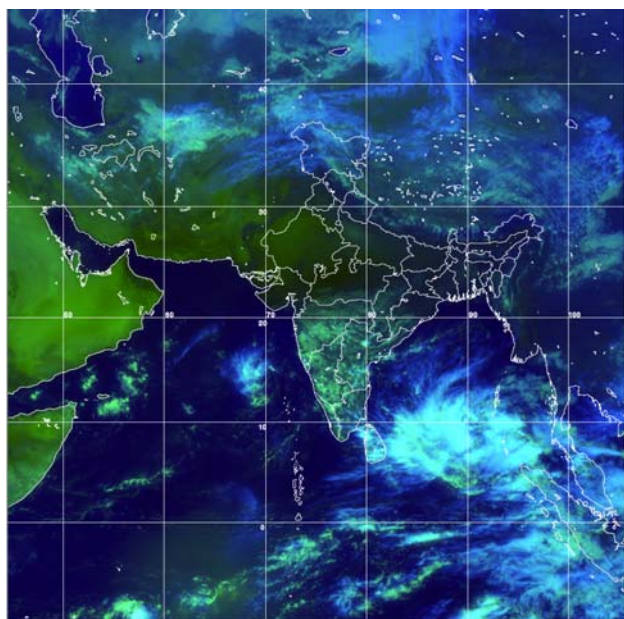




National Agromet Advisory Bulletin

WEDNESDAY, 3rd November, 2010

(For the period 3rd to 7th November, 2010)



Satellite image 0600 UTC Dated
4th November, 2010



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

Farmers in Kerala, Coastal Karnataka, South Interior Karnataka, Tamil Nadu and Andhra Pradesh are advised to postpone harvesting of matured crops and also sowing / transplanting, intercultural operations, application of fertilizers and pesticides and irrigation to plantation crops and vegetable crops in view of occurrence of sufficient rainfall during last week and expected rainfall at many places during next few days.

Dry or mainly dry condition prevailed during last week over most parts of the remaining region in the country. Farmers are advised to undertake harvesting of rice, maize, til, soybean and groundnut in Uttar Pradesh, cotton, rice, moong, sesamum and mash in Punjab, rice, cotton and bajra in Haryana, maize, bajra, moong, cowpea, sesamum and groundnut in Rajasthan, rice, maize, sesamum, groundnut, soybean, green gram etc. in Bihar, maize and groundnut in Jharkhand, rice, sesamum, green gram, black gram etc. in West Bengal and *sali* rice in Assam utilizing relatively dry condition. Farmers in Maharashtra are advised to undertake harvesting of *kharif* rice, *kharif* jowar, soyabean, sunflower and groundnut immediately to avoid the commencement of rainfall at many places shortly.

Farmers are also advised to undertake sowing of *rabi* crops like wheat, gram, mustard, lentil, oat, berseem, pea and planting of garlic and potato and transplanting of broccoli, cauliflower, cabbage, onion and tomato in Delhi, sowing of mustard, gram, field pea, wheat and barley in Jammu, planting of potato and sowing of niger, vegetables, rapeseed and mustard in Assam, sowing of toria and planting of potato in Uttar Pradesh, sowing of mustard, rai, toria, vegetable pea, berseem, lentil and horsegram and planting of potato in Uttarakhand, planting of potato and sowing of mustard, pulses like gram, lentil etc. and transplanting of vegetables like cabbage, cauliflower, chilli, tomato etc. in West Bengal, sowing of gram, raya, barseem, sugarcane and transplanting of vegetables in Punjab, sowing of mustard and berseem in Haryana and sarson, jowar, gram, sunflower, linseed, safflower and rainfed wheat in Maharashtra utilizing residual soil moisture.

Infestation of jassids is reported above ETL in cotton in North Sourashtra Zone of Gujarat. No other major pest incidence is reported during this week from different parts of the country. However, there is possibility of infestation of blast disease and leaf folder in rice and sucking pests like jassids, thrips and white fly in cotton due to continuous cloudy weather and congenial temperature. Farmers are advised to apply Copper oxychloride @ 1250 g per ha in 500 liters of water to control rice blast, Carbaryl 50 WP @ 20 g / 10 litres of water and Monocrotophos 36 WSC @ 11 ml / 10 litres of water to control leaf folder in rice, Dimethoate @ 10 ml or Imidachloprid @ 3 to 4 ml or Acetamiprid @ 3 to 4 g per 10 litres of water to control cotton jassids and Acetamiprid @ 2 g or Trizophos @ 30 ml or Aciphate @ 25 ml or Methyl dimeton @ 10 ml per 10 litres of water to control white fly.

Good *kharif* crop production is anticipated due to good rainfall and favourable weather conditions. Sowing of *rabi* crops is also in full swing due to sufficient residual soil moisture.

