



## **National Agromet Advisory Service Bulletin**

based on

### **Extended Range Weather Forecast (ERFS)**

**Validity: 10 July - 23 July 2020**

**Date of issue: 10 July 2020**

**Issued by**

**AICRP on Agro-Meteorology (AICRPAM),  
Central Research Institute for Dryland Agriculture (CRIDA),  
Indian Council of Agricultural Research (ICAR)**

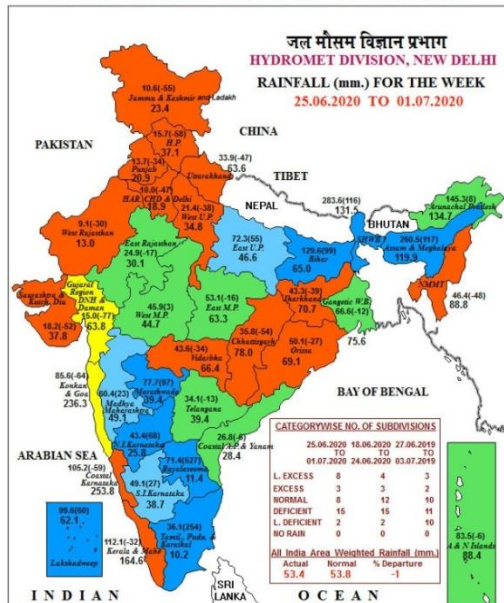
**&**

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

# Realized Rainfall

(25 June - 8 July, 2020)

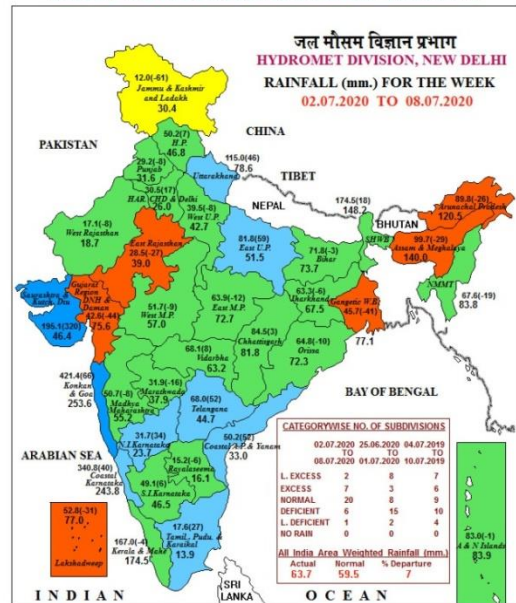
## भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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.

## 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.

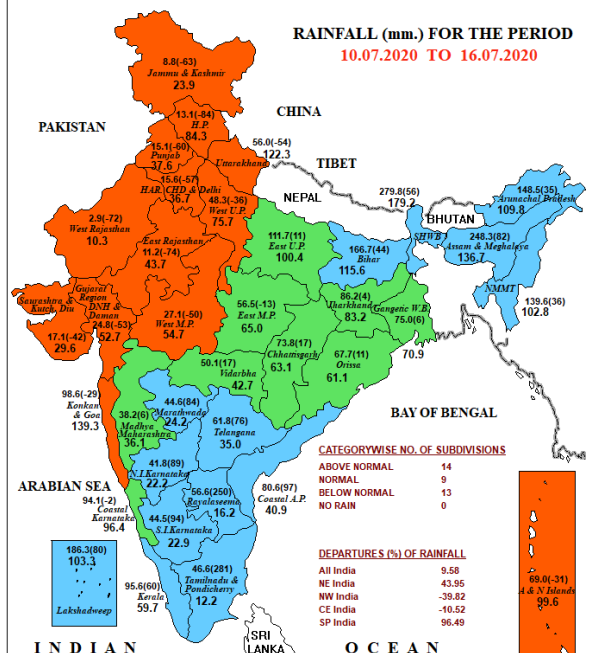
- Normal or above normal rainfall occurred in both the weeks in East Uttar Pradesh, Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra, Marathwada, Interior Karnataka, Andhra Pradesh & Yanam, Telangana, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands.
- Normal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

# Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 08 July)  
(10 - 23 July, 2020)

## भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

Rainfall Forecast Map - Normal RF Based Categories

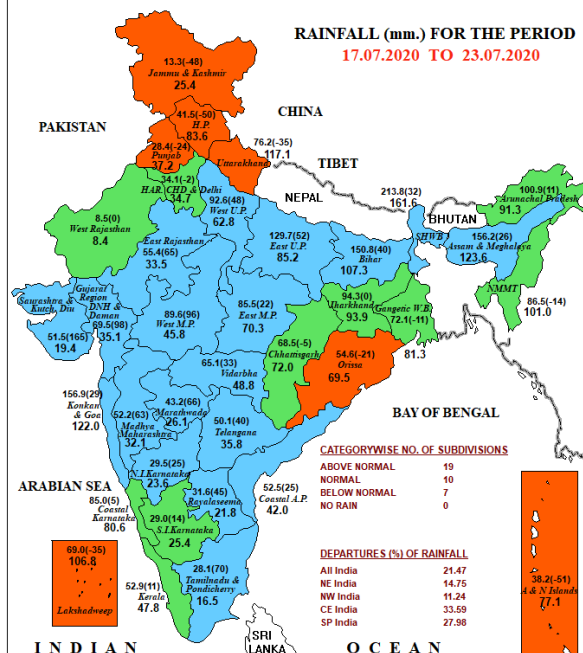


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%)  NO DATA

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

## भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

Rainfall Forecast Map - Normal RF Based Categories



LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%)  NO DATA

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

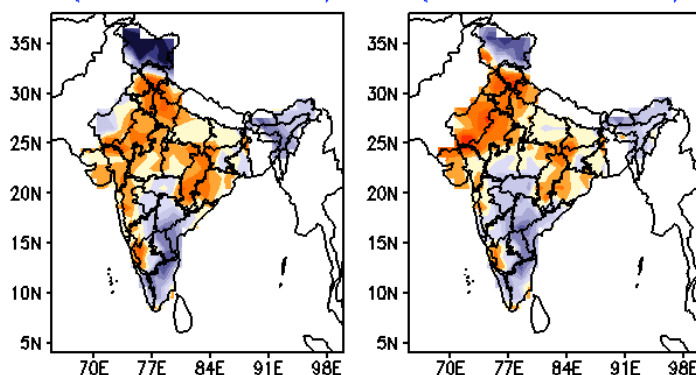
- **Week-1 (10.07.2020 to 16.07.2020):** Above normal rainfall over north-eastern states, Bihar and over south peninsula. Normal rainfall over Odisha, Chhattisgarh, East Madhya Pradesh, Gangetic West Bengal and Jharkhand. Whereas, below normal over most parts of north-west India.
- **Week-2 (17.07.2020 to 23.07.2020):** Rainfall over northern parts of India is likely to increase.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast for next 2 weeks (IC – 08 July)  
(10 - 23 July, 2020)**

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

(Week1: 10Jul–16Jul)

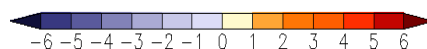
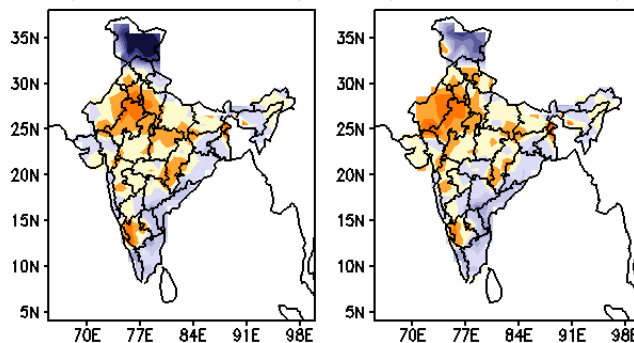
(Week2: 17Jul–23Jul)



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

(Week1: 10Jul–16Jul)

(Week2: 17Jul–23Jul)



**Maximum Temperature (Tmax)**

- **Week-1 (10.07.2020 to 16.07.2020) and Week-2 (17.07.2020 to 23.07.2020):** Above normal Tmax over North West India and adjoining region during most of the period, whereas below normal Tmax over North-eastern states and south-eastern coastal regions of India.

