



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast (ERFS)

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**AICRP on Agro-Meteorology (AICRPAM),
Central Research Institute for Dryland Agriculture (CRIDA),
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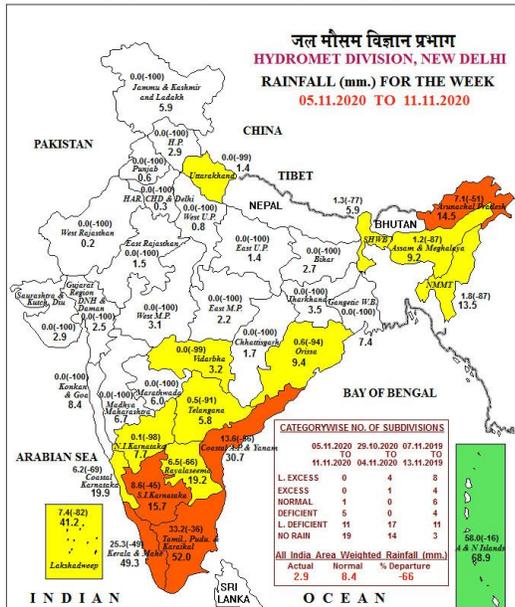
**India Meteorological Department (IMD),
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

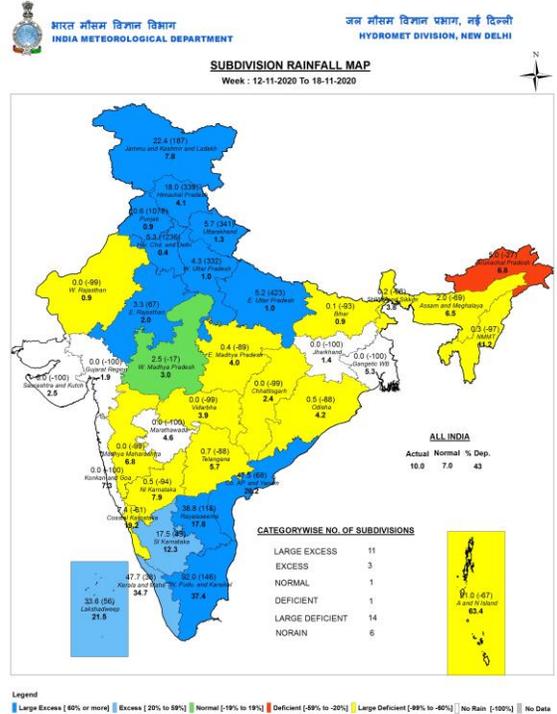
(5th to 18th November, 2020)

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% 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.)
Percentage Departures of Rainfall are shown in Brackets.



LEGEND: ■ Large Excess (60% or more) ■ Excess (20% to 59%) ■ Normal (19% to 19%) ■ Deficient (20% to -20%) ■ Large Deficient (59% to -40%) ■ No Rain (-100%) ■ No Data

NOTES:
a) Rainfall figures are based on operation data.
b) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm).
c) Percentage Departures of rainfall are shown in brackets.

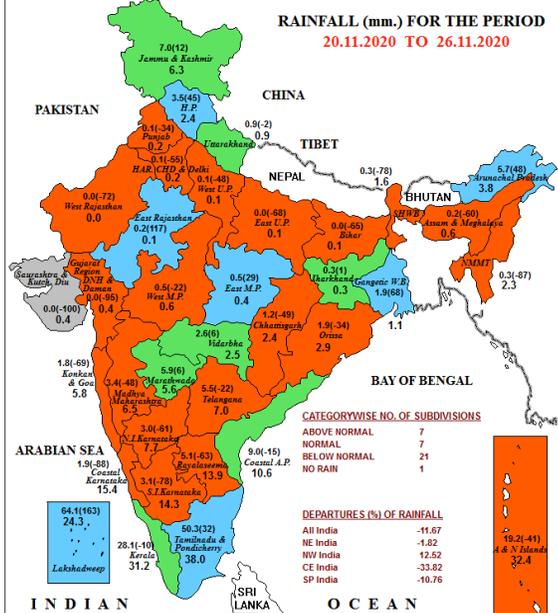
- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir and Ladakh (UTs), Uttarakhand, Himachal Pradesh, Uttar Pradesh, Punjab, Haryana Chandigarh & Delhi, East Rajasthan, West Madhya Pradesh, South Interior Karnataka, Rayalaseema, Coastal Andhra Pradesh & Yanam, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe, Lakshadweep and Andaman & Nicobar Islands
- Below Normal rainfall/no rain occurred in both the weeks over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 18 November) (20th November to 3rd December, 2020)