Distribution of rainfall (% departure from normal) for the districts of Karnataka, Kerala, Tamil Nadu and Andhra Pradesh during last five Weeks

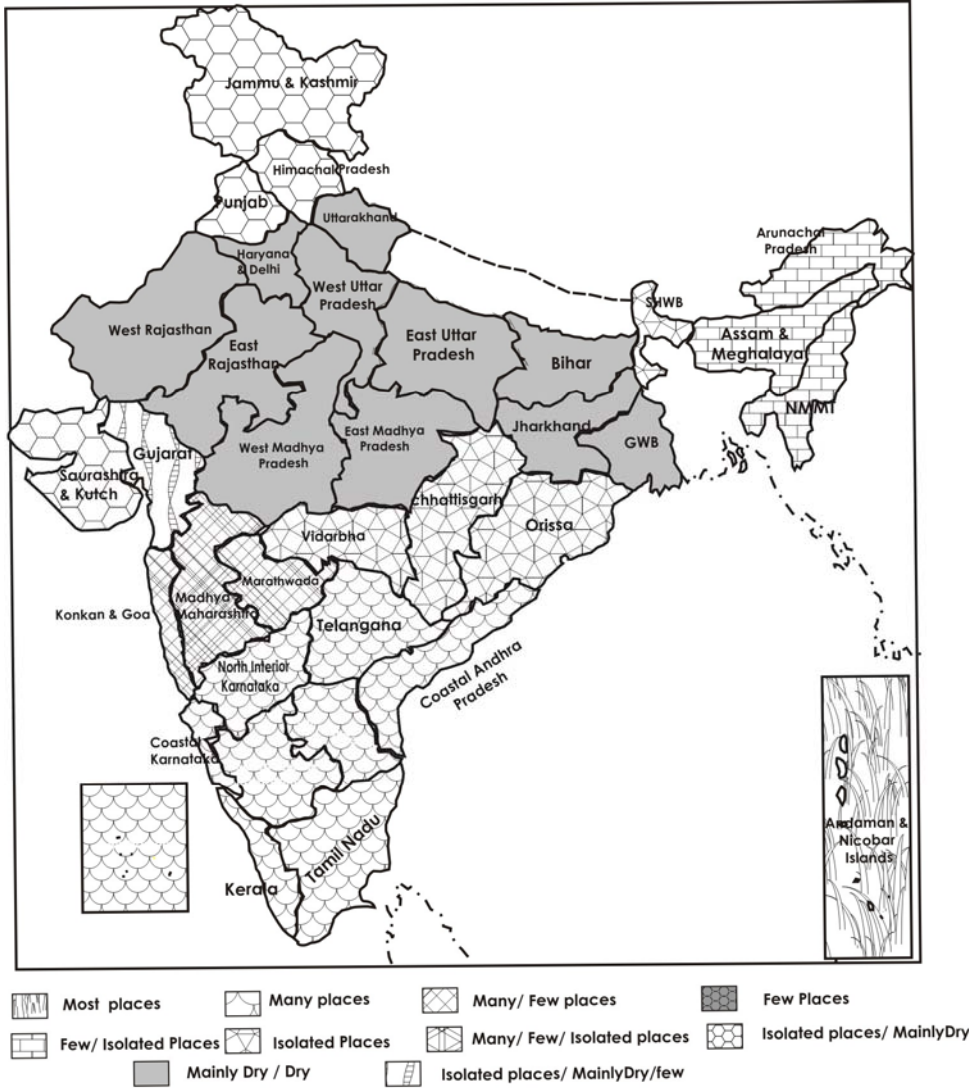
North Interior Karnataka					
	06.10.10	13.10.10	20.10.10	27.10.10	03.11.10
Bagalkote	-62	-99	87	4	-42
Belgaum	57	-96	54	19	-34
Bidar	-77	-99	100	133	-90
Bijapur	-42	-100	164	-46	-38
Dharwad	70	-35	-23	-9	-11
Gadag	-16	-91	44	-44	17
Gulbarga	-51	-93	287	11	-15
Haveri	165	-51	-61	-51	46
Koppal	-77	-92	-32	-7	4
Raichur	-67	-100	6	-48	17
South Interior Karnataka					
Bangalore Rural	-61	-56	23	-87	85
Bangalore Urban	-48	-16	9	-84	135
Bellary	-36	-92	58	34	90
Chamarajnagar	82	-41	-78	-91	267
Chickmagalur	232	-69	-23	62	6
Chitradurga	30	-73	21	-14	393
Davangere	120	-66	-20	39	108
Hassan	151	-45	-53	59	138
Kodagu	56	-40	-42	63	270
Kolar	-84	-96	-43	-42	232
Mandya	-5	-61	-53	-93	228
Mysore	52	-50	-75	-55	443
Shimoga	190	-1	-23	70	43
Tumkur	74	-62	-12	-90	332
Kerala					
Alappuzha	208	127	44	-28	-56
Kannur	-6	34	112	122	66
Ernakulam	89	148	68	-13	0
-2Idukki	32	40	-25	-53	24
Kasaragod	-14	-79	8	296	-85
Kollam	420	102	-26	-68	-49
Kottayam	191	120	32	-43	-35
Kozhikode	73	8	6	207	8
Malappuram	149	-3	-30	42	89
Palakkad	125	28	5	-12	68
Pathanamthitta	301	36	-10	-74	-22
Thiruvananthapuram	548	147	-77	-93	-65
Thrissur	66	239	78	10	140
Wyanad	39	-28	-76	-54	93
Tamil Nadu					
Chennai	-24	-96	-44	-98	41
Coimbatore	153	-93	-99	-69	202
Cuddalore	-29	-85	-79	-71	167
Dharmapuri	-78	-59	-13	-33	264
Dindigul	280	-6	-83	-9	143
Erode	64	-81	-93	-53	164
Kanchipuram	19	-26	-91	-27	51
Kanyakumari	874	250	-92	-96	-46
Karur	-57	-84	-90	-41	128
Krishnagiri	-30	-52	-24	-50	322
Madurai	67	-22	-74	-18	110
Nagapattinam	37	-79	-74	-99	58

