



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

**Validity for 11<sup>th</sup> to 24<sup>th</sup> May 2018**

**Date of issue: 11<sup>th</sup> May 2018**

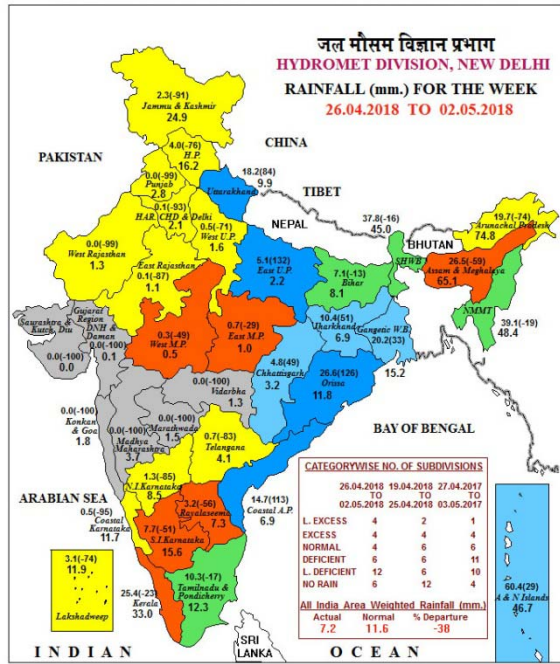
**Issued by**  
**Indian Council of Agricultural Research (ICAR)**  
**All India Coordinated Research Project on Agricultural Meteorology (AICRPAM),**  
**Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.**  
**&**  
**Earth System Science Organization**  
**India Meteorological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

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

### Realized Rainfall

(26<sup>th</sup> April to 9<sup>th</sup> May 2018)

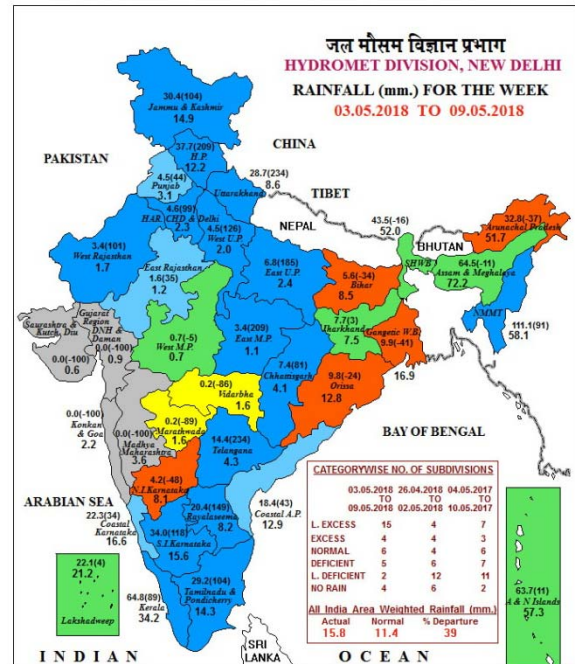
#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: L. EXCESS (+60% OR MORE) EXCESS (+20% TO +59%) NORMAL (+19% TO -19%)  
DEFICIENT (-20% TO -59%) L. DEFICIENT (-60% TO -99%) NO RAIN (-100%) NO DATA

