

**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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**दिसंबर 2023 के दौरान जारी मौसम की स्थिति और कृषि मौसम संबंधी सलाह**

**Weather conditions and Agromet advisories issued during December 2023**

**1. सामान्य मौसम की स्थिति**

**1. General Weather Conditions**

01 अक्टूबर 2023 - 28 दिसंबर 2023 के दौरान, पूरे देश में 110.6 मिमी वर्षा हुई है, जो इसी अवधि के लिए सामान्य वर्षा (119.5 मिमी) की तुलना में -7% कम है। 36 मौसम संबंधी उप-प्रभागों में से, 03, 05, 17, 10 और 01 उप-प्रभागों में वर्षा क्रमशः बहुत अधिक, अधिक, सामान्य, कम और बहुत कम थी, जैसा कि चित्र 1 में दर्शाया गया है।

During 01 October 2023 - 28 December 2023, the country as a whole has received 110.6 mm rainfall, which is -7% deficit, compared to the normal rainfall (119.5 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess, normal, deficient and large deficient in 03, 05, 17, 10 and 01 sub-division(s), respectively as depicted in Fig. 1.

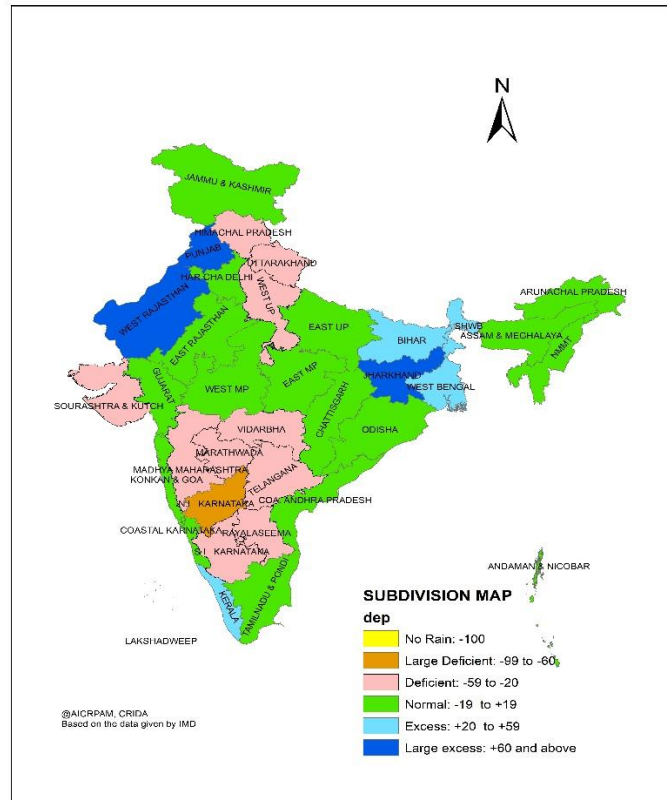


Fig. 1: Seasonal rainfall status (01 October - 28 December 2023) in 36 meteorological sub-divisions, India

