



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

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India Meteorological Department (IMD) पृथ्वी प्रणाली विज्ञान संगठन

Earth System Science Organization



Realized Rainfall and Extended Range Forecast

- Normal or above normal rainfall occurred in both the weeks over Sub-Himalayan West Bengal & Sikkim and Tamil Nadu Puducherry & Karaikal.
- Normal or above normal rainfall occurred in either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Assam & Meghalaya, Arunachal Pradesh, Nagaland Manipur Mizoram & Tripura (NMMT), Gujarat State, East Rajasthan, West Madhya Pradesh, Maharashtra, Telangana, Andhra Pradesh, North Interior Karnataka, Coastal Karnataka, Kerala & Mahe, Lakshadweep and Andaman & Nicobar Islands.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.



it is likely to be below normal over Kerala, southern parts of coastal Karnataka and Odisha.
Week 2 (05.07.2024 to 11.07.2024): Rainfall is likely to be above normal over most parts of the country except Northeast India, Bihar and East Uttar Pradesh.



- Week 1 (28.06.2024 to 04.07.2024): Minimum temperature likely to be above normal over Northwest India, Bihar, Madhya Maharashtra, Karnataka and parts of Chhattisgarh.
- Week 2 (05.07.2024 to 11.07.2024): Minimum temperature likely to be above normal over Himachal Pradesh, Uttarakhand, Bihar, Madhya Maharashtra and Karnataka.

Strategic Agricultural Planning based on rainfall till 11 July 2024

Agromet Advisories

Kerala

489 mm (-25% deficit) rainfall was received over Kerala from 01 June to 30 June 2024. The extended range weather forecast (rainfall) for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) is below normal rainfall for week 1 and above normal for week 2.

- Farmers are advised to provide propping to standing banana crop as there is a chance of high wind speed in the coming dates. Clean the drainage channels and do not apply pesticides during rainy periods.
- If the level of soil moisture content in the paddy field is optimum for ploughing, the tilling operations can be started. With the first ploughing itself, incorporate powdered FYM/compost or green manures @ 5 t/ha into the soil.
- During the rainy season, there is a chance of downy mildew attack in cucurbitaceous vegetables. To control, it is advised to spray 2.5 gram of Mancozeb per one litre of water under the leaves. Do not apply pesticides during rainy periods.

Karnataka

149 mm (-1% deficit) rainfall over South Interior Karnataka; 742 mm (-14% deficit) rainfall over Coastal Karnataka and 132 mm (26% excess) rainfall over North Interior Karnataka was received from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) is normal over North Interior Karnataka and Coastal Karnataka and below normal over South Interior Karnataka for week 1 and; normal over North, South Karnataka and above normal over Costal Karnataka during week 2.

South Interior Karnataka

- Prevailing weather condition is ideal condition for land preparation and postpone the sowing of *kharif* crops due to gusty wind and soil moisture stress observed in crop fields.
- Farmers are advised to take up ploughing or passing the cultivator in the areas where rainfall is received and it should be taken across the slope this improves infiltration and conservation of rainwater and avoids soil erosion.

Due to the good amount of rainfall, the following crops are suggested for sowing.

Under mono-cropping the long-duration crops:

- Redgram: *TTB-7*, *BRG-1,2,4* & 5
- Castor: *DCS-9* (*Jyothi*), *DCH-177* & 32
- Maize: Ganga-11, Deccan -103, Vijaya composite, Composite NAC- 6004,6002, Hybrid-Nityashree (NAH-2049)

Under double cropping the medium to short duration crops:

- Groundnut: TMV-2, JL-24, KCG-6
- Cowpea: TVX-944, KBC-1, Green gram: PS-16, PDM-84,178
- Redgram seeds are advised to treat with Carbendazim or Thiram @ 2 g/kg of seed 24 hours before sowing (or) with talc formulation of *Trichoderma viride* @ 4 g/kg of seed (or) *Pseudomonas fluorescens* @ 10 g/kg seed and Rhizobium @ 10 g/kg of seed.

