



National Agromet Advisory Service Bulletin

Friday 16th March 2018
(For the period 16th to 21st March 2018)



Issued by
India Meteorological Department

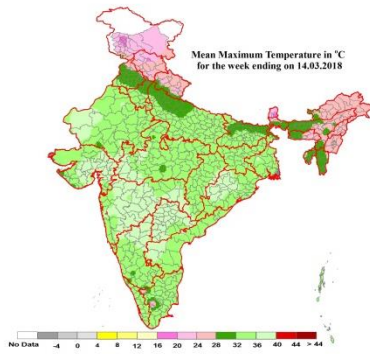
Weblink For

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

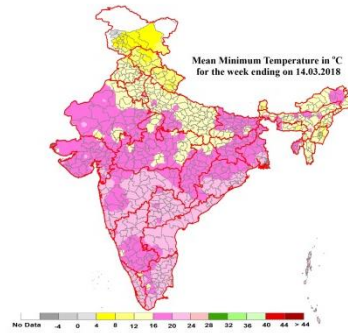
State Composite AAS Bulletin: <http://www.imdagrimet.gov.in/node/3544>

Spatial distribution of weather parameters for the week ending 14.03.2018

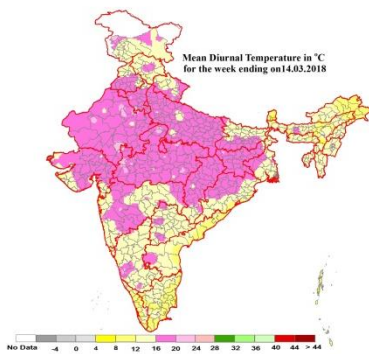
Mean Maximum Temperature (°C) for the week ending 14.03.2018



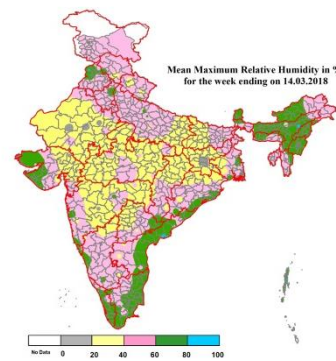
Mean Minimum Temperature (°C) for the week ending 14.03.2018



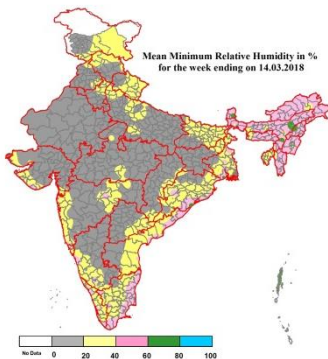
Mean Diurnal Temperature Variation (°C) for the week ending 14.03.2018



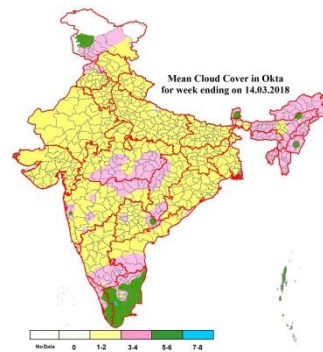
Mean Maximum Relative Humidity (%) for the week ending 14.03.2018



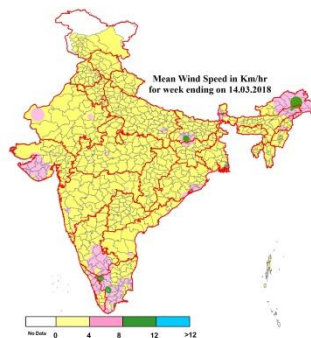
Mean Minimum Relative Humidity (%) for the week ending 14.03.2018



Mean Cloud Cover (okta) for the week ending 14.03.2018

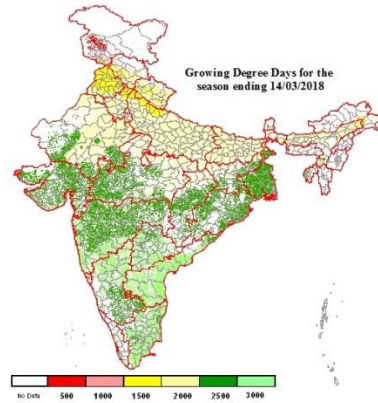
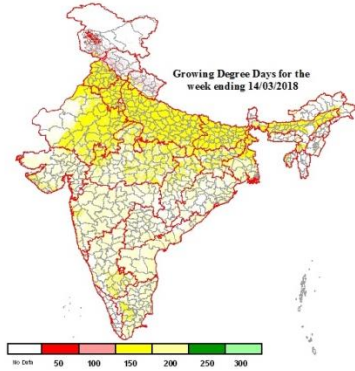


Mean Wind Speed (km/hr) for the week ending 14.03.2018



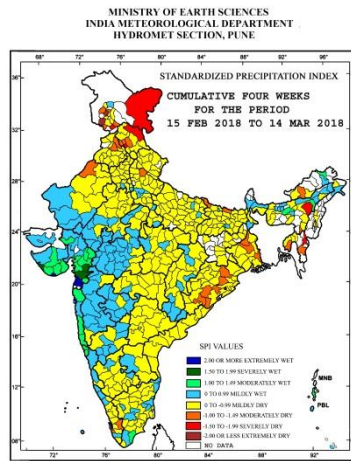
Growing Degree Days for the week ending 14.03.2018