	06.10.10	13.10.10	20.10.10	27.10.10	03.11.10
Namakkal	-27	-65	-72	-64	298
Nilgiris	139	38	-71	-30	139
Perambalur	-39	-58	-17	-71	209
Pondicherry	72	-81	-48	-26	54
Pudukottai	-29	-42	-37	-67	-27
Ramanathapuram	300	-29	-92	-67	76
Salem	-2	-71	-54	-41	325
Sivaganga	76	30	-73	-85	88
Thanjavur	41	30	-35	-70	102
Theni	169	-63	-93	-74	70
Tirunelveli	459	-18	-99	-92	-13
Tiruvallur	-12	-85	-85	-72	124
Tiruvannamalai	-59	-56	-67	-10	280
Tiruvarur	107	-98	-67	-85	122
Tuticorin	182	-92	-94	-81	18
Trichy	-49	-21	-56	-59	70
Vellore	-71	-53	-26	-53	184
Villupuram	-42	-71	-57	-41	203
Virudhunagar	28	-77	-91	-80	205
Andhra Pradesh					
Coastal Andhra Pradesh					
East Godavari	-28	-67	-68	-28	1113
Guntur	-34	-44	-36	10	172
Krishna	11	-62	-34	98	460
Nellore	-24	-92	-91	-53	264
Prakasam	35	-59	-61	-33	179
Sirkakulam	-16	35	77	0	203
Visakhapatnam	-5	-23	-67	-28	751
Vizianagram	-5	-34	-21	39	396
West Godavari	-4	-86	-52	-9	661
Telangana					
Adilabad	-59	-98	375	286	-52
Hyderabad	-25	-100	72	-20	-19
Karimnagar	-47	-99	263	349	21
Khammam	-21	-94	54	214	301
Mehabubnagar	-68	-75	63	-56	0
Medak	-73	-100	321	70	45
Nalgonda	-34	-87	-5	110	112
Nizamabad	-30	-58	556	277	-100
Rangareddy	-39	-98	80	148	50
Warangal	-64	-92	95	193	2
Rayalaseema					
Anantapur	-87	-76	23	54	494
Chittoor	-58	-96	-25	-48	235
Cuddapah	-33	-87	-72	-21	161
Kurnool	-62	-83	-80	208	-12

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 6th November, 2010)



Weather Warnings

- Heavy to very heavy rainfall would occur at a few places over Andaman & Nicobar Islands during next 48 hours.
- Strong winds with speed reaching 35 -45 kmph likely over and around Andaman & Nicobar Islands and adjoining southeast Bay of Bengal during next 12 hours and 45-55 kmph during next 24 hours. Fishermen are advised to be cautious while venturing into the sea.

Weather Outlook (upto 0830 hours IST of 2nd November, 2010)

- Widespread rainfall activity would occur over peninsular India and fairly widespread over west coast.
- The cyclonic storm which would develop over south Bay of Bengal, move in a west-northwesterly direction towards north Tamilnadu-south Andhra Pradesh coasts.

Zonewise Agromet Advisories

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

- **Realised Rainfall:** Gajapati, Ganjam, Koraput and Malkangiri districts of Orissa received good rain during last week. No significant rain occurred in most of the remaining districts of the States of this region.
- **Rainfall Forecast:** Isolated rain will occur in Orissa, Sub Himalayan West Bengal and Sikkim and dry or mainly dry weather will prevail over Gangetic West Bengal, Bihar and Jharkhand during the period.
- **Major Crops:**
 - Early sown rice (grain maturity / harvesting), late sown rice (grain formation / maturity), sesamum (early maturity / maturity), groundnut (early maturity / maturity), soybean, green gram (early maturity / maturity), black gram, kulthi (pod formation / early maturity), mustard (sowing / early vegetative), maize and wheat (sowing), potato (planting), vegetables like cauliflower, brinjal etc. (sowing / early vegetative / vegetative) in Bihar.
 - Early sown rice (maturity / harvesting), late sown rice (grain formation / early maturity), sesamum (early maturity / maturity), groundnut (maturity / harvesting), urd, green gram, and niger (maturity / harvesting), pignon pea (flowering / pod formation), kulthi (flowering / pod formation) and potato (planting), Onion, toria, mustard, pea, gram, lentil, wheat, barley, linseed etc. (sowing / early vegetative), tomato, cabbage and cauliflower (nursery sowing / transplanting / early vegetative), chilli and brinjal (nursery sowing / transplanting) in Jharkhand.
 - Rice (grain formation / early maturity / maturity / harvesting), *kharif* groundnut (early maturity / maturity / harvesting), pulses, soybean, sesamum and ragi (early maturity / maturity / harvesting), cotton (flowering / boll formation), *rabi* vegetable crops (sowing / germination / early vegetative / vegetative) in Orissa.
 - Sugarcane (cane development), *rabi* vegetable crops (sowing / germination / early vegetative / vegetative), *aman* rice (grain formation / early maturity / maturity), pulses (early maturity / maturity), arhar (flowering / pod formation), sesame (maturity / harvesting) and groundnut (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 Gajapati, Ganjam, Koraput and Malkangiri districts of Orissa received good rain during last week, postpone irrigation to the standing crops in these districts. As most of the remaining districts of the States of this region received no significant rain during last week, apply irrigation to the crops.
 - Taking the advantage of dry weather, farmers in West Bengal are advised to undertake harvesting of *aman* rice, pulses like green gram and black gram, sesame and groundnut.
 - In West Bengal, farmers are advised to undertake planting of potato and sowing of mustard, wheat, pulses like gram, lentil etc., sowing of vegetables like raddish and transplanting of vegetables like cabbage, cauliflower, chilli, tomato etc.
 - 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, oilseed crops like mustard, sarson, sunflower and vegetables like radish, carrot, turnip, beet etc. and transplanting of seedlings of tomato, chilli, knolkhol, cauliflower and cabbage in South Bihar Alluvial Zone and also sowing of mustard, maize and wheat and planting of potato in North West Alluvial Plain Zone in Bihar.
 - Farmers in Bihar are advised to harvest the matured *kharif* crops like rice, sesamum, groundnut, soybean, green gram, black gram etc.
 - Farmers in Jharkhand are advised to harvest the matured *kharif* crops like rice, sesamum, groundnut, urd, green gram and niger.

