

All India Coordinated Research Project on Agrometeorology (AICRPAM)

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Weather conditions and Agromet advisories issued during March 2023

1. General Weather Conditions

During 01 March - 31 March 2023, the country as a whole received 35.5 mm rainfall, which is -23% excess, compared to the normal rainfall (28.9 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess, normal, deficient, large deficient and no rainfall in 22, 02, 05, 04, 03 and zero sub-division(s), respectively as depicted in Fig. 1.

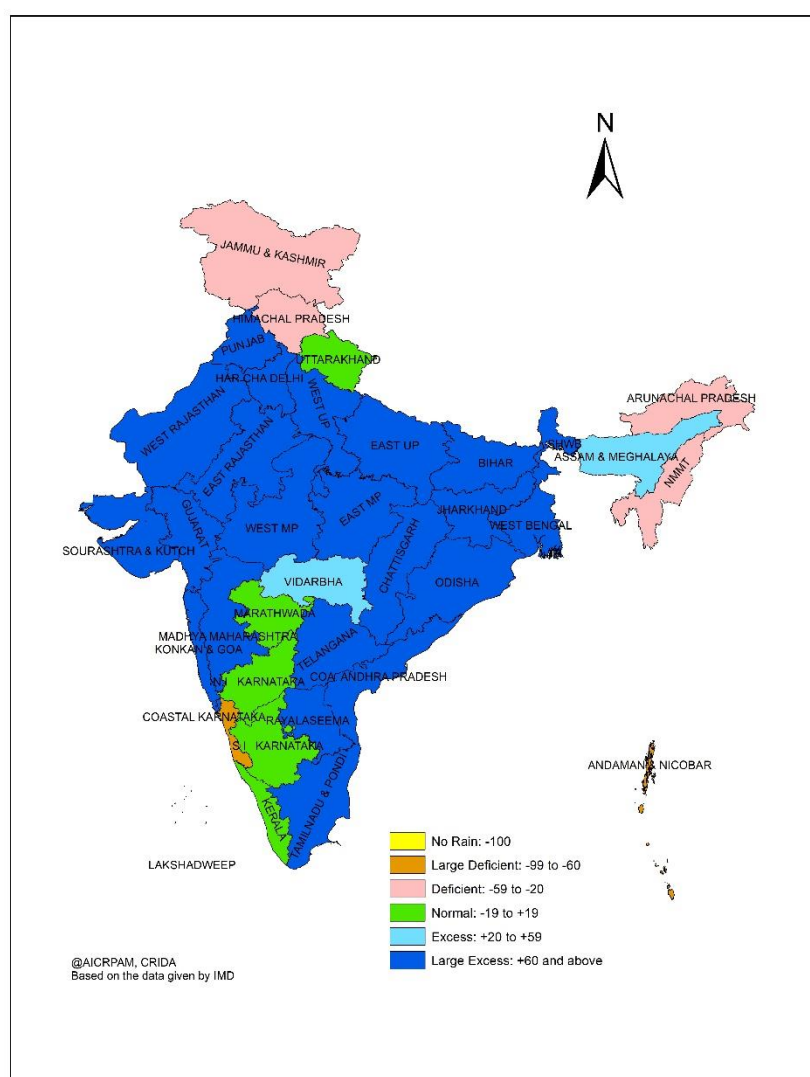


Fig. 1: Monthly rainfall status (01 March - 31 March 2023) in 36 meteorological sub-divisions, India

2. Agromet advisories issued by AICRPAM centers during March 2023

Date of issue	Advisory issued for the region	Agromet Advisory issued
03-03-2023	Western Uttar Pradesh	<ul style="list-style-type: none"> • Due to above normal temperature prevailed during second fortnight of February, farmers are advised to provide irrigation to wheat (anthesis/milking stage), barley (milk stage) and chickpea (pod formation stage). • Under prevailing weather condition, farmers are advised to start field preparation for early sowing of okra with recommended varieties like <i>A-4</i>, <i>Parbani Kranti</i>, <i>Arka Anamika</i> etc.
	Punjab	<ul style="list-style-type: none"> • To save the crops from heat stress due to the forecast of increase in temperature than normal, farmers are advised to apply light irrigation to the standing crop and apply two sprays of 2% Potassium nitrate (13:0:45) by dissolving 4 kg potassium nitrate in 200 litres of water at boot leaf and anthesis stages of wheat crop.
	Odisha	<ul style="list-style-type: none"> • Keeping in view of rise in temperature, farmers are advised to provide light irrigation in banana plantation. • February-March is the ideal time for sowing of cowpea, cluster bean, pumpkin, cucumber and watermelon. • Increase in temperature may enhance red hairy caterpillar and tobacco caterpillar infestation in groundnut. To control, it is advised to spray Pronephros 50% EC @ 400 ml/ 200 litre of water or Flubendiamide 480 SC @ 40 ml/200 litre of water.
	Rajasthan	<ul style="list-style-type: none"> • At present, timely sown wheat is at milk stage. Therefore, it is advised to provide irrigation to wheat crop. • Under present weather conditions, transplanting of young seedlings of tomato, chilli and cole crop is advised to complete in this week. • Keeping increasing temperature in view, farmers are advised for light irrigation in standing crops and vegetables as per requirement.
	Uttarakhand	<ul style="list-style-type: none"> • Under prevailing weather condition, farmers are advised to continue the sowing of potato in high altitude areas of the state. And use mulch materials (dry grass and leaves) between the rows for soil moisture conservation.

