



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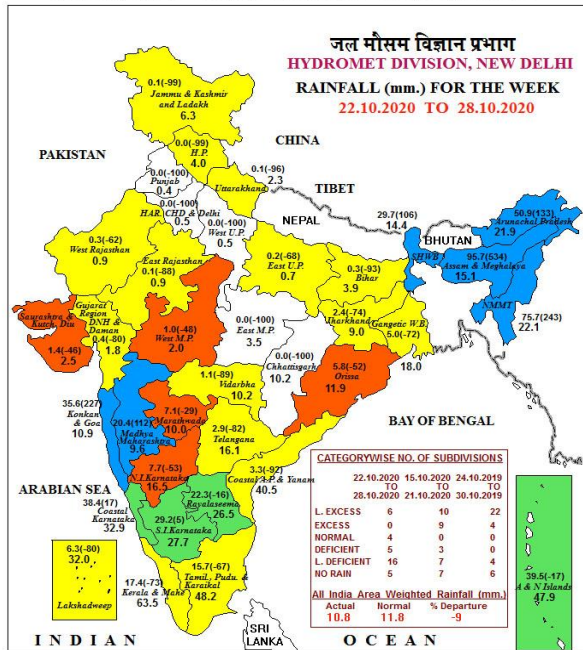
**India Meteorological Department (IMD),
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(22nd October to 4th November, 2020)

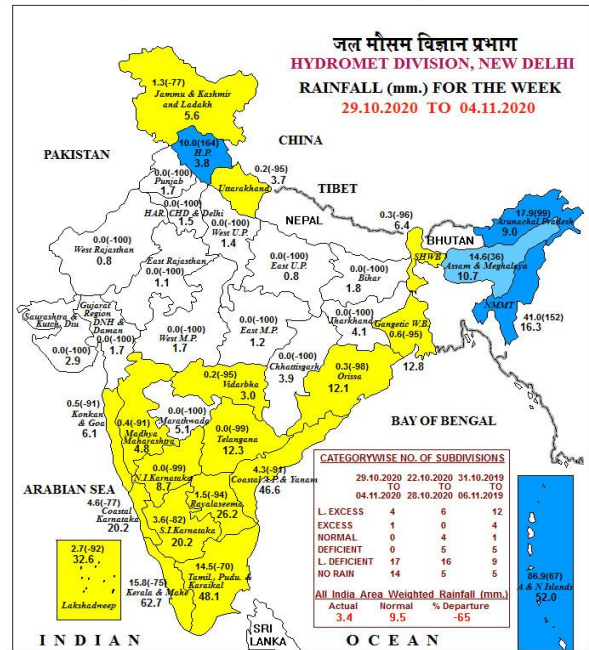
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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.), white bold figures indicate Normal rainfall (mm.)
Percentage Departures of Rainfall are shown in Brackets.

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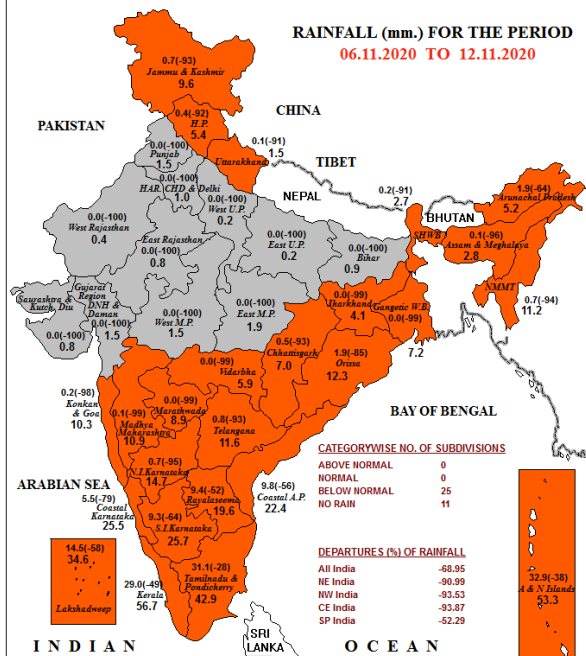
- Normal or above normal rainfall occurred in both the weeks in Arunachal Pradesh, Assam & Meghalaya, Nagaland Manipur Mizoram & Tripura (NMMT and Andaman & Nicobar Islands).
- Normal or above normal rainfall occurred in either of the two weeks in Himachal Pradesh, Sub-Himalayan West Bengal & Sikkim,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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 04 November 2020) (6th to 19th November, 2020)

