



National Agromet Advisory Service Bulletin



Friday 06th September 2019

(For the period 06th to 10th September 2019)



Issued by

India Meteorological Department

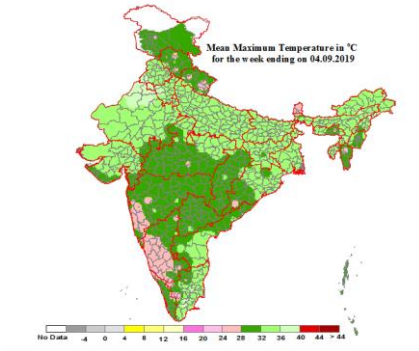
Weblink For

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

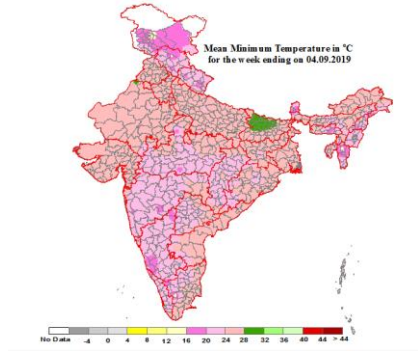
State Composite AAS Bulletin: <http://www.imdagrimet.gov.in/node/3544>

Spatial distribution of weather parameters for the week ending on 04.09.2019

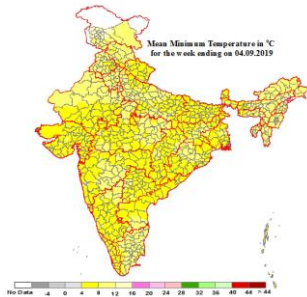
Mean Maximum Temperature (°C) for the week ending on 04.09.2019



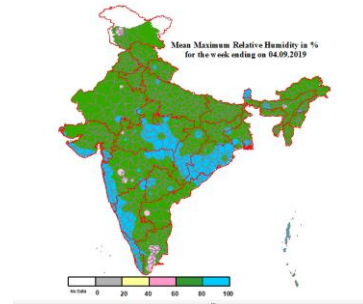
Mean Minimum Temperature (°C) for the week ending on 04.09.2019



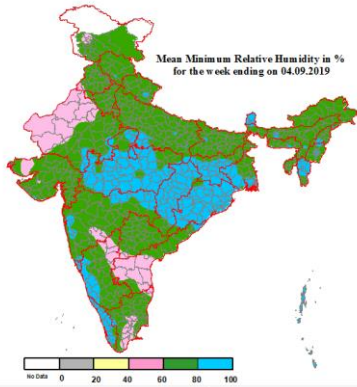
Mean Diurnal Temperature Variation (°C) for the week ending on 04.09.2019



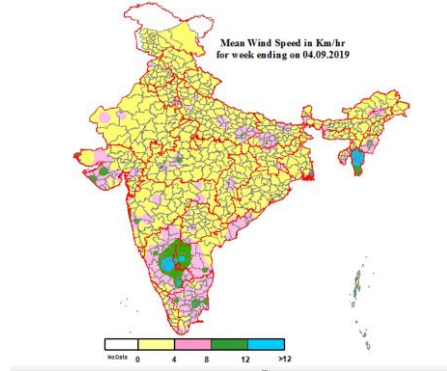
Mean Maximum Relative Humidity (%) for the week ending on 04.09.2019



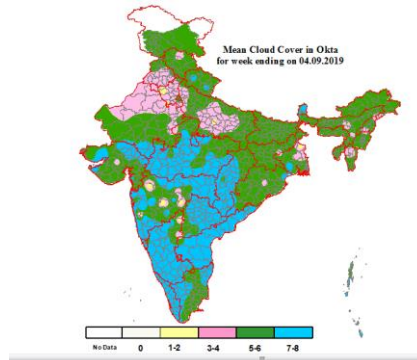
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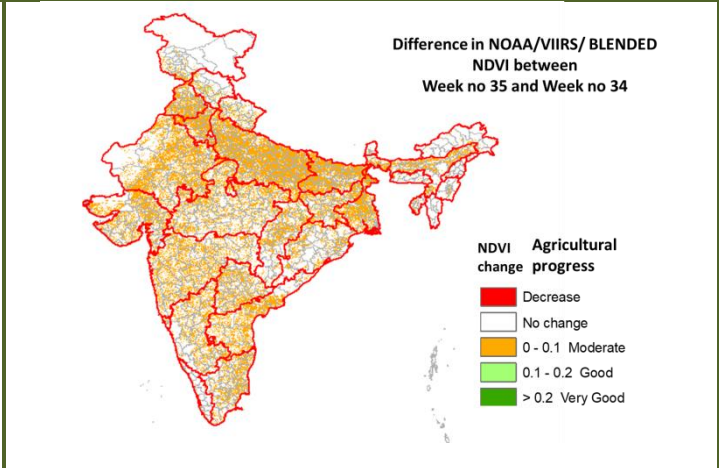
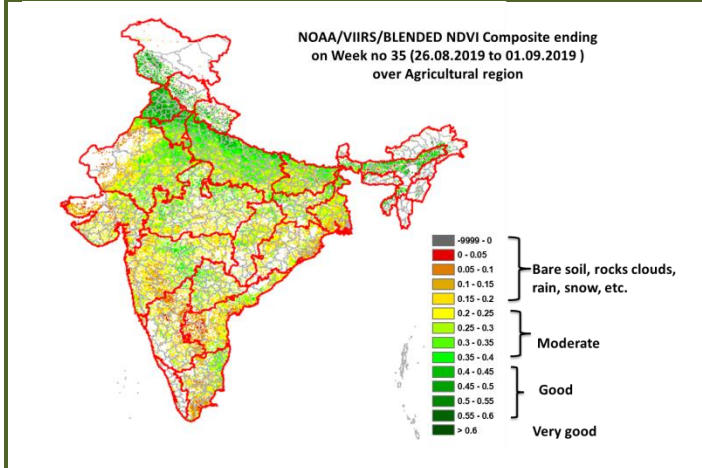
Mean Wind Speed (km/hr) for the week ending on 04.09.2019



