



National Agromet Advisory Services Bulletin

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based on

Extended Range Weather Forecast (ERFS)

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AICRP on Agro-Meteorology (AICRPAM)

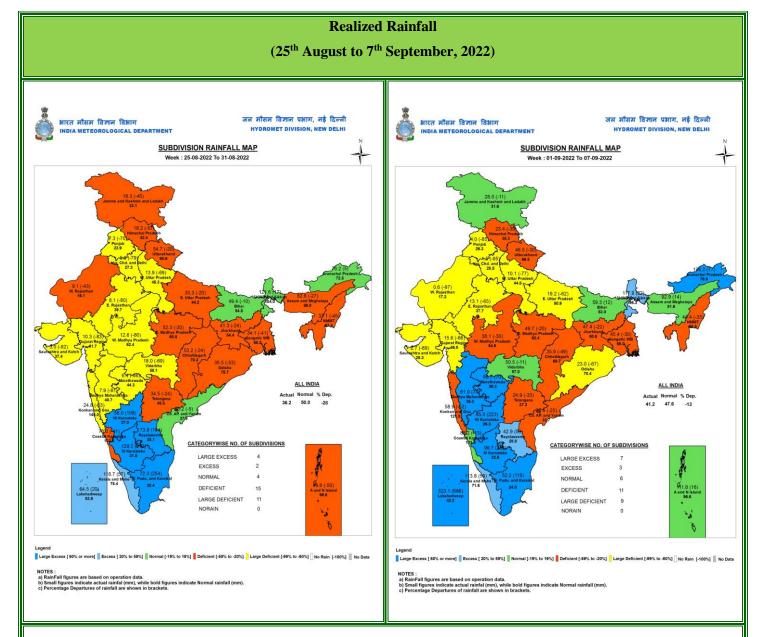
Central Research Institute for Dryland Agriculture (CRIDA)

Indian Council of Agricultural Research (ICAR)

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India Meteorological Department (IMD)
Earth System Science Organization

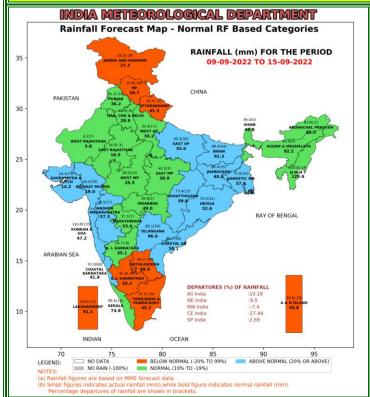
Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

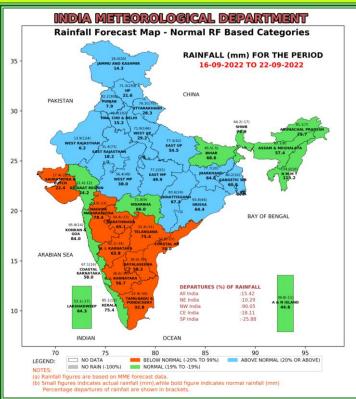


- Normal or above normal rainfall occurred in both the weeks in Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Interior Karnataka, Rayalaseema, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks in Jammu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

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC-7th September) (9th to 22nd September 2022)

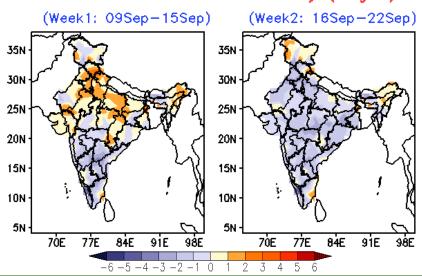




- Week 1 (09.09.2022 to 15.09.2022): Rainfall is likely to be normal over northwest India and above normal over west coast, Odisha, Coastal Andhra Pradesh, Chhattisgarh, East Uttar Pradesh, Bihar & adjoining regions.
- Week 2 (16.09.2022 to 22.09.2022): Rainfall is expected to increase over northern India and northern parts of central India.

