



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

Validity for 16<sup>th</sup> March to 29<sup>nd</sup> March 2018

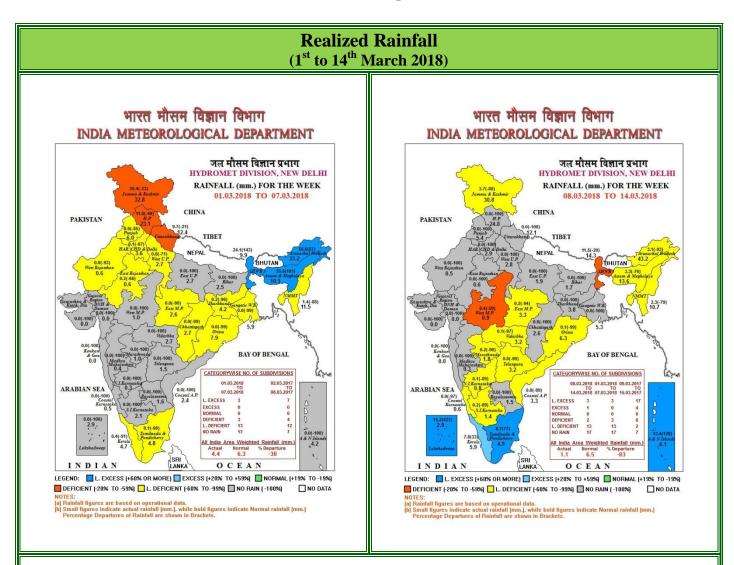
Date of issue: 16 March 2018

Issued by

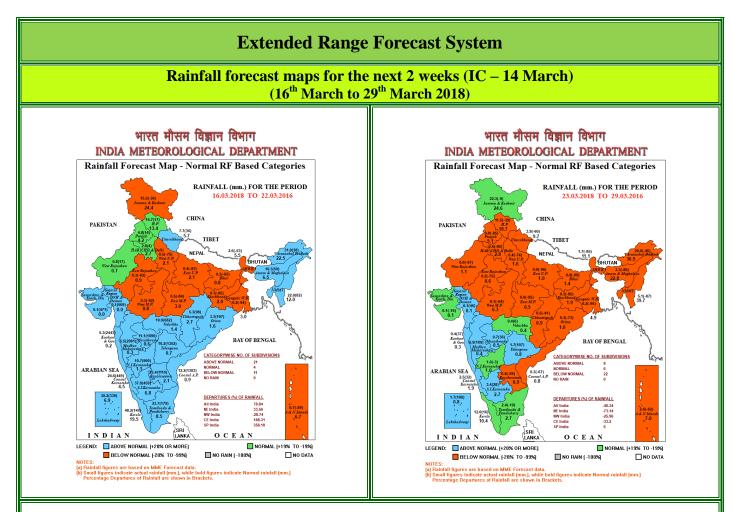
Indian Council of Agricultural Research (ICAR) All India Coordinated Research Project on Agricultural Meteorology (AICRPAM), Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.

> Earth System Science Organization India Meteorological Department

### Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

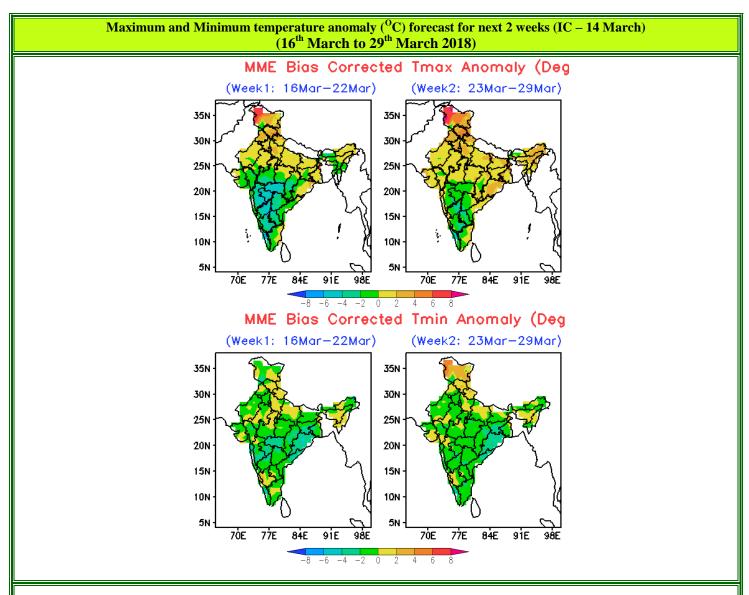


- Normal or above normal rainfall occurred in either of the last two weeks in Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Kerala, Tamil Nadu, Andaman & Nicobar Islands and Lakshadweep.
- Below normal rainfall/no rain occurred over rest of the country.



