



# राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन National Agromet Advisory Services Bulletin

जारी करने की तिथि/ Date of issue: 04 August 2023

आधारित/ based on

विस्तारित अवधि मौसम पूर्वानुमान/ Extended Range Weather Forecast (ERFS)

वैधता/ Validity: 04 - 17 August 2023

जारीकर्ता/ Issued by

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

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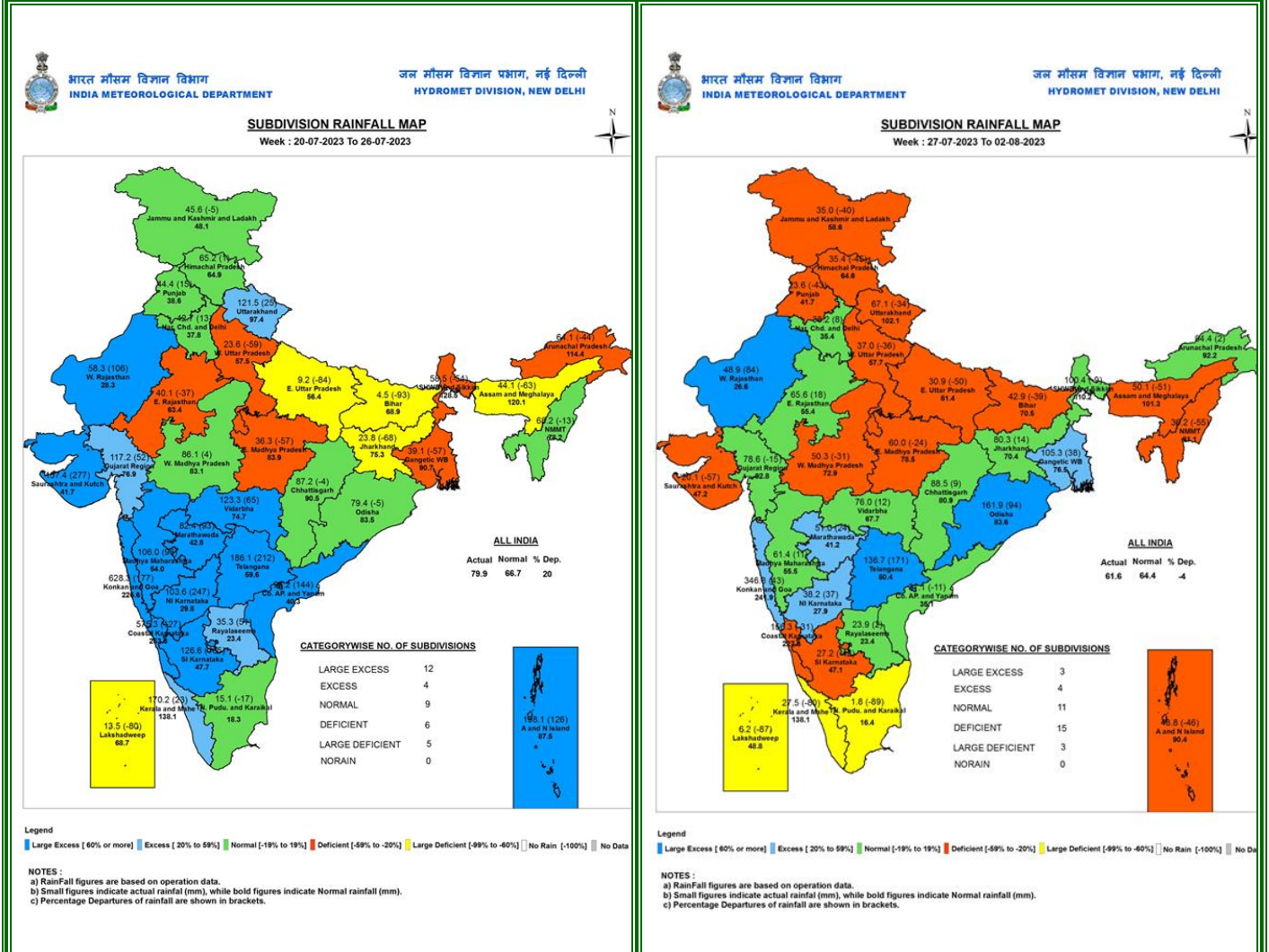
पृथ्वी प्रणाली विज्ञान संगठन

