



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

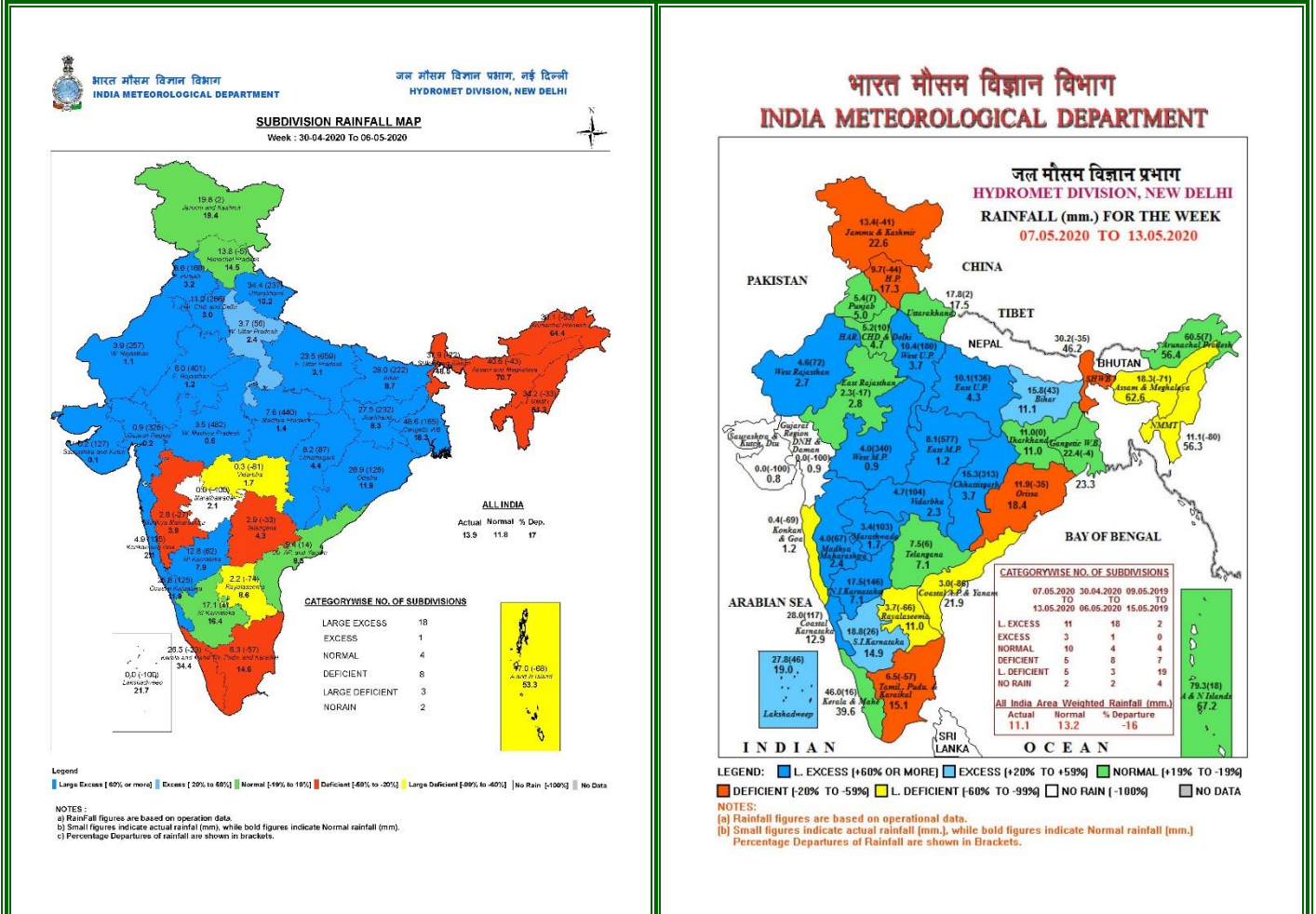
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&
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall (30th April to 13th May, 2020)



