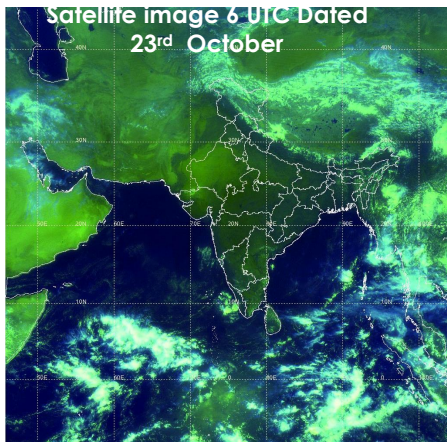




National Agromet Advisory Bulletin

Thursday, 22nd October, 2009 (For the period 22nd to 26th October, 2009)



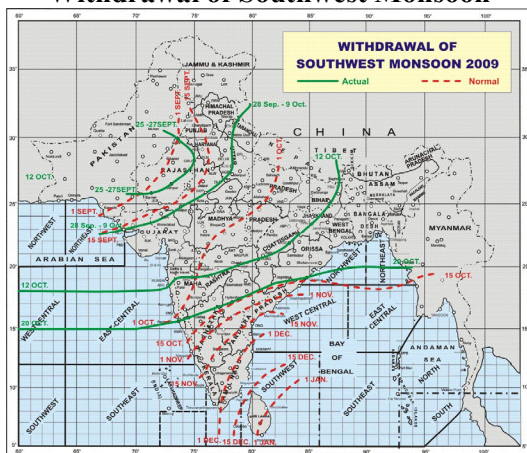
Rainfall Forecast valid upto 1730 hours IST of 25th October, 2009

- **Isolated Places:** South Coastal Tamil Nadu, Kerala.
- **Mainly dry Weather:** North West India, East India, North East India, West India, Central India, South India except South Coastal Tamil Nadu, Kerala.

Weather Outlook from 1730 hrs IST of 25th October to 1730 hrs IST of 27th October, 2009

Increase in rainfall activity is likely over extreme south peninsular India.

Withdrawal of Southwest Monsoon



Southwest monsoon further withdrew from remaining parts of Bihar, Jharkhand, Chhattisgarh, Vidarbha, Madhya Maharashtra, Marathwada and Konkan, entire West Bengal & Sikkim, Orissa and northeastern States and some parts of Telangana, North Interior Karnataka and Goa on 20th October, 2009.

Salient advisories

- As there was excess rainfall over Nagaland, Manipur, Mizoram and Tripura during last week, postpone irrigation, intercultural operations and application of fertilizers and pesticides to the standing crops.
- Farmers are advised not to apply irrigation in South Coastal Tamil Nadu, Kerala as there is chance of isolated rainfall in these regions.
- As there was no significant rain in the remaining states during last week and mainly dry weather/no significant rain is likely to occur for next five days, farmers are advised to apply need based irrigation to the standing crops.

Advisories for *rabi* sowing

- Prepare the land and undertake sowing of berseem and raya in Punjab and Haryana
- Farmers are advised to undertake field preparation and sowing of *rabi* crops like sorghum, gram, cowpea and maize in Karnataka and redgram, rajmah, cowpea and niger in Andhra Pradesh.
- As the weather is likely to be favourable undertake sowing of early peas, leafy vegetables and raddish in Himachal Pradesh.

Advisories for pest and disease

- Under favourable weather condition, there are chances of pest and disease incidences in the following regions:
 - Powdery mildew in cucurbit in Delhi
 - Gundhi bug in rice in Uttar pradesh
- Farmers are advised to undertake plant protection measures, if required.

Issued by

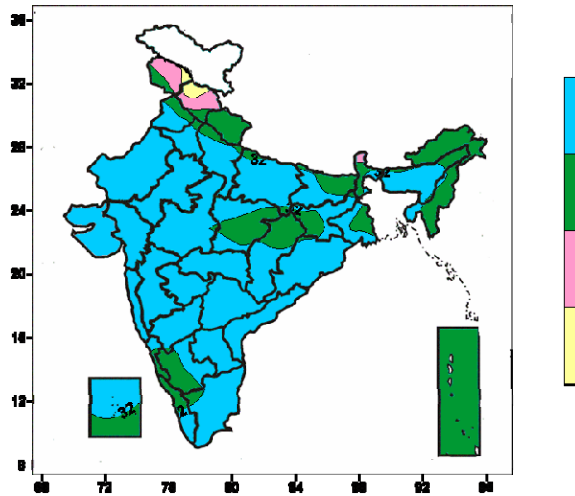
National Agrometeorological Advisory Service Centre,

Agricultural Meteorology Division, India Meteorological Department, Shivajinagar, Pune.

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

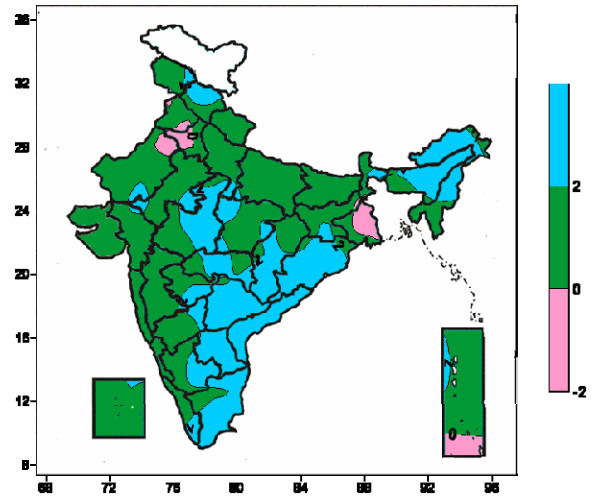
Contour maps for the week ending 21.10.09

Actual Mean Maximum Temperature (°C) in India for the week ending 21.10.09



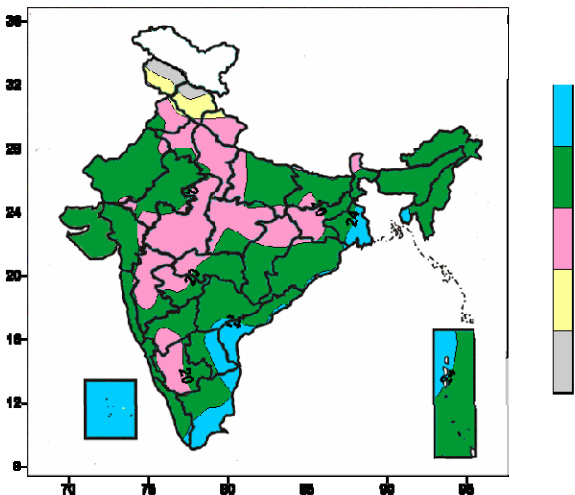
Actual Mean Maximum temperature ranged between 28 to 32°C over most parts of Uttarakhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Coastal Karnataka, South Interior Karnataka, Andaman & Nicobar Island, some parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Assam, Chattisgarh, Madhya Pradesh, Tamil Nadu, Kerala, Lakshadweep Islands, 24 to 28°C over some parts of Jammu & Kashmir, Himachal Pradesh, Sikkim, 32°C and above over remaining parts of the country.

Maximum Temperature (°C) Anomaly in India for the week ending 21.10.09



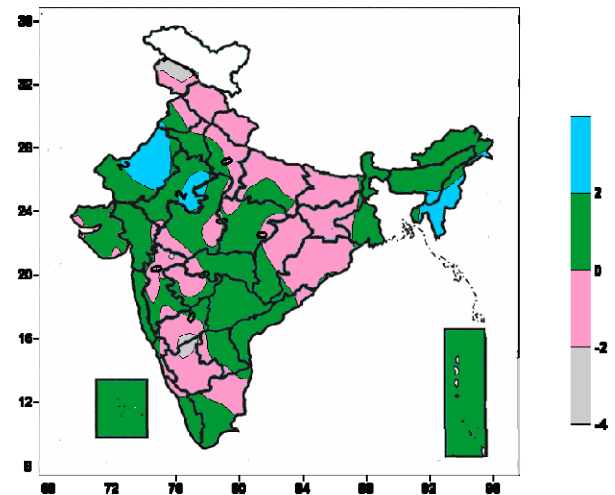
Actual Mean Maximum temperature anomaly ranged between 2°C and above over most parts Assam, Arunachal Pradesh, Nagaland, Manipur, Orissa, Chattisgarh, Andhra Pradesh, Tamil Nadu, West Madhya Pradesh, some parts of Jammu & Kashmir, Himachal Pradesh, Rajasthan, Jharkhand, Kerala, North & South Interior Karnataka, Marathwada, Vidarbha, Gujarat, East Madhya Pradesh, Lakshadweep, Andaman & Nicobar Islands, -2 to 0°C over some parts of Punjab, Haryana, West Rajasthan, Gangetic West Bengal, Jharkhand, Andaman & Nicobar Island, 0 to 2°C over remaining parts of the country.

