



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

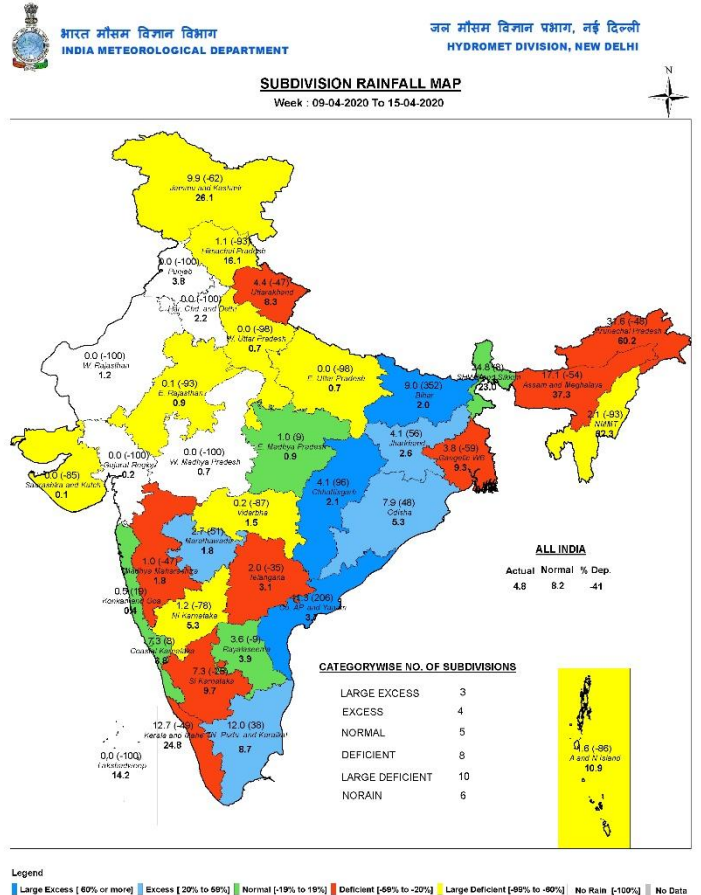
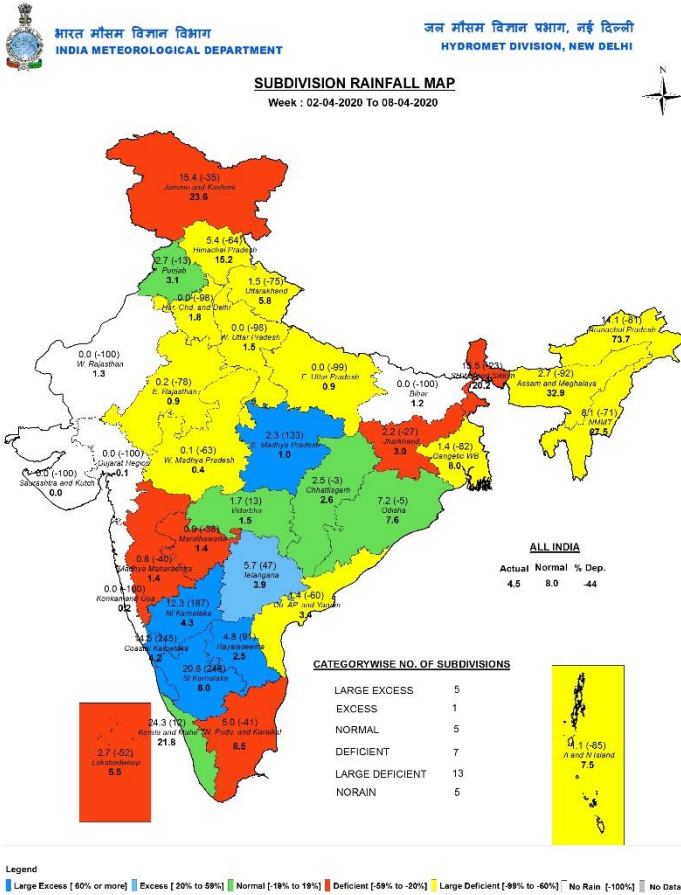
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&
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India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall (02 - 15 April 2020)

