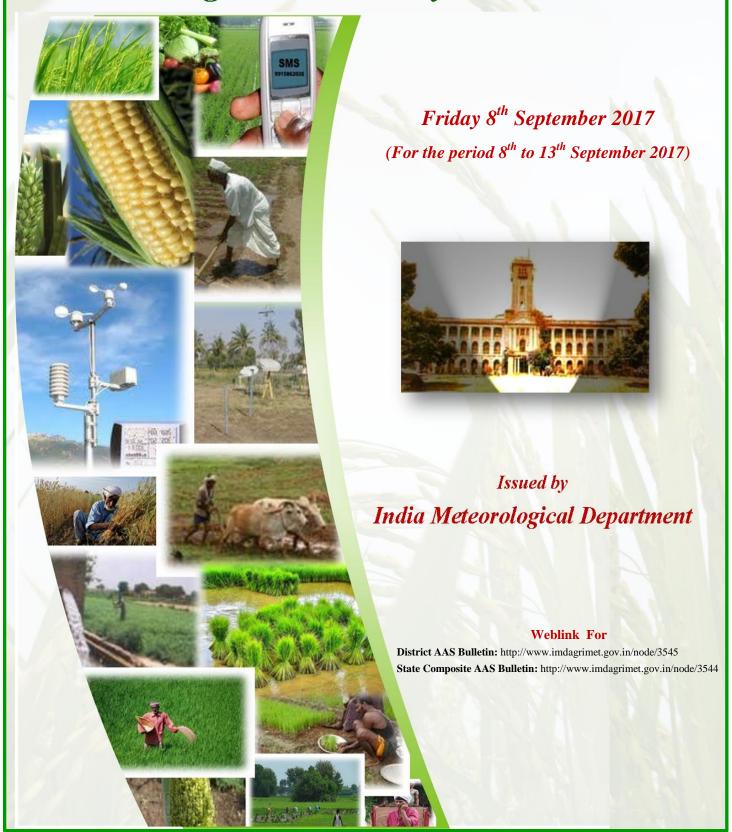
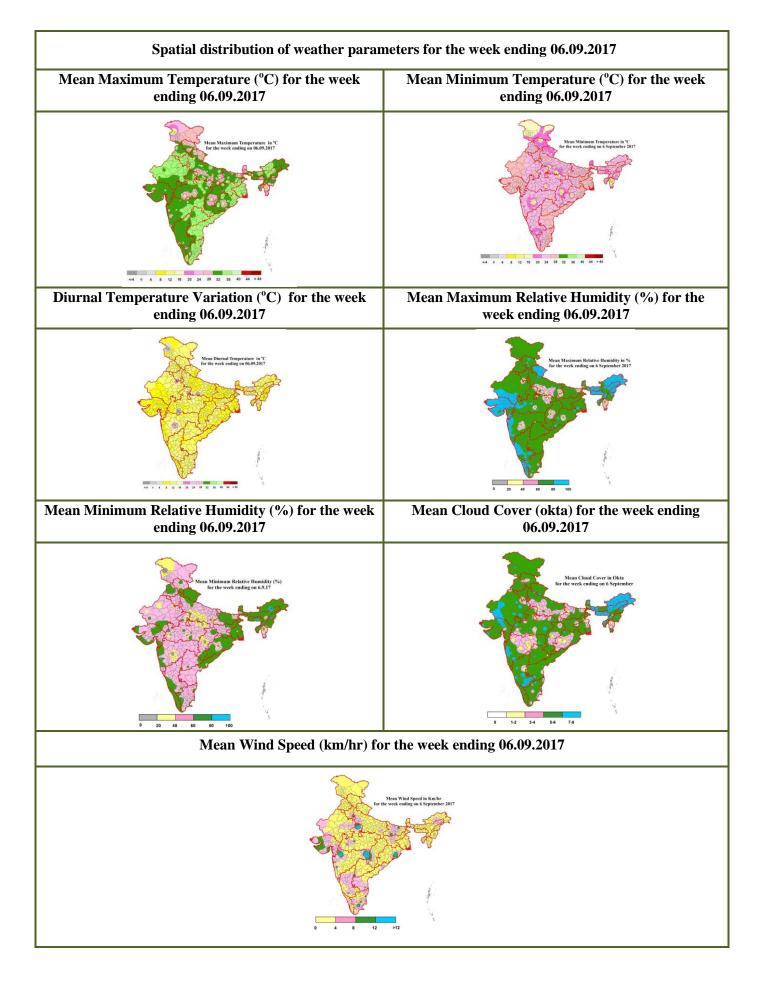
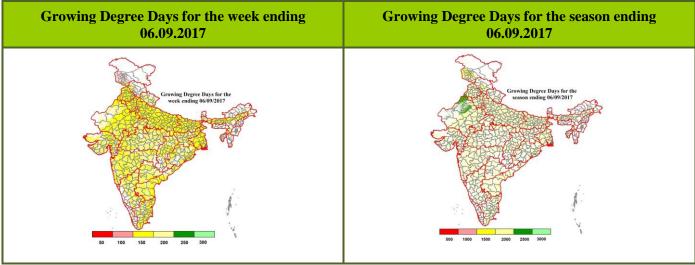


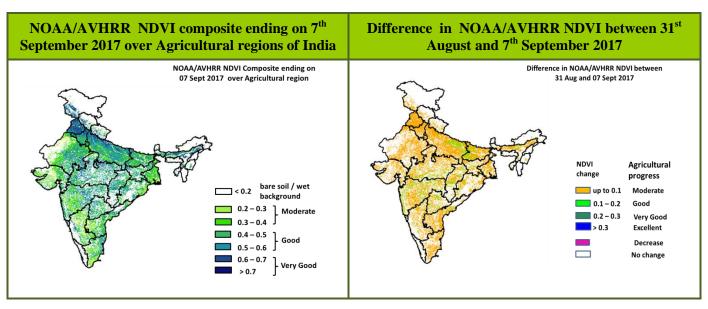
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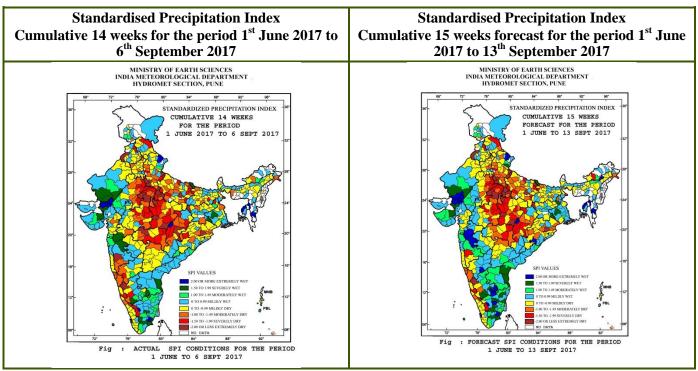


