



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन
National Agromet Advisory Services Bulletin

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

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AICRP on Agro-Meteorology (AICRPAM)

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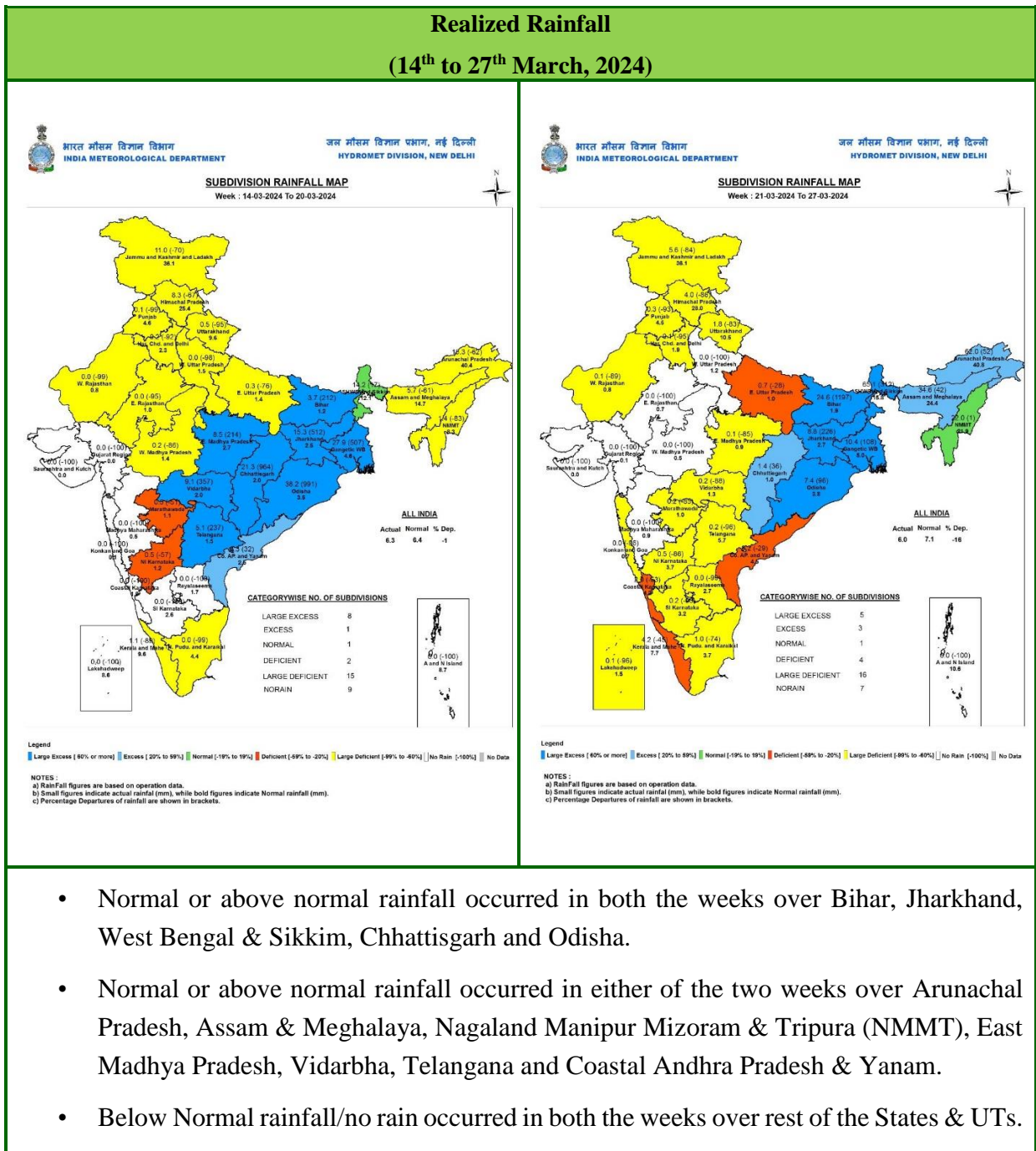
पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