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Rainfall Forecast Map - Normal RF Based Categories

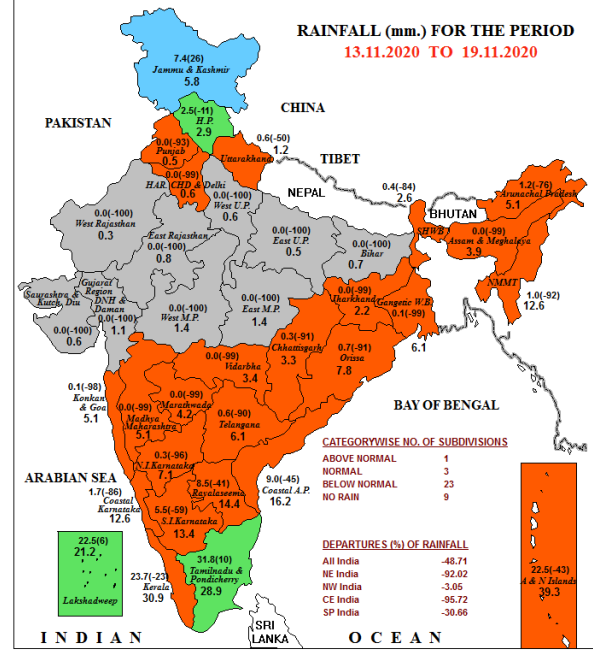


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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 [a] Rainfall figures are based on MME Forecast data.
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Rainfall Forecast Map - Normal RF Based Categories



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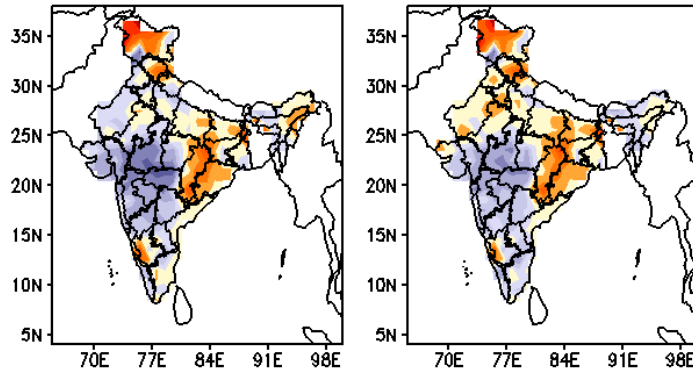
- **Week-1 (06.11.2020 to 12.11.2020):** Mostly dry weather over most parts of India (Northwest and central India) with main rainfall over the southern peninsula in week-1.
- **Week-2 (13.11.2020 to 19.11.2020):** Associated with approaching Western Disturbance the western Himalayas (Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh and Uttarakhand) regions expected to get some rainfall. Rainfall is likely over the south peninsula and some parts of eastern coastal region.

**Maximum and Minimum temperature anomaly ($^{\circ}$ C) forecast
for next 2 weeks (IC – 04 November 2020)
(6th to 19th November, 2020)**

MME forecast Tmax anomaly (Deg C)

(Week1: 06Nov–12Nov)

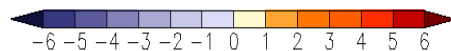
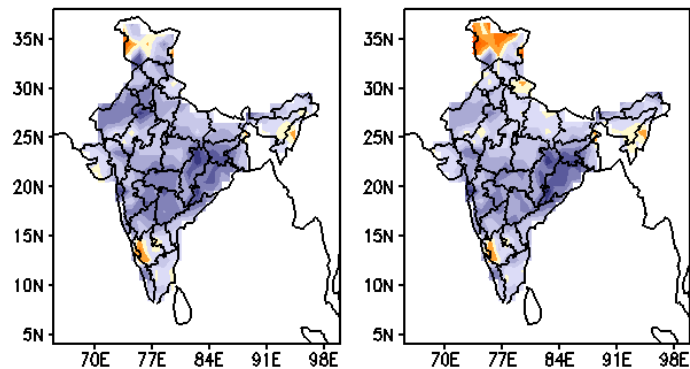
(Week2: 13Nov–19Nov)



MME forecast Tmin anomaly (Deg C)

(Week1: 06Nov–12Nov)

(Week2: 13Nov–19Nov)



Maximum Temperature (Tmax)

- **Week-1 (06.11.2020 to 12.11.2020) and Week-2 (13.11.2020 to 19.11.2020):** Tmax over northern India, Indo Gangetic Plain and parts of Northeast India will be above normal, whereas, Tmax over most of west central India will be below normal.