North Interior Karnataka

- Farmers are advised to carry out land preparation and undertake sowing of green gram, red gram, black gram, soybean, rice, groundnut, maize, cotton and sorghum.
- Irrigation schedule may be postponed depending to the rainfall condition to horticultural crops.
- As already light heavy rainfall was received in most of the districts and light to moderate rainfall was forecasted during during this week, depending on the soil type take up kharif sowing of maize with recommended varieties *EH-434042 (Arjun) or GH-0727 (Srusti)*, Bajra: *ICMV-221 or ICTP-8203*, Pigeonpea: short duration varieties *TS-3R*, *S-1* or medium duration varieties *GRG-811*.
- To manage fungal diseases in grapes, take up spraying of 1 per cent Bordeaux mixture 2-3 days after pruning.

Andhra Pradesh

161 mm (122% large excess) rainfall was received over Rayalaseema, and 149 mm (36% excess) was received over Coastal Andhra from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) is normal over Rayalaseema and Coastal Andhra Pradesh for week 1 and; above normal over Rayalaseema and Coastal Andhra Pradesh for week 2.

- In Krishna Godavari Zone, delay the sowing of cotton in the light soils as the sufficient amount of rainfall is not yet received to grow the cotton crop.
- Farmers are advised to cultivate high yielding varieties of foxtail Millet like *Suryanandi*, *SiA 3085, SiA 3156, Renadu, Garuda and Mahanandi*. The seed rate of korra 2 kg/acre for line sowing, 4 kg/acre for broadcasting and line sowing: 25 cm x 10 cm.
- Farmers are advised to utilize the moisture and go for sowing of pre-kharif green manure crops like sun hemp (12-15 kg/acre seed rate), dhaincha (10-12 kg/acre) or pillipesara (10-12 kg/acre) or short duration green gram (8-10 kg/acre).
- Under prevailing weather condition, farmers are advised to cultivate high-yielding varieties of bajra like *ABV-04*, *ICMV-221*, *ICMV-155*, *Raj 171 and PC 612*. The seed rate of bajra @1.6 kg/acre and follow spacing of 45 cm x 15 cm.

Maharashtra

173 mm (10% excess) rainfall over Madhya Maharashtra, 160 mm (18% excess) Marathwada, 707 mm (1% excess) Konkan and 147 mm (-16% deficit) rainfall over Vidarbha was recorded from 01 June to 30 June 2024. The extended range weather forecast (rainfall) for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) is above normal rainfall over Konkan and Madhya Maharashtra and normal over Marathwada and Vidarbha for week 1; and above normal over Konkan, Madhya Maharashtra, Vidarbha and normal over Marathwada for week 2, respectively.

Parbhani

• Sowing of *kharif* sorghum is advised only after receipt of sufficient amount of rainfall (75-100 mm). Sowing of kharif sorghum can be done up to 07th July.

- Under prevailing weather conditions, farmers are advised to undertake sowing of vegetables like okra, bitter gourd, ridge gourd, pumpkin etc. and transplanting of 45 days old seedlings of brinjal, tomato and chilli etc. during clear weather.
- If nutrient deficiency is observed in Mrig bahar citrus it is advised to spray of Chelated Zinc @ 50 g + 13:00:45 @ 150 g per 10 litres of water.

Vidarbha

- Undertake sowing of *kharif* crops like soybean, cotton, pigeon pea, black gram, green gram, sorghum etc. at wapsa conditions where sufficient rainfall has been received.
- Continue nursery sowing of vegetables like chilli, tomato and brinjal.
- For cultivation of *kharif* cotton recommended deshi varieties include *AKA-5*, *AKA-7* and *AKA-8* with seed rate of 12 to 15 kg /ha and spacing of 60 x 15 cm. American improved varieties include *AKH-081* (60 x 15 cm with seed rate 15 to 20 kg/ha), *AKH-09-5* (Suvarna Shubhra), *PKV Rajat and AKH 8828* (60 x 30 cm with seed rate 10 to 12 kg/ha). Cotton deshi hybrid *PKVDH-1*, *PKV-Suvarna* is recommended with seed rate @ 3.0 to 3.5 kg/ha and spaced at 60 x 45 cm

Madhya Maharashtra

- Under prevailing weather condition, it is advised to continue sowing of kharif crops like pigeon pea, black gram, green gram and soybean at *wapsa* condition.
- Field preparation is advised for raising nursery plants of onion, brinjal, chilli, and tomato on raised beds. After sowing seeds, it is advised to provide light irrigation with a rose can and later by flooding.

