



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

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

आधारित / based on

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

वैधता / Validity: 29 September - 12 October 2023

जारीकर्ता / Issued by

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

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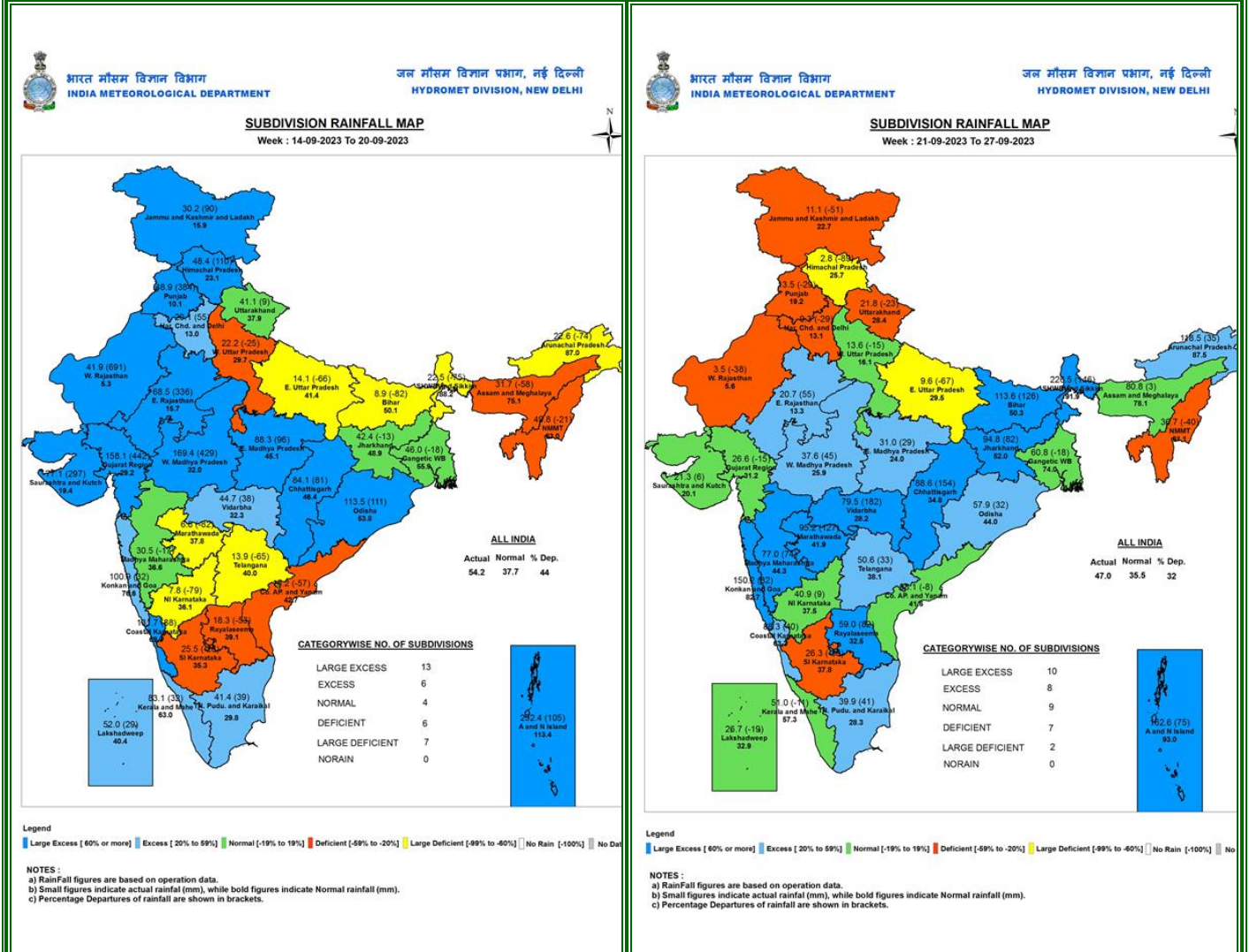
पृथ्वी प्रणाली विज्ञान संगठन

