



## National Agromet Advisory Service Bulletin

based on

### Extended Range Weather Forecast (ERFS)

**Validity:** 09 July - 22 July 2021

**Date of issue:** 09 July 2021

Issued by

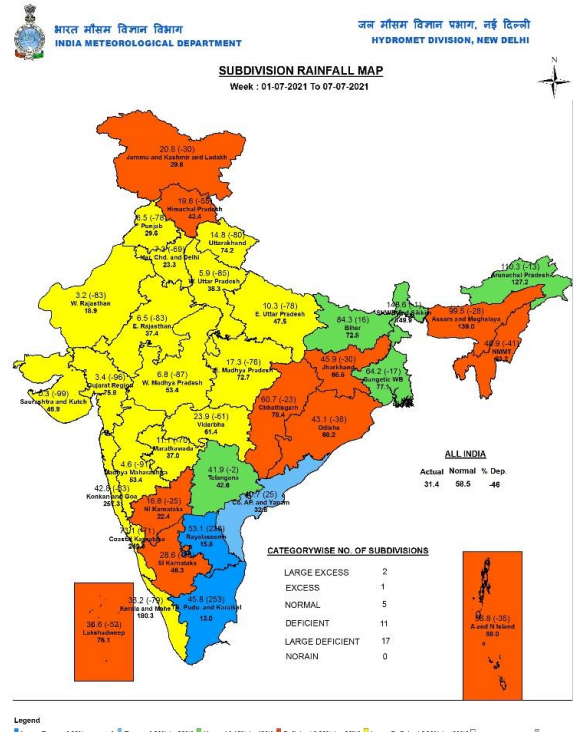
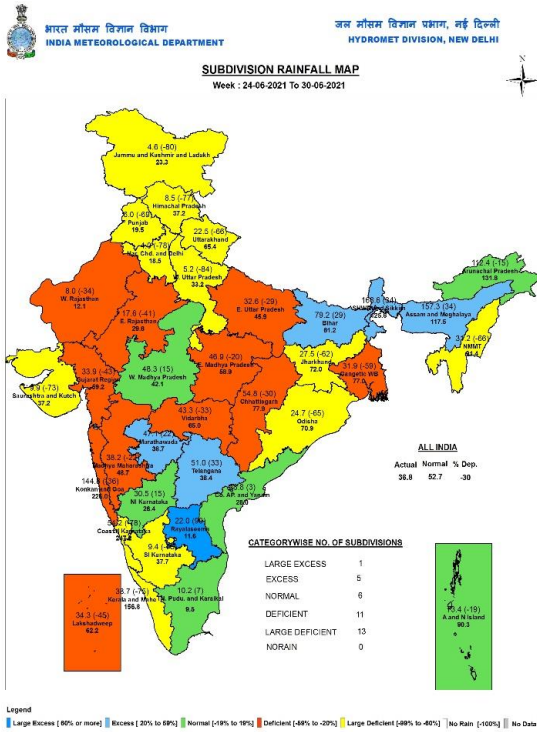
**AICRP on Agro-Meteorology (AICRPAM),  
Central Research Institute for Dryland Agriculture (CRIDA),  
Indian Council of Agricultural Research (ICAR)**

