



# National Agromet Advisory Service Bulletin

based on

**Extended Range Weather Forecast (ERFS)** 

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# Issued by

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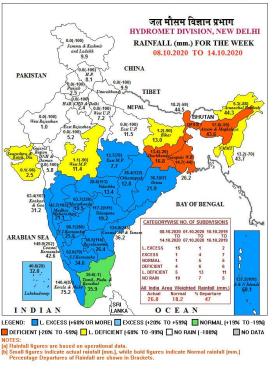
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India Meteorological Department (IMD), Earth System Science Organization

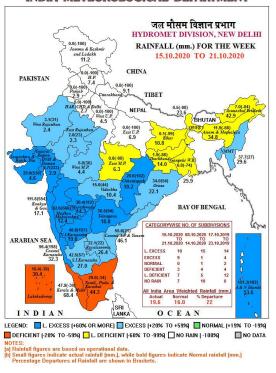
# Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

# Realized Rainfall (08<sup>th</sup> to 21<sup>st</sup> October, 2020)





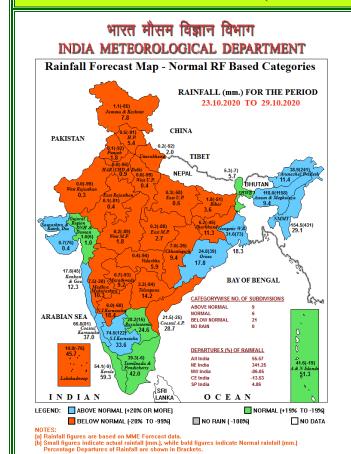
## भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

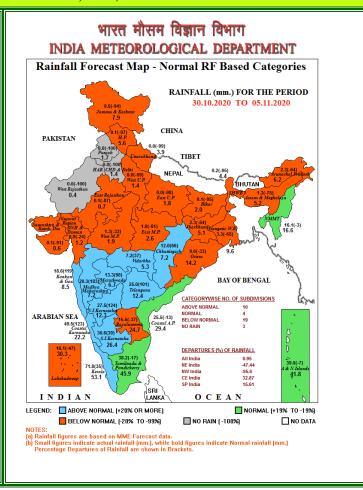


- Normal or above normal rainfall occurred in both the weeks in Odisha, Chhattisgarh, Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Telangana, Andhra Pradesh State & Yanam, Karnataka and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks in Rajasthan, Madhya Pradesh, Nagaland Manipur Mizoram & Tripura (NMMT), Gujarat State, Kerala & Mahe, Tamil Nadu Puducherry & Karaikal and Lakshadweep.
- Below Normal rainfall /no rain occurred in both the weeks Jammu & Kashmir and Ladakh (UTs), Uttarakhand, Himachal Pradesh, Punjab, Haryana Chandigarh & Delhi, Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya and Arunachal Pradesh.

# **Extended Range Forecast System**

Rainfall forecast maps for the next 2 weeks (IC -21 October) (23<sup>rd</sup> October to 05<sup>th</sup> November, 2020)

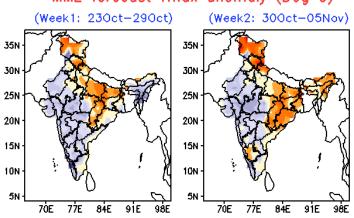




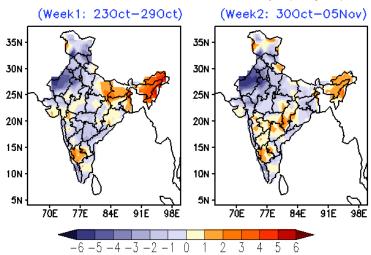
- Week-1 (23.10.2020 to 29.10.2020): Above normal rainfall over coastal Odisha, GWB and north-eastern states. Above normal rainfall over some parts of south peninsula in week 1. Rest of the region's weather will be mainly dry.
- Week-2 (30.10.2020 to 05.11.2020): Above normal rainfall over southern peninsula and adjoining central India in week 2 and below normal rainfall over most of northwest and adjoining central India.