**Minimum Temperature (Tmin)**

- **Week-1 (10.07.2020 to 16.07.2020) and Week-2 (17.07.2020 to 23.07.2020):** Above normal Tmax over North West India and adjoining region during most of the period, whereas below normal Tmax over North-eastern states and south-eastern coastal regions of India.

## Strategic Agricultural Planning based on rainfall during next two weeks till 23 July 2020

### Agro-met Advisories

#### Kerala

Amount of rainfall received over Kerala is 714.2 mm (-18% deficit) during the period of 01 June 2020 - 09 July 2020. The extended range weather forecast for next two weeks (10 - 16 July and 17 - 23 July 2020) is above normal for week-1 and normal for week-2.

- Due to high relative humidity, there is a chance of downy mildew attack in cucurbitaceous vegetables. To control, spray of pseudomonas solution @ 20 g/ litre under the leaves is advised.
- Due to increased rainfall, there is a chance of rhizome rot in banana. As a precaution, pour 3 litre of Pseudomonas solution (20g /litre) at the basin.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 301.4 mm (32% excess), over Marathwada is 272.7 mm (46% excess), Vidharbha is 254.4 mm (normal rainfall) and Konkan region 1201.2 mm (18% excess) during 01 June 2020 - 09 July 2020. The extended range weather forecast for next two weeks (10 - 16 July and 17 - 23 July 2020) over Madhya Maharashtra and Vidharbha is normal and Marathwada is above normal and Konkan is below normal for week-1 and above normal over Konkan, Madhya Maharashtra, Marathwada and Vidharbha for week-2.

#### *Madhya Maharashtra*

- Under rainfall deficit condition, it is advised to irrigate sugarcane crop with alternate furrow system.
- There may be a chance of attack of army worm on maize, jowar and sugarcane crop. If attack is more than 10% level, spray of Spinetoram 11.7 % SC @ 10 ml or Chlorantraniliprole 18.5% @ 3-4 ml per 10 litre of water is advised.

#### *Konkan*

- Due to expected heavy rainfall, it is advised to make arrangement for drain out of excess water from rice fields and maintain water level of 2.5 to 5 cm up to 30 days after transplanting.

#### *Vidharbha*

- Under prevailing weather condition, nursery seed sowing for *kharif* vegetables like chilli, tomato, brinjal etc. is advised.
- Sowing of *kharif* sorghum is recommended early duration varieties viz., CSH-30, medium duration varieties viz., CSH-35, SPH-1635 and improved varieties viz., PDKV Kalyani, CSV-20, CSV-27, CSV-34.

#### *Marathwada*

- For management of fall armyworm in maize crop, farmers are advised to spray Thiamethoxam 12 % + Lambda cyhalothrin 9.5 ZC @ 5 ml or Spinetoram 11.7 SC @ 4 ml per 10 litre of water during clear weather condition.
- For management of mealy bug in custard apple, it is advised to spray Neem oil @ 20 ml per 10

liters of water during clear weather condition.

### **Hisar**

Amount of rainfall received over Hisar is 84.0 mm (2% excess) during 01 June 2020 - 09 July 2020. The extended range rainfall forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) over Hisar is below normal for week-1 and above normal for week-2.

- If dry weather persists, farmers may apply irrigation in vegetable and fruits crops.
- Farmers are also advised to go for sowing of sorghum, maize and lobia as fodder crops.
- Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep animals healthy.

### **Karnataka**

Rainfall received during 01 June 2020 - 09 July 2020 over South Interior Karnataka is 209.4 mm (3% excess) and North Interior Karnataka is 179.0 mm (29% excess). The extended range weather forecast for next two weeks (10 - 16 July and 17 - 23 July 2020) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and normal over South Interior Karnataka and above normal over North Interior Karnataka for week-2.

#### *South Interior Karnataka*

- Farmers may go for sowing of medium to short duration groundnut with varieties TMV-2, JL-24, KCG-6; cowpea with varieties TVX-944, KBC-1; green gram with varieties PS-16, PDM-84,178 and blackgram with varieties Karagao-3, T-9, Rashmi (LBG-625).
- Farmers are advised for pruning of dried twigs and branches in mango to facilitate the sunlight to bear more fruits in next season.
- Farmers may also go for sowing of red gram as long duration mono crop with varieties TTB-7, BRG1, 2, 4 & 5, castor with varieties DCS-9 (Jyothi), DCH-177&32, maize with varieties Ganga-11, Deccan -103, Vijaya composite, Composite NAC-6004, 6002, hybrid-Nityashree (NAH-2049).

