



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

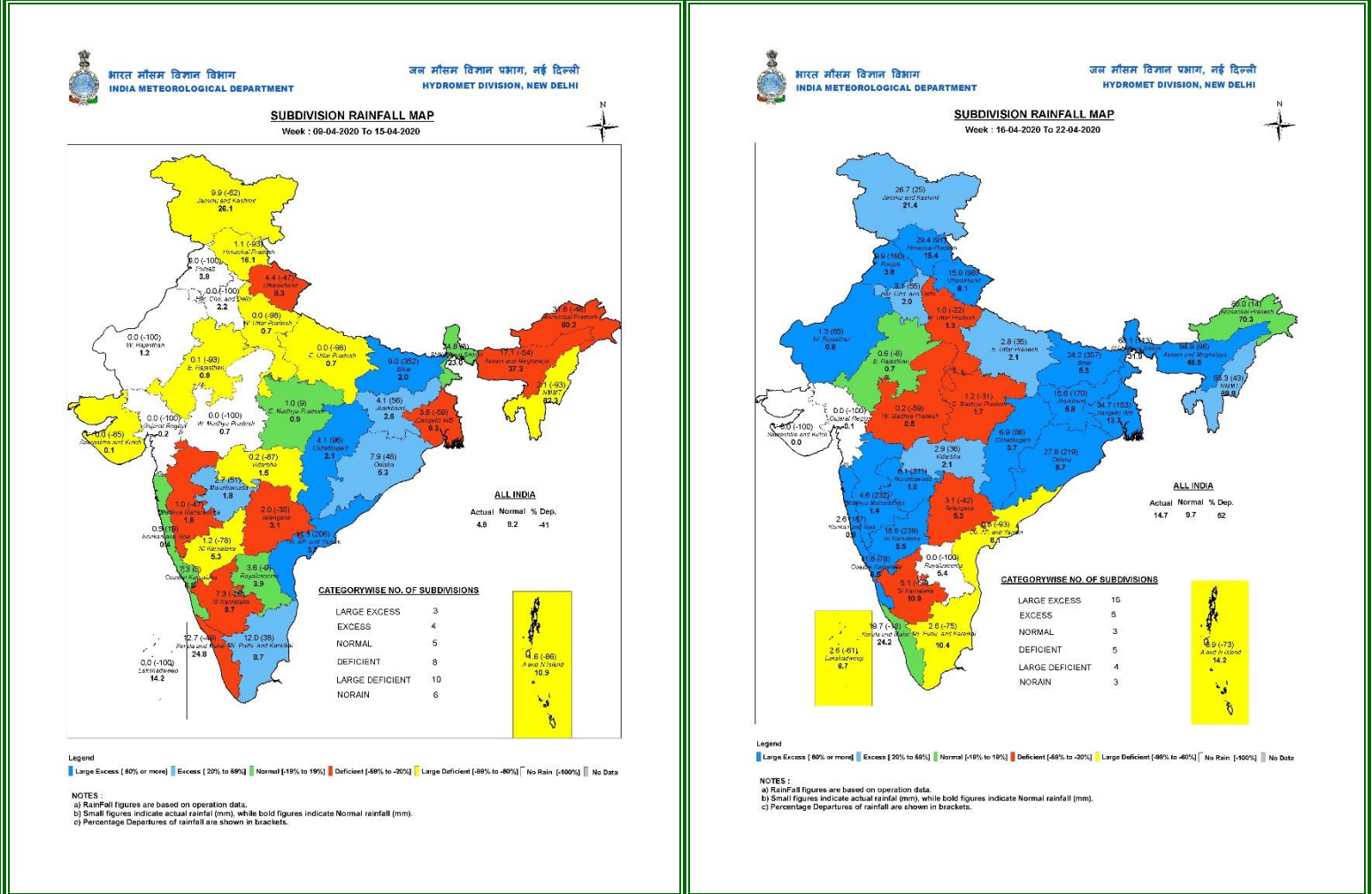
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**Indian Council of Agricultural Research (ICAR)**  
**All India Coordinated Research Project on Agro Meteorology (AICRPAM),**  
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**&**  
**Earth System Science Organization**  
**India Meteorological Department**

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

## Realized Rainfall (9<sup>th</sup> to 22<sup>nd</sup> April, 2020)



- Normal or above normal rainfall occurred in both the weeks in Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Chhattisgarh, Konkan & Goa, Marathwada, Odisha and Coastal Karnataka.
- Normal or above normal rainfall occurred in either of the weeks in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh & Delhi, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura (NMMT), Madhya Maharashtra, Vidarbha, Coastal Andhra Pradesh & Yanam, Rayalaseema, North Interior Karnataka, Kerala & Mahe and Tamil Nadu Puducherry & Karaikal.
- Below normal rainfall/no rain occurred over rest of the country.

