All India Coordinated Research Project on Agrometeorology अखिल भारतीय समन्वित कृषि-मौसम विज्ञान अनुसंधान परियोजना

(AICRPAM)

केंद्रीय बारानी कृषि अनुसंधान संस्थान

ICAR-Central Research Institute for Dryland Agriculture, Hyderabad, Telangana – 500059

जनवरी 2025 के दौरान जारी मौसम की स्थिति और कृषि मौसम संबंधी सलाह

Weather conditions and Agromet advisories issued during January 2025

1. सामान्य मौसम की स्थिति

1. General Weather Conditions

01 जनवरी - 31 जनवरी 2025 के दौरान, पूरे देश में 5.0 मिमी वर्षा हुई है, जो इसी अवधि के लिए सामान्य वर्षा (17.1 मिमी) की तुलना में -71% बड़ी कमी है। 36 मौसम संबंधी उप-विभागों में से, 03, 02, 03, 05, 13 और 10 उप-विभाजनों में क्रमशः बहुत अधिक, अधिक, सामान्य, कम, बहुत कम वर्षा हुई और कोई वर्षा नहीं हुई, जैसा कि चित्र 1 में दर्शाया गया है।

During 01 January - 31 January 2025, the country as a whole received 5.0 mm of rainfall, which is a -71% large deficit, compared to the normal rainfall (17.1 mm) for the same period. Out of 36 meteorological sub-divisions, rainfall was large excess, excess, normal, deficient, large deficient and no rain in 03, 02, 03, 05, 13 and 10 sub-division (s), respectively as depicted in Fig. 1.



Fig. 1: Monthly rainfall status (01 January - 31 January 2025) in 36 meteorological sub-divisions, India

Date Advisory of issued for Agromet Advisory issued the region issue It is the right time for sowing long-duration hybrids of sunflower. Sow the seed 4-5 cm deep, in rows 60 cm apart with a plant-to-plant spacing of 30 cm. Punjab In winter, the entry of cold air inside the sheds affects the milk production of animals. The combination of low temperature and cold air is harmful to the health of animals. To control moisture inside the sheds in cold weather, windows should be opened during the day for proper ventilation. Main field preparation should be started for transplanting of boro paddy seedlings at proper age i.e. 4 to 5 leaf stage (45 days old seedling) as weather is very much favorable. Preparation of seedlings for initial protection in the main field. After washing the roots of the uprooted seedlings, the root portion is to be dipped in 0.02% solution of Assam chlorpyriphos (1 ml/lit of water) along with 1% urea for 3 hrs as a protective measure against stem borer, gall midge and hoppers. Due to dry weather irrigation is advised to apply during the flowering stage. For enhancing yield through 03-01-2025 increased pollination, 5 honey bee colonies/ha may be placed in a rapeseed-mustard field after flowering. As temperatures are expected to fall significantly in the coming days, maintain adequate water in the nursery to mitigate the effects of cold injury. Avoid letting the seedbed dry, as the effects of cold injury are more severe in dry conditions. Ensure one irrigation if no irrigation has been applied in the last two weeks. Additionally, if weed infestation is observed, one round of hand weeding may be carried out. One-hand weeding is recommended along with clearance West Bengal of drainage channels. Due to the humid weather, there is an increased chance of shoot and fruit borer infestation. Collect and destroy affected fruits by burying them in the soil to prevent the spread of the pest. If the infestation is high, spray Spinosad 48 EC at the rate of 1 ml per litre of water. Ensure uniform coverage for effective control. Provide light and frequent irrigation to maintain soil moisture and support plant health during this period.

1. Agromet advisories issued by AICRPAM centres during January 2025

| | - Indication should be done at the full-address at a |
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| Jharkhand | Irrigation should be done at the following stages as per the availability of water in wheat and the crop requirement. First irrigation: When CRI and when tillering stage; Second irrigation: CRI and flowering stage; Third irrigation: CRI, flowering and milking stage; Fourth irrigation: CRI, tillering, flowering and milking stage; Fifth irrigation: CRI, tillering, jointing, flowering and milking stage. Complete the earthing up in 25 to 30 days old potato crop and after making the soil friable, add the remaining quantity of nitrogen (65 kg urea per acre). Thinning and weeding are recommended in the late-sown mustard crop. If low temperature continues for two weeks, white rust infection may start. Therefore, farmers are advised to keep observation on leaves for white rust appearance. |
| Himachal Pradesh | Add mulch material in the space between two rows of vegetable crops to the conservation of soil moisture and maintain the soil temperature. There has been a sharp decline in the temperature over the past few days which may result in the incidence of frost causing adverse effects on the vegetable as well as fruit trees. To avoid the losses caused by frost, farmers should go in for light and frequent irrigations. Farmers can also protect their crops from frost by generating smoke through burning plant material in the fields |
| Chhattisgarh | First irrigation should be done 20-25 days after sowing at CRI stage. Top dressing of the second dose of nitrogen should be done at the time of first irrigation. Second irrigation should be done 40-50 days after sowing. Top dressing of the third dose of nitrogen should be done at the time of Second irrigation. Second irrigation should be done 70-75 days after sowing in mustard. |