**Earth System Science Organization**

## Realized Rainfall and Extended Range Forecast

### Realized Rainfall

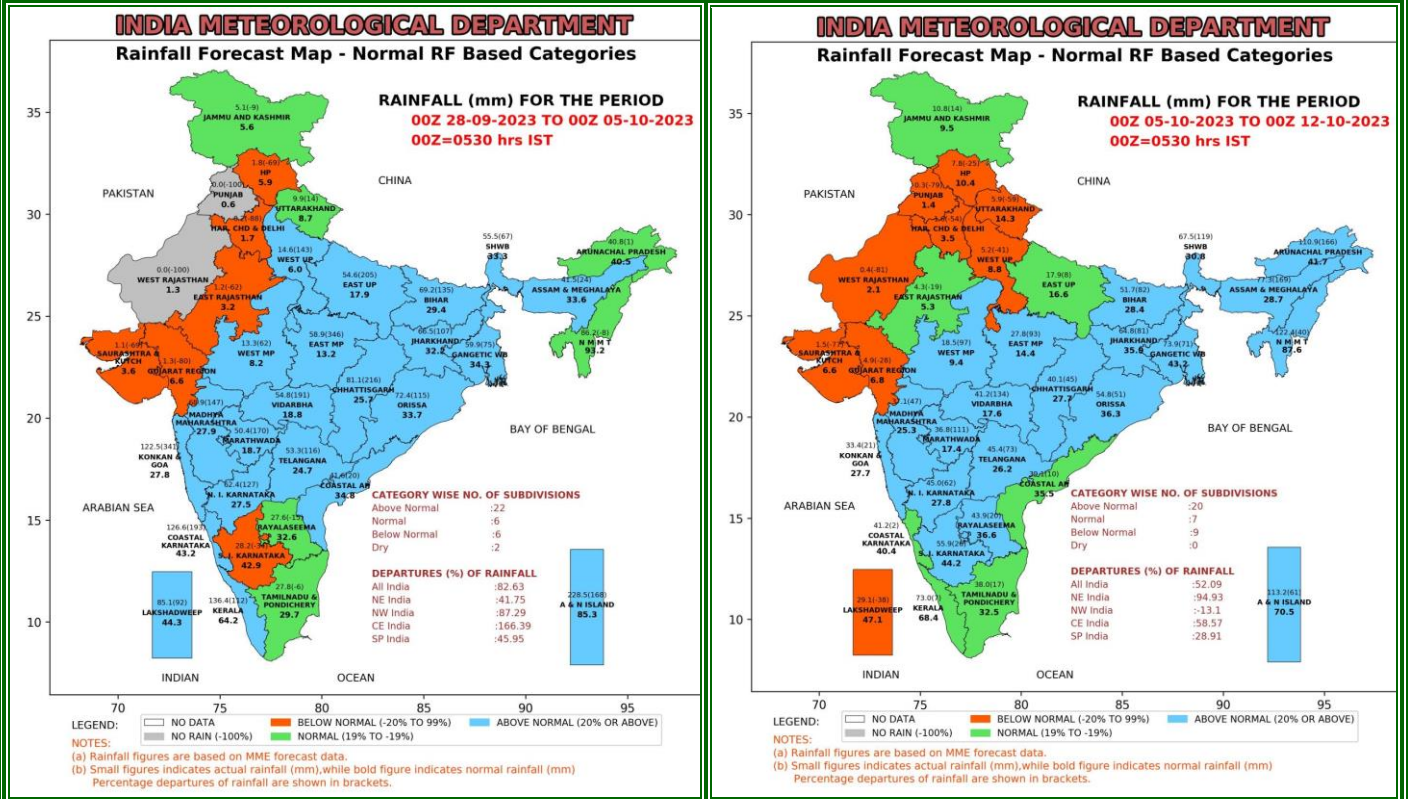
(14<sup>th</sup> to 27<sup>th</sup> September, 2023)



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

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC- 27<sup>th</sup> September) (29<sup>th</sup> September to 12<sup>th</sup> October, 2023)