Growing Degree Days for the season ending 14.03.2018

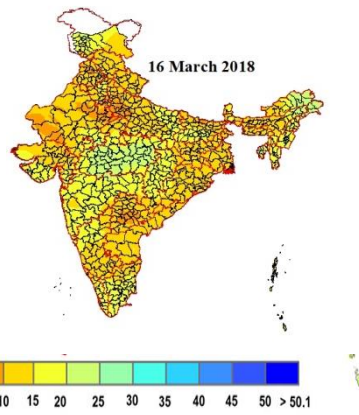


* Base temperature for *Rabi* Season is taken as 05⁰ C

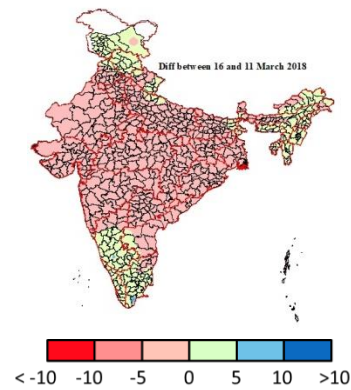
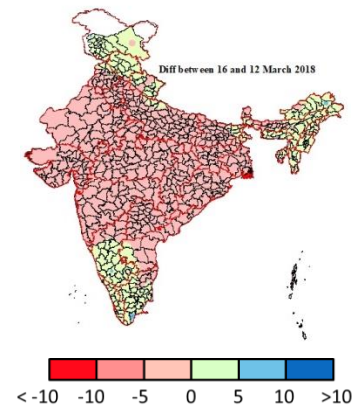
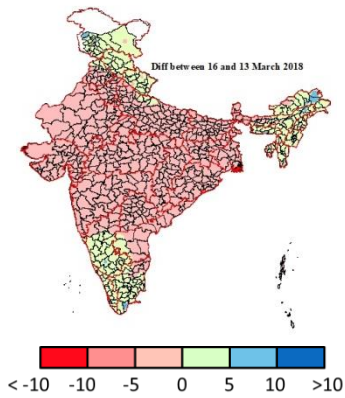
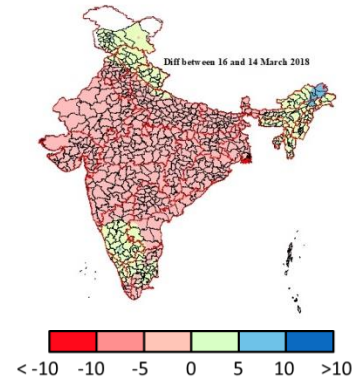
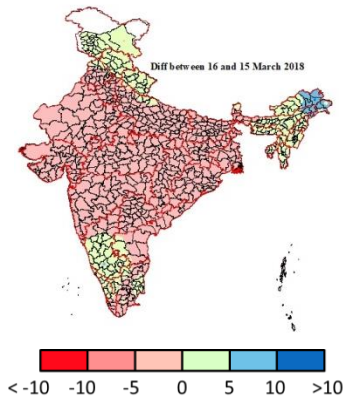
**Standardised Precipitation Index
Cumulative 4 weeks for the period 15th February to 14th March 2018**



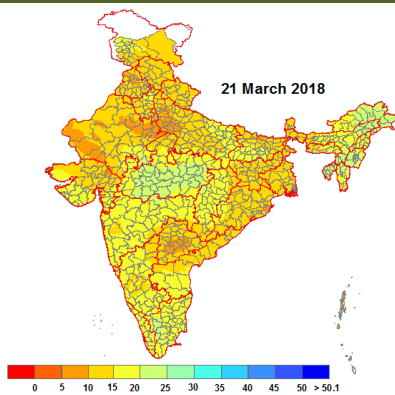
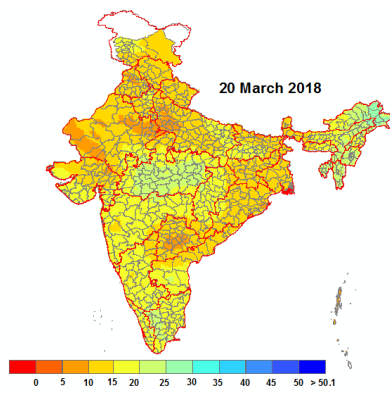
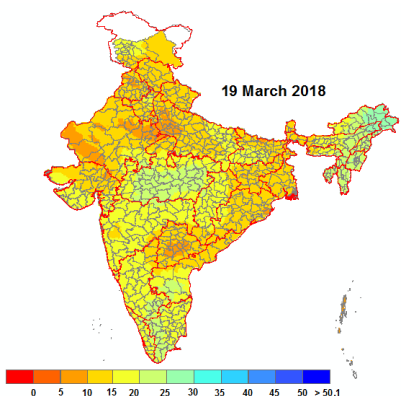
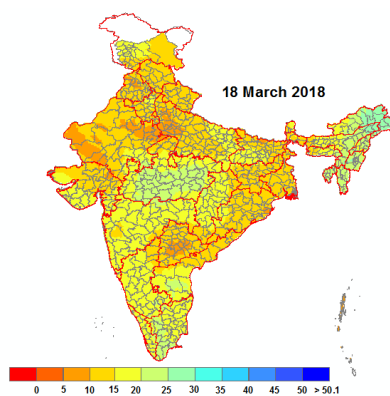
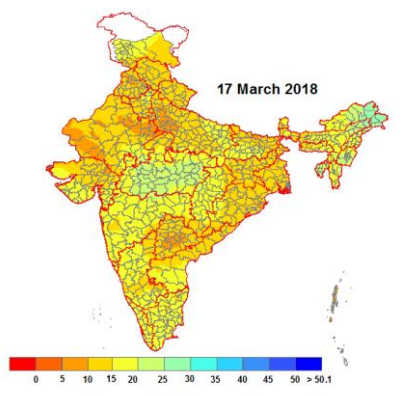
Daily Soil Moisture (mm) for 16th March 2018 (ending at 0830 IST) for 60 cm depth



Difference of Soil Moisture (mm) for 60 cm depth



**Forecasted Soil Moisture (mm) from 17th to 21st March 2018 (ending at 0830 IST)
for 60 cm depth**



Weather Forecast for next 5 days valid upto 0830 hours of 21st March 2018

- Meteorological subdivision wise detailed 5 days rainfall forecast is given in Table below.
- Rise in maximum temperatures by 2-4°C likely over northwest India during next 3 days.
- No significant change in maximum temperatures likely over west and central India during next 24 hours and over east India during next 48 hours and rise by 2-3°C thereafter.
- No significant change in maximum and minimum temperatures likely over rest of the country during next 3 days.

5 Day Rainfall Forecast (Mid day) 16th March 2018

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

% 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

- **16 March (Day 1):** Thunderstorm accompanied with gusty winds very likely at isolated places over Odisha, Jharkhand, south Chhattisgarh, Vidharbha, Telangana, Rayalaseema, South interior Karnataka, interior Tamilnadu and Kerala. Thunderstorm accompanied with squall very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

- **17 March (Day 2):** Thunderstorm accompanied with gusty winds very likely at isolated places over Odisha, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh, Telangana, Rayalaseema, South interior Karnataka and Interior Tamilnadu. Thunderstorm accompanied with squall very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- **18 March (Day 3):** No weather warning.
- **19 March (Day 4):** No weather warning.
- **20 March (Day 5):** No weather warning.