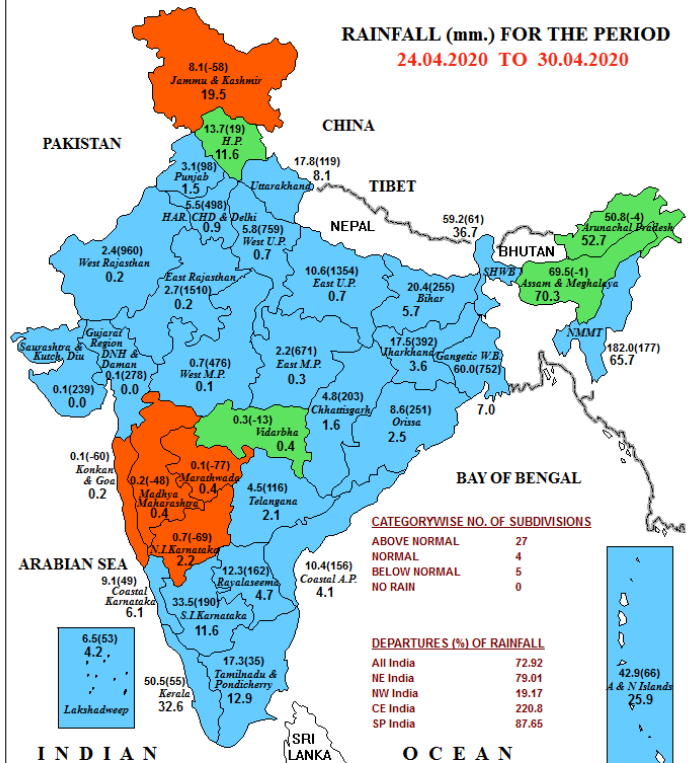
## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC – 22 April)

(24<sup>th</sup> April to 7<sup>th</sup> May, 2020)

### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

#### Rainfall Forecast Map - Normal RF Based Categories

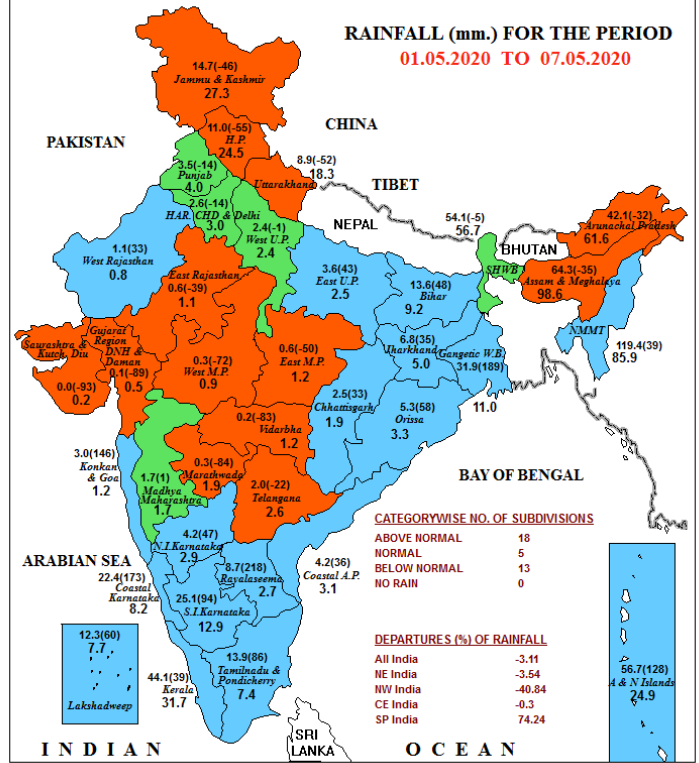


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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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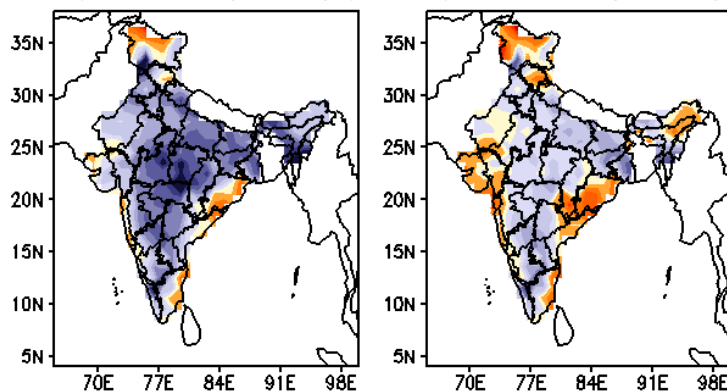
- **Week 1 (24.04.2020 to 30.04.2020) and Week 2 (01.05.2020 to 07.05.2020):** Parts of North-eastern states and south peninsula likely to get some rainfall during the period. The Western Disturbance associated rainfall over extreme north India (Jammu & Kashmir; Uttarakhand, Himachal Pradesh and adjoining region) is likely during week 2.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 22 April)  
(24<sup>th</sup> April to 7<sup>th</sup> May, 2020)**

**MME forecast Tmax anomaly (Deg C)**

(Week1: 24Apr–30Apr)

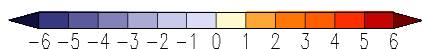
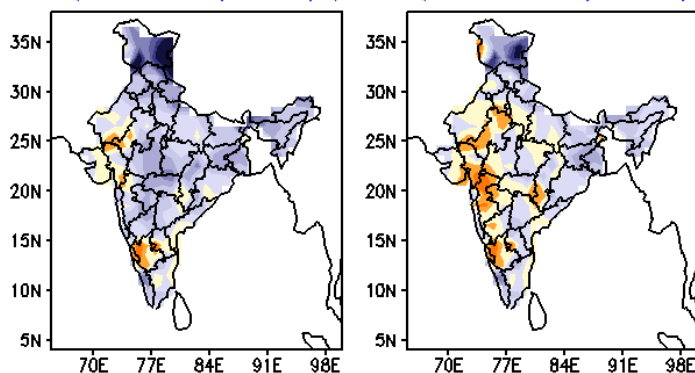
(Week2: 01May–07May)



**MME forecast Tmin anomaly (Deg C)**

(Week1: 24Apr–30Apr)

(Week2: 01May–07May)



**Maximum Temperature (Tmax)**

- **Week 1 (24.04.2020 to 30.04.2020) and Week 2 (01.05.2020 to 07.05.2020):** Tmax is mostly below normal till end of April except some isolated parts of eastern coastal states in week 1. During week 2, Tmax over the western coastal regions and eastern coastal parts (Odisha, South Chhattisgarh) will be above normal, whereas over the central India it will be below normal.

**Minimum Temperature (Tmin)**

- **Week 1 (24.04.2020 to 30.04.2020) and Week 2 (01.05.2020 to 07.05.2020):** Tmin anomaly is mostly negative over India except some isolated regions over western parts of India during week 1. During week 2, Tmin over many parts of western India will be above normal, whereas, over other regions it will be below normal.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 07 May 2020**

### **Agromet Advisories**

#### **Kerala**

Amount of rainfall received over Kerala is 103.3 mm (-5% deficit) during the period of 01 March –23 April 2020. The extended range weather forecast for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) is above normal for week-1 and week-2.

- Under prevailing weather condition, there is a chance of white rust attack in Amaranthus. To control, spray of 20 g Pseudomonas in cow dung water is advised.
- Present weather condition is ideal to prepare planting material for black pepper. Apply mulch and protect the plants from the scorching sun.

#### **Tamil Nadu**

Amount of rainfall received over Tamil Nadu is 24.1 mm (-53% deficit) during the period of 01 March – 23 April 2020. The extended range weather forecast for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) is above normal for week-1 and week-2.

- Due to rainy weather condition, farmers are advised for summer ploughing to conserve rain water.
- Due to anticipated weather condition, there is a chance of stem borer incidence in irrigated sorghum. To control, it is advised to apply Phorate 10 G 8 kg/ha or Carbofuran 3 G 17 kg/ha mix with sand to make up a total quantity of 50 kg/ha and apply on leaf whorls.
- To avoid heat stress on animals due to high temperature, it is advised to provide adequate drinking water and green fodder to animals. Spray of water on gunny bags surrounding the cattle shed.

