



# *National Agromet Advisory Service Bulletin*

*Friday 23<sup>rd</sup> August 2019*  
*(For the period 23<sup>rd</sup> to 27<sup>th</sup> August 2019)*



*Issued by*  
*India Meteorological Department*

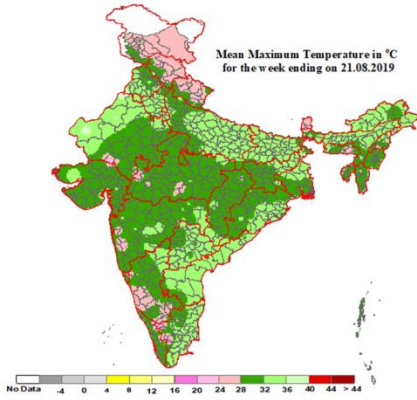
**Weblink For**

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

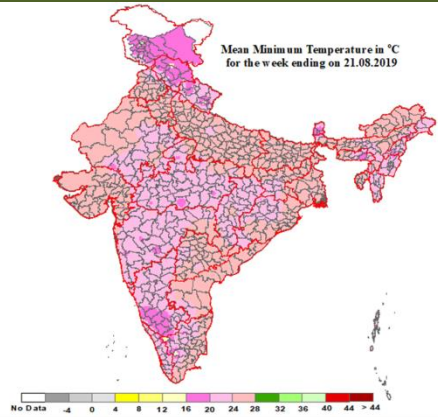
State Composite AAS Bulletin: <http://www.imdagrimet.gov.in/node/3544>

**Spatial distribution of weather parameters for the week ending on 21.08.2019**

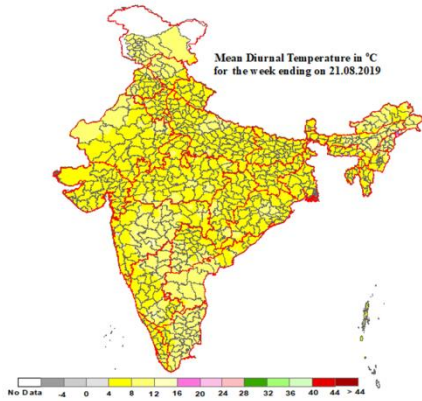
**Mean Maximum Temperature (°C) for the week ending on 21.08.2019**



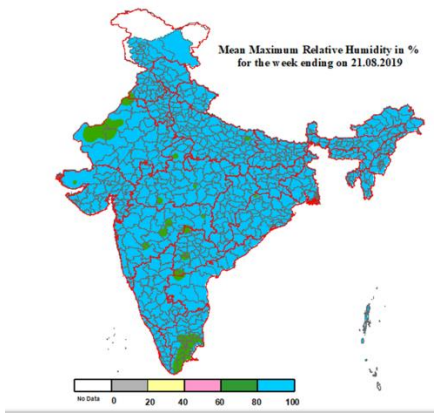
**Mean Minimum Temperature (°C) for the week ending on 21.08.2019**



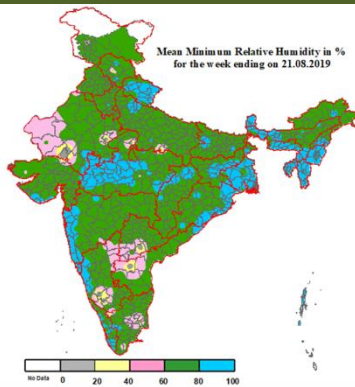
**Mean Diurnal Temperature Variation (°C) for the week ending on 21.08.2019**



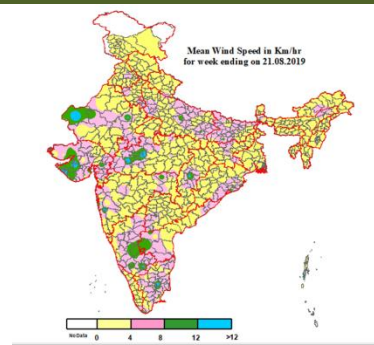
**Mean Maximum Relative Humidity (%) for the week ending on 21.08.2019**



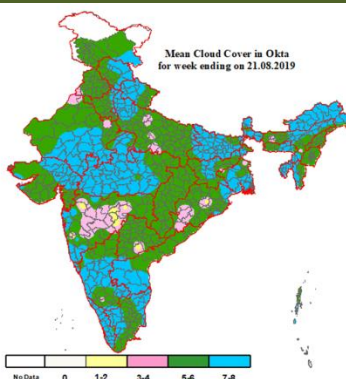
**Mean Minimum Relative Humidity (%) for the week ending on 21.08.2019**



**Mean Wind Speed (km/hr) for the week ending on 21.08.2019**

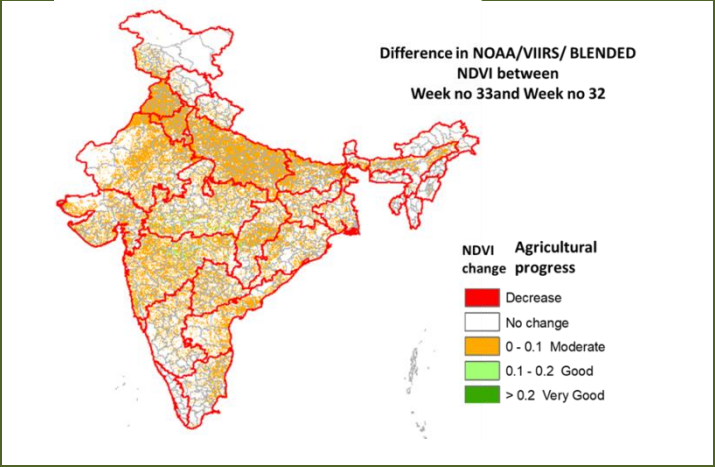
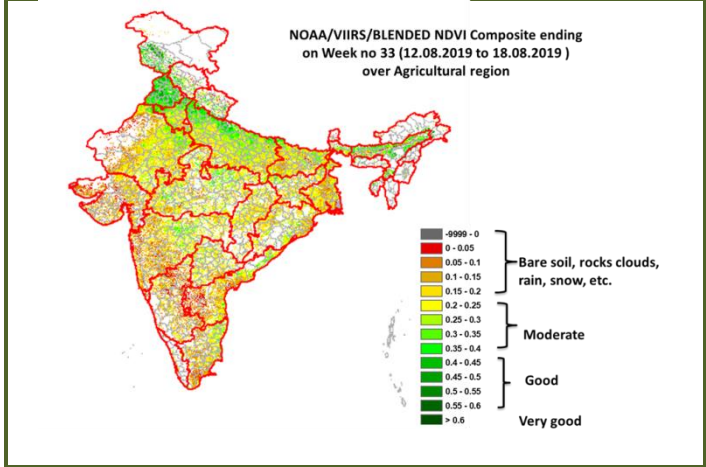