- Farmers in Jharkhand are advised to undertake land preparation and sowing of onion, wheat, barley, peas, toria, mustard, gram, lentil and linseed and planting of potato and sowing for raising seedlings of vegetables like tomato, cauliflower and cabbage and also transplanting of chilli and brinjal 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.
- Due to continuous cloudy weather, attack of aphids is reported and likely to be enhanced in toria and mustard in next few days in Jharkhand. Due to cloudy weather, infestation of early and late blight intensity in potato is also likely to become more prominent. Apply suitable plant protection measures to manage the same.
- Due to prevailing cloudy weather, root-rot of cabbage and cauliflower became prevalent in New Alluvial Zone of West Bengal. Apply Karjet @ 2 g per litre of water or Blitox or Fitolan @ 3 to 5 g per litre of water at the collar region.

NORTHEAST INDIA [ARUNACHAL PRADESH, NAGALAND, MANIPUR, MIZORAM & TRIPURA, ASSAM, MEGHALAYA]

- **Realised Rainfall:** No significant rain occurred in most of the districts of the States of this region during last week.
- **Rainfall Forecast:** Rain is likely to occur at a few places over the States of this region during next 24 hours and at isolated places thereafter.
- **Major Crops:**
 - *Rabi* vegetables (nursery sowing / transplanting / germination / early vegetative), sugarcane (cane development), *sali* rice (grain formation/ maturity / harvesting), arhar (flowering / pod formation), sesamum (pod formation / maturity) and black gram and green gram (pod formation / maturity), rapeseed and mustard (sowing / seedling), potato (planting) in Assam.
 - Rice (maturity / harvesting), *rabi* vegetables like cauliflower, cabbage, tomato etc. (nursery sowing / transplanting / early vegetative), pea and carrot (sowing), orange (fruiting) and ginger and turmeric (vegetative) in Arunachal Pradesh.
 - *Aman* rice (grain formation / maturity / harvesting), green gram, black gram and groundnut (sowing) and *rabi* vegetables (sowing / germination / transplanting / early vegetative / vegetative) in Tripura.
 - *Sali* rice (grain formation / maturity / harvesting), *boro* rice (nursery sowing / transplanting), wheat and rapeseed and mustard (sowing), *rabi* vegetables (nursery sowing / transplanting / early vegetative / vegetative) in Meghalaya.
- **Advisory:**
 - As most of the districts of the States of this region received no significant rain during last couple of weeks, apply irrigation to the standing crops.
 - Taking the advantage of relatively dry weather, farmers are advised to harvest the matured *kharif* crops like rice, *kharif* pulses etc. in the States of this region.
 - Farmers in Assam are advised to undertake sowing of rapeseed and mustard, planting of potato and nursery sowing of winter vegetables in Hills Zone, planting of potato and sowing of rapeseed of mustard, niger, lentil and pea in Lower Brahmaputra Valley Zone, sowing of rapeseed and mustard, planting of potato and nursery sowing and transplanting of knolkhol, cauliflower, early maturing cabbage, tomato, brinjal and raddish in Upper Brahmaputra Valley Zone, sowing of rapeseed and mustard and nursery sowing of winter vegetables in Barak Valley Zone, sowing of *rabi* pulses like lentil, rajmah, pea, lathyrus etc. and oilseeds like rapeseed, mustard, linseed and niger etc.,

vegetables like cauliflower, cabbage, brinjal and carrot and planting of potato in Central Brahmaputra Valley Zone and sowing of *boro* rice and rapeseed and mustard and vegetables like knolkhol, radish, brinjal, carrot 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 carrot and pea. Farmers are also advised to prepare field for potato and undertake planting.
- Farmers in Meghalaya are advised to undertake nursery sowing and transplanting of *boro* rice, sowing of wheat and rapeseed and mustard and also nursery sowing and transplanting of *rabi* vegetables.
- Prepare land and undertake sowing of gram, mustard and peas and winter season vegetables like French bean, pea, tomato etc. in Nagaland.
- Farmers in Mizoram are advised to undertake sowing of crops like carrot, raddish, peas, *rabi* onion and transplanting of other vegetables crops like cauliflower, cabbage, capsicum and tomato.
- Recommended varieties of major crops to be sown in different States of the region are mentioned in Annexure I.
- 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 favourable 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.