## 1. Agromet advisories issued by AICRPAM centers during December 2023

Date of issue	Advisory issued for the region	Agromet Advisory issued
01-12-2023	Uttar Pradesh	<ul style="list-style-type: none"> <li>Sowing of irrigated late sown wheat varieties is advised with recommended varieties such as <i>K-402</i>, <i>K-607</i>, <i>K-1006</i>, <i>DBW-187</i>, <i>PBW-234</i>, <i>HD-2649</i>, <i>DBW-16</i>, <i>K-9162</i>, <i>Narendra Wheat-1076</i>, <i>HW-2045</i>, <i>UP-2425</i>, <i>HUW-234</i> and <i>HD-3249</i> with 150:80:60:25 (N:P:K:Zn) and 100 kg of seed in 5.0-7.0 cm depth</li> <li>Under prevailing weather condition, if leaf roller infestation is observed in pigeon pea during vegetative/branching stage, it is advised to spray Spinosad 45 % SC @ 2 ml per 10 litre water or Quinalphos 25 EC @ 1 to 1.4 ml/litre water is advised</li> </ul>
	Punjab	<ul style="list-style-type: none"> <li>To protect the young fruit plants from upcoming winters, prepare the thatches or kullies of sarkanda or farm waste materials on the plants. Care should be taken that the South-West side should be left open to allow sufficient sunlight.</li> <li>Withhold the irrigation during these days in deciduous fruit orchards like pear, peach, plum and grapes, so that the trees can enter dormancy and become sufficiently hard to withstand cool weather.</li> </ul>
	Jharkhand	<ul style="list-style-type: none"> <li>In the areas where paddy crop is about to mature, it is advised to stop giving irrigation two weeks before harvesting. After harvesting dry the in the field for 2-3 days, threshing is advised. Grains should be properly dried to right moisture level before storing.</li> <li>November sown wheat crop is at tillering stage. For weed control (only at CRI stage), it is advised to spray Isoproturon 75 dust @ 600 g as well as 2,4-D @ 300 g or Sulfosulfuron 75 WP @ 500 g per acre in 300-400 litres of water for the control of all types of weed.</li> </ul>
	Bihar	<ul style="list-style-type: none"> <li>Farmers are advised to complete the sowing of <i>rabi</i> maize at the earliest. Weeding is advised in 25-30 days old maize crop. Give light irrigation based on moisture condition of the field.</li> <li>Farmers are also advised to start sowing of late variety of wheat crop. <i>PBW-373</i>, <i>HD-2285</i>, <i>HW-2045</i>, <i>HUW-234</i>, <i>WR-544</i>, <i>DBW-14</i>, <i>HD-2643</i>, <i>HD-2967</i>, <i>NW-</i></li> </ul>

		2036 varieties are recommended for late sowing in North Bihar.
	<b>Parbhani</b>	<ul style="list-style-type: none"> <li>• As per forecast of thunderstorm along with light to moderate rainfall at isolated places, it is advised to cover the harvested soybean crop with the help of polyethene/tarpaulin. Store the threshed grains at safe places. Precaution should be taken so that water may not stagnate in crops where rainfall was received.</li> <li>• Mechanical support is advised to provide to newly planted banana plants. The places where gusty wind, thunderstorm and rainfall was observed collect and destroy infected fruits and pruning of broken branches should be done.</li> </ul>
	<b>Kerala</b>	<ul style="list-style-type: none"> <li>• Due to increase in high relative humidity and dew, there is a chance of blast disease in paddy. As a precaution, it is advised to spray 20 g pseudomonas per one litre of water or 4 g Nativo (Trifloxystrobin Tebuconazole) can be sprayed in 10 litres of water.</li> </ul>
<b>08-12-2023</b>	<b>Jammu</b>	<ul style="list-style-type: none"> <li>• Due to the presence of sufficient moisture in soil, it is advised to apply 1st top dressing of nitrogen fertilizer in 20 to 25 days old wheat crop. Farmers are also advised to continue sowing of late sown wheat varieties at vattar condition. Treat the seed with Tebuconazole 2 DS @ 1.25 g/kg of seed to protect seedling blight and root rot disease. The varieties recommended are <i>HPN3, ONK-1 and GSC-7</i>.</li> </ul>
	<b>West Bengal</b>	<ul style="list-style-type: none"> <li>• Due to heavy rainfall during last week and forecast of above normal rainfall during next two weeks, the pulse crop establishment may face problems. Therefore, farmers are advised to prepare in advance for re-sowing. The water is advised to drain immediately from the pulse and vegetable fields.</li> </ul>
	<b>Chhattisgarh</b>	<ul style="list-style-type: none"> <li>• Because of untimely rains due to “MICHAUNG” cyclone in Bay of Bengal and forecast of above normal rainfall during next week, farmers are advised, not to provide irrigation in standing crop fields and apply insecticide/pesticides/fertilizer only during clear weather condition (no rainfall).</li> </ul>

