



## National Agromet Advisory Service Bulletin

based on

### Extended Range Weather Forecast (ERFS)

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**Issued by**

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

**&**

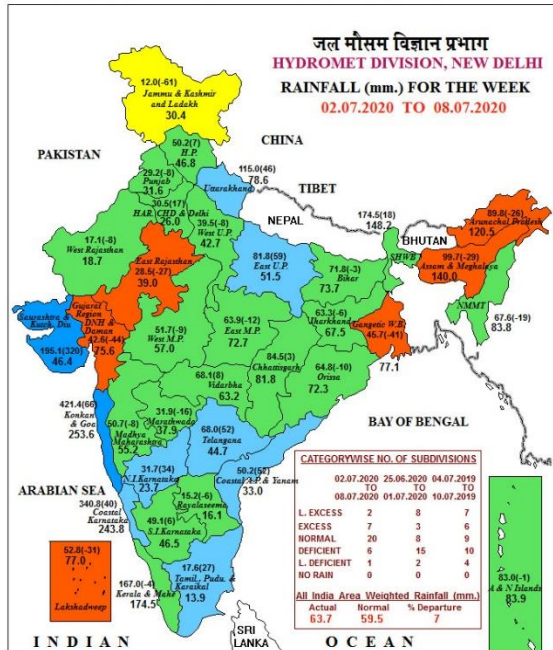
**India Meteorological Department (IMD)  
Earth System Science Organization**

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

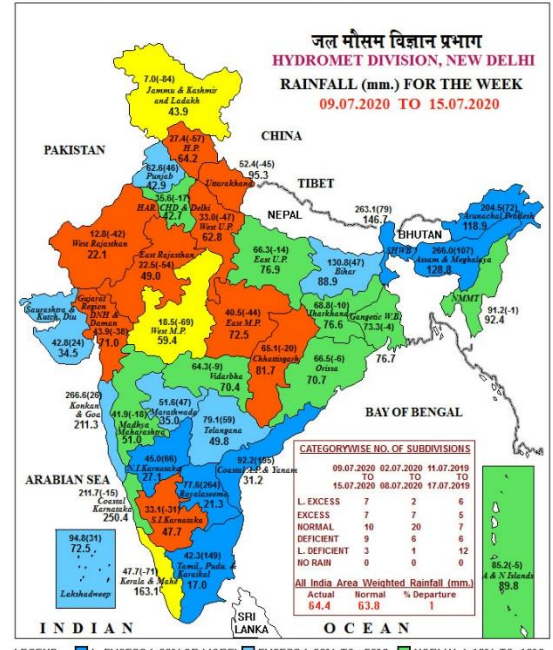
### Realized Rainfall

(2<sup>nd</sup> to 15<sup>th</sup> July, 2020)

#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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

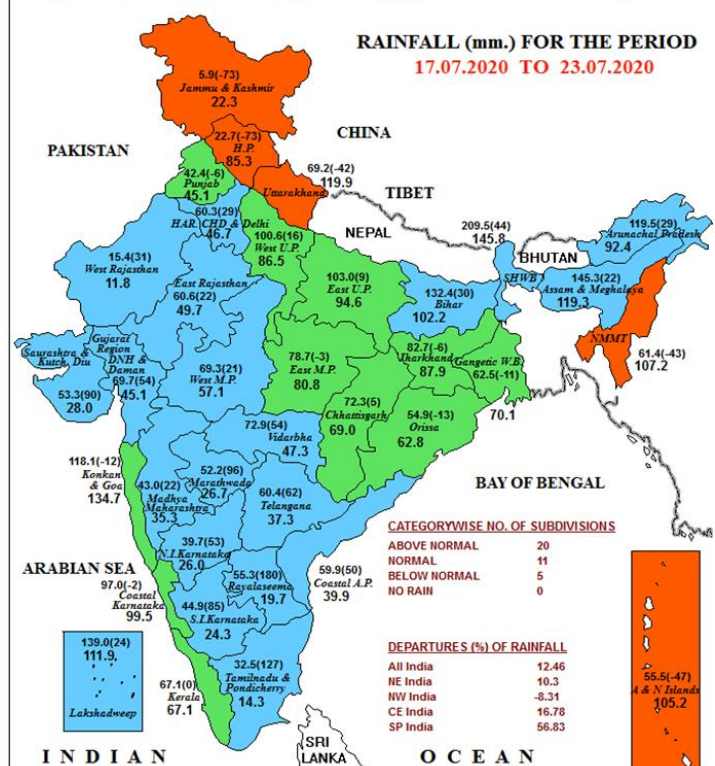
# Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 15 July)

(17<sup>th</sup> to 30<sup>th</sup> July, 2020)

## भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

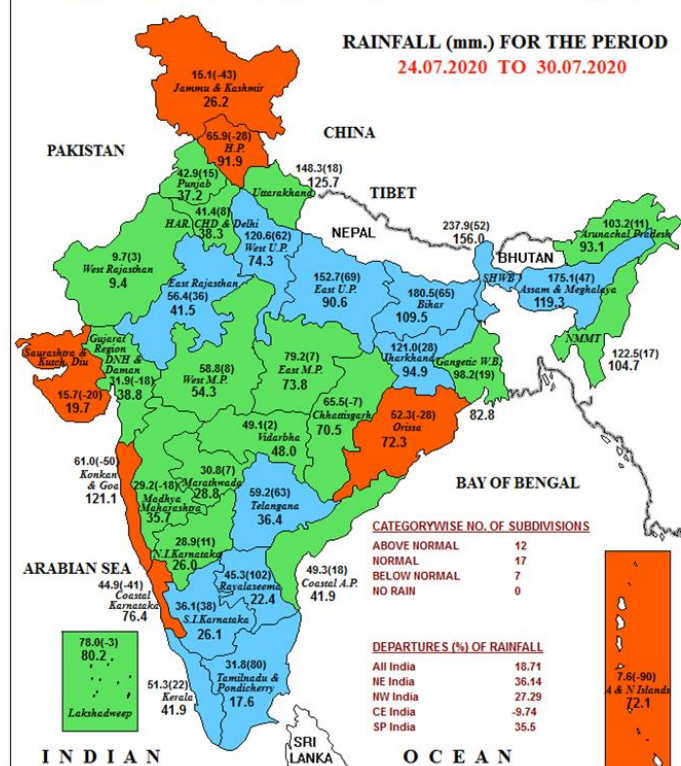
Rainfall Forecast Map - Normal RF Based Categories



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.

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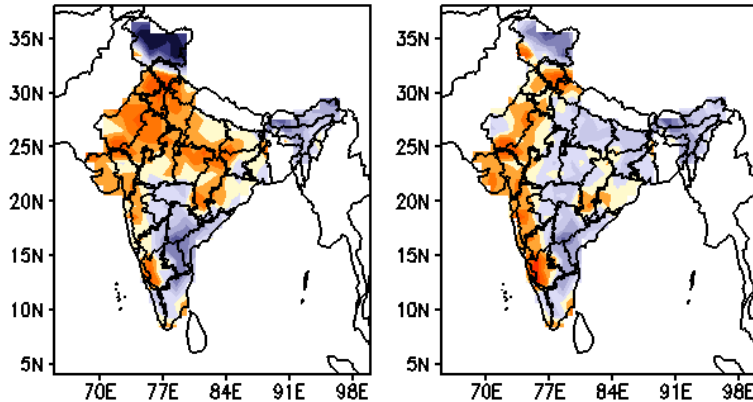
- Week-1 (17.07.2020 to 23.07.2020):** Mostly normal to slightly above normal rainfall over India with some regions of extreme north India, parts of northeast India and some parts of eastern states like Odisha, Chhattisgarh, Gangetic West Bengal and adjoining areas will be below normal to slightly below normal.
- Week-2 (24.07.2020 to 30.07.2020):** Rainfall over North-eastern states and sub-divisions over Uttar Pradesh, Uttarakhand, Bihar etc will have above normal rainfall. Monsoon rainfall over south Peninsula will also be above normal, whereas over remaining parts it will be normal to slightly below normal.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 15 July)  
(17<sup>th</sup> to 30<sup>th</sup> July, 2020)**

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

(Week1: 17Jul–23Jul)

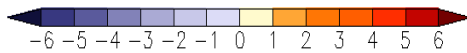
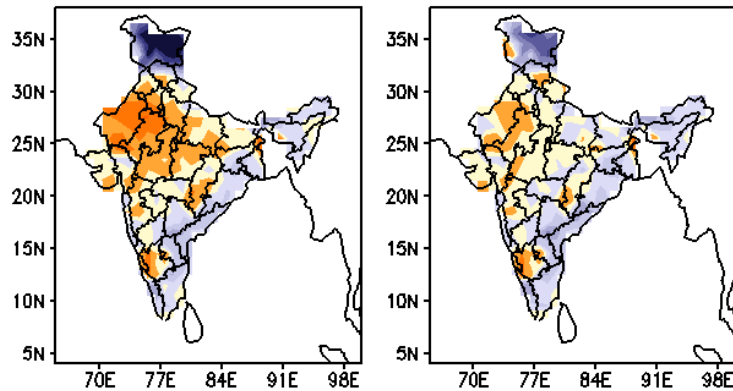
(Week2: 24Jul–30Jul)



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

(Week1: 17Jul–23Jul)

(Week2: 24Jul–30Jul)



**Maximum Temperature (Tmax)**

- **Week-1 (17.07.2020 to 23.07.2020) and Week 2 (24.07.2020 to 30.07.2020):** Above normal Tmax over Northwest 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 (17.07.2020 to 23.07.2020) and Week 2 (24.07.2020 to 30.07.2020):** Above normal Tmin over Northwest India and adjoining region during most of the period, whereas below normal Tmin over Northeastern states and south-eastern coastal regions of India.



