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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नवंबर 2024 के दौरान जारी मौसम की स्थिति और कृषि मौसम संबंधी सलाह

Weather conditions and Agromet advisories issued during November 2024

1. सामान्य मौसम की स्थिति

1. General Weather Conditions

01 अक्टूबर से 31 नवंबर 2024 के दौरान, पूरे देश में 89.3 मिमी बारिश हुई है, जो इसी अवधि के लिए सामान्य वर्षा (105.1 मिमी) की तुलना में -15% कम है। 36 मौसम विज्ञान उप-विभागों में से, 02, 04, 10, 10 और 10 उप-विभागों में क्रमशः बहुत अधिक, सामान्य से अधिक और कम बारिश हुई, जैसा कि चित्र 1 में दर्शाया गया है।

During 01 October - 31 November 2024, the country as a whole has received 89.3 mm of rainfall, which is -15% deficit, compared to the normal rainfall (105.1 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess normal and deficient in 02, 04, 10,10 and 10 sub-division (s), respectively as depicted in Fig. 1.



Fig. 1: Seasonal rainfall status (01 October - 30 November 2024) in 36 meteorological sub-divisions, India

Date Advisory of issue issued for **Agromet Advisory issued** the region Due to the presence of dry weather farmers may go for sowing of mustard (Pusa Bold, RSPR-01, RSPR-03, Kranti). Treat the seed with captan or thiram @ 3g/kg seed before sowing for management of seed-borne diseases. Farmers may go for sowing of Field Pea (var., AP-1, Jammu Bonnevillea, Rachna and Arkel); Chickpea (var., K-468, Gourav); Treat seed with fungicide (Captan or Thiram) @ 2.0 gm/ kg of seed as well as with crop-specific Rhizobium culture before sowing. Harvesting and threshing of the timely transplanted varieties of Basmati rice is recommended. After harvesting dry paddy sheaves well in the field for 2-3 days before threshing. Gundhi bug infestation is observed in sali rice at the panicle emergence stage to milk dough stage that can be controlled by spraying Neemazol or Neembicidine or Neem oil @ 4 ml per litre of water, if the infestation is severe then, Bifenthrin 10 % EC or Malathion 50EC@1ml per litre of water is recommended. 01-11-2024 During the time of final land preparation apply 3 to 4 quintals of FYM along with 12 kg Urea, 30 kg SSP and 3 Assam kg MOP in case of Rapeseed. For Mustard, the application of 23 kg Urea, 33 kg SSP and 7 kg MOP along with 1.0 kg Borax per bigha of land is recommended. Apply lime at least 21 days before sowing of seeds. Suitable varieties recommended for the state of Assam are M-27, TS-36, TS-38, TS-46, PM-26, PM-27, and NRCHB-101 etc. Well-drained sandy loam rich in organic matter with pH 5.0-7.0 land should be selected for tomato and sowing may be done in October to November. The land should be prepared to a fine tilth and FYM to be applied at least 15 days ahead of transplanting. The recommended varieties of tomato are; Punjab Chhuhara, S-12, Punjab Kesri, Pusa Early Dwarf, Sioux, Pusa Ruby, Arka Abha (BWR-1), Arka Alok (BWR-5) and BT-1.

1. Agromet advisories issued by AICRPAM centers during November 2024

West Bengal	 High rainfall led to havoc lodging in matured kharif rice. Rice crops that are yet to be harvested are requested to be kept in the field for further drying. Nets may be used to protect the matured rice from birds and insects. • In brinjal (flowering and fruiting), farmers are advised to avoid stagnation of water should. Upland planting is recommended. In pointed gourd, Bamboo structures may be repaired, and drainage channels should be cleared periodically. For the management of yellow stem borer, leaf folder, and hopper pests. Spraying of Bifenthrin 10 % EC@1ml or Carbosulfan 25% EC@ 1ml/litre water is advised.
Jharkhand	 Keeping in view of suitable weather conditions, sowing of mustard should be done in this week. Recommended cultivars: - <i>shivaani, pusa bold, Pusa Mustard 25, birsa bhabha sarson 1, pila sarson, NRCHB</i> – 11, 05, 02. Seed rate: - 1.5-2 kg per acre. Moisture level in the soil should be appropriate for proper germination otherwise apply pre-sowing irrigation. In the areas where the paddy crop is about to mature, water should be drained two weeks before harvesting. After harvesting crop should be dried in the field for 2-3 days and thereafter threshing should be done. Grains should be properly dried to the right moisture level 12-14 % before storing. Godowns should be properly cleaned by removing all the grains and other storage matter of previous crops. Farmers who want to cultivate early Peas, should arrange for good-quality seeds, fertilizers etc. Choose the recommended early pea variety, Arkel. For sowing in one acre, 40 kg seeds, 35 kg 85 urea, 200 kg SSP. And 25 kg of Muriate of potash is required.
Himachal Pradesh	 Before Rabi crop sowing after cleaning fields add decomposed FYM or compost before sowing of crops as it improves the physical and biological properties of soil and thus increases the water retention capacity as well as nutrient status of the soil. An early sowing wheat crop is advised, in case of termites-infestation, treat the seed with 4 ml of Chlorpyriphos 20 EC/kg of seed and dry it and then treat it with Bavistin or Vitavax 2.5 g/kg of the seed. Advised to complete the sowing of berseem crop by treating the seed with a suitable strain of Rhizobium and for higher production farmers can mix 500 g seed of mustard/ha.