Mean Cloud Cover (okta) for the week ending on 04.09.2019



NOAA/VIIRS/BLENDED NDVI composite for the week number 35 (26.08.2019 to 01.09.2019) over Agricultural regions of India	Difference in NOAA/VIIRS/BLENDED NDVI between week number 35 and week number 34
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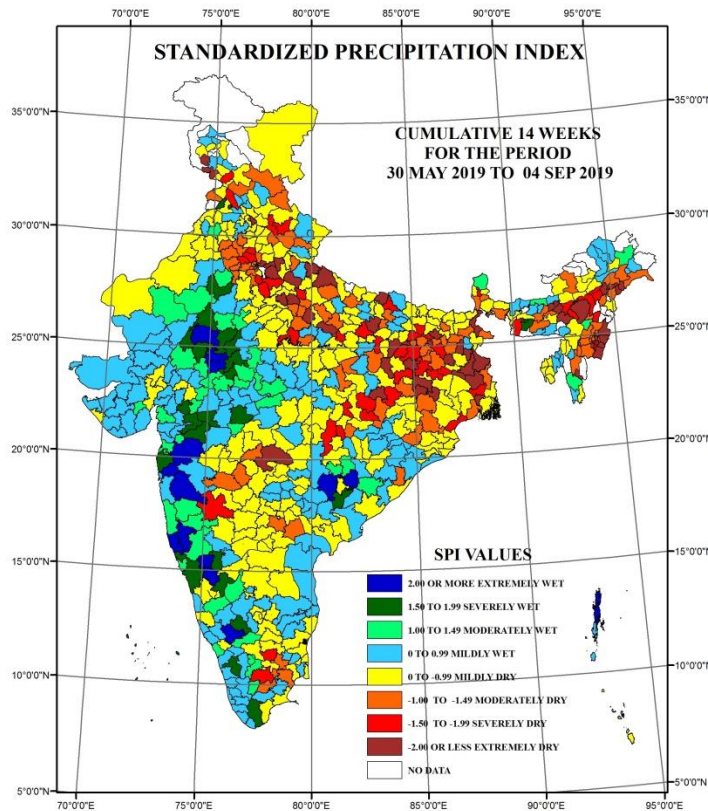
Agriculture vigour was good at many places over Jammu & Kashmir, North eastern States & Punjab ; at a few places over Himachal Pradesh, Haryana, Uttar Pradesh & Uttarakhand and in isolated places over Sub Himalayan West Bengal & Sikkim, Jharkhand, Madhya Pradesh, North Telangana, Northern Bihar and Vidarbha and adjoining Marathwada. NDVI could not be captured over rest of the country due to persistant cloud cover.

Good Agricultural vigour has been observed at a few places over Himachal Pradesh & Uttarakhand and at isolated places over Jammu & Kashmir, Uttar Pradesh, Madhya Pradesh and adjoining East Rajasthan, Gujarat, Madhya Maharashtra, Vidarbha, Bihar, Jharkhand, West Bengal & Sikkim, North Eastern States, North Chhattisgarh, North Telangana and Interior Karnataka.

**Standardised Precipitation Index
Cumulative 14 weeks for the period 30th May to 04th September 2019**



MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
HYDROMET SECTION, PUNE



- Extremely/Severely wet conditions exist in Chhota Udaipur district of Gujarat; Uttar Kannada, Dharwad, Gadag, Haveri, Davangere, Mandya, Mysore districts of Karnataka; Palakkad district of Kerala, Barwani, Khandwa, Mandsaur, Neemuch, Agar districts of West Madhya Pradesh; Raigad, Thane, Sindhudurg, Palghar, Dhule, Kolhapur, Nashik, Pune, Nandurbar districts of Maharashtra; East Garo Hills districts of Meghalaya; Kapurthala districts of Punjab; Ajmer, Bhilwara, Bundi, Chittorgarh, Jhalawar, Kota, Sikar, Rajsamand, districts of Rajasthan; Tirunelveli district of Tamilnadu; North & Middle Andaman districts of Andaman & Nicobar Islands; Bastar, Bijapur, Sukma districts of Chhattisgarh, North Goa district of Goa.
- Moderately wet conditions exist in Lower Dibang Valley district of Arunachal Pradesh; Baksa districts of Assam; Broach, Valsad, Dangs, Botad districts of Gujarat; Belgam, Chamarajanagar, Chikmagalur, Chitradurga districts of Karnataka; Kozhikode district of Kerala; Bhopal, Guna, Hoshangabad, Jhabua, Raisen, Rajgarh, Ratlam, Shajapur, Ujjain, Burhanpur, Alirajpur districts of West Madhya Pradesh; Ratnagiri, Mumbai Suburban, Sangli, Satara districts of Maharashtra; Lunglei districts of Mizoram; Paren district of Nagaland; Bhatinda district of Punjab; Jodhpur, Nagaur, Jhunjhunu, Sawai Madhopur, Tonk, Udaipur, Pratapgarh districts of Rajasthan; Theni, Tirupur districts of Tamilnadu; Dadara & Nagar Haveli district of Union Territory; North Sikkim district of Sikkim; Narayanpur, Kondagaon districts of Chhattisgarh; South Goa district of Goa.
- Moderately/ mildly dry conditions experienced in remaining districts in the country.

Weather Forecast for next 5 days valid upto 0830 hours of 11th September 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)
06th September 2019**

Met-Sub-Division	06-Sep Today	07Sep Sat	08Sep Sun	09Sep Mon	10Sep Tue
1. Andaman & Nicobar Islands	FWS	WS	WS	WS	FWS
2. Arunachal Pradesh	FWS	SCT	FWS	FWS	WS
3. Assam & Meghalaya	SCT	FWS	FWS	WS	WS
4. N. M. M. & T.	FWS	FWS	WS	WS	WS
5. S.H. West Bengal & Sikkim	FWS	FWS	WS	WS	WS
6. Gangetic West Bengal	WS	FWS	FWS	FWS	FWS
7. Odisha	WS	WS	FWS	FWS	FWS
8. Jharkhand	FWS	FWS	FWS	SCT	SCT
9. Bihar	ISOL	SCT	SCT	SCT	SCT
10. East Uttar Pradesh	SCT	SCT	SCT	SCT	SCT
11. West Uttar Pradesh	ISOL	SCT	SCT	SCT	SCT
12. Uttarakhand	FWS	FWS	SCT	SCT	SCT
13. Haryana, Chd & Delhi	ISOL	ISOL	ISOL	ISOL	ISOL
14. Punjab	ISOL	ISOL	ISOL	ISOL	ISOL
15. Himachal Pradesh	SCT	ISOL	ISOL	ISOL	ISOL
16. Jammu & Kashmir	SCT	ISOL	ISOL	ISOL	ISOL
17. West Rajsthan	SCT	ISOL	ISOL	ISOL	ISOL
18. East Rajasthan	FWS	FWS	FWS	SCT	SCT
19. West Madhya Pradesh	WS	WS	WS	FWS	FWS
20. East Madhya Pradesh	WS	WS	FWS	FWS	SCT
21. Gujarat Region	WS	WS	WS	FWS	FWS
22. Saurashtra & Kutch	WS	WS	WS	FWS	FWS
23. Konkan & Goa	WS	WS	WS	WS	WS
24. Madhya Maharashtra	FWS	FWS	FWS	FWS	SCT
25. Marathwada	FWS	WS	FWS	SCT	SCT
26. Vidharbha	WS	WS	FWS	FWS	FWS
27. Chhattisgarh	WS	WS	FWS	SCT	SCT
28. Coastal A. P. & Yanam	FWS	SCT	SCT	SCT	SCT
29. Telangana	WS	WS	FWS	SCT	SCT
30. Rayalaseema	ISOL	ISOL	ISOL	ISOL	ISOL
31. T.N.,Puducherry & Karaikal	ISOL	ISOL	ISOL	ISOL	SCT
32. Coastal Karnataka	WS	WS	WS	WS	WS
33. North Interior Karnataka	FWS	FWS	SCT	SCT	SCT
34. South Interior Karnataka	FWS	FWS	FWS	FWS	FWS
35. Kerala & Mahe	WS	WS	WS	WS	WS
36. Lakshadweep	SCT	SCT	SCT	FWS	FWS

% Station Reporting Rainfall

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

Weather Warning during next 5 days

- ◆ **06 September (Day 1):** ◆ **Heavy to very heavy rainfall** at a few places with **extremely heavy falls** at isolated places very likely over Konkan & Goa; **Heavy to very heavy rainfall** with **extremely heavy falls** at isolated places over Vidarbha, Chhattisgarh, Madhya Maharashtra and Telangana; **Heavy to very heavy rainfall** at isolated places over Odisha, Gujarat State and Coastal Andhra Pradesh; **Heavy Rainfall** at isolated places over East Rajasthan, Madhya Pradesh, Coastal & South Interior Karnataka and Kerala & Mahe.
- ◆ **Strong winds**, speed reaching 40-50 kmph, are very likely to prevail over central & southwest Arabian Sea, central & adjoining south Bay of Bengal and Andaman Sea & Islands. **Squally weather** is likely to prevail over Gujarat-Maharashtra, West Bengal-Odisha-Coastal Andhra Pradesh coasts and north Andaman Sea & island. Fishermen are advised not to venture into these

areas.