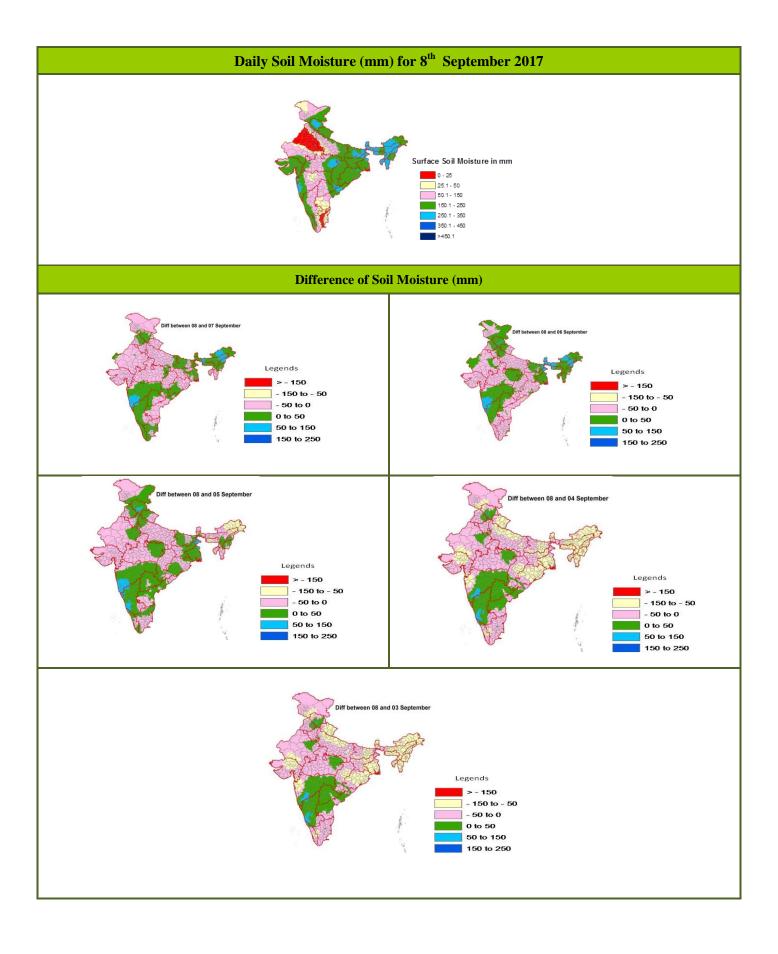


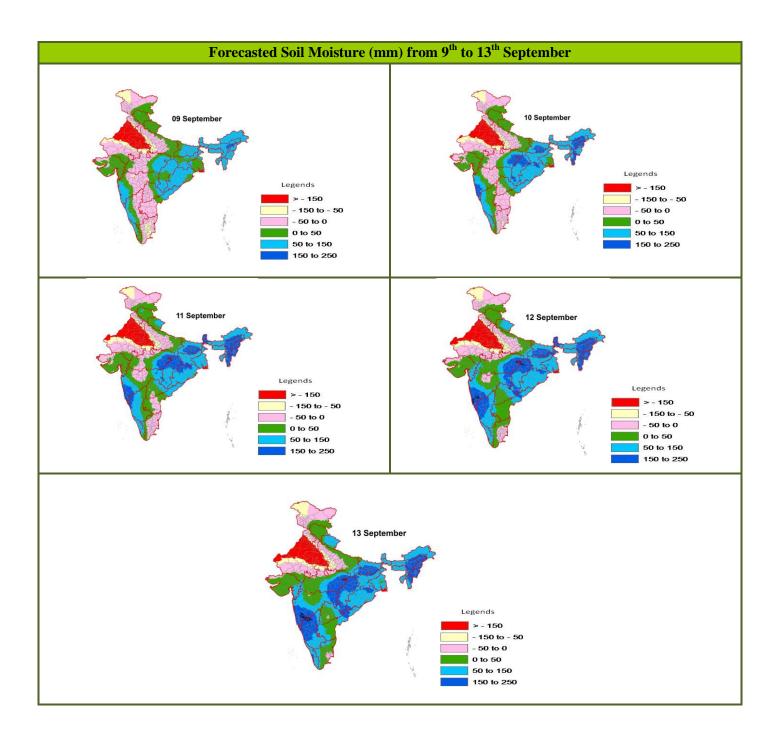


*Base temperature for *Kharif* Season is taken as 10⁰ C









Weather Forecast for next 5 days valid upto 0830 hours of 13th September 2017

- Meteorological sub-division wise detailed 5 day rainfall forecast is given below.
- No significant change in Maximum & Minimum temperatures over the country during next 2-3 days.

5 Day Rainfall Forecast (Mid-day) 8th September 2017

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

% 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

- **08 September (Day 1):** Heavy to very heavy rain at isolated places very likely over Madhya Maharashtra; heavy at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathawada, Konkan & Goa, Telangana, North Interior Karnataka, South Interior Karnataka, Tamilnadu & Pudducherry and Kerala. Thunderstorm accompanied with lightning very likely at isolated places over Madhya Maharashtra and Marathawada. Thunderstorm accompanied with gusty winds at isolated places very likely over Vidarbha. Thunderstorm very likely at isolated places over Assam & Meghalaya, Coastal Andhra Pradesh, Telangana and Rayalaseema.
- 09 September (Day 2): Heavy rain at isolated places likely over Sub-Himalayan West Bengal & Sikkim,

- Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Coastal Karnataka, South Interior Karnataka, Tamilnadu & Pudducherry and Kerala.
- 10 September (Day 3): Heavy rain at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Coastal Karnataka, South Interior Karnataka, Tamilnadu & Pudducherry, Kerala and Lakshadweep area.
- 11 September (Day 4): Heavy rain at isolated places likely over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Karnataka, South Interior Karnataka, Kerala and Lakshadweep area.
- 12 September (Day 5): Heavy rain at isolated places likely over Nagaland, Manipur, Mizoram & Tripura and Kerala.

Weather Outlook for subsequent 2 days from 13th to 15th September 2017

- Rain at most places with isolated heavy falls likely over northeast India and parts of peninsular India.
- Rain at many places likely over southern parts of central India.
- Rain at a few places likely over rest parts of the country, outside plains of northwest India where it is likely to be isolated.

