



**National Agromet Advisory Service Bulletin**  
**Based on**  
**Extended Range Weather Forecast (ERFS)**

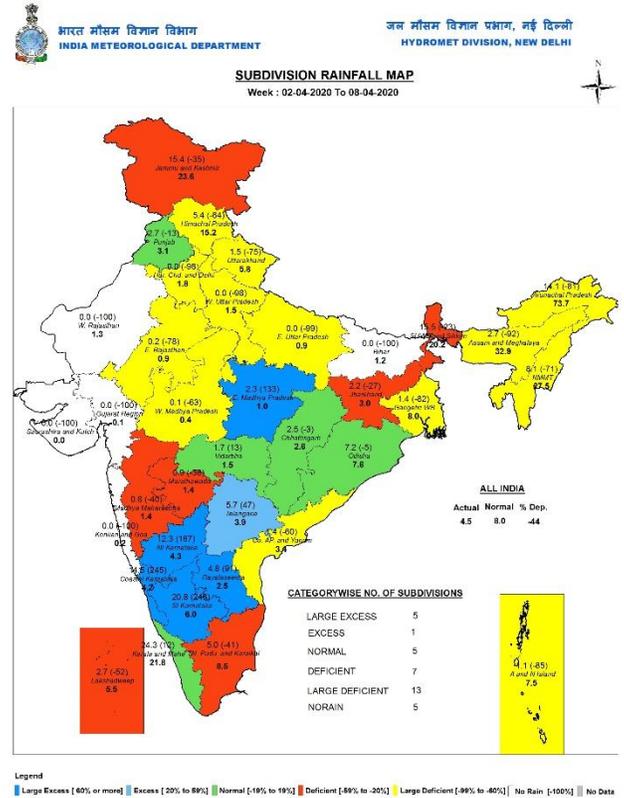
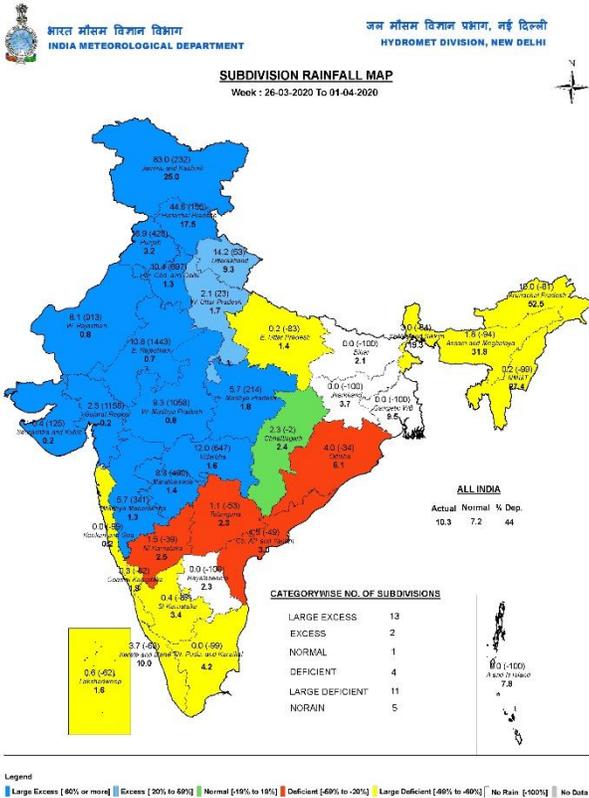
**Validity: 10 to 23 April 2020**

**Date of issue: 10 April 2020**

**Issued by**  
**Indian Council of Agricultural Research (ICAR)**  
**All India Coordinated Research Project on Agro meteorology (AICRPAM),**  
**Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.**  
**&**  
**Earth System Science Organization**  
**India Meteorological Department**

## Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

### Realized Rainfall (26<sup>th</sup> March to 8<sup>th</sup> April 2020)



- Normal or above normal rainfall occurred in both the weeks in Punjab, East Madhya Pradesh, Chhattisgarh and Vidarbha.
- Normal or above normal rainfall occurred in either of the weeks in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Haryana Chandigarh & Delhi, East Rajasthan, West Rajasthan, Gujarat Region, Saurashtra & Kutch, West Madhya Pradesh, Madhya Maharashtra, Marathwada, Odisha, Telangana, Rayalaseema, Kerala & Mahe and Karnataka.
- Below normal rainfall/no rain occurred over rest of the country.