Maximum and Minimum temperature anomaly (^{O}C) forecast for next 2 weeks (IC- 7^{th} September) $(9^{th}$ to 22^{nd} September 2022)

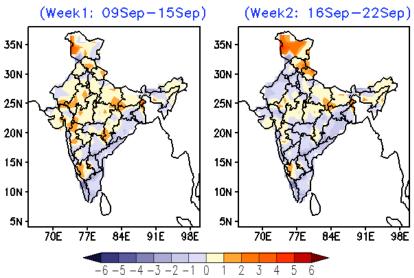
MME forecast Tmax anomaly (Deg C)



Maximum Temperature (Tmax)

- Week 1 (09.09.2022 to 15.09.2022): Tmax will be above normal over some parts of north and northwest India and slightly below normal over remaining parts of the country.
- Week 2 (16.09.2022 to 22.09.2022): Tmax will be normal to slightly below normal over most parts of the country.

MME forecast Tmin anomaly (Deg C)



Minimum Temperature (Tmin)

- Week 1 (09.09.2022 to 15.09.2022): Tmin will be above normal over central and northern parts of India.
- Week 2 (16.09.2022 to 22.09.2022): Tmin will be slightly above normal over Indo-Gangetic region and central India.

Strategic Agricultural Planning based on rainfall till 22 September 2022

Agromet Advisories

Uttar Pradesh

The amount of rainfall received over East Uttar Pradesh was 370 mm (-46% deficit) and over West Uttar Pradesh was 318 mm (-47% deficit) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) is above normal over East Uttar Pradesh and normal over West Uttar Pradesh for week-1; above normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

Western Uttar Pradesh

- Only 1.8 mm rainfall was received during last week against the normal rainfall of 52.1 mm. Therefore, farmers are advised to irrigate the paddy crop which is at panicle emergence/flowering stage (sensitive to moisture stress).
- Due to scanty and highly deficit rainfall condition, farmers are advised to take up land preparation of vacant field for the sowing of Toria.
- For the management of *khaira* disease in paddy crop, it is advised to spray 5.0 kg Zinc sulphate/ha with 2.0 % Urea solution.

Eastern Uttar Pradesh

- In view of the possibility of rainfall during next two weeks, farmers are advised to raise nursery of *kharif* onion by making beds under optimum moisture and the seed rate for planting per hectare will be 12-15 kg per hectare.
- In view of the high humidity and the possibility of rain in next two weeks, the farmers are advised to keep the sitting places of the animals clean, sprinkle lime outside the animal shelter to prevent infection from outside.

Bihar

The amount of rainfall received over Bihar is 538 mm (-36% deficit) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) is above normal for week-1 and; normal for week-2.

- In upland and medium land areas, where fields are vacant due to deficit rainfall, farmers are advised to start sowing of pigeon pea.
- Due to prevailing cloudy weather condition, there may be a chance of gundhi bug in early sown rice. As a control measure, it is advised to apply Folidol dust @ 10-15 kg per hectare in the early morning or late evening.
- Under prevailing weather condition, nursery sowing of early maturing varieties of cabbage is advised. *Pride of India, Golden Acre, Pusa mukta, Pusa agate*, and *early drum head* varieties of cabbage are recommended for sowing under North Bihar agro climatic condition.

Jharkhand

The amount of rainfall received over Jharkhand is 604 mm (-26% deficit) during 1 June - 08

September 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) is above normal for week-1 and week-2.

- Farmers wishing to cultivate Niger may select improved varieties like *Birsa niger-1*, *Birsa niger-2*, *Birsa niger-3*, *Pooja-1* etc.
- Farmers wishing to cultivate Rapeseed (Toria) crop after harvesting of black gram or green gram, may arrange improved seeds and fertilizers. The recommended varieties are *Tapeshwari* and *PT-203*.

West Bengal

The amount of rainfall received over Gangetic West Bengal was 693 mm (-29% deficit) and Sub Himalayan West Bengal was 1624 mm (1% excess) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) is above normal over Gangetic West Bengal and normal over Sub-Himalayan West Bengal during week-1 and week-2.

- Due to forecast of heavy rainfall in coming next two weeks, it is advised to harvest matured rice cultivars as early as possible.
- Due to low rainfall in the Southern districts of West Bengal in the previous week, retting quality in jute may be hampered. Additional water should be added accordingly to maintain the fiber quality.
- To control chili leaf curl, it is advised to spray Imidacloprid @ 0.2ml/litre of water at the evening hour.

Kerala

The amount of rainfall received over Kerala is 1648 mm (-10% deficit) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) is normal for week-1 and week-2.