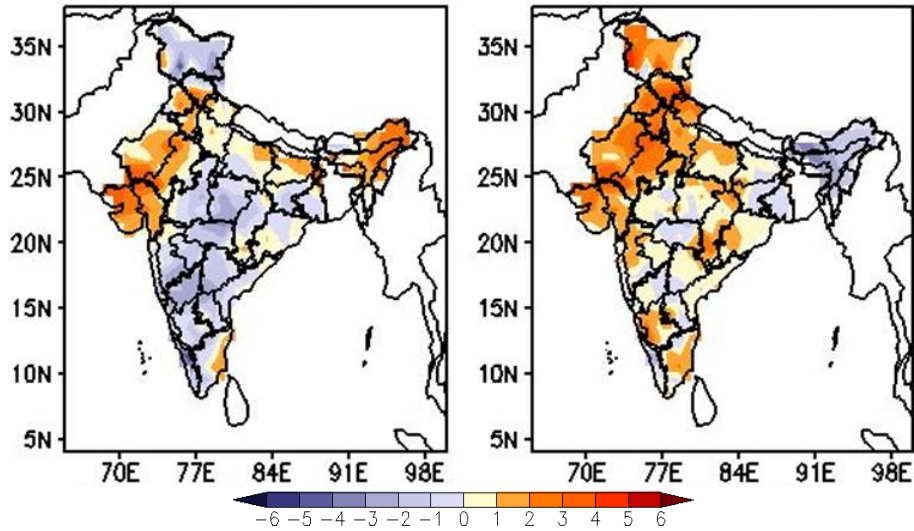
- **Week 1 (29.09.2023 to 05.10.2023):** Rainfall is likely to be above normal along west coast and over East India & parts of Central India.
- **Week 2 (06.10.2023 to 12.10.2023):** Rainfall is likely to be above normal over East and North East India. It is likely to be slightly above normal over central India and parts of Peninsular India.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for the next 2 weeks (IC- 27<sup>th</sup> September)  
(29<sup>th</sup> September to 12<sup>th</sup> October, 2023)**

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

(Week1: 29Sep-05Oct)

(Week2: 06Oct-12Oct)



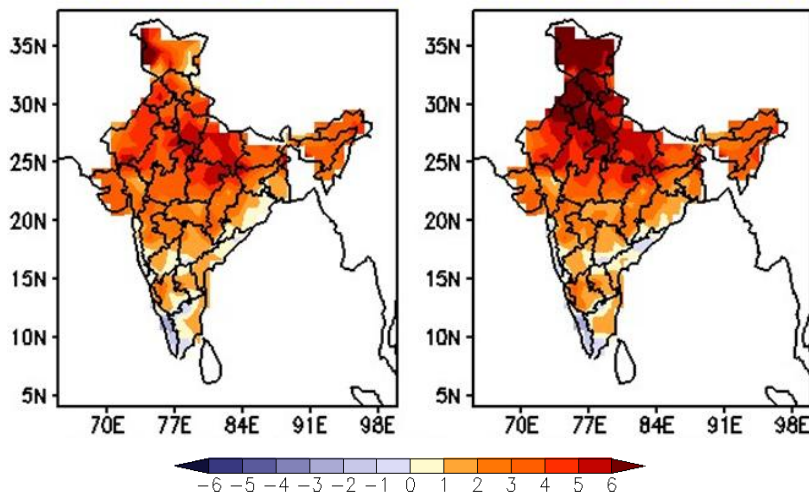
**Maximum Temperature (Tmax)**

- **Week 1 (29.09.2023 to 05.10.2023):** Tmax is likely to be above normal over parts of North West, East and North East India.
- **Week 2 (06.10.2023 to 12.10.2023):** Tmax is likely to be above normal over most parts of most parts of the country except North East India.

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

(Week1: 29Sep-05Oct)

(Week2: 06Oct-12Oct)



**Minimum Temperature (Tmin)**

- **Week 1 (29.09.2023 to 05.10.2023) and Week 2 (06.10.2023 to 12.10.2023):** Tmin is likely to be above normal over most parts of the country.



## Strategic Agricultural Planning based on rainfall till 12 October 2023

### Agromet Advisories

#### Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 569 mm (-29% deficit) and over West Uttar Pradesh was 660 mm (5% excess) during 01 June - 29 October 2023. The extended range weather forecast (rainfall) for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) is above normal over West Uttar Pradesh and East Uttar Pradesh for week-1 and; below normal over West Uttar Pradesh and normal over East Uttar Pradesh for week-2.

#### *Western Uttar Pradesh*

- If the earhead bug population in rice crop reaches 2-3 insect per hill at flowering stage, it is advised to spray Acetamiprid 20% SP @ 350 g/ha or Malathion dust 5% @ 20-25 kg/ha.
- To protect brinjal crop from fruit borer at flowering /fruiting stage, farmers are advised to spray Azadirachtin 1.0% EC (1000 ppm).

#### *Eastern Uttar Pradesh*

- Withhold irrigation considering the above normal rainfall forecast in this week. Farmers are advised to drain out excess water from the field and crop protect from birds.
- Under prevailing weather condition, there may be infestation of hairy caterpillar in soybean, till and black gram crops. To manage, it is advised to spray of Flubendiamide 20 % WG @ 0.5gram/litre water or Indoxacarb 15.80 % EC @ 0.5 ml/litre water.

#### Uttarakhand

1210 mm (4% excess) rainfall was received over Uttarakhand during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Uttarakhand is normal for week-1 and; below normal for week-2.

