



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

**Validity: (01<sup>st</sup> to 14<sup>th</sup> November 2019)**

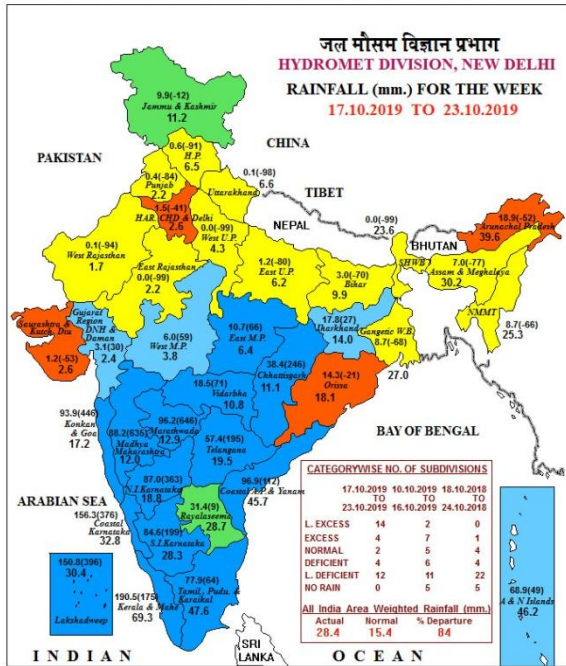
**Date of issue: 01<sup>st</sup> November 2019**

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**&**  
**Earth System Science Organization**  
**India Meteorological Department**

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

### Realized Rainfall (17<sup>th</sup> October to 30<sup>th</sup> October, 2019)

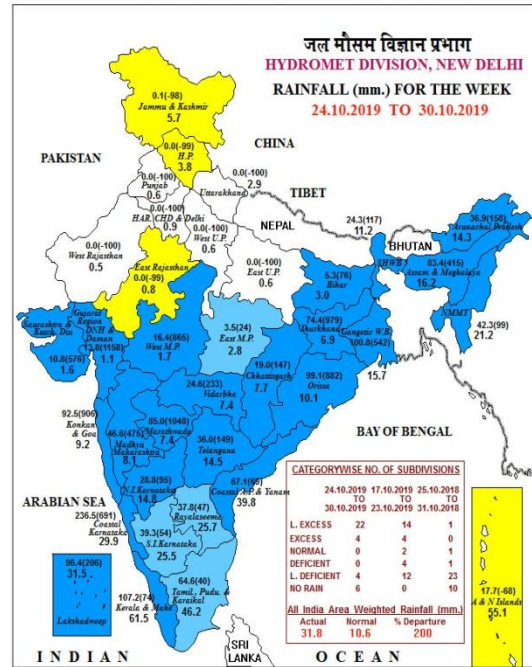
#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



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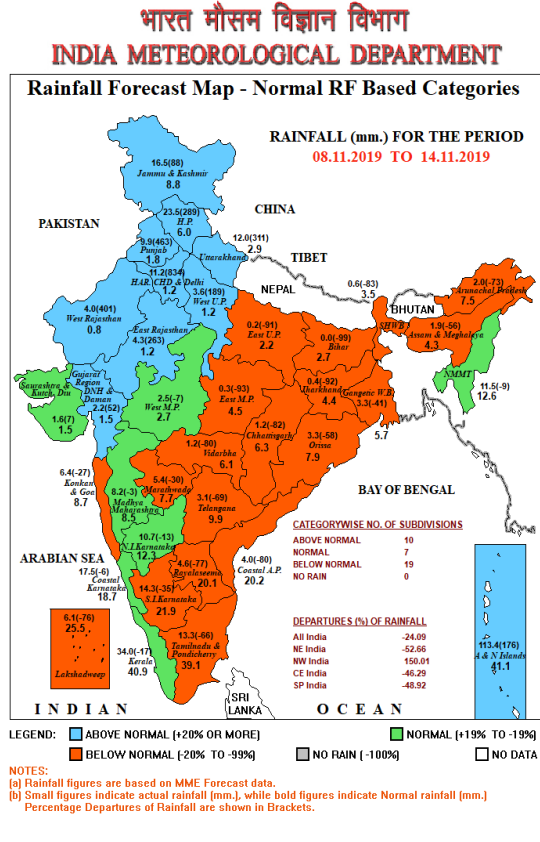
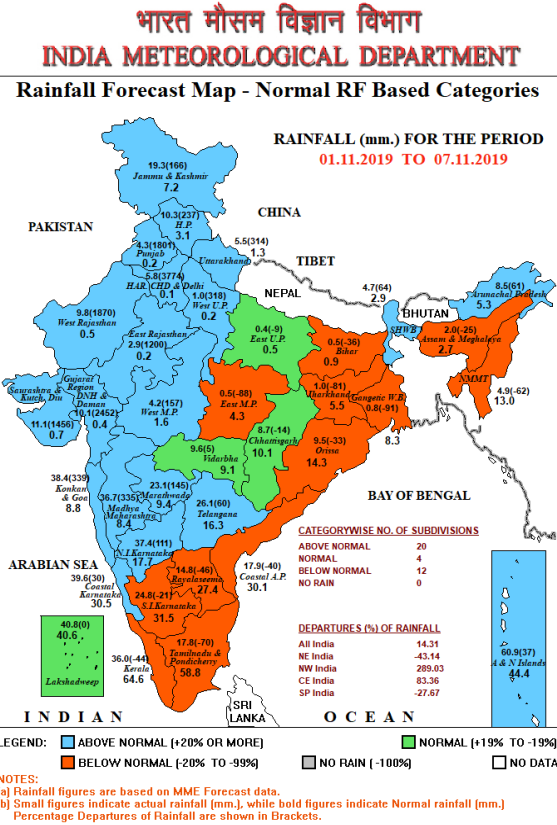
**NOTES:**  
 (a) Rainfall figures are based on operational data.  
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
 Percentage Departures of Rainfall are shown in Brackets.

