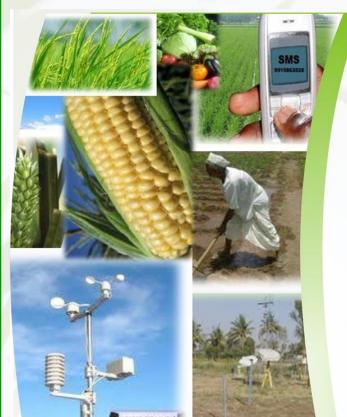
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National Agromet Advisory Service Bulletin



Friday 4th October 2019
(For the period 4th to 8th October 2019)

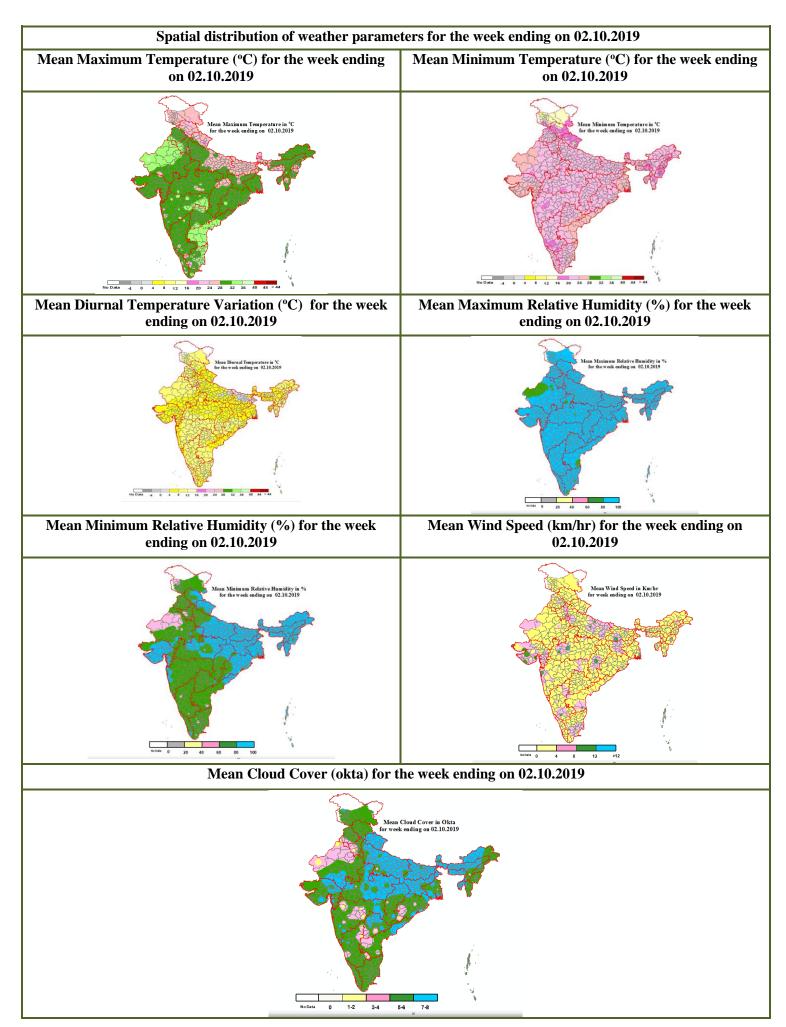


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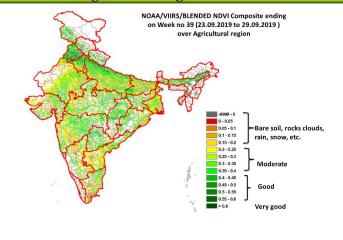
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District AAS Bulletin: http://www.imdagrimet.gov.in/node/3545
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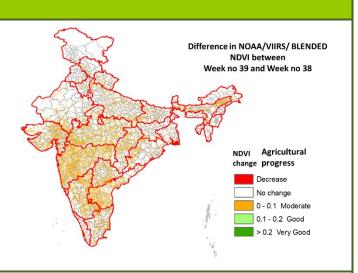




NOAA/VIIRS/BLENDED NDVI composite for the week number 39 (23.09.2019 to 29.09.2019) over Agricultural regions of India



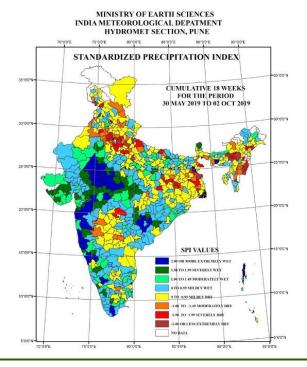
Difference in NOAA/VIIRS/BLENDED NDVI between week number 39 and week number 38



Agriculture vigour was good at many parts of Uttarakhand, Punjab, Himachal Pradesh, Northern part of Haryanan, North Eastern states, Sub Himalayan West Bengal & Northern part of Chattisgarh and at afew places over Jammu & Kashmir, Uttar Pradesh and North Coastal Andhra Pradesh. It was isolated over rest of the country.

Good Agricultural vigour has been observed at at a few places over Madhya Pradesh, Gujarat & Maharashtra and at isolated places over Himachal Pradesh, Uttaranchal, Bihar, South Telangana and Karnataka.

Standardised Precipitation Index Cumulative 18 weeks for the period 30th May to 2nd Oct 2019



