



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन  
**National Agromet Advisory Services Bulletin**

जारी करने की तिथि/ **Date of issue: 06 January 2025**

आधारित/**based on**

विस्तारित अवधि मौसम पूर्वानुमान/**Extended Range Weather Forecast (ERFS)**

वैधता/**Validity: 03 January 2025 – 16 January 2025**

जारीकर्ता/**Issued by**

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

**AICRP on Agro-Meteorology (AICRPAM)**

केंद्रीय बारानी कृषि अनुसंधान संस्थान

**Central Research Institute for Dryland Agriculture (CRIDA)**

भारतीय कृषि अनुसंधान परिषद

**Indian Council of Agricultural Research (ICAR)**

और

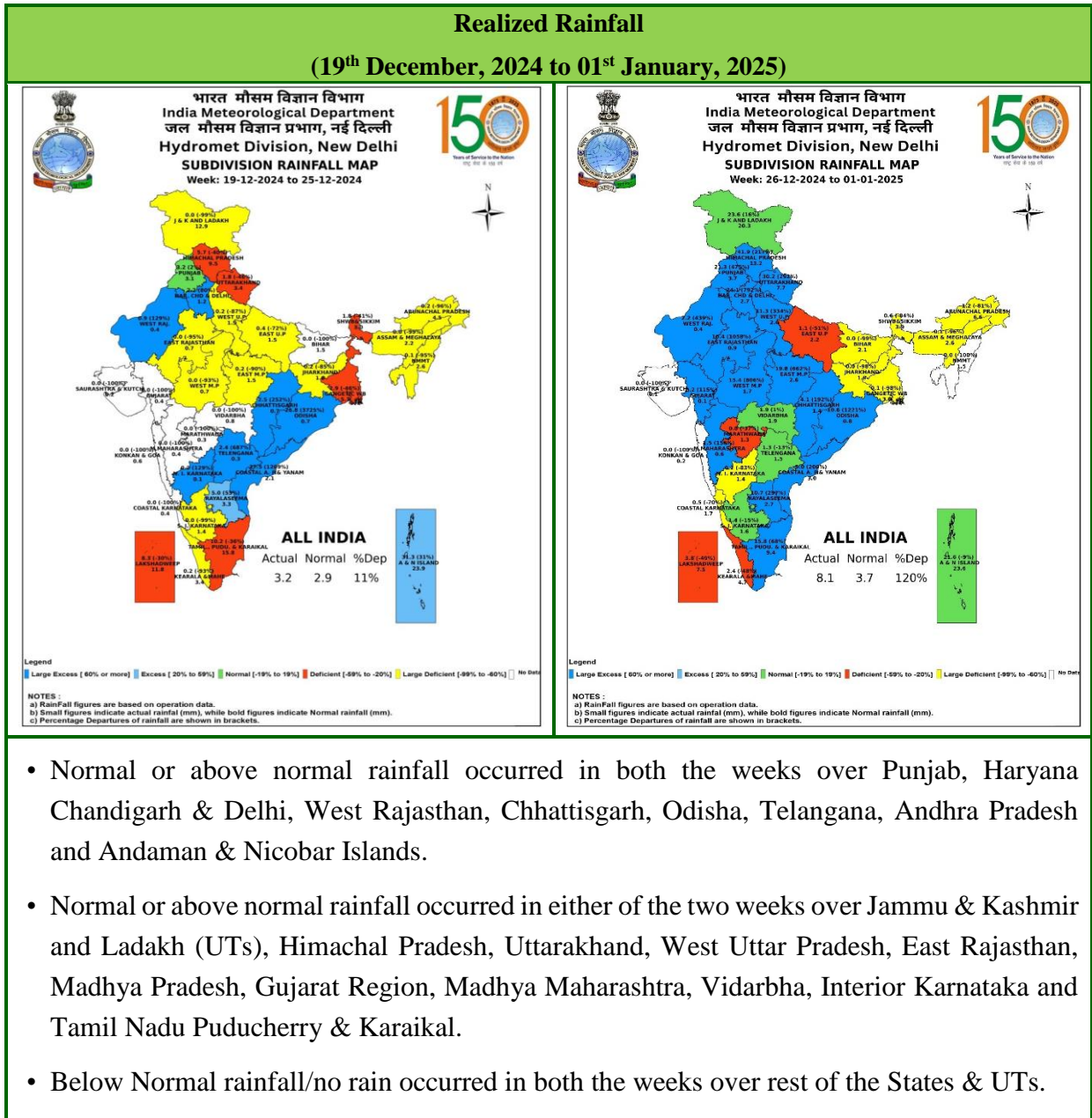
भारतीय मौसम विज्ञान विभाग

**India Meteorological Department (IMD)**

पृथ्वी प्रणाली विज्ञान संगठन

**Earth System Science Organization**

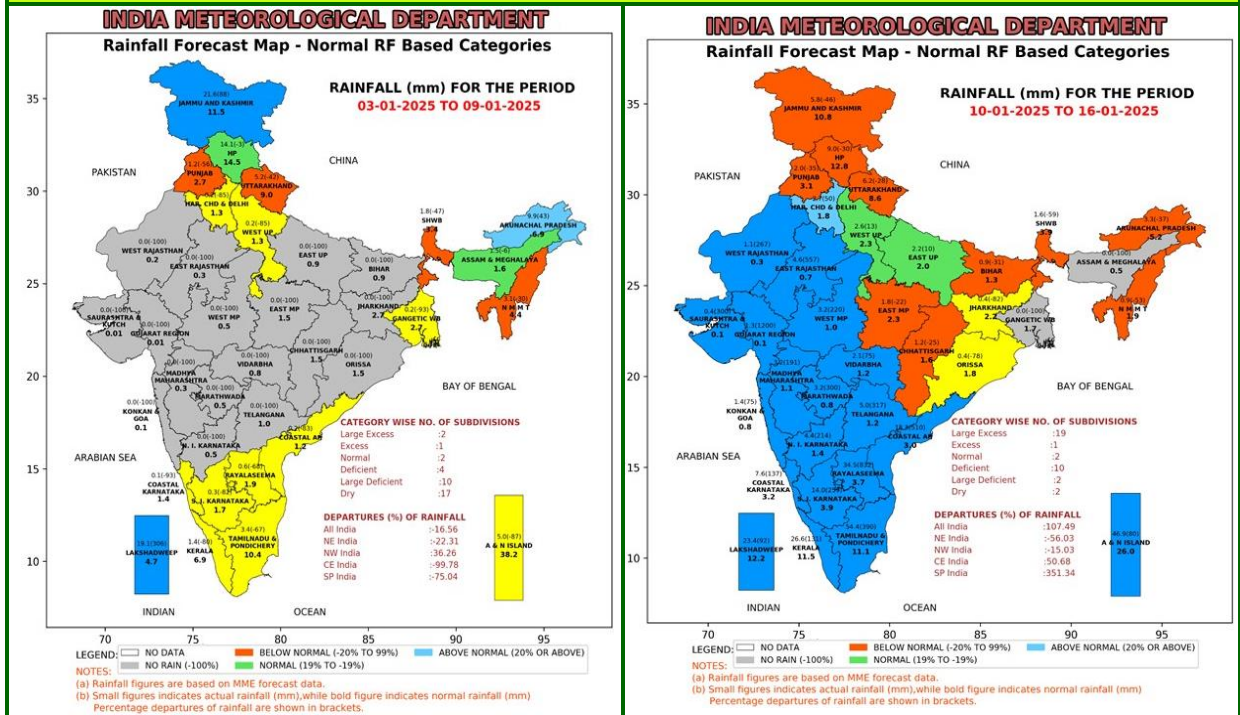
वास्तविक वर्षा तथा विस्तारित अवधि पूर्वानुमान  
**Realized Rainfall and Extended Range Forecast**  
 (वर्षा और तापमान)  
 (Rainfall and Temperature)



- Normal or above normal rainfall occurred in both the weeks over Punjab, Haryana Chandigarh & Delhi, West Rajasthan, Chhattisgarh, Odisha, Telangana, Andhra Pradesh and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Uttarakhand, West Uttar Pradesh, East Rajasthan, Madhya Pradesh, Gujarat Region, Madhya Maharashtra, Vidarbha, Interior Karnataka and Tamil Nadu Puducherry & Karaikal.