

All India Coordinated Research Project on Agrometeorology (AICRPAM)

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Weather conditions and Agromet advisories issued during April 2023

1. General Weather Conditions

During 01 March - 30 April 2023, the country as a whole received 79.0 mm rainfall, which is 14% excess, compared to the normal rainfall (69.2 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess, normal, deficient and large deficient in 20, 05, 02, 07, 02 sub-division(s), respectively as depicted in Fig. 1.

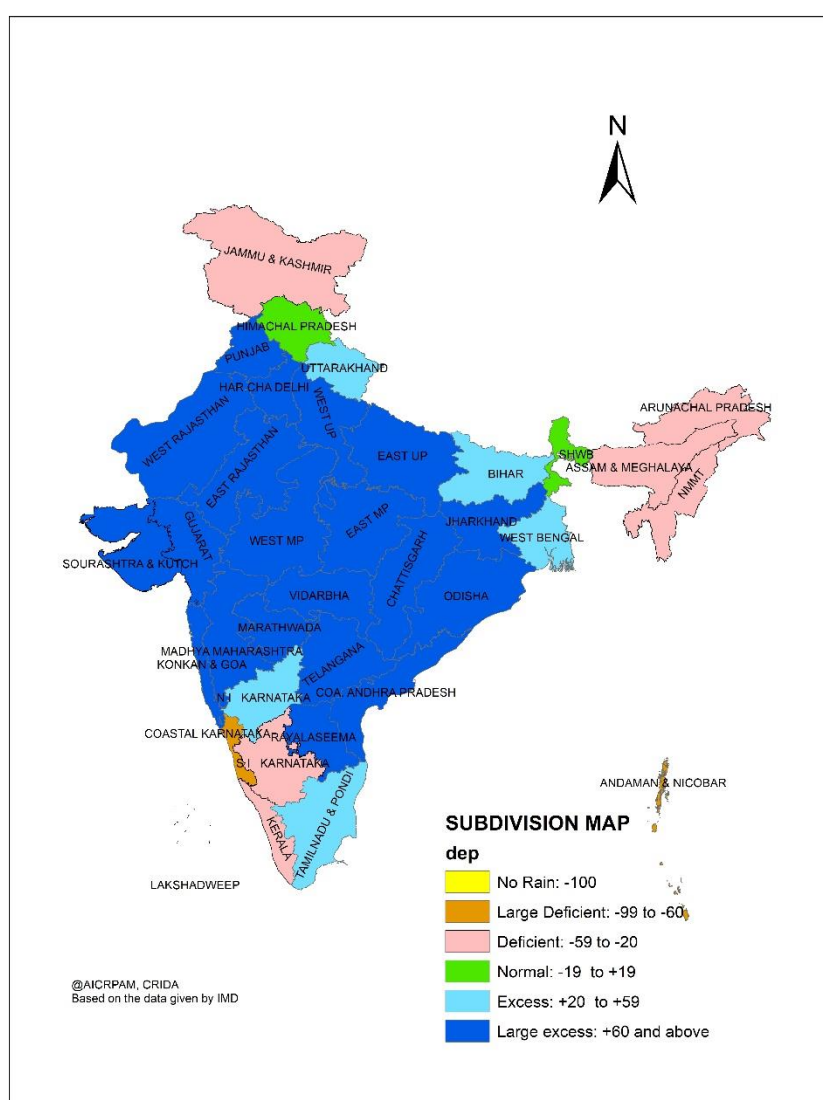


Fig. 1: Seasonal rainfall status (01 March - 30 April 2023) in 36 meteorological sub-divisions, India