**Mean Cloud Cover (okta) for the week ending on 21.08.2019**





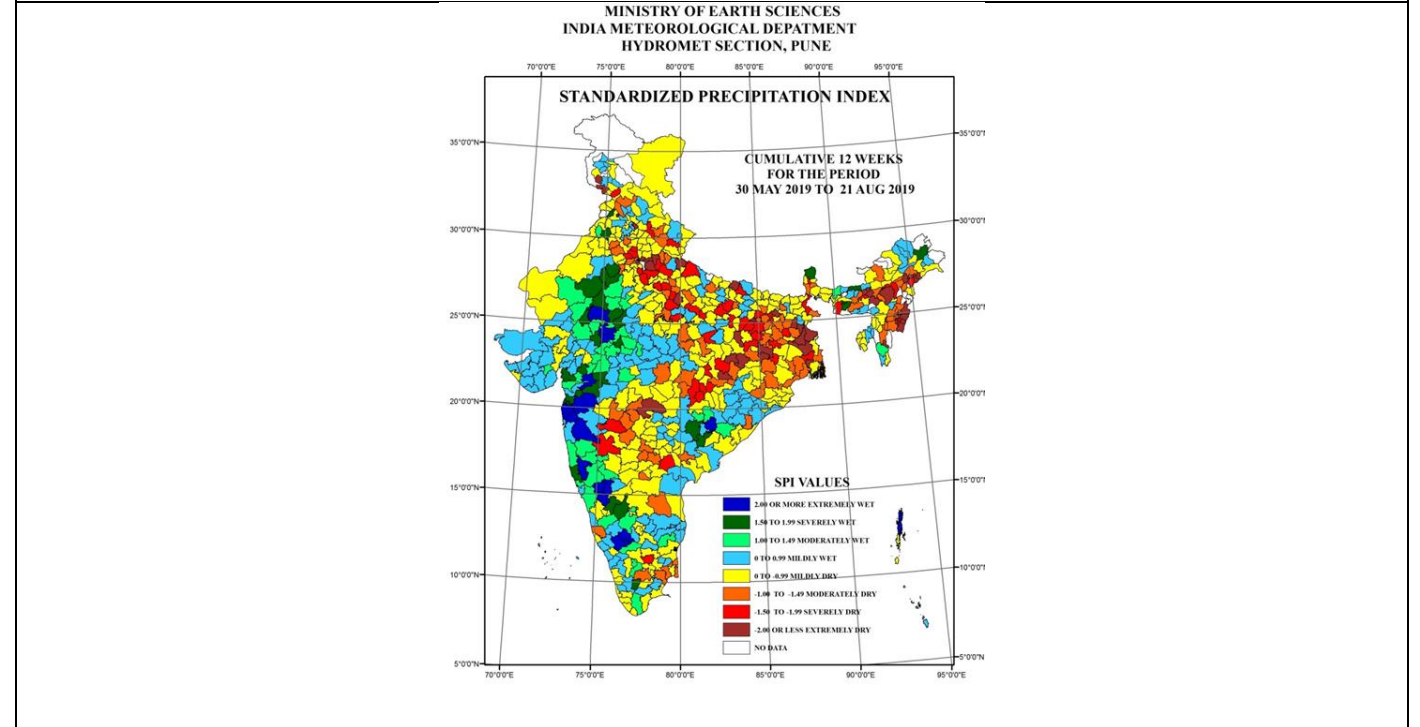
<b>NOAA/VIIRS/BLENDED NDVI composite for the week number 33 (12.08.2019 to 18.08.2019) over Agricultural regions of India</b>	<b>Difference in NOAA/VIIRS/BLENDED NDVI between week number 33 and week number 32</b>
---	--



Agriculture vigour was good at many places over Jammu & Kashmir & Punjab; at a few places over North eastern States, Himachal Pradesh & Uttarakhand and in isolated places over Haryana and Uttar Pradesh. 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 of over Vidarbha, Madhya Pradesh & Konkan and at isolated places over Jammu & Kashmir, Punjab, Haryana, West Uttar Pradesh, Uttarakhand, Himachal Pradesh, Gujarat, North Telangana, Chattisgarh, Odisha and Jharkhand.

**Standardised Precipitation Index  
Cumulative 12 weeks for the period 30<sup>th</sup> May to 21<sup>st</sup> Aug 2019**



- Extremely/Severely wet conditions exist in Lower Dibang Valley district of Arunachal Pradesh; Baksa district of Assam; Broach, Valsad, Dangs, Chhota Udepur districts of Gujarat; Dharwad, Gadag, Haveri, Chitradurga, Davangere, Mandya, Mysore districts of Karnataka; Barwani, 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; Bhatinda, Kapurthala districts of Punjab; Nagaur, Ajmer, Bhilwara, Bundi, Jhunjhunu, Kota, Sikar, Rajsamand, Pratapgarh districts of Rajasthan; Theni districts of Tamilnadu; Dadara & Nagar Haveli districts of Union Territory; North and Middle Andaman districts of Andaman and Nicobar Islands; North Sikkim districts of Sikkim; Bastar,

Bijapur, Sukma districts of Chhattisgarh.