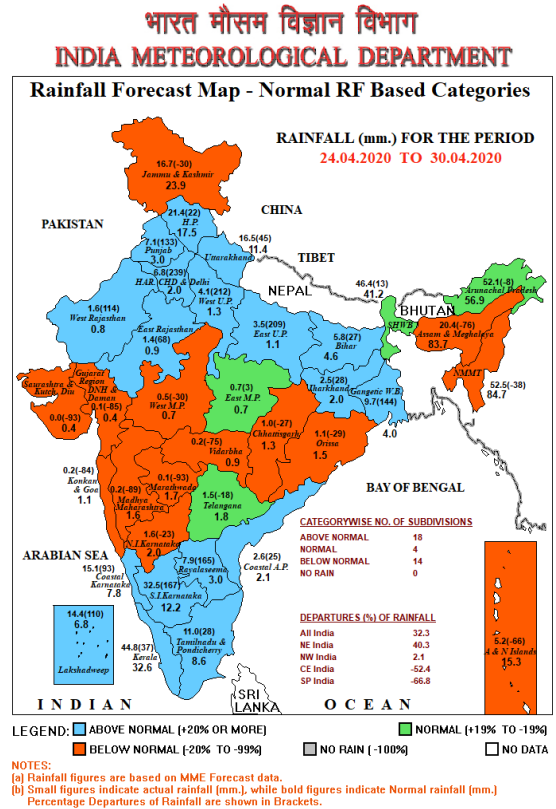
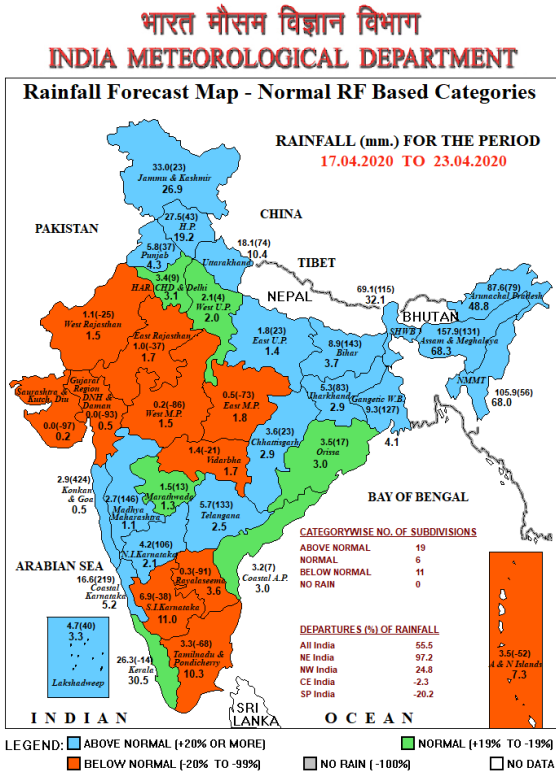


- Normal or above normal rainfall occurred in both the weeks in East Madhya Pradesh, Chhattisgarh, Odisha, Rayalaseema and Coastal Karnataka.
- Normal or above normal rainfall occurred in either of the weeks in Punjab, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Marathwada, Vidarbha, Telangana, Coastal Andhra Pradesh & Yanam, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe and Tamil Nadu Puducherry & Karaikal.
- Below normal rainfall/no rain occurred over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 15 April)

(17 - 30 April, 2020)



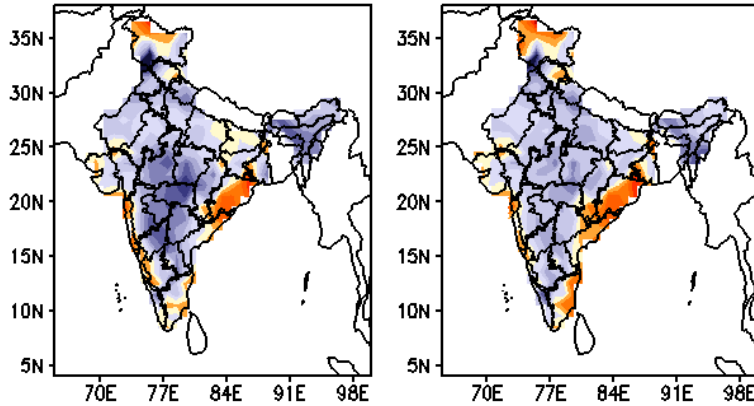
- **Week-1 (17.04.2020 to 23.04.2020) and Week-2 (24.04.2020 to 30.04.2020):** The Western Disturbance associated rainfall over extreme north India (Jammu & Kashmir; Uttarakhand, Himachal Pradesh, Punjab, Haryana and adjoining region) is likely during the period. Also, parts of north-eastern states and south peninsula likely to get some rainfall during the period.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 15 April)
(17 - 30 April, 2020)**

