All India Coordinated Research Project on Agrometeorology अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

(AICRPAM)

केंद्रीय बारानी कृषि अनुसंधान संस्थान

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अगस्त 2024 के दौरान जारी मौसम की स्थिति और कृषि मौसम संबंधी सलाह

Weather conditions and Agromet advisories issued during August 2024

1. सामान्य मौसम की स्थिति

1. General Weather Conditions

01 जून - 31 अगस्त 2024 के दौरान, पूरे देश में 768.2 मिमी वर्षा हुई है, जो इसी अवधि के लिए सामान्य वर्षा (714.3 मिमी) की तुलना में 8% अधिक है। 36 मौसम संबंधी उप-प्रभागों में से 03, 10,18 और 05 उप-प्रभागों में वर्षा क्रमशः बहुत अधिक, अधिक, सामान्य और कम थी, जैसा कि चित्र 1 में दर्शाया गया है।

During 01 June - 31 August 2024, the country as a whole received 768.2 mm of rainfall, which is 8% excess, compared to the normal rainfall (714.3 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess normal and deficient in 03, 10, 18 and 05 sub-division(s), respectively as depicted in Fig. 1.



Fig. 1: Seasonal rainfall status (01 June - 31 August 2024) in 36 meteorological sub-divisions, India

Date Advisory of issue issued for **Agromet Advisory issued** the region • During this week (02-15 August) there is a forecast of above-normal rainfall in central and western Uttar Pradesh therefore farmers are advised to plant short-Western Uttar duration paddy seedlings up to 07 August. Treating the Pradesh seedlings with Trichoderma before transplanting is advised. Top dressed ¹/₄ dose of Urea at tillering stage. For control of broad and narrow leaf weeds in rice, apply Bispyribac Sodium 10% SC @ 0.20 litres per often 15 20 dave of transmission in 500 600 1

1. Agromet advisories issued by AICRPAM centres during August 2024

		hectare after 15-20 days of transplanting in 500 600 litres of water during clear weather.
02-08-2024		• For effective control of top borer in sugarcane, use carbofuran 1 kg or Chlorantraniliprole @ 375 ml per ha. Undertake earthing up in autumn sugarcane.
	Assam	 Farmers are advised to collect short-duration rice varieties like <i>Luit, Kapilee and Dishang</i> in advance and the seeds may be directly sows in the field during August after flood water recedes from the field in those areas where flood water as well as the stagnation water still in the field and if the water does not recede within July. In areas where rice nurseries were damaged due to flood, undertake re-sowing in nursery bed in upland areas. Select varieties like <i>Pankaj, Biraj, Andrew Sali, Solpona, Prasadbhog, Gitesh</i> etc. so that the seedlings of these varieties can be transplanted in the main field by 20th August. Rainy season is most favourable for mosaic and leaf curl disease in papaya plant. Protect the nursery with nylon net (60-80 mesh) to prevent infection by insect vectors and rouge out affected plants from the main field.
	West Bengal	 Maintain proper drainage channels to avoid water stagnation in the vegetable fields. Spray fertilizers, pesticides and herbicides on a clear sunny day. Above-normal rainfall is forecasted during this week. Therefore, extra irrigation is not required in paddy fields. Farmers are advised to transplant the kharif rice within this week. One hand weading can be done to shock the
		 this week. One-hand weeding can be done to check the weed proliferation. Transplant kharif rice in the monsoon dependent areas. Go for alternate planting (short duration pulses: Mung, Kalai etc.) within second week of August in case of deficit