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

- **Realised Rainfall:** Dry weather prevailed over the states in the region.
- **Rainfall Forecast:** Either mainly dry or dry weather is likely over the region during next 3 days except in Himachal Pradesh and Jammu & Kashmir where rain is likely at isolated places after 24 hours.
- **Major Crops:**
 - Rice (maturity), jowar and maize (grain maturity / harvesting), pigeon pea (grain development), vegetable crops (flowering / fruiting), wheat, gram, oats, lentil, pea, garlic, potato, mustard and sarson (sowing) in Delhi
 - Rice (grain maturity), apple (harvesting), vegetables (vegetative / flowering / fruiting) in Himachal Pradesh.
 - Vegetable crops (flowering / fruiting / harvesting), rice (harvesting), maize (harvesting), mung (pod maturity / harvesting), sunflower (flowering), gobi sarson (early vegetative), toria (vegetative) in Jammu & Kashmir.
 - Sugarcane (grand growth), rice, ragi (harvesting), toria, mustard (sowing / early vegetative) in Uttarakhand.
 - Sugarcane (vegetative), cotton (boll maturity / picking), rice (maturity), maize (grain maturity / picking), mung, mash (pod maturity / picking) in Punjab.
 - Sugarcane (vegetative), cotton (boll maturity / picking), rice (maturity), guar and bajra (harvesting) in Haryana.
 - Rice (grain maturity / harvesting), maize, urd, moong, til, soybean, groundnut, jowar and bajra (grain maturity / harvesting), sugarcane (grand growth), vegetable crops (vegetative / flowering) in Uttar Pradesh.
 - Sugarcane (grand growth), vegetable crops (flowering / fruiting / harvesting), soybean, mung, cluster bean, sesamum and groundnut (grain maturity / harvesting) in Rajasthan.
 - This is proper time for land preparation and sowing of *rabi* crops like mustard, taramira and rapeseed in the region.

- **Advisory:**

- Farmers are advised to undertake land preparation and sowing of rabi crops like toria, potato, mustard, rai, vegetable pea, berseem, gram and sarson may be undertaken utilizing the residual soil moisture in various states of the region. Farmers are advised to complete harvesting of kharif crops and undertake post-harvesting operations. Arrange for proper storage facilities for the harvested produce.
- Farmers in Uttar Pradesh are advised to harvest matured crops of rice, maize, black gram, green gram, til, soyabean and groundnut. Undertake field preparation and sowing of toria and early rabi vegetables utilizing the residual soil moisture.
- There are chances for rainfall during next three days in Himachal Pradesh. Farmers in Mid Hills Sub-Humid (Solan, Shimla, Sirmaur) of Himachal Pradesh are advised to undertake sowing of wheat, barley and oat. The sowing of gram and lentil in lower belt may be completed. Also undertake sowing of raddish coriander, cabbage, knoll-khol, broccoli, parsley, lettuce, fennel, cauliflower, onion and peas. Garlic can also be planted in the field. New planting of tea seedlings and gap filling in the early planted tea orchards may be continued
- Farmers in Delhi region are advised to undertake sowing of wheat, gram, mustard, lentil, oat, berseem, pea and planting of garlic and potato and transplanting of broccoli, cauliflower, cabbage, onion and tomato.
- Farmers in Uttarakhand are advised to undertake sowing of wheat (varieties in Annexure I).
- 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 land preparation and sowing of wheat, gram and mustard, utilizing the residual soil moisture. Raise nursery for autumn vegetable crops like tomato, brinjal, cauliflower, cabbage and raddish (varieties given in Annexure I).
- Farmers in Semi Arid Eastern Plain Zone (Dausa, Ajmer, Tonk, Jaipur districts) in Rajasthan are advised to undertake sowing of rainfed wheat, mustard and barley 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 gram, 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 wheat from last week of October (varieties in Annexure I). This is optimum time for sowing of Gobhi sarson (GSC-5, GSL-1, GSL-2, PGSH-51, Hyola (PAC-401), African sarson PC-5 and raya. Continue sowing of raya, gram and complete planting of sugarcane and transplanting of cabbage, mid season cauliflower, mid season pea for green pods and Mithi *Phali* (edible pod) utilizing the residual soil moisture.

SOUTH INDIA [TAMIL NADU, ANDHRA PRADESH, KERALA, KARNATAKA, LAKSHADWEEP, ANDAMAN & NICOBAR ISLANDS]

- **Realised Rainfall:** All the districts in Kerala except Kasargod and Thiruvanthapuram districts, all the districts in Coastal Karnataka and South Interior Karnataka, all the districts in Tamil Nadu except Pudukkottai, all districts in Andhra Pradesh except Hyderabad, Mehubnagar, Nizamabad, Rengareddy

and Warangal districts.