#### **Extended Range Rainfall Forecast**

- Week 1 (16.03.2018 to 22.03.2018): Rainfall over western parts of southern peninsula are likely to get more rainfall compared to eastern parts of south peninsula. Moreover, extreme northern India (Jammu & Kashmir and N/H) is expected to get rainfall associated with Western Disturbance (WD) along with rainfall activity over Northeastern states.
- Week 2 (23.03.2018 to 29.03.2018): Overall rainfall will decrease during the week compared to week 1 except extreme north India, north east and extreme south peninsula, which will get some amount of rainfall.



#### **Tmax (Maximum Temperature)**

- Week 1 (16.03.2018 to 22.03.2018): As indicated earlier, above normal Tmax is likely to continue over northern part of India and adjoining central India and parts of eastern coastal region. However, parts of central India and adjoining peninsula will have below normal Tmax during the week.
- Week 2 (23.03.2018 to 29.03.2018): Area of above normal Tmax is likely to increase with except the western parts of south peninsula (where Tmax anomaly will be negative). Most parts of India will have above normal Tmax during the week.

#### **Tmin (Minimum Temperature)**

• Week 1 (16.03.2018 to 22.03.2018) and Week 2 (23.03.2018 to 29.03.2018): Except some parts of northwest India and adjoining central India, Tmin will be mostly below normal.

# Strategic Agricultural Planning based on rainfall during next two weeks till

# 29<sup>th</sup> March 2018

#### **Agromet Advisories**

## Tamil Nadu

# **Rainfall Situation**

Rainfall received during the period of 01 to 14 March 2018 over Tamil Nadu is 8.8 mm, which is 10% deficit compared to the normal. The extended range weather forecast provided for next two weeks [16 to 22 March (week-1) and 23 to 29 March (week-2)] are: above normal for week-1 and normal for week-2.

- Weather condition is conducive for the bacterial leaf blight incidence in rice. For an effective management farmers are advised to spray Copper Hydroxide 77 WP @ 1.25 kg/ha, after the forecasted spell of rainfall.
- As above normal rainfall is expected during week-1, take measures to ensure proper drainage. Anticipated weather condition is congenial for mealy bug incidence in cotton. For an effective management, farmers are advised to spray dimethoate or profenophos @ 2 ml/lit, after the forecasted spell of rainfall.
- To protect banana from high wind speed, mount the soil around the base of the tree and produce support of Casuarinas poles. Farmers are advised to go for plant protection measures to avoid disease spread.

# Kerala Rainfall Situation

Rainfall received during the period of 01 to 14 March 2018 over Kerala is 8.2 mm, which is 22% deficit than the normal. The extended range weather forecast provided for next two weeks are: above normal for week-1 and normal for week-2.

- Farmers are advised to keep vigilance against rhizome weevil infestation in banana. Irrigate once in three days. Against Sigatoka leaf spot disease, spray 1% Bordeaux mixture or Tilt 25 EC @ 1 ml/litre of water, after the forecasted spell of rainfall. Remove and destroy the severely affected banana leaves.
- Weather condition is conducive for the thrips incidence in vegetables; farmers are advised to spray Oberon @ 0.6 ml/litre of water, after the forecasted spell of rainfall.

# Karnataka Rainfall Situation

Rainfall received during the period of 01 to 14 March 2018 over different meteorological subdivisions of Karnataka is: Coastal Karnataka - No rainfall; North Interior Karnataka - 0.1 mm and South Interior Karnataka - 0.2 mm. According to the extended range weather forecast provided for next two weeks over all the meteorological sub divisions of the state. It is above normal for both weeks over south interior Karnataka. However, over North Interior Karnataka it is above normal during week-1 and normal during week-2.

# South Interior Karnataka

• Due to depression over southeast Arabian sea, above normal rainfall is expected in next week and farmers are advised to postpone the sun-drying of rabi crops during next two weeks.

