



# **National Agromet Advisory Services Bulletin**

Date of issue: 07 October 2022

based on

**Extended Range Weather Forecast (ERFS)** 

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AICRP on Agro-Meteorology (AICRPAM)

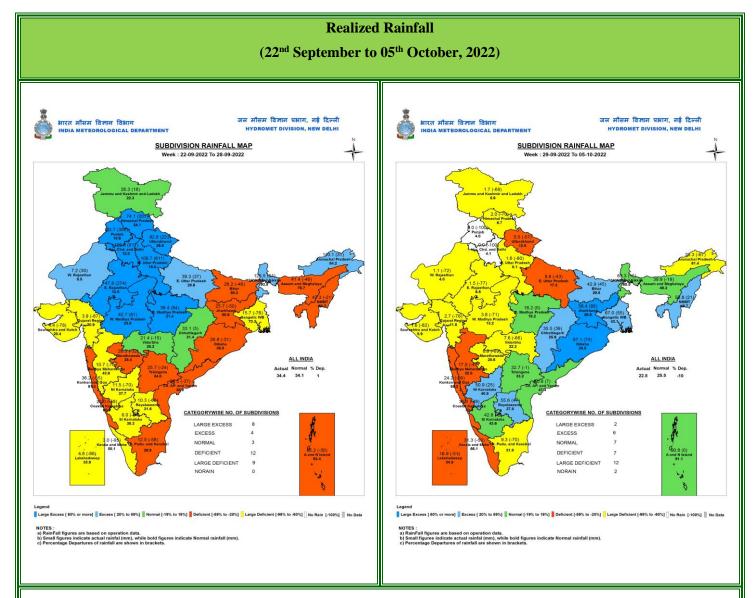
Central Research Institute for Dryland Agriculture (CRIDA)

Indian Council of Agricultural Research (ICAR)

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India Meteorological Department (IMD)
Earth System Science Organization

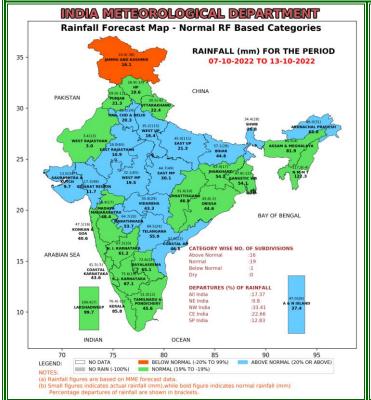
# Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

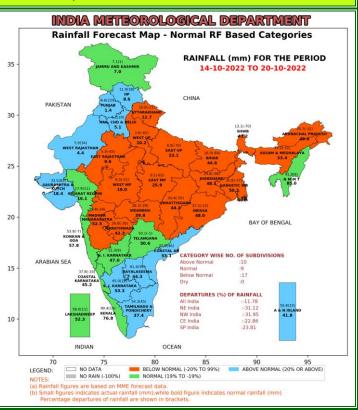


- Normal or above normal rainfall occurred in both the weeks in East Madhya Pradesh, Chhattisgarh and Sub-Himalayan West Bengal & Sikkim.
- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh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

# **Extended Range Forecast System**

Rainfall forecast maps for the next 2 weeks (IC- 05<sup>th</sup> October) (07<sup>th</sup> to 20<sup>th</sup> October 2022)

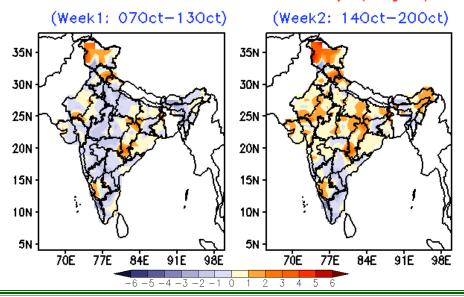




- Week 1 (07.10.2022 to 13.10.2022): Rainfall is likely to be normal to slightly above normal most parts of the country.
- Week 2 (14.10.2022 to 20.10.2022): Rainfall is expected to be slightly above normal over south peninsula and western part of the country.

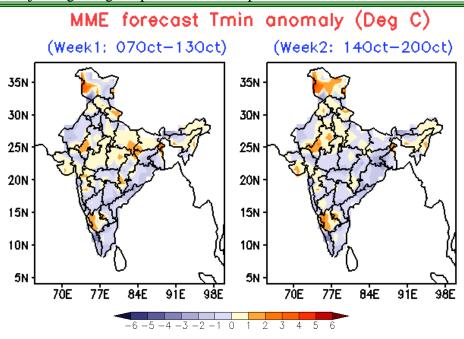
# Maximum and Minimum temperature anomaly (<sup>O</sup>C) forecast for next 2 weeks (IC-05<sup>th</sup> October) (07<sup>th</sup> to 20<sup>th</sup> October 2022)

# MME forecast Tmax anomaly (Deg C)



# **Maximum Temperature (Tmax)**

- Week 1 (07.10.2022 to 13.10.2022): Tmax is likely to be above normal over some parts of northwest India, Chhattisgarh, Jammu & Kashmir and parts of east coastal region.
- Week 2 (14.10.2022 to 20.10.2022): Tmax is expected to be slightly above normal over central India, northwest India, adjoining Gangetic plains and some parts of northeast India.



