



# **National Agromet Advisory Services Bulletin**

**Date of issue: 30 April 2023**

based on

**Extended Range Weather Forecast (ERFS)**

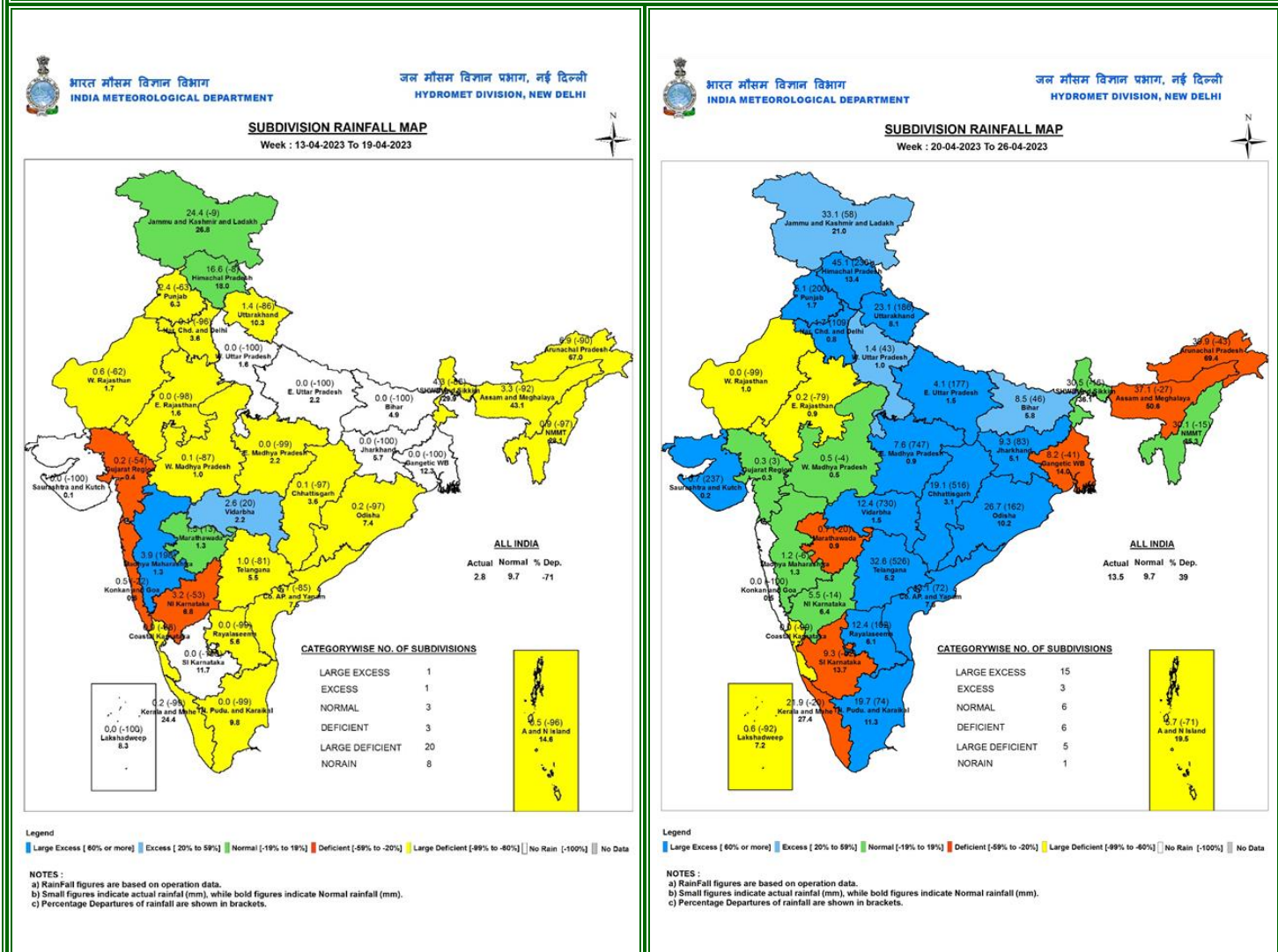
**Validity: 28 April - 11 May 2023**

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&  
India Meteorological Department (IMD)  
Earth System Science Organization**

