



# *National Agromet Advisory Service Bulletin*

*Friday 9<sup>th</sup> October,  
2020*

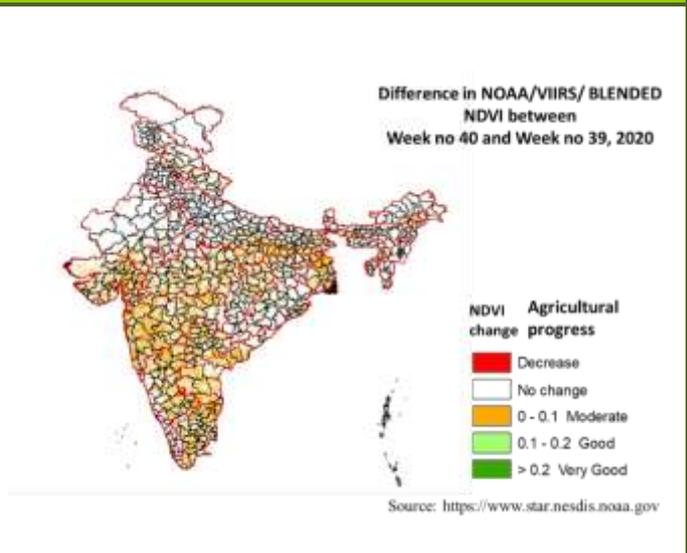
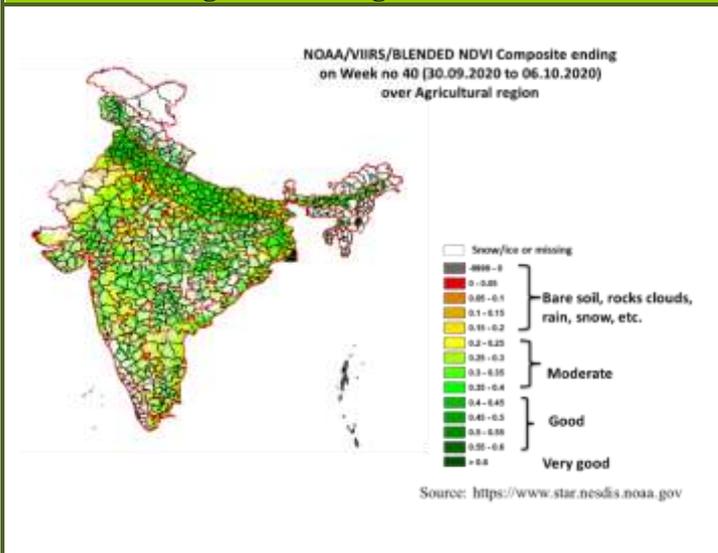


*Issued by  
India Meteorological Department*

**Weblink For**

**NOAA/VIIRS/BLENDED NDVI composite for the week number 40 (30.09.2020 to 06.10.2020) over Agricultural regions of India**

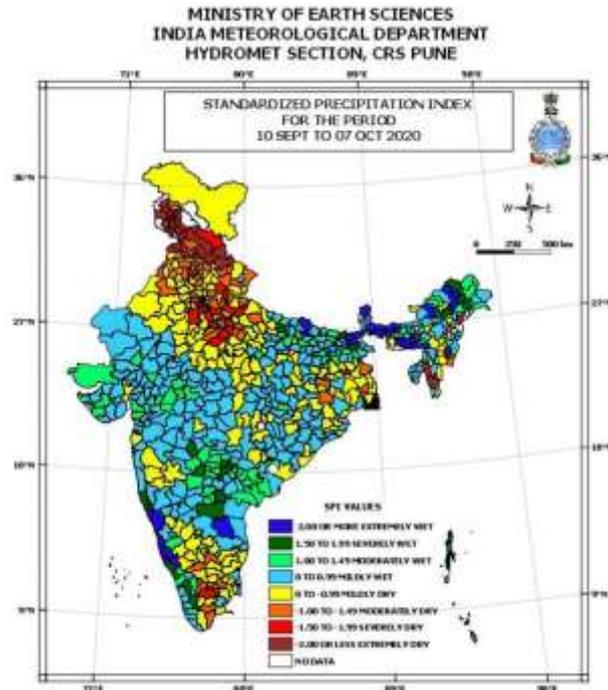
**Difference in NOAA/VIIRS/BLENDED NDVI between week number 40 and week number 39, 2020**



Agricultural vigour was good in many palces of Himachal Pradesh, Uttarakhand, North Eastern states & Norther part of Chhattisgarh; at a few palces of Punjab, Northern part of Haryana, Uttar Pradesh, Bihar, West Bengal, East Madhya Pradesh, Eastern part of Vidarbha, Telangana, Jammu & Kashmir and at isolated pockets of Jharkhand, North Coastal Andhra Pradesh, Karnataka, Gujarat, East Rajasthan, Odisha and remaining parts of Maharashtra.

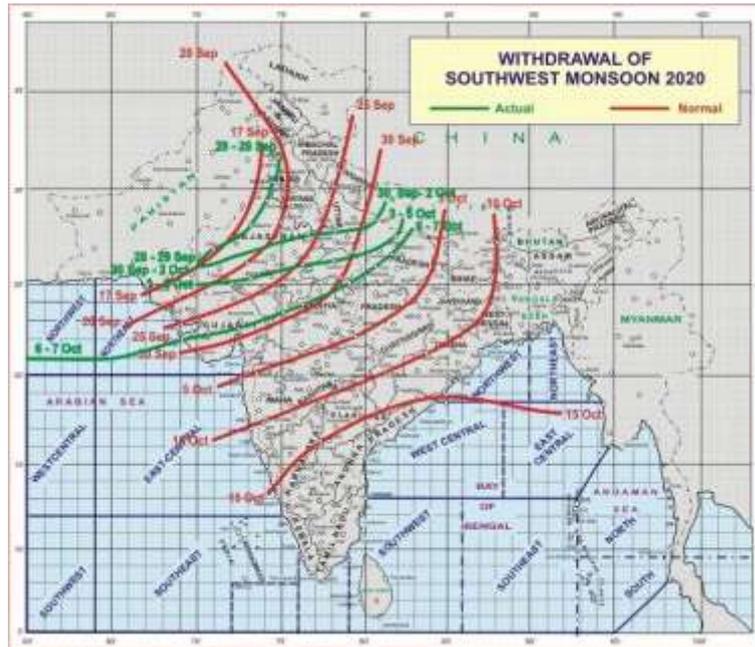
Difference in Agricultural vigour was good in many palces of Konkan; at a few places in North Tamilnadu, Karnataka and in isolated pockets of Uttarakhand, Jharkhand, Bihar, Ganetic West Bengal, Andhra Pradesh, South Tamilnadu, Kerala, Madhya Pradesh and rest of Maharashtra.