- Moderately wet conditions exist in Kokrajhar district of Assam; Surat, Narmada, Botad districts of Gujarat; Uttar Kannada, Bagalkote, Belgam, Chamarajanagar, Chikmagalur, Tumkur districts of Karnataka; Bhopal, Dhar, Jhabua, Khandwa, Rajgarh, Ratlam, Shajapur, Ujjain, Alirajpur districts of West Madhya Pradesh; Ratnagiri, Mumbai Suburban, Sangli, Satara districts of Maharashtra; Lunglei districts of Mizoram Koraput districts of Orissa; Muktsar districts of Punjab; Jodhpur, Pali, Chittorgarh, Jaipur, Jhalawar, Sawai Madhopur, Tonk, Udaipur districts of Rajasthan; Tirunelveli, Tiruvannamalai, Tirupur districts of Tamilnadu; Narayanpur, Kondagaon districts of Chhattisgarh; North 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 28<sup>th</sup> August 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 48 hours.

#### 5 Day Rainfall Forecast (MID-DAY)

23<sup>rd</sup> August 2019

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

#### % 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

**23 August (Day 1):** ♦ **Heavy to very heavy rainfall** very likely at isolated places over Odisha; **Heavy rainfall** at isolated places over East Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Telangana, Coastal & South Interior Karnataka, Tamilnadu and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** very likely at isolated places over Jharkhand, Bihar and Gangetic West Bengal.

♦ **Strong winds**, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, southeast Bay of Bengal, north Andaman Sea and Andaman & Nicobar Islands. Fishermen are advised not to venture into these areas.

**24 August (Day 2):** ♦ **Heavy to very heavy rainfall** very likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha and Coastal Karnataka; **Heavy rainfall** at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, Jharkhand, Gangetic West Bengal, Gujarat region, Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** very likely at isolated places over West Bengal & Sikkim, Jharkhand and Bihar.

♦ **Strong winds**, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, southeast & westcentral Bay of Bengal, north Andaman Sea and Andaman & Nicobar Islands. **Squally weather** is likely to prevail over Odisha. Fishermen are advised not to venture into these areas.

**25 August (Day 3):** ♦ **Heavy to very heavy rainfall with extremely heavy falls** very likely at isolated places over West Madhya Pradesh; **Heavy to very heavy rainfall** at isolated places over East Rajasthan, Gujarat region and Coastal Karnataka; **Heavy rainfall** at isolated places over West Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Odisha, Andaman & Nicobar Islands, South Interior Karnataka and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** very likely at isolated places over Jharkhand.

♦ **Strong winds**, speed reaching 45-55 kmph, are very likely to prevail over southwest Arabian Sea, southeast & westcentral Bay of Bengal, north Andaman Sea, Andaman & Nicobar Islands and along & off Konkan coast. **Squally weather** is likely to prevail over Odisha. Fishermen are advised not to venture into these areas.

**26 August (Day 4):** ♦ **Heavy to very heavy rainfall with extremely heavy falls** likely at isolated places over Gujarat region; **Heavy to very heavy rainfall** at isolated places over East Rajasthan and Saurashtra & Kutch; **Heavy rainfall** at isolated places over West Rajasthan, West Madhya Pradesh, Andaman & Nicobar Islands, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Jharkhand.

♦ **Strong winds**, speed reaching 45-55 kmph, are likely to prevail over southwest Arabian Sea, southeast Bay of Bengal, north Andaman Sea, Andaman & Nicobar Islands and along & off Gujarat-Konkan coasts. Fishermen are advised not to venture into these areas.

**27 August (Day 5):** ♦ **Heavy to very heavy rainfall** likely at isolated places over Gujarat; **Heavy rainfall** at isolated places over West Rajasthan, Andaman & Nicobar Islands, Konkan & Goa, Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** likely at isolated places over Jharkhand.

♦ **Strong winds**, speed reaching 45-55 kmph, are likely to prevail over southwest Arabian Sea, southeast Bay of Bengal, north Andaman Sea, Andaman & Nicobar Islands and along & off Gujarat-Konkan coasts. Fishermen are advised not to venture into these areas.

### Weather Outlook for subsequent 2 days from 28<sup>th</sup> August to 30<sup>th</sup> August 2019

♦ Fairly widespread to widespread rainfall with isolated heavy falls likely over central and adjoining plains of northwest India, northeast India, West Coast and Bay Islands.

♦ Isolated to Scattered rainfall likely over rest parts of the country excluding Lakshadweep where Scattered to fairly widespread rainfall is likely.

### Salient advisories

- As rain/thundershowers likely at most places over **Coastal Karnataka** and **Kerala** during the period, at many places over **South Interior Karnataka** during the period and over Telangana from 23<sup>rd</sup> to 25<sup>th</sup> August along with **Heavy /Heavy to very heavy rainfall at isolated places** over **Coastal Karnataka** during the period, **heavy rainfall** at isolated places over Kerala during the period and over South Interior Karnataka from 23<sup>rd</sup> to 25<sup>th</sup> August, rain/thundershowers likely at most places over **East Madhya Pradesh** on 24<sup>th</sup> & 25<sup>th</sup>, at most/ many places over **West Madhya Pradesh** from 24<sup>th</sup> to 26<sup>th</sup>, over **Chhattisgarh** from 23<sup>rd</sup> to 25<sup>th</sup>, over **East Rajasthan** from 25<sup>th</sup> to 27<sup>th</sup>, over **Uttarakhand** on 24<sup>th</sup>, 25<sup>th</sup> & 27<sup>th</sup> and over **Uttar Pradesh** on 25<sup>th</sup> & 26<sup>th</sup> along with **Heavy to very heavy rainfall** with **extremely heavy falls** likely at isolated places over West Madhya Pradesh on 25<sup>th</sup>, **Heavy to very heavy rainfall** at isolated places over Madhya Pradesh and Chhattisgarh on 24<sup>th</sup> and over East Rajasthan on 25<sup>th</sup> & 26<sup>th</sup>, rain/thundershowers likely at most places over **Konkan** during the period, at most/ many places over **Odisha** from 23<sup>rd</sup> to 26<sup>th</sup>, over **Vidarbha** from 23<sup>rd</sup> to 25<sup>th</sup>, over **Gujarat Region** from 25<sup>th</sup> to 27<sup>th</sup> and over **Saurashtra & Kutch** on 26<sup>th</sup> & 27<sup>th</sup> August along with **Heavy to very heavy rainfall** with **extremely heavy falls** likely at isolated places over Gujarat region on 26<sup>th</sup> and **Heavy to very heavy rainfall** at isolated places over Saurashtra & Kutch on 26<sup>th</sup>, over Gujarat on 27<sup>th</sup>, over Odisha from 23<sup>rd</sup> to 25<sup>th</sup> and over Vidarbha on 24<sup>th</sup> August; avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields like vegetables, pulses and maize. Provide mechanical support to young fruit plants and staking in vegetables to prevent the crops from lodging due to heavy rain.
- **Thunderstorm accompanied with lightning** very likely at isolated places over Jharkhand during the period, over Bihar on 23<sup>rd</sup> & 24<sup>th</sup> and over West Bengal and Sikkim on 24<sup>th</sup> August, provide mechanical support to young fruit plants and vegetables to prevent the crops from lodging due to strong winds.
- In **Kerala**, in flood affected areas, drain out excess water from rice, banana and vegetable fields. Maintain 3-5 cm water level in rice fields at tillering stage. Apply 20Kg Urea and 10 Kg Potash per acre in the rice fields. Rake up the accumulated mud from the root zone of banana for better aeration. To control quick wilt in pepper, apply Bordo mixture 1% and Copper Oxy Chloride @ 3 gm per litre of water around the root area of the pepper vines after current spells of rain.
- Utilizing the reliased and expected rainfall, undertake sowing/transplanting of following *Kharif* crops:
- In North Coastal Andhra Pradesh, undertake transplanting of rice.
  - In Cauvery Delta Zone of Tamil Nadu, continue nursery raising of long duration varieties of *Samba* rice.
  - In upland areas of Odisha, continue sowing of Ragi, Maize, Arhar, Green gram, Black gram, Cowpea, Sesame, Groundnut etc. after current spells of heavy rain.
- In Central Bramhaputra Valley Zone of **Assam**, prevailing weather is conducive for infestation of Rice Hispa at tillering stage of rice. Spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water for control on a non rainy day.