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC- 01<sup>st</sup> January, 2025) (03<sup>rd</sup> to 16<sup>th</sup> January, 2025)



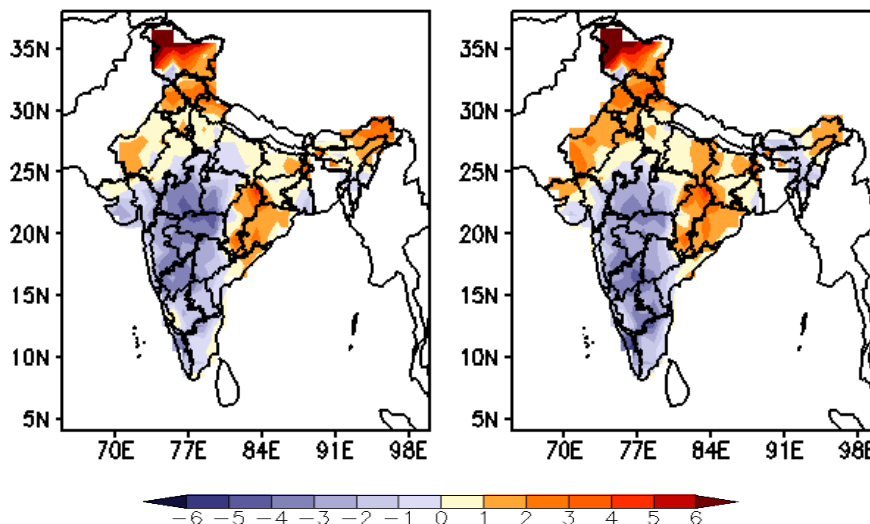
- **Week 1 (03.01.2025 to 09.01.2025):** Rainfall is likely to be above normal over Jammu & Kashmir.
- **Week 2 (10.01.2025 to 16.01.2025):** Rainfall is likely to be above normal over Tamil Nadu, Kerala, Rayalaseema, some parts of Coastal Andhra Pradesh and South Interior Karnataka.

**Maximum and Minimum temperature anomaly ( $^{\circ}$ C) forecast  
for the next 2 weeks (IC- 01<sup>st</sup> January, 2025)  
(03<sup>rd</sup> to 16<sup>th</sup> January, 2025)**

**MME forecast Tmax anomaly (Deg C)**

(Week1: 03Jan–09Jan)

(Week2: 10Jan–16Jan)



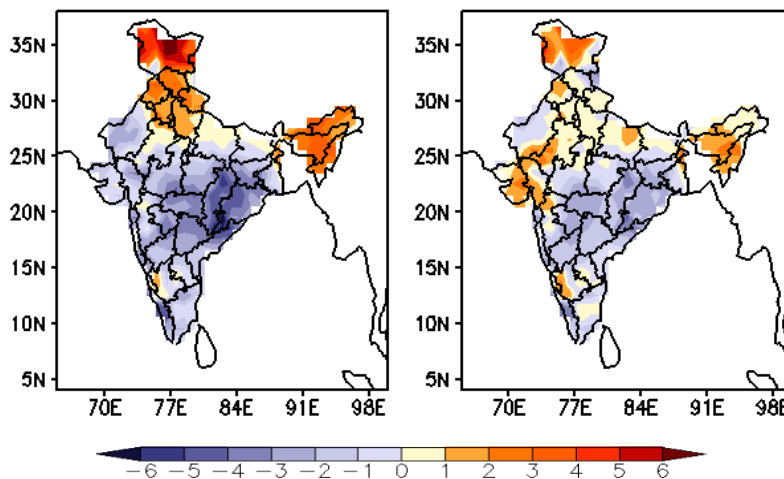
**Maximum Temperature (Tmax)**

- **Week 1 (03.01.2025 to 09.01.2025) and Week 2 (10.01.2025 to 16.01.2025):** Maximum temperature is likely to be below normal over Central and South India. However, it is likely to be above normal over East India, many parts of Chhattisgarh, North West India and North East India.

