



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

जारी करने की तिथि/ Date of issue: 07 February 2024

आधारित/based on

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

वैधता/Validity: 02 - 15 February 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

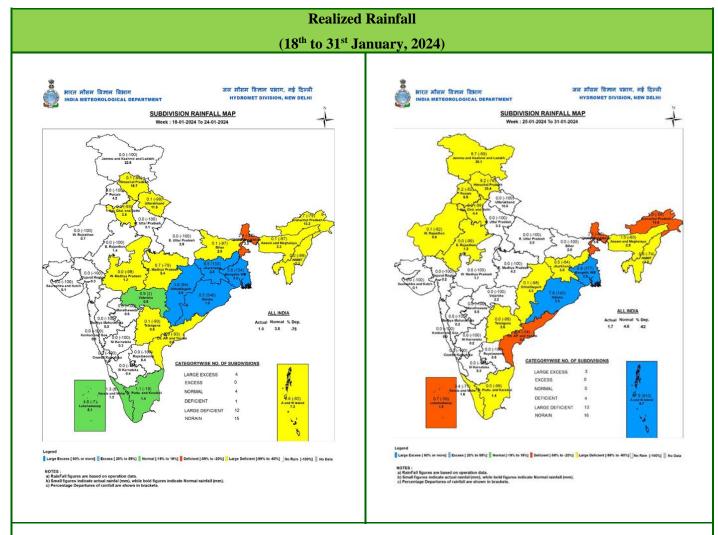
> Indian Council of Agricultural Research (ICAR) और

> > भारतीय मौसम विज्ञान विभाग

India Meteorological Department (IMD) पृथ्वी प्रणाली विज्ञान संगठन

**Earth System Science Organization** 

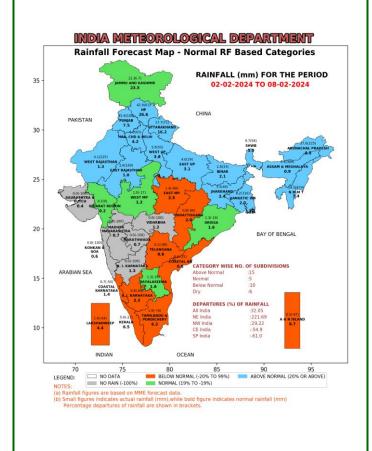
#### Realized Rainfall and Extended Range Forecast

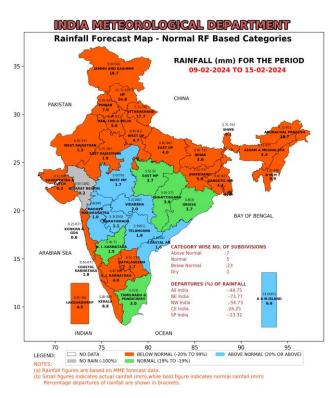


- Normal or above normal rainfall occurred in both the weeks over Gangetic West Bengal and Odisha.
- Normal or above normal rainfall occurred in either of the two weeks over Vidarbha, Chhattisgarh, Jharkhand, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe, Lakshadweep and Andaman & Nicobar Islands.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the country.

#### **Extended Range Forecast System**

Rainfall forecast maps for the next 2 weeks (IC- 31st January, 2024) (02nd to 15th February, 2024)



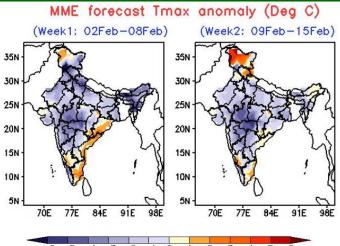


- Week 1 (02.02.2024 to 08.02.2024): Rainfall is likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Rajasthan, Uttar Pradesh, West Bengal & Sikkim and North East India.
- Week 2 (09.02.2024 to 15.02.2024): Rainfall associated with western disturbance is likely over Jammu & Kashmir, Himachal Pradesh and Uttarakhand

## Maximum and Minimum temperature anomaly (<sup>o</sup>C) forecast

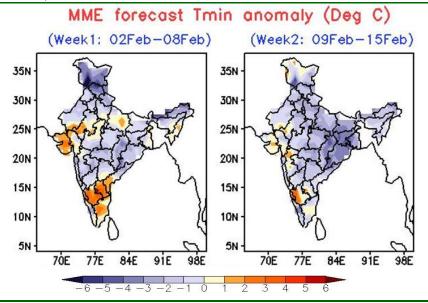
for the next 2 weeks (IC- 31st January, 2024)

**(02<sup>nd</sup> to 15<sup>th</sup> February, 2024)** 



#### **Maximum Temperature (Tmax)**

• Week 1 (02.02.2024 to 08.02.2024) and Week 2 (09.02.2024 to 15.02.2024): Maximum temperature is likely to be below normal in most parts of the country except in some parts of Jammu & Kashmir, Odisha, Coastal Andhra Pradesh, Tamil Nadu and Karnataka.



