



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

**Validity: (13<sup>th</sup> March to 26<sup>th</sup> March 2020)**

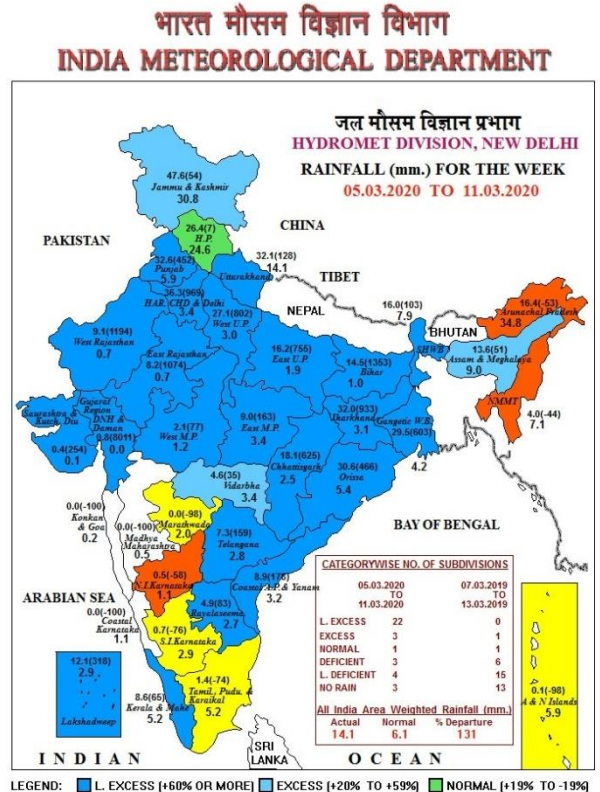
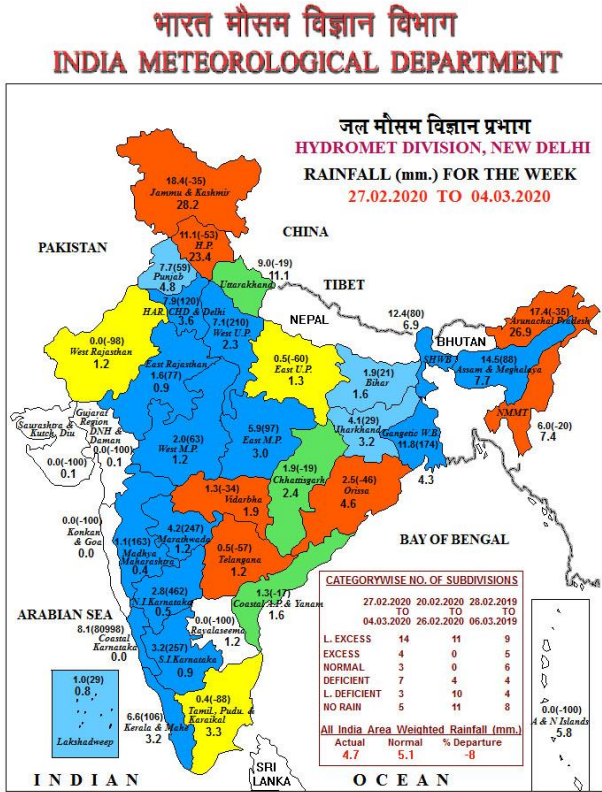
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**All India Coordinated Research Project on Agro meteorology (AICRPAM),**  
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**&**  
**Earth System Science Organization**  
**India Meteorological Department**

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

### Realized Rainfall

(27<sup>th</sup> February to 11<sup>th</sup> March, 2020)



- Normal or above normal rainfall occurred in both the weeks in Uttarakhand, Punjab, Haryana Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Madhya Pradesh, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Lakshadweep.
- Normal or above normal rainfall occurred in either of the weeks in Jammu & Kashmir, Himachal Pradesh, East Uttar Pradesh, West Rajasthan, Gujarat, Odisha, Madhya Maharashtra, Marathwada, Vidarbha, Telangana, Karnataka and Rayalaseema.
- Below normal rainfall/no rain occurred over rest of the country.