## Standardised Precipitation Index for the period 10<sup>th</sup> September to 7<sup>th</sup> October 2020



- Extremely/ Severely wet conditions exist in Cuddapah, Kurnool districts of Andhra Pradesh; East Kameng, East Siang, Papumpara, Upper Siang, West Siang districts of Arunachal Pradesh; Lakhimpur, Kokrajhar, Bongaigaon, Tinsukia, Dhemaji, Chirang districts of Assam; Araria, W Champaran, Gopalganj, Katihar, Kishanganj, Purnea, Supaul districts of Bihar; Uttara Kannada, Dakshin Kannada, Udupi, Bidar, Kodagu districts of Karnataka; Cannur, Kozhikode, Palakkad, Idukki, Kasargod districts of Kerala; Sindhudurg, Mumbai Suburban, Parbhani districts of Maharashtra; East Garo Hills, East Khasi Hills, West Khasi Hills, Ri-Bhoi districts of Meghalaya; Diu district of Union Territory; Basti district of Uttar Pradesh; Cooch Behar, Jalpaiguri districts of West Bengal; North Sikkim district of Sikkim; North Goa, South Goa districts of Goa; Karimnagar, M. Malkajgiri, Nagarkurnool, Rajanna Sircilla, Siddipet districts of Telangana.
- Extremely/Severely dry conditions exist in Gurgaon, Faridabad, Palwal districts of Haryana Bilaspur, Chamba, Kinnaur, Kullu, Lahaul & Spiti, Mandi, Hamirpur, Shimla districts of Himachal Pradesh Anantnag, Baramula, Doda, Jammu, Kathua, Poonch, Reasi, Udhampur, Badgam, Kupwara, Pulwama, Srinagar, Ramban, Shopian, Kulgam, Rajouri districts of Jammu Bhind, Gwalior districts of West Madhya Pradesh Lunglei, Mamit, Serchhip districts of Mizoram Mon districts of Nagaland Amritsar, Gurdaspur, Hoshiarpur, Patiala districts of Punjab Alwar districts of Rajasthan Dindigul districts of Tamilnadu Agra, Aligarh, Bijnor, Badaun, Etah, Etawah, Mainpuri, Mathura, Moradabad, Shahjahanpur districts of Uttar Pradesh Jamtara districts of Jharkhand Uttarkashi districts of Uttarakhand New Delhi, West Delhi districts of Delhi.
- Moderately wet to moderately dry conditions were experienced in remaining districts of the country.

## Withdrawal of Southwest-Monsoon 2020



- The withdrawal line of the Southwest Monsoon continues to pass through Lat. 28°N/ Long.83°E, Faizabad, Fatehpur, Nowgong, Rajgarh, Ratlam, Vallabh Vidyanagar, Porbandar, Lat. 21°N/ Long.65°E and Lat. 21°N/ Long.60°E.

## Weather Forecast for next 5 days upto 0830 hours IST of 14<sup>th</sup> October 2020

- ◆ Meteorological sub-divisionwise detailed 5days precipitation forecast is given inTable-1.
- ◆ No significant change in temperatures very likely over the country during next 4-5 days.

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

09-October-2020

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

#### % Station Reporting Rainfall

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

## Weather Warning during next 5 days

### 09 October (Day 1):

- ◆ **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Telangana, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- ◆ **Thundersquall (speed reaching 50-60 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **thunderstorm with lightning** at isolated places over Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Manipur & Mizoram, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- ◆ **Squally Winds** (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Andaman Islands, Andaman Sea & adjoining eastcentral Bay of Bengal. **Sea conditions** very likely to be rough to very rough over Andaman Sea & adjoining eastcentral Bay of Bengal. Fishermen are advised not to venture into these areas.

### 10 October (Day 2):

- ◆ **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- ◆ **Thundersquall (speed reaching 50-60 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **thunderstorm with lightning** at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- ◆ **Squally Winds** (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Andaman Islands, Andaman Sea & adjoining eastcentral Bay of Bengal. **Sea conditions** very likely to be rough to very rough over Andaman Sea & adjoining eastcentral Bay of Bengal. Fishermen are advised not to venture into these areas.

### 11 October (Day 3):

- ◆ **Heavy to very heavy rainfall** very likely at isolated places over Odisha, Coastal Andhra Pradesh & Yanam and Telangana and **heavy rainfall** at isolated places over Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Madhya Maharashtra, Marathawada, Rayalaseema, Karnataka and Kerala & Mahe.
- ◆ **Thunderstorm with lightning** at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- ◆ **Squally Winds** (speed reaching 45-55 kmph gusting to 65 kmph) likely over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha-Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar. **Sea conditions** very likely to be rough to very rough over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha- Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar. Fishermen are advised not to venture into these areas.

### 12 October (Day 4):

- ◆ **Heavy to very heavy rainfall** likely at isolated places over Odisha and Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Marathawada, Konkan & Goa, Telangana, Rayalaseema and North Interior Karnataka.
- ◆ **Thunderstorm with lightning** likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- ◆ **Squally Winds** (speed reaching 45-55 kmph gusting to 65 kmph) likely over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha-Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar. **Sea conditions** very likely to be rough to very rough over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha- Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar. Fishermen are advised not to venture into these areas.

### 13 October (Day 5):

- ◆ **Heavy rainfall** likely at isolated places over Vidarbha, Andaman & Nicobar Islands, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema.
- ◆ **Thunderstorm with lightning** likely at isolated places over Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe.
- ◆ **Squally Winds** (speed reaching 40-50 kmph) likely over north Andaman Sea. Fishermen are advised not to venture into these areas.

### Weather Outlook for subsequent 2 days from 14<sup>th</sup> October to 16<sup>th</sup> October, 2020

- ◆ Fairly widespread to widespread rainfall likely over central India and Andaman & Nicobar Islands; scattered to fairly widespread rainfall likely over East, Northeast India and along the coasts; isolated rainfall likely over East Rajasthan and Uttar Pradesh. Dry weather likely over rest parts of the country.

### Advisory for Fishermen

**Squally Winds** (speed reaching 40-50 kmph gusting to 60 kmph) very likely over Andaman Islands, Andaman Sea & adjoining eastcentral Bay of Bengal. **Sea conditions** very likely to be rough to very rough over Andaman Sea & adjoining eastcentral Bay of Bengal on 10<sup>th</sup>, **Squally Winds** (speed reaching 45-55 kmph gusting to 65 kmph) likely over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha-Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar, **Sea conditions** very likely to be rough to very rough over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha- Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar on 11<sup>th</sup>, **Squally Winds** (speed reaching 45-55 kmph gusting to 65 kmph) likely over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha-Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar, **Sea conditions** very likely to be rough to very rough over westcentral & adjoining northwest Bay of Bengal, southwest Bay of Bengal and along & off Odisha- Andhra Pradesh-Tamilnadu-Puducherry coasts and Gulf of Mannar on 12<sup>th</sup>, **Squally Winds** (speed reaching 40-50 kmph) likely over north Andaman Sea on 13<sup>th</sup> **October**, Fishermen are advised not to venture into these areas. Fishermen out at Sea over the Bay of Bengal are advised to return to the coasts.

## Salient advisories

- A **Low Pressure area** has formed over north Andaman Sea and neighbourhood in the early morning of today the 09th October 2020. It lay over north Andaman Sea and adjoining east central Bay of Bengal in the morning (0830 hrs IST) of today, the 09th October 2020. It is very likely to move west-northwestwards & intensify into a Depression over central Bay of Bengal by tomorrow, the 10th October 2020. Further moving west-northwestwards, it is very likely to cross north Andhra Pradesh coast as a Depression during 12<sup>th</sup> October 2020, morning. Under its influence:
- **Rain/thundershowers likely at most/ many places** over Andaman & Nicobar islands, Telangana during the period, over Odisha and Marathwada from 11<sup>th</sup> to 13<sup>th</sup>, over Vidarbha, Rayalseema and Coastal Andhra Pradesh & Yanam from 10<sup>th</sup> to 13<sup>th</sup>, over North Interior Karnataka from 10 to 12<sup>th</sup>, over Coastal & South Interior Karnataka from 9<sup>th</sup> to 11<sup>th</sup> and over Kerala & Mahe from 9<sup>th</sup> to 12<sup>th</sup> along with **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe on 10<sup>th</sup> October, **Heavy to very heavy rainfall** very likely at isolated places over Odisha, Coastal Andhra Pradesh & Yanam and Telangana and **heavy rainfall** at isolated places over Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Madhya Maharashtra, Marathawada, Rayalaseema, Karnataka and Kerala & Mahe on 11<sup>th</sup>, **Heavy to very heavy rainfall** likely at isolated places over Odisha and Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Vidarbha, Chhattisgarh, Andaman & Nicobar Islands, Marathawada, Konkan & Goa, Telangana, Rayalaseema and North Interior Karnataka on 12<sup>th</sup>, **Heavy rainfall** likely at isolated places over Vidarbha, Andaman & Nicobar Islands, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema on 13<sup>th</sup> October,
- Harvest the matured crop immediately and store the harvested products at safe place.
  - Avoid irrigation, intercultural operation and application of plant protection methods and fertilizers to the standing crops.
  - Arrange for adequate drainage to avoid water stagnation in standing crop fields.
  - Keep the cattle inside sheds during heavy rainfall.
- In **Odisha**, carry out harvesting of matured maize, black gram and green gram crop immediately and store the harvested products at safe place. In North Eastern Coastal Plain Zone, wrapping and propping should be done in medium and late duration varieties of sugarcane. Tie up the 3-4 plants of sugarcane to prevent lodging. After cessation of rain, drain out water from pigeonpea fields. Apply 2 gram (Metalaxyl + Mancozeb) or (Carbendazim + Mancozeb) per one liter water to protect the crop from wilting.
- **Thundersquall (speed reaching 50-60 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **thunderstorm with lightning** at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala

& Mahe and Lakshadweep on 10<sup>th</sup>, **Thunderstorm with lightning** at isolated places over East Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep on 11<sup>th</sup>, **Thunderstorm with lightning** likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe on 12<sup>th</sup>, Thunderstorm with lightning likely at isolated places over Madhya Pradesh, Vidarbha, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe on 13<sup>th</sup> October,

- Provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds.
- Keep harvested produce at safer places.
- Keep cattle/goats indoor during thunderstorm.

➤ **Undertake the following :**

- nursery sowing of *Mundakan* rice in Kerala.
- sowing of ragi, cowpea, field beans and sunflower crops in North Interior Karnataka..
- sowing of safflower, chickpea and hybrid sorghum in North Interior Karnataka.
- transplanting of *Samba* rice in Western Zone of Tamil Nadu.
- sowing of mustard in Arunachal Pradesh.
- land preparation and sowing of *Rabi* maize in Hill Zone of Assam.
- land preparation for sowing of improved varieties of toria and yellow mustard in Jharkhand.
- sowing of rabi sorghum, safflower, linseed and chickpea in Vidarbha in Maharashtra.
- sowing/planting of winter vegetables like potato, radish, carrot, turnip, garlic, fenugreek and spinach in Jammu & Kashmir (UT).
- planting of early varieties of potato in Punjab.
- sowing of early mustard in Haryana.
- transplanting of cabbage and cauliflower and land preparation for planting of sugarcane in Uttarakhand.
- sowing of mustard and vegetable pea in West Uttar Pradesh.
- sowing of sunflower, *rabi* sorghum, Bengal gram and safflower in Madhya Mharashtra.

## *Detailed Agromet Advisories*

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

**Realised Rainfall:** Significant rainfall occurred in the districts of East Godavari, Krishna, Sirkakulam, Visakhapatnam, Vizianagram, Cuddapah & Kurnool of Andhra Pradesh; Khammam & Mahabubabad districts of Telangana; in Udipi, Uttara Kannada districts of Coastal Karnataka; in Bagalkote, Belagavi, Dharwad, Gadag and Koppal districts of North Interior Karnataka; in Ballari, Chamarajanagar, Kolar, Mandya and Mysuru

districts of South Interior Karnataka; Kasaragod district in Kerala and Cuddalore, Madurai, Puducherry, Villupuram districts in Tamilnadu.

#### **Advisories:**

- **Rain/thundershowers likely at most/ many places** over Telangana during the period, over Rayalseema and Coastal Andhra Pradesh & Yanam from 10<sup>th</sup> to 13<sup>th</sup>, over North Interior Karnataka from 10 to 12<sup>th</sup>, over Coastal & South Interior Karnataka from 9<sup>th</sup> to 11<sup>th</sup> and over Kerala & Mahe from 9<sup>th</sup> to 12<sup>th</sup> along with **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana, Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe 10 October, **Heavy to very heavy rainfall** very likely at isolated places over Odisha, Coastal Andhra Pradesh & Yanam and Telangana and **heavy rainfall** at isolated places over Andaman & Nicobar Islands, Rayalaseema, Karnataka and Kerala & Mahe on 11<sup>th</sup>, **Heavy to very heavy rainfall** likely at isolated places over Odisha and Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Andaman & Nicobar Islands, Telangana, Rayalaseema and North Interior Karnataka on 12<sup>th</sup>, **Heavy rainfall** likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema on 13<sup>th</sup> October, avoid irrigation, intercultural operation and application of plant protection methods and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in standing crop fields. Keep harvested produce at safe places.
- **Thundersquall (speed reaching 50-60 kmph)** very likely at isolated places over Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep on 10<sup>th</sup>, **Thunderstorm with lightning** at isolated places over Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep on 11<sup>th</sup> to 13<sup>th</sup> October, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep cattle/goats indoor during thunderstorm.

#### **Karnataka**

- In South Interior Karnataka, undertake sowing of ragi, cowpea, finger millet, field beans and sunflower crops. Based on the soil moisture condition, apply second dose of fertilizer to coffee, Black, pepper and arecanut plantation under dry weather condition. Undertake harvesting of matured maize and groundnut. To control of blast disease in finger millet crop, spray Mancozeb @ 2 g/litre of water or Carbendazim @1 g/litre of water in clear weather.
- In North Interior Karnataka, complete harvesting of soybean, maize and groundnut crops and undertake land preparation for sowing of rabi crops. Undertake sowing of safflower, chickpea, hybrid sorghum, wheat crops under favorable conditions and new plantation of sugarcane crops. In Yadgir district, incidence of pink bollworm is noticed in cotton crop; spray Imamectine Benzoate 5 SG (Proclame) @ 0.4 gm / litre of water. Yellowing of leaves in pigeon pea crop is noticed; spray 19:19:19 @ 5g per litre of water.
- In Coastal Karnataka, continue planting of banana. If incidence of Red palm weevil is observed in crown in arecanut plantation, clean the crown area of plant and drench with Chloropyrifos @ 2ml/litre of water in clear weather. For control of leaf spot disease in jasmine, spray with Hexaconazole @ 1ml/litre of water.

#### **Kerala**

- In Problem Area Zone, weather is congenial for incidence of leaf roller and hoppers in vegetables, spray Thiamethoxam 25 WG, 3 g per 10 litre of water.
- In Central Zone, continue nursery sowing for second paddy (mundakan) crop. As a prophylactic measure, the root of seedlings can be soaked for 30 minutes in a solution of Pseudomonas culture to control sheath blight, sheath rot, leaf spot disease etc. Before transplanting, spray 20 gram Pseudomonas in one litre of

water. The micronutrient deficiency of paddy can be managed during rainy season, by spraying 5 gram of paddy sampoorna in one litre of water.

- In Southern Zone, banana affected with Panama wilt/ fusarium wilt may show symptoms like yellowing and lodging of external leaf, elongated cleavage of pseudostems etc. Proper drainage should be ensured in the field. Disease infected plants should be removed entirely from the field. During the initial stages of infection, Carbendazim @ 2 gram/ litre should be applied to the base of the stem in such a way that the soil should be wet.
- In Northern Zone, as a preventive measure for coconut, small perforated sachets containing 2 g of Mancozeb may be tied to the top leaf axil. When rains, a small quantity of the fungicide is released from the sachets to the leaf base and thus protecting the palm. Spray 1% Bordeaux mixture on the crown of palms.

