



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

जारी करने की तिथि/ **Date of issue: 26 November 2024**

आधारित/based on

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

वैधता/Validity: **22 November – 05 December 2024**

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

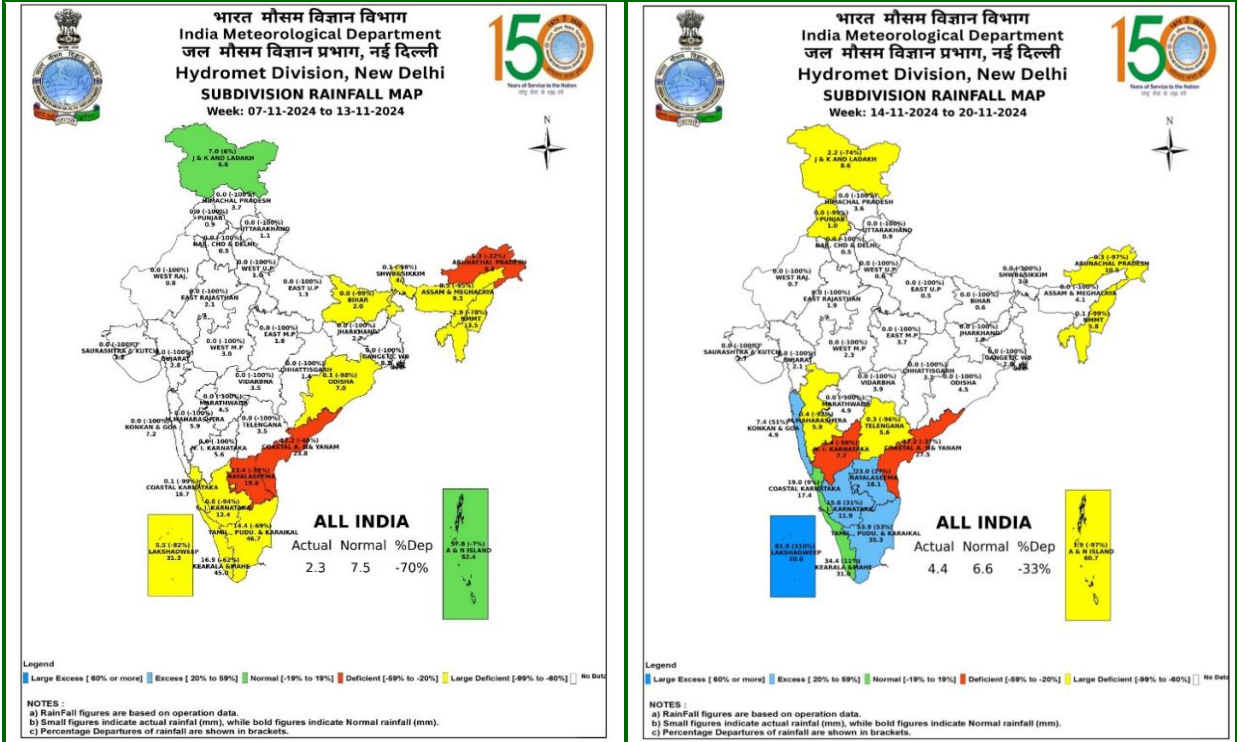
**India Meteorological Department (IMD)**

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)

