



## **National Agromet Advisory Service Bulletin**

based on

**Extended Range Weather Forecast (ERFS)** 

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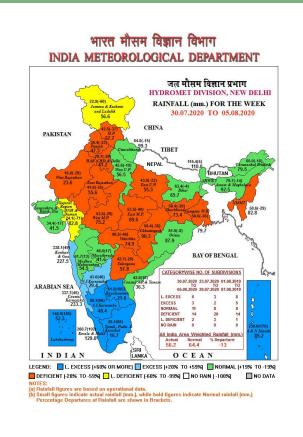
AICRP on Agro-Meteorology (AICRPAM),
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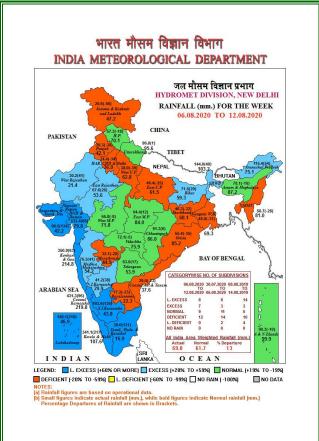
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India Meteorological Department (IMD)
Earth System Science Organization

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

## Realized Rainfall (30th July to 12th August, 2020)

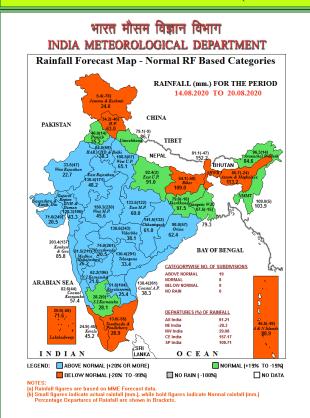


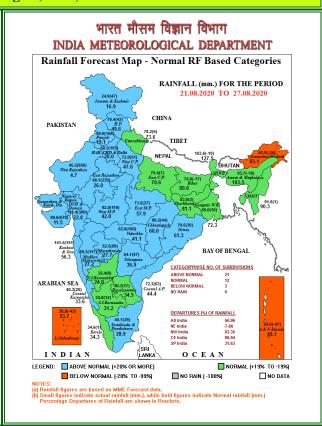


- Normal or above normal rainfall occurred in both the weeks in Uttarakhand, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands and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

#### **Extended Range Forecast System**

Rainfall forecast maps for the next 2 weeks (IC –12 August) (14<sup>h</sup> to 27<sup>th</sup> August, 2020)

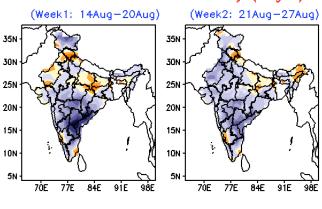




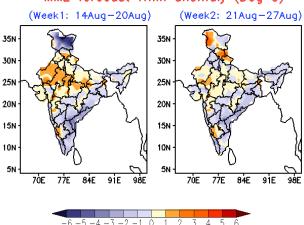
- Week-1 (14.08.2020 to 20.08.2020): Most of central India and adjoining northern India will have above normal rainfall. The southern parts of India like Kerala, Tamil Nadu, South Karnataka, North Eastern States, Uttar Pradesh, Bihar, Gangetic West Bengal, extreme north India (UTs of Jammu & Kashmir), parts of extreme northwest Rajasthan will have below normal rainfall.
- Week-2 (21.08.2020 to 27.08.2020): Except north-eastern states, Uttar Pradesh, Bihar and adjoining region, where rainfall will be below normal, the rainfall over remaining parts of India will have normal to slightly above normal rainfall.

# Maximum and Minimum temperature anomaly $(^{o}C)$ forecast for next 2 weeks (IC - 12 August) $(14^{h}$ to $27^{th}$ August, 2020)





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



#### **Maximum Temperature (Tmax)**

• Week-1 (14.08.2020 to 20.08.2020) and Week-2 (21.08.2020 to 27.08.2020): Mostly below normal Tmax over central parts of India and other adjoining regions in week-1 and week-2 with isolated regions over northern India and INDO-Gangetic region will have below normal Tmax.

