



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन National Agromet Advisory Services Bulletin

जारी करने की तिथि / Date of issue: 04 December 2023

आधारित / based on

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

वैधता / Validity: 01 - 14 December 2023

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)

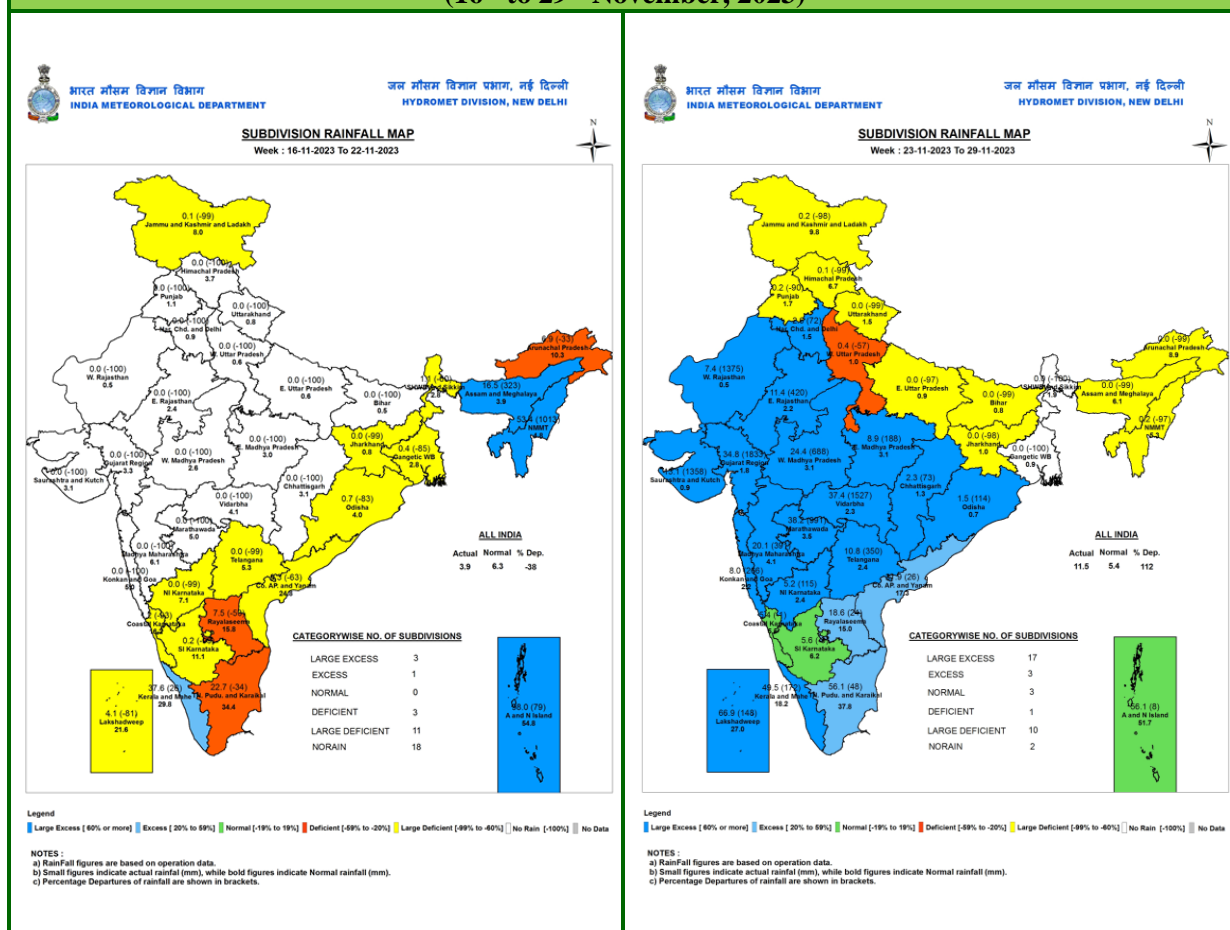
पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Realized Rainfall and Extended Range Forecast