**Realized Rainfall**  
 (07<sup>th</sup> to 20<sup>th</sup> November, 2024)

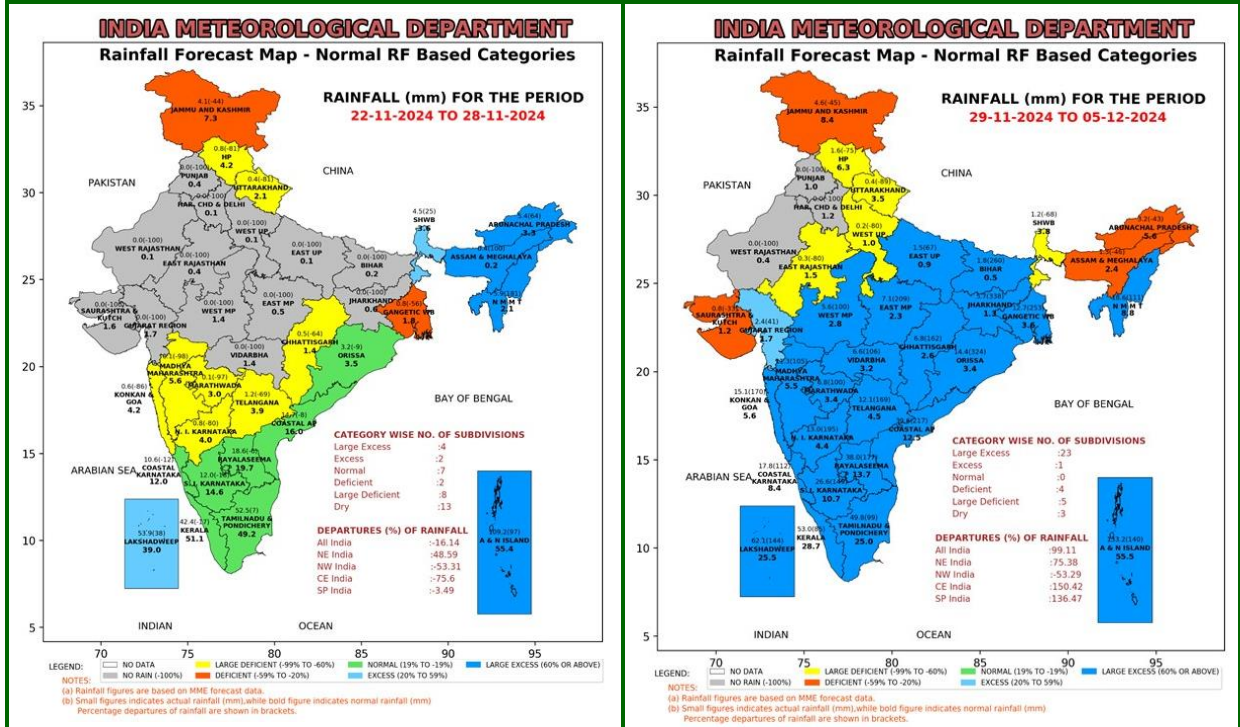


- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Konkan & Goa, Rayalaseema, Coastal Karnataka, South Interior Karnataka, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe, Lakshadweep and Andaman & Nicobar Islands.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.

## Extended Range Forecast System

**Rainfall forecast maps for the next 2 weeks (IC- 20<sup>th</sup> November, 2024)**

**(22<sup>nd</sup> November to 05<sup>th</sup> December, 2024)**



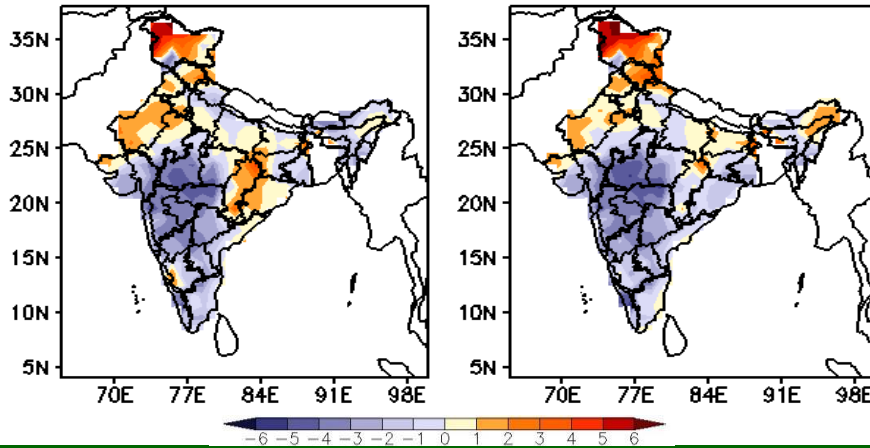
- **Week 1 (22.11.2024 to 28.11.2024):** Rainfall is likely to be normal over South India.
- **Week 2 (29.11.2024 to 05.12.2024):** Rainfall is likely over South India, Central India, East India and Nagaland, Manipur, Mizoram & Tripura (NMMT).

**Maximum and Minimum temperature anomaly ( $^{\circ}$ C) forecast  
for the next 2 weeks (IC- 20<sup>th</sup> November, 2024)  
(22<sup>nd</sup> November to 05<sup>th</sup> December, 2024)**

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

(Week1: 22Nov–28Nov)

(Week2: 29Nov–05Dec)



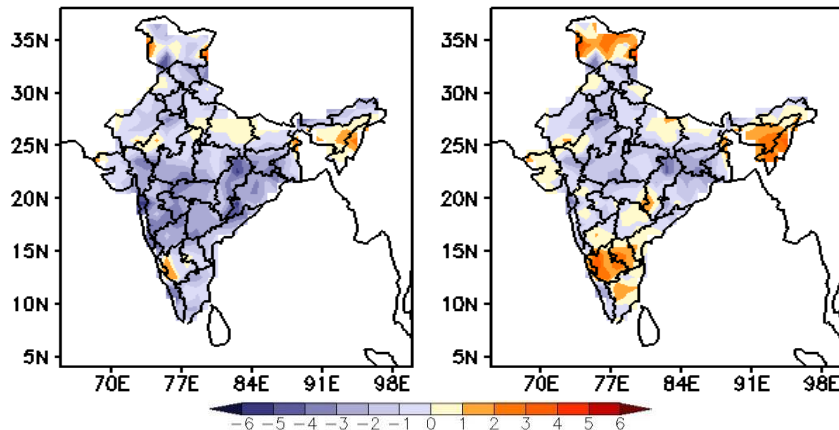
**Maximum Temperature (Tmax)**

- **Week 1 (22.11.2024 to 28.11.2024):** Maximum temperature is likely to be above normal over Jammu & Kashmir, Punjab, Himachal Pradesh, West Rajasthan and Chhattisgarh. It is likely to be below normal over Central India, West India and South India.
- **Week 2 (29.11.2024 to 05.12.2024):** Maximum temperature is likely to be above normal over Jammu & Kashmir, Himachal Pradesh, Punjab, West Rajasthan and Arunachal Pradesh. It is likely to be below normal over Central India, West India, South India and some parts of East India.

