



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

Validity for 04th to 17th May 2018

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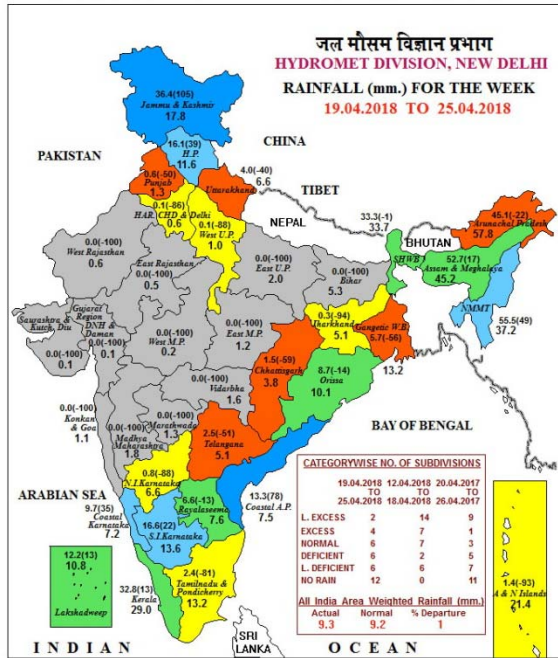
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&
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(19th April to 2 May 2018)

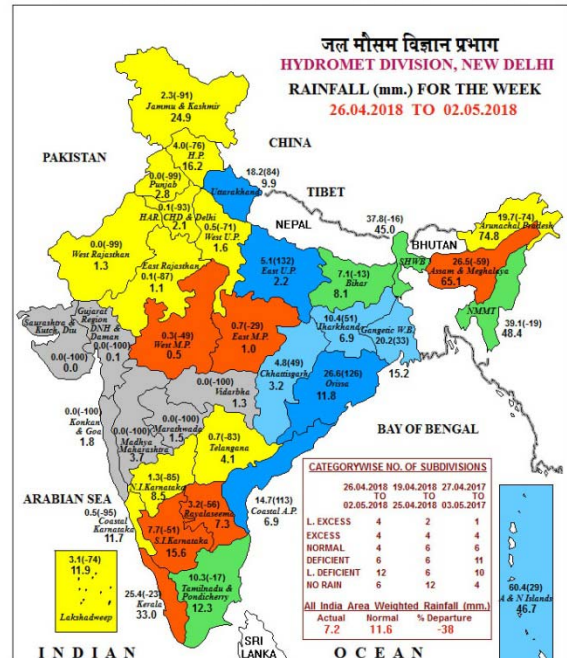
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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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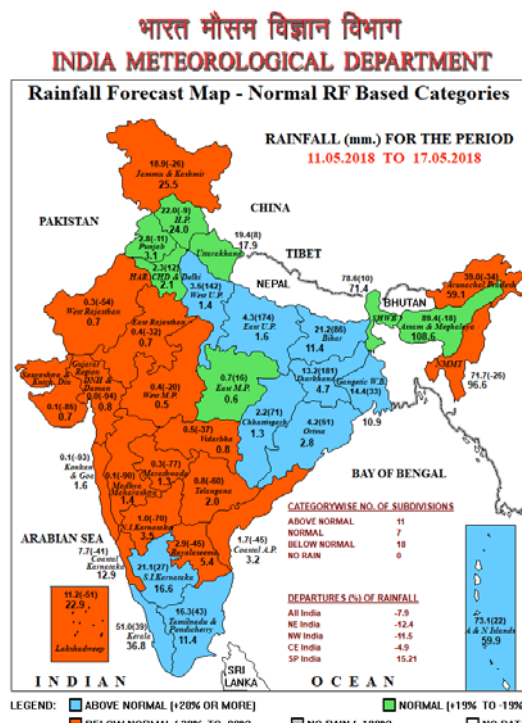
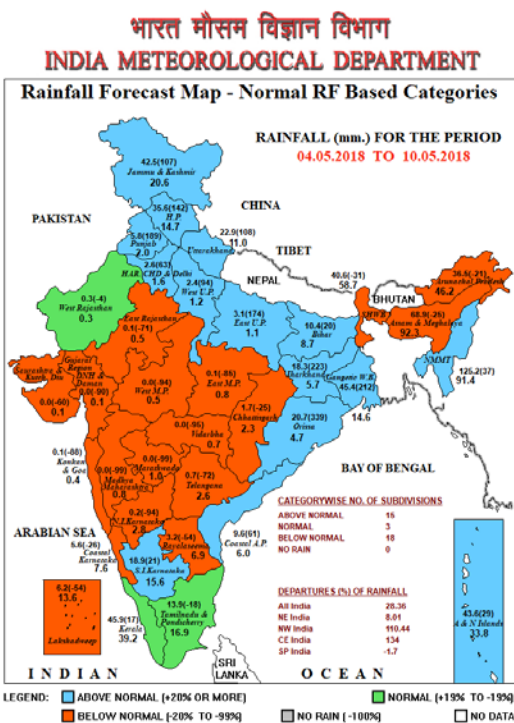
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[a] Rainfall figures are based on operational data.
[b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
Percentage Departures of Rainfall are shown in Brackets.

