



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

**Validity: (25<sup>th</sup> October to 7<sup>th</sup> November 2019)**

**Date of issue: 25<sup>th</sup> October 2019**

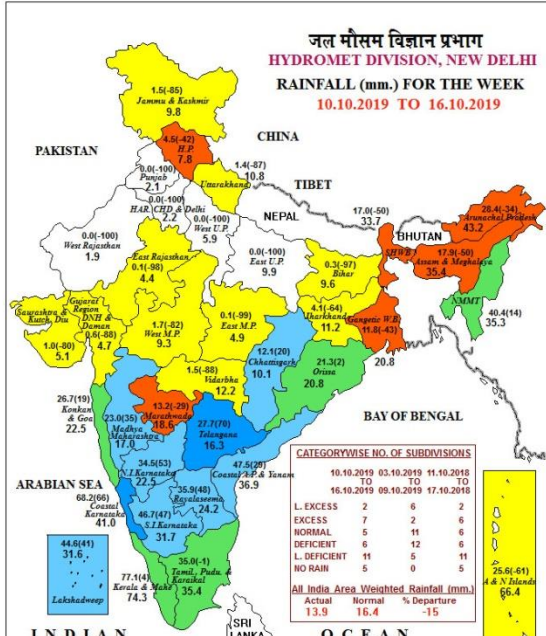
**Issued by**  
**Indian Council of Agricultural Research (ICAR)**  
**All India Coordinated Research Project on Agricultural Meteorology (AICRPAM),**  
**Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.**  
**&**  
**Earth System Science Organization**  
**India Meteorological Department**

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

### Realized Rainfall

(10<sup>th</sup> October to 23<sup>th</sup> October, 2019)

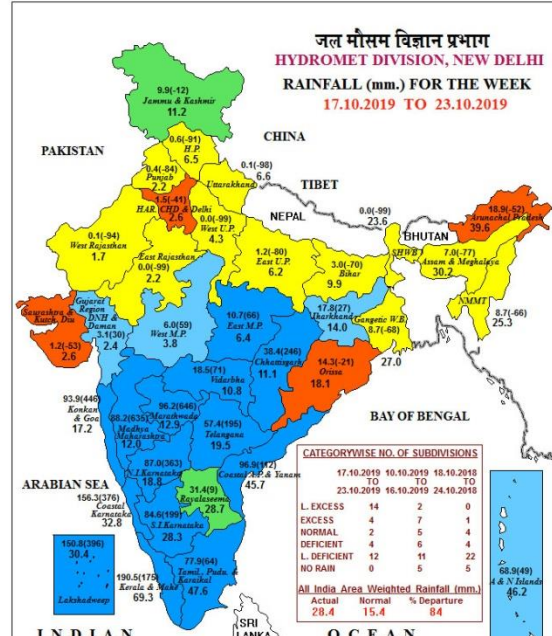
#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)  
■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

NOTES:  
 (a) Rainfall figures are based on operational 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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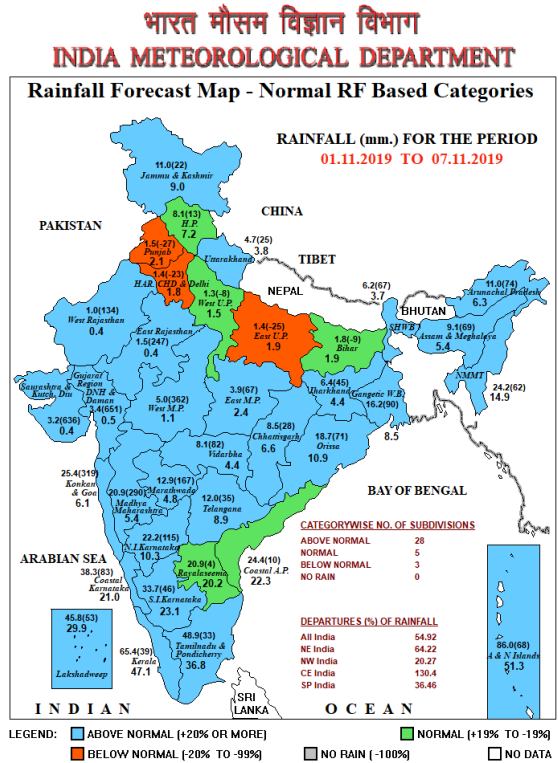
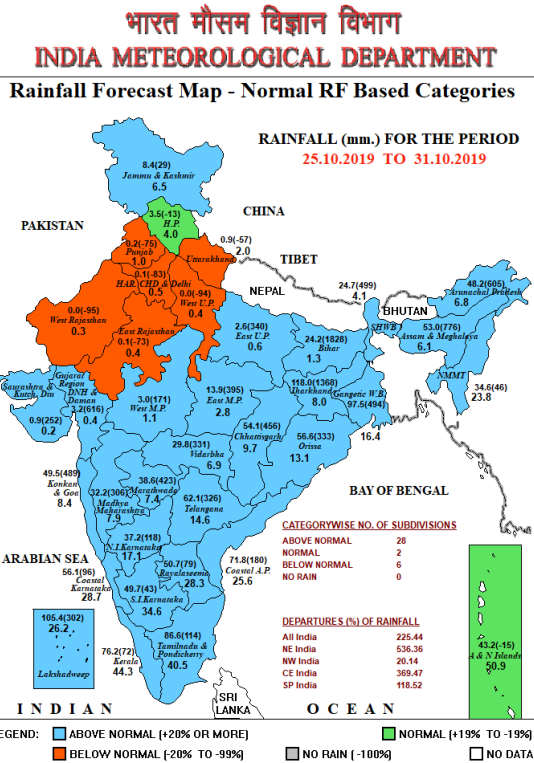
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NOTES:  
 (a) Rainfall figures are based on operational data.  
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
 Percentage Departures of Rainfall are shown in Brackets.