- ◆ Extremely/Severely wet conditions exist in Gopalganj district of Bihar; Broach, Valsad, Dangs, Chhota Udepur, Jamnagar, Junagarh, Surendranagar, Botad, Devbhumi Dwarka, Morbi districts of Gujarat; Uttar Kannada, Dharwad, Haveri, Chikmagalur, Mysore districts of Karnataka; Kozhikode, Palakkad districts of Kerala; Barwani, Bhopal, Dewas, Dhar, Guna, Harda, Hoshangabad, Indore, Jhabua, Khandwa, Mandsaur, Neemuch, Raisen, Rajgarh, Ratlam, Sehore, Shajapur, Ujjain, Vidisha, Burhanpur, Ashoknagar, Alirajpur, Agar, Jabalpur, Mandla, Narsinghpur, Sagar, Seoni districts of West Madhya Pradesh; Raigad, Ratnagiri, Thane, Sindhudurg, Mumbai Suburban, Palghar, Dhule, Jalgaon, Kolhapur, Nashik, Pune, Satara, Nandurbar, Gadchiroli districts of Maharashtra; East Garo Hills districts of Meghalaya; Koraput district of Orissa; Kapurthala district of Punjab; Ajmer, Banswara, Bhilwara, Bundi, Chittorgarh, Dungarpur, Jhalawar, Kota, Sikar, Tonk, Udaipur, Baran, Rajamand, Pratapgarh districts of Rajasthan; Theni, Tirunelveli districts of Tamilnadu; Dadara & Nagar Haveli districts of Union Territory; Mirzapur district of Uttar Pradesh; North and Middle Andaman districts of Andaman & Nicobar Islands; North Sikkim district of Sikkim; Sahibganj district of Jharkhand; Bastar, Bijapur, Narayanpur, Sukma, Kondagaon districts of Chhattisgarh; North Goa district of Goa.
- ♦ Moderately wet conditions exist in Lower Dibang Valley district of Arunachal Pradesh; Kokrajhar, Udalguri, Baksa, Chirang districts of Assam; Buxar, Samastipur, Siwan districts of Bihar; Kheda, Surat, Narmada, Navsari, Amreli, Bhavnagar, Kutch, Rajkot, Porbandar, Gir Somnath districts of Gujarat; Udupi, Belgam, Chitradurga, Davangere, Kodagu, Mandya districts of Karnataka; Betul, Khargone, Chindwara, Damoh, Rewa, Singrauli districts of West Madhya Pradesh; Mumbai City, Nagpur districts of Maharashtra; Boudhgarh, Ganjam, Nayagarh, Puri districts of Orissa; Patiala districts of Punjab; Jodhpur, Nagaur, Pali, Jaipur, Jhunjhunu, Sawai Madhopur districts of Rajasthan; Nilgiri, Sivaganga, Tiruvallur, Tiruvannamalai, Tiruvarur, Virudhunagar, Ariyalur districts of Tamilnadu; Puducherry districts of Union Territory; Ambedkar Nagar, Ballia, Banda, Barabanki, Basti, Pratapgarh, Sant Ravidas Nagar, Hamirpur districts of Uttar Pradesh; South Goa district of Goa; Karimnagar, Rajanna Sircilla districts of Telangana.
- ♦ Moderately dry conditions exist in East Kameng district of Arunachal Pradesh; Sheikhpura district of Bihar; Gurgaon, Hisar, Jind, Mahendragarh, Mewat, Bhiwani, Faridabad, Kaithal districts of Haryana; Kinnaur, Lahaul & Spiti districts of Himachal Pradesh; Rajouri district of Jammu.
- ♦ Severely / extremely dry conditions exist in remaining districts in the country.

Weather Forecast for next 5 days valid upto 0830 hours of 9th October 2019

- ♦ Meteorological sub-division wise detailed 5 days precipitation forecast is given in Table-1.
- ♦ No significant change in maximum temperatures likely over major parts of the country during next 2-3 days.

5 Day Rainfall Forecast (MID-DAY) 4^h October 2019

Met-Sub-Division	04-Oct Today	050ct Sat	060ct Sun	07Oct Mon	08Oct Tue
1. Andaman & Nicobar Islands	ISOL	ISOL	ISOL	SCT	SCT
2. Arunachal Pradesh	SCT	SCT	FWS	FWS	FWS
3. Assam & Meghalaya	SCT	FWS	FWS	FWS	FWS
4. N. M. M. & T.	SCT	FWS	WS	WS	FWS
5. S.H. West Bengal & Sikkim	FWS	SCT	SCT	FWS	FWS
6. Gangetic West Bengal	SCT	FWS	FWS	FWS	WS
7. Odisha	SCT	SCT	FWS	FWS	FWS
8. Jharkhand	SCT	SCT	SCT	FWS	FWS
9. Bihar	SCT	SCT	ISOL	ISOL	ISOL
10. East Uttar Pradesh	ISOL	DRY	DRY	DRY	DRY
11. West Uttar Pradesh	ISOL	DRY	DRY	DRY	DRY
12. Uttarakhand	ISOL	ISOL	ISOL	ISOL	ISOL
13. Haryana, Chd & Delhi	SCT	ISOL	ISOL	DRY	DRY
14. Punjab	SCT	ISOL	ISOL	DRY	DRY
15. Himachal Pradesh	SCT	ISOL	SCT	SCT	ISOL
16. Jammu & Kashmir	FWS	SCT	FWS	SCT	SCT
17. West Rajsthan	SCT	ISOL	ISOL	DRY	DRY
18. East Rajasthan	ISOL	ISOL	ISOL	DRY	DRY
19. West Madhya Pradesh	ISOL	ISOL	ISOL	ISOL	DRY
20. East Madhya Pradesh	ISOL	ISOL	ISOL	ISOL	DRY
21. Gujarat Region	ISOL	ISOL	ISOL	DRY	DRY
22. Saurashtra & Kutch	ISOL	ISOL	ISOL	DRY	DRY
23. Konkan & Goa	SCT	SCT	FWS	FWS	FWS
24. Madhya Maharashtra	SCT	FWS	FWS	FWS	FWS
25. Marathawada	ISOL	SCT	SCT	SCT	SCT
26. Vidharbha	ISOL	ISOL	ISOL	ISOL	ISOL
27. Chhattisgarh	ISOL	ISOL	ISOL	ISOL	SCT
28. Coastal A. P. & Yanam	SCT	SCT	SCT	FWS	FWS
29. Telangana	SCT	SCT	SCT	SCT	FWS
30. Rayalaseema	FWS	SCT	SCT	FWS	FWS
31. T.N., Puducherry & Karaikal	SCT	SCT	SCT	SCT	SCT
32. Coastal Karnataka	FWS	FWS	FWS	FWS	FWS
33. North Interior Karnataka	FWS	FWS	FWS	FWS	FWS
34. South Interior Karnataka	WS	FWS	FWS	FWS	WS
35. Kerala & Mahe	FWS	FWS	FWS	FWS	FWS
36. Lakshadweep	FWS	SCT	SCT	SCT	SCT

% Station Reporting Rainfall

% Stations	Category	% Stations	Category
76-100		26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespred (FWS/ Many Places)	1-25	Isolated (ISOL)
No Rain	Dry		