Realized Rainfall

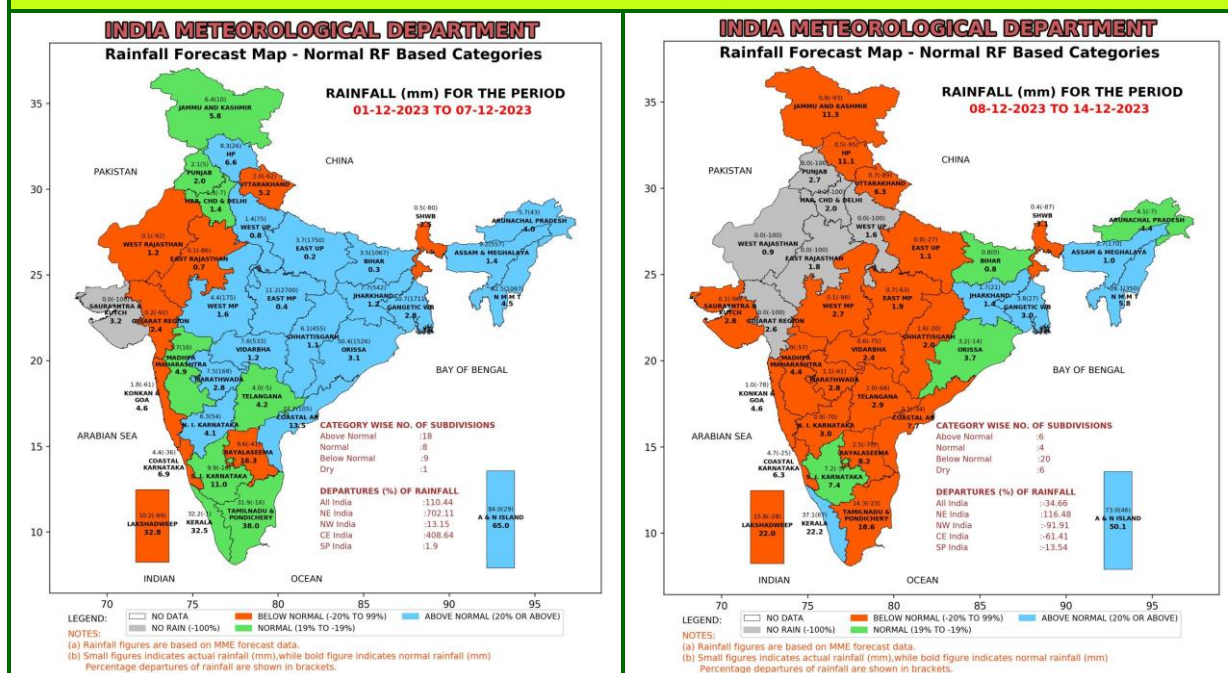
(16th to 29th November, 2023)



- Normal or above normal rainfall occurred in both the weeks over Kerala & Mahe and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks over Assam & Meghalaya, Nagaland Manipur Mizoram & Tripura (NMMT), Haryana Chandigarh & Delhi, Rajasthan, Gujarat, Madhya Pradesh, Chhattisgarh, Odisha, Maharashtra, Telangana, Andhra Pradesh, Karnataka, Tamil Nadu Puducherry & Karaikal and Lakshadweep.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 29th November) (01st to 14th December, 2023)



