



# **National Agromet Advisory Service Bulletin**

based on

**Extended Range Weather Forecast (ERFS)** 

**Validity:** 16 - 29 October 2020

Date of issue: 16 October 2020

# Issued by

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

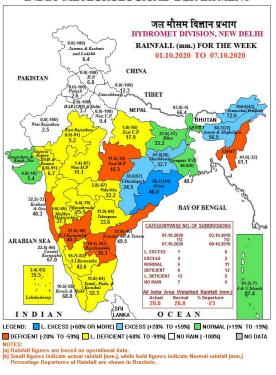
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India Meteorological Department (IMD), Earth System Science Organization

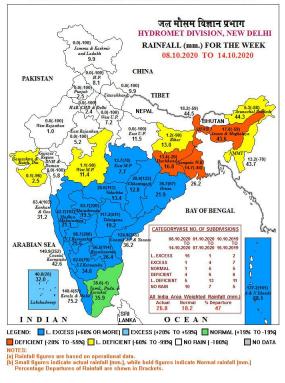
# Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

# Realized Rainfall (1st to 14th October, 2020)





# भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

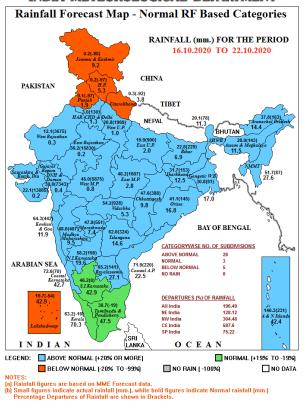


- Normal or above normal rainfall occurred in both the weeks in Odisha, Chhattisgarh and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks in Arunachal Pradesh, Assam & Meghalaya, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Gangetic West Bengal,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

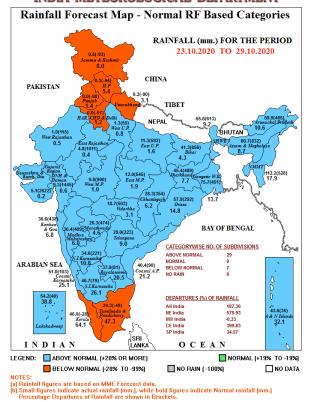
# **Extended Range Forecast System**

Rainfall forecast maps for the next 2 weeks (IC - 14 October)  $(16^{th}$  to  $29^{th}$  October, 2020)

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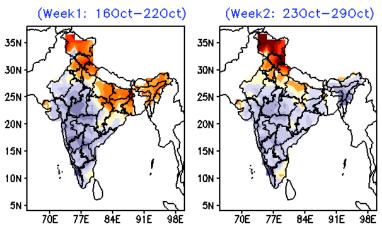
# भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



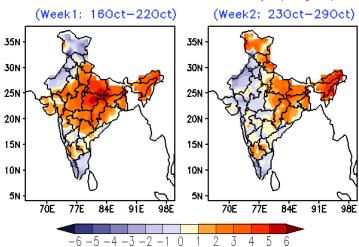
Week-1 (16.10.2020 to 22.10.2020) and Week-2 (23.10.2020 to 29.10.2020): Above normal rainfall likely over most parts of India in week-1 and week-2 except some parts over extreme north India and parts of extreme south peninsula (including Tamil Nadu).

# Maximum and Minimum temperature anomaly (<sup>o</sup>C) forecast for next 2 weeks (IC – 14 October) (16<sup>th</sup> to 29<sup>th</sup> October, 2020)

# MME forecast Tmax anomaly (Deg C)



# MME forecast Tmin anomaly (Deg C)



# **Maximum Temperature (Tmax)**

 Week-1 (16.10.2020 to 22.10.2020) and Week-2 (23.10.2020 to 29.10.2020): 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 (16.10.2020 to 22.10.2020) and Week-2 (23.10.2020 to 29.10.2020): Mainly above normal Tmin in week-1 and week-2 over eastern parts of India (Odisha, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Uttar Pradesh and adjoining regions) and north-eastern parts of the country. Tmin over some parts of western India will be normal to below normal mainly in week-2.