NOTES:  
[a] Rainfall figures are based on operational 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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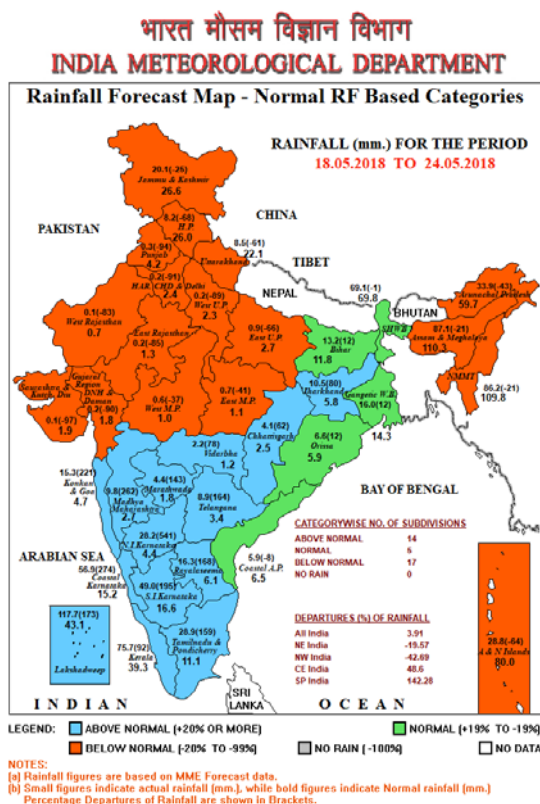
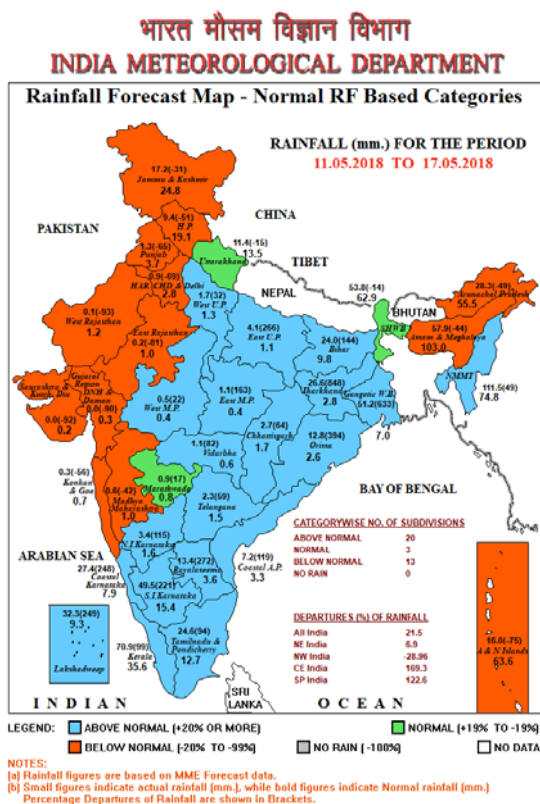
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NOTES:  
[a] Rainfall figures are based on operational data.  
[b] Small figures indicate actual rainfall [mm.], while bold figures indicate Normal rainfall [mm.]  
Percentage Departures of Rainfall are shown in Brackets.

- Normal or above normal rainfall occurred during last two weeks in Uttarakhand, East Uttar Pradesh, Chhattisgarh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, NMMT (Nagaland, Manipur, Mizoram and Tripura), Coastal Andhra Pradesh, Tamil Nadu and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the last two weeks in Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana Chd & Delhi, Rajasthan, West Uttar Pradesh, Madhya Pradesh, Bihar, Odisha, Assam & Meghalaya, Gangetic West Bengal, Telangana, Coastal Karnataka, South Interior Karnataka, Rayalaseema, Kerala and Lakshadweep.
- Below normal rainfall occurred in both the weeks in Arunachal Pradesh and North Interior Karnataka.
- No rain occurred in Gujarat, Konkan & Goa and Madhya Maharashtra.

