



National Agromet Advisory Service Bulletin
Based on
Extended Range Weather Forecast (ERFS)

Validity: (08th November to 21st November 2019)

Date of issue: 8th November 2019

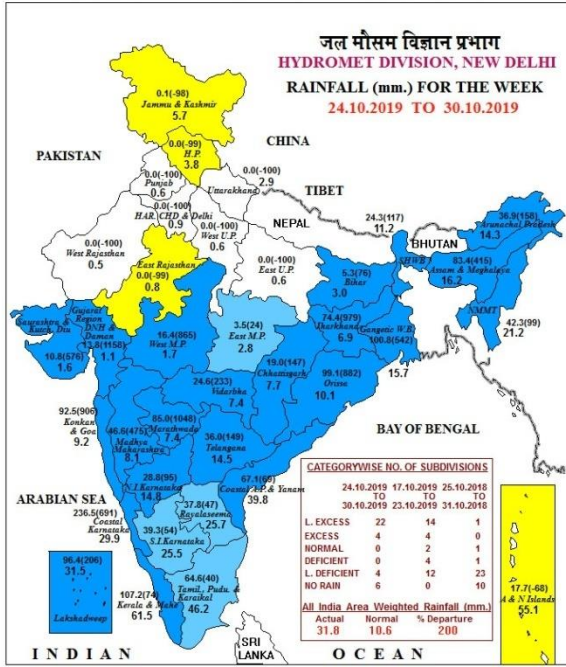
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&
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(24th October to 6th November, 2019)

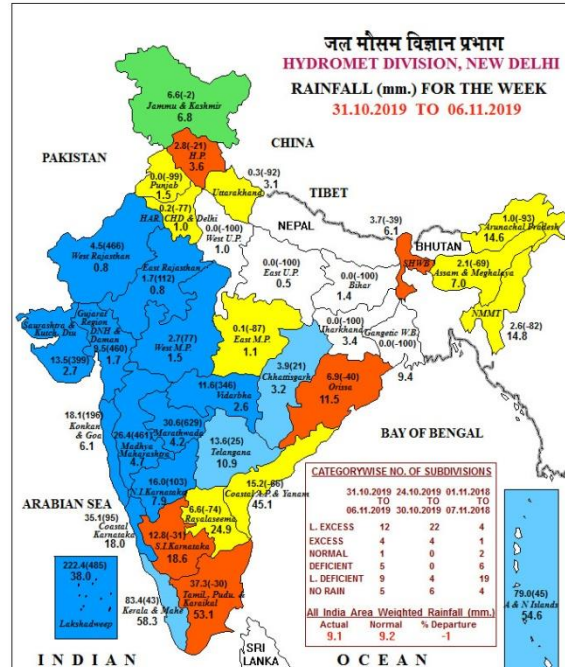
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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.

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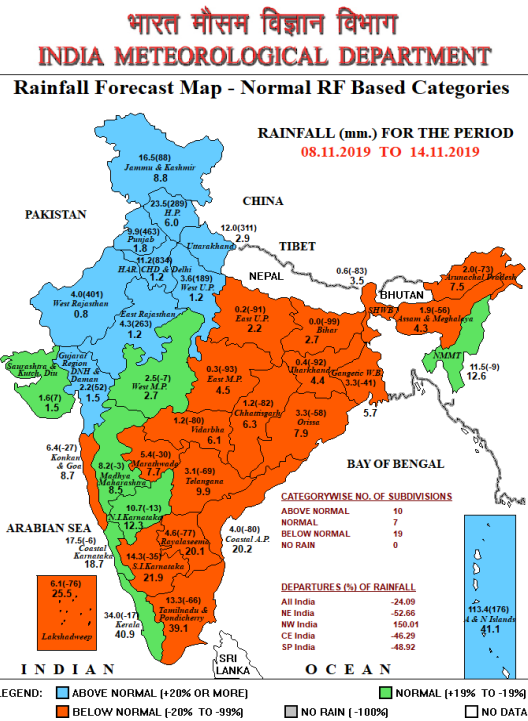
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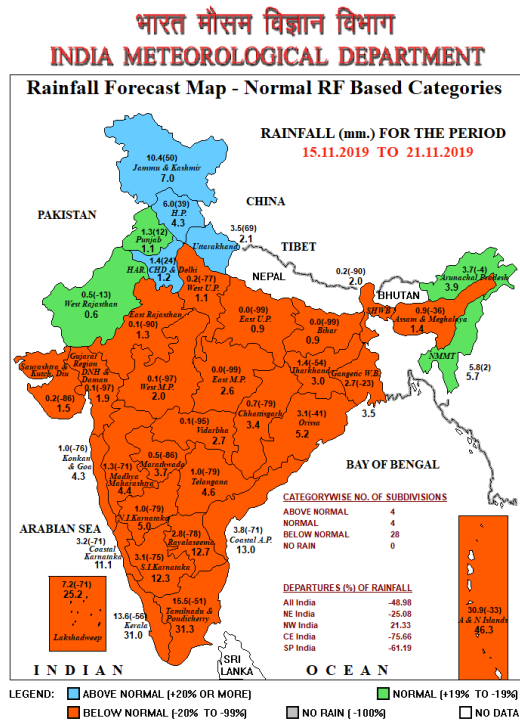
- Normal or above normal rainfall occurred in both the weeks in Gujarat Region, Saurashtra & Kutch, West Madhya Pradesh, Chhattisgarh, Maharashtra, Telangana, Coastal Karnataka, North Interior Karnataka, Kerala & Mahe and Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 23 October) (08th November to 21st November 2019)