# Strategic Agricultural Planning based on rainfall during next two weeks till 29 October 2020

# **Agro-met Advisories**

# Kerala

Amount of rainfall received over Kerala is 2407.3 mm (9% excess) during 01 June 2020 - 15 October 2020. The extended range weather forecast for next two weeks (16-22 October and 23-29 October 2020) is normal for week-1 and below normal for week-2.

- Due to rainy weather condition, there is a chance of downy mildew disease in cucurbits. To control, it is advised to spray Propineb 70 WP @ 2.5g per litre or Mancozeb75 WP @ 3g per litre of water.
- 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 486.3 mm (16% excess) during 01 June 2020 - 15 October 2020. The extended range weather forecast for next two weeks (16-22 October and 23-29 October 2020) is normal for week-1 and below normal for week-2.

- Under the prevailing weather condition, farmers are advised to monitor fall army worm incidence in maize. If incidence is noticed, spray Azardirachtin 1 EC @ 2 ml/litre or Thiodicarb 75 WP @ 2 g/litre or Emamectin benzoate 5 SG @ 0.4 g/litre or Spinetoram 12 SP @ 0.5 ml /litre of water.
- Prevailing weather condition is also congenial for mosaic incidence in gourds. It is advised to spray Monocrotophos @ 1.5 ml/litre or Chlorpyriphos 2.5 ml + Neem oil 2 ml/litre of water.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 1076.5 mm (34% excess), Marathawada is 957.0 mm (33% excess), Vidharbha is 889.7 mm (-9% deficit) and Konkan region 3857.2 mm (30% excess) during 01 June 2020 - 15 October 2020. The extended range weather forecast for next two weeks (16 - 22 October and 23-29 October 2020) over Madhya Maharashtra, Vidharbha, Marathawada and Konkan is above normal for week-1 and week-2.

#### Madhya Maharashtra

- Under prevailing weather condition, sowing of safflower (varieties SSF-708 and PBNS-120 and sunflower (Phule Bhaskar Variety) is advised.
- 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.

# Marathwada

• Due to rainy weather condition, farmers are advised to make proper arrangement so that water may not stagnate in crop fields and also arrange to remove excess amount of water from crop fields.

• For management of rhizome fly in turmeric, it is advised to take alternate spray of Quinalphos 25% @ 20 ml or Diamethoate 30% @ 10 ml/10 litres of water along with sticker during clear weather condition at an interval of 15 days.

# Vidharbha

- Due to chances of rainy-days, farmers are advised to harvest mature soybean crop during clear weather and ensure safe storage.
- Under prevailing weather condition, sowing of coriander, spinach, fenugreek, radish, carrot, dolichos bean and ivy gourd is advised.

#### Konkan

- Due to the chances of moderate rainfall, farmers are advised to postpone the protective spraying operation against pest and diseases and make arrangement for drain out of excess water from the crop fields.
- Due to chances of heavy wind conditions, farmers are advised to provide mechanical support to newly planted fruit plants.

#### Hisar

Amount of rainfall received over Hisar is 379.8 mm (-16% deficit) during 01 June 2020 - 15 October 2020. The extended range rainfall forecast provided for next two weeks (16-22 October and 23-29 October 2020) over Hisar is above normal for week-1 and below normal for week-2.

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

### Karnataka

Rainfall received during 01 June 2020 - 15 October 2020 over South Interior Karnataka is 910.6 mm (19% excess) and North Interior Karnataka is 875.1 mm (54% excess). The extended range weather forecast for next two weeks (16-22 October and 23-29 October 2020) over South Interior Karnataka is normal and North Interior Karnataka is above normal for week-1 and above 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 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.

#### Assam

Amount of rainfall received over Assam is 2235.8 mm (19% excess) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 2020) on rainfall over Assam is above normal for week-1 and week-2.

- Under prevailing weather condition, farmers may go for sowing of pumpkin with recommended varieties viz., Arka Suryamukhi, Arka Chandan and other local cultivars.
- Prevailing weather condition is also favourable for sowing of mid season crop like cauliflower, broccoli, cabbage and knol khol seeds in nursery bed.