Konkan

- Due to rainy weather condition and forecast of above normal rainfall during this week, in Konkan region it is advised to sow the *kharif* paddy. The recommended seed rate for rice is 5 to 6 kg per 10 guntha for bold varieties, 3.5 to 4 kg per 10 guntha for fine varieties and 2 kg per 10 guntha for hybrid varieties. Use seed rate of 3 to 3.5 kg per 10 guntha for fine varieties and 4 kg per 10 guntha for bold varieties for sowing by Rahu method.
- Due to rainy weather conditions and forecast of above-normal rainfall, it is advised to drain out excess water from rice nurseries, turmeric, groundnut, orchards and vegetables and provide mechanical support to newly planted mango, cashew, coconut and arecanut

Gujarat

77 mm (-42% large deficit) rainfall was received over Gujarat from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Gujarat is above normal for week 1 and week 2.

- Under prevailing weather condition, sowing of groundnut is advised. Select varieties like, *GG-20, GJG-22* (semi spreading type) and for bunch type, *GJG-31, GJG-32, GG-5, GG-35, GG-38, TG-51, TAG-24, TG-37 A, TPG-41, TLG-45, KDG-128* etc. for sowing of *kharif* groundnut.
- With the onset of monsoon sowing of *kharif* pearl millet is advised when sufficient rainfall is received. Select pearl millet varieties like *GHB-538*, 577, 719, 732, 744 for *kharif* sowing

with seed rate @ 4 kg/ha and seed sown at less than 4 cm soil depth with a spacing of 45 cm or 60 cm between rows

• Farmers are advised to start sowing of chilli, tomato and brinjal seeds in raised bed or portrays with cocopeat for raising of seedlings for *kharif* transplanting. Use (75% Shaded intensity) shade net to cover the nursery area to prevent insect entry.

Chhattisgarh

136 mm (-28% deficit) rainfall was received over Chhattisgarh from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Chhattisgarh is above normal for week 1 and week 2.

- Farmers are advised to arrange seeds of progressive varieties of rice crop, such as *Karma Mahsuri, Mahamaya, Danteshwari, Samleshwari, Indira Sugandhit Dhan-1* etc. for sowing in the *kharif* season.
- Under prevailing weather condition, farmers are advised to prepare the field for the nursery cultivation of rainy season vegetable crops like okra, brinjal, chilli, cucumber, bottle gourd, radish, cauliflower etc. and arrange the seeds.
- Mulching is advised in ginger, turmeric, elephant yam and taro root crops and maintain the drainage channel before rainy season.
- For control whitefly in sugarcane crop (grand growth stage), it is advised to spray Fenitrothion 50 EC @ 2 litres per ha.

Assam

565 mm (16% excess) rainfall received over Assam from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Assam is above normal for week 1 and normal for week 2.

- The grasses like hybrid napier, seteria, guinea and para can be successfully grown under Assam conditions. As enough rainfall received in the last week, farmers may plant the rooted slips of these grasses in upland areas to meet the fodder needs of livestock during the coming *kharif* season.
- To avoid physical damage in orchard trees due to gusty wind during this rainy season; mechanical support to crops like banana, citrus, papaya etc. may be advocated
- Since there are possibilities of getting rainfall in the in this week and next week, sowing of pre-germinated seeds of Sali rice may be done in upland areas free from water stagnation and having sufficient slope for draining out the excess rain water.
- To control pests like fruit fly, Epilachna beetle, aphid, red pumpkin beetle and black pumpkin beetle in vegetable crops like sponge gourd, spine gourd, ridge gourd, cowpea etc. and against borers in brinjal, okra etc. is advised to spray Emamectin Benzoate 5% SG (@ 5 g per 10 litres of water or Lambda Cyhalothrin 5 EC (@ 3-5 ml per 10 litres of water during fair weather condition.

