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

Validity for 27th April to 10th May 2018
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Indian Council of Agricultural Research (ICAR)
All India Coordinated Research Project on Agricultural Meteorology (AICRPAM),
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&
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India Meteorological Department
Realized Rainfall and Extended Range Forecast
(Rainfall and Temperatures)

Realized Rainfall
(12th April to 25th April 2018)

- Normal or above normal rainfall occurred during last two weeks in Jammu & Kashmir, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Odisha, Coastal Andhra Pradesh, Coastal Karnataka, South Interior Karnataka, Kerala and Lakshadweep.

- Normal or above normal rainfall occurred in either of the last two weeks in Uttarakhand, Himachal Pradesh, Haryana Chd & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, NMMT (Nagaland, Manipur, Mizoram and Tripura), Gujarat, Chhattisgarh, Maharashtra, North Interior Karnataka, Rayalaseema and Tamil Nadu.

- Below normal rainfall occurred in both the weeks in Punjab, Telangana and Andaman & Nicobar Islands.
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 25 April)

(27th April to 10th May 2018)

Extended Range Rainfall Forecast

- **Week-1 (27.04.2018 to 03.05.2018):** The rainfall is expected over North Eastern states. Isolated regions over extreme north India (Jammu & Kashmir, Himachal and Uttarakhand). Isolated region over Kerala and neighbourhood is also likely to get rainfall during the week.

- **Week-2 (04.05.2018 to 10.05.2018):** Almost similar rainfall pattern like that is in week 1 with likely increase of rainfall over the Bay of Bengal and parts of south Peninsula.
Maximum and Minimum temperature anomaly (°C) forecast for next 2 weeks (IC – 25 April) (27th April to 10th May 2018)

Tmax (Maximum Temperature)
- **Week 1 (27.04.2018 to 03.05.2018) and week 2 (04.05.2018 to 10.05.2018):** Above normal Tmax over most of India except over parts of Northeast states and adjoining Gangetic West Bengal and Jharkhand. Maximum warming (4 to 6°C) over central and south Odisha, Chhattisgarh and adjoining Telengana region.

Tmin (Minimum Temperature)
- **Week 1 (27.04.2018 to 03.05.2018) and week 2 (04.05.2018 to 10.05.2018):** 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 01 March to 25 April 2018 over Tamil Nadu is 48.2 mm, which is 9% deficit compared to the normal. The extended range weather forecast provided for next two weeks [27 April to 03 May (week-1) and 04 May to 10 May (week-2)] are below normal for week-1 and normal for week-2.

- Summer ploughing is advised to improve the infiltration rate and ground water recharge. Raise green manure crop to take advantage of unexpected rainfall during week-2.
- Vaccination against foot and mouth disease to the cattle is advised as a 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 25 April 2018 over Kerala is 154.2 mm, which is 31% excess. The extended range weather forecast provided for next two weeks is below normal for week-1 and above normal for week-2.

- Due to the changing weather pattern, there is a chance of sigatoka disease in banana. Farmers are advised to spray pseudomonas 10-20g per litre of water during week-1. In case of severe attack, apply SAAF @ 2 g in 1 litre of water.
- Weather condition is congenial for incidence of red palm weevil in small coconut trees. As a control measure, mix 1 ml of Imidacloprid in one liter of water and pour on the crown during week-1.
- Farmers are advised to prepare land for ginger and turmeric. To avoid foot rot in ginger, sock the suckers in 0.3% mancozeb/pseudomonas solution for 30 minutes during week-1. Apply green leaf mulching to prevent soil erosion and to increase the organic matter content in the soil.

**Karnataka**

**Rainfall Situation**

Rainfall received during 01 March to 25 April 2018 over different meteorological sub-divisions of Karnataka is: North Interior Karnataka is 39.6 (59 % excess), South Interior Karnataka is 67.0 mm (59 % excess) and Coastal Karnataka is 56.9 (130 % excess). The extended range weather forecast provided for next two weeks is below normal for all the subdivisions during week-1; above normal for coastal and south interior Karnataka and normal for north interior Karnataka during week-2.