**&**

**India Meteorological Department (IMD),  
Earth System Science Organization**

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

## Realized Rainfall (24<sup>th</sup> June to 7<sup>th</sup> July, 2021)



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

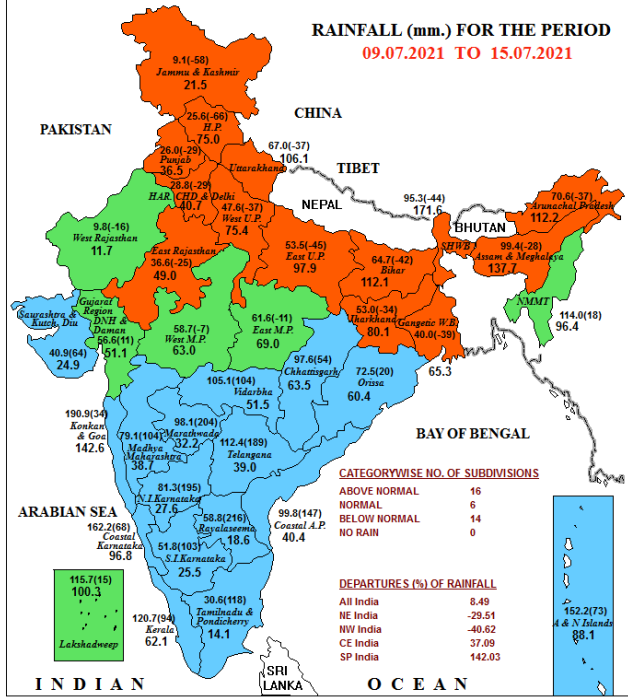
## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC -07 July)

(9<sup>th</sup> to 22<sup>nd</sup> July, 2021)

#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

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

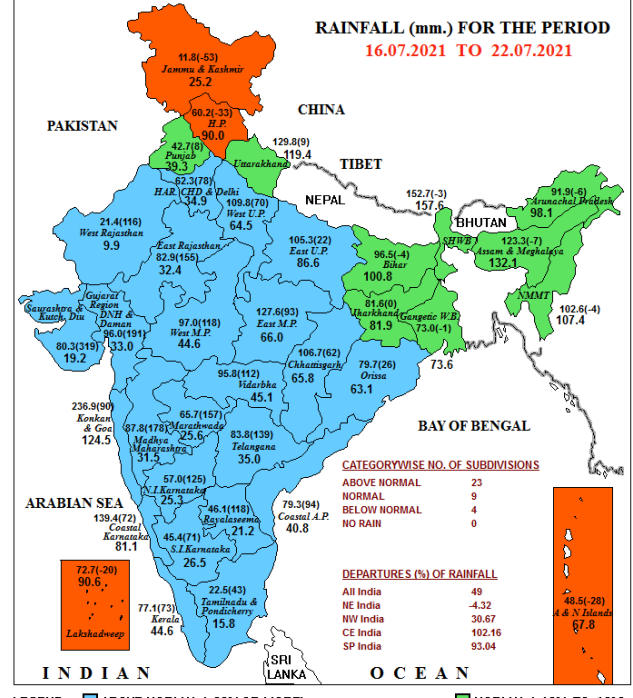


**LEGEND:** ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

**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.

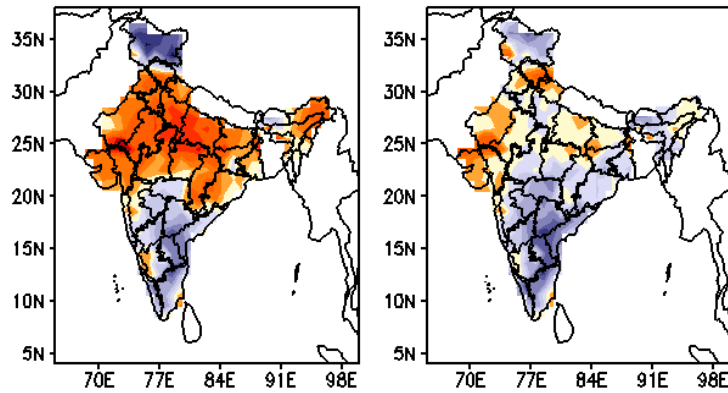
- **Week1 (09.07.2021 to 15.07.2021):** Improvement of rainfall likely over central India. However, it will be below normal over the northeastern, eastern part (Gangetic West Bengal, Bihar, Jharkhand, Uttar Pradesh, and Bihar) and also northern and northwestern parts of India.
- **Week 2 (16.07.2021 to 22.07.2021):** Improvement of rainfall will be over most parts of India except some parts of northeast India.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 07 July)  
(9<sup>th</sup> to 22<sup>nd</sup> July, 2021)**