# Extended Range Forecast System

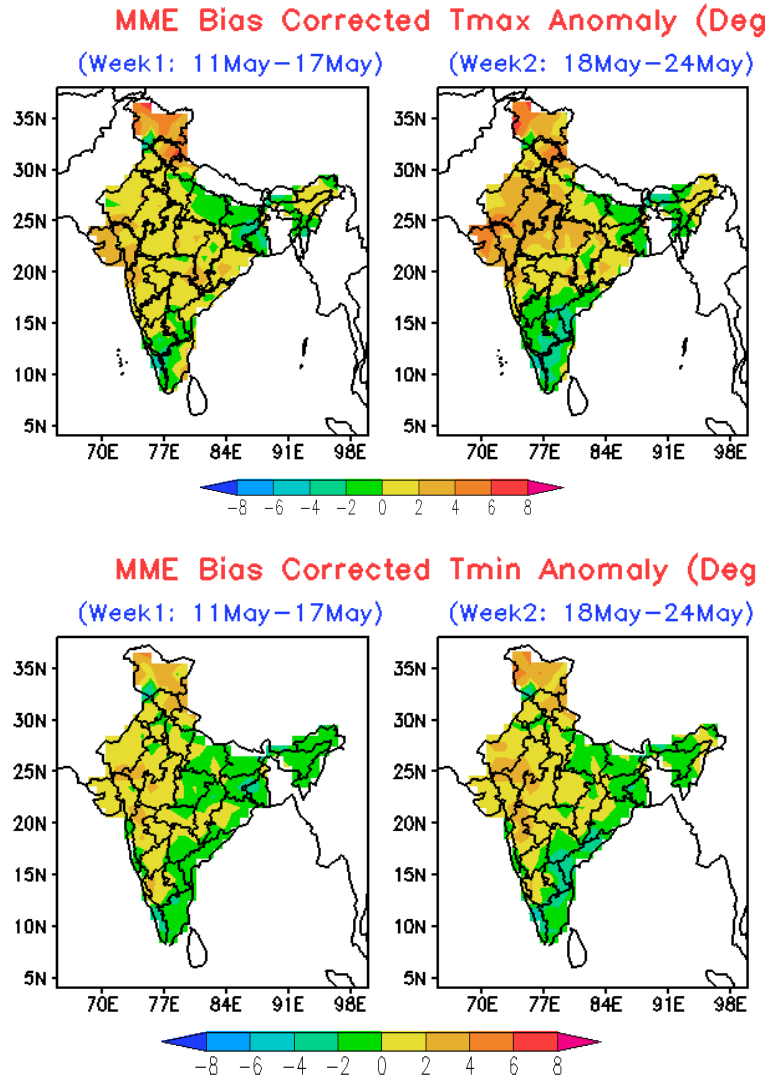
## Rainfall forecast maps for the next 2 weeks (IC – 9 May) (11<sup>th</sup> May to 24<sup>th</sup> May 2018)



### Extended Range Rainfall Forecast

- **Week 1 (11.05.2018 to 17.05.2018) and Week 2 (18.05.2018 to 24.05.2018):** Pre-monsoon rainfall to continue over Northeast India, extreme north India and also over the southern parts of India during week 1. In addition, the Arabian Sea and adjoining south peninsula is likely to be active during week 1 as well as week 2 with week 2 indicating large positive anomaly of rainfall over the Southeast Arabian Sea and adjoining Kerala and south peninsula region.
- Thus, as indicated in earlier week, the current forecast features indicate possibility of early onset of monsoon over the southern tip of India.

Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast for next 2 weeks (IC – 9 May)  
(11<sup>th</sup> May to 24<sup>th</sup> May 2018)



**Tmax (Maximum Temperature)**

- **Week 1 (11.05.2018 to 17.05.2018) and week 2 (18.05.2018 to 24.05.2018):** Above normal Tmax over most of India except over parts of Northeast states and adjoining Gangetic West Bengal and Jharkhand and south peninsula. In week 2, the warming is likely to increase further with maximum warming (4 to 6 Deg C) over northwest and adjoining central parts of India.