Weather Warning during next 5 days

- **04 October (Day 1): ♦ Heavy rainfall** very likely at isolated places over Assam & Meghalaya, Telangana, Rayalaseema, Interior Karnataka and Kerala & Mahe.
- ♦ Thunderstorm accompanied with lightning very likely to occur at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharshtra, Marathawada and Konkan & Goa.
- **05 October (Day 2): ♦ Heavy rainfall** very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Rayalaseema and Kerala & Mahe.
- ♦ Thunderstorm accompanied with lightning very likely to occur at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Jharkhand, Gangetic West Bengal, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharshtra, Marathawada and Konkan & Goa.
- **06 October (Day 3): ♦ Heavy rainfall** very likely at isolated places over Madhya Maharashtra, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Konkan & Goa.
- ♦ Thunderstorm accompanied with lightning very likely to occur at isolated places over Vidarbha, Jharkhand, Gangetic West Bengal, Odisha, Madhya Maharshtra, Marathawada and Konkan & Goa.
- **07 October (Day 4): ♦ Heavy rainfall** likely at isolated places over Madhya Maharashtra, Coastal Andhra Pradesh, South Interior Karnataka, Kerala & Mahe, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ♦ Thunderstorm accompanied with lightning very likely to occur at isolated places over Vidarbha, Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Madhya Maharshtra, Marathawada and Konkan & Goa.
- **08 October (Day 5): ♦ Heavy rainfall** likely at isolated places over Gangetic West Bengal, Odisha, Coastal Andhra Pradesh, Telangana, Rayalaseema, Interior Karnataka, Kerala & Mahe, Madhya Maharashtra, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- ♦ Thunderstorm accompanied with lightning very likely to occur at isolated places over Vidarbha, Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal, Madhya Maharshtra, Marathawada and Konkan & Goa.

Weather Outlook for subsequent 2 days from 9th October to 11th October 2019

- ♦ Fairly widespread to widespread rainfall with isolated heavy falls likely over parts of east & northeast India. Scattered to fairly widespread rainfall likely to occur over rest of the country except over Punjab, Haryana, Rajasthan, Gujarat and Madhya Pradesh where Dry weather is likely.
- ♦ Withdrawal of southwest monsoon is likely to commence from parts of northwest India.

Salient advisories

Thunderstorm accompanied with lightning very likely to occur at isolated places over Madhya Maharashtra, Marathawada and Konkan & Goa during the period, over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 4th & 5th, over Jharkhand during the period, over Gangetic West Bengal from 4th to 6th, over Odisha from 4th to 7th and over Sub-Himalayan West Bengal & Sikkim on 7th & 8th October, provide mechanical support to young fruit plants, banana and staking of vegetables to prevent the crops from lodging due to strong winds. Undertake propping up in sugarcane in Odisha.

- As rain/thundershowers likely at most/many places over **Kerala** and **Karnataka** during the period, over **Coastal Andhra Pradesh** and **Rayalaseema** on 7th and 8th and over **Telangana** on 8th, over **Konkan & Goa** from 6th to 8th and over **Madhya Maharashtra** from 5th to 8th, over **Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura** from 5th to 8th, over **Arunachal Pradesh** from 6th to 8th October along with **heavy rainfall** very likely at isolated places over Kerala on 5th, 7th & 8th, over Interior Karnataka on 8th, over Coastal Andhra Pradesh on 7th & 8th, over Rayalaseema on 5th & 8th and over Telangana on 8th, over Madhya Maharashtra from 6th to 8th, over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura from 5th to 8th and over Arunachal Pradesh on 7th & 8th October, avoid irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid water stagnation. Keep harvested produce at safer places.
- ➤ In Bihar, drain out the excess water from maize, pigeon pea, fruit orchards, vegetables. Drain out excess water from rice fields and maintain 5-7 cm water level.
- > Utilizing the realised and expected rainfall:
 - Undertake land preparation for sowing of rapeseed/mustard in Assam.
 - In Western Zone of Tamil Nadu, undertake transplanting of Samba rice.
 - In Southern Telangana zone, undertake sowing of rabi redgram, groundnut and castor.
 - In Semi-Arid Eastern Plain Zone of **Rajasthan**, undertake field preparation for sowing of rainfed Taramira.
 - In Madhya Maharashtra, continue land preparation for rabi jowar, safflower and rainfed gram in fallow lands. In Vidarbha, continue land preparation of *rabi* crops like safflower, jowar, linseed and gram in fallow lands

Detailed Agromet Advisories

SOUTH INDIA [TAMIL NADU, TELANGANA, ANDHRA PRADESH, KARNATAKA, KERALA]

Realised Rainfall: Significant rainfall occurred in all the districts of Kerala except Malappuram and Wayanad; all the districts of Tamilnadu except Chennai, Cuddalore, Erode, Kanchipuram, Karur, Krishnagiri, Namakkal, Perambalur, Puducherry, Pudukottai, Tirupur, Tiruvallur and Trichy; all the districts of the region except Nellore and Prakasam of Coastal Andhra Pradesh; Chittoor & Cuddapah of Rayalaseema and Jogulamba Gadwal, Kumaram Bheem, Suryapet, Vikarabad, Wanaparthy and Warangal_Urban of Telangana; all districts of Coastal Karnataka; in Bagalkote, Belagavi, Bidar, Koppal, Vijayapura, Yadgir districts of North Interior Karnataka and all districts of South Interior Karnataka except Bangalore Rural, Hassan, Kodagu, Ramanagara districts during the week.

Advisories:

As rainfall likely at most/many places over Kerala and Karnataka during the period, over Coastal Andhra Pradesh and Rayalaseema on 7th and 8th and over Telangana on 8th October along with **heavy rainfall** very likely at isolated places over Kerala on 5th, 7th & 8th, over Interior Karnataka on 8th, over Coastal Andhra Pradesh on 7th & 8th, over Rayalaseema on 5th & 8th and over Telangana on 8th October, avoid irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid water stagnation.

Kerala

- ➤ In High Altitude Zone, weather is congenial for white Stem borer and leaf rust in rice. Apply fertilizers @ 85 kg urea, 150 kg rock phosphate and 66 kg potash per hectare for white Stem borer and Bordeaux mixture (1%) for Leaf rust.
- In Problem Area Zone and Central Zone, weather is congenial Bud rot disease in coconut, Keep three numbers each of perforated Mancozeb sachets (5 gm per packet) around spindle leaves as a prophylactic measure against bud rot.
- ➤ In Northern Zone, weather is congenial for Tea mosquito attack and associated fungal diseases in newly planted seedlings of cashewnut, spray combination of Bordeaux mixture (1% strength) + Quinalphos (2ml/litre of the Bordeaux mixture).