MME forecast Tmax anomaly (Deg C)

(Week1: 17Apr–23Apr)

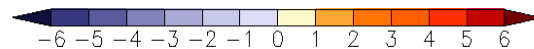
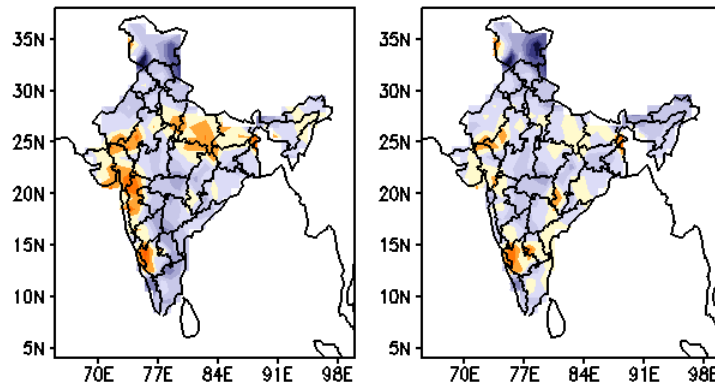
(Week2: 24Apr–30Apr)



MME forecast Tmin anomaly (Deg C)

(Week1: 17Apr–23Apr)

(Week2: 24Apr–30Apr)



Maximum Temperature (Tmax)

- **Week-1 (17.04.2020 to 23.04.2020) and Week-2 (24.04.2020 to 30.04.2020):** Tmax is mostly below normal till the end of April except some parts of eastern coastal regions of India and parts of extreme north India.

Minimum Temperature (Tmin)

- **Week-1 (17.04.2020 to 23.04.2020) and Week-2 (24.04.2020 to 30.04.2020):** Tmin anomaly is mostly negative over India except some parts of Indo-Gangetic Plains and some parts of western India during the period. However, over remaining parts, it is negative.

Strategic Agricultural Planning based on rainfall during next two weeks till 30 April 2020

Agromet Advisories

Kerala

Amount of rainfall received over Kerala is 82.0 mm (-3% deficit) during the period of 01 March – 16 April 2020. The extended range weather forecast for next two weeks (17 - 23 April and 24 - 30 April 2020) is normal for week-1 and above normal for week-2.

- Due to rainy weather condition, it is advised to bury fresh or dried coconut husk around the palm trees to conserve soil moisture.
- Under prevailing weather condition, there is a chance of mosaic virus attack in vegetables. To control, spray of 2% neem oil garlic emulsion once a week is advised.
- Under the current weather condition, there is a chance of Rhizome weevil attack in banana. As a precaution, apply Neem cake @ 1 kg/plant at the time of planting.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 21.7 mm (-46% deficit) during the period of 01 March – 16 April 2020. The extended range weather forecast for next two weeks (17 - 23 April and 24 - 30 April 2020) is below normal for week-1 and above normal for week-2.

- Prevailing weather condition is favorable for black headed caterpillar incidence in coconut. To control, it is advised to spray the under surface of the fronds with Dichlorovos 100 EC 0.02% or Malathion 50 EC 0.05% @ 1ml/litre.
- To protect banana from heavy wind, it is advised to mount the soil around the base of the tree and give support by using Casuarinas poles.
- To avoid heat stress to animals due to high temperature, it is advised to provide adequate drinking water and green fodder along with spray of water on gunny bags surrounding the cattle shed.

Maharashtra

Rainfall received over Madhya Maharashtra is 10.8 mm (67% large excess), over Marathwada is 16.6 mm (74% large excess), Vidharbha is 30.3 mm (120% large excess) and Konkan region 0.6 mm (-67% large deficit) during 01 March - 16 April 2020. The extended range weather forecast for next two weeks (17 - 23 April and 24 - 30 April 2020) over Konkan, and Madhya Maharashtra are above normal, over Marathwada is normal and over Vidharbha is below normal for week-1 and below normal over Marathwada, Konkan, Vidharbha and Madhya Maharashtra for week-2.