# Maximum and Minimum temperature anomaly ( $^{O}$ C) forecast for next 2 weeks (IC – 21 October) (23<sup>rd</sup> October to 05<sup>th</sup> November, 2020)

MME forecast Tmax anomaly (Deg C)



### MME forecast Tmin anomaly (Deg C)



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

• Week-1 (23.10.2020 to 29.10.2020) and Week 2 (30.10.2020 to 05.11.2020): Tmax over northern India, Indo Gangetic Plain and parts of Northeast India will be above normal, whereas, Tmax over most of remaining parts of India will be below normal.

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

- Week-1 (23.10.2020 to 29.10.2020): Mainly above normal Tmin over eastern parts (Odisha, Chhattisgarh, GWB, Bihar, Jharkhand, UP and adjoining regions) and north-eastern parts of the country. The north-western parts of India will have below normal Tmin.
- Week-2 (30.10.2020 to 05.11.2020): Below normal Tmin over the north-western parts of India.

#### Strategic Agricultural Planning based on rainfall during next two weeks till 05 November 2020

# **Agro-met Advisories**

#### Kerala

Amount of rainfall received over Kerala is 2436.5 mm (7% excess) during 01 June 2020 - 22 October 2020. The extended range weather forecast for next two weeks (23-29 October and 30 October - 05 November 2020) is normal for week-1 and above normal for week-2.

- Due to rainy weather condition, there is a chance of rice case worm in paddy field. To control, it is advised to spread 25 kg sawdust or rice husk ash mixed with one litre kerosene in 1 acre after draining the field.
- Due to continuous rain, there is a chance of quick wilt disease in pepper. As a preventive measure, drench with 3 g Copper Oxy Chloride (COC) per one litre of water into the basin of each plant.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 517.2 mm (12% excess) during 01 June 2020 - 22 October 2020. The extended range weather forecast for next two weeks (23-29 October and 30 October - 05 November 2020) is normal for week-1 and week-2.

- Due to chances of dry weather conditions, farmers are advised to irrigate the maize and sorghum crop based on the soil moisture availability.
- Prevailing weather condition is favorable for smallpox and PPR diseases in goat. Proper vaccination may be done for avoiding animal losses.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 1104.4 mm (36% excess), Marathawada is 968.3 mm (33% excess), Vidharbha is 898.5 mm (-9% deficit) and Konkan region 3878.5 mm (30% excess) during 01 June 2020 - 22 October 2020. The extended range weather forecast for next two weeks (23-29 October and 30 October - 05 November 2020) over Madhya Maharashtra, Vidharbha, and Marathwada is below normal and Konkan is above normal for week-1 and Madhya Maharashtra, Vidharbha, Marathwada and Konkan is above normal for week-2.

#### Madhya Maharashtra

- Under prevailing weather condition, there is a chance of powdery mildew disease in vegetable crops. It is advised to spray 80% W.S. Sulphur @ 2.5 g per litre of water.
- For control of American army worm attack in crops, it is advised to use pheromone trap @ 5 per ha or apply 50,000 eggs of *Trichogram pritiosum* or *Telenomus remus* parasite per acre three times in one-week interval.

#### Konkan

- Prevailing rainfall and high humidity weather condition is congenial for the development of fungal disease in coconut. To control, spray 1% Bordomixture during clear weather condition.
- Due to cloudy and rainy weather conditions, there is possibility for incidence of anthracnose disease on new vegetative flush of cashewnut. It is advised to spray 1% Bordomixture or

Carbendazim 12% + Mancozeb 63% combination fungicide @ 10 g per 10 litres of water during clear weather condition.