# **Uttar Pradesh**

Rainfall received during 01 June 2020 - 15 October 2020 over East Uttar Pradesh 785.8 mm (-10% deficit) and West Uttar Pradesh is 455.3 mm (-38% deficit). The extended range weather forecast for next two weeks (16-22 October and 23-29 October 2020) over East Uttar Pradesh and West Uttar Pradesh is above 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.

# 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 (-36% deficit) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 2020) on rainfall over Jammu is below normal for week-1 and week-2.

- Under prevailing weather condition, sowing of mustard and gobi sarson is advised. Recommended varieties are Pusa Bold, RSPR-01, RSPR-03, and Kranti.
- Present weather condition is congenial for sheath blight and glume discolouration in late transplanted basmati rice crop. If observed, it is advised to apply Cabendazim @ 0.1% and Mancozeb @ 0.25%, respectively.

# Rajasthan

Amount of rainfall received over East Rajasthan is 592.2 mm (-3% deficit) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 2020) on rainfall over East Rajasthan is above normal for week-1 and week-2.

- Under prevailing weather condition, sowing of early mustard may be taken up with recommended varieties RGN-73, Bio-902 (Pusa Jai kisan), Aashirwad, RH-9304 (Vasundhara), RH-9802 (Swarn Jyoti), RH-8812 (Laxmi), DRMRIJ-31 (Giriraj).
- Farmers are also advised for nursery sowing of gram with improved varieties viz., GNG-146, RSG-44, RSG-888, RSG-902, RSG-895, Pratap Raj Chana and Pratap Chana1.

# **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 565.5 mm (-28% deficit) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 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 1035.8 mm (11% excess) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 2020) on rainfall over Gujarat is above normal for week-1 and week-2.

- For the management of powdery mildew disease in okra, it is advised to uproot and burn infected plant, and spray Hexaconazole 10 ml or wettable sulphur @ 25 g in 10 liters of water.
- Farmers are advised for the land preparation for sowing of mustard with recommended varieties viz., Gujarat mustard 1, 2 3, Gujarat dantiwada mustard 4 and 5.

# **Punjab**

Amount of rainfall received over Punjab is 391.7 mm (-17% deficit) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16 - 22 October and 23 - 29 October 2020) on rainfall over Punjab is below normal for week-1 and 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 1309.5 mm (11% excess) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 2020) on rainfall over Chhattisgarh is above normal for week-1 and week-2.

- Due to the chances of light rainfall, 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 condition, 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 1056.9 mm (-2% deficit) during 01 June 2020 - 15

October 2020. The extended range weather forecast provided for next two weeks 16-22 October and 23-29 October 2020) on rainfall over Madhya Pradesh is above normal for week-1 and week-2.

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

# Uttarakhand

Amount of rainfall received over Uttarakhand is 943.2 mm (-22% deficit) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 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, sowing of maize, berseem, lucerne and oats as a fodder crop is advised.

# West Bengal

Amount of rainfall received over West Bengal is 1127.6 mm (-11% deficit) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 2020) on rainfall over West Bengal is above normal for week-1 and 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.
- Due to expected light rainfall and chance of attack of brown plant hopper, it is advised to apply 0.75 ml Nuvan or Vapona per litre of water or dusting of Quinolphos 1.5% at the lower portion of the stem.

# Jharkhand

Amount of rainfall received over Jharkhand is 955.0 mm (-14% deficit) during 01 June 2020 - 15 October 2020. The extended range weather forecast provided for next two weeks (16-22 October and 23-29 October 2020) on rainfall over Jharkhand is above normal for week-1 and week-2.

- Prevailing weather condition is congenial for cultivation of potato. Recommended varieties are Kufari Ashoka, Pukhraj, Kanchan, Pushkar and Lalima.
- Due to the chances of rainfall, land may be prepared for sowing of rainfed wheat. Recommended varieties are K1317, HD-3171, HI- 1612, Birsa gehun-3.

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