# **Minimum Temperature (Tmin)**

- Week 1 (07.10.2022 to 13.10.2022): Tmin will be slightly above normal over Indo Gangetic region central India and south Karnataka.
- Week 2 (14.10.2022 to 20.10.2022): Tmin will be slightly above normal over some parts of northwest, northeast India, Jammu & Kashmir and south Karnataka.

# Strategic Agricultural Planning based on rainfall till 20 October 2022

# **Agromet Advisories**

#### **Uttar Pradesh**

The amount of rainfall received over East Uttar Pradesh was 78 mm (379% large excess) and over West Uttar Pradesh was 18 mm (85% large excess) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) is above normal over East Uttar Pradesh and West Uttar Pradesh for week-1; below normal over West Uttar Pradesh and East Uttar Pradesh for week-2.

#### Western Uttar Pradesh

- 60.2 mm rainfall occurred during last week against 17.8 mm normal rainfall at the centre and forecast of heavy rainfall in next week, therefore, farmers are advised not to irrigate paddy fields.
- Under prevailing weather condition, farmers are advised to drain out excess rain water from vegetable fields and pick up mature fruits of standing vegetables crop like brinjal and chilies and also advised for nursery raising and transplanting of new seedlings.

#### Eastern Uttar Pradesh

- Due to the rainfall in the previous week and forecast of medium to heavy rainfall in the next week, farmers are advised to withhold irrigation in their crop fields
- Looking rainfall in the preceding week farmers are advised to collect the toria seeds and keep ready for timely sowing.
- In view of high humidity and the possibility of rain in next two weeks, the farmers are advised to keep the animal sheds clean, sprinkle lime outside the animal shelter to prevent infection from outside.

# West Bengal

The amount of rainfall received over Gangetic West Bengal was 72 mm (59% excess) and Sub Himalayan West Bengal was 70 mm (15% excess) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) is normal over Gangetic West Bengal and above normal over Sub-Himalayan West Bengal during week-1 and below normal over Gangetic West Bengal and Sub-Himalayan West Bengal for week-2.

- Due to forecast of normal rainfall in coming next week, it is advised to harvest the matured rice cultivars as early as possible and standing water of 5 cm should be maintained in late transplanted rice field.
- To control chili leaf curl, it is advised to spray Imidacloprid @ 0.2ml/litre of water at the evening hour.

# Punjab

The amount of rainfall received over Ludhiana was 0.1 mm (-98% large deficit) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) for the next two weeks (07 - 13

October 2022 and 14 - 20 October 2022) is normal for week-1 and above normal for week-2.

- As weather is expected to remain partly cloudy with possibility of isolated thundershowers during next two weeks, farmers are advised to do picking of cotton after weather clears up.
- If rainfall is not sufficient then it is advised to irrigate the vegetable crops at weekly intervals.

#### Haryana

The amount of rainfall received over Hisar was 0.6 mm (-82% large deficit) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) is above normal for week-1 and week-2.

• Due to prevailing dry weather condition and forecast of heavy rainfall in next two weeks, farmers are advised to pick the matured cotton ball, after complete dry (after sunrise)/complete evaporate the dew water/moisture over the cotton ball as soon as possible.

#### Kerala

The amount of rainfall received over Kerala was 42 mm (-38% deficit) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) is normal for week-1 and week-2.

- Under prevailing weather condition, there is a chance of rhizome maggot in ginger. For management, it is advised to apply neem cake in the basin of the plant.
- Due to increased relative humidity, there may be a chance of leaf rust disease in coffee. To control, it is advised to apply 0.5% Bordeaux mixture or plant wax 20 EC @ 1-2 ml per litre.

#### Tamil Nadu

The amount of rainfall received over Tamil Nadu was 12 mm (-59 % deficit) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) is normal for week-1 and above normal for week-2.

- Irrigation may be skipped since there is a moderate to heavy rainfall forecast for the next two weeks.
- Prevailing weather condition are congenial for aphid and leaf hopper incidence in pulses. Farmers are advised to go for foliar spray Emamectin benzoate 5% SG 220 g/ha.

