GA-10, Ootakmund, KGN-2.**Kulthi:** AK-21, AK-42, Bastar Kulthi, Birsa Kulthi, VLG-9.**Castor:** DCS-9, DCH-177, DCH-4, DCH-5.

Annexure II Contour maps for the week ending 20.10.10