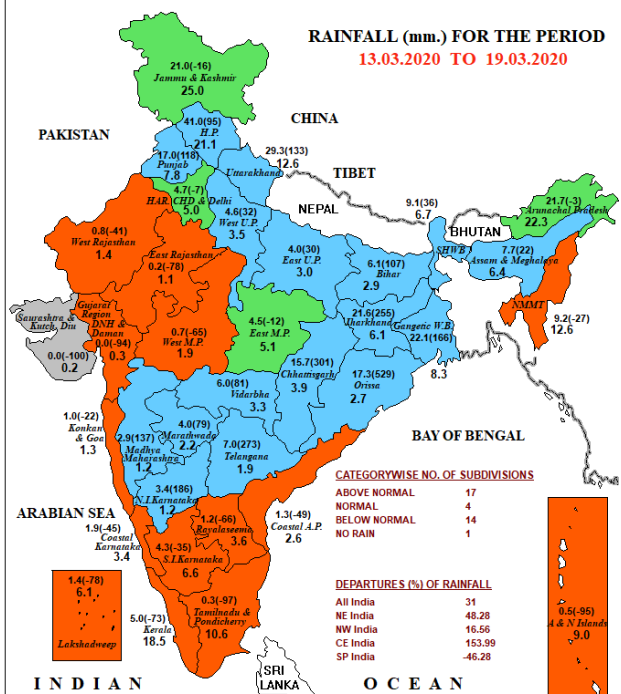
# Extended Range Forecast System

## Rainfall forecast maps for the next 2 weeks (IC – 11 March)

(13<sup>th</sup> to 26<sup>th</sup> March 2020)

### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

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

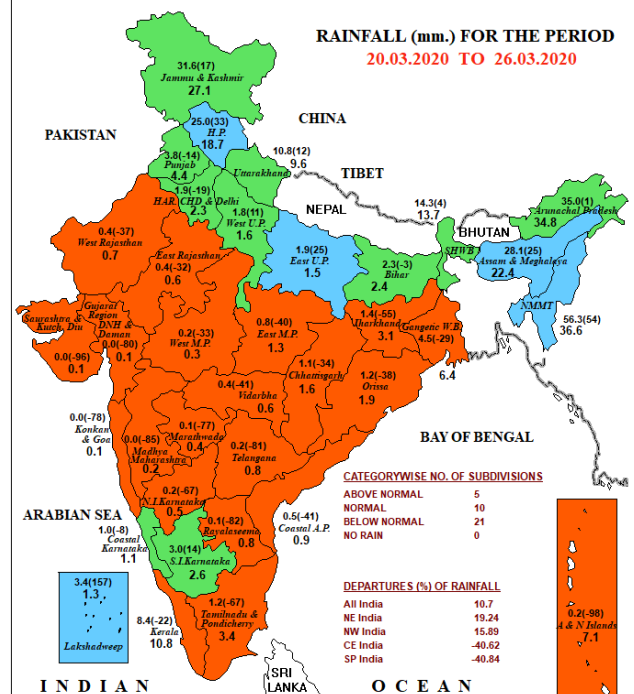


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%)  NO DATA

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.

### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

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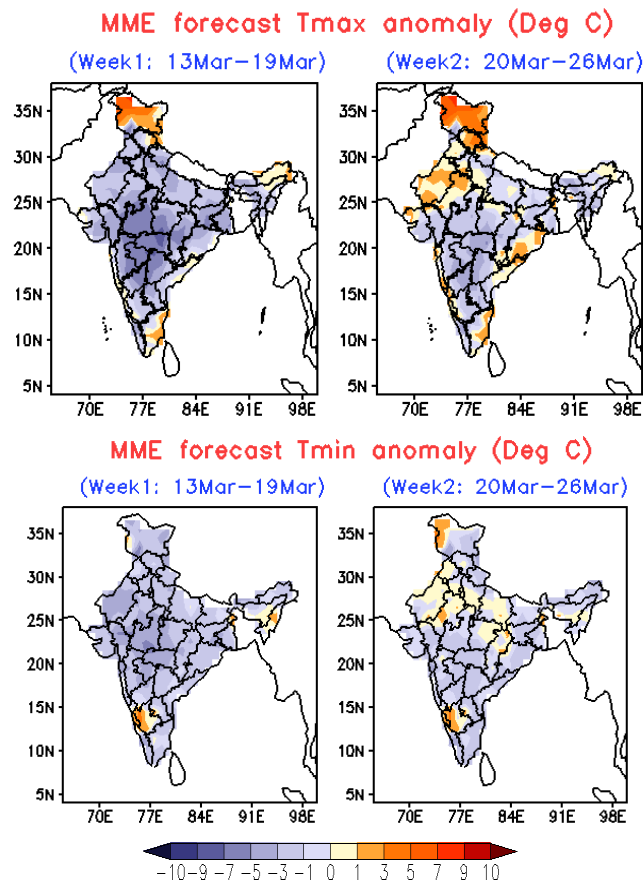