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[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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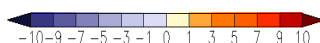
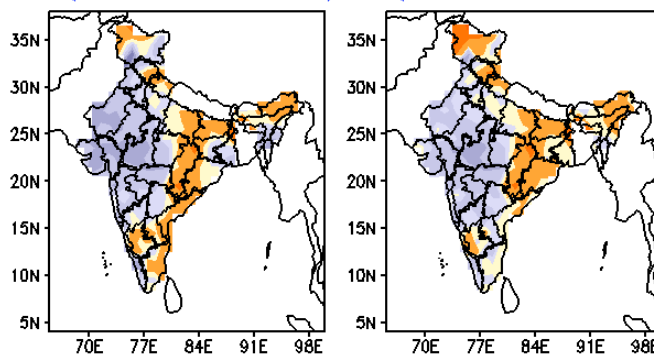
Week 1 (08.11.2019 to 14.11.2019) and Week 2 (15.11.2019 to 21.11.2019): Cyclonic circulation over the east-central and adjoining north Bay of Bengal in week 1 will make north-east Bay of Bengal active with adjoining Bangladesh and West Bengal and parts of north coastal Odisha.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 06 November)
(08th November to 21st November 2019)**

MME forecast Tmax anomaly (Deg C)

(Week1: 08Nov–14Nov)

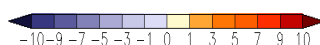
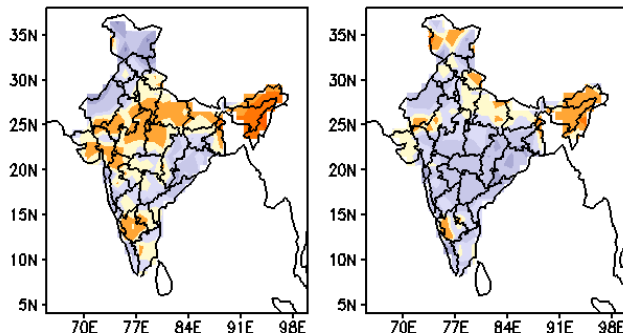
(Week2: 15Nov–21Nov)



MME forecast Tmin anomaly (Deg C)

(Week1: 08Nov–14Nov)

(Week2: 15Nov–21Nov)



Maximum Temperature (Tmax)

Week 1 (08.11.2019 to 14.11.2019) and Week 2 (15.11.2019 to 21.11.2019): Tmax anomaly is mostly negative over central and western parts of India during the period. Whereas it is slightly above normal over extreme northern parts and Indo-Gangetic region and adjoining eastern parts of India during the period.

Minimum Temperature (Tmin)

Week 1 (08.11.2019 to 14.11.2019): Slightly above normal Tmin over northern and northeastern parts of India.

Week 2 (15.11.2019 to 21.11.2019): The above Tmin anomaly will be confined to only a small pocket of northern parts of central India during.

Strategic Agricultural Planning based on rainfall during next two weeks till 21st November 2019

Agromet Advisories

Kerala

Amount of rainfall received over Kerala during the period from 01st October to 7th November 2019 is 519.2 mm (44% excess). The extended range weather forecast for next two weeks (8th to 14th November and 15th to 21st November 2019) is normal for week-1 and below normal for week-2.