#### Hisar

Amount of rainfall received over Hisar is 379.8 mm (-16% deficit) during 01 June 2020 - 22 October 2020. The extended range rainfall forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) over Hisar is below normal for week-1 and no rainfall for week-2.

- Due to high humidity and favorable temperature, farmers are advised to monitor the insect-pest/diseases in rice crop and remove the disease plants.
- Due to humid weather condition, farmers are advised to keep animals under well ventilated places and provide plenty of clean drinking water and green forage as per requirement.

#### Karnataka

Rainfall received during 01 June 2020 - 22 October 2020 over South Interior Karnataka is 947.2 mm (20% excess) and North Interior Karnataka is 913.2 mm (56% excess). The extended range weather forecast for next two weeks (23-29 October and 30 October - 05 November 2020) over South Interior Karnataka is above normal and North Interior Karnataka is below normal for week-1 and above normal over South Interior Karnataka and North Interior Karnataka for week-2.

#### South Interior Karnataka

- Under prevailing weather conditions, there is a chance of wilt disease in redgram. It is advised for drenching with Carbendazim 50 WP @ 2 g/litre of water and remove and burn the infected plants in the field.
- For the management of blast disease in finger millet, it is advised to spray Mancozeb @ 2 g/litre of water or Carbendazim @1 g/litre of water.

#### North Interior Karnataka

- Due to chances of moderate rainfall, it is advised to complete the sowing of sorghum, wheat and chickpea crop.
- Farmers are advised to vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic Septicaemia*.

#### Uttar Pradesh

Rainfall received during 01 June 2020 - 22 October 2020 over East Uttar Pradesh 785.8 mm (-10% deficit) and West Uttar Pradesh is 455.3 mm (-39% deficit). The extended range weather forecast for next two weeks (23-29 October and 30 October - 05 November 2020) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and week-2.

#### Western Uttar Pradesh

- Due to chances of no rainfall, farmers are advised to provide light irrigation in late sown paddy crop.
- Under prevailing weather condition, there is a chance of leaf webber attack in pigeon pea fields.

It is advised to spray Emamectin benzoate 5% SG @ 250 g/ha or Cypermethrin 25% EC @ 500 ml/ha with 500 litres water solution.

• For the management of gundhibug in late planted paddy crop, it is advised to apply Malathion dust 5% @ 20-25 kg/ha or spray Monocrotophos 36 WSC @ 1.5 litres.

#### Eastern Uttar Pradesh

- Intercultural operation is advised to check evaporation losses.
- Under the prevailing weather condition, sowing of chickpea, mustard, potato, pea and other *rabi* vegetables is advised.

#### Jammu

Amount of rainfall received over Jammu is 376.2 mm (-37% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Jammu is below normal for week-1 and week-2.

- Due to prevailing dry weather condition, it is advised to irrigate the vegetable and young fruit plants.
- Under prevailing weather condition, sowing of mustard and gobi sarson is advised. Recommended varieties are Pusa Bold, RSPR-01, RSPR-03, and Kranti.

### Rajasthan

Amount of rainfall received over East Rajasthan is 595.4 mm (-3% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over East Rajasthan is below normal for week-1 and week-2.

- Under prevailing weather condition, farmers are advised for land preparation and sowing of wheat with recommended varieties Raj-3077, WH-147, GW-190, GW-322, GW-273, HI-1544, Raj 4037, HI-8498, Lok-1 and Raj-3765.
- Prevailing mean temperature is suitable for sowing of garlic. Recommended cultivars are G-1, G-41, G-50 and G-282.

#### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 565.5 mm (-28% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Himachal Pradesh is below normal for week-1 and week-2.

- Farmers are advised to complete the sowing of toria/ early mustard, pea, radish, spinach and coriander, berseem, lucerne and oats for fodder.
- Farmers are advised to maintain room temperature of 18-22°C and relative humidity around 85% for successful cultivation of mushrooms.
- Due to decrease in night temperature, farmers are advised to protect newly born calves and milch animals from morning/evening cold.