## Detailed Agromet Advisories

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

**Realised Rainfall:** Significant rainfall occurred in all the districts of Kerala except Thiruvananthapuram; in all the districts except Srikakulam and Visakhapatnam districts of Andhra Pradesh; Adilabad, Hyderabad, Jagtial, Jogulamba Gadwal, Karimnagar, M. Malkajgiri, Mahabubnagar, Medak, Nagarkurnool, Nirmal, Rajanna Sircilla, Rangareddy, Sangareddy, Siddipet, Suryapet, Vikarabad, Warangal\_Urban, and Y. Bhuvanagiri districts of Telangana; in all districts of Coastal Karnataka, in Bidar district of North Interior Karnataka, in all districts of South Interior Karnataka except Ballari and Chitradurga districts; all the districts in Tamilnadu except Coimbatore, Dindigul, Erode, Kanyakumari, Karur, Nagapattinam, Ramanathapuram, Theni, Tirunelveli, Tirupur, Toothukudi.

#### Advisories:

- As rain/thundershowers likely at most places over **Coastal Karnataka** and **Kerala** during the period, at many places over South Interior Karnataka during the period and over Telangana from 23<sup>rd</sup> to 25<sup>th</sup> August along with Heavy /Heavy to very heavy rainfall at isolated places over **Coastal Karnataka** during the period, heavy rainfall at isolated places over Kerala during the period and over South Interior Karnataka from 23<sup>rd</sup> to 25<sup>th</sup> August, 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.

#### Kerala

- In Kerala, in flood affected areas, drain out excess water from rice, banana and vegetable fields. Maintain 3-5 cm water level in rice fields at tillering stage. Apply 20Kg Urea and 10 Kg Potash per acre in the rice fields. Rake up the accumulated mud from the root zone of banana for better aeration. To control quick wilt in pepper, apply Bordo mixture 1% and Copper Oxy Chloride @ 3 gm per litre of water around the root area of the pepper vines after current spells of rain.
- In Southern Zone, weather is congenial for attack of rice bug in paddy, apply fish amino acid 20ml/litre of water done in an encircling manner from outer to inner side either before 9am or after 3pm after current spells of rain.
- 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.
- In Northern Zone, weather is congenial for Tea mosquito bug and Anthracnose in cashew, spray Quinalphos @ 2ml/ Litre of water for control of Tea mosquito bug and against Anthracnose, spray Mancozeb @ 2gm/Litre of water after current spells of rain.

#### Andhra Pradesh

- In North Coastal Andhra Pradesh, undertake transplanting of rice. At the time of transplanting application of SSP(Single Superphosphate) will improve root development whereas potassium application helps in pest and disease resistance.
- In Scarce rainfall Zone of Rayalaseema, in Kurnool district, undertake transplanting of rice. Remove the top leaves before transplanting in the main field for controlling incidence of stem borer. Apply  $\frac{3}{4}$  th recommended dose of nitrogen, full dose of phosphorous and potassium fertilizers during final puddling.
- In Krishna Godavari Zone of Andhra Pradesh, if iron deficiency is observed in the red gram, spray mixture of annabedhi @ 50 grams+ citric acid @ 5 grams+ urea 150 grams by mixing in 10 liters of water twice at weekly interval.
- In Southern Zone of Andhra Pradesh, utilizing the realized and expected rainfall, undertake sowing of alternate crops like castor, field bean, cowpea, horsegram.

#### Telangana

- Prevailing weather conditions are congenial for the incidence of sucking pests in cotton and vegetables. To prevent the pests, apply Monocrotophos and water in 1:4 ratio with a soft brush on tender part of the stem for 30 days old cotton crop. To control on vegetables, spray Dimethoate @ 2ml or acephate @ 1.5 gr per liter of water.
- In Southern Telangana zone, undertake transplanting of rice in East-West direction with 20 cm alleyways at 2 m interval to minimize the incidence of BPH during the crop season.
- In Northern Telangana continue sowing of sesame & cowpea.

