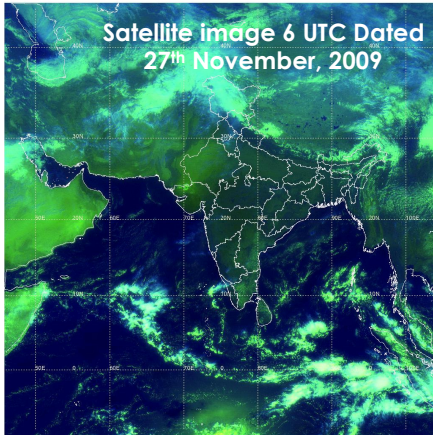




National Agromet Advisory Bulletin

Thursday, 26th November, 2009 (For the period 26th to 30th November, 2009)



Rainfall Forecast valid upto 0530 hours IST of 30th November, 2009

- **Isolated Places:** Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Jammu & Kashmir, Tamil Nadu & Pondicherry, Coastal Karnataka, Kerala, Lakshadweep, Andaman & Nicobar Islands.
- **Dry:** Gangetic West Bengal, Orissa, Jharkhand, Bihar, Uttar Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Punjab, Himachal Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Gujarat Region, Saurashtra, Kutch & Diu, Konkan & Goa, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh, Telengana, North Interior Karnataka
- **Mainly dry Weather:** SHWB & Sikkim, Rayalaseema, South Interior Karnataka

Weather Outlook (upto 0530 hrs IST of 2nd December, 2009)

- A fresh western disturbance is likely to affect western Himalayan region from 30th November.
- Increase in rainfall activity over extreme south Peninsular India from 30th November
- Dry weather conditions are likely over remaining parts of the country.

Salient advisories

- Farmers in Karnataka, Andhra Pradesh and Tamil Nadu are advised not to apply irrigation as there was sufficient rainfall during last week 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

- Farmers in Madhya Pradesh and Chhattisgarh are advised to undertake field preparation and sowing of wheat and continue sowing of chickpea, lentil and linseed.
- Farmers in Uttarakhand and Jammu & Kashmir are advised to complete sowing of wheat.
- Farmers in Himachal Pradesh are advised to undertake field preparation and sowing of wheat and barley.
- Farmers in Tamil Nadu are advised to continue sowing of cotton and groundnut and transplanting of rice in the main field utilizing the monsoon rainfall.

Advisories for pest and disease

- Due to favourable weather condition, there are chances of pest and disease incidences in the following regions:
 - Early blight in potato and tomato in Delhi.
 - Powdery mildew in sunflower and leaf caterpillar in gram in Karnataka.
 - Boll worm in cotton and pod borer in pigeon pea in Madhya Pradesh.
 - Mustard sawfly and aphids in mustard and other brassica crops in Rajasthan.
 - Hairy caterpillar in toria in Punjab.
- Farmers are advised to undertake plant protection measures, if required.

Issued by

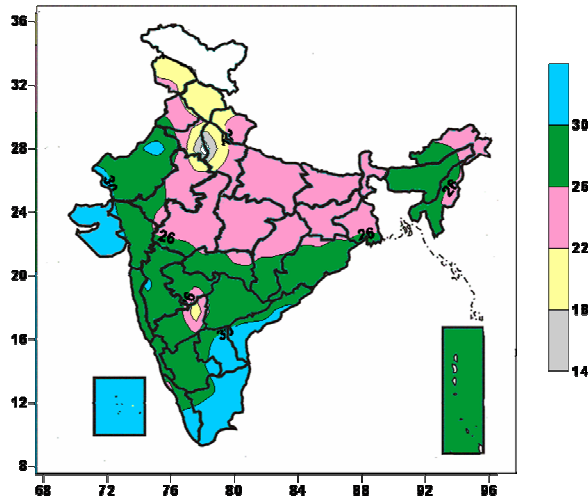
National Agrometeorological Advisory Service Centre,

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

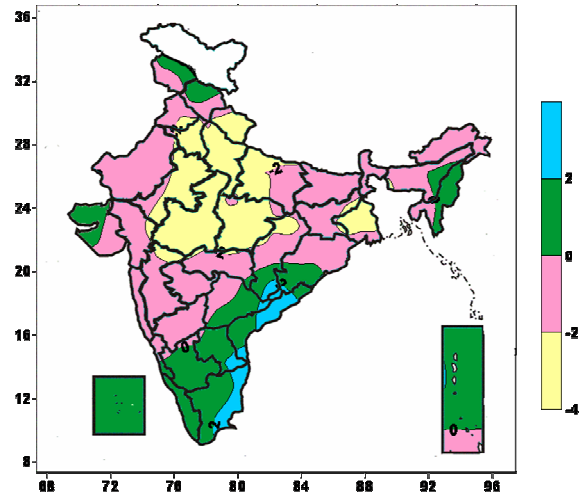
The bulletin is also displayed in the website (<http://www.imdagrimet.org>) of the Division

Contour maps for the week ending 25.11.09

Actual Mean Maximum Temperature (°C) in India for the week ending 25.11.09



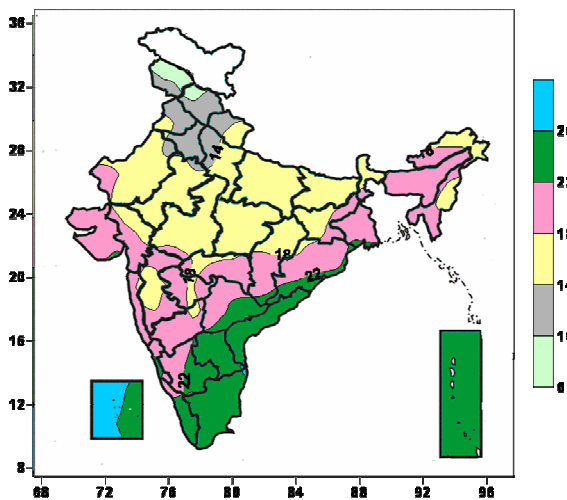
Maximum Temperature (°C) Anomaly in India for the week ending 25.11.09



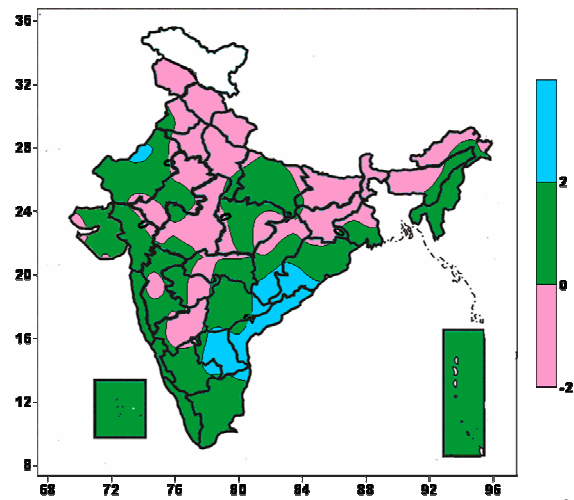
Actual Mean Maximum temperature ranged between 30°C and above over most parts of Saurashtra & Kutch, Coastal Andhra Pradesh, Rayalaseema, Tamil Nadu, Kerala, Lakshadweep Islands, some parts of West Rajasthan, Gujarat, Madhya Maharashtra, South Interior Karnataka, 22 to 26°C over most parts of Punjab, Uttarakhand, East Uttar Pradesh, East Rajasthan, Bihar, Jharkhand, West Bengal, Sikkim, Madhya Pradesh, some parts of Jammu & Kashmir, Haryana, West Uttar Pradesh, Arunachal Pradesh, Assam, Nagaland, Manipur, North Interior Karnataka, Marathwada, Orissa, Chattisgarh, Kerala, 18 to 22°C over most parts of Jammu & Kashmir, Himachal Pradesh, some parts of Haryana, West Uttar Pradesh, East Rajasthan, North Interior Karnataka, 14 to 18°C over some parts of Haryana, West Uttar Pradesh, 26 to 30°C over remaining parts of the country.

Actual Mean Maximum temperature anomaly ranged between 2°C and above over some parts of Chattisgarh, Orissa, Andhra Pradesh, Tamil Nadu, 0 to 2°C over most parts of Saurashtra, Nagaland, Manipur, Andhra Pradesh, Tamil Nadu, Kerala, Coastal & South Interior Karnataka, Lakshadweep, Andaman & Nicobar Islands, some parts of Jammu & Kashmir, Himachal Pradesh, Assam, Mizoram, Orissa, Chattisgarh, Kutch, -4 to -2°C over most parts of Uttarakhand, Haryana, Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Gangetic West Bengal, some parts of Punjab, Jharkhand, Gujarat, Madhya Maharashtra, Vidarbha, Chhattisgarh, -2 to 0°C over remaining parts of the country.