West Bengal

81 mm (-67% large deficit) rainfall was received over Gangetic West Bengal and rainfall received over Sub Himalayan West Bengal was 721 mm (58% large excess) from 01 June to 30 June 2024. The extended range weather forecast (rainfall) for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) is above normal rainfall over Gangetic West Bengal and normal rainfall

over Sub-Himalayan West Bengal during week 1 and above normal rainfall over Gangetic West Bengal and below normal rainfall over Sub-Himalayan West Bengal during week 2.

- Due to the forecast of above-normal rainfall, farmers are advised to practice rainwater harvesting for future dry spells.
- Drainage channels in the Jute field should be cleared well in advance to avoid water logging conditions. Farmers are advised to insure their jute crop to prevent any losses.
- Farmers are advised to harvest mature okras immediately to avoid loss from pest infestation. Drainage channels are also advised to clear immediately.
- To manage thrips in chili and capsicum (fruiting and harvesting stage), it is advised to spray cyantraniliprole 10.26% OD@ 1 ml/litre or Imidacloprid@ 0.8 ml or Acetamiprid 20 SP@ 1.6 gram in 10-litre water.

Jharkhand

73 mm (-61% large deficit) rainfall received over Jharkhand from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Jharkhand is above normal for week 1 and normal for week 2.

- After receipt of sufficient rainfall, farmers are advised to carry out sowing of dhaincha seeds @ 12 kg/acre prior to the transplanting of paddy seedlings.
- Farmers are advised to cultivate finger millet either by direct sowing or by transplanting. Farmers are recommended to raise the seedlings in nursery bed and keep the nursery bed above the ground level. 3.5 -4.0 kg of seeds are required for the cultivation in one acre.
- Prepare land for paddy and arrange seeds of paddy crops. The improved varieties for rice crops are for upland: *Birsa Vikas Dhan 109, 110, 111, Birsa Dhan-108* and *Vandana*; for medium land: *Sahbhagi dhan, IR-36, 64, Lalat, Naveen, Birasmati*; for low land: *Rajshree, Swarna, Sambha Mahsuri*. Before sowing seeds, treat with fungicide Bavistin at the rate of 2 grams per kg of seeds.

Odisha

154 mm (-27% deficit) rainfall was received over Odisha from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Odisha is normal for week 1 and above normal for week 2.

- Due to the forecast of light to moderate rainfall it is advised to protect the vegetable seedlings in the nursery from rain by covering them with polythene or by making a shed over the nursery bed.
- Under prevailing weather conditions, it is advised to complete the sowing of *kharif* crops like maize, pigeon pea, groundnut, cotton, green gram etc.
- Under prevailing weather conditions, there are chances of early shoot borer infestation in sugarcane crop. it is advised to collect and destroy the egg masses manually. In furrow, apply Fipronil 0.3% GR @ 10 kg/acre at the time of first earthing up. In case of severe infestation spray Prophenophos 50% EC @ 400 ml/acre or Chlorantraniliprole 18.5 % SC @ 375 ml/acre by mixing it in 500 litre of water.
- During the rainy season, make provision to ensure proper ventilation by allowing an opening of 1-2 ft at the top of side curtains during the day and the side walls of the empty shed should be completely covered with polythene curtains.

Uttar Pradesh

75 mm (-4% deficit) rainfall received over Western Uttar Pradesh and rainfall received over Eastern Uttar Pradesh was 55 mm (-49% deficit) from 01 June to 30 June 2024. The extended range weather forecast (rainfall) for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) is above normal over Eastern Uttar Pradesh and Western Uttar Pradesh during week 1 and normal rainfall over Western Uttar Pradesh and below normal over Eastern Uttar Pradesh for week 2.

Western Uttar Pradesh

- As per extended range weather forecast above normal and near to normal temperature forecast, farmers are advised to sowing of *kharif* maize varieties such as *Hybrid Dakan-*107, *Malveya-2*, *JH-3459*, *Prakash*, *PSM-5*, *Pro-303*, *KH-510*, *MMH-113* and Composite varieties *Novjoti*, *Pusa-2*, *Prabhat and Azad uttam* advised to sow 18-20 kg/ha treated seed.
- Heavy rainfall is forecast in the upcoming week, farmers are advised to arrange seed and fertilizer of pearl millet. Sowing is advised to start from 2nd week of July with recommended varieties *ICMB-155*, *WCC-75*, *PC-70*, *ICTP-8203 & amp; hybrid varieties such as Pusa-322*, *Pusa-23*, *ICMH-451* with 4-5 kg seed per ha and 80:40:40 kg/ha fertilizer.
- Due to the forecast of above-normal rainfall during this week farmers are advised to stop irrigation and pick up mature fruits on standing crop. Nursery for *kharif* season advised sowing.

