



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

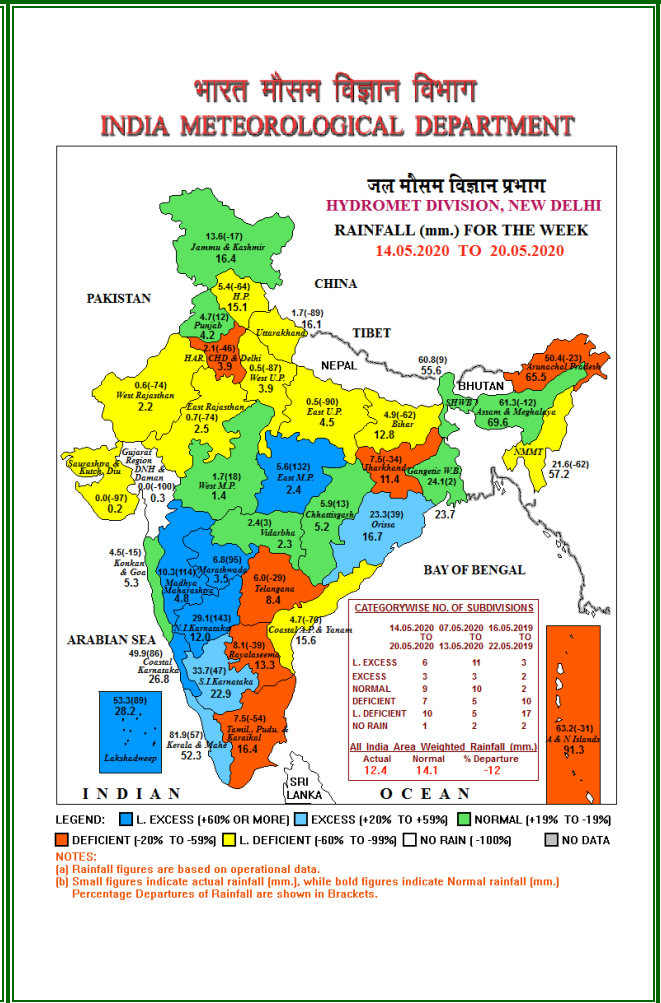
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**&**  
**Earth System Science Organization**  
**India Meteorological Department**

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

### Realized Rainfall 7<sup>th</sup> to 20<sup>th</sup> May, 2020



- Normal or above normal rainfall occurred in both the weeks in Punjab, Gangetic West Bengal, Madhya Pradesh, Chhattisgarh, Madhya Maharashtra, Marathwada, Vidarbha, Kerala & Mahe, Karnataka and Lakshadweep
- Normal or above normal rainfall occurred in either of the weeks in Jammu & Kashmir, Uttarakhand, Uttar Pradesh, Haryana Chandigarh & Delhi, Rajasthan, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Odisha, Arunachal Pradesh, Assam, Konkan & Goa, Telangana and Andaman & Nicobar Islands.
- Below normal rainfall / no rain occurred over rest of the country.

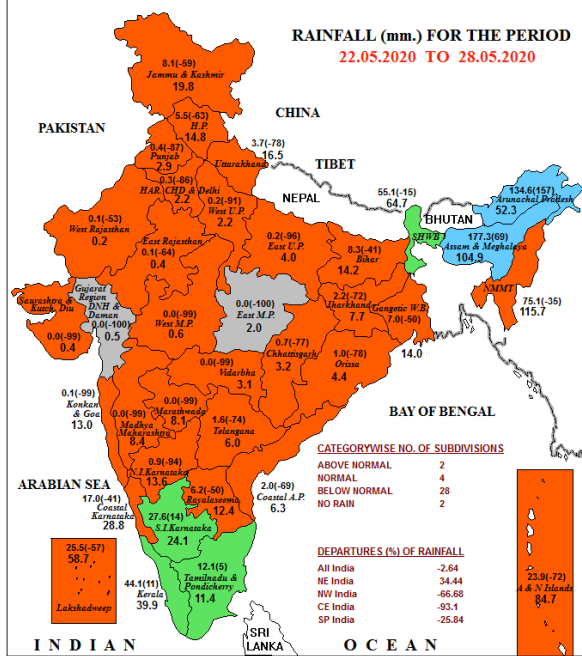
## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC – 20 May)