**Tmin (Minimum Temperature)**

- **Week 1 (11.05.2018 to 17.05.2018) and week 2 (18.05.2018 to 24.05.2018):** Slightly above Normal Tmin over Northwest and central Parts of India.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 24<sup>th</sup> May 2018**

### **Agromet Advisories**

#### **Tamil Nadu**

##### **Rainfall Situation**

Rainfall received during the period of 01 March to 09 May 2018 over Tamil Nadu is 87.7 mm, which is 10% excess when compared to the normal. The extended range weather forecast provided for next two weeks [11 to 17 May (week-1) and 18 to 24 May (week-2) is above normal for both the weeks.

- Prevailing high wind speed may damage banana crops. Propping is recommended.
- To avoid heat stress due to high temperature on animals, provide adequate drinking water and green fodder. Spray water on gunny bags surrounding the cattle shed.

#### **Kerala**

##### **Rainfall Situation**

Rainfall received during the period of 01 March to 09 May 2018 over Kerala is 243.9 mm, which is 32% excess than normal. The extended range weather forecast provided for next two weeks is above normal for both the weeks.

- Due to the increase in maximum temperature, there is a chance for Spodoptera infestation in banana. Destroy the affected leaves along with the spodoptera. In case of severe attack, spray Fame 2 ml/10 L of water, after the forecasted spell of rainfall.
- In Nutmeg spices, farmers are advised to protect the trees from drought and sun scorching. Mulching is recommended.
- In Coffee, apply fertilizers @ 85 kg urea, 150 kg rock phosphate and 66 kg potash per hectare of coffee. Leaf rust disease may become severe due to increase in relative humidity.

#### **Karnataka**

##### **Rainfall Situation**

Rainfall received during the period of 01 March to 09 May 2018 over different meteorological sub-divisions of Karnataka viz, North Interior Karnataka: 44.8 mm (8 % excess), South Interior Karnataka: 107.9 mm (47% excess) and Coastal Karnataka: 79.6mm (50% excess). The extended range weather forecast provided is above normal in both the weeks over all the subdivisions of the state.

##### **North Interior Karnataka**

- Land should be ploughed and the crop residue should be incorporated in the soil. This facilitates *in situ* conservation of water during the pre-monsoon rains and also helps to conserve the soil.
- Proper ventilation should be maintained for free circulation of air in the sheds.
- Animals may preferably be grazed during early morning and late evening to avoid exposure to extreme hot conditions and during hot hours, they must be tied and fed in shaded place or under the tree. This

will also help in reducing the water requirement.

### **South Interior Karnataka**

- In mango, due to heavy rain, fruit drop have been observed. Consequently fruit fly damage is also noticed. Spary Carbaryl @ 4 g/litre of water, after the forecasted spell of rainfall.

### **Maharashtra**

#### **Rainfall Situation**

Rainfall received during 01 March to 09 May 2018 over different meteorological sub divisions of the state viz., Konkan: 3.2 mm (48% deficit), Madhya Maharashtra: 5.8 mm (65% Deficit), Vidarbha: 11.6 mm (47% Deficit) and Marathwada: 10.8 mm (26 % Deficit). The extended range weather forecast provided for next two weeks is: above normal for Vidarbha during both weeks; below normal in week-1 and above normal in week-2 over Konkan; normal for week-1 and above normal for week-2 over Marathwada; below normal and above normal during week-1 and 2, respectively over Madhya Maharashtra.

### **Marathwada**

- Farmers are advised to keep harvested groundnut in safe storage, as rainfall is forecasted over next two weeks. For storage, the moisture percent may be 8 to 10 %.
- To increase quality of citrus fruit, take a spray of 1 % potassium nitrate (10 g / litre of water) + 0.5 % Zinc (5 g/ litre of water), after the forecasted spell of rainfall. As high wind speed is prevailing, give support to newly planted citrus plants with the help of sticks.

### **Konkan**

- To treat red palm weevil affected coconut, prepare a slanting hole with the help of screw drill about 1 m height from ground level on tree trunk and pour about 20 ml of 36% Monocrotophos or 20% Chlorpyrifos with the help of plastic funnel in the hole and close the hole with the help of cement, after the forecasted spell of rainfall.
- Harvest the mature groundnut pods and dry them in sunshine for 4 to 5 days (care should be taken as rainfall is forecasted over next two weeks) and store them in dry place.