#### **Minimum Temperature (Tmin)**

Week-1 (14.08.2020 to 20.08.2020) and Week-2 (21.08.2020 to 27.08.2020): Slightly above normal
Tmin over northwest and adjoining northern India and slightly below normal Tmin over southeastern coastal regions is likely. Over the remaining region Tmin is likely to be normal with weak
anomaly.

### Strategic Agricultural Planning based on rainfall during next two weeks till 27 August 2020

## **Agro-met Advisories**

#### Kerala

Amount of rainfall received over Kerala is 1572.5 mm (normal rainfall) during the period of 01 June 2020 - 13 August 2020. The extended range weather forecast for next two weeks (14 - 20 August and 21 - 27 August 2020) is below normal for week-1 and normal for week-2.

- Due to the increase in rainfall, there is a chance of rhizome rot in banana. As a precaution, drench the basin with three litre of pseudomonas solution @ 20 g per/litre of water.
- Due to continuous rain, there is a chance of foot rot disease in pepper. As a precaution, it is advised to drench with three gram Copper Oxy Chloride (COC) per one litre of water in to the basin of each plant.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 256.4 mm (58% excess) during the period 01 June 2020 - 13 August 2020. The extended range weather forecast for next two weeks (14 - 20 August and 21 - 27 August 2020) is below normal for week-1 and above normal for week-2.

- Present weather condition is favorable for stem weevil and fruit borer incidence in cotton. It is advised to spray of Carbaryl50 WP 2.5 kg/ha or Carbofuran 3G 33.3 kg/ha.
- Prevailing weather condition is also congenial for sucking pest incidence in chilly. It is advised to spray Imidacloprid 200 SL @ 100 ml or Methyl demeton 25 EC 500ml/ha.
- There are higher chances of incidence of smallpox and PPR diseases in goat. Farmers are advised to go for vaccination.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 582.4 mm (17% excess), Marathwada is 521.1 mm (32% excess), Vidharbha is 549.4 mm (-11% deficit) and Konkan region 2512.4 mm (16% excess) during 01 June 2020 - 13 August 2020. The extended range weather forecast for next two weeks (14 - 20 August and 21 - 27 August 2020) over Vidharbha, Konkan, Madhya Maharashtra and Marathwada is above normal for week-1 and week-2

#### Madhya Maharashtra

• Under prevailing weather condition, there is a chance of aphid attack on green gram and black gram. If incidence noticed, spray of Imidacloprid @ 4 ml/10 litre of water is advised.

#### Konkan

- Due continuous heavy rain, there is a chance of fungal disease-causing leaf drop and branch rot in cashewnut. To control, spray 0.2% Mancozeb @ 20 ml/10 litre of water on entire tree.
- Under prevailing rainy weather condition, there is possibility of incidence of bud rot disease. If incidence is noticed, spray 1% Bordo mixture.

#### Marathwada

- Due to cloudy and humid weather condition, there is a chance of infestation of sucking pest in cotton crop. For management, spray of 5 % NSKE or Thiamethoxam 25 % @ 40 g and Clothianidin 50 % @ 30 g per acre during clear weather condition is advised.
- Due to excess rainfall, fruit drop in citrus orchard is noticed. For management, it is advised to remove excess amount of water from orchard and spray of Trifloxystrobin 25 % + Tebuconazole 50% @ 2.5 g/ litre of water.

#### Vidharbha

• Under prevailing weather condition, there is a chance of pink boll worm larvae in cotton crop flowers. To control, it is advised to spray Quinolphos 25% AF @ 25 ml or Chlorpyriphos 20% EC @ 25 ml per 10 litres of water. It is also advised to collect and destroy rosette flowers/buds.

#### Hisar

Amount of rainfall received over Hisar is 272.1 mm (-2% deficit) during 01 June 2020 - 13 August 2020. The extended range rainfall forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) over Hisar is below normal for week-1 and above normal for week-2.