Actual Mean Minimum Temperature (°C) in India for the week ending 21.10.09



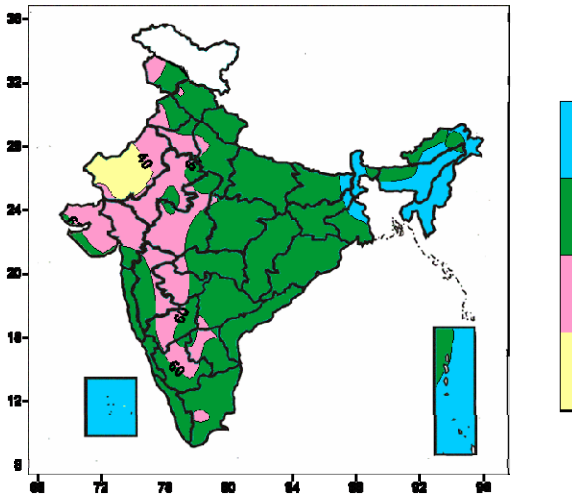
Actual Mean Minimum Temperature ranged between 24°C and above over most parts of Lakshadweep, some parts of Gangetic West Bengal, Tripura, Andhra Pradesh, Tamil Nadu, Kerala, Andaman & Nicobar Island, 16 to 20°C over most parts of Uttarakhand, Punjab, Haryana, Delhi, West Uttar Pradesh, Sikkim, Madhya Pradesh, Madhya Maharashtra, some parts of Rajasthan, East Uttar Pradesh, Bihar, Jharkhand, Orissa, Chattisgarh, North & South Interior Karnataka, Marathwada, Vidarbha, Gujarat, 12 to 16°C over some parts of Jammu & Kashmir, Punjab, Himachal Pradesh, Uttarakhand, 8 to 12°C over some parts Jammu & Kashmir, Himachal Pradesh, 20°C to 24°C over remaining parts of the country.

Minimum Temperature (°C) Anomaly in India for the week ending 21.10.09



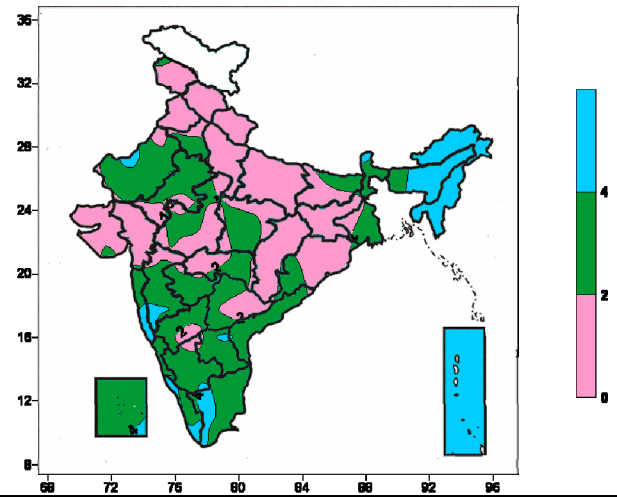
Minimum Temperature anomaly ranged between 2°C and above over some parts of Rajasthan, Meghalaya, Nagaland, Manipur, Mizoram, Tripura, -2 to 0°C over most parts of Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, Orissa, Chattisgarh, Karnataka, Marathwada, some parts of Punjab, Haryana, Madhya Pradesh, Coastal Andhra Pradesh, Rayalaseema, Tamil Nadu, Kerala, Madhya Maharashtra, Vidarbha, Gujarat, Saurashtra & Kutch, East Rajasthan, -4 to -2°C over some parts of Jammu & Kashmir, 0 to 2°C over remaining parts of the Country.

Relative Humidity (%) over India for the week ending 21.10.08



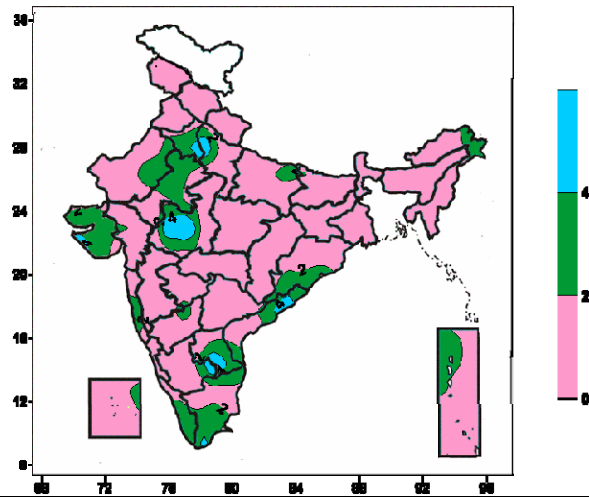
Relative humidity more than 80% over most parts of Sub-Himalayan West Bengal & Sikkim, Assam, Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Lakshadweep, Andaman & Nicobar Island, some parts of Bihar, Jharkhand, Gangetic West Bengal, 40 to 60% over most parts of East Rajasthan, Gujarat, Saurashtra & Kutch, West Madhya Pradesh, some parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, West Rajasthan, West Uttar Pradesh, East Madhya Pradesh, Telangana, Rayalaseema, Tamil Nadu, North & South Interior Karnataka, Madhya Maharashtra, Marathwada, Vidarbha, 20 to 40% most parts of West Rajasthan, 60 to 80 % over remaining parts of the country.

Cloud amount (okta) over India for the week ending 21.10.09



Cloud amount 4 okta and above over most parts Sikkim, North East India, Andaman & Nicobar Island, some parts of West Rajasthan, Rayalaseema, Tamil Nadu, Kerala, Konkan & Goa, Madhya Maharashtra, Lakshadweep Islands, 0 to 2 okta over most parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Uttar Pradesh, Bihar, Jharkhand, Orissa, Chattisgarh, Gujarat, Saurashtra & Kutch, some parts of Haryana, Rajasthan, Gangetic West Bengal, Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathwada, Telangana, North & South Interior Karnataka, 2 to 4 okta over remaining parts of the country.

Wind speed (knots) over India for the week ending 21.10.08






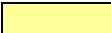


Wind speed ranged between 4 knots and above over some parts of Haryana, West Uttar Pradesh, Telangana, Coastal Andhra Pradesh, West Madhya Pradesh, Kutch, Tamil Nadu, South Interior Karnataka, 2 to 4 knots over most parts of Haryana, Saurashtra & Kutch, some parts of Uttar Pradesh, Rajasthan, Arunachal Pradesh, Orissa, Konkan & Goa, Marathwada, West Madhya Pradesh, Gujarat, Andhra Pradesh, Kerala, Tamil Nadu, North & South Interior Karnataka, Lakshdweep, Andaman & Nicobar Islands, 0 to 2 knots over remaining parts of the country.

Comparison of weekly rainfall distribution (in % dep.) in different Met. Sub-divisions during past 5 weeks