**South Interior Karnataka**

- Take up summer ploughing to expose the soil to kill the different stages of insect and weeds.
- Livestock management during summer.
1) Silage, hay and crop residues may be used for cattle feed when shortage of green fodder.
2) Apply 4-6 inch thick thatch as a roofing material.
3) Water can be used for spraying the floor and roof of shelter are recommended.
   - Average rainfall in April and May months are 36 mm and 93 mm, respectively. Hence, cowpea, sesame, black gram and green gram are recommended for the sowing during May. Agricultural implements and seeds may be kept ready for sowing of crops.
   - Under double cropping, the short duration varieties of first crop can be sown:
     Seasamum: Navile-1, T-7
     Cowpea: TVX-944, KBC-1, Green gram: PS-16, PDM-84,178
     Field bean: HA 1, 2, 3 &4.
     Groundnut : TMV-2, JL-24, KCG-6, Black gram: Karagao-3, T-9, Rashmi(LBG-625)
   - Crop residues other than cattle feed may be used for compost making instead of burning.

Maharashtra

Rainfall Situation
Rainfall received during 01 March to 25 April 2018 over different meteorological sub-divisions of the state is:
Konkan: 3.2 mm (52% excess), Madhya Maharashtra: 5.8 mm (37% Deficit), Vidarbha: 11.3 mm (40% Deficit) and Marathwada: 11.4 mm (7% Deficit). The extended range weather forecast provided for next two weeks is below normal for all the subdivisions of the state for both the weeks.

Marathwada
- Evaporation rate is more due to high temperature, which affects growth and development of sugarcane. Hence, the protective irrigation should be applied by drip irrigation method only during early morning or late evening.
- Farmers are advised to follow irrigation management in summer sunflower, Maize, Banana, Mango and Grapes.

Vidarbha
- Under the prevailing very hot weather, summer crops being at early reproductive stage, avoid moisture stress with provision of irrigation at 6 to 7 days interval. Spraying of anti-transpirant (Kaolin 5 to 7%) may be undertaken to minimize water loss in crops.
- Frequent light irrigation coupled with basin mulching is advisable in orange and mango orchards to reduce heat impact.
- Ensure proper ventilation and heat protection in the animal/poultry sheds. Applying gunny bags/grass on roof of sheds with sprinkling of water is advisable to reduce heat impact. Possibly, restrict working/grazing of farm/draught animals to morning and evening hours.

Vidarbha
- Due to increase in temperature and rate of evaporation, irrigate the groundnut crop at an interval of 6-8 days.
- Harvest mature pulse crops early in morning or late in evening and dry it for 3 to 4 days in sunlight. Stored dried grains in proper manner.
- As there is increase in average temperature, irrigation should be given to coconut orchard at 5-6 days
interval and for arecanut orchard at 4-5 days interval. To control adults and grubs of rhinoceros beetle in coconut, dust 2% Methyl parathion powder after every 2 months interval in FYM pits.

- Farmers are advised to protect the animals from afternoon heat. Keep good aeration in animal shed. For boiler poultry bird during 1st three weeks, provide boiler starter and 4 to 6 week old bird provide boiler finisher as per their daily requirement. The temperatures during day are increasing hence protect poultry birds from heat.

**West Bengal**

**Rainfall Situation**

Rainfall received over SHWB & Sikkim is 160.2 mm rainfall (3% excess) and Gangetic West Bengal is 66.2 mm (10% excess) during 01 March to 25 April 2018. The extended range weather forecast provided for next two weeks is: SHWB & Sikkim - above normal, Gangetic West Bengal - normal during week-1; normal over both subdivisions during week-2.