Realized Rainfall and Extended Range Forecast

Realized Rainfall

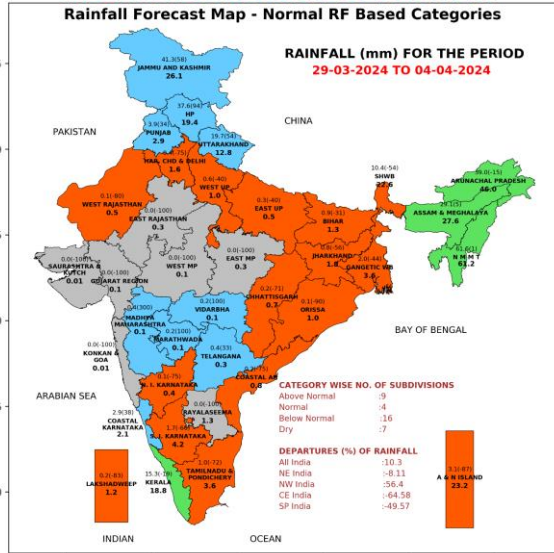
(14th to 27th March, 2024)



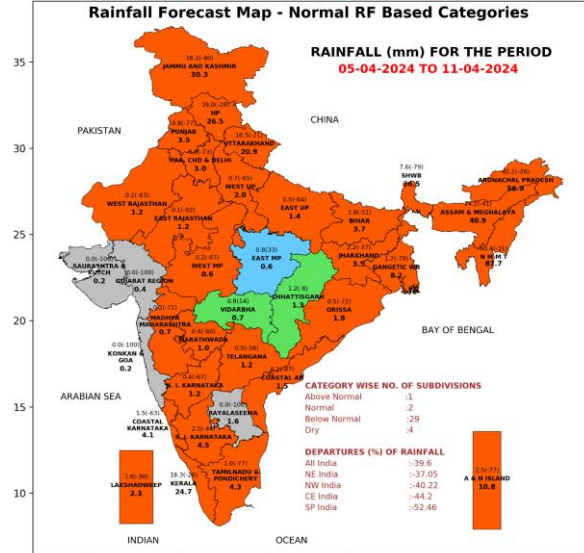
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 27th March, 2024) (29th March to 11th April, 2024)

INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



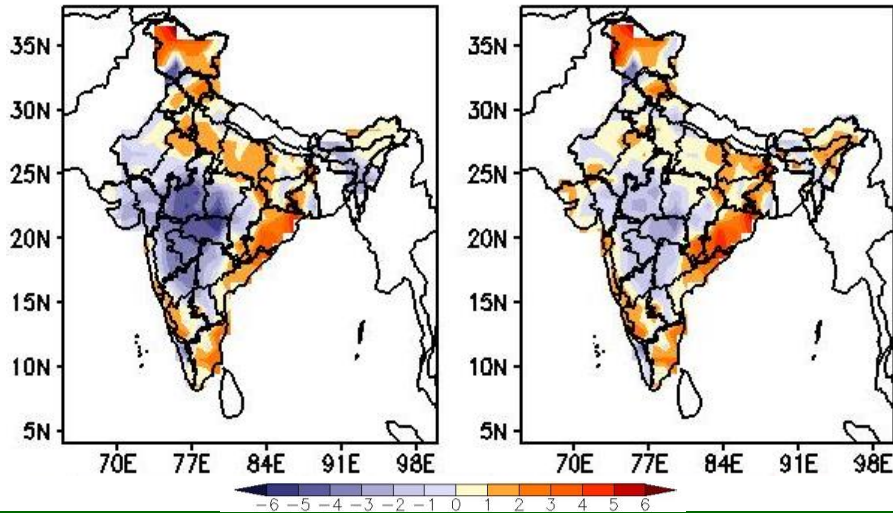
- **Week 1 (29.03.2024 to 04.04.2024) and Week 2 (05.04.2024 to 11.04.2024):** Rainfall is likely over Jammu & Kashmir, Himachal Pradesh and Uttarakhand with intense spell during week 1 due to more active Western Disturbances. Rainfall is also likely over Northeast region and Kerala.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 27th March, 2024)
(29th March to 11th April, 2024)**