**MME forecast Tmin anomaly (Deg C)**

(Week1: 03Jan–09Jan)

(Week2: 10Jan–16Jan)



**Minimum Temperature (Tmin)**

- **Week 1 (03.01.2025 to 09.01.2025):** Minimum temperature is likely to be below normal over many parts of the country. However, it is likely to be above normal over North East India and many parts of North West India.
- **Week 2 (10.01.2025 to 16.01.2025):** Minimum temperature is likely to be below normal over Central and East India. It is likely to be above normal over many parts of North West India & North East India and some parts of Karnataka and West India.

## Strategic Agricultural Planning based on rainfall till 05 January 2024

### Agromet Advisories

#### Kerala

Kerala received a rainfall of 0.1 mm (-96% large deficit) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is large deficit rainfall for week 1 and large excess rainfall during week 2.

- To control and prevent bacterial leaf blight in paddy, dissolve 20 g of cow dung in one liter of water and spray the supernatant liquid by mixing with 20g of pseudomonas. If the attack is severe spray 6 g of Streptocycline in 30 litre of water
- Attack of Rhinoceros beetle and Red Palm weevil is seen in coconut. As a prophylactic measure against this, top most three leaf axils may be filled with 25g neem cake and 200g sand mixture or naphthalene balls and sand and repeat this procedure 45 days interval; Crown cleaning followed by the application of 20g cartap hydrochloride 4G/ Fipronil 0.3G / Carbosulphan 6G mixed with 200g sand on top three leaf axils; mist net balls can be inserted around leaf spindles. Ideal time for mulching arecanut. Keep the garden clean and start irrigation. Spray 0.2% Carbaryl in spindle bug affected gardens.
- In rubber protect young leaves of budded seedlings from shedding due to fungal diseases spray a solution of Copper oxy chloride 4g in 1 litre of water.
- Black pepper plants are prone to pollu disease. To manage this, ensure proper shading in the plantation and spray 1% Bordeaux mixture. Additionally, prepare a solution by mixing 1 gram of Carbendazim and Mancozeb in 1 litre of water and spray it on the plants.
- There is a chance of pod borer attack in cowpea. It can be controlled by spraying 50 grams Neem extract per one liter of water or spray 20 grams of Beauveria in one litre of water.
- Yellowish-brown patches are observed on the leaves. As the disease progresses, these patches merge, causing the leaves to appear scorched, and lesions become visible. To control this, dissolve 20 grams of fresh cow dung, filter the solution, and mix it with 20 grams of Pseudomonas dissolved in one litre of water. Spray this mixture on the affected plants.

#### Tamil Nadu

Tamil Nadu received 1.6 mm (-47% deficit) of rainfall from 01 January to 05 January 2025. The extended-range weather forecast (rainfall) for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is large deficit rainfall for week 1 and large excess rainfall for week 2.

- In rainfed crops, farmers are advised to ensure proper drainage systems to avoid water stagnation in the fields and prevent crop damage from continuous rainfall.
- Farmers are advised to postpone the irrigation for the next two days.
- Continuous rainfall may affect the crop stand; hence farmers are requested to practice earth up and form new ridges to provide additional anchorage to the plants in sorghum and maize.
- Harvest the pods immediately and store them safely to prevent fungal spread.
- In Paddy (maturity), maintain an appropriate water level to prevent crop damage.
- High wind speeds may damage the physical appearance of the crop. Hence, farmers are advised to practice propping. Earthing up should be practised to avoid lodging in banana.



- Continuous rainfall may lodge the crop; hence, farmers are advised to provide support by propping and to practice earthing up in sugarcane.

### **Karnataka**

Coastal Karnataka received 0.0 mm (-100% No rain) rainfall, North Interior Karnataka received rainfall 0.0 mm (-100% no rain) and South Interior Karnataka received rainfall of 0.0 mm (-100% No rain); from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is large deficit rainfall over Coastal Karnataka and South Interior Karnataka and no rainfall over North Interior Karnataka for week 1 and large excess rainfall over Coastal Karnataka and South Interior Karnataka, and North Interior Karnataka during week 2.

#### *North Interior Karnataka*

- Weather is congenial for occurrence of leaf reddening take up spraying of Magnesium Sulphate @ 10 gram per litre of water and 2 per cent urea solution. Cotton picking may be taken up.
- Harvest matured crop and dry the grains under bright sunlight in pigeonpea.
- Cut the matured cane. Do not burn the trash. Spread the trash in between the rows and apply 20 Kg Urea and 20 Kg Super Phosphate fertilizer per acre on the trash. After this apply 2.5 Kg of trash decomposing bacteria mixed in dung slurry on the trash. This will facilitate early decomposition of the trash.
- Weather conditions are congenial for sucking pests in safflower, take up spraying of 0.2-gram Thiamethoxam 25 wg or 1-gram Acephate 75 SP dissolved in one litre of water.
- Weather conditions are congenial for Fall army worm: To manage, spray the crop with 0.2-gram Imamectin benzoate or 4.0 ml Phynoteron dissolved in 10 litres of water.

