



# *National Agromet Advisory Service Bulletin*

*Friday 29<sup>th</sup> September 2017*

*(For the period 29<sup>th</sup> September to 4<sup>th</sup> October 2017)*



*Issued by*

*India Meteorological Department*

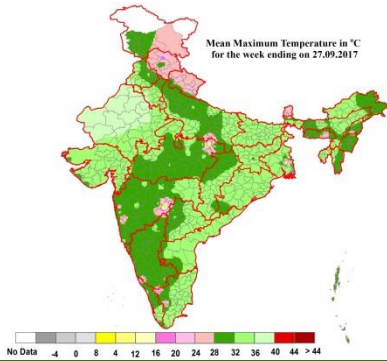
**Weblink For**

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

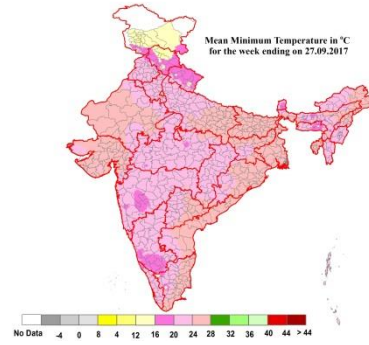
**State Composite AAS Bulletin:** <http://www.imdagrimet.gov.in/node/3544>

**Spatial distribution of weather parameters for the week ending 27.09.2017**

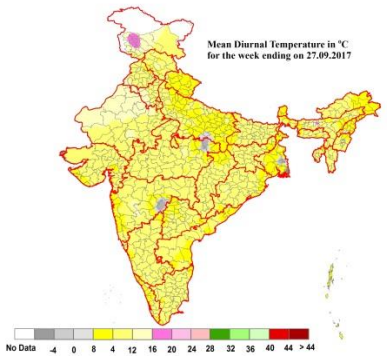
**Mean Maximum Temperature (°C) for the week ending 27.09.2017**



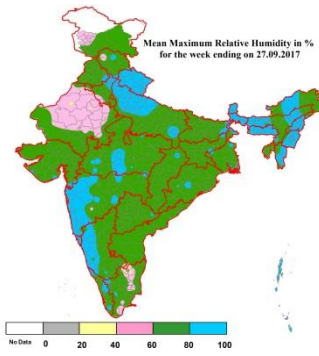
**Mean Minimum Temperature (°C) for the week ending 27.09.2017**



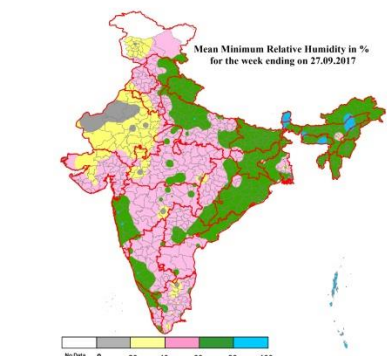
**Mean Diurnal Temperature Variation (°C) for the week ending 27.09.2017**



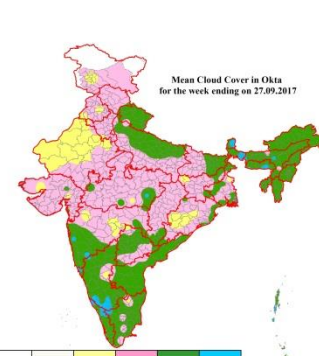
**Mean Maximum Relative Humidity (%) for the week ending 27.09.2017**



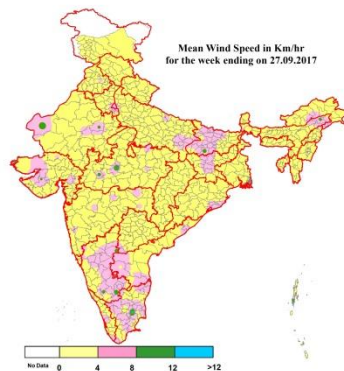
**Mean Minimum Relative Humidity (%) for the week ending 27.09.2017**



**Mean Cloud Cover (okta) for the week ending 27.09.2017**

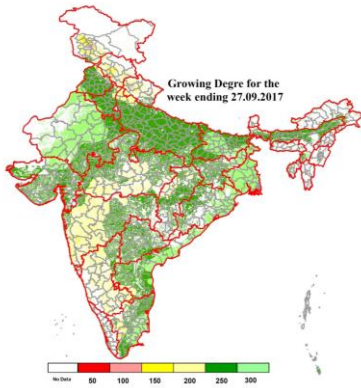


**Mean Wind Speed (km/hr) for the week ending 27.09.2017**

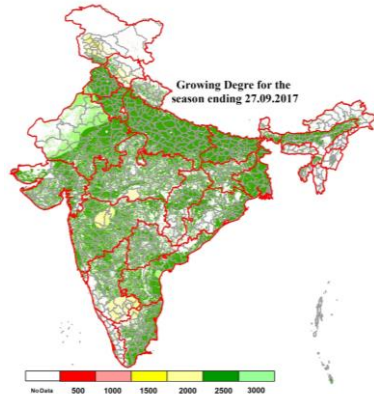




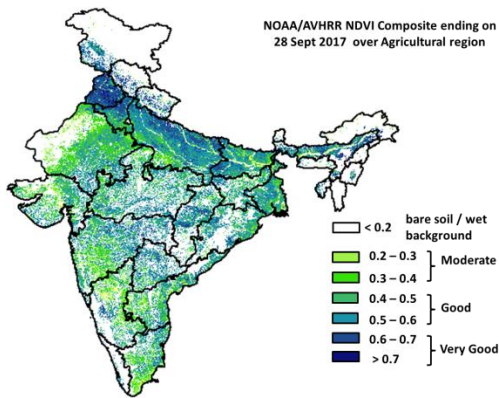
**Growing Degree Days for the week ending 27.09.2017**



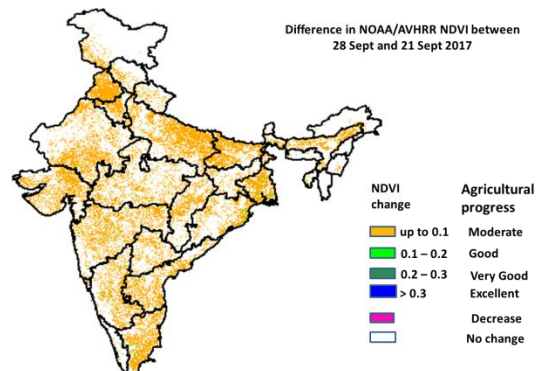
**Growing Degree Days for the season ending 27.09.2017**



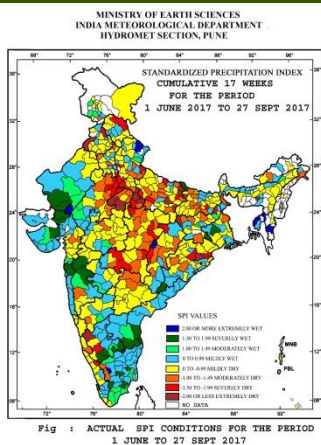
**NOAA/AVHRR NDVI composite ending on 28<sup>th</sup> September 2017 over Agricultural regions of India**