Eastern Uttar Pradesh

- Keeping above normal rainfall forecast during this week in view, farmers are advised to stop irrigation in standing nurseries and vegetable crops and advised for proper drainage.
- Farmers are advised to prepare land for maize crop. Recommended hybrids like *AH-421*, *AH-58* or Composites: *Pusa composite-3*, *Pusa composite-4*. Procure good quality seeds from certified sources

Himachal Pradesh

51 mm (-49% deficit) rainfall was received over Himachal Pradesh from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Himachal Pradesh is below normal for week 1 and normal for week 2.

- In High Hill Temperate Dry Zone of the state, due to the forecast of below-normal rainfall farmers are advised to weeding and apply irrigation as required to vegetables (cucumber and tomato).
- At the end of June or with the arrival of monsoon, farmers are advised to sow recommended varieties of mash (*Him mash-1, UG-218, Palampur-93*), moong (*Suketi-1, SML-668, Shining Moong No.-1 and Pusa Baisakhi*) and Kulthi (*BLG-1, Baiju, HPK-4*) keeping the seed rate 18-20 kg hectare.
- To control root rot in pea do drenching of Carbendazim @10 g and Streptocycline @1 g per 10 litres of water.
- Under prevailing weather conditions there is a chance of downy mildew disease appearing in cucurbits, it is advised to spray Dithane M-45 @ 2.5 g/litre of water.

Jammu

47 mm (-38% deficit) rainfall was received over Jammu from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Jammu is below normal for week 1 and above normal for week 2.

- Due to forecast of below normal rainfall during this week, it is advised to avoid moisture stress in all vegetable crops especially at flowering stage. Irrigate the crops in morning or evening hours.
- Farmers can go for sowing of maize (*Vivek-25, Vivek QOM-9 HM-5 and HQPM-1*) with seed rate of 20-30 kg/ha after receipt of rainfall at *vattar*/optimum soil moisture.

Uttarakhand

89 mm (-49% deficit) rainfall was received over Uttarakhand from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Uttarakhand is below normal for week 1 and normal for week 2.

- Farmers are advised to continue the sowing of *kharif* crops i.e. finger millets, maize, soybean and other pulse crops. Harvest mature vegetables at regular intervals. i.e. tomato, capsicum, cucumber, beans, okra etc. Undertake transplanting of pumpkin and chilli.
- Under prevailing weather condition, farmers are advised to continue the transplanting of rice. Strengthen the bund with planting fodder grass which facilitates the conservation of rainwater.
- Hoeing, weeding and gap filling is advised in finger millet (sowing/seedling stage) and barnyard millet (seedling/vegetative). Maintain proper drainage in crop fields. Thinning and gap filling should be done in early sown crops to maintain plant population.

Punjab

29 mm (-46% deficit) rainfall was received over Punjab from 01 June to 30 June 2024. The extended range weather forecast (rainfall) provided for the next two weeks (28 June - 04 July 2024 and 05 July - 11 July 2024) over Punjab is below normal for week 1 and above normal for week 2.

- Fruit drop may increase with further rise in temperature. Continuously keep the soil moist in orchards. In citrus, pear, litchi and mango apply light irrigations at regular intervals. White wash mixture can be applied on the main trunks of the fruit trees to protect them from intense heat.
- As temperature is higher than normal and forecast of below normal rainfall, it is advised to irrigate the sugarcane crop (vegetative stage) at 7-12 days interval for better growth.
- To control pink bollworm, install Delta traps with at least 10 micro litres of gossyplure and place it at 15 cm above the crop canopy.
- For the management of root-knot nematode in rice which is at the seedling stage, it is advised to apply mustard cake @40 g per square metre 10 days before sowing of the nursery with the last preparatory tillage operation after rain.

Disclaimer:/अस्वीकरणः

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