



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन
National Agromet Advisory Services Bulletin

जारी करने की तिथि/ **Date of issue: 04 June 2024**

आधारित/**based on**

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

वैधता/**Validity: 31 May - 13 June 2024**

जारीकर्ता/**Issued by**

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

AICRP on Agro-Meteorology (AICRPAM)

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Central Research Institute for Dryland Agriculture (CRIDA)

भारतीय कृषि अनुसंधान परिषद

Indian Council of Agricultural Research (ICAR)

और

भारतीय मौसम विज्ञान विभाग

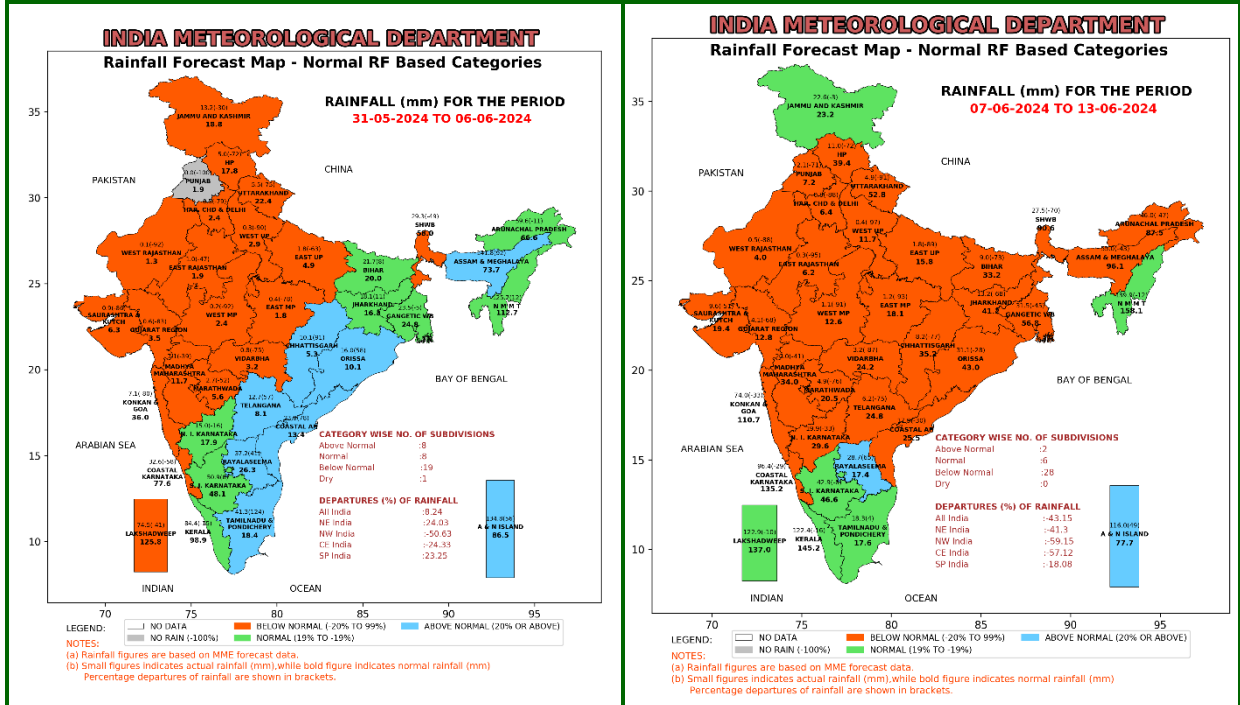
India Meteorological Department (IMD)

पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 29th May, 2024) (31st May to 13th June, 2024)



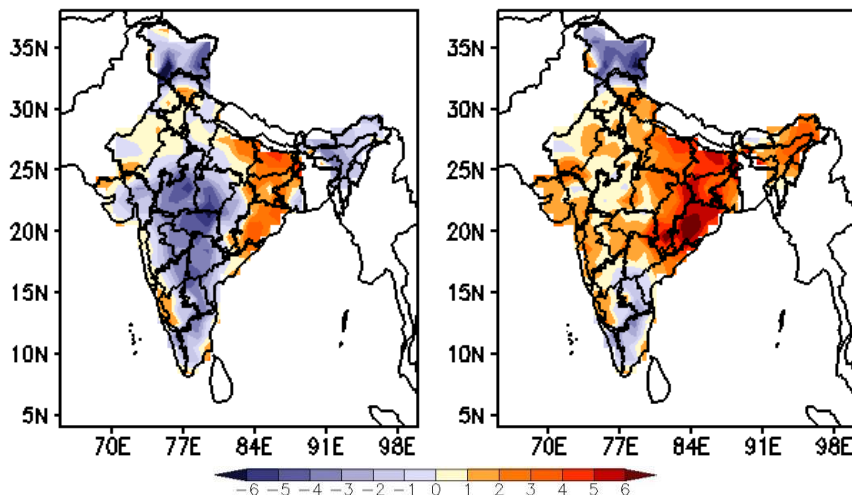
- **Week 1 (31.05.2024 to 06.06.2024):** Rainfall is likely to be normal to above normal over South India, East India, North East India and Andaman & Nicobar Islands.
- **Week 2 (31.05.2024 to 06.06.2024):** Rainfall is likely to be normal to above normal over southern parts of Peninsular India, Jammu & Kashmir, Nagaland Manipur Mizoram & Tripura and the Island regions. It is likely to be below normal over the rest of the country.