Marathwada

- Due to high temperature, it is advised to provide shade to newly planted or small plants of mango. Irrigate the mango orchard during early morning or late evening.
- For the management of sucking pests in summer groundnut, it is advised to spray 5 % NSKE or Imidaclopride 17.8 % @ 2.5 ml or Thiamethoxam 12.6 % + Lambda –cyhalothrin 9.5 % @ 3 ml/10 litre of water.

Konkan

- Due to cloudy weather condition, there is a chance of incidence of anthracnose disease in fruits of mango. It is advised to spray Carbendazim 12% + Mancozeb 63% @ 10 g/10 litre of water.
- Provide support to banana tree. Cover the bunches with gunny cloth or leaves to protect the fruits from sunburn and hot wind.

Vidharbha

- Due to hot weather, there is a chance of fruit drop in orange and in sweet lime. Spraying of NAA 1g or GA 1.5 g + Urea 1kg (1%) + Carbendazim 100g (0.1%) in 100 litre of water on pea sized fruits of mandarin orange (ambia bahar) and sweet lime is advised at an interval of 15 days.
- Under the prevailing hot weather condition, it is advised to irrigate summer crops like groundnut, sunflower, sesame, green gram and vegetables at 6 - 8 days interval in early morning or late afternoon.
- It is advised to take necessary precautions to reduce the incidence of fires at the farm due to prevailing very hot and dry weather conditions.

Madhya Maharashtra

- For the management of tikka disease in groundnut, spray of Mancozeb@ 2.5 g or Carbendazim 1g/litre of water is advised.
- It is advised to provide irrigation according to crop water requirement in summer groundnut and other summer sown crops.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 176.3 mm (20% excess) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Himachal Pradesh is above normal for week-1 and week-2.

- It is advised to apply mulch and well rotten FYM in vegetable crops.
- Under prevailing weather condition, it is advised to resume picking in tea at 6-7 days interval to maintain the quality and productivity.
- Farmers are advised to harvest the matured mustard crop when 75-80% pods turn parchment brown in color.

Hisar

Amount of rainfall received over Hisar is 69.9 mm (314% large excess) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Hisar is normal for week-1 and above normal week-2.

- Due to variable weather condition, farmers are advised to harvest and thresh mustard crop.
- Farmers may prepare the field and procure the seed for sowing of cotton crop.
- Provide 50 g iodized salt and 50 - 100 g mineral mixture daily to animals along with feed/fodder to

keep them healthy.

Karnataka

Rainfall received during 01 March – 16 April 2020 over South Interior Karnataka is 37.4 mm (27% excess) and North Interior Karnataka is 25.3 mm (40% excess). The extended range weather forecast for next two weeks (17 - 23 April and 24 - 30 April 2020) over South Interior Karnataka is below normal and above normal over North Interior Karnataka for week-1 and above normal over South Interior Karnataka and below normal over North Interior Karnataka for week-2.

North Interior Karnataka

- It is advised to plough soil and incorporate the crop residue to facilitate *in situ* conservation of water during the pre-monsoon rains and conserve the soil.
- Because of increase in temperature, it is advised to apply 4-6-inch-thick hay thatch as a roofing material and spray water on the floor periodically during peak hot hours to lower the temperature and heat load on animals.

South Interior Karnataka

- Farmers are advised for summer ploughing for solarization which helps in killing seeds of the weeds.
- Intercultural operation and mulching are advised in the standing crops as a contingency measure.

Assam

Amount of rainfall received over Assam is 63.8 mm (-60% large deficit) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Assam is above normal for week-1 and below normal for week-2.

- Due to rainy and high wind conditions, farmers are advised to go for renovation of drainage channel in pulse crop fields to avoid water stagnation.
- Avoid spraying of chemicals during the cloudy days.
- Due to rainy and high wind conditions, farmers are advised to postpone the chemical application in maize and establish wind breaks in the periphery of open crop maize fields.