	Chhattisgarh	 Farmers having irrigation facilities should irrigate their rice fields as per requirement. Irrigation should be withheld in the fields which are in saturation. Farmers are advised to control Armyworm and Panicle mite spray fungicides when the weather is clear. For control of Sheath Blight farmers are advised to spray insecticides when the weather is clear. The field where the rice crop is approaching maturity and the field is having some moisture; farmers can go for relay cropping (utera) of linseed or lathyrus.
	Kerala	 Farmers having irrigation facilities should irrigate their rice fields as per requirement. Irrigation should be withheld in the fields which are in saturation. Farmers are advised to control Armyworm and Panicle mite spray fungicides when the weather is clear. For control of Sheath Blight farmers are advised to spray of insecticides when the weather is clear. The field where rice crop is approaching maturity and the field is having some moisture; farmers can go for relay cropping (utera) of linseed or lathyrus.
08-11-2024	Tamil Nadu	 In Irrigated crops (water management stage), Persistent light to moderate rainfall is expected over the next five days and farmers are advised to delay irrigation activities. To prevent crop damage from continuous rainfall, farmers are advised to ensure proper drainage systems to avoid water stagnation in the fields. Gap filling and thinning can be carried out to take advantage of the recent rainfall. Since rainfall with wind speed >10 kmph is expected, provide propping to early season sugarcane. Create drainage facilities. Prevailing wind speeds may damage the physical appearance of the crop. Hence, farmers are advised to practice propping. Avoid water stagnation, create the drainage facility to drain the rain water from field.

	Rajasthan	 After harvesting of kharif crops, crop should be dried in the field for 2-3 days and thereafter threshing should be done. Before storing, grains should be dried to bring down moisture level below 12 %. Prepare the field for sowing of gram under conserved moisture. Gram varieties are: <i>GNG146</i>, <i>RSG-44</i>, <i>RSG-888</i>, <i>RSG-902</i>, <i>RSG-895</i>, <i>Pratap Raj Chana and Pratap Chana1</i>. Farmers are advised to procure good quality seeds of wheat and start field's preparation. Recommended cultivars for normal sowing: - Raj-3077, W.H147, G.W190, G.W322, G.W 273, H.I 1544, Raj-4037, H.I- 8498, Lok-1 and Raj-3765. Seed rate: - 100 kg seed per ha.
	Marathwada	 For proper growth of chickpea crop, it should be weed-free during early stage. first, hoeing should be done 20 to 25 days after sowing. For management of Rhizome fly in turmeric take a spray of Quinalphos 25 %EC @ 20 ml or Dimethoate 30 % EC@ 15 ml per 10 liters of water with an interval of 15 days during clear weather conditions.
15-11-2024	Madhya Maharashtra	 Pigeon pea crop is at flowering stage. For better pod formation and higher seed yield, foliar application of WSF grade 19:19:19 @ 10 g per lit of water is advised. In sorghum and chickpea, carry out hoeing by using the split hoe. To induce tolerance. Farmers who want to sow jowar for animal feed should choose the varieties viz., <i>Phule Ruchira, Phule Amruta, and Phule Godhan</i>. For sowing, use 40 kg of seeds per hectare and sowing of seeds at a distance of 30 cm is recommended.

		• The matured rice crop should be harvested at ground
	Konkan	 level using a "Vaibhav" sickle. The harvested rice crop should be threshed, and the grains should be dried for 2 to 3 days in the sun before being stored. If the rice is harvested late, the good grains at the tips of the panicles fall in the field, and the proportion of broken grains increases during the milling process. The roots of the tree need to be stressed for the mango blooming. For this, one meter of grass around the trunk of the mango orchards should be removed to pulverize the soil in the basin, shallow ploughing should be done in the open space in the mango orchard, the cleaning of the orchard should be completed as soon as possible so that the amount of water in the soil in the mango orchard can be reduced quickly and help the tree to bear stress.
	Gujarat	 Orobanche shoots should be removed regularly from tobacco fields and should be burned or disposed of properly. Apply light irrigation after ensuring soil moisture and weather condition in the tobacco crop. Select chickpea varieties like, Gujarat chickpea-1, 2, 3, Gujarat Junagadh chick pea-3, 6. Row spacing should be 30 cm between rows and seed rate should be 50 to 60 kg/ha. To control sterility mosaic disease in pigeon pea crop (which is transmitted by mites), spray Miticide like Propargite 57 EC @20 ml in 10 litres of water.
22-11-2024	Andhra Pradesh	 Form conservation furrows at the time of sowing or 20-30 days after sowing for one row every 3.6 m. Conservation furrows alleviate moisture stress during the dry spell period while also acting as a drainage channel during heavy rainfall. Rice crop is at nursery to transplanting stage grown in Rayalaseema districts of Andhra Pradesh. Farmers are advised to utilize the available soil moisture and take up transplanting of rice. The present weather conditions are favourable for bacterial leaf blight incidence in pomegranate. For management, it is advised that to remove infected fruits and burn it immediately. The symptoms observed to spray Streptocycline @ 0.5 g and Copper oxychloride @ 3 g/litre of water. In North Coastal Andhra Pradesh, if any moisture stress conditions prevail in rice nursery spray KNO3 (multi