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

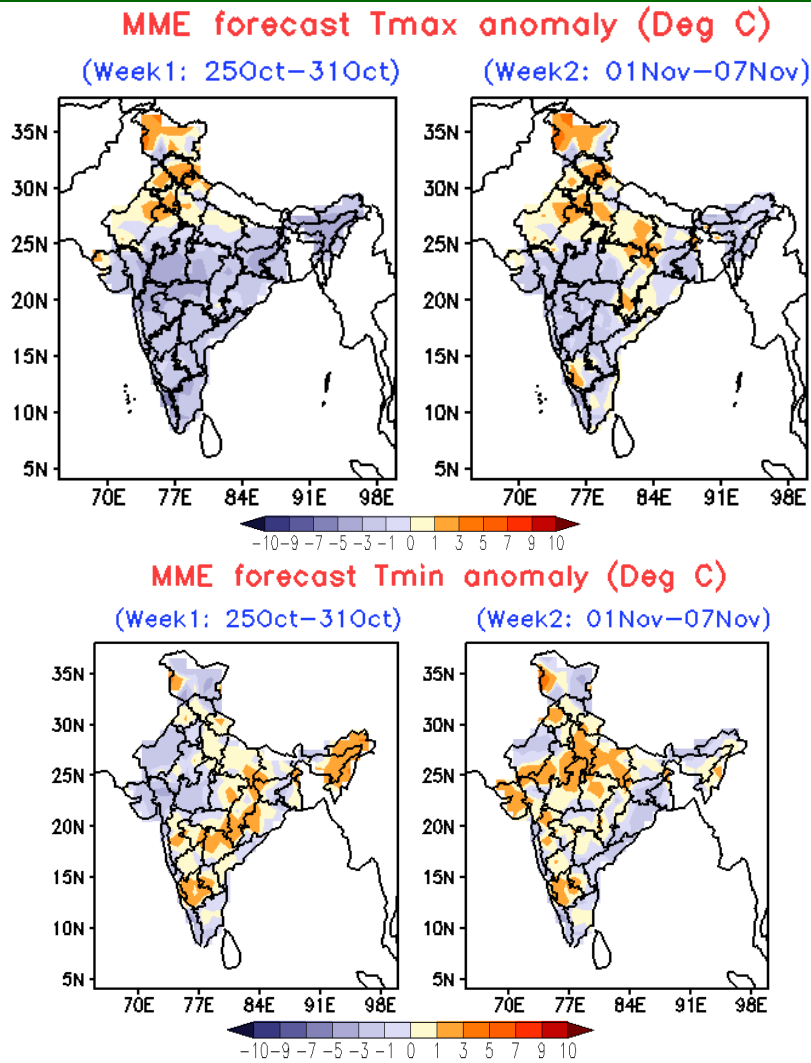
# Extended Range Forecast System

## Rainfall forecast maps for the next 2 weeks (IC – 23 October) (25<sup>th</sup> October to 7<sup>th</sup> November 2019)



- **Week 1 (25.10.2019 to 31.10.2019):** Main rainfall activity is over Central India and south Peninsula further extending into north-east India. Large positive departure of rainfall in week 1 for the country as a whole.
- **Week 2 (01.11.2019 to 07.11.2019):** Slightly above normal rainfall will continue over south peninsula and eastern coastal region of India.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 23 October)  
(25<sup>th</sup> October to 7<sup>th</sup> November 2019)**



**Maximum Temperature (Tmax)**

- **Week 1 (25.10.2019 to 31.10.2019) and Week 2 (01.11.2019 to 07.11.2019):** Tmax anomaly is mostly negative over central and south peninsular India during the period, whereas it is slightly above normal over extreme northern parts and Indo-Gangetic region during the period.