Sub-division	Cumulative Rainfall for the period									
	23 rd September		30 th September		7 th October		14 th October		21 st October	
	Normal (mm)	Dep.	Normal (mm)	Dep.	Normal (mm)	Dep.	Normal (mm)	Dep.	Normal (mm)	Dep.
A & N Islands	104.6	-64	113	78	99.0	69	67.0	-27	54.0	-79
Arunachal Pradesh	77.7	72	67	-56	71.7	-79	3808	98	32.1	-80
Assam and Meghalaya	63.0	30	58	-37	60.9	-59	44.6	103	23.2	-49
NMMT	48.9	44	48	-21	52.4	44	41.8	58	17.3	61
SH West Bengal & Sikkim	78.8	4	75	-70	69.5	43	44.8	276	24.9	-98
Gangetic West Bengal	47.0	-9	69	-49	47.9	53	32.1	-68	24.0	-98
Orissa	49.9	-44	45	1	39.8	172	28.5	-81	28.0	-99
Jharkhand	44.1	-64	45	-30	36.1	159	22.8	-11	15.4	-100
Bihar	45.5	-88	41	-36	35.0	-46	13.7	293	13.3	-99
East Uttar Pradesh	31.8	-86	29	-19	25.2	259	16.8	-51	6.5	-100
West Uttar Pradesh	23.8	-99	21	-19	20.5	218	14.3	-100	3.1	-97
Uttarakhand	34.5	-84	30	-24	23.1	313	21.3	-92	5.9	-99
Haryana, Chandigarh & Delhi	13.3	-99	18	-18	8.3	-85	5.5	-100	0.9	-100
Punjab	14.8	-97	27	-27	12.1	-81	6.8	-100	1.3	-100
Himachal Pradesh	20.2	-93	30	-29	18.4	-57	14.9	-93	6.2	-61
J & K	20.0	-93	22	-21	9.4	-45	9.9	-84	8.0	-99
West Rajasthan	4.7	-100	6	-6	2.1	-100	0.8	-98	0.5	-89
East Rajasthan	13.9	-100	13	-13	6.8	93	5.9	-99	1.4	-85
West M. P.	32.0	-100	22	-21	13.2	399	12.0	-100	4.3	-99
East M. P.	31.6	-99	21	-18	17.1	219	11.6	-99	5.8	-87
Gujarat region	24.3	-99	28	-28	8.8	218	8.9	-92	2.0	-100
Saurashtra & Kutch	11.7	-100	12	-12	5.3	-43	3.9	-100	2.0	-100
Konkan and Goa	67.1	-60	78	-36	42.5	567	30.6	-52	16.5	-91
Madhya Maharashtra	38.9	-29	42	-10	25.6	265	19.9	-79	13.1	-92
Marathwada	39.1	-86	44	-13	24.4	150	19.7	-93	10.1	-100
Vidarbha	37.0	-98	28	-9	21.6	84	14.4	-99	7.7	-100
Chhattisgarh	44.6	-86	33	-18	26.2	-54	17.0	-93	12.1	-100
Coastal A. P.	44.8	-56	43	9	46.5	14	34.2	-61	56.3	-100
Telangana	42.3	-86	39	26	31.0	194	17.3	-83	15.7	-99
Rayalseema	42.6	10	34	22	36.2	82	27.1	-54	24.5	-99
TamilNadu & Pondicherry	31.1	78	30	-9	34.5	-80	37.4	-45	49.8	-88
Coastal Karnataka	66.6	-6	72	67	56.0	317	41.9	-58	33.0	-81
N. I. Karnataka	49.2	13	42	51	36.2	405	23.2	-59	16.4	-99
S. I. Karnataka	45.1	93	37	17	39.4	69	36.2	-25	27.9	-89
Kerala	61.3	15	72	-2	59.3	173	69.1	-79	70.0	-76
Lakshadweep	45.6	-63	39	-22	35.2	56	34.1	-99	34.9	-93

The subdivision like Punjab, Himachal Pradesh, Jammu & Kashmir, received scanty / deficient rainfall in last 5 weeks; Bihar, Uttarakhand, Haryana, Chandigarh & Delhi, West Rajasthan, West Madhya Pradesh, Gujarat, Saurashtra & Kutch, Konkan & Goa, Chhattisgarh, Lakshdweep Islands received scanty / deficient / no rainfall in 4 out of last 5 weeks; Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Gangetic West Bengal, Orissa, Jharkhand, Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Madhya Maharashtra, Marathwada, Vidarbha, Coastal Andhra Pradesh, Telengana, Tamil Nadu & Pondicherry, received scanty / deficient / no rainfall in 3 out of last 5 weeks. Remaining States received normal / excess rain in 2 or more weeks during last 5 weeks.

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

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

Zonewise Agromet Advisories

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

Himachal Pradesh

- **Realised Rainfall:** Most of the districts of the State received deficient/scanty/no rainfall except Lahaul and Spiti which received normal rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather over the State.
- **Major Kharif Crops:** Rice, Vegetables
- **Crop Stage:** Maize(silking/cob formation), vegetables(early vegetative), rice(grain formation)
- **Crop Condition:** Good.
- **Advisory:**
 - Maintain proper depth of standing water in rice.
- **Major Seasonal Crop:** Fruit crops, Flower crops and Vegetables
- **Advisory:**
 - As there was no significant rainfall during last week and no significant rainfall is likely to occur during next five days over the State, apply irrigation to the crops.
 - Prepare the field for sowing of early peas, leafy vegetables and raddish as the weather is favourable for sowing.
 - It is optimum time for new plantation of tea plants or filling of gaps with new plants.
 - Complete field preparation and nursery raising of cabbage, cauliflower, knol khol, broccoli, parsley and lettuce. If the nursery of cabbage, cauliflower and broccoli is at 4-6 weeks stage can be planted in the fields directly.
 - It is optimum time for raising the nursery of winter flowers like Calendula, arctotis, dog flowers, sweet pea, dianthus, petunia, stock and flox in fields.
 - Undertake weeding, intercultural operations and top dressing of fertilizers.
 - Farmers are advised to complete the sowing of all leafy vegetable like lettuce and palak.
 - Intercultural operations, application of fertilizers and pesticides may be continued on a non rainy day
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - red spider mites in carnation, for control spray cypermethrin or nuvacron @0.05%.
 - leaf minor in new growth of citrus. For its control, spray 10 ml Matasystox or Malathion 10 ml in 10 litre of water.

Uttarakhand

- **Realised Rainfall:** Most of the districts of the State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather over the State
- **Major Kharif Crops:** Rice, Soyabean, Groundnut, Tur, mung, sesame.
- **Crop Stage:** Rice(grain formation/maturity stage), pulses(pod maturity), oilseeds(vegetative/flowering)
- **Crop Condition:** Good
- **Advisory:**
 - Farmers are advised to complete harvesting & threshing operations of late transplanted matured rice crop during this week. Stop irrigation 15 days prior to harvest.
 - Continue harvesting matured pulse crops.
 - **Major Seasonal Crop with stage:** Sugarcane ratoon (planting/early vegetative), cabbage, garlic, tomato (vegetative), French bean (early vegetative).
- **Crop Condition:** Good
 - **Advisory:** Undertake weeding and intercultural operation.
 - Under favourable soil moisture and temperature conditions planting of winter sugarcane crop is advised. After proper soil moisture do ploughing of the bare fields, go for soil sampling for soil testing for applying balanced fertilizer at the time of sowing and arrange timely sown sugarcane varieties like COS-8436, COS-88230, COS- 96258, COS-95255, COS 96268 and medium to late sown varieties like Co Pant 84212, Co Pant 90223, Co Pant 96219, COS-767, COS 97222 etc.

- Farmers are advised to go for sowing of Mustard crop with improved varieties like Rohini, Kranti, Krashna, Vardan etc. during this week under optimum soil moisture..
- Continue sowing of vegetable crops like vegetable pea, coriander, spinach, radish, menthe etc from end of this week as temperature conditions will remain favorable for sowing of these crop Arrange certified seed of vegetable crops from certified agency or select local or recommended varieties of vegetable pea like VL Ageti Mater-7, Vivek Mater-10, Pant Subjee Mater-3, Azad Mater-3 and Arke.
- Farmers can continue planting of Potato during this week also. Select high yielding varieties like Kufri Jyoti, Kufri Ashok or Kufri Anand. Top dress Urea as per the need and stage of the vegetable crops sown earlier.
- Farmers are also advised to go for sowing of Rai during this week with seed rate of 600 g / Nali. They can also transplanting of Rai seedlings grown earlier. Ensure that seedling height must be 10 cm and line to line distance must be 30 to 40 cm and plant to plant distance must be 15 to 20 cm.
- **Advisory for Plant Protection:** Weather conditions are favourable for mild incidences of sucking pests in Rajmah, spray a solution of 0.3 ml of 200 SL-Emidachloprid dissolved per litre of water.
- **Animal:** Give balanced feed to milking animals and clean properly their place of sitting .

