



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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Central Research Institute for Dryland Agriculture (CRIDA)

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Indian Council of Agricultural Research (ICAR)

और

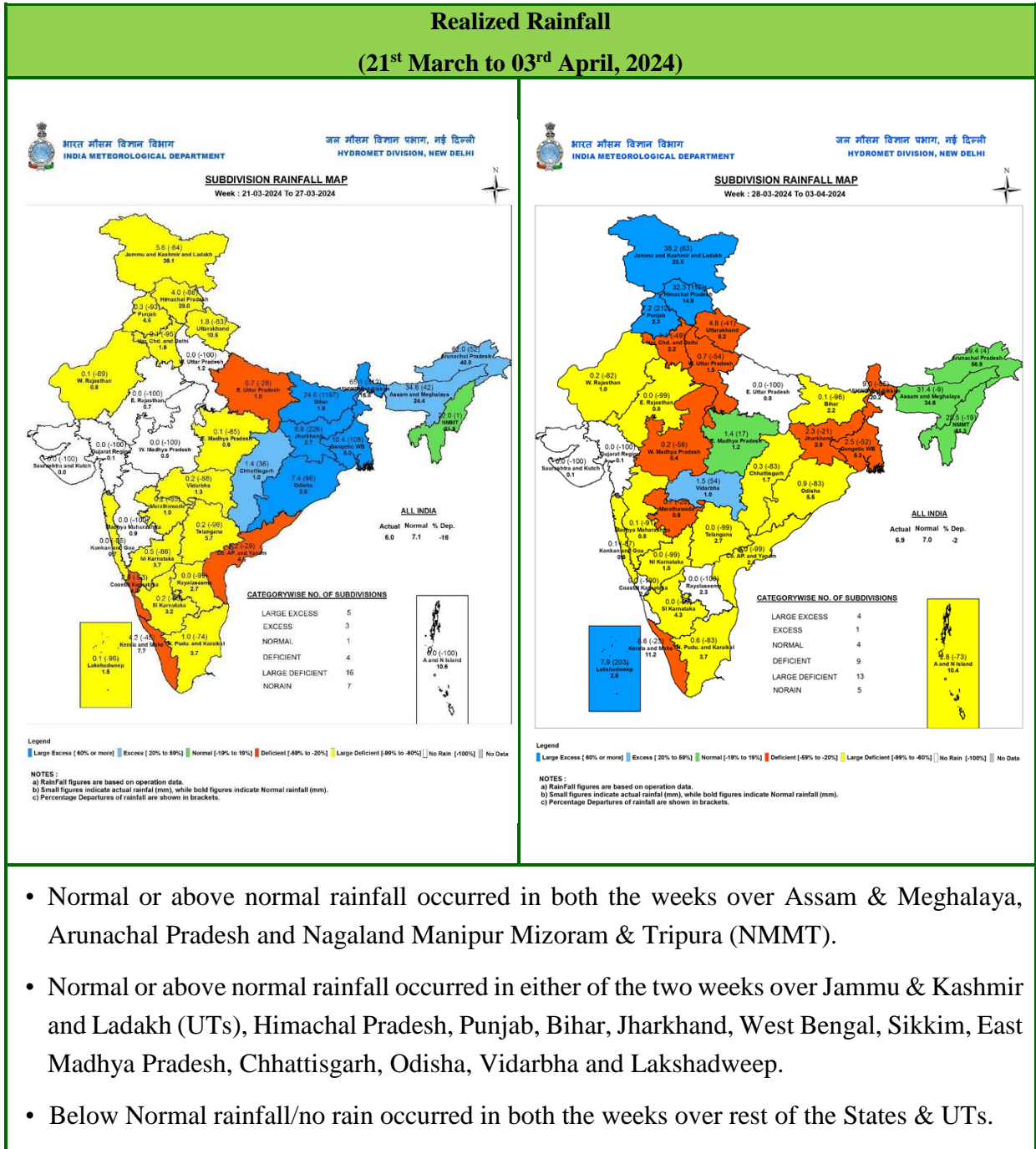
भारतीय मौसम विज्ञान विभाग

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पृथ्वी प्रणाली विज्ञान संगठन