#### **Minimum Temperature (Tmin)**

- Week 1 (02.02.2024 to 08.02.2024): Minimum temperature is likely to be below normal over most parts of north, northwest, central and East India and parts of North East India except parts of Rajasthan, Gujarat and Peninsular India.
- Week 2 (09.02.2024 to 15.02.2024): Minimum temperature is likely to be below normal over most parts of the country except some parts of Maharashtra and Karnataka.

#### Strategic Agricultural Planning based on rainfall till 15 February 2024

### **Agromet Advisories**

#### Uttar Pradesh

10 mm (-29% deficit) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 4 mm (-71% large deficit) during 01 - 04 February 2024. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) is above normal over Western Uttar Pradesh and Eastern Uttar Pradesh during week 1 and; below normal over Western Uttar Pradesh and Eastern Uttar Pradesh during week-2.

#### Western Uttar Pradesh

- Due to the forecast of above normal during week 1, famers are advised to postpone irrigation in all *rabi* crops viz., wheat, mustard, barley, pea and gram crop and top dress urea at optimum moisture.
- Farmers are advised to control powdery mildew disease due to high soil and air moisture, Copper oxychloride 50% WP @ 3.0 kg with 500 to 600 litres of water solution.
- To protect from the cold wave and provide paddy straw or ash as litter in animal houses. The routine immunization of animals is necessary, if needed near veterinary hospitals.

#### Himachal Pradesh

44 mm (-54% deficit) rainfall was received over Himachal Pradesh during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Himachal Pradesh is above normal for week-1 and; below normal for week 2.

- Farmers are advised to add mulch material in the space between two rows of vegetable crops for the conservation of soil moisture and maintaining the soil temperature.
- Due to a 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. For avoiding the losses caused by frost generating smoke through burning plant material in the fields is recommended.
- There may be sporadic cases of yellow rust in wheat. Farmers are advised to use Propiconazole 0.1% (1 ml/ litre water) on the appearance of symptoms and repeat the spray after 15 days.

#### Uttarakhand

20 mm (-56% deficit) rainfall was received over Uttarakhand during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Uttarakhand is above normal for week 1 and; below normal for week 2.

• Due to snowfall at higher reaches and sleet/hail at isolated places in Uttarakhand, farmers are advised to postpone irrigation, cover high-valued crops to save from hails and clean up debris from crop fields.

- Due to the forecast of above-normal rainfall, farmers are advised to postpone hoeing, weeding and pesticide applications, clean the irrigation channel, and use organic mulch in *rabi* crop fields. Store the rainwater.
- Keep the water depth up to 6 feet in the fish pond. The farmers are advised to aerate their ponds, especially during the early hours of the day. Use potassium permanganate, lime or salt as per requirement after consulting an expert.
- Stake weak and lean fruit plants to avoid snow damage. Cover small plants with grass to prevent cold/frost paralysis. Remove winter damage and old side shoots that are no longer producing fruit.

#### Jammu

42 mm (-61% large deficit) rainfall was received over Jammu during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Jammu is normal for week 1 and; below normal for week 2.

- Farmers are advised to monitor zinc deficiency in wheat crops, if yellow patches develop between the mid-vein and edge of young to middle leaves, spray Zinc sulphate @ 0.2% during clear weather after receipt of rain.
- Hoeing and weeding is recommended in pulse crops after receipt of rain at vattar condition of the soil.
- Due to prevailing relative humidity, there is a chance of powdery mildew disease in mango. To protect, it is advised to spray Dinocap @ 0.5 ml/litre during clear weather.

#### Rajasthan

1.2 mm (-76% large deficit) rainfall was received over East Rajasthan during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over East Rajasthan is above normal for week 1 and; below normal for week 2.

- The present weather condition is favourable for the incidence of powdery mildew in mustard. Farmers are advised to spray Carbendazim 12% + Mancozeb 62% @ 2 g/litre of water.
- Farmers are advised to prepare seedlings of early cucurbitaceous crops in small polythene bags.

#### Haryana

12 mm (-25% deficit) rainfall was received over Haryana during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Haryana is above normal for week 1 and; below normal for week 2.

- Protect young plants from low temperatures by providing covering with straw or thatches and also apply light irrigation.
- Farmers are advised to maintain sufficient soil moisture and regularly check on the development of late blight disease particularly in late-sown potato crops. To control this disease, it is advised to spray Mancozeb @ 600-800 g in 200 litres of water per acre. Repeat the spray after 15 days.