Punjab

- **Realised Rainfall:** The State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Kharif Crops:** Rice, maize, guar, til, urd, bajra, cowpea, cotton
- **Crop Stage:** Rice (grain development/maturity), pulses (pod formation/development), cotton (boll formation), soybean (pod formation), maize (cob formation), toria(early vegetative).
- **Crop Condition:** Rice crop is in satisfactory condition.
- **Advisory:**
- As there was no significant rainfall during last week and mainly dry weather is likely in the State during next five days, apply irrigation to the standing crops.
- Stop irrigating the rice crop two weeks before harvesting. After harvesting, don't burn paddy straw as it leads to environmental pollution as well as health hazards besides destroying valuable nutrients, flora & fauna etc.
- This is the optimum time for sowing of PDG 3 and PDG 4 varieties of gram under rainfed conditions and sowing of raya, autumn potato and African sarson wherever adequate soil moisture is available.
- In light textured soils sowing of taramira may be started.
- Undertake weeding, intercultural operations and application of fertilizers.
- **Major Seasonal Crop with stage:** Sugarcane and Vegetables
- **Advisory:** Undertake weeding, intercultural operations in sugarcane and cotton.
 - It is the time for planting of autumn sugarcane. Complete planting of sugarcane in the first fortnight. Intercropping of wheat, raya, toria, gobhi sarson, pea, gram, potato etc. can be done successfully in this crop for better returns to the farmers.
 - This is the right time for transplanting of main season varieties of cauliflower, cabbage and broccoli. Continue sowing of European varieties of carrot, radish, turnip and leafy vegetables.
 - This is suitable time for planting of evergreen fruit plants like sweet orange, lime, ber, amla & guava. Newly planted plants should be watered at frequent intervals. Remove the sprouts below the bud. Spray ber trees with 0.25 % wettable sulphur (250 g in 100 litres of water) or 0.05 % karathane 40 EC (50-80ml in 100 litres of water) or Bayleton for the control of powdery mildew.
 - **Advisory for Plant Protection:** Weather conditions are favourable for mild incidences of –
 - Jassid and white fly in cotton. Spray with recommended pesticides, if required.
 - bacterial leaf blight of rice has appeared in the farmers field. Farmers are advised to regulate water in the fields to check its further spread.
- **Animal Husbandry:** Feeds to be protected from fungal contamination and wet feeds to be dried and fed. Milch animals tend to come in heat during this season. So animals should be checked in morning and evening for the heat.

Haryana

- **Realised Rainfall:** The State received deficient/scanty/no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Kharif Crops:** Rice, maize, guar, cotton
- **Crop Stage:** Rice (grain development/maturity), pulses (pod formation/development), bajra (vegetative), toria (early vegetative).
- **Condition:** Satisfactory
- **Advisory:** As there was no significant rainfall during last week and mainly dry weather is likely in the State during next five days, apply irrigation to the standing crops.
- Maintain standing water in rice field.
- Stop irrigating the rice crop two weeks before harvesting.
- Undertake hoeing and weeding in the standing crops.
- Prepare the field and arrange for certified seeds of raya varieties: RH 30, Varuna, RH 8113 and RH 8812 (Luxmi) for sowing.
- Prepare the land and undertake sowing of berseem.
- Sowing of winter sugarcane may be done up to this week.
- **Major Seasonal crop with stage:** Spring sugarcane (early vegetative/vegetative), vegetable crops (vegetative), cotton (boll formation)
- **Crop Condition:** Good
- **Advisory:**
 - Undertake hoeing and weeding and apply the remaining dose of nitrogen fertilizer to the sugarcane.
 - Farmers are advised to undertake weeding and hoeing in cotton and intercultural operations in tomato, onion and chilli.
 - **Advisory for Plant Protection:** Weather conditions are favourable for mild incidences of –
 - jassid in cotton crop, spray the crop with recommended insecticide by the University if there is incidence of jassid.
 - bacterial blight in guar, farmers are advised to spray the crop with 400ml Blitox and 30 grams of Streptocyclin in 200 liters of water per acre.
- **Animal Husbandry:** Farmers are advised to supplement the deficiency of nutrients through concentrates feed and 50 to 100 gram good quality mixture of minerals per day may be given for better animal productivity.

Delhi

- **Realised Rainfall:** The State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Kharif Crops:** vegetables and rice
- **Crop Stage:** vegetative/grain formation; tillering/panicle initiation (late paddy)
- **Crop Condition: Satisfactory**
 - **Advisory:** In the areas where paddy crop is about to mature, stop irrigation two weeks before harvesting. After harvesting crop should be dried in the field for 2-3 days and thereafter threshing should be done. Grains should be properly dried to right moisture level before storing.
- **Crop Condition: Good**
 - **Advisory:** Present temperature is congenial for sowing of garden pea. Recommended cultivars:- Azad Matar, Pant Matar 3 and Bournville.
 - Farmers are advised to procure quality seeds of mustard. Recommended cultivars: - Pusa Jaikisan, Pusa Aghrani, Pusa Bold, RH 10. After ploughing the field planking should be done..
 - Present weather conditions are congenial for sowing of winter sugarcane. Row to row spacing should be 90 cm. Potato, mustard, gram, pea, wheat, greengram may be taken as intercrop.
 - Transplanting of mature tomato seedlings may be done in this weather conditions and seed bed may be prepared for new crop in raised bed.

- Present weather conditions are congenial for sowing of spinach, coriander and mustard for leafy vegetable. Recommended cultivar for coriander: - Pant Haritama and Azad Dhania 1. Before sowing of coriander, the seed should be separated into two cotyledons.
- Keeping in view the temperature, seed bed preparation for cauliflower (snowball cultivar group), lettuce, leak, cabbage and broccoli crop may be done. Seed should be sown in raised beds after proper seed treatment.
- Sowing of Hill Queen, Japanese White and Pusa Himani cultivar of radish, Crimson Globe cultivar of beetroot and snowball cultivars group of turnip can be done.
- Field sanitization is advised before sowing of *rabi* crop. Bunds, channels, uncultivated fields and field roads should be cleaned, by removing weeds.
- Use of fully decomposed cow dung or compost before sowing of vegetable is advised as it improves the physical and biological properties of soil and thus increases the water retention capacity as well as nutrient status of the soil

Uttar Pradesh

- **Realised Rainfall:** Most of the districts of the State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State
- **Major Kharif Crops: East UP:** Rice, mung, jowar, bajra.
- **West UP:** Rice, groundnut, urd, mung and vegetables
- **Crop Stage:** Rice (grain formation/maturity), groundnut, urd, mung and vegetables (grain formation), maize (tasseling/cob formation)
- **Crop Condition:**
- **East UP:** Satisfactory
- **West UP:** Satisfactory
- **Advisories:**
 - As there was no significant rainfall in the State during last week, apply irrigation to the standing crops.
 - Undertake weeding, intercultural operations and top dressing.
 - Continue harvesting matured crop of rice, jowar and bajra. Stop irrigation 15 days prior to harvesting of rice.
 - Plucking of beans as per maturity may be done in soya bean along with marketing work and storing may be done after drying well.
 - **Major Seasonal Crop with stage:** Sugarcane (grand growth) and vegetables (vegetative/fruitletting), mango (fruit setting). This is proper time for sowing of *rabi* crops.
- **Crop Condition:** Good
- **Advisory**
 - Undertake weeding, intercultural operations and application of fertilizers in the standing crops like sugarcane, vegetables and mentha.
 - Complete sowing Barseem at earliest.
 - Sowing of advance varieties of Rai, Mustard may be done after preparing the field and purification of seeds
 - Sowing of Garlic may be done after purification of seeds at the seed rate 500- 700 kg seeds/ hectare at distance 15x7.5 cm.
 - Sowing of Pea may be done after purification of seeds and take seeds 120 – 130 kg / hectare for early varieties and 80- 100 kg/ hectare for late varieties
 - Complete sowing of early varieties of potatoes like Kufri Chandramukhi, Kufri Bahar, Kufri Sadabahar, Kufri Ashok.
 - **Plant Protection:** Weather conditions are favourable for mild incidences of
 - fruit borer in tomato and brinjal, spray the solution of Carbaryl @ 2 g / litre of water.
 - gundhi bug in rice, farmers are advised to take adequate plant protection measures.

J & K

- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Kharif Crops:** Rice, maize, vegetables

- **Crop Stage:** grain formation (rice); pod maturity (pulses); maturity/harvesting (maize)
- **Crop Condition:** Satisfactory.
- **Advisory:**
- Take up timely harvest of matured crops like blackgram and greengram.
- Irrigate the late transplanted rice crop if crop is at grain formation/development stage.
- Undertake harvesting of apple.
- **Major Seasonal Crop with stage:** Vegetables (vegetative/flowering/fruited). This is proper time for sowing of *rabi* crops.
- **Crop Condition:** Good.
- **Advisory:** Conserve moisture by taking up 2 to 3 ploughings followed by planking to maintain sufficient moisture for *rabi* cropping.
- Farmer can go for sowing of mustard crop (optimum sowing time). The recommended varieties are RLM-514, RLM-619, Kranti, Varuna and RH -30 with seed rate @ 5kg/ha. Apply half dose of nitrogen and full dose of phosphorous & potash at the time of sowing. In areas more than 1500 m in altitude, KOS-1 and KS-101 (Gulcheen) should be selected.
- Irrigate the toria crop followed by top dressing of 1st dose of urea if crop is 25-30 days old. Hoeing & weeding in toria crop.
- Sowing of gram (var. C-235, K-468, Gourav and PBG-1) and field pea (var. T-163, PG-2, Rachna, HFP-3) can be done in conserved moisture condition. But before sowing inoculate the seed with Rhizobium culture in order to increase the yield and maintain the soil fertility.
- Sowing of gobi sarson may be done up to the first fortnight of October with varieties such as GSL-1, GSL-2 and DGS-1.
- Sowing of pea with varieties T-163, PG-2 and Rachna may be done from mid October to mid November in rows 30 cm apart keeping a plant to plant distance of 10 cm.
- Farmers can also go for sowing of barley crop in rainfed areas under conserved moisture condition during these days.
- Irrigate the vegetable crop and application of urea as top dressing in cauliflower, cabbage & cauliflower and knoll khol @ 60, 60 & 50 kg/ha, respectively. Transplanting of knoll khol & onion can be done during these days..
- Intercultural operations, application of fertilizers and pesticides may be continued.