### **Tamil Nadu**

- In Cauvery Delta Zone, undertake land preparation for sowing of rainfed cotton, maize and *Samba* rice using the expected rainfall.
- In Western Zone, undertake sowing of winter irrigated cotton. Also weather conditions is favourable for tikka leaf spot in groundnut, spray Carbendazim 500 gram or Mancozeb 1000 gram per ha.
- In High Rainfall Zone, weather is congenial for attack of leaf mite in paddy field, spray Propargite @ 2 ml/ litre of water or Spiromesifen @ 0.6ml/litre of water.
- In Southern Zone, weather is congenial for the incidence of Bud worm in drum stick plants, spray Neem oil 35ml+Sticky agent10ml with 10litres of water.

### **Karnataka**

- In Coastal Karnataka, drain out excess rain water from the standing crop fields. Maintain 3-5 cm water level in rice fields. To overcome Zinc deficiency in rice field, apply Zinc Sulphate @ 20 kg / ha. Carry out hand weeding in cotton crop after current spells of rain.
- In North Interior Karnataka, undertake harvesting of green gram crop. Complete sowing of sunflower and cowpea crops.
- In South Interior Karnataka, undertake planting of mango, Jack fruit, Jamun on bunds and planting of lime, pineapple, banana and cardamom. Complete sowing of Foxtail millet, sunflower, soybean and cowpea. Complete transplanting of ragi and rice seedlings.
- In Coastal Karnataka, for the control of Koleroga in Arecanut, spray 1% Bordeaux mixture solution after current spells of rain.
- In South Interior Karnataka, to manage blast in ragi crop, spray Mancozeb @ 2 g/litre or Carbendizim @ 1 g/litre or Jineb @2.5 g/litre of water after current spells of rain.

### **Animal Husbandry**

- In Karnataka, maintain optimum room temperature in poultry and sericulture unit.
- In Tamilnadu, during rainy days, goats may be affected with viral enteritis. As and when diarrhoea is noticed, immediate treatment should be done at the veterinary dispensary and do not allow the goats to graze outside

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

**Realised Rainfall :** Rainfall occurred in all districts of Arunachal Pradesh except Anjaw, Dibang Valley, East Kameng, Lower Subansari, Tawang, Upper Siang and West Siang; in all districts except Baksa, Dhubri, Dibrugarh, Goalpara, Lakhimpur, N. C. Hills, Nagaon, Nalbari, Tinsukia districts of Assam; all districts of Meghalaya except West Garo Hills; all districts of Mizoram except Serchhip; in Bishnupur, Imphal West, Tamenglong districts of Manipur; in Dimapur and Tuensang districts of Nagaland; and in all the districts of Tripura.

### **Advisories:**

#### **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.

#### **Assam & Meghalaya**

- In Upper Brahmaputra Valley Zone of Assam, undertake sowing of green gram.
- In Lower Brahmaputra Valley Zone, in case of any kind of damage to hills due to flood/stress or any other reason in transplanted rice, fill those gaps by splitting healthy hills of same age. Maintain a depth of 5-6 cm water level in the paddy field. Complete sowing of sesame at the earliest. Continue land preparation for sowing of finger millet.
- In Hill Zone of Assam, continue the sowing of Arahara. Undertake intercropping in arhar with green gram/ blackgram/ sesamum.
- In Barak Valley Zone of Assam, high temperature and relative humidity are conducive for leaf curl disease in chilli and brinjal. For effective control of the disease, apply Rogar or Dimethoate @ 1.5 ml per litre of water on a non rainy day .
- In Central Brahmaputra Valley, complete transplanting of Sali paddy seedlings of medium and long duration varieties (120-150) days and sowing of kharif sesame at the earliest. Continue land preparation



and sowing of kharif pulses (green gram & black gram). Prevailing weather is very conducive for heavy infestation of Rice Hispa of rice at tillering stage. Spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water to control rice hispa on a non rainy day.

- 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 Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water. Farmers of flood affected areas are advised for sowing of short duration cultivars like Luit, Kapilee, Kolong and Dishang in the nursery bed within the 3rd week of August. 20-25 days seedling of these cultivars can be transplanted 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. Undertake nursery raising for cole crops (cabbage, cauliflower, broccoli).

#### **Manipur, Mizoram, Tripura and Nagaland**

- In Nagaland, in ginger fields, remove the affected clumps and drench the soil with Bordeaux mixture 1% at 15 days interval against Rhizome rot disease in ginger.
- In Manipur, complete transplanting of kharif rice. Continue sowing of black gram, groundnut, black gram, rice bean and millet. Spray Carbendazim @ 0.5g / lit of water to control tikka disease in groundnut on a non rainy day.
- In Manipur, continue sowing of millet and black gram.
- In Mizoram, maintain optimum water level in jhum rice. To control rice blast spray Tricyclazole @ 1 gram per litre of water on a non rainy day.
- In Mizoram, continue transplanting of rice. Undertake harvesting of matured cobs of maize and pods of green gram.
- In Tripura, continue harvesting of *Aus* rice.

#### **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.

#### **Fishery**

- In Arunachal Pradesh, provide additional feed for the fishes in the pond. There is possibility of muddy water influx from the surrounding areas into the fishery resulting reduction of dissolved oxygen contents. Stirring the water with a bamboo pole will help in increasing the gaseous exchange and protect the fishes from suffocation.

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

**Realised Rainfall:** Rainfall occurred in all districts of Andaman & Nicobar Islands; in Araria, Aurangabad, Banka, Begusarai, Bhabua, Bhagalpur, Bhojpur, Darbhanga, Gaya, Gopalganj, Jahanabad, Jamui, Katihar, Kishanganj, Lakhisarai, Madhepura, Madhubani, Monghyr, Nalanda, Nawada, Purnea, Saharsa and Samastipur districts of Bihar; in all districts of Jharkhand except Godda; in all districts of Odisha; in all districts of Gangetic West Bengal and in all districts of Sub-Himalayan West Bengal and Sikkim except Malda. Weather remained dry over rest of the region.

#### **Advisories:**

- **Thunderstorm accompanied with lightning** very likely at isolated places over Jharkhand during the period, over Bihar on 23<sup>rd</sup> & 24<sup>th</sup> and over West Bengal and Sikkim on 24<sup>th</sup> August, provide mechanical support to young fruit plants and vegetables to prevent the crops from lodging due to strong winds.
- As rain/thundershowers likely at most/ many places over Odisha, Jharkhand and West Bengal and Sikkim from 23<sup>rd</sup> to 26<sup>th</sup> August along with **Heavy to very heavy rainfall** very likely at isolated places over Odisha from 23<sup>rd</sup> to 25<sup>th</sup> August; avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields in Odisha.

