



राष्ट्रीय कृषि मौसम परामर्शी सेवाएं बुलेटिन National Agromet Advisory Services Bulletin

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Central Research Institute for Dryland Agriculture (CRIDA) भारतीय कृषि अनुसंधान परिषद

> Indian Council of Agricultural Research (ICAR) और भारतीय मौसम विज्ञान विभाग

India Meteorological Department (IMD) पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization

वास्तविक वर्षा तथा विस्तारित अवधि पूर्वानुमान Realized Rainfall and Extended Range Forecast (वर्षा और तापमान) (Rainfall and Temperature)



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



- Week 1 (06.09.2024 to 12.09.2024): Rainfall is likely to be above normal over Odisha, Chhattisgarh, Madhya Pradesh, Vidarbha, Telangana and Coastal Andhra Pradesh. Rainfall is likely to be below normal rainfall over many parts of South India, North East India and Northwest India.
- Week 2 (13.09.2024 to 19.09.2024): Rainfall is likely to be above normal above normal over Uttarakhand, Haryana, Uttar Pradesh, Madhya Pradesh and West Rajasthan. Rainfall is likely to be below normal over most parts of South India Maharashtra and Gujarat State.



• Week 2 (13.09.2024 to 19.09.2024): Minimum temperature is likely to be above normal over Northeast India, Bihar, East Uttar Pradesh, Himachal Pradesh, Uttarakhand and Karnataka.

Strategic Agricultural Planning based on rainfall till 19 September 2024

Agromet Advisories

Kerala

1640 mm (-10% deficit) rainfall was received over Kerala from 01 June to 8 September 2024. The extended range weather forecast (rainfall) for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) is normal rainfall for week 1 and deficit for week 2.

- Under prevailing weather conditions, it is advised for land preparations for *Mundakan* paddy. Apply lime during nursery preparation. Seed treatment with pseudomonas can be done before sowing. (10 grams of pseudomonas for one kg of paddy seeds.).
- As a precaution against rain and wind, supporting the banana plant and strengthening the vegetable garden sheds is advised.
- Provide support to banana crops. Make the vegetable pandals stronger. To protect farmers and livestock from lightning and thunder avoid standing in open areas.
- There is a chance of rhizome rot disease in ginger. As a prophylactic measure spray, 2 g Copper oxychloride or 1.5 g copper hydroxide per one litre of water.

Tamil Nadu

355 mm (50% excess) rainfall was received over Tamil Nadu from 01 June to 8 September 2024. The extended range weather forecast (rainfall) for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) is a large deficit of rainfall for week 1 and a deficit for week 2.

- As light rainfall is expected, a top dressing of fertilizer may be applied to rice at maximum tillering.
- Mango cultivators are advised to manage the canopy in mango groves. Remove overlapping, inter-crossing, diseased, dried and weak branches in old trees to get good sunlight and aeration.
- Irrigation is advised for the newly planted fruit trees and coconut due forecast of large deficit rainfall.
- To increase the yield of brinjal, give foliar spraying with vegetable booster @ 5 g/ litre along with sticking agent at 30 days after planting with 15-day intervals.

Karnataka

724 mm (28% excess) rainfall over South Interior Karnataka; 3481 mm (21% excess) rainfall over Coastal Karnataka and 438 mm (18% excess) rainfall over North Interior Karnataka was received from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) is normal rainfall over Coastal Karnataka, deficit over North Interior Karnataka and large deficit rainfall over South Interior Karnataka for week 1 and; large deficient rainfall over Coastal and South Karnataka and deficit rainfall over North Karnataka during week 2.