### **Andhra Pradesh**

- In Chittoor, Farmers who are taking up blackgram sowings in the district are advise to select varieties like PU-31, TBG-104, PU-40, IPU-2-42, PU-31 and go for seed treatment with Thiomithaxam.
- In Ananthpur & Kurnool district, Utilizing the available soil moisture farmers are advised to sow the bengal gram in black soils and horse gram in red soils. Before sowing treat the seed with Thiarm or Captan @ 3 g or Carbendazim @2.5 g per kg of seed to prevent the spread of seed and soil born diseases.
- In West Godavari district due to current rainy and high wind speed conditions the flowering and the fruit setting have been affected in acid lime. To control, spray 1 gram Cycocel per 100 liters of water for prevention and without mixing any other chemicals.
- In Vizainagaram district, present weather condition was favourable for the incidence of spodoptera in Green gram and Black Gram. Arrange 4 pheromone traps per acre. If heavy infestation was observed, go for poison bait technique (Mix 500 ml of Chloropyriphos with 5 kg rice bran and half kilo jaggery).

### **Telangana**

- After current spells of heavy rain, take up sowing of Yasangi groundnut and castor under irrigation facilities in Southern Telangana, sowing of Bengal gram, Groundnut and Mustard in Northern Telangana. Sowing of mustard crop can be undertaken from October 1st fortnight to November 1st fortnight.
- Prevailing weather conditions are congenial for the incidence of False Smut in rice. To control spray Propiconazole @ 1.0 ml per liter of water twice at 10 days interval.
- The Prevailing weather conditions are favourable for stem borer in maize To control application of Carbofuron 3 G granules in leaf whorls @ 3kg /acre is recommended after current spells of rain.

### **Tamil Nadu**

- In Cauvery Delta Zone, the prevailing weather condition is favorable for blast incidence in the paddy field. To control this, spray Carbendazim 200 g/acre or Tricylazole @ 200 ml/acre in 200 liter of water.
- In Western Zone, continue the samba transplanting with sufficient drainage. Prevailing weather is conducive for Gall midge in rice. Apply Cartap Hydrochlorid 4G @ 25 kg/ha.
- In Southern Zone, prevailing weather condition the incense of Yellow Mosaic in Blackgram. The infected plants should be removed from the field. Spray Dimethoate 700 ml/ha 30 day after sowing.
- In High Altitude Hilly Zone, in cabbage and cauliflower, yield and quality of the crop produce could be increased by spraying of Gibberellic acid 0.001 @ 70 ml/acre with 200 litre of water at 45 days after sowing.
- In High Rainfall Zone, for paddy apply Zinc Sulphate @ 25 kg/ha mixed with 50 kg dry sand before transplanting.

### **Animal Husbandry:**

- In Karnataka, provide a concentrate mixture of protein supplements such as oil cakes, energy sources such as cereal grains (maize, jowar), tapioca chips and laxative feeds such as brans (rice bran, wheat bran, gram husk) to dairy cattle. Apply mixture of Neem leaves, tulasi, turmeric and lemon mixed in coconut oil against lumpy skin disease in animals in Bidar district.

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

**Realised Rainfall :** Rainfall occurred in all the districts except Anjaw, Lower Subansari and Tirap districts of Arunachal Pradesh; all the districts except Darrang, Golghat, Kamrup(Rural), Kamrup(Metro) and N.C.Hills districts of Assam; all districts except West Garo Hills district of Meghalaya; Aizwal, Champhai, Kolasib, Lawngtlai, Saiha and Serchhip districts of Mizoram; Bishnupur, Churachandpur, Imphal West and Tamenglong districts of Manipur; Dimapur, Kephire, Kohima, Mokokchung, Wokha and Zunheboto districts of Nagaland and all districts except South Tripura district of Tripura.

### Advisories:

#### Arunachal Pradesh

- In Arunachal Pradesh, continue planting of potato. Continue harvesting of early transplanted rice. Undertake sowing of mustard and *Rabi* maize. Maintain proper drainage in the fields to avoid water stagnation.

#### Assam & Meghalaya

- In Hill Zone of Assam, continue nursery sowing/ transplanting of cauliflower and sowing of *Rabi* maize. Make provision of mechanical support to the canes of sugarcane, by tying 3 to 4 canes together by their leaves to prevent lodging. Drain out the excess water and spray Chloropyriphos (20%) @ 2ml/litre to control stem borer and caseworm infestation in *Sali* paddy during panicle initiation stage. Drain out the excess amount of water from the field of standing crops immediately.
- In Lower Brahmaputra Valley Zone, spray Fipronil 5 SC @ 50 ml per bigha of land or Thiamethoxam 25 WG @ 13 gm per bigha of land against stem borer and case worm attack in *Sali* rice at the time of panicle initiation stage during the rain free weather. Continue sowing of sowing of vegetables, cole crops and *Rabi* maize. Undertake land preparation and sowing of Rapeseed and Mustard. Present weather condition is conducive for pod borer, aphids, jassids and leaf roller infestation in pigeon pea during vegetative stage. Spray Fenitrothion @ 130-200 ml in 65-95 litres of water per bigha, 3 times post flower initiation, at 15 days interval.
- In Upper Brahmaputra Valley Zone, maintain a depth of 5±2 cm standing water in the fields of rice. Undertake land preparation for planting of potato. Cloudy weather and rainfall coupled with high humidity and daytime temperature may trigger the occurrence of blast and brown spot disease in *Sali* rice crop. Spray fungicides like Glyodin or Azoxystrobin or Trifloxystrobin at an interval of 15 days under fair weather condition.
- In Barak Valley Zone, maintain 5 cm of the water. Prevailing weather situation may favour for the stem borer and leaf folder infestation at the tillering stage in rice, farmers are advised to monitor the field against these insects and also suggested to spray Thiamethoxam @ 0.3 g/litre or Chlorantranilliprole @ 0.4 ml/litre of water during fair weather. Undertake land preparation for planting of potato.
- In Central Brahmaputra Valley Zone, continue sowing of *Rabi* maize, rapeseed, mustard, *Rabi* pulses and oilseeds and cole crops. In *Sali* rice at tillering stage, there is chance of stem borer and caseworm infestation which may be controlled by draining out of excess water or spraying Chloropyriphos (20%) @ 2ml/litre to control the attack. Spray Quinalphos @ 2.5 ml/litre of water followed by Dimethoate @ 2ml/litre of water at

10 days interval against Leaf folder and aphids infestation in many fields of black gram and green gram fields of Nagaon and Marigaon district.

- In North Bank Plain Zone, continue sowing brinjal and cole crops. Present Weather condition is favourable for heavy infestation of rice hispa, leaf folder, army worm case worm etc. in *Sali* rice field at tillering stage. Spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water after current spells of rain. Undertake land preparation for sowing of rapeseed and mustard.
- In Meghalaya, ensure proper drainage system in the ginger/turmeric and vegetable crop field. Continue nursery sowing/ transplanting of cole crops. Spray Azadirachtin 0.15% EC @ 3ml/litre or other neem formulation against Hopper, Stem Borer, Leaf Fodder in *Sali/Kharif* Rice (Lowland) after current spells of rain. Maintain 3-5 cm of water in field as crop is in panicle initiation stage.