Weather Outlook for subsequent 2 days from 21st to 23rd March 2018

- Isolated to scattered precipitation likely over Western Himalayan region and adjoining plains.
- Isolated rainfall activity likely over northeast, central, peninsular India and Islands.

Salient Advisories

- As thunderstorm accompanied with gusty winds very likely at isolated places **Odisha** and **Jharkhand** on 16th and 17th, over **south Chhattisgarh** and **Vidarbha** on 16th and over **Gangetic West Bengal** on 17th March, over **Telangana, Rayalaseema, South interior Karnataka** and **interior Tamilnadu** on 16th and 17th and over **Kerala** on 16th March, thunderstorm accompanied with squall very likely at isolated places over **Assam & Meghalaya** and **Nagaland, Manipur, Mizoram & Tripura** on 16th and 17th March, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Keep harvested produce at safe places.
- As thunderstorm accompanied with gusty winds very likely at isolated places over **Vidarbha** on 16th March, keep the harvested produce of wheat, vegetables (onion) and fruits in safer place. In view of gusty winds do not take spraying on any crop during next 2 to 3 days. In view of gusty winds and scattered rainfall in next 24 hours, give staking of bamboo support to fruit crops like pomegranates, mango etc.
- In **South Interior Karnataka**, as rainfall is expected at many places on 16th & 17th March, avoid irrigation, application of fertilizers and plant protection methods in standing crops and in mango orchards.
- Utilizing the expected rainfall, in **Arunachal Pradesh**, undertake sowing of summer vegetables. Continue sowing of summer green gram in Gangetic West Bengal, Chhattisgarh, Gujarat and Punjab.
- In Eastern Dry Zone of **Karnataka**, there is chances of incidence of powdery mildew disease in mango, spray Lamda Cyhalothrin 5 EC@ 0.5 ml/litre of water or Sulphur dust (SULTAF) 80 W @ 3g/litre of water for control after current spells of rain.

Detailed Zonewise Agromet Advisories

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

- **Realised Rainfall:** Rain/snow occurred in Bandipore district of Jammu and Kashmir during the week and weather remained mainly dry/dry over rest of the region.
- **Advisories:**
 - **Jammu & Kashmir:**
 - Continue preparation of trenches and polyhouses for raising seedlings of vegetables in Cold Arid Zone. Continue sowing of cucurbit seeds in poly bags for early nursery raising inside polyhouses. Undertake training and pruning in orchards.
 - In Sub Tropical Zone, continue transplanting of cucurbits, tomato, brinjal and chilli. Continue direct sowing of bottle gourd, bitter gourd and pumpkin. Undertake digging up of matured tubers of potato.
 - In Intermediate Zone, undertake land preparation for transplanting of cucurbits and vegetables. Continue planting of orchards.
 - Continue nursery bed preparation for raising of vegetables and sowing of cucurbits in polybags inside

polyhouse in Valley Temperate Zone.

- There are chances of attack of yellow rust and leaf spot in wheat in Sub Tropical Zone, if observed apply Propiconazole (Tilt) @ 0.1% 2-3 sprays and repeat at 15 days interval.
- **Uttarakhand:**
 - Complete planting of sugarcane in Bhabar and Tarai Zone. In mid and high hills, continue nursery sowing of brinjal, tomato, capsicum and chilli. Continue sowing of barnyard millet and French bean.
 - In Sub Humid Sub Tropic Zone, continue transplanting of onion and tomato.
 - Undertake sowing of French bean and okra in Hill Zone. Undertake intercultural operations in onion and garlic.
 - In Bhabar and Tarai Zone, there are chances of leaf spot disease in cole crops, spray Mancozeb @ 2.5 g/litre of water.
- **Himachal Pradesh:**
 - Continue nursery preparation of summer vegetables, raising of seedlings of cucurbits in polythene bags and sowing of okra, French bean, coriander, radish and turnip in Sub-Montane and Low Hill SubTropical Zone. Continue sowing of sunflower in lowland mid-hill areas. Undertake sowing of green gram and black gram.
 - Continue nursery sowing of vegetables like chilli, tomato, capsicum and sowing of bhindi, gourd etc. in Mid Hills Sub Humid Zone.
 - In High Hill Temperate Dry Zone, undertake pruning of unwanted branches on apple trees and apply Boudreaux paint on wounds. Clean the polyhouse and prepare beds for nursery of vegetables.
 - For control of aphid in mustard crop, spray Rogar or Quinalphos @ 2.0 ml/litre of water in Sub-Montane and Low Hill Tropical Zone.
- **Punjab, Haryana & Delhi:**
 - Apply irrigation in wheat at dough stage in Western Zone of Punjab. Continue sowing of okra and cucurbits. Continue transplanting of chilli.
 - In Western Plain Zone of Punjab, apply irrigation in wheat at flowering stage. Continue sowing of maize and planting of spring sugarcane. Continue transplanting chilli. Continue sowing of summer moong and mash. Undertake harvesting of matured mustard.
 - In Undulating Plain Zone of Punjab, continue planting of sugarcane and sowing of spring maize. Continue transplanting of chilli and tomato and raising of cucurbit seedlings. Undertake sowing of summer Mash.
 - Continue sowing of spring maize in Central Plain Zone of Punjab. Continue sowing of cucurbits, okra and cowpea and transplanting of brinjal, chilli and tomato. Apply irrigation in wheat at grain filling stage.
 - In Delhi, continue sowing of French bean, cluster bean, summer radish. Continue sowing of green gram and black gram. Apply irrigation in wheat at milk and grain filling stage. Continue harvesting of matured mustard.
 - Constant monitoring of timely sown onion crop against attack of thrips should be done in Delhi. Spray Imidacloprid @ 0.5 ml per litre of water with sticky material (Tipol 1.0 g/litre) for effective control.
- **Uttar Pradesh:**
 - In Allahabad district of Central Plain Zone, undertake harvesting of matured mustard. Undertake sowing of green gram and black gram. Complete harvesting of late varieties of Sugarcane.
 - Continue sowing of okra and cucurbits in Eastern Plain Zone. Undertake harvesting of matured mustard and pea. Undertake sowing of green gram and black gram.
 - In Varanasi district of Central Plain Zone, continue intercultural operations in cucurbit crops. Continue harvesting of matured barley. Continue planting of spring sugarcane. Continue sowing of okra. In Kanpur district, undertake transplanting of vegetables like tomato and chilli. Continue sowing of maize and black gram. Apply irrigation in wheat at milk stage. Complete sowing of okra and cucurbits.
- **Rajasthan:**
 - Continue harvesting of matured mustard and cumin in Jodhpur district of Arid Western Plain Zone. Apply irrigation in vegetables. Undertake intercultural operations in okra.
 - In Sub Humid Southern Plain and Aravalli Hill Zone, apply irrigation in wheat from dough to maturity stage. Continue transplanting of vegetables like tomato, chilli and cole crops. Continue harvesting of matured mustard. Continue sowing of guar and cowpea.
 - In Irrigated North Western Plain Zone, continue planting of sugarcane. Apply irrigation in wheat at milk stage and in gram at pod formation stage.
 - In Bikaner district of Arid Western Plain Zone, in timely sown wheat apply irrigation at dough stage and in late sowing wheat at milk stage. Continue harvesting of matured mustard. Apply irrigation in orchards and also apply recommended dose of fertilizers and manures along with irrigation water.
 - Continue sowing cucurbitaceous vegetables like melon, bottle gourd, ridge gourd, bitter gourd, pumpkin and smooth gourd etc. and nursery raising of brinjal and chilli in Flood Prone Eastern Plain Zone. Continue digging of matured tubers of potato. Continue harvesting of matured mustard.
 - In gram, to prevent Heliethis infestation, spray Quinalphos 25 EC @ 1200 ml/ha or Indoxycarb @ 200 ml/ha along with water at the time of flowering and repeat the spray if required in Arid Western Plain Zone.
 - Early sown summer cucurbits are likely to be affected by red pumpkin beetle. Broadcast Carbaryl 5% @ 20