- Water may be drained from the rice field about 7-10 days before harvest to facilitate harvesting. Harvest mature crops where they attain maturity.
- Harvest mature kharif crops, thresh and dry quickly after cutting. In present weather conditions, field preparation should be started for rabi crops. Ploughing and planking should be done properly to conserve the moisture in the soil.
- Land preparation is advised for sowing of garlic at mid to high hill regions.
- Land preparation is also advised in lower hills for the sowing of potato.

#### Himachal Pradesh

876 mm (19% excess) rainfall was received over Himachal Pradesh during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Himachal Pradesh is below normal for week-1 and week-2.

- In mid hills of the state sowing of early season pea varieties is advised. The varieties recommended are *Palam Triloki, Arkel, VL-7 and Matar Ageta*.

- It is also the optimum time for the sowing of oats for fodder purpose. The varieties recommended are *Palampur-1* and *Kent*.
- Under prevailing weather condition, farmers are advised to make bund in major paddy growing areas of the state to ensure standing water.

### **Punjab**

417 mm (-5% deficit) rainfall was received over Punjab during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Punjab is no rainfall for week-1 and; below normal for week-2.

- As there is a no rainfall forecast during next week, farmers are advised need-based irrigation and pesticide application as the weather will remain clear and dry during the coming days.
- As dry weather is expected during coming days, farmers are advised to do picking of cotton.
- Prevailing weather conditions are ideal for sowing early varieties of potato like *Kufri Surya*, *Kufri Pukhraj*, *Kufri Ashoka* and *Kufri Chandramukhi*.
- It is the optimum time for planting of evergreen pants such as citrus, guava, mango, litchi, sapota, jamun, bael, amla etc.

### **Jammu**

574 mm (5% excess) rainfall was received over Jammu during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Jammu is normal for week-1 and; week-2.

- Sowing of toria (var. *RSPT-1*, *RSPT-2*, *RSPR-3*) is recommended under conserved soil moisture without any further delay. Intercrop toria with gobi sarson (*GSS-1*).
- Under prevailing weather condition, it is advised to harvest black gram and early sown maize crop.

### **Assam**

1427 mm (-19% deficit) rainfall was received over Assam during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Assam is above normal for week-1 and week 2.

- As forecast of above normal rainfall during week-1 and 2, farmers are advised to repair the bunds in the paddy fields to conserve rain water and maintain standing water of 5±2 cm depth in the rice field.
- It is also advised to postpone top-dressing of urea fertilizer in standing rice crop due to forecast of above normal rainfall during next week.
- As rainfall is forecasted in most of the districts of Assam during this week, farmers may postpone the land preparation for sowing of maize. As soon as rainfall recedes, farmers

may go for final land preparation followed by sowing of seeds. The optimum sowing window is from mid-September to mid-October.

- Due continuous rainfall and water stagnation may lead to red rot in sugarcane crop. To avoid this, it is advised to drain out excess water, rogue affected plants and remove old and dry leaves from the cane.

### **Chhattisgarh**

1052 mm (-7% deficit) rainfall was received over Chhattisgarh during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Chhattisgarh is above normal for week-1 and; week-2.

- Considering the above normal rainfall forecast in coming days, farmers are advised to drain out excess water from the fields.
- Due to the possibility above normal rainfall, the farmers are advised that to go for spray of insecticide on during clear weather condition.
- Short duration rice is in flowering stage and if 50% of flowering may occur then farmers are advised for application of third dose of nitrogenous fertilizer. Farmers are advised to go for 25% potash top dressing to increase rice grain quantity and quality.

### **Madhya Pradesh**

1052 mm (-7% deficit) rainfall was received over Madhya Pradesh during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Madhya Pradesh is above normal for week-1 and; week-2.

- Farmers are advised to harvest early maturing soybean varieties after 90% pods have turned yellow.
- Due to forecast of above normal rainfall, farmers are advised to drain out excess water from the nursery beds. Transplant seedlings of onion, chilli and brinjal in the field, preferably on raised bed. Also, preparation of nursery for cauliflower, cabbage is advised.

### **Odisha**

1105 mm (-3% deficit) rainfall received over Odisha during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Odisha is above normal for week-1 and; normal for week-2.

- The present high humid weather condition is favourable for brown plant hopper and white backed plant hopper infestation in paddy. To manage, it is advised to avoid excess use of nitrogenous fertilizer. Do not keeping standing water in the field for longer period. Alter

the micro-climate of the rice field by alternate wetting and drying technique. Make alleys at 6 feet spacing for sunlight entry and proper aeration below the crop zone.