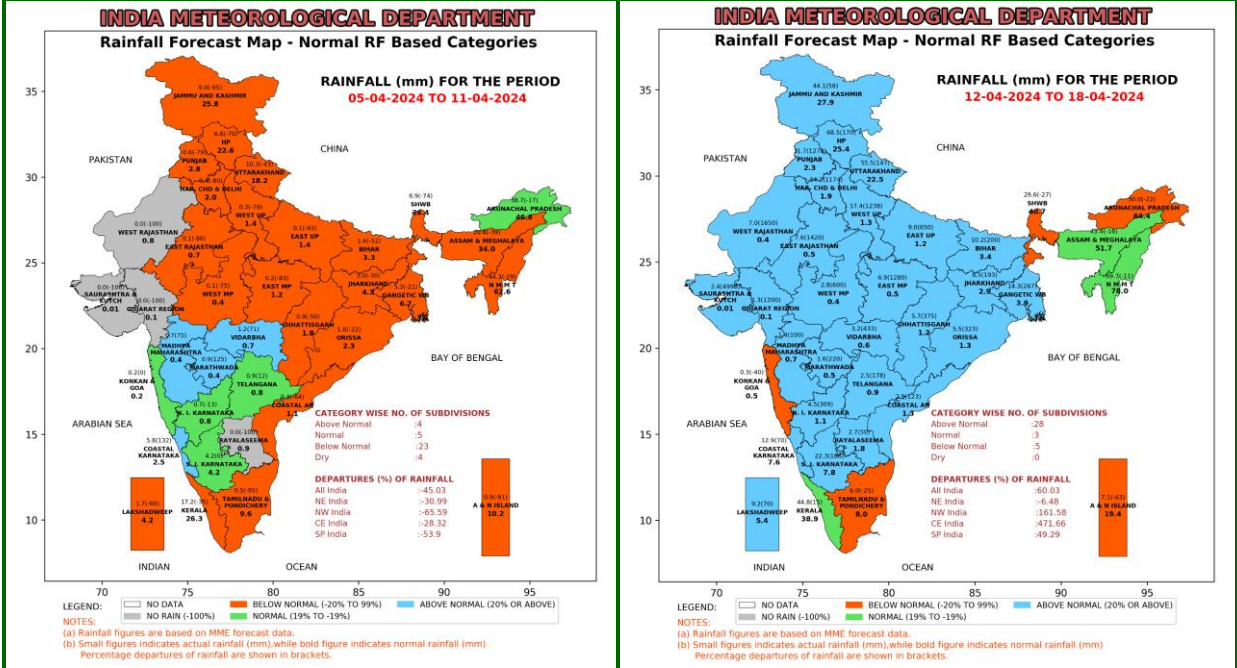
Earth System Science Organization

Realized Rainfall and Extended Range Forecast



Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC- 03rd April, 2024) (05th to 18th April, 2024)



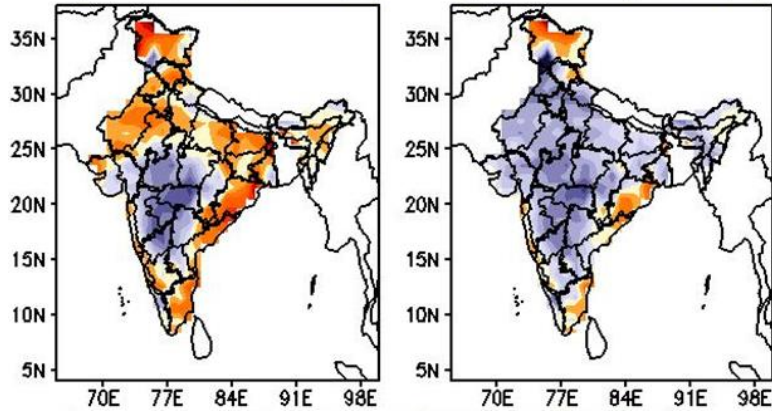
- **Week 1 (05.04.2024 to 11.04.2024):** Rainfall associated with more active Western Disturbances is likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand and Northeast region. Rainfall is also likely over Kerala.
- **Week 2 (12.04.2024 to 18.04.2024):** Rainfall associated with Western Disturbances is likely over most parts of Northwest India, East and Northeast India. Rainfall is also likely over Kerala and Karnataka.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for the next 2 weeks (IC- 03rd April, 2024)
(05th to 18th April, 2024)**