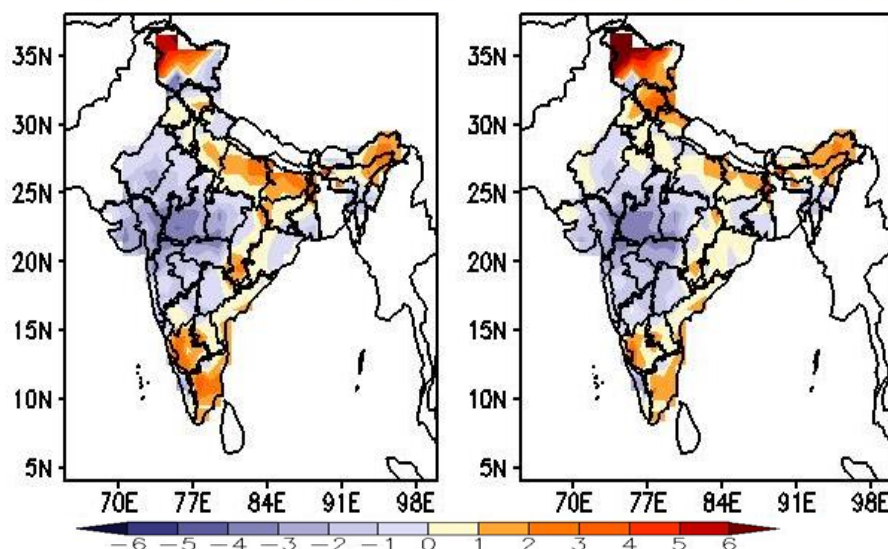
- **Week 1 (01.12.2023 to 07.12.2023):** Rainfall is likely to be above normal over East Coast of India and Andaman & Nicobar Islands.
- **Week 2 (08.12.2023 to 14.12.2023):** Rainfall is likely to be above normal over Kerala, Andaman & Nicobar Islands and some parts of North East India.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 29th November)
(01st to 14th December, 2023)**

MME forecast Tmax anomaly (Deg C)

(Week1: 01Dec-07Dec)

(Week2: 08Dec-14Dec)



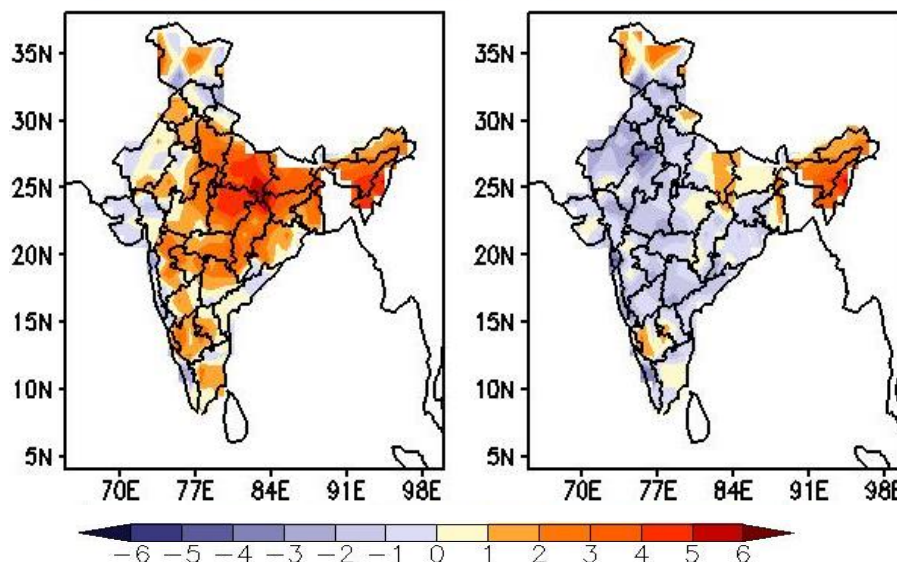
Maximum Temperature (Tmax)

- **Week 1 (01.12.2023 to 07.12.2023) and Week 2 (08.12.2023 to 14.12.2023):** Maximum temperature is likely to be below normal over Central India, West India, Kerala and some parts of North West and North East India.

MME forecast Tmin anomaly (Deg C)

(Week1: 01Dec-07Dec)

(Week2: 08Dec-14Dec)



Minimum Temperature (Tmin)

- **Week 1 (01.12.2023 to 07.12.2023):** Minimum temperature is likely to be above normal over most parts of the country.
- **Week 2 (08.12.2023 to 14.12.2023):** Minimum temperature is likely to be below normal over most parts of the country except North East India.