#### *South Interior Karnataka*

- Right time for harvested late Kharif crops cleaning, drying and stored in gunny bag.
- The grains of the harvested crops should be properly dried by retaining moisture percentage of Cereals 11-12 %, Pulses-9%, Oilseeds-8% and Vegetable seeds 5-6% for long storage & also minimizes the store pest damage.
- To protect the pulse grains from storage pests, apply oils of Castor/ linseed/honge/neem oil @ 3-5 ml per kg of grains.
- Maintain optimum room temperature in sericulture and poultry unit.
- To control of aphids and white fly in Field bean and Cowpea to spray Carbosulfan 25% EC @ 1.5 ml/ litre of water.

### **Andhra Pradesh**

Coastal Andhra received 0.0 mm (-100% no rain) and 0.0 mm (-100% excess) of rainfall in the Rayalaseema region from 01 January to 05 January 2025, the extended-range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) shows large deficit rainfall over Rayalaseema and Coastal Andhra Pradesh for week 1 and large excess rainfall over Rayalaseema and Coastal Andhra Pradesh during week 2.

- Rabi rice transplanting is under progress. Farmers are advised to apply recommended dose of fertilizers and make 20 cm alleyways at every 2 meters apart to facilitate free aeration and for uniform application of fertilizers, weedicides and pest management practices. Zinc deficiency is major problem during rabi season, suggested to apply zinc sulphate @ 20 kg/acre to avoid the zinc deficiency. Deficiency in the standing crop can be corrected by spraying zinc sulphate @

0.2% (2 g /l of water). The spraying should be repeated at 5 days interval depending on the severity of the problem.

- Farmers are advised to take up intercultural operations and apply 10 kg of urea per acre at initial flowering stage. During maximum flowering stage apply gypsum @ 200 kg/acre by placement method.
- In North Coastal Andhra Pradesh, farmers are advised to go for sowing of sesame after rice with high yielding sesame variety like YLM-66 with a seed rate of 2 kg/acre duly following the seed treatment with carbendazim @ 1g/kg seed and go for pre-emergence spraying with pendimethalin @ 4 ml/L for control of weeds.
- Current weather conditions are congenial for helicoverpa and wilt incidence in gram and farmers are advised to spray emamecton benzoate @ 0.4 g or chlorantraniliprole @0.3 ml per liter of water. Current weather conditions are congenial for wilt incidence in gram. For control, advised to spray carbendazim + mancozeb @2 g per litre of water is recommended.
- Present weather conditions are congenial for incidence of hoppers, anthracnose and powdery mildew in mango. To control, during flower bud initiation advised to spray imidacloprid @0.3 ml + chlorothalonil @2.0 ml per litre of water. Before flowering stage, to spray thiamethoxam @0.3 g or buprofezin @ 1.5 ml and hexaconozol@2 ml or mancozeb@2 g per litre of water is recommended.
- Present weather conditions are favorable for sucking pest incidence in mango. For control, full-grown trees, especially centre branches, have to be pruned to facilitate adequate light penetrance. Spray neem oil @ 5 ml per litre of water and based on intensity of infestation spray systemic insecticides i.e., imidacloprid 17.8SL @ 0.3 ml or thiamethoxam @ 0.2 g per liter of water is recommended.

### **Odisha**

Odisha received rainfall of 0.0 mm (-100% no rain) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is a no rainfall over Odisha for week 1 and large deficit rainfall during week 2.

- Provide light irrigation to standing vegetables and crops during morning hours to prevent damage from fog, low temperature and moisture stress.
- Cover the recently planted cole crops with paper pockets during night time to avoid low temperature.
- To manage fungal and bacterial diseases (leaf blight, wilt, and rot) in different standing crops, spray (Metalaxyl+ Mancozeb) @ 2-gram/litre of water or (Carbendazim+ Mancozeb) @ 2-gram/litre of water along with Plantomycin @ 1-gram/ litre of water.
- Do proper field surveillance for pests and diseases regularly and take appropriate plant protection measures accordingly.
- For maintaining the heat in the poultry shed during winter season, install heaters in the shed.
- In winter during cold hours farmers should keep doors, windows and open spaces in cow sheds covered with polythene or gunny bag curtains to prevent direct contact to cold air.
- Present weather condition is favourable for the incidence of yellow mosaic virus which is caused by the vector white fly. To control go for spraying of triazophos @ 400 ml/acre or Acetamipride @ 40 g per acre
- Prevailing weather condition favours the development of sucking pest like aphid, jassids and whitefly. Install yellow sticky trap @ 8nos/acre to monitor the pest population. Apply Neem oil-based pesticide Azadiractin 0.03% (300 ppm) @ 5ml/ltr of water at initial stage of infestation.

- **Wilting:** In view of high humid condition wilting may occur at this stage. Spray Mancozeb 75% WP @ 2g/ltr of water if symptom is noticed. Fruit & Shoot borer: Install pheromone trap @ 8nos/acre to monitor pest population.

### **Maharashtra**

Konkan received rainfall of 0.0 mm (-100% no rain), 0.0 mm (-100% no rain) rainfall over Madhya Maharashtra, 0.0 mm (-100% no rain) rainfall over Marathwada, and 0.0 mm (-100% no rain) rainfall over Vidarbha was recorded from 01 January to 05 January 2025. The extended range weather forecast (rainfall) for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is no rainfall over Konkan, Madhya Maharashtra, Marathwada, and Vidarbha for week 1 and large excess rainfall over Konkan, Madhya Maharashtra, Marathwada and Vidarbha during week 2.