**Maximum and Minimum temperature anomaly ($^{\circ}$ C) forecast
for the next 2 weeks (IC- 29th May, 2024)
(31st May to 13th June, 2024)**

MME forecast Tmax anomaly (Deg C)

(Week1: 31May-06Jun)

(Week2: 07Jun-13Jun)



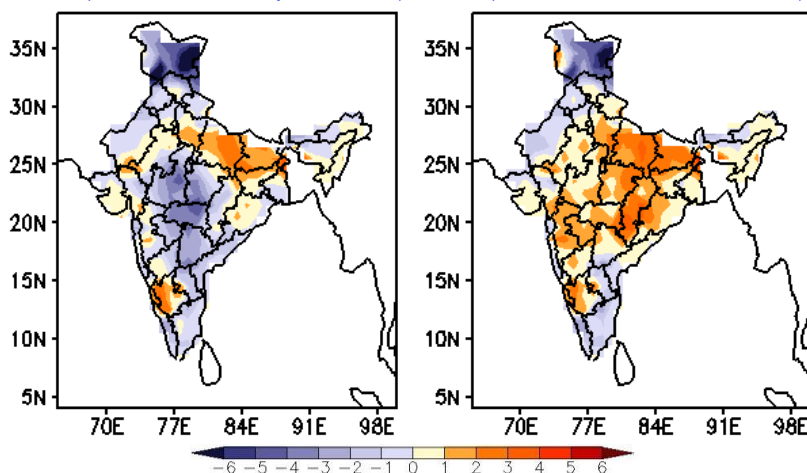
Maximum Temperature (Tmax)

- **Week 1 (31.05.2024 to 06.06.2024):** Maximum temperature is likely to be below normal over most parts of the country. However, it is likely to be above normal over most parts of East India, some parts of Northwest India and Karnataka.
- **Week 2 (07.06.2024 to 13.06.2024):** Maximum temperature is likely to be above normal over most parts of the country with appreciably above normal temperatures over East India. It is likely to be below normal over Jammu & Kashmir and some parts of South India.

MME forecast Tmin anomaly (Deg C)

(Week1: 31May-06Jun)

(Week2: 07Jun-13Jun)



Minimum Temperature (Tmin)

- **Week 1 (31.05.2024 to 06.06.2024):** Minimum temperature is likely to be below normal over most parts of the country. However, it is likely to be above normal over many parts of Uttar Pradesh & Bihar and some parts of Jharkhand, Sub-Himalayan West Bengal and Karnataka.
- **Week 2 (07.06.2024 to 13.06.2024):** Minimum temperature is likely to be normal to above normal over most parts of the country except Jammu & Kashmir, Kerala and Tamil Nadu.

Agromet Advisories

Kerala

37 mm (32% excess) rainfall was received over Kerala from 01 June to 02 June 2024. The extended range weather forecast (rainfall) for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) is normal rainfall for week 1 and week 2.

- Land preparation and nursery for *virippu* paddy (Rainfed) can be started after summer rains. Seeds should be soaked in Pseudomonas @10 g per litre of water for one kg seeds for 30 minutes.
- Due to the forecast of light to moderate rainfall, propping of the banana plants recommended. Make necessary arrangements for proper drainage in the fields.
- During the rainy season, Rhizome rot in banana is possible. Proper drainage facilities must be ensured. As a precaution, drench the basin with three litres of pseudomonas solution (20g per litre of water).
- During the rainy season there is a chance of rhizome rots in ginger. As a prophylactic measure to rhizome rot disease in ginger, soak ginger seeds in a solution of 3 grams of Mancozeb mixed with one litre of water for 30 minutes and then plant it.
- Care should be taken to avoid fungal growth in the cattle feed. Take precautions to avoid ectoparasitic infestation. Care should be taken to prevent rat breeding in the premises of cattle shed to prevent leptospirosis

Karnataka

8 mm (-13% deficit) rainfall over South Interior Karnataka; 2 mm (-90% large deficit) rainfall over Coastal Karnataka and 2 mm (-71% large deficit) rainfall over North Interior Karnataka was received during 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) is normal over North and South Interior Karnataka and below normal over Coastal Karnataka week 1 and; below normal for North and Coastal Interior Karnataka and normal over South Karnataka during week 2.