### **Vidarbha**

- Frequent light irrigation coupled with basin mulching (2 to 3 inch layer of organic mulch over the root zone and a few inches away from the trunk) is advisable in orange and mango orchards to reduce solar heat stress (Though above normal rainfall is forecasted, the quantity of rainfall is very less).
- Provide proper ventilation and heat protection in the animal/poultry sheds. Applying gunny bags/grass on roof of shed with sprinkling of water is advisable to reduce heat impact. Restrict working/grazing of farm/draught animals to morning and evening hours and give them plenty of water to drink.

### **Chhattisgarh**

#### **Rainfall situation**

The state as a whole has received 38.1 mm of rainfall during 01 March to 09 May 2018, which is 18% excess. The extended range weather forecast provided for next two weeks is above normal for both the weeks.



- Need based irrigation and intercultural operation should be done in Tomato, Brinjal, Chilli, Okra and other vegetable crops. Farmers are advised to increase the frequency of irrigation as per temperature (Though above normal rainfall is forecasted, the quantity of rainfall is very less).
- Buffalo should be kept in the water-filled pond for at least half an hour every day.

## **Odisha**

### **Rainfall situation**

The state as a whole has received 99.8 mm of rainfall during 01 March to 09 May 2018, which is 24% excess. The extended range weather forecast provided for next two weeks is above normal for both the weeks.

- Go for line sowing of rice followed by early beushening and weeding.
- If there is availability of irrigation, then farmers are advised to go for sowing of Cucurbits, Gourds, Beans, etc.
- Harvest the matured Watermelon.
- Farmers are advised to harvest Onion & Garlic as soon as possible.

## **Bihar**

### **Rainfall situation**

The state as a whole has received 22.5 mm of rainfall received during 01 March to 09 May 2018, which is 40% deficit. The extended range weather forecast provided for next two weeks is above normal for week-1 and normal for week-2.

- During the last several days, good rainfall has occurred at many places in the North Bihar districts. This has brought adequate moisture in the soil, which may be utilized for sowing of turmeric crop from 15<sup>th</sup> May.
- Intercultural operation is advised in summer vegetable crops such as lady's finger, pumpkin, cucumber, sponge gourd etc. Use sulphur-based medicines in the crop like powdery asphyxia and spider pests in pumpkin, Cucumber.
- For rice, farmers are advised to go for land preparation for sowing of seeds in nursery. Application of cow dung is suggested for good and healthy seedlings. Farmers may start the nursery sowing of long duration paddy from 25<sup>th</sup> May.

## **West Bengal**

### **Rainfall Situation**

Rainfall received over Sub-Himalayan West Bengal (SHWB) is 241.4 mm rainfall (5% deficit) and Gangetic West Bengal is 96.4mm (5% excess) during 01 March to 09 May 2018. The extended range weather forecast provided is above normal for week-1 and normal for week-2 over Gangetic WB; normal for both the weeks over SHWB.

- In next five days, moderate to heavy rainfall is forecasted. Thus, farmers, who have harvested the crop, are advised to immediately keep the harvested crops in a secure place.
- In Jute, complete the intercultural operations and after that apply top dressing. For crops of three-week stage, apply 6 to 7 kg Urea (per bigha) as first top dressing and for crops of six-week stage apply the same amount of fertilizer as second top-dressing, after the forecasted spell of rainfall.

## **Madhya Pradesh**

### **Rainfall Situation**

Rainfall received over West Madhya Pradesh and East Madhya Pradesh is 3.5 mm rainfall (54% deficit) and 12.8mm (34%deficit), respectively during 01 March to 09 May 2018. The extended range weather forecast provided is above normal for week-1 and below normal for week-2 over both the subdivisions.