#### **Odisha**

- Complete the transplanting of rice as early as possible. Go for sowing of green gram and black gram as

well as planting of brinjal and banana after current spells of heavy rain. Drain out excess water from maize field. In upland areas, continue sowing of non-paddy crops like Ragi, Maize, Arhar, Green gram, Black gram, Cowpea, Sesame, Groundnut etc.

- In North Eastern Coastal Plain zone of Odisha, wrapping and propping should be done in sugarcane 4-5 months old in medium and late duration varieties.
- In East and South Eastern Coastal Plain Zone of Odisha, complete sowing of greengram and blackgram in fallow uplands.
- To minimize infestation of top shoot borer in sugarcane crop, spray Lamba Cyhalothrin @2ml/ litre of water. In early transplanted paddy crop, there is a chance for leaf folder infestation due to the prevalence of cloudy weather. Spray Chlorantraniliprole 18.5% SC @ 3 ml/10 litre of water or Fipronil 5% SC @ 2 ml/litre of water. Undertake plant protection measures after current spells of rain.

### **Bihar**

- In the transplanted rice field, farmers are advised to carry out weed management. Carry out weeding and intercultural operations in vegetable crops. Continue transplanting of 45-50 days old onion seedlings in raised seedbed and planting new saplings of fruit plants such as mango, litchi, jackfruit, guava, custard apple, lemon, etc.
- Drain out excess water or make trench around the kharif maize fields. Spray Profenofos/Chlorpyrifos @2ml/litre of water in maize crop for management of stem borer. Undertake plant protection measures after current spells of rain.

### **Jharkhand**

- Complete the transplanting of paddy. Farmers having irrigation facility may go for cultivation of short duration variety of maize. In fallow upland, undertake cultivation of medium duration Pigeon pea and pulses like Horse gram, Moong, Urd, Oilseeds like Niger and Safflower.
- To control stem borer in paddy, spray Monocrotophos 36 E.C. @ 1-2 ml per litre of water and mix Tipol in the solution or prepare the solution in soap water. Undertake plant protection measures after current spells of rain.

### **West Bengal**

- In Sub-Himalayan West Bengal, go for transplanting aromatic rice as weather conditions are suitable for good quality yield. Keep okra and ginger fields weed-free and provide adequate drainage. In Darjeeling and Kalimpong districts, transplant 28-30 days old rice seedlings in the main field and keep 4-5 cm water level.
- 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, complete the transplanting of Aman paddy in medium land areas. Carry out hand weeding in the main rice fields at regular interval. Check the bunds around the field. Keep the drainage channels clean and arrange proper aeration in the betel vine gardens. Provide drainage and carry out weeding in tomato, chilli and brinjal fields.
- For management of rice Hispa, delay the first top dressing, do manual collection and kill beetles, cut the shoot tips and spray Quinalphos @ 0.5 ml per litre of water. Undertake plant protection measures after current spells of rain.

### **Andaman & Nicobar Islands**

- In Andaman & Nicobar Islands, do hand weeding in rice main field at 30 days after transplanting and maintain thin film of water. Make nursery for brinjal and use seed rate @ 400 g/ha. Collect fallen coconut from the field and make pits at distance of 7.5 m for planting. Remove excess water from vegetable field, as good amount of rainfall is expected.

### **Animal Husbandry**

- In Bihar, keep animal yard or farm clean and dry to avoid mastitis disease in dairy cattle and diarrhoea like situation.
- In Odisha, vaccinate calves above 3 months and sheep and goat above two months against Foot and Mouth disease.
- In West Bengal, give the animals 30-50 grams of mineral mixture along with their feed on a daily basis. This increases milk productivity and enhances immunity.
- In Andaman & Nicobar Islands, use banana stem and leaves as animal feed. Feed milking cow @ 15 to

20 kg per day.

**Fishery:**

- In West Bengal, apply lime @ 20 kg per bigha of pond water. Remove weeds from the pond. Make boundary with a net surrounding the pond.
- In Andaman & Nicobar Islands, do breeding of IMC carp fishes and store spawn in well managed nursery pond.

**WEST INDIA [GOA, MAHARASHTRA, GUJARAT]**

**Realised Rainfall:** Rainfall occurred in all districts of Konkan & Goa except Mumbai city, in Kolhapur, Nandurbar, Nasik districts of Madhya Maharashtra, in Bhandara, Gadchiroli, Gondia districts of Vidarbha; in all districts of Gujarat Region except Anand, Daman, Kheda, Surat, Vadodara districts, in Bhavnagar district of Saurashtra & Kutch.

**Advisories:**

- As rain/thundershowers likely at most places over Konkan during the period, at most/ many places over Vidarbha from 23<sup>rd</sup> to 25<sup>th</sup>, over Gujarat Region from 25<sup>th</sup> to 27<sup>th</sup> and over Saurashtra & Kutch on 26<sup>th</sup> & 27<sup>th</sup> August along with **Heavy to very heavy rainfall** with **extremely heavy falls** likely at isolated places over Gujarat region and **Heavy to very heavy rainfall** at isolated places over Saurashtra & Kutch on 26<sup>th</sup>, **Heavy to very heavy rainfall** at isolated places over Gujarat on 27<sup>th</sup> and over Vidarbha on 24<sup>th</sup> August; avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields in Konkan and Gujarat.

**Maharashtra**

- In Konkan, maintain 5 cm water level in rice fields. To control blue beetle in rice, spray Quinalphos 25% EC @ 40 ml or Triazophos 40%EC@ 12.5 ml or Lambda cyhalothrin 5%EC @ 5 ml per 10 liter of water after current spells of rain.
- In Madhya Maharashtra, maintain 5 cm water level in rice fields. For control of pod borer/ hairy caterpillar in green gram, spray Quinalphos 25 EC @ 20 ml per 10 liter of water. To control sap sucking pest in vegetables, spray Imidachloprid 17.8 SL @ 2 ml per 10 liter of water on a non-rainy day.
- In Marathwada, apply top dressing of Urea @ 40 kg per ha in pearl millet. To control stem borer in sorghum, spray of Chlorpyrifos @ 20 ml per 10 liter of water on a non rainy day.
- In Vidharbha, maintain 5 cm water level in rice fields in East Vidarbha. Undertake foliar spray of 2% Urea (Urea @ 200 g +10 litre water) at flowering stage in soybean after current spell of rain. Undertake intercultural operation like weeding in pigeon pea. Also to control leaf eating caterpillar in pigeon pea, spray Nimboli Arc 5 % per 10 liters of water after current spell of rain.