(22<sup>nd</sup> May to 4<sup>th</sup> June, 2020)

#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

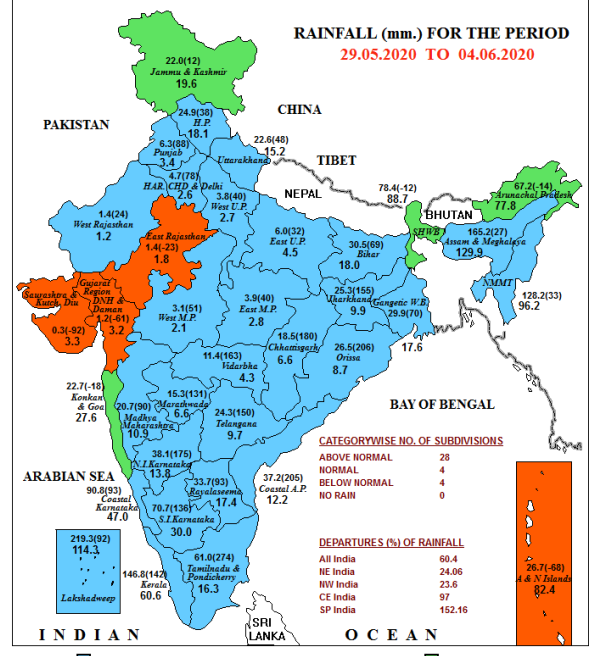
**Rainfall Forecast Map - Normal RF Based Categories**



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



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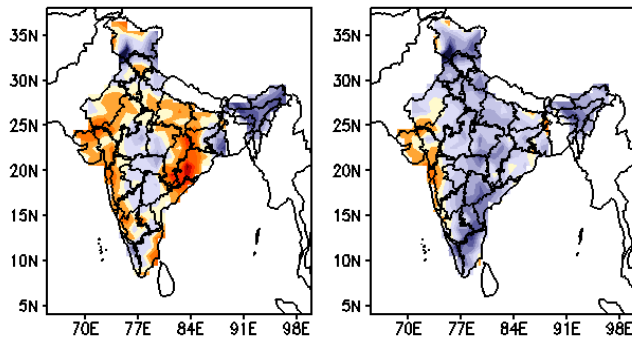
- **Week 1 (22.05.2020 to 28.05.2020):** Some parts of south peninsula, north-eastern parts of the country and parts of extreme north India will get rainfall during week 1. The south Bay of Bengal will be active.
- **Week 2 (29.05.2020 to 04.06.2020):** Rainfall over Kerala and south Peninsula will increase. Onset over Kerala can bring monsoon over some parts of south peninsula during the period.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC -20 May)  
(22<sup>nd</sup> May to 4<sup>th</sup> June, 2020)**

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

(Week1: 22May-28May)

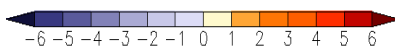
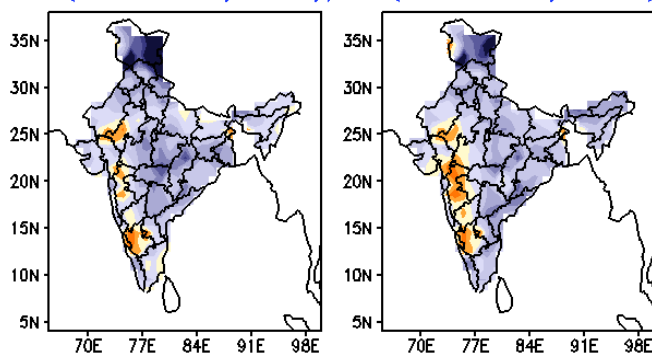
(Week2: 29May-04Jun)