07 September (Day 2): ♦ **Heavy to very heavy rainfall** at a few places with **extremely heavy falls** at isolated places very likely over Konkan & Goa; **Heavy to very heavy rainfall** with **extremely heavy falls** very likely at isolated places over Vidarbha, Madhya Maharashtra and Telangana; **Heavy to very heavy rainfall** at isolated places over East Madhya Pradesh, Odisha and Gujarat State; **Heavy Rainfall** at isolated places over East Rajasthan, West Madhya Pradesh, Chhattisgarh, Andaman & Nicobar Islands, Assam & Meghalaya, Marathawada, Coastal Karnataka and Kerala & Mahe.

- ♦ **Strong winds**, speed reaching 40-50 kmph, are very likely to prevail over central & southwest Arabian Sea and central & adjoining south Bay of Bengal. **Squally weather** is likely to prevail over Gujarat-Maharashtra, West Bengal-Odisha-Coastal Andhra Pradesh coasts. Fishermen are advised not to venture into these areas.

08 September (Day 3): ♦ **Heavy to very heavy rainfall** with **extremely heavy falls** very likely at isolated places over Saurashtra & Kutch; **Heavy to very heavy rainfall** at isolated places over East Rajasthan, West Madhya Pradesh and Gujarat Region; **Heavy Rainfall** at isolated places over East Madhya Pradesh, Vidarbha, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Coastal Karnataka and Kerala & Mahe.

- ♦ **Strong winds**, speed reaching 40-50 kmph, are likely to prevail over central & southwest Arabian Sea. Fishermen are advised not to venture into these areas.

09 September (Day 4): ♦ **Heavy to very heavy rainfall** with **extremely heavy falls** very likely at isolated places over Saurashtra & Kutch; **Heavy to very heavy rainfall** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **Heavy Rainfall** at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Gujarat Region, Madhya Maharashtra, Konkan & Goa and Coastal Karnataka.

- ♦ **Strong winds**, speed reaching 40-50 kmph, are likely to prevail over westcentral & southwest Arabian Sea. Fishermen are advised not to venture into these areas.

10 September (Day 5): **Heavy to very heavy rainfall** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura; **Heavy Rainfall** at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Konkan & Goa and Coastal Karnataka.

- ♦ **Strong winds**, speed reaching 40-50 kmph, are likely to prevail over westcentral & southwest Arabian Sea. Fishermen are advised not to venture into these areas.

♦

Weather Outlook for subsequent 2 days from 11th September to 13th September 2019

- ♦ Increase in rainfall activity over northeastern states.
- ♦ Fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely over northeastern states, Scattered to fairly widespread rainfall with isolated heavy falls likely over East & Central India and along west coast.
- ♦ Isolated to Scattered rainfall likely over rest parts of the country, outside Jammu & Kashmir, Himachal Pradesh, West Rajasthan, Andhra Pradesh and Telangana where rainfall is likely to be isolated.

Salient advisories

- **Heavy to very heavy rainfall** at a few places with **extremely heavy falls** at isolated places very likely over Konkan & Goa; **Heavy to very heavy rainfall** with **extremely heavy falls** very likely at isolated places over Vidarbha, Madhya Maharashtra and Telangana on 7th; **Heavy to very heavy rainfall** at isolated places over Gujarat State on 7th; **Heavy to very heavy rainfall** with **extremely heavy falls** very likely at isolated places over Saurashtra & Kutch on 8th & 9th, **Heavy to very heavy rainfall** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 9th & 10th September, over Odisha on 6th & 7th, over Madhya Pradesh from 6th to 8th, over East Rajasthan from 6th to 8th September, **heavy rainfall** very likely at isolated places over Arunachal Pradesh on 9th & 10th, over Sub-Himalayan West Bengal & Sikkim and over Coastal Karnataka during the period and over Kerala from 6th to 8th September; provide adequate drainage in standing crop fields to avoid water stagnation. Provide mechanical support to banana, young fruit plants and staking in vegetables to prevent the crops from lodging due to heavy rain.
- As rain/thundershowers likely at most places over **West Madhya Pradesh, Konkan, Coastal Karnataka** and **Kerala** during the period, at most/ many places over **Vidarbha** and **Gujarat** during the period, over Madhya Maharashtra from 6th to 9th and over Marathwada from 6th to 8th September, over East Madhya Pradesh from 6th to 9th, over Chhattisgarh from 6th to 8th, over South Interior Karnataka, Nagaland, Manipur, Mizoram & Tripura, Andaman & Nicobar Islands, West Bengal and Sikkim and Odisha during the period, over North Interior Karnataka on 6th & 7th, over Telangana from 6th to 8th, over Arunachal Pradesh from 8th to 10th, over Assam & Meghalaya from 7th to 10th September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops.
- In South Interior **Karnataka**, if incidence of aphid and leaf minor is noticed in groundnut crop, spray Dimethoate @ 1.75ml /litre after current spells of rain.
- In Western Zone of **Haryana**, due to favourable weather condition there is chance of occurrence of myrothecium leaf spot, bacterial blight in cotton, for control spray 800 gram Copper-oxy-chloride mixed with 250 liter water per acre when weather is remain clear. Also, due to favourable weather, monitor the infestation of rice leaf roller and stem borer in early transplanted rice crop. If infestation is noticed then broadcast 7.5 kg Fipronil (Regent/Mortal) 0.3 G mixed with 10 kg dry sand in per acre.

Detailed Agromet Advisories

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

Realised Rainfall: Significant rainfall occurred in all the districts except Nellore, Prakasam, Anantapur, Chittoor & Cuddapah districts of Andhra Pradesh and Adilabad district of Telangana; in all the districts of Kerala; Chennai, Coimbatore, Nilgiris, Salem, Tiruvallur districts of Tamilnadu; in all districts of Coastal Karnataka, in Bidar, Haveri, Kalaburgi, Yadgir district of North Interior Karnataka, in Chikkamagaluru, Kodagu, Shivamogga districts of South Interior Karnataka during the week.

Advisories:

➤ As rain/thundershowers likely at most places over **Coastal Karnataka** and **Kerala** during the period, at most / many places over South Interior Karnataka during the period, over North Interior Karnataka on 6th & 7th, over Telangana from 6th to 8th September along with **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over Telangana on 7th; heavy rainfall at isolated places over Coastal Karnataka during the period and over Kerala from 6th to 8th September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide mechanical support to banana, young fruit plants and staking in vegetables to prevent the crops from lodging due to heavy rain. Provide adequate drainage in standing crop fields in Telangana, Coastal Karnataka and Kerala.