MME forecast Tmax anomaly (Deg C)

(Week1: 29Mar-04Apr)

(Week2: 05Apr-11Apr)



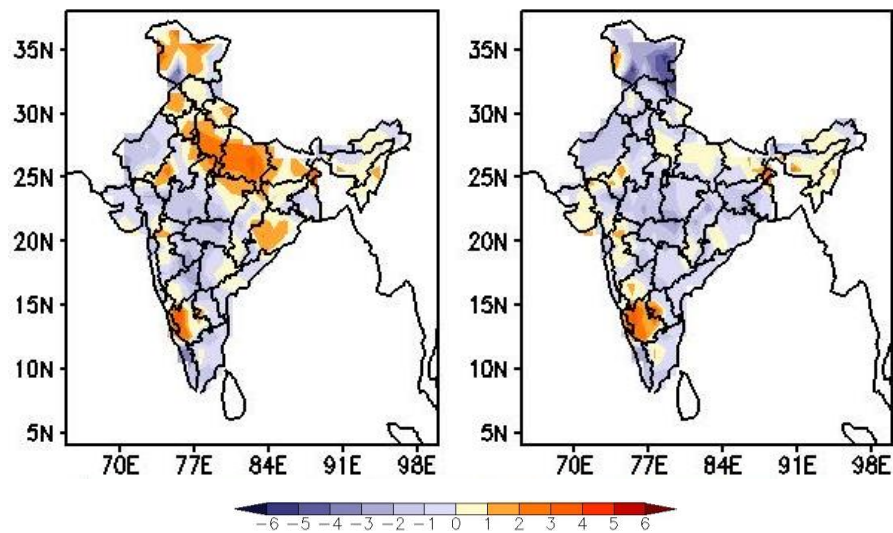
Maximum Temperature (Tmax)

- **Week 1 (29.03.2024 to 04.04.2024) and Week 2 (05.04.2024 to 11.04.2024):** Maximum temperature is likely to be above normal over many parts of the country except in some parts of west-central India.

MME forecast Tmin anomaly (Deg C)

(Week1: 29Mar-04Apr)

(Week2: 05Apr-11Apr)



Minimum Temperature (Tmin)

- **Week 1 (29.03.2024 to 04.04.2024):** Minimum temperature is likely to be above normal over many parts of Northwest India, some parts of Karnataka, East India and North East India.
- **Week 2 (05.04.2024 to 11.04.2024):** Minimum temperature is likely to be above normal over Karnataka and slightly above normal over parts of Gujarat, Maharashtra, Uttar Pradesh, Bihar and North East India.

Agromet Advisories

Uttar Pradesh

19 mm (79% large excess) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 13 mm (79% large excess) during 01 March - 31 March 2024. The extended range weather forecast (rainfall) for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) is below normal over Western Uttar Pradesh and Eastern Uttar Pradesh during week 1 and; week 2.

Western Uttar Pradesh

- Due to forecast of below normal rainfall and higher maximum temperature forecast during this week, farmers are advised for light irrigation in wheat crop.
- Due to clear weather forecast during this week farmers are advised sowing of *zaid* maize crop in vacant field with recommended composite varieties viz., *Novjoti, Pusa-2, Sweta and Azad uttam and hybrid varieties viz., Hybrid Dakan-107, Malviya hybrid-2, JH-3459, Prakash, PSM-5, Pro-303, KH-510, MMH-113, Azad hybrid-1, Azad hybrid-2, DKC-9108, DKC-7074*
- Due to high day and night temperatures during this week, there is a chance of pod borer in the pea crop. To manage, it is advised to spray Fenvalerate 20% EC @ 2.0 litres or Novaluron 10% EC @ 750 ml/ ha with 500 to 600 litres of water solution in clear sky weather.

Eastern Uttar Pradesh

- Due to prevailing dry weather condition, farmers are advised to harvest matured barley crop.
- To prevent flower and fruit drop in mango crop, farmers are advised to spray NAA 0.0025 ml / litres (25 ppm) or Gibberellic acid (25 ppm).

