



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

जारी करने की तिथि / Date of issue: 16 October 2023

आधारित / based on

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

वैधता / Validity: 13 - 26 October 2023

जारीकर्ता / Issued by

अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

**AICRP on Agro-Meteorology (AICRPAM)**

केंद्रीय बारानी कृषि अनुसंधान संस्थान

**Central Research Institute for Dryland Agriculture (CRIDA)**

भारतीय कृषि अनुसंधान परिषद

**Indian Council of Agricultural Research (ICAR)**

और

भारतीय मौसम विज्ञान विभाग

**India Meteorological Department (IMD)**

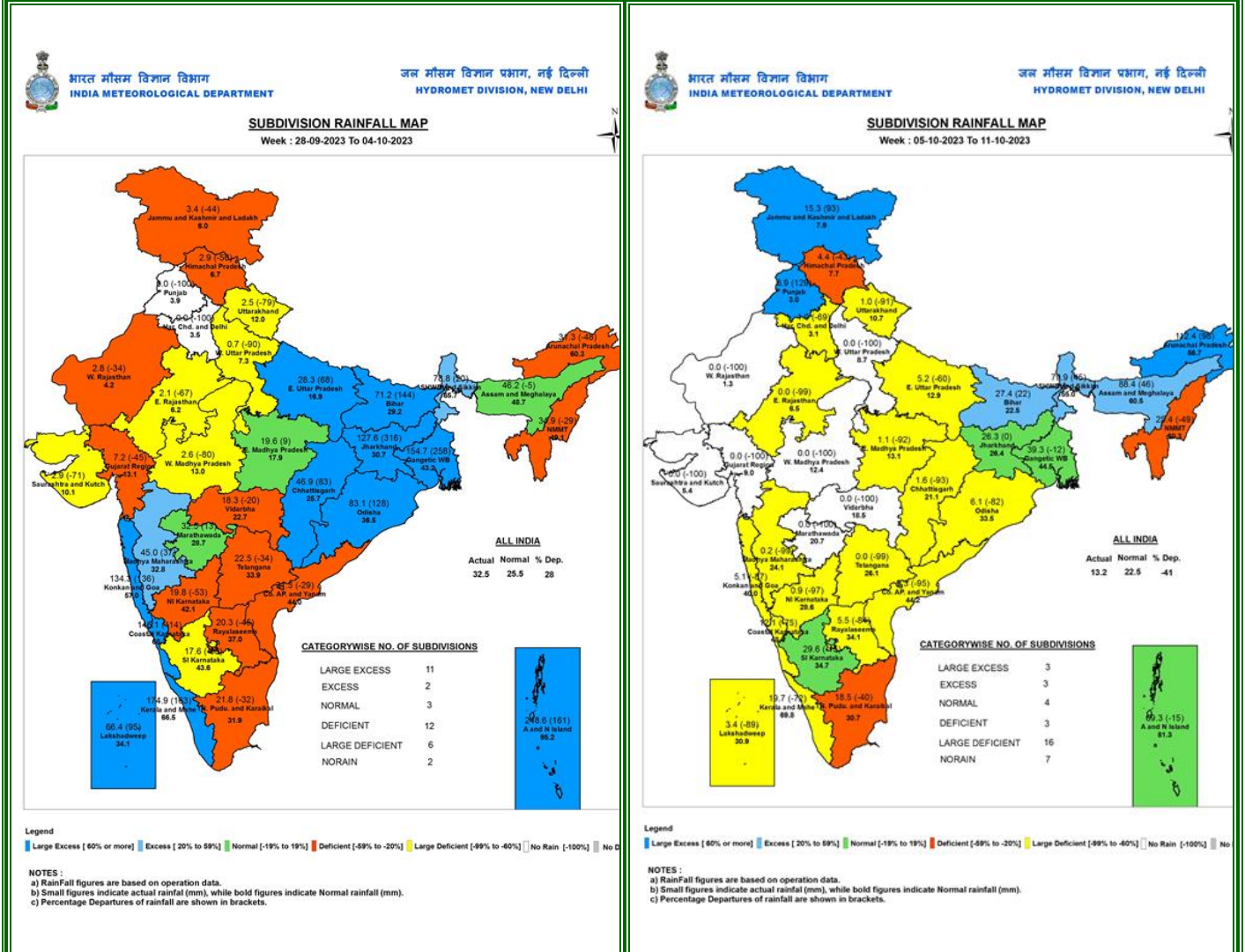
पृथ्वी प्रणाली विज्ञान संगठन

**Earth System Science Organization**

# Realized Rainfall and Extended Range Forecast

## Realized Rainfall

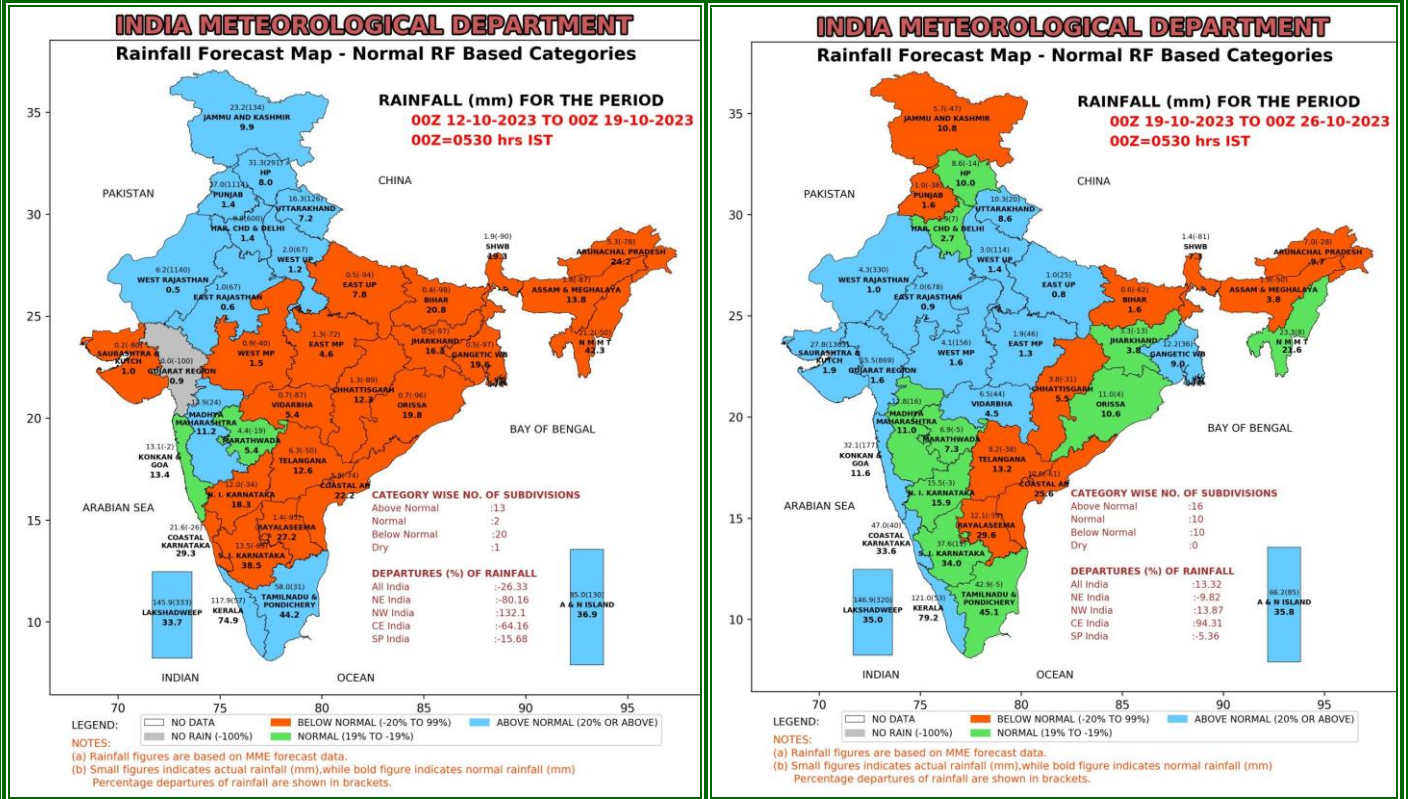
(28<sup>th</sup> September to 11<sup>th</sup> October, 2023)