Salient Advisories

- As per the forecast table and weather warning given above, in the regions likely to receive rainfall at most/many places and heavy/heavy to very heavy rainfall, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in standing crop fields.
- As thunderstorm accompanied with gusty wind at isolated places over **Vidarbha**, thunderstorm accompanied with lightning very likely at isolated places over **Madhya Maharashtra and Marathwda** on 8th September, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Undertake propping in sugarcane.
- > In **Marathwada**, in view of realised rain and expected widespread rain with heavy rainfall at isolated places during next 24 hours, provide adequate drainage to avoid water stagnation in the field.
- In the Southern Zone of **Kerala**, drain out excess water from the vegetables and banana fields. As rainfall is expected at most/many places, avoid harvesting of Viruppu rice in Thiruvananthapuram and Kollam districts. Keep already harvested produce at safer places. In the Central Zone, proper drainage should be ensured to control erwinia rot incidence in bananas. As a precaution, apply lime in the banana basin or bleaching powder in the irrigation channels. To improve the disease resistance, drench the basin with Pseudomonas @ 20g per litre of water. Affected plants can be protected by drenching the basin with Copper Hydroxide @ 2g/ litre of water. Severely affected plants should be cut and removed to prevent the spread of disease.
- ➤ In **South Bihar Alluvial Zone**, present weather conditions are highly favourable for incidence of Blast disease in rice. Monitoring at 2-3 days interval is advised. Early symptoms include development of eye shaped spot in the leaf sheath with light center and dark boundaries. If symptoms appear, spraying of Bavistin 2 g/litre of water 2-3 times with an interval of 10 day is advised for effective control
- ➤ In Western Plain Zone of **Punjab**, in the prevailing weather monitor cotton fields regularly for attack of whitefly. If the whitefly reaches 6 whiteflies per leaf in the upper canopy, spray the crop with Ulala 50 WG 80 g/acre or Lano 10 EC @ 500 ml/acre or 200 ml/acre Oberon in 125-150 litres of water/acre.

Detailed Zonewise Agromet Advisories

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

• Realised Rainfall: Rainfall occurred in all districts of Kerala except Kannur, Kasaragod, Kozhikode and Thiruvananthapuram, in Koppal, Raichur and Yadgir districts of North Interior Karnataka, all districts of South Interior Karnataka except Chikkamagaluru, Chitradurga, Davangere and Shivamogga, all districts of Tamil Nadu except Chennai, Cuddalore, Karaikal, Nagapattinam, Pudukkotai, Tiruvarur and Toothukudi, in Guntur, Nellore, Vishakapatnam and Vizianagaram districts of Coastal Andhra Pradesh, all districts of Rayalaseema except Cuddapah and Khammam, in Nalgonda and Warangal districts of Telangana during the week and weather remained mainly dry over rest of the region.

Advisories:

- As rainfall is very likely at most/many places over Karnataka, Kerala during the period, at many places over Tamil Nadu from 8th to 10th and on 12th, over Coastal Andhra Pradesh on 11th and 12th, over Rayalaseema on 8th, 11th and 12th, over Telangana on 8th and 12th September, along with heavy rain at isolated places over Kerala during the period, over Tamil Nadu & Puducherry from 8th to 10th, over South Interior Karnataka from 8th to 11th, over Coastal Karnataka from 9th to 11th, over North Interior Karnataka and Telangana on 8th Septmeber, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops.
- As thunderstorm very likely at isolated places over Coastal Andhra Pradesh, Telangana and Rayalaseema on 8th September, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Undertake propping in sugarcane.

Kerala:

- In the Southern Zone, drain out excess water from the vegetables and banana fields. As rainfall is expected at most/many places, avoid harvesting of Viruppu rice in Thiruvananthapuram and Kollam districts. Keep already harvested produce at safer places. In Pathanamthitta district, undertake harvesting of early planted sugarcane after current speels of heavy rain.
- In the Problem Area Zone, in areas where BPH attack is noticed on rice, drain water from the field and apply Acephate @ 800g/ha. Avoid spraying synthetic pyrethroids in paddy fields. There are chances of bud rot in coconut due to high relative humidity. For the control of bud rot, cut and remove all affected tissues of the crown and apply Bordeaux paste and protect it from rain until normal shoot emerges.
- In the Central Zone, proper drainage should be ensured to control erwinia rot incidence in bananas. As a precaution, apply lime in the banana basin or bleaching powder in the irrigation channels. To improve the disease resistance, drench the basin with Pseudomonas @ 20g per litre of water. Affected plants can be protected by drenching the basin with Copper Hydroxide @ 2g/ litre of water. Severely affected plants should be cut and removed to prevent the spread of disease.
- In the Northern Zone, apply fish amino acid @ 20 ml/litre of water to control rice bug incidence after current spells of rain

Karnataka:

- ➤ In Southern Dry Zone, continue sowing of ragi (GPU-28, KMR-204) crop. Take up sowing of fodder grass (NB-21, CO-3, CO-4, Road grass, Gini grass) on bunds or at waste lands
- In Eastern Dry Zone, postpone application of plant protection measure in standing crops as heavy rainfall is likely to occur. Drain out the excess rainwater from already sown crops.
- In North Dry Zone, taking advantage of realised rainfall, undertake sowing of sunflower, desi cotton and fodder crops in medium black to deep black soils and sowing of sunflower, setaria (navane), horse gram in shallow and red soils. Undertake harvesting of green gram after current spells of rain. Follow moisture conservation dry land techniques such as compartment bunding, ridges furrows and scooping in fields spared for rabi sowing.
- ➤ In North East Dry Zone, tie sugarcane crops at 5-6 feet 4-5 plants together to avoid lodging from gusty winds followed by earthing up.
- ➤ In Hill Zone, to reduce the square/flower bud/flower drop in cotton, spray Planofix @ 0.25 ml/litre of water after current spells of rain.
- ➤ In North East Dry Zone, thrips, leaf hoppers were noticed in late sown cotton crop; to manage spray Fipronil 5% SC @ 1.0 ml or Thiomethaxam 25 WP @ 0.2 g /litre of water.
- In Central Dry Zone, cloudy weather followed by drizzling favours the severity of purple blotch and basal rot in onion; if observed, spray Chlorthalonil @2 g/litre of water and undertake drenching with Carbendazim @1g/litre for control.
- In Central Dry Zone, prevailing temperature coupled with intermittent rainfall is favourable for incidence of leaf spot in arecanut; if observed, spray with Blitex @ 2.5/litre) with Strptocycline @ 0.6 g/litre of water for control.
- In Southern Dry Zone, due to the prevailing weather, blast disease is noticed in ragi and rice; spray the fungicide Bavistin @1g/litre of water or Tricyclozone or (Bhim) @0.6 g/litre of water after current spells of rain and repeat this spray after 15 days.
- ➤ In Hill Zone, as a precautionary measure, for the control of Katte roga in black pepper, spray 1% Bordeaux mixture solution and pour 5 liters of 0.2 % Copper Oxychloride solution to the root of the each vine in the soil.

