



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

जारी करने की तिथि/ Date of issue: 15 May 2024

आधारित/based on

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

वैधता/Validity: 10 - 23 May 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 East Madhya Pradesh, Vidarbha and Arunachal Pradesh.
- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Punjab, Bihar, Jharkhand, Gangetic West Bengal, Nagaland Manipur Mizoram & Tripura (NMMT), Gujarat Region, West Madhya Pradesh, Chhattisgarh, Telangana and Andhra Pradesh & Yanam.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.



- Week 1 (10.05.2024 to 16.05.2024): Rainfall is likely to be normal to slightly below normal over Jammu & Kashmir, Himachal Pradesh, and Uttarakhand. Rainfall is also likely over most parts of South India including parts of Madhya Maharashtra; over Bihar, Jharkhand, Gangetic West Bengal, Odisha, Chhattisgarh and northeast India.
- Week 2 (17.05.2024 to 23.05.2024): Rainfall is likely to be normal to slightly below normal over Jammu & Kashmir, Himachal Pradesh and Uttarakhand. Rainfall is also likely over most parts of South India including parts of Madhya Maharashtra; over Bihar, Jharkhand, Gangetic West Bengal and northeast India.



# Minimum Temperature (Tmin)

- Week 1 (10.05.2024 to 16.05.2024): Minimum temperature is likely to be below normal over Central and northeast India. However, it is likely to be above normal over many parts of Northwest India, Gujarat, Madhya Maharashtra, Karnataka and Odisha.
- Week 2 (17.05.2024 to 23.05.2024): Minimum temperature is likely to be above normal over many parts of Northwest & East India, Gujarat, Madhya Maharashtra and Karnataka. However, it is likely to be below normal over northeast India.

#### Strategic Agricultural Planning based on rainfall till 23 May 2024

# **Agromet Advisories**

#### Uttar Pradesh

24 mm (11% excess) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 15 mm (-24% deficit) during 01 March - 14 May 2024. The extended range weather forecast (rainfall) for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) is normal over Western Uttar Pradesh and above normal over Eastern Uttar Pradesh during week 1 and; below normal over Western Uttar Pradesh and Eastern Uttar Pradesh during week 2.

#### Western Uttar Pradesh

- Given the possibility of light rain, farmers are advised to harvest and thresh mature wheat crops. After harvesting the wheat crop, tie the bundle and thresh in the evening and at night when the wind is cool.
- Because of the possibility of rain, postpone irrigation of maize (vegetative stage), black/green gram (vegetative stage). Keep the maize crops free from weeds and irrigate them at intervals of 12-15 days as per the requirement and maintain proper moisture.
- Under prevailing weather conditions, there is a possibility of an outbreak of thrips/green moths in the green gram crop. For prevention, spraying of Oxydemeton-methyl 25% EC or Dimethoate 30% EC at the rate of 1.0 litre/ha in 600-700 litres of water is sprayed.
- To protect the chickens from heat, arrange curtains, fans and ventilation in the hen house. To reduce the temperature of the hen house, cover the roof of the shed with straw

#### Eastern Uttar Pradesh

- Under prevailing weather farmers are advised to keep the maize crops free from weeds and irrigate them at intervals of 12-15 days as per the requirement and maintain proper moisture.
- Optimum moisture level advised to be maintained in cucurbitaceous crops by light and frequent irrigation as dry conditions may lead to poor pollination and thus drop in yield of the crop.

#### **Himachal Pradesh**

219 mm (6% excess) rainfall was received over Himachal Pradesh during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over Himachal Pradesh is below normal for week 1 and; week 2.

- Due to the forecast of below-normal rainfall, it is advised to provide light irrigation to the onion crop which is at the harvesting/maturity stage. Do not give fertilizer at this stage of the crop, otherwise, the vegetative part of the crop will grow more and the onion bulb will grow less.
- Under prevailing weather conditions, farmers are advised to monitor roses and balsam crops for blue beetle. If flowers are affected with aphids, spray Malathion @0.05% for the control. Light and frequent irrigation is also advised.
- Given the high temperature in the coming days, farmers are advised to sprinkle the water on the body of animals 2-3 times a day. Ensure plenty of clean drinking water for animals.