Plant Protection: Weather conditions are favourable for

- leaf curl/stigmata blight in peaches/plum/apricot and almond, spray copper oxychloride (0.3%) or captan (0.2%) before leaf fall.

Rajasthan

- **Realised Rainfall:** Most of the districts of the State received no rainfall except Jaipur, Sawai Madhopur received excess rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State
- **Major Kharif Crops:**
- **East Rajasthan:** Cowpea, bajra, maize
- **West Rajasthan:** Pearl millet, sorghum, maize, cluster bean, Sesamum, Pigeonpea, Groundnut
- **Crop Stage:** flowering/grain formation
- **Crop Condition:** Satisfactory
- **Advisory:** Apply irrigation to the standing crops at grain formation stage as there was no significant rainfall except Sawai Madhopur and Sikar districts during last week and no significant rainfall is likely to occur during next five days over the State
- Take up hoeing, weeding and top dressing in maize and sorghum with application of urea
- **Major Seasonal Crop with stage:** vegetable crops (flowering / fruited / harvesting)
- **Crop Condition:** Good
- **Advisory:** Undertake intercultural operations in sweet gourd, cucumber, pumpkin, bitter melon, tinda, tomato and ladies finger.

- Sow seeds in nursery for raising seedling of autumn vegetables. Use following improved varieties for nursery sowing: Tomato: Pusa Rubi, Pusa Early and Vihar. Brinjal: Pusa Summer Prolific Round, Pusa Summer Prolific Long, Meghdoot, Navin and Arka Bahar. Cucumber: Balam and Pusa Sahyog. Smooth gourd: Chikni and Nasdar.
- Undertake preparation of seed bed should be done for raising nursery of chilli and brinjal for Rabi season.
- Undertake sowing of rapeseed, mustard at vapsa condition using 5-6 kg/ha certified seed of HYV of rapeseed, mustard viz. NRCDD-2, Urvashi, Pusa Jai Kisan, Laxmi, Rohini, NRCHB 506, NRCHB 101, Maya and treat seed with Apron 35 SD @ 6g/kg seeds or 2% garlic bulb extract.
- Undertake sowing of gram, pea, Lucerne and Taramira.
- **Plant Protection:**
 - Green gram, moth bean & cowpea crop may be affected with yellow mosaic virus disease. To control this disease spray Dimethoate 30 EC @ 1.0 litre per hectare
 - Spray a solution of Acephate 70 SP @ 1 g or Profenophos @ 3 ml per litre water on calm and clear days to control mealy bug in okra.
 - In clusterbean aphid attack seen in the fields, spray monocrotophos @ 250ml/bigha or daimethoate 30EC @300ml/bigha
 - Blight on tomato, spray Mancozeb 2 gram or Copper Oxy Chloride 3 gram per litre of water.

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

Bihar

- **Realised Rainfall:** Most of the districts of the State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Kharif Crops:** Rice, urd, sunflower, maize and pigeon pea
- **Crop Stage:** Rice (flowering/grain formation), maize(silking). This is proper time for sowing of rabi crops.
- **Crop Condition:** Good
- **Advisory**
 - Continue the field preparation and sowing of *rabi* vegetables.
 - Weather has become congenial for sowing of gram, lentil and pea crops. Farmers are advised to prepare land and immediately start the sowing of these crops.
 - Temperature condition has also become favourable for sowing of sesamum in north Bihar. T 397, Shuvra, Garima, Sweta and Shekhar are recommended varieties for sowing. Use seed rate 15 to 20 kg per hectare.
 - Continue sowing of yellow sorson as weather is remaining very congenial for its sowing and good germination.
 - Continue the field preparation for sowing of rapeseed and mustard. Select RAUTS 17, Panchali, PT 303, Bhawani varieties of rapeseed and Rajendra Sorson 1, Swarna and 66-197-3 varieties of yellow sarson for sowing in north Bihar.
 - Farmers are advised to prepare the field for sowing of rabi maize crop. Shaktiman 3, Shaktiman 4, Laxmi, Deoki, Rajendra Shankar Makka 1 and 2, High starch and Ganga are recommended variety for sowing in the districts of north Bihar.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative/grand growth), fodder maize, jowar, lobia and sudan grass (vegetative)
- **Crop Condition:** Good
- **Advisory:**
 - Undertake intercultural operations, application of fertilizers.
 - Weather condition is congenial for transplanting of Aghani, Pusa Dipali, Pusi, Patna Main and Pusa Shuvra varieties of cauliflower.
 - **Plant Protection:** Weather conditions are favourable for mild incidences of -
 - stem borer insects in brinjal crop. Farmers are advised to apply Endosulphan @1.5 ml per litre of water.

Jharkhand

- **Realised Rainfall:** Most of the districts of the State received no rainfall during last week..
- **Rainfall Forecast:** Mainly dry weather is likely over the State
- **Major Kharif Crops:** Maize, Arhar, Til, Ragi, Vegetables
- **Crop Stage:** Direct sown rice(grain formation), Maize(grain formation), other *kharif* crops are at grain formation stage.
- **Crop Condition:** Good
- **Advisory:**
 - As there was no significant rainfall during last week, farmers are advised to apply irrigation to the crops.
 - Undertake weeding, intercultural operations and top dressing.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative/grand growth), This is proper time for sowing of *rabi* crops.
- **Crop Condition:** Good
- **Advisory:** Farmers are advised to undertake sowing of rai, toria, gram, peas, potato, mustard etc. Recommended varieties of rai are – Pusa Jaikishan, Shivani, Varuna, Kanti. Good varieties of toria are PT-303, Parechali, Bhavani. Good varieties of peas are- Arkel, Pant Uphar, Pusa Pragati etc. Good varieties of potato are - Kufri Ashoka, Kufri Chipsona-1, Kufri Chipsona-2. Recommended varieties of gram are- Pant G 114, KWR 108, KPG 59. Seed rate is 75 kg per hectare. Treat the seed before seeding with Rhizobium culture @ 5 packet of 100 gm/hectare. Give urea 44 kg, SSP-250 kg & MOP 34 kg/hectare. Recommended varieties of Mustard are Shivani, Varuna, Pusa bold, Kranti.
- In irrigated condition seeding of wheat can be done from end of October to 10th November. Varieties for irrigated conditions are – C-306, K-8027, HDR-77.
- Also undertake sowing of Cabbage varieties in Early type – Golden Acre, Early drum head, Pride of India. Late type – Late drum head Cauliflower Varieties are – Early – Pant Early, Pusa katki, Pusa Dipali. Seed rate is 600 – 700 gm/Hactare.

Orissa

- **Realised Rainfall:** Most of the districts of the State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State
- **Major Kharif Crops:** Rice, ragi, arhar, maize, green gram, blackgram
- **Crop Stage:** Rice(grain development), Pigeonpea(pod formation), groundnut(pod formation/maturity), cotton(vegetative), early sown maize(silking/cob formation), green gram, blackgram(maturity)
- **Crop Condition:** Good
- **Advisory:** As there was no significant rainfall in most of the districts of the State, farmers are advised to apply irrigation to the crops.
 - Conserve moisture where the crops are at maturity stage.
 - *Kharif* groundnut is at maturity stage. Start harvesting the groundnut crop.
 - Harvest the early sown black gram and green gram.
- **Major Seasonal Crop with stage:** Sugarcane (early vegetative), vegetables (fruiting / harvesting), onion (vegetative), jute (vegetative)
- **Crop Condition:** Good
- **Advisory:** Undertake weeding, intercultural operations and application of fertilizers.
 - The weather is optimum time for sowing of garlic in irrigated upland and medium land Grow HYV like Phawari, Rajalbadi, Jamnagar and G-282. Use 150 kg seed material per acre.
 - The weather is optimum time for nursery raising of onion. Grow HYV like 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.
 - Sunflower is a profitable rabi oilseed crop. Now the time is optimum for sowing of sunflower . Grow high yielding varieties like Morden, Sunrise, Surya and Hybrid varieties like KBSH-1, KBSH-3 and MSFH.
 - The weather is optimum for sowing of rainfed groundnut. Go for land preparation Grow high yielding varieties like AK-12-24, Smruti and JL-24.