- In boro rice, crop is in milk to ripening stage. In the present weather situation, there is a chance for the spread of yellow stem borer and Gundhi bug. If there is 1 adult of Gundhi bug per 5 hills of plants, apply Carbaryl or Fenvalerate as control after the forecasted spell of rainfall. Farmers are advised to avoid unnecessary spraying for the control of yellow stem borer and destroy any egg cluster if visible.
- In the prevailing weather condition, there is a possibility of attack of the fungal diseases like fruit rot, stem rot or powdery mildew in summer vegetables. To prevent it apply blitox (4 g) or carbendazim (1 g) for rot and for powdery mildew apply hexaconazole or dinocap or propiconazole @ 1 ml per litre. Water, after the forecasted spell of rainfall.

**Assam**

**Rainfall Situation**

Assam has received 185 mm of rainfall during the period of 01 March to 25 April 2018, which is deficit of 14%, respectively. The extended range weather forecast provided for next two weeks is: normal for week-1 and above normal for week-2.

- As sufficient rainfall has 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.
- Due to conducive weather condition, infestation of cutworm may be seen in okra fields. Apply Malathion 50 EC @ 5 ml per 3 litre of water at seven days interval on clear weather.
- Expecting the optimum soil moisture condition during week-1, application of first split of recommended fertilizer in coconut palm may be adopted. The fertilizer dose for each bearing palm is 750 gm urea, 1250 g SSP, 875 g MOP along with 25 g of Borax.

**Rajasthan**

**Rainfall Situation**

West Rajasthan has received 0.9 mm and East Rajasthan has received 4.4 mm of rainfall during the period of 01 March to 25 April 2018, which is deficit of 87% and 23%, respectively. The extended range weather forecast provided for next two weeks is: below normal for both the subdivisions for both the weeks.
• Deep ploughing of fields after harvesting of rabi crops should be done as high temperature is prevailed which is suitable for killing insect's eggs and pupae and weed seeds.
• For green manure, sowing of daincha and cluster bean etc may be done during this week. Seed rate for dhaicha is 50-60 kilogram per hectare.
• Apply irrigation in fodder crops like maize, sorghum, pearl millet and cluster bean.

Hisar
Rainfall Situation
Haryana has received 10.9mm of rainfall during 01 March to 25 April 2018, which is 42% deficit. The extended range weather forecast provided for next two weeks is: below normal for both the weeks.

• Undertake intercultural operation to control weeds and conserve the soil moisture.
• Provide irrigation in spring sown and ratoon sugarcane, which is in early vegetative stage.
• Keep the animals in shed during high wind speeds and thundershowers. Provide ample amount of clean water to drink and shower to overcome the high temperature

Punjab
Rainfall Situation
Punjab has received 18mm of rainfall during 01 March to 25 April 2018, which is 50% deficit. The extended range weather forecast provided for next two weeks is: below normal for both the weeks.

• Farmers are advised not to burn wheat straw but plough the same in the field. Burning not only pollutes atmosphere, but also destroy the nutrients of soil. Rather, ploughing of straw will improve the fertility of soil.
• As weather is becoming congenial for downy mildew of muskmelon, farmers are advised to, give 3-4 spray Indofil M-45/ Kavach and give 2 sprays of Ridomil MZ @ 500 g or Aliette @ 600 g per acre in 200 litres of water at 10 days interval.

Jammu and Kashmir
Rainfall Situation
Rainfall received during 01 March to 25 April 2018 over Jammu and Kashmir is 178.5 mm, which is 23% deficit. The extended range weather forecast provided for next two weeks over Jammu and Kashmir are below normal for week-1 and above normal for week-2.

• Sowing of summer pulses is recommended due to sufficient moisture in soil. Hoeing and weeding may be done to conserve soil moisture and proper aeration of the roots and to keep the weeds under check. Harvesting and threshing of rabi pulses is recommended.
• Sowing of summer fodder (maize+cowpea+charri) and bajra is recommended as soil is due to sufficient moisture in soil.

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