South Interior Karnataka

- Due to the forecast of above-normal rainfall, deep ploughing is advised in the mango orchard.
- Harvesting of mango without dropping ground level using mango net.
- Mango growers should harvest matured fruit and try to leave one or two inches of stem in the mango bunch, which helps to avoid sap burn disease. Afterwards, the mango fruit should be wrapped using papers using paper and then keep it using paper and plastic crates. Within 24 hours of harvesting, the crates are placed on top of each other with 5 to 6 crates half-feet apart and then take 300 ml. of water in small plastic bottles, add 10 ml of ethylene to the water, adding 10 g sodium hydroxide (caustic soda). Then seal the tarpaulin cover tightly without aeration for 48 to 60 hours, and then tarpaulin should be removed and left out for aeration. Ethylene should be kept in 8 to 10 glasses for to ripen 1 ton of fruit. Natural ripening will help to get good quality fruit and better market price.

North Interior Karnataka

- As light to moderate rainfall is forecasted during this week, it is advised that wherever soil moisture condition is sufficient, depending on the soil type kharif sowing of bajra, kharif sorghum, groundnut, green gram, sesame may be taken up
- To manage Bacterial blight disease, spray the lime orchards with 3-gram Copper Oxychloride or 1 per cent Bordo mixture dissolved in one litre of water or 300 ppm Streptomycin (3 grams in 10 litres of water)
- Provide irrigation by looking to the rainfall condition of horticultural crops

Andhra Pradesh

10 mm (115% large excess) rainfall was received over Rayalaseema, and 9 mm (127% large excess) was received over Coastal Andhra from 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) is above normal over Rayalaseema and Coastal Andhra Pradesh for week 1 and; below normal over Coastal Andhra Pradesh and above normal over Rayalaseema for week 2.

- Utilizing the available soil moisture, farmers are advised to take up land preparation for castor sowing. Farmers are advised to select high-yielding varieties of castor such as *Haritha, Kiran, Jwala, Pragathi and hybrids i.e., DCH-117, PCH-111, GCH-8, ICH-66 and ICH-5.*
- The pomegranate crop is at the resting stage. Farmers are advised to spray Bordeaux mixture @ 10 g per litre of water to prevent the spread of bacterial leaf blight.
- In Southern zone of the state, the present weather conditions are favourable for early shoot borer in sugarcane. To control, it is advised to provide frequent irrigations, remove dead hearts from the affected plants, and control the larvae by spraying Chlorpyrifos @ 2.5 ml/litre of water at 4th, 6th and 9th weeks after planting.

Tamil Nadu

8 mm (129% large excess) rainfall received over Tamil Nadu during 01 June - 02 June 2024. The extended range weather forecast (rainfall) for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) is above normal for week 1 and normal for week 2.

- Due to high wind speed and forecast of above normal rainfall, it is advised to provide propping to the sugarcane by tying opposite row to prevent from lodging. By utilizing the past week rainfall and soil moisture, late season sugarcane setts may be planted with proper drainage.
- Due to rainy weather conditions, it is advised to spray NAA 40 ppm in cotton to prevent early shedding of buds and squares and increase the yield (40 mg of NAA dissolved in one litre of water will give 40 ppm).
- Above rainfall is forecasted during this week, hence vegetable farmers are requested to drain the excess water in vegetable field by making proper drainage facility. Seeds can be treated with *Trichoderma viride* @ 4g/kg or *Bacillus subtilis* @ 10 g/kg to manage seed and soil borne pathogens.

Maharashtra

No rainfall over Madhya Maharashtra, Marathwada and Konkan and 0.2 mm (-88% large deficit) rainfall over Vidarbha was recorded during 01 June - 02 June 2024. The extended range weather forecast (rainfall) for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) is below normal rainfall over Konkan, Vidarbha, Madhya Maharashtra and Marathwada for week 1; and week 2, respectively.