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Rainfall Forecast Map - Normal RF Based Categories

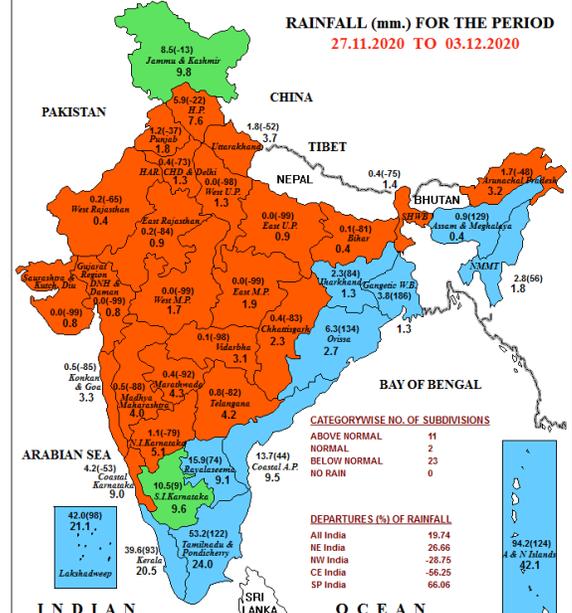


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN [-100%] ■ NO DATA

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.

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Rainfall Forecast Map - Normal RF Based Categories



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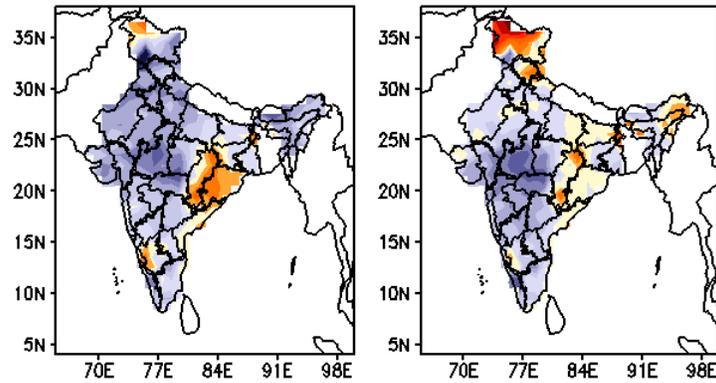
- **Week-1 (20.11.2020 to 26.11.2020):** Mostly dry weather over most parts Northwest and central India with main rainfall is over the southern peninsula (mainly Tamil Nadu and adjoining region). Some light rainfall over extreme north India is likely associated with Western Disturbance.
- **Week-2 (27.11.2020 to 03.11.2020):** Northeast monsoon rainfall over the south Peninsula and eastern coastal belts likely to increase during week 2.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 18 November)
(20th November to 3rd December, 2020)**

MME forecast Tmax anomaly (Deg C)

(Week1: 20Nov–26Nov)

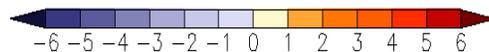
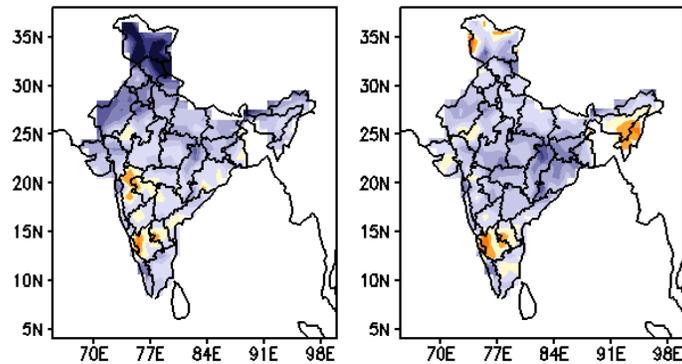
(Week2: 27Nov–03Dec)



MME forecast Tmin anomaly (Deg C)

(Week1: 20Nov–26Nov)

(Week2: 27Nov–03Dec)



Maximum Temperature (Tmax)

- **Week-1 (20.11.2020 to 26.11.2020) and Week-2 (27.11.2020 to 03.11.2020):** Below normal Tmax likely over most parts of India except isolated regions over extreme north India and some parts of eastern India.

Minimum Temperature (Tmin)

- **Week-1 (20.11.2020 to 26.11.2020) and Week-2 (27.11.2020 to 03.11.2020):** As predicted in the previous week, Tmin will be below normal over most of India during week-1 and week-2 with high negative anomalies will prevail over extreme north India in week-1. The negative anomaly belt will be concentrated more towards eastern region in week-2.