Kerala

- Due to heavy rains during the past weeks, there is a chance of quick wilt disease in pepper. To control quick wilt and pollu disease, drench the soil with 0.2 % Copper oxychloride and spray the aerial part (plant) with 1% Bordeaux mixture as a prophylactic measure. Application Trichoderma/ Pseudomonas culture will control the quick wilt infestation. Apply fertilizers @ 250g Urea, 285g Rock phosphate, 350g Potash, 500 g MgSO₄ and 2 kg lime per plant in coconut. As a prophylactic measure to control bud rot, apply 1% Bordeaux mixture in the tender leaf axils after current spells of rain.
- High rainfall may cause fruit rot and leaf fall in nutmeg. As a prophylactic measure, apply Trichoderma mixture (Add 2 kg Trichoderma to a mixture of 90 kg FYM and 10 kg Neemcake and keep for two weeks with sufficient moisture). Basal application of 2.5 kg of this mixture followed by foliar spray with Pseudomonas (20g/litre) or 1% Bordeaux mixture can control the fruit rot. Also there is a chance of spread of mahali disease in arecanut. Prophylactic spraying of Bordeaux mixture (1%) or Copper Oxychloride 50WP (2g/l) with sticker is recommended.
- In Central Zone, weather is congenial for bacterial leaf blight in *virrupu* paddy, mix 20 g of cow dung in one litre of water and spray the cow dung slurry by mixing with 20g of pseudomonas in one litre of water after current spells of rain.
- In High Altitude Zone, weather is congenial for soft rot in ginger, drench the soil with 1% Bordeaux mixture/0.3% Mancozeb after current spells of rain and apply green leaf mulching to prevent soil erosion and to increase the organic matter content in the soil.

Andhra Pradesh

- In North Coastal Andhra Pradesh, if the farmers are going for rice transplantings with overaged nursery then i. Maintain closer spacing, ii. Ensure the minimum 5-6 seedlings per hill iii. Go for 25% additional nitrogen application. Apply 75% at the time of puddling or transplanting.
- In Scarce rainfall Zone of Rayalaseema, when transplanting late with aged seedlings of rice, farmers are advised to increase the plant population, retain 4-5 plants per hill and increase the nitrogen dose by 25 % and apply the nitrogen in two splits i.e 70 % at basal and remaining 30 % at panicle initiation stage.
- In Krishna Godavari Zone of Andhra Pradesh, weather is congenial for incidence of stem borer attack in paddy. Spray cartaphydrochloride @ 2 g. (or) Chloripyriphos @ 2.5 ml/Litre of water.
- In Southern Zone of Andhra Pradesh, areas where rainfall is very less, there is a chance of occurrence of sucking pests in groundnut crop. To control spray imidacloprid 60 ml /200 lit of water per acre.

Telangana

- In Southern Telangana zone, Drain out the excess water from the fields of rainfed crops wherever heavy rainfall is received. Prevailing weather conditions are congenial for the incidence of Spodoptera in Cotton. If noticed control it by spraying Thiodicarb @ 1.5 g per litre of water.
- In Northern Telangana continue sowing of sesame & cowpea. Take up sowing of sesame & cowpea. Excess soil moisture congenial for the incidence of parawilt in cotton .To prevent the spread of the disease soil drench with copper- oxy-chloride @ 3gr per lit of water on a non rainy day.

Tamil Nadu

- In Puducherry, continue land preparation and nursery sowing of Samba rice with long duration varieties

like CR 1009, ADT 50 and KKL 1.

- In Cauvery Delta Zone, undertake land preparation for sowing of rainfed cotton, maize and nursery raising of *Samba* rice
- In Western Zone, continue sowing of winter irrigated cotton. Also samba season rice nursery of medium duration rice may be raised.
- In the prevailing weather, incidence of boll worm in cotton is expected. To control, spray Phosalone 35% EC @ 2.5 l/ha or Quinalphos 25 EC @ 2.0 l/ha (or) Emamectin benzoate 5% SG @ 190-220 g/ha. Conditions are favorable for Yellow mosaic virus in pulses. To control, spray Dimethoate 30 EC @ 500 ml/ha or Thiamethoxam 75 WS @ 1 g/litre of water.
- Shoot and fruit borer occurrence is noticed in Brinjal. To control, remove the affected fruits, terminal shoot showing boreholes and spray Neem Seed Kernel Extract 5 %.

Karnataka

- In North Interior Karnataka, in medium black to deep black soils, undertake sowing of sunflower and sorghum crops. For sowing of *rabi* crops, prepare the land with compartment bunds and furrows for in-situ soil-moisture conservation. Wherever water resource (Bore wells/ponds) are available, undertake sowing of maize, bajra, castor, horsegram, niger, sunflower and fodder crops.
- In South Interior Karnataka, undertake sowing of sunflower, ragi, sugarcane and soybean crops. Continue planting of mango, Jack fruit and Jamun on the bunds. Sowing of horsegram / green manure crops for later stage mulching in mango orchard is recommended.
- In Coastal Karnataka, drain out excess water from crop fields.
- In South Interior Karnataka, wherever the incidence of aphid and leaf minor is noticed in groundnut crop, spray Dimethoate @ 1.75ml/litre after current spells of rain.
- In Coastal Karnataka, for the control of Katte Roga disease in Black pepper, spray 1% Bordeaux mixture solution and pour 5 liters of 0.2 % Copper Oxochloride solution to the root of the vine in the soil after current spells of rain.

Animal Husbandry

- In Karnataka, vaccinate (ET vaccine) sheep and goats against Enterotoxemia.
- In Southern Zone of Tamilnadu, Hemorrhagic Septicaemia disease may occur during the rainy season. This disease mainly affects the cow, buffalo and cross breed cows. The main symptoms are fever, dysentery, swelling of lower mandible and death. Advised to approach the nearby veterinarian and vaccinate the animal once in a year.

Fishery

- In North Interior Karnataka, procure the fish seeds from nearby fish hatchery. Release 3-6 species fish of size 10-15 cm length into the fish pound having 2-3 m water depth. Release 10-12 thousand fish seeds per hector depending on the pound fertility and water availability.

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

Realised Rainfall : Rainfall occurred in Anjaw, East Kameng, Kurung Kumey, Lower Subansari, Tawang, Tirap, Upper Siang, West Kameng and West Siang districts of Arunachal Pradesh; Baksa, Barpeta, Bongaigaon, Chirang, Darrang, Dhubri, Dibrugarh, Goalpara, Kamrup(Rural), Kamrup(Metro), Kokrajhar, Lakhimpur, Morigaon, Nalbari, Sonitpur, Sibsagar and Udalgiri districts of Assam; East Khasi Hills, Jaintia Hills, South Garo Hills and West Khasi Hills districts of Meghalaya; Lawngtlai and Saiha districts of Mizoram; Mokokchung district of Nagaland and all districts of Tripura.

- **Advisories:** As rain/thundershowers likely at most/ many places over Nagaland, Manipur, Mizoram & Tripura during the period, over Arunachal Pradesh from 8th to 10th, over Assam & Meghalaya from 7th to 10th along with **Heavy to very heavy rainfall** at isolated places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 9th & 10th September, **heavy rainfall** very likely at isolated places over Arunachal Pradesh on 9th & 10th September ; avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields.

Arunachal Pradesh

- In Arunachal Pradesh, maintain optimum water level in rice fields. Maintain periphery of Jhum rice

field weed free and clean to prevent disease and pest harbouring in weeds. Undertake nursery bed raising for early cauliflowers and tomato.