### *Konkan*

- The roots of the tree need to be stressed for the mango blooming. For this, one meter of grass around the trunk of the mango orchards should be removed to pulverize the soil in the basin, shallow ploughing should be done in the open space in the mango orchard, the cleaning of the orchard should be completed as soon as possible so that the amount of water in the soil in the mango orchard can be reduced quickly and help the tree to bear stress.
- Avoid consecutive spraying of the same insecticide. Clean the cashew orchard by removing weeds and then proceed with the pesticide spray. Additionally, spray nearby native trees along with the grafted cashew trees to achieve effective control over the pest infestation. Due to cloudy weather, it likely led to an outbreak of anthracnose disease. The disease causes irregularly shaped hazel spots on the leaves and if the disease intensifies, the whole leaves blight off and fall off. To control disease, spray Mancozeb 20 gm per 10 liters of water.
- Fertilizer's second dose should be applied to the arecanut orchard during December to January. For arecanut plants older than three years, 160 grams of urea and 125 grams of muriate of potash should be applied per tree using the ring method. While applying these fertilizers to orchards under three years of age, one-third of the dose should be given in the first year and two-thirds in the second year.
- At the rhizome formation stage, the turmeric crop is likely to experience water scarcity. Additionally, since the rhizome formation stage is highly sensitive to soil moisture, it is essential to ensure an adequate water supply to the crop as needed.
- Cloudy weather and increased humidity may lead to a significant rise in the population of hoppers on mango crops. If the hopper population exceeds the economic threshold level (ETL) (on vegetative flush/flowering stage => 10 hoppers per flush/inflorescence), insecticide spraying should be undertaken. For pale greenish vegetative flush, spray Deltamethrin 2.8% EC at 9 ml per 10 liters of water. During the bud initiation stage, spray Lambda-Cyhalothrin 5% EC at 6 ml per 10 liters of water. Before flowering, spray Imidacloprid 17.8% EC at 3 ml or Buprofezin 25% EC at 20 ml per 10 liters of water. After flowering, during the fruit set stage, spray Thiamethoxam 25% WG at 1 gram per 10 liters of water.
- Due to cloudy weather, it likely led to an outbreak of anthracnose disease. The disease causes irregularly shaped hazel spots on the leaves and if the disease intensifies, the whole leaves blight off and fall off. To control disease, spray Mancozeb 20 gm per 10 liters of water.
- Due to cloudy and humid weather, Amaranths, Radish etc. Leafy vegetables are likely to be attacked by aphids and leaf-eating caterpillars. To control this pest, spray 50% EC malathion at the rate of 1 ml per liter of water.

### *Madhya Maharashtra*



- Rabi Sorghum is in flowering to seed setting stage. Soil moisture is depleted and needs to be irrigate immediately for higher seed yield.
- One irrigation may be supplied on availability. Foliar application of 2 percent urea is advised. and a second spray of 2 % Potassium nitrate @ 200 g in 10 lit water is recommended for chickpea.
- Harvesting at reduced seed moisture level to 10-12 per cent in Kharif pigeonpea.
- One spray of NAA @ 20 ppm is advised on mangle bloom to reduce the flower drop.

#### *Vidarbha*

- Undertake remaining picking of well burst cotton bolls preferably during morning hours. Picked cotton be dried in shed and store at dry place. Store cotton from different pickings separately.
- Undertake need based intercultural and irrigation in chickpea crops.
- In late sown irrigated wheat crop, top dressing of nitrogenous fertilizer (@ 50 kg N/ha) 20-25 days after sowing (CRI stage) at the time of irrigation is advisable. In case of limited water availability apply three irrigation schedules at the 21, 42- and 65-day crop stage.

#### **Gujarat**

Gujarat received a rainfall of 0.0 mm (-100% no rain) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Gujarat is no rainfall for week 1 and large excess rainfall during week 2.

- To control leaf spot disease of bidi tobacco, apply two sprays of Carbendazim 50 WP 5 g in 10 liter of water at an interval of 15 days in clear weather conditions. Remove leaf curl disease infected tobacco plants from the field. Spray Neem oil 1 ml in 1 liter of water or Diafenthiuron 50 WP 12 g in 10 liter of water.
- For control of the fruit borer of tomato at the initial stage, spray Neem oil 50 ml or Neem based insecticides 20 ml (1 EC) to 40 ml (0.15 EC) kg in 10 liters of water. In heavy incidence, spray Indoxacarb 14.5 SC 10 ml or Chlorantraniliprole 18.5 SC 3 ml or Spinosad 45 SC 3 ml in 10 liters of water in clear weather conditions.
- Spray 80 % Wetttable sulphur 25 g or Dinocap 5 ml in 10 liters of water for control of powdery mildew disease of coriander.
- Spraying of Deltamethrin 2.8 % EC @ 5 ml./10 liter water on mango tree trunk and branches for management mango hopper. Pruning of Dieback infected mango branches, applying 10 % Bordeaux paste and spraying Carbendazim 50 wp, 10 g/10 liter water.
- Avoid application of irrigation to potato field during cloudy weather conditions. Apply nitrogen 55 kg/ha at 45 days after planting. Carry out inter-culturing, weeding operations and earthing up operations.

#### **Chhattisgarh**

Rainfall received over Chhattisgarh was 0.0 mm (-100% no rain) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Chhattisgarh is no rainfall for week 1 and deficit rainfall for week 2.

- First irrigation should be done 20-25 days after sowing at CRI stage. Top dressing of second dose of nitrogen should be done at the time of first irrigation.
- Second irrigation should be done 40-50 days after sowing. Top dressing of third dose of nitrogen should be done at the time of Second irrigation.
- Second irrigation should be done 70-75 days after sowing in mustard.

- When the safflower crop is at the stage of 35-40 days, control weeds by weeding.
- For management and monitoring of pod borer in pigeon pea, install pheromone traps and T-shaped pegs (for birds to sit) and change the pheromone septa every 15 days. Spray Indoxacarb 14.5 SC @ 353-400 ml /ha. for control of pod borer in pigeon pea.