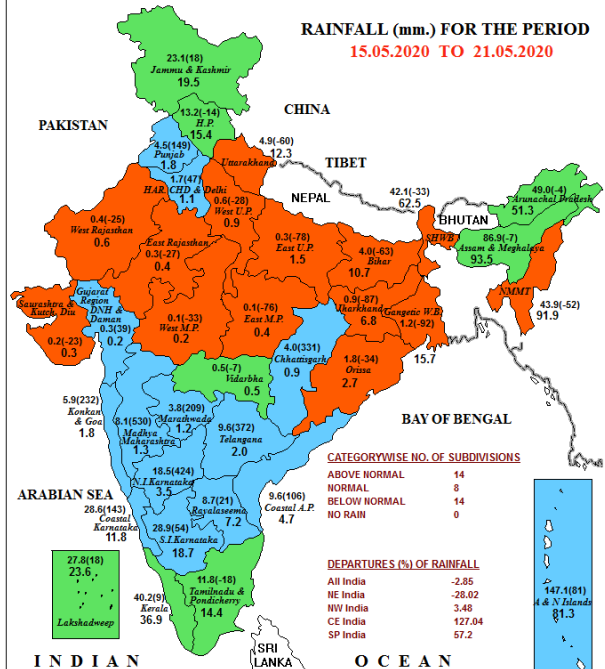
- Normal or above normal rainfall occurred in both the weeks in Uttarakhand, Punjab, Haryana Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Gangetic West Bengal, Madhya Pradesh, Chhattisgarh and Karnataka.
- Normal or above normal rainfall occurred in either of the weeks in Jammu & Kashmir, Himachal Pradesh, Arunachal Pradesh, Odisha, Coastal Andhra Pradesh & Yanam, Gujarat, Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Telangana, Kerala & Mahe, Lakshadweep and Andaman & Nicobar Islands.
- Below normal rainfall / no rain occurred over rest of the country.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 13 May) (15th to 28th May, 2020)

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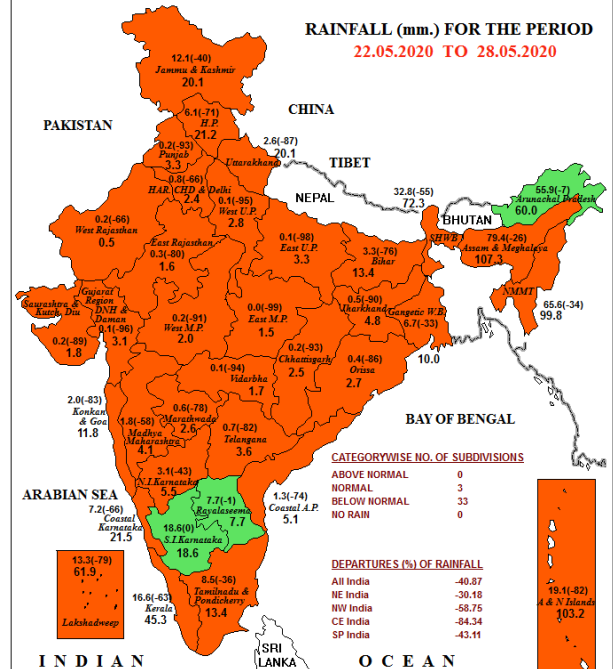
Rainfall Forecast Map - Normal RF Based Categories