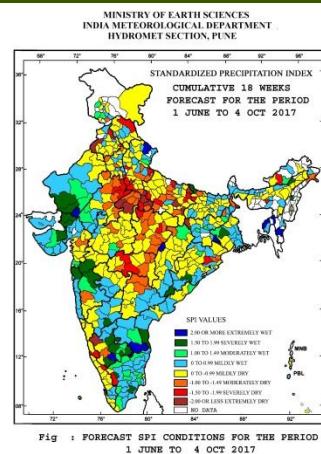
**Difference in NOAA/AVHRR NDVI between 21<sup>st</sup> and 28<sup>th</sup> September 2017**



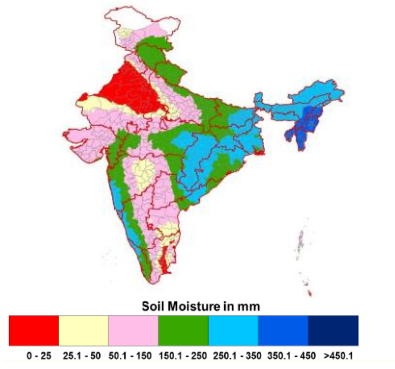
**Standardised Precipitation Index Cumulative 17 weeks for the period 1<sup>st</sup> June 2017 to 27<sup>th</sup> September 2017**



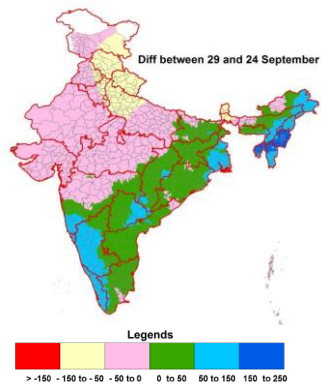
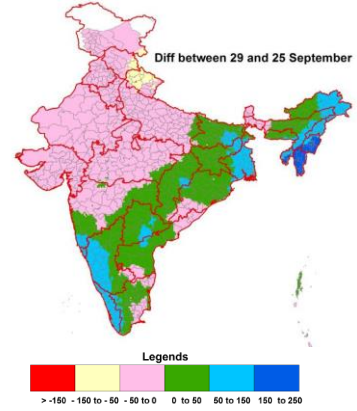
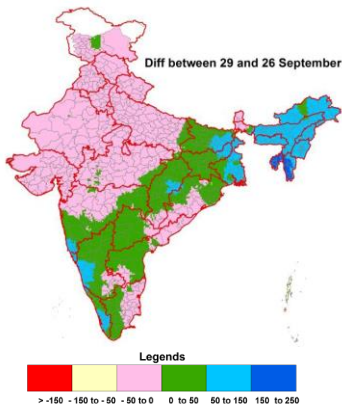
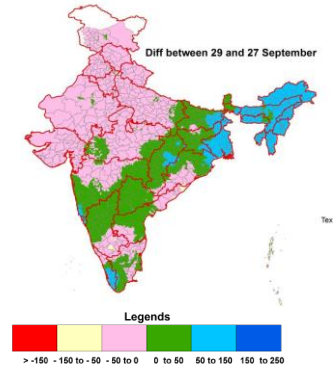
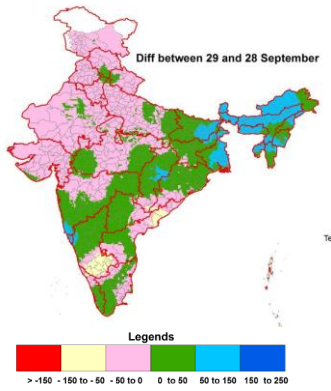
**Standardised Precipitation Index Cumulative 18 weeks forecast for the period 1<sup>st</sup> June 2017 to 4<sup>th</sup> October 2017**



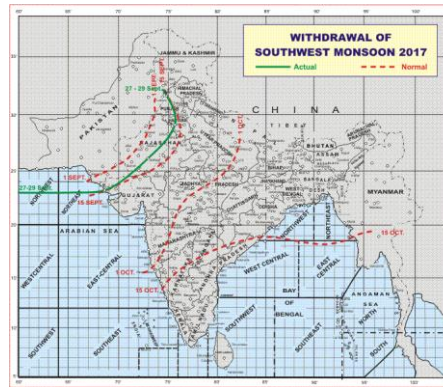
# Daily Soil Moisture (mm) for 29<sup>th</sup> September (ending at 0830 IST) for 1 m depth



## Difference of Soil Moisture (mm)



## Withdrawal of South West Monsoon



- In view of the establishment of anticyclone in the lower tropospheric levels, substantial reduction in moisture content and dry weather prevailing over the region, the south west monsoon has withdrawn from some parts of Punjab & Haryana; most parts of West Rajasthan; some parts of Kutch and north Arabian Sea on 27<sup>th</sup> September 2017.
- The monsoon withdrawal line continues to pass through Amritsar, Hissar, Jodhpur, Naliya, Lat. 23°N/Long. 65°E and Lat. 23°N/Long. 60°E.
- Conditions are becoming favourable for further withdrawal of southwest monsoon from some parts of Jammu & Kashmir, Himachal Pradesh, remaining parts of Punjab, West Rajasthan, some more parts of Haryana, some parts of east Rajasthan, some more parts of Gujarat state and north Arabian Sea during next 24 hours.

## Weather Forecast for next 5 days valid upto 0830 hours of 4<sup>th</sup> October 2017

- Meteorological sub-division wise detailed 5 day rainfall forecast is given below.
- No significant change in maximum and minimum temperatures over most parts of the country during next 3 days.

### 5 Day Rainfall Forecast (Mid-day) 29<sup>th</sup> September 2017

Met-Sub-Division	29-Sep Today	30Sep Sat	01Oct Sun	02Oct Mon	03Oct Tue
1. Andaman & Nicobar Islands	FWS	FWS	FWS	SCT	FWS
2. Arunachal Pradesh	WS	FWS	FWS	FWS	FWS
3. Assam & Meghalaya	WS	FWS	FWS	FWS	FWS
4. N. M. M. & T.	WS	FWS	FWS	FWS	FWS
5. S.H. West Bengal & Sikkim	WS	WS	WS	FWS	FWS
6. Gangetic West Bengal	WS	FWS	FWS	FWS	FWS
7. Odisha	WS	FWS	FWS	FWS	FWS
8. Jharkhand	FWS	FWS	FWS	FWS	FWS
9. Bihar	FWS	FWS	FWS	FWS	FWS
10. East Uttar Pradesh	ISOL	ISOL	ISOL	ISOL	ISOL
11. West Uttar Pradesh	DRY	DRY	DRY	DRY	DRY
12. Uttarakhand	DRY	DRY	ISOL	ISOL	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. Jammu & Kashmir	ISOL	DRY	DRY	DRY	DRY
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	ISOL	ISOL	ISOL	ISOL
21. Gujarat Region	DRY	DRY	DRY	DRY	DRY
22. Saurashtra & Kutch	DRY	DRY	DRY	DRY	DRY
23. Konkan & Goa	WS	FWS	SCT	SCT	SCT
24. Madhya Maharashtra	FWS	SCT	ISOL	ISOL	ISOL
25. Marathwada	SCT	ISOL	ISOL	ISOL	ISOL
26. Vidharbha	ISOL	ISOL	ISOL	ISOL	ISOL
27. Chhattisgarh	FWS	FWS	WS	FWS	SCT
28. Coastal Andhra Pradesh	WS	WS	FWS	FWS	FWS
29. Telangana	SCT	FWS	FWS	FWS	SCT
30. Rayalaseema	WS	WS	FWS	FWS	SCT
31. Tamilnadu & Puducherry	SCT	ISOL	ISOL	SCT	SCT
32. Coastal Karnataka	WS	WS	WS	WS	WS
33. North Interior Karnataka	WS	WS	FWS	FWS	SCT
34. South Interior Karnataka	WS	FWS	FWS	FWS	FWS
35. Kerala	FWS	FWS	FWS	SCT	SCT
36. Lakshadweep	FWS	FWS	FWS	SCT	SCT