## Strategic Agricultural Planning based on rainfall during next two weeks till 30 July 2020

### Agro-met Advisories

#### Kerala

Amount of rainfall received over Kerala is 781.2 mm (-25% deficit) during the period of 01 June 2020 - 16 July 2020. The extended range weather forecast for next two weeks (17 - 23 July and 24 - 30 July 2020) is normal for week-1 and above normal for week-2.

- Due to rainy weather condition, there is a chance of anthracnose disease in cowpea. As a precaution, apply 1% Bordeaux mixture or spray pseudomonas 20 g/ litre of water.
- Due to high relative humidity, there is a severe attack of leaf rust disease in coffee. It is advised to spray Oxycarboxin (Plant vax 20 EC) @ 1 ml/litre of water or spray Bordeaux mixture (1%).

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 125.9 mm (41% excess) during the period of 01 June 2020 - 16 July 2020. The extended range weather forecast for next two weeks (17 - 23 July and 24 - 30 July 2020) is above normal for week-1 and week-2.

- Present prevailing weather condition is favorable for Tristeza virus disease in citrus. It is advised to spray Streptomycin sulphate 500-1000 ppm or Phytozinc 2500 ppm or Copper oxychloride 0.2% at fortnight intervals.
- Present prevailing weather condition is favorable for thrip incidence in onion. To control, it is advised to spray Dimethoate @ 0.06% or Profenofos @ 0.05%.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 344.4 mm (24% excess), over Marathwada is 332.2 mm (50% excess), Vidharbha is 328.7 mm (2% excess) and Konkan region 1488.6 mm (21% excess) during 01 June 2020 - 16 July 2020. The extended range weather forecast for next two weeks (17 - 23 July and 24 - 30 July 2020) over Madhya Maharashtra, Vidharbha and Marathwada is above normal and Konkan is normal for week-1 and normal over Madhya Maharashtra, Vidharbha and Marathwada and below normal over Konkan for week-2.

#### *Madhya Maharashtra*

- To control the incidence of white grub, nematodes and termites in *kharif* crops, application of granular Phorate mixed with fertilizers @ 10-12 kg/ha 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 rainy weather condition, it is advised to complete the sowing of pigeon pea as soon as possible.
- For the management of stem fly incidence on crops, it is advised to spray Chlorantraniliprole 18.5% @ 3 ml/10 liter of water, during clear weather.

### *Marathwada*

- Under rainy weather condition it is advised, drain out excess amount of water from crop field so that water may not stagnate in crop field.
- For management of fall armyworm in maize crop, farmers are advised to spray of 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.

### **Hisar**

Amount of rainfall received over Hisar is 113.9 mm (-10% deficit) during 01 June 2020 - 16 July 2020. The extended range rainfall forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) over Hisar is above normal for week-1 and normal for week-2.

- Under prevailing weather condition, farmers are advised to withhold 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 - 16 July 2020 over South Interior Karnataka is 242.0 mm (-4% deficit) and North Interior Karnataka is 241.0 mm (46% excess). The extended range weather forecast for next two weeks (17 - 23 July and 24 -30 July 2020) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and normal over North Interior Karnataka and above normal over South Interior Karnataka for week-2.

#### *South Interior Karnataka*

- 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 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).
- Farmers are advised to vaccinate cows against the Black quarter disease.

#### *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 1023.1 mm (28% excess) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 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. For control, soil drenching with Copper oxychloride solution @ 3g/ litre of water at 60 and 90 days after planting is recommended.
- 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 - 16 July 2020 over East Uttar Pradesh is 356.6 mm (41% excess) and West Uttar Pradesh is 126.0 mm (-35% deficit). The extended range weather forecast for next two weeks (17 - 23 July and 24 - 30 July 2020) over East Uttar Pradesh and West Uttar Pradesh is 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, pulse and vegetable crops.
- Farmers are advised for sowing of *kharif* maize with recommended varieties viz., hybrid Dakan107, Malveya-2, JH-3459, Prakash, PSM-5, Pro-303, KH-510, MMH-113 and composite varieties viz., Novjoti, Pusa-2, Prabhat and Azad uttam.
- For the fish seed production, it is advised to disinfect hatchery by using Potassium permanganate @ 5 mg/ litre of water.

## **Odisha**

Amount of rainfall received over Odisha is 392.8 mm (3% excess) during 01 June 2020 - 16 July 2020. The extended range rainfall forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) over Odisha is normal for week-1 and below normal for week-2.