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

(Week1: 09Jul–15Jul)

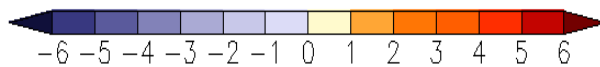
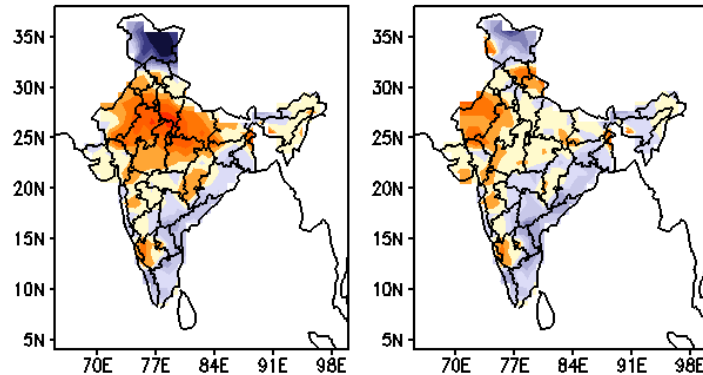
(Week2: 16Jul–22Jul)



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

(Week1: 09Jul–15Jul)

(Week2: 16Jul–22Jul)



**Maximum Temperature (Tmax)**

- **Week 1 (09.07.2021 to 15.07.2021) and Week 2 (16.07.2021 to 22.07.2021):** Mainly below normal Tmax in week 1 and week 2 over southeastern parts of India. However, above normal Tmax in Northwest India. Warm anomalies over parts of northwest and northern India in week 2.

**Minimum Temperature (Tmin)**

- **Week 1 (09.07.2021 to 15.07.2021) and Week 2 (16.07.2021 to 22.07.2021):** Mostly close to normal Tmin patterns will be over southeastern coastal regions, whereas, it will be normal to slightly above normal over most parts of India.

## Strategic Agricultural Planning based on rainfall during next two weeks till 22 July 2021

### Agro-met Advisories

#### Kerala

Amount of rainfall received over Kerala is 464.6 mm (-46% deficit) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) is above normal for week-1 and week-2.

- Due to high humidity, there is a chance of downy mildew attack in cucurbitaceous vegetables. To manage, it is advised to spray Mancozeb @ 2.5 g per one litre of water under the leaves.
- During rainy season, there is a chance of Anthracnose disease in cowpea and chilly. As a prophylactic measure, it is advised to apply 1% Bordeaux mixture or spray *Pseudomonas* @ 20 g per litre

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 127.5 mm (86% large excess) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) is above normal for week-1 and week-2.

- Prevailing weather condition is favourable for aphids and thrips incidence in chilli. To manage, it is advised to spray Imidacloprid 200 SL @ 100 ml or Methyl demeton 25 EC 500ml/ha.
- Weather condition is also favourable for pod bug incidence in black gram and green gram. To manage, it is advised to apply Dimethoate 30% EC @ 500 ml/ha or Methyl demeton 25% EC @ 500 ml/ha or Imidacloprid 17.8 SL @ 100-125 ml/ha.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 218.1 mm (-4% deficit), Marathwada is 219.3 mm (18% excess), Vidarbha is 263.5 mm (4% excess) and Konkan region 1077.5 mm (6% excess) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) over Konkan, Madhya Maharashtra, Vidharbha and Marathwada is above normal for week-1 and week-2.

#### Marathwada

- After receiving sufficient rainfall, it is advised to transplant the seedlings of brinjal, tomato, and chilli crops from nursery to the main field.

#### Vidharbha

- After receiving sufficient rainfall, sowing of greengram/ blackgram in intercrop is advised.
- Due to the chances of thunderstorm with lightning and gusty wind, it is advised to keep the farm animals indoor.