- Normal or above normal rainfall occurred during last two weeks in Sub-Himalayan West Bengal & Sikkim, Odisha, NMMT (Nagaland, Manipur, Mizoram and Tripura) and Coastal Andhra Pradesh.
- Normal or above normal rainfall occurred in either of the last two weeks in Jammu & Kashmir, Uttarakhand, Himachal Pradesh, East Uttar Pradesh, Bihar, Jharkhand, Assam & Meghalaya, Gangetic West Bengal, Chhattisgarh, Coastal Karnataka, South Interior Karnataka, Rayalaseema, Kerala, Tamil Nadu, Lakshadweep and Andaman & Nicobar Islands.
- Below normal rainfall occurred in both the weeks in Punjab, Haryana Chd & Delhi, West Uttar Pradesh, Arunachal Pradesh, Telangana and North Interior Karnataka.
- No rain occurred in Gujarat and Maharashtra.

Extended Range Forecast System

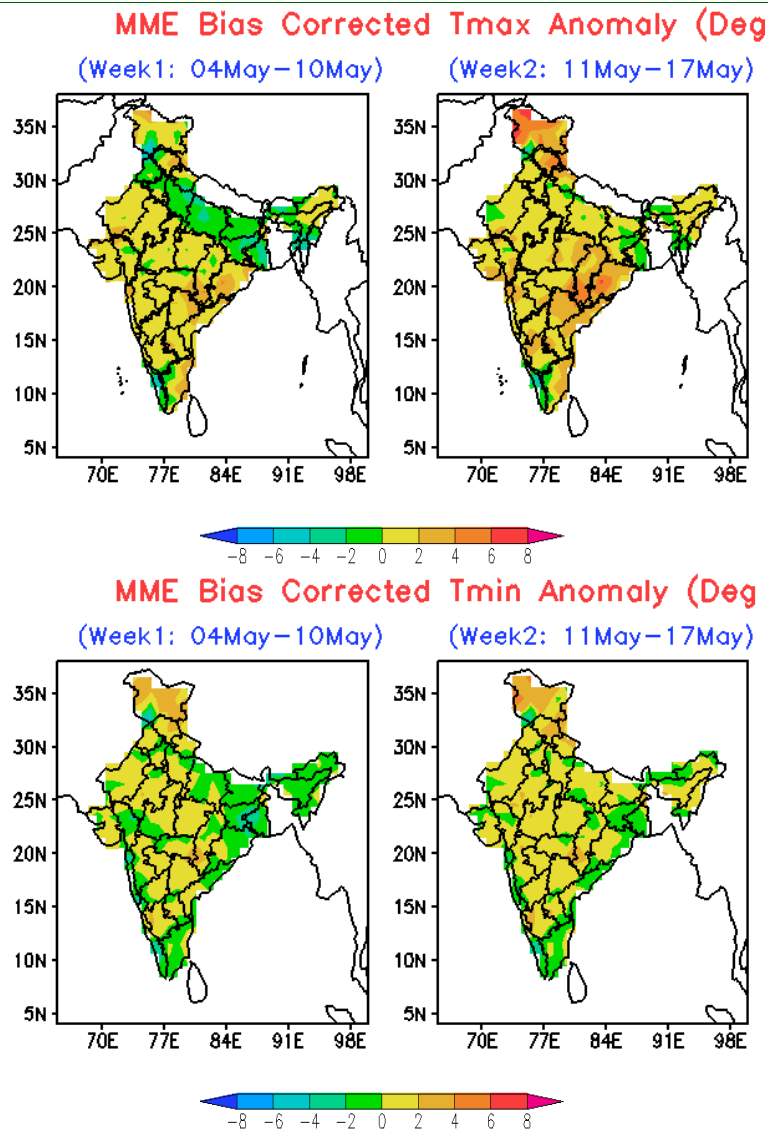
Rainfall forecast maps for the next 2 weeks (IC – 2 May) (4th May to 17th May 2018)