# North Interior Karnataka

- Farmers are advised to take all precautionary measures during harvesting, threshing and drying of matured rabi crops. The proper covering material for raisin making shed of grapes may be kept ready.
- 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 moisture. The left over crop residue should not be burnt. It can be used for making compost or vermi compost.
- Farmers are advised to vaccinate (ET vaccine) sheep and goats against Enterotoxaemia. For milch animals regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 litres of milk yield and feed all the animals with both green fodder and dry fodder.

#### Maharashtra Rainfall Situation

Konkan and Madhya Maharashtra has not received any rainfall during 01 to 14 March 2018; Vidarbha and Marathwada has received 0.1 mm and 0.2 mm, respectively. The extended range weather forecast provided for next two weeks over all the meteorological sub divisions of the state is: above normal during week-1 and normal during week-2, except vidarbha (normal during week-2).

# Vidarbha

- Farmers are advised for sowing of summer green gram. Recommended variety is Pusa Vaishakhi. Seed rate of 12 kg/ha with 30 cm row spacing is recommended. Seed treatment should be followed with bio-fungicide Trichoderma @ 5g/kg seed and biofertlizers *Rhizobium* and PSB each @ 25g/kg seed.
- Above normal rainfall is forecasted during week-1. So, farmers are advised for sowing of summer vegetables like okra, bitter gourd, tinda, gourds, cowpea, cluster bean, coriander and leafy vegetables fenugreek/spinach.
- With increasing thermal regime and evaporative demand, organic mulching in fruit orchard basins, particularly of new/young plantation is advisable to conserve moisture and maintain thermal regime.

# Marathwada

- Farmers are advised for harvesting and storage of *rabi* sorghum and to protect the crop from rain, as above normal rainfall is forecasted during week-1.
- To fulfil the demand of animals for fodder in summer season, planting of African tall variety of maize should be done as per availability of water. For sowing, 75 kg/ha seed is recommended. Seed treatment with 250 gm Azotabactor per 10 kg seed before sowing is

recommended.

• Farmers are advised to take spray of 10 ppm NAA in mango orchard to control fruit dropping. To protect the crop from fungal diseases, take a spray of Carbendazim 1 gm/ liter of water.

## Konkan

- Due to diurnal temperature variation, there is a possibility for fruit drop in mango. Hence, apply irrigation for alphonso mango @ 150 to 200 lit. of water at fortnightly interval to reduce fruit drop and increase the size of fruits. As medium wind speed is expected for next five days, support mango fruits bearing branches to avoid bark damage.
- As above normal rainfall is forecasted during week-1, there is a possibility of Anthracnose incidence on Alphonso mango. Spray Thiophanate methyl @ 1 gm or Carbendazim @ 10 gm or Propineb @ 20 gm or Carbendazim 12% + Mancozeb 63% @ 10 g per 10 lit of water.
- Weather is congenial for the incidence of Tea mosquito bug on new emerging flush of cashew. So, farmers are advised to spray Lambda Cyhalothrin 5% EC @ 6 ml. in 10 lit. of water.

## Madhya Pradesh Rainfall situation

Rainfall received over meteorological sub divisions of Madhya Pradesh during the period of 01 to 14 March are: West MP - 1.9 mm (81% deficient) and East MP - 5.9mm (96% deficient). The extended range weather forecast provided for next two weeks is: below normal for both the sub-divisions during both the weeks.

- Farmers are advised to start preparing land for sowing of summer green gram and black gram with assured irrigation facility.
- Due to high day temperature, shrinking and shrivelling of grains in wheat is reported. Farmers are advised to irrigate the field of November sown wheat, as below normal rainfall is forecasted for next two weeks.

#### Odisha Rainfall situation

No rainfall was received over Odisha during the period of 01 to 14 March. The extended range weather forecast provided for next two weeks (16 to 22 March and 23 to 29 March) are: above normal for week-1 and below normal for week-2.

- Flowering in summer groundnut has been started. Complete hoeing, weeding followed by earthing up without any delay. Do not disturb the soil to avoid disturbances in pegging. Apply 250 kg Gypsum or 200-300 kg of Calcium Sulphate/ha. Current temperature favours thrips infestation. Spray 400 ml Dimethoate or Endosulphan or 50 ml Imidachloprid in 200 litre water per acre.
- The prevailing high temperature increases the crop water requirement. Farmers are advised to irrigate all the field crops.

