



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

**Validity: 16 to 29 August 2019**

**Date of issue: 16 August 2019**

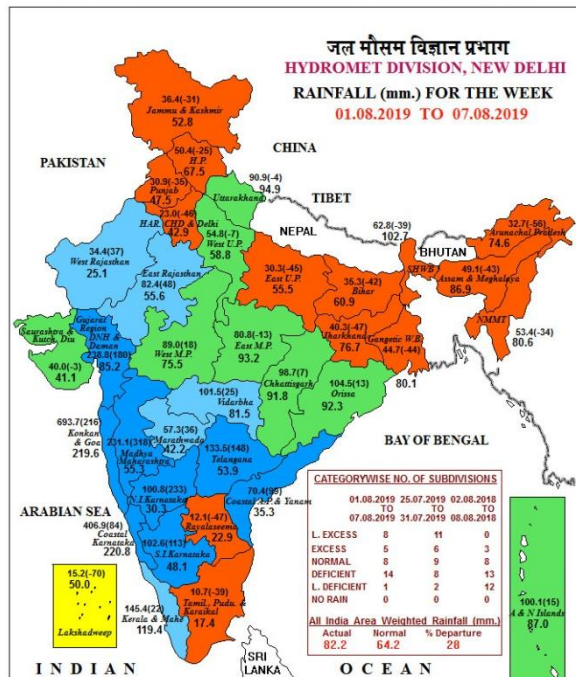
**Issued by**  
**Indian Council of Agricultural Research (ICAR)**  
**All India Coordinated Research Project on Agricultural Meteorology (AICRPAM),**  
**Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.**  
**&**  
**Earth System Science Organization**  
**India Meteorological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

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

### Realized Rainfall

(1<sup>st</sup> to 14<sup>th</sup> August, 2019)

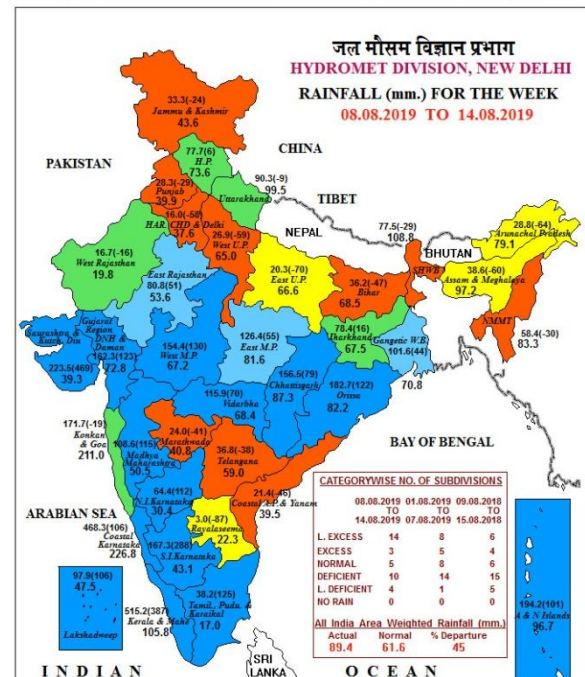
#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