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

(Week1: 22Nov–28Nov)

(Week2: 29Nov–05Dec)



**Minimum Temperature (Tmin)**

- **Week 1 (22.11.2024 to 28.11.2024):** Minimum temperature is likely to be below normal over most parts of the country.
- **Week 2 (29.11.2024 to 05.12.2024):** Minimum temperature is likely to be below normal over many parts of Northwest India, Central India and some parts of East India. It is likely to be above normal over Jammu & Kashmir, Northeast India, many parts of West India and South India.

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

### Agromet Advisories

#### Kerala

Kerala received rainfall of 352.8 mm (-21% deficit) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) is normal rainfall for week 1 and large excess rainfall for week 2.

- To control and prevent bacterial leaf blight in paddy, dissolve 20 g of cow dung in one litre of water and spray the supernatant liquid with 20g of pseudomonas. If the attack is severe, spray 6 g of streptomycin in 30 litres of water
- As a prophylactic measure for Sigatoka leaf spot disease in a banana crop, spray 20g of pseudomonas in one liter of water. If sigatoka it occurs, then spray hexaconazole @ 1ml or propiconazole @ 1ml per litre of water.
- Apply 1% Bordeaux mixture or 0.3% copper oxychloride solution in the heart of the crown. Apply lime. Spray borax also on leaves @ 5g per litre. Also adopt all the basal management practices as described for the yellowing, above.
- As prophylactic measure, apply 150 gram of Trichoderma enriched neem cake - cow dung mixture in the basins of the vines and incorporate thoroughly with the soil. If disease is already appeared, drench soil in the plant basins with Redomil MZ 0.2% (2g per litre of water). Spray the same on the leaves.
- There is a chance of leaf blotch diseases in turmeric. Remove and destroy affected plants. As a prophylactic measure, spray 2ml hexaconazole or 2-gram SAAF dissolved in one litre of water. Spraying can be continued at fortnightly intervals depending upon the intensity of the disease.

#### Tamil Nadu

Tamil Nadu received rainfall of 327.1 mm (01% normal) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) for the next two weeks (22 November - 05 December 2024) is a normal rainfall for week 1 and large excess rainfall for week 2.

- In Irrigated crops, Persistent light to moderate rainfall is expected over the next five days. Farmers are advised to delay irrigation activities.
- In Paddy (nursery), Maintain the water level to avoid crop damage.
- To prevent crop damage from continuous rainfall, farmers are advised to ensure proper drainage systems to avoid water stagnation in the fields. Gap filling and thinning can be carried out to take advantage of the recent rainfall. Continuous rainfall may affect nutrient availability, causing crops to appear yellow. Farmers are advised to apply nutrients through foliar application, considering the local weather conditions.
- Since rainfall with wind speed >10 kmph is expected, provide propping to early season sugarcane. Create drainage facilities.
- Prevailing wind speeds may damage the crop. Hence, farmers are advised to practice propping. To avoid water stagnation, create a drainage facility to drain the rainwater from the field. Earthing up should be practised to avoid lodging.

- Vegetables growers are requested to give foliar spraying with Vegetable Booster @ 5 g / litre of water along with sticking agent thrice at 15-day intervals in order to increase the flowering and fruiting aspect of the crops

### **Karnataka**

South Interior Karnataka received rainfall of 252.7 mm (37% excess); Coastal Karnataka received 284.0 mm (13% normal) rainfall and 128.3 mm (03% normal) rainfall was received by North Interior Karnataka from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 05 December 2024) is normal rainfall over South Interior Karnataka, Coastal Karnataka and large deficit rainfall over North Interior Karnataka for week 1 and; large excess rainfall over North Interior Karnataka, Coastal Karnataka and South Interior Karnataka during week 2.

#### *South Interior Karnataka*

- The right time for harvesting Maize and Groundnut crops
- 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 Castor/ linseed/honge/neem oil @ 3-5 ml per kg of grains.
- Tie the ear head of Finger millet, Sunflower and late planted Maize crop whole plants.
- For Biological control of pod borer insect in Redgram 200 LE/acre HANPV 400 litre with teepol (1 ml/lit.). Pheromone traps for *Helicoverpa armigera* 12/ha
- If wilt disease is noticed in the Red gram field-Drenching of Carbendazim: 50 WP 2 g/litre of water to be done and simultaneously remove and burn the infected wilt plants from the field.

#### *North Interior Karnataka*

- Necessary plant protection measures may be taken up.
- Provide irrigation to crops like pigeonpea at the flowering and pod development stage.
- Care should be taken to maintain 60% moisture in vermicompost pits.
- Conserve the moisture by adapting Mulching practices in horticultural crops.
- To control the dropping of squares and flowers take up spraying of Planofix @ 0.25 ml per litre of water. Use 325-400-litre spray solution per acre. Cotton picking may be started in a completely boll-opened crop.
- To manage Pod borer Spray 0.6 gram of Thiodicarb 75 WP or 2.0 ml of Profenophos 50 EC or 0.6 gram of methomyl 40 SP at the time of flowering and pod filling stage
- To manage thrips, whitefly (upside leaf curling) spray 0.5 ml Imidacloprid 17.8 % SL / litre of water at the seedling stage.

## Andhra Pradesh

From 01 October to 24 November 2024, Coastal Andhra received 233.6 mm (18% normal) and 196.5 mm (-30% deficit) of rainfall in the Rayalaseema region. The extended-range weather forecast (rainfall) provided for the next two weeks (22 November—28 November 2024 and 29 November—05 December 2024) shows normal rainfall over Rayalaseema and Coastal Andhra Pradesh for week 1 and large excess rainfall over Rayalaseema and Coastal Andhra Pradesh for week 2.