- Dahlia comes to flowering 3 months after planting. It can be planted up to November
- October to March is suitable for greens sowing. Greens are of two types- White or Red. Use 3 kg seeds/acre. Layout 5 ft long beds of 4 ft wide with bunds.
- Farmers are advised to go for early planting of cole crops like raddish, cabbage, cauliflower, beans and cluster bean tomato. For cabbage and cauliflower, go for nursery raising of seedlings.

West Bengal

- **Realised Rainfall:** Most of the districts of the State received scanty/no rainfall during last week..
- **Rainfall Forecast:** Mainly dry weather is likely over the State
- **Major Kharif Crops:** Rice, vegetables
- **Crop Stage:** pod development (pulse crops), *aman* rice (grain development), harvesting (*aus* paddy)
- **Crop Condition: Good**
- **Advisory:**
 - Undertake top dressing last dose of urea @ 6 kg/bigha to paddy.
 - After the harvest of *aus* rice and jute, farmers are advised to undertake sowing of oil seed crops
- **Major Seasonal Crop with stage:** Sugarcane (vegetative), vegetable crops (transplanting)
- **Crop Condition: Good**
- **Advisory:**
 - Farmers are advised to apply top dressing of urea @ 30 kg/acre to cauliflower (Var: Micardo, White Barna) and hybrid cabbage (Var: Green Express).
 - Farmers are advised to undertake sowing of mustard
 - Also undertake transplanting of brinjal and tomato
- **Plant protection:**
 - Weather conditions are favourable for the incidences of leaf folder and BPH in late transplanted *aman* paddy. To control leaf folder apply Lamdacyhalothrin 5EC @ 0.5 ml and for BPH (If it cross 10 per hill) apply Buprofezin @ 1.5 ml per litre of water. In this weather Blast disease may be severe. To prevent the disease apply Tricyclazole 0.6 gm per litre of water.

Sikkim

- **Realised Rainfall:** The state received scanty rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Seasonal Crop with stage: Rice:** grain formation/development **Kharif Vegetables:** flowering/fruitleting/ harvesting; **Large Cardamom:** Capsule maturity/harvesting;
- **Crop Condition: Good**
 - **Advisory:** Apply irrigation to the crops as there was no sufficient rainfall during last week.
 - Application of fertilizers, pesticides and intercultural operations may also be undertaken.
 - Water level of 5 cm to at least 3/2.5 cm should be maintained in paddy fields for better yield.
- **Plant protection:**
 - Regular inspection may be carried out to observe caterpillar/shoot borer/shoot fly incidence, if any, and may be hand picked and destroyed mechanically or by burning.

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

Assam

- **Realised Rainfall:** Most of the districts of the States received deficient/scanty rainfall except Karimganj, Lakhimpur, Sonitpur, Dibrugarh districts which received excess/normal rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather over the State.
- **Major Kharif Crops:** *Sali* paddy
- **Crop Stage:** Rice (flowering)
- **Crop Condition:** Good
- **Advisory:** Apply top dressing in late sown *sali* rice.

- Rape seed and mustard may be sown from mid-October to mid-November. Early sown crop can escape the attack of mustard aphids. Recommended varieties are M-27, TS-29, TS-36, TS-38 etc.
 - Apply irrigation to the crops as there was no sufficient rainfall received during last week except Karimganj, Lakhimpur, Sonitpur, Dibrugarh districts.
 - Undertake sowing of *rabi* crops like pea, linseed, lentil(cv.T-397) etc and potato.
 - Undertake sowing of toria varieties like M27, TS 36, TS 38 and TS 46 and niger. Collect quality seeds of field peas like Rasna, Arpana and Pant 14 and sowing can be done by this week.
 - Undertake sowing of *rabi* vegetables.
 - **Major Seasonal Crop with stage:** Vegetables (vegetative / flowering / fruiting / harvesting), early *ahu* rice (panicle initiation), maize (tasselling) and sugarcane (vegetative).
 - **Crop Condition:** Good
 - **Advisory:**
 - Seeds of cabbage, cauliflower, knoll khol, tomato, brinjal etc., can be sown in nursery beds. Farmers are advised to sow early varieties of cauliflower (eg. Early Kuwari, Pusa Keteki, Pusa Dipali etc.).
 - **Plant protection:** Weather conditions are favourable for mild incidences of –
 - leaf folder or stem borer in rice. When there is one damage leaf per hill due to attack of leaf folder or appearance of one adult hispa per hill is observed farmers are advised to spray Chloropyriphos 20EC @ 1.5ml per liter of water.
 - Stem borer on *Sali* rice, spray Monocrotophos 40 EC @ 2 ml per litre of water in rainless period.
 - Undertake land preparation for cabbage, cauliflower, knolkhol, Onion and garlic.
 - Farmers affected by drought like situation during *khariif* season and those who could not grow Sali paddy in time, should concentrate on *rabi* crops and collect quality seeds of *rabi* pulses and oilseed crops like pea, rajmah, lentil, lathyrus, toria, linseed, niger etc.
 - Undertake land preparation for raising tea nurseries.
- Animal Husbandry:** skin disease in cattle To control the disease, farmers are advised to wash the infected areas with potash and apply Himex ointment over the infected area.

Arunachal Pradesh

- **Realised Rainfall:** Most of the districts of the State received scanty/no rainfall except Papumpara, Tirap district, which received excess/normal rainfall during last week.
- **Rainfall Forecast:** Minly dry weather is likely over the State.
- **Major *Khariif* Crops:** *Jhum* rice, WRC rice, millets
- **Crop Stage:** Rice, ragi(grain formation)
- **Crop Condition:** Good.
- **Advisory:**
- Apply irrigation to the crops as there was no sufficient rainfall during last week except Papumpara, Tirap district.
- Undertake weeding and intercultural operations.
- Complete sowing of maize and pea.
- Land preparation and planting of potato may be completed.
- **Major Seasonal Crop:** Vegetables
- Harvest the matured vegetable crops.
- **Plant Protection:** Prophylactic measure for protection of seed ginger rhizome from fungal disease may be taken.

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

Andhra Pradesh

- **Realised Rainfall:** The state received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State..
- **Major *Khariif* Crops:** Cotton, soybean, jowar, black gram, green gram, pearl millet, finger millet, jowar, green gram, groundnut, sunflower, rice, brinjal, tomato and chillies.
- **Crop Stage:** grain formation (rice), pegging (groundnut), vegetative (cotton).
- **Crop Condition:** Good.

- **Advisory:**
- Additional dose of fertilizers (35 kg urea + 15 kg MOP per acre) should be applied in water logged fields.
- The fields which are completely inundated due to the recent floods to Krishna river and cotton crop completely damaged, alternate crops like greengram, blackgram, rabi redgram, maize, sorghum is recommended.
- Spraying 2% urea or 2% KNO₃ should be taken up two times at weekly intervals for partially inundated crop.
- **Major Seasonal Crop:** Sugarcane and Vegetables
- Farmers are advised to undertake intercultural operations in sugarcane and vegetables to keep the fields weed free.
- Redgram can be sown. Adopt closer spacing of 90X20 cm under delayed sowings. Suitable redgram varieties are LRG-41, LRG-30, LRG-38, Abhaya, Maruthi, ICPL 87, ICPL 312 etc.
- Greengram / blackgram can be sown as rabi pulses. Suitable greengram varieties for sowing are LGG 410, LGG 460, LGG 407, and that of blackgram are LBG 17, LBG 20, LBG 22 , LBG 623, LBG 402, LBG 611, LBG 685.
- **Plant protection:**
 - Present weather conditions are congenial for the incidence of late leaf spot in groundnut. Spray Mancozeb @ 3g or Hexaconazole @ 2ml/litre of water to control it. Also high incidence of leaf miner in groundnut is noticed; to control spray Imidacloprid @ 0.4 ml/l or Monocrotophos @ 1.6 ml/l of water.
 - Present weather conditions were congenial for the incidence of wilt in redgram. To control, spray Bavistin @1.0 gm/litre of water.
 - Prevailing weather conditions are congenial for the incidence of blast in rice. To control, spray Tricyclazole @ 0.6 g per litre of water.
 - Prevailing weather conditions are congenial for the incidence of scale insect and mealy bug. To Control them, de trash the basal leaves and spray Dimethoate @ 1.7 ml or Malathion @ 3 ml per litre of water. Severe incidence of white fly is noticed in Krishna district. To control, Place yellow sticky traps to attract and kill white flies, Spray Triazophos or Profenophos @ 2 ml per litre of water.