08-12-2023	Odisha	<ul style="list-style-type: none"> <li>• Under prevailing weather condition, it is advised to make provision to drain out rain water in standing rice crop by making alleys (Pahi) and keep the drain ends open.</li> <li>• Due to prevailing rainy weather, farmers are advised to delay the sowing of <i>rabi</i> crops like maize, wheat, pulses, oil seeds, vegetables and spices.</li> <li>• Cover the vegetable nursery with polythene sheet to save it from rain.</li> <li>• To prevent lodging in sugarcane due to rains, it is advised to tie sugarcane leaves from four to five plants together and provide staking.</li> <li>• Farmers are advised to withhold spraying of pesticides and irrigation for the time being.</li> </ul>
	Tamil Nadu	<ul style="list-style-type: none"> <li>• Continuous rainfall and wind may damage the banana crop stand. Hence, farmers are advised for earthing-up and propping to avoid lodging.</li> <li>• Due to continuous rainy days, intermittent drizzles, cloudy weather, low night temperature less than 22 °C and longer leaf wetness favours blast incidence in paddy crop. To manage, it is advised to spray Carbendazim 50 WP @ 500 g/ha or Tricyclazole 75 WP @ 500 g/ha after observing initial infection of the disease.</li> <li>• Due to forecast of above normal rainfall during next week, farmers are advised to postpone the irrigation in irrigated crops.</li> </ul>
	Anantapur	<ul style="list-style-type: none"> <li>• The cyclone “Michaung” drastically affected the rice crop (90% of the rice cropped area in the cyclone affected districts) at harvesting stages. Also, the cyclone caused human deaths (6 Nos.).</li> <li>• Due to the cyclone in the Bay of Bengal from 3<sup>rd</sup> December 2023, light to moderate rainy conditions may prevail this week. Hence, farmers are advised to avoid irrigation to the crops and provide good drainage to run off the excess water.</li> <li>• Farmers are advised to do farm operations like weeding, spraying and fertilizer application after rains get stopped. Harvestings can be completed immediately.</li> </ul>

15-12-2023	Parbhani	<ul style="list-style-type: none"> <li>• Due to cloudy weather condition, there is a chance of pod borer infestation in pigeon pea crop (flowering to pod development stage). To manage, it is advised to spray of Emamectin Benzoate 5% @ 4.4 g + Metalaxyl + Mancozeb @ 25 g per 10 litres of water.</li> <li>• Due to forecast of above normal rainfall, harvesting of mature vegetable crops is advised as early as possible.</li> </ul>
	Vidarbha	<ul style="list-style-type: none"> <li>• To avoid the rotting of matured bolls from outer side due to recent rainfall and fungal leaf spot diseases, it is advised to undertake foliar spray Carbendazim 50 WP @ 20 g or Propiconazole 25 EC @10 ml or Pyraclostrobin 20 WP @ 20 g in 10 litres of water.</li> <li>• For delayed sowing of irrigated wheat (November 15 - December 15) use varieties - <i>PDKV Sardar (AKAW 4210-6)</i> and <i>AKW-1071(Purna)</i>. Follow seed treatment with Carbendazim @ 2.5 g / kg seed.</li> </ul>
	Madhya Maharashtra	<ul style="list-style-type: none"> <li>• Due to prevailing complete cloudy condition in the major part of the region, there may be fungal incidence on <i>rabi</i> crops and horticultural crops. Farmers are advised to remove excess water from fields to protect the crops from fungal attack.</li> <li>• To protect mango blossom from flower drop, it is advised to apply NAA 20 ppm @ 40 ml + 2 per cent micronutrients in 200 litres of water.</li> <li>• For effective control of mealy bugs in custard apple (fruit setting to ripening), it is advised to apply <i>Verticillium lecanii</i> @ 4 ml/litre of water.</li> </ul>
	Konkan	<ul style="list-style-type: none"> <li>• Due to forecast of cloudy weather, there is a possibility of fish mortality due to reduction of oxygen content in the pond water. To protect, it is advised to run the aerator for two hours in the morning and in the evening for improving oxygen content in pond water or to circulate the water from the farm/pond with the help of water pump or bamboo stick so that moving the water will help increase the amount of oxygen in the water.</li> </ul>