- Under prevailing weather conditions, farmers are advised to withhold irrigation in vegetables and fruits crops.
- Farmers are also advised to go for sowing of sorghum, maize and lobia as fodder crops.
- Provide 50 g iodized salt and 50 100 g mineral mixture daily with animal feed/fodder to keep animals healthy.

#### Karnataka

Rainfall received during 01 June 2020 - 13 August 2020 over South Interior Karnataka is 526.1 mm (19% excess) and North Interior Karnataka is 415.7 mm (45% excess). The extended range weather forecast for next two weeks (14 - 20 August and 21 - 27 August 2020) over South Interior Karnataka is normal and North Interior Karnataka is above normal for week-1 and normal over South Interior Karnataka and North Interior Karnataka for week-2.

#### South Interior Karnataka

- Under prevailing weather condition, there is a chance of wilt diseases in redgram. It is advised for drenching with Carbendazim 50 WP @ 2 g/litre of water. Remove and burn the infected plants in the field itself.
- Due to high wind speed, it is advised to provide staking support to banana and vegetable crop to protect from uprooting of crops.

#### North Interior Karnataka

- Under prevailing rainy weather condition, sowing of *kharif* crops like bajra, redgram, groundnut (spreading type), navane, and horsegram is recommended.
- Farmers are also advised to sow the crops in rows across the slope to facilitate better soil

moisture conservation.

• Farmers are advised to vaccinate livestock against foot and mouth disease (FMD vaccination), black quarter disease (BC vaccination) and *haemorrhagic septicaemia*.

#### Assam

Amount of rainfall received over Assam is 1435.3 mm (17% excess) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Assam is below normal for week-1 and normal for week-2.

- Due to favorable weather condition, there is a chance of infestation of case worm in Sali rice crop field. To control, it is advised to spray Quinalphos 25EC @ 1ml/litre of water during rain free weather.
- Due to heavy rainfall and strong wind conditions, farmers are advised to go for stripping and propping in sugarcane crop to avoid mechanical damage and lodging.

#### Uttar Pradesh

Rainfall received during 01 June 2020 - 13 August 2020 over East Uttar Pradesh is 572.9 mm (14% excess) and West Uttar Pradesh is 318.4 mm (-26% deficit). The extended range weather forecast for next two weeks (14 - 20 August and 21 - 27 August 2020) over East Uttar Pradesh is normal and West Uttar Pradesh is above normal for week-1 and week-2.

#### Western Uttar Pradesh

- Due to the chances of heavy rainfall, farmers are advised to prepare broad and elevated bunds to conserve rain water in the paddy fields.
- Farmers are advised for sowing of green gram with varieties Pant Moong-3, 4, Samrat, Asha, HUM-16, MH-2-3, KM-2241, IPM-2-3, KM-2195 and IPM-205-7.

#### Eastern Uttar Pradesh

- The possibility of stem borer attack in maize is high. Therefore, farmers are advised for application of Carbofuran 3% granules @ 20 kg/ha.
- For the fish seed production, it is advised to disinfect hatchery by using Potassium permanganate @ 5 mg/litre of water.

#### Odisha

Amount of rainfall received over Odisha is 622.4 mm (-14% deficit) during 01 June 2020 - 13 August 2020. The extended range rainfall forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) over Odisha is above normal for week-1 and week-2.

- Due to heavy rain and moistness in soil, there may be a chance of incidence of collar rot/stem
  rot in groundnut. To control, it is advised for drenching of Metalaxyi + Mancozeb @ 400 g /
  acre.
- It is the optimum time for mango planting. Recommended varieties are Baiganpalli, Totapuri, Bombay green, Suvarnarekha, Neelam, Himsagar, Langra, Dusheri, Amrapalli, Mallika, Ratna,

Ramkella, Rummani, Sindhu, Alphanso and Keshar.

#### West Bengal

Amount of rainfall received over West Bengal is 657.7 mm (-10% deficit) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over West Bengal is normal for week-1 and week-2.

- Prevailing weather condition is favorable for thrips and mite in chillies. To control, spray of Diphentiuran @ 1.2 g/ of water is recommended.
- For the management of brinjal fruit borer and stem borer, farmers are advised to apply Triazophos 40 EC @ 1.5 ml or Spinosad 45 EC @ 0.2 ml or Cartap Hydrochloride @ 0.75 g/ of water.