Andhra Pradesh

- In North Coastal Andhra Pradesh, undertake harvesting of matured maize at the earliest. Present prevailing weather conditions are favourable for Brown plant hopper (BPH) infestation on rice. Spray Etofenprox @2 ml or monocrotophos @ 2.2 ml per liter of water if noticed on a onon rainy day.
- ➤ In Scarce rainfall Zone of Rayalaseema, undertake sowing of the Bengal gram in black soils and horsegram in red soils.
- ➤ In Krishna Godavari Zone of Andhra Pradesh, maintain optimum soil moisture content in rice so as to encourage the healthy growth and more number of tillers. The present weather is favourable for infestation of hoppers in rice. Spray bopropheziz @1.6ml or acetate 1.5 g or imafachloprid + athiprole 0.25 g or monochrotophos 2.2 ml per litre of water
- ➤ In Southern Zone of Andhra Pradesh, undertake harvesting of groundnut when 80% of groundnut plant leaves, stems should turn yellow colour and inside of the pod shell might have turned black colour. Pods which are to be used for sowing purpose should be dried under sun until the moisture content is 9%. Harvested produce should be stored in gunny bags which are treated with malathion @ 5-10 ml/lt. of water and dried under sun

Telangana

- ➤ In Southern Telangana zone, drain out the excess water from the fields of rainfed crops wherever heavy rainfall received. Take up sowing of Rabi Redgram, Groundnut and Castor.
- ➤ In Northern Telangana drain out the excess water from the field of rainfed crops wherever heavy rainfall received. The conditions are favourable for bacterial leaf blight in paddy crop. To control, spray agrimycin @ 4 g / 10 lit or poushamycin @ 2 g/lit of water on a non rainy day, two times at 5-7 days interval.

Tamil Nadu

- ➤ In Cauvery Delta Zone, undertake nursery sowing of late *Samba*. In *Samba* nursery, applications of 2 kg DAP/cent is recommended.
- In Western Zone, continue sowing of millets in rainfed black soil and also transplanting of Samba rice.
- ➤ In Southern Zone, weather is congenial for Fall Army worm seen in Maize, spray insecticides 10 gms of Emamectin benzoate and 25ml of Permethrin per 10 litres of water on a non rainy day.
- In High Altitude Hilly Zone, apply 1 kg of borax per acre as soil application during the field preparation as basal dose for vegetable crops.

Karnataka

- In Coastal Karnataka, Potassium deficiency is noticed in rice crop in Uttar Kannada district; spray 1% Potassium (10 g Potassium Nitrate in 1 liter of water) after current spells of rain.
- In North Interior Karnataka, continue sowing of sunflower, sorghum, chickpea, safflower, sorghum + chickpea (2:1), safflower + chickpea (2:4) crops and transplanting of rice crop. Carry out nipping in pigeon crop.
- In South Interior Karnataka, complete sowing of sunflower, ragi, sugarcane and soybean crops and sowing of fodder sorghum, maize, bajra, cowpea crops.
- In South Interior Karnataka, there is a possibility of continuation of purple blotch and bulb rot disease in severe form in onion crop; avoid water logging condition; spray Chlorothalonil @2gm/litre of water along with Sticker

- and drench with Copper Oxychloride @2.5g/litre of water after current spells of rain.
- ➤ In North Interior Karnataka, for management of sunflower Necrosis, spray super Confidor 200 SL @0.5ml or Flonicamide 50 WG @ 0.02ml/litre of water after current spells of rain.

Animal Husbandry:

- In Tamilnadu, protect animal feed ingredients from rain to avoid development of aflatoxin. Spray Ectoparasiticides in their livestock sheds, clean up any cob webs, ant and houseflies which may act as intermediate lost.
- ➤ In Karnataka, vaccinate the livestock for Black Quarter and foot and mouth diseases.

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

Realised Rainfall: Rainfall occurred in all districts of Meghalaya and Tripura; East Kameng, East Siang, Kurung Kumey, Lohit, Papumpare and Tirap districts of Arunachal Pradesh; Barpeta, Bongaigaon, Cachar, Chirang, Dhubri, Goalpara, Golghat, Hailakandi, Jorhat, Kamrup(Rural), Kamrup(Metro), Karbi Anglong, Kokrajhar, Lakhimpur, N.C.Hills, Nowgaon, Nalbari, Sonitpur and Sibsagar districts of Assam; all districts except Lunglei and Serchip districts of Mizoram; Churachandpur, Imphal East, Senapati, Tamenglong and Ukhrul districts of Manipur; Dimapur, Kephire, Kohima, Longleng, Mokokchung, Mon, Paren, Tuensang and Wokha districts of Nagaland.

Advisories:

- As rain/thundershowers likely at most/many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura from 5th to 8th, over Arunachal Pradesh from 6th to 8th October along with **heavy rainfall** very likely at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura from 5th to 8th and over Arunachal Pradesh on 7th & 8th October; avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields.
- ➤ Thunderstorm accompanied with lightning very likely to occur at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 4th & 5th October, provide mechanical support to young fruit plants, banana and staking of vegetables, to prevent the crops from lodging due to strong winds.

Arunachal Pradesh

➤ In Arunachal Pradesh, continue nursery bed raising for early cauliflower and tomato. Undertake sowing of black/green gram in rice fallow of Jhum fields at the earliest. Maintain adequate moisture level in the field where crop is in CRI stage or in tasseling stage.