Himachal Pradesh

140 mm (24% excess) rainfall was received over Himachal Pradesh during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) over Himachal Pradesh is above normal for week 1 and; below normal for week 2.

Farmers are advised to prepare the nursery of following vegetables in polytubes for planting in the coming days

- **Cucumber:** *Poinsette, Long Green and Hybrids: Malini, 243 Malav, Mathura, Maharaja, Amrit and US-6125.*
- **Summer Squash:** *Pusa Alankar and Australian Green*
- **Bitter Gourd:** *Solan Hara, Solan Safed and Hybrids: F1 Chaman and F1 Palli*
- **Bottle Gourd:** *Pusa Manjri, Pusa Meghdoot, PSPL and Warad*
- The prevailing weather is conducive for the development of yellow rust disease 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.

Jammu

128 mm (-16% deficit) rainfall was received over Jammu during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April

2024 and 05 - 11 April 2024) over Jammu is above normal for week 1 and; below normal for week 2.

- Due to the chances of rainfall in this week, it is advised to postpone irrigation in late and very late sown wheat crop and also postpone the chemical plant protection measures in this week.
- Due to chances of rainfall, harvest the mustard crop immediately to prevent the shattering of seeds. Keep the bundles of harvested mustard in stacks or shift harvested crop to safer places or cover the harvested crop with polythene sheets/tarpaulin.
- Under prevailing weather condition, farmers are advised to vaccinate sheep and goat against sheep and goat pox.

Haryana

16 mm (8% excess) rainfall was received over Haryana during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) over Haryana is below normal for week 1 and; week 2.

- Due to forecast of below normal rainfall, farmers are advised for irrigation in wheat crop and application of fertilizers
- Due to possibility of dry weather, farmers are advised to spray recommended chemicals to control mustard aphid, white rust and Alternaria blight diseases in mustard crop.
- Farmers are advised to keep regular watch at their field because this weather is favourable for the development of white rust disease and incidence of aphids in mustard crop. In early stage of incidence, destroy the infested part of the plant.
- Under prevailing weather condition, farmers are advised to harvest the cucurbits and other vegetables like tomato, chilli, brinjal and okra at regular intervals to get maximum yield.

Punjab

23 mm (1% excess) rainfall was received over Punjab during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) over Punjab is above normal for week 1 and; below normal for week 2.

- Start sowing of summer udad dal with recommended varieties *Mash 1137 and Mash 1008*. Sow mash at 22.5 cm row to row distance by using 20 kg seed per acre.
- In timely wheat sown crop, apply two sprays of 2% Potassium nitrate (13:0:45) by dissolving 4 kg Potassium nitrate in 200 litres of water at boot leaf and at anthesis stage or apply 2 sprays of Salicylic acid by dissolving 15 g Salicylic acid in 450 ml of ethyl alcohol using 200 litres of water per acre at boot leaf and early milk stages to mitigate the effect of high temperature at grain filling and enhance the wheat yield.
- Complete the sowing of recommended varieties of sugarcane upto end March i.e. *CoPB-95, CoPB-96, Co15023, CoPB-92, Co118, CoJ-85, CoJ-64* (early maturing), *CoPB-94, CoPB-93, CoPB-98, CoPB-91, Co-238, CoJ-88* for mid-season and late maturing.

West Bengal

47 mm (84% large excess) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 84 mm (49% excess) during 01 March - 31 March 2024. The extended range weather forecast (rainfall) for the next two weeks (29 March - 04 April 2024

and 05 - 11 April 2024) is below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week 1 and; and week 2.

- As there is a forecast of below normal rainfall, light irrigation may be given to boro rice (PI stage) this week, if cracking appears in soil.
- Due to forecast of below normal rainfall, water stress may occur in tomato crop and cause flower drop. To manage it is advised to apply timely and required amount of irrigation. Spray Boron 20% 2 g/litre during early flowering and 15 days later.
- As below normal rainfall is forecast in this week, farmers may apply fertilizers and pesticides to the crops.