**Earth System Science Organization**

## Realized Rainfall and Extended Range Forecast

### Realized Rainfall

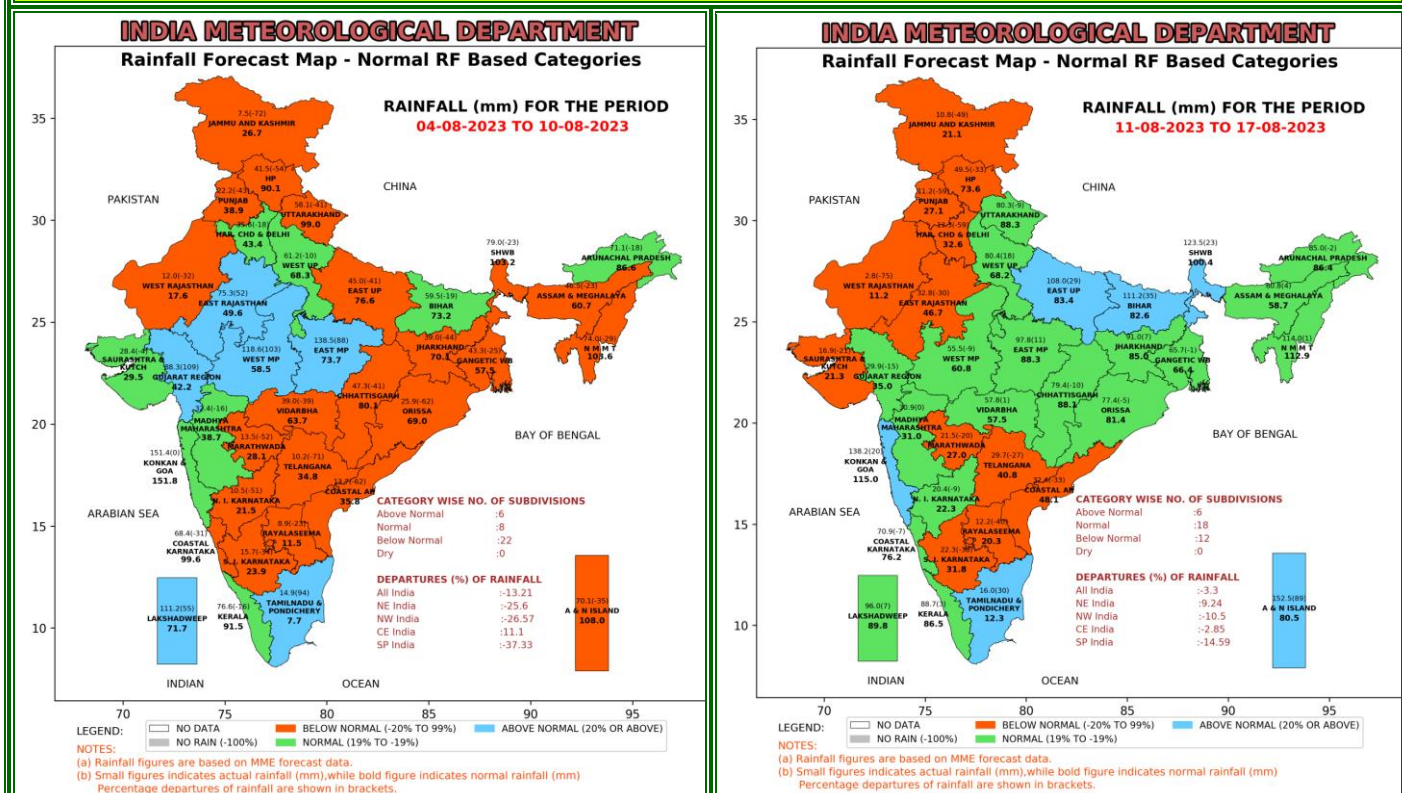
(20<sup>th</sup> July to 2<sup>nd</sup> August, 2023)