Assam & Meghalaya

- In Lower Bramhaputra Valley Zone, undertake land preparation for sowing of rapeseed/mustard. Continue transplanting of cole crops. Due to favourable weather, Sigatoka leaf spot may be observed in the banana plant. Spray Carbendazim @ 0.5gm/litre of water against Sigatoka leaf spot. Prevail weather condition is favourable for incidence and spread of rice hispa/ Army warm in paddy field. If Hispa population exceeds more than 2 adult per hill then it is recommended to spray Chloropyriphos 20EC @ 1ml/liter of water during rain free weather situation. In case of high Hispa incidence, skip top dressing of Nitrogen fertilizer. To prevent the escaping of larvae of army worm to next field, apply Malathion 5% @ 3-4kg per bigha in the dyke of the paddy field during fair weather.
- ➤ In Central Bramhaputra Valley, continue sowing of *rabi* maize and cole crops. Undertake land preparation for sowing of rapeseed-mustard and *rabi* pulses and oilseeds. Prevailing weather is very conducive for infestation of stem borer and caseworm in Sali rice which may be controlled by draining out of excess water or spraying Chloropyriphos(20%) @2ml/litre of water after current spells of rain.
- In Upper Brahmaputra Valley Zone and Barak Valley Zone of Assam, undertake planting of potato.
- ➤ In Barak Valley Zone of Assam, combination of rainy weather, dull windy days and maximum temperature of 25-34°C favours Bacterial Leaf Blight (BLB) in Sali rice at tillering stage. To control the disease, apply 1 kg Potash fertilizer per bigha of land or stop top dressing of nitrogenous fertilizer. Spray Quinalphos 25EC @ 1ml/litre against caseworm in the rice field. Also prevailing weather conditions favours more egg laying capacity of Yellow stem

- borer (YSB). So, the farmers are advised to spray Chloropyriphos 20EC @ 1ml per litre of water after current spells of rain.
- In North Bank Plain Zone of Assam, repair the field bunds to conserve water in the paddy field. There is chance of attack of leaf folder /rice hispa disease attack in tillering/ panicle initiation stage of rice. Spray of Chlorpyriphos 20 EC @ 2.5 litre/ha or Quinalphos 25 EC @ 2.0 litre/ha on the rice crop during evening hours after current spells of rain.
- ➤ In Hill Zone of Assam, undertake sowing of black gram.
- ➤ In Meghalaya, continue nursery raising/ transplanting for cole crops (cabbage, cauliflower, broccoli). When weather is clear, drench the soil with Bio-Control agents, Trichoderma based formulation 4 gram/1 litre of water to avoid Soft rot/Wilt in ginger and turmeric at the interval of 30 days. Spray Tricy-Biofungicide, Pseudomonas fluorescens @ 4g/10 litre against blast in rice after current spells of rain. Maintain proper water level up to 4-5 cm in the rice fields.

Manipur, Mizoram, Tripura and Nagaland

- ➤ In Nagaland, present weather is favourable for tikka disease in ground nut. Collect the affected plant debris and burn them. Undertake land preparation for sowing of *rabi* crops and nursery preparation for vegetables like cabbage, cauliflower, knolkhol, broccoli, radish, tomato after the harvesting of upland rice/maize. Undertake harvesting of low land/Jhum rice.
- ➤ In Manipur, continue planting of potato, nursery sowing of cole crops and sowing of Broad bean/ pea/French bean. Maintain water level of 5-8 cm in the *kharif* rice field. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of black gram/ lentil/ green gram / Lathyrus (kachari) may be done as contingency crop by the mid of November.
- ➤ In Mizoram, continue harvesting of matured cobs of maize. Continue nursery raising of brinjal, chilli and early crucifer crops.
- ➤ In Tripura, continue sowing of black & green gram. Continue land preparation for nursery sowing of cole crops. Prevailing cloudy and humid weather is conducive for the attack of Blast disease in Aman rice. Apply Tricyclazole 75 WP @ 0.6 gm/litre of water or Carbendazim 50 WP (Bavistin) @ 1 gm per litre of water after current spells of rain.

Animal Husbandry

- In Upper Brahmaputra Valley Zone of Assam, carry out vaccination (RDF1) against Ranikhet disease in one week old chicks and against Gamboro disease in two weeks old chicks.
- In Mizoram, keep surrounding of poultry house clean to avoid mosquitoes and other blood sucking insects that may transmit fowl pox. Vaccination of chicken (0- 7 days old, ideally 4 days old) against Ranikhet disease is advised in the presence of qualified personnel.

Fishery

In Upper Brahmaputra Valley Zone of Assam, provide supplementary feeds in the fisheries with rice bran and mustard oil cake mixed in the ratio of 1:1 in bags at different depths of water.

EAST INDIA [JHARKHAND, BIHAR, ODISHA, WEST BENGAL & SIKKIM, ANDAMAN & NICOBAR ISLANDS]

Realised Rainfall: Rainfall occurred in all districts of Bihar; in all districts of Jharkhand; in all districts of Odisha except Malkangiri and Nawarangpur; in all districts of Gangetic West Bengal and in all districts of Sub-Himalayan West Bengal & Sikkim. Weather remained dry/mainly dry over the rest of the region.

Advisories:

➤ Thunderstorm accompanied with lightning very likely to occur at isolated places over Jharkhand during the period, over Gangetic West Bengal from 4th to 6th, over Odisha from 4th to 7th and over Sub-Himalayan West Bengal & Sikkim on 7th & 8th October, provide mechanical support to young fruit plants, banana and staking of vegetables, to prevent the crops from lodging due to strong winds. Undertake propping up in sugarcane in

Odisha.

Odisha

- ➤ Keep water level up to 5cm in direct seeded rice at flowering to milking stage (thirteen to fourteen weeks). Early sown kharif groundnut crop is at maturity stage. Go for harvesting of the crop. Make bundles and keep them under sun for drying. Continue sowing of sesame, niger and pre-Rabi pulses like green gram, black gram and horse gram in fallow uplands. Continue early planting of high yielding varieties of beans, cluster bean, tomato as well as cole crops like radish, cabbage, cauliflower. Complete the planting of papaya.
- Monitor cotton crop, which is at square formation to boll formation stage, for jassids and thrips. Spray Thiomethoxam 25% WG 40ml or Imidacloprid 17.8% SL 50ml or Buprofezin 25% SC 400ml mixing with 200 litres of water per acre. Undertake plant protection measures after current spells of rain.

Bihar

- ➤ Drain out the excess water from maize, pigeon pea, fruit orchards, vegetable fields and nurseries. Drain out excess water from rice fields and maintain 5-7 cm water level.
- ➤ Monitor sucking insect/pests in vegetables fields and nursery. For management, spray Imidacloprid @ 0.3ml/litre of water on a non rainy day.

Jharkhand

- Most of the timely sown kharif crops in upland are at maturity/harvesting stage. Harvest them during sunny weather. After harvesting of crops, immediately plough the land to utilize residual moisture of the soil and sow the rabi crops like rainfed wheat, table pea, potato or different vegetables, if assured irrigation facility is available. Otherwise proceed for rapeseed (toria) cultivation.
- ➤ If blast disease is noticed in transplanted rice crops, spray fungicide Beam @ 5 gram per 10 liter of water after current spells of rain.