- Normal or above normal rainfall occurred in both the weeks over Bihar, Jharkhand, West Bengal, Sikkim, Assam & Meghalaya and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Punjab, East Uttar Pradesh, Arunachal Pradesh, East Madhya Pradesh, Chhattisgarh, Odisha, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Karnataka, South Interior Karnataka, Kerala & Mahe and Lakshadweep.
- Below normal rainfall/no rain occurred in both the weeks over rest of the country.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC- 11<sup>th</sup> October) (13<sup>th</sup> to 26<sup>th</sup> October, 2023)



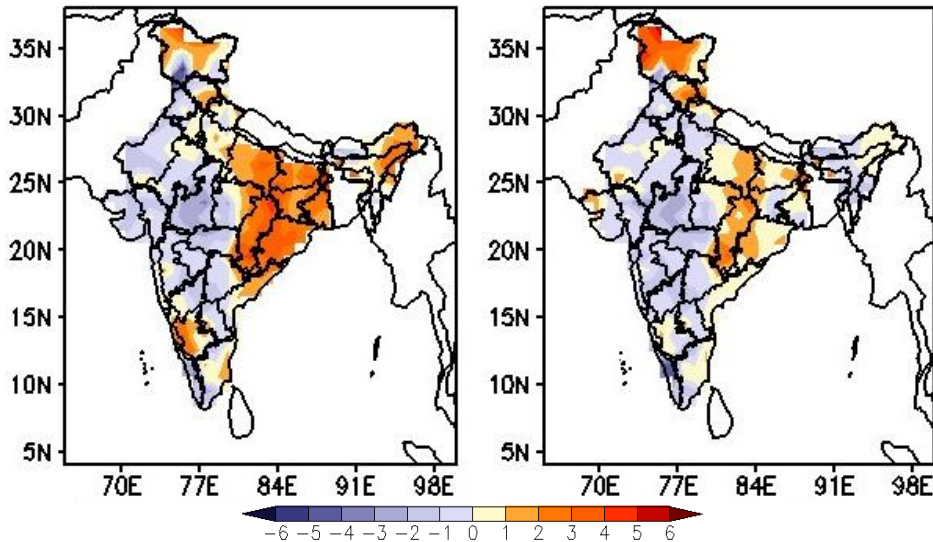
- **Week 1 (13.10.2023 to 19.10.2023):** Rainfall is likely to be above normal over parts of Northwest and South Peninsular India.
- **Week 2 (20.10.2023 to 26.10.2023):** Rainfall is likely to be above normal over West Coast of India.

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

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

(Week1: 13Oct–19Oct)

(Week2: 20Oct–26Oct)