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

# Extended Range Forecast System

## Rainfall forecast maps for the next 2 weeks (IC – 30 October)

(01<sup>st</sup> November to 14<sup>th</sup> November 2019)



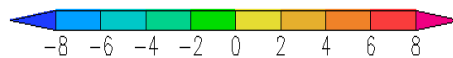
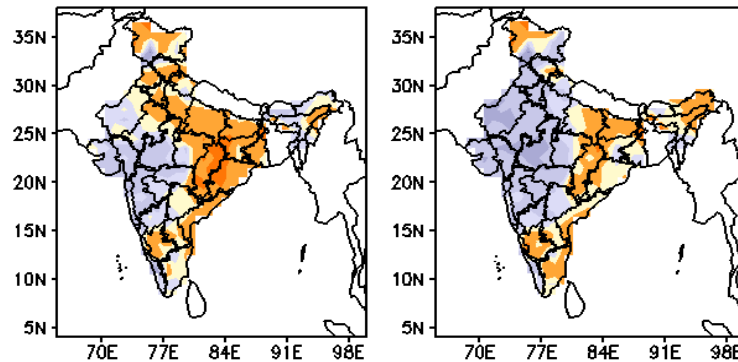
- **Week 1 (01.11.2019 to 07.11.2019):** Cyclonic system over the Arabian Sea will make south peninsula, adjoining central India and parts of northwest India active.
- **Week 2 (08.11.2019 to 14.11.2019):** Cyclonic circulation over the Bay of Bengal will make the central Bay of Bengal active.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC -30 October)  
(01<sup>st</sup> November to 14<sup>th</sup> November 2019)**

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

(Week1: 01Nov-07Nov)

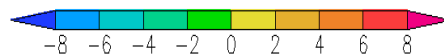
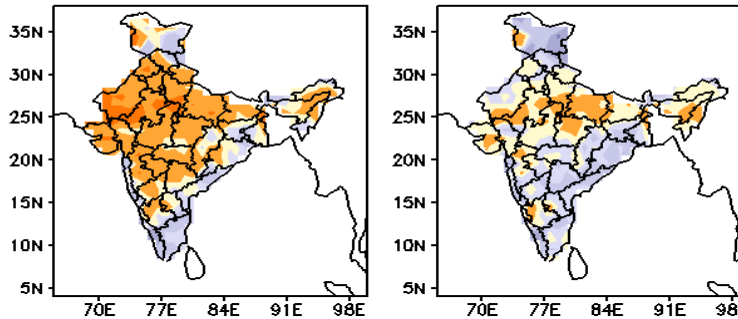
(Week2: 08Nov-14Nov)



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

(Week1: 01Nov-07Nov)

(Week2: 08Nov-14Nov)



**Maximum Temperature (Tmax)**

- **Week 1 (01.11.2019 to 07.11.2019) and Week 2 (08.11.2019 to 14.11.2019):** Tmax anomaly will be mostly negative over central and western parts of India during the period. Whereas, it will be slightly above normal over extreme northern parts and Indo-Gangetic region and adjoining eastern parts of India during the period.