- Irrigate summer green gram and black gram during week-2.
- Due to high temperature, farmers are advised to apply pest protection measures in tomato and okra during week-2. For controlling sucking pests, spray Malathion at 2 ml/litre water. For controlling caterpillar, spray of Triazaphos at 750 ml/500-600 litres of water. Apply insecticide after harvesting of fruits.

## **Rajasthan**

Rainfall received over West Rajasthan and East Rajasthan is 4.5 mm rainfall (55% deficit) and 6.3mm (23% deficit), respectively during 01 March to 09 May 2018. The extended range weather forecast provided is below normal for week-1 and week-2 over both subdivisions.

- Deep ploughing of fields after harvesting of *rabi* crops should be done as high temperature is prevailing, which is suitable for killing insect eggs and pupae and weed seeds.
- Before storage, grains should be properly cleaned and it should be dried to the recommended level of moisture content. Godown should be properly cleaned and advised to spray 0.5 % Malathion solution and keep the chamber closed for a week.
- For green manure, sowing of Daincha and Clusterbean etc may be done during this week. Seed rate for Dhaincha is 50-60 kilogram per hectare.
- Apply irrigation in fodder crops like Maize, Sorghum, Bajra and Cluster bean.

## **Assam**

### **Rainfall Situation**

Rainfall received over Assam is 276.7 mm rainfall (22% deficit) during 01 March to 09 May 2018. The extended range weather forecast provided is below normal for both weeks.

- Harvest the matured Arecanut and sort out the healthy seed nut form the harvested lot, which are suitable for raising seedlings. For nursery rising, select well drained soil free from water-logging.
- Collect the seeds of high yielding varieties of *Sali* rice namely Ranjit, Bahadur, Satyaranjan, Basundhara, Kushal, Mahsuri, Bhogali, Rangilee, Ketekijoha etc. Choose Satyaranjan and Basundhara in double cropping areas having crop duration of 130-135 days. Jalashree, Jalkunwari, Plawan are some suitable varieties of *Sali* rice for flood affected areas.

## **Punjab**

### **Rainfall Situation**

Punjab has received 22.4mm of rainfall during 01 March to 09 May 2018, which is 46% deficit. The extended range weather forecast provided for next two weeks is below normal for both weeks.



- To control weeds in summer green gram, take up first hoeing 4 weeks after sowing of the crop and second hoeing, if needed, about two weeks thereafter. Spray 1 litre Stamp 30 EC to control weeds. Stamp should be sprayed within 2 days of sowing of the crop.
- Sowing of cotton is recommended. (American cotton- PAU Bt 1, Non Bt cotton- F 2228, F2383, LH 2108, LH 2076 and LHH 144).
- For management of fruit drop in mango, spray 2,4-D sodium salt (Horticulture grade) @ 10g in 500 litres of water.
- Onion thrips should be checked by spraying 250 ml Malathion 50 EC in 80 litres of water per acre.
- To protect the tomato crop from early blight spray the crop with Indofil M-45 @ 600 g/acre in 200 litres of water.

## **Jammu**

### **Rainfall Situation**

Rainfall received during 01 March to 09 May 2018 over Jammu is 210.9 mm, which is 22% deficit. The extended range weather forecast provided for next two weeks over Jammu is: below normal for both weeks.

- In summer pulses, farmers are advised to undertake hoeing and weeding to conserve soil moisture and proper aeration of the roots and to keep the weeds under check.
- In tomato, install yellow sticky traps for aphid/whitefly @4 traps/kanal and need based application of neem oil @ 3ml/L.
- In Brinjal, spray Mancozeb @ 0.25% to control phomopsis blight.
- In Cucurbits, maintain good fertility in soil for maximum female flowers in the vine. Spray Thiomethoxam @ 0.5gm/lt of water and Mancozeb @ 2.5gm/lt of water to give protection against beetle attack and anthracnose respectively.

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