22-12-2023	Uttarakhand	<ul style="list-style-type: none"> <li>• In nursery of temperate fruits, it is advised to remove the stock sprout, suckers and water sprout from budded/grafted plants. Protect young plants from low temperature by providing paddy straw.</li> <li>• In the valley region of the state, it is advised to give first irrigation in early sown wheat crop which is at CRI stage (21-25 DAS) and also apply a second dose of nitrogen fertilizer at first irrigation.</li> </ul>
	Himachal Pradesh	<ul style="list-style-type: none"> <li>• Farmers are advised to add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.</li> <li>• Under prevailing weather condition, farmers are advised to ensure fresh and clean drinking water to animals. Dry bedding may be provided to save the animals from cold. Avoid direct entry of cold winds in animal sheds. Young calves must be kept in sheds during nights.</li> <li>• Farmers are advised to prepare their fields for potato sowing. Adequate amount of well rotten FYM or compost is recommended to add in the soil during field preparation. The varieties recommended are <i>Kufri Jyoti</i>, <i>Kufri Chandermukhi</i>, <i>Kufri Himalini</i> and <i>Kufri Giriraj</i>.</li> </ul>
	Madhya Pradesh	<ul style="list-style-type: none"> <li>• Due to forecast of no rainfall, farmers are advised to provide first irrigation in wheat at CRI stage (20-25 DAS) followed by urea application.</li> </ul>
	Tamil Nadu	<ul style="list-style-type: none"> <li>• Continuous rainfall and wind may damage the banana crop stand. Hence, farmers are advised for earthing-up and propping to avoid lodging.</li> <li>• Farmers are advised to take sowing of dryland crops with proper drainage facilities across the field to collect rain water.</li> <li>• Due to continues rain fall, cattle shed and cow penning areas in moist condition. Hence, farmers are advised to keep the cattle shed in dry condition and use disinfectant like lime.</li> <li>• Fish farmers are advised to reduce the pond water level and the inlet may fix with 5- and 15-mm wire mesh to avoid the entry of predatory fishes.</li> <li>• Drain the excess water if young seedlings of rice are completely affected by cyclonic storm and replant the same variety to maintain the crop population.</li> </ul>

29-12-2023	Eastern Uttar Pradesh	<ul style="list-style-type: none"> <li>Keeping in view of temperature farmers are advised for sowing of late wheat as soon as possible @ seed rate 125 kg seed per hectare. Recommended cultivars are <i>HD-2967</i>, <i>LOK-1</i>, <i>HD-3271</i>, <i>PBW-373</i>.</li> <li>In potato, earthing followed by light irrigation is advised at emergence/vegetative stage.</li> <li>Due to high relative humidity, there is a chance of blight may occur in potato and tomato. If symptoms appear, farmers are advised spray of Dithane-M-45 @ 2.0 g/litre of water.</li> </ul>
	Rajasthan	<ul style="list-style-type: none"> <li>Due to humid weather condition, there is a chance of aphids in mustard crop at flowering stage. Farmers are advised to spray Dimethoate @ 875 ml or Nimbecidine @ 500 ml/ha for the control of aphid.</li> <li>Prevailing weather is suitable for sowing of rabi onion with seed rate- 10 kg/ha. Before sowing, seeds should be treated with Captan @ 2.5 g/kg of seeds.</li> </ul>
	Hisar	<ul style="list-style-type: none"> <li>Due to forecast of below normal rainfall, farmers are advised to provide need base irrigation in <i>rabi</i> crops and manual weeding is advised in mustard and chickpea crop.</li> <li>The weather conditions are favourable for blight disease in potato. For control, spray Mancozeb 600-800 g in 200 litres of water per acre. Repeat the spray after 15 days.</li> </ul>
	Gujarat	<ul style="list-style-type: none"> <li>Planting of sugarcane is advised from October to February at the spacing of 90 to 120 cm.</li> <li>To control leaf spot disease of bidi tobacco, it is advised to apply two sprays of Hexaconazole 5 SC 10 ml or Propineb 70 WP 30 g or Carbendazim 50 WP 5 g in 10 litres of water at an interval of 15 days clear in weather condition.</li> </ul>
	North Interior Karnataka	<ul style="list-style-type: none"> <li>Early sown groundnut crop is at harvesting stage. Farmers are advised for harvesting operation during early morning and evening hours.</li> <li>For October-November plantation of sugar cane it is advised to use short duration variety like <i>COC-671</i> (10-11 Months) or medium duration Variety <i>CO-86032</i> (Nayana, 12-14 Months) or <i>SNK632</i> (11-13 Months).</li> <li>Harvest the matured crops like pigeon pea, groundnut, onion, cotton and sugarcane crops.</li> </ul>