



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 (29th March to 11th April 2018)





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

Extended Range Forecast System

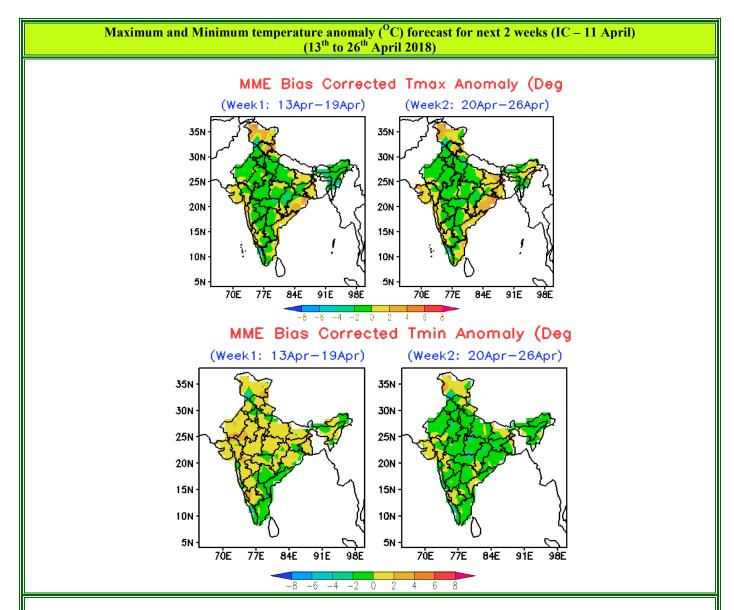
Rainfall forecast maps for the next 2 weeks (IC – 11 April) (14th to 27th April 2018)





Extended Range Rainfall Forecast

- Week 1 (13.04.2018 to 19.04.2018): The rainfall likely over North-eastern states and extreme north India (Jammu & Kashmir, Himachal Pradesh and Uttarakhand), Nepal and Bhutan to Northeast India. Kerala and adjoining region is also likely to get rainfall during the week.
- Week 2 (20.04.2018 to 26.04.2018): The rainfall likely over North-eastern states, Kerala coast in south and neighbourhood during the period. Also isolated region will likely to get rainfall over extreme north India.



Tmax (Maximum Temperature)

• Week 1 (13.04.2018 to 19.04.2018) and Week 2 (20.04.2018 to 26.04.2018): Above normal Tmax likely to continue during the period over western coastal belt, eastern coastal belt and extreme north India, whereas, the remaining parts will have below normal Tmax.

Tmin (Minimum Temperature)

- Week 1 (13.04.2018 to 19.04.2018): Except some parts of southeast India Tmin will be mostly above normal.
- Week 2 (20.04.2018 to 26.04.2018): Almost below normal Tmin likely over 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 11 April 2018 over Tamil Nadu is 32.5 mm, which is 11% excess compared to the normal. The extended range weather forecast provided for next two weeks [13 to 19 April (week-1) and 20 to 26 April (week-2)] are above normal for week-1 and normal for week-2.

- Anticipated weather is light to moderate rainfall, moderate cloud cover and moderate to high humidity. Summer ploughing is advised to improve the infiltration rate and ground water recharge.
- Prevailing weather condition is favorable for stem weevil incidence in banana. Spraying of Monocrotophos 36 WSC @1 ml/litre of water is recommended, after the forecasted spell of rainfall.
- The forecasted weather condition is favorable for ear head bug incidence in rice. Farmers are advised to spray Neem Seed Kernel Extract 5% @ 25 kg/ha, after the forecasted spell of rainfall.

Kerala

Rainfall Situation

Rainfall received during the period of 01 March to 11 April 2018 over Kerala is 69.6 mm, which is 11% excess. The extended range weather forecast provided for next two weeks are above normal for week-1 and normal for week-2

- Weather is conducive for stem borer in paddy. Farmers are advised to use 2 CC trichocards as 10 pieces in different corners of field under leaf. In severe condition apply Flubendamide in 2 ml/10 litre.
- There is a chance of quick wilt disease due to high relative humidity in pepper. Farmers are advised to apply Trichoderma or pseudomonas culture in soil or 1% Bordeaux mixture can be sprayed on the leaves and small branches, after the forecasted spell of rainfall.