- Farmers are advised to take up sowing of rabi groundnut to 15th December and also take up seed treatment with imidacloprid @ 2 ml + mancozeb @ 3g or tebuconazole @ 1 per kg seed. Pre-emergence application of pendimethalin 30% E.C @ 1.0-1.5 lit/acre and mixed with 200 litres of water and take up spraying within 24-48 hrs after sowing. Boarder crops like sorghum/bajra can be sown around the field to protect the crop from viral diseases.
- In the Godavari zone of A, P, the sugar cane crop is at the grand growth to harvesting stage. The current climatic conditions may increase the occurrence of aphids, which can spread the YLD disease. To manage the vector, spray dimethoate at a concentration of 2 mL/L. The rains may cause sugarcane to wilt. To control, and avoid waterlogging, remove and destroy any affected plants. To prevent it from spreading, spray the crop with 3 g/l COC (copper oxychloride).
- Maize crop is at the vegetative stage to grain development stage. Utilizing the available soil moisture, farmers are advised to apply 25% of N at 25-30 DAS (knee high), 25% of N at 45- 50 (Pre-tasseling) and 25% of N at 60-65 DAS (Tasseling).
- In the North coastal zone of Andhra Pradesh, farmers are advised to go for sowing of rice fallow sunhemp with a seed rate of 10 kg/acre
- In the North coastal zone of Andhra Pradesh, current weather conditions favour the development of neck blast and sheath blight diseases in rice. To control these diseases, spray either Tebuconazole 50% + Trifloxystrobin 25% WG at a rate of 0.4 g per litre of water, or Tricyclazole 45% + Hexaconazole 10% WG at 1 g per litre of water.
- Redgram crop is at the flowering stage to pod development stage. Current weather conditions are congenial for Maruca and pod borer incidence in redgram. Farmers are advised to spray neem oil @5 ml per liter of water initially and based on incidence to spray profenophos @2.0 ml or emamectin benzoate @0.5g or chlorpyriphos @ 2.5 ml per litre of water. Suggested to take up spraying operations based on local weather conditions.
- Current weather conditions are favorable for Pink bollworm incidence in cotton. Monitoring for pest build-up with pheromone traps @ 10 /ha. Destroy rosette flowers and remove the dropped squares, dried flowers and pre-matured bolls to suppress pest population periodically at the initial stage. Need-based use of insecticides: Spraying of insecticides like thiodicarb 75 WP @ 1.5 g/l or profenophos @ 2 ml/l or quinalphos 25 EC @ 2.5 ml/l or chlorpyriphos 20 EC @ 2.5 ml/l is advised.

- Current weather conditions are congenial for wilt incidence in gram. For control, advised to spray hexaconazole @2.0 ml per litre of water.

### **Odisha**

Odisha received rainfall of 74.1 mm (-45% deficit) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) is normal rainfall over Odisha for week 1 and large excess rainfall for week 2.

- Harvest rice crops which have reached 85% maturity of the panicle and look pale yellow.
- After threshing, paddy grains need to be sun-dried to 14% moisture for consumption purposes and for seed purposes, it should be dried to 12% moisture for better self-life.
- Do proper field surveillance for pests and diseases regularly and take appropriate plant protection measures accordingly.
- Farmers are advised to undertake necessary agricultural activities, including weeding, fertilization, irrigation, harvesting and pesticide application.
- To control leaf-eating caterpillar and fruit borer in winter vegetables like Brinjal, Cauliflower, Cabbage, Chilli & tomato, spray 0.5 g Emamectin benzoate or 0.4 ml Spinosad per litre of water.
- Consult to nearest veterinary doctor for vaccination and deworming in animals.

### **Maharashtra**

Madhya Maharashtra received rainfall of 102.8 mm (07% normal), 71.9 mm (-19% normal) rainfall over Marathwada, 239.6mm (76% large excess) rainfall over Konkan, and 41.7 mm (-39% deficit) rainfall over Vidarbha was recorded from 01 October to 24 November 2024. The extended range weather forecast (rainfall) for the next two weeks (22 November - 05 December 2024) is large deficit rainfall over Konkan, Madhya Maharashtra, Marathwada and no rainfall over Vidarbha for week 1; and large excess rainfall over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week 2, respectively.

#### *Marathwada*

- For proper growth of chickpea crop, it should be weed-free during an early stage. first, hoeing should be done 20 to 25 days after sowing.
- For management of Rhizome fly in turmeric, spraying of Quinalphos 25 %EC @ 20 ml or Dimethoate 30 % EC@ 15 ml per 10 litres of water with an interval of 15 days during clear weather conditions.
- Last few days fall in minimum temperature, incidence of aphids observed in Safflower crop, for management take a spray of Dimethoate 30 %EC @ 13 ml or Acephate 75 % SP@ 10 grams per 10 litres of water. For weed management in safflower crops, one to two weeding and hoeing should be done 25 to 50 days after sowing.
- Plantation of pre-seasonal sugarcane should be done as early as possible. Apply 30:85:85 Kg NPK (327 Kg 10:26:26 or 185 Kg DAP + 142 Kg MOP or 65 Kg Urea 531 Kg SSP + 142 Kg MOP) per ha at the time of plantation. For the management of stem borer in Sugarcane crop take a spray of Chlorpyrifos 20%EC @ 25 ml or chlorantraniliprole 18.5 % SC@ 4 ml per 10 litres of water.



