



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

**Validity: (29 May to 11 June 2020)**

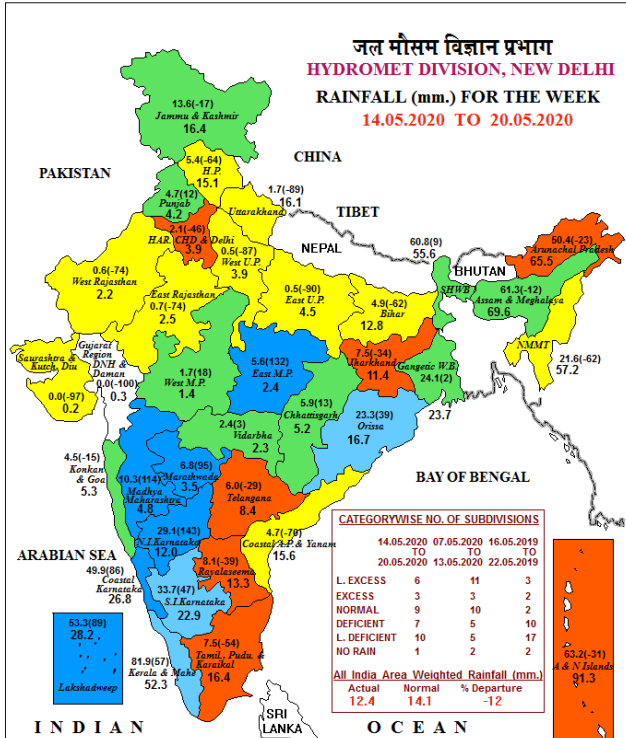
**Date of issue: 29 May 2020**

**Issued by**  
**Indian Council of Agricultural Research (ICAR)**  
**All India Coordinated Research Project on Agro-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 (14<sup>th</sup> to 27<sup>th</sup> May, 2020)

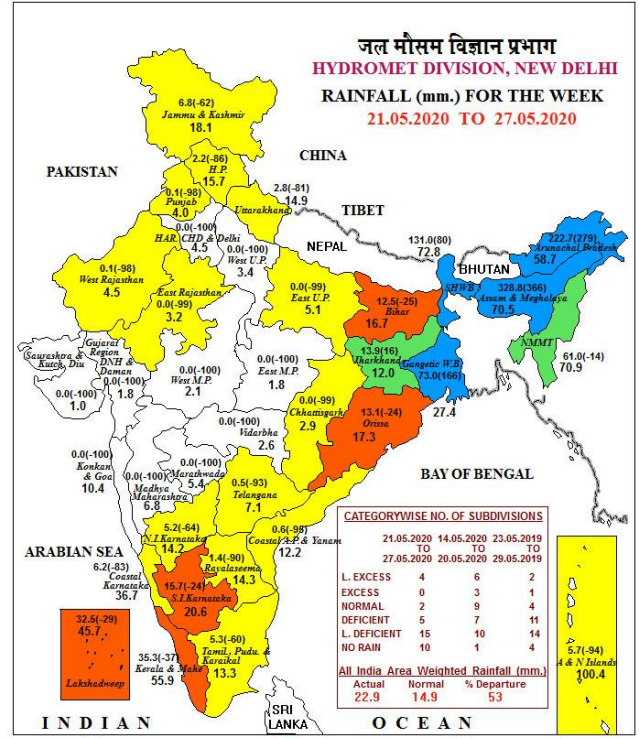
#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



**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.

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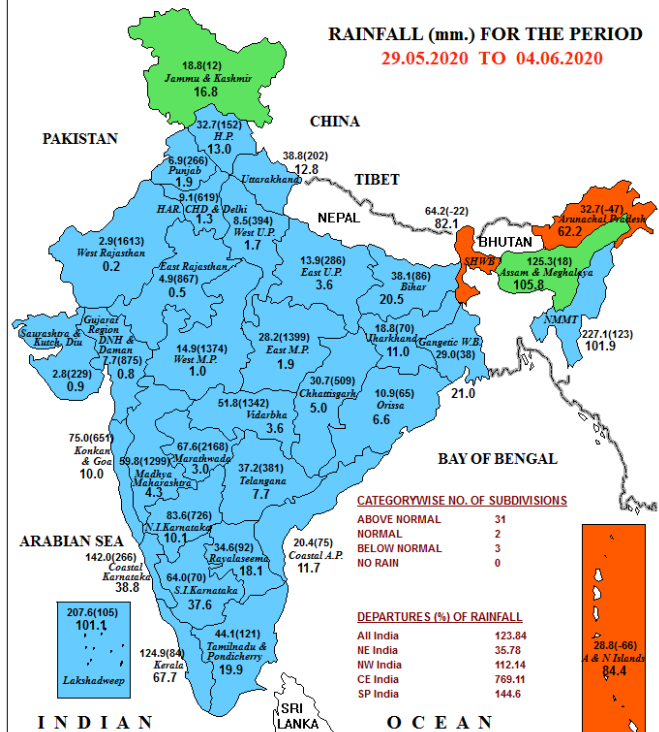
- Normal or above normal rainfall occurred in both the weeks in Sub-Himalayan West Bengal & Sikkim, Gangetic West Bengal and Assam & Meghalaya.
- Normal or above normal rainfall occurred in either of the weeks in Jammu & Kashmir, Punjab, Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura (NMMT), Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Karnataka, Kerala & Mahe and Lakshadweep.
- Below normal rainfall / no rain occurred over rest of the country during the period.

# Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 27 May)  
(29<sup>th</sup> May to 11<sup>th</sup> June, 2020)

## भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

Rainfall Forecast Map - Normal RF Based Categories

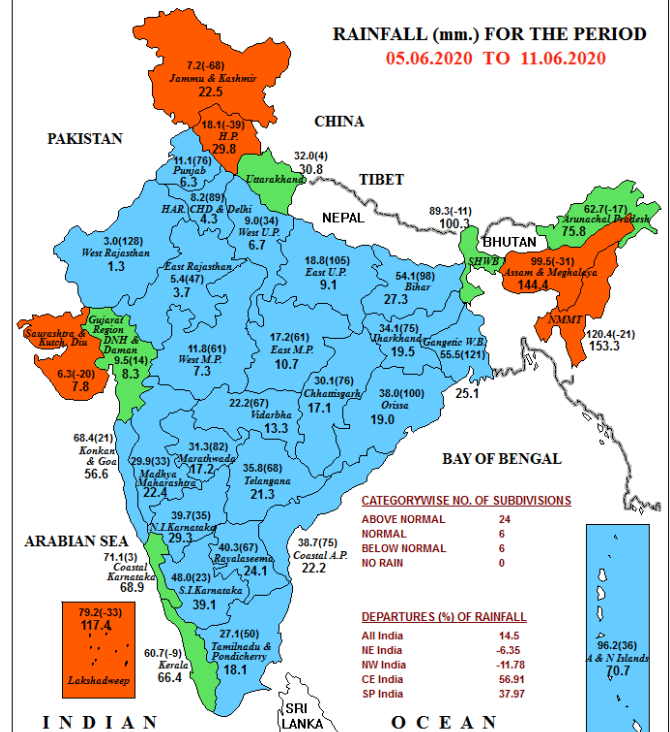


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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Rainfall Forecast Map - Normal RF Based Categories



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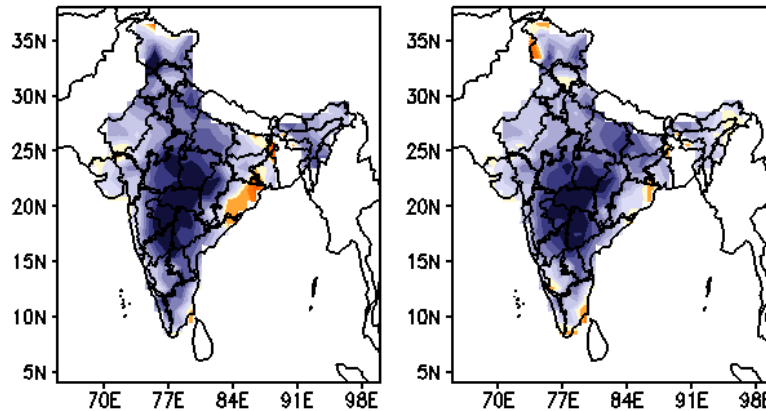
- **Week-1 (29.05.2020 to 04.06.2020):** Monsoon onset associated rainfall over Kerala and other west-coast regions including Konkan, coastal Maharashtra and Karnataka region. North-eastern region will also get rainfall.
- **Week-2 (05.06.2020 to 11.06.2020):** Rainfall will slightly decrease in week 2 as compared to week 1.