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		rainfall in an unirrigated area where transplanting is not possible due to insufficient rainfall.
	Jharkhand	 In view of irregularity of rainfall in medium or low land, farmers can go for Aerobic paddy farming system in which paddy is directly sown (dry water-soaked seed) in the fields without puddling. Improved varieties for this – CR Dhaan 202 and CR Dhaan 204, which are 100 to 115 days' crop. Due to deficiency of rains if farmers have not been able to sow rice crop till now, choose short duration varieties of paddy in place of long duration varieties. Prefer intercropping instead of single paddy. Taking advantage of the rains in the coming days, farmers are advised to sow fodder crops for cattle by selecting any one of the following: <i>Napier IGFRI-6, 10, Berseem-Bardan, Maize- African Tall, Cowpea- Bandel Cowpea-1, 2</i>, etc. Take Napier-1200 slips, Berseem 12 kg, Maize 12 kg and Cowpea 16 kg per acre.
	Himachal Pradesh	 Heavy to rather heavy rainfall, landslides, cloudburst, mudflow and flood situations in different areas of the state (Date of occurrence: 29.07.2024, 30.07.2024 and 31.07.2024). The Farmers are advised not to go to crop fields near the banks of rivers. Ensure proper drainage of water in maize, soybean and vegetable fields. Transplant the healthy seedlings of early cauliflower (<i>Palam Uphaar, Improved Japanese, Pusa Deepali and</i> hybrid varieties <i>Megha and Barkha</i>). In high hilly intercultural operations and urea dose to peas, turnip, carrot, palak etc. advised. Transplanting of cabbage, cauliflower broccoli and exotic vegetables is advised to complete.
	Jammu	 In view of the rainfall forecast, avoid intercultural operations like hoeing and weeding in maize. Maize crop is highly susceptible to water logging, so provide proper drainage in the fields to avoid water logging. Ensure staking with plastic string in tomato and cucurbits (bottle gourd, bitter gourd, sponge gourd and cucumber) to avoid losses from gusty winds. Farmers are advised to postpone irrigation in paddy crops (tillering stage) due to the chances of rainfall. Apply 2nd dose of nitrogenous fertilizer in 25-30 days old crop as top dressing during clear weather

	Kerala	 Special crop management is required for crops during monsoon season. Proper drainage facilities have to be ensured. If the soil is more acidic, add lime as per soil testing. Pesticides are advised to be applied during rainy periods. Provide support to banana crops. Make the vegetable pandals stronger. To protect farmers and livestock from lightning and thunder avoid standing in open areas. During the rainy season, rhizome rot in banana is possible. Drench the basin with 3 litres of pseudomonas solution (20 g per one litre of water) as a prophylactic measure.
		• During the rainy season, there is a chance of downy mildew attack in cucurbitaceous vegetables. To protect, spraying 2.5 g Mancozeb per one litre of water under the leaves is advised.
09-08-2024		• Recently transplanted paddy main field may be provided with adequate drainage in anticipation of rainfall. Land preparation may be done for irrigated Cambodia cotton. Also undertake sowing of gourds like snake gourd, bitter gourd and other cucurbits.
	Tamil Nadu	• Considering the high wind speed, it is advised to provide propping to the sugarcane by tying the opposite row to prevent from lodging.
		• Due to continuous rainfall stem rot disease may appear in groundnut fields. To manage, it is advised to provide proper drainage facility in the crop field and apply Chlorothalonil @ 400 g/acre.
	Rajasthan	• Keeping in the view of above normal rainfall forecast during this week, farmers are advised to proper management of 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.
		 Complete the sowing of maize at optimum soil moisture conditions. Farmers are advised to do proper arrangement for rainwater harvesting at one portion of the field which can be used for irrigation in the crops at a suitable time during dry spells.

16-08-2024	Marathwada	 Undertake intercultural operations in soybean, pearl millet, vegetables and orchards. Due to realized rains during the last week and cloudy weather, the incidence of whiteflies is observed in sugarcane, spray Fipronil 05 % SC @ 2 ml per 10 litres of water. Due to last week's cloudy weather, the incidence of sucking pests (aphids, thrips, white fly) is observed in cotton, to control spray Acetamiprid 20 % @ 2g/10-liter water or Thiamethoxam 25 WG @ 2g/10-litres water Due to the forecast of below-normal rainfall, it is advised to undertake intercultural operations in soybean, pearl millet, vegetables and orchard.
	Madhya Maharashtra	 Due to continuous rainfall, a heavy infestation of weeds in the alleys of pigeon pea is observed. Hence, if possible, remove the weeds mechanically to avoid further problems. Undertake nipping in 45 days old pigeon pea. Due to cloudy and humid weather during the past few days, if the incidence of stem fly is observed in soybean, spray Chlorantraniliprole 18.5 SC @ 3 ml per 10 litres of water during clear weather For effective in situ soil moisture conservation and anticipation of higher fruit yield from the orchard of custard apples grown on light-slopped soils of scarcity region of western Maharashtra, draw the half-moon- shaped basins around the tree across the slope. Dig out the trenches at 1 meter away from the tree and fill it with the leftovers of the field