Actual Mean Minimum Temperature (°C) in India for the week ending 25.11.09



Minimum Temperature (°C) Anomaly in India for the week ending 25.11.09



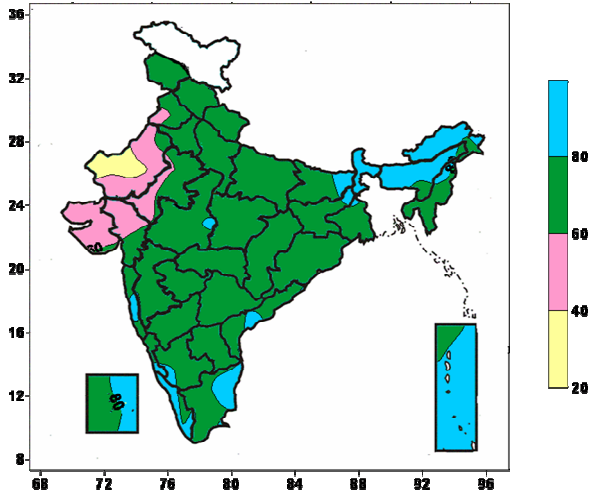
Actual Mean Minimum Temperature ranged between 26°C and above over most parts of Lakshadweep Islands, 22 to 26°C over most parts of Kerala, Andhra Pradesh, Tamil Nadu, Andaman & Nicobar Islands, some parts of Orissa, Chattisgarh, South Interior Karnataka, Coastal Karnataka, Lakshadweep Islands, 14 to 18°C over most parts of Rajasthan, Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Manipur, Madhya Pradesh, some parts of Uttarakhand, Punjab,

Minimum Temperature anomaly ranged between 2 to 4°C over most parts of Coastal Andhra Pradesh, Rayalaseema, some parts of Chattisgarh, Orissa, Telangana, Tamil Nadu, South Interior Karnataka, West Rajasthan, -2 to 0°C over most parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, West Uttar Pradesh, Bihar, Jharkhand, West Bengal, Sikkim, West Madhya Pradesh, East Rajasthan, some parts of East Uttar Pradesh, Assam, Meghalaya, Arunachal Pradesh, Orissa, Chattisgarh, East

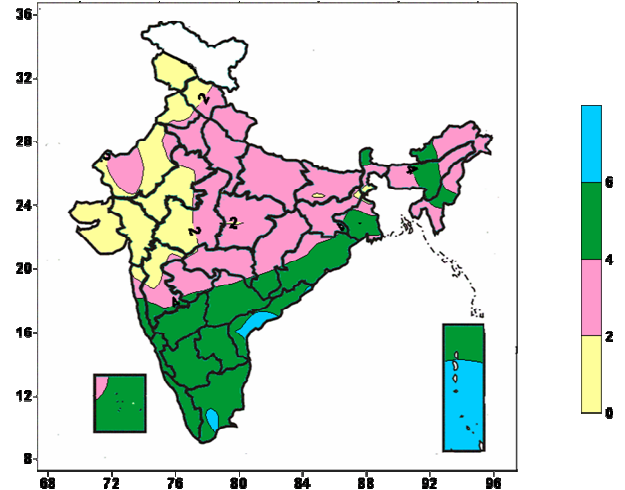
Arunachal Pradesh, Nagaland, Jharkhand, Orissa, Chattisgarh, North Interior Karnataka, Maharashtra, Gujarat, 10 to 14°C over most parts of Himachal Pradesh, Punjab, Haryana, Delhi, some parts of Jammu & Kashmir, Uttarakhand, West Uttar Pradesh, Rajasthan, 6°C to 10°C some parts of Jammu & Kashmir, Himachal Pradesh, 18°C to 22°C over remaining parts of the country.

Madhya Pradesh, North & South Interior Karnataka, Madhya Maharashtra, Marathwada, Vidarbha, Gujarat, Saurashtra & Kutch, -2 to 0°C over remaining parts of the Country.

Relative Humidity (%) over India for the week ending 25.11.09



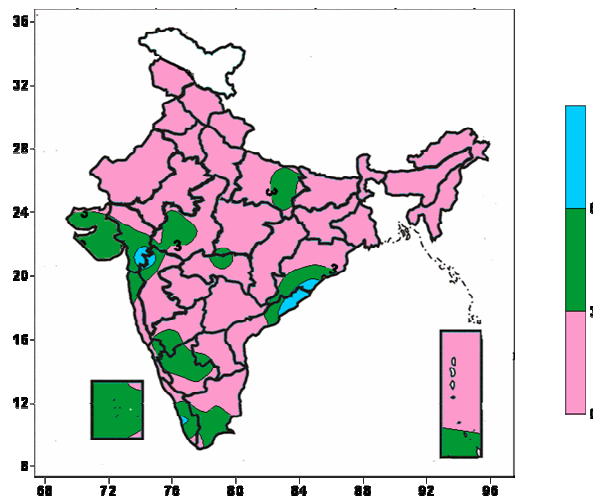
Cloud amount (okta) over India for the week ending 25.11.09



Relative humidity more than 80% over most parts of Sub-Himalayan West Bengal & Sikkim, Assam, Meghalaya, Arunachal Pradesh, Andaman & Nicobar Island, some parts of Bihar, Jharkhand, Gangetic West Bengal, Nagaland, Mizoram, Coastal Andhra Pradesh, Tamil Nadu, Kerala, Coastal & South Interior Karnataka, Konkan & Goa, West Madhya Pradesh, Lakshadweep Islands, 40 to 60% over most parts of West Rajasthan, Saurashtra, Kutchh, Gujarat, some parts of East Rajasthan, 20 to 40 % over some parts of West Rajasthan, 60 to 80 % over remaining parts of the country.

Cloud amount 6 okta and above over most parts of Andaman & Nicobar Island, some parts of Coastal Andhra Pradesh, Tamil Nadu, 4 to 6 okta over most parts of Sikkim, Gangetic West Bengal, Orissa, Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Lakshadweep Island, some parts of Assam, Arunachal Pradesh, Mizoram, Chattisgarh, Maharashtra, Andaman & Nicobar Islands, 0 to 2 okta over most parts of Jammu & Kashmir, Himachal Pradesh, Punjab, Rajasthan, Gujarat, Saurashtra & Kutchh, some parts of Madhya Pradesh, Madhya Maharashtra, Konkan, Bihar, Sub Himalayan West Bengal, 2 to 4 okta over remaining parts of the country.

Wind speed (knots) over India for the week ending 25.11.09



Wind speed ranged between 6 knots and above over some parts of Gujarat, Madhya Maharashtra, Orissa, Coastal Andhra Pradesh, Kerala, 3 to 6 knots over most parts of Gujarat, Saurashtra & Kutch, Lakshdweep Islands, some parts of East Uttar Pradesh, Orissa, Madhya Pradesh, Konkan, Madhya Maharashtra, Vidarbha, Coastal Andhra Pradesh, Rayalaseema, Karnataka, Kerala, Tamil Nadu, Andaman & Nicobar Islands, 3 to 6 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									
	28 th October		4 th November		11 th November		18 th November		25 th November	
	Normal (mm)	(%) Dep.	Normal (mm)	(%) Dep.	Normal (mm)	(%) Dep.	Normal (mm)	(%) Dep.	Normal (mm)	(%) Dep.
A & N Islands	55.6	-21	60.8	-92	64.3	-64	61.0	-85	50	-64
Arunachal Pradesh	21.2	-96	7.5	-100	14.0	-94	5.6	433	9.7	-44
Assam and Meghalaya	20.9	-99	9.3	-100	9.2	-97	3.7	175	3.9	-80
NMMT	23.6	-100	17.7	-100	16.6	-100	6.4	102	5.2	-99
SH West Bengal & Sikkim	13.1	-100	9.0	-100	4.1	-100	2.8	-29	2.2	-100
Gangetic West Bengal	17.7	-100	12.2	-95	7.1	-96	5.0	146	3.6	-95
Orissa	17.8	-100	15.4	-100	8.2	-52	5.9	230	4.7	71
Jharkhand	8.0	-100	4.8	-100	3.3	-94	1.7	526	2.0	-100
Bihar	4.8	-100	4.4	-100	1.2	-100	0.6	538	0.5	-100
East Uttar Pradesh	1.1	-100	3.5	-100	1.0	-100	0.6	1141	0.5	-100
West Uttar Pradesh	0.9	-100	1.8	-100	1.3	-97	0.6	2273	0.8	-100
Uttarakhand	3.2	-100	4.2	-100	1.8	-22	1.1	525	2.1	-100
Haryana, Chandigarh & Delhi	1.0	-100	1.5	-100	0.5	-62	0.4	550	1.4	-100
Punjab	0.8	-100	1.8	-100	0.8	91	0.7	539	1.3	-100
Himachal Pradesh	5.0	-100	4.4	-100	2.8	380	2.7	1157	6.8	-100
J & K	6.6	-99	7.0	-100	5.5	274	6.7	262	7.6	-96
West Rajasthan	0.8	-100	0.8	-100	0.3	-100	0.5	-96	0.8	-100
East Rajasthan	0.9	-100	1.1	-100	1.6	-100	1.0	781	2.9	-100
West M. P.	1.1	-100	2.2	-100	4.4	-33	1.7	2525	3.1	-100
East M. P.	2.6	-100	3.0	-100	3.5	-39	1.5	3973	3.5	-100
Gujarat region	1.3	-100	1.8	-100	2.9	-51	1.9	265	4.2	-100
Saurashtra & Kutch	1.7	-100	3.2	-100	3.0	-100	2.2	-43	2.9	-100
Konkan and Goa	11.9	-99	7.3	-100	7.3	355	6.1	1274	7.3	-85
Madhya Maharashtra	9.3	-100	6.5	-100	7.8	508	6.4	1102	7.3	-78
Marathwada	10.4	-100	6.5	-100	6.5	229	3.2	1420	4.4	-100
Vidarbha	6.9	-100	4.2	-100	3.4	192	1.8	2950	5.2	-100
Chhattisgarh	9.3	-100	4.6	-100	2.1	-100	1.3	3274	3.0	-60
Coastal A. P.	46.1	-96	36.1	-71	30.3	170	21.1	73	20.5	118
Telangana	16.4	-100	9.7	-99	6.4	25	3.3	386	3.5	122
Rayalseema	27.2	-97	20.5	-45	17.8	257	14.9	44	13.7	2
TamilNadu & Pondicherry	46.3	-92	44.1	8	44.8	325	38.9	68	34.6	-1
Coastal Karnataka	35.3	-100	22.6	-84	22.5	169	14.7	351	14.1	15
N. I. Karnataka	22.0	-100	11.6	-94	9.4	95	4.9	382	3.9	92
S. I. Karnataka	27.3	-99	17.7	-58	15.6	123	9.7	124	10.1	58
Kerala	68.7	-85	62.6	-88	48.2	244	37.2	85	31.3	15
Lakshadweep	33.2	-65	35.2	-3	35.6	278	23.9	-83	24.7	-43