- Due to continuous rainfall and water logging, there is a chance of fusarium wilt in cowpea. It is advised to drain the field properly and drench the soil rhizosphere with 2 g of Bavistin or 2 ml of Contaf/litre of water alternatively within 15 days interval to control the disease.
- Due to intermittent rainfall and sunshine, there is a chance of sigatoka disease in banana. It is advised to spray pseudomonas 20g/litre of water. In case of severe attack, spray 2 ml Hexaconazole or 1 ml Propiconazole/litre of water by mixing it with a sticker and spray on both the surface of the leaf.
- Due to increase in relative humidity, there is a chance of severe leaf rust disease in coffee. It is advised to apply 0.5% Bordeaux mixture or plant wax 20 EC @ 1-2 ml/litre to control the disease.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 236.4 mm (2% normal) during the period of 01st October to 7th November 2019. The extended range weather forecast for next two weeks (8th to 14th November and 15th to 21st November 2019) is below normal for week-1 and week-2.

- Prevailing weather condition is favorable for sucking pest and leaf hopper incidence in pulses. Spray Emamectin benzoate 5% SG 220 g/ha for the control of sucking pest and Methyl-o-demeton 750 ml in 700-1000 litre of water/ha for the control of leaf hopper.
- Prevailing weather condition is favorable for shoot fly. Spraying of Dimethoate 30 EC @ 500 ml/ha or Neem seed kernel extract 5% are recommended.

Maharashtra

Rainfall received over Madhya Maharashtra is 225.1 mm (189% large excess), over Marathwada is 253.7 mm (233% large excess), Vidharbha is 62.8 mm (5% normal) and Konkan region 275.3 mm (136% large excess) during 01st October to 7th November 2019. The extended range weather forecast for next two weeks (8th to 14th November and 15th to 21st November 2019) over Marathwada, Konkan, Vidharbha are below normal and Madhya Maharashtra is normal for week-1 and in week-2 Marathwada, Konkan, Vidharbha and Madhya Maharashtra are below normal.

Konkan

- Due to forecast of light rain, it is advised to harvest the matured finger millet crop in morning hours by cutting of ear head with sickle and sun-dry for 2-3 days followed by threshing and stored in protected shed.
- Due to cloudy and humid weather condition, there is a possibility of incidence of hoppers, midge fly and shoot borer on vegetative flush of mango. To protect the flush of mango, spray Lambda

Cyhalothrin 5% EC @ 6ml or Quinalphos 25% EC @ 25 ml/10 litre of water.

Madhya Maharashtra

- For the control of alternaria leaf spot and leaf eating caterpillar of safflower, spray Carbendazim+ Mancozeb combine fungicide @200 g + *Cypermethrin* @15 ml/10 litre of water.
- For control of blight disease of onion, farmers are advised to spray Copper oxychloride 4 g/litre of water.
- Phule and Revati varieties of sorghum should be used for late sowing (Upto 15th November).

Vidharbha

- In cotton, foliar spray of 2% DAP (200 g DAP + 10 litre water) mixed with 4 ml Planofix at boll development stage is advisable to reduce boll shedding and improve boll growth.
- With provision of protective irrigation later in the season, sowing of mustard ACN-9 (Shatabdi), NRCHB-101 can be undertaken up to first week of November.

Gujarat

Amount of rainfall received over Gujarat is 77.9 mm (308% large excess) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) over Gujarat region is above normal for week-1 and below normal for week-2.

- It is advised to monitor the cluster bean crop for infestation of jassid and white fly. Spray 500 ml of 5 % neem seed extract or neem seed oil 50 ml with Diafenthiuron 50% wp @ 16 g in 10 litre of water.
- For the control of purple blotch blight disease in *kharif* onion, make 3 alternate spray of Mencozeb 27 g and Thiophanate methyl 15 g in 10 litre of water at 10 days interval.
- It is advised to drain water from the matured paddy crop field and harvest the crop during clear sky and fair weather condition. Dry the grains properly before storage.

Rajasthan

Rainfall received during 01st October to 7th November 2019 over east Rajasthan is 30.9 mm (110% large excess). The extended range weather forecast for next two weeks (8th to 14th November and 15th to 21st November 2019) over east Rajasthan is above normal for week-1 and below normal for week-2.

- Farmers are advised not to burn *kharif* crops residue in the field as it pollute the environment and causes health problems.
- Farmers are advised to complete the sowing of lucerne and berseem for green fodder and oats for dual purpose during this week with improved varieties of dual purpose oats viz. Kent, UPO-212, JHO-822. Berseem: Mescavi and Wardan, Lucerne: Anand-2 and RL-88.
- Farmers are advised to sow garlic on raised bed and ensure optimum soil moisture for better seed

germination.

Jammu

Rainfall received during 01st October to 7th November 2019 in Jammu is 60.7 mm (39% excess). The extended range weather forecast for next two weeks (8th to 14th November and 15th to 21st November 2019) is above normal for the week-1 and week-2.