- **Rainfall Forecast:** Rain is likely to occur at many places over the region during next three days.
- **Major Crops:**
 - *Mundakan* rice is at vegetative / tillering stage. Pepper is at maturity stage and arecanut is at nut development / maturity stage in Kerala. New planting is continued for coconut, black pepper, cocoa, cashew, nutmeg, mangosteen, rambutan etc.
 - *Late samba / thaladi* rice (transplanting / vegetative), groundnut (maturity / harvesting), sugarcane (cane development), banana (fruit bearing stage) in Tamil Nadu. This is proper time for sowing or rainfed crops.
 - *Kharif* crops viz., maize is at harvesting stage, paddy crop is at grain development / maturity stage and groundnut is at pod development / maturity stage, *rabi* vegetables (nursery / transplanting) in Andhra Pradesh.
 - Pigeon pea (grain formation) and sugarcane (cane development). This is proper time for sowing of gram, safflower, *rabi* sorghum and sunflower in Karnataka.
- **Advisories:**
 - Northeast monsoon has been vigorous over Rayalaseema and South Interior Karnataka and active over Coastal Andhra Pradesh. Rainfall occurred at all the districts in Kerala except Kasargod and Thiruvanthapuram districts, all the districts in Coastal Karnataka and South Interior Karnataka, all the districts in Tamil Nadu except Pudukkottai, all districts in Andhra Pradesh except Hyderabad, Mehabubnagar, Nizamabad, Rengareddy and Warangal districts; farmers are advised to postpone intercultural operations, application of fertilizers and pesticides and irrigation to plantation crops and vegetable crops. Sowing / transplanting of crops may be withheld at the time of heavy rainfall.
 - Due to intermittent rains in Eastern Dry Zone of Karnataka take precautionary measures for harvesting of early sown crops and vegetable crops
 - Waterlogging is reported in the crop fields in North Coastal Zone (Srikakulam, Visakhapatnam, Vizainagaram) in Andhra Pradesh due to rains. This also leads to the attack of whitefly. As there are chances for rainfall during next five days, drain out excess water from the fields.
 - Sufficient rainfall received in High Altitude and Krishna Godavari Zones of Andhra Pradesh. Farmers are advised to undertake land preparation and sowing of black gram, green gram, maize and sunflower in uplands as *rabi* 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.
 - Farmers in North Transition Zone (Dharwad, Haveri, Belgaum) and North East Transition Zone (Bidar) are advised to undertake sowing of *rabi* sorghum and Bengal gram.
 - 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 planting of coconut, black pepper, cocoa, cashew, nutmeg, mangosteen and rambutan in South Zone of Kerala.
 - Farmers in Cauvery Delta Zone (Thanjavur, Nagapattinam, Thiruvarur, Karur, Perambalur and Tiruchirapalli) of Tamil Nadu are advised to undertake transplanting of *late samba / thaladi* rice. If sowing is not yet undertaken under rainfed conditions in Southern Zone of Tamil Nadu, farmers are advised to undertake sowing of sunflower, coriander etc, which are suitable for very late sowing (November 1st week).

- Prevailing weather conditions are favourable for the incidences of blast, sheath rot, sheath blight, bacterial leaf blight, rice bug in rice, rhinoceros beetle, red palm weevil, bud rot disease and stem bleeding in coconut, spindle bug and yellow leaf disease in arecanut, pollu beetle, quick wilt and burrowing nematode in pepper, Sigatoka leaf spot, burrowing nematode and pseudo stem borer in banana, rhizome rot disease in cardamom and berry borer in coffee in Kerala. Farmers are advised to undertake plant protection measures to control the pests and diseases.
- Weather conditions are favourable for the incidences of blast disease in rice in Cauvery Delta Zone in Tamil Nadu. Farmers are advised to drain the excess water in the field. Farmers are advised to spray Propiconazole (Tilt) 2ml in one liter of water.
- High cloud cover and humidity forecasted during the coming days in Southern Zone of Tamil Nadu are conducive for the incidence of stem borer in maize, aphids and sphingids in green gram and stem weevil in cotton. Undertake plant protection measures to control the pests.
- Plant protection measures may be undertaken after spells of rain in the region
- **Animal husbandry:**
 - Care should be taken against the decrease in day temperature in Karnataka for silk worm and poultry and dairy rearing houses by maintaining optimum room temperature and hygiene condition. Vaccination for cattle's to be taken up against the out break foot and mouth and rinder pest
 - Prevailing weather conditions are congenial for the occurrence of Hemorrhagic Septicemia and Black Quarter in cattle and ET and sheep pox in sheep in Andhra Pradesh. Undertake vaccination to prevent from infection.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

- **Realised Rainfall:** No significant rain occurred over the region during last week.
- **Rainfall Forecast:** Rain is likely to occur at a few places during next 24 hours over Konkan and Goa, Madhya Maharashtra and Marathwada and increase thereafter. Isolated rain is likely to occur during the period over Vidarbha region. Either dry weather will prevail or isolated rain will occur over Gujarat region during next 48 hours and rainfall is likely to increase thereafter. Either dry weather will prevail or isolated rain will occur over Saurashtra and Kutch region during the period.
- **Major Crops:**
 - *Kharif* rice (maturity / harvesting in East Vidarbha and grain formation in late varieties and grain maturity / harvesting in early and medium maturing varieties in Konkan, Kolhapur, Nashik & Pune (western parts) divisions), *kharif* jowar (grain maturity / harvesting), soyabean (harvesting), cotton (boll formation / maturity / picking), sunflower (seed maturity / harvesting), groundnut (pod maturity / harvesting), red gram (secondary branching / flowering), irrigated cotton (boll formation / boll maturity / picking), *rabi* jowar & safflower (sowing / germination), gram, linseed and maize (sowing) and rainfed wheat (sowing) in Maharashtra.
 - Rice (maturity / harvesting), groundnut (maturity / harvesting), cotton (boll formation / boll maturity / picking), maize (maturity / harvesting), bajra (maturity / harvesting), pigeon pea (flowering / pod formation), sesamum (maturity / harvesting), soybean, green gram and black gram (maturity / harvesting) and castor (spike formation), garlic, wheat, gram, mustard, *rabi* fennel, cumin and coriander (sowing), sugarcane (planting) and cauliflower (transplanting) in Gujarat.
- **Advisory:**
 - As most of the districts of Gujarat State and Vidarbha region received no significant rain during last couple of weeks and weather is likely to be dry or only isolated rain may occur during next few days, farmers are advised to apply irrigation to the standing crops. As rain is likely to occur over Konkan and Goa, Madhya Maharashtra and Marathwada, farmers are advised to postpone irrigation to the crops.
 - Undertake harvesting of already matured crops like *Kharif* rice, *kharif* jowar, soyabean, sunflower

and groundnut and picking of cotton in Maharashtra. Perform the same immediately in Konkan and Goa, Madhya Maharashtra and Marathwada before the commencement of rain.