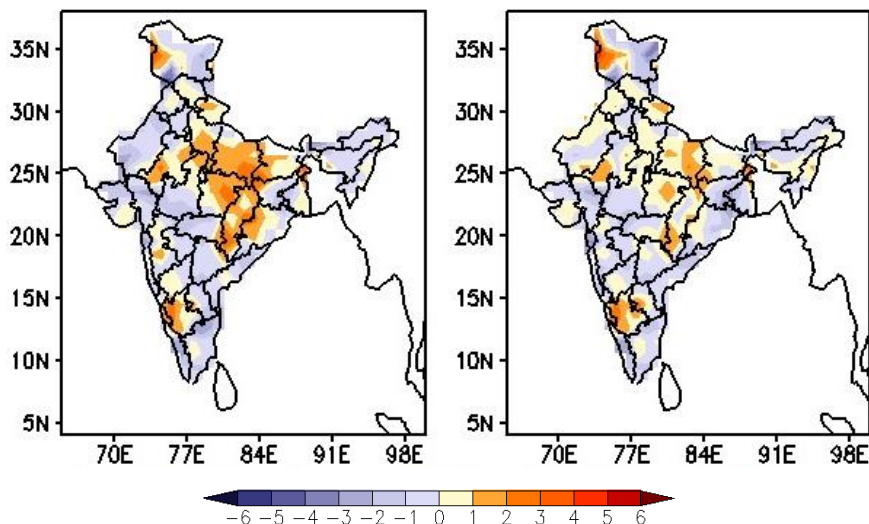
**Maximum Temperature (Tmax)**

- **Week 1 (13.10.2023 to 19.10.2023):** Tmax is likely to be above normal over East & North East India and some parts of Northwest India and Karnataka.
- **Week 2 (20.10.2023 to 26.10.2023):** Tmax is likely to be above normal over parts of East and Central India.

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

(Week1: 13Oct–19Oct)

(Week2: 20Oct–26Oct)



**Minimum Temperature (Tmin)**

- **Week 1 (13.10.2023 to 19.10.2023):** Tmin is likely to be above normal over parts of the North and Central India.
- **Week 2 (20.10.2023 to 26.10.2023):** Tmin is likely to be close to normal over most parts of the country.

## Strategic Agricultural Planning based on rainfall till 26 October 2023

### Agromet Advisories

#### Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 34 mm (48% excess) and over West Uttar Pradesh was 0.7 mm (-97% large deficit) during 01 - 12 October 2023. The extended range weather forecast (rainfall) for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) is above normal over West Uttar Pradesh and below normal over East Uttar Pradesh for week-1 and above normal over West Uttar Pradesh and East Uttar Pradesh for week-2.

#### Western Uttar Pradesh

- Under prevailing weather conditions, sowing of mustard varieties viz., *Varuna*, *Vaibhav*, *Vardhan*, *Kanti*, *Rohini*, *Peetambri* etc. is advised.
- Sowing of gram is also advised with recommended varieties like *Avarodhi*, *KWR-108*, *Radhey*, *JG-16*, *KGD-1168* and *K-850*.
- Under prevailing weather condition, there may be a chance of tikka disease incidence in groundnut crop at pod filling stage. To manage, it is advised to spray 2% Mancozeb or Zineb 75% 2.5 kg or Ziram 27% @3 litres with 500 to 600 litres of water solution.

#### Eastern Uttar Pradesh

- Since there is below normal rainfall forecast during next week, farmers are advised to irrigate the rice crop which is at flowering and milking stage. Harvest early maturing rice crop.
- Due to below rainfall forecast, farmers are advised to harvest the mature maize crop during clear weather conditions.
- Sowing of mustard crop is advised with recommended varieties viz., *RH-725*, *NDR 8502*, *Varuna*, *Kanti*, *Peetambri* etc.

#### Uttarakhand

3.1 mm (-82% large deficit) rainfall received over Uttarakhand during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Uttarakhand is above normal for week-1 and week-2.

- Sowing of potatoes is advised at low lying areas with good water facilities.
- Remove mulch after germination of onion seeds in nursery. Provide light irrigation to maintain optimum soil moisture (avoid over watering).
- Due to forecast of above normal rainfall during next week, farmers are advised to harvest matured rice crop during clear weather condition and keep them at dry place only.
- Farmers are advised to start the sowing of wheat, barley, mustard/toria, lentil etc.

#### Himachal Pradesh

7 mm (-44% deficit) rainfall was received over Himachal Pradesh during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October

2023 and 20 - 26 October 2023) over Himachal Pradesh is above normal for week-1 and; normal for week-2.

- Under prevailing weather condition, farmers are advised to harvest paddy during clear weather condition.
- It is also the optimum time for the sowing of oats for fodder purpose. The varieties recommended are *Palampur-1* and *Kent*.
- Farmers are also advised for sowing of gobhi sarson. The varieties recommended are *HPN-3*, *ONK-1* and *GSC-7*.
- In mid hills of the state farmers are advised for sowing of improved varieties of garlic (*GHC 1* and *Agrifound Parvati*).