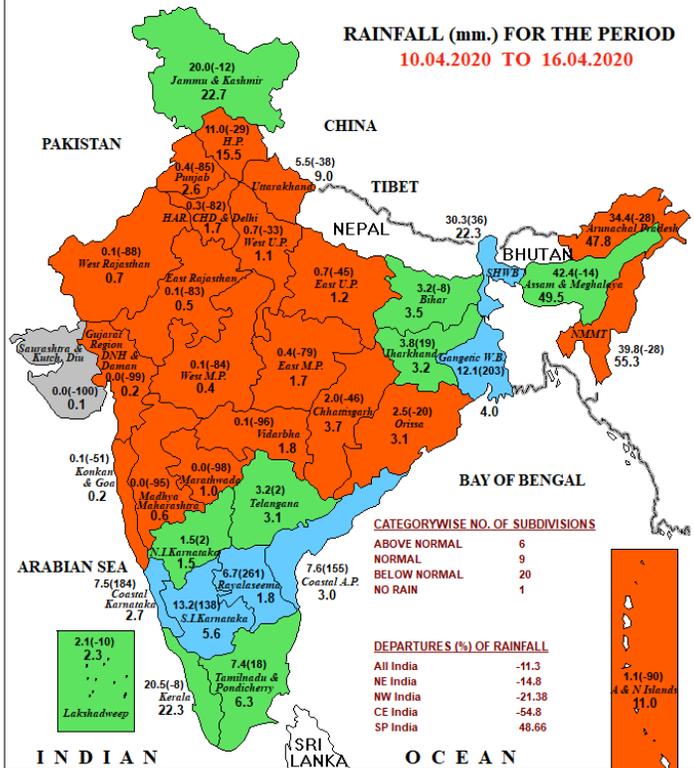
## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC – 08 April)

(10<sup>th</sup> to 23<sup>rd</sup> April, 2020)

### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

#### Rainfall Forecast Map - Normal RF Based Categories

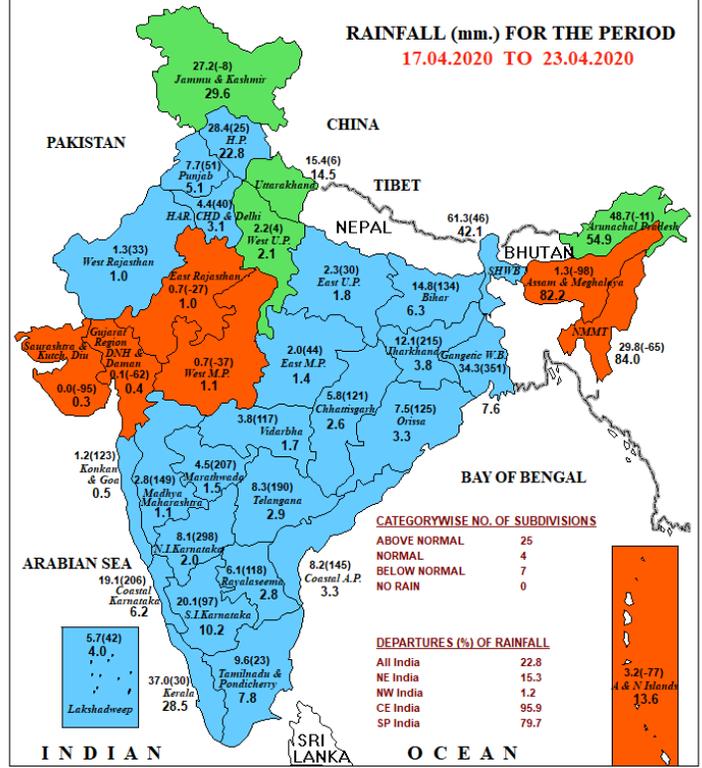


**LEGEND:** ■ ABOVE NORMAL (+20% OR MORE) ■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

**NOTES:**  
 (a) Rainfall figures are based on MME Forecast data.  
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
 Percentage Departures of Rainfall are shown in Brackets.