Karnataka

Rainfall Situation

Rainfall received during 01 March to 11 April 2018 over different meteorological sub-divisions of Karnataka is: North Interior Karnataka is 19.5 (64 % excess), South Interior Karnataka is 41.1 mm (125 % excess) and Coastal Karnataka is 32.2 (190 % excess). The extended range weather forecast provided for 13 to 19 April and 20 to 26 April are over North Interior Karnataka is normal in both the weeks, South Interior Karnataka is above normal in both the weeks and over Coastal Karnataka is above normal for week-1 and below normal for week -2.

South Interior Karnataka

- Deep ploughing/summer ploughing is recommended.
- Ensure proper drainage as above normal rainfall is forecasted for next two weeks.
- For soil moisture conservation in mango orchard, crop residue mulching is recommended
- To control the malformation in mango, thorough pruning of affected flowers parts between trees to reduce the spread of pests and disease and spray Carbendazim @ 1 g/litre, after the forecasted spell of

rainfall. Spray Lamda Cyhalothrin 5EC @ 0.5 ml/ litre of water or sulphur dust (SULTAF) 80 W @3g/litre of water against the Powdery mildew diseases, after the forecasted spell of rainfall.

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.
- Proper ventilation should be maintained in cattle sheds.
- Animals may preferably be grazed during early morning and late evening hours to avoid exposure to extreme hot conditions. During hot hours, 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 11 April 2018 over different meteorological sub divisions of the state is: Konkan: 1.2 mm (150% excess), Madhya Maharashtra: 2.3 mm (56% Deficit), Vidarbha: 5.2 mm (66% Deficit) and Marathwada: 4.5 mm (43 % Deficit). The extended range weather forecast provided for next two weeks is: below normal for all the subdivisions of the state during week-1; Vidarbha and Madhya Maharashtra: above normal, Marathwada and Konkan: below normal during week-2.

Marathwada

- Farmers are advised to irrigate summer pearl millet, sugarcane, sunflower, groundnut, maize and vegetables as below normal rainfall is forecasted for next two weeks.
- To reduce the effect of high temperature, the outer portion of poultry shed should be painted with white colour.

Konkan

- As there is increase in daily mean temperature, irrigation should be given to coconut and arecanut plantations during week-2.
- Farmers are advised to protect the animals from afternoon heat. Provide good aeration in animal shed.

Chhattisgarh

Rainfall situation

11.4 mm of rainfall was received over Chhattisgarh during 01 March to 11 April 2018, which is 38% deficit. The extended range weather forecast provided for next two weeks is: below normal for week-1 and above normal for week-2.

- Due to increase in temperature and thereby increase in evaporation, the water requirement of summer crops will also increase. Hence, it is advised to irrigate the crops/ vegetables frequently as per requirement, wherever possible.
- The farmers who have drip irrigation system for vegetables and plantation crops should regulate the water discharge rate to maintain proper soil moisture around root zone during week-1.
- Weather conditions are suitable for proper germination of summer green gram; hence it is advised to

prepare the fields after harvesting of wheat/gram and complete the sowing of green gram at the earliest.

Odisha

Rainfall situation

Odisha has received 39.5 mm of rainfall during 01 March to 11 April 2018, which is 4% excess. The extended range weather forecast provided for next two weeks is below normal for both the weeks.

- Increased temperature may favour the egg laying of stem borer in rice in the main field. Farmers are advised to place 4 pheromone traps/acre, collect the adults and destroy them.
- High diurnal temperature range may favour the infestation of blast in main field. Farmers are recommended to spray tricyclazole @ 1 g/litre of water.
- Present weather is conducive for the infestation of alternaria blight in tomato. Farmers are advised to spray 3 g Dithane-M-45 (Mancozeb) in 1 litre water.

Jharkhand

Rainfall situation

The state as a whole has received 17.7 mm of rainfall received during 01 March to 11 April 2018, which is 20% deficit. The extended range weather forecast provided for next two weeks are below normal for both the weeks.

- Farmers may start sowing of summer green gram to utilize available soil moisture. Select improved variety SML- 668 at a seed rate of 12 kg per acre. Before sowing, seed must be treated with Rhizobium culture. Inter-cultural operation may be done to conserve moisture for a longer period in crop.
- Farmers having assured irrigation may proceed for sowing/transplanting of summer vegetables like cauliflower, cabbage, lady's finger, brinjal, chilly etc. At present there is a chance of attack of leaf spot disease in cabbage and cauliflower. To control the disease, spray fungicide Blitox-50 @ 3 g per litre of water. Spray bio-insecticide like Halt, Delfin or Biolep @ 1.5 g/litre of water in brinjal and bhindi against fruit borer and in Cauliflower and Cabbage against white fly insect.
- The prevailing weather condition is conducive for TPR disease in which animals will suffer with high fever, accompanied with secretion of water droplets from their eyes and nose. To control the disease animals should be vaccinated with TPR vaccine.