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 41 mm (10% excess) and over West Uttar Pradesh was 14 mm (-41% deficit) during 01 October - 30 November 2023. The extended range weather forecast (rainfall) for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) is above normal over West Uttar Pradesh and East Uttar Pradesh for week-1 and No rainfall over West Uttar Pradesh and below normal rainfall over East Uttar Pradesh for week-2.

Western Uttar Pradesh

- Sowing of irrigated late sown wheat varieties is advised with recommended varieties are K-402, K-607, K-1006, DBW-187, PBW-234, HD-2649, DBW-16, K-9162, Narendra Wheat-1076, HW-2045, UP-2425, HUW-234 and HD-3249 with 150:80:60:25 (N:P:K:Zn) and 100 kg of seed in 5.0-7.0 cm depth.
- Under prevailing weather condition, if leaf roller infestation is observed in pigeon pea during vegetative/branching stage, it is advised to spray Spinosad 45 % SC @ 2ml per 10 litre water or Quinalphos 25 EC @ 1 to 1.4 ml/litre water is advised
- Weeding and earthing is advised in potato crop at emergence/vegetative stage.

Himachal Pradesh

39 mm (-12 deficit) rainfall was received over Himachal Pradesh during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) over Himachal Pradesh is above normal for week-1 and; below normal for week-2.

- Under prevailing weather condition, farmers are advised to go for sowing for late sown wheat crop. The varieties recommended are *VL-892*, *HPW-373 (mid hills)* and *HS-490 (Pusa Baker)* (low hills). A seed rate of 125 kg / ha is recommended.
- Farmers are advised to go for sowing for barley crop. The varieties recommended are *Him Palam Jau 1 (HBL 713)*, *HBL 276 (Harit)*, *HBL 113 (Vimal)*, *HBL 391 (Gokul)* *BHS 400 (Pusa Sheetal)* while dual purpose varieties (for green fodder and grain) that can be sown include *BHS 380 (Pusa Losar)* and *Him Palam Jau 2 (HBL 804)*.
- Farmers are advised to prepare their fields for potato sowing. Adequate amount of well rotten FYM or compost is recommended to add in the soil during field preparation. The varieties recommended are *Kufri Jyoti*, *Kufri Chandermukhi*, *Kufri Himalini* and *Kufri Giriraj*.
- Farmers are advised to maintain room temperature 25 – 28 °C and relative humidity around 80 - 85% for successful cultivation of mushrooms.

Jammu

118 mm (73% large excess) rainfall was received over Jammu during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07

December 2023 and 08 - 14 December 2023) over Jammu is normal for week-1 and; below normal for week-2.

- Due to chances of normal rainfall during next week, farmers are advised to continue sowing of normal sown wheat varieties after receipt of rain, vattar condition. Treat the seed with Tebuconazole 2 DS @ 1.25 g/kg of seed to protect seedling blight and root rot disease.
- Nipping is recommended in chickpea after receipt of rain in 3-4-week-old crop. Hoeing and weeding is also recommended after receipt of rain.
- Farmers are advised to give weeding and hoeing to the potato crop, after receipt of rain.
- Vaccinate the chicks against infectious bursal disease (IBD) and Gumbroo disease.

Punjab

37 mm (178% large excess) rainfall was received over Punjab during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) over Punjab is normal for week-1 and; no rainfall for week-2.

- Farmers are advised to complete the sowing of wheat varieties *PBW 826, PBW 869, PBW 824, PBW 803, Sunehri (PBW 766), PBW-1 Chapati, DBW-222, DBW-187, HD-3226, Unnat PBW-343, Unnat PBW-550, PBW-1 Zn, PBW-725, PBW-677, HD-3086, WH-1105 and HD-2967* under irrigated conditions.
- It is best time for sowing of spinach, fenugreek, coriander, radish, turnip and main season varieties of pea viz., *Punjab 89 and Mithi Phali*. This time is also optimum for transplanting of tomato, brinjal, chilli and capsicum for early and higher yield.
- To protect the young fruit plants from upcoming winters, prepare the thatches or kullies of sarkanda or farm waste materials on the plants. Care should be taken that the South-West side should be left open to allow sufficient sunlight.
- Withhold the irrigation during these days in deciduous fruit orchards like pear, peach, plum and grapes, so that the trees can enter dormancy and become sufficiently hard to withstand cool weather.