# Maharashtra

33 mm (10% excess) rainfall over Madhya Maharashtra; 28 mm (1% excess) in Marathwada; 40 mm (-20% surplus) in Konkan region and 25 mm (9% excess) over Vidarbha was recorded during 01 October - 07 October 2022. The extended range weather forecast (rainfall) for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) is normal over Madhya Maharashtra and Konkan and above normal over Vidarbha and Marathwada for week-1 and; normal over Konkan and below normal over Vidarbha, Marathwada and Madhya Maharashtra for week-2, respectively.

#### Vidarbha

- Under prevailing weather condition, rainfed safflower var. *PKV-Pink*, *AKS-311* and *AKS-207* and Nari-non-spiny (*NH-1*) can be sown up to first week of October to escape the damage caused by aphid incidence later stage.
- Farmers are advised to carry out harvesting of matured soybean and stored on elevated field and cover the harvested produce with tarpaulin and allow for sun drying by considering the local weather condition.

#### Marathwada

- For the management of *Helicoverpa armigera* in *kharif* sorghum it is advised to spray of 5% NSKE or dusting of Malathion powder 5% @ 20 kg per ha or Malathion 50% @ 10 ml per 10 litres of water during clear weather condition.
- Under prevailing weather condition, it is advised to store the harvested pods and threshed grains of black/green gram at safe places, precaution should be taken so that the harvested pods may not damage due to rainfall.

#### Konkan

• Due to forecast of intermittent rainfall and humid and cloudy weather there may be a chance of incidence of brown plant hopper on late rice in lowline area. If incidence of brown plant hopper is observed above threshold level (5-10 hopper/hill), it is advised to spray Acephate 75% WP @ 22.5 g or Fipronil 5% SC @ 20 ml or Imidacloprid 17.8% SL @ 2 ml per 10 litres of water during clear weather (no rainfall).

#### Odisha

The amount of rainfall received over Odisha was 69 mm (80% large excess) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Odisha is normal for week-1 and below normal for week-2.

- Present high temperature and humidity condition, favors infestation of sucking pest in different crops. For management, it is advised to go for spraying of neem-based pesticide (Neem Oil 1500 ppm) @ 600 ml/acre by mixing it in 200 litres of water.
- Farmers are advised to grow short duration pre *rabi* crops like amaranthus, ragi, horse gram, green gram, black gram, cowpea, sweet potato and sesame in upland/medium lands utilizing the available soil moisture in the field.

# Gujarat

The amount of rainfall received over Gujarat was 10 mm (9% excess) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Gujarat is above normal for week-1 and normal for week-2.

• To control of thrips in chili, it is advised to spray Neem seed oil @ 30-50 ml in 10 litres of water and in case of heavy attack, spraying of Spinosad @ 3 ml per 10 liters of water is recommended.

#### Jammu

1.2 mm of rainfall (-77% large deficit) was received over Jammu during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Jammu is below normal for week-1 and normal for week-2.

• Sowing of winter vegetables like potato (var. *K Badshah, K Sinduri, K Chipsona* and *K Sona*), radish (var. *P Reshmi*), carrot (var. *Pusa Kesar, P Yamdagani*), Turnip (var. *PTWG*), garlic (var. *local, Yamuna safed, Agrifound parvati*), Methi (var. *Pusa early bunching* and *Kasuri methi*) and spinach (var. *All green*) is recommended at optimum soil moisture condition.

# Assam

The amount of rainfall received over Assam during 01 October - 07 October 2022 was 46 mm (-16% deficit). The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Assam is normal for week-1 and below normal for week-2.

- As moderate to heavy rainfall during the past week in few regions of the state, sowing of seeds of *kharif* pulses may get delayed.
- Under consecutive cloudy condition, appearance of aphid may be observed in lower side of the leaves of green/black gram. To control the pest, it is advised to apply Dimethoate 30 EC @ 2ml per litres water during fair weather only.

# Karnataka

Rainfall received during 01 October - 07 October 2022 over South Interior Karnataka was 45 mm (+7% excess), 53 mm (+35% excess) over North Interior Karnataka and 61 mm (-10% deficit) over Coastal Karnataka. The extended range weather forecast (rainfall) for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) is normal over North Interior Karnataka, South Interior Karnataka and Coastal Karnataka for week-1 and; normal over North Interior Karnataka and Coastal Karnataka and above normal over South Interior Karnataka during week-2.