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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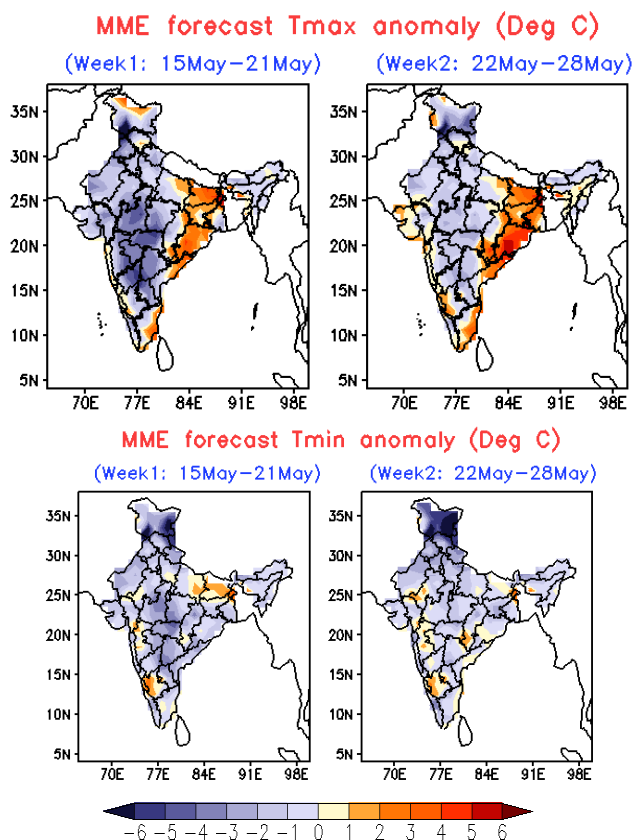
Rainfall Forecast Map - Normal RF Based Categories



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.

- **Week 1 (15.05.2020 to 21.05.2020):** The south peninsular, north-eastern parts of the country and parts of extreme north India will get rainfall during week 1. The Bay of Bengal will be active associated with the system.
- **Week 2 (22.05.2020 to 28.05.2020):** Rainfall over south Peninsular will decrease. After the weakening of the Bay of Bengal system, the Arabian Sea branch will need some time to establish.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 13 May)
(15th to 28th May, 2020)**



Maximum Temperature (Tmax)

- **Week 1 (15.05.2020 to 21.05.2020): Tmax (Maximum temperature):** Above normal Tmax over eastern coastal states including Jharkhand, Bihar, Gangetic West Bengal and parts of western coastal states likely in week 1. Over the central, Northwest and northern Indian region, Tmax will be below normal.
- **Week 2 (22.05.2020 to 28.05.2020):** The positive anomaly area of Tmax is likely to increase in week 2 over eastern coastal states of India. Also, over some parts of western coastal region, Tmax will be above normal in week 2, whereas over major part of India it is negative anomaly.

Minimum Temperature (Tmin)

- **Week 1 (15.05.2020 to 21.05.2020) and Week 2 (22.05.2020 to 28.05.2020):** Tmin is mostly normal to below normal over most of India except some isolated pockets of India.

Strategic Agricultural Planning based on rainfall during next two weeks till 28 May 2020

Agromet Advisories

Kerala

Amount of rainfall received over Kerala is 233.8 mm (9% excess) during the period of 01 March –14 May 2020. The extended range weather forecast for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) is normal for week-1 and below normal for week-2.

- Under prevailing weather condition, there is a chance of pseudo stem weevil attack in banana. As a precaution, apply 50 g neem cake powder in leaf axils.
- Farmers are advised to add pseudomonas culture in the soil at the time of planting of vegetables to reduce fungal diseases.
- Due to rainy weather condition, it is advised to bury fresh or dried coconut husk around the palm trees to conserve soil moisture.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 49.5 mm (-46% deficit) during the period of 01 March – 14 May 2020. The extended range weather forecast for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) is normal for week-1 and below normal for week-2.

- Farmers are advised to skip irrigation and to ensure proper drying of harvested produce prior to storage of harvested paddy and cotton.
- Present prevailing weather condition is favorable for Tristeza virus disease in citrus. It is advised to spray Methyl demeton 25 EC or Monocrotophos @ 1 ml/litre water to control the aphids which spread the disease and use pre-immunized acid lime seedlings for planting.
- Prevailing weather condition is favorable for smallpox and PPR diseases in goat. Farmers are advised to do proper vaccination to avoid animal mortality.

Maharashtra

Rainfall received over Madhya Maharashtra is 23.3 mm (40% excess), over Marathwada is 26.7 mm (71% large excess), Vidharbha is 40.0 mm (88% large excess) and Konkan region 7.7 mm (20% excess) during 01 March – 14 May 2020. The extended range weather forecast for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) over Vidharbha is normal and over Madhya Maharashtra, Marathwada and Konkan are above normal for week-1 and below normal over Marathwada, Madhya Maharashtra, Vidharbha and Konkan for week-2.