The subdivision like Andaman & Nicobar Islands, West Rajasthan, Saurashtra & Kutch, received scanty / deficient rainfall in last 5 weeks; Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, West Bengal & Sikkim, Jharkhand, Bihar, Uttar Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, East Rajasthan, Madhya Pradesh, Gujarat and Chhattisgarh received scanty / deficient / no rainfall in 4 out of last 5 weeks; Orissa, Punjab, Himachal Pradesh, Jammu & Kashmir, Konkan & Goa, Madhya Maharashtra, Marathwada and Vidarbha and Lakshadweep Islands 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		(-60 to -99 %) scanty rainfall
	(-19 to +19%) normal rainfall		(-100%) no rainfall
	(-20 to -59%) deficient rainfall		** Data not available

Zonewise Agromet Advisories

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

Himachal Pradesh

- **Realised Rainfall:** There was no rainfall during last week in the State.
- **Rainfall Forecast:** Dry weather is likely over the State.
- **Major *rabi* Crops:** Wheat
- **Advisory:**
 - Undertake spraying of Isoproturon @ 80g in 30-32 litres of water per kanal to control the weeds in early sown wheat. Termite affected plots may be treated with 80 ml chloropyriphos mixed with 1kg of sand and spread over one kanal area of plot. The sowing of gram and lentil in lower belt may also be completed.
 - It is optimum time for sowing of wheat crop with varieties like HPW-89,147 VL-738 and HS-240 barley HBL-316 and Dolma and oat (Palampur-1) can be sown.
 - To protect the wheat seed from fungal disease, seed treatment with 2.5g bavistin or savin / Kg should be done before sowing.
 - Sowing of gobhi sarson may be completed.
- **Major Seasonal Crop:** Fruit crops, Flower crops and Vegetables
- **Advisory:**
 - Farmers are advised to undertake field preparation and planting for new orchards.
 - In apple spray 1 per cent urea (2 kg urea per 200 liters of water) before leaf fall, so that there will be good fruit setting and hence production during the next year.
 - It is optimum time for nursery sowing of onion. For taking seed crop of onion plant bulbs at 45x45 cm apart directly in filed. It is also time for sowing of peas (var. agad, Lincoln and priya)
 - Farmers are advised to undertake field preparations and sowing of winter vegetables like radish, turnip, carrot. Complete sowing of leafy vegetable seeds.
 - Farmers are advised to treat the seed with 2.5 g Sevin or bavistin per kg before sowing of peas crop.
 - Undertake weeding, intercultural operations and top dressing of fertilizers.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - To control the pre-mature leaf fall and fruit-blotch diseases spray Mancozeb @ 700 ml or Ziram @ 600 ml per 200 liters of water. This spray also avoids the formation of any spot on the fruits and also saves from diseases during the storage period.
 - During apple picking if fruits of any plant having San Jose Scale, mark it and after fruit harvesting spray Chlorpyriphos (Durmet/Dursban 20 E.C. @ 400 ml per 200 liters of water).
 - To control the root borer in apple irrigate the basins after removing the upper soil with 10-15 liters of the solution of Chlorpyriphos 20 E.C. @ 5 ml per liter of water.

Uttarakhand

- **Realised Rainfall:** There was no rainfall during last week in the State.
- **Rainfall Forecast:** Dry weather is likely over the State.
- **Major *Rabi* crops:** Wheat
- **Advisory:**
 - Due to favourable temperature conditions, farmers are advised to complete sowing of wheat during this week. The recommended high varieties of wheat for this week for both irrigated and un-irrigated conditions are UP-2572, UP-2584 UP-1109 and other local varieties. If farmers are using their own seed then treat it with @ 2.5 g Thiram per kg of seed for improving seed germination. Apply balanced fertilizers based on soil test values. However, if soil testing has not been possible, then under un-irrigated conditions, at the time of sowing mix 1 kg Urea, 4 kg SSP and 800 g MoP per Nali. Under expected dry conditions, farmers having irrigation facilities are advised to give irrigation in wheat crop at CRI stage and then top dress Urea when soil moisture is sufficient. Do weeding for remove weeds for better growth of wheat crop by hand hoe.
 - Farmers are also advised to continue sowing of lentil with recommended varieties under sufficient moisture in soil. The line to line distance must be kept at 20 to 25 cm and depth must not exceed 4 to

5 cm. Do weeding & thinning in mustard crops and top dress 1/2 kg Urea per Nali if not done so far. Do weeding and thinning operations in other standing crops like pea, chickpea, rajmash etc. for their better growth.

- **Major Seasonal Crop with stage:** Sugarcane ratoon (planting/early vegetative), cabbage, garlic, tomato (vegetative), French bean (early vegetative). This is proper time for sowing of *rabi* crops like wheat.
- **Crop Condition:** Good
 - **Advisory:**
 - Farmers are advised to complete harvesting and threshing operations of matured soybean and finger millets crops during this week also and keep the produce in safer place
 - Farmers are advised to continue weeding operation in vegetable crops. If pods of vegetable pea are ready then plug them and sent to the nearby market. No need for applying irrigation in any crop including coriander, spinach, radish, menthe etc.

Punjab

- **Realised Rainfall:** There was no rainfall during last week in the State.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Rabi Crops:** toria(early vegetative), raya, rape seed & mustard (early vegetative)
 - It is right time to sow long duration varieties of wheat like DBW 17, PBW 550, PBW 502, PBW 343, WH 542, PDW 291, PDW 274 and PDW 233. Drill 55 kg DAP and 35 kg Urea or 55 kg urea and 155 kg single super phosphate per acre at the time of sowing. For control of loose smut of wheat treat the seed of all wheat varieties except durum wheat varieties with Raxil @ 1g/kg of seed or Vitavax @ 2g/kg of seed.
 - This is the optimum time for preparation of land and sowing of *rabi* intercrops like wheat, peas etc.
 - During November farmers are advised to undertake sowing transplanting of gobhi sarson, which is more profitable than direct sowing.
 - To early sown raya, apply 45 kg urea per acre with first irrigation.
 - Complete sowing of PDG 3, PDG 4 and GPF 2 varieties of gram under rainfed conditions. Treat the seed with Bavistin and Thiram (1:1) or Hexacap / Captan / Captaf @ 3 g/kg of seed for the control of blight.
 - Thinning operation in timely sown rape seed & mustard crops may be undertaken.
 - Farmers are advised to undertake the first cutting of Barseem. Conserve the surplus maize fodder as silage at milk dough stage.
 - Complete sowing of autumn potato crop particularly for seed production during this period. Before sowing treat the potato tubers in 0.25% solution of Emisan 6 or Monceren (250 g or ml in 100 litres of water) for 10 min. to black scurf of potato. Discard & destroy late blight infected tubers. Keep the soil wet at tuberization to minimize the scab infection.
 - This is the right time for sowing of English varieties of Radish (Japanese White, white Icicle), Turnip (Golden Ball), transplanting of 4 to 6 week old seedlings of cabbage, Chinese cabbage and late season cauliflower.
 - Sow 100 g seed of tomato (TH-1/TH- 2312/TH 802/Punjab NR 7/Punjab Tropic/ Pb Chhuara/Punjab kesri) on raised beds.
- **Advisory for Plant Protection:** Weather conditions are favourable for mild incidences of –
 - Powdery mildew in ber orchards, to control irrigate the ber orchard as they carry fruit load & 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.
 - hairy caterpillar on toria. For its control, spray 500 ml of Thiodan 35 EC or 200 ml of Nuvan 85 SL in 80-125 litres of water or dust 15 kg Malathion 5 % per acre.
- **Animal Husbandry:** Regularly deworm the calves with piperazine liquid (4ml/kg body weight) first at 15 days of age, then 7 days later twice and then on 3 months of age and then 3 months after upto 1 year of age. Animals should come in heat in this month. For this watch the animals regularly in the morning and evening for heat symptoms. Because of scarcity of green fodder during this month, give silage to the animals alongwith mineral mixture @ 50 g per animal per day and common salt @ 20 g per animal per day. Protect young calves from cold weather by providing dry bedding and clothing (Jhull).