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

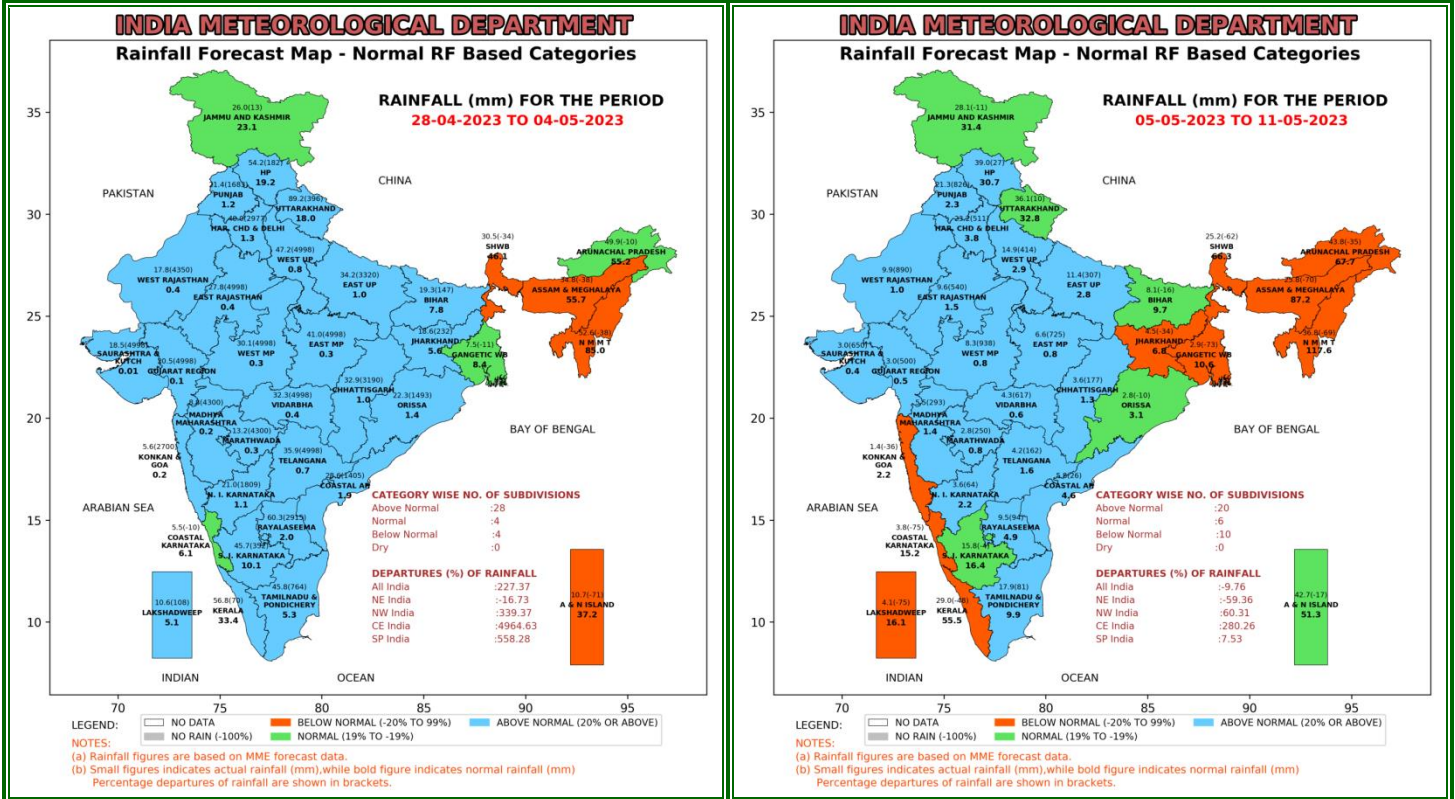
### Realized Rainfall (13<sup>th</sup> April to 26<sup>th</sup> April 2023)



- Normal or above normal rainfall occurred in both the weeks in Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Madhya Maharashtra and Vidarbha.
- Normal or above normal rainfall occurred in either of the two weeks over Uttarakhand, Punjab, Haryana Chandigarh & Delhi, Uttar Pradesh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Nagaland Manipur Mizoram & Tripura (NMMT), Gujarat, Madhya Pradesh, Chhattisgarh, Odisha, Marathwada, North Interior Karnataka, Telangana, Andhra Pradesh & Yanam and Tamil Nadu Puducherry & Karaikal.
- Below Normal rainfall/no rain occurred in both the weeks over rest of States and UTs.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC - 26<sup>th</sup> April) (28<sup>th</sup> April to 11<sup>th</sup> May 2023)