#### % 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

- **29 September (Day 1):** Heavy to very heavy rain at isolated places very likely over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; heavy at isolated places very likely over Chhattisgarh, Gangetic West Bengal, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh, Telangana, Rayalaseema, Karnataka, Kerala and Tamilnadu & Puducherry. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Jharkhand, Gangetic West Bengal, Madhya Maharashtra, Marathwada and Konkan & Goa.
- **30 September (Day 2):** Heavy rain at isolated places very likely over Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Konkan & Goa and Karnataka. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Madhya Maharashtra, Marathwada and

Konkan & Goa.

- **01 October (Day 3):** Heavy rain at isolated places likely over Chhattisgarh, Bihar, Jharkhand and Coastal Karnataka.
- **02 October (Day 4):** Heavy rain at isolated places likely over Chhattisgarh.
- **03 October (Day 5):** No weather warning.

#### Weather Outlook for subsequent 2 days from 4<sup>th</sup> to 6<sup>th</sup> October 2017

- Rain at most places likely over most parts of east & northeast India.
- Rain at a few/many places likely over Konkan & Goa, Andaman & Nicobar Islands, south peninsula and eastern parts of Central India.
- Weather likely to be dry over the remaining parts of the country.

#### Salient Advisories

- As per the forecast and weather warning given above, the regions likely to receive rainfall at most/many places and heavy/heavy to very heavy rainfall, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid water stagnation.
- In **Vidarbha**, undertake preparatory tillage in harvested greengram/blackgram fields with minimum tillage to avoid excess moisture loss from field in case of early sowing of rainfed rabi crops viz., safflower (AKS 207, Bhima, PKV pink, Nari 6), Sorghum for grain & fodder (Maldandi 35- 1, Phule Yashoda, PKV Kranti) and Chickpea (Jaki 9218, Vijay, ICCV 10, Digvijay, Akash). With prevailing condition of decline in humidity and increase in maximum temperature (>33.0 °C), foliar spray of 2% DAP (200 g DAP +10 litre water) mixed with 4 ml Planofix at boll development stage in cotton is advisable to reduce boll shedding and improve boll growth.
- In **Tamil Nadu**, in the Cauvery Delta Zone, continue nursery preparation of thaladi rice crop and undertake harvesting of kuruvai rice. In the Western Zone, undertake sowing of dryland crops like sorghum and cumbu. In the South Zone, continue sowing of sorghum, cotton and maize.
- As thunderstorm accompanied with lightning very likely at isolated places over **Bihar, Madhya Maharashtra, Marathwada and Konkan & Goa** on 29<sup>th</sup> and 30<sup>th</sup>, over **Jharkhand** and **Gangetic West Bengal** on 29<sup>th</sup> September, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Undertake propping in sugarcane.
- In **Haryana**, as dry weather is forecasted during the period, farmers are advised to apply protective irrigation in standing crops wherever necessary. Avoid moisture stress during flowering and boll formation stages in cotton.
- In the Northern Zone of **Kerala**, harvest matured rice and other crops quickly during non rainy days and keep at safer places.
- In **Jammu & Kashmir**, as mainly dry weather would prevail during the period, undertake harvesting of matured rice and maize. Continue harvesting of matured pulses and maize in Central Plain Zone of Uttar Pradesh. In **Gujarat**, continue harvesting of sesame, pearl millet, green gram and cowpea.

#### Detailed Zonewise Agromet Advisories

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

- **Realised Rainfall:** Rainfall occurred in Ernakulam, Idukki, Kasargod, Kottayam, Kozhikode, Malappuram and Wynad districts of Kerala, Udipi and Uttar Kannada district of Coastal Karnataka, in Bagalkote, Belagavi, Dharwad, Gadag, Haveri and Koppal districts of North Interior Karnataka, all districts of South Interior Karnataka except Ballari, Kolar and Shivamogga, in Ariyalur, Cuddalore, Dharmapuri, Erode, Krishnagiri, Madurai, Nagapattinam, Namakkal, Perambalur, Pudukkotai, Salem, Thanjavur, Tiruvarur, Trichy and Villupuram districts of Tamil Nadu, East Godavari,



Nellore and Vizianagaram districts of Coastal Andhra Pradesh, Chittoor district of Rayalaseema during the week and weather remained mainly dry over rest of the region.

• **Advisories:**

➤ As rainfall is very likely at most places over Coastal Karnataka during the period, at most/many places over Coastal Andhra Pradesh and South Interior Karnataka during the period, over Rayalaseema and North Interior Karnataka on 29<sup>th</sup>, 30<sup>th</sup> September, 1<sup>st</sup> and 2<sup>nd</sup> October, at many places over Kerala on 29<sup>th</sup>, 30<sup>th</sup> September and 1<sup>st</sup> October, over Telangana on 30<sup>th</sup> September and 1<sup>st</sup> and 2<sup>nd</sup> October, along with heavy rain at isolated places over Coastal Andhra Pradesh, Telangana, Rayalaseema, Kerala and Tamilnadu & Puducherry on 29<sup>th</sup>, over Karnataka on 29<sup>th</sup> and 30<sup>th</sup> September and over Coastal Karnataka on 1<sup>st</sup> October, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid water stagnation.

▪ **Kerala:**

- In the Southern Zone, undertake land preparation for nursery sowing of *Mundakan* rice in Thiruvananthapuram and Kollam districts, planting of Nendran bananas and harvesting of vegetables. Plough the coconut fields before onset of North-East monsoon and continue tapping of rubber. Undertake planting of arecanut in Pathanamthitta district.
- In the Problem Area Zone, sigatoka disease may occur in newly planted banana gardens. Cut and remove severely affected leaves and spray Propiconazole @ 1ml/litre of water. Nendran bunches are nearing harvest. Give propping to protect the plants from lodging.
- In the Northern Zone, harvest all matured crops quickly on non rainy days. Continue planting of vegetables.
- In the Central Zone, there is a chance for sheath blight disease in rice due to rains. Apply *Pseudomonas* or @ 20 gram/litre of water and Hexaconazole @ 2 ml/litre of water to prevent the disease.