- 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, mustard, garlic, wheat, gram, *rabi* fennel, cumin, coriander etc. and vegetables like carrot, onion, raddish, brinjal and transplanting of vegetables like cauliflower and cabbage and also planting of sugarcane in Gujarat State during this period.
- Recommended varieties of major crops to be sown in different States of the region are mentioned in Annexure I.
- Taking the advantage of dry condition, intercultural operation and weeding may be carried out in standing crops in Gujarat State and also in Vidarbha region of Maharashtra State.
- Prevailing weather is favourable 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.
- There is attack of sucking pests like jassids, thrips and white fly on cotton in Maharashtra. For control of jassids and leaf eating caterpillar, spray Dimethoate @ 10 ml or Imidachloprid @ 3 to 4 ml or Acetamiprid @ 3 to 4 g per 10 litres of water. For control of white fly, spray Acetamiprid @ 2 g or Trizophos @ 30 ml or Aciphate @ 25 ml or Methyl dimeton @ 10 ml per 10 litres of water.
- The incidence of rice leaf folder is noticed on rice in some parts of the Nagpur division; spray the crop with Carbaryl 50 WP @ 20 g / 10 litres of water and Monocrotophos 36 WSC @ 11 ml / 10 litres of water.
- There is possibility of incidence of rice ear head bug on maturing grains in Konkan; dusting of 2% Methyl Parathion @ 20 kg / ha may be done.
- There is possibility of attack of buck eye rot on tomato fruit and downey mildew on cucurbitaceous crop in Maharashtra due to cloudy weather and favourable temperature. For controlling the same, spray Metalaxyl 8% @ 200 g per 100 litres of water.
- The atmosphere is favourable for sucking pests in cotton in South Gujarat region; spray acetamiprid 20 SP @ 2 g / 10 litres of water.
- Infestation of jassids crossed ETL in North Saurashtra Zone. Spray Imidachloprid @ 4 ml or Acetamiprid @ 2 g / 10 litres of water.
- Apply plant protection measures in Konkan and Goa, Madhya Maharashtra and Marathwada before the commencement of rain.

CENTRAL INDIA [MADHYA PRADESH, CHHATTISGARH]

- **Realised Rainfall:** Some districts in East Madhya Pradesh and Chattishgarh received rain during the week.
- **Rainfall Forecast:** Mainly dry weather is likely to prevail over the region.
- **Major Crops:**
 - *Kharif* crops like soyabean, maize, sorghum, sesame, green gram and black gram (harvesting) in Madhya Pradesh.
 - *Kharif* crops like soyabean, maize, green gram etc (harvesting), 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 sowing of *rabi* crops like wheat, *rabi* vegetables, mustard and wheat.
 - Farmers in Kymore Plateau and Satpura Hill Zones of Madhya Pradesh are advised to sow the crops like gram, mustard, linseed and lentil as temperatures and moisture are optimum for sowing of *rabi*

crops like chickpea, mustard, linseed, lentil etc. Arrange the inputs like seed, fertilizers, and fungicides. Also sufficient soil moisture is available in the field hence farmers are advised to sowing of pea and potato at earliest.

- Farmers in Malwa Plateau zone are advised for sowing of winter season sugarcane and garlic and prepare nursery for onion. Farmers are advised to prepare nursery of winter vegetables in Gird Zone in Madhya Pradesh.
- Farmers in Central Narmada Valley Zone of Madhya Pradesh are advised to start land preparation for sowing of lentil, gram and mustard and planting of sugarcane.
- At present the minimum temperature is around 20°C which is favourable for the sowing of rabi crops in Chattisgarh Plain Zone specially gram, wheat and mustard. Moreover, due to the rains received during the month of October, there is sufficient moisture in the soil. Looking to this, farmers are advised to undertake sowing of rabi crops like gram, pea, linseed and other crops just after the harvesting of kharif crops. Wherever irrigation facility is available sowing of wheat and mustard can also be done. To skip the infestation of aphids in mustard farmers are advised to complete the sowing of the crop by the first week of the November.
- At present the weather conditions are suitable for the sowing of the potato in Chattisgarh Plain Zone. Farmers are hence advised for the sowing of the said crop. Before the sowing, the seeds should be treated with Thiram @ 3 g per kg of seed or Bavistine @ 2g per kg seed.
- Present weather conditions are favourable for painted bug (Bagrada) in mustard crop in Gird Zone in Madhya Pradesh in recently sown crop, to control this insect, spray of Dimethate @1 ml /litre of water is effective or dust methyl parathion @12-16 kg/ ha.
- Present weather conditions are favourable for Bilstor Bittle in Bundelkhand Zone, spray Tryjophos 40 EC 2 ml per litre of water and also pod borer in brinjal, for this spray Melethion 50 EC in 1 ml of water

Animal Husbandry

- As humid weather condition is prevailed in Kymore Plateau and Satpura Hill Zones hence keep cattle's in dry and clean place. Create neem leaves smoke in night to save them from mosquitoes and bees. Also temperature is decreasing therefore take precaution for live stock against the coolness.

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, TS-46 etc.

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

Tomato: Punjab Chhuhara, Arka Alok, Pusa Rubi, Sioux, Punjab Keshri, Arka Abhijit, BT-1, VC-48-1 etc.

Lentil: B-77, L-9-12, PL406 and PL81-4.