kg/ha or spray Asiphet 75 S.P. @ 0.5 g/litre of water in Semi Arid Eastern Plain Zone.

- **Animal Husbandry**

- In Jammu & Kashmir, give special care to young calves as they are more sensitive to pneumonia. Protect the pregnant and milch animals from cold and feed them mineral mixture regularly. Put some bedding material like puaal etc. to keep animals warm. Provide dry bedding during night.
- In Western Zone of Punjab, give special care to new born calves as day temperature is rising. Deworming should be done in calves regularly.

- **Apiculture:**

- In Jammu & Kashmir, need based sugar feeding is recommended in bee colony. Inspect colony at regular intervals.

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

- **Realised Rainfall:** Rainfall occurred in Darjeeling, East Sikkim, North Sikkim and South Sikkim districts of Sub-Himalayan West Bengal & Sikkim during the week and weather remained mainly dry/dry over rest of the region.

- **Advisories:**

- As thunderstorm accompanied with gusty winds very likely at isolated places over Odisha and Jharkhand on 16th and 17th, over Gangetic West Bengal on 17th March, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Keep harvested produce at safe places.

- **Odisha:**

- Undertake harvesting of matured mustard during clear weather and keep them at safe places in Western Undulating Zone. Increase in temperature may favour the egg laying of stem borer in rice fields at active/late tillering stages. To attract the butterflies, place 4 Pheromon Traps/acre, collect the adults and destroy them by burning or by burying them under soil. Also spray Chlorantraniliprole 18.5SC 80ml per acre @ 0.4ml/litre of water.
- In West Central Table Land Zone, continue sowing of sesame. Early sown summer sunflower is at 25 days. Go for hoeing and weeding. Apply 3 kg N to improved varieties and 6 kg to hybrid ones. Thin out plants, keeping one healthy plant per hill.
- In Mid Central Table Land Zone, as mainly dry weather would prevail, continue harvesting of matured crop of green gram and black gram. Rising temperature along with cloudy weather favours the aphid infestation. To control, spray Neem oil 500 ppm @ 5ml/litre of water.
- In Eastern Ghat High Land Zone, it is optimum time for sowing of summer cow pea. Grow the following improved varieties of cowpea such as bush type- Pusa Phalguni, Pusa Komal and runner type- American long, and Banarasi long. In the prevailing weather, undertake planting of papaya. The mustard crop is at (twelve to fourteen week) seed formation to harvesting stage. Mustard saw fly attack occurs at siliqua and seed formation stage. Spray Triazophos or Profenophos 2ml/litre of water for control.

- **Bihar:**

- As dry weather would prevail, in South Bihar Alluvial Zone, farmers are advised to provide irrigation and nitrogenous fertilizers in late sown wheat crop which are at flowering or milk stage. Apply 65 kg ha⁻¹ urea fertilizer after 3-5 days from irrigation. Keeping in view of increasing temperature, farmers are advised to provide irrigation in standing vegetables such as brinjal, tomato, chilli, pea and cabbage. If brinjal and tomato crops are affected from shoot and fruit borer, spray Spinosad 48 EC @ 1 ml/4 litres of water.
- In North West Alluvial Plain Zone, maintain proper moisture in the field before sowing of summer crops. Proper soil moisture at the time of sowing would ensure good germination of seeds. If necessary, light irrigation may be given to maintain moisture. Continue the sowing of summer maize varieties such as Suwan, Deoki, Ganga 11, Shaktiman-1, 2, 3, 4 & 5. Farmers are advised to treat seeds with Thiram and Captaf @ 2.5 g per kilogram of seeds. Farmers are advised to harvest early sown mustard, which is in maturity stage. Regular monitoring is advised for infestation of aphid in late sown mustard crop.
- In North East Alluvial Zone, continue sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd ridge guard and bitter guard. Keeping in view of increasing temperature, farmers are advised to provide irrigation in vegetables such as brinjal, tomato, chilli, pea and cabbage.

- **Jharkhand:**

- Farmers having atleast 1 or 2 irrigation facility may undertake cultivation of mung in Western Plateau Zone after harvesting of rabi crops. Select improved variety of mung S.M.L.- 668 and sow the seed rate @ 12 kg per acre. Before sowing, seed must be treated with Rhizobium culture. If ear head affected with loose smut disease (in which ear head appears black and does not bear any grain) and the weed Phalaris minor (Genhu ka mama) appears in the wheat field, destroy them carefully after hand picking and burning.
- In South Eastern Plateau Zone, December sown wheat crop is at flowering stage and is very critical stage. Therefore, according the moisture status of the soil, apply irrigation because increasing trend in temperature and wind speed are expected in coming days. Because of prevailing high wind speed and high temperature, which

also favours the movement of loose smut spores hence, there is a chance of spread of disease (loose smut) in a more speedy way. Hence if symptoms are noticed try to remove and bury the affected plants very carefully inside the soil. In November month sown crop at soft dough stage, apply last irrigation and avoid flooding, otherwise crop will lodge because of high wind seed at this time.