Assam & Meghalaya

- In Upper Brahmaputra Valley Zone of Assam, due to congenial weather, there is chance of attack of stem borer, hispa and swarming caterpillar in the rice fields. Spray Chlorpyrifos 20 EC or Quinalphos 25 EC @ 66-80 ml per 66-80 litre of water per bigha against the infestation. To prevent the spread of army worms from one field to another, it is advised to apply Malathion 5% dust in the bunds.
- In Lower Brahmaputra Valley Zone, undertake transplanting of Finger millets, sowing of maize, Khol Khol and cabbage.
- In Hill Zone of Assam, continue the sowing of Arhar, green gram/ blackgram/ sesamum.
- In Central Brahmaputra Valley, continue land preparation and sowing of kharif pulses (green gram & black gram). Prevailing weather is very conducive for infestation of stem borer and caseworm which may be controlled by draining out of excess water or spraying Chlorpyrifos(20%) @2ml/litre of water after current spells of rain.
- In North Bank Plain Zone of Assam, there is chance of attack of leaf folder /rice hispa in seedling and tillering stage of early transplanted rice. If there is one damage leaf per hill due to attack of leaf folder or appearance of one adult hispa per hill is observed, the farmers are advised to spray Chlorpyrifos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water after current spells of rain. Farmers of flood affected areas are advised to transplant 20-25 days seedling of short duration cultivars like Luit, Kapilee, Kolong and Dishang in the main field with a spacing of 15x15 cm up to mid of September. Continue sowing of kharif Sesame and pulses (green gram and black gram).
- In Meghalaya, maintain proper drainage in the field of ginger, turmeric and maize fields. Continue nursery raising for cole crops (cabbage, cauliflower, broccoli). Undertake harvesting of maize. Undertake land preparation and sowing of French bean and cowpea.

Manipur, Mizoram, Tripura and Nagaland

- In Nagaland, spray fungicide mixture of Carbendazim 0.05% + Mancozeb 0.2% upto to 50 DAS to control leaf spot disease in groundnut. Also spray NSKE@ 5% to manage early stage larvae and sucking pest in soybean crop. Undertake plant protection methods after current spells of rain.
- In Manipur, continue sowing of black gram, groundnut, black gram, rice bean and millet and planting of potato and onion. Maintain water level of 5-8 cm in the *kharif* rice field. Spray Carbendazim @ 0.5g / lit of water to control tikka disease in groundnut and also spray Mancozeb 75% WP @ 1.25 to 2 kg/ ha at 7 to 10 days interval against rust disease in Soybean after current spells of rain.
- In Mizoram, to control rice blast, spray Tricyclazole @ 1 gram per litre of water after current spells of rain. Continue harvesting of matured cobs of maize and pods of green gram. Maintain drainage properly to avoid water stagnation in standing crops.
- In Tripura, continue harvesting of *Aus* rice. Continue nursery bed preparation for sowing of *Aman* rice and land preparation for sowing of black & green gram and sesame. Due to cloudy and humid weather there is chance of attack of Stem and Cob rot disease in maize crop at grain filling stage. The combination of Trichoderma Viride (5ml per litre) and Seodomonous Flurensense (5ml per litre) may be applied to manage the attack. Infestation like Damping off, downy mildew may occur in vegetable field. Maintain good drainage in vegetable field.

Animal Husbandry

- In Upper Brahmaputra valley zone of Assam, during the monsoon season, to prevent the livestock from worm infestations, it is advised to give Piperzine or Mebendazole at recommended dose after proper consultation with veterinary doctor.
- In Tripura, monsoon weather could lead to gastrointestinal parasites infection in pig. It is advised to maintain good sanitary conditions of pig sheds.
- In Meghalaya, protect poultry houses from extreme rain/wind by covering with polythene sheets on the sheds. Provide vitamin B complex @ 7ml/litre in drinking water daily in broiler for healthy growth. Litter should be change periodically and provide clean drinking water and changed the water every day.

Fishery

- In Barak Valley Zone of Assam, to avoid insect infestation in nursery ponds, apply soap oil emulsion (mixture of cheap soap @ 2.5 kg and kerosene oil @ 13 litre per bigha of pond) and apply gently in nursery ponds.

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

Realised Rainfall: Rainfall occurred in all districts of Andaman & Nicobar Islands; in Sheohar and West Champaran districts of Bihar; in Bokaro, Dumka, Giridih, Gumla, Jamtara, Khunti, Ramgarh, Ranchi, Sahebganj, Simdega and West Singhbhum districts of Jharkhand; in all districts of Odisha; in all districts of Gangetic West Bengal except Birbhum, Hooghly, Murshidabad and Nadia and in all districts of Sub-Himalayan West Bengal & Sikkim except North Dinajpur and South Dinajpur.

Advisories:

- As rain/thundershowers likely at most/ many places over Andaman & Nicobar Islands, West Bengal and Sikkim and Odisha during the period, over Jharkhand from 6th to 8th along with **Heavy to very heavy rainfall** very likely at isolated places over Odisha on 6th & 7th September, **heavy rainfall** very likely at isolated places over Sub-Himalayan West Bengal & Sikkim during the period; avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields in Sub-Himalayan West Bengal & Sikkim and Odisha.

Odisha

- Keep up to 5cm water in the Direct seeded rice field at nine to ten week stage. Repair the bunds to check water loss from fields. Carry out weeding in transplanted paddy field where paddy crop is at tillering (two to five week) stage. Keep the drainage channels open in arhar and groundnut fields. Go for planting of papaya. Go for sowing of ragi in plain upland areas. Cultivate ginger in areas with high loamy soil.
- Apply Phosalone 35 EC @ 750 ml/ha in 375 litres of water for control of hairy caterpillar in groundnut. In case of severe attack of sucking pests in cotton, spray 2 ml Methyle Demeton in 1 litre of water or 5 ml Imidachloprid in 10 litres of water. Use Pheromone traps @ 10 nos. /acre to monitor stem borer population in transplanted paddy. Undertake plant protection measures after current spells of rain.

Bihar

- Carry out weeding in transplanted as well as direct seeded rice. Apply irrigation to maize crop. Continue sowing of pigeon pea in the upland areas in the month of September. Continue planting new saplings of fruit plants such as mango, litchi, jackfruit, guava, custard apple, lemon, etc.
- Monitor paddy crop regularly for stem borer. For control, spray Cartap Hydrochloride @ 2 g per liter of water. Spray Profenofos/Chlorpyrifos @ 2ml/litre of water in maize crop against stem borer attack. Undertake plant protection measures on clear days.

Jharkhand

- Complete the sowing Kulthi and Niger in this week. Harvest the timely sown green gram and black gram crops when the siliqua turns golden yellow. Farmers having assured irrigation may proceed for early potato cultivation.
- Timely sown direct seeded paddy crop is at flowering stage and susceptible to the attack of Gandhi bug. To control, carry out dusting of Chlorpyrifos / Quinolphos / Methyl Parathion dust @ 10 kg per acre. Undertake plant protection measures on a non rainy day.