### **Punjab**

7 mm (46% excess) rainfall was received over Punjab during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Punjab is above normal for week-1 and; below normal for week-2.

- It is optimum time for sowing of spinach, fenugreek, coriander, radish, turnip, garlic and early varieties of pea viz., *Matar ageta-7* and *AP-3*.
- Sowing of early varieties of potato is also advised. Recommended varieties are *Kufri Surya*, *Kufri Pukhraj*, *Kufri Ashoka* and *Kufri Chandramukhi*.

### **Rajasthan**

No rainfall was received over East Rajasthan during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over East Rajasthan is above normal for week-1 and; normal for week-2.

- Farmers are advised to harvest the maize crop at physiological maturity stage during clear weather condition and keep it in safe, dry place.
- After harvesting of *kharif* crops ploughing and planking is advised to conserve the moisture in the soil.
- To control girdle beetle in soybean, it is advised to spray Acephate 75SP @1 g/litre at 15 days interval.

### **Jammu**

19 mm (53% excess) rainfall was received over Jammu during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Jammu is above normal for week-1 and; normal for week-2.

- Due to chances of rainfall in next week, farmers are advised to go for harvesting and threshing of early mature rice crop immediately to prevent grain shattering during thunderstorms and shift threshed crop immediately to safer places.
- Farmers are advised to postpone sowing of gobi sarson (var: *RSPN-25*, *GSC-7*, *GSL-1* and *DGS-1*) crop due to chances of above normal rainfall. Recommendations are given to treat

the seed with Captan/Thiram @ 3 g/kg seed against Alternaria blight/seedling rot before sowing.

- To control brown spot in late sown Basmati rice which is at soft dough/milking, it is advised to spray Propiconazole @ 1 ml/litre during clear weather @ 2-3 sprays at 15 days intervals.

### **Assam**

135 mm (51% excess) rainfall was received over Assam during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Assam is below normal for week-1 and week 2.

- As forecast of below normal rainfall, farmers are advised for sowing of *rabi* maize with recommended varieties of *rabi* maize viz., *Ganga 101*, *Ganga-5*, *Kishan*, *Vijay*, *Pratap* etc. for obtaining higher yield.
- Under prevailing weather condition, land preparation for potato cultivation is advised. For early planting of potato, collect the recommended varieties of potato like *Kufri Chandramukhi*, *Kufri Jyoti*, *Kufri Megha*, *Kufri Pukhraj* etc. from reliable sources.
- Due to congenial weather condition, there is a chance of bacterial blight in the rice crop. Under such situation, farmers are advised to top dress with MOP fertilizer @ 2 kg/bigha, instead of urea.

### **Jharkhand**

134 mm (205% large excess) rainfall was received over Jharkhand during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Jharkhand is below normal for week-1 and normal for week 2.

- Sowing of mustard is advised to complete within this week. Recommended cultivars are *Shivani*, *Pusa bold*, *Pusa mustard 25*, *Birsa Bhabha sarson-1*, *Pila sarso*, *NRCHB-11*.

### **Bihar**

93 mm (151% large excess) rainfall was received over Bihar during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Bihar is below normal for week-1 and week 2.

- Monitoring of khaira disease is advised in late transplanted paddy. If symptoms occur, spraying of zinc sulphate @ 5.0 kg mixed with lime @ 2.5 kg in 500 litres of water is advised for one hectare cropped area.
- Early sowing of radish is advised. *Pusa chetki*, *Pusa desi*, *Jounpuri*, *Pusa himani*, *Japani safed*, *Pusa rashmi*, *Punjab safed* and *Arka nishant* varieties of radish are advised for sowing in North Bihar region.
- Nursery sowing of early varieties of cabbage is advised. *Pride of India*, *Golden Acre*, *Pusa mukta*, *Pusa agate* and *early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition.

## **West Bengal**

166 mm (136% large excess) rainfall received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 166 mm (74% large excess) during 01 - 12 October 2023. The extended range weather forecast (rainfall) for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) is below normal over Gangetic West Bengal and Sub-Himalayan West Bengal during week-1 and; above normal over Gangetic West Bengal and below normal over Sub-Himalayan West Bengal for week-2.