**Minimum Temperature (Tmin)**

- **Week 1 (25.10.2019 to 31.10.2019):** Slightly above normal Tmin over south-eastern parts of Central India and north-eastern parts of India.
- **Week 2 (01.11.2019 to 07.11.2019):** Slightly above normal Tmin over northern and north-western parts of India.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 7<sup>th</sup> November 2019**

### **Agromet Advisories**

#### **Kerala**

Amount of rainfall received over Kerala during the period from 01<sup>st</sup> October to 24<sup>th</sup> October 2019 is 363.4 mm (50% excess). The extended range weather forecast for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) is above normal for week-1 and week-2.

- Due to prevailing cloudy weather, there is a chance of leaf folder in paddy. As a prophylactic measure, apply 2CC Trichogramma chilonis card/acre to control leaf folder in paddy. Cut the cards in to small pieces and fix in different parts of the field in plastic cups.
- Due to intermittent rainfall and sunshine, there is a chance of sigatoka disease in banana. It is advised to spray pseudomonas 20g/litre of water. In case of severe attack, spray 2 ml Hexaconazole or 1 ml Propiconazole/litre of water by mixing it with a sticker and spray on both the surface of the leaf.
- Due to intermittent rainfall and bright sunshine, there is a chance of stem borer in ginger. Spray 20 g Beauveria/litre of water to control stem borer in ginger.

#### **Tamil Nadu**

Amount of rainfall received over Tamil Nadu is 147.9 mm (11% normal) during the period of 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) is above normal for week-1 and week-2.

- Prevailing weather condition is favorable for thrip incidence in cotton. It is advised to spray any one of the insecticides (500 l spray fluid /ha), Imidacloprid 200 SL @ 100 ml or Methyl demeton 25 EC 500ml/ha or Dimethoate 30 EC 500 ml/ha or NSKE 5% @ 2 kg/ha.
- Farmers are advised to adopt the weed management practices for dryland crops viz., maize, sorghum, cotton and pulses based on the receipt of rainfall for effective control of weeds.

#### **Maharashtra**

Rainfall received over Madhya Maharashtra is 161.2 mm (145% large excess), over Marathwada is 142.5 mm (120% large excess), Vidharbha is 27.4 mm (-47% deficit) and Konkan region 180.2 mm (76% large excess) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) over Madhya Maharashtra, Marathwada, Konkan, Vidharbha are above normal for week-1 and in week-2.

#### **Konkan**

- Due to cloudy and humid weather conditions, there is a possibility of incidence of tea mosquito bug and thrips on vegetative flush of cashew nut. To protect the flush of cashew, spray Monocrotophos 36% SL @ 15 ml or Lambda Cyhalothrin 5% EC @ 6 ml/10 litre of water.
- Due to cloudy and humid weather condition, there is a possibility of incidence of hoppers, midge fly and shoot borer on vegetative flush of mango to protect the flush of mango, spray Lambda Cyhalothrin 5%EC @ 6ml or Quinalphos 25% EC @ 25 ml/10 litre of water.

## Madhya Maharashtra

- Farmers are advised that to treat the seeds with Azotobacter and PSB @ 25 g/kg seeds before sowing of *rabi* sorghum and safflower.
- It is advised that planting of recommended variety of pre seasonal sugarcane should be done between 15 October- 15 November.
- Vijay and Digvijay varieties of chickpea should be used for sowing in dry land area.

## Gujarat

Amount of rainfall received over Gujarat is 55.0 mm (229% large excess) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) over Gujarat region is above normal for week-1 and week-2.

- Under prevailing weather conditions, rouging of viral infested crop is advised in chilly. Infected plants should be uprooted and buried in the soil. After rouging, spraying of Imidacloprid @ 5 ml/10 litre of water is advised or control of disease vectors during clear sky condition.
- It is advised to prepare land for sowing of mustard and apply FYM. Procure certified seed @ 4 kg/ha of any recommended mustard cultivar viz., Gujarat Mustard 1 or 2 or 3 or GDM 4 or bio 902. Apply Basal dose of nitrogen @ 25hg/ha and Phosphorus @50 kg/ha.
- Prepare land for sowing of *rabi* fennel by applying FYM. Select varieties like Gujarat fennel-2, 11 and 12 with a seed rate of 5 kg/ha and spacing 45 x 15cm.