- Normal or above normal rainfall occurred in both the weeks over Haryana Chandigarh & Delhi, West Rajasthan, Gujarat Region, Maharashtra, Chhattisgarh, Odisha, Telangana, Andhra Pradesh & Yanam and North Interior Karnataka.
- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Uttarakhand, Punjab, East Rajasthan, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Nagaland Manipur Mizoram & Tripura (NMMT), West Madhya Pradesh, Saurashtra & Kutch, Coastal & South Interior Karnataka, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe and Andaman & Nicobar Islands.
- Below Normal rainfall occurred in both the weeks over Uttar Pradesh, Bihar, Assam & Meghalaya, East Madhya Pradesh and Lakshadweep.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC- 2<sup>nd</sup> August) (04<sup>th</sup> August to 17<sup>th</sup> August, 2023)



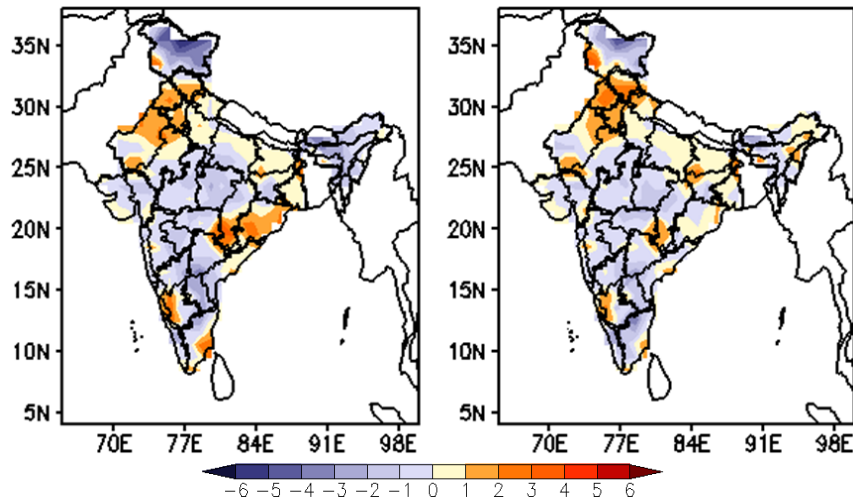
- **Week 1 (04.08.2023 to 10.08.2023):** Rainfall is likely to be normal to above normal over Madhya Pradesh, East Rajasthan, Gujarat and adjoining Maharashtra.
- **Week 2 (11.08.2023 to 17.08.2023):** Rainfall is likely to be normal to above normal over Central, East & Northeast India, west coast and parts of Indo-Gangetic plains.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for the next 2 weeks (IC- 2<sup>nd</sup> August)  
(04<sup>th</sup> August to 17<sup>th</sup> August, 2023)**

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

(Week1: 04Aug–10Aug)

(Week2: 11Aug–17Aug)