	k) or 19:19:19 @ 5 g/l. and continue transplanting of rice.
Madhya Pradesh	 Monitoring the field. Rabi crops are ready for sowing and also in the germination stage. The late-sown kharif crops are ready for harvesting. The storage site should be cleaned. Light irrigation in fodder berseem crop. In Chickpea and lentils, Nipping is required in chickpea to increase the number of branches per plant. Light sprinkler irrigation in garden peas. Crop is ready for sowing once the day temperature comes down to less than 28 °C. Sowing of wheat crop. Seed should be treated with fungicide before sowing in the field. Varieties are selected as per rainfed, irrigated and life-saving irrigated conditions as per the agroclimatic zones.
Uttarakhand	 Complete the sowing as early. Seed treatment should be done with fungicide before sowing. First irrigation should be done at 21-25 days after sowing at the time of Crown Root Initiation (CRI) stage. In Mustard, Weeding should be done after one month of sowing. Apply light irrigation. Complete the sowing of crops with suitable varieties. Seed treatment should be done with Rhizobium culture. Remove weeds. Provide light irrigation to achieve good growth in spinach. Undertake wedding, hoeing and bio mulching. Use dry grass for mulch material in onion(seeding).
Marathwada	 For proper growth of chickpea crop, it should be weedfree during an early stage. first, hoeing should be done 20 to 25 days after sowing. For management of Rhizome fly in turmeric, spraying of Quinalphos 25% EC @ 20 ml or Dimethoate 30% EC@ 15 ml per 10 litres of water with an interval of 15 days during clear weather conditions. Last few days fall in minimum temperature, incidence of aphids observed in Safflower crop, for management take a spray of Dimethoate 30% EC @ 13 ml or Acephate 75% SP@ 10 grams per 10 litres of water. For weed management in safflower crops, one to two weeding and hoeing should be done 25 to 50 days after sowing.
Vidarbha	• Undertake clean picking of burst bolls in earlier sown cotton and properly dry the produce before storage,

	 variety-wise. A foliar spray of 2% DAP at the boll development stage is advisable for better productivity. Foliar spray of 1% urea and 1% Magnesium sulphate in the boll development stage is advisable to avoid the reddening of cotton in the later crop stage. Undertake need-based intercultural in earlier sown crops and keep the field weed-free. Need-based protective irrigation is advisable in earlier sown chickpea. For delayed sowing of irrigated wheat (November 15-December 15) use varieties – PDKV Sardar (AKAW 4210-6), and AKW-1071(Purna). Follow seed treatment with Carbendazim @2.5 g / kg seed. Also, seed treatment with Azotobacter and PSB @ 25 g each / kg seed treatment is advisable. Use fertilizer @ 40:40:40 kg NPK/ha at sowing and remaining N @ 40 kg/ha at 18-20 days stage at first irrigation.
Bihar	 Temperature and other Agro-meteorological conditions are getting congenial for the sowing of wheat crops. Farmers are advised to start the sowing of wheat crop. PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38, DBW39 varieties of wheat are recommended for timely sowing under irrigated condition. Application of 15-20-ton FYM manures, 60 kg nitrogen, 60 kg phosphorus and 40 kg potash per hectare is advised before sowing. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For the broadcasting method, a seed rate of 125kg per hectare is advised and 100 kg per hectare is recommended for the seed drill method. Deep sowing of seeds is not advisable. Sowing of rabi maize is advised. Application of 10-15-ton FYM,50 kg nitrogen, 75 kg phosphorus 50 kg Potash per hectare during land preparation. <i>Shaktiman-1 white, Shaktiman-2 white, Shaktiman-5 yellow, Ganga-11 orange yellow, Rajendra sanker makka-1 Rajendra sanker makka-2, and Rajendra sanker makka deepjwala varieties of hybrid maize and Dewki white, Lakshmi white and Suaan yellow varieties of composite maize are recommended for north Bihar. Seed rate@ 20kg/ha is advised. Seed should be treated with Thiram @2.5g /kg of seed</i>