MME forecast Tmax anomaly (Deg C)

(Week1: 05Apr–11Apr)

(Week2: 12Apr–18Apr)



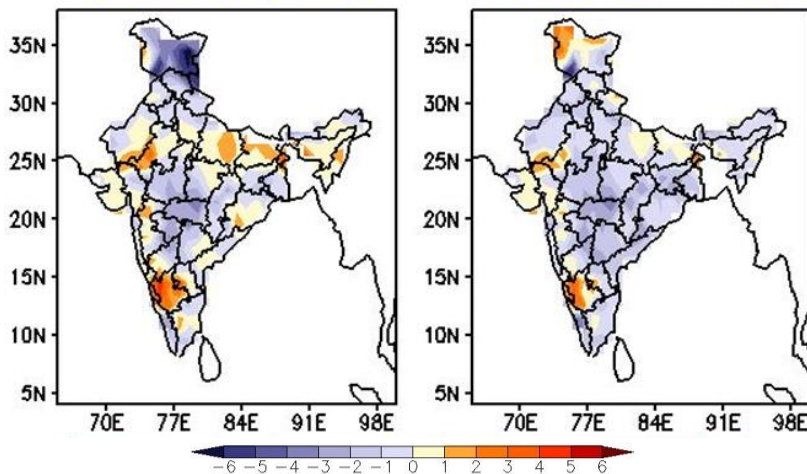
Maximum Temperature (Tmax)

- **Week 1 (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.
- **Week 2 (12.04.2024 to 18.04.2024):** Maximum temperature is likely to be below normal over most parts of the country except in Jammu & Kashmir, Odisha, parts of Tamil Nadu, Coastal Andhra Pradesh and Konkan & Goa.

MME forecast Tmin anomaly (Deg C)

(Week1: 05Apr–11Apr)

(Week2: 12Apr–18Apr)



Minimum Temperature (Tmin)

- **Week 1 (05.04.2024 to 11.04.2024):** Minimum temperature is likely to be above normal over Karnataka, some parts of Rajasthan, Uttar Pradesh, Bihar, Madhya Maharashtra and North East India. It is slightly above normal over Gujarat, Odisha and Tamil Nadu.
- **Week 2 (12.04.2024 to 18.04.2024):** Minimum temperature is likely to be below normal over most parts of the country. However, it is likely to be above normal over parts of Karnataka, Rajasthan, Jammu & Kashmir and slightly above normal over Gujarat, East Uttar Pradesh and Bihar.

Strategic Agricultural Planning based on rainfall till 18 April 2024

Agromet Advisories

Uttar Pradesh

19 mm (58% excess) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 13 mm (60% large excess) during 01 March - 07 April 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) is below normal over Western Uttar Pradesh and Eastern Uttar Pradesh during week 1 and; above normal for week 2.

Western Uttar Pradesh

- As per forecast weather will be mainly dry and hot this week, therefore farmers are advised to harvest mature wheat, mustard and barley crop and after drying tying bundles and threshing is advised.
- Due to the 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 gram 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 conditions, farmers are advised to harvest matured barley crops.
- To prevent flower and fruit drop in mango crops, farmers are advised to spray NAA 0.0025 ml/litres (25 ppm) or Gibberellic acid (25 ppm).

Himachal Pradesh

143 mm (24% excess) rainfall was received over Himachal Pradesh during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Himachal Pradesh is below normal for week 1 and; above normal for week 2.

Farmers are advised to prepare the nursery of the 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 to 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.
- For the control of aphids in mustard, it is advised to spray methyl Demeton 25 EC or Dimethoate 30 EC @ 1 ml per litre of water. Spray the insecticides on the crop during evening hours to avoid harm to honeybees.