- Due to forecast of above normal rainfall, farmers are advised to wait for clear weather and remove excess water from field, before applying any fertilizer in the field.
- Farmers are advised to maintain about 5-10 cm standing water during panicle initiation stage in paddy. Remove the weeds and keep the field clean.

### **Gujarat**

908 mm (-2% deficit) rainfall received over Gujarat during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) over Gujarat is below normal for week-1 and week-2.

- To control sigatoka disease in banana orchard, it is advised to cut and remove infected leaves at every 1.5 to 2 months interval and burn it outside the field. Spray Carbendazim 50 WP @ 10 g or Mancozeb 75 WP @ 27 g or Propineb 70 WP @ 20 g or Propiconazole 25 EC @ 5 ml in 10 litres of water at 15 days interval as per disease severity in clear weather condition.

### **Maharashtra**

646 mm (-13% deficit) rainfall over Madhya Maharashtra; 910 mm (-3% deficit) rainfall over Vidarbha; 558 mm (-13% deficit) rainfall over Marathwada; and 3151 mm (10% excess) in Konkan region was recorded during 01 June - 29 October 2023. The extended range weather forecast (rainfall) for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) is above normal over Konkan, Vidarbha, Madhya Maharashtra and Marathwada for week-1 and; week-2, respectively.

#### *Vidarbha*

- Due to recent continuous rainy/cloudy weather/water logging condition para wilt symptoms may be observed in cotton crop. To control, it is advised for drenching with Copper oxychloride 50 WP @ 25 g + Urea @100 g in 10 litres of water.
- To control incidence of pod borers in soybean, it is advised to spray of Indoxacarb 15.8% EC @ 6-7 ml per 10 litres of water.

#### *Madhya Maharashtra*

- Sowing of rabi sorghum is advised at proper field capacity at the depth of 5 cm. Select the cultivars as per the soil type.
  - Light Soil: *Phule Anuradha, Phule Yashomati, Phule Mauli.*
  - Medium soils: *Phule Suchitra, Phule Chitra, Phule Mauli, Parabhani Moti.*
  - Heavy soils: *Phule Vasudha, Phule Yashoda, Phule Mauli.PKV Kranti.*
  - Under protective irrigation: *Phule Revati, Phule Vasudha.*



### *Parbhani*

- As rainfall received during past week and forecast of rainfall during week, farmers are advised to remove excess amount of water stagnated in *kharif* sorghum, soybean and sugarcane crops and other fruit orchards by proper drainage.
- Due to forecast of thunderstorm along with moderate to heavy rainfall at isolated places, farmers are advised to keep the animals at safe places. Do not allow animals for grazing during warning period.

### **Kerala**

1292 mm (-36% deficit) received over Kerala during 01 June - 29 October 2023. The extended range weather forecast (rainfall) for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) is above normal for week-1 and; normal for week-2.

- Due to the forecast of above normal rainfall, there is a chance of damage in paddy due to flooding. Ensure drainage in paddy fields and strengthen bunds.
- Due to prevailing rainfall condition, farmers are advised to spray insecticide and pesticide during clear weather condition (no rainfall).
- Adhesive /sticking agents is advised to use to prevent runoff of pesticide, fungicide under rainy weather condition.
- If cloudy condition is prevailed, there is a chance of leaf folder attack in Paddy. It can be controlled by using Trichogramma cards (2 CC per one acre). Cut the cards in to small pieces and fix in different regions of the field. If the infestation is severe, spray Quinalphos@25% EC @ 1 ml per litre or Acephate 75 % SP @2gram per litre of water.

### **Anantapur**

350 mm (-13% deficit) rainfall was received over Rayalaseema and 573 mm (-4% deficit) rainfall was received over Coastal Andhra Pradesh during 01 June - 29 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (29 September - 05 October 2023 and 06 -12 October 2023) is normal over Rayalaseema and above normal over Coastal Andhra Pradesh for week-1 and; above normal over Rayalaseema and normal over Coastal Andhra Pradesh for week-2.

- Present weather conditions are favourable for the incidence of pink boll worm in cotton grown in Srikakulam, Vizianagaram and Krishna districts. To control, farmers are advised to spray Profenophos @ 2 ml or Thiodicarb 1.5 g/litre of water.
- Farmers are advised to take up foliar spray of KNO<sub>3</sub> @ 5 grams per litre of water to mitigate the adverse effect of dry spell.

- Farmers are advised to form dead furrows or conservation furrows after last intercultivation in flat method of sowing to conserve the moisture.

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