| 10-01-2025 | Kerala | Attack of rugose white fly is seen in coconut. As this is a sap-sucking pest, its infestation will be heavy during the hot and dry climatic periods. The sticking property of the gum secreted by the insects may be lost in moist conditions. Adopting mulching and irrigations may help the plants to keep the leaves' surfaces moist. On young palms intermittently sprinkle water on the leaves also. During high humidity, there is a chance of pollu disease in pepper plants. Control the shade in the garden and spray with 1% Bordeaux mixture. |
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| | | • Since dry weather conditions prevail, there is a chance of white fly attack in tomato, apply 2% neem oil+ garlic emulsion under the leaf surface at 10-day intervals. If the attack is severe, apply Thiamethoxam 4 grams per |
| 10-01-2025 | Tamil Nadu | In rainfed crops, Farmers are advised to ensure proper drainage systems to avoid water stagnation in the fields to prevent crop damage from continuous rainfall. Farmers are advised to postpone the irrigation of crops. In Sorghum and maize, Continuous rainfall may affect the crop stand; hence farmers are requested to practice earth up and form new ridges to provide additional anchorage to the plants. High wind speeds may damage the physical appearance of the crop. Hence, farmers are advised to practice propping. Earthing up should be practiced to avoid lodging. Maintain an appropriate water level to prevent crop damage in paddy. Continuous rainfall may lodge the crop; hence, farmers are advised to provide support by propping and to practice earthing up in sugarcane |

| | Bihar | Farmers are advised to remove weeds from the wheat crop, which is in the 30-35 days stage. For this purpose, spraying of a solution of 33 gm Sulfosulfuron and 20 gm Metsulfuron in 500-600 litres of water per hectare is advised. Give irrigation in a timely sown wheat crop which is in 40-50 days. Farmers are advised to continue the transplanting of onion. Application of 15-20 ton/ha FYM, 60 kg nitrogen, 80 kg phosphorus, 80 kg potash and 40 kg Sulphur per hectare is advised during land preparation. Transplanting of seedlings should be done in small beds with a size of 3x2 m or 5x2 m and with a spacing of 15 cm line to line and 10 cm plant to plant. Deep transplanting should be avoided. |
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| 17-01-2025 | Marathwada | Irrigation management should be done in chickpea crop as per requirement with the help of a sprinkler irrigation system. Precaution should be taken so that water may not stagnate in chickpea crop. If infestation of pod borer is observed in timely sown chickpea crop for management of pod borer make use of T-shaped bird perches @ 20 per acre and two pheromone traps per acre. For management of pod borer in timely sown chickpea crop take a spray of 5 % NSKE or Quinalphos 25% EC @ 20 ml per 10 litre of water. If an infestation of aphids is observed in the Safflower crop, for management take a spray of Dimethoate 30 % @ 13 ml or Acephate 75 % @ 10 grams per 10 litre of water. As per requirement irrigation management should be done in safflower crop. During the winter months, when cold winds start blowing, you should protect your animals, especially goats and sheep, from the cold. It is generally observed that the goat kids are severely affected by cold waves may result in mortality. To avoid mortality in kids due to severe cold waves, provide warm bedding, they may be kept in a basket where cloth is provided. An ample amount of milk is to be provided to maintain energy in the body |

| Madhya Maharashtra | For control of safflower Aphids in late sown safflower spraying of Acephate 75 SP @ 16 gm per lit. of water or Dimethoate 30 EC 25 ml per 10 lit of water is recommended. Also, for control of the Capsule borer spraying of Fenvalerate 20 EC @ 5 ml per 10 lit. of water is recommended. For control of fruit drops in mango spraying of 20 PPM NAA (40 ml in 200 lit. of water) is recommended. For control of Powdery mildew in mango spraying of Hexaconazole 5 SC @ 1 ml per lit. of water is recommended. For control of gram pod borer in chickpea, spraying of Chlorantraniliprole 18.5 SC @ 2.5 ml per 10 lit. of water is recommended. |
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| Konkan | Harvest black pepper when 1 to 2 berries in the cluster turn yellow or reddish. The next day, separate the pepper berries from the cluster and immerse them in boiling water for one minute using bamboo baskets or muslin cloth. Then, dry them well in the sun for 3 to 4 days. Due to decreased minimum temperatures and favourable weather conditions, flowering is being observed in mango crops in some areas. In such locations, to reduce fruit drop and ensure good fruit setting, spray the soluble nutrient Amrashakti at the rate of 1 litre per 19 litres of water as per the university's recommendations. This 20-litre solution should be used for four flowering trees. To get more cashew yield, water-soluble fertilizer 19:19:19 should be sprayed after flowering at the rate of 20 grams per litre of water. To increase the yield of cashew nuts, dried fish extract 500 g per 10 litres of water should be sprayed at the time of first flowering |