Parbhani

- Due to forecast of below-normal rainfall this week, irrigation management is advised in the citrus orchard and pomegranate early in the morning or in the evening with the help of a drip irrigation system in newly planted orchard so that water stress may not occur in a newly planted citrus orchard.
- Provide shade to newly planted and small plants to protect them from temperature and mulching is also advised around the stem.
- For sowing of soybean crop one deep ploughing (30 to 45 cm) with an interval of two to three years is advised followed by two to three harrowing. Apply well-decomposed FYM or compost fertiliser before last harrowing @ 20 bullock carts (5 tons) per hectare.
- To protect the dairy animals from heat stress and minimize the effect of heat stress, it is advised to arrange sprinklers and foggers for cooling effect inside, fixing of gunny bags as curtains. Ample of drinking water is also advised to be provided to animals.

Vidarbha

- Avoid pre-monsoon sowing of cotton as it may help in emergence of pink bollworm moths from the dormant population of the previous season.
- Because of heat wave to severe heat wave conditions, farmers of Vidarbha are advised to, apply light and frequent irrigation to vegetables and orchards during morning or evening hour
- Under prevailing weather condition, it is advised to continue nursery sowing of vegetables like chilli, tomato and brinjal with assured irrigation facilities.

Konkan

- Under prevailing weather condition, it is advised to continue land preparation for sowing of kharif rice and finger millet and nursery bed preparation for vegetables.
- There is a possibility for the incidence of fruit flies on mango. Collect and destroy all fallen fruits due to gusty winds and install “Rakshak fruit fly trap” developed by the university @ 2 traps per acre.
- Due to forecast of below-normal rainfall, it is advised to continue harvesting matured mango

Assam

40 mm (61% large excess) rainfall received over Assam during 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) over Assam is above normal for week 1 and below normal for week 2.

Because of heavy rainfall accompanied by high wind velocity due to cyclone “Remal” it is advised to :

- Early harvest the crops, if 80% matured and store the harvested crop at a safer place.
- Arrange the drainage facilities in the fall-out areas
- In the case of horticulture crops provide mechanical support to plants to avoid lodging and being uprooted
- Keep the animals in proper sheds
- It is advised to not sow the seeds of Sali rice as normal to above rainfall forecasted during this week. Advocate timely collection of the seeds of high-yielding varieties of Sali rice namely *Ranjit, Bahadur, Satyaranjan, Basundhara, Kushal, Mahsuri, Bhogali, Rangilee, Ketekijoha etc. Select Numoli, Dholi, Mulagabhoru, Satyaranjan and Basundhara* in double cropping areas having crop duration of 130-135 days.

West Bengal

9 mm (7% excess) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 22 mm (-5% deficit) during 01 June - 02 June 2024. The extended range weather forecast (rainfall) for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) is normal rainfall over Gangetic West Bengal below normal over Sub-Himalayan West Bengal during week 1 and below normal over Gangetic West Bengal and Sub-Himalayan West Bengal week 2.

Due to cyclone “Remal” in West Bengal:

- Severe damage to crops such as betel vines, cucumber, ridge gourd, pumpkin and pointed gourd is noted especially in South 24 Parganas.
- Stagnation of water in vegetable fields for a longer duration may cause wilting.
- Damage to mango trees as well as guava, litchi and jackfruit occurred due to strong winds.
- Vegetable trailing structures are broken.
- Farmers are advised to insure their pre-kharif crops (summer vegetables, jute) to avoid heavy losses due to extreme events. Drainage channels in the Jute field is advised to clear well in advance to avoid water-logging conditions
- Apply Dimethoate 30% EC and Buprofezin 25% SC @1-2 ml/litre (2-4 ml per tree) to control mango mealy bug and mango hopper in mango orchards which are at the fruiting stage.

Odisha

7 mm (36% excess) rainfall received over Odisha during 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) over Odisha is above normal for week 1 and below normal for week 2.

- Due to forecast of thunderstorms with very light to moderate rainfall during this week, it is advised to make necessary arrangements for draining out excess water from crop fields in case of rain and provide staking in creeping vegetable crops and avoid spraying of insecticides during these days as heavy wind speed forecasted during this week.
- To control fruit and shoot borer in brinjal, tomato and okra, it is advised to spray Neem-based pesticide 1500 ppm @600 ml/acre at initial stages. Later, go for alternate spray of Spinosad 45 SC @70 ml/acre or Emamectin benzoate @80-100 g/acre and Thiacloprid @ 250 ml/litre of water.
- For planting of fruit crops in July and August go for digging of pits before onset of monsoon

to effect solarisation of soils removed from the pits for killing the hibernated insects and their eggs.