**Minimum Temperature (Tmin)**

- **Week 1 (01.11.2019 to 07.11.2019):** Slightly above normal Tmin over northern and north-western parts of India.
- **Week 2 (08.11.2019 to 14.11.2019):** Slightly above normal Tmin will remain confined to only a small pocket of northern parts of central India.

## Strategic Agricultural Planning based on rainfall during next two weeks till 14<sup>th</sup> November 2019

### Agromet Advisories

#### Kerala

Amount of rainfall received over Kerala during the period from 01st to 30th October 2019 470mm /303.4mm (normal). The extended range weather forecast for next two weeks (01- 07 Nov and 08-14 Nov) is below normal for week-1 and normal for week-2.

- There is a chance of gall midge attack in mundakan paddy during rainy weather. As a prophylactic measure, root of the seedlings should be dipped in 0.02% chlorpyrifos suspension for 12 hours prior to planting.
- 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.
- The rainy condition may favour the incidence of damping off disease in solanaceous vegetables like chilli, brinjal and tomato. Drench a solution of pseudomonas 20g/ litre as a prophylactic measure.
- There is a chance of wilt disease in pepper due to intermittent rainfall and sunshine. A foliar spray of pseudomonas 15-20g /litre of water will be effective as a prophylactic measure against quick wilt disease in pepper.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 224.6mm / 177.2mm (normal) during the period of 01<sup>st</sup> to 30<sup>th</sup> October. The extended range weather forecast for next two weeks (01-07 Nov and 08-14 Nov) is below 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.
- Prevailing weather condition is favorable for sucking pest - bean aphids and leaf hopper incidence in pulses. To control the incidence spray any one of the insecticides (Spray fluid 500 l/ha) Emamectin benzoate 5%SG 220 g/ha or Indoxacarb 15.8%SC 333 ml/ha or NSKE 5% twice followed by triazophos 0.05%.
- To control shoot fly in sorghum, spray any one of the insecticide Dimethoate 30 EC @ 500 ml/ha (or) Neem Seed Kernel extract 5%.
- Farmers are advised to monitor fall army worm incidence (Spodoptera Frugiperda) in maize. To control the incidence spray any one of the insecticide Azadirachtin 1 EC @ 2 ml/l (or) Thiodicarb 75 WP @ 2 g/l (or) Emamectin benzoate 5 SG @ 0.4 g/l (or) Spinetoram 12 SP @ 0.5 ml/l.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 202.3mm/73.3 mm (normal), over Marathwada is 227.4mm/71.7 mm (normal), Vidharbha is 52.5mm/57.6 mm (normal) and Konkan region 255.4mm/110.5mm (normal) during 01st to 30th October. The extended range weather forecast for next two weeks

(01-07 Nov and 08-14 Nov) over Madhya Maharashtra, Marathwada, Konkan, are above normal and Vidarbha is normal for week-1 and Marathwada, Konkan, Vidarbha are below normal and Madhya Maharashtra is normal for week-2.

#### Madhya Maharashtra

- For control of sucking pests (whitefly, jassids) on rabi crops like sorghum, sunflower, safflower, spray 15 ml of Dimethioate or Methyl demeton in 10 litres of water.
- To control of blight disease of onion, spray fungicides Carbendazim+ Mancozeb (2 gm) + 1 litre water + sticker.
- For chickpea crop, apply recommended dose fertilizer at the time of sowing i.e. 25 kg N, 50 kg P and 25 kg K per ha.

#### Vidarbha

- In pigeon pea install pheromone traps at a distance of 50 m @ 5 / ha for monitoring of Helicoverpa. Monitor the crop for eggs and small larvae.
- For management of fungal disease on bolls of cotton crop take a spray of Carbendazim (50% WP) @ 1 gm or Pyraclostrobin (20 % WG) @ 1 gm per liter of water during clear weather condition.
- In cotton, foliar spray of 2% DAP (200 g DAP +10 litre water) mixed with 4 ml Planofix at boll development stage is advisable to reduce boll shedding and improve boll growth.

#### Konkan

- Due to cloudy and humid weather condition, there is possibility of incidence of tea mosquito bug and thrips on vegetative flush of cashewnut to protect the flush of cashew, spray Monocrotophos 36%SL @ 15 ml or Lambda cyhalothrin 5% EC @ 6 ml per 10 liter of water.
- Before sowing lallab bean, treat the seed with Thiram fungicide @3 gm/kg of seeds. After that treat the seed with Rhizobium biofertilizers @ 25 gms per kg of seed and dry in shed one hours before sowing.
- Due to cloudy and humid weather condition, there is a possibility of incidence of anthracnose on new flush of mango, if incidence is noticed spray 1% Bordeaux mixture or 0.1% carbendazim 10 gm per 10 liter of water.