▪ **Karnataka:**

- In Northeast Transition Zone, undertake planting of improved sugarcane variety Co-86032. Undertake sowing of improved variety of chickpea (JG-11), in October, before sowing treat the seeds with Rhizobium (500gm)+PSB(500gm).
- In Southern Dry Zone, undertake plantation of fruit trees like teak, neem, tamarind, acacia etc.
- In Central Dry Zone, undertake sowing of cotton under irrigated condition.
- In Northeast Dry Zone, undertake land preparation and sowing of rabi sorghum, wheat, Bengalgram, safflower, maize and sunflower.
- In Central Dry Zone, due to cloudy weather and drizzle, there is possibility of incidence of purple blotch in onion, to control spray Chlorothalanin or Mancozeb @ 2 gram per liter with adhesive gum to the spraying mixture after current spells of rain.
- In Coastal Zone, there are chances of leaf roller disease in rice, apply Quinolphos 25 EC @ 2ml/litre or Indox Carb 14.5 EC @ 0.3ml/litre of water after current spells of rain.
- In Southern Dry Zone, due to cloudy weather there are chances of blast infection in paddy and ragi nursery. To manage the blast infection in nursery, spray Bevistin @ 1gm/litre or Saaf @ 2gm/litre of water after current spells of rain.
- In Southern Transition Zone, for control of brown spot disease in rice, spray Mancozeb @ 2 g/litre or Carbendizim @ 1g/litre of water after current spells of rain.
- In Hill Zone, for the control of tube rot in ginger and turmeric, treat the tubers with 3 gm Copper Oxychloride per litre of water and remove excess water from the field after current spells of rain.

▪ **Andhra Pradesh:**

- In the Krishna Godavari Zone, prevailing rains create excess moisture field condition which will lead to iron chlorosis in younger red gram crop. To manage, spray FeSo<sub>4</sub>+citric acid on the standing crop. There is possibility of flowers square and early fruit drops in cotton. This can be managed by spraying Naphthalene acetic acid (N A A ) 10 ppm by mixing with 1- 2 % DAP twice within 10-15 days interval based on the need.
- In Chittoor and Kadapa districts of the Southern Zone, in view of rain forecast, farmers are advised to take up staking of tomato and banana crops etc. Undertake harvesting of groundnut crop in clear weather before the pods get germinated in the soil.

▪ **Telangana:**

- In North Telangana Zone, continue harvesting of maize in clear weather and sowing of jowar(Magi Jower)
- In South Telangana Zone, prevailing weather conditions are congenial for the incidence of sucking pests in bhendi, brinjal and tomato crops. To control, keep 10-20 sticky traps. If incidence is severe, spray Dimethoate @ 2 ml/litre of water.

▪ **Tamil Nadu:**

- In the Cauvery Delta Zone, continue nursery field preparation of thaladi rice crop and harvesting of kuruvai rice.
- In the Western Zone, by utilizing prevailing rainfall, undertake sowing of North East Monsoon dryland crops like sorghum and cumbu.
- In the South Zone, continue dry sowing of sorghum, cotton and maize.
- In Karaikal, continue raising medium duration rice varieties like White Ponni, Improved Samba Masuri, TKM 13



and ADT 39.

- In the High Altitude Hilly Zone, drainage facilities should be created in the field to drain off excess water.
- **Animal Husbandry**
- In the Problem Area Zone of Kerala, avoid moist conditions in cattle shed to prevent incidence of foot rot.
- In the Central Zone of Kerala, adopt mosquito control measures. Cattle should not be allowed graze in water logged areas for avoiding diseases.
- In the Cauvery Delta Zone of Tamil Nadu, avoid stagnation of water in and around the animal sheds and make adequate arrangements for water drainage and keeping the sheds dry. A lot of green fodder is available at this time hence, to protect animals from problems associated with excess grazing like Enterotoxaemia disease lambs should be vaccinated against Enterotoxaemia.
- In the Western Zone of Tamil Nadu, keep the animal shed and surrounding dry to control multiplication of disease causing mosquito and flies.
- In Eastern Dry Zone, maintain optimum room temperature in poultry and sericulture unit.

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

- **Realised Rainfall:** Rainfall occurred in East Siang, Lohit, Lower Dibang Valley, Papumpare, Tirap, Upper Siang and West Siang districts of Arunachal Pradesh, Baksa, Barpeta, Chirang, Gopalpara, Dhemaji, Dhubri, Dibrugarh, Golaghat, Jorhat, Kokrajhar, Lakhimpur, N.C.Hills, Nagaon, Nalbari, Sibsagar, Timsukia and Udalgiri districts of Assam, East Garo Hills, East Khasi Hills and West Garo districts of Meghalaya, Lunglei and Serchip districts of Mizoram, Imphal East, and Senapati districts of Manipur, Dimapur and Kohima districts of Nagaland during the week and weather remained mainly dry over rest of the region.
- **Advisories:**
  - As rainfall is very likely at most/many places over Nagaland, Manipur, Mizoram & Tripura, Arunachal Pradesh and Assam & Meghalaya during the period, along with heavy to very heavy/heavy rain at isolated places over Assam & Meghalaya on 29<sup>th</sup> and 30<sup>th</sup>, heavy rain at isolated places over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura on 29<sup>th</sup> September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops.
  - **Assam & Meghalaya, Arunachal Pradesh:**
    - In Arunachal Pradesh, undertake nursery sowing of hybrid tomato, cabbage and cauliflower on raised nursery beds. Carry out harvesting of okra. Remove excess sucker from Banana in mother plant and give support to banana bunches to protect them from falling due to heavy rain. Remove the male flower in banana bunches to attain better finger/fruit size. Do not carry out spading/hoeing operations in the ground nut field as it may disturb the soil structure. Apply need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/litre against rice skipper & leaf folder using sticker. Spray Carbendazim/Mancozeb @ 1-2 ml/lit of water for leaf spot/tikka disease in groundnut after current spells of rain. Uproot & burn virus infected plants of large cardamom and spray Imidacloprid 17.8% SL @ 2ml/10 litre after current spells of rain and repeat at 10-15 days interval.
    - In the North Bank Plain Zone, undertake sowing of brinjal, tomato, carrot, spinach beet, knol khol, cabbage, cauliflower and radish. Maintain proper drainage in the pulses fields and carry out weeding and thinning operations. Present weather condition is favourable for attack of leaf folder and rice hispa at the tillering stage of paddy field. Spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water for management after current spells of rain.
    - In Barak Valley Zone of Assam, apply top dressing of 5 kg Urea at the time of tillering stage of Sali rice, i.e., 20 -30 days after transplanting of seedlings. Undertake nursery bed preparation for winter vegetables. For stem borer and leaf minor attack in the Sali rice field, apply Chloropyriphos @ 2ml per litre of water after current spells of rain.
    - In Hill Zone of Assam, undertake weeding in 20-25 days old sesame, green gram and black gram crops after current spells of rain. Undertake planting of coconut in low lying areas with irrigation facility during this month. Undertake sowing of recommended varieties of cabbage.  
Spray with Carbendazim @ 1gm/ litre for blast spots in Sali paddy at tillering stage followed by two sprayings of Ediphenphos @ 1ml/litre at panicle initiation stage after current spells of rain.
  - **Nagaland, Mizoram, Manipur and Tripura:**
    - In Tripura, undertake sowing of winter vegetable like tomato, cauliflower, cabbage, broccoli, etc. on raised nursery beds. Spray Penconazole 10% EC @ 1ml per liter of water or Dinocap 48% EC @ 2ml or Triadimefon 25% WP @ 0.3gm per liter of water to manage the attack of powdery mildew in bitter gourd and pointed gourd.
    - In Nagaland, monitor constantly for leaf folder in TRC/WRC rice fields and use mechanical methods such as rope method for its management. Fix dead crabs, frogs or even pieces of jackfruit to bamboo sticks and place them in rice fields to attract/divert pests from sucking milk of rice grain. Carry out timely harvesting of cucurbits and okra. Carry out timely weeding and earthing up operation in brinjal, Naga king chilli and groundnut crops. Remove and destroy wilt affected brinjal plants. Provide proper drainage to soybean crop. Spray Neem oil @5ml/litre of water for aphids

