



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

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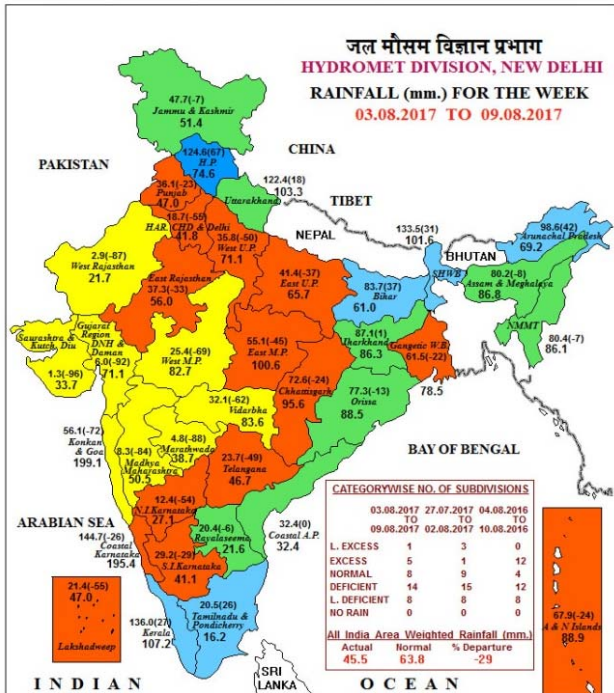
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**Indian Council of Agricultural Research (ICAR)**  
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**Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad**  
**&**  
**Earth System Science Organization**  
**India Meteorological Department**

# Realized Rainfall and Extended Range Forecast

## Realized Rainfall

(3<sup>rd</sup> to 16<sup>th</sup> August 2017)

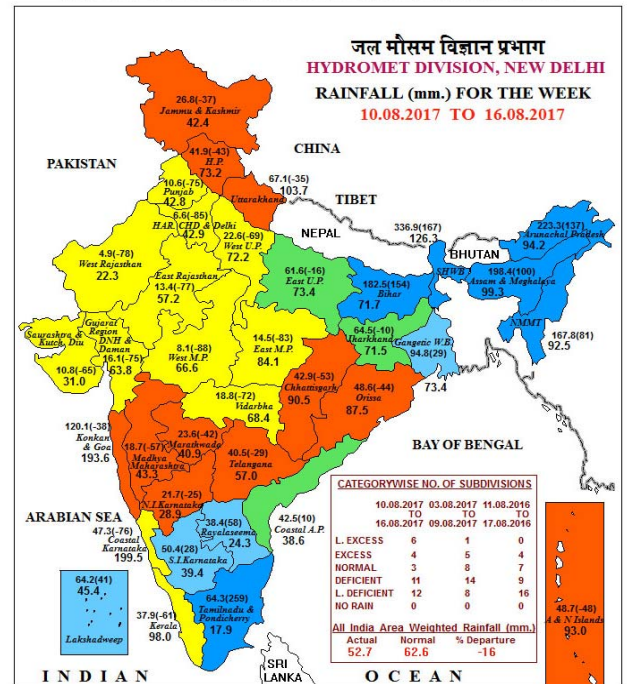
### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: L. EXCESS (+60% OR MORE) EXCESS (+20% TO +59%) NORMAL (+1% 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.] (c) Percentage Departures of Rainfall are shown in Brackets.

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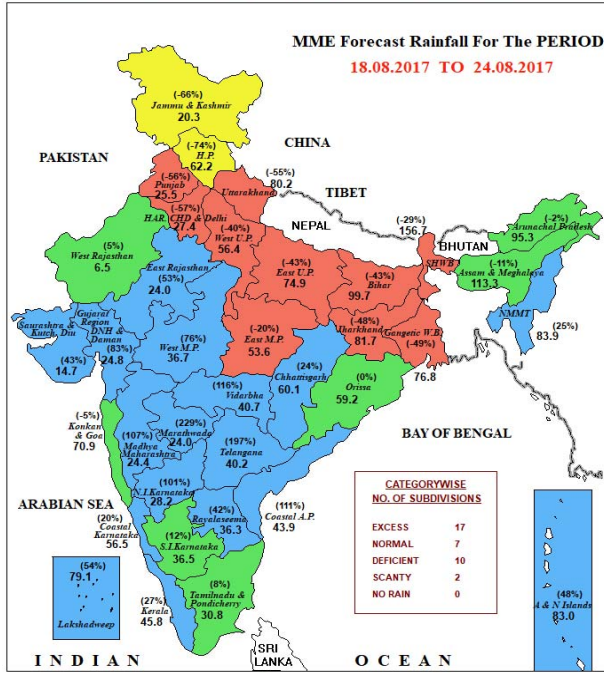
- Normal or above normal rainfall occurred during last two weeks in Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram and Tripura, Sub-Himalayan West Bengal & Sikkim, Bihar, Jharkhand, Andhra Pradesh and Tamil Nadu & Pondicherry.
- Normal or above normal rainfall occurred in either of the last two weeks in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Gangetic West Bengal, Odisha, South Interior Karnataka Kerala and Lakshadweep.