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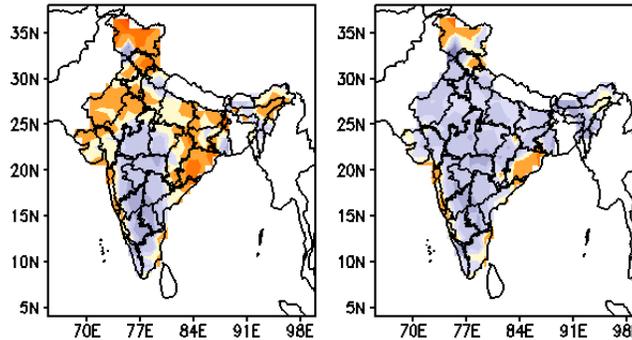
- Week-1 (10.04.2020 to 16.04.2020):** Western Disturbance associated rainfall over extreme north India is likely during week-1. Some parts of northeast India are also likely to get rainfall during the period. Rainfall over parts of Kerala, South Interior Karnataka and adjoining region is likely during week-1.
- Week-2 (17.04.2020 to 23.04.2020):** Western Disturbance associated rainfall over extreme north India is likely to extend towards Uttarakhand and adjoining region during week-2. Rainfall over northeast India is likely to increase during this period compared to week-1. Regions over Kerala, Karnataka and adjoining south peninsula will also get rainfall during the period.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 08 April)  
(10<sup>th</sup> to 23<sup>rd</sup> April, 2020)**

**MME forecast Tmax anomaly (Deg C)**

(Week1: 10Apr–16Apr)

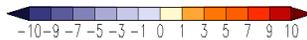
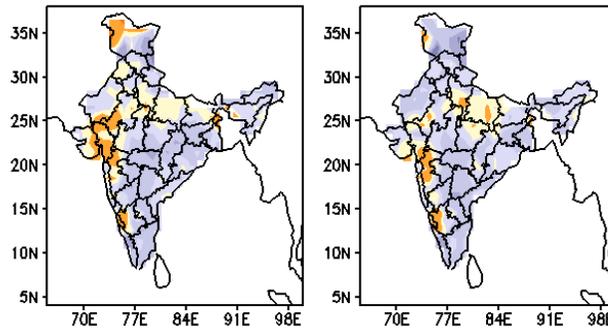
(Week2: 17Apr–23Apr)



**MME forecast Tmin anomaly (Deg C)**

(Week1: 10Apr–16Apr)

(Week2: 17Apr–23Apr)



**Maximum Temperature (Tmax)**

- **Week-1 (10.04.2020 to 16.04.2020):** Tmax anomaly is positive over northwest India, Indo-Gangetic region (Uttar Pradesh) and adjoining eastern states of India (Odisha, Chhattisgarh, Jharkhand, Bihar, etc). Over south peninsula and some parts of adjoining central India it will be negative.
- **Week-2 (17.04.2020 to 23.04.2020):** Tmax anomaly will be mostly negative over major parts of India (Central, northwest and south peninsula) except extreme north India, eastern coastal and northeastern region and some parts of western coastal region of India.

**Minimum Temperature (Tmin)**

- **Week-1 (10.04.2020 to 16.04.2020) and Week 2 (17.04.2020 to 23.04.2020):** Over northwest India, Indo-Gangetic regions and western coastal parts Tmin will be slightly positive, whereas, over the other regions over central India, south peninsula and northeast India Tmin anomaly will be slightly negative.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 23 April 2020**

### **Agromet Advisories**

#### **Kerala**

Amount of rainfall received over Kerala is 74.2 mm (18% excess) during the period of 01 March – 10 April 2020. The extended range weather forecast for next two weeks (10 – 16 April and 17 - 23 April 2020) is normal for week-1 and above normal for week-2.

- It is advised to provide shades for small seedlings of rubber crop against direct sunlight and adopt measures for summer protection like mulching, shading, white washing and making fire belts in rubber crop.
- Under prevailing weather condition, there is a chance of white fly attack in chilli. It is advised to apply 2% Neem oil garlic emulsion or spray 20g Lecanicillium lecanii/litre of water in ten-days intervals.
- Under the current weather condition, there is a chance of Rhizome weevil attack in banana. As a precaution, apply Neem cake @ 1 kg/plant at the time of planting.

#### **Tamil Nadu**

Amount of rainfall received over Tamil Nadu is 32.2 mm (-36% deficit) during the period of 01 March – 10 April 2020. The extended range weather forecast for next two weeks (10 - 16 April and 17 - 23 April 2020) is normal for week-1 and above normal for week-2.