and white flies in ginger and turmeric crops after current spells of rain.

- **Animal Husbandry**

- In Northeastern states, immunizations against FMD, Anthrax, HS and BQ in cattle & buffaloes and swine fever in pigs may be carried out during monsoon season. Vaccination (RDF1) against Ranikhet disease in one week old chicks and against Gamboro disease in two weeks old chicks may be carried out.

- **Fishery**

- In Assam, in fish ponds, apply fish feed (mustard oil cake) for achieving higher yield.

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

- **Realised Rainfall:** Rainfall occurred in all districts of Konkan & Goa except Palghar, in Ahmednagar, Jalgaon, Kolhapur, Pune, Sangli and Sholapur districts of Madhya Maharashtra, Aurangabad, Jalna and Osmanabad districts of Marathwada, Amraoti, Buldhana, Nagpur and Wardha districts of Vidarbha, Tapi district of Gujarat region during the week and weather remained mainly dry/dry over rest of the region.

- **Advisories:**

- As rainfall is very likely at most/many places over Konkan & Goa on 29<sup>th</sup> and 30<sup>th</sup>, at many places over Madhya Maharashtra on 29<sup>th</sup> September, along with heavy rain at isolated places over Konkan & Goa on 29<sup>th</sup> and 30<sup>th</sup>, over Madhya Maharashtra on 29<sup>th</sup> September, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops.

- As thunderstorm accompanied with lightning very likely at isolated places over Madhya Maharashtra, Marathwada and Konkan & Goa on 29<sup>th</sup> and 30<sup>th</sup> September, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Undertake propping in sugarcane.

- **Maharashtra:**

- In North Konkan, maintain 5-8 cm water level in rice fields at panicle initiation/flowering stage. When intensity of rainfall very low, apply 3<sup>rd</sup> dose of fertilizer @ 20 Kg N/ha to the late rice varieties at the time of flowering. There is a possibility for incidence of blue beetle in rice, if it is noticed; spray Quinalphos 25% EC @ 2 lit. or Triazophos 40% EC @ 625 ml or lambda-cyhalothrin 5% EC @ 250 ml in 500 lit. of water per hectare after current spells of rain.

- In South Konkan, maintain 5-8 cm water level in rice fields at panicle initiation/flowering stage. For control of stem borer in rice field, if sufficient moisture is there, apply Phorate 10 % granules @ 10 kg per ha or 5 % Quinalphos granules @ 15 kg per ha or if the field is dry, spray Phenthoate @ 800 ml or Quinalphos @ 1600 ml in 500 litres of water per ha. If the incidence of rice ear head bug is observed in rice crop, dust 2% Methyl parathion @ 20 kg/ha during calm wind. At some places groundnut crop is in peg initiation stage, proper care should be taken. If the incidence of tikka leaf spot disease is noticed, spray Carbendazim @ 10 g or Dithane M-45 @ 20 g per 10 litres of water after current spells of rain.

- In Sub-Monate Zone, for control leaf scald/blast in rice, spray Carbendazim @ 10g per 10 litres water. For control of woolly aphid in sugarcane use predators like Conobatha, Micromes, Defa. Incidence of rust is likely, if noticed spray Mancozeb 0.3 % (3g/ litre) or 0.1 % Tebuconazole (1 g/litre water). In cloudy weather there may be attack of sucking pests in vegetables, spray Thiomethoxam @ 4 g / 10 litres of water

- In Western Maharashtra Plain Zone, continue sowing of chickpea (varieties – *Vijay*, *Digvijay*). In cotton, to control of white flies, thrips and jassids, spray Acefate @ 20 g + Monosil @ 20 ml per 10 liters of water. Also for the control of leaf reddening, spray D.A.P. mixture @ 4 kg per acre. Apply this spray 2 times at an interval of 15 days. Continue sowing of safflower (varieties are- *Bhima*, *Phule Kusuma*). Use these varieties 10-12 kg/ ha. Treat seeds with Thirum or Captan or Bavistin @ 2.5 g per kg seed.

- In Marathwada, undertake sowing of chickpea and before sowing treat seed with rhizobium and PSB. Undertake sowing of safflower crop and before sowing treat seed with rhizobium and PSB. To control bacterial blight disease on fruit in pomegranate, spray Copper oxychloride @ 25 g per 10 liter of water in clear weather. Undertake harvesting of matured soybean & jowar. Keep harvested produce in safer place.

- In Vidarbha, undertake preparatory tillage in harvested greengram/blackgram fields with minimum tillage to avoid excess moisture loss from field in case of early sowing of rainfed rabi crops viz., safflower (AKS 207, Bhima, PKV pink, Nari 6), Sorghum for grain & fodder (Maldandi 35- 1, Phule Yashoda, PKV Kranti) and Chickpea (Jaki 9218, Vijay, ICCV 10, Digvijay, Akash). With prevailing condition of decline in humidity and increase in maximum temperature (>33.0 °C), foliar spray of 2% DAP (200 g DAP +10 litre water) mixed with 4 ml Planofix at boll development stage in cotton is advisable to reduce boll shedding and improve boll growth.

- **Gujarat:**

- In North West Zone and North Gujarat Zone as dry weather would prevail, apply irrigation in cotton, castor and vegetables as per requirement. Undertake harvesting of matured bajra and green gram.

- In Bhal and Coastal Zone, maintain water level of 5-7 cm in rice fields. Apply irrigation in cotton, castor and vegetables. Undertake harvesting of sesame, pearl millet, green gram and cowpea.

- In South Gujarat Zone, undertake nursery preparation for rabi vegetables like chilli, brinjal and tomato.

- In South Saurashtra Zone, apply irrigation in sugarcane crop and vegetables.