Jharkhand

35 mm (137% large excess) rainfall was received over Jharkhand during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) over Jharkhand is below normal for week 1 and; week 2.

- After harvesting of rabi crops, farmers are advised for sowing of summer maize. Recommended improved varieties are *BAUMH-05*, *Yellow flint*, *Prakash*, *Vivek* hybrid maize. At the time of field preparation, apply 40 to 60 quintals FYM or compost per acre.
- Under assured irrigation facilities, farmers are advised to cultivate summer moong after harvesting of *rabi* crop. Use improved varieties-*MML-688*, *HUM-16*, *IPM-2*, 3. Use 8 to 10 kg seeds per acre
- Under prevailing weather conditions, there may be a chance of infestation of late blight in tomatoes. To manage, it is advised to spray Metalaxyl 8% + Mancozeb 64% WP @ 400-g/acre at 10 days interval.

Assam

48 mm (-35% deficit) rainfall was received over Assam during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) over Assam is normal for week 1 and; below normal for week 2.

- In areas with heavy to medium textured soils and having assured irrigation facilities, farmers are advised to continue nursery sowing of *ahu* rice seeds. Select seeds of recommended semi-dwarf varieties like *IR-36*, *Lachit*, *Chilarai*, *Dishang* etc. for obtaining higher yield.
- Due to sufficient rainfall received during the last week, sugarcane sets may be planted. Select high yielding varieties like *Dhansiri*, *Kalang*, *Luhit*, *CO-Jor-1*, *CO-Jor-2*. Apply 5% Malathion dust @ 3 kg per bigha to avoid attack of termites before planting the sets.
- Due to forecast of normal rainfall in this week, farmers are advised to postpone the second topdressing of urea in *boro* rice till clear weather.
- Due to forecast of normal rainfall in this week, farmers are advised to postpone the sowing of seeds of okra in the main field till clear weather. For obtaining higher yield farmers are advised to select seeds of recommended varieties like *Pusa Sawani*, *Arka Anamika*, *Parbhani Kranti* etc.

Chhattisgarh

29 mm (222% large excess) rainfall was received over Chhattisgarh during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March -

04 April 2024 and 05 - 11 April 2024) over Chhattisgarh is below normal rainfall for week 1 and; normal rainfall for week 2.

- In summer paddy, farmers are advised to fix pheromone traps and light traps nearby the field for the control of stem borer.
- Intercultural operation and earthing up is advised in 25-30 days old maize crop.
- To control borer insect in okra and brinjal, it is advised to use pheromone traps @ 10 nos/acre and destroy the upper portion of affected plants.

Odisha

50 mm (151% large excess) rainfall received over Odisha during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) over Odisha is below normal for week 1 and; week 2.

- High temperature in day hours may lead to wilting in tomato and brinjal. To protect farmers are advised to apply 1 g Streptocycline in 10 litres water in root zone.
- Mulching of leaves around newly planted cashewnut plants is advised to conserve moisture. Irrigate 20 to 25 litres per plant.
- Due to rise in temperature there are chances of increase in stem borer infestation in paddy crop. To manage it is advised to spray Fipronil 5% SC @ 400 ml/acre or Flubendiamide 20% WG @ 50 g/acre or Chlorantraniliprole 18.5% SC @ 60 ml /acre or Chromafenozide 80% WP @ 50 g/acre.

Maharashtra

0.5 mm (-86% large deficit) rainfall over Madhya Maharashtra; 13 mm (26% excess) rainfall over Vidarbha; 1.5 mm (-78% large deficit) rainfall over Marathwada; and 0.1 mm (-95% large deficit) rainfall over Konkan region was recorded during 01 March - 31 March 2024. The extended range weather forecast (rainfall) for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) is no rainfall over Konkan and above normal rainfall over Vidarbha, Madhya Maharashtra and Marathwada for week 1 and no rainfall over Konkan and below normal over Madhya Maharashtra and Marathwada and normal over Vidarbha for week-2, respectively.