#### Tammu

Amount of rainfall received over Jammu is 183.4 mm (-50% deficit) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Jammu is below normal for week-1 and above normal for week-2.

- Prevailing weather condition is favourable for attack of blight in maize crop. To control, it is advised to spray Mancozeb 75 WP @ 0.25%.
- Due to present rainfall, the infestation of weed in maize, pulses, bajra & *kharif* oilseed crops, go for intercultural operations (thinning, weeding, hoeing) in order to conserve moisture in the soil.

#### Rajasthan

Amount of rainfall received over East Rajasthan is 296.7 mm (-23% deficit) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over East Rajasthan is above normal for week-1 and week-2.

- Due to dry spell and deficit rainfall condition, farmers are advised for mulching in *kharif* crops to minimize evaporation from crop fields.
- Due to humid weather condition, there may be increase in population of insect pests of cotton. Farmers are advised to install pest specific pheromone traps in the fields for the control of insect population.

#### Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 366.7 mm (-27% deficit) during June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Himachal Pradesh is below normal for week-1 and above normal for week-2.

- Under prevailing weather condition, it is advised to resume picking in tea at 8-10 days interval to maintain the quality and productivity.
- Under prevailing weather condition, it is advised to use mulches for conservation of moisture in the soil especially under rainfed areas.

• The chance of ecto-parasite attack in dairy animal is very high. Spray, Butox @ 2ml/ of water in cowshed.

#### Uttarakhand

Amount of rainfall received over Uttarakhand is 675.0 mm (-12% deficit) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Uttarakhand is normal for week-1 and week-2.

- For the control of insect infestation in crop fields, it is advised to use pheromone/light traps or yellow strips.
- Under rainy weather condition, farmers must arrange to drain out excess rain water from vegetable fields.

#### **Iharkhand**

Amount of rainfall received over Jharkhand is 562.4 mm (-14% deficit) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Jharkhand is normal for week-1 and week-2.

- Under prevailing weather condition, there is a chance of tikka or leaf spot disease in groundnut. It is advised to spray fungicide Kavach @ 2 g/litre of water during clear weather.
- Farmers are advised for cultivation of niger with recommended varieties Birsa niger-1, Birsa niger-2, Birsa niger-3, Pooja-1.

### Punjab

Amount of rainfall received over Punjab is 281.1 mm (-9% deficit) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Punjab is normal for week-1 and above normal for week-2.

- Farmers are advised to monitor foliar leaf spots in cotton crop. If symptom is observed, spray Amistar Top @ 200 ml in 200 litres of water per acre.
- To manage fall armyworm in maize crop, it is advised to spray Coragen 18.5 SC @ 0.4ml/litre of water or Delegate 11.7 SC (Spinetoram) @ 0.5ml/ litre of water or Missile 5SG (Emamectin benzoate).
- Prevailing weather condition is favorable for fruit rot and die back disease in chilli crop.
   Farmers are advised to spray 250 ml Folicur/ 750 g Indofil M-45 /Blitox in 250 litre of water per acre at 10 days interval.

#### Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 583.2 mm (-9% deficit) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Madhya Pradesh is above normal for week-1 and week-2.

• Due to rainy weather condition, farmers are advised for proper drainage facilities in the pulses, oilseeds and vegetables fields.

#### Bihar

Amount of rainfall received over Bihar is 884.0 mm (39% excess) during 01 June 2020 - 13 August 2020. The extended range weather forecast provided for next two weeks (14 - 20 August and 21 - 27 August 2020) on rainfall over Bihar is normal for week-1 and week-2.

- Monitoring is advised for the infestation of fruit and shoot borer in brinjal. If infestation occurs, spraying of Spinosad 48 EC @ 1ml/ 4 litres of water is advised.
- Under prevailing weather condition, it is advised to complete the transplanting of early varieties of cauliflower viz., Kuwari, Patna early, Pusa Katki, Pusa Deepali and Hajipur Agaat.

#### Disclaimer:

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