West Bengal

- In Sub-Himalayan West Bengal, carry out weeding in rice field. Prepare raised beds for sowing cole crops. Treat the seeds with Carbendazim @ 2g/kg of seed before sowing. Arrange proper drainage in ginger field. Carry out careful rouging and destruction of infected ginger and large cardamom plants. Remove excess water from cabbage and cauliflower field to avoid fungal infection.
- For management of fruit fly in cucurbitaceous vegetables, install pheromone trap @ 6-8 nos./ha and apply bait spray in spots @ 30 nos./ha (at least). Prepare bait by mixing 10 ml Chlorpyriphos with 200g molasses. To control downy mildew in cucurbits, spray Metalaxyl + Mancozeb @ 2-2.5g/liter of water. Spray Tricyclazole 75% WP @ 0.5 gm/litre of water (if not sprayed earlier) as a preventive measure to manage blast disease in rice crop. Undertake plant protection measures after current spells of rain.
- ➤ In Gangetic West Bengal, carry out weeding in Aman paddy field. Drain out excess water from okra, brinjal and tomato fields as early as possible.
- Spray Chlorpyrifos @ 1.5ml/litre of water for hairy caterpillar in black gram crop. For sucking pest in bhindi crop, spray Neem seed kernal extract solution @ 50 ml/litre of water. Undertake plant protection measures after current spells of rain.

Andaman & Nicobar Islands

➤ In Andaman & Nicobar Islands, close the bunds in rice main fields and do weeding in long duration rice variety. Prepare the field for sowing of cowpea and apply manure @ 150-200 kg for 100 sq. meter area during final ploughing. Clean the field for ploughing at depth 15 -20 cm to grow sweet potato as seasonal crop and use vine cutting of size 10-15cm for planting. Setup light trap to monitor leaf folder and stem borer infestation in rice main field.

Animal Husbandry

- ➤ In Bihar, vaccinate animals against FMD. Provide mineral mixture @ 50-60 gram with fodder.
- ➤ In Odisha, provide clean drinking water to cattle and keep their sheds clean. Follow vaccination at regular intervals.

- ➤ In West Bengal, to protect animals from problems associated with excess grazing, restrict the time that they spend in pastures. Mix essential salts in the feed of the animals.
- In Andaman & Nicobar Islands, provide sufficient drinking water to the grazing animals during day time as the air temperature is rising. Feed colocasia and tapioca along with normal feeding and mineral mixture to pigs.

Fishery

In Odisha, purchase fish seeds from a reliable fish seed producer and stock 3000 nos. of advance fingerlings of more than 8cm size per one acre of pond area. In case of three species combination, the stock numbers should be Catla-900, Rohu-1200 and Mrigal-900. In case of six species combination, the stocking numbers should be Catla-800, Rohu-1200, Mrigal-500, Common carp-300, Grass carp-100 and Silver carp-100. Maintain the average water depth of the pond at more than 5ft.

In West Bengal, apply fish feed (Rice bran and Mustard oil cake in the ratio 1:1) @ 3-2% of the total body weight of the fish stock.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

➤ Realised Rainfall: Rainfall occurred in all districts except South Goa and Thane districts of Konkan & Goa; Dhule, Jalgaon, Nasik, Pune and Solapur districts of Madhya Maharashtra; Aurangabad, Hingoli and Nanded districts of Marathawada; all districts except Yeotmal in Vidharbha and in all districts of Gujarat during the period.

Advisories:

- Thunderstorm **accompanied** with **lightning** very likely to occur at isolated places over Madhya Maharashtra, Marathawada and Konkan & Goa during the period, provide mechanical support to young fruit plants, banana and staking of vegetables to prevent the crops from lodging due to strong winds. Undertake propping up in sugarcane.
- As rain/thundershowers likely at many places over Konkan & Goa from 6th to 8th and over Madhya Maharashtra from 5th to 8th along with **heavy rainfall** at isolated places very likely over Madhya Maharashtra from 6th to 8th October; avoid irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields Madhya Maharashtra. Keep harvested produce at safer places.

Maharashtra

- In Konkan, continue harvesting of matured early varities of rice on a non rainy day. Drain out water from the field where early rice varieties is in maturity stage. Keep the harvested produce in safer place. To control army worm & gundi bug in rice, undertake dusting with 2 % Methyl Parathion powder @ 20 kg/ha. To control hoppers in mango, spray Lambda cyhalothrin 5% EC @ 6ml or Quinalphos 25% EC @ 25 ml per 10 liter of water after current spells of rain.
- In Madhya Maharashtra, continue land preparation for rabi jowar, wheat, gram and safflower and rainfed gram in fallow lands. Continue nursery sowing of *rabi* (rangada) onion (varities: Baswant 780, Phule Samarth and N-2-4-1) in fallow lands. Continue harvesting of matured groundnut and soybean during on a non rainy day. Keep the harvested produce in safer place. To control Spodoptera litura in soybean, spray SLNPV @ 10 ml or Nomuraea rileyi @ 50 g per 10 liters of water after current spell of rain. To control fall army worm in maize, spray Emamectin benzoate @ 4 g per 10 litres of water or Thiamethoxam + Lambda cyhalothrin@ 3 ml per 10 litres of water on a non rainy day. If reddening of cotton leaves are observed, apply micro nutrient-Magnesium @ 20 to 30 Kg/ ha on a non rainy day.
- In Marathawada, undertake land preparation for *rabi* safflower and rainfed gram in fallow lands. Continue picking of matured green gram on a non rainy day. Undertake harvesting of matured soybean. Keep the harvested produce in safer place. To control sucking pest in vegetable crops like brinjal and okra, spray

Fenpropathrin 30 % @ 3 ml per 10 liter of water.

➤ In Vidharbha, continue harvesting of soybean. Undertake intercultural operation like weeding in cotton and vegetable fields. Continue land preparation of *rabi* crops like safflower, jowar, linseed and gram in fallow lands. To control boll rot in cotton, undertake foliar spray with Streptocycline @ 2.5 g + Copper oxychloride @ 25 g per 10 litres of water. Maintain 5-7 cm water level in rice fields. Apply 3rd dose of nitrogenous fertilizer Urea @ 54 kg/ ha to rice crop (flowering stage). To control leaf spot in tumeric, spray Mancozeb @ 25 g per 10 liters of water along with sticker.