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	Konkan	 Due to the forecast for light to moderate rainfall, maintain an optimum water level of 5 cm in the rice field. External water sources can be used to maintain water levels in the rice field. Arrangements should be made to keep the water in the rice paddies by making embankments. Undertake intercultural operations in red gram, black gram and finger millet when the intensity of rainfall is low. Apply a second split dose of nitrogenous fertilizers @ 35 kg urea per acre to finger millet at the tillering stage after weeding operation during clear weather (no rainfall). Due to intermittent rainfall and cloudy weather conditions, there is a possibility of incidence of blue beetle on lowland rice, to control spray Quinalphos 25% EC @ 20 ml or Lambda-cyhalothrin 5% EC @ 5 ml per 10 litres of water.
	Haryana	 10 litres of water. Possibility of light rain farmers are advised to withhold the in next three day intercultural/hoeing operation as per requirement of the crop for removal of weed and conserved the soil moisture. Possibility of variable weather farmers are advised to prepare the field for nurseries of late transplanting of rice crop with the application of compost/FYM/manure 10 to 12 carts per acre and sowing of paddy nursery Due to variable weather and light rain in the next three days, farmers are advised to vigil before the application of irrigation as per the requirement of crop.
23-08-2024	Andhra Pradesh	 Form conservation furrows at the time of sowing or 20- 30 days after sowing for one row every 3.6 m. Conservation furrows alleviate moisture stress during the dry spell period while also acting as a drainage channel during heavy rainfall. Rice crop is at nursery to transplanting stage grown in Rayalaseema districts of Andhra Pradesh. Farmers are advised to utilize the available soil moisture and take up transplanting of rice. The present weather conditions are favourable for bacterial leaf blight incidence in pomegranate. For management, it is advised that to remove infected fruits and burn it immediately. The symptoms observed to spray Streptocycline @ 0.5 g and Copper oxychloride @ 3 g/litre of water. In North Coastal Andhra Pradesh, if any moisture stress conditions prevail in rice nursery spray KNO3 (multi

		1) or 10,10,10 @ 5 of and continue to a last i
		k) or 19:19:19 @ 5 g/l. and continue transplanting of rice.
	Madhya Pradesh	 Due to forecast of above normal rainfall during this week, crop lodging in sugarcane and maize plants may occur. Farmers are advised to upright the plants and tie with the neighboring plants to prevent from lodging. Under prevailing weather condition, ensure drainage arrangement in maize, soybean, cotton and sugarcane to avoid waterlogging caused due to heavy rains. This is the optimum time to plant new fruitful plants, hence, plant saplings of mango, guava, amla, jamun etc. in the prepared pits and before planting, use earthworm manure, neem cake for termites and drain off excess rain water.
	Gujarat	 Under prevailing weather condition, it is advised to prop the sugarcanes by tying together the canes in clumps to protect against high wind speed. Remove 25% lower mature leaf to improve sugar content and yield in sugarcane. Drain out stagnant water from the field for management of sugarcane whitefly. Intercultural operations are advised in a timely sown pigeon pea crop for weed management and proper growth. Planting of yellow marigold around the field as well as between the crops for management of <i>Helicoverpa</i> caterpillars. For control of the yellow stem borer in paddy, it is advised to use a pheromone trap 35 to 40/ ha. In heavy incidence of stem borer, spray Flubendiamide 480 SC 3 ml or Indoxacarb 15.8 EC 10 ml in 10 liters of water.
23-08-2024	Marathwada	 Due to forecast of above normal rainfall during this week, it is advised to make arrangements to drain out excess water from standing crops, vegetables and orchards. Undertake intercultural operations in sapota, pomegranate and vegetables during clear weather. For management of fall armyworm in kharif sorghum crop take a spray of Emamectin Benzoate 5 % @ 4 g or Spinetoram 11.7 SC @ 4 ml per 10 litres of water during clear weather. Due water logging condition with low temperature and high humidity the Pokkah Boeng disease observed in sugarcane crop. For management it is advised to spray of Carbendazim 12% + Mancozeb 63% WP @ 50 g or Copper Oxychloride 50% WP 20 g per 10 litres of water with sticker 2-3 sprays for 10-12 days interval during clear weather condition.