### **Madhya Pradesh**

Rainfall received over East Madhya Pradesh was 0.0 mm (-100% no rain), and 0.0 mm (-100% no rain) over West Madhya Pradesh from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is no rainfall over East Madhya Pradesh and West Madhya Pradesh for week 1 and deficit rainfall over East Madhya Pradesh and large excess rainfall over West Madhya Pradesh for week 2.

- As rainfall occurred the previous week, apply urea in the field. Make sure that leaves are dried during urea application. Drain out excess water from the field.
- Monitor the field. Look for any fungal disease due to high moisture in the field. October sown chickpea is in flower stage. Nipping after 30-40 days old crop to produce a greater number of branches/ plants.
- Due to high moisture in the field, monitor the field against mustard aphid.
- Drain out excess water from the field. Monitor the field against insect-pest and diseases, particularly in garden pea, which is in pod picking stage
- For autumn sugarcane, manures and fertilizers need to be applied.

### **Assam**

Rainfall received over Assam was 0.0 mm (-100% no rain) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks for Assam is (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) normal rainfall for week 1 and no rainfall for week 2.

- Healthy and diseased free panicles should be threshed separately and kept as seed after proper sun drying.
- Solanaceous vegetables viz. potato, tomato, brinjal etc. may be attacked by bacterial wilt causing severe damage. Infected plants should be burned and the remaining plants should be sprayed with Agrimycin or Streptomycin to soak the soil of the root zone. The problem can also be controlled by application of 1g Asafetida and 5g turmeric diluted in 10 liters of water in the root zone. These should be done mainly in fair weather.
- Main field preparation should be started for transplanting of boro paddy seedlings at proper age i.e 4 to 5 leaf stage (45 days old seedling) as weather is very much favourable. Preparation of seedlings for initial protection in the main field. After washing the roots of the uprooted seedlings, the root portion is to be dipped in 0.02% solution of chlorpyrifos (1 ml/lit of water) along with 1% urea for 3 hrs as a protective measure against stem borer, gall midge and hoppers.
- Due to dry weather irrigation should be applied during the flowering stage. For enhancing yield through increased pollination, 5 honey bee colonies/ha may be placed in a rapeseed-mustard field after flowering.
- Due to rapidly decreasing night temperature, birds should be protected from cold by using gunny bags or plastic sheath curtains to install on the side walls of the shed and bedding material (litter) should be increased by six inches. Protect poultry birds from the cold by using an electric bulb (300 Watt for 100 sq.foot) to prevent Coryza disease. In case of lacrimation and swelling of the head, treat the fowl with Sulphur drugs.

- Due to insufficient rains for a long period of time drying of fish ponds are observed in the District. So, there is the chance of suffering due to shallow water in ponds and increasing population per unit volume of water. Therefore, farmers are advised to capture some fishes to reduce the population & digging of ponds to increase depth. Apply following chemicals to protect the fish population against various bacterial diseases prevalent in winter season -Potash @ 4-5 mg/lit of water, Lime in required doses.

### **West Bengal**

Gangetic West Bengal received rainfall of 0.0 mm (-100% no rain) and Sub Himalayan West Bengal received 0.0 mm (-100% no rain) rainfall from 01 January to 05 January 2025. The extended range weather forecast (rainfall) for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is large deficit rainfall over Gangetic West Bengal and deficit rainfall over Sub-Himalayan West Bengal during week 1 and no rainfall over Gangetic West Bengal and deficit rainfall over Sub-Himalayan West Bengal during week 2.

- As temperatures are expected to fall significantly in the coming days, maintain adequate water in the nursery to mitigate the effects of cold injury. Avoid letting the seedbed dry, as the effects of cold injury are more severe in dry conditions. As the seedlings grow, maintain 2.0–2.5cm of water in the nursery bed, and irrigate as necessary. Periodically dust the seedlings with fuel wood ash, straw ash, or cattle dung ash to reduce the impact of cold injury. Remove dew from the leaf tips in the morning using a bamboo stick or rope to prevent cold-related damage.
- Ensure one irrigation if no irrigation has been applied in the last two weeks. Additionally, if weed infestation is observed, one round of hand weeding may be carried out.
- One hand weeding is recommended along with clearance of drainage channels.
- Due to the humid weather, there is an increased chance of shoot and fruit borer infestation. Collect and destroy affected fruits by burying them in the soil to prevent the spread of the pest. If the infestation is high, spray Spinosad 48EC at the rate of 1 ml per liter of water. Ensure uniform coverage for effective control. Provide light and frequent irrigation to maintain soil moisture and support plant health during this period.
- The mustard crop at the flowering stage is susceptible to pest infestations, including mustard aphids and sawfly. To manage mustard sawfly, farmers are advised to spray Ethofenprox 10% EC at 200 ml per acre or Chlorpyrifos 50% + Cypermethrin 5% EC at 400 ml per acre, mixed in 200 liters of water. For the control of aphids and painted bugs during the early stages of infestation, spray Neem-based pesticide (1500 ppm) at 600 ml per acre.

### **Jharkhand**

Jharkhand received rainfall of 0.0 mm (-100% no rain) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Jharkhand is a no rainfall for week 1 and large deficit rainfall during week 2.

- Irrigation should be done at the following stages as per the availability of water in wheat and the crop requirement. First irrigation: When CRI and when tillering stage; Second irrigation: CRI and flowering stage; Third irrigation: CRI, flowering and milking stage; Fourth irrigation: CRI, tillering, flowering and milking stage; Fifth irrigation: CRI, tillering, jointing, flowering and milking stage.
- Complete the earthing up in 25 to 30 days old potato crop and after making the soil friable, add the remaining quantity of nitrogen (65 kg urea per acre).