Extended Range Rainfall Forecast

- **Week 1 (04.05.2018 to 10.05.2018) and Week 2 (11.05.2018 to 17.05.2018):** Pre-monsoon rainfall to continue over Northeast India, extreme north India and also over the southern parts of India during week 1 and week 2. In addition, the Bay of Bengal branch is active with rainfall over Andaman region commencing itself from week 1 and further extending towards the central & western parts of Bay and adjoining Kerala region during week 2. This indicates there is a possibility of early onset of monsoon over the Andaman region and also over the southern tip of India.

Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast for next 2 weeks (IC – 2 May)
(4th May to 17th May 2018)



Tmax (Maximum Temperature)

- **Week 1 (04.05.2018 to 10.05.2018) and week 2 (11.05.2018 to 17.05.2018):** Above normal Tmax over most of India except over parts of Northeast states and adjoining Gangetic West Bengal and Jharkhand. In week 2, the warming is likely to increase further with maximum warming (4 to 6°C) over central and south Odisha, Chhattisgarh and adjoining Telangana region.

Tmin (Minimum Temperature)

- **Week 1 (04.05.2018 to 10.05.2018) and week 2 (11.05.2018 to 17.05.2018):** Slightly above Normal Tmin over Northwest and central parts of India.

Strategic Agricultural Planning based on rainfall during next two weeks till 26th April 2018

Agromet Advisories

Tamil Nadu

Rainfall Situation

Rainfall received during the period of 01 March to 02 May 2018 over Tamil Nadu is 58.5 mm, which is 10% deficit when compared to the normal. The extended range weather forecast provided for next two weeks [04 to 10 May (week-1) and 11 to 17 May (week-2)] is: normal for week-1 and above normal for week-2.

- Prevailing high wind speed may damage banana crop. Farmers are advised to do propping. As normal and above normal rainfall is forecasted during next two weeks respectively, farmers are advised to cautiously withhold irrigation.
- Vaccine for foot and mouth disease to the cattle is advised as prophylactic measure by utilizing the facility from nearby veterinary hospital.
- To avoid heat stress due to high temperature on animals, provide adequate drinking water and green fodder and spray water on gunny bags surrounding the cattle shed.

Kerala

Rainfall Situation

Rainfall received during the period of 01 March to 02 May 2018 over Kerala is 179.2 mm, which is 19% excess than normal. The extended range weather forecast provided for next two weeks is: normal for week-1 and above normal for week-2.

- Due to the increase in maximum temperature, there is a chance for infestation of spodoptera in banana. Destroy the affected leaves. Spray Flubendiamide (Fame) @ 2 ml/10 L of water.
- As normal and above normal rainfall is forecasted during next two weeks respectively, farmers are advised cautiously withhold irrigation

Karnataka

Rainfall Situation

Rainfall has received during the period of 01 March to 02 May 2018 over different meteorological subdivisions of Karnataka viz, North Interior Karnataka: 40.7 mm (22 % excess), South Interior Karnataka: 74.2 mm (28 % excess) and Coastal Karnataka: 57.3 mm (58 % excess). The extended range weather forecast provided from 04 to 10 May and 11 to 17 May over North Interior & Coastal Karnataka is below normal during both the weeks, South Interior Karnataka is above normal in both the weeks.