- In South Gujarat Heavy Rainfall Zone, continue sowing seeds of bottle gourd, ridge gourd, sponge gourd, bitter gourd, cucumber at the distance of 1.5m × 1m. Continue nursery preparation for brinjal and chilli. Apply irrigation in sugarcane crop. Undertake harvesting of matured pulses.
- In North Saurashtra Zone, continue transplanting of cabbage and cauliflower.
- In Middle Gujarat Zone, due to cloudy weather there are chances of infestation of heliothis in pulses, spray Quinalphos 25 EC 20ml in 10 litres of water or Renaxypr 3 ml in 10 liters of water.
- In South Gujarat Zone, for effective control of cotton jassids, spray Acetamiprid 20 % SP- 2 gm or Thiamithoxam 25 % WG- 3-4 gm in 10 liters of water.
- In South Saurashtra Zone, for the control of sucking pest in pulses, spray 10 ml Dimethoate or Methyl-O-Demeton in 10 litre of water.
- In North Saurashtra Zone, infestation of semilooper is observed in castor, spray Chlorpyrophos 30 ml in 10 liters of water.

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

- **Realised Rainfall:** Rainfall occurred in all districts of Andaman & Nicobar Islands, all districts of Sub-Himalayan West Bengal & Sikkim, Araria, Banka, Begusarai, Bhagalpur, Darbhanga, Gopalganj, Jahanabad, Katihar, Khagadia, Kishanganj, Monghyr, Saharsa, Samastipur, Saran and West Champaran districts of Bihar, Bokaro, Dumka, East Singbhum, Ramgarh and Sahebganj districts of Jharkhand, Kandhamal, Koraput, Malakangiri and Nayagarh districts of Odisha during the week and weather remained mainly dry over rest of the region.
- **Advisories:**
  - As rain/thundershowers very likely at mos/many places over West Bengal & Sikkim and Odisha during the period, at many places over Bihar, Jharkhand during the period and over Andaman & Nicobar Islands on 29<sup>th</sup> and 30<sup>th</sup> September and 1<sup>st</sup> and 3<sup>rd</sup> October, along with heavy to very heavy/heavy rain isolated places over Sub-Himalayan West Bengal & Sikkim on 29<sup>th</sup>, 30<sup>th</sup>, heavy rain at isolated palces over Gangetic West Bengal and Odisha on 29<sup>th</sup>, over Bihar and Jharkhand on 30<sup>th</sup> September and 1<sup>st</sup> October, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops.
  - As thunderstorm accompanied with lightning very likely at isolated places over Bihar on 29<sup>th</sup> and 30<sup>th</sup>, over Jharkhand and Gangetic West Bengal on 29<sup>th</sup> September, provide support to banana, young fruit plants and vegetables to prevent the crops from lodging due to strong winds. Undertake propping in sugarcane
  - **Odisha:**
    - In North Central Plateau Zone, now the weather is optimum for sowing of green gram, black gram and cowpea.
    - In West Central Table Land Zone, red and black hairy caterpillar has been found in groundnut and pulses. Apply 10-12 kg Chloropyriphs or spray 400 ml quinalphos and endosulphan in 200 liter water after current spells of rain.
    - In South Eastern Ghat Zone, current weather may favour blast disease in rice. Spray Carbendazim 50% WP @ 1g/litre of water or Tricyclazole 75% WP @ 0.6 g/litre of water after current spells of rain.
    - In South Eastern Ghat Zone, due to high humidity and cloudy weather there is chance of bacterial leaf blight in paddy, spray the crop with 1 g Streptocycline along with 20 g Copper oxychloride in 10 litres of water after current spells of rain.
    - In South Eastern Ghat Zone, leaf folder reported in rice field, spray Chlorpyriphos 20% EC 2 ml/litre of water or Chlorantraniliprole 18.5% SC 0.3 ml/litre of water after current spells of rain.
  - **Bihar:**
    - In North East and North West Alluvial Zone of Bihar, to protect from damping - off of vegetable seedlings in nursery bed, spray Copper oxychloride 50WP @ 3g/litre of water +Streptocycline @ 1g/10 litres of water on a non rainy day.
    - In South Bihar Alluvial Zone, maintain 3-5 cm water level in rice fields and undertake weeding and hoeing in vegetables. Present weather conditions are highly favourable for incidence of Blast disease in rice. Monitoring at 2-3 days interval is advised. Early symptoms include development of eye shaped spot in the leaf sheath with light center and dark boundaries. If symptoms appear, spraying of Bavistin 2 g/litre of water 2-3 times with an interval of 10 day is advised for effective control. Also in maize fields, constant monitoring of stem borer should be done, if insect population is above ETL, spray Carbrayl @ 2 gm/ litre of water. Undertake plant protection measures after current spells of rain.
  - **Jharkhand:**
    - In Central and North Eastern Plateau Zone, utilising the realised and expected rainfall, undertake sowing of fodder crops. Due to cloudy, humid and windy weather it has seen that particularly in hybrid rice, intensity of false smut has become more in rice at panicle emergance to Milking stage and the spores of false smut likely to follow wind coming from variable direction and subsequently infest adjacent field crops also. Therefore, immediately spray Propiconazole or Tilt @ 1 ml per liter of water to check further infestation during clear weather.
    - In South Eastern Plateau Zone, undertake field preparation for the cultivation of short duration early potato varieties viz. Kufri Ashoka and Kufri Pukhraj, Kufri Surya and Kufri Puskar of 80-90 days crop.

- In Western Plateau Zone, continue land preparation and sowing of toria. Recommended varieties of toria are T.-9, B.R.-23 and P.T.-303. Timely sown direct seeded rice crops are at flowering stage and this stage is susceptible to the attack of the insect Gandhi bug. To control the insects, dusting of Chlorpyrifos / Quinalphos / Methyl Parathion dust @ 10 kg per acre is recommended. However, dusting should be carried during clear weather.
- In Central and North Eastern Plateau zone, pigeon pea crops at vegetative stage are seen with the infestation of insects like beetles and can be controlled by spraying of Chlorpyrifos @ 1.5 ml per liter of water after current spells of rain.
- **West Bengal:**
  - In the New Alluvial Zone, apply second top dressing of urea @ 4.5 kg per bigha at panicle initiation stage in medium and late varieties of kharif rice. Spray 0.75ml Nuvan/Vapona per litre of water to control brown plant hopper. Spray 2.5 g Indofil-M-45 or koboij per litre of water for leaf spot disease in cauliflower. Apply 1 ml Dimecron per litre of water for management of leaf cutting caterpillar in Amrapali mango after current spells of rain.
  - In the Old Alluvial Zone, undertake seedbed preparation and sowing of cabbage and cauliflower. Spray Propoconazole @ 0.75 ml/litre of water to control sheath blight, Tricyclozole @ 0.5 gm/litre of water to control blast and Chlorpyrifos @ 2 ml/litres of water to control leaf folder/case worm in paddy. Undertake plant protection methods after current spells of rain.
  - In the Hill Zone of West Bengal, provide proper drainage to ginger, turmeric, large cardamom and Mandarin orange. Maintain 2-3 cm of water in the rice field. Drainage system should be maintained properly to remove excess water from rice field. Carry out regular harvesting of bhindi and round chilli crop. Spray Azadirachtin 0.03% (300PPM) neem oil based WSP @ 2000gm/ ha in 1000 litres of water, if 10% dead heart or 2 egg mass / m<sup>2</sup> of yellow stem borer is found in rice and spray Validamycin 3%L @ 0.75 ml/lit of water for incidence of blast and sheath blight disease in rice crop. Undertake plant protection methods after current spells of rain.
  - In Coastal Saline Zone, carry out hand weeding in the Aman paddy field. Spray Trizophos @ 1.5 ml/litre of water for stem borer attack and Chlorpyrifos @ 1.5 ml/ litre of water for leaf roller attack in Aman paddy. Spray a mixture of Bavitin@1g/liter of water and Diethane M-45 @ 2.5 gm/litre of water for Stem rot or blunt rot due to occasional rainfall and high humidity Early winter Vegetables. Undertake plant protection methods after current spells of rain.
- **Animal Husbandry**
  - In Coastal Saline Zone of West Bengal, protect animals from parasites. Lambs should be vaccinated against Enterotoxemia. Prepare silage from the abundantly available green fodder. Also, green fodder can be mixed with dry grasses and fed to the animals. Calf should be fed with calf starter after 3-4 days of birth. It helps in good development of the digestive system.
- **Fishery**
  - Apply Rice bran & Mustered oil cake (1:1) @ 3-2% of the total body weight of fish stocked in the fish culture pond as a supplementary feed.