Haryana

- **Realised Rainfall:** There was no rainfall during last week in the State.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major *rabi* Crops:** Wheat, raya and mustard
- **Advisory:**
 - Complete planting of winter sugarcane, varieties: COH 56, COH 64, COH 99, COH 119, CO 7717 and COS 8436. Apply 45 kg Urea or 80 kg Kisan Khad and 125 kg Single Super Phosphate.
 - Complete the sowing of barley with certified seed of BG-25, BH-75 and C-164 under timely sown irrigated conditions and C-138 in rainfed conditions as earliest.
 - Apply the irrigation in timely sown raya/mustard crop.
 - Complete the sowing of wheat crop with seed treatment by Bavistin or Fenvalerate @ 2 g/kg seed of certified varieties WH-711, WH-283, WH 542, PBW-343, PBW 550, DWR 17, UP 2338 and HD 2687 within this month.
- **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.
 - The weather conditions are ideal for sowing early varieties. Start sowing “desi” varieties of radish (Punjab Pasand & Punjab Safed), turnip (L-1 & 4-white) and carrot (No. 29 PC-34 and Sel. 21), pea, potato and palak (Punjab Green). Transplant fully developed seedlings (4-6 week old) of main season varieties of cauliflower. Sowing of late season varieties of cauliflower i.e. Snow-Ball-16, Pusa Snow ball 1 & Pusa Snow ball K-1 can be started.
 - This is suitable time for planting of evergreen fruit plants like sweet orange, mandarin, lime, lemon, guava & ber. For checking pre-harvest fruit drop, spray the trees with 10 ppm of 2,4-D and 0.3% of Zinc sulphate. In citrus leaf miner can be checked by spraying 500 ml of Sumicidin 20 EC or 1000 ml Ripcord 10 EC or 1250 ml Hostathion 40 EC in 500 litres of water. In grapes, spray the vines with Bavistin @ 400g/400 litres of water to control anthracnose.
 - 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 –
 - Saw fly and burgada (Dholia) in younger plants of mustard, to control spray 200 ml malathion 50 EC or 400 ml endosulphan 35EC in 200 lt. of water/acre.
 - 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:** Possibility of fall in temperature, farmers are advised to protect against from cold winds. Farmers are advised to give the 50grams Iodized salt and 50 to 100 grams mineral mixture daily to keep them healthy.

Delhi

- **Realised Rainfall:** The State received no rainfall during last week.
- **Rainfall Forecast:** Dry weather is likely to prevail over the State.
- **Major *Kharif* Crops:** vegetables and rice
- **Crop Stage:** vegetative; tillering/panicle initiation (late paddy)
- **Crop Condition:** Satisfactory
- **Advisory:** In view of clear sunny days for the next five days farmers are advised to dry harvested paddy crop, which got wet due to untimely rains by spreading in an open dry surface and then only threshing should be done.
- **Crop Condition:** Good
 - **Advisory:** Sowing of gram can be taken up in this week. Spacing to be maintained is 30-35 from row to row. Varieties:- Kabuli type - Pusa 267, Pusa 1003, Pusa Chamatkar; local type – C235, Pusa 246, P.B.G. 1, Pusa 372.
- **Major *Rabi* Crops:** Wheat

- **Advisory:**
 - Average daily temperature is likely to be below 20°C for the next five days, which is optimum for sowing of wheat. Seed rate: 100 kg seed per hectare. Recommended cultivars: - CPAN-3004, Raj-3077, PBW-343, DBW-17, DBW-550, HD 2851, HD 2687, HD 2733. Seed should be treated with Bavistin or Thiram @ 2-2.5 g per kilogram of seed. Application of Chlorpyrifos (20EC) @ 5 litres per hectare with irrigation water or by spraying is recommended before sowing in the fields having perennial problem of termite infestation.
 - Thinning and weeding is recommended in mustard crop.
 - Planting of late cultivars of potato may be done in present weather conditions.
 - Under present weather conditions sowing of Pusa Yamdagini cultivar of carrot may be done.
 - Due to high relative humidity, infection of early blight may occur in potato and tomato. Constant monitoring is advised. Two to three spraying of Mencozeb @ 1 gm per litre of water at 8-10 days interval is advised when disease is detected.
 - Present weather conditions are suitable 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.
 - Transplanting of mature seedlings of tomato, cauliflower, cabbage, knolkhol and broccoli crop may be done in the raised bed.
 - Sowing of Nantes group of carrot, European group of radish such as Pusa Mridula and Pusa Himani, Crimson Globe cultivar of beetroot and snowball cultivars group of turnip can be done this weather conditions.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
 - late blight in early potato. Spray Dithane M 45 or Ridomil @ 2-5 gm per litre at 8-10 days interval when sky will be clear.

Uttar Pradesh

- **Realised Rainfall:** The State received no rainfall during last week.
- **Rainfall Forecast:** Dry weather is likely over the State.
 - **Major rabi crops:** Wheat, maize, gram, pea, and lentil.
 - Sowing of late sown varieties of wheat as Malviya – 234, Narendra - 236, T.W.T – 373 etc. may be taken up, using seeds @ 125 Kg/ha and purification of seeds may be done by carbendazim or thiram. For sowing varieties of wheat KRL – 203, Raj -3077, Lokvan etc. in barren land, take seeds 25% more than normal and use of fertilizers may be done as per soil testing.
 - Undertake weeding, intercultural operation in gram, pea, and lentil.
 - **Major Seasonal Crop with stage:** Sugarcane (grand growth) and vegetables (vegetative/fruited), 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 the 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.
 - Complete the Sowing of advance and recommended varieties of gram, pea and lentil and other pulses crops in sufficient moisture at the earliest.
 - Complete sowing of early varieties of potatoes like Kufri Chandramukhi, Kufri Bahar, Kufri Sadabahar, Kufri Ashok.
 - Weeding, hoeing, thinning and top dressing of recommended amount of Nitrogen may be done in toria.
 - **Plant Protection:** Weather conditions are favourable for for mild incidences of

- mal formation disease in mango, spray the solution of Naphthalene Acetic acid @ 200 ppm or 4ml. Planofix in 9 litre of water.
- cankers disease in lemon, spray the solution of Blitox 3-4 gram/litre in water.
- fruit borer in tomato and brinjal, spray the solution of Carbaryl @ 2 g / litre of water.

J & K

- **Realised Rainfall:** There was no significant rainfall during last week in the State.
- **Rainfall Forecast:** Rain is likely to occur at isolated places over the State.
- **Major *rabi* crops:** Wheat, barley, brown sarson
- **Advisory:**
 - Farmers are advised to complete the sowing of normal wheat (cv HD2329, PBW-154, PBW-343, Raj-3077, RSP-303 and WH 542) for irrigated areas and PBW 175, PBW-396 and IWP-72 for rainfed areas with seed rate 100 kg/ha during this period.
 - In rainfed areas where sowing is not done yet farmers can go for sowing of Mustard (Cv RLM-514, RLM-619, Kranti, Varuna and RH -30) can be done during this period with seed rate of 5kg/ha with recommended dose of fertilizer due to the presence of moisture in the soil.
 - Farmers are advised to continue the sowing of lentil (var L-9/12, PL-406 and L-4147) with seed rate 40 kg/ha. Hoeing and weeding in gram crop if crop is 40 days old.
 - In brown sarson first thinning may be done any time 20 days after germination if field in condition. Maintain 10 cm plant to plant distance in line sown crop. While thinning, keep extra plants in a row as an allowance of frost injury. Left over excess plant can be removed during 1st week of March. Under broadcast condition maintain approximately 50 plants per sq m area at the time of 1st thinning.
 - Farmers are advised to sow lentil at the rate of 2.25 kg seed / kanal at a distance of 23 cm row to row. Use 2.5 kg seed/ kanal for bold seeded variety. Apply 1.8 kg urea, 6.5 kg DAP and 1.7 kg MOP /kanal as basal. For weed control spray pendimethalin @ 1 kg a.i. /ha with 500 liter water within 2-3 days after sowing. Provide adequate drainage to avoid water stagnation in field.
 - Continue sowing of Oats, orchardgrass, tallfescue, sainfoin, clover and lucerne. Assure proper moisture in field for good germination.
- **Major Seasonal Crop with stage:** Vegetables (vegetative/flowering/fruitletting).
- **Crop Condition:** Good.
- **Advisory:**
 - Transplanting of onion and garlic should be completed positively by the end of this week as the minimum temperature is expected to fall below 2 °C, which adversely affects the establishment of seedlings. As the weather is expected to remain clear, hoeing and earthing up operation in potato, cabbage, cauliflower and main season knoll-khol should be taken up on priority. Harvesting of early sown knolkhol, spinach and methi should be done.
 - Undertake top dressing of cauliflower, knoll-khol, potato, spinach, methi and garlic @ 60, 50, 20, 20, 20 and 20 kg/ha. Rouging of virus effected plants from brinjal, tomato, cauliflower and cabbage crop.
 - Harvest early variety of sweet orange. Remove the stock sprout, suckers and water sprout from budded/grafted plants.
 - Select well drained field, if sowing of peas is not done so far, sowing should be done at the seed rate of 5 kg/ kanal. Apply fertilizer @ 5.5 kg DAP /kanal and 4.25kg MOP/ kanal as basal. Required nitrogen is met through DAP applied.
 - Continue sowing of Oats, orchardgrass, tallfescue, sainfoin, clover and lucerne. Assure proper moisture in field for good germination.
 - Undertake hoeing and weeding in transplanted crops like cabbage, cauliflower, kale and other standing crops.
 - Sowing of pea, spinach, methi, coriander etc. may continue. Planting of garlic clove may continue. Transplanting of onion seedlings may be started if seedlings are ready. Provide adequate drainage to avoid water stagnation in field.
 - As the weather is expected to remain largely clear, hoeing and earthing up operation in potato, cabbage, cauliflower and main season knoll-khol should be taken up on priority.

- **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.
 - flea beetle in toria crop, spray Carbaryl 50 WP @ 2gm/ltr or Malathion @ 0.05 %.
 - anthracnose and die back diseases in citrus and mango, soft rot, anthracnose and scab in guava and anthracnose in grapes, spray with copper oxychloride (0.3%) at 15 days interval. Young trees and nursery plants may also be given chemical protection if needed.