- Prevailing weather is favourable for sucking pest in chilli. To control, spray Imidacloprid 17.8% SL 3.0 ml/10 litre or Dimethoate 30% EC 1.0 ml/litre.
- To protect banana from high wind speed, it is advised to mount the soil around the base of the tree and give support by using Casuarinas poles.

#### **Maharashtra**

Rainfall received over Madhya Maharashtra is 9.6 mm (89% large excess), over Marathwada is 13.7 mm (71% large excess), Vidharbha is 29.9 mm (137% large excess) and Konkan region 0.0 mm (-99% large deficit) during 01 March – 10 April 2020. The extended range weather forecast for next two weeks (10 - 16 April and 17 - 23 April 2020) over Marathwada, Konkan, Vidharbha and Madhya Maharashtra are below normal for week-1 and above normal over Marathwada, Konkan, Vidharbha and Madhya Maharashtra for week-2.

#### *Marathwada*

- Due to high temperature and bright sunshine hour, there is a chance that the banana bunch may turn black. To protect the crop from high temperature, it is advised to cover the bunch of bananas by dried leaves and provision of shade to small plants.
- Irrigation is advised for summer groundnut with the help of sprinkler irrigation during early

morning or at evening.

#### *Konkan*

- Due to increase in temperature, it is advised to provide irrigation to coconut orchard at 5-6 days interval and to use straw mulch to reduce evaporation losses.
- To reduce the heat stress in farm animals, it is advised to provide roughage mix with solution of 1% jaggery and 0.5% salt separately.

#### *Vidharbha*

- Under the prevailing hot weather condition, it is advised to irrigate summer crops like groundnut, sunflower, sesame, green gram and vegetables at 6 - 8 days interval in the early morning or late afternoon.
- For the control of mango hoppers, it is advised to spray Buprofezine 25%SC @ 10ml or Deltamethrin 2.8% EC@ 5ml or Imidachloprid 17.8% SL @ 4ml or Lambda cyhalothrin 5%EC @ 5ml per 10 litre of water, on trunk region, branches, new vegetative flush and inflorescence.

#### *Madhya Maharashtra*

- To avoid fruit fall in mango crop, it is advised to spray Planofix regulator 20 ppm and 1% Calbor micronutrient.
- It is advised to provide irrigation according to crop water requirement in summer groundnut and other summer sown crops.

#### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 175.2 mm (32% excess) during 01 March – 10 April 2020. The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Himachal Pradesh is below normal for week-1 and above normal for week-2.

- Due to anticipated rain, it is advised to skip irrigation and all type of sprays in all standing crops and vegetables.
- Under the prevailing weather condition, farmers may start sowing in vegetable nurseries.

#### **Hisar**

Amount of rainfall received over Hisar is 69.9 mm (372% large excess) during 01 March – 10 April 2020. The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Hisar is below normal for week-1 and above normal week-2.

- Due to chance of light rains and winds, farmers are advised to harvest mature green gram crop and store the threshed green gram crop.

- Provide 50 g iodized salt and 50 - 100 g mineral mixture daily with animal feed/fodder to keep them healthy.

### **Karnataka**

Rainfall received during 01 March – 10 April 2020 over South Interior Karnataka is 36.4 mm (86% large excess) and North Interior Karnataka is 24.2 mm (89% large excess). The extended range weather forecast for next two weeks (10 - 16 April and 17 - 23 April 2020) over South Interior Karnataka is above normal and normal over North Interior Karnataka for week-1 and above normal over South Interior Karnataka and North Interior Karnataka for week-2.

#### *North Interior Karnataka*

- It is advised to plough soil and incorporate the crop residue to facilitate *in situ* conservation of water during the pre-monsoon rains and conserve the soil.
- Because of increase in temperature, it is advised to apply 4-6-inch-thick hay thatch as a roofing material and spray water on the floor and roof of shelter periodically during peak hot hours to lower the temperature and heat load on animals.

#### *South Interior Karnataka*

- To protect the pulse grains from storage pests, it is advised to apply oils like castor/linseed/honge/neem oil @ 3-5 ml per kg of grains.
- Proper ventilation is advised to maintain for free circulation of air in the sheds.

### **Assam**

Amount of rainfall received over Assam is 39.4 mm (-69% large deficit) during 01 March – 10 April 2020. The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Assam is normal for week-1 and below normal for week-2.