Jammu

131 mm (-26% deficit) rainfall was received over Jammu during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Jammu is below normal for week 1 and; above normal for week 2.

- Farmers may go for sowing of Mash (var.) *Pant U-19, Uttara* and Moong (var.) *PDM-54, ML-131, ML 818, PS-16, PS-7*, in those areas where *rabi* crops are already harvested under irrigated areas.
- Farmers are advised to harvest mature mustard crops (if not harvested yet) as and when 75-80 per cent of the pods (Siliqua) turn brown. Dry the harvested crop well before threshing.
- Under prevailing weather conditions, farmers are advised to vaccinate sheep and goat against sheep and goat pox.

Haryana

16 mm (-7% deficit) rainfall was received over Haryana during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Haryana is below normal for week 1 and; above normal for week 2.

- Due to the forecast of below-normal rainfall, farmers are advised for need-based irrigation in late-sown wheat crops and application of fertilizers
- Due to the possibility of dry weather, farmers are advised to spray recommended chemicals to control mustard aphids, white rust and Alternaria blight diseases in mustard crops.
- Under prevailing weather conditions, 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 (-11% deficit) rainfall was received over Punjab during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Punjab is below normal for week 1 and; above normal for week 2.

- Start sowing summer urad 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 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.
- For control of purple blotch in onion crop, it is advised to spray the crop 300 g of Caviet or 600 g of Indofil M-45 mixed with 200 ml of Triton or linseed oil in 200 litres of water per acre as soon as a first symptom of purple blotch appears in the field.

West Bengal

47 mm (44% excess) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 94 mm (20% excess) during 01 March - 07 April 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) is below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week 1; and above normal over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal for 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 the forecast of below-normal rainfall, water stress may occur in tomato crops and cause flower drop. To manage it is advised to apply a 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 this week, farmers may apply fertilizers and pesticides to the crops.

Jharkhand

35 mm (102% large excess) rainfall was received over Jharkhand during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Jharkhand is below normal for week 1 and; above normal for week 2.

- For fodder purposes, it is advised to sow sorghum in irrigated areas with recommended cultivars like – *Rio 988*, *Pusachari- 615* and *Green Sona* with a seed rate of 6-18 kg per acre for sowing.
- 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
- High temperature followed by intermittent thunder showers is favourable for Brown Plant hopper infestation in rice. If infestation exceeds ETL, it is advised to alter the micro-climate of the rice plant by alternate wetting and drying techniques. If the problem still persists, then spray Azadirachtin 0.15% neem seed kernel formulation @ 800 ml in 200 litres of water for one acre.

Assam

83 mm (-24% deficit) rainfall was received over Assam during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Assam is below normal for week 1 and; 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.
- To control the infestation of stem borer and leaf folder in the rice crop, spraying of Imidacloprid 70 WG (@ 2 ml per litre of water is advocated under fair weather conditions.

Chhattisgarh

29 mm (162% large excess) rainfall was received over Chhattisgarh during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Chhattisgarh is below normal rainfall for week 1 and; above normal rainfall for week 2.

- Below normal soil moisture status and thermal stress in crops due to an increase in minimum and maximum temperature. To manage this, water conservation agronomic techniques, need to be adopted and light irrigation to be applied in *rabi* crops wherever required.

- To control borer insects in okra and brinjal, it is advised to use pheromone traps @ 10 nos/acre and destroy the upper portion of affected plants.
- In summer paddy farmers are advised to fix pheromone traps and light traps nearby the crop fields for the control of stem borer.

Odisha

51 mm (87% large excess) rainfall received over Odisha during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Odisha is below normal for week 1 and; above normal for week 2.

- The high temperature also increases the water requirement of maize crop. Therefore, farmers are advised to irrigate the maize crop and never allow water to remain stagnant for more than six hours in the field.
- High temperatures in day hours may lead to wilting in tomatoes and brinjal. To protect farmers are advised to apply 1 g Streptocycline in 10 litres of water in the root zone.
- Mulching of leaves around newly planted cashew nut plants is advised to conserve moisture. Irrigate 20 to 25 litres per plant.
- Due to the temperature rise there are chances of an 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.

