#### 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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# मई 2024 के दौरान जारी मौसम की स्थिति और कृषि मौसम संबंधी सलाह

Weather conditions and Agromet advisories issued during May 2024

### 1. सामान्य मौसम की स्थिति

#### 1. General Weather Conditions

01 मार्च - 24 मई 2024 के दौरान, पूरे देश में 105 मिमी वर्षा हुई है, जो इसी अवधि के लिए सामान्य वर्षा (114 मिमी) की तुलना में -8% कम है। 36 मौसम संबंधी उप-प्रभागों में से 08, 10, 08, और 10 उप-प्रभागों में वर्षा क्रमशः बहुत अधिक, अधिक, सामान्य और कम थी, जैसा कि चित्र 1 में दर्शाया गया है।

During 01 March - 24 May 2024, the country as a whole received 105 mm of rainfall, which is -8% deficit, compared to the normal rainfall (114 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess, normal, and deficient in 08, 10, 08 and 10 sub-division(s), respectively as depicted in Fig. 1.



Fig. 1: Seasonal rainfall status (01 March - 24 May 2024) in 36 meteorological sub-divisions, India

Date of issue	Advisory issued for the region	Agromet Advisory issued
03-05-2024	Western Uttar Pradesh	<ul> <li>As a forecast of above-normal rainfall and below-normal temperature during this week, farmers are advised to harvest and threshing the wheat crop as early as possible and keep in a safe place.</li> <li>To prevent the fruit dropping of mango, it is advised to spray Naphthalene acetic acid (NAA) with 20 ppm solution per litre of water.</li> </ul>
	Odisha	• Considering the forecast of high day temperatures along with heatwave conditions, farmers are advised to provide frequent irrigation to the standing crops during evening or early morning hours and the time of irrigation should be prolonged in a conventional method.
		• In view of rainfall during the second half of the week, farmers are advised to harvest the matured produce before due time. • Use a temporary shade net to protect the fruit plants from high temperatures.
		<ul> <li>Make arrangements for drip irrigation with organic mulch to reduce evaporation loss in standing vegetables and fruit orchards.</li> <li>Due to high variation of temperature between day and night leads to infestation of neck blast disease. To control blast disease spray Hexaconazole 5% SC @ 500 ml/acre or Azoxystrobin 18.2% + Difenoconazole 11.4 % SC @ 500 ml/acre.</li> </ul>
	West Bengal	• Due to heat wave conditions in the past week, farmers are advised to maintain proper soil moisture by using mulches and applying light and frequent irrigation in green gram and various crops during morning and afternoon hours to avoid heat stress. Vegetable fields are advised to keep under irrigation.
		• Considering the forecast of rainfall this week, fresh sowing of okra is not recommended as okra seed is very susceptible to decay at high soil moisture.
		• Mulch material-like residue may be used to conserve moisture and prevent soil from cracking.
		• Due to prevailing hot and dry weather conditions,

## 1. Agromet advisories issued by AICRPAM centres during May 2024

		farmers are advised to keep the cattle under shade during the daytime. Electrolyte mixed water is advised to avoid dehydration.
	Haryana	<ul> <li>Due to the possibility of variable weather and rainfall during this week, farmers are advised to withhold irrigation in the next three days in the sugarcane crop which is at the seedling stage.</li> <li>It is the right time for direct sowing of okra and cowpea and cucurbits like muskmelon, cucumber,</li> </ul>
		bitter gourd, bottle gourd, pumpkin, sponge gourd, squashes etc.
	Chhattisgarh	• Due to high minimum and maximum temperatures and below-normal soil moisture status cause thermal stress in crops. Farmers are advised to adopt water conservation agronomic techniques and apply light irrigation in rabi crops wherever required.
Ch		• This time is favourable for summer maize sowing, hence the farmers are advised to prepare fields without stubble after harvesting wheat/chickpea in irrigated areas and complete the sowing of maize crop as soon as possible and sow the recommended varieties of maize for corn.
		• If yellow stem borer is observed in the rice crop, it is advised to spray Cartap Hydrochloride 75 % SG @1 gram or Chlorpyriphos 20% EC @ 1.5 ml per litre of water.
F	Rajasthan	• Summers deep ploughing is advised to open the field that is required for exposure of insect eggs and pupa and weed seeds towards sunlight.
		• Intercultural operations and hand hoeing are advised to control weed infestation and proper pegging.
	Punjab	• Farmers are advised to start sowing of fodder maize, sorghum, bajra, Napier bajra and guinea grass to get early fodder. It will provide good quality fodder during the lean period.
10-05-2024		• Complete sowing of recommended varieties/hybrids of cotton including Bt cotton or desi cotton up to 15th of May. Sow seeds in polythene bags to fill gaps in cotton. Apply heavy pre-sowing irrigation with good quality water for better germination and crop stand.