- Harvesting of Jute is advised, tied in bundles and left-over stagnant water for retting. CRIJAF SONA is advised to use for enhanced retting developed by ICAR CRIJAF.
- Monitoring of sucking pest in brinjal crop is advised to install yellow sticky traps @10 traps per acre for sucking pests

## **Chhattisgarh**

29 mm (-22% deficit) rainfall was received over Chhattisgarh during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Chhattisgarh is below normal for week-1 and; week-2.

- Under prevailing weather condition, farmers are advised to harvest the matured crops like black gram, green gram and soybean.
- If short duration rice is in flowering stage (50% flowering), then farmers are advised for application of third dose of nitrogenous and 25% potash fertilizer, as top dressing to increase quantity and quality of rice grain.

## **Madhya Pradesh**

14 mm (-43% deficit) rainfall was received over Madhya Pradesh during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Madhya Pradesh is below normal for week-1 and; above normal for week-2.

- Farmers are advised to harvest June sown crops like soybean, mung, urd, sesame and maize.
- Monitoring of pink boll worm in cotton is advised at square formation to boll formation stage. To control, it is advised to install pheromone traps @5/ha to in areas where infestation occurs.
- Due to forecast of below normal rainfall during next week, farmers are advised to provide irrigation in June sown rice crop which is at milk to soft dough stage.

## **Odisha**

73 mm (24% large excess) rainfall received over Odisha during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Odisha is below normal for week-1 and; normal for week-2.

- Farmers are advised to maintain about 5-10 cm standing water during panicle initiation stage in paddy and keep the field clean from weeds



- Harvesting of maize crop is advised, when cob-sheath turns brownish, grains become hard with a moisture more than 30%.
- To control fruit and shoot borer in brinjal, it is advised to spray Emamectin benzoate (0.4g/litre water) or Chlorantraniliprole 18.50 % SC (0.3ml/litre water) or Spinosad @ 0.4ml/litre water.

## **Gujarat**

0.8 mm (-95% large deficit) rainfall received over Gujarat during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) over Gujarat is no rainfall for week-1 and above normal rainfall for week-2.

- Land preparation is advised for sowing of mustard crop. Recommended varieties are Varuna, *Gujarat Mustard-1, 2, 3, GDM 4, Bio-902* etc.
- Prepare the land for garlic crop cultivation. Select high yielding varieties like *Gujarat Garlic 3, Gujarat Garlic 4, Gujarat garlic 7, Gujarat Anand garlic 6, Gujarat Junagadh Garlic 5, Yamuna Safed-2, 3.*

## **Maharashtra**

20 mm (-57% deficit) rainfall over Madhya Maharashtra; 5 mm (-87% large deficit) rainfall over Vidarbha; 8 mm (-82% large deficit) rainfall over Marathwada; and 77 mm (2% excess) in Konkan region was recorded during 01 - 12 October 2023. The extended range weather forecast (rainfall) for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) is below normal over Vidarbha and normal over Konkan and Marathwada and above normal over Madhya Maharashtra for week-1 and; above normal over Konkan and Vidarbha and normal over Madhya Maharashtra and Marathwada for week-2, respectively.

### *Vidarbha*

- Complete the harvesting of matured soybean crop, particularly early duration varieties and ensure safe storage of harvested produce.
- Monitor for presence of pink boll worm larvae within flowers/ buds of cotton. Collect and destroy rosette flowers/ buds. If infestation is more than 10% (ETL) spray of Profenofos 50% EC @ 1 to 1.5 ml or Chlorpyrifos 50% EC @ 1 to 1.5ml or Cypermethrin 10 % EC 1ml 10 litres of water is advisable.

### *Parbhani*

- For the management of sucking pest in cotton crop, it is advised to spray Flonicamid 50% WG @ 70 g or Dinotefuran 20% SG @ 70 g or Diafenthiuron 50% WP @ 300 g per 300 litre water per acre.
- As per the forecast of dry weather and rise in maximum temperature, irrigation management is advised in newly planted banana orchard and as per requirement.