**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.

#### 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.

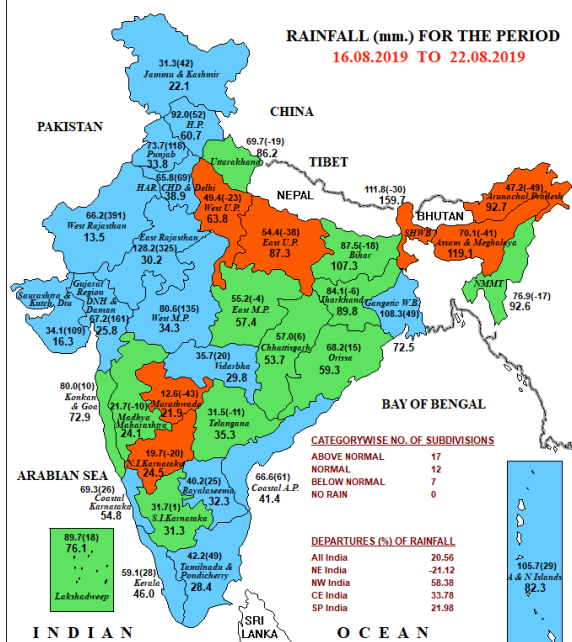
- Normal or above normal rainfall occurred in both the weeks in Uttarakhand, Rajasthan, Saurashtra & Kutch, Gujarat Region, East Madhya Pradesh, West Madhya Pradesh,, Chattisgarh, Odisha, Konkan & Goa, Madhya Maharashtra, Vidarbha, North Interior Karnataka, South Interior Karnataka, Coastal Karnataka, Kerala & Mahe and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks in Himachal Pradesh, West Uttar Pradesh, Marathwada, Jharkhand, Gangetic West Bengal, Telangana, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- Below normal rainfall occurred in both the weeks in Jammu & Kashmir, Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura (NMMT) and Rayalaseema.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC – 14 August) (16<sup>th</sup> to 29<sup>th</sup> August 2019)

#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

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

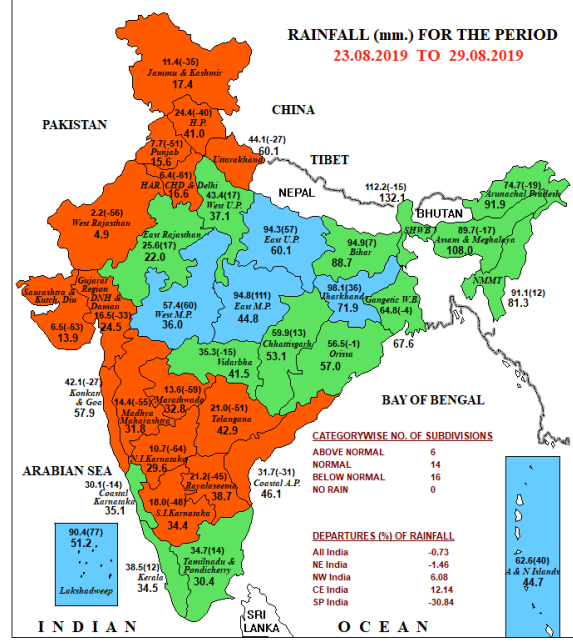


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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

**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.

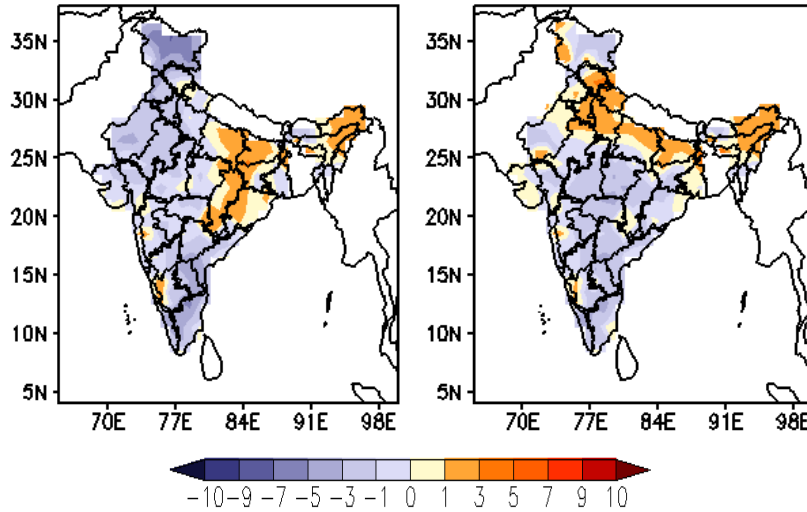
- **Week 1 (16.08.2019 to 22.08.2019):** Mainly above normal rainfall over northwest parts of India and mostly normal rainfall over central parts and south peninsula. Below normal rainfall over northeast India.
- **Week 2 (23.08.2019 to 29.08.2019):** Above normal rainfall over Bihar, Jharkhand, north Madhya Pradesh, north Jharkhand and adjoining region.