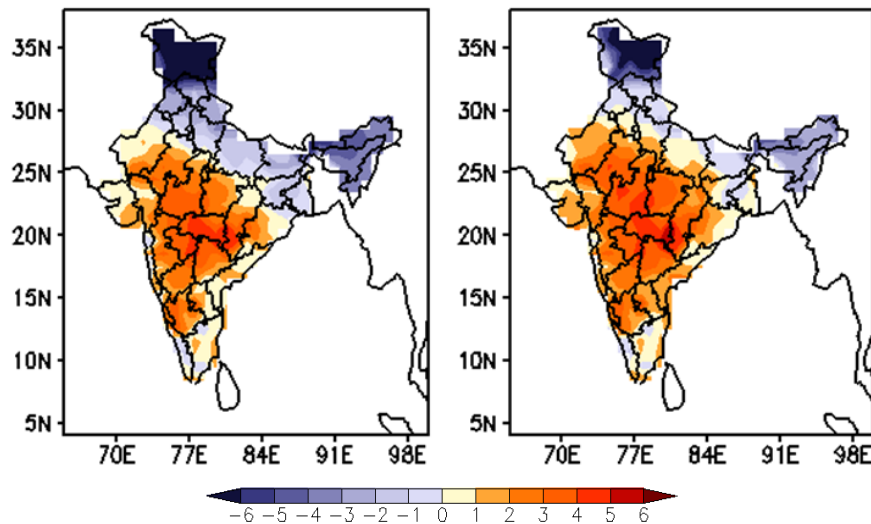
**Maximum Temperature (Tmax)**

- **Week 1 (04.08.2023 to 10.08.2023):** Tmax is likely to be above normal over some parts of Odisha, Chhattisgarh and North West India.
- **Week 2 (11.08.2023 to 17.08.2023):** Tmax is likely to be above normal over some parts of North West India.

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

(Week1: 04Aug–10Aug)

(Week2: 11Aug–17Aug)



**Minimum Temperature (Tmin)**

- **Week 1 (04.08.2023 to 10.08.2023) and Week 2 (11.08.2023 to 17.08.2023):** Tmin is likely to be above normal over most parts of the country.

## **Agromet Advisories**

### **Uttar Pradesh**

The amount of rainfall received over East Uttar Pradesh was 275 mm (-33% deficit) and over West Uttar Pradesh was 381 mm (12% excess) during 01 June - 04 August 2023. The extended range weather forecast (rainfall) for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) is normal over West Uttar Pradesh and below normal over East Uttar Pradesh for week-1 and; above normal over East Uttar Pradesh and normal over West Uttar Pradesh for week-2.

#### *Western Uttar Pradesh*

- Under prevailing weather condition, farmers are advised for transplanting of short duration rice varieties.
- After rainfall, farmers are advised for weeding and hoeing in maize crop, which is at knee height stage.
- Sowing of sesame is advised with recommended varieties like *Gujrat Til-6*, *RT-346*, *RT-351*, Tarun, Pragati and Shekhar in clear sky.
- To control shoot borer in maize crop which is at knee height stage, farmers are advised for whorl application of carbofuran 3G granules @ 3 kg/ acre, mix the granules with sand (1:1 ratio) or chlorantraniliprole @2ml per litre water.

#### *Eastern Uttar Pradesh*

- For the management of zinc deficiency in rice which is at transplanting stage, it is advised to spray 5.0 Zinc sulphate mixed 20 kg Urea in 500 litres water solution during clear sky.

### **Uttarakhand**

733 mm (15% excess) rainfall was received over Uttarakhand during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Uttarakhand is below normal for week-1 and; normal for week-2.

- For the management of whitefly in soybean crop, it is advised to spray Thiamethoxam 25 WG @100 g per 500 litres water/ha or spray insecticide mixture Acetamiprid 25% + Bifenthrin 25 % WG @ 0.5ml per litre of water.
- Due to prevailing rainy weather condition, it is advised to maintain proper drainage in pulse crops and monitor the crops for pests and diseases.
- Planting the saplings of multipurpose tree species like *bhimal*, *khadik*, *bedu*, *guiral*, *banj*, *napier grass* etc in Van Panchayat Bhoomi or fallow lands or any other suitable sites is advised.



- Under prevailing weather condition, farmers are advised to continue harvesting of early varieties of apples.

### **Himachal Pradesh**

569 mm (47% large excess) rainfall was received over Himachal Pradesh during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Himachal Pradesh is below normal for week-1 and week-2.