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NOTES:  
 (a) Rainfall figures are based on MME Forecast data.  
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
 Percentage Departures of Rainfall are shown in Brackets.

- **Week 1 (13.03.2020 to 19.03.2020) and Week 2 (20.03.2020 to 26.03.2020):** Rainfall associated with Western Disturbance is likely over north India (Jammu & Kashmir; Uttarakhand, Himachal Pradesh, Punjab and Haryana), western UP and adjoining region of Jharkhand, Gangetic West Bengal, Odisha and Chhattisgarh during the week.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 11 March)  
(13<sup>th</sup> to 26<sup>th</sup> March 2020)**



- **Maximum Temperature (Tmax)**
- **Week 1 (13.03.2020 to 19.03.2020):** Tmax (Maximum temperature) is likely to be above normal over small parts of extreme north India. However, over the remaining parts of India, including most parts of central India and south peninsula, Tmax will be below normal.
- **Week 2 (20.03.2020 to 26.03.2020):** Tmax will be above normal over eastern & north-western belt of India. However, very weak anomalies of Tmax are likely over central and north-west India during the period.
- **Minimum Temperature (Tmin)**
- **Week 1 (13.03.2020 to 19.03.2020):** Tmin anomaly is mostly negative over south-eastern coast, central India and south peninsula during week 1.
- **Week 2 (20.03.2020 to 26.03.2020):** Tmin anomaly is mostly negative over India during week 2.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 26<sup>th</sup> March 2020**

### **Agromet Advisories**

#### **Kerala**

Amount of rainfall received over Kerala is 653.6 mm (25% excess) during the period of 01 Oct. 2019 - 12 March 2020. The extended range weather forecast for next two weeks (13 - 19 March and 20 - 26 March 2020) is below normal for week-1 and week-2.

- Due to dry weather condition, there is a chance of sooty mould in coconut leaves. To control, application of starch solution is advised.
- Because of increase in temperature, it is advised to adopt measures for summer protection like mulching, shading, white washing and making fire belts in rubber crop.

#### **Tamil Nadu**

Amount of rainfall received over Tamil Nadu is 464.5 mm (-4% deficit) during the period of 01 Oct. 2019 - 12 March 2020. The extended range weather forecast for next two weeks (13 - 19 March and 20 - 26 March 2020) is below normal for week-1 and week-2.

- Prevailing weather condition is favourable for canker disease incidence in citrus. To control, spray of Streptomycin sulphate 500-1000 ppm or Phytomycin 2500 ppm or Copper oxychloride 0.2% at fortnight interval is advised.
- Prevailing weather condition is favourable for black headed caterpillar incidence in coconut. To control, it is advised to spray the under surface of the fronds with Dichlorovos 100EC 0.02%, Malathion 50 EC 0.05% @ 1ml/litre.

#### **Maharashtra**

Rainfall received over Madhya Maharashtra is 229.7 mm (115% large excess), over Marathwada is 264.5 mm (140% large excess), Vidharbha is 98.5 mm (-6% deficit) and Konkan region 281.5 mm (100% large excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast for next two weeks (13 - 19 March and 20 - 26 March 2020) over Marathwada, Vidharbha, and Madhya Maharashtra is above normal and below normal over Konkan for week-1 and below normal over Marathwada, Konkan, Vidharbha and Madhya Maharashtra for week-2.