Haryana

15 mm (11% excess) rainfall was received over Haryana during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) over Haryana is normal for week-1 and; no rainfall for week-2.

- Farmers are advised to complete the sowing of wheat. Recommended improved varieties are *Raj-3077, WH-147, GW-190, GW-322, GW- 273, HI- 1544, Raj- 4037, HI- 8498, Lok-1 and Raj-3765*. Seed rate: - 100 kg seed per ha.
- Sowing of potato is advised as soon as possible. Selection of cultivars can be done on the basis of need. Recommended cultivars *Kufri Badshah* (Late blight tolerant), *Kufri Jyoti* (Short duration), *Kufri Alankar, Kufri Chandramukhi*

Jharkhand

139 mm (69% large excess) rainfall was received over Jharkhand during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) over Jharkhand is above normal for week-1 and; week-2.

- In the areas where paddy crop is about to mature, it is advised to stop giving irrigation two weeks before harvesting. After harvesting dry the in the field for 2-3 days, threshing is advised. Grains should be properly dried to right moisture level before storing.
- November sown wheat crop is at tillering stage. For weed control (only at CRI stage), it is advised to spray Isoproturon 75 dust @ 600 g as well as 2,4-D @ 300 g or Sulfosulfuron 75 WP @ 500 g per acre in 300-400 litres of water for the control of all types of weed.

Bihar

95 mm (53% excess) rainfall was received over Bihar during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) over Bihar is above normal for week-1 and; normal for week-2.

- Farmers are advised to complete the sowing of *rabi* maize at the earliest. Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field.
- Farmers are advised to complete the timely sown wheat crop at the earliest. Farmers are also advised to give light irrigation in early sown wheat crop which has reached Crown Root Initiation (CRI) (21-25 days after sowing).
- Farmers are also advised to start sowing of late variety of wheat crop. *PBW-373*, *HD-2285*, *HW-2045*, *HUW-234*, *WR-544*, *DBW-14*, *HD-2643*, *HD-2967*, *NW-2036* varieties are recommended for late sowing in North Bihar.

West Bengal

178 mm (14% excess) rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 190 mm (20% excess) during 01 October - 30 November 2023. The extended range weather forecast (rainfall) for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) is above normal over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal during week-1 and; week-2.

- Famers are advised to completely dry the harvested seeds of okra crop before storing.
- To monitor and control aphid, jassid, mite, white fly and other sucking pest in brinjal crop at flowering stage, sticky traps are suggested to install. Apply Alika against sucking and chewing pests like flies and aphids.

Chhattisgarh

34 mm (-51% deficit) rainfall was received over Chhattisgarh during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07

December 2023 and 08 - 14 December 2023) over Chhattisgarh is above normal for week-1 and; below normal for week-2.

- Farmers are advised to use improved variety of mustard for sowing like *Pusa Jai Kisan*, *Pusa Bold*, *Vardan*, *Varuna*, *Kranti*, *Chhattisgarh Mustard* etc. Seed rate can be applied @ 4-5 kg per hectare.
- Considering the decrease in temperature, dairy farmers are advised to keep the animals in the cattle shed with concrete / brick roof.

Odisha

88 mm (-34% deficit) rainfall received over Odisha during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) over Odisha is above normal for week-1 and; normal for week-2.

- Farmers are advised to complete nursery sowing of winter vegetable crops. And use low cost polythene cover above the vegetable nursery to avoid poor germination due to low temperature.
- For controlling red rot disease in sugarcane, it is advised to spray Carbendazim 12% + Mancozeb 63% WP @ 400 g/acre or Metalaxyl 8% + Mancozeb 64% WP @ 400 g/acre by mixing it in 200 litres of water.
- To prevent whitefly infestation in greengram and blackgram, it is advised to treat the seeds Imidacloprid @ 7 g/kg of seeds before sowing. Install 8-10 number of yellow sticky traps starting from 2-3 leaf stage of the crop.