**Maximum and Minimum temperature anomaly (°C) forecast  
for next 2 weeks (IC -27 May)  
(29<sup>th</sup> May to 11<sup>th</sup> June, 2020)**

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

(Week1: 29May-04Jun)

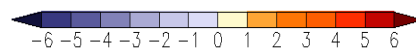
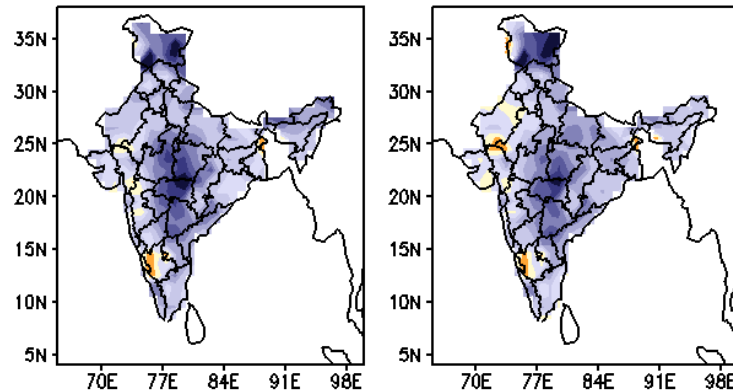
(Week2: 05Jun-11Jun)



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

(Week1: 29May-04Jun)

(Week2: 05Jun-11Jun)



**Maximum Temperature (Tmax)**

- **Week 1 (29.05.2020 to 04.06.2020):** Tmax is expected to be below normal in most parts of India except some isolated regions over eastern coastal region of India.
- **Week 2 (05.06.2020 to 11.06.2020):** Tmax is expected to be below normal in most parts of India.

**Minimum Temperature (Tmin)**

- **Week 1 (29.05.2020 to 04.06.2020) and Week 2 (05.06.2020 to 11.06.2020):** Tmin is expected to be mostly normal to below normal over most of India except some isolated pockets of India.

## **Strategic Agricultural Planning based on rainfall during next two weeks till 11 June 2020**

### **Agromet Advisories**

#### **Kerala**

Amount of rainfall received over Kerala is 349.1 mm (7% excess) during the period of 01 March 2020 - 28 May 2020. The extended range weather forecast for next two weeks (29 May - 04 June and 05 June - 11 June 2020) is above normal for week-1 and normal for week-2.

- It is advised to prepare fields for ginger and turmeric planting. To protect the ginger crop from foot rot disease, soak the suckers in 0.3% Mancozeb/ Pseudomonas solution for 30 minutes.
- For the management of sigatoka disease in banana, it is advised to spray 20 g Pseudomonas per one litre of water.

#### **Tamil Nadu**

Amount of rainfall received over Tamil Nadu is 63.5 mm (-48% deficit) during the period of 01 March 2020 - 28 May 2020. The extended range weather forecast for next two weeks (29 May - 04 June and 05 June - 11 June 2020) is above normal for week-1 and week-2.

- Farmers are advised to skip irrigation and to ensure proper drying of harvested produce prior to storage of harvested paddy and cotton.
- Present prevailing weather condition is favorable for Tristeza virus disease in citrus. It is advised to spray Streptomycin sulphate 500-1000 ppm or Phytomycin 2500 ppm or Copper oxychloride 0.2% at fortnight intervals.

#### **Maharashtra**

Rainfall received over Madhya Maharashtra is 32.6 mm (13% excess), over Marathwada is 32.7 mm (32% excess), Vidharbha is 41.7 mm (60% large excess) and Konkan region 12.2 mm (-50% deficit) during 01 March 2020 - 28 May 2020. The extended range weather forecast for next two weeks (29 May - 04 June and 05 June - 11 June 2020) over Madhya Maharashtra, Marathwada, Vidharbha and Konkan is above normal for week-1 and week-2.

##### *Madhya Maharashtra*

- Harvesting of groundnut crop is advised at proper maturity stage.
- It is advised to keep animals in shade and cover cows and buffaloes with wet gunny bags to protect from high temperature and heat stroke.

##### *Konkan*

- Due to increase in temperature and decrease in humidity, it is advised to provide irrigation to coconut orchard at 5-6 days interval and use straw mulch to reduce evaporation losses.
- To prevent incidence of post-harvest diseases in mango fruits, it is advised to keep the fruits in warm

water (~ 52°C) for 10 minutes and then keep for ripening .