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

- In Manipur, during milky dough to grain filling stage in rice, maintain optimum water level in the *Kharif* rice fields. Spray Hexaconazole @2ml/ litre of water against sheath blight or sheath rot disease in rice and spray Copper Hydroxide 53.8% DF @ 3g/ litre water during flowering stage or Tricyclazole 18.0%w/w + Tebuconazole 14.4 % w/w SC @2ml/litre water against Smut disease. Spray Acephate 95%SC @1ml/litre of water 2 times at 7 days interval or Buprofezin 15% + Acephate35% WP @ 2.5g/ litre water twice with 15days interval against White back plant hopper/ aphid in rice. Spray Streptocycline @ 2g/15 litre of water (at least three pumps per sangam) or Copper Hydroxide 53.8 % DF @ 3g/ litre of water against Bacterial Leaf Blight in rice. Procure healthy disease free quality rapeseed/mustard seeds of suitable variety from reliable source for sowing in the field just after harvest of rice/ soybean/ groundnut/ black gram or rice bean. Continue nursery raising of cole crops (cauliflower/ cabbage/ broccoli) and harvesting of ginger. Construct proper drainage system to avoid water logging in the field soybean/ groundnut/ blackgram/ rice bean during maturity to harvesting stage during rainy days. Undertake land preparation for planting of potato.
- In Mizoram, continue harvesting of *Jhum* rice, sorghum and matured pods of cow pea on sunny days. Due to high humidity (90-95%) and moderate rainfall, possibility of rust disease on soybean is higher. So farmers are advised to spray Hexaconazole 5% @ 2.0 ml/litre of water to control the disease. Apply Cypermethrin 2.0 ml/litre of water against gundhi bugs infestation in normal rice at Panicle emergence stage if attack is above ETL. Due to fluctuating humidity, there is chance of tikka disease in groundnut during flowering stage. Apply Dithane Z 78 @ 1.5 g per litre of water with linseed oil as sticker at an interval of 15 days. Spray Copper Oxy Chloride (COC) or Ridomil Gold @ 2 g/litre of water during sunny days to reduce shoot rot disease in vegetative stage of ginger.
- In Tripura, apply mulching with locally available material for moisture conservation in black & green gram. Maintain 5 cm water in the field of *Aman* rice during panicle initiation/ flowering stage. Top dressing with urea@ 10 kg per kani. Give a foliar spray of Zinc Sulphate 0.5% (5gm per litter of water). For better grain filling a give a spray of Boran @ 2gm per litre. Keep field weed free. Undertake land preparation for sowing of winter vegetables like tomatoes, cabbage, cauliflower etc. To manage attack of stem borer in rice, broadcast granular insecticides Carbofuran, 500 gm mixed with 1 to 1.5 kg soil. Drain out the water from the field before the application. Due to high humidity and cloudy condition, there is chance of combined attack of Downy mildew and Mosaic in bitter gourd and pointed gourd. Apply Ridomil Gold MZ @2 gm per litrew of water to manage the attack.
- In Nagaland, spray Neem Seed Kernel Extract 5 % against leaf folder and stem borer disease in rice. Weather is congenial for various pests. To control insect infestation in the rice crop fields, it is advised to use pheromone or yellow sticky traps @5 Nos./acre or light traps @3 Nos./acre. Continue harvesting of groundnut and transplanting of onion and cole crops. Drench around the infected ginger plants, after slightly

removing of soil with Bordeaux mixture (1%) or Copper Oxychloride @ 2g/1 litre of water against Soft rot disease in ginger during rhizome development stage and also remove the badly affected plants.

#### **Animal Husbandry**

- In Northeastern states, carry out immunizations against BQ, HS, Foot and mouth disease as well as anthrax diseases in livestock like cows, buffaloes, goats and pigs. Also carry out vaccination (RDF1) against Ranikhet disease in one week old chicks and against Gamboro disease in two weeks old chicks. Animals should not be fed with water submerged rotten grasses.
- In some parts of Assam, infection of Lumpy skin disease in livestock has been observed. The disease is characterized by mild fever for two-three days, followed by development of stiff, round nodules on the skin all over the body. If such symptoms are observed, consult local veterinarian at the earliest for proper diagnosis and immediate treatment.

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

**Realised Rainfall:** Significant rainfall occurred in all districts of Andaman & Nicobar Islands; in Banka, Begusarai, Bhagalpur, Darbhanga, Gaya, Jamui, Katihar, Khagaria, Kishanganj, Lakhisarai, Madhepura, Monghyar, Nawada, Patna, Purnea and Saharsa districts of Bihar; in all districts of Jharkhand except Garhwa, Giridih, Gumla, Jamtara, Khunti, Ranchi and Sahebganj; in all districts of Odisha except Bargarh and Jharsuguda; in all districts of Gangetic West Bengal except Bankura, Birbhum, Murshidabad and South 24 Paraganas and in all districts of Sub-Himalayan West Bengal & Sikkim except East Sikkim, North Dinajpur and South Sikkim. Weather remained dry/mostly dry over the rest of the region.

#### **Advisories:**

- **Rain/thundershowers likely at most/ many places** over Andaman & Nicobar islands, Telangana during the period, over Odisha from 11<sup>th</sup> to 13<sup>th</sup> along with **Heavy rainfall** very likely at isolated places over Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana on 10 October, **Heavy to very heavy rainfall** very likely at isolated places over Odisha and **heavy rainfall** at isolated places over Andaman & Nicobar Islands on 11<sup>th</sup>, **Heavy to very heavy rainfall** likely at isolated places over Odisha and **heavy rainfall** at isolated places over Andaman & Nicobar Islands on 12<sup>th</sup>, **Heavy rainfall** likely at isolated places over Andaman & Nicobar Islands on 13<sup>th</sup> October, avoid irrigation, intercultural operation and application of plant protection methods and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in standing crop fields. Keep harvested produce at safe places.
- **Thundersquall (speed reaching 50-60 kmph)** very likely at isolated places over Andaman & Nicobar Islands; **thunderstorm with lightning** at isolated places over Jharkhand, on 10<sup>th</sup>, 11<sup>th</sup> October, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Keep cattle/goats indoor during thunderstorm.

#### **Odisha**

- In East & South Eastern Zone, carry out harvesting of matured maize, groundnut, black gram and green gram immediately ; store it in safe places.
- In North Eastern Coastal Plain Zone, wrapping and propping should be done in medium and late duration varieties of sugarcane. Tie up the 3-4 plants of sugarcane to prevent lodging. After cessation of rain, drain out water from pigeonpea fields. Apply 2 gram (Metalaxyl + Mancozeb) or (Carbendazim + Mancozeb) per one liter water to protect the crop from wilting.

- In West Central Table Land Zone, undertake pre-rabi sowing of pulses like *moong*, *urd*, horse gram, etc. carry out raising of nursery for tomato, cabbage and cauliflower after current spells of heavy rain. Rice crop is at tillering / panicle initiation stage; in case of stem borer infestation, apply Rynaxypyr 20 SC @ 0.3ml or Cartap hydrochloride 50 SP @ 1.25g or Acephate 75 SP @ 1.5g per litre of water after current spells of rain.
- In North Central Plateau Zone, carry out land preparation for transplanting tomato, cabbage and cauliflower at 3-4 week stage; apply 4 ton FYM per acre before final ploughing. Present weather conditions are favourable for false smut disease in paddy; to control, spray Blitox-50 @ 2gm or 0.5gm Bavistin per litre of water. If Gundhi bug is found in paddy field, spray Fipronil @ 1ml/litre of water; in case of higher incidence, use Imidachloprid @ 1ml in 4 litres of water after current spells of rain.

### **Bihar**

- In North East Alluvial Zone, carry out land preparation for sowing rapeseed and mustard; apply 100 quintal compost, 30 kg nitrogen, 40 kg phosphorus, 40 kg potash and 20-30 kg sulphur per hectare during land preparation. Monitor Gundhi bug in timely sown rice crop during grain forming stage; apply Folidol dust @ 10-15 kg per hectare during early morning or late evening hours.
- In North West Alluvial Zone, complete the sowing of pigeon pea in upland areas; apply 20 kg/ha Nitrogen, 45 kg/ha Phosphorus, 20 kg/ha Potash and 20 kg Sulphur/ha during land preparation; treat seeds Thiram/Captan @ 2.5gm/kg of seeds. Undertake sowing of radish, nursery sowing of early cabbage varieties and transplanting of mid-duration cauliflower varieties. Monitor for *khaira* disease in late transplanted paddy; if symptoms appear, spray Zinc sulphate @ 5 kg mixed with lime @ 2.5 kg in 500 litres of water per hectare of cropped area.