Gujarat

- ➤ In Middle Gujarat, continue harvesting of pearl millet and picking of matured pods of green gram crop. Remove excess rain water from the standing crop fields.
- In Saurashtra & Kutch, undertake harvesting of sesame, soybean and bunch groundnut crops.
- In South Gujarat, undertake harvesting of matured rice and pulse crops. Complete land preparation for planting of sugarcane, nursery preparation for chilli and brinjal.
- ➤ In North Gujarat, to reduce dropping of flower and immature bolls in pre-sown cotton, spray Nephathalic Acetic Acid @7 ml /10 liters of water. Complete harvesting of matured groundnut, sesame, bajra, maize, green gram and cowpea crops and keep harvested produce at safer places.
- ➤ In Saurashtra, due to cloudy weather condition infestation of semi looper in castor is observed; spray Quinalphos (1.5 % powder) @20 ml or Carbaryl @ 40 gm in 10 liters of water.
- ➤ In South Gujarat, to control fall armyworm in maize, spray Chlorantraniliprole @3 ml/10 litre of water.
- > Animal Husbandry
- ➤ In Gujarat, feed silage & hay material along with concentrate feed to animals.

CENTRAL INDIA [M.P., CHHATTISGARH]

Realised Rainfall: Rainfall occurred in all districts of Madhya Pradesh and in all districts of Chhattisgarh except in Bastar, Bijapur, Dantewara, Kanker, Narayanpur and Sukma districts

Advisories:

Madhya Pradesh

- In Madhya Pradesh, keeping in view of heavy rainfall during last week, farmers are advised to drain out excess water from vegetables, pulse, maize crop fields and maintain adequate drainage in the crop fields. Continue harvesting of matured soybean. Undertake prepration of nursery bed for Rabi vegetable crops. Treated seeds to be sown in line i.e. Tomato, Brinjal, Chilli, Cabbage and cauliflower etc.
- ➤ In Gird Zone, undertake harvesting of matured bajra, urad and moong. Undertake land preparation for sowing of mustard.
- In Nimar Valley Zone, in areas where Jassid & White fly crosses ETL in Cotton crop, apply Imidachloprid 17.8 SL @ 3 ml/10 litre or Thiamethoxam 25 WG @ 2g/ 10 litre or Acetamiprid 20 SP@ 3g/10 litres of water. Install pheromone traps @ 5/ha for monitoring Pink bollworm.

Chhattisgarh

- In Chhattisgarh Plain Zone, maintain 5-7cm water level in rice fields. In the rice crop, for monitoring of yellow stem borer, install pheromone traps 10 nos. per acre. Undertake nursery preparation for early varieties of cauliflower and cabbage, tomato, chilli and capsicum. Undertake earthing up in banana plantations.
- ➤ In Northern Hill Zone, continue nursery sowing of brinjal, tomato, chilli. In Bastar Plateau Zone, continue sowing of horse gram, black gram, green gram and sesame.

Animal Husbandry

- In Madhya Pradesh, cattle sheds should be kept dry. Vaccinate the cow and baffeloes for FMD disease and vaccinate goats with ETV vaccine. Take measures to control ticks and mites in animals.
- > In Chhattisgarh, cattle sheds should be kept dry to prevent from foot rot disease. Hygiene should be maintained

around cattle shed, Bushes, parthenium weeds should be uprooted and pits etc. should be filled to control mosquitoes.

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

Realised Rainfall: Significant rain occurred in Una district of Himachal Pradesh; Rajouri, Reasi, Samba and Udhampur districts of Jammu & Kashmir and in all the districts of Uttarakhand; Chandigarh, Gurdaspur, Hoshaiarpur, Kapurthala, Nawashahar, Patiala, Ropar Mohali, Taran Taran districts of Punjab; Ambala, Panchkula, Yamunanagar districts of Haryana and in North Delhi; Barmer, Jalore, Pali districts of West Rajasthan and all the districts of East Rajasthan except Ajmer, Alwar, Bharatpur, Dausa, Jaipur, Jhunjhunu, Karauli, Rajsamand, Sawai Madhopur, Sikar and Tonk; Agra, Auraiya, Etawah, GB Nagar, Hamirpur, Jalaun, Jhansi, Lalitpur, Mahoba and Shahjahanpur districts of West Uttar Pradesh and all districts of East Uttar Pradesh except Bahraich, Balrampur, Kheri, Shravasti during the week. Weather remained mainly dry in rest of the region.

Advisories:

➤ Thunderstorm accompanied with lightning very likely to occur at isolated places over Jammu & Kashmir, Himachal Pradesh and Uttarakhand on 4th & 5th October, provide mechanical support to young fruit plants, banana and staking of vegetables to prevent the crops from lodging due to strong winds.

Jammu & Kashmir

- ➤ In Sub Tropical Zone, undertake harvesting of early maturing rice varieties. Undertake harvesting and threshing of maize crop. Spray the pulses crop with Imidacloprid @0.5% during clear weather to check the population of white fly. Undertake sowing of toria intercropped with gobi sarson. Undertake transplanting of cole crops. Keep the turmeric field weed free.
- > In Intermediate Zone, continue sowing of root crops like carrot and radish.

Himachal Pradesh

- ➤ In Sub Montane and Low Hills Sub Tropical Zone, undertake harvesting of maize. Make preparation for harvesting of rice and pulses. Undertake field preparation for early sowing of mustard. Carry out weeding and hoeing operations in tomato, chilli, capsicum and brinjal. Undertake sowing of potato.
- ➤ In High Hill Temperate Dry Zone, undertake harvesting of potato.
- ➤ In Mid Hills Sub Humid Zone, to control the fruit fall in Citrus fruits like orange, malta, sweet lime and lemon, spray Ziram 27 SC@ 2.5 ml / litre of water. Continue sowing of carrot, radish, pea, coriander, garlic and turnip. Undertake transplanting of the nursery of cabbage, broccoli, knol- khol and chinese cabbage.
- ➤ In Mild Hills Sub Humid Zone, spray Antracol 500 g per 200 litres of water for prevention of fungal diseases in pomegranate.