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

(Week1: 22May-28May)

(Week2: 29May-04Jun)



**Maximum Temperature (Tmax)**

- **Week 1 (22.05.2020 to 28.05.2020):** Above normal Tmax over eastern coastal states including Jharkhand, Bihar, Uttar Pradesh, Odisha, Chhattisgarh and north Coastal Andhra Pradesh and adjoining regions, parts of north western coastal states (Rajasthan & Gujarat and western parts of Maharashtra) in week 1. Over the remaining region, it will be below normal.
- **Week 2 (29.05.2020 to 04.06.2020):** The positive anomaly over some parts of western/North West India (Gujarat & Rajasthan) and isolated regions over eastern coastal belt, whereas, negative anomaly over major part of India.

**Minimum Temperature (Tmin)**

- **Week 1 (22.05.2020 to 28.05.2020) and Week 2 (29.05.2020 to 04.06.2020):** Tmin is mostly normal to below normal over most of India except some isolated pockets over western India.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 04 June 2020**

### **Agromet Advisories**

#### **Kerala**

Amount of rainfall received over Kerala is 313.5 mm (18% excess) during the period of 01 March – 21 May 2020. The extended range weather forecast for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) is normal for week-1 and above normal for week-2.

- It is advised to prepare fields for ginger and turmeric planting. To protect the ginger crop from foot rot disease, soak the suckers in 0.3% Mancozeb/Pseudomonas solution for 30 minutes.
- Under prevailing weather condition, there is a chance of pseudo stem weevil attack in banana. As a precaution, apply 50 g neem cake powder in leaf axils.
- Farmers are advised to add pseudomonas culture in the soil at the time of planting of vegetables to reduce fungal diseases.

#### **Tamil Nadu**

Amount of rainfall received over Tamil Nadu is 57.1 mm (-47% deficit) during the period of 01 March – 21 May 2020. The extended range weather forecast for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) is normal for week-1 and above normal for week-2.

- Due to rainy weather condition, farmers are advised for summer ploughing to conserve rain water.
- Present prevailing weather condition is favorable for *Helicoverpa armigera* in chilli. It is advised to spray Emamectin benzoate 5% SG 4 g/10 litre of water.
- To avoid heat stress due to high temperature on animals, it is advised to provide adequate drinking water and green fodder and spray water on gunny bags surrounding the cattle shed.

#### **Maharashtra**

Rainfall received over Madhya Maharashtra is 32.6 mm (52% excess), over Marathwada is 32.7 mm (71% large excess), Vidharbha is 41.7 mm (77% large excess) and Konkan region 12.2 mm (-5% deficit) during 01 March – 21 May 2020. The extended range weather forecast for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) over Vidharbha, Madhya Maharashtra, Marathwada and Konkan are below normal for week-1 and above normal over Marathwada, Madhya Maharashtra and Vidharbha and normal over Konkan for week-2.

#### *Marathwada*

- For proper growth of sprouting in pruned grape crop, it is advised to spray 6 BA growth regulator @ 10 ml per litre of water.
- To reduce the impact of high temperature on poultry and animals, it is advised to surround the poultry shade with moist gunny bags and provide 3 to 4 times clean and cold water to animals for drinking.

### *Konkan*

- During rainfall condition, there is a chance of incidence of bud rot disease on young coconut plant. To control, it is advised to spray 1% bordo mixture onto the crown region of palm.
- To prevent incidence of post-harvest diseases in mango fruits, it is advised to keep the fruits in warm water (~ 52°C) for 10 minutes and then keep for ripening.