- In South Eastern Plateau Zone, lentil crops sown in the mid of November is at flowering to pod formation stage and present weather is very conducive for the occurrence of wilt disease. Hence, spraying of Carbendazim @ 1 g per lt. of water twice at weekly interval is suggested.
- **West Bengal:**
 - In Coastal Saline Zone, continue sowing of green gram. Start harvesting mustard if siliqua is found dry and mature.
 - In the New Alluvial Zone, undertake sowing of green gram and black gram. Undertake sowing of French bean, cluster bean and summer radish.
 - In the Hill Zone, carry out land preparation for maize, ginger and turmeric cultivation. Harvest mature crop of mustard. Avoid irrigation to potato crop as light rainfall is expected.
 - In the Terai Zone, continue transplanting of Boro paddy seedlings. Provide mulching to cucurbit crops.
 - In the Laterite and Red Soil Zone, apply light irrigation to wheat crop at dough stage. Carry out hand weeding in rice crop.
 - In the Old Alluvial Zone, ensure 2-3 cm standing water in the Boro rice fields. Undertake sowing of summer green gram in a land with good drainage facility. Carry out harvesting of lentil, ginger and turmeric.
 - In the Terai Zone, apply Flubenamida 39.35% SC @ 4 ml/tank to control sucking pest in chilli crop at vegetative stage. To protect mustard from aphid infestation, spray Thiomethoxam 0.3 SC @ 1gm per 3 litres.
 - In Old Alluvial Zone, to control sucking pests in solanaceous and cucurbitaceous vegetables spray Chlothianidine 50WDG @ 1 gram/10 litres of water with sticker @ 0.5ml/litre water. Install sex pheromone trap @ 1trap/bigha for monitoring of rice stem borer in Boro rice at tillering stage. Install of sex pheromone trap @ 1trap/bigha for monitoring of rice stem borer in Boro rice at tillering stage.
 - In the Coastal Saline Zone, spray Trycyclozole @ 5-6g/10 litres of water for blast disease in Boro paddy at active tillering stage. Spray a mixture of Carbendazin @ 1g/liter of water and Mancozeb @ 2g/liter of water Collar rot (Blackish at base region and die back) in cucurbits.
 - In the Laterite and Red Soil Zone, apply Melathion 50 EC @ 1 ml per litre of water for fruit fly at vegetative stage in pointed gourd.
- **Andaman & Nicobar Islands:**
 - In Andaman Islands, remove and burn the plants showing viral infection such as leaf curling, yellowing and mosaic in bhendi and chilli. Spray Mancozeb @ 2 g/litre twice at 10 days interval to control downy mildew in cucurbits.
 - In the Nicobar Islands, clear the crown of coconut tree and remove the old bunches to avoid the attack of rhinoceros beetles.
- **Animal Husbandry**
 - Keeping in view of increasing temperature, in South Bihar Alluvial Zone, farmers are advised to vaccinate the animals to protect from foot and mouth disease, bovine ephemeral fever (aadhaya). Give clean drinking water and keep them in shed and airy places. Vaccinate the poultry to protect from ranikhet, gambora(IBD) and fowl pox diseases.
 - In Mid Central Table Land Zone of Odisha, as temperature has started increasing, provide sufficient clean drinking water to the cattle. Provide gunny bag covering outside the cowshed and sprinkle water. Avoid grazing of animals during the noon hours.
 - In the Old Alluvial Zone of West Bengal, vaccinate goat against pox virus and PPR.
 - In Andaman & Nicobar Islands, provide vitamin-C and electrolyte along with cool drinking water to the poultry birds to prevent heat stress.
- **Fisheries**
 - In the Andaman Islands, harvest the well grown fishes to reduce the population in the pond as water level is expected to go down due to dry period.
 - In the Coastal Saline Zone, apply Potassium Permanganate Solution and Lime in pond water if death of carp takes place due to red wound at the tail.
 - In Mid Central Table Land Zone of Odisha, start harvesting the fish from those ponds where it is not possible to maintain minimum 3-4 ft depth of water. Increase the feed as the intake will be more with increase in temperature.

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

- **Realised Rainfall:** Rainfall occurred in Cachar district of Assam, Imphal East, Imphal West and Thoubal districts of Manipur during the week and weather remained mainly dry/dry over rest of the region.
- **Advisories:**