### *Vidarbha*

- Undertake clean picking of burst bolls in earlier sown cotton and properly dry the produce before storage, variety-wise. A foliar spray of 2% DAP at the boll development stage is advisable for better productivity. Foliar spray of 1% urea and 1% Magnesium sulphate in the boll development stage is advisable to avoid the reddening of cotton in the later crop stage.
- Undertake need-based intercultural in earlier sown crops and keep the field weed-free. Need-based protective irrigation is advisable in earlier sown chickpea
- For delayed sowing of irrigated wheat (November 15- December 15) use varieties – PDKV Sardar (AKAW 4210-6), and AKW-1071(Purna). Follow seed treatment with Carbendazim @2.5 g / kg seed. Also, seed treatment with Azotobacter and PSB @ 25 g each / kg seed treatment is advisable. Use fertilizer @ 40:40:40 kg NPK/ha at sowing and remaining N @ 40 kg/ha at 18-20 days stage at first irrigation.

### *Konkan*

- If the rice crop is yet to be harvested, it should be harvested as soon as possible at ground level using the "Vaibhav" sickle. In a rice field, where stem borer infestation was found, harvest the crop at the ground level, plough the field immediately after harvesting, also remove stubble to expose the hibernate stages of pests.
- 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 orchard 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.
- Clean the Cashew Nut orchard field by removing weeds, and diseased infected branches.
- If the Finger millet crop is yet to be harvested, it should be harvested as soon as possible.
- As the prevailing weather conditions are suitable for sowing Amaranthus, radish and coriander crops. Incorporate 200-250 kg of FYM for Amaranthus and coriander and 100 kg for radish along with 4 kg of Suphala (15:15:15) fertilizer per Guntha area. Sow the seed in a row of 20-25 cm. apart in the case of Amaranthus and coriander and 45 to 60 cm. for radish.

### **Gujarat**

Gujarat received a rainfall of 41.1 mm (34% excess) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over Gujarat is no rainfall for week 1 and excess rainfall for week 2.

- New plantation of sugarcane crops should be done after proper preparation of land at proper moisture conditions deep plough and level the soil. Planting should be done from October to February. Apply FYM/Compost at the time of ploughing. Select healthy, diseases-insect and mature seed materials of your selected variety. Planting should be done at a spacing of 90 to 120 cm.
- Banana plants should be propped with the help of bamboo by placing them against the stem on the leaning side. Covering a bunch using the leaves of the plants prevents the bunch from direct exposure to sunlight and also enhances the quality of the fruit. For Control of

sucking pest in cotton, spray *Beuveria basiana* 40 g or Thiamethoxam 25 WG @4 g or Flonicamid 50 WG @ 4 g mix in 10 litre of water and spray it. To control angular leaf spots in cotton crops, spray Streptomycin Sulphate + 40 g Copper Oxychloride 50 WP in 10 litres of water. To arrange pheromone traps with lure attracting male caterpillars of pink caterpillars per hectare for survey and observation.

### **Chhattisgarh**

Rainfall received over Chhattisgarh was 27.6 mm (-60% deficit) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over Chhattisgarh is large deficit rainfall for week 1 and large excess rainfall for week 2.

- After the rice harvest is over, the field will attain proper tilth condition. At that time, 2-3 times criss-cross ploughing and planking should be done. If the field is not well prepared, low germination of the wheat crop is obtained. Use improved varieties of wheat like Ratan, Chhattisgarh wheat-3, Chhattisgarh-1036 Chhattisgarh-1018 etc. for sowing with the seed rate @ 100-125 Kg. per hectare.
- If there is recurring infestation of wilt and collar rot disease of gram crop each year, follow crop rotation for rabi wheat, lathyrus, safflower and linseed crops. Use improved varieties of mustard like Pusa Jai Kisan, Pusa Bold, Vardan, Varuna, Kranti & Chhattisgarh Mustard etc. for sowing with the seed rate @ 4-5 kg per hectare.
- Use improved varieties of mustard like Pusa Jai Kisan, Pusa Bold, Vardan, Varuna, Kranti & Chhattisgarh Mustard etc. for sowing with the seed rate @ 4-5 kg per hectare.
- Kodo/little millet, Finger millet and sugar crops are in the maturity stage.

### **Madhya Pradesh**

East Madhya Pradesh received 16.8 mm rainfall (-59% deficit) and 34.9 mm (2% normal) rainfall was received over West Madhya Pradesh from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over No rainfall over East Madhya Pradesh and West Madhya Pradesh during week 1 and No rainfall over East Madhya Pradesh and large deficit rainfall over West Madhya Pradesh during week 2.

- Monitoring the field. Rabi crops are ready for sowing and also in the germination stage. The late-sown kharif crops are ready for harvesting. The storage site should be cleaned.
- Light irrigation in fodder berseem crop.
- In Chickpea and lentils, Nipping is required in chickpea to increase the number of branches per plant. Light sprinkler irrigation in garden peas.
- Crop is ready for sowing once the day temperature comes down to less than 28 ° C. Sowing of wheat crop. Seed should be treated with fungicide before sowing in the field. Varieties are selected as per rainfed, irrigated and life-saving irrigated conditions as per the agro-climatic zones.