West Bengal

- In Sub-Himalayan West Bengal, carry out weeding in large cardamom, okra and rice fields. Select upland for sowing of black gram; treat seeds with Rhizobium before sowing. Take up sowing of early cabbage and cauliflower seeds in the nursery bed after treating them with Bavistin or Mancozeb.
- Spray Neem oil 10,000 ppm @ 3ml + sticker 0.5ml per litre of water in the rice field as a preventive measure at early vegetative stage. Undertake plant protection measures after current spells of rain.
- In Gangetic West Bengal, transplant tomato, brinjal and chilli seedlings in main field in ridge furrow system. Use staking during planting of seedlings. Keep 2 cm water level in transplanted rice field. Carry out one hand weeding in Aman wet seeded paddy. Keep the drainage channels clean and arrange proper aeration in the betel vine gardens. Pluck muddy leaves from the lower parts of betel nut plants.
- If insect population is above ETL in paddy field, spray Imidacloprid 17.8 % SL@ 1 ml / 3 litres of water. Undertake plant protection measures after current spells of rain.

Andaman & Nicobar Islands

- In Andaman & Nicobar Islands, maintain water level at 3 to 5cm in rice main field. Prepare the upland area and make bed of 3 X 1m with drainage facility for sowing of *marsa*. Raise nursery for chilli for transplanting in upland area. Use seed rate @ 500 to 800 g/ha. Collect all the fallen coconuts from the

field to avoid sprouting.

Animal Husbandry

- In Bihar, to control the internal and external parasites in animals, give Ivermectin 10 Mg per 50kg body weight. Provide mineral mixture 50-60 gram per day along with regular feed.
- In Jharkhand, vaccinate goat against PPR disease.
- In Odisha, considering prevailing humid and cloudy conditions, keep the shelter dry and provide clean drinking water to animals. Vaccinate calves above three months and sheep and goat above two months against Foot and Mouth disease. Carry out de-worming in animals.
- In West Bengal, keep animal shelters and poultry sheds dry during the monsoon season.
- In Andaman & Nicobar Islands, provide 16 hrs light to the poultry birds during cloudy weather to avoid mortality.

Fishery:

- In West Bengal, stock 1000-1500 numbers of fish fingerlings in/bigha pond.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

Realised Rainfall: Rainfall occurred in all districts of Konkan & Goa; in all districts except Nandurbar, Solapur, Sangli districts of Madhya Maharashtra, in all districts of Vidarbha and Marathwada; in all districts of Gujarat Region except Bharuch, Chota Udepur, Dahod, Gandhinagar, Kheda, Mahisagar, Narmada, Panchmahal, Tapi, Vadodara districts, in all districts of Saurashtra & Kutch.

Advisories:

- As rain/thundershowers likely at most places over Konkan, at most/ many places over Vidarbha and Gujarat during the period, over Madhya Maharashtra from 6th to 9th and over Marathwada from 6th to 8th September along with **Heavy to very heavy rainfall** at a few places with **extremely heavy falls** at isolated places very likely over Konkan & Goa; **Heavy to very heavy rainfall** with **extremely heavy falls** very likely at isolated places over Vidarbha, Madhya Maharashtra on 7th; **Heavy to very heavy rainfall** at isolated places over Gujarat State on 7th; **Heavy to very heavy rainfall** with **extremely heavy falls** very likely at isolated places over Saurashtra & Kutch on 8th & 9th September; avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields.

Maharashtra

- In Konkan, maintain 5 cm water level in rice fields. Provide adequate drainage facilities in standing crop, orchards and vegetable fields. To control downy mildew and powdery mildew in vegetables, spray Dithane M-45 or Dithane Z-78 each @ 2.5 g/litre of water after current spells of rain.
- In Madhya Maharashtra, maintain 5 cm water level in rice fields. Undertake planting of *adsali* sugarcane and harvesting of matured green gram and black gram after current spells of rain. Keep the produce in safer place. To control thrips in pomegranate, spray Spinosad 2.5 SC @ 10 ml per 10 liters of water after current spell of rain. To control leaf eating caterpillar in soybean, spray Quinalphos @ 25 ml per 10 litres of water after current spells of rain.
- In Marathwada, drain out excess water from orchards and vegetable fields. Undertake land preparation for planting of preseasonal sugarcane. Continue picking of matured green gram during after current spell of rain. To control fall army worm in maize, spray Thiamethoxam 12 % + Lambda – cyhalothrin 9.5 ZC @ 5 ml or Spinetoram 11.7 SC @ 4 ml per 10 liter of water after current spells of rain.
- In Vidharbha, provide adequate drainage in standing crop fields, orchards and vegetable fields. Maintain 5-7 cm water level in the rice fields in East Vidarbha. Undertake foliar spray of 2% Urea (200 g Urea +10 litre water) + 5 ml planofix at flowering stage and foliar spray of 2% DAP (200 g DAP +10 litre water) + 4 ml planofix at boll development stage for better productivity in cotton after current spells of rain. Also to control leaf eating caterpillar in pigeon pea, spray Nimboli Arc 5 % per 10 liters of water after current spells of rain. Continue nursery sowing of vegetables like tomato, brinjal, cabbage and cauliflower after current spells of heavy rain.

Gujarat

- In North Gujarat, in view of rainfall forecast, avoid irrigation and application of plant protection measures to the standing (cotton, groundnut, sesame) crops. Carry out picking of mature pods of green gram and cowpea in clear weather.
- In Middle and North Gujarat, carry out intercultural operations at vapsa condition in transplanted vegetable crops after current spells of rain.

- In South Gujarat, undertake weeding in pulse crop and transplanting of seedlings of bell pepper after current spells of heavy rain.
- In Saurashtra & Kutch, drain out excess rain water from crop fields in Porbandar district.
- In South Gujarat, to manage infestation of white fly in chilli and brinjal crops spray Triazophos 40 EC @ 20g/10 litres of water after current spells of rain.

Animal Husbandry:

- In Gujarat, provide balanced mineral mixture in diet of animals. Keep animal in shed. Keep fodder in safe place to avoid spoilage due to rainfall.

CENTRAL INDIA [M.P., CHHATTISGARH]

Realised Rainfall: Rainfall occurred in all districts of Chhattisgarh, East Madhya Pradesh except Shahdol and Umaria districts and in Asoknagar, Betul, Bhopal, Burhanpur, Dewas, Harda, Hoshangabad, Khandwa, Khargone, Mandsaur, Raisen, Sehare, Shivpuri and Vidisha districts of West Madhya Pradesh.

Advisories:

- As rain/thundershowers likely at most places over West Madhya Pradesh during the period, at most/many places over East Madhya Pradesh from 6th to 9th and over Chhattisgarh from 6th to 8th along with **heavy/ Heavy to very heavy rainfall** at isolated places over Madhya Pradesh from 6th to 8th September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields in Madhya Pradesh.

Madhya Pradesh

- In Madhya Pradesh, keeping in view of heavy rainfall forecast, farmers are advised to do proper arrangement for drainage in all vegetables, pulse, maize crop fields.
- In Malwa Plateau Zone, continue intercultural operations in soybean, maize and cotton crops. Farmers are advised to install Light Trap / Insects specific Pheromone Trap in soybean crop in order to assess the likely infestation of insects and for integrated pest management. For management of defoliators and white fly in soybean, spray pre-mixed insecticides like Betacyfluthrin + Imidacloprid @ 350 ml/ha or Thimethoxam + Lambda cyhelothrin @ 125 ml/ha after current spells of rain.
- In Jabhua Hill Zone, provide drainage channels in proper distance for drainage of excess rain water in tomato, chilli, brinjal, kharif onion and early cauliflower crop and give recommended dose of fertilizers.
- In Satpura Plateau Zone, if leaf eating caterpillar is observed in soybean crop, apply Trizofas @ 2 ml/acre or Flubendiamide @ 0.5 ml/acre +200 liter water. Bud necrosis disease is observed in groundnut, for control, apply Monocrotophos @ 1.6 ml/liter of water and for stem rot of groundnut spray of Saaf @ 3gram/ liter of water after current spells of rain.