Below normal rainfall occurred in the last two weeks over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, Gujarat, Madhya Pradesh, Chhattisgarh, Maharashtra, Telangana, Coastal Karnataka, North Interior Karnataka and Andaman & Nicobar Islands.

## Extended Range Forecast System

### Subdivision-wise rainfall forecast maps for the next 2 weeks (IC - 16August) (18<sup>th</sup> to 31<sup>st</sup> August 2017)

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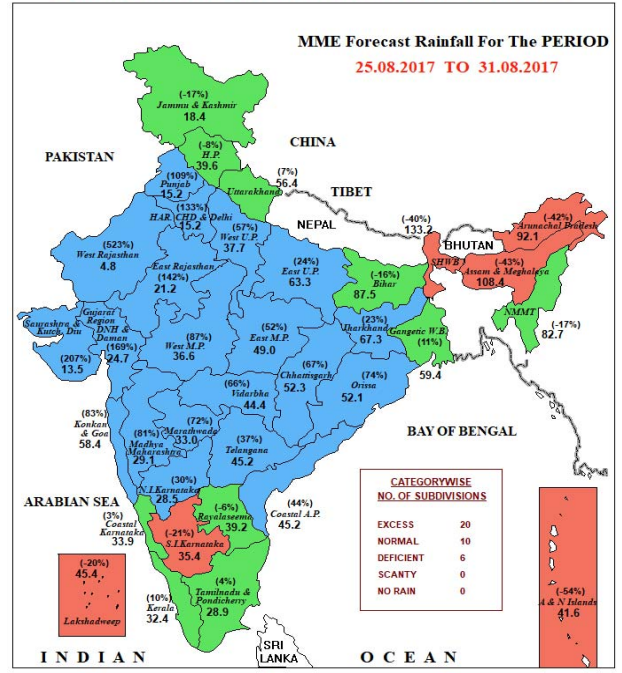


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■ SCANTY [-60% TO -99%] ■ NO RAIN (-100%)  NO DATA

**NOTES:**

- (a) Rainfall figures are based on MME Forecast.
- (b) Bold figures indicate Forecast Normal rainfall [mm.]
- (c) Percentage Departures of Rainfall are shown in Brackets.

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- Extended Range Forecast (ERF) indicates that, during week 1 (18 August - 24 August), after a relatively weak spell of monsoon over central India the monsoon is getting revived associated with cyclonic system over central part of India, whereas, the rainfall over North eastern states and adjoining eastern region of India will decrease. The central India and southern peninsula will have active monsoon. Above normal rainfall is likely over southern Odisha, south Chhattisgarh, Coastal Andhra Pradesh, Telangana, Rayalaseema, Maharashtra (except Konkan region), North Interior Karnataka, south and eastern part of Gujarat and eastern Rajasthan. For the country as a whole, rainfall will be normal with slight positive departure.
- During week 2 (25 August - 31 August), rainfall over central India and northwest India will be active while rainfall in northeast India will continue to remain subdued. South peninsula will have slightly above normal rainfall.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 31<sup>st</sup> August 2017**

### **Agromet Advisories**

#### **Deficit rainfall areas**

##### **Kerala**

The state as a whole has received 1151 mm rainfall so far during the season, which is 30% deficit, compared to the normal rainfall during the season. According to the extended range weather forecast provided by IMD, above normal and normal rainfall is forecasted over Kerala during August 18-24 and 25-31, respectively. The plant protection measures recommended should be undertaken after the rain spell.

- Paddy: There is a chance for Sheath blight disease during rainy season. The immediate symptom is the change in colour of outer leaves to yellow. Black lesions can be seen on the lower part just above the water level. Apply Propiconazole 25 EC @ 500 ml per 1 hectare to control Sheath blight.
- Ginger/ Turmeric: During rainy season there is a chance of rhizome rot, to control this dig out the affected plants and apply Kocide 2gm/litre water.
- Nutmeg: There is a chance of occurrence of fruit rot disease in nutmeg in rainy season. To control this disease, apply 1% Bordeaux mixture.
- Vegetables: Due to change in weather pattern (alternate rainfall), chance for the attack of mites and thrips in vegetables is high. Apply Spiromecifen 8ml/10 litre to control it.

##### **Karnataka**

The rainfall received from 1<sup>st</sup> June to 17<sup>th</sup> August over north interior Karnataka is 248 mm, against the normal of 308 which is 19% deficit. South interior Karnataka has received 323 mm against the normal of 457 mm, which is 29% deficit. Coastal Karnataka is also under deficit rainfall condition (-26%). The extended range weather forecast for next two weeks (18-24 and 25-31 August) for different subdivisions of Karnataka are: South Interior Karnataka: normal and below normal; North Interior Karnataka: above normal for both weeks; Coastal Karnataka: above normal and normal, respectively.