### **Assam**

Rainfall received over Assam was 209.6 mm (20% excess) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks for Assam is (22 November - 28 November 2024 and 29 November - 05 December 2024) large excess rainfall for week 1 and deficit rainfall for week 2.

- Already harvested matured Sali paddy should be transferred into a safer place. Harvesting and threshing of already matured Sali paddy may be continued in sunny weather.

Harvesting at the right time is crucial to prevent losses and ensure good grain quality and high market value.

- Thinning and weeding should be done in fair weather after 15-20 days after sowing. Sawfly infestation seen in many vegetative toria fields. To control the pest spray chlorantraniliprole (Corazon) 18.5 SC @ 0.2 ml/lit or neomycin 1500 ppm @3ml/lit of water in the early morning to reduce this pest infestation.
- Planting may be continued during this week. Earthing up is to be done 25 days after planting (stolon formation stage), just before the first irrigation.
- For coriander, the field should be thoroughly ploughed and harrowed to obtain a fine seeding bed and FYM to be applied. Suitable for cultivation under rainfed conditions are UP 41, Pusa 360 and Local selection. To ensure good germination, the seed should be soaked in water for 12-24 hours. Floated seeds should be discarded. Seeds should be treated with Carboxin @ 2 g/kg seed before sowing and rubbed or crushed between palms until the pericarps separate. Carrot varieties (like Nantes, Pusa Kesar and Chautney) can be sown this week. Seed treatment should be done with captan or thiram 50 WP @3g/kg before sowing the seeds.

### **West Bengal**

Gangetic West Bengal received rainfall of 201.2 mm (29% excess) and Sub Himalayan West Bengal received 171.4 mm (10% normal) rainfall from 01 October to 24 November 2024. The extended range weather forecast (rainfall) for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) is deficit rainfall over Gangetic West Bengal and excess rainfall over Sub-Himalayan West Bengal during week 1 and large excess rainfall over Gangetic West Bengal and large deficit over Sub-Himalayan West Bengal during week 2.

- Harvesting of matured kharif rice should be done immediately. The weather conditions are very congenial for rice harvesting and post-harvesting processes.
- Sowing of mustard can be done after the kharif rice harvesting. The recommended seed rate is given 4-5 kg/ha. Pusa Mustard 25 (NPJ 112), RH 749, NRCDR-2, and PM-28 are some of the promising mustard varieties that farmers may adopt. The recommended dose of fertilizer for mustard is 80:40:0 kg/ha (N:P: K), additionally, 5 t/ha vermicompost or 10 t/ha FYM, 37.5 kg ZnSO<sub>4</sub>/ha and 20 kg Borax/ha may be found beneficial.
- Farmers should plough the land before sowing, no extra irrigation should be given during sowing for lentils. Pusa Ageti, Bidhan-lentil, and L-4727 are the recommended varieties of the lentil. As there is a delay in sowing, short-duration varieties may be promising this year. The recommended fertilizer dose for lentils is 20:40:20 kg/ha (N:P: K). 20 kg/ha Sulphur may be helpful in better seed quality.
- Regular monitoring of Fruit and Shoot borer, aphids, jassids and spider mites are suggested. Remove and destroy affected parts immediately. Apply Spinosad 45 SC (1 ml/4 litres of water) or Emamectin Benzoate 5 SG (4 g/10 litres of water) for effective control of fruit and shoot borer. Spray Neem oil 3% or Imidacloprid 17.8 SL (1 ml/3 litres of water) if aphid and jassid infestations are severe. Use Propargite 57 EC (2 ml/litre of water) for effective control of spider mites.

### **Bihar**

Rainfall received over Bihar was 19.7 mm (-68% large deficit) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22

November - 28 November 2024 and 29 November - 05 December 2024) over Bihar is no rainfall for week 1 and large excess rainfall for week 2.

- Temperature and other Agro-meteorological conditions are getting congenial for the sowing of wheat crops. Farmers are advised to start the sowing of wheat crop. PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39 varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20-ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For the broadcasting method, a seed rate of 125kg per hectare is advised and 100 kg per hectare is recommended for the seed drill method. Deep sowing of seeds is not advisable.
- Sowing of rabi maize is advised. Application of 10-15-ton FYM, 50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. Shaktiman-1 white, Shaktiman-2 white, Shaktiman-3 yellow, Shaktiman-4 yellow, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala varieties of hybrid maize and Dewki white, Lakshmi white and Suaan yellow varieties of composite maize are recommended for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed.
- Sowing of Potato is advised. Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima, Kufri sinduri, Kufri arun, Kufri anand, Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3, varieties of potato are recommended for planting in north Bihar region. Seed rate@20-25q/ha and planting distance of 50-60cm X15-20cm is advised. Application of 20-25-ton FYM/ha, 75 kg nitrogen, 90 kg phosphorus and 100kg potash is advised during land preparation. Seed treatment with Emission-6@0.5% or Di-Ethane M-45@0.2% is advised for 10 minutes before planting. Planting of whole tuber (20-40 grams) is advised.

### **Jharkhand**

Jharkhand received rainfall of 60.7 mm (-25% deficit) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over Jharkhand is a no rainfall for week 1 and a large excess for week 2.