**Maximum and Minimum temperature anomaly ( $^{\circ}$ C) forecast  
for next 2 weeks (IC – 14 August)  
(16<sup>th</sup> to 29<sup>th</sup> August 2019)**

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

(Week1: 16Aug–22Aug)

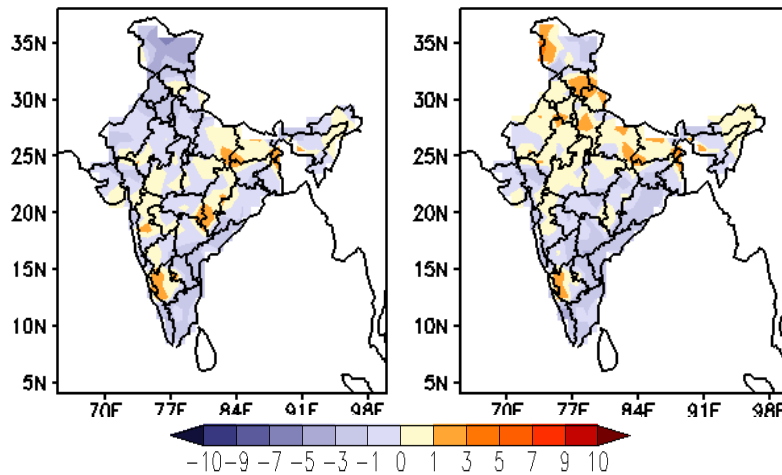
(Week2: 23Aug–29Aug)



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

(Week1: 16Aug–22Aug)

(Week2: 23Aug–29Aug)



**Maximum Temperature (Tmax)**

- **Week 1 (16.08.2019 to 22.08.2019) and Week 2 (23.08.2019 to 29.08.2019):** Tmax anomaly is likely to be positive over small parts of Indo-gangetic belts and negative over rest of the region.

**Minimum Temperature (Tmin)**

- **Week 1 (16.08.2019 to 22.08.2019) and Week 2 (23.08.2019 to 29.08.2019):** Normal Tmin over most parts of India with very weak anomaly. During week 2, the positive anomaly over Indo Gangetic region is expected to increase.

## Strategic Agricultural Planning based on rainfall during next two weeks till 29<sup>th</sup> August 2019

### Agromet Advisories

#### Kerala

Amount of rainfall received over Kerala during the period from 01 June to 14 August 2019 is 1593.4 mm (0% deficit). The extended range weather forecast for next two weeks (16-22 and 23-29 August) is above normal for week 1 and normal for week 2.

- During the rainy season, there is a chance for increase in the pest population in rice. As a prophylactic measure, apply 2CC Trichogramma chilonis card per acre to control leaf folder and 2CC Trichogramma japonicum card per acre to control stem borer in paddy. Cut the cards in to small pieces and fix in different parts of the field in plastic cups. If the attack is severe, spray 3ml Chlorantraniliprole per 10 litre of water.
- Apply fertilizers @ 250g Urea, 285g Rock phosphate, 350g Potash, 500 g MgSO<sub>4</sub> and 2 kg lime per plant in coconut. As a prophylactic measure to control bud rot, apply 1% Bordeaux mixture in the tender leaf axils.
- During the rainy season, if infestation of pseudostem weevil is noticed, spray 2.5 ml of Chlorpyrifos or 2 ml of Quinalphos mixing with gum per one litre of water in leaf axils and by inserting the nozzle through the boreholes made by the larvae.
- During the rainy season, there is a chance of Mahali disease in Arecanut. The conidia of the fungus carried by wind and rainwater is favourable for disease spread. Prophylactic spraying of Bordeaux mixture (1%) or Copper Oxychloride 50WP (2g/l) with sticker is recommended.
- In this cool and moist conditions, there is a chance of soft rot disease in ginger. To control soft rot, drench the soil with 1% Bordeaux mixture/0.3% Mancozeb. Apply green leaf mulching to prevent soil erosion and to increase the organic matter content in the soil.