### *Vidharbha*

- To avoid heat stress in mandarin orange and sweet lime, it is advised to increase the frequency of irrigation, use of temporary shade net and mulching.
- Under the prevailing hot weather condition, it is advised to irrigate summer crops vegetables and orchards at 5 - 6 days interval in the early morning or evening hours.

### *Madhya Maharashtra*

- For control of shoot fly of sugarcane crop it is advised to spray Chlorantraniliprole 18.5% S.C @ 3-4 ml/10 litre of water.
- It is advised to keep animals in shade and cover cows and buffaloes with wet gunny bags to protect from high temperature and heat stroke.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 243.8 mm (9% excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Himachal Pradesh is below normal for week-1 and above normal for week-2.

- Prevailing weather is conducive for incidence of aphids in rose. To control, it is advised to spray Rogor @ 1 ml/litre of water.
- Under prevailing weather condition, it is advised to sow fodder maize along with cowpeas and soybean in irrigated areas.
- It is advised to maintain room temperature of 18-22°C and relative humidity around 85% for successful cultivation of mushrooms.

### **Hisar**

Amount of rainfall received over Hisar is 95.3 mm (198% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Hisar is below normal for week-1 and above normal for week-2.

- Under the prevailing weather condition, farmers are advised to do sowing of sorghum, maize and lobia as a fodder crop

- Due to increase in day temperature, farmers are advised to apply light irrigation in planted vegetable crops and fruits plants as per requirement and harvest the mature vegetables during morning and evening hours.

### **Karnataka**

Rainfall received during 01 March – 21 May 2020 over South Interior Karnataka is 137.3 mm (26% excess) and North Interior Karnataka is 105.0 mm (81% large excess). The extended range weather forecast for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) over South Interior Karnataka is normal and below 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 fields 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 periodically during peak hot hours to lower the temperature and heat load on animals.
- It is advised to complete the heaping of fodder and straw as early as possible and cover it properly.

#### *South Interior Karnataka*

- Farmers may do summer ploughing for solarization which destroy eggs and pupating stages of insects and weed seeds underneath the surface.
- Intercultural operation and mulching are advised in the standing crops as a contingency measure.

### **Uttar Pradesh**

Rainfall received during 01 March – 21 May 2020 over East Uttar Pradesh is 88.2 mm (246% large excess) and West Uttar Pradesh is 75.8 mm (206% large excess). The extended range weather forecast for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and above normal for week-2.

- Due to rainy weather condition, it is advised to skip the irrigation in *Zaid* crops
- Intercultural operation is advised to check the evapotranspiration losses and proper utilization of nutrient to the crop.
- Under the prevailing weather condition, sowing of green manure crops is advised.

### **Punjab**

Amount of rainfall received over Punjab is 119.9 mm (139% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Punjab is below normal for week-1 and above normal for week-2.

- For the management of early shoot borer in sugarcane, use Tricho-cards having 20,000 eggs

of *Corcyra cephalonica* parasitized (seven days old) by *Trichogramma chilonis* per acre at 10 days interval.

- To check zinc deficiency in citrus, it is advised to spray the affected trees with 0.47 Zinc sulphate (4.7g/litre of water) solution, without addition of lime.
- To protect the brinjal crop from fruit and shoot borer, it is advised to spray 100 ml Sumicidin 20 EC or 200 ml Ripcord 10 EC or 160 ml Decis 2.8 EC in 100-125 litre of water per acre.

### **Rajasthan**

Amount of rainfall received over Rajasthan is 36.2 mm (160% large excess) during 01 March – 21 May 2020. The ex

tended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Rajasthan is below normal for week-1 and week-2.

- To control shoot and fruit borer in tomato, it is advised to collect and bury the infested fruits and shoots. If pest population is above ETL, spraying of Spinosad 48 EC @ 1 ml/4 litre of water is advised.
- Deep summer ploughing is advised for the management of cyst, reniform and root-knot nematodes in maize, pulse-oilseeds and vegetable crops, respectively.