2. Agromet advisories issued by AICRPAM centers during April 2023

Date of issue	Advisory issued for the region	Agromet Advisory issued
07-04-2023	Western Uttar Pradesh	<ul style="list-style-type: none"> Farmers are advised to sow <i>zaid</i> Urd and Moong in vacant fields of pea, lentil, chickpea and mustard. Spraying of pre-emergence weedicide Pendimethalin 30% EC @ 2.5 to 3 litres/ha before sowing is recommended. For managing shoot & fruit borer in brinjal, farmers are advised to spray Chlorantraniliprole 18.5% SC @ 3ml /10 liters of water or Deltamethrin 2.8% EC 10 ml/10 liters of water.
	Punjab	<ul style="list-style-type: none"> Farmers are advised to drain out excess water from crops by drainage channels as there are chances of light to moderate rainfall during week-2. Harvest the cucurbits and other vegetables like tomato, chilli, brinjal and okra at regular intervals.
	Odisha	<ul style="list-style-type: none"> Green gram and black gram have reached maturity. Harvest the matured green gram and black gram crop. After harvesting, dry the seeds until the optimum moisture content is attained. The present high temperature and intermittent thunder shower is favorable for Brown Plant Hopper and White Backed Plant Hopper infestation in paddy. Avoid excess use of nitrogenous fertilizer. Do not keep standing water in the field for longer period. If infestation of BPH occurs (5-10 hoppers/hill), spray Neem Based Pesticide (Azadirachtin) 1500 PPM @ 600 ml/acre at the base of the plant. If problem persists, or Dinotefuran 20 % SG @ 80 g/acre or Flonicamid 50 % WG @ 60 g/acre at the base of the plant.
	Rajasthan	<ul style="list-style-type: none"> Farmers are advised to harvest mustard crop and cover it by plastic sheets or keep in shaded place. Farmers are advised to delay harvesting of wheat and barley crops. If already harvested, they can keep the produce by covering plastic sheets or keep in shaded place.
	Himachal Pradesh	<ul style="list-style-type: none"> Farmers are advised to cover their apple crop with anti-hail nets to protect flowers and fruit setting from the hail. Nursery sowing of chilly, tomato and brinjal (Arka Nidhi, Arka Keshav and Hissar Shymal) as well as transplanting in mid hills is recommended.

	Jharkhand	<ul style="list-style-type: none"> • Summer rice is in panicle initiation stage. Use cono-weeder for inter cultural operation and broadcast urea @30 kg per acre. • Chick pea is at physiological maturity in most of the places. Farmers are suggested to harvest the crop to avoid scorching sun and high wind velocity.
	Bihar	<ul style="list-style-type: none"> • Sowing of green gram (mung bean) & black gram (urd) is advised. Application of 20 kg nitrogen, 45 kg phosphorus, 20kg potash and 20 kg sulphur/ha is advised during land preparation. Pusa Vishal, HUM-16 and Sona varieties for mung bean and Pant Urd-19 and Pant Urd-31, Uttra and Navin varieties of urd 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 rhizobium culture. • Complete the sowing of summer vegetables such as okra, pumpkin, cucumber, sponge gourd, ridge gourd, bitter gourd at the earliest.
14-04-2023	Uttarakhand	<ul style="list-style-type: none"> • Farmers are advised to spread straw mulch between the rows of potato crops to conserve soil moisture. • Under prevailing weather condition, transplanting of summer vegetables is advised and provide irrigation just after planting.
	Chhattisgarh	<ul style="list-style-type: none"> • Due to untimely rains at isolated places in few districts of Chhattisgarh, farmers are advised to start harvesting the crops carefully and if the crop has been harvested, keep it in a safe place and make proper arrangements for drainage.
	Madhya Pradesh	<ul style="list-style-type: none"> • As temperature is rising, farmers are advised to apply the paste of Copper oxychloride (BLITOX) along with lime to old citrus trees stem to protect from diseases. • Due to the forecast of no rainfall during next week-1, farmers are advised to provide irrigation in sugarcane crop at weekly intervals and also tie the canes together to prevent from lodging.
	Tamil Nadu	<ul style="list-style-type: none"> • Since the maximum temperature is increasing, ensure clean, cool drinking water to the dairy animals at all time and also provide quality green fodder to prevent the production loss.