#### *Vidharbha*

- It is advised to monitor incidence of locust swarm in the region. If locust attack is found, farmers are advised to follow the following measures; (i) Make noise by different equipments. (ii) In the evening/night swarms are lodged over trees and shrubs can be control by preparing smoke of rubber tyre or flame. (iii) Farmers are advised to spray of Neem based insecticides i.e. Azadirachtin 1500 ppm @ 30 ml or 5 % Neem Ark per 10 litre of water. (iv) Spraying should be done in late night or morning hours if possible. (v) Dusting should be done of Methyl parathion 2 % Powder @ 25 to 30 kg/ha. (vi) Recommended spraying as per the Insecticide control Board Chloropyriphos 20 E.C @ 24 ml or Chloropyriphos 50 E.C @ 10 ml or Deltamethrin 2.8 E.C. @ 10 ml or Fipronil 5 EC @ 2.5ml or Lambda Cyhalothrin 5 E.C. and 10 WP or Malathion 50 E.C. @ 37 ml per 10 litre of water.
- Due to severe heat wave conditions, it is advised to provide frequent irrigation coupled with mulching in summer crops/vegetables/orchards to reduce heat impact and spraying of antitranspirant (Kaolin 5 to 7%) is also advised to minimize water loss from crops.

#### *Marathwada*

- It is advised to provide shade and organic mulching to newly planted saplings in banana orchard to protect from high temperature.
- For management of white grub in mulberry, it is advised to apply 8 kg Phorate 10 g granular insecticide/acre.

#### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 246.4 mm (3% excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Himachal Pradesh is above normal for week-1 and below normal week-2.

- Under prevailing weather condition, it is advised to resume picking in tea at 8-9 days interval to maintain the quality and productivity.
- Under prevailing weather condition, sowing of fodder maize along with cowpeas and soybean in irrigated areas is advised.
- It is advised to maintain room temperature of 18-22°C and relative humidity around 85% for successful cultivation of mushrooms.

#### **Hisar**

Amount of rainfall received over Hisar is 95.4 mm (160% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June



- 11 June 2020) on rainfall over Hisar is above normal for week-1 and week-2.

- Under prevailing weather condition, farmers are advised to sow sorghum, maize and lobia as a fodder crop.
- Due to hot and dry weather condition, farmers are advised to apply light irrigation in vegetable crops and fruits plants as per requirement in evening/morning hours.
- 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 March 2020 - 28 May 2020 over South Interior Karnataka is 156.4 mm (20% excess) and North Interior Karnataka is 108.6 mm (48% excess). The extended range weather forecast for next two weeks (29 May - 04 June and 05 June - 11 June 2020) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and week-2.

### *South Interior Karnataka*

- Farmers are advised for summer ploughing and to apply tank silt and FYM in soil to increase fertility, moisture holding capacity and improvement in soil micro flora.
- It is advised to vaccinate the animals before onset of monsoon.

### *North Interior Karnataka*

- It is advised to complete the heaping of fodder and straw as early as possible and cover it properly.
- Because of increase in temperature, it is advised to apply 4-6-inch-thick hay thatch as a roofing material and spray water on the floor periodically during peak hot hours to lower the temperature and heat load on animals.

## **Assam**

Amount of rainfall received over Assam is 642.2 mm (17% excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Assam is normal for week-1 and below normal for week-2.

- Due to heavy rainfall condition, farmers are advised to provide proper drainage facility in banana orchards to drain out the excess amount of water.
- Due to cloudy and rainy weather condition, there is a chance of infestation of early shoot borer in sugarcane crop. To control, proper earthing up at the base followed by burying or burning of the infested canes is advised. If infestation is above ETL, spray of Phosphamidon @ 60-70ml per 120 litre of water/ bigha land in fair weather condition is advised.

## **Jharkhand**

Amount of rainfall received over Jharkhand is 208.0 mm (166% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Jharkhand is above normal for week-1 and week-2.

- Under prevailing weather condition, farmers may prepare papaya seedlings in polythene bags.
- Due to increase in day temperature, there is a possibility of heat stroke in animals. Farmers are advised to protect the animals against intense heat and not to allow them to expose in sunlight during noon and make available plenty of water for drinking.

## **Uttar Pradesh**

Rainfall received during 01 March 2020 - 28 May 2020 over East Uttar Pradesh is 89.3 mm (195% excess) and West Uttar Pradesh is 75.9 mm (167% large excess). The extended range weather forecast for next two weeks (29 May - 04 June and 05 June - 11 June 2020) over East Uttar Pradesh and West Uttar Pradesh is above normal for week-1 and week-2.

- Due to prevailing heat wave, it is advised to maintain proper soil moisture in vegetable and fruit crops to protect from heat wave.
- Sowing of short duration pigeon pea varieties (Paras, UPAS-120, Type-21 and Pusa-992) is advised..
- Intercultural operation is advised to check the evapo-transpiration losses and proper utilization of nutrient by the crop.

## **Odisha**

Amount of rainfall received over Odisha is 245.0 mm (100% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Odisha is above normal for week-1 and week-2.