#### Jammu

294 mm (2% excess) rainfall was received over Jammu during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over Jammu is below normal for week 1 and; week 2.

- Sowing of summer mixed fodder (maize+cowpea+charri) and bajra is recommended during clear weather. In case of an already sown crop, top dressing of Nitrogen is recommended.
- Harvest Onion/garlic immediately and shift to safer places, keep them in a muslin cloth in well-ventilated rooms.
- It is the right time to start beekeeping especially for beginners as pollen and nectar are in plenty and bee activity is at its peak.

#### Rajasthan

10 mm (-21% deficit) rainfall was received over East Rajasthan during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over East Rajasthan is normal for week 1 and; week 2.

- Field preparation is advised for the sowing of cotton this week. Farmers are advised to procure good quality certified seeds from reliable sources.
- Intercultural operations and hand hoeing are advised to control weed infestation and proper pegging.
- Red beetle insects cause damage to germinated and new leaves of cucurbits crops. For the control of red beetle in cucurbit crops dusting of Carbaryl 5% @ 25 kg/ha in morning or evening time is advised.

#### Haryana

25 mm (-22% deficit) rainfall was received over Haryana during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over Haryana is normal for week 1 and; week 2.

- Due to possibilities of variable weather, farmers are advised to withhold the sowing of Bt cotton crop, if possible.
- Due to the possibility of variable weather and rainfall during this week, farmers are advised to withhold irrigation in the next three days in the sugarcane crop which is at the seedling stage.
- Under prevailing weather conditions, farmers are advised to prepare the land and sow pulse crop green gram, lobia, moth and pigeon pea.

#### Punjab

32 mm (-27% deficit) rainfall was received over Punjab during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over Punjab is above normal for week 1 and; below normal for week 2.

• Prepare field for *kharif* season and to save water and for ease in management of paddy straw, prefer PAU recommended short duration varieties PR 126, PR 127, PR 130 and HKR-47. Adopt direct seeding of rice to conserve water.

- Farmers are advised to start sowing of fodder maize, sorghum, bajra, Napier bajra and guinea grass to get early fodder. It will provide good quality fodder during the lean period.
- Complete sowing of recommended varieties/hybrids of cotton including Bt cotton or desi cotton up to 15<sup>th</sup> of May. Sow seeds in polythene bags to fill gaps in cotton. Apply heavy pre-sowing irrigation with good quality water for better germination and crop stand.

# West Bengal

132 mm (17% excess) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 175 mm (-34% deficit) during 01 March - 14 May 2024. The extended range weather forecast (rainfall) for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) is above normal rainfall over Gangetic West Bengal normal over Sub-Himalayan West Bengal during week 1; and normal over Sub-Himalayan West Bengal and below normal over Gangetic West Bengal for week 2.

- Due to the forecast of rainfall in this week, farmers are advised to harvest mature boro rice immediately to avoid lodging loss in the upcoming rainfall situation. Farmers are requested to complete the post-harvest operations as soon as possible.
- Due to the forecast of rainfall in this week, farmers are advised to clear the drainage channels to avoid water stagnation in vegetables. Crop protection measures may be stopped for this week.

# Jharkhand

62 mm (24% excess) rainfall was received over Jharkhand during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over Jharkhand is above normal for week 1 and; below normal over week 2.