#### South Interior Karnataka

- Wherever over population of crop plants exist, thinning operation is advised for better availability of scarce soil moisture to the reduced population of crop plants.
- Under prevailing weather following crops with recommended varieties are advised:
  - Finger millet: (var. *Indaf-5,7,9, ML-365, KMR-301*), Horse gram: (var. *PHG-9, KBH-1, Niger*), Field bean (var. *HA-3* and 4) and Sunflower: (*KBSH-1,41,42, 44* and *53*), Cowpea (*KBC-1, TVX-944* and *PKB-4* for vegetable purpose).
- To control leaf folder insect in redgram, it is advised to spray Methomyl 40 SP @ 2 g/litre of

water before flowering of crop.

#### North Interior Karnataka

- Farmers are advised to sow the crop in rows across the slope to facilitate better conservation of moisture in the soil.
- In case, the rainfall is more, it is advised to drained out excess water from crop fields, by making drainage furrows in the crops at regular intervals. The runoff water should be collected in the farm pond which can be utilizes for giving protective irrigation to the crops.

#### **Himachal Pradesh**

The amount of rainfall received over Himachal Pradesh was 1 mm (-82% large deficit) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Himachal Pradesh is normal for week-1 and: above normal for week-2.

• Farmers are also advised for transplanting of tomato, cucumber and other high value vegetables in polyhouses. Keep yellow sticky trap in polyhouses one week before sowing of crops.

Sowing of root vegetables like radish (var. *Japanese White, Chinese Pink* and *Miro Early*), turnip (*PTWG*), carrot (var. *Nantes, Chanteny, Pusa Yamdagni*) and leafy vegetable like spinach (var. *Pusa Harit, Pusa Bharti*) and Fenugreek (var. *IC-74, Palam Soumava* and *Pusa Kasuri*).

#### Andhra Pradesh

The amount of rainfall received over Coastal Andhra Pradesh was 91 mm (82% excess) and over Rayalaseema was 486 mm (+19% excess) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) above normal over Coastal Andhra Pradesh and normal over Rayalaseema for week-1 and above normal over Coastal Andhra Pradesh and Rayalaseema for week-2.

- In Ananthapuramu, Kurnool and Kadapa districts, present weather conditions are favorable for tikka leaf spot incidence in groundnut. To control the disease, farmers are advised to spray, Mancozeb @ 2 g + Carbendazim @ 1 g or Hexaconazole @ 2 ml/litre of water.
- In Kurnool, YSR Kadapa and Nandyal districts, present weather conditions are favorable for incidence of fall army worm in maize. To control fall army worm, spraying of Thiodicarb@2g or Emamectin benzoate @0.4 g/litre of water is recommended.

# Chhattisgarh

The amount of rainfall received over Chhattisgarh was 23 mm (+8% surplus) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Chhattisgarh is normal for week-1 and below normal for week-2.

• Due to the possibility of light to moderate rainfall at some places in in next week in Chhattisgarh plains, farmers are advised to drain out excess water from the field.

• Under prevailing weather condition, winter vegetables like cauliflower, cabbage and *knolkhol* early varieties are advised for nursery sowing.

# Madhya Pradesh

The amount of rainfall received over East Madhya Pradesh was 34 mm (+91% large excess) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Madhya Pradesh is above normal for week-1 and below normal for week-2.

- Farmers are advised to harvest crops that were sown during June month like soybean, mung, urd, sesame and maize crops and keep it under shaded protected conditions.
- Tie the sugar cane plants together to prevent from lodging due to excess rainfall.
- Under humid and heavy rainfall conditions, citrus canker may occur in the citrus tree. For management, the affected leaves and twigs are destroyed by breaking, after that, spray of solution @ 180 g of Copper oxychloride and @ 6 g of Streptocycline in 60 litres of water is advised.

#### Rajasthan

The amount of rainfall received over East Rajasthan was 4 mm (-39% deficit) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over East Rajasthan is above normal for week-1 and below normal for week-2.

• Under prevailing weather condition, sowing of early mustard is advised with recommended varieties like RGN-73, Bio-902 (Pusa Jai kisan), Aashirwad, RH-9304 (Vasundhara), RH-9802 (Swarn Jyoti), RH-8812 (Laxmi), DRMRIJ-31 (Giriraj).

# Uttarakhand

The amount of rainfall received over Uttarakhand was 18 mm (53% excess) during 01 October - 07 October 2022. The extended range weather forecast (rainfall) provided for the next two weeks (07 - 13 October 2022 and 14 - 20 October 2022) over Uttarakhand is normal for week-1 and below normal for week-2.

- Under prevailing weather condition, it is advised to harvest the mature *kharif* crops like rice, finger millet, barnyard millet, soybean etc.
- Light to moderate rainfall forecasted in coming next week, it is advised to maintain proper drainage in the standing crops to drain out excess water to avoid water stagnation and avoid spraying of pesticides and application of fertilizers during rainfall.

#### Disclaimer:

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