**Gujarat**

- In North Gujarat, undertake transplanting of tomato, brinjal, chilli and early cauliflower crops after current spells of heavy rain. Carry out the planting of saplings of new orchard.
- In South Gujarat, maintain optimum water level in rice field. Complete nursery preparation for chilli and brinjal.
- In Middle Gujarat, complete sowing of intercrops like green gram, black gram etc. in cotton field. Carry out hand weeding in pearl millet crop after current spells of rain.
- In Saurashtra & Kutch, carry out intercultural operations in sesame, pearl millet and cotton crops on a non rainy day.
- In North Gujarat, due to deficiency of Fe in soil, chlorosis observed in ground nut crop; spray Ferrus Sulphate @ 100 gm with 10 gm Citric acid in 10 litres of water; for 1 hectare prepare 500 litres solution.
- In Saurashtra & Kutch, monitor the cotton crop for infestation of sucking pests; if required, spray Imidacloprid 30.5 % @3 ml / 10 litres of water on non-rainy day.

**Animal Husbandry:**

- In Gujarat, take care of cattle and stored dry fodder during heavy rainfall period.

**CENTRAL INDIA [M.P., CHHATTISGARH]**

**Realised Rainfall:** Rainfall occurred in all districts of East Madhya Pradesh, in all districts of West Madhya Pradesh except in Khandwa, Khargone and Burhanpur districts and in all districts of Chhattisgarh except in Dhamtari, Mungeli and Rajnandgaon districts.



### Advisories:

- As rain/thundershowers likely at most places over East Madhya Pradesh on 24<sup>th</sup> & 25<sup>th</sup>, at most/ many places over West Madhya Pradesh from 24<sup>th</sup> to 26<sup>th</sup> and over Chhattisgarh from 23<sup>rd</sup> to 25<sup>th</sup> August along with **Heavy to very heavy rainfall** with **extremely heavy falls** likely at isolated places over West Madhya Pradesh on 25<sup>th</sup>, **Heavy to very heavy rainfall** at isolated places over Madhya Pradesh and Chhattisgarh on 24<sup>th</sup> August, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields.

#### Madhya Pradesh

- 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 should be done. Undertake plant protection methods after current spells of rain.
- In Central Narmada Valley Zone, undertake weed management in soybean crops after current spells of rain.
- 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. Undertake plant protection methods after current spells of rain.

#### Chhattisgarh

- In Northern Hill Zone, in upland areas, continue sowing of urad, sesamum, moong etc., inter cropping of maize with Urd is advised. Farmers are advised to sow brinjal, early tomato, chilli and onion in the nursery in the upland areas. Undertake intercultural operations in different kharif crops like Maize, Ragi, Arhar, Groundnut, Soybean, Urd, Mung etc after current spells of rain. After weeding, broadcast urea as per requirement.
- In Chhattisgarh Plain Zone, upland rice should be kept weed free and nitrogenous fertilizer should be applied after current spells of rain. Nursery preparation of cauliflower and cabbage may be started. If leaf eating caterpillar is observed in soybean crop, apply Trizofas @ 2 ml or Flubendiamide @ 0.5 ml/ 200 liter water in one acre. Undertake plant protection methods after current spells of 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.

#### 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 all the districts of Himachal Pradesh; in Jammu, Kathua, Reasi, Samba, Srinagar and Udhampur districts of Jammu & Kashmir and in all the districts of Uttarakhand; in most of the districts except Ambedkarnagar, Farrukhabad, Kannauj, Kanpur, Kheri, Kushinagar, Maharajganj, Mau and Sant kabirnagar districts of East Uttar Pradesh and Auraiya, Badaun, Etah, Etawah, Firozabad, Ghaziabad and Jalaun, districts of West Uttar Pradesh; in all districts of Punjab except Faridkot, Ferozpur, Mansa, Moga, Muktesar; in all districts of Haryana except Bhiwani, Fatehabad, Hissar, Jhajar, Mahendragarh, Panipat, Rohtak, Sirsa, Sonapat; in all districts except North West Delhi and West Delhi; in all the districts of East Rajasthan, except Barmer, Hanumangarh, Jaisalmer, Sriganganagar in West Rajasthan.

#### Advisories:

- As rain/thundershowers likely at most/many places over East Rajasthan from 25<sup>th</sup> to 27<sup>th</sup>, over Uttarakhand on 24<sup>th</sup>, 25<sup>th</sup> & 27<sup>th</sup> and over Uttar Pradesh on 25<sup>th</sup> & 26<sup>th</sup> along with **Heavy rainfall** at

isolated places on 24<sup>th</sup>; **Heavy to very heavy rainfall** at isolated places over East Rajasthan on 25<sup>th</sup> & 26<sup>th</sup> August, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields.

#### **Jammu & Kashmir**

- In Sub Tropical Zone, apply 2<sup>nd</sup> dose of Nitrogen as top dressing in early and normal transplanted paddy just before panicle initiation stage, if crop is 55 – 65 DAT. Spray Carbendazim @ 0.1%, if attack of sheath blight is observed in paddy crop. Due to presence of sufficient moisture in the soil, top dress nitrogen (Urea) before tassel formation in maize (30-40 days after sowing) during evening hours. Spray Mancozeb 75WP @ 0.25%, if blight attack is observed. Carry out weeding and hoeing operations in vegetables.
- In Intermediate Zone, install pheromone traps @ 5 – 7/ha for early detection of stem borer in rice field. On observation of the same, 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 hours after application.