### **Jharkhand**

- In South Eastern Plateau Zone, continue sowing of toria and chick pea crops in medium fallow land. Undertake nursery raising of onion. Make 3 m long, 2 m wide raised beds with 15 cm height. Treat the beds with 5g Thiram per bed; after sowing, cover the seeds with dried soil or dried powdered cow dung followed with straw; sprinkle water to the beds. Continue sowing of mid-early and late varieties of cauliflower.
- In Western Plateau Zone, cultivate early table pea crop on ridge; for cultivation in 1 acre use 40 kg seeds, 35 kg Urea, 200 kg S.S.P. and 25 kg Muriate of Potash. Undertake planting of potato; 12 quintal seeds (germinated tubers of 20-30 gram each), 40 kg Urea, 70 kg D.A.P., 80 kg Muriate of Potash and 10 kg Sulphur are required for cultivation in 1 acre. Start transplanting the seedlings of tomato, cauliflower, cabbage etc. on ridge. However, the seeds of radish, French bean, carrot etc. maybe sown directly on ridge. Long duration maize varieties are at grain filling stage; tag shiny wires/strips around the field to ward off birds.

### **West Bengal**

#### **Sub-Himalayan West Bengal:**

- In Hill Zone, carry out harvesting of large cardamom. Use yellow sticky traps (@10 traps/ha) to manage aphids in the soybean field. Spray Propiconazol+ Difenconazole 1 ml or Carbendazim + Flusilazole 1.5 ml or Carbendazim (Bavistin) 1 g/liter of water to control sheath blight disease in rice field at active tillering stage.
- In Old Alluvial Zone, keeping in view of suitable weather conditions, take up sowing of mustard in fallow lands during coming weeks; treat seeds with Thiram or Captan @ 2-2.5 g/ kg of seeds. Present weather conditions are congenial for incidence of anthracnose or collar rot disease in black gram; spray Carbendazim (0.1%) or Thiophanate methyl (0.1%) or Mancozeb (0.25%) twice at 15 days interval; to control powdery mildew, second spray with Dinocap @ 1 ml + Mancozeb @ 2.5 g/litre of water is recommended.

### **Gangetic West Bengal:**

- In the Coastal Saline Zone, to control BLB attack in Aman paddy at panicle initiation stage, drain out excess water as much as possible to prevent delayed flowering; apply potash fertilizer; spray Streptocycline @ 0.2g/litre of water + Planktomycin @ 1-2g/litre of water + Copper fungicide or blue copper @ 2g/litre of water; follow at least 3 spraying. To prevent rotting in elephant foot yam, ginger and turmeric at rhizome bearing stage, avoid water stagnation at the base; immediately drain out excess water; apply any copper fungicide at the base.
- In New Alluvial Zone, in view of suitable weather conditions, undertake sowing of early mustard at seed rate 1.5-2 kg per acre; treat seeds with Captan or Thairam 2.5g per kg seed. Undertake planting of broccoli; prepare main field with 12 to 15-ton cow dung per hectare land; carry out transplanting of age 4 to 6 weeks old seedlings; apply irrigation just after planting.
- In Laterite & Red Soil Zone, prevailing weather is favorable for Brown Plant Hopper (BPH) and White-backed Plant Hopper (WBPH) attack in transplanted paddy; to manage the disease, follow a spray schedule with Buprofezin 25% SC @ 0.5 ml or Thiamethoxam 25% WG @ 0.3 gm or Imidacloprid 17.8% SL @ 0.3 ml or neem oil @ 2 ml per litre of water 2-3 times at an interval of 7-10 days in the early morning or evening hours on bright sunny days. Forecasted weather is favourable for blast, sheath blight and brown spot disease attack in rice; to manage the diseases, spray Propiconazole or Hexaconazole @ 1 gm per litre of water. Current weather is congenial for attack of downy mildew in pumpkin, ridge-gourd, and bitter gourd fields; spray Mancozeb or Chlorothalonil 2g/litre of water twice at 10 days' interval to manage the attack.

### **Andaman & Nicobar Islands**

- In Andaman & Nicobar Islands, keep open the rice field bunds at 15 cm height to remove excess water as moderate/heavy rainfall will continue next few days. Improve drainage facility in the vegetable field and harvest the matured vegetable for market sale. Avoid using pesticide and fungicides particularly those containing sulphur.

### **Animal Husbandry**

- In Andaman & Nicobar Islands, Goat kids lose body energy very rapidly when exposed to cold or wet environment and may become weak or die. Ensure good management practices and feeding during this season. Vaccinate animals against FMD, PPR, Haemorrhagic septicemia and Black quarter.

### **Fishery**

- In Andaman & Nicobar Islands, feed fish fingerlings of IMC carps with the mixture of rice bran and ground nut oil cake at 1:1 ratio at the rate of 2 % of body weight.

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

- **Realised Rainfall:** Significant rainfall occurred in Mumbai Suburban, Ratnagiri, Sindhudurg districts of Konkan & Goa; in Junagarh district of Saurashtra & Kutch. Weather remained mainly dry over rest of the districts of Maharashtra and Gujarat.

### **Advisories:**

- **Rain/thundershowers likely at most/ many places** over Marathwada from 11<sup>th</sup> to 13<sup>th</sup>, over Vidarbha from 10<sup>th</sup> to 13<sup>th</sup> along with **Heavy rainfall** very likely at isolated places over Vidarbha, Madhya Maharashtra, Marathawada on 11<sup>th</sup>, **heavy rainfall** at isolated places over Vidarbha, Marathawada, Konkan & Goa on 12<sup>th</sup> & 13<sup>th</sup> October, avoid irrigation, intercultural operation and application of plant protection methods and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in standing crop fields. Keep harvested produce at safe places.
- **Thunderstorm with lightning** at isolated places over Vidarbha, Madhya Maharashtra, Marathawada, Konkan & Goa on 10<sup>th</sup> to 13<sup>th</sup> October, provide mechanical support to banana, young fruit plants and

vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Keep cattle/goats indoor during thunderstorm.

### **Maharashtra**

- In Konkan, undertake harvesting of matured rice and finger millet during clear weather condition in Sindhudurg district. Keep the harvested produce in safer place.
- In Madhya Maharashtra, maintain 10 cm water level in rice fields (flowering/grain filling stage). Continue sowing of sunflower, *rabi* sorghum, Bengal gram and safflower. Undertake transplanting of 40-45 old onion. Continue harvesting of matured pearl millet, sunflower, groundnut, maize, jowar and soybean during clear weather and store the harvested produce in safer place. To control thrips and blight in onion, spray with hand pump Lambda Cyhalothrin 5 EC @ 6 ml + Tebuconazole @ 10 ml + Sticker @ 10 ml per 10 liters of water during clear weather. If reddening in cotton observed due to deficiency of Magnesium micronutrient, spray 2 % DAP. For control of leaf roller in pigeon pea, spray 5 % Neem ark.
- In Marathwada, undertake harvesting of matured soybean, pearl millet and sorghum in during clear weather. Keep the harvested produce in safer place. To control sucking pest (white fly, sugarcane pyrilla) in sugarcane, spray Chlorpyrifos @ 20 % @ 30 ml per 10 liters of water during clear weather.
- In Vidarbha, complete sowing of rainfed safflower (PKV-Pink, AKS-207, Bhima,) during this week. Sowing of rainfed *rabi* sorghum (PKV Kranti) and linseed can be undertaken up to first fortnight of October. Continue harvesting of matured soybean immediately during clear weather. Keep the harvested produce in safer place. Continue nursery sowing of onion, tomato, brinjal, cabbage, cauliflower and sowing of spinach, fenugreek, radish and carrot. To control stem fly in tumeric, spray Nimboli Arc of 5 % per 10 liters of water during clear weather.