### *Madhya Maharashtra*

- For the management of wilt and root rot diseases in pigeonpea, green gram, blackgram, groundnut, soybean, it is advised to treat the seeds with Thiram + Carbendazim @ 2 g/kg or *Trichoderma* @ 5 g/kg and after chemical treatment, treat the seed with *Rhizobium* and PSB @ 25g/kg before sowing.

### *Konkan*

- Due to intermittent rainfall, there is a possibility of incidence of army worm in finger millet and proso millet nursery. If incidence is noticed, dust the crop with Chlorpyrifos 1.5% DP powder during calm weather.
- For the management of stem borer and leaf folder in rice, it is advised to spray Chlorantraniliprole 0.4% granule @ 4 kg or Fipronil 0.3% granule @ 8.3 kg per acre in nursery before transplanting in moist soil.

### **Hisar**

Amount of rainfall received over Hisar is 57.4 mm (-30% deficit) during 01 June 2021 - 09 July 2021. The extended range rainfall forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) over Hisar is below normal for week-1 and above normal for week-2.

- Due to hot and dry weather condition, farmers are advised to apply light irrigation in planted vegetable crops and fruit plants as per requirement.
- Farmers are also advised to go for sowing of sorghum, maize and lobia as fodder crop.

### **Karnataka**

Rainfall received during 01 June 2021 - 09 July 2021 over South Interior Karnataka is 201.6 mm (-1% deficit) and North Interior Karnataka is 189.6 mm (37% excess). The extended range weather forecast (rainfall) for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and week-2.

### *South Interior Karnataka*

- After receiving sufficient rainfall, under mono cropping, sowing of long duration crops like red gram is recommended with varieties BRG-1, 2, 4 & 5, TTB-7 and Castor crop with varieties DCH-9, 32 & 177. For maize Ganga-11, Deccan-103, Vijaya composite, Composite NAC- 6004, 6002, Hybrid-Nityashree (NAH-2049) varieties are recommended.

### *North Interior Karnataka*

- Under prevailing weather condition, sowing of bajra, pigeonpea, groundnut (bunch type), green gram, maize, Bt. cotton, chilli, onion, sesamum, and navane is advised.
- Vaccinate the livestock against Foot and Mouth disease (FMD vaccination), Black Quarter

disease (BC vaccination) and *Haemorrhagic septicaemia*.

### **Uttar Pradesh**

Rainfall received during 01 June 2021 - 01 July 202 over East Uttar Pradesh 205.3 mm (80% large excess) and West Uttar Pradesh is 73.5 mm (-9% deficit). The extended range weather forecast (rainfall) for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and normal over West Uttar Pradesh and East Uttar Pradesh week-2.

#### *Eastern Uttar Pradesh*

- Under prevailing weather condition, there is a chance of downy mildew in cucurbits and other vegetables. To prevent, it is advised to spray Mancozeb @ 2g/litre.
- Under prevailing weather condition, sowing of *khariif* vegetables and nursery of brinjal, chillis and cauliflower is advised.

### **Jammu**

Amount of rainfall received over Jammu is 65.5 mm (-42% deficit) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Jammu is below normal for week-1 and week-2.

- Due to rise in temperature, farmers are advised to protect young fruit plants from heat by providing thatches/cover and ensure free circulation of air.
- For the control of fruit borer attack in brinjal crop, it is advised to apply of Dichlorovos @ 2.0 ml/litre of water.

### **West Bengal**

Amount of rainfall received over West Bengal is 464.8 mm (31% excess) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over West Bengal is below normal for week-1 and normal for week-2.

- For the management of pumpkin beetle in bitter gourd, it is advised to apply Fenvalerate 0.4% dust @ 10 kg/acre.

### **Odisha**

Amount of rainfall received over Odisha is 250.3 mm (-18% deficit) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Odisha is above normal for week-1 and week-2.