North Interior Karnataka

- Land should be ploughed and the crop residue should be incorporated in the soil. This facilitates *in situ* conservation of water during the pre-monsoon rains and also helps to conserve the soil.
- Proper ventilation should be maintained for free circulation of air in the cattle sheds.
- Animals may preferably be grazed during early morning and late evening to avoid exposure to extreme hot conditions during day time, they must be tied and fed in shaded place or under the tree. This will also help in reducing the water requirement.

- Clean drinking water should be provided to animals and water troughs should be regularly cleaned.

Maharashtra

Rainfall Situation

Rainfall received during 01 March to 02 May 2018 over different meteorological sub divisions of the state viz., Konkan: 3.2 mm (18% deficit), Madhya Maharashtra: 5.8 mm (55% Deficit), Vidarbha: 11.3 mm (44% Deficit) and Marathwada: 10.6 mm (18 % Deficit). The extended range weather forecast provided for next two weeks is: below normal for Vidarbha, Konkan and Marathwada during both the weeks.

Marathwada

- Make use of sprinkler irrigation to irrigate late sown summer groundnut.
- Evaporation rate is more due to higher temperature, which affects growth and development of sugarcane. Hence, protective irrigation should be supplied by drip irrigation method only during early morning or evening.
- Due to increase in temperature, farmers are advised for irrigation management and mulching in Citrus and Pomegranate orchard.
- If the windbreak are not planted to protect the banana from heat wave, then farmers can prepare artificial windbreaks with the help of stover of sorghum, sugarcane trash etc. and apply on the border of banana field. Use drip irrigation system for high water use efficiency.
- To reduce the stress due to hot weather in animals, provide electrolyte powder mixed in drinking water or fodder. Provide clean and cold drinking water to the animals two to three times during night.

Konkan

- Due to increase in temperature and evaporation, farmers are advised to irrigate the groundnut at an interval of 6-8 days.
- Harvest the mature mango fruits before 10 am in the morning and after 4 pm in the evening with the help of Nutan Mango harvester at 80 to 85% maturity. Keep the harvested fruits in shade to prevent spongy tissue formation.
- As there is increase in average temperature, irrigation should be given to coconut orchards at 5-6 days interval and for arecanut orchards at 4-5 days interval.
- As the day temperature is increasing, protect poultry birds from heat stress.

Vidarbha

- Frequent light irrigation coupled with basin mulching (2 to 3 inch layer of organic mulch over the root zone and a few inches away from the trunk) is advisable in orange and mango orchards to reduce heat impact.
- To avoid adverse effect under the prevailing very hot and high evaporative weather, summer crops (groundnut, sunflower, maize, green gram) farmers are advised to provide irrigation at 6 to 7 days interval. Irrigate in the early morning or late afternoon.
- Provide proper ventilation and heat protection in the animal/poultry sheds. Applying gunny bags/grass on roof of shed with sprinkling of water is advised to reduce heat impact.

Chhattisgarh

Rainfall situation

The state has received 29.9 mm of rainfall during 01 March to 02 May 2018, which is 6% excess. The extended range weather forecast provided for next two weeks is: below normal for week-1 and above normal for week-2.

- Water requirement of Citrus is high in these days. Hence, orchards should be irrigated during week-1.
- Spray of Imidacloprid @ 8 ml is important to control red pumpkin beetle during week-1.

Odisha

Rainfall situation

The as a whole has received 90.4 mm of rainfall received during 01 March to 02 May 2018, which is 34% excess. The extended range weather forecast provided for next two weeks is: above normal for both the weeks.

- Increased temperature may favour the egg laying of stem borer in rice in the main field. To attract the butterflies, place 4 Pheromone Traps/acre, collect the adults and destroy them by burning them under soil or by burying.
- *Rabi* forages are to be irrigated after each cut and at an interval of 20-25 days in case of multi-cut Oats and 12-15 days in Berseem and Lucerne.
- Fish farmers, in case have stocked fingerlings in the pond for fish culture, should monitor the quality & level of water and temperature. In case of water temperature goes above 30⁰ C or water level goes below one meter depth, farmers are advised to go for early harvest and discontinue fish seed production and culture activity.