- Thinning and weeding are recommended in the late-sown mustard crop. If low temperature continues for two weeks, white rust infection may start. Therefore, farmers are advised to keep observation on leaves for white rust appearance.
- In wheat crop, if symptoms of termite are appearing than application of mixture of 20 kg sand and with Chlorpyrifos 20 EC @ 2.0 litre should be done in evening hours and subsequent irrigation is recommended.
- At some places, outbreaks of blight disease are being seen in potato crops. Due to this disease, small, pale brown shiny spots are formed on the lower leaves which gradually start spreading on the upper leaves and eventually the leaves shrink and fall. As soon as you see such symptoms in the plants, immediately spray fungicide Ridomil at the rate of 1.5 grams per liter of water.
- There is a possibility of infestation of aphids in cabbage and cauliflower crops, farmers should spray Quinalphos 25% EC at the rate of 1 ml per litre of water to prevent the crop.

### **Bihar**

Bihar received rainfall of 0.0 mm (-100% no rain) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Bihar is a no rainfall for week 1 and deficit rainfall during week 2.

- Application of 30kg nitrogen per hectare is advised in late-sown wheat crop which reaches the Crown Root Initiation stage (21-25 days after sowing). Farmers are also advised to remove weeds from wheat crop, which is in 30-35 days stage. For this purpose, spraying of a solution of 33 gm Sulfosulfuron and 20 gm Metsulfuron in 500-600 litres of water per hectare is advised.
- Transplanting of onion seedlings are advised. Application of 15-20 ton/ha FYM, 60kg nitrogen, 80 kg phosphorus, 80 kg potash and 40kg sulphur per hectare is advised during land preparation. Transplanting of seedlings should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10cm plant to plant. Deep transplanting should be avoided.
- Regular monitoring is advised against attack of stem borer. The young caterpillar fed on the epidermal layer of leaf sheath and remain there in the early stages of growth. later they bore in to central shoots resulting in the drying up of the growing point. The larvae after entering the stem, feed on the tissues. If insect population observed in the crop field, application of phorate 10G@ 5-7 granules per pour/plant. Spraying of Deltamethrin 250-300 ml/hectare is advised in cases of more damages of crop. In 50-55 days, old maize crop, farmers are advised to top dress 50 kg nitrogen/hectare and subsequently earthing –up is advised.
- Regular monitoring is advised for infestation of pod borer in pea. If infestation occurs; installation of Pheromone trap @ 3-4 traps per acre is advised. If more damage is observed, Spraying of Quinalphos 25 EC/Novaluron10 EC@1.0ml/litre of water is advised. Spraying of 2% urea is advised for proper growth of pods in pea crop. Regular monitoring is also advised against infestation of powdery mildew disease.

### **Uttar Pradesh**

Western Uttar Pradesh received rainfall of 0.0 mm (-100% no rain) and 0.0 mm (-100% no rain) rainfall received over Eastern Uttar Pradesh from 01 January to 05 January 2025. The extended range weather forecast (rainfall) for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) is no rainfall over Eastern Uttar Pradesh and large deficit rainfall over Western Uttar Pradesh during week 1 and normal rainfall over East Uttar Pradesh and West Uttar Pradesh during week 2.

### *Eastern Uttar Pradesh*

- In wheat crop, if symptoms of termite are appearing, the application of a mixture of 20 kg sand and with Chlorpyrifos 20 EC @ 2.0 litre should be done in evening hours and subsequent irrigation is recommended.
- Due to dry weather irrigation should be applied during the flowering stage. For enhancing yield through increased pollination, 5 honey bee colonies/ha may be placed in a rapeseed-mustard field after flowering.
- Harvest the mature crop as per the market or sugar mill demand. Avoid irrigation in late maturing varieties in view of variable weather.
- The temperature has fallen and expected to fall further, so give the winter packing immediately to colonies. Check the colonies for nectar and provide artificial food to honey bees as there is scarcity of flowers during these days. And keep colonies in sun on clear day.

### *Western Uttar Pradesh*

- Farmers are advised to irrigation should be done at CRI stage of wheat crop. Top dress  $\frac{1}{4}$  Urea at optimum moisture in tillering initiation stage. Use 4.0 g/ha Metsulfuron or 2,4-D 500g/ha or Carfentrazone 20 g/ha with 350 lt. water spray at optimum moisture for control of broad leaf weeds.
- Farmers are advised that light irrigation should be done and top dress 60 kg/ha Urea at optimum moisture in barley.
- Farmers are advised that light irrigation should be done and top dress Urea at optimum moisture in mustard.

### **Jammu**

Jammu received rainfall of 0.5 mm (-95% large deficit) from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Jammu is a large excess rainfall for week 1 and deficit rainfall during week 2.

- Farmers may go for sowing of very late sown wheat (varieties PBW-757 and PBW-752) upto 15<sup>th</sup> January with 25% increase in the seed rate. Treat the seed with vitavax or bavistin or agrozim @ 2g/kg of seed before sowing to avoid the crop from seed borne disease. Apply recommended dose of fertilizer as basal dose after receipt of rain during clear weather.
- Do not spray when the honeybees and other pollinators are foraging in the field. Application of 1st dose of nitrogen fertilizer as top dressing after receipt of rainfall during clear weather is recommended.
- Do not allow water to stagnate in fields. To manage collar rot and root rot in gram, rogue out affected plants and drench the affected patches of the field with thiram or captan @ 2g/L of water, after receipt of rain during clear weather. Apply 2 litres of Chlorpyrifos 20 EC mixed with 25kg of dry sand during clear weather and broadcast followed by hoeing, if an attack of cutworm is observed in chickpea.
- Apply chloropyrifos 3EC @ 2ml/lt in the afternoon during clear weather to control mustard sawfly.

### **Rajasthan**

East Rajasthan received rainfall of 0.0 mm (-100% no rain) and 0.0 mm (-100% no rain) rainfall was received over West Rajasthan from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16



January 2025) has no rainfall over East Rajasthan and West Rajasthan for week 1 and large excess rainfall during week 2.