# Jharkhand Rainfall situation

Rainfall of 0.2 mm was received over Jharkhand during 01 to 14 March. The extended range weather forecast provided for next two weeks is below normal for both the weeks.

- Farmers are advised to harvest different *rabi* crops, when it attains the proper stage. After harvesting of the crops, plough the field immediately, if optimum soil moisture is available.
- In wheat, incidence of loose smut disease and the weed *Phalaris minor* is reported in some regions. Destroy them carefully after hand picking and burning. This operation is essential for those who use this crop produce as seed during next year.
- Farmers having at least 1 2 irrigation facility may proceed for mung cultivation after harvesting of rabi crops. Select improved variety of mung S.M.L.- 668 and sow the seed @ 12 kg per acre. Before sowing, seed must be treated with Rhizobium culture.

# Bihar

# Rainfall situation

No rainfall was received over Bihar during 01 to 14 March. The extended range weather forecast provided for next two weeks over Bihar is: below normal for both the weeks.

- Sowing of green gram (mung bean) & black gram (urd) is advised, wherever assured irrigation is available. Application of 20 kg Nitrogen, 40 kg Phosphorus, 20 kg Potash and 20 kg sulphur/ha is advised before sowing. *Pusa Vishal, Samrat, SML-668, HUM-16* and *Sona* varieties for green gram and *Type-6, Pant Urd-19, Pant Urd-31, Uttra* and *Navin* varieties for black gram are recommended. Seed should be treated with Rhizobium culture.
- Farmers are advised not to spray any pesticide on the litchi crop at this stage.
- Farmers are advised to give irrigation in maize and wheat, which are in grain forming/milk stage. Limiting soil moisture at this critical stage would badly impact grain yield.
- In view of below normal rainfall forecast, farmers are advised to harvest mustard. Weather would remain favourable for drying of the produce. Farmers are also advised to dig out potato tubers from the field. Increasing soil temperature at the stage of maturity would deteriorate the quality of the tubers.

# West Bengal Rainfall Situation

Rainfall received over Sub Himalayan West Bengal (SHWB) & Sikkim is 35.5 mm rainfall (47% excess) and Gangetic West Bengal has not received any rainfall during 01 to 14 March 2018. The extended range weather forecast provided for next two weeks: below normal for both the sub-divisions for both the weeks.

• Cloudy weather and below normal rainfall is forecasted during week-1. So, farmers are advised to keep irrigating the Boro rice. Always maintain 5 to 7 cm of stagnant water in

the field. For timely sown crop, apply second dose of fertilizer at the rate of 25 kg N/ha of land. In the prevailing weather condition, there may be a chance of the stem-borer infestation. If the infestation is more than 10%, then only apply control measures. Please do not use insecticide unnecessarily.

- Harvesting is almost over in Potato. As cloudy weather is expected in coming days, farmers are advised to harvest the tuber as early as possible.
- Weather is conducive for the incidence of leaf-blight and collar-rot in pointed gourd. To prevent the disease, apply 1 ml Ridomil or Indofil-M-85 per litre of water at an interval of three weeks.

## Assam Rainfall Situation

Assam has received 23.8 mm of rainfall during the period of 01 to 14 March 2018. The extended range weather forecast provided for next two weeks is: above normal for week-1 and below normal for week-2.

- Farmers are advised to store harvested rapeseeds and mustard in cool, dark cupboard, away from the direct heat or sunlight. Seeds should also be tightly closed when not in use.
- Farmers are advised to start preparing the land for planting of colocasia, after the harvest of potato, rapeseed and mustard.
- Farmers may go for cultivation of summer vegetables like ladies finger, bottle gourd, pumpkin, ridge gourd, cucumber etc.

#### Haryana Rainfall Situation

The state has received only 0.1 mm rainfall during 01 to 14 March 2018. The extended range weather forecast provided for next two weeks over Haryana is: normal for week-1 and below normal for week-2.

• Farmers are advised to provide irrigation as per requirement of wheat during week-2. Due to variable weather and high humidity, there is chance of infestation of yellow rust. Farmers are advised to monitor the fields regularly. If symptoms appear, apply Tilt 25% EC (Propiconazole 25% EC) @ 200 ml in 200 liter water per acre.

**Disclaimer:** The predictability of weather depends on many factors which are dynamic in nature. The success of agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.