### **Gujarat**

- In Saurashtra and Kutch, complete harvesting of groundnut, sesame, green gram, black gram and soybean crops. Undertake sowing of chick pea, mustard and fodder sorghum in the fields where *kharif* crops harvested. Carry out intercultural operations in cotton and vegetable crops. Under present weather condition, infestation of jassids, whitefly and thrips is observed in cotton; for control, To prevent damage due to Psylla & thrips in lemon orchard, spray Imidacloprid 30.5 % @ 5 ml / 10 litres of water.
- In North Gujarat, complete harvesting of matured maize, green gram, cowpea, groundnut, sesame and pearl millet crops. For control of incidence of Spodoptera in castor, spray Bacillus Turingiensis powder @ 20 g/10 litres of water; in case of heavy incidence of Spodoptera, spray Chlorpyrifos 20 EC @ 20 ml or Quinalphos 25 EC @ 20 ml in 10 litres of water in clear weather.
- In Middle Gujarat, maintain 4 to 5 cm water level in the rice field. Provide support to banana plant at fruit harvesting stage. Continue picking of matured fruits of chili and brinjal. Complete harvesting of matured ear heads of pearl millet. Carry out intercultural operations in tobacco crop.
- In South Gujarat, complete harvesting of rice crop and cucurbits in clear weather. Undertake land preparation for new planting of sugarcane and sowing of cabbage. Provide support to newly planted mango grafts. For control of powdery mildew disease in okra, spray Hexaconazole @10 ml /10 liters or wetttable Sulphur @ 25 gram/10 litres of water.
- **Animal Husbandry**
- In Gujarat, provide adequate concentrated feed and keep the animals in clean shed. Feed silage & hay material to animals.

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

**Realised Rainfall:** Rainfall occurred in Anuppur, Balaghat, Shahdol, Singrauli, Tikamgarh, Umaria districts

of East Madhya Pradesh, rainfall occurred in all districts of Chhattisgarh except Bemetara, Bijapur, Durg, Kanker, Narayanpur, Raipur, Rajnandgaon districts during the week.

#### **Advisories:**

- **Rain/thundershowers likely at most/ many places** over East Madhya Pradesh on 12<sup>th</sup> & 13<sup>th</sup> and over Chhattisgarh from 11<sup>th</sup> to 13<sup>th</sup> along with **Heavy rainfall** very likely at isolated places over Chhattisgarh on 10 to 12<sup>th</sup> October, avoid irrigation, intercultural operation and application of plant protection methods and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in standing crop fields. Keep harvested produce at safe places.
- **Thunderstorm with lightning** at isolated places over East Madhya Pradesh, Chhattisgarh on 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup> October, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Keep cattle/goats indoor during thunderstorm.

#### **Madhya Pradesh**

- In Malwa Plateau Zone, harvest the matured soybean crop immediately in order to minimize the yield losses due to shattering as well as to prevent quality deterioration due to rains; store harvested crop in safe place covering it with Tarpolin. Present weather conditions are suitable for sowing of early pea. Recommended cultivars: - Pusa Pragati. Seed should be treated with fungicides, Captan @ 2.0 gm/kilogram and after that with crop-specific *Rhizobium* culture. It is highly recommended that the treated seeds should be sown after 24 hours of treatment. In present weather condition, field preparation should be started for rabi crops. Ploughing and planking should be done properly to conserve the moisture in the soil.
- In Nimar Valley Zone, present weather conditions are suitable for sowing of early pea. Seed should be treated with fungicides, Captan @ 2.0 gm/kilogram and after that with crop-specific *Rhizobium* culture. For the management of boll rot in cotton, prophylactic spray with Copper Oxychloride 400 gm + Streptocyclin 20 gm in 200 lit. of water/acre may be taken up. Continue harvesting of soybean. If Groundnut crop is infested with *Cercospora* leaf spot (Tikka) disease, spray the crop with Carbendazim 1 gm or Mancozeb 2 gm/litre of water.
- In Bundelkhand Zone, undertake preparation of the fields for sowing of potato and garlic. Start the sowing of radish, fenugreek, spinach, corianders and turnip.

#### **Chhattisgarh**

- In Northern Hill Zone, most of the timely sown kharif crops like moong, urd, maize, rice, groundnut, finger millet etc. are at maturity stage. Hence, farmers are advised to plough the land immediately after harvesting of different crops and sow immediately rabi crops like toria, mustard, green pea and potato and arrange seed & fertilizer for cultivation of rainfed wheat, if having assured irrigation facility. Farmers who wish to cultivate mustard crop, may start sowing after preparation of the field and Select the improved seed, recommended for this region like Shiwani, Varuna, Pusa Bold, BR-40 etc. 3 kg seeds are required for cultivation in one acre. Sow the seed in line at a distance of 30 cm. (Row to row) and 10 cm. (Plant to plant).
- In Chhattisgarh Plain Zone, undertake nursery sowing of early varieties of Winter vegetables like cauliflower, cabbage and kholkhol. Preparation for nursery sowing of tomato, brinjal, chillies and capsicum may be done. In some parts, hoppers insects are being observed in rice. Crops should be properly monitored and if insects are being observed more than @ 10-15 per plant then Buprofenzic @ 800 ml should be sprayed. In case insects keep multiplying after 15 days then Dinotofuron @ 200 gram/ hectare mixed in 500 litre water should be sprayed preferably in evening time in the lower parts of plant.

- In Bastar Plateau Zone, spray Pseudomonas @ 10 g /litre of water or Tebuconazole (50%) + Trifloxystrobin 25 WG @ 0.40 g /litre of water to control blast disease in paddy. Apply Rynaxypyr 150 gm/ha to control stem borer in rice. If swarming caterpillar are seen in rice fields, spray Quinalphos 25 EC @ 2 ml / litre of water.

### **Animal Husbandry**

- In Madhya Pradesh, cattle should be kept in shade and provide clean and fresh water two times in a day. Cowshed should be whitewashed with lime. Cows/ buffaloes should be vaccinated to prevent Haemorrhagic Septicaemia (HS) and black quarter disease. To control ecto parasite use Butox and also deworming to cattle.

## **NORTH INDIA [JAMMU & KASHMIR (UTs), HIMACHAL PRADESH, UTTARAKHAND, PUNJAB, HARYANA, DELHI, UTTAR PRADESH & RAJASTHAN]**

**Realised Rainfall** :. No significant rainfall occurred over the region.

### **Advisories:**

#### **UTs of Jammu & Kashmir and Ladakh**

- In Sub Tropical Zone, continue harvesting of early maturing varieties of rice. Continue harvesting of early sown matured maize cobs. Continue harvesting of matured green gram pods. Continue sowing of winter vegetables like potato, radish, carrot, turnip, garlic, fenugreek and spinach.
- In Cold Arid Zone, continue harvesting of carrot, cabbage and turnip. To control fruit rot of tomato, chilli, brinjal and capsicum, spray Metalaxyl 8% + Mancozeb 64% @ 0.25% or Mancozeb 75WP @ 0.3%.
- In Intermediate Zone, stop irrigation to rice crop nearing maturity stage. Continue harvesting of early sown maize. Undertake nursery sowing of late cauliflower. Undertake nursery sowing of onion on raised beds. Carry out hoeing and weeding in root crops. Continue sowing of leafy vegetables.
- In Valley Temperate Zone, dehusk the harvested maize cobs and dry them for 2-3 days before shelling. Complete harvesting of rice. Undertake land preparation for sowing of rabi crops. Continue land preparation for sowing of peas.

#### **Himachal Pradesh**

- In High Hill Temperate Dry Zone, continue harvesting of potato. Carry out ploughing in the harvested cauliflower and cabbage fields for fewer weeds next year. Undertake harvesting of matured fruits of tomato and cucumber.
- In Mid Hills Sub Humid Zone, undertake transplanting of cabbage, broccoli, knol- khol and chinese cabbage. To control the stem borer in temperate fruits like apple, pear, peach, plum and apricot, clean the borer's hole with a soft wire and put a piece of cotton dipped in petrol or Methyl Parathion in the hole and close the hole by putting clay soil .
- In Sub Montane and Low Hills Sub Tropical Zone, continue harvesting of rice. Continue harvesting of maize. Continue harvesting of pulses. Complete sowing of gram and lentil. Continue harvesting of peas, cabbage and cauliflower. Carry out hoeing and weeding in tomato, chilli, capsicum and brinjal.
- In Mild Hills Sub Humid Zone, continue transplanting in the mid hills where the nursery of cauliflower, broccoli is 26-28 days old. Continue planting of button mushrooms.