Gujarat

36 mm (-14% deficit) rainfall received over Gujarat during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) over Gujarat is below normal for week-1 and; no rainfall for week-2.

- Farmers are advised to carry out sowing of potatoes. For sowing, it is advised to select the short duration cultivars viz., *Punkharaj*, *Kufari Chandramukhi*, *Kufari Jawahar*, *Kufari Bahar*, *Asoka*; Long duration cultivars viz., *Kufari Laukar*, *Kufari Jyoti*, *Kufari Badshah*, *Kufari Sinduri*, *Satalaj*. Potato tuber seed should be treated with recommended fungicides before planting for control of seed borne disease.
- To control thrips in chili, it is advised to spray Neem seed oil 30 to 50 ml in 10 litres of water. In case of heavy attack, spray of Spinosad 3 ml or Cyantraniliprole 20 ml per 10 litres of water.

Maharashtra

49 mm (-51% deficit) rainfall over Madhya Maharashtra; 44 mm (-38% deficit) rainfall over Vidarbha; 51 mm (-44% deficit) rainfall over Marathwada; and 118 mm (-14% deficit) in Konkan region was recorded during 01 October - 30 November 2023. The extended range weather forecast

(rainfall) for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) is below normal over Konkan, normal over Madhya Maharashtra and above normal over Marathwada and Vidarbha for week-1 and; below normal over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week-2, respectively.

Parbhani

- As per forecast of thunderstorm and rainfall at isolated places in the state, farmers are advised to drain out excess amount of water stagnated in from *rabi* crop fields.
- As per forecast of thunderstorm along with light to moderate rainfall at isolated places, it is advised to cover the harvested soybean crop with the help of polyethene/tarpaulin. Store the threshed grains at safe places. Precaution should be taken so that water may not stagnate in crops where rainfall was received.
- Mechanical support is advised to provide to newly planted banana plants. The places where gusty wind, thunderstorm and rainfall was observed collect and destroy infected fruits and pruning of broken branches should be done.
- As per forecast of above normal rainfall during next week, picking of cotton is advised as early as possible and store the harvested produce at safe places.
- Farmers are advised to apply curtains of gunny bags to poultry, sheep and goat animal shed to protect the animals from cold, during early morning. Make use electric bulbs in poultry shed.

Konkan

- Due to cloudy weather condition, there may be the chance of anthracnose disease and pests like midge fly and shoot borer in mango's new vegetative flush and inflorescence. To protect against anthracnose disease, it is advised to spray Carbendazim 12% + Mancozeb 63% @ 10 g per 10 litres of water along with insecticides given as per blossom protection schedule was suggested.
- Due to forecast of cloudy weather there is a possibility of fish mortality due to reduction of oxygen content in the pond water. Farmers are advised to run the aerator for two hours in the morning and in the evening for improving oxygen content in pond water or to circulate the water from the farm/pond with the help of water pump or bamboo stick so that moving the water will help increase the amount of oxygen in the water.

Vidarbha

- To avoid the rotting of matured bolls from outer side due to recent rainfall and fungal leaf spot diseases it is advised to undertake foliar spray Carbendazim 50 WP @ 20 g or Propiconazole 25 EC @ 10 ml or Pyraclostrobin 20 WP @ 20 g in 10 litres of water.
- 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.

- Undertake need based intercultural in earlier sown chick pea crop and keep the field weed free. Need based protective irrigation is advisable in earlier sown chickpea.

Kerala

551 mm (20% excess) received over Kerala during 01 October - 30 November 2023. The extended range weather forecast (rainfall) for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) is normal week-1 and; above normal for week-2.