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

- **Realised Rainfall:** Rainfall occurred in all districts of East Madhya Pradesh except, Didori, Shahdol, Sidhi, Singrauli and Umaria, all districts of West Madhya Pradesh except Alirajpur, Barwani, Betul, Jhabua, Mandasaur, Neemuch, Ratlam, Sheopur Kalani and Ujjain, in Balod, Balrampur, Bastar, Bilaspur, Dhamtari, Janjgir, Jashpur, Kabirdham, Korba, Raigarh, Rajnandgaon, Sukma, Surajpur and Surguja districts of Chhattisgarh during the week and weather remained mainly dry over rest of the region.
- **Advisories:**
  - As rain/thundershowers very likely at most/many places over Chhattisgarh on 29<sup>th</sup>, 30<sup>th</sup> September, 1<sup>st</sup> and 2<sup>nd</sup> October, along with heavy rain at isolated places over Chhattisgarh on 29<sup>th</sup>, 30<sup>th</sup> September, 1<sup>st</sup> and 2<sup>nd</sup> October, avoid intercultural operation and application of plant protection measures and fertilizers to the standing crops.
  - **Madhya Pradesh:**
    - In Kymore Plateau and Satpura Hill Zone, continue nursery preparation of cauliflower and cabbage. Apply irrigation in rice fields at flowering stage. Undertake field preparation for sowing of mustard and garden pea.
    - In Malwa Plateau Zone, continue nursery preparation of cauliflower for mid season (Oct-Nov.). Continue harvesting of matured early soybean variety. Undertake field preparation for chickpea, potato, garlic and onion.
    - In Jhabua Hill Zone, continue harvesting of matured pods of black gram and green gram in clear weather. Undertake harvesting of maize and soybean.
    - In Gird Zone, undertake sowing of toria. Undertake land preparation for sowing of mustard. Undertake harvesting of matured soybean, maize, green gram, black gram and bajra.
    - In Vindya Plateau Zone, undertake harvesting of matured soybean, green gram and black gram. Undertake nursery sowing of *rabi* vegetables and keep inputs ready for sowing of *rabi* crops.
    - In Central Narmada Valley Zone, infestation of stem borers and gundhi bug can be seen in the rice fields, apply Quinalphos 25 EC or 20 EC @ 1-1.25 litre per hectare.



▪ **Chhattisgarh:**

- In North Hill Zone, continue raising of seedlings of winter vegetables like cauliflower, cabbage, chilli, tomato, brinjal. Undertake sowing of *rabi* crops like toria, mustard, green pea and potato and arrange seed & fertilizer for cultivation of rain fed wheat, if having assured irrigation facility.
- In Bastar Plateau Zone, continue nursery preparation for *rabi* vegetables. Undertake field preparation for sowing of toria.
- In Chhattisgarh Plain Zone, continue nursery sowing of medium duration cauliflower. Keep inputs ready for sowing of *rabi* crops like chickpea, wheat, linseed, toria etc.
- In North Hill Zone, attack of blast is observed in rice crop, spray Tricyclazole @ 120 gram per acre after current spells of rain and repeat after 10-12 days as per requirement.

• **Animal Husbandry**

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

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

- **Realised Rainfall:** Rainfall occurred in all districts of Himachal Pradesh except Kinnaur, Lahaul & Spiti, all districts of Uttarakhand, Ludhiana, Nawanshahar, Patiala, Ropar, Mohali districts of Punjab, Ambala, Chandigarh, Faridabad, Gurgaon, Karnal, Kurukshetra, Mewat, Palwal, Panchkula, Panipat, Sonapat, Yamunanagar districts of Haryana, all districts of Delhi except North East Delhi, Ambedkarnagar, Bhairaich, Barabanki, Basti, Faizabad, Farrukhabad, Fatehpur, Gonda, Gorakhpur, Hardoi, Kannauj, Kanpurcity, Kaushambi, Kheri, Lucknow, Maharajganj, Pratapgarh, Rai Bareilly, SahujiMaharaj Nagar, Sant Kabir Nagar, Sant Ravidas Nagar, Shrawasti, Sidharth nagar, Sitapur, Sultanpur, Unnao, Varanasi districts of East Uttar Pradesh, all districts of West Uttar Pradesh except Etawah, Hamirpur, Jalaun, in Baran districts of East Rajasthan during the week and weather remained mainly dry/dry over rest of the region.

• **Advisories:**

▪ **Jammu & Kashmir:**

- In Sub Tropical Zone, as mainly dry weather would prevail, continue harvesting of matured rice and maize. Sowing of toria (RSPT-1, RSPT-2, RSPR-3) intercropped with gobi sarson (GSS-1) can be done under conserved soil moisture condition. Treat the seed with Captan/Thiram @ 3g/kg seed against alternaria blight/seedling rot.
- In Rajouri, Ramban, Poonch and Udhampur districts of Intermediate Zone, continue land preparation and sowing of toria and continue nursery raising of main season cole crops (cauliflower, cabbage and Knol khol). Farmers are advised to utilize the upcoming dry weather conditions to harvest matured rice and early sown maize crop (where cobs and stem color turns yellow).
- In Intermediate Zone, farmers are advised to sprinkle the nursery beds with 0.2 % Bavistin solution (2 g/liter of water) to control damping off. Also, farmers are advised to keep vigil on blister beetle attack in maize crop. If observed, apply Carbofuron 3G @ 20 kg/ha (apply 3- 4 granules/leaf whorls to control the blister beetle).

▪ **Uttarakhand:**

- In Central Plain Zone of Uttar Pradesh, continue sowing of toria. Keep mustard seeds ready ( kanti, narendra mustard ageti-4) and fertilizers for early sowing of mustard after current spells of heavy rain.
- In Udham Singh district of Bhabar and Tarai Zone, in irrigated areas sowing of radish and turnip and in unirrigated mid hills, radish varieties like Meenu early, Japanese white, Pusa Himani and early varieties of Saljam like Parpiltop, white glow should be sown.