#### Gujarat

Amount of rainfall received over Gujarat is 1045.4 mm (11% excess) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Gujarat is above normal for week-1 and below normal for week-2.

- Under prevailing weather condition, farmers are advised to go for land preparation for sowing of *rabi* crops like wheat, mustard, potato, cumin, coriander, garlic, onion.
- Vaccination is advised against *Haemorrhagic septicaemia* (HS) disease in animals.

## Punjab

Amount of rainfall received over Punjab is 391.7 mm (-18% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Punjab is below normal for week-1 and no rainfall for week-2.

- Present weather condition is congenial for sowing of late season cauliflower, carrot, broccoli, Chinese cabbage, spinach and early varieties of potato.
- For the management of mango malformation, it is advised to prune and destroy the malformed shoots and spray Napthalene Acetic Acid @ 100 g + 100-150 ml alcohol in 500 liters of water per acre.

# Chhattisgarh

Amount of rainfall received over Chhattisgarh is 1321.8 mm (11% excess) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Chhattisgarh is below normal for week-1 and above normal for week-2.

- Under prevailing weather conditions, farmers are advised to continuously monitor panicle mite in rice field. If infestation is found, spray Propiconazole 2ml + Profenophos @ 2ml /litre/ha mixed in 500 litres of water.
- Under prevailing weather conditions, sowing of winter vegetables like early varieties of cauliflower, cabbage and knol khol in nursery is advised.

#### Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 1057.6 mm (-2% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Madhya Pradesh is below normal for week-1 and week-2.

• Under prevailing weather conditions, field preparation for sowing of mustard, toria and ageti garden pea is advised.

#### Uttarakhand

Amount of rainfall received over Uttarakhand is 943.3 mm (-22% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Uttarakhand is below normal for week-1 and week-2.

- Due to prevailing dry weather, farmers are advised to provide light irrigation in vegetable crops.
- Under prevailing weather condition, field preparation is advised for sowing of early variety of barley, wheat and lentils.
- Sowing of maize, berseem, lucerne and oats as a fodder crop is also advised.

#### West Bengal

Amount of rainfall received over West Bengal is 1132.1 mm (-12% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over West Bengal is above normal for week-1 and below normal for week-2.

- Prevailing temperature and humid weather condition are congenial for the spread of thrips and mites in chilli. It is advised to spray Diafenthiuron @ 0.75g / litre of water at 7-10 days interval.
- The conditions are also favourable for the attack of white fly in Okra. To control, spray of Difenthiuron @ 0.75g per litre of water is advised.

#### Jharkhand

Amount of rainfall received over Jharkhand is 956.4 mm (-15% deficit) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Jharkhand is below normal for week-1 and week-2.

- Prevailing weather condition is congenial for cultivation of chickpea. Recommended varieties for Deshi (indegenious) gram viz., Pusa-372, KWR108, KGP-59 and for Kabuli gram viz., HK-9431, Kak-2 Birsa chana.
- As there are higher chances for rain, land may be prepared for sowing of rainfed wheat. Recommended varieties are K1317, HD-3171, HI- 1612, Birsa gehun-3.

#### Odisha

Amount of rainfall received over Odisha is 1300.3 mm (5% excess) during 01 June 2020 - 22 October 2020. The extended range weather forecast provided for next two weeks (23-29 October and 30 October - 05 November 2020) on rainfall over Odisha is above normal for week-1 and below normal for week-2.

Prevailing high humid weather condition is favourable for brown plant hopper (BPH) and white backed plant hopper (WBPH) infestation in paddy. It is advised to spray Neem based pesticide (Azadirachtin) 1500 ppm @ 600 ml/acre or Pymetrozine 50% WG @ 120 g/acre or Dinotefuran 20% SG @ 80 g/acre or Flonicamid 50% WG @ 60 g/acre or Triflumezopyrim 10% SC @ 100 ml/acre at the base of the plant.

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