Karnataka

- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Kharif Crops:** Jowar, Maize, Bajra, Redgram, Ragi, Greengram, Blackgram, Cowpea, Sesamum, Groundnut, Sunflower, Soyabean, Cotton.
- **Crop Stage:** grain formation (rice), pod formation (pulse crops), pod formation (groundnut), cob formation/ grain development (maize).
- **Crop Condition:** Major crop loss is reported due to flooding in northern parts of the state. Crop conditions may improve only after receding of water
- **Advisory:**
- Detailed contingency plan for the flood affected areas is given in Annexure I.
- Operations like earthingup, weeding is suggested. In addition to this, top dressing with nitrogen (urea) is suggested to boost up the crop growth for finger millet.
- **Major Seasonal Crop:** Sugarcane and vegetables. This is proper time for sowing of *rabi* crops.
- Undertake intercultural operations in sugarcane and early sown crops over coastal Karnataka to keep the field weed free.
- Sowing of sorghum, Bengalgram, safflower and sunflower can be continued and sowing of wheat can be started in Bijapur and sorghum, wheat, chickpea, safflower in Dharwad after receding of water.
- It is ideal time for planting banana, arecanut and cashew in Brahamavar.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - thrips and leaf blight in cotton. To control Thrips, spray the crop with 0.33 ml Imidachloprid or 1.7 ml Dimethoate dissolved in one liter of water. If the incidence of Thrips is more, then along with the above

mentioned insecticides, mix DDVP @ 0.5 ml per liter of water. To manage Phytophthora leaf blight, spray the crop with 2 g. Dithane Z-78 or 2.5 g Dithane M-45 dissolved in one liter of water.

- *Helicoverpa* (Pod borer) pest in red gram; spray 2 ml neem seed origin insecticide or 0.3 ml Indoxicarb or 0.1 ml Spinosad dissolved in one liter of water. Spraying should be completed preferably before 2 PM and 1000 liter spray solution should be used for effective control of the pest. To manage wilt disease, drench the plant infected using solution prepared by dissolving 2 g of Carbandizem in one liter of water.

Kerala

- **Realised Rainfall:** Most of the districts of the state received scanty rainfall during last week.
- **Rainfall Forecast:** Isolated rain / thundershowers is likely over the State.
- **Major Kharif Crops:** Rice
- **Crop Stage:** sowing/transplanting (*mundakan* rice).
- **Crop Condition:** Good.
- **Advisory:**
- Farmers are advised to continue transplanting of *mundakan* rice in the main field
- **Major Seasonal Crop:** Vegetables and plantation crops (coconut, arecanut, pepper and cashew). Time for planting of coffee and arecanut
- Farmers are advised not to apply irrigation as there is chance of rainfall during next five days
- Intercultural operations, application of fertilizers and pesticides may be continued on a non rainy day.
- Planting of arecanut seedling can be continued. Srimangla, sumangla and Mohitnagar are best suited and high yielding varieties.
- Transplanting of 20-25 days old seedlings of tomato, brinjal and chillies may be done.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - In coconut, due to favourable weather conditions, as a prophylactic measure to control bud rot apply 1% Bordeaux mixture in the tender leaf axils. Stem bleeding may become more severe. Farmers are advised to keep vigilance against Red palm weevil and rhinoceros beetle.

Tamil Nadu

- **Realised Rainfall:** Most of the districts of the state received scanty rainfall during last week.
- **Rainfall Forecast:** Isolated rain / thundershowers is likely over Coastal South Tamil Nadu and mainly dry weather over rest of the state.
- **Major Kharif Crops:** Groundnut, pulses and rice
- **Crop Stage:** pod development (pulses), picking (cotton)
- **Crop Condition:** Good
- **Advisory:**
- This is the right time to take up pre-monsoon sowing of cotton in rainfed tracts of Kovilpatti block. Select the varieties like KC 2, KC 3, PA 255, SVPR 2, Bt cotton etc. which are suitable for rainfed tracts.
- Farmers are advised to take paddy sowing through SRI mat nursery.
- **Major Seasonal Crop:** *thaladi* rice (transplanting), sugarcane, banana and vegetables.
 - Farmers are advised to undertake transplanting of *thaladi* rice.
 - Intercultural operations and application of fertilizers may be continued in vegetables and sugarcane.
 - Prevailing weather conditions are suitable for raising vegetable nursery (Tomato, Brinjal). Also climbers crops like, all gourds, Beans and cluster beans and Bhendi crop may be sown under irrigated conditions. For vegetable nursery, there should not be any stagnation of water in the beds. Thus, channels in between the raised nursery beds should be cleaned for proper drainage.
 - Bendi growing farmers can increase the yield by spraying a solution containing urea and potash each @ 10 grams per litre for 10 days either during morning or evening for three times at an interval of 10 days.
- **Plant Protection:**
 - Prevailing weather conditions are favourable for fruit borer incidence in brinjal crop. Hence spray endosulfan @ 3 ml/ ha.

- Prevailing weather conditions are conducive for tikka leaf spot in groundnut. Hence spray carbendazim @ 500g/ha.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

Maharashtra

- **Realised Rainfall:** Most of the districts of the State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely to prevail over the State.
- **Major Kharif Crops:** Rice, ragi, cotton, Vegetables, Pulses, bajra, groundnut, tur, horse gram, soybean, jowar
- **Crop Stage:** *Kharif* paddy (early variety at grain maturity / harvesting, mid late variety at grain filling / maturity & late variety at flowering / panicle formation in Konkan & Kolhapur divisions and flowering/grain filling in other divisions), jowar (flowering / grain formation), *Kharif* cotton (flowering / boll formation), bajra (grain maturity / harvesting), groundnut (pod formation / pod maturity), soybean (pod maturity / harvesting), irrigated cotton (flowering / boll formation) and rabi jowar, safflower, sunflower (sowing/ germination)
- **Crop Condition:** Good
- **Advisory:** Conserve moisture in the crop field at maturity stage.
- Apply third dose of Nitrogenous fertilizer @ 20 kg N per ha to *Kharif* paddy crop at flowering stage
 - Continue sowing of *rabi* jowar, safflower, sunflower in Vidarbha, Marathwada & Madhya Maharashtra. Start sowing of *rabi* gram.
- **Major Seasonal Crop:** Fruit crops, Sugarcane and vegetables
 - Apply top dressing of N @160 kg/ha to new *adsali* sugarcane after 6-8 weeks of planting.
 - Undertake spraying, fertilizer application in the standing crops.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - leaf roller in red gram, for control infested leaves may be removed & destroyed. If infestation is more, spray Endosulfan 35 %WSC @ 20 ml or Quinolphos 25 % WSC @ 16 ml or Fenthoate 50% WS @ 15 ml in 10 liters of water.
 - sap sucking pest on cotton in Central Vidarbha zone, for control spray Acitamepid 20 % WS@ 4 gm or Dimethoate 30 % WS @ 10 ml in 10 liters of water.
 - stem fly on jowar in western Maharashtra plain zone. For control spray 2 ml Endosulfan in a lit of water or Acifet @1 gm in a liter of water.

Gujarat

- **Realised Rainfall:** The State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely to prevail over the State.
- **Major Kharif Crops:** Rice, castor, pigeon pea, cotton, groundnut, bajra, sesamum, cluster bean, pulses
- **Crop Stage:** Rice (grain formation), groundnut (pegging), maize (siliking/cob formation), cotton (square formation), bajra (vegetative/ flowering).
- **Crop Condition:** Crop condition is satisfactory
- **Advisory:**
 - Apply irrigation to the crops as there was no significant rainfall during last week and mainly dry weather is likely for the next five days.
 - Harvest the mature groundnut crop, if soil is hard than light irrigation can be applied before pulling.
 - Stop irrigation 15 days prior to harvest of rice. Harvesting may be started as soon as grains turn golden yellow colour.
 - Undertake sowing of mustard varieties Varuna, Gujarat Mustar-1, 2 and 3 before 15th October to escape mustard sawfly and thrip epidemic.
- **Major Seasonal Crop:** Fruit crops, Sugarcane and vegetables
 - Undertake intercultural operation and application of fertilizer and plant protection measures. Undertake planting of different fruit crops like mango, sapota, pomegranate, lemon, guava, custard apple etc.
 - Farmers are advised for sowing of fodder sorghum.