	Jharkhand	<ul> <li>Keeping in view the possibility of rain in the coming days, farmers should ensure drainage facilities in the vegetable fields and maintain the ridges in the paddy crops so that water can be stored.</li> <li>At the flowering stage of rice there is the possibility of the attack of the insects Gundhi bugs. To control the attack of the insects, farmers are advised to apply Thiamethoxam 25% WG @ 0.5 grams per litre of water during evening hours.</li> </ul>
	Himachal Pradesh	• Due to the forecast of below-normal rainfall, it is advised to provide light irrigation to the onion crop which is at the harvesting/maturity stage. Do not give fertilizer at this stage of the crop, otherwise, the vegetative part of the crop will grow more and the onion bulb will grow less.
		<ul> <li>Under prevailing weather conditions, farmers are advised to monitor roses and balsam crops for blue beetle. If flowers are affected with aphids, spray Malathion @0.05% for the control. Light and frequent</li> </ul>
		• Rainfall is predicted. Farmers are advised to postpone the irrigation in the field crops. Excavate proper drainage channel to avoid water stagnation.
17-05-2024	Tamil Nadu	• Under prevailing weather condition, it is advised to provide propping to the sugarcane by tying opposite row to prevent from lodging. With the receipt of rainfall, late season sugarcane setts may be planted with proper drainage.
	Assam	• Considering the optimum soil moisture condition, it is advised to complete the sowing of seeds of bao (deep water) rice varieties in the field within April. During final land preparation application of 2 kg neem-coated urea is advocated. Seed rate is 10 kg/bigha. In <i>ufra</i> epidemic areas, apply 3 kg Carbofuran granules per bigha of land before sowing.
		• Sugarcane sets may be planted during this time as sufficient rainfall has received during last two weeks. Select high yielding varieties like Dhansiri,

17-05-2024	Madhya Pradesh	<ul> <li>As dry weather prevailed and rainfall is expected only at isolated places, it is advised to apply light and frequent irrigation in summer crops, vegetables and orchards.</li> <li>Use yellow/blue sticky traps @ 4-5 trap/acre for the control of sucking pest in green gram and black gram or spray neem oil @ 5 ml/litre or spray Imidacloprid @0.5 ml per liter of water.</li> </ul>
	Gujarat	<ul> <li>Apply mulch of paddy straw/mango leaves and give light irrigation to reduce fruit drop in mango.</li> <li>As temperature is increasing rapidly favoring population buildup of red spider mite in okra, for its management spray Fenazaquin 10 EC @ 15 ml or Spiromesifen 22.9 SC @ 8 ml per 10 lit of water during clear weather conditions.</li> </ul>
	Odisha	<ul> <li>Land preparation and nursery for <i>virippu</i> paddy (Rainfed) can be started after summer rains. Seeds should be soaked in Pseudomonas @10 g per one liter of water for one kg seeds for 30 minutes.</li> <li>During the beginning of the southwest monsoon season, one-kilogram lime can be applied per matured palm by opening the round basin below the coconut palm.</li> <li>During the rainy season, there is a chance of Rhizome rot in banana. Proper drainage facilities must be ensured. As a precaution, drench the basin with three litre of pseudomonas solution (20 g per liter of water).</li> </ul>
24-05-2024	Andhra Pradesh	<ul> <li>Summer groundnut is at vegetative to pod development stage. Iron deficiency was noticed in parts of the district. Farmers are advised to spray iron sulphate @5.0 g and citric acid @1.0 g per liter of water at two times in weekly interval is recommended based on local weather conditions.</li> <li>Summer deep ploughing with sub-soiler or chisel plough will help to break the hard pans in the subsoil and increase the water retention capacity of soil.</li> </ul>
	Marathwada	<ul> <li>As per the forecast of thunderstorms along with light to moderate rainfall during next five days, store the harvested summer groundnut, turmeric and sesame produce at safe places.</li> <li>Thinning of excess sprouting should be done in the</li> </ul>