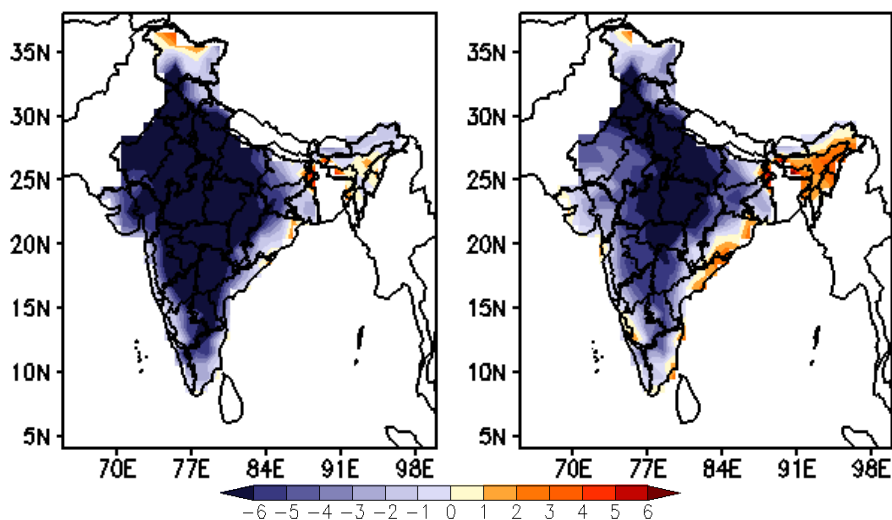
- **Week 1 (28.04.2023 to 04.05.2023):** Rainfall activity associated with Western Disturbance is likely over many parts of north India. Rainfall associated with convective activity is likely over many parts of central & northwest India and southern Peninsula.
- **Week 2 (05.05.2023 to 11.05.2023):** Rainfall activity associated with Western Disturbance is likely to continue over northwest India.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for the next 2 weeks (IC- 26<sup>th</sup> April)  
(28<sup>th</sup> April to 11<sup>th</sup> May 2023)**

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

(Week1: 28Apr-04May)

(Week2: 05May-11May)



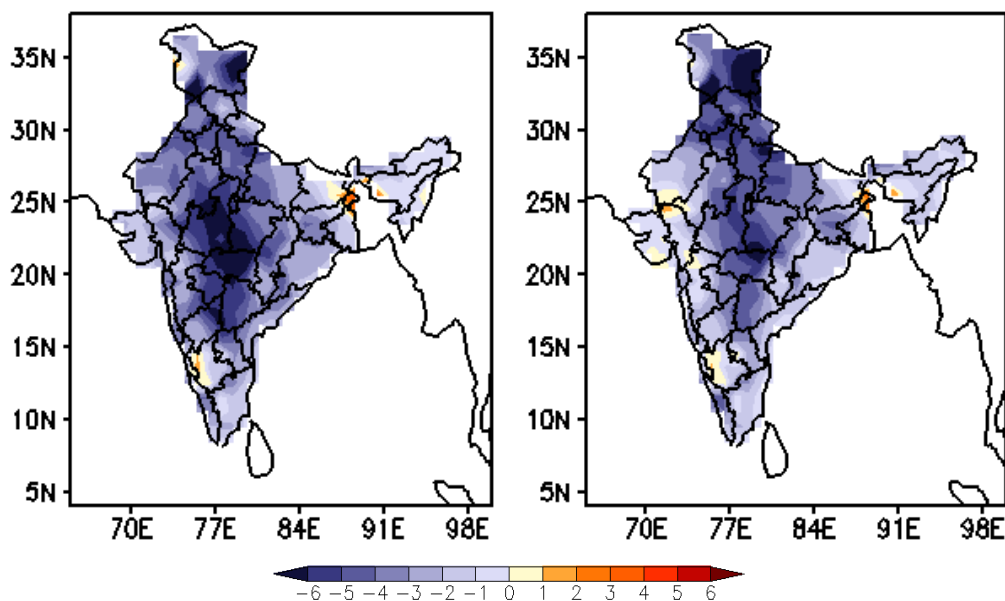
**Maximum Temperature (Tmax)**

- **Week 1 (28.04.2023 to 04.05.2023) and Week 2 (05.05.2023 to 11.05.2023):** Tmax is likely to be below over most parts of country. It is likely to be above normal over parts of Odisha, Coastal Andhra Pradesh and northeastern states.