West Bengal Eastern Uttar Pradesh	 Under prevailing weather conditions, it is advised to make necessary arrangements for draining out excess water from crop fields in case of heavy rain. No extra irrigation is needed in the paddy (PI to the flowering stage). Transplanting of <i>aman</i> paddy of late sown short duration variety is advised to be completed immediately. It is the optimum time to cut the jute and prepare for retting. Use of CRIJAF-SONA @25-30 kg for 1 ha harvest of jute. Farmers are advised to avoid water stagnation inside betel vine gardens and vegetable fields with ridge furrow systems. Avoid top dressing in watered aman paddy fields. Drain out excess water from the vegetable nursery; to prevent wilting, drench the soil around seedlings with Dithane M-45 @ 2.5 g/litre of water during sunny days. Due to the forecast of above normal rainfall during this week, farmers are advised to do proper arrangement for drainage in all vegetables, pulse, maize and nurseries of the vegetables. Farmers are advised to monitor paddy crops regularly, if the population of leaf folder or stem borer is above ETL, broadcast Cartap 4% granules @ 10 kg/acre. Install pest-specific pheromone traps @ 3-4/acre in the
Jammu	 paddy fields for monitoring of stem borer. Due to the forecast of above-normal rainfall during this week, it is advised to postpone irrigation in rice. Apply urea as the first top dress if the crop is 30-35 days (at mid-tillering stage) during clear weather, Apply 2nd dose of N early as well as normal transplanted rice crop as top dressing just before the panicle initiation stage (55 – 65 DAT) during clear weather. Do not allow water to stagnate in maize, pulses and vegetable fields. Do not allow water to stagnate in pearl millet fields. Due to sufficient moisture availability, apply 2nd dose of nitrogenous fertilizer during clear weather.

30-08-2024		 Due to the forecast of above-normal rainfall during the week it is advised to postpone the sowing of seeds of any crops; if already sown, avoid water stagnation in the field and cover the seeded area with natural mulching materials like straw, farm residues, etc. Proper drainage facilities must be ensured. Pesticides should not be applied during rainy periods. Provide support to banana crops. Make the vegetable pandals stronger. To protect farmers and livestock from lightning and thunder avoid standing in open areas. In places where flooding occurs, there are chances of blight disease resulting in the decaying of paddy plants; as a precautionary measure, place perforated bags containing bleaching powder @ 2kg/acre, at the face of water entry into the fields.
	Tamil Nadu	 Due to anticipated light drizzling and high cloud cover, top dressing of nitrogen through soil application will not be effective. Hence spray 1% urea in rice. Prevailing high wind speed may damage the banana crop. Farmers are advised to do propping. Proper drainage and earthing up may be practiced to avoid lodging. Provide drainage facility in garlic crops. Postpone the intercultural/plant protection activities such as fertilizer and pesticide application until the rain stops. Due to continuous rainfall stem rot disease may be appear in groundnut field. Therefore, it is advised to provide proper drainage facility in groundnut fields and for management, farmers are advised to apply Carbendazim 25 %+ Flusilazole 12.5% SE@1.5ml/litre.
	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.

North Interior Karnataka	 Since from last two weeks the isolated districts have experienced below-normal rainfall. Therefore, it is advised to take up sowing of late kharif crops as soon as the condition permits depending on the soil type. Sunflower: RSFH-130, 1886, KBSH-44, 41, 53- II FN of August to September, Horsegram: GPM-6-June-September. Due to the forecast of above-normal rainfall during this week, supplementary irrigation to the crops suffering from moisture stress conditions may be postponed. Due to high cloudy conditions and rainfall, there is a chance of occurrence of Anthracnose disease in grapes. To manage Anthracnose disease, spraying of Thiophanate methyl @ 1 g/litre of water. Carbendazim 50% WP@0.5g/litre water (300gram/ha) or Iprodione50% WP@2gram/litre water (1kg/ha). To manage powdery mildew disease in green gram/black gram crops it is advised to spray the crop with Penconazole 10% EC@5ml/10 Litre water (500 L/ha)
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