Punjab, Haryana and New Delhi

- ➤ In Punjab, complete planting of ever green fruit plants like mango, sweet orange, mandarin, lime, lemon, litchi, guava, aonla, loquat and papaya. Undertake sowing of carrot, broccoli, chinese cabbage, radish, spinach and transplanting of mid-season cauliflower. Harvest matured maize crop.
- ➤ In Undulating Plain Zone, due to high humid conditions, sheath blight may appear in rice and basmati. Attack of brown spot may be noticed in direct seeded rice. Apply recommended fungicides for control. Farmers are advised to remove foot rot infected plants from rice field and avoid ponding of water to check further spreading of infection. Use fruit fly trap to control fruit fly damage in guava orchards and cucurbits.
- In Haryana, continue sowing of pulses i.e. green gram, lobia, moth. Undertake sowing of mustard and gram crop. Due to possibility of variable weather, while harvesting of matured bajra and mung, arrange to cover the harvested bajra and mung crop.
- ➤ In Western Zone of Haryana, due to favourable weather condition may infestation of rice leaf roller and stem borer in rice crop. If infestation occurs than broadcast 10kg Methyl parathion 2% Dust in per acre. Due to prevailing weather condition, there is chance of infestation of rice blast in early transplanted rice crop. If

infestation occurs than spray 200 gram Carbendazim 50 WP mixed with 200 liter water per acre.

- ➤ In Delhi, undertake sowing of mustard, transplanting of onion seedling in the prepared fields and planting of early potato. In present weather condition, false smut may appear in paddy spray Blitox 50 @ 500 grams per acre at 10 days interval (2-3 times). In vegetables (brinjal, cauliflower, cabbage, tomato etc), monitor borer insect, use pheromone trap @ 3-4/acre. If insect population is above ETL, spraying of Spinosad @ 1 ml/4 litre of water when sky is clear against fruit borer, diamond back moth in cauliflower and cabbage.
- ➤ In Western Zone of Punjab, to protect rice crop from sheath blight, spray the crop with Amistar Top or Tilt/Bumper or Folicur Orius @ 200ml or Nativo @ 80g in 200 litres of water per acre at the base of the plants. Regularly monitor the rice fields for plant hopper infestation.

Uttar Pradesh

- ➤ In East Uttar Pradesh, undertake tying of sugarcane which has been lodged by rainfall. Undertake sowing of early varieties of toria. For the sowing of Toria always use treated traditional seeds. Remove emerging side suckers of banana and to make proper arrangement to remove excess water from the fields and give the support by bamboo to prevent from lodging. For control of Pyrrila disease in sugarcane, spray phosphomidon (300-400 ml) or Methyl-o-demeton (1.5 liter) dissolved in 1000 liters of water. Remove water to prevent the Bacterial disease and bacterial blight of Paddy. Drain out water from to prevent Brown mildew fungal disease of Paddy and apply Neem oil at rate of 1.5 liter per hectare. Undertake sowing of Tomato and cole cabbage seeds in nursery. Undertake Plantation of Orchard crops.
- In West Uttar Pradesh, monitor the rice crop against Gundhi bug and take suitable control measures if noticed. Undertake top dressing of Nitrogen/Urea in paddy crop. Maintain optimum water level in paddy crop at Flowering / milk stage. For management of stem borer in paddy, spray Chlorpyrifos 20EC @ 1.5 litres in 500-600 litres of water per hectare. Drain out of excess rain water from vegetable crop fields. Farmers are advised to arrange the seed and fertilizer for sowing of rabi vegetable crops potato, garlic, coriander, Spinach etc. Continue transplanting of medium duration variety Shimla, chilli, tomato, cabbage, Tomato, Brinjal and Chilli. Continue planting of horticultural crops viz, papaya, mango, guava etc.

Uttarakhand

- ➤ In Bhabar and Tarai Zone, undertake sowing of mustard. To control the yellow mosaic disease in soybean, black gram and green gram, destroy the plants which are turning yellow. Spray Sarvangi insecticide to control the white fly in soybean, black gram and green gram. When more than 5% maize plants are damaged due to fall armyworm then spray Spinetoram 11.7%SC @ 0.5 ml/litre or Chlorantraniliprole 18.5% SC @ 0.4 ml/litre or Thiamethoxam 12.6% + Lambda Cyhalothrin 9.5% ZC @ 0.25 ml/litre of water. To control the Leaf folder stem borer in rice, spray 150ml of Chlorantraniliprole 20 SC or 1 litre of Fipronil 5 SC in 500 litres of water per ha after 50 days of transplanting. Undertake planting of winter season sugarcane.
- ➤ In Hill Zone, undertake field preparation for sowing of rabi crops like wheat, mustard, lentil, gram etc. Continue sowing of radish, mustard and coriander. Carry out proper sun drying of walnut fruits before storing. Collect and store wild walnut fruits for nursery.
- ➤ In Sub-Humid Sub-Tropic Zone, maintain proper drainage in paddy field. Tie up sugarcane plants in bunches of 4-5 plants above the first circle. Drain out excess water from vegetable fields.

Rajasthan

- ➤ In Arid Western Plain Zone, kharif crops are at maturity stage, so harvest the crops and keep at safe place.
- In Sub Humid Southern Plain and Aravali Hill Zone, undertake harvesting of sorghum, pearl millet, maize and pulses (moong and urd) and prepare vacant field for sowing of rabi crops (mustard, taramira & gram) under residual moisture. Also undertake preparation of seed bed for raising nursery of onion for rabi season.
- ➤ In Semi-Arid Eastern Plain Zone, field preparation may be started for the sowing of rainfed Taramira, procure

- improved varieties seed (RTM-1355, RTM-1351, RTM-314 and RTM-2002).
- ➤ In Irrigated North Western Plain Zone, continue planting of new seedlings of kinnow in prepared pits of orchards. Purchase kinnow plants from certified nursery & keep kinnow orchard free from weed by weeding time to time.

Animal Husbandry

- ➤ In West Uttar Pradesh, vaccinate livestock with H.S and BQ serums. Cattle sheds should be kept dry as far as possible. Farmers are advised to provided dry fodder with green fodder in (50:50) ratio & 20-30 g mineral mixture and salt for the dairy animal's every day.
- ➤ In Rajasthan, vaccinate the livestock against FMD and brucellosis (only to 04 10 months female calf) diseases and give oral dose for stomach worms time to time as per the advice of registered veterinarian.
- In Western Zone of Haryana, due to humid weather conditions farmers are advised to keep the animals under well ventilated places. Keep cleanliness around the animal shed to avoid the infestation of house fly/others. Provide the 50 grams iodized salt and 50 to 100 grams mineral mixture daily with feed & green fodder to keep them healthy.

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