#### **West Bengal**

19 mm (24% excess) rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 13 mm (-31% deficit) during 01 - 04 February 2024. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) is above normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week 1 and; below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week-2.

- As there is a forecast of rainfall during this week, farmers are advised to make drainage channels to drain stagnated water immediately. In the case of tuber crops, untimely rainfall can harm their crops, so procurement of crop insurance is advised
- Due to a decrease in maximum temperature and forecast of above-normal rainfall during this week. Farmers are advised to cover the cattle sheds from all sides and check the roofs thoroughly to prevent rainwater.
- Due to the forecast of above-normal rainfall, farmers are advised not to spray or apply pesticides or fertilizer before rainfall especially in the immediate week.

#### Bihar

1 mm (-91% large deficit) rainfall was received over Bihar during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Bihar is above normal for week 1 and; below normal for week-2.

- Farmers are advised to give 3 irrigation in the timely sown wheat crop which is in the 60-65 days stage and 2 irrigation in the late sown wheat crop, which is in the 40-55 days stage. Spraying of mixture of 2.5 kg zinc sulphate, 1.25 kg lime and 12.5 kg urea in 500 litres of water per hectare is advised in late sown wheat crop, provided zinc deficiency symptoms appear in the crop field.
- Farmers are advised to provide irrigation in *rabi* maize, which is in the tassel/silking stage. Application of 50 kg nitrogen/ha is advised after irrigation.
- Harvesting of matured crops of early varieties of potato is advised. Regular monitoring is advised for attack of cut worm in late-sown potato crop. If infestation is observed in the crop field, spraying of Chlorpyriphos 20 EC @ 2.5-3 ml per litre of water is advised.

#### Madhya Pradesh

9 mm (-53% deficit) rainfall was received over Madhya Pradesh during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Madhya Pradesh is below normal for week 1 and; normal for week 2.

- Field preparation for sowing of summer season soybean, mung and urd crops. Collect the necessary input for its sowing.
- Due to the rise in temperature, cloudy weather and humidity conditions, pest and disease incidence may happen. It is advised to monitor the field against insect pests and disease occurrences in mustard, chickpea, garden pea, lentil crops, and consult scientists from the nearby KVK for its control.

• A light irrigation is advised in tomato, brinjal and chilli vegetables to prevent from cold wave conditions.

#### Chhattisgarh

4.8 mm (-64% large deficit) rainfall was received over Chhattisgarh during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Chhattisgarh is below normal for week 1 and; normal for week 2.

- In late sown wheat crop, first irrigation is advised to give at 20-25 days after sowing (CRI stage) and also give 25% of the second dose of nitrogen in top dressing. Second irrigation is advised at 40-50 days after sowing i.e. at the tillering stage and also give a third dose of nitrogen in the top dressing.
- For the management of white rust or downy mildew disease in mustard crops, spraying of Metalaxyl @1 g/ litre is advised. If necessary then repeat after 10-12 days.

#### Odisha

15 mm (25% excess) rainfall received over Odisha during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) over Odisha is normal for week 1 and; week-2.

- Mulching is advised in vegetable seedlings with straw or other mulching material to avoid cold injury.
- Under prevailing weather conditions, it is advised to cover the recently planted cole crops with paper pockets during night time to prevent low-temperature stress.
- Farmers are advised to harvest mature produce like cauliflower, cabbage, tomato, bean, green pea, carrot, and radish.
- After rain there is a chance of rotting and wilting of plants due to stagnation of water. To manage wilt disease in vegetable crops, drench the root zone with a solution of 1.5 g of streptocycline and 20 g, Metalaxyl 8% + Mancozeb 64 % WP mixed in 10 litres of water.
- Because of prevailing low temperature, for maintaining heat in the poultry shed is advised to use an electric bulb or install heaters in the shed.

#### Maharashtra

1.2 mm (-24% deficit) rainfall over Madhya Maharashtra; 2.3 mm (-78% large deficit) rainfall over Vidarbha; 0.5 mm (-88% large deficit) rainfall over Marathwada; and 5 mm (1126% large excess) in Konkan region was recorded during 01 - 04 February 2024. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) is no rainfall over Konkan, above normal rainfall over Madhya Maharashtra, below normal rainfall over Marathwada and Vidarbha for week-1 and; no rainfall over Konkan, Madhya Maharashtra, Marathwada and below normal over Vidarbha for week-2, respectively.