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

(Week1: 28Apr-04May)

(Week2: 05May-11May)



**Minimum Temperature (Tmin)**

- **Week 1 (28.04.2023 to 04.05.2023) and Week 2 (05.05.2023 to 11.05.2023):** Tmin is likely to be below normal over most parts of country.

## Agromet Advisories

### Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 31 mm (137% large excess) and over West Uttar Pradesh was 42 mm (162% large excess) during 01 March - 28 April 2023. The extended range weather forecast (rainfall) for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) is above normal over East Uttar Pradesh and West Uttar Pradesh during both week-1 and week-2.

#### Western Uttar Pradesh

- There is a forecast of above normal rainfall during week-1 and week-2. Therefore farmers are advised to harvest the wheat crop (maturity stage), dry in the sun, thresh as early as possible and store the produce in a safe place.
- As above normal rainfall is forecasted during next two weeks, farmers are advised to withhold irrigation in *rabi* maize, which is at knee height stage, and summer pulses, which are in vegetative stage. Weeding and top dressing should be done at proper soil moisture.
- To protect the brinjal crop from food borer at flowering/fruitlet stage, farmers are advised to spray Azadirachtin 1.0 % EC (1000ppm).

#### Eastern Uttar Pradesh

- Due to rainfall occurred during last week and forecast of rainfall during next two weeks, it is advised not to provide irrigation in black/green/gram (vegetative stage) and in sugarcane (which is at emergence stage).
- To protect the vegetables (tomato/chilli/ladyfinger) from cut worms, it is advised to spray Profenofos @ 0.5ml/litre of water, sprayed 10 cm away from the root zone at 15 days intervals.
- For protection against infectious Brusel disease (Gumboro), vaccinate 12-14 days old poultry birds. Vaccinate the 1-month-old ducklings with cholera vaccine in order to immunize them against avian cholera.

### Haryana

56 mm (134% large excess) rainfall was received over Haryana during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) over Haryana is above normal for week-1 and; week-2.

- Due to possibility of rainfall during next two weeks, farmers are advised to harvest and thresh the matured wheat and barley crops.
- Farmers are advised to prepare the field and procure the recommended *desi* cotton crop with

certified seeds *HD 123, HD 324 and HD 432.*

### **Uttarakhand**

123 mm (37% excess) rainfall was received over Uttarakhand during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) over Uttarakhand is above normal for week-1 and; normal for week-2.

- Due to the forecast of above normal rainfall during week-1, farmers are advised to keep the harvested matured wheat and barley crops at safe place as soon as possible during clear weather condition.
- Under prevailing weather condition, farmers are advised to prepare the field for sowing of ginger and turmeric. Rhizome treatment should be done before sowing.
- Due to rainfall/hailstorm in last week, it is advised to postpone the irrigation in vegetable crops like capsicum and cover the vegetable crops by anti-hail net/shade net to protect from hail damages.
- Use an anti hail net over fruit plants. Harvest the matured fruits.

### **Himachal Pradesh**

169 mm (-3% deficit) rainfall received over Himachal Pradesh during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) over Himachal Pradesh is above normal for week-1 and week-2.

- Due to hail/heavy rainfall/snowfall/thunderstorms/gusty winds, lodging of the standing wheat crop has occurred and it is difficult to harvest the crop in lower areas of the state. Farmers are advised to harvest wheat crop only when the weather becomes clear.
- Due to hail/heavy rainfall during last week and forecast of above normal rainfall during next two weeks, farmers are advised to cover their apple crop with anti hail nets to protect flowers and fruit setting from the hail.
- Transplanting of vegetables like chillies, tomato and brinjal from nursery to main field is advised in lower and mid hills. Varieties recommended for chillies: *Surjamukhi*, for tomato: *Palam Pink, Palam Pride, Hybrid 7711, Rakshitae* and *Palam Tomato* and for brinjal: *Arka Nidhi, Arka Keshav* and *Hissar Shymal*.
- Under prevailing weather condition, there may be incidence of late blight disease in potato crop which is at tuber formation stage. For control it is advised to spray Ridomil MZ or Metamil @ 2.5 g / litre water ( Mancozeb + Metalaxyl) and repeat the spray after 15 days.