### **Bihar**

Amount of rainfall received over Bihar is 161.0 mm (175% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Bihar is below normal for week-1 and above normal for week-2.

- Farmers are advised to harvest matured pods of early sown black gram and green gram and regular monitor in the late sown green gram and black gram against infestation of pod borer.
- Under the prevailing weather condition, sowing of turmeric crop is advised. Recommended varieties are Rajendra Sonia and Rajendra Sonali for sowing in North Bihar.
- Vaccination is advised for all dairy animals for the control of Black quarter and Haemorrhagic septicaemia diseases.

### **West Bengal**

Amount of rainfall received over West Bengal is 252.7 mm (72% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over West Bengal is below normal for week-1 and above normal for week-2.

- Due to rainy weather condition, there is a chance of fungal disease in the vegetable crops. It is advised to spray Copper Oxychloride @ 2.5 g/litre or Metalaxyl+ Mancozeb 2g/litre of water, respectively after cessation of rain to prevent and counterpart disease.
- Under prevailing rainy weather condition, farmers are advised to sow early and medium early



varieties of Aman paddy by utilizing rain water.

### **Odisha**

Amount of rainfall received over Odisha is 243.0 mm (132% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Odisha is below normal for week-1 and above normal for week-2.

- Under prevailing heavy rain condition, there is a chance of root rot in vegetables. To control, it is advised to spray 2 g Metalaxil +Mancozeb in 1 litre water.
- Under prevailing weather condition, staking is advised in banana plants avoid lodging.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 202.6 mm (208% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Jharkhand is below normal for week-1 and above normal for week-2.

- Intercultural operation is advised in greengram to maintain soil moisture for a longer period.
- Under the prevailing weather condition, farmers are advised to go for planting of ginger crop with recommended varieties like Bardhwan, Suruchi, Nadiya, Suprabha.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 108.6 mm (202% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Chhattisgarh is below normal for week-1 and above normal for week-2.

- Deep ploughing of the field is advised to prevent crops from soil borne diseases, weeds and insect eggs in the soil.
- Due to increase in temperature, farmers are advised to cover animal and poultry sheds with gunny bags to maintain the inner temperature.

### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 53.3 mm (-15% deficit) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Andhra Pradesh is below normal for week-1 and above normal for week-2.

- Farmers are advised to do summer ploughing to control of sedges and deep-rooted weeds, expose the pupae of insects to high temperatures and improve soil moisture retention.
- Under prevailing high temperature, farmers of North and central Coastal Andhra Pradesh are advised to provide irrigation in sugarcane crop.

## **Madhya Pradesh**

Amount of rainfall received over Madhya Pradesh is 79.0 mm (284% large excess) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Madhya Pradesh is no rain for week-1 and above normal for week-2.

- Due to high humidity and cloud cover, insect-pest management practice is advised in green gram crop and rogue out mosaic plant from the field.
- Farmers are advised to place cooling system in the poultry and dairy houses to reduce high temperature stress during day hours.

## **Assam**

Amount of rainfall received over Assam is 340.2 mm (-28% deficit) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Assam is above normal for week-1 and week-2.

- Due to high wind and rainy weather condition, it is advised to remove excess amount of water from vegetable crop fields and provide mechanical support followed by earthing up at the base of the stem.
- Under prevailing rainy condition, farmers are advised for planting of fodder crops like Napier, Para, Setaria.

## **Jammu**

Amount of rainfall received over Assam is 312.2 mm (-1% deficit) during 01 March – 21 May 2020. The extended range weather forecast provided for next two weeks (22 – 28 May 2020 and 29 May – 04 June 2020) on rainfall over Assam is below normal for week-1 and normal for week-2.

- Under the prevailing weather condition, land preparation and nursery raising of early transplanted rice is advised. Recommended varieties viz. IET-1410, K-39, Ratna, PC-19, Jaya.
- Ploughing of fallow land for soil solarization against insect pests and weed infestation is advised.

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