- As thunderstorm accompanied with squall likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 16th and 17th March, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Keep harvested produce at safe places.
- **Assam & Meghalaya, Arunachal Pradesh:**
- In Arunachal Pradesh, undertake harvesting of toria, mustard, cabbage, cauliflower and pineapple on non rainy days. Undertake sowing of summer vegetables under present weather conditions.
- In Meghalaya, continue harvesting of cabbage and cauliflower at mature stage. Provide irrigation to pea, lentil and chickpea crops at pod formation stage and to rapeseed and mustard crops at flowering/pod formation stage. Continue transplanting of tomato and capsicum crops. Continue nursery raising of chilli and brinjal crops.
- In Lower Brahmaputra Valley Zone of Assam, undertake sowing of Early Ahu rice (direct seeded) with dwarf varieties such as Luit, Kapilee, IR-36, Kalinga-3 etc. and tall varieties such as Baghlami, Rangadoria, Ahujaha, Kolamanik etc. Undertake sowing of kharif maize. Protect mature Rabi maize from birds by using shiny, coloured strips.
- In the Hill Zone of Assam, undertake land preparation and sowing of okra and green gram (varieties like T44, AAU 34, AAU 39, Pratap etc) and black gram (varieties like T-9, Pant U 19, JU 78 etc) black gram. Undertake sowing of Early Ahu rice (direct seeded) with dwarf varieties such as Luit, Kapilee, IR-36, Kalinga 3 etc. and tall varieties such as Baghlami, Rangadoria, Ahujaha, Kolamanik etc. Undertake transplanting of young seedlings of cucurbits, tomato and chilli.
- In the Upper Brahmaputra Valley Zone, undertake land preparation for Bao rice, ginger and banana. Complete sowing of okra in this week. Due to possibilities of getting light to moderate rainfall on 17th and 18th March, planting of sugarcane setts may be postponed.
- In the Barak Valley Zone, continue land preparation/sowing of okra, ridge gourd and sponge gourd. Undertake sowing of Ahu rice (direct seeded) in this month as weather is favourable.
- In the Central Brahmaputra Valley Zone, postpone irrigation to Boro paddy and banana crop as rain is forecast for next 5 days. Undertake harvesting of mature wheat crop immediately. Continue sowing of summer green/black gram and pointed gourd. Undertake land preparation / planting of summer vegetables, turmeric and ginger.
- In the North Bank Plain Zone, continue land preparation for direct-seeded Ahu rice. Collect the seeds of varieties like Banglami, Rangadoria, Ahu joha, Rasi etc. Undertake land preparation/sowing of Bau rice varieties like Maguri, Panikekua, Amona, Negheri etc. Undertake land preparation for sowing of summer green gram and black gram. Undertake land preparation for ridge gourd, cucumber, bitter gourd, okra etc. Undertake nursery raising of coconuts.
- In the Hill Zone of Assam, spray Imidacloprid @ 0.5 ml per litre of water (with sticky material like Tipol @ 1 gm per litre of water) for aphid attack in onion crop @ sowing stage on a non rainy day.
- In the Lower Brahmaputra Valley Zone, spray Dimethoate or Dimecron or Dichlorvos @ 1 ml/litre of water for fruit borer in lentil crop at maturity stage on a non rainy day.
- In the Barak Valley Zone, to control the attack thrips in chilli crop, spray Rogor or Dimethoate @ 1.5 ml per litre of water on a non rainy day.
- In the North Bank Plain Zone, spray of Chloropyriphos 20EC @1ml/litre of water against potato tuber moth in standing potato crop on a non rainy day.
- **Nagaland, Mizoram, Manipur and Tripura:**
- In Manipur, for broadcasting, seeds of pre-kharif rice should be uniformly sprouted before sowing. Uproot seedlings at 21-25 days after sowing depending on seedlings size and availability of water. Transplant the seedlings immediately (not later than 2 days) after uprooting to avoid transplanting shocks. After 3-4 days of transplanting water level of 5-8 cm may be maintained. Carry out harvesting of pea, chickpea lentil, mustard and rapeseed. Harvest potato crop after 10-15 days after haulm cutting.
- In Mizoram, continue harvesting of ginger, turmeric, early cole crops, brinjal, tomato and chilli. Harvest mature cobs of maize and potato in clear weather.
- In Tripura, continue transplanting of the young seedlings of summer brinjal and tomato to the main field.
- In Nagaland, carry out land preparation for summer maize and green gram. Undertake sowing of summer vegetables like okra, pumpkin, ridge gourd, ash gourd and spine gourd. Harvest linseed, ginger and turmeric.
- In Manipur, in chilies and capsicum nursery, spray Carbendazim + Mancozeb (Sixer) @ 2 g per litre of water to control the fungal attack on a non rainy day.
- **Animal Husbandry**
- In the Hill Zone and Lower Brahmaputra Valley Zone of Assam, Vaccinate cattle against FMD, HS and BQ.
- In Meghalaya, vaccinate poultry birds against coccidiosis and Ranikhet diseases. Vaccinate pigs against swine fever and cattle against Brucellosis, FMD, Hemorrhagic Septicemia, Black Quarter.
- In the North Bank Plain Zone, vaccinate poultry birds against Ranikhet disease. Provide protection to poultry birds against cold.
- In the Lower Brahmaputra Valley Zone, provide de-worming medicines to the livestock.

- In Arunachal Pradesh, protect day-old chicks from cold with the help of lighting.
- **Fishery**
- In the Upper Brahmaputra Valley Zone, drain the water from the pond; dry up for 15-20 days and remove the upper layer of the bottom soil, then plough it and add lime. After 7-15 days of application of lime, add cow-dung and mix it properly. Add fertilizer 7-15 days after addition of cow-dung.
- In the Barak Valley Zone, culture pabda @ 4500 numbers per bigha along with IMC @ 1000 numbers per bigha for better profitability from the fish pond.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

- **Realised Rainfall:** Weather remained dry over the region during the week.
- **Advisories:**
 - **Maharashtra:**
 - As thunderstorm accompanied with gusty winds very likely at isolated places over Vidharbha on 16th, keep the harvested produce of wheat, vegetables (onion) and fruits in safer place. In view of gusty winds do not take spraying on any crop during next 2 to 3 days. In view of gusty winds and scattered rainfall in next 24 hours, give staking of bamboo support to fruit crops like pomogranates, mango, grapes etc. In view of expected rainfall during next 48 hours, matured leafy vegetables (fenugreek, spinach, coriander, etc.) and other vegetable like watermelon, sweet melon, cucumber should be harvested and kept in proper safe place until selling.
 - In North Konkan, Maintain 8-10 cm water level in summer rice after 10 days of panicle initiation. Continue harvesting of okra, leafy vegetables and water melon. Continue planting of seasonal forage crops like cowpea, maize (African Tall), multicus sorghum and rice bean. In South Konkan, complete harvesting of pulse crops, vegetables and fruits as early as possible and keep the produce in safer place.
 - In Madhya Maharashtra, complete harvesting of *rabi* crops like wheat, jowar, vegetables and fruits and keep the produce in safer place. Complete sowing of summer moong.
 - as early as possible and keep the produce in safer place.
 - In Marathwada, complete harvesting of rabi crops like wheat, sorghum, turmeric, vegetables and fruits as early as possible and keep the produce in safer place. Undertake intercultural operation like weeding in maize and summer sunflower.
 - In Madhya Maharashtra, in early sown groundnut, if leaf spot disease and rust are observed, spray Mancozeb @ 25 g in 10 litre of water in clear weather.
 - **Gujarat:**
 - In South Saurashtra Zone, carry out weeding and intercultural operations in timely sown summer sesame, green gram and black gram.
 - In North Gujarat Zone, undertake sowing of green gram and cowpea; continue sowing of sesame, pearl millet, vegetable crops (okra, cluster bean and cowpea) and transplanting of brinjal seedlings. Undertake weeding in groundnut crop.
 - In North Saurashtra Zone, undertake sowing of green gram and black gram.
 - In South Gujarat Zone, apply irrigation in vegetable and fruit crops.
 - In Bhal and Coastal Zone, complete sowing of green gram, cow pea and pearl millet.
 - In North Saurashtra Zone, continue sowing of green gram and black gram. Undertake digging out of garlic bulbs.
 - In North West Zone of Gujarat, undertake sowing of groundnut, green gram, pearl millet, vegetable crops (okra, cluster bean and cowpea) and transplanting of brinjal seedlings. Complete harvesting of cumin and castor.
 - In Middle Gujarat Zone, complete land preparation and undertake sowing of summer groundnut, pearl millet, green gram and sesame. Continue harvesting of matured mustard crop.
 - In North Saurashtra Zone, thrips infestation above ETL is observed in groundnut crop; for control, spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with Profenofos @20 ml or Imidacloprid 30.5 SC @3 ml or Lemda Cyheloثرin @10 ml 10 litres of water.
- **Animal Husbandry**
 - In Gujarat, for milch animals, regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 liters of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed.