#### Karnataka

Amount of rainfall received over North Interior Karnataka is 408.4 mm (40 % excess), South Interior Karnataka is 540.6 mm (21 % excess) ) and Coastal Karnataka is 2666.4 mm (10 % excess ) during 01 June to 14 August 2019. The extended range weather forecast for next two weeks (16-22 and 23-29 August) over south interior Karnataka is above normal for week-1 and below normal for week-2.

##### *South Interior Karnataka*

- Due to warm and humid weather, possibility of pest and disease build up is more in already sown crops. Take prophylactic measures.
- Wherever over population of crop plants is existing, undertake thinning operation for better availability of soil moisture.

## Tamil Nadu

Amount of rainfall received over Tamil Nadu is 141.3 mm (14 % deficit) during the period of 01 June to 14 August 2019. The extended range weather forecast for next two weeks (16-22 and 23-29 August) is above normal for week-1 and normal for week-2.

- Prevailing weather condition is favorable for incidence of boll worm. To control, spray Phosalone 35% EC @ 2.5 l/ ha or Quinalphos 25 EC @ 2.0 l/ha (or) Emamectin benzoate 5% SG @ 190-220 g/ha.
- Prevailing weather conditions are favorable for Yellow mosaic virus in pulses. To control, spray Dimethoate 30 EC @ 500 ml / ha or Thiamethoxam 75 WS @ 1 g/ lit.

## Maharashtra

Rainfall received over Madhya Maharashtra is 857.5 mm (70% excess), over Marathwada is 320.3 mm (20% deficit), Vidarbha is 646.4 mm (3% excess) and Konkan region 3130 mm (43% excess) during 01 June to 14 August 2019. The extended range weather forecast for next two weeks (16-22 and 23-29 August) over Madhya Maharashtra is above normal for week-1 and below normal for week-2. For Marathwada, it is below normal for both the weeks.

### Marathwada

- To control pink bollworm in cotton crop, spray Profenophos 40 % + Cypermethrin 4% @ 20 ml per 10 litre of water during clear weather condition. For management of aphids in cotton crop, take a spray of Flonicamid 50 WG @ 2 g Buprofezin 25 SC @ 20 ml per 10 litre of water during clear weather condition. If yellowing of leaves is observed in cotton crop, take a spray of micronutrients grade – II @ 0.5 % and 19:19:19 @ 2% during clear weather condition.
- In sugarcane, soil application of Metarhizium anisopliae @ 4 kg per acre should be done for management of white grubs.
- To control aphids in black gram / green gram, farmers are advised to spray Dimethoate 30 % @ 12 ml per 10 litre of water during clear weather condition.
- Soil application of Metarhizium anisopliae @ 4 kg per acre should be done for management of white grubs in sugarcane crop.

### Madhya Maharashtra

- To control the leaf eating caterpillars in *kharif* sunflower, greengram, blackgram, pigeonpea etc., spray Chloropyriphos or Quinolphos @ 15-20 ml + 10 litre of water + 5 ml sticker.
- Prepare ridges and furrows or compartmental bunds of 6x6 meter size in the fallow land kept for *rabi* sowing. It will help to conserve more rain water during *kharif* and will help to increase yield of *rabi* jawar.
- For control of sucking pests in vegetable crops, spraying of 5 % Neem ark or Verticillum leccani( Phule bugicide) 1 kg + 1 lit. milk in 200 lit of water or Imidyachloprid 17.8 SL 2 ml per 10 litre of water.



## **Jharkhand**

Jharkhand received 451.2 mm rainfall which is 32 % deficit during 01 June to 14 August 2019. The extended range weather forecast for next two weeks (16-22 and 23-29 August) is normal for week-1 and above normal for week-2.