Andhra Pradesh:

- ➤ In the North Coastal Zone, drain out excess water from groundnut, maize and mesta crop fields.
- ➤ In the Krishna Godavari Zone, remove excess rain water immediately from chilly fields, if present rains may lead to water logging. Present rains may leads to excess moisture condition in the field that may favour the appearance of root rot in cotton. If it is severe, to manage, spray Copper Oxycloride @ 3g/ litre of water.
- ➤ In the Scarce Rainfall Zone of Rayalaseema, continue sowing of the following contingent crops:
- > Contingent crop suitable for sowing in red soils for the Month of September: jowar, green gram, bajra, cowpea, horsegram, field bean.
- > Contingent crop suitable for sowing in black soils for the Month of September: jowar, foxtail millet, green gram, field bean, sunflower.
- ➤ In Chittoor and Kadapa districts of the Southern Zone, continue sowing of contingent crops like red gram, castor, bajra, field bean, cowpea, korra and cluster bean in the month of August.
- ➤ In the North Coastal Zone, there are chances for severe incidence of viral diseases in sugarcane (formative stage). To control, apply 50 kg urea + 20 kg potash per acre and spray Diamethoate @ 2.0 ml/litre of water.
- ➤ In Chittoor district of the Southern Zone, in vegetable crops like tomato, bhendi and green pea, there is possibility of jassid incidence. To control, young stage larvas and eggs can be discarded by spraying 5% Neem decoction. If incidence is more, spray Thiodicarb @ 1g/litre of water.

Telangana:

- In North Telangana Zone, continue transplanting of bananas utilizing the realized rainfall.
- ➤ In South Telangana Zone, continue transplanting of long and short duration cultivars of rice. Incidence of hispa is noticed in rice. To control, spray Profenophos @ 2 ml/ litre of water.
- In North Telangana Zone, spodoptera incidence was noticed green gram, black gram and soyabean. To control, spray Chloripyriphos @ 2.5 ml/litre of water.

■ Tamil Nadu:

- ➤ In the Cauvery Delta Zone, continue land preparation/sowing of *samba* rice.
- In the Western Zone, moderate rainfall is continuing for next few days. Proper drainage may be done in all the crops to avoid water logging and root rot incidence. By utilizing past rainfall, land preparation may be done at optimum moisture for the North East Monsoon sowing. The root activeness is less due to continuous rainfall and cloudiness, hence avoid soil application of fertilizer to any crop. Considering the continuous rainfall, harvest the excess rain water into farm pond to reuse the same during scarce period. Provide propping for early season and midseason planted canes against lodging with heavy wind anticipated. Also protect banana crop against lodging by giving support.
- > In the North Western Zone, CONTINUE cultivation of sorghum, minor millets, green gram, red gram and black gram utilizing the realized rainfall.
- In the High Altitude Hilly Zone, drainage facilities should be created in the field to drain excess water. To control shoot borer insect in ginger crop, foliar spray of Dimethoate @ 2 ml/litre of water can be undertaken. To prevent rubbberisation disorder in garlic crop, use Ammonium Sulphate fertilizer in place of urea as basal dose.
- ➤ In the Western Zone, prevailing cloudy and humid weather condition is congenial for leaf spot disease in turmeric. To control, spray Mancozeb @ 2.5 g/ litre of water during non rainy days.

• Animal Husbandry

- ➤ In the Problem Area Zone of Kerala, avoid moist conditions in cattle shed to prevent incidence of foot rot.
- ➤ In the Central Zone of Kerala, adopt mosquito control measures. Cattle should not be allowed graze in water logged areas for avoiding diseases.
- In the Cauvery Delta Zone of Tamil Nadu, crossbred cows may require additional electrolytes and vitamins supplements. Vaccinate sheep and goats with Enterotoxaemia and Blue tongue vaccine with the help of veterinarians.
- ➤ In the Western Zone of Tamil Nadu, present weather is conducive for initiation of foot and mouth disease in dairy animals and cattle. Provide medicines to control.
- In Southern Dry Zone of karnataka, in view of low temperature in morning and night hours, maintain the optimum room temperature in sericulture, poultry and dairy unit by providing electric bulb for creating warm room temperature. Do not feed the silkworms with mulberry sprayed with insecticides/pesticides.

Fishery

➤ In Southern Dry Zone, take up fishery by leaving fingerlings of raho, catla, grasscarp at 1:1:1 ratio (4000 fingerlings/acre) into farm pond.

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

• Realised Rainfall: Rainfall occurred in Changlang, Dibang Valley, East Kameng, East Siang, Lohit, Lower Dibang Valley, Papumpara, Tawang, Tirap and West Kameng districts of Arunachal Pradesh, Baksa, Barpeta, Bongaigaon, Cachar, Chirang, Dhemaji, Dhubri, Gopalpara, Golaghat, Hailakandi, Jorhat, Kamrup (Rural), Karimganj, Lakhimpur, Morigaon, N.C.Hills, Nagaon, Sonitpur, Sibsagar and Udalguri districts of Assam, East Garo Hills, East Khasi Hills and

Ri-Bhoi districts of Meghalaya, Aizwal, Lunglei and Serchip districts of Mizoram, Imphal East, Imphal West, Senapati and Thoubal districts of Manipur, Dimapur, Kohima and Phek districts of Nagaland, Dhalai, North Tripura, South Tripura and West Tripura districts of Tripura during the week and weather remained mainly dry over rest of the region.

Advisories:

- As rainfall is very likely at most/many places over Assam & Meghalaya, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura during the period, along with heavy rain at isolated places over Nagaland, Manipur, Mizoram & Tripura during the period, over Assam & Meghalaya from 8th to 11th, over and Arunachal Pradesh from 8th to 10th September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crops and vegetables to avoid water stagnation.
- As thunderstorm very likely at isolated places over Assam & Meghalaya on 8th September, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Undertake propping in sugarcane.

Assam& Meghalaya, Arunachal Pradesh:

- ➤ In the North Bank Plain Zone, repair the field bunds to conserveserve water in the paddy fields. Undertake sowing of brinjal, tomato, carrot, spinach beet, knol khol, cabbage, cauliflower and radish. Maintain proper drainage in the pulses fields.
- In the Lower Brahmaputra Valley Zone, undertake sowing of bottle gourd varieties like Pusa Summer Prolific Long, Pusa Summer Prolific Round, Pusa Meghdoot and Pusa Manjiri with seed rate @ 2.2-3.2 kg/ha. Undertake sowing of improved varieties of Black gram such as T9, T27, Pant U 19, T122, Saonia mah (SB123), KU 301, USJD113 and of Green gram such as T44, Kopergaon, K851,ML56, ML131, SG1 (Pratap), SG21-5, etc. Undertake land preparation and sowing of sesame and brinjal. Undertake sowing of seeds of early cauliflower varieties like Early Kunwari, Pusa Dipali, Pusa Katki etc. in the seedbed. Treat the seeds before sowing with fungicides like Thiram or Captan @ 3 gm/kg of seeds.
- ➤ In Hill Zone of Assam, undertake sowing of green gram and black gram seeds in upland, sandy loam soil. Treat the seeds with Rhizobium culture before sowing. Undertake planting of coconut. Complete sowing of seeds of early radish varieties like Pusa Desi, Pusa Chetki etc. in September.
- In Barak Valley Zone of Assam, apply top dressing of 5 kg Urea at the time of tillering stage of Sali rice, i.e., 20 -30 days after transplanting of seedlings. Undertake nursery bed preparation for winter vegetables. Prevent water logging in the banana field. In Arunachal Pradesh, undertake nursery preparation for cabbage and couliflower. Avoid stagnation of water in and around the newly transplanted seedlings. Remove excess sucker from Banana in mother plant and give support to banana bunches to protect them from falling due to heavy rain. Remove the male flower in banana bunches to attain better finger/fruit size.
- ➤ In the Lower Brahmaputra Valley Zone, foliar spray of 0.05 gm Streptocycline and 0.05 g Copper Sulphate per litre of water may be done for control of bacterial leaf blight in Sali rice after current spells of rain.
- ➤ In the North Bank Plain Zone, present weather condition is favourable for attack of leaf folder and rice hispa at the tillering stage of paddy field. Spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water for management after current spells of rain.
- ➤ In Barak Valley Zone of Assam, for controlling mosaic and leaf curl disease in papaya plant, either rouge out the affected plants or spray with Rogar @ 0.1% after current spells of rain. For leaf miner and stem borer attack in the Sali rice field, apply Chlorpyriphos @ 2ml per litter of water after current spells of rain.
- ➤ In Hill Zone of Assam, spray with Quinalphos @ 2 teaspoonful/5 liters of water for rice hispa and Carbendazim @ 1g/litre of water to control blast disease in rice crop after current spells of rain.
- ➤ In Arunachal Pradesh, apply need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/litre against rice skipper & leaf folder using sticker. Spray carbendazim/Mancozeb @ 1-2 ml/lit of water for leaf spot/tikka disease in groundnut. Apply need based drenching of Metalaxyl-8% + Mancozeb 64% WP @ 2.5 g per litre of water for management of soft rot in ginger after current spells of rain.

Nagaland, Mizoram:

- In Nagaland, monitor constantly for leaf folder in TRC/WRC rice fields and use mechanical methods such as rope method for its management. Fix dead crabs, frogs or even pieces of jackfruit to bamboo sticks and place them in rice fields to attract/divert pests from sucking milk of rice grain. Carry out timely harvesting of cucurbits and okra. Carry out timely weeding and earthing up operation in brinjal, Naga king chilli and groundnut crops. Remove and destroy wilt affected brinjal plants. Provide proper drainage to soybean crop.
- ➤ In Nagaland, spray Neem oil @5ml/litre of water for aphids and white flies in ginger and turmeric crops after current spells of rain.
- In Mizoram, provide staking to coffee, banana, khasi mandarin, star fruit, plum and peach plants.
- In Mizoram, spray Monocrotophos @ 1.5 ml/litre of water for rice leaf roller; Imidachloroprid 0.5 ml/litre of water for effective control of yellow stem borer; and Tubeconazole @ 1 ml/10 lt of water for control of blast in kharif/Jhum rice. Apply insecticide like Imidacloprid 0.5 ml or Phosolone 1.5 ml or Acephate 1.0 g or Dimethoate 2 ml/litre of water for leaf-roller in Okra. Apply insecticide like Imidacloprid 0.5 ml or Phosolone 1.5 ml or Acephate 1.0 g or Dimethoate 2 ml/litre of water for shoot borer infestation in ginger and turmeric crops after current spells of

rain.

Animal Husbandry

- ➤ In the Northeastern states, vaccinate poultry birds against prevalent diseases like Ranikhet disease and deworm them every two months, provide adlibitum water, clean drinking water and take measures to prevent fungal contamination of bird feed
- To prevent mastitis in dairy cows, clean the floor of the dairy shed with suitable antiseptic solution.
- Fishery
- ➤ Apply fish feed (mustard oil cake) for achieving higher yield.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

• Realised Rainfall: Rainfall occurred in all districts of Konkan & Goa except North Goa and South Goa, Aravalli, Gandhinagar, Kheda, Sabarkantha and Valsad districts of Gujarat Region, all districts of Saurashtra & Kutch except Amreli, Bhavnagar, Diu and Surendranagar during the week and weather remained mainly dry over rest of the region.

Advisories:

- As rainfall is very likely at most/many places over Konkan & Goa and Madhya Maharashtra during the period, over Marathwada on 8th, 9th and 12th September, along with heavy to very heavy/heavy rain at isolated places very likely over Madhya Maharashtra from 8th to 10th and heavy rain at isolated places over Konkan & Goa on 11th September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops.
- As thunderstorm accompanied with lightning very likely at isolated places over Madhya Maharashtra and Marathawada on 8th and thunderstorm accompanied with gusty winds at isolated places very likely over Vidarbha on 8th September, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Undertake propping in sugarcane.

Maharashtra:

- ➤ In Konkan, maintain 5-7 cm water level in rice field at tillering stage. There is a possibility for incidence of blue beetle, if it is noticed, spray Quinalphos 25% EC per 2 litre of water or Triazophos 40% EC @ 625 ml or lambdacyhalothrin 5% EC @ 250 ml in 500 litres of water/ha. There is a possibility for incidence of blast on rice crop, if incidence is noticed; spray any one fungicides of Tricyclazole (75% WP) @ 10 g per 10 litre of water or Isoprothiolane 40% @ 10 ml per 10 lit or water after current spells of rain.
- ➤ In Western Ghat Zone, maintain water level upto 5 cm at tillering stage in rice & keep crop weed free. Due to prevailing weather condition incidence of sucking pest as green leaf hopper & others sucking pest may occur in rice & finger millet, spray with Methyl demeton 25% @ 400 ml per 500 litres water or Neem oil (10000 ppm) @1 ml per liter or Trizophos @ 1 ml per 1 liter of water. To control leaf roller in rice, spray Chloropyriphos @ 1 ml per littre water or Cypermetharin @ 0.5 ml per litre water after current spells of rain.
- In Western Maharashtra Plain Zone, under prevailing humid weater there may be attack of green semilooper in soybean, spray Quinalphos 25 EC @ 30 ml or Profenophos 50 EC @ 20 ml per 10 liters of water. For the control of jassids and thrips in cotton, spray Thiamethoxam 25 WG @ 2g in 10 liters of water. To control of thrips in pomegranate, spray spinosad 2.5 SC @10 ml in 10 liters of water after current spells of rain.
- ➤ In Sub Monate Zone, for control of woolly aphid in sugarcane use Conobatha, Micromes, Defa as predators. Incidence of rust is likely, if noticed spray Mancozeb 0.3 % (3g/lit) or 0.1 % Tebuconazole (1 g/litre) For control of brown hoppers in rice, spray Cypermethrin @ 4 ml/10 litre on the lower region (stem portion) of crop. To control leaf scald/blast, spray Carbendenzim @ 10g per10 litres water after current spells of rain.
- In Marathwada, in view of realised rain and expected widespread rain with heavy rainfall at isolated places during next 24 hours, provide adequate drainage to avoid water stagnation in the field. To control girdle beetle and tobacco eating catter pillar in soybean crop take a spray of Triazophos 40 % @ 20 ml per 10 liter of water. To control pod blight take a spray of Mancozeb @ 25 g per 10 liter of water after current spells of rain. For biological control of white fly in sugarcane crop use Chrysoperla Carnea (Chrysopa) 1000 adults or 2500 larva per hectareTo control Ergot disease in pearl millet uproot and destroy infested plants.
- In Vidarbha, under present weather situation Stem borer infestation was found in rice crop. Spray Quinalphos 32 ml in 10 liter of water. For the control of Girdle beetle in soybean, take foliar spray of Trizophos 40 % 12.5 ml. per 10 liters of water. In Bt Cotton incidence of pink bollworm on flowering stage is observed, for its control manually pickup the infected flowers from field with help of labour, repeat the procedure each week by labour, also take the foliar spray of Nimboli Arc of 5 % and also apply 4-5 / hector Pheromone traps in the field.