##### **South Interior Karnataka**

- Postpone the plant protection measure in next couple of days as normal rainfall is forecasted during next week.
- Drain out the excess rainwater from already sown crop field.
- Recommended for gap filling in already sown kharif crops.
- Wherever, the long duration crops like redgram, and castor were sown, undertake earthing up operation in addition to the above agronomic measures.
- The following crops are suggested for sowing in this month(August)

- Medium to short duration crops like ragi (Indaf-5, HR-911, GPU-26, 28, 45 & 48, PR-202, ML-365), maize (Ganga, Deccan, Vijaya composite and Composite NAC), cowpea (KBC-1, TVX-944 and PKB-4 for vegetable purpose)

### **Maharashtra**

Rainfall received in major meteorological sub-divisions of the state, so far during the season is as follows:

Vidarbha – 452 mm (32% deficit); Marathwada – 296 mm (31% deficit); Madhya Maharashtra- 506 mm (1% surplus) and Konkan- 2145 mm (7% deficit)

The extended range weather forecast for next two weeks (18-24 and 25-31 August) for different subdivisions of Maharashtra are: above normal for both weeks over Vidarbha, Marathwada and Madhya Maharashtra; normal and above normal over Konkan, respectively.

### **Marathwada**

- Opening of furrow should be done in cotton crop, so that excess amount of water can be drained out from the field.
- Withhold application of fertilizer, pesticides and herbicides as above normal rainfall is forecasted for next two weeks.
- Nipping should be done in 55 to 60 days old pigeonpea crop.

### **Vidarbha**

- Early-rabi pigeonpea (C-11 or ICPL 87119 (Asha)) or semi-rabi sesame (N-8) can be sown up to September 15.
- Ensure proper drainage for all the crops as excess rainfall is forecasted for next two weeks over the region.

### **Excess rainfall areas**

#### **Assam**

Excess rainfall was received in Assam during the week ending on 16<sup>th</sup> August, 2017. Actual rainfall received during the week was 162.6 mm, which was 86 % greater than normal. Flood condition prevails over Baksa, Bonaigaon, lakhimpur, Sonitpur and Nagaon districts.

The extended range weather forecast for next two weeks (18-24 and 25-31 August) over Assam is: normal and below normal, respectively.

- Farmers of flood affected areas are advised to drain excess water and apply  $1/3^{\text{rd}}$   $N_2$  + 50%  $K_2O$  of total dose as top dressing during tillering stage of Sali rice.
- In tillering stage of Sali rice, attack of leaf folder on rice hispa may occur. Farmers are advised to spray Chloropyriphos 20 EC or Monocrotophos 40EC @ 1.5 ml per liter of water.

- Farmers are advised to sow seeds of green gram and black gram. The recommended varieties of green gram are T-44, Kopergaon, K-851, ML-56, ML-131, SG-1, SG 21-5 etc. Recommended varieties for black gram are T-9, T-27, T-122.

## **Bihar**

During 10-16 August 2017, the state as a whole has received 182.5 mm rainfall, which is 154% higher than the normal rainfall for the same period. Severe flood situation prevails over West Champaran, Muzaffarpur, Madhubani, Madhepura, Araria, Supaul, Purnia and Kishanganj districts. Due to widespread flooding in north Bihar districts, standing crops such as rice, maize, pigeon pea and vegetable crops have suffered maximum damage.

The extended range weather forecast for next two weeks (18-24 and 25-31 August) over Assam is: below normal and normal

The following agromet advisories are recommended for crops in non-flood affected areas.

- Farmers are advised to drain out excess water from standing crops/nurseries
- Paddy: Weeding is advised in paddy on priority basis. Monitoring is advised for infestation of stem borer and leaf folder.
- Brinjal: Monitoring is advised for infestation of fruit and shoot borers
- Horticulture: Weather conditions are now congenial for planting of fruit plants. Saplings of horticultural crops such as mango, litchi, jackfruit, guava, blackberry, custard apple and lemon can be planted, after the current spell of heavy rain.

## **West Bengal**

During 10.8.17 to 16.8.17, all north Bengal districts received excess rainfall (125% - 614%). Some districts of South Bengal (Murshidabd, Nadia, Burdwan and North 24 Pargana) also received excess rainfall of 23% - 58%. During Monsoon Season (01.06.2017 to till date), excess rainfall experienced in Purulia, Howrah, Burdwan, Bankura, North Dinajpur and North 24 Pargana.

The extended range weather forecast for next two weeks (18-24 and 25-31 August) for different subdivisions of Karnataka are: Sub-Himalayan West Bengal – below normal for both the weeks; Gangetic West Bengal – below normal and normal, respectively.

Paddy and vegetables are most affected crops due to flood situation. Now water is receding from different parts of flood affected districts of South Bengal.

- In flood affected area, use dapog method of nursery rising for quick preparation of seedling.
- Due to heavy rainfall vegetable crops, which faced inundated condition for few days are severely infected by rotting and other fungal infection. Spray mixture of Carbendazim and Mancozeb @ 2 g per liters of water, if the weather is clear.

- Ensure proper drainage in the vegetables field.
- Retting process of Jute should be completed.
- In those areas where there is little chance of receding flood water within coming 7 days, farmers can raise seedling of early cauliflower, which can be grown at first week of September.
- Short duration (60-65 days) vegetables like spinach, coriander may be cultivated in flood affected areas which can be harvested before starting of winter crops.

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