Chhattisgarh

0.9 mm (-61% large deficit) rainfall received over Chhattisgarh during 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) over Chhattisgarh is above normal for week 1 and below normal for week 2.

- Due to the forecast of above-normal rainfall during this week, farmers are advised to make arrangements for the drainage of excess rainwater in areas where vegetable crops are grown
- Under prevailing weather condition, there is a possibility of stem borer in maize crop which is at vegetative stage. To control it is advised to spray Chlorantraniliprole 18.5% SC @ 150 ml per hectare.

Uttar Pradesh

0.5 mm (-71% large deficit) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 0.9 mm (-41% deficit) during 01 June - 02 June 2024. The extended range weather forecast (rainfall) for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) is below normal over both subdivisions during week 1 and week 2.

Western Uttar Pradesh

- As per forecast hot and dry weather during this week, farmers are advised to maintain moisture in the vegetable crops and pick up mature fruits on standing crop.
- As per weather forecast of below normal rainfall and above normal day and night temperature during this week. Farmers are advised to arrange seed and fertilizer for sowing of paddy nursery. Medium duration paddy varieties such as *Narendra Dhan-359, Malviya Dhan-36, Narendra Dhan-2064, Narendra Dhan -2026, or Hybrid varieties as Arize -6444, 6201, PHB-71, KRH-2, PRH-10 and JKRH-401* etc. Raise the rice nursery only when water is available for irrigation
- To protect brinjal and chilli crop (fruiting stage) from food borer farmers are advised to spray Azadirachtin 1.0% EC (1000 ppm).
- Sowing of maize varieties such as *Hybrid Dakan-107, Malveya-2, JH-3459, Prakash, PSM-5, Pro-303, KH-510, MMH-113, DKC-7074* and Composite varieties *Novjoti, Pusa-2, Prabhat and Azad uttam* is advised to sow with 18-20 kg/ha treated seed.

Punjab

0.1 mm (-91% large deficit) rainfall was received over Punjab during 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) over Punjab is no rainfall for week 1 and below normal for week 2.

- To control mango fruit drop due to an increase in temperature, it is advised to spray of 10 g sodium salt 2,4-D in 500 litres of water to control the preharvest fruit drop
- Due to forecast of no rainfall in this week, it is advised to irrigate vegetable crops like tomato, brinjal, chilli, capsicum and cucurbits at regularly intervals but avoid overwatering. Apply mulches, if possible provide shade

- Irrigate the sugarcane crop at 7 to 12 days interval under dry weather conditions. Apply paddy straw or rice husk or sugarcane trash @ 20-25 q/acre between the rows to reduce soil temperature and moisture loss.

Himachal Pradesh

0.8 mm (-76% large deficit) rainfall was received over Himachal Pradesh during 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) over Himachal Pradesh is below normal for both week 1 and week 2.

- Due to present dry weather (heat wave) conditions and forecast of below normal rainfall, farmers are advised to apply irrigation and mulching (straw) in fruit orchard like kiwi, apple orchards and vegetable crops like okra, French beans, cucurbits etc. to conserve soil moisture.
- Keep the honey bees colonies in shady places and sprinkle water to reduce the heat as temperature rising high in the region. Insert the brood chamber without frame to ensure aeration
- Deep ploughing is advised after rabi crop harvest to conserve more water in the field. Clean waterways for efficient watering. Use mulches in the vegetable nursery and crops if available good for soil moisture conservation and soil temperature.
- Sowing of fodder maize along with soybean or cowpea is advised in the irrigated areas to get green fodder. Sowing of maize crop is advised to be delayed in rainfed areas.

Jammu

0.2 mm (-95% large deficit) rainfall was received over Jammu during 01 June - 02 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (31 May - 06 June 2024 and 07 - 13 June 2024) over Jammu is below normal for week 1 and normal for week 2.

- Give irrigation to the rice nursery daily due to high temperature and hence evaporation rate. Irrigation is recommended during evening hours. Cover the nursery with grass/straw to prevent the evaporation rate.
- Postpone sowing of maize till first onset of monsoon to prevent mortality of seed due to high temperature and low soil moisture availability. Deep ploughing with soil turning plough to maximum exposure of soil for destroying the larva as well as weed seed in the deep layer of soil.
- Proper staking of cucurbit vines (bitter gourd, bottle gourd, squash gourd, pumpkin etc.) is recommended. Provide support to the plants. Install 5 pheromone traps per kanal to control fruit fly.
- Due to rise in temperature farmers are advised to protect young fruit plants from heat by providing thatches/cover but ensure free circulation of air.

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