#### West Bengal

Amount of rainfall received over Gangetic West Bengal during 01st to 30th October 2019 is 177.3mm/127.6mm (normal). The extended range weather forecast for next two weeks (01-07 Nov and 08-14 Nov) is below normal for week-1 and week-2.

- Prevailing weather condition , there is a chance of attack of black-rot of crucifers in the cabbage and cauliflower, this causes rotting of leaves and blackening of head. Apply 1 gm Streptocycline in 10 lt of water and spray thoroughly and also apply top-dressing to cauliflower field.



- Start sowing of Sita, Vagirathi etc varieties of mustard. Maintain the seed rate @1kg per hectare. Apply 11.5 kg Urea, 33 kg SSP and 8.5 kg MOP per Bigha before final land preparation.
- Apply compost or FYM @2 ton/ bigha one month before planting potatoes. At the time of final land preparation apply 30kg Urea, 83 kg SSP and 21kg MOP in one bigha land.

### **Jammu**

Rainfall received during 01st to 30th October 2019 in Jammu is 28.3mm/26mm (normal). The extended range weather forecast for next two weeks (01-07 Nov and 08-14 Nov) 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.
- Due to prevalence of dry weather, hoeing and weeding is recommended to conserve soil moisture and thinning in 15-20 days old crop to provide proper spacing in oilseed crops.
- To save berseem from the damage of grass hopper clean bunds, channels and dust Malathion 5% on the peripheral bunds of the field before land preparation.

### **Assam**

Rainfall received during 01st to 30th October 2019 in Assam is 188.4mm/157.6 mm (normal). The extended range weather forecast for next two weeks (01-07 Nov and 08-14 Nov) is below normal for week-1 and week-2.

- Spraying of Malathion 5% dust @ 20 kg/ha. is advised as weather is favourable for rice gundhi bug infestation.
- Farmers are advised to prepare land for sowing of rapeseed and mustard crop. Apply lime @ 65.5 kg/bigha at least 15 days prior to sowing of seeds. The recommended varieties of rapeseed and mustard are M-27, TS-36, TS-38 etc.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 132.8mm/74.7mm (normal) during 01st to 30th October 2019. The extended range weather forecast provided for next two weeks (01-07 Nov and 08-14 Nov) over Jharkhand is below normal for week-1 and week-2.

- In medium land, rice crops transplanted at right time are at maturity stage or ready to harvest. Harvest them at proper time. At the time of harvesting, pick the black earhead (affected earhead with false smut disease) and destroy them by burning.
- The recommended varieties for Deshi (indigenous) gram are B.G.-372, B.G.-256, K.W.R.-108, Pant G.-186, Pant G. 114 and for Kabuli gram are H.K.-94-134, B.G.-1053, B.G.-1003 etc. 30 kg seeds for deshi variety and 40 kg seeds for Kabuli type varieties are required for cultivation in one acre. Seed may be sown in line at a distance of 30 cm (Row to row) and 8 cm. (Plant to plant).

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 100.3mm/59.4mm (normal) during 01st to 30th

2019. The extended range weather forecast provided for next two weeks (01-07 Nov and 08-14 Nov) over Chhattisgarh is normal for week-1 and below normal for week-2.

- Use Pheromone Traps @ 20 Nos/ha. to control attack of fruit borer in brinjal, tomato and bhindi crops.
- Vaccinate animals against FMD, haemorrhagic septicaemia (HS) and black quarter diseases.
- To protect 6-7 weeks poultry birds from ranikhet and smallpox diseases give proper vaccination to animals.
- In rice, panicle mite is being observed as brownish patches on stem. To control Propiconazole 2ml + Profenophos @ 2ml per litre should be sprayed per hectare mixed in 500 litres of water.

### **Uttar Pradesh**

Amount of rainfall received over East Uttar Pradesh region is 25.1mm/37.3 mm (normal) and West Uttar Pradesh is 9.3 mm (-58% deficit) 01st to 30th October 2019. The extended range weather forecast provided for two weeks (01-07 Nov and 08-14 Nov) for West Uttar Pradesh is above normal for week-1 and week-2 and East Uttar Pradesh is normal for week-1 and below normal for week-2.