### **Chhattisgarh**

70 mm (251% large excess) rainfall received over Chhattisgarh during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) over Chhattisgarh is above normal for week-1 and; week-2.

- Due to untimely rains at isolated places in few districts of Chhattisgarh, farmers are advised to start harvesting the crops carefully and if the crop has been harvested, keep it in a safe place and make proper arrangements for drainage.
- Inter-cultural operations, fertilizer application, earthing followed by irrigation are advised in sugarcane at knee height stage.
- Intercultural operation in summer black gram and green gram crop control should be done after 20-25 days of timely sown pulse crop.
- Due to possibility of above normal rainfall in the next two weeks, there is a chance of aphid outbreak in summer vegetable crops. Farmers are advised to keep a constant watch and spray neem-based insecticides on observation of the initial outbreak.

### **Odisha**

118 mm (125% large excess) rainfall received over Odisha during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) over Odisha is above normal for week-1 and; normal for week-2.

- Due to possibility of rainfall during next week, farmers are advised to harvest the matured vegetables immediately and cover the harvested produce with polythene sheet.
- Harvest the rice crop at physiological maturity (85% grains matured in a panicle and appears pale yellow in colour). It will minimize loss due to shattering of grains in summer paddy.
- Prolonged dry spell followed by rain may increase the infestation of fall army worm in maize. To control this, spray 80 g Emamectin benzoate 5% SG or 80 ml Chlorantraniliprole 18.5% AC in 200 liter water per acre.
- To protect the honeybee from afternoon thundershower, it is advised to tie the box with cement stand.
- To manage the stem borer infestation in paddy, it is advised to spray Quinalphos 25 EC @ 400 ml/acre or Chlorpyrifos 20 EC @ 500ml/acre in 200 litres of water. It should be applied in the morning hours to the base of the crop.

### **Jammu**

The amount of rainfall received over Jammu was 189 mm (-23% deficit) during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) over Jammu is normal for week-1 and; week-2.

- Sowing of Mash (var.) *Pant U-19*, *Uttara* and Moong (var.) *PDM-54*, *ML-131*, *ML 818*, *PS-16*, *PS-7* after receipt of rain in fallow fields.
- Sowing of summer fodder (maize+cowpea+charri) and bajra is recommended after receipt of

rain.

- Due to chances of light rain during next two weeks, it is advised to postpone the harvesting and threshing of wheat (early and normal sown) and mustard crops; shift the threshed crop to safer places.
- Under prevailing weather condition, farmers are advised to go for sowing of okra crop with recommended varieties like *Jammu okra 05* and *Arka anamika* @ 1kg/kanal is recommended.
- If leaf blight is observed in onion crop, it is advised to spray Ridomil MZ @ 2g/litre of water during clear weather condition.

### **Tamil Nadu**

The amount of rainfall received over Tamil Nadu was 72 mm (29% excess) during 01 March - 28 April 2023. The extended range weather forecast (rainfall) for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) is above normal for week-1 and; week-2.

- As above normal rainfall is forecasted during next two weeks, irrigated fodder sorghum may be sown.
- Due to moderate rainfall in past week and forecast of rainfall during next two weeks, there may be a chance of nematode infestation in cotton crop which is at flowering crop. Hence, to avoid the widespread of the infection, remove the infected plants from the field. Furthermore, drenching with Bavistin @ 200g/acre or Chlorpyrifos @ 200ml/100 litre per acre may be done.
- Since the maximum temperature is increasing, it is advised to ensure clean cool drinking water to the animals at all time. Vitamins and electrolytes can be mixed with water. Quality green fodder should be provided to prevent the production loss.

### **Kerala**

87 mm (-34% deficit) received over Kerala during 01 March - 28 April 2023. The extended range weather forecast (rainfall) for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) is above normal for week-1 and; below normal for week-2.