##### *Madhya Maharashtra*

- Ploughing in the field is advised immediately after harvesting of *rabi* crops to bury stubbles and to control soil born pest and diseases.
- To avoid fruit fall in mango crop, it is advised to spray Planofix regulator 20 ppm and 1% Calbor micronutrient.

##### *Konkan*

- Due to decrease in humidity and increase in temperature, it is advised to irrigate the coconut

orchard and use straw mulch to reduce evaporation losses.

- There are chances of incidence of budworm in sapota. It is advised to spray anyone of the insecticides viz., Emamectin benzoate 5%SG @ 4.5 g or Deltamehtrin 2.8% EC @ 10 ml or Lambda cyhalothrin 5% EC @ 10 ml or Profenophos 40% EC@ 10 ml/10 litre of water.

#### *Vidharbha*

- Sowing of summer vegetables like okra, cluster bean, cowpea, cucumber, gourd is advised and also apply need based irrigation to growing vegetables.
- In farm livestocks, preventive vaccination for foot and mouth disease (FMD) and deworming for flat worms is advised.

#### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 316.7 mm (-1% deficit) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Himachal Pradesh is above normal for week-1 and week-2.

- Due to prevailing weather condition, there are chances of aphid in mustard crop. Farmers are advised to spray Rogor or Quinalphos @ 2.0 ml/litre of water.
- Due to rainy weather condition, farmers are advised to skip irrigation and sprays on all crops .

#### **Hisar**

Amount of rainfall received over Hisar is 109.6 mm (95% excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Hisar is normal for week-1 and week-2.

- Farmers are advised to keep vigilance on insect-pest and diseases and follow proper weed control measures and cover fruit seedling with rice straw (parali)/thatches in nursery.
- It is advised to maintain good amount of water in pond to save fishes from low temperature.
- Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep them healthy.

#### **Karnataka**

Rainfall received during 01 Oct. 2019 - 12 March 2020 over South Interior Karnataka is 311.3 mm (46% excess) and North Interior Karnataka is 249.0 mm (72% large excess). The extended range weather forecast for next two weeks (13 - 19 March and 20 - 26 March 2020) over South Interior Karnataka is below normal and over North Interior Karnataka is above normal for week-1 and over South Interior Karnataka is normal and over North Interior Karnataka is below normal for week-2.

### *South Interior Karnataka*

- To protect the pulse grains from storage pests, application of oils of castor/linseed/honge/ neem oil @ 3-5 ml per kg of grains is advised.
- Due to continuous dry spell, there are chances of termite attack in horticulture, forestry tree and shrubs. To control, apply Aldrin termiticides for termites.
- There are chances of leaf hopper and powdery mildew disease incidence in mango before flowering and immediately after fruit formation. To control, spraying of Carbaryl, 50 WP @4g/litre of water or Imidachlorpid @ 0.3ml/ litre of water is advised.

### **Assam**

Amount of rainfall received over Assam is 258.0 mm (normal rainfall) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Assam is above normal for week-1 and week-2.

- Under prevailing weather condition, farmers are advised to go for cultivation of ginger crop. To protect the crop from rhizome rot, farmers are advised to spray Indofil M-45 @ 3g/litre for half an hour.
- Under prevailing weather condition, farmers are advised to go for cultivation of colocasia crop. Recommended healthy improve varieties are Kaka Kachu, White Gaurya, Panchamukhia, Bidhan Chattanya, Ahinia Kachu and Bidhan Jaydeb.
- It is advised to prepare land for growing greengram & blackgram crop with recommended varieties viz. T9, Pant U 19, UG 157 for black gram and Kopergaon, Pratap, AAU 39 for green gram cultivation.

### **Jammu**

Amount of rainfall received over Jammu is 478.3 mm (17% excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Jammu is normal for week-1 and week-2.

- The prevailing weather condition favours the outbreak of yellow rust in late sown wheat crop. If noticed, spray of Propiconazole @ 0.1% during clear weather is advised.
- Present weather is favourable for damping off disease in onion crop. It is advised to spray the crop with Bavistin @ 1g/litre during clear weather.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 227.9 mm (82% large excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Jharkhand is above normal for week-1 and below normal for week-2.