Rajasthan

- **Realised Rainfall:** There was no rainfall during last week in the State.
- **Rainfall Forecast:** Dry weather is likely to prevail over the State.
- **Major Seasonal Crop with stage:** vegetable crops (flowering / fruiting / harvesting)
- **Crop Condition:** Good
- **Advisory:**
 - Undertake intercultural operations in sweet gourd, cucumber, pumpkin, bitter gourd, 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. NRCDR-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.
 - Top dress half doze of nitrogen (65 kg urea/ha) in mustard.
 - Undertake sowing of barley at vapsa condition using 100-125 kg/ha certified seed of HYV of barley viz. RD 2035, RD 2052, RD 2503, RD 2668, BL 2 and treat seed with Thiram @ 3g/kg seeds.
 - Right time for planting nursery of late cauliflower, cabbage & rabi onion and sowing of carrot, radish & garlic.
 - Looking downfall of temperature in next few days sowing of wheat should be done. Farmers should give pre sowing irrigation in the field before sowing of wheat. For the control of termites seed should be treated with 600 ml chlorpyrifos 20 EC or endosulphan 35 EC per 100 kg seeds. Improved varieties of wheat are HI-1531, HI-1500, and HI-8627, GW-273, GW-322, Raj-3777, Raj-3765, HI-8498, Raj-4037, etc.
 - Undertake sowing of gram, lentil, pea, Lucerne cumin, Isabgol & Ajwain and Taramira.
- **Plant Protection:** Weather conditions are favourable for
 - mustard sawfly and aphid attack in mustard and other brassica. Keep watch in field and take appropriate protection measures. Cut the aphid infested twigs and bury them in soil. Apply 25 kg/ha Endosulphan 4% or Quinalphos 1.5% dust to manage saw fly.
 - Mango, Guava & pomegranate may be attacked by mealy bug insect. Hopper of this bug suck sap of tender leaves of these trees. To control this mix quinalphos 1.5 % or Endosulfan 4% granules @ 50-100 gm per tree in soil at a depth of 10-25 cm.

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

Bihar

- **Realised Rainfall:** There was no rainfall during last week in the State.
- **Rainfall Forecast:** Dry weather is likely to prevail over the State.
- **Major rabi Crops:** sarson, rai, maize, wheat
- **Crop Condition:** Good
- **Advisory**
 - Undertake preparation of the field for sowing of *rabi* crops viz., Sarson (Var-Rajendra Sarson-1, Swarna, etc.), rai (Rajendra Rai Pachheti, Pusabold and Kranti) using seedrate @ 5kg/ha and sunflower like (modern, surya Paradovie, KBSH I-44 using seed rate 5kg/ha for hybrid and 8 kg/ha

for composite variety, gram (Rajendra chana, Uday, Pusa 256, RAU 52, SG2) using seed rate 75 to 80 kg/ha sowing at a distance of 30x10 cm, Lentil (BR 25, Pant1406, 639, Malika, Arun) using seed rate @ 40 to 45 kg/ha and apply 20: 40: N:P kg/ha respectively. All pulses seed should be treated with Rhizobium culture @ 5 Pkt/ha or chemical treatments should be done with thiram or bavistine @ 2.0gm/kg of seed for good germination and minimum losses from insects and diseases.

- *Rabi* maize varieties like Shaktiman 1,2,3,4: Laxmi, Rajendra Shankar Makka 1 and 2 should be sown at a distance of 75 x 20 cm and apply 20 kg seeds /ha for getting maximum yield. To drop the seed of onion in the nursery. Start the sowing of fodder crops like berseem, lucerne and oat in the field.
- As the sharp fall in temperature is expected in coming days, which will be highly favourable for sowing of normal sown wheat varieties. Farmers are advised to start immediately the sowing of these varieties. The wheat varieties HD 2824, HD 2733, PBW 343, HP 1731, K 9107, HP 1761, PBW 434, UP 262, RW 346, RW 3413 are recommended for sowing under normal sowing conditions. Use seed rate @125 kg/ha and fertilizer dose should be given @ 120:60:40 N:P:K kg/ha respectively the full dose of phosphate and potash and 1/3 of Nitrogen should be given at the time of last ploughing of the field. Seed should be treated with azotobactor, bavistine or vitavax @ 1gm/kg of seeds. Spacing should be given at a distance of 20cm row to row and prepared the field for timely sown wheat.
- Undertake sowing of un irrigated Oat varieties like: Ratna, Azad and K125 and seed rate @ 100 kg/ha and nutrient doses approx 60:30:20 N:P:K kg/ha respectively should be given at the last ploughing of the field.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative/grand growth), fodder maize, jowar, lobia and sudan grass (vegetative)
- **Crop Condition:** Good
- **Advisory:**
 - Prepare the field for autumn planting sugarcane and no need of irrigation is required in early sowing of potato.
 - 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.
 - Prepare the field and transplanting late maturing cauliflower, cabbage, brinjal, tomato and sowing of medium & late potato like Kufri Badsah, Kurfi Sinduri, Kufri Lalima, Rajendra Alu 1, 2 and 3. Apply intercultural practices and plant protection measures like spraying of Malathion or Endoslfan-35 EC @1.5-2ml per liter of water to controls the insects-pest in vegetables crop.
- **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:** There was no rainfall during last week in the State.
- **Rainfall Forecast:** Dry weather is likely to prevail over the State.
- **Major *rabi* Crops:** rai, toria, gram, peas, potato, mustard
- **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. Select varieties of toria like 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. 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.
 - Undertake weeding, intercultural operations and top dressing.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative/grand growth)
- **Crop Condition:** Good

- **Advisory:**
 - 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:** 11 districts of the state received excess rainfall otherwise remaining districts received no rainfall/ deficient/ scanty rainfall during last week.
- **Rainfall Forecast:** Dry weather is likely over the State.
- **Major *rabi* Crops:** wheat, pulses, mustard, sunflower, groundnut
- **Advisory:**
 - Undertake weeding, intercultural operations and application of fertilizers.
 - The current temperature is favourable for wheat sowing in inland districts. Grow HYV like Sonalika, UP-262. Use 40 kg seed/acre. Before sowing the seeds should be treated with 3 g Captan or Thiram/kg of seeds.
 - Complete sowing of *rabi* pulses by the end of November. Go for sowing of lentil, field pea and chickpea @ 20 kg/acre. Now the current temperature is optimum for sowing of Bengal gram. Use 25 kg seeds/acre. Grow the improved varieties like Gourav, Annegiri, Radhey Treat seeds with 2 g Carbendazim or 3 g Thiram per kg seed.
 - The current temperature is favourable for wheat sowing in inland districts. Select HYV like Sonalika, UP-262. Use 40 kg seed/acre. Before sowing the seeds should be treated with 3 g Captan or Thiram/kg of seeds. To avoid the infestation of loose smut disease, soak the seeds in water for 5-6 hours, dry it in sun for 4-5 hours after draining out water then treat the seeds in the 2.5 g/kg of Bavistin of seeds before sowing. Sow the seeds in line at a row distance of 15 cm. Before sowing apply 15:20:20 kg NPK/acre. In termite prone areas, apply 1.5% Chloropyriphos @ 10 kg dust during the final land preparation.
 - Complete sowing of mustard under irrigated condition.
 - This is the optimum time for sowing of sunflower. Grow high yielding varieties like Morden, Sunrise, Surya and Hybrid varieties like KBSH-1, KBSH-3 and MSFH. Use 4 kg seeds/acre for high yielding varieties for rainfed condition, 3.5 kg for irrigated condition, 2-2.5 kg seeds/acre for hybrid varieties under rainfed condition and 1.5-2 kg seeds for irrigated condition. Sow the seeds in lines 30 cm apart.
 - The weather is optimum for sowing of rainfed groundnut. Grow high yielding varieties. *Kharif* groundnut is at maturity stage Go for harvesting the crop.
 - Dahlia comes to flowering 3 months after planting. It can be planted up to November.
 - Go for *piara* cropping of green gram, black gram, lentil and mustard as the weather is optimum.
- **Major Seasonal Crop with stage:** Sugarcane (early vegetative), vegetables (fruiting / harvesting), onion (vegetative).
- **Crop Condition: Good**
- **Advisory:**
 - Cole crop seedlings are at 3-week stage in the nursery. Go for transplanting in the main field.
 - Undertake weeding, intercultural operations and application of fertilizers.