- The heavy to rather heavy rainfall, landslides, cloudbursts, mud flows, and floods that have occurred throughout the state has caused the waterlogged conditions in crops such as maize and other *kharif* crops. Extensive damage has been inflicted on apple, rice, maize, pea, and tomato crops. The general public is cautioned not to go near the banks of rivers and drain out the excess water in maize, soybean and vegetable fields.
- Farmers willing to establish new orchards during this rainy season are advised to dig the pits (1m x 1m x 1m) and fill with well decomposed FYM and may start transplanting of babul, subabul, khair and amla.
- Under prevailing weather condition, it is advised to prepare proper bunds in paddy fields for water conservation.
- In regions where the maize crop has reached knee height stage, it is recommended for earthing up. Additionally, it is advised to apply the initial nitrogen fertilizer (85 kg urea per hectare) during this stage.

### **Punjab**

303 mm (28% excess) rainfall was received over Punjab during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Punjab is below normal for week-1 and; week-2.

- Prevailing weather is optimum for sowing of okra (var: *Punjab Suhawani* and *Punjab Lalima*) and cowpea.
- Farmers are advised that after draining out excess rainwater from the rice field, apply recommended dose of nitrogen fertilizer. Keep water standing in paddy field only for 2 weeks and thereafter apply irrigation.
- In flooded areas, it is advised to drain out excess water from the fields of maize, cotton, vegetables, pulses, fodder and orchards. Farmers are also advised not to irrigate or spray the crop during the period.
- Farmers are advised to harvest the cucurbits and other vegetables like tomato, chilli, brinjal and okra at regular intervals to get maximum yield.
- To control jassid in cotton it is advised to spray Flonicamid 50 % WG@ or Imidacloprid 17.80 % SL 3 ml per 10 litres of water.

## **Rajasthan**

446 mm (37% excess) rainfall was received over East Rajasthan during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over East Rajasthan is above normal for week-1 and; below normal for week-2.

- Due to the forecast of above normal rainfall in next week, farmers are advised to do proper arrangement for harvesting of rain water in the field to use it later to irrigate the crops during dry spell.
- Under prevailing weather condition, farmers are advised for transplanting of chilli in raised bed.
- Hoeing and weeding is advised in groundnut and soybean crop.

## **Hisar**

332 mm (49% excess) rainfall was received over Hisar during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Hisar is normal for week-1 and; below normal for week-2.

- Under prevailing weather conditions, farmers are advised to transplant the paddy from nursery to main field and apply fertilizers as recommended by CCS HAU, Hisar. Use recommended herbicides for control of weeds by mixing with sand in standing water within 2-3 days of transplanting.

## **Assam**

891 mm (-17% deficit) rainfall was received over Assam during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Assam is below normal for week-1 and normal for week-2.

- Due to flood/ inundation situation in the state, farmers are advised to download “MAUSAM” app for weather forecast and “DAMINI” app for lightning alert, intending to help save lives of humans as well as livestock. Provide staking to vegetable crop and drain out excess amount of water from low lying crop field.
- During prevailing monsoon season, in some district of Assam, large deficit rainfall was observed, therefore farmers are advised to provide need-based irrigation in field crops, during water stress.
- Farmers who have not yet sown the seeds of long duration *sali* rice varieties are advised to complete sowing in the nurseries within this week. Recommended varieties like *Ranjit*, *Bahadur*, *Piolee*, *Kushal*, *Moniram*, *Bhgalee*, *Aghoni* etc.
- Land preparation for sowing of green gram and black gram seeds is advised. Select upland, well drained sandy loam soil for these crops. The recommended varieties for green gram are *Pratap*, *T-44*, *Kopergaon*, *K-851*, *M L-56* and *M L-131*, for black gram viz., *T-9*, *T-27*, *T-122*, *Pant U-19* etc

- Prevailing weather is favourable for caseworm infestation in early transplanted *sali* rice crops (early seedling stage). Farmers are advised to drain out the excess amount of water from the rice field as to reduce pest population.