CENTRAL INDIA [M.P., CHHATTISGARH]

- **Realised Rainfall:** Weather remained dry over the region during the week.
- **Advisories:**
 - **Madhya Pradesh:**
 - Continue harvesting of gram and wheat in Nimar Valley Zone. Undertake sowing of okra.
 - In Vindhya Plateau Zone, continue harvesting of matured gram and wheat. Continue sowing of cucurbits. Continue sowing of okra and planting of sugarcane.

- Apply irrigation in wheat at milk stage in Kymore Plateau and Satpura Hill Zone. Continue harvesting matured lentil, alsi and sunflower. Undertake sowing of cucurbits and land preparation for sowing of summer moong and urad.
- In Grid Zone, continue digging up of matured tubers if potato. Continue sowing of okra and cucurbits. Undertake sowing of green gram.
- Continue sowing of vegetables like bitter gourd, pumpkin, okra, bottle gourd, watermelon, muskmelon etc. in Bundelkhand Zone. Undertake sowing of summer moong.
- In Satpura Plateau Zone, continue sowing of groundnut and maize. Continue harvesting of matured oilseeds, pulses and wheat and keep the harvested produce at safe place. Continue preparation of seedlings of cucurbits in polythene bags.
- Apply irrigation in wheat at dough stage. Continue intercultural operations in vegetables in Central Narmada Valley Zone.
- In Malwa Plateau Zone, continue sowing of cucurbits, chilli, tomato and brinjal crops in the nursery. Continue sowing of green gram and black gram. Continue transplanting of young seedlings of tomato, chilli and cole crops.
- In Jhabua Hill Zone, continue harvesting of matured wheat, gram and mustard. Continue transplanting of vegetables like tomato, chilli, brinjal, okra and cluster bean. Undertake sowing of green gram, black gram, okra and cucurbits.
- In Satpura Plateau Zone, there are chances of powdery mildew attack in mango at flowering/fruit setting stage, which causes poor fruit setting and later on fruit dropping. Spray Carbendizim (Bavistin) @ 1.5g or Sulphex @ 3.0g per litre of water.
- **Chhattisgarh:**
- As thunderstorm accompanied with gusty winds very likely at isolated places over south Chhattisgarh on 16th, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Keep harvested produce at safe places.
- In North Hill Zone, continue harvesting of matured mustard, potato, gram and lentil crops. Apply irrigation in wheat at milk to dough stage. Continue planting of sugarcane. Complete sowing of summer moong, til and groundnut. Continue sowing of pumpkin, cucumber, sponge gourd etc. Complete the transplanting of summer rice by end of March.
- Continue sowing of green gram and groundnut in Chhattisgarh Plain Zone. Complete sowing of cucurbits in polythene bags. Continue harvesting of lathyrus, mustard and toria crops followed by threshing. Complete planting of sugarcane.
- In Bastar Plateau Zone, continue planting of summer arvi and bunda. Undertake intercultural operations in vegetables. Complete planting of sugarcane.
- **Animal Husbandry**
- In Madhya Pradesh, provide mineral mixture and fresh and clean water to birds. Vaccinate the poultry birds to prevent Ranikhet disease. Get all the animals vaccinated against foot and mouth disease (FMD).
- In Chhattisgarh, feed the cattle with dried fodder chaff cutting mixed with legume fodder such as Berseem, Lucerne etc.

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

- **Realised Rainfall:** Rainfall occurred in Kanyakumari, Tirunelveli and Toothukudi districts of Tamil Nadu during the week and weather remained mainly dry/dry over rest of the region.
- **Advisories:**
 - As thunderstorm accompanied with gusty winds very likely at isolated places over Telangana, Rayalaseema, South interior Karnataka and interior Tamilnadu on 16th and 17th and over Kerala on 16th March, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Keep harvested produce at safe places.
 - **Kerala:**
 - In the Problem Area Zone, continue harvesting of mature nutmeg fruits. Undertake preparation for planting of new cuttings of pepper. Provide shade to vegetables seedlings.
 - In the Central Zone, carry out land preparation for ginger. In the Problem Area Zone, spray Indofil M45 @ 4g/ litre of water against downy mildew in cucurbits. Stop irrigation during this week. Give shade to seedlings. In case of sucking pests apply neem oil emulsion (65 ml/ litre of water) in cow pea and 25ml/ litre of water in cucurbits.
 - In the Central Zone, spray Spiromesifen @ 0.8 ml per litre of water for curling and stunted growth in chilly crop due to thrips and virus attack. Leaf folder attack in rice crop at tillering stage can be controlled using trichogramma cards (2CC per one acre). Cut the cards in to small pieces and fix in different regions of the field. If the attack is severe, spray Quinalphos @ 2ml per one liter of water on a non rainy day.
 - In the Northern Zone, apply Quinalphos @ 1.5 ml per litre of water with sticking agent for leaf eating caterpillar

in banana crop @ all stages on a non rainy day.