- During high humidity, there is a chance of *Pollu* disease in pepper plants. To protect, it is advised that control the shade in the garden and spray with 1% Bordeaux mixture. Also, Carbendazim and Mancozeb can be mixed and sprayed at the rate of one gram per one litre of water.
- Due to increase in high relative humidity and dew, there is a chance of blast disease in paddy. As a precaution, it is advised to spray 20 g *pseudomonas* per one litre of water or 4 g Nativo (Trifloxystrobin Tebuconazole) can be sprayed in 10 litres of water.

Tamil Nadu

332 mm (-6% deficit) received over Tamil Nadu during 01 October - 30 November 2023. The extended range weather forecast (rainfall) for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) is normal week-1 and; below normal for week-2.

- Due to continuous rainy days, intermittent drizzles, cloudy weather, low night temperature less than 22 °C and longer leaf wetness favours blast incidence in paddy crop. To manage, it is advised to spray Carbendazim 50 WP @ 500 g/ha or Tricyclazole 75 WP @ 500 g/ha after observing initial infection of the disease.
- Due to forecast of light rain fall is predicted during next week, farmers are advised to postpone the irrigation in irrigated crops

Anantapur

81 mm (-61% large deficit) rainfall was received over Rayalaseema and 94 mm (-68% large deficit) rainfall was received over Coastal Andhra Pradesh during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) is below normal over Rayalaseema and above normal over Coastal Andhra Pradesh for week-1 and; below normal over Rayalaseema and Coastal Andhra Pradesh for week-2.

- In Ananthapuramu, Kurnool, Chittoor and Kadapa districts, under irrigated conditions, farmers are advised to take up *rabi* groundnut sowings and select the varieties *Dharani*, *Narayani*, *K6*, *K7*, *Kadiri Amaravathi*, *Bheema*, *TCGS1157* and *TCGS1073*. Further, seed treatment with Imidacloprid 600 FS @2 ml per kg seed is recommended to control bud necrosis and stem necrosis.
- Present weather conditions are favourable for the incidence of pink boll worm in cotton grown in Srikakulam, Vizianagaram and Krishna districts. To control, farmers are advised to spray Prophenophos @ 2 ml or Thiodicarb 1.5 g/litre of water.

Karnataka

141 mm (-25% deficit) rainfall received over South Interior Karnataka, 219 mm (-14% deficit) over Coastal Karnataka and 48 mm (-67% large deficit) rainfall received over North Interior Karnataka during 01 October - 30 November 2023. The extended range weather forecast (rainfall) provided for the next two weeks (01 - 07 December 2023 and 08 - 14 December 2023) is above normal over North Interior Karnataka, below normal over Coastal Karnataka and normal over South Interior Karnataka for week-1 and; below normal over North Interior Karnataka and Coastal Karnataka and normal over South Interior Karnataka for week-2.

South Interior Karnataka

- Early sown ragi crop is at maturity/harvesting stage, farmers are recommended for to harvest the crop and keep at safe place.
- Red gram crop is also at maturity/harvesting stage. Farmers are advised to harvest the red gram also.

Disclaimer:/अस्वीकरण:

मौसम की भविष्यवाणी कई कारकों पर निर्भर करती है जो प्रकृति में गतिशील हैं। यहां दी गई कृषि मौसम संबंधी सलाहों की सफलता मौसम पूर्वानुमान की सटीकता पर निर्भर करती है। किसी भी स्थिति में, भारतीय मौसम विज्ञान विभाग (IMD) और भारतीय कृषि अनुसंधान परिषद (ICAR) उपयोगकर्ता या किसी तीसरे पक्ष के लिए किसी भी प्रत्यक्ष, अप्रत्यक्ष, आकस्मिक, परिणामी, विशेष या अनुकरणीय नुकसान या खोए हुए लाभ के लिए इस बुलेटिन में प्रस्तुत जानकारी का उपयोग या दुरुपयोग करने के लिये उत्तरदायी नहीं होंगे।

The predictability of weather depends on many factors which are dynamic in nature. The success of Agromet advisories provided here depends on the accuracy of the weather forecast. In no event, India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) will be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information presented in this bulletin.