- Keeping in view the possibility of rain in the coming days, farmers should ensure drainage facilities in the vegetable fields and maintain the ridges in the paddy crops so that water can be stored.
- At the flowering stage of rice there is the possibility of the attack of the insects Gundhi bugs. To control the attack of the insects, farmers are advised to apply Thiamethoxam 25% WG @ 0.5 grams per litre of water during evening hours.
- Farmers are advised to go for earthing up in summer maize which are its knee stage height. Apply 26-kilogram urea per acre. If infestation of stem borer is observed in crop apply Chlorantraniliprole 18.5 SC @ 60 ml/acre.

#### Odisha

103 mm (23% excess) rainfall received over Odisha during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over Odisha is above normal for week 1 and; below normal for week 2.

- Looking into the anticipated rainfall, farmers are advised to withhold spraying of plant protection chemicals for the time being.
- Protect the mango trees by netting from thunderstorm and heavy winds.
- Go for harvesting of matured non-paddy crops like groundnut and pulses to avoid viviparous germination and cover the harvested produce with a polythene sheet.

 Due to high variation of temperature between day and night leads to an infestation of neck blast disease. To control blast disease spray Hexaconazole 5% SC @ 500 ml/acre or Azoxystrobin 18.2% + Difenoconazole 11.4 % SC @ 500 ml/acre.

# Chhattisgarh

62 mm (128% large excess) rainfall received over Chhattisgarh during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) over Chhattisgarh is above normal for week 1 and; below normal for week 2.

- Due to high minimum and maximum temperatures and below-normal soil moisture status cause thermal stress in crops. Farmers are advised to adopt water conservation agronomic techniques and apply light irrigation in *rabi* crops wherever required.
- Inter-culture operation, fertilizer application, and earthing followed by irrigation is advised in sugarcane crops at knee height stage
- This time is favourable for summer maize sowing; hence the farmers are advised to prepare fields without stubble after harvesting wheat/chickpea in irrigated areas and complete the sowing of maize crop as soon as possible and sow the recommended varieties of maize for corn.
- If yellow stem borer is observed in the rice crop, it is advised to spray Cartap Hydrochloride 75 % SG @1gram or Chlorpyriphos 20 % EC @ 1.5 ml per litre of water.

# Maharashtra

12 mm (-10% deficit) rainfall over Madhya Maharashtra; 72 mm (246% large excess) rainfall over Vidarbha; 22 mm (42% excess) rainfall over Marathwada; and 5 mm (-19% deficit) rainfall over Konkan region was recorded during 01 March - 14 May 2024. The extended range weather forecast (rainfall) for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) is above normal over Konkan, Vidarbha, Madhya Maharashtra and Marathwada for week 1 and below normal over Konkan, Vidarbha, and Marathwada and above normal Madhya Maharashtra for week 2, respectively.

#### Parbhani

- For moisture conservation and maintenance of soil temperature mulching is advised in newly planted horticultural orchards.
- As per the forecast of thunderstorms and rainfall during this week, it is advised to not to store turmeric crop in the open place. Store the harvested crop at safe places (Warehouse).
- Due to the forecast of thunderstorms and rainfall during this week, mechanical support/staking is advised for newly planted vegetables /creeper vegetables.
- As rainfall is expected only at isolated places, apply irrigation to summer groundnut, sesame, orchards and vegetables.

#### Vidarbha

• Due to the forecast of above-normal rainfall during this week, harvesting of matured vegetables and fruits like mango, watermelon at the earliest and keep harvested produce at safer places.

- Under prevailing weather conditions, it is advised to provide mechanical support to newly planted orchards and vegetables to avoid lodging due to strong winds.
- To control jassids in sesamum, it is advised to spray Quinalphos 25% @ 20 ml per 10 litres of water during clear weather

#### Madhya Maharashtra

- Under prevailing weather conditions, harvesting of matured groundnut is advised and the harvested produce at safer places.
- Due to the forecast of above-normal rainfall during this week, it is advised to provide mechanical support to newly planted orchards and vegetables to avoid lodging due to strong winds.