West Bengal

- **Realised Rainfall:** There was no significant rainfall during last week.
- **Rainfall Forecast:** Dry weather is likely over the State.
- **Major *Kharif* Crops:** Rice, vegetables
- **Crop Stage:** *aman* rice (grain development/harvesting)
- **Crop Condition: Good**
- **Advisory:**
 - Arrange for harvesting matured crop of paddy.
- **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).
 - Prepare upland, light loam and well-drained land for early potato (90 days) varieties like Kufri Alankar and Kufri Chandramukhi cultivation.
 - Farmers are advised to undertake sowing of mustard
 - Undertake thinning and weeding in early sown toria keeping plant to plant distance at 10 cm. Spray 32g disodium octaborate tetrahydrate in 32 litres of water for 1 bigha crop.
 - Also undertake transplanting of brinjal and tomato in coastal saline zone.
 - Prepare nursery bed for sowing the seeds of cabbage and knoll-khol. The recommended varieties are Early golden, Acare, Pride of India for cabbage and White viena for knoll-khol.
- **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 no rainfall during last week.
- **Rainfall Forecast:** Mainly dry weather is likely over the State.
- **Major Seasonal Crop with stage: Rice:** grain maturity **Vegetables:** flowering/ fruiting/ harvesting; **Large Cardamom:** Capsule maturity/harvesting;
- **Crop Condition: Good**
 - **Advisory:** Farmers are advised to continue transplanting of rabi vegetable crops. Apply compost/FYM before transplanting of seedlings
 - 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 in standing crops like ginger.
 - 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:** There was no significant rainfall in most of the districts of the State except Tinsukia district which received excess rainfall during last week.
- **Rainfall Forecast:** No significant rainfall is likely in the State.
- **Major Kharif Crops:** *Sali* paddy
- **Crop Stage:** Rice (maturity/harvesting)
- **Crop Condition:** Good
- **Advisory:** Matured crop should be harvested immediately.
- **Major rabi crops:** Wheat, Potato, Pea and vegetables.
- Undertake land preparation and seed sowing of wheat in wheat areas.
- Farmers may collect recommended seeds of wheat variety viz., Sonalika, UP-262 and K-7410, etc. from reliable source. Thoroughly prepare the land sow seeds within this fortnight. Light pre sowing irrigation is advocated as the weather is going to be dry.
- Farmers are advised to sow early varieties of cauliflower (eg. Early Kuwari, Pusa Keteki, Pusa Dipali etc.).
- 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.
- Farmers are advised to start planting of potato, tomato, cabbage, knol khol etc.

- Plant quality tubers of late potato variety like Kufri Megha. Depending up on weather, irrigate the crop and spray Indofil M-45 @ 0.25 % (2.5 g/L of water) against late blight.
- 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.
- **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.
- Start land preparation for sowing of onion and garlic under well drained, sandy loam condition.
- **Plant protection:** Weather conditions are favourable for mild incidences of –
 - early blight in potato, spray Equation-pro (1 ml/l) or Diathene M-45 (2g/l).
 - The blight attack of potato may appear in the field. For controlling the early blight of Potato, spray Mancozeb 75% a.i.(2.5g/l).
 - saw fly in mustard. For controlling it, spray Rogor @2ml/l.
 - It is the possibility of attacking saw fly in the oil seed crops. For controlling it, spray Dimethoate 30 EC @2ml/l. or Chloropyriphos 20 EC @2ml/l.
 - late blight in tomato, *phytophthora* rot in onion and bacterial wilt and *phytophthora* fruit rot in brinjal is observed, spray Equation-pro (1 ml/l) or Acrobat (2 g/l) for their control. For purple blotch disease of onion, spray Dithane M-45 or Kavach (2 g/l).

Arunachal Pradesh

- **Realised Rainfall:** Many districts of the state received no rainfall except East Slang, Tirap and West Kameng districts, which received excess rainfall during last week.
- **Rainfall Forecast:** Rain is likely to occur at isolated places over the State.
- **Major Kharif Crops:** *Jhum* rice, WRC rice, millets
- **Crop Stage:** Rice, ragi (grain formation)
- **Crop Condition:** Good.
- **Advisory:**
 - Harvest the crop without delay otherwise the yield will be reduced drastically
- **Major Seasonal Crop:** Vegetables
 - Matured fruits be harvested for sale & avoid over maturity.
 - Transplanted vegetables be provided with proper irrigation and weeding be done followed by fertilizer application
 - Sowing of pea may be done followed by thinning wherever necessary.
- **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:** Most of the districts received excess rainfall except Nellore, Medak, Adilabad, Nizamabad and Kurnool districts which received deficient rainfall during last week.
- **Rainfall Forecast:** Dry weather is likely over the State.
- **Major Kharif Crops:** Cotton
- **Crop Stage:** boll development (cotton).
- **Crop Condition:** Good.
- **Advisory:**
 - The fields which are completely inundated due to the floods to Krishna river and cotton crop completely damaged, alternate crops like greengram, blackgram, rabi redgram ,maize,chickpea, sorghum is recommended.
 - With the help of this rain third split dose of fertilizer ie, 35 kg urea and 15 kg MOP per acre is to be applied for Cotton crop. (Krishna, Guntur and Prakasam). Spraying 2% urea or 2% KNO₃ should be taken up two times at weekly intervals.

- Suitable varieties for rabi NLR-145, NLR-34449, MTU-1010, MTU-1001, BPT- 5204. Treat the paddy seed with carbendazim @ 1g /kg seed. If BPT 5204 is to be planted then treat the seed with 0.6ml tricyclazole/kg seed . Apply carbofuran 3G@ 1.0kg/200m² ,5-7 days before pulling the nursery. Provide alley ways of 20cm width for every 2m for monitoring of BPH while transplanting.
- 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, LBG 752. Greengram/ blackgram seed to be treated with carbosulphan @ 30g or imidacloprid @ 5ml and mancozeb @ 3g or carbendazim @ 2.0 per kg of seed.
- Chickpea can be sown from October-November. Suitable chickpea varieties for sowing are ICCV-7, Swetha, Annegiri, Jyothi, ICCV-10, KAK-2, JG-11, LBeG-7. Seed treatment with *Trichoderma viride* @ 4g/ kg seed in wilt prone areas. The crop should be sown with a spacing of 30X10cm. The recommended seed rate is 25-30 kg/acre. 50kg DAP or 35kg urea + 125 kg SSP/acre should be applied as basal fertilizers for chickpea.
- **Major Seasonal Crop:** Sugarcane and Vegetables
 - Farmers are advised to undertake intercultural operations in sugarcane and vegetables to keep the fields weed free.
 - Raise the nurseries of *rabi* vegetable crops like brinjal, cabbage, cauliflower, capsicum and tomato.
 - In view of prevailing low minimum temperatures, apply Dormix @ 30 ml per litre of water on pruned branches for obtaining better bud break on grapes.
- **Plant protection:** Present weather conditions were congenial for the incidence of
 - Incidence of Aphids and whitefly in Cotton. To control them, spray Monocrotophos @ 1.5 ml or Methyl Demeton @ 2 ml or Acetamaprid @ 0.2 g or Acephate @ 1.5 g per litre of water.
 - Incidence of leaf spots in Cotton. To control, spray Mancozeb @ 2.5 g or Copper-Oxy-Chloride @ 3g or Cuman-L @ 4 ml per litre of water 4-5 times at 15 days interval.
 - Severe incidence of white fly is noticed in water logged sugar cane fields of Krishna district. To control, spray Endosulphon or Malathion @ 2 ml per litre of water.
 - Prevailing weather conditions are congenial for the incidence of scale insect, mealy bug and *Pyrilla* in Sugarcane. To control, de trash the basal leaves and spray Dimethoate @ 1.7 ml or Malathion @ 3 ml per litre of water. To control *Pyrilla*, spray Endosulfan or Malathion @ 2 ml per litre of water.
 - Incidence of thrips is noticed in onion. To control, spray Imidacloprid @ 0.4 ml or Fipronil @ 2 ml per litre of water.
 - Incidence of shoot and fruit borer is noticed in brinjal and bhendi. To control, install pheromone traps @ 4 per acre, clip the infested shoots and destroy, spray Endosulfan or Profenophos @ 2 ml per litre of water.
 - Incidence of thrips and mites is noticed in chillies. To control **Thrips**, spray Acephate @ 1.5 g or Fipronil @ 2 ml per litre of water **and to control Mites**, spray Phosolone @ 2 ml per litre of water.
 - Leaf webber in mango. To control spray Monocrotophos @ 1.6 ml or Quinolphos @ 2 ml per litre of water.
 - Canker is noticed in sweet orange and acid lime in Nalgonda district. To control, spray Copper. Oxy. Chloride @ 30 g + Plantamycin @ 1 g in 10 litres of water 2 to 3 times at 20 days interval.

Karnataka

- **Realised Rainfall:** Most of the districts of the South Interior Karnataka and coastal Karnataka received good rainfall and there was no significant rainfall in North Interior Karnataka.
- **Rainfall Forecast:** Rainfall is likely at isolated places at coastal Karnataka and mainly dry weather over Interior Karnataka.
- **Major *rabi* Crops:** Wheat (6 - 8 leaf emergence), Bengal gram (Branching), Rabi Sorghum (Knee-high), Pigeonpea (Pod filling), Sunflower(Head filling)
- **Advisory:**
- **Advisory:**
 - As there was sufficient rainfall in South Interior Karnataka and coastal Karnataka during last week, farmers are advised to postpone irrigation to the crops.