Strategic Agricultural Planning based on rainfall during next two weeks till 03 December 2020

Agro-met Advisories

Kerala

Amount of rainfall received over Kerala is 2533.9 mm (2% excess) during 01 June 2020 - 19 November 2020. The extended range weather forecast for next two weeks (20 - 26 November and 27 November - 03 December 2020) is normal for week-1 and above normal for week-2.

- Under prevailing weather condition there is chance of berry borer in coffee. Farmers are advised to spray Quinalphos (0.05%) @ 400 ml in 200 litres of water.
- For the management of white fly in chilly, it is advised to apply 2% Neem oil garlic emulsion or spray 20g *Lecanicillium lecanii* per one litre of water in ten days intervals.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 676.3 mm (5% excess) during 01 June 2020 - 19 November 2020. The extended range weather forecast for next two weeks (20 - 26 November and 27 November - 03 December 2020) is above normal for week-1 and 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.
- Present weather condition is favorable for thrips incidence in cotton. It is advised to spray Imidacloprid 200 SL @ 100 ml or Methyl demeton 25 EC 500ml/ha or Dimethoate 30 EC 500ml/ha or NSKE 5% @ 2 kg/ha.

Maharashtra

Rainfall received over Madhya Maharashtra is 1122.2 mm (33% excess), Marathwada is 972.6 mm (29% excess), Vidharbha is 899.6 mm (-11% deficit) and Konkan region 3904.5 mm (30% excess) during 01 June 2020 - 19 November 2020. The extended range weather forecast for next two weeks (20 - 26 November and 27 November - 03 December 2020) over Madhya Maharashtra and Konkan is below normal and Vidharbha and Marathwada is normal for week-1 and below normal over Madhya Maharashtra, Konkan, Vidharbha and Marathwada for week-2.

Madhya Maharashtra

- Under prevailing weather condition, there is a chance of army worm in sorghum and other *rabi* crops. It is advised to spray Quinolphos 25 E.C. @ 15-20 ml in 10 litres 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 pritosum* or *Telenomus remus* parasite per acre three times in one-week interval.

Konkan

- Due to cloudy weather condition, there is a possibility of incidence of anthracnose disease in brinjal. If incidence is noticed, it is advised to spray mancozeb @ 2.5 g per litre of water.
- Present weather condition is congenial for tea mosquito bug and thrips incidence in cashewnut.

It is advised to spray Profenophos 50% EC @10 ml per 10 litres of water.

Marathwada

- For management of leaf spot diseases in turmeric crop, it is advised to spray Azoxystrobin 18.2 % + Difenconazole 11.4 % SC @ 10 ml per 10 litres of water.

Hisar

Amount of rainfall received over Hisar is 385.1 mm (-15% deficit) during 01 June 2020 - 19 November 2020. The extended range rainfall forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) over Hisar is below normal for week-1 and week-2.

- Due to anticipated weather condition, farmers were advised to withhold sowing of wheat.
- There is a higher chance of decrease in night temperature. Therefore, it is advised to keep the animals under sheds and clean around to control fly and mosquitos in cattle shade.

Karnataka

Rainfall received during 01 June 2020 - 19 November 2020 over South Interior Karnataka is 996.5 mm (15% excess) and North Interior Karnataka is 916.4 mm (47% excess). The extended range weather forecast for next two weeks (20 - 26 November and 27 November - 03 December 2020) over South Interior Karnataka and North Interior Karnataka is below normal for week-1 and below normal over North Interior Karnataka and normal over South Interior Karnataka for week-2.

North Interior Karnataka

- Due to chances of light rainfall, farmers are advised for sowing of chickpea and wheat crops.
- Farmers are advised to vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic Septicaemia*.

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.
- To control cob borer in maize, it is advised to spray Malathion 50 EC @ 2ml/litre in 500 ml/acre.

Uttar Pradesh

Rainfall received during 01 June 2020 - 19 November 2020 over East Uttar Pradesh 791.7 mm (-10% deficit) and West Uttar Pradesh is 459.7 mm (-38% deficit). The extended range weather forecast for next two weeks (20 - 26 November and 27 November - 03 December 2020) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and week-2.

Western Uttar Pradesh

- Present weather condition is optimum for sowing of potato. Recommended varieties are Kufari chandramukhi, Kufari Bahar, Kufari Badshah, Kufari Anand, Kufari Lalima, Kufari Surya,

Kufari chipsona-1, Kufari chifsona-3 and Kufari stlaj.