Gujarat:

- Carry out hand weeding and intercultural operations in cotton crop in Bhal and Coastal Zone and in urd bean in North Gujarat Zone, in vegetable crops in South Saurashtra Zone and in rice and groundnut crops in Middle Gujarat Zone.
- In South Gujarat Zone, undertake intercultural operations in pigeon pea crop before flowering
- In South Saurashtra Zone, complete sowing of castor crop.
- In North West Zone of Gujarat, carry out gap filling in castor and fennel crops.
- In North West Zone of Saurashtra & Kutch, apply split dose of 60 kg/ha Nitrogen in cotton crop at optimum soil

moisture.

- In South Gujarat Heavy Rainfall Zone, maintain optimum water level in transplanted rice.
- In Middle Gujarat Zone, due to cloudy weather there are chances of infestation of blast disease in pearl millet crop; to avoid, apply Carbendezim @ 10 g or Tricyclazol @ 6 g in 10 litres of water.
- ➤ In North Gujarat Zone, Bhal and Coastal Zone and North West Zone of Gujarat, prevailing weather condition is favorable for infestation of heliothis in pulse crops; if observed, spray Quinalphos 25 EC @ 20 ml in 10 litres of water or Renaxypyr @ 3 ml in 10 liters of water under clear weather.
- ➤ In South Gujarat Zone, for effective control of stem borer in new planted mango spray Dimethoate (30% EC) @ 10 ml/10 litres of water and for control of sucking pest in cotton, alternate spraying with Imidacloprid 200 SL @ 5 ml or Methyl-o-Demeton 25 EC @ 10 ml/10 litres of water is recommended.

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

• Realised Rainfall: Rainfall occurred in all districts of Andaman & Nicobar Islands, all districts of Gangetic West Bengal except Bankura, Birbhum, Murshidabad, Nadia and Purulia, all districts of Sub-Himalayan West Bengal & Sikkim except North dinajpur and South Dinajpur, all districts of Bihar except Darbhanga, Gaya, Jamui, Lakhisari, Monghyr, Muzaffarpur, Nawada, Rohtas, Saharsa, Sitamarhi, Siwan and Vaishali, in Chatra, Dumka, Godda, Latehar, Lohardaga, Pakur and Palamu districts of Jharkhand, all districts of Odisha except Bolangir, Kalahandi, Koraput, Malkangiri, Nawarangpur, Rayagada and Sundargarh during the week and weather remained mainly dry over rest of the region.

• Advisories:

As rain/thundershowers very likely at most/many places over Sub-Himalayan West Bengal & Sikkim during the period, along with heavy rain isolated places over Sub-Himalayan West Bengal & Sikkim from 8th to 10th September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in maize, pulses and vegetable fields to avoid water stagnation in the crop fields.

Bihar:

- In North East and North West Alluvial Zone of Bihar, in flood affected areas, drain out excess water from the standing crop fields. To protect from damping off of vegetable seedlings in nursery bed, spray Copper oxychloride 50WP @ 3g/litre of water +Streptocycline @ 1g/10 litres of water after current spells of rain.
- In South Bihar Alluvial Zone, maintain 3-5 cm water level in rice fields and undertake weeding and hoeing in vegetables. Present weather conditions are highly favourable for incidence of Blast disease in rice. Monitoring at 2-3 days interval is advised. Early symptoms include development of eye shaped spot in the leaf sheath with light center and dark boundaries. If symptoms appear, spraying of Bavistin 2 g/litre of water 2-3 times with an interval of 10 day is advised for effective control. Also in maize fields, constant monitoring of stem borer should be done, if insect population is above ETL, spray Carbrayl @ 2 gm/ litre of water. Undertake plant protection measures on a non rainy day

Jharkhand:

- In South Eastern Plateau Zone, undertake intercultural operation in standing crop of Horsegram, safflower, lobia, Urd and Moong bean at 15 DAS. Farmers may start preparation of land for the cultivation of short duration early potato hence, advised for the selection of varities viz. Kufri Ashoka and Kufri Pukhraj, Kufri Surya and Kufri Puskar of 80-90 days crop.
- In Western Plateau Zone, undertake land preparation for sowing of toria. Recommended varities of toria are T.-9, B.R.-23 and P.T.-303. Timely sown direct seeded rice crops are at flowering stage and this stage is susceptible to the attack of the insect Gandhi bug. To control the insects, dusting of Chlorpyriphos / Quinolphos / Methyl Parathion dust @ 10 kg per acre is recommended. However, dusting should be carried during clear weather.
- In South Eastern Plateau Zone, in the prevailing weather, chance of occurrence and spreading of Blast disease in rice is more. Hence, spraying of Bavistin @ 1 g or Beam (Tricyclazole) @ 6 g per 10 liter of water by mixing Teepol @ 0.5 ml per liter of water is advised on a non rainy day. Timely sown crops (Last week of June) are at flowering stage and this stage is susceptible to the attack of the insect Gandhi bug. To control the insects, dusting of Chlorpyriphos / Quinolphos / Methyl Parathion dust @ 10 kg per acre is recommended. However, dusting should be performed during clear weather.