## **Kerala**

123 mm (2% excess) received over Kerala during 01 - 12 October 2023. The extended range weather forecast (rainfall) for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) is above normal for week-1 and; week-2.

- Harvesting of matured rice is advised during clear weather condition only and keep them at safe place.
- There is a chance of thrips attack in chilli crop. If the infestation is less, it is advised to spray 2% neem oil+ garlic emulsion under the leaf surface at 10 days intervals. If it is severe then spray Cyantranilprole 10.26 % OD @ml or Acetamidrid 20 % SP @0.2g per litre water.

### **Anantapur**

9 mm (-85% large deficit) rainfall was received over Rayalaseema and 14 mm (-81% large deficit) rainfall was received over Coastal Andhra Pradesh during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) is below normal over Rayalaseema and Coastal Andhra Pradesh for week-1 and; week-2.

- Due to the forecast of below normal rainfall, 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 inter-cultivation in flat method of sowing to conserve the moisture.
- In Anantapur, Kurnool, Chittoor, Krishna, Guntur and Prakasam districts, present weather conditions are favourable for incidence of leaf folder in red gram. To control the leaf folder, spraying of Quinalphos 25% EC @ 1.5 ml or Emamectin benzoate 05 % SG@ 0.4 g/l or Lambda-cyhalothrin 05 % EC @1ml per litre of water is recommended.
- 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 Profenofos 50% EC @ 1 to 1.5 ml or Chlorpyriphos 50% EC @ 1 to 1.5 ml or Cypermethrin 10 % EC 1ml 10 litres of water is advisable.
- of water.

### **Karnataka**

47 mm (-28% deficit) rainfall received over South Interior Karnataka, 79 mm (-19% deficit) over Coastal Karnataka and 9 mm (-84% large deficit) rainfall received over North Interior Karnataka during 01 - 12 October 2023. The extended range weather forecast (rainfall) provided for the next two weeks (13 - 19 October 2023 and 20 - 26 October 2023) is below normal over North Interior Karnataka, Coastal Karnataka and South Interior Karnataka for week-1 and; normal over North Interior Karnataka and South Interior Karnataka and above normal over Coastal Karnataka for week-2.

*South Interior Karnataka*

- Early sown ragi crop is at ear head formation and grain filling stage, farmers are recommended for ear head tying to protect from lodging of crop.
- Deep ploughing is recommended in mango orchard, for conserving the soil moisture and removal of weeds in the field.
- Wherever over population of crop plants is existing, thinning operation is advised for better availability of scarce soil moisture to the reduce population of crop plants.

#### *North Interior Karnataka*

- As there is a forecast of below normal rainfall during next week, it is advised to provide protective irrigation to the crops.
- Under prevailing weather condition, repeated intercultivation is advised to conserve soil moisture and control weed infestation in already sown crops
- Sowing of sunflower and sorghum crops is advised.

#### ***Disclaimer:/अस्वीकरण:***

*मौसम की भव्यवाणी कई कारकों पर निर्भर करती है जो प्रकृति में गतिशील हैं। यहां दी गई कृषि मौसम संबंधी सलाहों की सफलता मौसम पूर्वानुमान की सटीकता पर निर्भर करती है। किसी भी स्थिति में, भारतीय मौसम विज्ञान विभाग (IMD) और भारतीय कृषि अनुसंधान परिषद (ICAR) उपयोगकर्ता या किसी तीसरे पक्ष के लिए किसी भी प्रत्यक्ष, अप्रत्यक्ष, आकस्मिक, परिणामी, विशेष या अनुकरणीय नुकसान या खोए हुए लाभ के लिए इस बुलेटिन में प्रस्तुत जानकारी का उपयोग या दुरुपयोग करने के लिये उत्तरदायी नहीं होंगे।*

***The predictability of weather depends on many factors which are dynamic in nature. The success of Agromet advisories provided here depends on the accuracy of the weather forecast. In no event, India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) will be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information presented in this bulletin.***