# Dapoli

- As thunderstorms accompanied by lightning & gusty winds and light to moderate rainfall is expected at isolated places, undertake harvesting of matured summer rice, groundnut, green gram, cashew nut & watermelon and keep the harvested produce at safer places.
- As rainfall is expected only at isolated places, apply need-based irrigation to vegetables and newly planted orchards.
- Due to hot and humid weather, cover banana bunches with banana leaves or gunny bags to protect them from excessive sunshine.

# Kerala

105 mm (-52% deficit) rainfall received over Kerala during 01 March - 14 May 2024. The extended range weather forecast (rainfall) for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) is above normal for week 1 and; normal for week 2.

- It is recommended to sow dhaincha seeds in the paddy field before virippu planting.
- There is a chance for the development of stem bleeding disease in coconut palms. As a precaution, apply 5 kg neem cake in the basins of the palms. Also, apply 50 g of each Trichoderma mixed along with organic manures in the basins.
- Since dry weather conditions prevailed, irrigate areca nut. Irrigate once in 3-5 days at a rate of 175 liters per palm. Protect the palms from direct sunlight by wrapping the stems with areca sheaths or whitewash the exposed portion.

# Tamil Nadu

36 mm (-59% deficit) rainfall received over Tamil Nadu during 01 March - 14 May 2024. The extended range weather forecast (rainfall) for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) is above normal for week 1 and week 2.

- Due to the forecast of above-normal rainfall, irrigation may be postponed based on soil moisture and apply crop residue mulches to all irrigated crops to maintain sufficient soil moisture. Plan for summer ploughing against the slope with soil inverting-type ploughs.
- Considering the local circulation due to increased temperature and expected summer rains, provide propping to the sugarcane by tying opposite rows to prevent it from lodging.
- Raising of green manure crops like daincha, sunnhemp and kolinji can be done to utilizing the summer rainfall.

#### Andhra Pradesh

40 mm (-15% deficit) rainfall was received over Rayalaseema and 50 mm (-26% deficit) rainfall was received over Coastal Andhra during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) is above normal over Rayalaseema and Costal Andhra Pradesh for week 1 and; normal over Rayalaseema and below normal over Coastal Andhra Pradesh for week 2.

- Farmers are advised to grow high yielding and drought tolerant groundnut varieties like *Kadiri-9, Kadiri Harithandhra, Anantha, Greeshma, Narayani, Abhaya, Dharani, ICGV91114, Kadiri Amaravathi and Kadiri Chitravathi.*
- Present weather conditions are favorable for bacterial rhizome rot in banana. Soil drenching of bleaching powder @15-20 g/litre of water after 24 hrs of irrigation at 15 day intervals for better control of rhizome rot.
- Prevailing dry weather conditions are congenial for the incidence of dry root rot in sweet orange. To control, farmers are advised to apply light and frequent irrigation to sweet orange and after irrigation soil drenching with Mancozeb @3g/litre (based on the age of the plant 10-15 lit of spray fluid) after a week carbendazim 2 g/litre

#### Karnataka

50 mm (-42% deficit) rainfall was received over South Interior Karnataka, 42 mm (-35% deficit) Coastal Karnataka and 41 mm (-11% deficit) over North Interior Karnataka during 01 March - 14 May 2024. The extended range weather forecast (rainfall) provided for the next two weeks (10 - 16 May 2024 and 17 - 23 May 2024) is above normal over Coastal Karnataka, North Interior Karnataka and South Interior Karnataka for week 1 and; week 2.

#### South Interior Karnataka

- Due to the forecast of above-normal rainfall, deep ploughing is advised in the mango orchard.
- Mulching (crop residue after harvesting of rabi and other crops) and one or two protective irrigation is recommended for mango and other horticultural crops to conserve the soil moisture due to high temperatures and dry weather persisting over long period of time.
- To control fruit, drop in mango by spraying Naphthalene acetic acid (NAA) @ 20 ppm twice at an interval of 15 days during the early stage (peanut stage/marble stage) of fruit development stage.

#### 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.