- Pepper grown in open places is advised to irrigate with 100 litres of water per vine at an interval of 8-10 days. This must be followed during November-December to March-April and withholding irrigation thereafter till monsoon break, increases pepper yield by about 50%.
- On receipt of pre-monsoon showers, prepare beds for turmeric planting of size 3 m x 1.2 m with a spacing of 40 cm between beds in already tilled land. Whole or split mother rhizomes are used for planting. Mulch the crop immediately after planting.



- Due to increase in atmospheric temperature, there is a chance for infestation by sucking pests in vegetables. They can be controlled by applying 2% neem oil emulsion once in a week or by spraying *Lecanicillium lecani* at 5 gm per litre of water.
- During cloudy condition, avoid bathing the cow and washing the cattle shed, otherwise more heat will be built up. Provide proper air circulation using fans. Assure increased ventilation in the cattle shed. Ensure sufficient supply of clean drinking water to the animals.

### **Maharashtra**

14.4 mm (65% large excess) rainfall over Madhya Maharashtra; 22 mm (85% large excess) in Marathwada; 8.4 mm (120% large excess) in Konkan region and 55.5 mm (226% large excess) over Vidarbha was recorded during 01 March - 28 April 2023. The extended range weather forecast (rainfall) for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) is above normal over Konkan, Marathwada, Madhya Maharashtra and Vidarbha for week -1 and; below normal over Konkan and above normal over Madhya Maharashtra, Marathwada and Vidarbha for week -2, respectively.

### *Vidarbha*

- In summer groundnut and sunflower, need based irrigation is advised, depending upon soil moisture condition and local weather. Avoid over irrigation/water stagnation to prevent the incidence of root rot.
- In early sown summer greengram (pod development stage), need based irrigation is advised depending upon soil moisture condition and local weather.
- For control of sap sucking pests (jassids, thrips and white fly) in summer sunflower, it is advised to spray of Imidacloprid 17.8 % EC @ 2.0 ml per 10 liters of water.
- For control of leaf miner, thrips and jassids in groundnut, spraying of Lambda-cyhalothrin 5% @ 10 ml or Quinalphos 25% @ 10 ml per 10 litres of water is advised.

### *Marathwada*

- Due to thunderstorm, rainfall during last week and forecast of isolated thunderstorm along with rainfall and hail at isolated places, turmeric crop should not be stored in open place. Store the harvested crop at safe places (Warehouse).
- As per forecast of isolated thunderstorm along with rainfall and hail at isolated places, it is advised to provide mechanical support to the newly planted banana plants. Harvesting of mature banana fruits should be also advised as early as possible.
- Harvesting of matured mango fruits is advised as early as possible and store the harvested fruits at safe places. As isolated thunderstorm along with rainfall and hail at isolated places is forecasted, mechanical support is advised in newly planted mango orchards.

### *Madhya Maharashtra*

- Considering the forecast of rainfall during next two week, it is advised to keep the harvested & threshed grains of *rabi* crops for sun drying for 2 to 3 days under clear weather condition and store in a safe place by adding neem leaves.
- Do not burn the organic residues or trash left in the field after harvest of *rabi* crops. It can be used for preparation of organic manure.
- For the control of Fall Armyworm in maize (milk stage), it is advised to use Tricho-cards @ 5 numbers per ha. If outbreak is more, then spraying of Emamectin benzoate 5 % SG @5g or Chlorantraniliprole 18.5 % SC @5ml per 10 lit of water is recommended .
- For control of onion blight, spraying of Mancozeb 30 g or Tebuconazole 10 ml in 10 litres of water is recommended.

### *Konkan*

- Considering the forecast of light rainfall at isolated places, it is advised to harvest the matured rice varieties by observing rainfall. And, maintain optimum water level of 5-10 cm in rice field where rice crop is in grain filling stage.
- Harvest the matured mango fruits before 10 am in the morning and after 4 pm in the evening at 80 to 85% maturity. Keep the harvested fruits in shade to prevent spongy tissue disease and from heat.
- To prevent incidence of post-harvest disease on mango fruits, place the fruits in 0.05% Potassium meta bisulphite at 50 °C for 10 minutes and then keep for ripening.
- Due to forecast of thunderstorm along with lighting and rain and gusty winds at isolated places during next week-1, it is advised to keep farm animals at safe place and away from open water, pond or river.