West Bengal

Rainfall Situation

Rainfall received over SHWB & Sikkim is 91.9 mm rainfall (7% deficit) and Gangetic West Bengal is 40.8mm (6% excess) during 01 March to 11 April 2018. The extended range weather forecast provided is: below normal for both the sub divisions of the state during both the weeks.

- In the prevailing weather condition, there is a possibility of spreading of sheath blight. To control it, apply hexaconazole 5 EC @ 2.0 ml or thifluzamide 24 SC @ 0.75 ml or propiconazole 25 EC @ 1 ml /litre of water. Start weeding operation in *boro* rice as soon as possible. Complete top dressing of nitrogenous fertilizer during flowering stage of boro rice.
- As there is forecast of high temperature and humidity, there is a possibility of attack of the fungal diseases like fruit rot, stem rot or powdery mildew. To prevent it apply blitox (4 gram) or carbendazim

- (1 g) for rot and for powdery mildew apply hexaconazole or dinocap or propiconazole @ 1 ml per litre of water.
- In the last week, light rainfall occurred throughout Nadia, Burdwan, North 24 Pargana, Howrah and Hooghly districts. Farmers are advised for the land preparation for planting of jute. At the time of land preparation, apply 1.5 to 2 carts of compost manure per *bigha* of land. Collect improved varieties of seeds like Chaitali, Basudev, Naveen, Sonali, Sobuj-sona etc. Before last ploughing, apply 20 to 25 Kg Super-Phosphate, 5.5 to 6.0 Kg MOP and mix the fertilizer thoroughly.

Rajasthan

Rainfall Situation

West Rajasthan has received 0.6 mm and East Rajasthan has received 1.6mm of rainfall during the period of 01 March to 11 April 2018, which is deficit of 88% and 63%, respectively. The extended range weather forecast provided for next two weeks is: above normal and normal for West and East Rajasthan, respectively during week-1 and below normal and normal for West and East Rajasthan, respectively during week-2.

- Sowing of forage maize (var. African tall and Paratp Makka-6) and green gram was advised to the farmers during week-1. Recommended Green gram varieties are: K-851, Pusa Baisakhi, RMG-62 and SML-668. Seed treatment with crop specific Rhizobium culture as well as phosphorus solubilizing bacteria should be done before sowing of green gram.
- Sowing of green manure crop is advised where harvesting of *rabi* crop is over. For green manuring cluster bean, daincha, senai, lobia etc may be sown.
- Constant monitoring of insect pest in vegetables is advised.
- Deep ploughing of fields after harvesting of *rabi* crops is advised.

Punjab

Rainfall Situation

Punjab has received 16.4mm of rainfall during 01 March to 11 April 2018, which is 44% deficit. The extended range weather forecast provided for next two weeks (13 to 19 April and 20 to 26 April) are above normal for week-1 and normal for week-2.

- Forecasted weather is conducive for aphid incidence in wheat and mustard. Farmers are advised to monitor wheat and mustard fields. It the population reaches ETL, spray thiamethoxam 25 WG @ 20 g/acre in wheat and 40 g/acre in mustard using 80-100 litres of water, after the forecasted spell of rainfall.
- Weather is congenial for incidence of downy mildew in muskmelon. Farmers are advised for 3-4 spray of Indofil M-45/ Kavach and 2 sprays of Ridomil MZ @ 500 g or Aliette @ 600 g per acre in 200 litres of water at 10 days interval, after the forecasted spell of rainfall.
- As feed intake is reduced due to effect of high temperature, protein content in the concentrate mixture need to be increased. It can be done by increasing oilseed cakes by 5-7 per cent.

Himachal Pradesh Rainfall Situation

Rainfall received during 01 March to 11 April 2018 over Himachal Pradesh is 63.0 mm, which is 55% deficit. The extended range weather forecast provided for next two weeks over Himachal Pradesh is: above normal for week-1 and normal for week-2.

• Since rain in low and mid hills and snow in high hills is predicted for the state during week 1, farmers are suggested to withhold irrigation application in field crops.

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