- Wherever Kharif crops have been harvested, prepare the fields for wheat to be sown on time. The improved varieties for irrigated conditions are – K 1006, K 0307, Birsa Wheat 3, HD 2967, DBW 39, 187. The improved varieties for the rainfed stage are – K 1317, HD 3171, and HI 1612. Sow these varieties by the second fortnight of November. Take the seed rate of 40 kg per acre. Before sowing, treat the seeds with Betawax or Carbendzim at the rate of 2.5 grams per kg seed. If there is termite infestation, treat the seeds before sowing with Imidacloprid 17.8 SL @ 5 ml per kg of seeds
- For chickpea crops, after harvesting paddy, farmers should plough their fields two to three times with a local plough and then level the field. For sowing chickpeas, select medium soil which has a proper drainage facility. Take 28 to 32 kg seed per acre for desi gram and 36 to 40 kg seed rate per acre for Kabuli gram. Improved varieties are - Desi chickpea - BG-3043, GNG 2207, KPG-59, Birsa gram 3; Kabuli chickpea - HK-94-314, Kak-2.
- Those farmers who want to cultivate early Potato, they should arrange for the best quality seeds, fertilizers etc. Choose either Kufri Ashoka or Kufri Pukhraj, the recommended early potato variety. For sowing in one acre, 12 quintal seeds, (20-30-gram sprouted tuber), 40 kg urea, 70 kg DAP, 80 kg muriate of potash and 10 kg sulfur are required.

- Farmers who want to cultivate early Peas, should arrange for good-quality seeds, fertilizers etc. Choose the recommended early pea variety, Arkel. For sowing in one acre, 40 kg seeds, 35 kg 85 urea, 200 kg SSP. And 25 kg of muriate of potash is required.

### **Uttar Pradesh**

Western Uttar Pradesh received rainfall of 0.3 mm (-99% large deficit) and 3.1 mm (-91% large deficit) rainfall received over Eastern Uttar Pradesh from 01 October to 24 November 2024. The extended range weather forecast (rainfall) for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) is no rainfall over Eastern Uttar Pradesh and Western Uttar Pradesh during week 1 and large excess rainfall over Eastern Uttar Pradesh and Western Uttar Pradesh week 2.

### **Western Uttar Pradesh**

- In paddy, no rainfall is forecast during this week farmers are advised to harvest mature crops and threshing should be done as early as possible.
- Timely sown wheat varieties sowing should be completed as early as possible. Recommended varieties of wheat at irrigated conditions such as K-307, DBW-17, DBW-187, DBW-202, PBW-443, HD-2733, HD-2967, K-9107, DBW-39, CBW-38 and HUW-510 with 100 kg/ha of seed and 120:60:60 kg /ha fertilizer. Treated seed should be used.
- Sowing of rabi maize with suitable composite varieties such as Dhawal, Shradamani and Shakti-1 and for Popcorn Amber, BL Amber and Pearl and for sweet corn Madhuri, Priya and for Baby corn BL-42, Prakash and HM-4 with 20-22 kg seed per hectare.
- Dry weather appears during this week, farmers are advised to light irrigation should be done as per crop requirements in pigeonpea.

### **Himachal Pradesh**

Himachal Pradesh received rainfall of 0.9 mm (-98% large deficit) rainfall was received over from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over Himachal Pradesh is large deficit for week 1 and week 2.

- Before rabi crop sowing after cleaning fields add decomposed FYM or compost before sowing of crops as it improves the physical and biological properties of soil and thus increases the water retention capacity as well as nutrient status of the soil.
- Farmers practising natural farming can control insect-pest attacks by spraying Agniastra, Brahmastra and Neemastra and dashparni ark at weekly intervals @3.0 per cent and Jeevaamrit @ 10.0 per cent at regular intervals during the clear weather condition.
- Sowing of gram and lentils should be completed in lower areas.
- Advised to complete wheat sowing and Ensure proper soil moisture. In termites infected soils, treat the seed with 4 ml Chlorpyrifos 20 EC/kg of seed and dry it and then treat it with Bavistin or Vitavax 2.5g/kg of the seed. In the early planted wheat crop where weeds are 2-3 leaves stage, spray isoproturon @ 70 g or Vesta @ 16 g per 30 litres of water in one kanal for the control of weeds.

### **Jammu**

Jammu received rainfall of 19.5 mm (-67% large deficit) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November -

28 November 2024 and 29 November - 05 December 2024) over Jammu is deficit rainfall for week 1 and week 2.

- Farmers are advised to go for sowing of wheat (var. JAUW-672, DBW-296, HD-3406, HD-3369, HD3237) after pre-sowing irrigation. Treat the seed with tebuconazole 2DS @ 1.25 g/kg of seed to protect against seedling blight and root rot disease. Apply the recommended dose of fertilizer as a basal dose.
- Application of 1st dose of urea is recommended in Gobhi Sarson. Irrigation is recommended
- Harvesting and threshing of basmati rice is recommended. Sundry grains after threshing in the open to reduce moisture to 10-12% for storage. Clean the Godowns by removing all the grains and other debris of previously stored crop
- Give light hoeing in the crop to avoid crust formation Onion/Garlic. Apply vermicompost along with split doses of Nitrogen to these crops after each cut in Leafy vegetables.