Uttar Pradesh

Rainfall received during 01 March – 16 April 2020 over East Uttar Pradesh is 38.3 mm (336% large excess) and West Uttar Pradesh is 48.1 mm (305% large excess). The extended range weather forecast for next two weeks (17 - 23 April and 24 - 30 April 2020) over East Uttar Pradesh is above normal and West Uttar Pradesh is normal for week-1 and above normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

- Under prevailing weather condition, sowing of maize crop is advised with recommended composite seed and varieties viz. Novjoti , Pusa-2, Sweta and Azad uttam and hybrid varieties viz. hybrid Dakan-107, Malveya hybrid-2, JH-3459, Prakash, PSM-5, Pro-303, KH-510, MMH-113, Azad hybrid-1, Azad hybrid-2 , DKC-9108, DKC-7074.

- Intercultural operation is advised to check the evapotranspiration losses.
- It is advised to follow a regular vaccination programme in cattle, buffalo, goat, sheep and poultry to prevent the infectious diseases.

Punjab

Amount of rainfall received over Punjab is 88.2 mm (174% large excess) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Punjab is above normal for week-1 and for week-2.

- For the management of early shoot borer in sugarcane, it is advised to apply 10 kg granules of Regent/ Mortel/ Rippen 0.3 G before the sets are covered with soil or use Tricho-cards having 20,000 eggs of *Corcyra cephalonica* parasitized (seven days old) by *Trichogramma chilonis* per acre at 10 days interval.
- For the management of fruit borer attack in tomato crop, it is advised to spray 30 ml of Fame 480 SL or 60 ml Coragen 18.5 or 200 ml or Indoxacarb 14.5 SC in 100 litre of water per acre.

Rajasthan

Amount of rainfall received over Rajasthan is 38.3 mm (336% large excess) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Rajasthan is below normal for week-1 and above normal for week-2.

- Farmers are advised to harvest the wheat crop and keep it at open fields for sun drying.
- For the control of white fly in summer moong, it is advised to spray Dimethoate.
- Because of hot weather condition, it is advised to irrigate fruiting mango plants with an interval of 7-10 days.

Andhra Pradesh

Amount of rainfall received over Andhra Pradesh is 14.9 mm (-10% deficit) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Andhra Pradesh is below normal for week-1 and above normal for week-2.

- It is advised to provide mechanical support in banana and papaya plants to prevent lodging. Harvest the matured and undamaged banana bunches and papaya fruits and spray Copper oxychloride @ 3 g per litre of water for control of fungal diseases.
- Under the rainy and thunderstorm conditions, farmers are advised to go for summer ploughing, to control of sedges and deep-rooted weeds, and expose the pupae of insects to high temperatures, besides improving the soil moisture retention.

Jammu

Amount of rainfall received over Jammu is 237.9 mm (13% excess) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April

2020) on rainfall over Jammu is above normal for week-1 and below normal for week-2.

- Farmers are advised to harvest the early and timely sown wheat crop.
- Under prevailing weather condition, sowing of black gram var. Pant U-19, Uttara and green gram var. PDM-54, ML-131, ML 818, PS-16, PS-7 is advised.
- It is advised to monitor the tomato crop for leaf curl. Spray of Imidacloprid @ 0.5ml/litre of water during clear weather is advised and remove virus infected plants.

Bihar

Amount of rainfall received over Bihar is 55.3 mm (349% large excess) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Monitoring is advised for infestation of leaf hopper in okra. Spraying of Imidacloprid @ 0.5ml/litre of water is recommended for control of leaf hopper.
- Intercultural operation is may be done in summer vegetables like lady finger, pumpkin, cucumber, sponge gourd, bottle gourd.

Gujarat

Amount of rainfall received over Gujarat is 3.5 mm (149% large excess) during 01 March – 16 April 2020. The extended range weather forecast provided for next two weeks (17 - 23 April and 24 - 30 April 2020) on rainfall over Gujarat is below normal for week-1 and week-2.

- For control of fruit and shoot borer in brinjal, it is advised to apply Chlorpyrifos 20 EC @ 20 ml or Emamectin Benzoate 5 SP @ 3 g or Chlorantraniliprole 18.5 SC @ 3 ml or Cypermethrin 10 EC @ 10 ml or Lambda-cyhalothrin 5 EC @5 ml/10 litre water. Spray Diafenthiuron 50 WP @ 10 g/10 litre water.
- It is advised to keep animal shed hygienic and cleaned to avoid flies and mosquitoes. Regular check-up for infectious disease like FMD, tuberculosis and Brucellosis should be done.

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