

All India Coordinated Research Project on Agrometeorology (AICRPAM)

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Weather conditions and Agromet advisories issued during February 2023

1. General Weather Conditions

During 01 January - 28 February 2023, the country as a whole received 22 mm rainfall, which is -45% deficit, compared to the normal rainfall (40 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess, normal, deficient, large deficient and no rainfall in 02, 01, 01, 09, 20 and 03 sub-division(s), respectively as depicted in Fig. 1.

Above normal temperatures across North and North-west India were observed from the second fortnight of February.

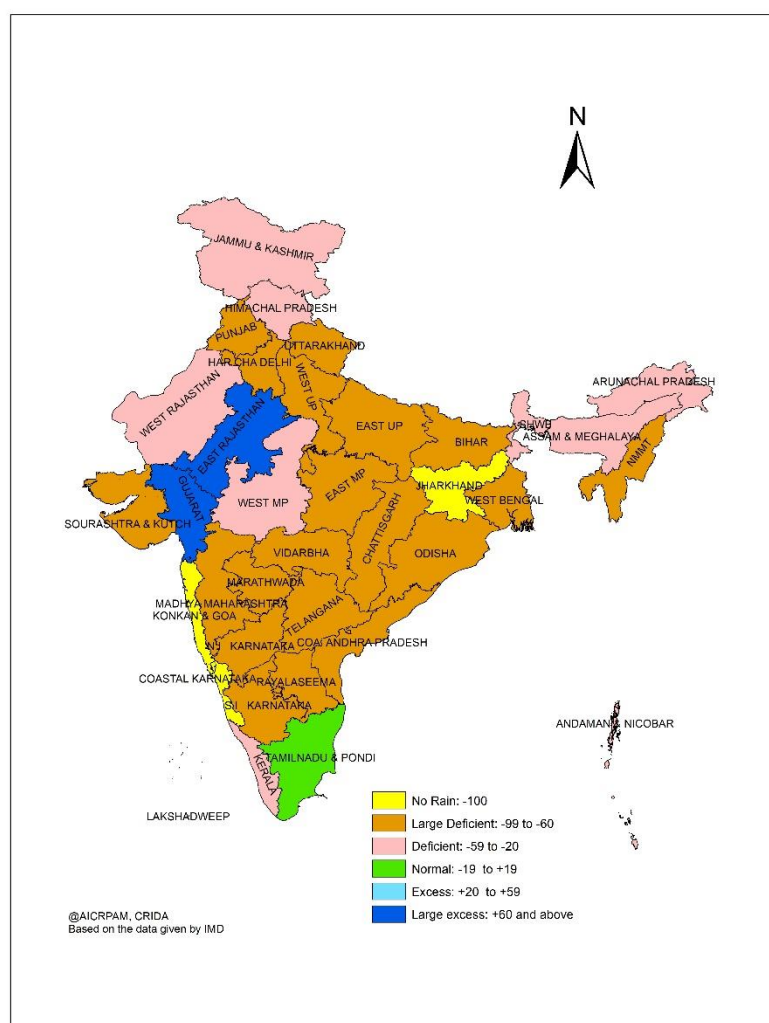


Fig. 1: Seasonal rainfall status (01 January - 28 February 2023) in 36 meteorological sub-divisions, India

2. Agromet advisories issued by AICRPAM centers during February 2023

Date of issue	Advisory issued for the region	Agromet Advisory issued
03-02-2023	Vidarbha	<ul style="list-style-type: none"> As dry weather is prevailing, it is advised to ensure sufficient soil moisture through irrigation at pod formation stage for better productivity, particularly in late sown chickpea.
	Konkan	<ul style="list-style-type: none"> To minimize the pre-mature fruit drop of mango due to forecast of rise in temperature, it is advised to apply 150 to 200 litres of water per tree after fruit setting at 15 days interval for 3 to 4 times.
	Odisha	<ul style="list-style-type: none"> Due to cloudy weather condition, there is a chance of infestation of sucking pest like hoppers in mango orchards. To control, it is advised to spray Imidacloprid 17.8% SL @ 5ml/15 litres of water or Thiamethoxam 25% WG @ 3 ml/15 litres of water.
	Madhya Pradesh	<ul style="list-style-type: none"> Due to high dew formation, spread of early and late blight disease may occur in potato crop. To control, spraying of Dithane (Mancozeb) @ 2.5 g /litre water is advised.
10-02-2023	Assam	<ul style="list-style-type: none"> Low night temperature coupled with dense fog is favorable for aphid infestation in rapeseed. To control aphid infestation, it is advised to spray Thiamethoxam 25 WG @ 3 g per 10 liters of water.
	Marathwada	<ul style="list-style-type: none"> Due to fall in minimum temperature during last five days, sugary disease may be observed in late sown <i>rabi</i> sorghum. For management, it is advised to spray Carbendazim @ 10 g per 10 litres of water.
	Jharkhand	<ul style="list-style-type: none"> Due to favorable temperature, it is advised for nursery preparation of cucurbits, tomato, brinjal and chili crops and also, transplant-ready seedlings during this week.
	Jammu	<ul style="list-style-type: none"> Due to prevailing high relative humidity and low day temperature, there is a possibility for outbreak the alternaria blight in mustard and gobi sarson. To manage, it is advised to spray the crop with Mancozeb @ 0.25%.
17-02-2023	Western Uttar Pradesh	<ul style="list-style-type: none"> Due to forecast of increase in temperature and no rainfall during next week, farmers are advised to provide irrigation in wheat crop which is at tillering, jointing and PI stages. Top dress $\frac{1}{4}$ urea at optimum moisture during CRI stage.