### **Uttarakhand**

Rainfall received over Uttarakhand was 3.5 mm (-90% large deficit) from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over Uttarakhand is large deficit rainfall for week 1 and week 2.

- Complete the sowing as early. Seed treatment should be done with fungicide before sowing. First irrigation should be done at 21-25 days after sowing at the time of Crown Root Initiation (CRI) stage
- In Mustard, Weeding should be done after one month of sowing. Apply light irrigation.
- Complete the sowing of crops with suitable varieties. Seed treatment should be done with Rhizobium culture.
- Remove weeds. Provide light irrigation to achieve good growth in spinach.
- Undertake weeding, hoeing and bio mulching. Use dry grass for mulch material in onion(seeding).

### **Rajasthan**

East Rajasthan received 11.4 mm rainfall (-47% deficit) and 4.5 mm (-57% deficit) rainfall was received over West Rajasthan from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over East Rajasthan and West Rajasthan is no rainfall for week 1 and large deficit rainfall over East Rajasthan and no rainfall over West Rajasthan for week 2.

- Farmers are advised to complete the sowing of wheat. Improved varieties: - Raj-3077, W.H.-147, G.W.-190, G.W.-322, G.W.- 273, H.I.- 1544, Raj- 4037, H.I- 8498, Lok-1 and Raj-3765. Seed rate: - 100 kg seed per ha. Application of Chlorpyrifos (20EC) @ 5 litres per ha. with pre-irrigation is recommended before sowing in the fields having perennial problems of termite infestation. The recommended dose of fertilizer for N: P: K is 120, 50 and 40 kg/ha.
- Complete the sowing of barley in this week. Improved varieties: R.D-2035, R.D-2786, R.D-2715, R.D-2849 and B.H.- 902. Application of Chlorpyrifos (20EC) @ 5 litres per ha. with pre-irrigation is recommended before sowing in the fields having perennial problems of termite infestation.

- For the management of mustard sawfly, spray Dimethoate 30%EC@1.0-1.5ml/litre or Quinalphos 25EC @1ml/Liter, and also to control blight in gram, spraying of Mancozeb @ 2g/ litre of water.
- Sowing of potatoes should be done as soon as possible. Selection of cultivars can be done based on need. Cultivars: -Kufri Badshah (Late blight tolerant), Kufri Jyoti (Short duration), Kufri Alankar, Kufri Chandramukhi. Row to row plant to plant spacing of 45cm×20cm or 60cm × 15 cm is advised. Seed treatment with 2.0 gm Carbendazim mixed per litre of water per kilogram of seed for five minutes should be done. Thereafter, seeds should be dried in the shade before planting in the field.
- After 30 and 50 days, in the standing crop of late cabbage, 66 kg of nitrogen per hectare should be given.
- Complete the sowing of opium this week. The seed rate is 5kg/ha and the improved varieties are Chetak.

### **Punjab**

Rainfall of 2.5 mm (-79% large deficit) was received over Punjab from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over Punjab is no rainfall for week 1 and week 2.

- Farmers are advised to decide on sowing of wheat varieties PBW 826, PBW 803, PBW 824, Sunehri PBW 766, PBW 1 Chapati, DBW 222, DBW 187, HD 3226, Unnat PBW 343, Unnat PBW 550, PBW Zn 2, PBW RS 1, PBW 1 Zn, PBW 725, PBW 677, HD 3086, should be completed up to fourth week of November.
- Under late sowing, transplanting of gobhi sarson is more profitable than direct sowing. Use 30-day-old seedlings for canola gobhi sarson.
- Sow the nursery of chilli and brinjal which is to be transplanted in February-March. Start transplanting seedlings of tomato and brinjal which were sown in October.
- Withhold the irrigation during these days in deciduous fruit orchards like pear, peach, plum and grapes, so that the trees may enter dormancy and become sufficiently hard to withstand cool weather.
- To protect the young fruit plants from upcoming winters, arrangements should be made to prepare the thatches or kullies of sarkanda or farm waste materials on the plants during November.

### **Haryana**

Rainfall of 0.5 mm (-96% large deficit) was received over Haryana from 01 October to 24 November 2024. The extended range weather forecast (rainfall) provided for the next two weeks (22 November - 28 November 2024 and 29 November - 05 December 2024) over Haryana is no rainfall for week 1 and week 2.

- Possibility of variable weather farmers are advised to do the thinning and weeding in the timely sown mustard crop.
- Possibility of favourable temperature and farmers are advised for sowing of gram crops with recommended varieties. Farmers are advised to treat the gram seed with Trichoderma 4 gram and 1-gram Vitavax mix with 5 ml water for 1 kg seed to control fungal disease and also Rhizobium seed treatment advised as per university recommendation.
- Possibility of variable weather and favourable temperature farmers are advised to the sowing of wheat with recommended timely sowing varieties like WH 283, WH 542, DBW 17, WH 711, and WH 1105.

- Farmers are advised for sowing of oat and Berseem fodder crops with recommended certified seeds and Berseem (varieties Hisar Berseem 1, Hisar Berseem 2).
- Possibility of variable weather keeping the animal under sheds and cleaning around to control flies and mosquitoes in cattle shade. To provide the cattle /animal 50 grams of iodized salt and 50 to 100 grams of mineral mixture daily along with animal feed/fodder, and green fodder to keep them healthy.

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