Marathwada

- For management of fruit borer in okra, it is advised to spray 5% NSKE or Chlorantraniliprole 18.5% SC @ 2.5 ml or Cypermethrin 10% EC @ 15 ml or Quinalphos 25% EC @ 20 ml/10 litre of water.
- It is also advised to provide shade and mulching in the newly planted or small plants of banana.

Irrigate the banana orchard during early morning, at evening or night.

Konkan

- Due to increase in temperature and decrease in humidity, it is advised to provide irrigation to coconut orchard at 5-6 days interval and use straw mulch to reduce evaporation losses.
- To reduce the heat stress in farm animals, it is advised to provide roughages by mixing with solution of 1% jaggery and 0.5% salt separately.

Vidharbha

- Because of high temperature, there is a chance of fruit drop in mandarin orange and sweet lime. To reduce fruit drop, spraying of NAA 1g (10 ppm) or GA 1.5 g (15 ppm) + Urea 1 kg (1%) + Carbendazim 100 g (0.1%) in 100 litre of water is advised.
- 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 the early morning or late afternoon.
- Deep summer ploughing of harvested fields is advised to expose the hibernating insects, larvae/pupa to sun and predator birds.

Madhya Maharashtra

- For the management of tikka disease in groundnut, spray Mancozeb 2.5 g or Carbendazim 1 g mixed in 1 litre of water.
- It is advised to keep animals in shade and cover cows and buffaloes with wet gunny bags to protect from high temperature and heat stroke.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 238.6 mm (14% excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Himachal Pradesh is normal for week-1 and below normal for week-2.

- Under prevailing weather condition, it is advised to resume picking in tea at 6-7 days interval to maintain the quality and productivity.
- Under prevailing weather condition, sowing of seeds of babul, subabul, khair, amla and prosopis in polythene bags for raising nursery is advised.
- It is advised to maintain room temperature of 18-22°C and relative humidity around 85% for successful cultivation of mushrooms.

Hisar

Amount of rainfall received over Hisar is 93.4 mm (232% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Hisar is above normal for week-1 and below normal for week-2.

- Under the prevailing weather condition, farmers are advised to do sowing of sorghum, maize and lobia as a fodder crop
- Due to increase in day temperature, farmers are advised to apply light irrigation in planted vegetable crops and fruits plants as per requirement and harvest the mature vegetables during morning and evening hours.

Karnataka

Rainfall received during 01 March – 14 May 2020 over South Interior Karnataka is 105.8 mm (22% excess) and North Interior Karnataka is 77.8 mm (68% large excess). The extended range weather forecast for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and normal over South Interior Karnataka and below normal over North Interior Karnataka for week-2.

North Interior Karnataka

- It is advised to plough fields 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.
- It is advised to complete the heaping of fodder and straw as early as possible and cover it properly.

South Interior Karnataka

- Farmers may do summer ploughing for solarization which destroy eggs and pupating stages of insects and weed seeds underneath the surface.
- Intercultural operation and mulching are advised in the standing crops as a contingency measure.

Uttar Pradesh

Rainfall received during 01 March – 14 May 2020 over East Uttar Pradesh is 87.9 mm (324% large excess) and West Uttar Pradesh is 75.3 mm (264% large excess). The extended range weather forecast for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and week-2.

- Due to rainy weather condition, it is advised to skip the irrigation in *Zaid* crops
- Intercultural operation is advised to check the evapotranspiration losses and proper utilization of nutrient to the crop.

- Under the prevailing weather condition, sowing of green manure crops is advised.

Punjab

Amount of rainfall received over Punjab is 115.3 mm (151% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Punjab is above normal for week-1 and below normal for week-2.

- For the management of early shoot borer in sugarcane, use Tricho-cards having 20,000 eggs of *Corcyra cephalonica* parasitized (seven days old) by *Trichogramma chilonis* per acre at 10 days interval.
- Under the prevailing weather condition, it is advised to sow Bt cotton varieties. Recommended Bt varieties, Bt hybrids and non Bt hybrids of cotton viz. PAU Bt 1, F 2228, F2383, LH 2108, LH 2076 and LHH 144.
- To protect the tomato crop from early blight disease, it is advised to spray the crop with Indofil M-45 @ 600 g/acre in 200 litre of water.