South Interior Karnataka

- Deep ploughing is recommended in mango orchards to conserve soil moisture and incorporate crop residue in the soil.
- Intercultural operation in red gram, maize and groundnut are recommended.
- Due to high wind speed it is advised to postpone the spraying operation in agricultural and horticultural crops.
- Wind speed is high therefore it is advised to provide staking support to Banana and vegetable crops to protect from uprooting of crops.
- As a forecast of large deficit rainfall conditions, during this week, it is advised to undertake harvesting of maize, groundnut and cowpea during dry spells to avoid spoilage and store the harvested produce in dry conditions to prevent fungal growth.
- Continue sowing of finger millet and black gram. Carry out mulching in standing crops to conserve soil moisture

Andhra Pradesh

427 mm (41% excess) rainfall was received over Rayalaseema, and 700 mm (47% excess) was received over Coastal Andhra from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) is large deficit rainfall over Rayalaseema and excess rainfall over Coastal Andhra Pradesh for week 1 and; a deficit over Rayalaseema and large deficit over Coastal Andhra Pradesh for week 2.

- September month is suitable for taking up the sowings of horse gram. Farmers who are are advised to select varieties like PDM-1, VZM-1, PHG-9 and PHG-62 and follow seed treatment before sowing. Inter-row spacing should be 30 cm and intra-row spacing should be 10 cm.
- Cotton crop is at flowering to boll development stage. Farmers are advised to take up top
 dressing of urea and potash @ 10 kg/acre at 30, 60 and 90 DAS using the available soil
 moisture. If Magnesium deficiency is noticed in cotton crop, spraying 10 g of MgSO4 twice
 at 45 and 75 DAS is advised.
- In the North Coastal, Krishna and Godavari zones, due to the rains there may be incidence of wilt in sugarcane. To control, it is advised to avoid water logging in the field. Remove and destroy the affected plants. To avoid spreading of the disease drench the crop with COC (Copper oxy chloride) @ 3 g/litre.
- Farmers are advised to spray in sweet orange micro nutrients mixtures or formula 4 @ 2.5 to 3 g/litre of water for control of nutrient deficiency in newly formed leaves.

Odisha

875 mm (-12% deficit) rainfall was received over Odisha from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12

September 2024 and 13 September - 19 September 2024) is a large excess over Odisha for week 1 and; normal rainfall for week 2.

- Keeping rainfall forecast in mind farmers are advised not to do any type of spray and do proper drainage management in pulse crops and vegetable nurseries.
- After rainfall recedes apply top dressing of fertilizers either in transplanted or direct seeded rice. In the case of transplanted rice in low/ medium land where the top dressing of urea has not been applied, spray 2% urea after rainfall.
- There are chances of appearance of iron toxicity symptoms in paddy like lesser tillering, yellowing of leaves and stunted growth due to stagnant water. In such cases drain out stagnant water and apply 10 kg of MOP and 10 kg of Zinc Sulphate 21% per acre.
- Due to the prevailing cloudy weather associated with high humidity, regular monitoring for the occurrence of insects and diseases in crops is recommended.

Maharashtra

923 mm (47% excess) rainfall over Madhya Maharashtra, 693 mm (31% excess) Marathwada, 3360 mm (28% excess) Konkan, and 972 mm (15% excess) rainfall over Vidarbha was recorded from 01 June to 8 September 2024. The extended range weather forecast (rainfall) for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) is normal rainfall over Konkan and Marathwada, deficit over Madhya Maharashtra and large excess over Vidarbha for week 1; and large deficit rainfall over Konkan, Madhya Maharashtra, Marathwada and Vidarbha week 2, respectively.

Parbhani

- Due to heavy to very heavy rainfall on 1 Sep and 2 Sept, 2024 water stagnated in the crop/orchard. Farmers are advised to drain out the stagnated water as soon as possible and spraying should be done during clear weather condition.
- Remove the stagnated excess amount of water from citrus orchard. If fruit drop is observed in citrus orchard take a spray of NAA 15 ppm during clear weather condition. For fruit development in citrus take a spray of 00:52:34 @ 10 g per litre of water during clear weather condition.
- Due to continuous rain in last week wilting may observed in cotton. For management undertake drenching of 200 g Urea + 100 g White potash (00:00:50 fertilizer) + 25 g Copper oxychloride per 10 litres of water during clear weather at wapsa condition.
- For management of insects in soybean, for leaf eating insects spray Chlorantraniliprole 18.5% @ 75 ml/acre (in 500-liter water). And for sucking pests spray Diafenthiuron 47.80 % SC@250ml (in 500 liter water)

Vidarbha

- In view of rainfall during next 5 days, ensure safe storage of harvested farm produce of black gram and green gram, continue harvesting of remaining matured crops during clear weather at *wapsa* condition.
- Undertake intercultural operations in cotton at *wapsa* condition during clear weather.