		<ul style="list-style-type: none"> • Due to the prevailing dry weather, farmers are advised to continue the sowing of summer vegetables like tomato, capsicum, pumpkin, cucumber, okra etc.
	Haryana	<ul style="list-style-type: none"> • Due to possibility of dry and clear weather, Farmers are advised to apply need-based irrigation and agrochemicals in rabi crops.
	Bihar	<ul style="list-style-type: none"> • In view of dry weather, farmers are advised to dig out potato tubers from the field. • Land preparation is advised for sowing of green gram (Mung bean) & black gram (Urd). <i>Pusa Vishal, Samrat, SML-668, Sona, HUM-16</i> varieties for mung bean and <i>Pant Urd-19, Pant Urd-31, Uttra</i> and <i>Navin</i> varieties for urd are recommended for sowing in North Bihar
10-03-2023	Eastern Uttar Pradesh	<ul style="list-style-type: none"> • Keeping the increase in temperature in view, farmers are advised for light irrigation in standing wheat crop and vegetables as per requirement. • In view of dry weather and increasing temperature, farmers are advised to harvest fully ripe rapeseed and mustard crops as soon as possible. • In view of rising temperature, farmers are advised to procure quality seeds for green gram and black gram seeds from certified source for sowing during first week of March. Recommended varieties for green gram are <i>Pusa Visal, Pusa Vaisakhi, PDM-11, SML-32</i> and black gram are <i>Pant Urd 19, Pant Urd 30, Pant Urd 35, PDU-1, K-851, GM-05</i>.
	Jammu	<ul style="list-style-type: none"> • Due to increase in day and night temperature, it is recommended to apply light irrigation to wheat crop or if possible give sprinkler irrigation to meet the water requirement as well as to reduce the effect of increasing heat. Application of 0.2% KCl or 400 g of Muriate of Potash in 200 litres of water per acre to avoid terminal heat stress in wheat crop is also recommended.
	Vidarbha	<ul style="list-style-type: none"> • The unseasonal rainfall with thunderstorm and lightning occurred at isolated places over Vidarbha has caused the damage to chickpea and lodging of wheat crop. Farmers are advised to harvest earlier sown mature wheat crop immediately and keep harvested produce safely under clear weather.

	Madhya Maharashtra	<ul style="list-style-type: none"> Due to unseasonal rain and hailstorm in some parts of northern part of western Maharashtra, the rabi season crops and fruit crops were damaged due to hailstorms and animals were killed due to lightening in the rainfall and hailstorm. Farmers are advised for crop insurance.
	Marathwada	<ul style="list-style-type: none"> Due to forecast of light to moderate rain along with thundershower at isolated places, farmers are advised to harvest mature crops and fruits like chickpea, rabi sorghum, safflower, wheat, summer sesamum, turmeric, citrus, grapes etc.
17-03-2023	Chhattisgarh	<ul style="list-style-type: none"> Keeping in view of possibility of light rains in the next two weeks, farmers are advised to harvest the wheat crop. If the crop has already been harvested, keep it in a safe place.
	Madhya Pradesh	<ul style="list-style-type: none"> Farmers are advised to start harvesting the wheat crop, keeping in view the possibility of light rains in the coming days. If the crop has been harvested, keep it in a safe place. Keeping in view of the possibility of light rains in the next two days, there is a possibility of aphid outbreak in summer vegetable crops. Therefore, it is advised to keep a constant watch and spray neem-based insecticides on observation of the initial outbreak.
	Odisha	<ul style="list-style-type: none"> Due to chances of rainfall in next two week, farmers are advised to withhold the sowing, spraying and irrigation activities for some days.
	Kerala	<ul style="list-style-type: none"> Due to prevailing dry weather condition, it is advised to irrigate coconut palm as per requirement during week-1. It is a desirable practice to bury fresh or dried coconut husk in the coconut basin to conserve soil moisture and also apply lime on the coconut stem near the ground to protect from hot sun.
24-03-2023	Uttar Pradesh	<ul style="list-style-type: none"> Due to forecast of rainfall during next two weeks, farmers are advised to postpone the harvesting of barley crop. If the crop is harvested, the produce should be stored in a safe place. Due to rainy weather condition and forecast of rainfall during next two weeks, farmers are advised to stop irrigation in wheat crop.
	Haryana	<ul style="list-style-type: none"> Due to possibility of rainfall and hailstorm, farmers are advised to stop application of irrigation, pesticides and fertilizer in wheat, barley and chickpea crops.