	Kerala	<ul style="list-style-type: none"> • Since dry weather condition is prevailing, there is a chance of mite's infestation in banana. To control, it is advised to apply wettable Sulphur three gram per one litre of water. • During high temperature, there is a chance of whitefly infestation in brinjal. Apply 2% neem oil garlic emulsion or spray 20g <i>Lecanicillium lecanii</i> per one litre of water at ten days intervals.
21-04-2023	Jammu	<ul style="list-style-type: none"> • Due to chances of light rain during next two weeks, it is advised to postpone the harvesting and threshing of wheat and mustard crops and shift thrashed crop to safer places. • Sowing of summer fodder (maize+cowpea+charri) and bajra is recommended after receipt of rain.
	Vidarbha	<ul style="list-style-type: none"> • Farmers are advised to avoid intercultural operations during peg penetration stage. Light earthing up is also advised during peg initiation stage for effective peg penetration. Also ensure adequate soil moisture during pegging/peg penetration stage. • During hot summer weather, it is advised to provide sufficient feed/forage, cold water, shelter from heat and follow proper grazing time (morning/evening) for farm/milch animals. Also give them protein-fat bypass supplements and mineral mixture in diet.
	Marathwada	<ul style="list-style-type: none"> • Due to increase in maximum temperature and no rainfall forecast during next week, irrigation management is advised in summer groundnut crop, which is at peg formation as per requirement of crop and soil moisture condition. Irrigation should be done during early in the morning or at evening hours with the help of micro irrigation (Drip or Sprinkler) system. • For moisture conservation and maintenance of soil temperature, mulching is advised in banana orchards. Irrigation should be done early in the morning or at evening hours with the help of drip irrigation system.

	Konkan	<ul style="list-style-type: none"> • Due to prevailing cloudy weather and realized rainfall, there is possibility for anthracnose disease on mango fruits. If incidence is observed, then it is advised to spray Carbendazim 12% + Mancozeb 63% @ 10 g per 10 litres of water. • Provide irrigation to first four years old coconut orchard at 3 to 4 days interval and for above four years old orchard provide irrigation at 4 to 5 days interval. Apply 40 liter of water per day to fully grown coconut tree by drip or micro jet irrigation. also use straw mulch to reduce evaporation losses. and provide shed to newly planted orchard.
28-04-2023	Rayalaseema	<ul style="list-style-type: none"> • Due to gusty winds accompanied with rain in last week, it is advised to removing excess moisture from fields through drainage channels and spraying of Carbendazim @ 1g per litre of water in the crops at maturity stage to reduce the disease incidence. • Prevailing weather conditions are congenial for the incidence of black thrips and white flies in chillies (flowering stage). Framers are advised to install 30-35 blue and yellow colored sticky traps per acre to capture these insects and reduce their population in the field.
	Gujarat	<ul style="list-style-type: none"> • Under prevailing weather condition, it is advised to carefully harvest the matured capsule from the castor plants. Stored at safe place for sun drying before threshing. • Cover the peduncle and whole bunch with dried banana leaves to protect from direct sunlight.
	South Interior Karnataka	<ul style="list-style-type: none"> • Provide irrigation in mango orchard during week-2, as the fruits are in marble stage. This will help for the better development of fruits. If sufficient water is available, irrigation can be given at 15-20 days interval starting from fruit setting till maturity. • Fruit drop 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.
	North Interior Karnataka	<ul style="list-style-type: none"> • Considering the forecast of rainfall during next two weeks, farmers are advised to harvest matured wheat, groundnut and sunflower under clear weather condition with necessary precautionary measures. • Under prevailing weather condition, it is advised to apply 4-6-inch-thick hay thatch as a roofing material. Water can be used for spraying the floor and roof of shelter periodically during peak hot hours which

		lowers the temperature and consequently reduces the heat load on animals.
	West Bengal	<ul style="list-style-type: none"> • Under prevailing weather condition, famers are advised to harvest maize and boro rice as soon as possible. • To prevent fruit fly attacks in mango orchard, it is advised to install methyl eugenol traps.