#### *North Interior Karnataka*

- Under prevailing rainy weather condition, sowing of *kharif* crops like greengram, redgram, bajra, navane and groundnut (bunch type), castor, onion, chilli is recommended.
- Farmers are also advised to sow the crop in rows across the slope to facilitate better conservation of moisture in the soil.
- Farmers are advised to vaccinate livestock against foot and mouth disease (FMD vaccination), black quarter disease (BC vaccination) and *haemorrhagic septicaemia*.

### **Assam**

Amount of rainfall received over Assam is 786.0 mm (16% excess) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Assam is above normal for week-1 and week-2.

- Present weather is favourable for incidence of rhizome rot disease in ginger. To control, soil drenching with Copper oxychloride solution @ 3g/litre of water at 60 and 90 days after planting is advised.
- Farmers are advised to maintain proper drainage facility in coconut, citrus, papaya, banana and other vegetable orchards to drain out excess amount of water from the crop fields.

### **Uttar Pradesh**

Rainfall received during 01 June 2020 - 09 July 2020 over East Uttar Pradesh is 292.8 mm (66% large excess) and West Uttar Pradesh is 99.9 mm (-25% deficit). The extended range weather forecast for next two weeks (10 - 16 July and 17 - 23 July 2020) over East Uttar Pradesh is normal and West Uttar Pradesh is below normal for week-1 and above normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

- Due to expected heavy rainfall, farmers are advised to make proper drainage system in all cereals & pulses crops and vegetable crops.
- Farmers are advised for sowing of *kharif* maize with recommended varieties viz., hybrid Dakan-107, Malveya-2, JH-3459, Prakash, PSM-5, Pro-303, KH-510, MMH-113 and composite varieties viz., Novjoti, Pusa-2, Prabhat and Azad uttam.

### **Odisha**

Amount of rainfall received over Odisha is 331.4 mm (8% excess) during 01 June 2020 - 09 July 2020. The extended range rainfall forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) over Odisha is normal for week-1 and below normal for week-2.

- Under prevailing rainy weather, sowing of ragi in nursery is advised with varieties Divyasingh, AKP-2, AKP-3, AKP-7, Godavari, Neelachal, Bhairavi, Shubhra, and Chilika.
- It is the optimum time for cashewnut planting with high yield varieties Vengrulla-1.4, BPP-4, Bhubaneswar-1, VRI-2, Hybrid 2-17.
- There is a chance of top shoot borer infestation in sugarcane crop. To manage, spray Fipronil 5% SC (Reagent/Sergent) @ 600ml/acre or Profenophos 50% EC (Profigan/Prahar) @ 400 ml/acre by mixing it in 200 litre of water.

### **West Bengal**

Amount of rainfall received over West Bengal is 335.8 mm (-5% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over West Bengal is normal for week-1 and week-2.

- Due to higher chances of rainfall, it is advised to maintain proper drainage channel in Jute crop fields.
- There is also a chance of fruit rot in pointed gourd. It is advised to apply Endosulphan @ 2 ml/litre of water.

## **Bihar**

Amount of rainfall received over Bihar is 400.8 mm (51% excess) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Sowing of sunflower is advised in upland areas with recommended composite varieties Mordane, Surya, C O-1, Pairadevik, DRSF-108 and hybrid varieties BSH-1, KBSH-1, KBSH-44 and MSFH-1, MSHF-8 for sowing in North Bihar.
- It is advised to complete the nursery sowing of paddy. Recommended early varieties for North Bihar are Sahbhagi, Prabhat, Dhanlakshmi, Richariya, Saket-4, Rajendra Sweta and Rajendra Bhagwati.
- Land preparation is advised for sowing of pigeon pea in upland areas. Recommended varieties for North Bihar are Bahar, Pusa-9, Narendra Arher-1, Rajendra Arher-1 and Maalvia-13.

## **Gujarat**

Amount of rainfall received over Gujarat is 158.0 mm (-33% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Gujarat is below normal for week-1 and week-2.