#### **Himachal Pradesh**

- In Sub Montane and Low Hills Sub Tropical Zone, spray Carbendazim @ 2gram per litre of water to protect rice from blast and brown spot diseases. Ensure proper drainage in pulses fields. Spray Cypermethrin 25 EC @0.5 ml /litres of water to control Hairy caterpillar in pulses. Spray Imidacloprid 17.8 % SC@ 1.0 ml / 3 lit of water to protect vegetable crops from white flies and other sucking pests when the sky is clear. In tomato, brinjal, chilli and capsicum crops, apply dose of urea and carry out intercultural operation. For shoot and fruit borer in brinjal and tomato crops, collect and bury the infested fruits and shoots inside the soil. Also install pheromone trap @25 per hectare. If pest population is high, spray Spinosad 48 EC @ 1 ml /4 litres of water when sky is clear. Continue picking of tea leaves at 8-10 days interval to maintain the quality and productivity.
- In Mid Hills Sub Humid Zone, to control the white fly and sucking pest in crops and vegetables, spray Imidacloprid 1 ml @ 3 litres of water. To control fruit borer in tomato, spray Endoxacarb 14.5 EC 11ml or Lamda Sylothrin 5EC (Krate 18.75 ml) @ 15 litres of water. To control fruit blight and fruit rot disease in Pomegranate spray Mencozeb 600g & Carbendazim 100 g@ 200 ltr of water. To control Canker disease in Citrus fruit and Pomegranate spray Copper Oxichloride 600 g and Streptocyclin 40g @ 200 ltr of water. To control fruit blight and fruit rot disease in Pomegranate, spray Mancozeb 600g & Carbendazim 100 g@ 200 litres of water. To control Canker disease in Citrus fruits and Pomegranate, spray Copper Oxychloride 600 g and Streptocyclin 40g @ 200 litres of water.
- In High Hill Temperate Dry Zone, carry out weeding operation in 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.

#### **Punjab, Haryana and New Delhi**

- In Punjab, remove excess rain water to avoid any damage in maize and pulses fields. 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. Farmers are advised to remove foot rot infected plants from rice field and avoid ponding of water to check further spreading of infection. 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.
- In Undulating Plain Zone, use fruit fly trap to control fruit fly damage in guava orchards. 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.
- In Delhi, continue transplanting of early cauliflower, tomato, chilli and brinjal whose seedlings are ready. Undertake sowing of fodder sorghum, sweet corn and baby corn. Protect cucurbitaceous crops against fruit fly by use of bait trap (mixing jaggary 10 % with Malathion 10 % and putting at different corners of the field). Undertake hoeing & weeding in all crops and vegetables and monitor all crops 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.
- In Haryana, due to congenial weather, there is chance of attack of cotton jassid in cotton vegetative/flower initiation stage, spray 80g Ulala to control the attack after current spells of rain.
- 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 Punjab, in case of severe attack of thrips and jassid in cotton, spray the crop with 80 g Ulala 50 WG in 100 litres of water per acre. Parawilt in cotton plants can be checked by spraying cobalt chloride @ 10 mg/ litre of water on the affected plants at the initial stage of wilting. Apply 4 sprays of 2 % Potassium nitrate (13-0-45) solution at weekly intervals, starting at flower initiation stage.
- 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 during clear weather.

#### **Uttar Pradesh**

- In East Uttar Pradesh, continue weeding, split application of nitrogen/ top dressing of zinc/iron/sulphur in standing crop's field of paddy. Continue weeding and thinning in black gram, maize, pearl millet, pigeon pea, sorghum, jowar and great millet, bottle gourd etc on a non rainy day. Continue planting of new fruit orchards. There is possibility attack of leaf hopper in sugarcane, monitor the crop and remove the affected parts. There is a possibility of stem borer attack in Maize, farmers are advised for application in Carbofuran 3% granules @ 20 kg/ha after current spells of rain.
- In West Uttar Pradesh, continue nursery sowing of medium duration capsicum, tomato, cabbage. Carry out transplanting of vegetables such as brinjal, chilli, cauliflower etc. Undertake sowing of okra, lobia gourd, bitter gourd, cucumber etc. Continue planting of mango, guava, berry, amla, lemon etc in fruit orchards.

#### **Uttarakhand**

- In Bhabar and Tarai Zone, remaining dose of nitrogen should be given in paddy as a top dressing, twice, at the time of panicle initiation after 20 days of transplanting and starting stage of ear formation i.e. 40-50 days of transplanting. Undertake transplanting of radish, turnip. Continue sowing of early variety of pea. Continue transplanting of cabbage and broccoli. On the occurrence of circular brown spots on the leaves, spray solution of Mancozeb @ 2.5 g/litre of water after current spells of rain.
- In Hill Zone, continue planting of lemon sapling and other fruit plants. Give remaining dose of nitrogen in paddy as a top dressing, twice, at the time of panicle initiation after 20 days of transplanting and starting stage of ear formation i.e. 40-50 days of transplanting. Proper moisture should be available in the field at the time of top dressing and rain drops should not be there in the leaves. To control stem and fruit borer in brinjal, spray Emamectin Benzoate 5 SG @ 4g/Nali, Cypermethrin 25EC @4ml/Nali after current spells of rain.
- In Sub-Humid Sub-Tropic Zone, apply 1/4th of the total nitrogen (i.e kg/ha) in timely sown paddy crop. Tie 4-5 sugarcane plants above first knot to avoid the lodging due to high wind velocity.

#### **Rajasthan**

- In Flood Prone Eastern Plain Zone, 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 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.
- In Semi-Arid Eastern Plain Zone, undertake planting of papaya seedlings. Also weather is congenial for leaf spot in groundnut, spray Bavistin @ 0.5 gm or Mencozeb @ 2 gm per litre water.
- In Sub Humid Southern Plain and Aravali Hill Zone, weather is congenial for powdery mildew in moong, spray Carbendazim 50 WP @ 2g/litre water after current spells of rain.

#### **Animal Husbandry**

- In Uttar Pradesh, undertake vaccination in Buffalow as per schedule and provide fresh drinking water.

The Agromet Products in this Bulletin are generated by Agrimet Division, weather forecast issued by NWFC, New Delhi and AgrometAdvisories are prepared based on the DAAS Bulletins issued by different Agrometeorological Field Units.