- Vegetable pea (Azad P-2 and P-3) sowing should be completed with in this week. The crop sown earlier was in emergence and vegetative stage, If white flies are noticed, apply Malathion dust 5% @ 20-25 kg/ha.
- To control gundhi bug in paddy crop, apply Malathion dust 5% @ 20-25 kg/ha when population reaches 2-3 insect per hill or spray Monocrotophos 36 WSC @ 1.5 lt/ha.
- Sowing of recommended varieties of mustard viz, Varuna (T-59), Basnti, Rohini, Maya, Urvarshi, Narendra Swarna rai-8, NDR-8801 should be done.
- Farmers are advised to vaccinate cows, buffaloes, goats and sheeps against the mouth and foot disease. Vaccinate goats against PPR disease.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 21.9mm/27.5 mm (normal) during 01st to 30th October 2019. The extended range weather forecast provided for next two weeks (01-07 Nov and 08-14 Nov) on rainfall over Himachal Pradesh is above normal for week-1 and week-2.

- Farmers are advised to harvest maize, paddy and pulses and also utilize the expected sunny skyconditions for hay making and drying of harvested crops.
- Dingri can be sown in closed room, maintain temperature at 25-28 oC and relative humidity of 80-85 % for good crop.
- Farmers should protect their milch animals and their young ones from morning/evening cold by covering them with gunny bags during night and ample exposure to sunlight during day time to avoid pneumonia.
- Farmers before sowing rabi crop, should clean fields and add well decomposed FYM or compost before sowing crops as it improves the physical and biological properties of soil and thus increases the water retention capacity as well as nutrient status of the soil.



## Uttarakhand

Uttarakhand has received 32.0mm/35.3mm (normal) of rainfall 01st to 30th October 2019 during 01st to 30th October. The extended range weather forecast provided for next two (01-07 Nov and 08-14 Nov) is above normal for week-1 and week-2.

- Spray ecto-parasites in livestock sheds, clean up any cob webs, ant and houseflies which may act as intermediate host. Consult veterinarian and vaccinate the six months old calves against the disease of brucellosis, IVR, diarrhea, parainfluenza, mouth diseases jointly.
- Prepare the fields for onion nursery. Apply Trichoderma mixed with organic manure during ploughing and treat the seeds with Carbendazim @ 2g/kg before sowing. Avoid excess moisture in seed bed.
- Undertake lay out and field work for establishment of new orchard in temperate regions. Bunds, channels, uncultivated fields and field roads should be cleaned by removing weeds/shrubs/herbs. Collect and store wild walnut and wild himalayan pear (Pyrus pashia) for seed purposes.

## Karnataka

Amount of rainfall received over South Interior Karnataka is 259.3mm/141.6mm (normal) and North Interior Karnataka is 219.6 mm (110 large excess) during 01st to 30th October. The extended range weather forecast provided for next two weeks (01-07 Nov and 08-14 Nov) on rainfall over North Interior Karnataka and Coastal Karnataka is above normal for week-1 and is normal for week-2, over South Interior Karnataka it is below normal for both the weeks.

### South Interior Karnataka

- To control stem borer in maize crop, spray Quinolphos-25 EC @ 2ml/liter of water or Chlorophyphos -20 EC @ 2ml/liter of water.
- If wilt disease is noticed in red gram field drench Carbendazim 50 WP 2 g/litre of water. Remove and burn the wilt infected plant in the field.

## Punjab

Amount of rainfall received over Punjab is 9.1mm/8.9 mm (normal) during 01st to 30th October 2019. The extended range weather forecast provided for next two weeks (01-07 Nov and 08-14 Nov) on rainfall over Punjab is above normal for week-1 and week-2.

- To control citrus canker, spray with 50 g of Streptocycline + 25 g of Copper sulphate in 500 litres of water/acre during the period.
- For management of physiological fruit drop in 'Umran' ber spray 15 g NAA (Naphthalene Acetic Acid) in 500 litres of water. Dissolve NAA in alcohol before making final solution.
- In termite infested wheat fields, treat the seed with 1 g Cruiser 70 WS or 2 ml Neonix 20 FS or 4 ml Dursban/Ruban/Durmet 20 EC per kg seed and dry in shade. Seeds treated with Neonix also controls smuts of wheat.
- It is the optimum time for sowing of Gobhi Sarson varieties lije GSC 7, GSC 6, Hyola PAC 401, GSL 2 and GSL 1.

***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.***