West Bengal:

- ➤ In the Old Alluvial Zone, apply 6 kg urea & 2-3 kg MOP as second top dressing to surviving paddy crops after receding of water from the paddy fields. Undertake seedbed preparation and sowing of cabbage and cauliflower.
- ➤ In the Hill Zone of West Bengal, provide proper drainage to ginger, turmeric and Mandarin orange. Harvest early maturity large cardamom crop/capsules. Maintain 2-3 cm of water in the rice field. Drainage system should be maintained properly to remove excess water from rice field. Carry out regular harvesting of bhindi crop.
- ➤ In Hill Zone, spray Azadirachtin 0.03% (300PPM) neem oil based WSP @ 2000gm/ ha in 1000 litres of water, if 10% dead heart or 2 egg mass / m² of yellow stem borer is found in rice and spray Validamycin 3%L @ 0.75 ml/lit of water for incidence of blast and sheath blight disease in rice crop after current spells of rain.
- In Coastal Saline Zone, carry out hand weeding in the Aman paddy field. Drain out excess water and arrange proper

- aeration in betel vine field. Carry out weeding within the furrow in okra and brinjal fields.
- In Coastal Saline Zone, spray Kopiconazole @1.5ml/liter of water with sticker if sheath blight found above threshold level in high yielding variety of Aman paddy. Spray Spinosad @1.5ml/liter of water for fruit and shoot borer in brinjal and okra on a non rainy day.
- ➤ In the Old Alluvial Zone, spray Propoconazole @ 0.75 ml/litre of water to control sheath blight, Tricyclozole @ 0.5 gm/litre of water to control blast and Chlorpyphos @ 2 ml/litres of water to control leaf folder/case worm in paddy after current spells of rain.

• Animal Husbandry

- In North Central Plateau Zone of Odisha, periodic vaccination viz. FMD, HS & BQ may be carried out to protect the dairy animals. Keep the animal sheds clean and dry. RD vaccine should be given immediately to the chicks which are 7 days old. To prevent coxidiosis disease spray antibiotic solution named Kohrsolin-TH in the poultry house.
- In Jharkhand, for milch animals, provide mineral mixture and concentrates of groundnut/mustard/linseed, salt with clean green and dry fodder. Keep animal shelter clean and dry. Vaccinate poultry for the protection against ranikhet disease.

CENTRAL INDIA [M.P., CHHATTISGARH]

- **Realised Rainfall:** Rainfall occurred in Dindori and Mandla districts of East Madhya Pradesh, Bemetara, Dhamtari, Raigarh and Sukma districts of Chhattisgarh during the week and weather remained mainly dry over rest of the region.
- Advisories:
 - Madhya Pradesh:
 - ➤ In Satpura Plateau Zone, apply irrigation in groundnut, maize and soybean at pod formation/grain filling stage.
 - ➤ In Malwa Plateau Zone, continue transplanting of onion, brinjal, tomato, chilli, cauliflower and cabbage on raised bed. Continue nursery preparation of cauliflower for mid season (Oct-Nov.). Apply split dose of Nitrogen in maize crop.
 - ➤ In Jhabua Hill Zone, at flower initiation stage of cotton apply remaining dose of nitrogen fertilizer through urea and spray Naphthalene Acetic Acid (NAA) @ 50.0 ppm solution.
 - ➤ In Jhabua Hill Zone, due to cloudy weather there are chances of attack of shoot and fruit borer in okra, tomato & brinjal, spray Triazophos @ 2.0 ml/litre of water.
 - ➤ In Gird Zone, due to cloudy weather there are chances of attack of sucking pests in brinjal, tomato, chilli and okra, spray Dimethoate @ 750ml per hectare dissolved in 500-600 litres of water.
 - ➤ In Central Narmada Valley Zone, infestation of stem borers and gundhi bug can be seen in the rice fields, apply Quinalphos 25 EC or 20 EC @ 1-1.25 litre per hectare.

Chhattisgarh:

- In North Hill Zone, raise the seedlings of winter vegetables like cauliflower, cabbage, chilli, tomato, brinjal. Apply third does of Nitrogen fertilizer in rice crop at flowering stage.
- ➤ In Bastar Plateau Zone, maintain 5-7 cm water in rice fields for better growth and to supress weeds. Continue nursery preparation for papaya and custard apple. Continue sowing of niger, kulthi, urad and vegetable crops.
- ➤ In Chhattisgarh Plain Zone, in low rainfall regions (deficit rainfall), continue sowing of post-kharif crops like horsegram, moong, urad, toria, maize, sunflower, vegetables and forage crops. Continue nursery sowing of medium duration cauliflower.
- ➤ In North Hill Zone, attack of blast is observed in rice crop, spray Tricyclazole @ 120 gram per acre on a non rainy day and repeat after 10-12 days as per requirement.

• Animal Husbandry

- In Madhya Pradesh, vaccinate the poultry birds to prevent Ranikhet disease.
- > In Chhattisgarh, provide concentrate feed to milch animals mix with dry and green fodder and insure for enrich diet having protein, carbohydrate, fat, vitamins etc.

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

Realised Rainfall: Rainfall occurred in Jammu, Kathua, Reasi, Samba districts of Jammu & Kashmir, all districts of Himachal Pradesh except Kinnaur, Kullu, Lahaul & Spiti, all districts of Uttarakhand, all districts of Punjab except Amritsar, Ferozpur, Hoshiarpur, Jalandhar, Kapurthala, Mansa, Moga, Taran Taran, in Ambala, Chandigarh, Faridabad, Fatehabad, Jind, Kathial, Karnal, Kurukshetra, Panchkkula, Panipat, Rohtak, Sirsa, Sonepat, Yamunanagar districts of Haryana, all districts of Delhi except North East Delhi, in Ambedkarnagar, Azamgarh, Bhairaich, Ballia, Barabanki, Deoria, Faizabad, Farrukhabad, Ghazipur, Gorakhpur, Kannauj, Kheri, Sant Kabir Nagar, Shrawasti, Sidharth Nagar districts of East Uttar Pradesh, Badaun, Baghpat, Bareilly, Bijnour, Bulandshahar, Etawah, GB Nagar, Ghaziabad, Jotiba Phule Nagar, Mahamayanagar, Meerut, Moradabad, Muzzaffarnagar, Pilpbhit, Rampur, Saharanpur districts of West Uttar Pradesh, Dholpur, Sirohi districts of East Rajasthan, Hanumangarh, Sriganganagar districts of West Rajasthan during the week and weather remained mainly dry/dry over rest of the region.

Advisories:

Jammu& Kashmir:

- In Jammu, Kathua, Samba and Reasi districts of Sub Tropical Zone, prepare nursery beds of cole crops. For knoll-khol,make 3beds/Kanal, for cauliflower, make 1bed/Kanal; for cabbage, make 1bed/Kanal; for Kale, make 3 beds/Kanal. Undertake sowing of vegetables like Methi, Spinach Beet, Coriander, Radish, Carrot, Beet Root and Spinach within first fortnight of September.
- ➤ In Rajouri, Ramban, Poonch and Udhampur districts of Intermediate Zone, Farmers are advised to continue nursery raising of main season cole crops (cauliflower, cabbage and Knol khol). Sowing of root crops like carrot and radish can be done on ridges.
- ➤ In Rajouri, Ramban, Poonch and Udhampur districts of Intermediate Zone, if attack of Bacterial Leaf Blight (tip burning) is observed, apply Streptocyclin Sulphate @ 1.0 gm/10 litre of water on clear weather conditions.
- In Rajouri, Ramban, Poonch and Udhampur districts of Intermediate Zone, Farmers are advised to keep vigil on blister beetle attack in maize crop. If observed, apply Carbofuron 3G @ 20 kg/ha (apply 3-4 granules/leaf whorls to control the blister beetle). Also advised to collect blister beetle by hand and kill them by burning or putting in water.