Madhya Maharashtra

- In view of heavy to very heavy rainfall at isolated places in ghat areas of Pune district, make arrangements to drain out excess water from kharif crops, vegetables and orchards.
- Complete harvesting of matured green gram and black gram during clear weather and keep harvested produce at safer places.
- Undertake nipping in 45 days old pigeon pea.
- Undertake intercultural operations in cotton at wapsa conditions during clear weather.
- Maintain a 5 to 10 cm water level in rice fields at stem elongation and panicle initiation stage.
- Due to intermittent rainfall and cloudy weather, there is a possibility of incidence of blast on rice, if incidence is noticed spray Ediphenphos 50%EC@1ml/liter water or Hexaconazole 5% EC@2ml/liter water. Or Tricyclazole 75% WP @ 8 grams / 10 liters of water during clear weather.

Konkan

- In view of heavy to very heavy rainfall at isolated places in all districts, plan to drain excess water from kharif crops, vegetables and orchards.
- Maintain optimum 5 10 cm water level in rice fields.
- Undertake weed management in rice, groundnut, finger millet and turmeric.
- Apply Paclobutrazol (cultar) for regular bearing in 10-year-old mango trees when the intensity of rainfall is low.

Gujarat

1066 mm (28% excess) rainfall was received over Gujarat from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Gujarat is normal for week 1 and deficit for week 2.

- Undertake transplanting of ready seedlings of bidi tobacco at a spacing of 90 cm x 75 cm or 105 cm x 90 cm from the third week of August to the third week of September. Drain out excess rainwater due to recent heavy rain in the transplanted tobacco crop field. Undertake intercultural and weeding operations in *Wapasa* condition.
- For controlling the yellow stem borer in paddy, use a pheromone trap 10-20 per ha. Spray Neem based insecticides 10 ml (5 EC) to 60 ml (0.03 EC) in 10 liters of water. In heavy incidence of stem borer, spray Indoxacarb 14.50 % SC 0.5ml/ liter of water or Cartap Hydrochloride 75 % SG@1gram/liter water in clear sky conditions.

- In North Gujarat, postpone irrigation to crops such as castor, cotton, pearl millet, groundnut, sesame and maize. Withhold spraying of pesticides and application of fertilizers. Postpone intercultural and weeding operations.
- To control leaf blight and stem rot in sesame, spray Copper oxychloride 50 % WP 40g or Mancozeb 75 % WP @ 25ml per 10 litres of water after cessation of the current spell of heavy rainfall.

Chhattisgarh

1014 mm (1% excess) rainfall was received over Chhattisgarh from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Chhattisgarh is large excess rainfall for week 1 and normal for week 2.

- Most of the rice crop is at tillering to the booting stage in fields. Farmers are advised to go for the first top dressing of urea (40 kg/ha.) fertilizer at the tillering stage of rice for healthy tillers 2-3 days after cessation of rains. Farmers are advised to go for urea top dressing only after control of insects and weeds.
- Under prevailing weather conditions, mulching is advised in ginger, turmeric, elephant yam and taro root crops.
- In early transplanted rice, if the problem of thrips is noticed, it is advised to spray neemseed kernel-based insecticide like Azadirachtin 0.15% @ 1 lit/acre or Lambda-cyhalothrin 5% EC @ 100 ml/acre or Thiamethoxam 25 % WG @ 40 g/acre in 200 litres of water.

Madhya Pradesh

972 mm (5% excess) rainfall was received over East Madhya Pradesh from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Madhya Pradesh is large excess rainfall for week 1 and week 2.