Bihar

Rainfall situation

The state as a whole has received 16.7 mm of rainfall received during 01 March to 02 May 2018, which is 43% deficit. The extended range weather forecast provided for next two weeks is: above normal for week-1 and week-2.

- Land preparation is advised for turmeric and ginger. Application of 25-30 tones of cow dung per hectare is advised during land preparation. Farmers are suggested to start the sowing of turmeric and ginger from 15th May.
- As normal and above normal rainfall is forecasted during next two weeks respectively, farmers are advised to withhold irrigation
- Intercultural operation is advised in summer vegetable crops such as lady's finger, pumpkin, cucumber, sponge gourd etc.
- Monitoring is advised in cucurbitaceous crops for infestation of red pumpkin beetle. If population of red pumpkin beetle exceeds economic threshold level, spraying of Dichlorvos 76EC @1 ml/litre of water is advised under clear sky condition.

West Bengal

Rainfall Situation

Rainfall received over SHWB & Sikkim is 198.0 mm rainfall (1% deficit) and Gangetic West Bengal is 86.4mm (15% excess) during 01 March to 02 May 2018. The extended range weather forecast provided is: above normal for week-1 and week-2.

- *Boro* rice: Early sown crop should be harvested, if more than 80% grains ripened. After harvesting, dry the crop properly. As above normal rainfall is forecasted, precaution must be taken for drying.
- Jute: At 15 to 20 DAS, carry out intercultural operation. As above normal rainfall is forecasted, withhold fertilizer application.

Assam

Rainfall Situation

Rainfall received over Assam is 211.5 mm rainfall (25% deficit) during 01 March to 02 May 2018. The extended range weather forecast is: below normal for week-1 and normal for week-2.

- As sufficient rainfall was received during the last week, summer ploughing in rice fields is advocated. This will kill the eggs and larvae of insects and also will help in moisture conservation in soil. Continue irrigation for this week as below normal rainfall is forecasted.
- Incidence and spread of blight may be observed in foliage of green gram and black gram. Apply Carbendazim 0.05% @ 300-500 g in 600-700 lit of water at an interval of 12-15 days during week-1.

Rajasthan

Rainfall Situation

West Rajasthan has received 1.1 mm and East Rajasthan has received 4.7 mm of rainfall during the period of 01 March to 02 May 2018, which is 87% and 33% deficit, respectively. The extended range weather forecast provided for next two weeks is: normal and below normal for West and East Rajasthan respectively during week-1; below normal for West and East Rajasthan respectively during week-2.

- Before storing, grains should be properly cleaned and it should be dried to the recommended level of moisture content. Godown should be properly cleaned and it is advised to spray 0.5 % malathion solution and keep the chamber closed for a week.
- Deep ploughing of fields after harvesting of rabi crops should be done as high temperature is prevailing, which is suitable for killing insect's eggs and pupae and weed seeds.
- Farmers are advised to procure good quality cotton seeds from certified source for sowing in coming week.

Punjab

Rainfall Situation

Punjab has received 18.0 mm of rainfall during 01 March to 02 May 2018, which is 54% deficit. The extended range weather forecast provided for next two weeks is: above normal for week-1 and normal for week-2.

- Farmers are advised to harvest and thresh the ripened crop as soon as possible
- It is the right time of sowing of recommended varieties of cotton i.e. American cotton PAU Bt 1, Non

Bt cotton F 2228, F2383, LH 2108, LH 2076 and LHH 144.

- To protect the tomato crop from early blight, spray Indofil M-45 @ 600 g/acre in 200 litres of water, after the forecasted spell of rainfall.
- To control weeds in summer green gram, give first hoeing 4 weeks after sowing of the crop and second hoeing, if needed, about two weeks thereafter.

Jammu

Rainfall Situation

Rainfall received during 01 March to 02 May 2018 over Jammu is 180.8 mm, which is 29% deficit. The extended range weather forecast provided for next two weeks over Jammu is above normal for week-1 and below normal for week-2.

- Sowing of summer pulses is recommended in those areas where harvesting and threshing of *rabi* crops are completed.
- Apply Carbaryl @ 2g/litre or Cypermethrin @ 1ml/litre of water against pumpkin beetle during week-2.

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