- To control weeds in the rice field, it is advised to use cono weeder after 25-30 days of transplanting of rice.
- If the symptoms of pneumonia or C.C.P.P. disease are noticed in goat, then it is advised to vaccinate

immediately with Enroflxacyl @ 1 c.c. for kid animals and 2 c.c. for adult animals.

### **Rajasthan**

Amount of rainfall received over East Rajasthan is 50.4 mm (37% excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over East Rajasthan is below normal for week-1 and week-2.

- Because of increase in temperature, farmers are advised for light irrigation in standing crops and vegetables as per requirement.
- Under prevailing weather conditions, it is advised to start the sowing of green gram, with recommended varieties viz. Pusa Visal, Pusa 9531, PDM-11, SML-668.

### **Uttar Pradesh**

Rainfall received during 01 Oct. 2019 - 12 March 2020 over East Uttar Pradesh is 103.1 mm (36% excess) and West Uttar Pradesh is 134.3 mm (106% large excess). The extended range weather forecast for next two weeks (13 - 19 March and 20 - 26 March 2020) over East Uttar Pradesh and West Uttar Pradesh is above normal for week-1 and above normal over East Uttar Pradesh and normal over West Uttar Pradesh for week-2.

- Intercultural operation is advised to check the evapo-transpiration losses and proper utilization of nutrient by the crop.
- Sowing of black gram is advised under clear sky with recommended varieties viz., T-9, Narender Urd-1, Azaid Urd-1, Uttara, Azad Urd-2, and Shekhar-2.

### **Odisha**

Amount of rainfall received over Odisha is 285.5 mm (68% large excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Odisha is above normal for week-1 and below normal for week-2.

- Present weather condition is optimum for sowing of sesame with varieties viz., Uma, Kalika, Kanak, Amrit, Prachi, Nirmala and Usha.
- Present moderate temperature favours infestation of thrips in groundnut crop. Spray of 400 ml Dimethoate or 50 ml Imidacloprid in 200 litre water per acre is advised.

### **West Bengal**

Amount of rainfall received over West Bengal is 322.2 mm (63% large excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over West Bengal is above normal for week-1 and below normal for week-2.

- For the control of stem borer in boro rice, application of Cartap 4G @ 25 kg/ha or Phorate 10G @ 10 kg/ha or Fipronil 0.3G @ 25 kg/ha or Chlorpyrifos 10G @ 10kg/ha at 21 DAS during top dressing is advised.



- For the control of attack of mango hopper, application of 2 g Carbaril or 1.5 g Monocrotophos/litre of water is advised.

### **Bihar**

Amount of rainfall received over Bihar is 93.6 mm (-2% deficit) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Bihar is above normal for week-1 and normal for week-2.

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

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 344.8 mm (90% large excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Uttarakhand is above normal for week-1 and normal for week-2.

- Under prevailing rainy weather condition, it is advised to cover the nursery seedlings of tomato crop by polythene sheet or dry grasses and postpone transplanting work because of hails & strong surface wind.
- Farmers are advised to bind/support the young transplanted saplings of temperate orchards by wooden stick to prevent from strong surface winds and postpone any type of pesticides as well as fertilizer application.

### **Punjab**

Amount of rainfall received over Punjab is 161.6 mm (93% large excess) during 01 Oct. 2019 - 12 March 2020. The extended range weather forecast provided for next two weeks (13 - 19 March and 20 - 26 March 2020) on rainfall over Punjab is above normal for week-1 and normal for week-2.

- To control aphid on mustard, it is advised to spray Actara 25 WG @ 40g or Metasystox 25 EC or Rogor 30 EC @400 ml or Dursban/Coroban 20 EC @ 600 ml using 80-125 litre of water.
- Under prevailing weather condition, it is advised to transplant the crops like tomato, brinjal, chilli and plug tray/polythene raised nursery of cucurbits in the main field. Sowing of okra and cucurbits is also advised.

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