- Because of high moisture content in the atmosphere, there is a chance for the development of
 mahali disease in arecanut and coconut. For management, spraying of Copper oxy chloride
 @ 3g per litres of water is advised.
- To avoid water logging in the fields, ensure drainage facility by cutting off water channels and open all the drainage channels in the fields. Protect the soft stemmed crops such as banana and vegetables by providing staking due to the possibility of wind.

Tamil Nadu

The amount of rainfall received over Tamil Nadu is 450 mm (+90% large excess) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) is below normal for week-1 and week-2.

• Due to forecast of deficit rainfall during next two weeks, farmers are advised to provide irrigation in crop fields.

• Prevailing weather condition is also favourable for mealy bug incidence in papaya. To control, it is advised to release *Acerophagus papayae* @ 100 parasitoids / field / village or block.

Maharashtra

792 mm (26% excess) rainfall over Madhya Maharashtra; 657 mm (24% excess) in Marathwada; 2709 mm (+3% surplus) in Konkan region and 1036 mm (23% excess) over Vidarbha was recorded during 1 June - 08 September 2022. The extended range weather forecast (rainfall) for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) is normal over Vidarbha and Marathwada and above normal over Konkan and Madhya Maharashtra for week-1 and; normal over Konkan and Vidarbha and below normal over Madhya Maharashtra and Marathwada for week-2, respectively.

Madhya Maharashtra

- Due to cloudy weather condition, there may be a chance of leaf eating caterpillar in *kharif* crops like soybean, sunflower, pigeon pea, bajra etc. To manage, it is advised to use pheromone traps @ 5/ha and also if required spray Profenofos/Quinalphos/Chlorpyrifos @ 20 ml per 10 litre of water.
- In area where soils are affected with white grub and termites, application of Phorate granules
 @ 15 kg per ha is recommended.

Vidarbha

- Due to fairly widespread to widespread rains, it is advised to drain out excess water stagnation occurred in orchards, standing crops and vegetable fields.
- Due to rainy/cloudy weather, there may be incidence of Phytophthora blight observed in pigeon pea crop. For management, it is advised to spray Fosetyl AL 80% WP @ 25 g per 10 litres of water.

Marathwada

• As per forecast of normal rainfall during coming first week, it is advised to harvest timely sown and mature black gram/green gram pods as early as possible.

Konkan

• Due to forecast for heavy to very heavy rainfall during coming first week, it is advised to postpone all spraying and fertilizer application to crops and make arrangement to drain out excess water from crop fields.

Odisha

The amount of rainfall received over Odisha was 1016 mm (+2% excess) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Odisha is above normal for week-1 and week-2.

• To manage gram pod borer in cowpea spraying of Emamectin benzoate @ 80 g/ acre by

mixing it in 200 litres of water is advised.

• Deficit in rainfall leads to infestation of Epilachna beetle in cucurbit crops. To manage it is advised to spray neem-based pesticide (Neem Oil 1500 ppm) @ 3 ml/litre of water at early stage of infestation.

Gujarat

The amount of rainfall received over Gujarat was 971 mm (16% excess) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Gujarat is above normal for week-1 and normal for week-2.

- For the control of citrus canker disease in lemon, it is advised to spray Copper Oxychloride 40 g or Streptocycline 1.5 g in 10 liters of water.
- Vaccination is advised against Lumpy Skin Disease (LSD) in cows. For the control of ectoparasite, spray Deltamethrin or Amitraz 2 ml in 1 litre of water.

Jammu

528 mm of rainfall (8% excess) was received over Jammu during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Jammu is below normal for week-1 and above normal for week-2.

- Prevailing weather is congenial for hairy caterpillar in *kharif* pulses, if observed then destroy young larvae in gregarious phase. If population is high, spray Quinalphos @ 0.03% or Dichlorvos @ 0.05% during clear weather.
- Under optimum soil moisture condition, it is advised to prepare nursery beds for cole crops.

Assam

The amount of rainfall received over Assam during 1 June - 08 September 2022 was 1463 mm (-4% deficit). The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Assam is normal for week-1 and week-2.

- Under prevailing weather condition, farmers may continue nursery sowing of mid-season varieties of cauliflower like *Pusa Synthetic*, *Pusa Snowball* and *Main Crop Patna* under shed-nets or poly houses.
- Due to favorable weather, farmers may observe the infestation of Phytophthora leaf and root rot in betelvine plants. To manage, it is advised to immediately apply four drenches and eight sprays of Bordeaux mixture @ 1.0% and 0.5% respectively.