▪ **Punjab, Haryana and Delhi:**

- In Delhi, continue sowing of carrot in the raised bed. Recommended cultivars: - Pusa Rudhira with Seed rate- 4 kg/acre. Application of FYM, potash and phosphorus fertilizer is recommended. Seed treatment with Captan @ 2 gm per kilogram is advised. Field preparation should be started for early pea and arrangement for quality seeds should be done. It is suitable time for preparation of nurseries on raised bed for mid season cauliflower (Nov.-Dec.). Varieties: Pusa sharad, Pusa hybrid-2, Pant shubra. In present weather condition, constant monitoring for brown plant hopper in paddy field is advised. Farmers are advised to enter into the middle of the crop field and see mosquito like insect at the basal portion of the plant. If insect population is above ETL, spray of Imidacloprid 17.8 % SC @ 1.0 ml / 3 lit of water is recommended. In paddy crop constant monitoring of stem borer is advised by using pheromone traps 4-6 per acre is advised, If insect population is above ETL, than broadcast of Cartap 4% granules @ 10 kg/acre for effective control is recommended.
- In Haryana, as dry weather is forecasted during the period, farmers are advised to apply protective irrigation in standing crops wherever necessary. Avoid moisture stress during flowering and boll formation stages in cotton.
- In Western Zone of Punjab, as dry weather would prevail, apply irrigation in rice and cotton fields as per requirement. Continue sowing of early potato and “desi” varieties of radish (Punjab Pasand), turnip (L-1) and carrot (Punjab Black Beauty, Punjab Carrot Red and PC 34), using 4-5 kg seed rate of radish and carrot and 2-3 kg seed rate of turnip per acre. Keep ridges 45 cm and plants 7.5 cm apart.

- In Western Zone of Punjab, in the prevailing weather, there is chance of attack of leaf folder and plant hoppers in rice. Control leaf folder when leaf damage reaches 10 per cent by spraying 20 ml Fame 480 SC or 170g Mortar 75 SG or 350 ml Sutathion/ 40 EC in 100L of water /acre. □ The plant hoppers can be controlled by spraying 40 ml of Confidor/Crocodile 17.8 SL or 800 ml of Ekalux/Quinalmass 25 EC in 100 litres of water per acre.
- **Himachal Pradesh:**
  - In Mid Hills Sub-Humid Zone of Himachal Pradesh, in Solan, Shimla, Bilaspur, Sirmaur districts, farmers are advised to prepare fields for sowing of garlic, radish, carrot, turnip and other winter vegetables.
  - In Mid Hills Sub-Humid Zone of Himachal Pradesh, in Solan, Shimla, Bilaspur, Sirmaur districts, present weather is conducive for attack of late blight disease in tomato crop, for control spray Diethane M-45 or Ridomil Gold @ 250 gram in 100 litres of water after current spells of rain.
- **Uttar Pradesh:**
  - In Central Plain Zone of Uttar Pradesh, undertake harvesting of matured maize and pulse crops.
  - In Central Plain Zone of Uttar Pradesh, due to prevailing weather condition, there may be chances of attack of khaira disease in paddy crop, for control apply Zinc Sulphate @ 25kg/ha as basal. For control of stem borer, brown plant hopper, gall midge, leaf folder and jassids, apply Profenophos 50EC @ 2 ml/litre.
  - In Central Plain Zone of Uttar Pradesh, there may be chances of attack of yellow mosaic in moong/urad crop for control spray 2 to 3 times of Dimethoate 30 E.C. @ 1 litre or Methyl-O-Demeton 25 E.C. @ 1 litre per hectare.
- **Rajasthan:**
  - In Sub Humid Southern Plain and Aravali Hill Zone, in Bhilwara, Chittorgarh, Rajsamand, Sirohi and Udaipur districts, undertake harvesting of matured moong and urd crops. Preparation of seed bed should be done for raising nursery of onion, chilli, brinjal, cauliflower, cabbage and tomato for Rabi season. Main varieties of onion are Punjab safed goal, Udaipur 102, nasik red and seed rate should be 10 kg/ha. Apply irrigation in standing crops as per requirement.
  - In Sub Humid Southern Plain and Aravali Hill Zone, in Bhilwara, Chittorgarh, Rajsamand, Sirohi and Udaipur districts, prevailing weather condition is congenial for attack of cob borer in maize crop for control spray Carberyl WP @ 4 g per litre.
  - In Jaipur, Ajmer, Tonk and Dausa districts of Semi-Arid Eastern Plain Zone, Undertake field preparation for the sowing of rainfed Taramira and Mustard. Farmers are advised to procure seed, fertilizers and chemical in advance for the sowing of crops. To Control Painted bug & mustard sawfly in mustard treat seeds with Imidacloprid 600 FS. @ 8 ml per kg seed before sowing. Time for the sowing of Radish (Pusa Rasmi). Use 10-12 kg seed per hectare and 20 kg Nitrogen, 48 kg Phosphorus and 48 kg potash per hectare at the time of sowing. Time to procure seed and fertilizer for the sowing of Deshi carrot. Pusa Keshar is improved variety of Deshi carrot. Use 30 kg nitrogen, 40 kg phosphorus and 120 kg potash at the time of sowing and remaining 30 kg nitrogen 45 days after sowing. Use 5 to 6 kg seed per hectare and row to row spacing 30 cm and plant to plant spacing 6-8 cm.
  - In Alwar, Bharatpur, Dhaulpur, Karauli, Sawaimadhopur districts of Flood Prone Eastern Plain Zone, undertake raising of nursery for late sown cauliflower. Pusa snow ball K-1, Hisar-1, Dania and Selection-7 are improved varieties. Use 375 to 400 gram seed per hectare. Treat seeds with 2 g Captan or 3 g Thiram per kg seed.
  - In Jaipur, Ajmer, Tonk and Dausa districts of Semi-Arid Eastern Plain Zone, prevailing weather condition is congenial for attack of blight in tomato crop, for control spray spray Mencozeb @ 2 gm or Copper Oxchloride @ 3 gm per litre of water.
- **Horticulture:**
  - In East Rajasthan, In Irrigated North Western Plain Zone, Hanumangarh and Sriganganagar districts, start planting of new seedlings of kinnow in already prepared pit in the field. Purchase kinnow plants from certified nursery, after planting apply light irrigation at regular interval.
  - In Alwar, Bharatpur, Dhaulpur, Karauli, Sawaimadhopur districts of Flood Prone Eastern Plain Zone, prevailing weather condition is congenial for attack of fruit fly in guava, for control spray Malathion 50 EC @ 1.0 ml/litre of water.
- **Animal Husbandary:**
  - In Jammu & Kashmir, vaccination should be done in livestock against foot & mouth disease, Haemorrhagic Septicemia etc. Farmers are advised for silage making, so that green fodder should be conserved for scarcity period.
  - In Punjab, in poultry, light plays an important role in egg production. Provide 14-16 hours of total light to layers, including the day light. Gradually go on increasing the light when egg production starts.

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