- Farmers are advised for summer ploughing to reduce the weed infestation, destroy eggs/ larvae of hibernated soil insects and to improve soil profile recharge.
- Due to high humidity and heavy rain, there is a chance of infestation of the stored grain pests. Fumigation is advised by using Aluminium phosphide tablets @ 3 tablets/ton grain in air tight containers.

## **West Bengal**

Amount of rainfall received over West Bengal is 341.0 mm (95% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over West Bengal is above normal for week-1 and week-2.

- Due to rainy weather conditions, farmers are advised to drain out excess water from the jute field.
- Under the prevailing rainy weather condition, there is a chance of rotting in summer vegetable crops. To prevent, spraying of Copper hydroxide @ 2.5 g/litre of water or Copper oxychloride @ 4g/litre of water is advised.



## **Bihar**

Amount of rainfall received over Bihar is 170.9 mm (128% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Regular monitoring is advised in late sown green gram/ black gram against infestation of pod borer and harvest matured pods of early sown black gram/ green gram.
- Under prevailing weather condition, it is advised to start the land preparation for nursery sowing of long duration varieties of paddy (Rajshree, Rajendra sweta, Rajendra mansuri, BPT-5204, Swarna, Satyam and Kishori).

## **Punjab**

Amount of rainfall received over Punjab is 120.0 mm (124% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Punjab is above normal for week-1 and week-2.

- For the control of powdery mildew in cucurbits, it is advised to spray Karathane 50-80 ml/acre at the appearance of powdery patches on the leaves.
- To check zinc deficiency in citrus, it is advised to spray the affected trees with Zinc sulphate @ 4.7 g/litre of water solution, without addition of lime to spring flush.

## **Gujarat**

Amount of rainfall received over Gujarat is 4.2 mm (-17% deficit) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Gujarat is above normal for week-1 and normal for week-2.

- Sowing of paddy in nursery seed bed is advised with varieties viz., NAUR-1, GNR-2 (Costal area) GNR-3, GNR-4, GNR-5, GNR-6, Jaya, Gurjari, GR-5, 7, 8, 9, IR-28, Purna and GAR-13.
- Farmers are advised to keep the animals in the shade during noon hours and provide cool drinking water frequently at regular interval.

## **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 108.6 mm (178% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Chhattisgarh is above normal for week-1 and week-2.

- For the management of locust swarm, farmers are advised to spray Diflubenzuron 25% WP 10 g or Lambda Sihelothin 5% EC 400 ml or Cinelothin 10 % WP 200 g/ha or produce smoke by burning the grass and crop residues or making sounds to control the locust swarm.

## **Madhya Pradesh**

Amount of rainfall received over Madhya Pradesh is 79.1 mm (253% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04

June and 05 June - 11 June 2020) on rainfall over Madhya Pradesh is above normal for week-1 and week-2.

- Due to high humidity and cloud cover, insect-pest management practice is advised in green gram crop and rogue out mosaic plant from the field.
- Farmers are advised to place cooling system in the poultry and dairy houses to reduce high temperature stress during day hours.

### **Jammu**

Amount of rainfall received over Jammu is 320.1 mm (-3% deficit) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Jammu is normal for week-1 and below normal for week-2.

- Due to increase in temperature, there is a chance of infestation of fruit and shoot borer in vegetable and fruit crops. It is advised to spray a mixture of Profenfos + Cypermethrin (4:40) @ 1ml/litre of water at 10 days interval after harvesting of fruit.
- Due to rise in temperature, farmers are advised to protect young fruit plants from heat by providing thatches and cover.
- Ploughing of fallow land for soil solarization against insect pests and weed infestation is advised.

### **Rajasthan**

Amount of rainfall received over Rajasthan is 36.2 mm (108% large excess) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Rajasthan is above normal for week-1 and week-2.

- For the management of locust attack, farmers are advised to make noise and sound to avoid settle down of locust in the field and spray of Malathion 50% EC @1850 ml/ha and give information to the agricultural authorities about the outbreak of locust in region.
- Due to continue increasing in temperature, farmers are advised for deep ploughing in the crop field to destroy the eggs and pupating stages of insects and weed seeds.

### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 56.1 mm (-27% deficit) during 01 March 2020 - 28 May 2020. The extended range weather forecast provided for next two weeks (29 May - 04 June and 05 June - 11 June 2020) on rainfall over Andhra Pradesh is above normal for week-1 and week-2.

- For the management of locust attack, farmers may be ready with Neem based pesticides to be sprayed on standing horticultural crops.
- Due to increase in temperature, farmers of Krishna zone are advised to provide irrigation to sugarcane, banana and other horticultural crops.

***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.***