#### **Punjab, Haryana, Delhi**

- In Western Zone of Punjab, undertake harvesting of timely sown rice crop and picking of timely sown cotton crop. For the late sown cotton crop, irrigation may be given during the period to avoid moisture stress which cause reduction in seed cotton yield. Due to favourable weather for root crops, continue sowing of “desi” varieties of radish (Punjab Safed Mooli2), turnip (L-1) and carrot (Punjab Black Beauty and PC 161). Weather is suitable for planting of evergreen fruit plants like citrus, mango, guava, litchi, loquat, sapota etc. Irrigate the crops as per need.

- In Western Plain Zone of Punjab, stop irrigation to the paddy crop before a fortnight to maintain the optimum grain moisture, facilitate easy harvesting and timely sowing of succeeding crop in the same field. In basmati, stem borer is a serious problem. When more than 2% dead hearts or white ears appear, spray Fame 480 SC @ 20 ml or Mortar 75 SG @ 170 g or Coragen 20 SC @ 60 ml or Monocil 36 SL @ 560 ml or Coroban/Dursban/ Lethal/Chlorguard/ Durmet /Classic /Force 20 EC one litre or Fipronil 80 % WG @ 15 g in 100 litres of water/acre.
- In Undulating Plain Zone of Punjab, complete harvesting of green gram and sun dry properly before storing/marketing. Weather would be favourable for harvesting and marketing of mature rice/basmati. Undertake transplanting of cauliflower for timely crop and apply need based irrigation to already transplanted crop. Apply need based irrigation to newly planted evergreen fruit trees and nursery plants in view of expected dry weather. Plan irrigation and fertilizer application in sugarcane. To save crop from Pyrrilla damage, spray sugarcane crop with 600 ml Dursban 20 EC (chlorpyrifos) in 400 litres of water per acre with manually operated sprayer. Apply need based irrigation to newly planted evergreen fruit trees and nursery plants in view of expected dry weather in coming week.
- In Central Plain Zone of Punjab, this is optimum time for sowing of barseem. Complete sowing of autumn potato crop in the first fortnight of October. Monitor the basmati field for sheath rot disease attack.
- In Western Zone of Haryana, due to possibility of dry weather conditions, farmers are advised to complete picking in cotton and apply need based irrigation in guar crop. Prepare the fields for mustard crop, keep arrangements for the fertilizers and varieties seed of mustard crop. Complete picking in cotton crops after evaporation of dew.
- In Eastern Zone of Haryana, paddy crop ready after harvesting should harvest their crop. Fortnight of October is suitable time for sowing early variety of mustard, pea and sugarcane. Undertake sowing of cabbage, cauliflower and radish on ridges. Plow vacant fields and suppress the crop residues of the fields and prepare the fields for the sowing of rabi crops. Under present weather condition, monitor paddy for infection of bacterial leaf blight. If paddy leaves are yellowing, spray solution of copper hydroxide 77 WP @ 1.25 kg/ha mixing with 150 liters of water at 10-12 days intervals.
- In Delhi, continue sowing of early pea, radish, spinach, amaranths, sweet corn and baby corn on ridges. Undertake sowing of early mustard - Pusa Sarson-28, PusaTarak etc. Undertake transplanting of brinjal, tomato, chilli and early cauliflower on ridge whose seedlings are ready. Under the present weather condition, monitor paddy crop for the infection of bacterial leaf blight. In present weather conditions, false smut may appear in basmati (paddy) crop, spray Blitox 50 @ 500 grams per acre at 10 days' interval (2-3 times). In present weather conditions termites may damage crops and vegetables, spray Chlorpyrifos 20 EC @ 4 ml/litre of water with irrigation water. Keeping present weather in view, monitor the fields regularly. Spray Imidacloprid 17.8 % SC@ 1.0 ml / 3 lit. of water against white flies and other sucking pests in all crop and vegetables when sky remains clear.

#### **Uttar Pradesh:**

- **In East Uttar Pradesh**, continue transplanting of brinjal, tomato, chilli and early cauliflower on ridge. Irrigate the paddy crop to maintain optimum water level. In paddy crop for control of stem borer, brown plant hopper, gall midge, leaf folder and jassids, apply Profenophos 50EC @2 ml/lit. Undertake sowing of rabi crops like gram, field pea, lentil, carrot, mustard etc. under suitable moisture condition. Prepare the fallow field for Potato cultivation.
- **In West Uttar Pradesh**, to prevent bacterial blight disease in the paddy in which the ends and edges of the leaves begin to dry, spray with streptocycline 15 g and 500 g copper oxychloride solution in 200 liters of

water. Irrigate in the stage of pod formation in groundnut. Farmers are advised to start sowing of rabi crops like gram, field pea, lentil, mustard, spinach, fenugreek, carrot, radish, coriander, maize etc.

- In south western semi-arid zone, undertake planting of sugarcane in the autumn. Undertake weeding in the rapeseed within 20 days of sowing. Harvest matured paddy and make proper storage arrangements. Sow early varieties of potato Kufri Ashoka, Kufri Chandramukhi, Kufri Jawahar from 10 October and Kufri Bahar, Kufri Pukhraj from 15 to 20 October. To prevent fruit rot disease in Amla, spray the copperoxychloride solution at the rate of 2 grams per liter of water.
- In western plain zone, in the black gram/green gram crop, there is a possibility of outbreak of pod borer in trunks, so for prevention, spraying of 5% of Nibouli or Qinalfas 25 EC at a rate of 1.25 liters / ha in 500-600 liters of water should be sprayed in clear weather.

#### **Uttarakhand**

- In Bhabar and Tarai Zone, continue harvesting of rice. Undertake sowing of wheat. Undertake sowing of barley. In valleys, undertake transplanting of cauliflower. Undertake nursery sowing of onion.
- In Hill Zone, undertake harvesting of finger millet. After harvesting, plough the fields and leave them without planking for a few days. Undertake land preparation for early sowing of wheat and mustard in high altitude. Undertake sowing of radish.
- In Sub Humid Sub Tropic Zone, maintain proper soil moisture in early sown sugarcane. Continue sowing of Barseem and Lucern crop for fodder. Maintain proper soil moisture in late sown rice crop. Undertake sowing of carrot crop. Undertake sowing of spinach, fenugreek and potato.

#### **Rajasthan**

- In Semi Arid Eastern Plain Zone, field preparation may be started for the sowing of rainfed Taramira. Farmers are advised to procure improved varieties seed (RTM-314 and RTM-2002), fertilizers and chemical in advance for the sowing of crops.
- In Arid Western Plain Zone, for the control of termite attack in cotton crop, apply Chlorpyrifos @ 4 liter per hectare with irrigation.
- In Transitional Plain Zone of Inland Drainage, farmers are advised for sowing of radish (Pusa Chetki), spinach (Pusa Bharti, All green), amaranths (Pusa lal Chaulai, Pusa Kiran) on ridges.
- In Sub Humid Southern Plain and Aravali Hill Zone, complete the sowing of gram up to 15th October. Gram varieties are: GNG-146, RSG-44, RSG-888, RSG902, RSG-895, Pratap Raj Chana and Pratap Chana1. Seed rate 80kg/ha.
- In Irrigated North Western Plain Zone, to control fruit dropping in kinnow orchards, spray bavistin (50 W.P.) @ 1 gm/litre or Propineb (70 W.P.) @ 2 g/litre of water. Add Zibrelic acid @ 20 mg per litre water in the prepared spray.

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