- It is the optimum time for cashew nut planting with high yield varieties Vengrulla-1.4, BPP-4, Bhubaneswar-1, VRI-2 and Hybrid 2-17.
- There is a chance of top shoot borer infestation in sugarcane crop. To manage, spray Fipronil 5% SC (Reagent/ Sergeant) @ 600ml/acre or Profenophos 50% EC (Profigan/ Prahar) @ 400 ml/ acre by mixing it in 200 litre of water.
- 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.

## **West Bengal**

Amount of rainfall received over West Bengal is 407.5 mm (-5% deficit) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over West Bengal is normal for week-1 and week-2.

- Under the prevailing weather condition, there is a chance of fruit rot disease in pointed gourd. It

is advised to apply Endosulphan @ 2 ml/ litre of water.

- For the management of brinjal fruit borer and stem borer, farmers are advised to apply Triazophos 40 EC @ 1.5 ml or Spinosad 45 EC @ 0.2 ml or Cartap Hydrochloride @ 0.75 g/litre of water.

### **Bihar**

Amount of rainfall received over Bihar is 516.8 mm (45% excess) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Because of heavy rainfall conditions, farmers of North Bihar are advised to prepare the bunds in the fields to collect rain water for paddy transplanting.
- Sowing of pigeon pea in upland areas is advised. 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 207.8 mm (-32% deficit) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Gujarat is above normal for week-1 and normal for week-2.

- If soil moisture is optimum, sowing of black gram with varieties viz., Gujarat Urd 1 and Gujarat Urd 2 and T-9 is advised.
- Due to high wind condition, it is advised to provide support in banana orchards.

### **Jammu**

Amount of rainfall received over Jammu is 65.1 mm (-59% deficit) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Jammu is below normal for week-1 and week-2.

- Due to chances of rainfall, farmers are advised to prepare bund in the paddy fields for the storage of rain water and utilize it for puddling.
- Under sufficient soil moisture condition, transplanting of rainy seasonal annuals like gaillardia, balsam, cosmos, portulaca, kochia, sunflower, morning glory, gomphrena, celosia is advised.

### **Rajasthan**

Amount of rainfall received over East Rajasthan is 131.7 mm (-21% deficit) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over East Rajasthan is above normal for week-1 and week-2.

- For the control of fall army worm in maize, spray of Thiamethoxam 12.6 ml or Spinetoram 11.7 SC 250 ml/ ha is advised.
- Farmers are advised to sow guar and moth. Improved varieties of guar are HG-75, RGC-936, RGC-197, RGC-1017, RGC-1002, RGC-1003, RGC-986 and moth are RMO-257, RMO-225, RMO-425, RMO-423, RMO-40.



### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 148.2 mm (-34% deficit) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 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.
- Under prevailing weather condition, there is a chance of ecto-parasite attack in dairy animal. To control, spray Butox @ 2ml/litre of water in cowshed.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 443.1 mm (16% excess) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Chhattisgarh is normal for week-1 and week-2.

- Due to continuous rainfall, farmers are advised to prepare proper drainage channel in fields to remove excess water.

### **Madhya Pradesh**

Amount of rainfall received over Madhya Pradesh is 337.2 mm (9% excess) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Madhya Pradesh is normal for week-1 and week-2.

- Under the prevailing weather condition, transplanting of egg plant, tomato, chilli and *kharif* onion is advised.

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 323.1 mm (-14% deficit) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Uttarakhand is below normal for week-1 and normal for week-2.

- For the control of insect infestation in the crop fields, it is advised to use pheromone/light traps or yellow strips.
- Under rainy weather condition, farmers must arrange to drain out excess rain water from vegetable fields.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 340.0 mm (-7% deficit) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Jharkhand is normal for week-1 and above normal for week-2.

- Present weather condition is conducive for the attack of tikka disease in groundnut. To control, it is recommended to spray fungicide Kavach @ 2/litre of water during clear weather.
- Under favorable weather condition, farmers may go for sowing of pigeon pea, black gram, green gram, finger millet.

## **Punjab**

Amount of rainfall received over Punjab is 142.2 mm (5% excess) during 01 June 2020 - 16 July 2020. The extended range weather forecast provided for next two weeks (17 - 23 July and 24 - 30 July 2020) on rainfall over Punjab is normal for week-1 and week-2.

- To manage the foot rot disease in basmati rice, it is advised to treat the seed with *Trichoderma harzianum* @ 15g/ kg before sowing.
- Prevailing weather condition is favorable for fruit rot and die back disease of chilli. Farmers are advised to spray 250 ml Folicur / 750 g Indofil M-45/Blitox in 250 litres of water per acre at 10 days interval.

### ***Disclaimer:***

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