## Rajasthan

Rainfall received during 01<sup>st</sup> October to 24<sup>th</sup> October 2019 over East Rajasthan was 28.6 mm (114% large excess). The extended range weather forecast for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) over east Rajasthan is below normal for week-1 and above normal for week-2.

- Farmers are advised to procure good quality seeds of wheat and start field preparation. Recommended varieties are WH-147, Lok-1, Raj-3077, GW-190, Raj-3765, GW-173, GW-273, Raj-3777, GW-, Raj-4037, Raj-4083, HI-1544, Raj-4120, Raj-4079 and for durum wheat – Raj-155, Malav Shakti HI-8498, MPO-1215, HI-8713, HI-873, HI-8759. Application of Chloropyriphos 20EC@ 5 litre/ha with pre-irrigation is recommended before sowing in the fields having problem of termite infestation.
- Complete sowing of dual oat during this week with improved varieties Kent and JHO-99-2. Use 100 kg/ha seed and apply 30 kg N and 40 kg K/ha at sowing and remaining 30 kg nitrogen after first cutting.
- Sowing of garlic is advised on raised bed. Before sowing, farmers are advised to ensure optimum soil moisture for better seed germination. Application of FYM and phosphorus fertilizer is recommended.

## West Bengal

Amount of rainfall received over Gangetic West Bengal during 01<sup>st</sup> October to 24<sup>th</sup> October 2019 is 89.1 mm (-37 % deficit). The extended range weather forecast for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) is above normal for week-1 and week-2.

- Under present situation, attack of white fly has been reported from many areas leading to the spread of yellow mosaic virus in Okra. Spray Difenthiuron @ 0.75g/litre of water to prevent the further spread of the disease.
- Present temperature and humidity conditions are congenial for the rapid spread of thrips and mites leading to the leaf curling in chilli. As a control spray Diafenthiuron @ 0.75g/litre of water at 7-10 days interval in dry days only.
- Start sowing of early varieties of cabbage (e.g. Pride of India, Pusa early, Kranti etc.) & cauliflower (e.g. Jawharmoti, Bharat Jyoti, Early banaras etc.) @ 4g/katha. For early sown crops, apply Carbendazim 12% + Mancozeb 64% @ 2 g/litre of water to prevent damping off in seedbed. Maintain the proper drainage channel to drain out the excess water and cover the seedbed with polythene if possible.

## Jammu

Rainfall received during 01<sup>st</sup> October to 24<sup>th</sup> October 2019 in Jammu is 28.0 mm (-7% deficit). The extended range weather forecast for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) is above normal for the week-1 and week-2.

- Due to prevalence of dry weather, it is advised to apply irrigation in vegetables and young fruit plants.
- Remove the water suckers and keep the area clean. Remove the tying material from bud/graft union. If the plants show week growth, apply light dose of urea.

## Assam

Rainfall received during 01<sup>st</sup> October to 24<sup>th</sup> October 2019 in Assam is 107.6 mm (-24% deficit). The extended range weather forecast for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) is normal for the week-1 and week-2.

- Farmers are advised to collect the seeds of recommended varieties of potato Kufri Chandramukhi, Kufri Jyoti, Kufri Megha, Kufri Sindhuri etc. from reliable sources.
- Sowing of cauliflower seeds @ 8-10g/m<sup>2</sup> for mid season varieties (like Improved Japanese, Pusa Synthetic, Pusa Snow hall) and cabbage @10g/m<sup>2</sup> for early (like Golden Acre, Pride of India, Pusa Mukta) and late maturity varieties (like Drum head) can be sown in this week. Seed treatment should be done with Captan or Thiram 50 WP @3g/kg before sowing the seeds.

## Jharkhand

Amount of rainfall received over Jharkhand is 80.0 mm (14% normal) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) over Jharkhand is above normal for week-1 and week-2.

- Farmers opting for rainfed wheat may prepare their field after harvesting of *kharif* crop and arrange

improved seed and fertilizer. Select one of the recommended varieties like K-1317, HD-3171, HI-1612, Birsa gehun-3 etc. 40 kg seeds, 80 kg Urea, 75 kg SSP and 15 kg Muriate of Potash are required for cultivation in one acre.