Parbhani

- As per forecast of thunderstorm along with light to moderate rain at isolated places in Marathwada region, it is advised to store the threshed grain of safflower at safe places. If threshing is not possible then cover the harvested crop with plastic paper.
- Under prevailing weather condition, farmers are advised to provide shed to newly planted citrus plants to protect them from sun rays.
- Due to increase in maximum temperature, farmers are advised to keep the animals in shade and provide cold and clean water to the animals for drinking. Avoid working of animals in the field between 11 am to 4 pm.

Vidarbha

- Due to forecast of above normal rainfall, farmers are advised to harvest the matured earlier sown or timely sown wheat crop as soon as possible and store at a safer place. For any possibility of sudden rainfall always keep tarpaulin ready to cover harvested produce

- Mulch with crop residue, straw/polythene or undertake soil mulching to conserve soil moisture.
- Farmers are advised to undertake need based inter-culture operation in groundnut crop to loosen the surface soil and keep the crop weed free.

Konkan

- In some pockets of Konkan region, harvesting of the mature mango fruits before 10 hours in the morning and after 16 hours in the evening at 80 to 85% maturity is advised.
- To protect animals from heat because of increase in temperature, sprinkling cold water on animals during the afternoon was suggested to maintain the body temperature.

Kerala

11 mm (-66% large deficit) rainfall received over Kerala during 01 March - 31 March 2024. The extended range weather forecast (rainfall) for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) is normal for week 1 and; below normal for week 2.

- High temperature may induce pollen sterility in late sown paddy. To avoid this, keep standing water in the rice field
- Since dry and hot weather is prevailing and forecast for normal rainfall during this week, farmers are advised to irrigate the crops as per need to ensure adequate soil moisture. Proper mulching is advised to follow to conserve soil moisture. Adopt drip irrigation method for maximum water use efficiency.
- Due to the increase in atmospheric temperature, the attack of sucking pests was increased. To control, it is advised to apply 2% neem oil emulsion once in a week or by spraying *Lecanicillium lecanii* at 20 gm per litre of water.
- During high temperature, there is a chance of brown plant hopper attack in rice. To manage, it is advised to spray 2 g Thiamethoxam per 10 litres of water.

Andhra Pradesh

No rainfall received over Rayalaseema and 8 mm (-44% deficit) rainfall received over Coastal Andhra during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) is no rainfall over Rayalaseema and below normal over Coastal Andhra Pradesh for week 1 and; week-2.

- Due to the forecast of no rainfall in Rayalaseema and below normal rainfall forecast in coastal Andhra in this week, irrigation is advised at every 3-4 days intervals in banana orchard. Cover the peduncle and whole bunch with dried banana leaves to protect from direct sunlight.
- 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 drenching the soil with Mancozeb @ 3 g/litre after a week Carbendazim 2 g/litres and also advised to mulch with rice husk or groundnut shells or any available organic mulching material around the plant to avoid evaporation losses.

Karnataka

0.8 mm (-98% large deficit) rainfall was received over South Interior Karnataka, 2.0 mm (-79% large deficit) Coastal Karnataka and 1.0 mm (-88% large deficit) over North Interior Karnataka during 01 March - 31 March 2024. The extended range weather forecast (rainfall) provided for the next two weeks (29 March - 04 April 2024 and 05 - 11 April 2024) is below normal over North Interior Karnataka, South Interior Karnataka and normal over Coastal Karnataka for week 1 and; below normal over North Interior Karnataka, South Interior Karnataka and Coastal Karnataka for week-2.

South Interior Karnataka

- Mulching (residual 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 temperature and dry weather persisting in long period of time
- Farmers are advised for one or two protective irrigation at the marble stage to protect fruit drop at this stage.
- Carry out threshing of the harvested crops, the grains should be dried by retaining the moisture percentage of cereals to 11-12 %.
- Periodically water spray during peak hot hours lowers the temperature and consequently reduces the heat load on animals. Maintain proper ventilation for free circulation of air in the sheds and also provide clean drinking water to animals and water troughs regularly cleaned.

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