- Farmers having seedlings of about 18 - 20 days, but sufficient water not available for puddling may collect rain water flowing from upland as runoff. Continue transplanting in low land (Don-1), as the sufficient water is available for puddling.
- In medium land where sufficient water is not available for puddling, farmers may continue transplanting through SRI method with 10-15 days old seedlings.
- The present weather is favorable for the attack of blast disease (in which boat shaped brown spot appears on the leaves. The spots have ash colour in center and deep brown stripes on margin). As and when this symptom appears, immediately spray the fungicide Beam @ 3 gram per 5 liter of water during clear weather.

## **Jammu**

Rainfall received during 01 June to 14 August 2019 over Jammu was 342.0 mm, which is 9% deficit. The extended range weather forecast for next two weeks (16-22 and 23-29 August) is above normal for week-1 and below normal for week-2.

- Due to presence of congenial weather, there may be attack of root weevil and thread worm in paddy crop. Under such situation, apply 1 kg/kanal of Carbofuran 3G.
- Due to the availability of moisture, apply 2<sup>nd</sup> dose of nitrogenous fertilizer as top dressing in normal transplanted rice crop if the crop is 50-65 days old.
- The present weather conditions are favourable for attack of blight in maize crop under such situation spray Mancozeb 75WP @ 0.25%.
- The weather is favorable for new plantation of horticultural crops like guava, ber, papaya, mango & citrus.

## **Andhra Pradesh**

Rainfall received during 01 June to 14 August 2019 over Coastal AP and Yanam was 327.8 mm (3% deficit) and in Rayalaseema region 133.2(36 deficit). The extended range weather forecast for Coastal AP and Rayalaseema region (16-22 and 23-29 August) was above normal for week-1 and below normal for week-2, respectively.

- As the prevailing conditions are favourable for incidence of blast and sheath blight in rice crop in East Godavari, Srikakulam, Vishakhapatnam, Vizianagaram districts, farmers are advised to spray Isoprothioline@1.5ml/L of water for control of blast and Hexaconazole@2ml/L or Propiconazole@1ml/L of water for control of sheath blight.

- As high wind speed is prevailing in Kadapa and Ananthapuramu districts, farmers are advised to provide support to banana plants to avoid lodging and harvest the matured fruits.
- As present weather conditions are favourable for incidence and spread of sucking pests, leaf miner and collar rot in groundnut in Chittoor, Kadapa and Nellore districts, farmers are advised to spray Monocrotophos @ 1.6 ml/L or Imidachloprid @ 0.4 ml./L of water for control of sucking pests, Chloripyriphos@2.5ml/L of water for control of leaf miner and Saaf @ 3g/L or Carbendizem @ 1 g/L + Mancozeb @ 2.5 g./L of water for control of collar rot.

## Uttarpradesh

Rainfall received during 01 June to 14 August 2019 over Western Uttar Pradesh was 324.8mm (27% deficit). The extended range weather forecast for next two weeks (16-22 and 23-29 August) is normal for week-1 and below normal for week-2.

### *Kanpur*

- Keeping in view of light rainfall during next five days, farmers are advised to do proper arrangement for drainage in all vegetables crops, nurseries, pulse and maize crops. Farmers are also advised not to give irrigation to crops
- Farmers are also advised to conserve rain water in the paddy fields by making broad and elevated bunds.
- If Khaira disease is seen under late planted paddy, spray Zinc Sulphate@5.0 kg/ha with 2.0% Urea solution.
- Sowing of black gram varieties like Pant U-35, Pant U-30, Pant Urd-31 Azad Urd-2, Azad Urd-3, Sekhar-1, Sekhar-2, Sekhar-3, Narendra Urd-1 etc,. Green gram varieties like Pant Moong-3,4, Samrat, Asha, HUM-16, MH-2-3, K.M.-2241,IPM-2-3, K.M.-2195 and IPM-205-7 etc, should be done with 12-15 kg/ha treated seed in proper moisture should be taken up.

**Disclaimer:** The predictability of weather depends on many factors which are dynamic in nature. The success of agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.