- Due to favourable weather, it is advised to harvest the cobs of matured *rabi* maize. Store the sundried cobs in gunny bags.
- Economic use of water at critical stages of the crop is recommended.

### **Uttar Pradesh**

Rainfall received during 01 March – 10 April 2020 over East Uttar Pradesh is 38.3 mm (367% large excess) and West Uttar Pradesh is 48.1 mm (326% large excess). The extended range weather forecast for next two weeks (10 - 16 April and 17 - 23 April 2020) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and above normal over East Uttar Pradesh and normal over West Uttar Pradesh for week-2.

- Due to high temperature, there are chances of pod borer and semi looper in pigeon pea and in chickpea. Hence, farmers are advised to spray 1.5 litre Monocrotophas or Quinalphos 20% EC 2.0

litre/ha or Malathion 50 % EC 2.0 litre/ha with 500 to 600 litre of water on clear sky.

- Due to cloudy and hot weather conditions, farmers are advised to harvest mature *rabi* crops like gram, pea, lentil, pigeon pea, mustard, wheat, barley.
- Intercultural operation is advised to check the evapotranspiration losses and proper utilization of nutrient to the crop.

### **Punjab**

Amount of rainfall received over Punjab is 88.2 mm (213% large excess) during 01 March – 10 April 2020. The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Punjab is below normal for week-1 and above normal for week-2.

- Due to no rainfall condition, farmers are advised to apply light irrigation in December sown wheat crop.
- For management of citrus psylla, spray of 200 ml Crocodile/Confidor 17.8 SL (Imidacloprid) or 160 g Actara/Dotara (Thiamethoxam) by mixing in 500 litre of water per acre is advised.

### **Rajasthan**

Amount of rainfall received over Rajasthan is 21.8 mm (365% large excess) during 01 March – 10 April 2020. The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Rajasthan is below normal for week-1 and week-2.

- For the control of white fly in summer moong, it is advised to spray Dimethoate.
- Under the prevailing weather condition, sowing of green manure crop like cluster bean, daincha, senai, lobia is advised.

### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 14.9 mm (17% normal) during 01 March – 10 April 2020. The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Andhra Pradesh is above normal for week-1 and week-2.

- Due to prevailing rainy conditions, farmers are advised to remove the excess water from vegetable fields, and spray Copper oxy chloride @ 3g/litre of water to control the spread of fungal and bacterial diseases.
- Under the rainy and thunderstorm conditions, there may be lodging in banana. It is advised to provide mechanical support to prevent lodging and harvest the matured and undamaged bunches.
- Due to rainy condition, it is advised to remove the water from rice fields. Wherever, the crop is at grain development stage, lift and tie the lodged plants. Spray 5% salt solution in the crop at/nearing maturity to prevent germination.

### **Jammu**

Amount of rainfall received over Jammu is 228.1 mm (21% excess) during 01 March – 10 April 2020.

The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Jammu is normal for week-1 and week-2.

- Due to the rainy condition, irrigation is not advised in late sown and in very late sown wheat crop.
- Due to rainy weather condition, sowing of black gram var. Pant U-19, Uttara and green gram var. PDM-54, ML-131, ML 818, PS-16, PS-7 is advised.
- Under the prevailing rainy condition, sowing of summer vegetables and transplanting of tomato, brinjal and chillies is advised. Spray of Chloropyriphos @2 ml/litre of water in cucurbits is advised for control of red pumpkin beetle during clear weather.

## **Bihar**

Amount of rainfall received over Bihar is 45.8 mm (353% large excess) during 01 March – 10 April 2020. The extended range weather forecast provided for next two weeks (10 - 16 April and 17 - 23 April 2020) on rainfall over Bihar is normal for week-1 and above normal for week-2.

- Under prevailing weather condition, it is advised to complete the sowing of green gram & black gram in Northern Bihar with green gram varieties viz., Pusa Vishal, Samrat, SML-668, HUM-16 and Sona varieties and black gram varieties Pant Urd-19 and Pant Urd-31, Uttra, Navin.
- It is advised to monitor red pumpkin beetle in cucurbitaceous vegetables. Dusting of Chlorpyriphos 2% dust @ 20 kg/hectare near root of the plant is advised. In severe cases, spray Dichlorvos 76 EC @ 1ml/litre of water.

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