- Land preparation for sowing of maize should be done. Recommended varieties are GM 2, Narmada Motior, hybrids like GAYMH 1, GDYMH 101, GAWMH-2, HPQM 1.
- It is advised to monitor the brinjal crop for infestation of white fly. If infestation is observed, spray 500 ml of 5% Neem seed extract or Neem seed oil 50 ml with Diafenthuron 50% wp @ 60 g/litre of water. If infestation is above ETL, spray Propargite 57% EC @10 ml/10 litre of water.

## **Jammu**

Amount of rainfall received over Jammu is 60.3 mm (-47% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Jammu is below normal for week-1 and week-2.

- Due to prevailing dry and humid weather, there is a chance of leaf miner and citrus psylla in citrus crop. If observed, spray Dimethoate @ 1ml/litre of water during clear weather.
- Due to high temperature and high humidity, there is cracking in citrus fruits. To prevent, it is advised to spray the crop with Zinc sulphate or Boron during clear weather.

## **Rajasthan**

Amount of rainfall received over Rajasthan is 109.9 mm (-5% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Rajasthan is below normal for week-1 and above normal for week-2.

- Under rainy weather condition, farmers are advised to complete the sowing of soybean with recommended improved varieties viz., Pratap soya-1, Pratap Raj soya- 2, NRC-37, JS-335, JS-93-05, JS-71-05, JS-9560 and RKS-45.



- Farmers of Western parts are advised to sow bajra and moth. Improved varieties of bajra are HHB-67, Raj-171, ICMH-356, RHB-121, RHB-173, RHB-154 &177 and moth are RMO-257, RMO-225, RMO-425, RMO-423, RMO-40.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 122.1 mm (-24% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Himachal Pradesh is below normal for week-1 and week-2.

- Under prevailing weather condition, nursery raising of medicinal plants viz. aswagandha, tulsi, digitalis, jangli bhindi and agarkara is advised.
- It is advised to maintain room temperature of 18-22°C and relative humidity around 85% for proper growth and development of mushrooms.
- Under prevailing weather condition, there is a chance of ecto-parasite attack in dairy animal. To control, spray of Butox @ 2ml/litre of water in cowshed is advised.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 374.6 mm (26% excess) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Chhattisgarh is normal for week-1 and week-2.

- Under prevailing rainy weather condition, farmers are advised for sowing of soybean with recommended varieties viz., JS 93-05, JS 97-52, JS 335, JS 95-60, RKS-18 Chhattisgarh Soya-1.

### **Madhya Pradesh**

Amount of rainfall received over Madhya Pradesh is 291.6 mm (25% excess) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Madhya Pradesh is normal for week-1 and above normal for week-2.

- Under prevailing rainy weather condition, sowing of rice seeds in nursery bed in irrigated areas of East Madhya Pradesh is advised.
- Due to chances of heavy rainfall, farmers are advised to prepare proper drainage channel in pulse, oilseed and vegetable growing fields.

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 271.6 mm (-2% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Uttarakhand is below normal for week-1 and week-2.

- It is advised to harvest mature fruits of plum, apricot and use pheromone traps/ light traps/ yellow strips in the fields for control of pests.
- Under rainy weather condition, farmers must arrange to drain out excess rain water from

vegetable fields.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 281.0 mm (-2% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Jharkhand is normal for week-1 and week-2.

- Due to rainy weather condition, it is advised to start land preparation and sowing of timely sown direct seeded upland rice.
- Under prevailing weather condition, sowing of groundnut is also advised with recommended varieties viz., AK 12-24, Birsa moongfali 1, 2, 3 and bold type are Birsa bold (BAU 13).

### **Punjab**

Amount of rainfall received over Punjab is 86.5 mm (-5% deficit) during 01 June 2020 - 09 July 2020. The extended range weather forecast provided for next two weeks (10 - 16 July and 17 - 23 July 2020) on rainfall over Punjab is below normal for week-1 and week-2.

- Prevailing weather condition is favourable for fruit rot and die back disease of chilli. Farmers are advised to spray 250 ml Folicur or 750 g Indofil M-45 or Blitox in 250 litre of water per acre at 10 days interval.
- It is the optimum time for planting of citrus, mango, litchi, guava, papaya, sapota.

### ***Disclaimer:***

*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 forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) 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 on this bulletin.*