- Undertake sowing chickpea, treat the seeds being used for one hectare with 375 g. Rhizobium and 375 g. Phosphorus solubilising bacteria. Also treat the seeds with 2 g. Carbandizem or 4 g. Trichoderma to disease infestation to the crop.
- Farmers in Udupi and Dakshin Kannada are advised to undertake sowing of pulse crops. Select among varieties like PS-16 (Green gram), C-152, TVX-944 (Cow pea), T-9, TAU-1 (Black gram), PHG-9 (Horse gram).
- It is right time to give 2nd dose of fertilizer to plantation crops. For the four year old and above tree or vine, the below mentioned dose of N:P:K fertilizer can be given as the 2nd dose. 1) Arecanut:- 50:20:70 gm per tree. 2) Black pepper:- 50:20:70 gm per vine. 3) Banana: 90:54:113 gm per plant. 4) Coconut: 250:165:600 gm per tree. 5) Cardamom: 250:60:60 gm per tree.
- Farmers in Shimoga and Hassan districts are advised to undertake planting of banana. Select healthy and disease free suckers and apply 500 grams neemcake and 20grams Carbofuran per plant before planting.
- Since cloudy weather followed by rainfall expected for coming 5 days and farmers are suggested to postpone irrigation for Horticultural and Agriculture crops in Hiriyur dist.
- Farmers in Hiriyur district are advised to undertake sowing of Rabi crops like Bengal gram, sunflower rainfed and Maize and Onion under irrigated condition.
- Provide one irrigation as the wheat crop is in crown root initiation (CRI) stage which is critical stage for irrigation.
- Carry out the nipping operation in the Bengal gram as it helps in spreading of the crop and produce more of side branches. Take up the spraying of 2 % urea. This will helps for better establishment of vegetative growth.
- **Major Seasonal Crop:** Sugarcane, vegetables, ginger (Nursery), onion (5 - 6 leaf emergence)
- **Advisory:**
- **Major Seasonal Crop:** Sugarcane and Vegetables
 - Farmers are advised to undertake intercultural operations in sugarcane and vegetables to keep the fields weed free.
 - Raise the nurseries of *rabi* vegetable crops like brinjal, cabbage, cauliflower, capsicum and tomato.
 - In view of prevailing low minimum temperatures, apply Dormix @ 30 ml per litre of water on pruned branches for obtaining better bud break on grapes.
- **Plant protection:** Present weather conditions were congenial for the incidence of
 - leaf eating caterpillar's in Bengalgram. To control the pest, spray the crop with 4 g carbaryl or 1 ml Methyl parathion or 2 ml Chlorpyrifos dissolved in one liter of water.
 - powdery mildew disease in sunflower, spray the crop with 1 ml Hexaconazole or 1 g Carbendazeme dissolved in one liter of water.

Kerala

- **Realised Rainfall:** Most of the districts of the state received no rainfall except Wyanad and Malappuram districts which received excess rainfall during last week.
- **Rainfall Forecast:** Rainfall is likely to occur at isolated places 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.
 - 2nd doze of lime @ 250kg/ha may be applied for direct sown/and transplanted crop one month after planting. One week after lime application top dressing of fertilizers may be done. Drain water from the field before fertilizer application. After 12 hours, water may be let in.
- **Major Seasonal Crop:** Vegetables and plantation crops (coconut, arecanut, pepper and cashew). Time for planting of coffee and arecanut
 - Farmers are advised to postpone irrigation as there is chance of rainfall during next five days
 - Intercultural operations, application of fertilizers and pesticides may be continued after current spells of rain.

- Planting of arecanut seedling can be continued. Srimangla, sumangla and Mohitnagar are best suited and high yielding varieties.
- Fresh planting of banana can be continued during this period in Ernakulam.
- **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 on a non rainy day. Stem bleeding may become more severe. Farmers are advised to keep vigilance against Red palm weevil and rhinoceros beetle.
 - Pests like leaf folder, brown plant hopper, jasids, stem borer etc. in rice, spray fenthion @ 1000ml of 50 EC/ha may be done. 2.5 Kg pseudomonas culture may be mixed with 50 kg of cow dung powder and apply where there is a chance of blast and bacterial blight diseases. Application may not be done with chemical fertilizers and plant protection chemicals.
 - During this season the attack of coried bug may be seen in Coconut. If the attack is severe, spray carbaryl 4 gm / litre of water using roker sprayer. Spray crowns and leaves with 1% Bordeaux mixture / 0.5 % copper oxychloride formulation / 0.4% mancozeb as a prophylactic measure against leaf rot disease. In the leaf rot affected plants, remove the rotten parts from the spear and two adjacent leaves and pour 300ml of fungicide solution at the base of the spear which can be prepared by mixing Hexaconazol 5EC 2 ml or mancozeb 3 gm in 300 ml of water. If stem bleeding is seen, chisel out the affected tissues and paint the wound with tridemorph 5%. Apply coal tar after 1-2 days. Root feed with tridemorph 5% to prevent further spread of lesions. Leaf axil filling with 25 gm Sevidol 8G and 200gm fine may be done to control rhinoceros beetle.
 - tea mosquitos in cashew plantations, spray carbaryl 0.1% or quinolphos 0.05%. Apply 640 g of urea, 800 g of rock phosphate, 500 g of MOP to plantation with 5 years of age.
 - sucking pest in cowpea and bittergourd, spray the plants with neem oil emulsion. For this , dissolve 60g of bar soap on half litre of water and mix the emulsion with 1 lit of neem oil by vigorous stirring. This solution should be diluted 40 times for spraying purpose.
 - pseudo stem weevil in banana, apply Chlorpyrifos @2ml/l in leaf axils.

Tamil Nadu

- **Realised Rainfall:** Most of the districts received excess rainfall during last week.
- **Rainfall Forecast:** Rainfall is likely at isolated places over the state.
- **Major Kharif Crops:** Groundnut, pulses and rice
- **Crop Stage:** pod development (pulses), picking (cotton)
- **Crop Condition:** Good
- **Advisory:**
 - North east monsoon has been vigorous over the State. Farmers are advised to drain out excess water in the fields of standing crops.
 - This is the right time to take up sowing of cotton in Kovilpatti. 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.
 - Farmers are advised to undertake sowing of *rabi* crops utilizing the current rainfall.
- **Major Seasonal Crop:** *thaladi* rice (tillering), sugarcane, banana and vegetables.
 - As there was sufficient rainfall during last week and there is possibility of rainfall during next 3 days, postpone intercultural operations like weeding and fertilizer application in *thaladi* rice.
 - Postpone intercultural operations and application of fertilizers in vegetables and sugarcane as there is chance of rain for next 3 days.
 - Farmers are advised to take paddy nursery sowing in the current week.
 - Farmers are advised to apply top dressing of nitrogenous fertilizers based on leaf colour chart (LCC).
 - Farmers are advised to take up land preparation activities like ploughing, puddling, green manure in corporation and leveling for paddy main field.
 - In vegetable belt area, farmers are advised to spray NAA (Growth hormone) for controlling of flower dropping and increase fruit selling.
 - Farmers involved in ground nut sowing are advised to choose the varieties suitable for the present season (Karthigai pattam) like VRI-6, 7 and TMV-13. Seeds (50-55 kg per acre) should first be

treated with *Trichoderma viridii* (10 grams/kg of seed). Green gram varieties like Vamban-2 or Vamban-7 and black gram varieties like Vamban-4 or Vamban-5 may be preferred.

- Place a bag of neem cake at the mouth of the irrigation channel to control insect and pest. While top dressing neem cake is mixed with urea @ 1:5 ratio to reduce pest population and to increase the yield.
 - Drain the excess rain water, stagnating in the Samba and Thaladi fields.
 - Use Leaf Colour Chart (LCC) when applying nitrogenous fertilizer
 - Apply the following recommended chemical fertilizers; 100% of phosphorous, 50% nitrogen & Potash and 200 kg of gypsum as basal just before last ploughing, level the field properly and transplant the rice seedlings (Thaladi crop). Transplant 2 to 3 seedlings with a spacing of 20 cm between rows and 10 cm between plants to get 50 hills/m². Complete the gap filling within 10 days after transplanting.
 - Apply 10 kg of ZnSo₄ per acre after transplanting, do not incorporate.
 - Hand weeding is to be done on 20 & 45 DAT in Thaladi crop.
 - As rainfall is expected in the forth coming days, postpone irrigation to gardenland crops.
- **Plant Protection:**
 - In *samba* and *thaladi* crop, spray Carbendazim or Tricyclozole @ 200 ml in 200 l of water to control blast and bacterial leaf spot disease and spray 20% cow dung slurry to control Bacterial Leaf Blight diseases.
 - stem borer, leaf folder and Green leaf hopper in paddy field, spray application of profenophos 50EC 1000ml/ha for controlling of above pests.
 - incidence of sphingid in the pulses crops, spray endosulfan at 1 litre / ha.
 - mealy bug incidence is seen in pepper as a result of dry weather, spray the crop with Dimethoate 2 ml /litre of water.
 - incidence of crown rot in Coconut. To prevent this swab the infected crowns with 1% Bordeaux mixture.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

Maharashtra

- **Realised Rainfall:** There was no significant rainfall during last week.
- **Rainfall Forecast:** Dry weather is likely over the State
- **Major Kharif Crops:** Rice, cotton, Vegetables, tur
- **Major rabi Crops:** *jowar*, safflower, sunflower, linseed, gram, wheat, vegetables.
- **Crop Stage:** *Kharif* paddy (mid late & late variety at grain maturity / harvesting), red gram(flowering / pod formation), *Kharif* & irrigated cotton(boll maturity / picking), and *rabi* jowar, safflower (vegetative growth stage), sunflower, linseed (early vegetative growth), gram (sowing / germination), wheat(sowing/early vegetative)
- **Crop Condition:** Satisfactory.
- **Advisory:** Conserve moisture in the crop field at maturity stage.
 - Complete sowing of *rabi* gram and wheat.
 - Thinning and weeding may be done early sown crop.
- **Major Seasonal Crop:** Fruit crops, Sugarcane and vegetables.
 - Undertake spraying, fertilizer application in the standing crops.
 - Complete harvesting of already matured groundnut, jowar & mid late and late variety of rice.
- **Plant Protection:** Weather conditions are favourable for mild incidences of –
- blast and powdery mildew disease on grapes, for control spray Copper Oxy chloride, Mancozeb or Capton. For control of downy mildew, deep the grape bunch in a solution of Zebralic acid, Phenamedon plus Mancozeb 250gm per 100 liter of water.
- leaf blight disease of onion spray, Mancozeb 0.25% + 0.10 % sticker at an interval of 15 days. For control of thrips on onion spray, Dimeton @10 ml or Carbosulfan @ 10 ml per 10 lit of water at an interval of 15 days

- pod borer on red gram; for control spray 5% Neemark. If infestation is more, spray Endosulfan 35 %WSC @ 20 ml or Quinolphos 25 % WSC @ 16 ml or Fenthioate 50% WS @ 14 ml in 10 liters of water.