- In the Southern Zone, cut and burn all severely affected banana leaves and spray Tilt @ 1 ml per litre of water for Sigatoka disease in banana. To control fruit fly in cucurbits, cover the fruits with paper or poly bags, destroy the affected fruits, use pheromone traps and other traps with food lure on a non rainy day.
- **Andhra Pradesh:**
- In the North Coastal Zone, continue planting of sugarcane after sett treatment with Propiconazol @ 1.0 ml/litre for 15 minutes before planting.
- In the Krishna Godavari Zone, maintain 5cm water from PI to grain hardening stage in paddy crop. Crop should not face water stress at panicle initiation, flowering and milk stages.
- In the Scarce Rainfall Zone, for the control of leaf folder/stem borer in paddy, farmers are advised to spray Chlorpyrifos @ 2 ml/litre for control. For control of leaf folder in groundnut, spray Chlorpyrifos @ 500 ml (or) Flubendamide 40 ml (or) Monocrotophos 320 ml per 200 litres of water on a non rainy day.
- In the Krishna Godavari Zone, spray Tricyclozole @ 120 g or Isoprothiolin @ 300 ml or Kasugamycin @ 400 ml per acre for neck blast in rice at PI - flowering stage. Spray Monocrotophos @ 320 ml or Dimethoate @ 400 ml/acre for sucking pests in green/black gram.
- In the Southern Zone, to control tikka leaf spot at pod stage in Rabi groundnut, spray Hexaconazole @ 2 ml per litre of water. The present weather conditions are favourable for Leaf folder and stem borer in paddy. To control spray Chlorpyrifos @ 2.5 ml or Acephate @ 1.5 g or Flubendiamide @ 2 ml per litre of water.
- In the North Coastal Zone, spray Chlorpyrifos @ 2.5 ml/litre of water for stem borer; Isoprothiolane @ 1.5 ml/litre of water for blast disease and Hexaconazole @ 2.0 ml/litre of water for sheath blight in Rabi paddy at tillering stage. Spray Carbendazim @ 1 g/litre of water in ragi crop at tillering stage.
- **Telangana:**
- In North Telangana Zone, maintain shallow depth of water (2-3 cm) during tillering stage of paddy crop. At the time of boot leaf to flowering stage, maintain 5 cm depth of water. Follow alternate wetting and drying (AWD) method of irrigation. Give irrigation to maize crop at before flowering, flowering & milking stages, to sorghum crop at flowering/grain filling stages and to groundnut crop at pegging to pod development stage.
- In South Telangana Zone, prevailing dry weather conditions are favorable for incidence of aphids in maize. To control, spray Dimethoate @ 2 ml or Methyl Demetan @ 2 ml or Acephate @ 1.5 g per litre of water. For Incidence of Blast in rice, spray Tricyclazole @ 0.6 g or Isoprothiolane @ 1.5 ml or Kasugamycin @ 2.5 ml per litre of water twice in 10-15 days interval.
- In North Telangana Zone, spray Acephate 75 SP @ 1.5 g or Chlorantraniliprole @ 0.3 ml or Flubendiamide 20WDG @ 0.25 g or Flubendiamide 480 SC @ 0.1 ml/l of water leaf folder in paddy at tillering to maximum tillering stage. Spray Chlorothalonil @ 2 g or Pyraclostrobin @ 1g/litre of water for early blight in tomato crop. Spray Flubendamide @ 0.3 ml/litre of water at 28 and 35 days for stem borer in tomato crop. Spray Myclobutanil @ 1 ml/litre of water for powdery mildew in bhindi crop.
- **Tamil Nadu:**
- In the High Rainfall Zone, keep harvested mature paddy in safer place. Provide support to banana plants to prevent lodging.
- In the Western Zone, utilizing expected rainfall, prepare irrigated fallow land for sowing cumbu during first week of April.
- In the Southern Zone, spray NAA @ 20 ppm at flowering in mango to increase fruit retention. Spray 0.5% Urea (5 g/litre) or 1% Potassium Nitrate (10g/litre) to induce flowering, if trees do not flower by that time.
- In the South Zone, to control fruit rot and die back incidence in chilli, spray Copper Oxochloride 0.25% and Zineb 0.15%. For cut worms (*Helicoverpa armigera*) incidence in chilli crop, spray Indoxacarb 14.5 % SC @ 6.5 ml/10 litres. Prevailing weather condition is favorable for rice earhead bug at tillering to harvesting stage. To control spray Malathion 50 EC @ 500 ml/ha twice on a non rainy day.
- In the North Western Zone, occurrence of termite incidence is observed in tapioca crops due to prevailing dry weather. To control this insect, carry out soil drenching with Chlorpyrifos @ 2ml/litre of water near to the crops on a non rainy day.
- **Karnataka:**
- In South Interior Karnataka, as rainfall is expected at many places on 16th & 17th, avoid irrigation, application of fertilizers and plant protection methods in standing crops and in mango orchards.
- In Eastern Dry Zone, as rainfall is expected, avoid irrigation in mango orchard.
- In Southern Dry Zone, avoid irrigation in coffee plantation as rainfall is expected. Undertake ploughing or passing the cultivator in the areas where rainfall is received.
- In North East Transition Zone, undertake cultivation of green fodder crops such as maize, bajra and jowar respectively.
- In Hill Zone, there is chance of incidence of button dropping, inflorescence dieback in arecanut; for control, spray Carbendazim @ 1 g/litre or Mancozeb @ 2 g/litre of water in clear weather.
- In Southern Dry Zone, to manage leaf folder in rice, spray Quinolphose @ 2 ml/litre of water or Indoxycarb @

- 0.5 ml/liter of water after current spells of rain.
- In North East Dry Zone, due to increase in day temperature incidence of leaf spot was noticed in groundnut; for control, spray Hexaconazole @ 1ml/litre or Carbendazim @1g/litre of water in clear weather. Spray Imidachlorpid @0.5 ml/litre of water for control of sucking pest in watermelon vines.
 - In Eastern Dry Zone, spray Lamda Cyhalothrin 5 EC@ 0.5 ml/litre of water or Sulphur dust (SULTAF) 80 W @3g/litre of water against the powdery mildew disease in mango after current spells of rain.
 - In Southern Transition Zone, spray Trycyclazole @ 0.6 g/litre or Carbendezim 1g/litre of water against blast disease in rice crop after current spells of rain.
 - In Central Dry Zone, to manage leaf and fruit spot disease in pomegranate, spray the crop with Chlorothonil @ 2 ml dissolved in one litre of water.
 - **Animal Husbandry**
 - In the South Telangana Zone, vaccinate sheep against ET and cattle against FMD and Hemorrhagic Septicemia diseases.
 - In the Southern Zone of Tamil Nadu, provide half quantity of greens and straw in the morning and half in the evening after milking. Feed cow with mixture of young foliage and dry grass with hay. Give silage after the end of milking. Give concentrate feed in the morning and evening with equal distribution.
 - In Southern Dry Zone, maintain the optimum room temperature in sericulture, poultry and dairy unit. Keep cattle yard clean and dry.

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