#### **Maharashtra**

Rainfall received over Madhya Maharashtra is 15.3mm (93% large excess), over Marathwada is 22.4mm (114% large excess), Vidharbha is 32.9mm (108% large excess) and Konkan region 2.4mm (-4% deficit) during 01 March – 23 April 2020. The extended range weather forecast for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) over Konkan, Madhya Maharashtra and Marathwada are below normal and over Vidharbha is normal for week-1 and below normal over Marathwada and Vidharbha, normal over Madhya Maharashtra and above normal over Konkan for week-2.

#### *Marathwada*

- For the 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.
- Due to high temperature, it is advised to provide shade to newly planted or small plants of mango. Irrigate the mango orchard during early morning, at evening or night.

### *Konkan*

- To prevent incidence of post-harvest diseases in mango fruits, it is advised to keep the fruits in warm water (~ 52°C) for 10 minutes and then keep for ripening.
- Due to increase in temperature and decrease in humidity, it is advised to provide irrigation to newly planted cashew orchard @ 15 litre of water once in a week and use straw or polythene mulch to reduce evaporation losses.

### *Vidharbha*

- 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.
- For control of leaf miner, thrips and jassids in groundnut, it is advised to spray Lambda cyhalothrin 5% @ 4 ml OR quinalphos 25% @ 28 ml per 10 litre of water.
- Due to windy weather condition, is advised to provide mechanical support to papaya, banana bunches, young fruit trees to avoid damage and lodging.

### *Madhya Maharashtra*

- For the management of shoot fly in sugarcane, spray of Chlorantraniliprole 18.5%, S.C, in 3 to 4 ml/10 litre of water or 0.4% G, 18.75 kg/ha is advised.
- It is advised to provide irrigation according to crop water requirement in summer groundnut and other summer sown crops.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 205.3mm (28% excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 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 apply mulch and well rotten FYM in vegetable crops.

### **Hisar**

Amount of rainfall received over Hisar is 73.0mm (297% large excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Hisar is above normal for week-1 and normal for week-2.

- Farmers are advised to prepare the field and procure the seed for sowing of cotton crop.

- Due to variable weather condition, farmers are advised to harvest and thresh mustard crop.
- Provide 50 g iodized salt and 50 - 100 g mineral mixture daily with animal feed/fodder to keep them healthy.

### **Karnataka**

Rainfall received during 01 March – 23 April 2020 over South Interior Karnataka is 44.5 mm (9% excess) and North Interior Karnataka is 43.7 mm (84% large excess). The extended range weather forecast for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) over South Interior Karnataka is above normal and below normal over North Interior Karnataka for week-1 and above normal over South Interior Karnataka and North Interior Karnataka for week-2.

#### *North Interior Karnataka*

- It is advised to go for ploughing of fields and incorporate the crop residue to facilitate *in situ* conservation of water during the pre-monsoon rains and conserve the soil.
- It is advised to complete the heaping of fodder and straw as early as possible and cover it properly to prevent the damage of fodder.

#### *South Interior Karnataka*

- Farmers are advised for 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.

### **Assam**

Amount of rainfall received over Assam is 153.7 mm (-27% deficit) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Assam is normal for week-1 and below normal for week-2.

- Under prevailing weather condition, there is a chance of gundhi bug attack in boro rice. To control, apply 5% Malathion dust @ 2.7kg/bigha of land to control the pest.
- Due to rainy condition, farmers are advised to go for renovation of drainage channel in pulse crop field to avoid water stagnation, and avoid spraying of chemicals during the cloudy days.

### **Uttar Pradesh**

Rainfall received during 01 March – 23 April 2020 over East Uttar Pradesh is 41.2 mm (274% large excess) and West Uttar Pradesh is 49.2 mm (273% large excess). The extended range weather forecast for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) over East Uttar Pradesh and West Uttar Pradesh is above normal for week-1 and above normal over East Uttar Pradesh and normal over West Uttar Pradesh for week-2.

- Under prevailing weather condition, sowing of maize crop is advised. Recommended composite seed and varieties viz. Novjoti, Pusa-2, Sweta and Azad uttam and hybrid varieties viz. hybrid

Dakan-107, Malveya hybrid-2, JH-3459, Prakash, PSM-5, Pro-303, KH-510, MMH-113, Azad hybrid-1, Azad hybrid-2, DKC-9108, DKC-7074.