- Due to forecast of heavy rainfall, it is advised to drain out the excess water from mustard, toria, chickpea, field pea fields in case of stagnation conditions.
- Application of nitrogenous fertilizer is advised in the young fruit plants after the receipt of rainfall.

Assam

Rainfall received during 01st October to 7th November 2019 in Assam is 190.6 mm (16% normal). The extended range weather forecast for next two weeks (8th to 14th November and 15th to 21st November 2019) is below normal for the week-1 and week-2.

- Present weather is conducive for infestation of gundhi bug in Sali rice crop field at dough stage. Spraying of Malathion 5% dust @ 3kg/bigha is advised.
- Farmers are advised to start seedbed preparation for raising seedlings of tomato. Recommended varieties are Punjab Chuhara, Arka Alok, Pusa Rubi, Sioux, Punjab Keshri, Arka Abhijit, BT-1 etc.

Jharkhand

Amount of rainfall received over Jharkhand is 132.8 mm (71% large excess) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) over Jharkhand is below normal for week-1 and week-2.

- In medium land, rice crop transplanted at normal time are ready to harvest. At the time of harvesting, pick the black earhead (affected earhead with false smut disease) and destroy them with burning. In lowland, maintain the bunds of field under rice to keep it submerged.
- Farmers opting for mustard crop, may prepare their fields and select the improved varieties of seed like Shiwani, Pusa Bold, Pusa mustard.
- The recommended varieties for Deshi (indigenous) gram are BG-372, BG-256, KWR-108, Pant G-186, Pant G 114 and for Kabuli gram are HK-94-134, BG-1053, BG-1003 etc.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 101.0 mm (62% large excess) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) over Chhattisgarh is below normal for week-1 and for week-2.

- Farmers are advised to paint stem of tree by using Bordo mixer/paste, maintain cleanliness in the orchard, prepare basin around the tree and apply recommended dose of manure and fertilizer.
- It is right time for plantations of chrysanthemum and gladiolus. In weed control management operation should be taken up in rajnigandha.

Odisha

Amount of rainfall received over Odisha is 179.4 mm (62% large excess) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) over Odisha is below normal for week-1 and week-2.

- It is the optimum weather for sowing of garlic in irrigated upland and medium lands. It is advised to grow high yielding varieties like Phawari, Rajalbadi, Jamnagar and G-282.
- It is optimum time for sowing of rainfed groundnut in river banks. It is advised to grow high yielding varieties like Smruti, TAG-27, TAG – 24 and JL-24 with seed rate 60kg pods/acre.
- The current temperature is optimum for sowing of bengal gram. Grow the improved varieties like Gourav, Annegiri, Radhey with seed rate @25kg/acre.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 26.3 mm (-16% deficit) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) on rainfall over Himachal Pradesh is above normal for both the weeks.

- Sowing of bengal gram should be done with optimum soil moisture for better seed germination.
- Dingri/mushroom can be sown in closed room and maintain temperature of 25-28°C and relative humidity of 80-85%.
- Sowing of turnip and radish in lower rain fed areas may be taken up.

Bihar

Amount of rainfall received over Bihar is 25.5 mm (-59% deficit) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) for rainfall over Bihar is below normal for week 1 and normal for week 2.

- Regular monitoring of sucking insect-pests such as white fly, leaf hopper and aphid is advised in vegetable crops. Spraying of Imidacloprid 17.8% SL @ 0.3 ml/litre of water is advised.
- Planting of potato is advised with recommended varieties like 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.

Punjab

Amount of rainfall received over Punjab is 10.9 mm (6% normal) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) on rainfall over Punjab is above normal for weeks 1 and normal for week 2.

- Farmers are advised to sow early sown wheat varieties i.e. Unnat PBW 343, PBW 1 Zn, PBW 725, PBW 677, HD 3086, WH 1105, HD 2967, PBW 621 and advised to use happy seeder for the sowing.
- Farmers are advised for management of physiological fruit drop in 'Umran' ber by spraying 15 g

NAA with 500 litre of water.

Uttar Pradesh

Amount of rainfall received over West Uttar Pradesh is 9.3 mm (-60% large deficit) and East Uttar Pradesh is 25.1 mm (-34% deficit) during 01st October to 7th November 2019. The extended range weather forecast provided for next two weeks (8th to 14th November and 15th to 21st November 2019) on rainfall over West Uttar Pradesh is above normal and below normal in East Uttar Pradesh for week 1 and below normal for West and East UTTAR Pradesh for week 2.

- As there is no forecast for rainfall during the coming week, farmers are advised to irrigate their late planted paddy crop.
- Balanced diet (green fodder 15-20 kg and wheat or rice husk 2-3 kg) per day should be given to the buffaloes and cows so that milk production did not affected by the fluctuating weather.

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