Chhattisgarh

- In Northern Hill Zone, farmers are advised nursery sowing of brinjal, early tomato, chilli and onion in the upland areas. Undertake intercultural operations in different kharif crops like Maize, Ragi, Arhar, Groundnut, Soybean, Urd, Mung etc. After weeding, broadcast urea as per requirement.
- In Chhattisgarh Plain Zone, undertake nursery sowing of medium duration cauliflower after current spells of heavy rain. Maintain 5cm water level in rice fields. In the rice crop, continuous monitoring of harmful insects should be done. For this light trap should be used. Light trap should be placed at some distance from the crop and bulb should be lighted from evening 06:30 pm to 10:30 pm. Collected insects should be destroyed in the morning hours.
- In Bastar Plateau Zone of Chhattisgarh, undertake field preparation for sowing of horse gram, blackgram, green gram and sesame

Animal Husbandry

- In Madhya Pradesh, cattle sheds should be kept dry and farmers are advised to provide dry feed along with green feed in (50:50) ratio and 20-30 g mineral mixture and salt for the dairy animal's every day. . Vaccinate the chicks at 7 days (F1) and at 6 weeks with R2B. Vaccinate the poultry birds to prevent Ranikhet disease. (first F-1 in age of 7 days & second R2B in age of 8 weeks)
- In Chhattisgarh, cattle shed should be kept dry as far as possible 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 so that mosquitoes control is there.

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

Realised Rainfall: Rainfall occurred in Faridkot, Gurdaspur, Jalandhar, Kapurthala district of Punjab; in Chandigarh; in Faridabad district of Haryana; in North East Delhi and North Delhi districts; in Alwar, Bharatpur, Dausa, Dholpur, Dungarpur, Jhunjhunu, Karauli in East Rajasthan, in all districts except Bikaner, Churu, Hanumangarh, Sri Ganganagar of West Rajasthan; in Auraiya, Baduan, Bijnore, Etawah, Jalaun, Jyotiba Phule Nagar, Kanshiram Nagar, Mahamaya Nagar, Mahoba, Meerut, Moradabad, Rampur and Sambhal districts in West Uttar Pradesh and in Banda, Sonbhadra districts in East Uttar Pradesh; in Bilaspur, Hamirpur, Mandi and Sirmour districts of Himachal Pradesh; and in most of the districts of Uttarakhand except Garhwal Pauri, Garhwal Tehri and Haridwar; in Kathua, Reasi, Udhampur districts of Jammu & Kashmir

Advisories:

Jammu & Kashmir

- In Sub Tropical Zone, spray Carbendazim @ 0.1%, if attack of sheath blight is observed in paddy crop. Do not allow excess rain water to stagnate in maize fields. If excessive weeds are observed in maize field, uproot the weeds manually and mulch the soil with dead weeds. Top dress nitrogen (Urea) before tassel formation in maize (30-40 days after sowing) during evening hours. Spray Carbaryl @ 0.1 % during clear weather, if attack of blister beetle is observed on maize. Weather is congenial for hairy caterpillar on kharif pulses. If observed, then destroy young larvae in gregarious phase. If population is high, spray Quinalphos @ 0.03% or Dichlorvos @ 0.05% on a non rainy day.
- In Intermediate Zone, keep strict vigil on attack of blister beetle in maize crop. If observed, apply Carbofuron 3G @ 20 kg/ha (apply 3- 4 granules/leaf whorls to control the blister beetle). Also collect blister beetle by hand and kill them by burning or putting in water. Keep strict vigil on incidence of blister beetle in mash crop. If observed, apply appropriate plant protection measures to control the same. Farmers are advised to remain vigil for the attack of stem borer in paddy crop. If stem borer attack is observed, look for egg mass on flag leaf of paddy plant and destroy the mass. Install pheromone traps @ 5 – 7/ha for early detection of stem borer. On observation of the same, farmers are advised to install pheromone traps @ 12 – 15/ha. For chemical control, apply Carbofuron 3G @ 20 kg/ha in standing water and do not drain or irrigate the field for 72 hrs after application.

Himachal Pradesh

- In Sub Montane and Low Hills Sub Tropical Zone, carry out weeding and hoeing in all crops and vegetables for optimum growth and regularly monitor the fields. For control of Rice leaf folder, spray chloropyriphos 20 EC (2.5ml /litres) of water. False smut is expected in paddy crop, spray Blitox @ 500 grams per acre at 10 days interval (2-3 times). Stalk rot is expected in maize, for control drench maize fields with bleaching powder @16 kg/ha a week before tasseling. In maize, for control of stem borer, spray Carbrayl @ 2gm/ litre of water or broadcasting of Carbofuran 3% G or phorate 10 % G @ 8 kg/acre when sky is clear.
- In High Hill Temperate Dry Zone, after harvesting of peas, sow oats immediately. Spray Streptocycline (1 gram / 10 liter) and Blitox (Copper oxychloride) @ 3gm/liter at 15 days interval after flowering to control black rot in cabbage and cauliflower. Remove the weed from the potato field. For the prevention of blight disease in potato, spray Ridomil 2.5 g or Blitox (copper oxy chloride) at 3 g per litre of water.
- In Mid Hills Sub Humid Zone, pre harvest (20-25 days before harvest) spray of Captan(600 gm) or Ziram Metiram55% (600ml) (200 litre water for the control of scab/ Fly Speck/ Bitter Rot Scab in apple. Also Pre harvest (20-25 days before harvest) spray of Malathion 200 ml or Oxy-demeton methyl 200 ml 200 litre water for the control of Aphid Sanjose scale in apple. In pomegranate, spray Bactinash (70 gm) or Propineb (600 gm) or Mancozeb (600 gm) for the control of bacterial fruit spots.

Punjab, Haryana and New Delhi

- In Punjab, continue transplanting of vegetables (tomato, chilli, brinjal, cauliflower) and sowing of maize. Undertake planting of kharif onion crop both with bulbsets as well as seedlings. In early transplanted rice, drying of leaves due to bacterial leaf blight disease may be noticed, avoid ponding of water to check further spreading of infection. Undertake planting of ever green fruit plants like mango, sweet orange, mandarin, lime, lemon, litchi, guava, aonla, loquat and papaya.
- In Western Plain Zone of Punjab, due to persistence of high humidity and cloudy weather false smut may appear in rice, spray with Kocide 46 DF (Chopper hydroxide) @ 500 g in 200 litres of water per acre to

control false smut and after 10 days of its application spray Tilt 200 ml in 200 litres of water after current spells of rain.