Gujarat

- **Realised Rainfall:** Mainly dry weather was prevailed over the State during last week.
- **Rainfall Forecast:** Dry weather is likely over Gujarat region and Saurashtra and Kutch.
- **Major Kharif Crops:** Rice, castor, pigeon pea, cotton, groundnut, bajra, sesamum, cluster bean, pulses
- **Crop Stage:** groundnut (pod development/maturity), maize (silking/ cob formation), cotton (square formation), bajra (grain formation).
- **Crop Condition:** Crop condition is satisfactory
- **Advisory:**
 - Apply irrigation to the crops as there was no significant rainfall during last week and no rainfall is likely for the next five days.
 - Harvest the mature groundnut crop, if soil is hard than light irrigation can be applied before pulling.
 - Undertake sowing of cabbage, cauliflower and radish.
- **Major rabi Crops:** wheat, potato, mustard
- **Crop Stage:** mustard (early vegetative), gram (flowering)
- **Crop Condition:** Crop condition is satisfactory
- **Advisory:**
 - Farmers are advised to undertake sowing of wheat and select among GW-496, 366, 322, Lok-1 certified seed @ 100 kg /ha keeping 30 x 10 cm distance. Apply irrigation immediately after sowing.
 - Undertake weeding, intercultural operations in early sown mustard crop. After that apply first irrigation to the crop.
 - Undertake land preparation operations for sowing of potato.
 - Farmers are advised to apply irrigation to gram crop as it is in flowering stage.
 - Undertake sowing of wheat. For timely sowing select cultivars viz., GW- 496, GW 273 GW- 503 and GW- 322. Farmers may use seed rate @ 125 kg/ ha. Lines sowing distance- 22.5 cm and depth of sowing is 5- 6 cm for better germination. Seed treated before sowing with Endosulfan 35 EC @ 700ml per 100 kg seed to control termite in the field. Seeds are to be treated during night time before sowing. Apply FYM @ 10-15 t/hectare and basal dose of chemical fertilizers @ 60 kg Nitrogen + 60 kg Phosphorus per hectare.
 - Undertake land preparation and sowing of gram, amaranthus and cumin.
 - Undertake sowing of maize with variety GM-3 or Ganga.
 - Undertake sowing of garlic with variety Gujarat Garlic-1, Gujarat Garlic-10 or Gujarat Garlic-2 recommended @ 600-700 kg claws/ha.
- **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.
 - 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.
 - Color rot in groundnut, spray carbendazim @ 0.2 %.
 - mealy bug on cotton, uproot the affected plants then burn and eradicate weeds surrounding field as it is host plant and spray Emidaclopride @ 5 ml + Prophenofos @ 15 ml in 10 litre of water + adding solution of oil soap @ 10 gram. Dust Methyl parathion 2 % powder surrounding the crop stem.

- mealy bug in orchard, dust Methyl Parathion 2 % powder in soil after digging near the stem and Spray Emidaclopride @ 5 ml + Prophenofos @ 15 ml in 10 litre of water + adding solution of oil soap @ 10 gram surrounding the tree stem.
- On cotton alternaria leaf spot disease, spray mencozeb + chlorothanolin @ 25 gm in 10 liters of water, for thrips spray triazophos 20 ml or methyl-o-dematon 5 ml or dimethoate 10 ml in 10 liters of water and for the control of leaf blight, spray Mencozeb 25 gm or copper oxychloride 30 gm in 10 liters of water.
- semi looper in castor, spray chlorpyripos 20 ml or endosulphan 20ml or quinalphos 20 ml in 10 liters of water.
- Shoot borer in brinjal, remove and destroy infested shoot and arrange to put at least 12 to 15 pheromone trap /ha. and spray endosalphan @ 21 ml or DDVP @ 5 ml/10 lit of water.

CENTRAL INDIA [M.P., CHHATTISGARH]

Madhya Pradesh

- **Realised Rainfall:** Mainly dry weather was prevailed over the State during last week.
- **Rainfall Forecast:** Dry weather is likely to prevail over the State.
- **Major rabi Crops:** wheat, pulses, gram
- **Crop Condition:** Satisfactory.
- **Advisory:**
 - Use Rhizobium culture for sowing of legume crops and use thiram and vebestene (1.5g each) as fungicides before the sowing of different Rabi crops also.
 - Undertake sowing of potato, onion , rabi crops and vegetable crops.
 - Undertake sowing of wheat, chickpea, lentil, linseed and field pea.
 - Sowing of berseem, dhanian, pyaj, and lahsun.
 - Undertake sowing of desi gram with varieties JG 130, JG 11, JG 315, JG 16.
 - This is favorable time for sowing of wheat. Apply split dose of nitrogen fertilizer in wheat. Prefer wilt resistant late varieties of Gram if farmers wants to sow gram crop. for sowing. Seeds must be Treated by fungicide & biofertilizer (Rhizobium) before sowing.
 - Farmers should be shown 3-4 irrigation required HI - 1418, HI -1479 and HI – 1544 and 5 – 6 irrigation required GW – 322, GW -273 improved varieties of wheat.
 - Farmers should be irrigated their wheat crop 21 days after sowing and give nitrogen fertilizer 1/4rd recommended dose by urea as top dressing.
 - Farmers should be done seed treatment of *rabi* crops with Carbendazim 2.0 gm/kg or Mencozeb or Thirum 3.0 gm/kg of seed.
- **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.
 - Undertake pit preparation for planting of new orchard crops.
- **Plant Protection:**
 - Weather conditions are favourable for-
 - boll worm cotton crops, spray Profenophos 40% EC @ 3.0 ml/l.
 - pod borer in pigeonpea, spray Profenophos 50 EC @ 1.5 l/ha.
 - Mealy bug in cotton, spray Prophenophos 2 ml per litre of water.
 - Boll worm on cotton crops, farmers use pheromone traps to control male insect, if attack is increased spray Profenophos 40% EC @ 3.0 ml/l.
 - powdery mildew in vegetables farmers are advised to take up the spraying of 1.0 g Carbendazime dissolved in one liter of water.
 - fruit fly in ber, farmers are advised that they should spray Endosulphon 35 EC @ 2 ml/l and second spray after 15 days.
 - Caterpillar in cabbage, Spray Melathyon 1 ml per litre of water.
 - **Animal Husbandry:** Animals are to be checked by veterinarians Cattle should be vaccinated to save them from infections/diseases like Anthrax, Galgotu, Black Quarter and FMD etc. The

animals should be dewormed through deworming tablets. Take care the pregnant animals and feed them balance diet. Provide the animal's clean water and balance and nutrients rich food.

Chattisgarh

- **Realised Rainfall:** Mainly dry weather was prevailed over the State except Dantewara district which received excess rainfall during last week.
- **Rainfall Forecast:** Dry weather is likely to prevail over the State.
- **Major Kharif Crops:** Rice,
- **Crop Stage:** grain development (rice),
- **Crop Condition:** Good
- **Advisory:** Complete harvesting the matured crops of rice
- Rice crop should be 12% dried after harvesting before storage.
- **Major Seasonal Crop with stage:** Sugarcane (vegetative), vegetables (flowering / fruiting / harvesting),
- **Crop Condition:** Good
- **Advisory:**
 - Undertake sowing of pulses, potato, onion, gram, pea, lentil and safflower.
 - Undertake planting of sugarcane crop with varieties CO 86032, CO 86141.
- **Major rabi Crops:** Rice,
- **Advisory:** The temperatures become favorable for sowing of wheat, hence it is advised to undertake sowing of wheat at the earliest. GW-273, Kanchan, GW-173, Amar, Lok-1, Ratan and HD-2329 are suitable varieties for Chhattisgarh Plains zone. However, under limited irrigation sowing of Sujata variety is recommended. For sowing of wheat seed rate should be 125 kg/ha for all the varieties.
- Proper seed treatment methods should be adopted before sowing of gram. Seed treatment with fungicides like Carbedizim @ 2.5 g/kg of seed recommended. After this seed should also be treated with Rhizobium culture @ 5 g/kg of seed. Vaibhav, JG-74, TG-315, ICC-2 (Kabuli) etc. are suitable varieties for the Chhattisgarh plains agro-climatic zone.
- **Plant Protection:**
 - Pigeon pea crop is at flowering/pod formation stage. At this stage keep watch over the crop for pod borer complex due to partly cloudy weather during past week. If necessary, spray Endosulphan or Metasystox @ 1.5 ml per liter of water. Spraying of HNPV @ 250 LE/ha is also recommended, but while using HNPV, care should be taken that spraying should be done during morning or evening hours to avoid loss of efficacy during bright sunshine hours.
 - Weather conditions are favorable for incidence of Diamond Back Moth in Cole crops. Hence it is advised to spray Endosulphan or Trizophos @ 1.5 ml/liter of water is necessary.
 - Weather conditions are suitable for sowing of onion, gram, pea, lentil and safflower, hence it is advised that after harvesting of kharif crops the fields should be prepared as early as possible whenever the optimum moisture is there in the field and complete the sowing of these crops.