Gujarat

4 mm (665% large excess) rainfall received over Gujarat during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) over Gujarat is no rainfall for week 1 and; above normal for week 2.

- Carry out thinning operation in maintaining 10 cm spacing between plants at 20 DAS in summer green gram. Apply irrigation as per the requirement of crop and carryout weeding and intercultural operation.
- Apply mulch of paddy straw/mango leaves and give light irrigation to reduce fruit drop in mango.
- To control thrips in chilli, it is advised to spray neem seed oil 30 to 50 ml in 10 litres of water. In case of a heavy attack, spray Spinosad 45 % SC 3 ml per 10 litres of water in clear weather conditions.

Maharashtra

0.5 mm (-90% large deficit) rainfall over Madhya Maharashtra; 13 mm (11% excess) rainfall over Vidarbha; 1.5 mm (-82% large deficit) rainfall over Marathwada; and 0.1 mm (-95% large deficit) rainfall over Konkan region was recorded during 01 March - 07 April 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) is normal over Konkan and above normal rainfall over Vidarbha, Madhya Maharashtra and Marathwada for week 1 and below normal over Konkan and above normal over Madhya Maharashtra, Marathwada and Vidarbha for week-2, respectively.

Parbhani

- As per the forecast of thunderstorms along with light to moderate rain at isolated places in the Marathwada region, it is advised to store the threshed crops at safe places. If threshing is not possible then cover the harvested crop with plastic paper.
- Under prevailing weather conditions, farmers are advised to provide sheds to newly planted citrus plants to protect them from sun rays.
- Due to the 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 with animals in the field between 11 am to 4 pm.

Vidarbha

- Due to the 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 crops to loosen the surface soil and keep the crop weed-free.

Kerala

17 mm (-69% large deficit) rainfall received over Kerala during 01 March - 07 April 2024. The extended range weather forecast (rainfall) for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) is below normal for week 1 and; normal for week 2.

- Since dry weather conditions is prevailing, it is advised to provide adequate irrigation in coconut and areca nut. Since air temperature is increasing, it is advised to bury fresh or dried coconut husk around the coconut palm to conserve soil moisture and apply lime (white colour) on the stem near the ground to protect it from heat.
- Protect the pepper plants from direct sunlight by smothering the basal portions of the vines with dried banana leaves, plated coconut leaves etc. Give protective irrigations one in every two weeks.
- An increase in temperature results in the dropping of flowers in tomatoes. To protect, it is advised to provide minimal shade and deep irrigation.

Andhra Pradesh

No rainfall was received over Rayalaseema and 9 mm (-55% deficit) rainfall was received over Coastal Andhra during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) is no rainfall over Rayalaseema and below normal over Costal Andhra Pradesh for week 1 and; above normal over Rayalaseema and Costal Andhra Pradesh for week-2.

- Farmers are advised for summer ploughing to reduce pest/disease build-up in field.
- Under prevailing weather conditions there is the possibility of early shoot borer incidence in sugarcane. To control, it is advised to go for the release of *Trichogramma chilonis* @ 20,000 eggs/ ac (1 card) from 30 days after planting for 4-6 times at 7-10 days interval or go for application of Chlorantraniliprole granules @ 10 kg/acre after giving light irrigation.

Karnataka

0.6 mm (-97% large deficit) rainfall was received over South Interior Karnataka, 2.0 mm (-85% large deficit) Coastal Karnataka and 1.0 mm (-91% large deficit) over North Interior Karnataka during 01 March - 07 April 2024. The extended range weather forecast (rainfall) provided for the next two weeks (05 - 11 April 2024 and 12 - 18 April 2024) is normal over North Interior Karnataka and South Interior Karnataka and normal over Coastal Karnataka for week 1 and; above 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 soil moisture due to high temperatures and dry weather persisting in long period of time
- Under prevailing hot and dry weather conditions, farmers are advised for frequent irrigation for standing horticultural crop due to increasing temperatures day by day. Mulching is also advised to conserve the soil moisture due to high temperature and dry weather persisting in long period.
- 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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