17-02-2023	Punjab	<ul style="list-style-type: none"> • Prevailing high temperature conditions are not favourable for pollination and fertilization stage of the wheat crop, which is currently at anthesis stage. Therefore, farmers are advised to apply light irrigation to the wheat crop or 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 or apply two sprays of salicylic acid by dissolving 15 g Salicylic acid in 450 ml of ethyl alcohol using 200 litres of water per acre at boot leaf and early milk stages.
	Haryana	<ul style="list-style-type: none"> • Due to possibility of dry and clear weather, farmers are advised to apply the irrigation and fertilizer in wheat and barley crop as per need.
	Uttarakhand	<ul style="list-style-type: none"> • Farmers are advised to irrigate the crops/orchards to reduce the impact of high temperature. • Farmers are also advised to add mulch material in the space between two rows of vegetable crops for conservation of soil moisture and maintaining the soil temperature.
	Rajasthan	<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.
	Chhattisgarh	<ul style="list-style-type: none"> • Summer season banana crop is generally affected by heat waves. To protect them, it is advised to grow chari, jowar and sunhemp crops in the periphery of banana fields so that during summer, it will grow up and protect banana crop from heat waves.
	Madhya Pradesh	<ul style="list-style-type: none"> • As day temperature is rising, it is advised to provide light irrigation in sugarcane field and vegetable crops.
24-02-2023	Western Uttar Pradesh	<ul style="list-style-type: none"> • During last week, the average weekly maximum and minimum temperature were 4.9 °C and 1.1 °C higher than normal. As weather will remain dry during this week, farmers are advised to irrigate wheat crop. Light irrigation should be taken up during PI, anthesis and milk stage, which are the critical stages of wheat. • Due to above normal temperature prevailing during second fortnight of February, farmers are advised to provide irrigation to barley crop (milk stage) and chickpea (pod formation stage).
	Eastern Uttar Pradesh	<ul style="list-style-type: none"> • Due to the dry and warming weather conditions, farmers are advised to monitor aphid infestation on vegetable crops. To control, spraying of Imidacloprid @ 0.25 to 0.5 ml per litre of water is recommended.

24-02-2023		<ul style="list-style-type: none"> Under prevailing weather condition, farmers are advised to start field preparation for early sowing of okra with recommended varieties like <i>A-4, Parbani Kranti, Arka Anamika</i> etc.
	Rajasthan	<ul style="list-style-type: none"> Keeping in view of increasing temperature, farmers are advised to provide light irrigation in standing crops like wheat, which is at milk stage and vegetables as per requirement. To overcome the effect of higher temperature in wheat and barley crop, farmers are also advised to spray KCl 0.2% or CaCl₂ 0.1% dissolved in 500 litres of water as foliar spray.
	Punjab	<ul style="list-style-type: none"> Due to prevailing dry weather condition, farmers are advised to apply need-based irrigation to the crops. Due to rise in temperature, there may be a chance of aphid infestation on mustard crop. If population observed above ETL, then it is advised to spray Actara @ 40 g 25 WG or 400 ml of Rogor 30 EC or 600 ml Dursban/Coroban 20 EC in 80-125 litres of water per acre.
	Himachal Pradesh	<ul style="list-style-type: none"> In lower areas of the state, there has been a rise in temperature which may have an adverse impact on the flowering, grain formation & grain filling of wheat as well as other crops. For protecting the crops from this, farmers are advised to go for light and frequent irrigations, wherever available. Farmers can also go in for the spray of salicylic acid or calcium chloride for protecting their crops from this heat stress. Add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
	Vidarbha	<ul style="list-style-type: none"> Due to prevailing dry and hot weather conditions, farmers are advised to ensure irrigation at milk stage in timely sown wheat and at anthesis stage in late sown wheat.
	Konkan	<ul style="list-style-type: none"> Due to increase in temperature, there is a possibility of wild fires in fruit orchard. To protect the mango, cashewnut fruit crop orchard from fire, it is advised to prepare fire breaks in the orchards. Due to forecast for rise in temperature, it is advised to apply 150 to 200 litres of water to nut bearing trees also use straw mulch to reduce evaporation losses.
	Jammu	<ul style="list-style-type: none"> Apply light irrigation at pod initiation stage in late sown mustard/gobi sarson crop to reduce the effect of increasing temperature.

	Konkan	<ul style="list-style-type: none"> • Due to fall in minimum temperature, provide irrigation to nursery, new fruit crop plantation and vegetable crops during evening hours. • Protect the poultry birds from low temperature by providing curtains and electric bulbs during night time.
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