Minimum Temperature (Tmin)

- **Week-1 (06.11.2020 to 12.11.2020) and Week-2 (13.11.2020 to 19.11.2020):** Mostly below normal Tmin over the country except some parts of northeast India and extreme north India with slightly higher negative anomalies during week-1 and week-2.

Agro-met Advisories

Kerala

Amount of rainfall received over Kerala is 2467.4 mm (3% excess) during 01 June 2020 - 05 November 2020. The extended range weather forecast for next two weeks (06 - 12 November and 13 - 19 November 2020) is below normal for week-1 and week-2.

- 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.
- Under prevailing weather condition, attack of stem borer may be observed in the collar region of ginger. To control, spray Flubendiamide @ 1 ml per 10 litres water.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 553.7 mm (-1% deficit) during 01 June 2020 - 05 November 2020. The extended range weather forecast for next two weeks (06 - 12 November and 13 - 19 November 2020) is below normal for week-1 and 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 Azadirachtin 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 favorable for smallpox and PPR diseases in goat. Proper vaccination may be done for avoiding animal losses.

Maharashtra

Rainfall received over Madhya Maharashtra is 1122.2 mm (36% excess), Marathawada is 972.6 mm (31% excess), Vidharbha is 899.6 mm (-10% deficit) and Konkan region 3904.5 mm (31% excess) during 01 June 2020 - 05 November 2020. The extended range weather forecast for next two weeks (06 - 12 November and 13 - 19 November 2020) over Madhya Maharashtra, Vidharbha, Marathawada and Konkan is below normal for week-1 and 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 pritiolum* or *Telenomus remus* parasite per acre three times in one-week interval.

Konkan

- Due to increase in temperature, it is advised to provide irrigation in newly planted fruit crop orchards and vegetable crops.
- There is possibility for incidence of shoot borer and midge fly on new vegetative flush of mango. If incidence is noticed, spray Monocrotophos 36%SL @ 11 ml per 10 liters of water

during clear weather.

Vidharbha

- Under prevailing weather condition, sowing of sorghum, safflower, sunflower and chickpea crop is advised.
- For the management of helicoverpa, it is advised to install pheromone traps @ 5/ha at a distance of 50 meter.

Marathawada

- For management of pod borer in pigeonpea crop, it is advised to spray Quinalphos 25% @ 20 ml or Emamectin benzoate 5% @ 4.4 g per 10 litres of water.
- 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 379.8 mm (-16% deficit) during 01 June 2020 - 05 November 2020. The extended range rainfall forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) over Hisar is no rainfall 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 and remove the disease plants.
- There is a 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 - 05 November 2020 over South Interior Karnataka is 970.7 mm (16% excess) and North Interior Karnataka is 915.7 mm (50% excess). The extended range weather forecast for next two weeks (06 - 12 November and 13 - 19 November 2020) over South Interior Karnataka and North Interior Karnataka is below normal for week-1 and week-2.

North Interior Karnataka

- Under prevailing weather condition, farmers are advised for sowing of sorghum, chickpea, safflower 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

- 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.

Uttar Pradesh

Rainfall received during 01 June 2020 - 05 November 2020 over East Uttar Pradesh 786.0 mm (-10% deficit) and West Uttar Pradesh is 455.3 mm (-39% deficit). The extended range weather forecast for next two weeks (06 - 12 November and 13 - 19 November 2020) over East Uttar Pradesh and West Uttar Pradesh is no rainfall for week-1 and week-2.

Western Uttar Pradesh

- Present weather condition is optimum for sowing of timely sown wheat varieties under irrigated condition. Recommended varieties are PBW-343, K-9107, UP - 2382, K-307, DBW-17, PBW-443, HD-2824, DBW-39, CBW-38 and HUW-510.
- For the management of white flies in early planted vegetable pea, it is advised to apply Malathion dust 5% @ 20-25 kg/ha.

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 377.6 mm (-38% deficit) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over Jammu is below normal for week-1 and week-2.