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			grape orchard.
		•	Due to the forecast of thunderstorms and rainfall
			during this week, mechanical support/staking is
			advised for newly planted vegetables /creeper
			vegetables.
		•	Due to the forecast of above-normal rainfall during
			this week, harvesting of matured summer green
			gram, groundnut and sesame at the earliest; keep the
			harvested produce at safer places.
	Vidarbha	•	Under prevailing weather conditions, it is advised to
			provide mechanical support to newly planted
			orchards and vegetables to avoid lodging due to
			strong winds.
		•	Ensure protection of farm animals during
			thunderstorm/lightning.
-		•	Farmers were suggested to start the land preparation
			operation for kharif season and expose the soil to
			sun which will help in controlling weeds effectively.
		•	Procurement of the rice seed as per requirement for
		Ĩ	<i>kharif</i> season was suggested. 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
	Konkan		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.
		•	There is a possibility for development of spongy
			tissue disease in harvested mango fruits.
		•	To prevent spongy tissue disease development in
			mango fruits, farmers were suggested to harvest the
			matured mango fruits before 10 am in the morning
			and after 4 pm in the evening at 80 to 85% maturity
			and keep the harvested fruits in shade.

24-05-2024	Madhya Maharashtra	<ul> <li>Carry out deep ploughing of the field across the slope for effective weed control and to expose pupal stages of different insect pests.</li> <li>Field bunding and repairing of damaged field boundaries work is to be carried out. Farm ponds, wells and bore well recharging is to be carried out during the summer season for water conservation</li> </ul>
	West Bengal	<ul> <li>Due to cyclone "<i>Remal</i>" in West Bengal: • Severe damage to crops such as betel vines, cucumber, ridge gourd, pumpkin and pointed gourd is noted especially in South 24 Parganas.</li> <li>Stagnation of water in vegetable fields for a longer duration may cause wilting.</li> <li>Damage to mango trees as well as guava, litchi and jackfruit occurred due to strong winds.</li> <li>Vegetable trailing structures are broken.</li> <li>Farmers are advised to insure their pre-<i>kharif</i> crops (summer vegetables, jute) to avoid heavy losses due to extreme events. Drainage channels in the Jute field is advised to clear well in advance to avoid water-logging conditions.</li> <li>Apply Dimethoate 30% EC and Buprofezin 25% SC @1-2 ml/litre (2-4 ml per tree) to control mango mealy bug and mango hopper in mango orchards which are at the fruiting stage.</li> </ul>
31-05-2024	North Interior Karnataka	<ul> <li>As light to moderate rainfall is forecasted during this week, it is advised that wherever soil moisture condition is sufficient, depending on the soil type kharif sowing of bajra, <i>kharif</i> sorghum, groundnut, green gram, sesame may be taken up.</li> <li>To manage Bacterial blight disease, spray the lime orchards with 3-gram Copper Oxychloride or 1 per cent Bordo mixture dissolved in one litre of water or 300 ppm Streptomycin (3 grams in 10 litres of water).</li> <li>Provide irrigation by looking at the rainfall condition of horticultural crops</li> </ul>

	<ul> <li>Because of heavy rainfall accompanied by high wind velocity due to cyclone "Remal" it is advised to:</li> <li>Early harvest the crops, if 80% matured and store the harvested crop at a safer place.</li> <li>Arrange the drainage facilities in the fall-out areas.</li> <li>In the case of horticulture crops provide mechanical support to plants to avoid lodging and being uprooted.</li> <li>Keep the animals in proper sheds.</li> <li>It is advised to not sow the seeds of Sali rice as normal to above rainfall forecasted during this week. Advocate timely collection of the seeds of high-yielding varieties of Sali rice namely <i>Ranjit</i>, <i>Bahadur, Satyaranjan, Basundhara, Kushal, Mahsuri, Bhogali, Rangilee, Ketekijoha etc. Select Numoli, Dholi, Mulagabhoru, Satyaranjan and Basundhara</i> in double cropping areas having crop duration of 130-135 days.</li> </ul>
Assam	