### **Anantapur**

54.4 mm (99% large excess) rainfall received over Rayalaseema and 92.4 mm (155% large excess) rainfall received over Coastal Andhra Pradesh during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) is above normal over Rayalaseema and Coastal Andhra Pradesh for week-1 and week-2.

- Prevailing weather conditions are congenial for the incidence of black thrips and white flies in chillies (flowering stage). Framers are advised to install 30-35 blue and yellow colored sticky traps per acre to capture these insects and reduce their population in the field.
- In Kurnool, Chittoor, Vizianagaram, West Godavari, Krishna, Guntur, Ananthapuramu and Kadapa districts, present weather conditions are favorable for fruit borer incidence in mango (fruit development stage). To control fruit borer, spraying of Chlorpyrifos @

2.5ml+Dichlorvos @ 1.5 ml/litre of water @ 15 days interval is recommended.

- Due to gusty winds accompanied with rain in last week, it is advised to removing excess moisture from fields through drainage channels and spraying of Carbendazim @ 1g per litre of water in the crops at maturity stage to reduce the disease incidence.

### **Gujarat**

12.3 mm (921% large excess) rainfall received over Gujarat during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) over Gujarat is above normal for week-1 and; week-2.

- Under prevailing weather condition, it is advised to carefully harvest the matured capsule from the castor plants. Stored at safe place for sun drying before threshing.
- Farmers are advised to apply Calcium nitrate 2 g per liter of water at the time of flowering, apply Magnesium sulphate 2 g per liter of water at 15 days to 20 days after development of the vines and apply Boron 1 g + Calcium 1 g per liter at the time of fruit development to increase the number of fruits in watermelon.
- Cover the peduncle and whole bunch with dried banana leaves to protect from direct sunlight.
- For management of stem borer infestation in summer pearl millet, spray Cypermethrin 25 % EC 10 ml/10 liter of water in clear sky condition.

### **Karnataka**

26.5 mm (-50% deficit) rainfall received over South Interior Karnataka, 5.8 mm (-84 large deficit) over Coastal Karnataka and 34.4 mm (-15% deficit) rainfall received over North Interior Karnataka during 01 March - 28 April 2023. The extended range weather forecast (rainfall) provided for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) is above normal over South Interior Karnataka and North Interior Karnataka and normal over Coastal Karnataka for week-1 and; below normal over over Coastal Karnataka, normal over South Interior Karnataka and above normal over North Interior Karnataka for week-2.

#### *South Interior Karnataka*

- Provide irrigation in mango orchard during week-2, as the fruits are in marble stage. This will help for the better development of fruits. If sufficient water is available, irrigation can be given at 15-20 days interval starting from fruit setting till maturity.
- Fruit drop can be controlled by spraying Naphthalene acetic acid (NAA) @ 20 ppm twice at an interval of 15 days during the early stage (peanut stage/marble stage) of fruit development.
- Periodically water spray is advised during peak hot hours to lowers the temperature and consequently reduces the heat load on animals.

### *North Interior Karnataka*

- Considering the forecast of rainfall during next two weeks, farmers are advised to harvest matured wheat, groundnut and sunflower under clear weather condition with necessary precautionary measures.
- Under prevailing weather condition, it is advised to apply 4-6 inch thick hay thatch as a roofing material. Water can be used for spraying the floor and roof of shelter periodically during peak hot hours which lowers the temperature and consequently reduces the heat load on animals.

### **West Bengal**

90.5 mm (26% excess) rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 197 mm (16% excess) during 01 March - 28 April 2023. The extended range weather forecast (rainfall) for the next two weeks (28 April - 04 May 2023 and 05 - 11 May 2023) is normal over Gangetic West Bengal and below normal Sub-Himalayan West Bengal during week-1 and; below normal over Gangetic West Bengal and Sub-Himalayan West Bengal for week-2.

- Under prevailing weather condition, famers are advised to harvest maize and boro rice as soon as possible.
- To prevent fruit fly attacks in mango orchard, it is advised to install methyl eugenol traps.
- To save the cattles from ectoparasite infestation it is advised to keep the cattle shed clean. Neem oil application can be done inside the shed.

### ***Disclaimer:***

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