- For the management of top shoot borer infestation in sugarcane, it is advised to spray Fipronil 5% SC @ 600 ml/acre or Profenophos 50% EC @ 400 ml/acre by mixing it in 200 litres of water.

- Prevailing weather is optimum for sowing of sesame crop. Recommended high yielding varieties are Prachi, Kalika, Kanak, and Vinayak.

### **Assam**

Amount of rainfall received over Assam is 575.0 mm (-15% deficit) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Assam is below normal for week-1 and normal for week-2.

- Prevailing high humidity and rainy weather condition is congenial for incidence of fruit fly and leaf hopper in gourds. As a preventive measure, it is advised to spray solution of Emmamectin Benzoate @ 4.5g with 100g jaggery mixed in 10 litres of water.
- Under prevailing weather condition, infestation of stem borer may be observed in *kharif* maize. To control, it is advised to apply Fenitrothion 50 EC solution @ 1.0 litre/200-250 litres of water per 7.5 bigha land.

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 285.8 mm (4% excess) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Uttarakhand is below normal for week-1 and normal for week-2.

- To control the insect/pest in cucurbit crops, it is advised to apply sticky trap @ 1 trap /100 m<sup>2</sup> area in the crop fields.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 345.1 mm (16% excess) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Chhattisgarh is above normal for week-1 and week-2.

- Due to chances of rainfall, farmers are advised to go for sowing of rice in nursery beds. Soybean, pigeon pea and maize fields should be provided with proper drainage channel facilities.
- Under prevailing weather condition, need based irrigation and inter-cultural operations is advised in tomato, brinjal, chilli, okra and other vegetable crops.
- Farmers are also advised to vaccinate the animal to prevent *Haemorrhagic septicaemia* and black quarter disease.

### **Madhya Pradesh**

Amount of rainfall received over Madhya Pradesh is 234.6 mm (normal rainfall) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Madhya Pradesh is normal for week-1 and above normal for week-2.



- Due to deficit rainfall, farmers are advised to follow cultural practices like weeding, soil mulching, etc for conservation of soil moisture.
- Sugarcane plants should be tied to prevent from lodging due to strong winds.

### **Gujarat**

Amount of rainfall received over Gujarat is 140.8 mm (-40% deficit) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Gujarat is normal for week-1 and above normal for week-2.

- Under prevailing weather condition, land preparation for sowing of finger millet is advised.
- For the management of sugarcane borer, it is advised to apply Carbofuran 3G @ 33 kg/ha in soil.

### **Bihar**

Amount of rainfall received over Bihar is 466.5 mm (76% large excess) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Bihar is below normal for week-1 and normal for week-2.

- Under prevailing rainy weather condition, it is advised to complete the nursery sowing of paddy. Sahbhagi, Prabhat, Dhanlakshmi, Richariya, Saket-4, Rajendra Sweta and Rajendra Bhagwati are early varieties of paddy recommended for North Bihar.
- Prevailing weather conditions are congenial for planting of mango saplings in the orchards. Recommended varieties for North Bihar are Mithua, Gulabkhaas, Bumbai, Alfanso, Jardaalu, Langra, Hemsager, Krishnabhog, Aman Dasahri.

### **Punjab**

Amount of rainfall received over Punjab is 58.2 mm (-36% deficit) during 01 June 2021 - 09 July 2021. The extended range weather forecast (rainfall) provided for next two weeks (09 - 15 July 2021 and 16 - 22 July 2021) on rainfall over Punjab is below normal for week-1 and normal for week-2.

- To protect the fruit plants from intense heat, it is advised to apply frequent irrigations to the fruit bearing and young fruit plants.
- To manage the fruit and shoot borer attack in brinjal crop, it is advised to spray 80 ml Coragen 18.5 SC or 80 g Proclaim 5SG in 100-125 litres of water per acre.

***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 weather forecast. In no event, India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) will 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 presented in this bulletin.*