- For the control of broad leaf weeds in wheat, spray of 2,4 D Ester salt 38% E.C. @ 500 g or 2, 4 D Amine salt 58 % S.L. @ 750 g in 500-700 litre of water /ha.
- To control Phalaris minor and wild oat in barley spray of isoproturon @ 0.75 kg/ha for light soil and @ 1.25 kg/ha in heavy soil at 30-35 DAS.
- At present mustard crop is at flowering stage and cloudy weather is prevailed, it may increase the infestation of aphid. So, farmers are advised to spray Diamethoate @875 ml or Nimbecidine @ 500 ml/ha for the control of aphid.
- In gram, when the symptoms of root rot disease are appearing, the growth of white fungus in the root is seen when the plant is uprooted along with the root. For the control of this disease, spraying Carbendazim 50 wp @ 2g / litre of water.
- Due to high relative humidity, infection of blight may occur in tomato. Farmers are advised to do constant monitoring in the crops. If symptoms appear than spray of Carbandizam @ 1.0 gm / litre of water or Dithane-M-45 @ 2.0 gm / litre of water is recommended.
- Weather is suitable for sowing of rabi onion. Seed rate- 10 kg\ha. Before sowing seeds should be treated with Captan @ 2.5 g/ kg of seeds.
- Spray solution of Ridomil-M-Z @ 2g/ litre of water for the control of downy mildew in opium.
- Make proper arrangements to protect animals from the cold wave.

### **Punjab**

Rainfall of 0.0 mm (-100% no rain) was received over Punjab from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Punjab is deficit rainfall for week 1 and week 2.

- After first irrigation Phalaris minor and wild oats can be controlled by spraying Clodinafop 15 WP @ 160 g/acre or Fenoxaprop-p-ethyl 10 EC @ 400 ml/acre or Leader/SF 10/ Safal/Marksulfo 75 WG (Sulfosulfuron) @ 13 g/acre or Axial 5 EC (Pinoxaden) 400 ml/acre or Atlantis 3.6 WDG (mesosulfuron+iodosulfuron) 160 g/acre or Total/Markpower 75 WG (sulfosulfuron + metsulfuron) 16 g/acre or Accord Plus (Fenoxaprop+ Metribuzin) 500ml/acre or Shagun 21-11 @ 200g/acre or ACM-9 @ 240g/acre. Spray either of the herbicide in 150 litres of water after 30-35 days of sowing wheat by using flat fan nozzle.
- It is the right time for sowing long duration hybrids of sunflower. Sow the seed 4-5 cm deep, in rows 60 cm apart with plant to plant spacing of 30 cm.
- In winter, the entry of cold air inside the sheds affects milk production of animals. The combination of low temperature and cold air is harmful for the health of animals. To control moisture inside the sheds in cold weather, windows should be opened during the day for proper ventilation.

### **Haryana**

Rainfall of 0.0 mm (-100% no rain) was received over Haryana from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Haryana is large deficit rainfall for week 1 and excess rainfall during week 2.

- In wheat, there is a possibility of variable weather and farmers are advised to postpone irrigation and chemical spray during the next two days. Adopt weed control in wheat crop. Keep vigil for incidence of yellow rust disease.

- The irrigation can be postponed if possible in view of anticipated light rains during the next two days. Keep vigil on occurrence of white rust disease as the weather is favourable for occurrence. If white rust appears then spray the crop with 600-800 g Mancozeb (Dithan M-45) in 250-300 litre of water per acre and repeat 2-3 times at 15 days interval. For stem rot disease spray the crop with Carbendazim 0.1% @ 1g/litre of water.
- Harvest the mature crop as per the market or sugar mill demand. Avoid irrigation in late-maturing varieties given variable weather.
- Low temperature and cloudy conditions favour the incidence of yellow rust disease. The yellow powder appears on the leaves. If the disease appears, spray the crop with 200 ml Tilt (Propiconazole 25 EC) in 200 litre water per acre in the afternoon and repeat the spray after 15 days.
- Keep vigil on occurrence of white rust disease as the weather is favourable for occurrence. If white rust appears then spray the crop with 600-800 g Mancozeb (Dithan M-45) in 250-300 litre of water per acre and repeat 2-3 times at 15 days interval. For stem rot disease spray the crop with Carbendazim 0.1% @ 1g/litre of water.

### **Himachal Pradesh**

Rainfall of 0.2 mm (-97% large deficit) was received over Himachal Pradesh from 01 January to 05 January 2025. The extended range weather forecast (rainfall) provided for the next two weeks (03 January 2025 - 09 January 2025 and 10 January - 16 January 2025) over Himachal Pradesh is large normal rainfall for week 1 and deficit rainfall during week 2.

- In wheat, Timely & Late sown crop: Further topdressing with urea should be done @ 125 kg/ha (5 kg urea / kanal).
- Ensure weeding in mustard crop. Aphid expected in mustard crop. In early stage cut and destroy the infested part of the plant, if insect population above ETL than spraying of recommended chemicals. For the control of soil borne insects viz. white grubs, cutworms, red ants etc. mix chlorpyrifos 20 EC with sand (2 litre in 25 kg sand for one-hectare area) and incorporate the mixture into soil before sowing of potato or transplanting of vegetable crops. Vegetables may also be protected from frost bites
- In addition, hoeing and earthing up operations and top dressing of nitrogen (40-50 kg Urea/ha) should be carried out in standing vegetable crops. Add mulch material in the space between two rows of vegetable crops to the conservation of soil moisture and maintain the soil temperature. There has been a sharp decline in the temperature over the past few days which may result in the incidence of frost causing adverse effects on the vegetable as well as fruit trees. To avoid the losses caused by frost, farmers should go in for light and frequent irrigations. Farmers can also protect their crops from frost by generating smoke through burning plant material in the fields.

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