- Farmers are advised to vaccinate cows, buffalo, goat, and sheep against the mouth and foot disease.

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 400.0 mm (-36% deficit) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Jammu is normal for week-1 and week-2.

- Under prevailing weather condition, farmers are advised to continue the sowing of wheat with varieties PBW-644, WH-1080 and PBW-396 for rainfed areas and PBW-550, DBW-16, Raj-3077, RSP-303, WH-1105, HD-2987 under irrigated area.
- For the management of hairy caterpillar in vegetable crops, it is advised to spray Dichlorovos @ 1.0 ml/litre of water or Chloropyrifos 20 EC @ 1.5 ml/litre of water at weekly interval.

Punjab

Amount of rainfall received over Punjab is 402.3 mm (-16% deficit) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Punjab is below normal for week-1 and week-2.

- Under prevailing weather conditions, farmers are advised to complete sowing of long duration varieties of wheat. Recommended varieties are Unnat PBW 343, PBW 1 Zinc, PBW 725, PBW 677, HD 3086, WH 1105, PBW 621, HD 2967 and WHD 943 / PDW 291.
- Prevailing weather condition is optimum time for sowing of root crops like radish, turnip and carrot.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 1322.2 mm (9% excess) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Chhattisgarh is below normal for week-1 and week-2.

- Under prevailing weather condition, transplanting of tomato, brinjal, chilli and cauliflower is advised.
- Under prevailing weather conditions, sowing of mustard is advised with recommended varieties Pusa Jai Kisan, Pusa Bold, Boon, Varuna, Kranti, Chhattisgarh Mustard.

West Bengal

Amount of rainfall received over West Bengal is 1137.5 mm (-14% deficit) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over West Bengal is above normal for week-1 and week-2.

- Under prevailing weather condition, there is a chance of attack of black-rot of crucifers in the cabbage and cauliflower. To control, it is advised to spray 1g Streptocycline in 10 litres of water.
- Under prevailing weather conditions, it is advised to complete the harvesting of Aman rice.

Odisha

Amount of rainfall received over Odisha is 1304.4 mm (2% excess) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Odisha is below normal for week-1 and above 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.
- For the management of leaf webber and pod borer in red gram crop, it is advised to spray Chlorpyrifos 50% + Cypermethrin 5% EC @ 400 ml/acre or Profenophos 50% EC @ 400 ml/acre.

Assam

Amount of rainfall received over Assam is 2359.4 mm (21% excess) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Assam is below normal for week-1 and above normal for week-2.

- Due to favorable weather, there is a chance of pod borer in green gram and black gram crop. Farmers are advised to spray Emmamectin Benzoate 5% SG @ 5 g/10 litres water to control the pest infestation.
- Prevailing weather condition is suitable for sowing of potato. Recommended varieties are Kufri Chandramukhi, Kufri Jyoti, Kufri Megha, Kufri Badshah, Kufri Sindhuri etc.

Bihar

Amount of rainfall received over Bihar is 1301.7 mm (20% excess) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Bihar is below normal for week-1 and week-2.

- Prevailing weather condition is congenial for sowing of wheat with varieties PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW-39.
- Prevailing weather condition is also congenial for planting of Potato. Recommended varieties

for north Bihar region are Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima, Kufri sinduri, Kufri arun, Kufri anand, Kufri pusker, Rajendra alu 1, Rajendra alu 2 and Rajendra alu 3.

Jharkhand

Amount of rainfall received over Jharkhand is 960.1 mm (-16% deficit) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Jharkhand is normal for week-1 and above normal for week-2.

- For the management of leaf blight disease in potato, it is advised to spray fungicide Redomyl @ 1.5 g per litre of water.
- Farmers wishing to cultivate gram crop, may start sowing after field preparation. The recommended varieties for Deshi (indigenous) gram are Pusa-372, KWR108, KGP-59 and for Kabuli gram are H.K.-9431, Kak-2 Birsa chana.

Uttarakhand

Amount of rainfall received over Uttarakhand is 949.2 mm (-22% deficit) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Uttarakhand is normal for week-1 and below normal for week-2.

- It is advised to earthen up and use mulch to conserve the soil moisture in potato crop.

Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 1059.6 mm (-3% deficit) during 01 June 2020 - 19 November 2020. The extended range weather forecast provided for next two weeks (20 - 26 November and 27 November - 03 December 2020) on rainfall over Madhya Pradesh is above normal for week-1 and below normal for week-2.

- Farmers are advised to prepare the fields for sowing of *rabi* season wheat crop under irrigated condition.

Disclaimer:

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