Rajasthan

Amount of rainfall received over Rajasthan is 35.9 mm (209% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Rajasthan is below normal for week-1 and week-2.

- Field preparation is advised for sowing of cotton. Recommended varieties are Ankur-3224 (BG II) and PCH-9605.
- It is advised to apply irrigation in fodder crops like maize, sorghum, bajra and cluster bean.
- It is advised not to provide the irrigation in pomegranate and guava at flowering stage to prevent flower drops.

Bihar

Amount of rainfall received over Bihar is 150.5 mm (234% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Bihar is below normal for week-1 and week-2.

- Under the prevailing weather condition, sowing of turmeric crop is advised. Recommended varieties are Rajendra Sonia and Rajendra Sonali for sowing in North Bihar.
- Land preparation is advised for sowing of *kharif* maize. Application of 100-150 quintal of FYM per hectare is advised during land preparation.

Gujarat

Amount of rainfall received over Gujarat is 4.2 mm (45% excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Gujarat is above normal for week-1 and below normal for week-2.

- Due to high temperature condition, it is advised to irrigate the vegetable crops regularly at evening

time.

- It is advised to monitor okra crop for infestation of mite. Spray of Ethion @ 1.5-2 ml/litre water is advised.

West Bengal

Amount of rainfall received over West Bengal is 206.6 mm (67% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over West Bengal is below normal for week-1 and week-2.

- Under the prevailing weather condition, there is a chance of red pumpkin beetle in pumpkin, ridge-gourd, pointed gourd and cucumber. To control the pest, it is advised to apply Dimecron or Rogor in 1ml/litre of water.

Odisha

Amount of rainfall received over Odisha is 208.1 mm (134% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Odisha is below normal for week-1 and week-2.

- Prevailing weather condition is optimum for planting of yam with recommended local varieties viz. Shreekirti, Shreerupa, Hatikhoj, Shreeshilpi, Small yam varieties viz. Shreelata, Shreekala and white yam varieties viz. Shreesubhra, Shreepriya, Shreedhanya.
- It is advised to provide shade and sprinkle water to the poultry house to protect the poultry from high temperature.

Jharkhand

Amount of rainfall received over Jharkhand is 184.0 mm (236% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Jharkhand is below normal for week-1 and week-2.

- Intercultural operation is advised in greengram to maintain soil moisture for a longer period.
- Under the prevailing weather condition, farmers are advised to go for planting of ginger crop with recommended varieties like Bardhwan, Suruchi, Nadiya, Suprabha.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 102.8 mm (227% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Chhattisgarh is above normal for week-1 and below normal for week-2.

- Deep ploughing of the field is advised to prevent crops from soil borne diseases, weeds and insect eggs in the soil.
- Due to increase in temperature, farmers are advised to cover animal and poultry sheds with gunny

bags to maintain the inner temperature.

Andhra Pradesh

Amount of rainfall received over Andhra Pradesh is 45.2 mm (-9% deficit) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Andhra Pradesh is above normal for week-1 and normal for week-2.

- Farmers are advised to do summer ploughing to control of sedges and deep-rooted weeds, expose the pupae of insects to high temperatures and improve soil moisture retention.
- Under prevailing high temperature, farmers of North and central Coastal Andhra Pradesh are advised to provide irrigation in sugarcane crop.

Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 74.5 mm (309% large excess) during 01 March – 14 May 2020. The extended range weather forecast provided for next two weeks (15 – 21 May 2020 and 22 – 28 May 2020) on rainfall over Madhya Pradesh is below normal for week-1 and week-2.

- Due to high humidity and cloud cover, insect-pest management practice is advised in greengram crop and rogue out mosaic plant from the field.
- Farmers are advised to place cooling system in the poultry and dairy houses to reduce high temperature stress during day hours.

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