- Undertake top dressing in castor.
- Continue sowing of clusterbean varieties like GC – 1, 2 at 30 cm spacing.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - mealy bug in cotton; to control uproot the affected plants and burn and eradicate parthenium weed as it is host plant.
 - For control of mango hopper spraying the crop with monocrotophos 10 ml/10 liter water
 - For control of stem rot in Banana drenching with carbendazim 0.05% @ 1 gm/lit water.
 - Powdery mildew and downey mildew in cucurbits. For control of powdery mildew two to three spray of wettable Sulphur @ 25 gm. /10 lit of water at weekly interval. For control of downey mildew spray copper fungicide @40 gm. /10 lit of water at an 8 to 10 days interval.

CENTRAL INDIA [M.P., CHHATTISGARH]

Madhya Pradesh

- **Realised Rainfall:** Most of the districts of the State received no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely to prevail over the State.
- **Major Kharif Crops:** Rice, jowar, sunflower, jowar and soybean
- **Crop Stage:** grain formation/ development (rice), pod development/maturity (soybean and other pulse crops).
- **Crop Condition:** Satisfactory.
- **Advisory:** Start harvesting the matured crops of soybean and other pulses.
- Stop irrigation 15 days prior to the harvesting of rice.
- **Major Seasonal Crop with stage:** Sugarcane (cane development), cotton (boll development/ maturity) and vegetable crops (vegetative)
- **Crop Condition:** Good
- **Advisory:** Farmers are advised to transplant cabbage and cauliflower on the field.
- Farmers are advised to undertake transplanting of chilli, tomato and onion.
- Undertake pit preparation for planting of new orchard crops.
- Farmers are advised to apply FYM/vermicompost, N, P, K at recommended dose for fruit crops
- Undertake intercultural operations in the seasonal crop.
- Undertake sowing of gram.
- Undertake sowing of Safflower, gram etc. But barseem, safflower, sunflower can be sown.(if moisture is not sufficient for wheat & gram). Prefer wilt resistant varieties of Gram (JG-130, JG-218, JG-11, JG-16 etc.) for sowing.
- Undertake sowing of potato, *rabi* crops and vegetable crops.
- **Plant Protection:**
 - Destroy YMV affected plants from soybean field and spray Methyle Demeton for controlling of vector.
 - Weather conditions are favourable for-
 - semi-looper in *kharif* crops; spray Trizophos 40 E.C. @ 2.0 ml/l for control.
 - sucking pest i.e. jassid, white fly etc. in *kharif* crops; spray Amydachloroprid 17.8 SL. @ 0.5 ml/l for control.
 - tobacco caterpillar in soybean crop, spray Profenophos 40 EC and cypermethrin 4 EC @ 1 lit/ha.
 - boll worm cotton crops, spray Profenophos 40% EC @ 3.0 ml/l.
 - girdle beetle/leaf defoliator in soybean, spray Quinolphos 25 or Endosulphan 35 @ 1000 ml in 500 litre of water per hectare.
 - pyrilla in sugarcane or shoot borer, spray Melathyon 1.5 litre per hectare in 700-800 litre of water.
 - pod borer in pigeonpea, spray Profenophos 50 EC @ 1.5 l/ha.
 - Mealy bug in cotton, spray Prophenophos 2 ml per litre of water.
- **Animal Husbandry:** To control ticks and mite in cattle, sheep and goat, apply butox / deltox @ 4 ml / litre of water on the body in Jhabua and Dhar districts.
- Arrange vaccination for animals to protect from the disease Galgotu, Langadi and Anthrex in Sagar, Bhopal, Vidisha, Damoh, Raisen, Sehore.
- Farmers should vaccinate there animals for Khurpaka-Muhpaka disease in Jhabua and Dhar.

Chattisgarh

- **Rainfall Forecast:** Mainly dry weather is likely to prevail over the State.
- **Major Kharif Crops:** Rice, soybean, maize, sesamum, tur.
- **Crop Stage:** grain formation/ development (rice), cob formation/development (maize), pod development/ maturity (pulse crops)
- **Crop Condition:** Good
- **Advisory:** Where maize is at tasseling stage farmers are advised to apply top dressing last dose of nitrogen.
- Start harvesting the matured crops of pulses.
- Stop irrigation 15 days prior to the harvesting of rice.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative), vegetables (flowering / fruiting / harvesting),
- **Crop Condition:** Good
- **Advisory:** Prepare the land for sowing niger, horsegram, linseed and toria
- Present weather conditions are suitable for the nursery sowing of vegetables like brinjal, tomato, chilli etc. Start transplanting as and when seedlings attain proper age.
- Farmers are advised to undertake intercultural operations, application of fertilizers and pesticides in early sown crops.
- **Plant protection:** Weather conditions are favourable for the incidences of leaf folder in arhar, farmers are advised to spray of chlorpyrifos @ 2 ml/litre of water

Annexure I

Karnataka

1) Removing excess water and improving soil physical and Biological Condition of the soil :

- Standing water in the field crops and orchards should be drained out immediately by providing proper channels.
- Seepage trenches of 2-3 feet depth may be dugout along the length/width at the end of field at lower side (sloping side) and the seepage water collected in the trench should be taken out so that the soil is dried up as early as possible and better aeration is provided for the roots in the soil.
- Weeds have grown in the fields where rabi sowing is to be taken up immediately and it is not possible to control them by inter cultivation since there is excess moisture in the soil. So under such conditions, Take up blanket spraying of Paraquat weedicide @ 10 ml dissolved in one liter of water. The weeds will be killed in 8-10 days. This will facilitate further intercultivation and sowing of Rabi crops as and when the soil moisture is favourable.
- Sparying of above mentioned weedicide may be taken up to control weeds in wider row spaced crops like sugarcane, cotton and horticultural crops. However care should be taken to see that weedicide does not fall on the crop.
- Take up repeated intercultivation as soon as the soil moisture is favorable to provide better aeration in the soil and control of weeds.
- Apply FYM and Gypsum and mix in the soil to improve its physical and biological 4properties.
- Apply fertilizers such as Urea (Nitrogen), DAP (Nitrogen and Phosphorus) and complex fertilizers depending on the crop so as to improve the vigor of the crop.

2) **Contingent measures in inundated areas:** After the flood water retreats from the standing field/horticultural crops, the above mentioned measures should be taken up immediately so as to improve the physical and iological condition of the soil and the following crop specific measures should be taken.

Maize and Bajra : The crops are in harvesting stage. If harvesting is delayed, germination of seeds within the earhead may start and also the fungal diseases will spoil the grain quality. So harvest the crops immediately, dry the cobs/ earheads properly before shelling/threshing. Sun dry the grains before storing. Go for sowing of Rabi crops like sorghum, Safflower, Chickpea and wheat in medium to deep black soils.

Chilli : Wilting of seedlings has occurred and fungal disease will appear. Take up drenching with suitable fungicide.

Onion : Rotting of bulb has started. So, harrow the crop and go for sowing of *Rabi* crops like Sorghum, Chickpea, Safflower, and Wheat

Groundnut : Germination of matured pod is observed. So, harvest the crop as early as possible and dry the produce and go for sowing of *Rabi* crops.

Pigeonpea : Flower dropping is noticed in the pigeonpea crop. Take up spraying of Planofix @ 4.5 ml dissolved in 18 liters of water. The crop is likely to be affected by pests and diseases due to prevailing high humid conditions. Hence it is suggested to take up spraying of Thiodicarb @ 1 gm or Spinosad 0.25 ml per liter of water.

Cotton : Take up spraying of Planofix @ 4.5 ml + 360 g. DAP + 180 g. MgSO₄ dissolved in 18 liters of water to control flower and boll dropping and leaf reddening in cotton crop.

Sugarcane: Iron deficiency induced chlorosis is noticed in sugarcane. Take up spraying of FeSO₄ @ 90 gr. dissolved in 18 liters of water or soil application of FeSO₄ @ 25 Kg /ha.

3) Contingent measures in recently sown Rabi Crops :

If the germination is very poor and the plant population is not satisfactory, then harrow the land and go for re-sowing of the same crop or sowing of other suitable crops like Sorghum, Chick pea, wheat, safflower as and when the soil moisture is favourable for sowing

4) Measures to be taken in Irrigated conditions:

Sowing of Wheat, Maize, Chickpea and Dicoccum wheat to be taken up during the winter season.