### **West Bengal**

442 mm (-29% deficit) rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 1051 mm (6% excess) during 01 June - 04 August 2023. The extended range weather forecast (rainfall) for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) is below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week-1 and; normal over Gangetic West Bengal and above normal over Sub-Himalayan West Bengal week-2.

- To protect the rice from seed borne diseases like bacterial leaf blight (*Xanthomonas oryzae*), blast (*Pyricularia oryzae*), leaf spot (*Helminthosporium oryzae*) application of bio-fungicide *Pseudomonas fluorescens* 1.5% WP @ 5g/kg as seed treatment material before sowing is advised.
- To protect the cattle from ectoparasite infestation, it is advised to keep the cattle shed clean and dry and also apply Neem oil inside the shed.

### **Jharkhand**

347 mm (-36% deficit) rainfall was received over Jharkhand during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Jharkhand is below normal for week-1 and normal for week-2.

- Due to forecast of below normal rainfall, farmers are advised to choose less water-requiring crops and short duration pulses and oilseeds (moong, urad, sesame) crops.
- Due to heavy rainfall observed during last week over parts of Jharkhand, farmers are advised for rain water in-situ conservation and water harvesting through construction of pits in the field (on 1/10th of the land area at the lower end), which can help in meeting the water demand of crops during dry days.
- Under prevailing weather condition, it is advised to use straw (mulching) in nursery and vegetable crops to increase moisture holding capacity of soil. Increase the amount of potassium in the crops which will help the crops to fight against water shortage.
- Due to insufficient rainfall, farmers are advised to go for short duration paddy varieties such as *Birsa vikas dhaan* – 111 (95 days), *Birsa Vikas dhaan* – 109 (90 days), *Birsa Vikas dhaan* – 110 (95 days), *birsa dhaan* – 108 (80 days), *sehbhagi dhaan* (115 days) in low and medium lands

### **Chhattisgarh**

592 mm (-1% deficit) rainfall was received over Chhattisgarh during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August



2023 and 11 - 17 August 2023) over Chhattisgarh is below normal for week-1 and; normal for week-2.

- Due forecast of below normal rainfall, farmers are advised for adopting water conservation agronomic techniques.
- The present weather is suitable for planting of fruit crops like *papaya*, *mango*, *guava* and *banana* and agroforestry plants. Therefore, farmers are advised to complete planting operation in time.

### **Odisha**

628 mm (7% excess) rainfall received over Odisha during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Odisha is below normal for week-1 and; normal for week-2.

- During rainy season there is a chance of infestation of red hairy caterpillar in pulses like black gram, green gram and arhar. To control, it is advised to apply Chlorpyrifos dust @ 10 kg per acre during morning hour.
- Under prevailing weather condition, farmers are advised to drain out the excess water from jute field as it affects the quality of fibre.

### **Gujarat**

634 mm (24% excess) rainfall received over Gujarat during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) over Gujarat is above normal for week-1 and normal for week-2.

- Farmers are advised for sowing of castor, recommended hybrid varieties are: *GAUCH-2*, *GCH-5*, *GCH-6*, *GCH-7*, *GCH-8*, *GCH-9*, *GCH-10*, *GNCH-1* etc.
- For management of whitefly/white wooly aphid of sugarcane, it is advised to spray Imidacloprid 5 ml/15 litres of water.

### **Maharashtra**

396 mm (-4% deficit) rainfall over Madhya Maharashtra; 548 mm (7% excess) rainfall over Vidarbha; 337 mm (5% excess) rainfall over Marathwada; and 2393 mm (29% excess) in Konkan region was recorded during 01 June - 04 August 2023. The extended range weather forecast (rainfall) for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) is normal over Konkan and Madhya Maharashtra, below normal over Marathwada and Vidarbha for week-1 and; below normal over Marathwada, above normal over Konkan and normal over Madhya Maharashtra and Vidarbha for week-2, respectively.