- Due to prevailing dry weather condition, harvesting and threshing of basmati rice is advised.
- Under prevailing weather condition, sowing of wheat is advised with recommended varieties PBW-175, PBW-396, RSP-81(Jitto), WH-1080 and PBW-644 under conserved soil moisture in kandi belt.

Rajasthan

Amount of rainfall received over East Rajasthan is 595.4 mm (-4% deficit) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) over East Rajasthan is no rainfall for week-1 and week-2.

- Under prevailing weather condition, farmers are advised for land preparation and sowing of wheat. Recommended cultivars for normal sowing are 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.

Gujarat

Amount of rainfall received over Gujarat is 1045.6 mm (11% excess) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over Gujarat is no rainfall for week-1 and week-2.

- Under prevailing weather condition, sowing of coriander is advised. Recommended varieties are Gujarat coriander 1 and Gujarat coriander 2.
- For management of downy mildew disease in cucurbits, it is advised to spray Mancozeb + Metalaxyl 72 WP 20 g in 10 liters of water.

Punjab

Amount of rainfall received over Punjab is 391.7 mm (-18% deficit) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over Punjab is no rainfall for week-1 and below normal for

week-2.

- Under prevailing weather conditions, farmers are advised to start the sowing of wheat with varieties Unnat PBW 343, PBW 1 Zinc, PBW 725, PBW 677, HD 3086, WH 1105, PBW 621, HD 2967 and WHD 943 / PDW 291 (durum wheat).
- Prevailing weather condition is also congenial for nursery sowing of onion. Recommended varieties are POH-1 PRO-7, Punjab Naroya, PYO-1 and PWO-2.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 1321.8 mm (10% excess) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 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.
- Due to decrease in temperature, it is advised to keep the animals in the cattle shed with concrete / brick roof.

West Bengal

Amount of rainfall received over West Bengal is 1136.5 mm (-13% deficit) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over West Bengal is below normal for week-1 and week-2.

- Prevailing temperature and humid weather conditions 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.
- Prevailing weather condition is also congenial for the blast disease in Aman rice. To control, it is advised to spray Tricyclazole 0.6 gm or Hexaconazole @ 1ml per litre of water.

Jharkhand

Amount of rainfall received over Jharkhand is 958.8 mm (-15% deficit) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 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 Desi (indigenous) gram are Pusa-372, KWR108, KGP-59 and varieties for Kabuli gram are HK-9431, Kak-2 Birsa chana.
- Under prevailing weather condition, land preparation for sowing of rainfed wheat. Recommended varieties are K1317, HD-3171, HI- 1612, Birsa gehun-3.

Odisha

Amount of rainfall received over Odisha is 1303.3 mm (3% excess) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over Odisha is below normal for week-1 and 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 red rot disease in sugarcane, it is advised to spray Carbendazim 12%+ Mancozeb 63 % WP @ 400g/acre or Metalaxyl 8% + Mancozeb 64% WP @ 400 g/acre by mixing it in 200 litres of water.

Assam

Amount of rainfall received over Assam is 2356.9 mm (22% excess) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over Assam is below normal for week-1 and week-2.

- Due to favorable weather, there is a chance of infestation of aphid in the green gram crop. To control, it is advised to apply Malathion 50 EC @ 130 ml in 65 litres of water to spray in one bigha land.
- It is also the right time to prepare the land for potato crop. Recommended varieties are Kufri Chandramukhi, Kufri Jyoti, Kufri Megha, Kufri Badshah, Kufri Sindhuri etc.

Bihar

Amount of rainfall received over Bihar is 1301.6 mm (21% excess) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over Bihar is no rainfall for week-1 and week-2.

- Under prevailing weather conditions, farmers are advised to sow mustard crop. Recommended varieties for North Bihar region are Rajendra Sarso-1, 66-197-3 and Swarna.
- Harvesting and threshing of paddy is also advised.

Uttarakhand

Amount of rainfall received over Uttarakhand is 943.5 mm (-22% deficit) during 01 June 2020 - 05 November 2020. The extended range weather forecast provided for next two weeks (06 - 12 November and 13 - 19 November 2020) on rainfall over Uttarakhand is above normal for week-1 and below normal for week-2.

- Due to dry weather prevailing in the region, farmers are advised to give light irrigation in onion nursery, garlic, cabbage, potato and other vegetable crops.
- Due to decrease in temperature, farmers are advised to prepare fields and sow barley, wheat, lentil in mid-hill and valley region.

Disclaimer:

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