Pea: T-163, Boneville, HUP-2, Rachna and Pant 14.

Carrot: Nuntez.

Boro rice: Jyotiprasad, Kanaklata, Jaymoti, Boro-1, Boro-2, Masuri etc.

Bihar

Potato: Kufri Lalima, Kufri Kuber and Kufri Alankar, Kufri Jyoti, Kufri Chandramukhi, Kufri Ahoka, Ranjendra Aloo 1, 2 and 3, Kufri Badshah.

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

Gram: Rajendra Chana, K.P.G. 59, Pusa 256, RAU 52, KWR 108, Uday, SG2.

Lentil: Pusa 25, Pant L 406, Mallika, Arun, Pant L 639, BR 25.

Peas: Ratna, Aprna, Harbhajan.

Mustard: Baruna, Pusa Bold and Kranti.

Rapeseed: Rajendar Rai Pichheti, Rajendra Anukul and Rajendra Suflam.

Sarson: Rajendra Sarson-1, Swarna etc.

Sunflower: Morden, Surya, Paradovic, KBSH 1, 44.

Maize: Saktiman 1, 2, 3, 4, Laxmi, Rajendra Shankar Makka 1 and 2.

Jharkhand

Toria: PT-303, Panchali, Bhavani etc.

Mustard: Pusa Jaikisan, Siwani, Varuna and Kranti, Pusa Bold.

Potato: Kufari Chandramukhi, Kufari Ashoka and Kufari Kanchan.

Pea: Arkel and Azad P-1 for vegetable and D.D.R 23 and swarn Rekha for grain.

Gram: Birsa Chana-3, BG-372, BG-256, KWR-108, Pant G-186, Pant G-114 and BG-1053, BG-1003, KAK-2.

Lentil: P.L.-406, P.L.-639, D.P.L.-15, D.P.I.-62.

Linseed: Shubhra, T-397, Sweta etc.

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

Onion: Pusa Red, Pusa Ratnar, N-53, Early Grano, Light Red, Arka Niketan, Agrifound Dark Red.

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.

Wheat: Rajlakshmi, HP 1701, Janak, HP-1209, BW-11, Sonalika and UP-262.

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

Wheat: PBW-396, PBW-175, IWP-72 and RSP-81 (jitto) for rainfed areas and HD2428, HD2329 and CPAN3004 under rainfed and irrigated areas

Rajasthan

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.

Gram: GNG-469, GNG-663, RSG-44, RSG-888 and for rainfed C-235

Mustard: T-59, Pusa bold, Bio-902, RGN-73 and for rain fed RGN-48

Tomato: Pusa Rubi, Pusa Earli and Vihar

Brinjal: Pusa Summer Prolific Round, Pusa Summer Prolific Long, Meghdoot, Navin and Arka Bahar

Cauliflower: Pusa Snowball 1 and Hissar 1

Cabbage: Pusa Drum Head and Hybrid 10

Radish: Japanese White and Hill Queen

Uttarakhand

Wheat: Under irrigated conditions: UP-1109, VL-804, VL-738, VL-421, HS-240; un-irrigated conditions: VL-616, HS-277, VL-829 etc

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.

Gram: Kabuli type - Pusa 267, Pusa 1003, Pusa Chamatkar; local type – C235, Pusa 246, P.B.G. 1, Pusa 372

Mustard:- for irrigated conditions- Rohini, Pusa Jaikisan, Pusa Bold, Vardan, Jaggannath, Jawahar and for rainfed conditions: Pusa Barani, Pusa Aghrani, RH 10.

Potato:- Kufri Badshah (Late blight tolerant), Kufri Jyoti (Short duration), Kufri Alankar, Kufri Chandramukhi.

Haryana

Barseem: Mescavi.

Raya: PBR-210 and PBR 91

Gram: PDG 3 and PDG 4

Punjab

Wheat: DBW-17, PBW-502, PBW-343, WH-542, and durum wheat PDW 291, PDW-274 and PDW-233 under irrigated conditions and PBW-527, PBW-175 under rainfed conditions.

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)**Raddish:** Japani White, Early Mino White,**Cabbage** Snow ball K-1 Palam Uphar, Golden Acre,**Knol khol** White Bina,**Broccoli** Palm Kanchan, Palam Vichtrta, Palam Samridhi,**Cauliflower** Pride of India,**Peas:** Lincoln, Priya**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****Wheat:** Arnej - 206, GW-1 & 2.**Rapeseed:** Guj. Rapeseed-1 or 2.**Mustard:** Varuna, Gujarat Mustard-1, Gujarat mustard-2.**Gram (rainfed):** Gujarat Chickpea – 1 & 2.**Gram (irrigated):** Gujarat Gram-1 or ICC-4.**Garlic:** Gujarat Garlic 1, 2 & 10.**Cabbage:** Kranti, Golden Acre, Pride of India, Copen Market etc.**Cauliflower:** Early maturing varieties like Pusa Early, Pusa Dipali, Pusa Kartiki, Early Kuvvari etc. and for medium duration varieties like Pusa synthetic, Early Snowball, Snowball 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.**Cumin:** Guj. Cumin- 2, 3, 4.**Coriender:** Guj. Coriander – 1, 2.**Madhya Pradesh****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 in rainfed and semi irrigated condition and rabi Maize cv.: JM- 421, JM- 8, JM- 12, Chandan makka- 3, Ganga- 3, Ganga- 4, HPQM – 1 in irrigated condition.

Annexure II Contour maps for the week ending 03.11.10