Karnataka

Rainfall received during 1 June - 08 September 2022 over South Interior Karnataka was 965 mm (+71% large excess) and 573 mm (+54% excess) over North Interior Karnataka and 2989 mm (+4% surplus) over Coastal Karnataka. The extended range weather forecast (rainfall) for the next two

weeks (09 - 15 September 2022 and 16 - 22 September 2022) is normal over North Interior Karnataka, below normal over South Interior Karnataka and over Coastal Karnataka is above normal for week-1 and; normal over Coastal Karnataka and below normal over North Interior Karnataka and South Interior Karnataka during week-2.

South Interior Karnataka

- In long-duration field crops like pigeon pea, earthing up is advised for better availability of soil moisture to the crop rows.
- Due to moderate rainfall, it is advised to postpone the application of top dress fertilizer in red gram crop.

Punjab

The amount of rainfall received over Punjab was 321 mm (-18% deficit) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Punjab is normal for week-1 and above normal for week-2.

- To manage fall armyworm in maize crop, it is advised to spray Coragen 18.5 SC (@ 0.4 ml per litre of water.
- Prevailing weather condition is highly suitable for planting of citrus, guava, mango, litchi, etc.

Himachal Pradesh

The amount of rainfall received over Himachal Pradesh was 602 mm (-8% deficit) during 1 June -08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Himachal Pradesh is below normal for week-1 and; above normal for week-2.

- Farmers are advised for the picking in tea at 10-12 days interval to maintain the quality and productivity.
- Ensure proper ventilation in poultry houses. Replace the poultry houses with fresh litter and keep the houses clean and ensure drinking water to the birds.
- In mid-hills of the state, transplant seedlings of mid-season cauliflower varieties. Recommended varieties are *Palam Uphar*, *Pusa Deepali*, *F1 Megha*, *F1 Barkha* and *F1 White Excel*.

Andhra Pradesh

The amount of rainfall received over Coastal Andhra Pradesh was 502 mm (+5% excess) and over Rayalaseema was 425 mm (+40% excess) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Coastal Andhra Pradesh is above normal and Rayalaseema is below normal

for week-1 and; below normal over Coastal Andhra Pradesh and Rayalaseema for week-2.

- In Srikakulam, Vizianagaram, Guntur and Krishna districts, present weather conditions are favorable for the incidence of sucking pests in cotton. To control, spraying of Imidacloprid @ 0.3 ml or Acetamiprid @0.2g/litre of water is recommended.
- Present weather conditions are favourable for the incidence and spread of sigatoka leaf spot disease in banana grown in Vizianagaram and Nellore districts. To control, spraying of Propiconazole @ 0.1% (or) Tebuconazole + Trifloxystrobin @ 1ml/litre of water for 2-3 times in 25 days interval is recommended.

Chhattisgarh

The amount of rainfall received over Chhattisgarh was 1078 mm (+8% surplus) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Chhattisgarh is above normal for week-1 and week-2.

• Looking into the forecast of heavy rainfall in next two weeks, farmers are advised to drain out excess water from the field.

Madhya Pradesh

The amount of rainfall received over East Madhya Pradesh was 970 mm (+5% surplus) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Madhya Pradesh is normal for week-1 and above normal for week-2.

 Monitoring of field for Tobacco caterpillar/ semi looper/foliage feeder and girdle beetle. For management, it is advised to spray of Quinalphos 25 EC @ 1 litre/ha or Lambda Cyhalothrin 4.9 % CS @ 300 ml/ha.

Uttarakhand

The amount of rainfall received over Uttarakhand was 908 mm (-14% deficit) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over Uttarakhand is below normal for week-1 and above normal for week-2.

• Maintain proper drainage in the crop fields to drain out excess water to avoid water stagnation.

Rajasthan

The amount of rainfall received over East Rajasthan was 695 mm (20% excess) during 1 June - 08 September 2022. The extended range weather forecast (rainfall) provided for the next two weeks (09 - 15 September 2022 and 16 - 22 September 2022) over East Rajasthan is normal for week-1 and above normal for week-2.

• Keeping in the view of rainfall forecast in next few days, farmers are advised to do proper

arrangement for storing rain water at one portion in the field and can be used for irrigation in the crops at suitable time during dry spell.

Disclaimer:

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