Uttarakhand:

In Udham Singh district of Bhabar and Tarai Zone, in irrigated areas sowing of radish and turnip should be completed in this month. In unirrigated mid hills, radish varieties like Meenu early, Japanese white, Pusa Himani and early varieties of Saljam like Parpiltop, white glow should be sown at the earliest. Proper drainage of water should be maintained in standing crop of potato. Digging of crop should be done in the proper moisture condition.

Punjab, Haryana and Delhi:

- ➤ In Delhi, weather is suitable for sowing of carrot in the raised bed. Recommended cultivars: Pusa Rudhira with Seed rate- 4 kg/acre. Application of FYM, potash and phosphorus fertilizer is recommended. Seed treatment with Captan @ 2 gm per kilogram is advised. Field preparation should be started for early pea and arrangement for quality seeds should be done. In vegetables (brinjal, cauliflower, cabbage, tomato etc) constant monitoring of borers by using pheromone traps 4-6 per acre is advised, If insect population is above ETL than spraying of Spinosad 1.0 ml/4 litre of water is advised against fruit borer, diamond back moth. Undertake transplanting of onion, brinjal, tomato, chilli cauliflower and cabbage are advised on raised bed for those farmers whose seedlings are ready. It is suitable time for preparation of nurseries on raised bed for mid season cauliflower (Nov.-Dec.). Varieties: Pusa sharad, Pusa hybrid-2, Pant shubra. In present weather condition, constant monitoring for brown plant hopper in paddy field is advised. Farmers are advised to enter into the middle of the crop field and see mosquito like insect at the basal portion of the plant. If insect population is above ETL, spray of Imidacloprid 17.8 % SC@ 1.0 ml / 3 lit of water is recommended. In paddy crop constant monitoring of stem borer is advised by using pheromone traps 4-6 per acre is advised, If insect population is above ETL, than broadcast of Cartap 4% granules @ 10 kg/acre for effective control is recommended.
- ➤ In Western Zone of Punjab, undertake sowing of early potato and "desi" varieties of radish (Punjab Pasand), turnip (L-1) and carrot (Punjab Black Beauty, Punjab Carrot Red and PC 34), using 4-5 kg seed rate of radish and carrot and 2-3 kg seed rate of turnip per acre. Keep ridges 45 cm and plants 7.5 cm apart. Apply 4 sprays of 2 % potassium nitrate (13-0-45) solution at weekly intervals, starting at flower initiation. If the whitefly reaches 6 whiteflies per leaf in the upper canopy, spray the crop with Ulala 50 WG 80 g/acre or Lano 10 EC @ 500 ml/acre or 200 ml/acre Oberon in 125-150 litres of water/acre.
- ➤ In Western Plain Zone of Punjab, monitor cotton fields regularly for attack of whitefly. If the whitefly reaches 6 whiteflies per leaf in the upper canopy, spray the crop with Ulala 50 WG 80 g/acre or Lano 10 EC @ 500 ml/acre or 200 ml/acre Oberon in 125-150 litres of water/acre.
- ➤ In Eastern Zone of Haryana, continue planting of fruit trees like mango ,pears (gauva),jamun ,orange ,ber ,phalsa etc.

Uttar Pradesh:

- ➤ In Central Plain Zone of Uttar Pradesh, complete weeding and thinning operation in pigeon pea crop. Undertake top dressing of 1/4th dose of nitrogen after hand weeding and thinning operation in sorghum and pearl millet crops. Undertake land preparation for timely sowing of toria crop.
- ➤ In Central Plain Zone of Uttar Pradesh, due to prevailing weather condition there may be chances of attack of Khaira disease in paddy crop, for control apply Zinc Sulphate @ 25kg/ha as basal. For control of stem borer, brown plant hopper, gall midge, leaf folder and jassids, apply Quinalphos 25 EC @ 1litre/ha.
- ➤ In Central Plain Zone of Uttar Pradesh, due to prevailing weather condition there may be chances of attack of stem borer in maize crop, for control, spray Carbofuran 3G or Phorate 10 G @ 20kg/ha or Cloropyriphos 25 EC @ 1.5 litre in 600 litres of water/ha. For control of brown stripe/downy mildew, leaf blight, spray Mancozeb 75WP @ 1.5 kg + zinc sulphate @ 0.25 kg in 500 litres of water/ha.

Rajasthan:

- In Jaipur, Ajmer, Tonk and Dausa districts of Semi-Arid Eastern Plain Zone, undertake field preparation for early sowing of pea, Arkil, Hara bona, VL-3, Jawahar Matar-4, Matar Ageti-6 are improved varieties of early pea.
- > In Jaipur, Ajmer, Tonk and Dausa districts of Semi-Arid Eastern Plain Zone, prevailing weather condition is

- congenial for attack of little leaf disease in brinjal crop, due to which leaf remain small & appear in cluster. For control this disease remove affected plants & spray Malathion 50 EC @ 1 ml per litre of water.
- In Alwar, Bharatpur, Dhaulpur, Karauli, Sawaimadhopur districts of Flood Prone Eastern Plain Zone, undertake field preparation for sowing of early mustard crop. Depending upon soil site and farming situation select improved early mustard varieties. Apply Quinalphos 1.5% dust during last ploughing to manage soil borne pathogens and insects.
- ➤ In Alwar, Bharatpur, Dhaulpur, Karauli, Sawaimadhopur districts of Flood Prone Eastern Plain Zone, prevailing weather condition is congenial for attack of leaf curl & mosaic disease in Chilli crop, for control uproot & burn affected plants & spray Dimethoate 30 EC @ 1.0 ml per litre of water.
- ➤ In Alwar, Bharatpur, Dhaulpur, Karauli, Sawaimadhopur districts of Flood Prone Eastern Plain Zone, prevailing weather condition is congenial for attack of yellow mosaic disease in okra, for control spray Malathion 50 EC @ 1.0 ml per litre of water.

Animal Husbandary:

In Jaipur, Ajmer, Tonk and Dausa districts of Semi-Arid Eastern Plain Zone, livestock may be attacked by external parasites like ticks. These parasites cause blood parasite diseases like Babesia & Thelaria. In this disease frequent fever come in animals. Treat animal immediately if symptoms are seen.

• Horticulture:

- ➤ In Jaipur, Ajmer, Tonk and Dausa districts of Semi-Arid Eastern Plain Zone, prevailing weather condition is congenial for attack of leaf curl & mosaic in papaya, for control uproot & burn the affected plants and spray Dimethoate 30 EC or Methyl Demeton 25 EC @ 1 ml per litre of water.
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