- Due to the forecast of large excess rainfall and heavy clouds with thunderstorm and lightning activities, it is advised to postpone the application of insecticides, fungicides and nitrogen fertilizers till open weather conditions. Ensure drainage arrangement in their field to avoid waterlogging caused due to heavy rains.
- As night temperature rises, it may cause more humidity with infestation of insect-pest and diseases. Monitoring of crop fields, particularly pulse crops (Soybean, mung, urd) for insect pest and diseases. Apply insecticide applications if symptoms of mosaic or caterpillar appear more than the economic threshold in the field as advised by the scientist of the nearest KVKs.

Assam

1374 mm (-10% deficit) rainfall received over Assam from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Assam is deficit for week 1 and normal for week 2.

• Sowing of pulses is advised to continue as below normal rainfall is forecasted. Sandy loam soil is most preferable. The land is to be ploughed 2-3 times followed by leveling. Provide

surface drain to facilitate quick removal of excess water from the field. Collect the high yielding varieties of greengram like *Pratap*, *SGC 16*, *SGC 20*, *IPM-02-3 etc and black gram like PU-31*, *KU 301*, *SBC 40*, and *SBC 47* etc. for recommended sowing time.

• Sunny days/ high temperatures after continuous rainfall for a long period (1 to 2 weeks) during August are very conducive for a heavy infestation of rice hispa. Spraying with Chlorpyriphos 20 EC or Quinalphos 25 % EC @ 1.5 ml per litre of water is advised to control rice hispa.

West Bengal

809 mm (-17% deficit) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 1740 mm (8% excess) from 01 June to 8 September 2024. The extended range weather forecast (rainfall) for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) is normal rainfall over Gangetic West Bengal and Sub-Himalayan West Bengal during week 1 and week 2.

- Irrigation may be given in the rice field wherever needed. To control sheath blight in rice crops, avoid the use of excess nitrogen fertilizer it is advised to drain out excess water from the infected field and spray Propiconazole + Difenoconazole @ 1 ml/litre of water or Carbendazim + Flusilazole 1.5 ml/litre or Carbendazim @ 1 g/litre of water.
- To control wilting in vegetable field, spray Dithane M-45 @ 2.5g/litre of water.
- To control trunk borer in mature mango tree, clean the hole in the trunk with cloth dipped into kerosene and kills the larvae and apply Blitox mixed with any pesticide by making a thick layer at the attacked region.

Uttar Pradesh

523 mm (-12% deficit) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 576 mm (-16% deficit) from 01 June to 8 September 2024. The extended range weather forecast (rainfall) for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) is excess over Eastern Uttar Pradesh and normal over Western Uttar Pradesh during week 1 and excess over Eastern Uttar Pradesh and Western Uttar Pradesh for week 2.

Western Uttar Pradesh

- As per the extended range weather forecast, normal rainfall and temperature forecast during 06 19 September 2024 in the Central and Western zone of Uttar Pradesh therefore, farmers are advised no need for irrigation in paddy fields farmers are advised after weeding top dressed 1/4 Urea at tillering stage. Farmers are also advised to watch out for insects and pests due to hot and warm weather conditions during this week.
- The second topdressing of urea in maize crop may be done @ 60 to 70 kg per hectare at the time of the tasselling stage in case of no rain.
- For the control of stem borer/shoot fly in sorghum crop, spray Emamectin Benzoate 5% SG @ 0.4g/litre (200g/ha) or Dimethoate 30% EC @ 1.0 litre/hectare mixed in 500-600 litres of water during clear weather.

Eastern Uttar Pradesh

- Keeping in view of present weather, farmers are advised to monitor crops regularly for leaf folder or stem borer as paddy crop is in the vegetative stage. Farmers are advised to install yellow stem borer pheromone traps @ 5/acre in the paddy fields for monitoring.
- Under prevailing weather conditions, it is advised to transplant rainy season onion in the prepared fields with proper drainage. Also, in this weather condition, farmers are advised for weeding and hoeing in the standing crops and vegetables. Proper drainage is advised in all pulses, vegetables and other crops.