24-03-2023	Himachal Pradesh	<ul style="list-style-type: none"> Since there is a possibility of light to moderate rains in most parts of the state, farmers are advised to ensure proper drainage in the wheat fields as crop is susceptible to water logging.
	Uttarakhand	<ul style="list-style-type: none"> Farmers are advised to cover the vegetable nursery beds by polythene sheets or any other means during hailstorm and use anti-hail nets to cover high-value fruit trees. It is also advised do not irrigate the field crops; maintain proper drainage in wheat, onion, garlic, vegetable pea, etc. and avoid spraying of insecticide/pesticide.
	Bihar	<ul style="list-style-type: none"> Keeping in view of increasing temperature, farmers are advised to start field preparation for sowing of early maturing okra with improved varieties such as <i>A-4</i>, <i>Parbani Kranti</i> and <i>Arka anamika</i> cultivars.
	Jharkhand	<ul style="list-style-type: none"> Due to rainfall during past week and forecast of rainfall during second week, farmers are advised to avoid irrigation and spraying of need-based pesticides and application of fertilizer in standing crop and vegetables for coming days.
	Odisha	<ul style="list-style-type: none"> After receding of rain water, there is a chance of swarming caterpillar infestation in summer paddy. To control, it is advised to spray Chlorpyrifos 50 % + Cypermethrin 5 % EC @ 400 ml/acre or Lambda-cyhalothrin @ 400 ml/acre. Under prevailing rainy weather condition, it is advised to drain out excess water from standing vegetable and non-paddy field by keeping drain ends open and withheld sowing, spraying of pesticide and irrigation activities for some days.
31-03-2023	Punjab	<ul style="list-style-type: none"> Farmers are advised to postpone the harvesting of wheat until weather clears up and crop dries properly. To manage powdery mildew in mango, spray Hexaconazole 5% EC @ 1.0 ml per litre of water after weather clears up.
	Gujarat	<ul style="list-style-type: none"> Sugarcane is in vegetative stage. Apply split dose of nitrogen as per recommendation- 2nd dose 30% of 250 kg N/ha at 3 to 3.5 month after planting, 3rd dose 20% of 250 kg N/ha at 4 to 4.5 month after planting and 4th dose 35% of 250 kg N/ha at 5.5 to 6 months after planting. To control whitefly infestation in brinjal, spray neem oil 50 ml or neem seed powder 500 g in 10 liters of water is advised. Spray Diafenthiuron 50 WP 10 g or Acephate 25% + Fenvalerate 3 % EC 10 ml in 10 liters of water in case of heavy infestation.

	Bihar	<ul style="list-style-type: none"> • Sowing soon of green gram (<i>mung bean</i>) & black gram (<i>urd</i>) is advised. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. <i>Pusa Vishal</i>, <i>HUM-16</i> and <i>Sona</i> varieties for <i>mung bean</i> and <i>Pant Urd-19</i> and <i>Pant Urd-31</i>, <i>Uttra</i> and <i>Navin</i> varieties of <i>urd</i> are recommended for sowing in North Bihar. Seed rate @20-25 kg/ha for small sized grain and 30-35 kg/ha for large sized grain with a spacing of 30x10 cm plant to plant is advised. Before sowing, seed should be treated with <i>rhizobium</i> culture • In mango orchards, application of plant growth regulator like Planofix (Naphthyl Acetic Acid-NAA) @1ml/3 liters of water is advised during pea stage of fruit against fruit drop • Monitoring is advised for red pumpkin beetle in cucurbits. The grubs damage the plants by boring into the roots and underground stems. The adult beetles injure the flower, foliage by biting holes in to them. Severe infestation results in the death of the plant or retardation of growth. Dusting of Chlorpyrifos 2% dust @20 kg/hectare near root of the plant is advised for control of grub infestation.
	South Interior Karnataka	<ul style="list-style-type: none"> • Fruit drop in mango can be controlled by spraying Naphthalene acetic acid (NAA) @ 20 ppm twice at an interval of 15 days during the early stage (peanut stage/marble stage) of fruit development stage, under clear weather conditions. • Leaf hopper and powdery mildew disease incidence is more before flowering and immediately after fruit formation in mango. To manage this, spraying of Imidachloprid @ 0.3ml/ litre of water is recommended. • Ensure provision of 60 lts. of water/day/animal. Proper ventilation should be maintained for free circulation of air in the sheds. Apply 4-6-inch-thick thatch as a roofing material. Water can be used for spraying the floor and roof of shelter.