#### *Vidarbha*

- In early sown pigeon pea fields, inter culture operation (weeding/hoeing) is advised during clear weather for the management of weeds and improve soil aeration.

- For weed control in soybean at early vegetative stage, it is advised to spray early post emergence herbicide Imazethapyr 10% SL @ 20 ml or Propaquizafop 2.5% + Imazamox 3.75 % @ 40 ml per 10 litres of water.
- For the management of early stage incidence of aphids/jassids in cotton, application of 5% neem extract or Azadirachtin 0.03% (300 ppm) @ 50 ml per 10 litres of water is advised.
- Keep farm animals indoor during thunderstorm/lightning. In farm livestock preventive vaccination for foot and mouth disease (FMD) and preventive deworming for flat worms is advisable.

#### *Madhya Maharashtra*

- Nipping the apical bud of pigeon pea crop is advised for more branching.
- To control leaf eating caterpillar in mango, foliar spray of Dimethoate 30 % EC@ 1.5 ml/litre of water is advised.

#### *Parbhani*

- Due to cloudy weather condition in last week sucking pests may increase in cotton crop. To manage, it is advised to spray 5% NSKE or Acetamiprid 20% @ 2 g per 10 litres of water during clear weather condition.

#### **Kerala**

858 mm (-37% deficit) received over Kerala during 01 June - 04 August 2023. The extended range weather forecast (rainfall) for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) is normal for week-1 and; week-2.

- Due to the rainfall, there is a chance for the development of stem bleeding disease in coconut palms. As a precaution, apply 5 kg neem cake in the basins of the palms. Also, apply 50 g each Trichoderma mixed along with organic manures in the basins.
- Heavy rainfall and winds may cause breakage of the pseudo stem and lodging in banana gardens. Provide propping for banana plants and strengthen existing supports. Ensure good drainage in the garden.
- In order to prevent fungal diseases during monsoon season, root dipping of vegetable seedlings in *Pseudomonas* solution is advised before planting.

#### **Anantapur**

144 mm (-17% deficit) rainfall was received over Rayalaseema and 313 mm (10% excess) rainfall was received over Coastal Andhra Pradesh during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17

August 2023) is below normal over Rayalaseema and Coastal Andhra Pradesh for week-1 and; week-2.

- The present weather conditions are favourable for sucking pests in groundnut (vegetative stage) grown in Ananthapuramu, Kurnool, Kadapa and Chittoor districts. To control, farmers are advised to spray Imidacloprid @ 0.3 ml/litre or Lambda-cyhalothrin 05 % EC @ 1ml litre of water.
- Farmers growing pearl millet are advised to select bajra varieties viz., *ABV-04*, *Raj-171*, *Pusa-61* and *PSV-56* and treat the seeds with Thiram or Captan @ 3g/kg of seed.

### **Karnataka**

330 mm (-11% deficit) rainfall received over South Interior Karnataka, 2087 mm (2% excess) over Coastal Karnataka and 272 mm (16% excess) rainfall received over North Interior Karnataka during 01 June - 04 August 2023. The extended range weather forecast (rainfall) provided for the next two weeks (04 - 10 August 2023 and 11 - 17 August 2023) is below normal over North Interior Karnataka, Coastal Karnataka and South Interior Karnataka for week-1 and; normal over North Interior Karnataka, Coastal Karnataka and below normal over South Interior Karnataka for week-2.

#### *South Interior Karnataka*

- Due to high wind speed it is advised to postpone the spraying operation in agricultural and horticultural crops and also provide staking support to banana and vegetable crop to protect from uprooting of crops.
- In groundnut crop (vegetative stage and flower initiation stage) intercultural operation is recommended for the conservation of soil moisture due to shortage of rainfall.

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