Parbhani

- As per maximum temperature during the last four days and forecast of dry weather during this week, irrigation management is advised in safflower crops during flowering (65 to 70 days after sowing) with the help of a sprinkler irrigation system.
- Due to cloudy weather during the last three days, if shoot borer and fruit borer in brinjal is observed collect and destroy the infected plant part and for management make use of Pheromone traps @ 2 per acre or take a spray of Chlorantraniliprole 18.5 % SC @ 4 ml or Chlorpyriphos 20 % EC @ 20 ml or Cypermethrin 10 % EC @ 11 ml per 10 litre of water.
- Harvesting of mature Mrug bahar pomegranate fruits is advised.
- Due to cloudy weather during the last three days, mites may be observed in mrug bahar citrus orchard. For management take a spray of 5% NSKE or Azadirachtin (10000 ppm) 3 to 5 ml per litre of water.

#### Vidarbha

- With the prevalence of dry weather, it is advised for need-based irrigation in late sown chickpea crops. Ensure irrigation preferably with a sprinkler at pod formation stage for better productivity. Avoid over-irrigation/water stagnation to prevent the incidence of root rot.
- In timely sown irrigated wheat, ensure irrigation at flowering (65-70 days stage). In late-sown irrigated wheat, ensure adequate soil moisture at the late jointing stage (45-50 days) for better productivity.
- Intermittent cloudy weather favours infestation of pod borer in early sown chickpea crop. IPM practices should be followed for the control of *Helicoverpa* by using 5 Pheromone traps per hectare.

#### Madhya Maharashtra

- Application of NAA (Planofix 20 ppm @ 40 ml in 200 lit water) is suggested for reducing flower and fruit drop in mango.
- For powdery mildew management in Mango, foliar application of Hexaconazole 5 EC @
   2 ml per litre of water is advised.

#### Kerala

59 mm (581% large excess) received over Kerala during 01 - 04 February 2024. The extended range weather forecast (rainfall) for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) is below normal for week 1 and; week-2.

- Due to dry weather conditions, there is a chance of slow wilt disease in pepper. As a control
  measure, drench the basin with three-gram Copper Oxy Chloride (COC) per one litre of
  water.
- Under prevailing weather conditions, there is a chance of a thrips attack in chilli. To manage, it is advised to apply 2% Neem oil+ garlic emulsion under the leaf surface at 10-day intervals. If the attack is severe, apply Spiromesifen 8 ml per ten litre of water.

• Boron deficiency is seen more during dry weather in banana orchards. To manage, it is advised to spray one gram borax per one litre of water.

#### Anantapur

4 mm (-13% deficit) rainfall was received over Rayalaseema and 0.6 mm (-94% large deficit) rainfall was received over Coastal Andhra Pradesh during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) is below normal rainfall over Rayalaseema and normal over Coastal Andhra Pradesh for week 1 and; below normal over Rayalaseema and Coastal Andhra Pradesh for week-2.

- As per the forecast of normal to below rainfall and higher minimum temperature in the Rayalaseema region and below normal to above normal rainfall is expected in the coastal Andhra region. Hence, farmers are suggested to give need-based light irrigations in groundnut crops for increasing peg penetration and pod development.
- To reduce qualitative and quantitative losses farmers are advised to harvest the redgram crop and store in a dry place before threshing the crop.
- Present weather conditions are favourable for the incidence of gram pod borer and semilooper in Bengal gram grown in Ananthapuramu, Kurnool and Prakasam districts. To control the pests, spraying of Indoxacarb @ 1.0 ml or Flubendiamide @ 0.2 ml/L of water is recommended.

#### Karnataka

9 mm (278% large excess) rainfall received over South Interior Karnataka, 39.1 mm (2074% large excess) over Coastal Karnataka and 1.1 mm (-62% large deficit) rainfall received over North Interior Karnataka during 01 - 04 February 2024. The extended range weather forecast (rainfall) provided for the next two weeks (02 - 08 February 2024 and 09 - 15 February 2024) is no rainfall over North Interior Karnataka and below normal rainfall over South Interior Karnataka and Coastal Karnataka for week 1 and; normal rainfall over North Interior Karnataka and below normal rainfall over South Interior Karnataka and Coastal Karnataka for week-2.

#### North Interior Karnataka

- As no rainfall was forecasted during this week, farmers are advised to provide protective irrigation to the late-sown crops.
- Do not apply any nitrogen-based fertilizer in the grape orchard just before flowering to the fruit setting stage to avoid problems of inflorescence necrosis.

#### South Interior Karnataka

As below normal rain forecast for this week, farmers are advised for one or two protective irrigation at marble stage of mango to protect fruit drop at this stage.

• Do not apply any nitrogen-based fertilizer in grape orchard just before flowering to fruit setting stage to avoid problems of inflorescence necrosis

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