Himachal Pradesh

522 mm (-21% deficit) rainfall was received over Himachal Pradesh from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Himachal Pradesh is large deficit for week 1 and normal for week 2.

- Under prevailing weather condition, it is advised to for harvesting of matured tomatoes to avoid spoilage and transplanting of cabbage and cauliflower from nursery to the field after receipt of rain.
- Transplanting of mid-season cauliflower varieties is advised (*Palam Uphar, Improved Japanese and F1 Megha*0. Transplanting is to be done at a spacing of 60 x 45 cm. Before transplanting 25 t / ha FYM should be added along with 235 kg / ha IFFCO (12:32:16) along with 54 kg MOP/ha and 105 kg urea/ha.

Jammu

386 mm (-21% deficit) rainfall was received over Jammu from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Jammu is a large deficit for week 1 and deficit rainfall for week 2.

- Do not allow water to stagnate in pearl millet fields. Due to sufficient moisture availability, apply 2nd dose of nitrogenous fertilizer during clear weather before the ear head emergence under late sown crop and Sow direct-sown vegetables like Methi, Spinach Beet, Coriander, Radish, Carrot, Beet Root and Spinach within the first fortnight of September during clear weather for good germination and crop stand.
- Arrange for adequate drainage to avoid water stagnation in kharif pulses and vegetables. Ensure staking with plastic string in tomato and cucurbits (bottle gourd, bitter gourd, sponge gourd and cucumber) to avoid losses from gusty winds.
- If the attack of Bacterial Leaf Blight (tip burning) is observed in rice, apply Streptocycline Sulphate @ 1.0 g/10 litres of water

Rajasthan

841 mm (45% excess) rainfall was received over East Rajasthan from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over East Rajasthan is normal for week 1 and a excess for week 2.

- Keeping in the view of rainfall forecast in next few days, farmers are advised to properly manage drainage in standing crops and vegetable nurseries. Before spraying insecticides and weedicides, ensure that there is no rain for 3 to 4 hours. Otherwise, postpone the spray.
- Due to the continuous cloudy sky, there is a chance of tikka disease in groundnut. For the prevention, it is advised to spray Carbendazim @ 0.5g per litre of water.
- Monitor paddy crop regularly, if population of leaf folder or stem borer is above ETL then it is advised to broadcast Cartap 4% granules @ 10 kg/acre.or spray Cartap Hydrochloride 50 % SP@1.5ml/liter water

Haryana

359 mm (-7% deficit) rainfall was received over Haryana from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Haryana is a large deficit for week 1 and an excess for week 2.

- Don't irrigate the crop in view of anticipated rainfall and keep vigil on top borer. Tie the canes to avoid lodging during monsoon season.
- Avoid plant protection measures in cotton. Pest monitoring should be done, if the population of insects above ETL farmers are advised to install pest-specific pheromone traps in the fields for control of the insect population.
- Keeping in the view rainfall forecast in the next few days, farmers are advised to properly manage drainage in standing crops and vegetable nurseries. Before spraying insecticides and weedicides, ensure that there is no rain for 3 to 4 hours. Otherwise, postpone the spray

Punjab

299 mm (-24% deficit) rainfall was received over Punjab from 01 June to 8 September 2024. The extended range weather forecast (rainfall) provided for the next two weeks (06 September - 12 September 2024 and 13 September - 19 September 2024) over Punjab is a large deficit for week 1 and normal for week 2.

- It is a suitable period for planting plants such as citrus, guava, mango, litchi, sapota, jamun, bael, amla etc. Large weeds such as congress grass, cannabis etc. growing in and around the orchards should be removed as it is very easy to uproot these during this season. Drain out excessive rainwater from the periphery of fruit plants or orchards if any.
- As rainfall is expected in the coming days it is advised to drain away the excess water from the sugarcane field. To prevent lodging, prop up the crop at the end of August by using trash twist method.

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