- Due to cloudy condition, farmers are advised to harvest wheat and barley crop.
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### **Punjab**

Amount of rainfall received over Punjab is 98.1 mm (183% large excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Punjab is above normal for week-1 and normal for week-2.

- Due to rainy weather condition, farmers are advised to complete the harvesting and threshing of wheat and mustard crop and store the produce at safe place.
- Farmers are advised to apply paddy straw or rice husk or sugarcane trash @ 20-25 q/acre between the rows of sugarcane to reduce soil temperature and moisture loss.

### **Rajasthan**

Amount of rainfall received over Rajasthan is 22.6 mm (264% large excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Rajasthan is above normal for week-1 and below normal for week-2.

- Under the prevailing weather condition, there is a chance of incidence of powdery mildew disease in cucurbitaceous crops. Spraying of Carbendazim @ 1.0 g/litre of water is advised.
- Deep ploughing of fields after harvesting of *rabi* crops is advised so that eggs and pupating stages of insects and weed seeds are destroyed.
- Due to hot weather condition, it is advised to provide irrigation in groundnut crop at pegging stage.

### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 15.2 mm (-32% deficit) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Andhra Pradesh is above normal for week-1 and week-2.

- It is advised to provide mechanical support in banana and papaya to prevent lodging. Harvest the matured and undamaged banana bunches and papaya fruits and spray Copper oxychloride @ 3 g/litre of water for control of fungal diseases.
- Under the rainy and thunderstorm conditions, farmers are advised to go for summer ploughing to control of sedges and deeprooted weeds, and expose the pupae of insects to high temperature, and improve soil moisture condition.

### **Jammu**

Amount of rainfall received over Jammu is 262.8 mm (15% excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Jammu is below normal for week-1 and week-2.



- Under clear weather condition, farmers are advised to harvest and thresh the mature crop of wheat and store it after proper drying.
- Due to the favourable weather for red pumpkin beetle, spray of Chloropyriphos @2 ml/litre of water immediately followed by ash application on wetted leaves in cucurbits is advised.
- It is advised to monitor the potato crop for leaf roll. Spray of Imidacloprid @ 0.5ml/litre of water during clear weather is advised and remove virus infected plants.

### **Bihar**

Amount of rainfall received over Bihar is 78.9 mm (348% large excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Monitoring is advised for infestation of fruit fly in cucurbitaceous crop. If infestation is found, spray Dimethoate 30 EC @ 2 ml+10 g sugar/litre of water.
- Intercultural operation is advised in summer vegetables such as lady finger, pumpkin, cucumber, sponge gourd, bottle gourd.

### **Gujarat**

Amount of rainfall received over Gujarat is 3.5 mm (132% large excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Gujarat is above normal for week-1 and below normal for week-2.

- Due to high temperature and high wind condition, farmers are advised to protect papaya crop by covering fruits using gunny bags and provide support to heavy fruiting plants.
- It is advised to monitor lucern crop for infestation of white thrips. Spray of 500 ml of 5 % Neem seed extract or neem seed oil (Azadirachtin 1500 ppm) 50 ml/10 litre of water is advised.

### **West Bengal**

Amount of rainfall received over West Bengal is 93.0 mm (43% excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over West Bengal is above normal for week-1 and week-2.

- Due to increase in temperature, there is a chance of attack of mites in mango. To control, it is advised to apply 1-2 g Sulphur per litre of water.

### **Odisha**

Amount of rainfall received over Odisha is 106.5 mm (127% large excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Odisha is above normal for week-1 and week-2.

- Prevailing weather condition is optimum for okra planting with recommended hybrid and high yielding varieties like Varsa, Vijay Utkal Gourav, Arkaand Anamika.
- Under the prevailing weather condition, chance of attack of white ant and white grub is high. To

control, thorough soil drenching with Chloropyriphos solution @ 2ml/litre water is advised.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 113.7 mm (306% large excess) during 01 March – 23 April 2020. The extended range weather forecast provided for next two weeks (24 - 30 April 2020 and 01 – 07 May 2020) on rainfall over Jharkhand is above normal for week-1 and week-2.

- It is advised to monitor stem and fruit borer in brinjal crop. To control, install 10 Pheromone traps in one acre for effective control of the insects.
- Under the prevailing weather condition, farmers are advised to go for planting of ginger crop with recommended varieties like Bardhwan, Suruchi, Nadiya, Suprabha.

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