- In Undulating Plain Zone, use fruit fly trap to control fruit fly damage in guava orchards and cucurbits. Farmers are advised to remove foot rot infected plants from rice field and avoid ponding of water to check further spreading of infection. Weather condition is favourable for planting of evergreen fruit plants like Mango, Litchi, Guava.
- In Haryana, continue transplanting of matured seedlings of tomato, cauliflower, cabbage in prepared field and complete the sowing of ladyfinger, bottle gourd, cucumber, ridge gourd and summer radish. Complete transplanting of rice and continue land preparation for sowing for pulses i.e. green gram, lobia, moth. Maintain optimum water level and undertake weeding operation in paddy crop.
- In Delhi, continue transplanting of early cauliflower, tomato, chilli, brinjal cauliflower and cabbage whose seedlings are ready. Monitor all crops and vegetables regularly against white flies and sucking pests. Undertake plant protection methods after current spells of rain. Undertake proper arrangement for drainage in all vegetables, pulse, maize and nurseries of the crops. Due to humid weather conditions, there may be increase in population of insect pests of cotton, install pest specific pheromone traps in the fields for monitoring the insect. In present weather condition, constant monitoring for leaf folder in paddy field, control the pest, mechanical methods, such as rope method (to dislodge the larvae) is advised.
- In Undulating Plain Zone of Punjab, borers in sugarcane can be managed by using Tricho-cards having 20,000 eggs of *Corcyra cephalonica* parasitized (seven days old) by *Trichogramma chilonis* and *Tricogramma japonicum* per acre at 10 days interval. Remove excess rain water to avoid any damage. Sucking pest population may increase which can also transmit Mosaic disease in mung and mash, spray recommended insecticides for control of sucking pest.
- In Western Zone of Haryana, due to favourable weather condition there is chance of occurrence of myrothecium leaf spot, bacterial blight in cotton, for control spray 800 gram Copper-oxy-chloride mixed with 250 liter water per acre when weather is remain clear. Also, due to favourable weather, monitor the infestation of rice leaf roller and stem borer in early transplanted rice crop. If infestation is noticed then broadcast 7.5 kg Fipronil (Regent/Mortal) 0.3 G mixed with 10 kg dry sand in per acre.
- In Western Plain Zone of Punjab, due to warm and humid conditions after rainfall, bacterial blight is likely to occur in cotton, spray the crop with Blitox 50 (WP) 500 g along with 3.0 g Streptomycin per acre, on clear day. Uproot and destroy leaf curl infected American cotton plants.
- In Central Plain Zone of Punjab, prevailing weather is favourable for the development and spread of fruit rot in chilli, give 3-4 sprays of Folicur @ 250 ml of Indofil M-45 or blitox 50 WP @ 750 gm/acre at 10 days interval after current spells of rain.

Uttar Pradesh

- In East Uttar Pradesh, there is possibility of attack of leaf hopper in sugarcane, remove of infested plants. Continue weeding and thinning in pigeon pea and urd crops. Monitor insect/pest population in standing crops and take appropriate measures if it goes above ETL. Apply Zinc sulphate @ 25kg/ha as basal for control of Khaira disease for paddy crop. Undertake irrigation to paddy crop as per requirement and apply Quinalphos 25 EC @ 1litre/ha for control of stem borer, brown plant hopper, gall midge, leaf folder and jassids. For maize crop apply Carbofuran 3G or Phorate 10 G @ 20kg/ha or Chloropyrifos 25 EC @ 1.5 litre + 600 litre water/ha. for control of stem borer and for control of brown stripe/downy mildew, leaf blight; spray mancozeb 75WP @ 1.5 kg + zinc sulphate @0.25 kg + 500 litre water/ha on a non rainy day.
- In West Uttar Pradesh, farmers are advised for monitoring for brown plant hopper (BPH) in paddy field. In sugarcane crop, undertake propping. Continue weeding and hoeing in all crops and vegetables. Continue transplanting of vegetables such as brinjal, chilli, cauliflower, etc. Continue planting of mango, guava, berry, amla, lemon, etc. in new fruit orchards. This is proper time for sowing of potato crop (i.e. mid-September). Use species of varieties -Kufri Badshah, Kufri Chandramukhi, Kufri Ashoka etc.
- For management of stem borer in paddy, spray Chlorpyrifos 20EC @ 1.5 litres in 500-600 litres of water per hectare. There is a possibility of stem borer in the maize crop. Hence for its control spray dimethoate 30 EC, 1 liter / ha or Qinalafas 25 EC, 1.5 liters / ha at the rate of 400-800 liters of water, when the weather is clear.

Uttarakhand

- In Bhabar and Tarai Zone, undertake planting of evergreen fruit plants like Mango, guava, Lemon, papaya, Litchi etc. and weeding and hoeing operation in orchard. To control the leaf blight disease in maize, spray solution of Mancozeb 75 WP @ 3g/litre of water. To control leaf spot disease in cucurbitous crops, spray

solution of Mancozeb @ 2.5 g/litre of water. To control the stem and fruit borer in brinjal, spray Emamectin Benzoate 5 SG @ 200g/Ha or Cypermethrin 25EC @200ml/Ha or Lambda Cyhalothrin 5CS @ 300ml/ha after current spells of rain. The fruits should be used 5 days after the last spraying of chemicals.

- In Sub-Humid Sub-Tropic Zone, under prevailing weather condition there is possibility of khaira disease in rice crop, spray 5 kg Zinc sulphate with 20 kg of urea dissolved in 800-1000 litres of water when sky is clear. Continue plantation of rainy season fruits and maintain proper drainage in orchards.
- In Hill Zone, undertake sowing of pea. Complete planting of lemon sapling, fodder plants and other fruit plants. In present weather condition, if blast disease on the paddy leaves observed, spray Carbendazim 50 WP@10 gram/10 liters of water/Nali during clear sky condition and 2nd doses should be apply after 10-12 days interval. Monitor soybean, moong, urd crops regularly. If white flies or sucking pests insect observed above ETL on crops, spray Imidacloprid @0.5-1.0 ml or Neem oil @2-2.5ml per liter of water with added adhesive in small quantity on a non rainy day.

Rajasthan

- As rain/thundershowers likely at many places over East Rajasthan from 6th to 8th September along with **Heavy / Heavy to very heavy rainfall** at isolated places, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields.
- In Flood Prone Eastern Plain Zone, undertake raise nursery of cauliflower varieties like Pusa Hybrid-2, Improved Japanese and Pusa Himjyoti after current spells of heavy rain. Use 375-400 g seed for transplanting one hectare area.
- 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.
- In Transitional Plain Zone and Inland Drainage Zone, undertake planting of fruit plants like ber, aonla, pomegranate. Also advised to transplant onion seedling in the prepared fields.
- Due to humid weather conditions, there may be increase in population of insect pest of cotton. Farmers are advised to install pest specific pheromone traps in the fields for monitoring the insect. If sucking pest's population is above ETL, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 litre or Trizophos 40 EC @ 1.0 ml/litre of water is advised against all type of borers.
- In Semi-Arid Eastern Plain Zone, in the prevailing weather groundnut may be affected by leaf spot disease, spray Bavistin @ 0.5 gm or Mencozeb @ 2 gm per litre water after current spells of rain.

Animal Husbandry

- In Uttar Pradesh, Vaccinate the goat to control PPR disease.Keep goat in dry and shaded place and provide green fodder, fresh and clean water three times in a day. Vaccinate cow and buffalo against FMD and langra diseases. Provide mixture of dry/green fodder with mineral salts and clean drinking water to the cattle. Vaccinate the poultry birds to prevent Ranikhet disease.Provide mineral mixture, fresh and clean water to birds.

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