- The recommended varieties for Deshi (indigenous) gram are BG-372, BG-256, KWR-108, Pant G-186, Pant G 114 and for Kabuli gram are HK-94-134, BG-1053, BG-1003 etc. 30 kg seeds for deshi variety and 40 kg seeds for Kabuli type varieties are required for cultivation in one acre.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 85.8 mm (60% large excess) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) over Chhattisgarh is above normal for week-1 and for week-2.

- In rice, panicle mite is being observed. Dissolved grains or chaffy grain and brownish patches can be observed on stem. For its control Propiconazole 2ml + Profenophos @ 2ml/litre can be sprayed per hectare mixed in 500 litres of water only after cessation of rainfall.
- At present green fodder is available in plenty. Therefore dairy farmers are advised that green fodder mixed with forage should be fed to animals/cows/buffaloes. Care for prevention of loose motion should also be followed.

### **Odisha**

Amount of rainfall received over Odisha is 111.8 mm (23% excess) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) over Odisha is above normal for week-1 and week-2.

- It is the optimum time for sowing of green pea in the fallow uplands. High yielding varieties suitable for Odisha such as Rachana, Arkel and T -163 should be taken up with 30 kg seeds/acre. Before sowing, seeds are to be treated with 2 g Carbendazim/kg seeds. Apply 10:16:10 kg NPK/acre during final land preparation.
- As *kharif* green gram and black gram crop at maturity stage it is advised for picking of pods as the weather is favourable for harvesting and drying of pods. Dry them under sun for 2 to 3 days before threshing. Clean the seeds and dry again to reduce the moisture content of seeds to 14% moisture content for safe storage
- It is optimum time for sowing of rainfed groundnut in river banks. It is advised to grow high yielding varieties like Smruti, TAG-27, TAG – 24 and JL-24. Use 60 kg pods/acre. Treat the seeds with 1.5 g Carbendazim or Thiram 3g /kg of seeds one week before sowing.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 21.8 mm (-10% deficit) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) on rainfall over Himachal Pradesh is normal for both the weeks.

- Farmers are advised to harvest maize, paddy and pulses and also utilize the expected sunny sky



conditions for hay making and drying of harvested crops.

- It is advised for early wheat sowing in lower regions. Early sown varieties of wheat can be sown during second fortnight of October.
- Training and pruning as well as intercultural operations are advised in rose in present weather conditions. Apply Bavistin paste in the cut portion to protect the crop against fungal attack.

### **Karnataka**

Amount of rainfall received over South Interior Karnataka is 220.4 mm (88% large excess) and North Interior Karnataka is 197.0 mm (112 large excess) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) on rainfall over South Interior Karnataka and North Interior Karnataka is above normal for both the weeks.

#### **South Interior Karnataka**

- Intercultural operation is recommended to overcome weeds infestation. Drain out excess rainwater in crop field due to heavy rainfall forecast.
- To control stem borer in maize crop, spray Quinolphos-25 EC @ 2ml/litre of water or Chlorophyriphos -20 EC @ 2ml/litre of water.
- Since rainfall aberration are extreme these days, farmers are advised to take up planting for mango, Jack fruit and Jamun on the bunds

### **Bihar**

Amount of rainfall received over Bihar is 20.3 mm (-66% large deficit) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) for rainfall over Bihar is above normal for week 1 and normal for week 2.

- Farmers are advised to ensure optimum soil moisture at the time of sowing of *rabi* crops for proper germination and crop establishment. If soil moisture is found lacking, pre-sowing irrigation is suggested.
  - Nursery sowing of *rabi* onion is advised. The size of seedbed should be 1.0 m in length and 3-5 meters in width. Arka Niketen, N-2-4-1, Pusa-Red, Bhimaraj and Nashik Red varieties of *rabi* onion are recommended for sowing in north Bihar. Treated seeds @8-10 kg/hectare is advised.

### **Punjab**

Amount of rainfall received over Punjab is 9.1 mm (13% normal) during 01<sup>st</sup> October to 24<sup>th</sup> October 2019. The extended range weather forecast provided for next two weeks (25<sup>th</sup> to 31<sup>st</sup> October and 01<sup>st</sup> to 7<sup>th</sup> November 2019) on rainfall over Punjab is below normal for both the weeks.

- Farmers are advised to prepare land for sowing of wheat varieties. Pre-sowing irrigation can be

given during these days.

- It is the optimum time for the sowing of barseem and shaftal, lucerne, oats and senji. To get higher yield from first cutting, sow barseem and lucerne in mixture with oats and sarson.
- It is the optimum time for transplanting of mid-season cauliflower and sowing of pea, root and leafy vegetables.

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