| | Gujarat | Uproot and burn yellow vein music virus infected okra plant, spraying of recommended systemic insecticide for management of vector white fly. Spray Neem-based insecticide Azadirachtin 40 ml/10 litre of water for control of aphids, jassid and white flies in clear weather conditions. Before spraying pesticides in cotton, disintegrate the pink ball worm-infected flower/ball from the cotton plant and destroy it along with the caterpillar. Profenofos 50 EC 10 ml Or Cypermethrin 10 % EC 10 ml Or Cypermethrin 25 % EC 4 ml Or Spinosad 45 % SC 03 ml Emamectin Benzoate 5 % SG 3 g or Indoxacarb 14.8 % EC 10 ml Or Fenpropathrin 30 EC 10 ml in 10 litres of water and spray simultaneously. Keep 12 pheromone traps/ha in the Kharif pigeon pea field to control <i>Helicoverpa Armigera</i>. Spray 4% Neem extract, 0.2 % Neem oil and 2 % cow urine alternatively at 15 days interval from the flowering. Keep 50 bird perch/ha to control the insects. If a termite infestation is observed in the standing crop of wheat, immediately apply Fipronil 5 SC @ 1.6 litres or Chlorpyrifos 20 EC @ 1.5 litres with 100 kg of sand or soil per hectare, then lightly irrigate the crop. Application of Mancozeb (35 g/10 litre) and 25 ml concentrated desi soap solution at 10-day intervals for effective control of blight disease of cumin. |
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| 24-01-2025 | South Interior Karnataka | Dry weather followed by morning dew/mist conditions forecasted for the domain district in the next 5 days. Right time for harvesting of Rabi crops and cleaning, drying and storing in gunny bag. The grains of the harvested crops should be properly dried by retaining moisture percentage of Cereals 11-12 %, Pulses-9%, Oilseeds-8% and Vegetable seeds 5-6% for long storage & also minimizes the store pest damage. To protect the pulse grains from storage pests, apply oils of Castor/ linseed/honge/neem oil @ 3-5 ml per kg of grains. Maintain optimum room temperature in the sericulture and poultry unit. Rabi crops: To control sucking pests and pod borers in Field bean and Cowpea crop, spray Carbosulfan 25% EC @ 1.5 ml/ litre of water. |

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| Andhra Pradesh | At present mango crop is at the vegetative to flowering stage. Farmers are advised to spray potassium nitrate @10 g and boron@2 g per litter of water to initiate flowering in mango. • Farmers are advised to do intercultivation and to apply gypsum@ 200 kg and urea @10 kg per acre during the flowering stage. In North Coastal Andhra Pradesh, farmers are advised to complete sowing of sesame before 31st of this month. Late sowing may lead to phyllody disease in sesame. Treat the seed with Trichoderma viride @ 10 g/kg seed to avoid soil-borne diseases, by spraying pendimethalin @ 4 ml/L to control weeds. Present weather conditions are favourable for leaf folder incidence in paddy. Advised to spray Cartap hydrochloride @ 2.0 g or Acephate @ 1.5 g or Chlorantraniliprole @ 0.3 ml/litre of water. Present weather conditions favour fruit rot and fruit spot incidence in pomegranate. Farmers are advised to spray propiconazole @ 1 ml or difenoconazole @1 ml or tebuconazole (50%) and Trifloxystrobin neem (Nativo) @1 g per litre of water is recommended. |
| Odisha | Farmers are advised to irrigate their fields as mildly dry conditions prevail. Prepare the main field for summer paddy and start transplanting with 3-week-old seedlings. The summer rice seedlings at 4-5 leaf stage are ready for transplanting. Plant 2 to 3 seedlings per hill shallow and upright in lines 15 cm apart and hills 10 cm apart. Apply 8 kg N, 16 kg P2O5 and 16 kg K2O as basal fertilizer at final land preparation. Standing water to a depth of 2-3 cm should be maintained for at least 2-3 days before uprooting of seedlings. Rabi crop needs 10-15 irrigations at 7-10 days intervals depending on soil moisture. Use pre-emergence herbicides like Atrazine 50 % WP @ 800-gram/acre or Metribuzin 70% WP @ 400-500-gram/acre within 3 days after planting to control weeds in Sugarcane. |

| | Madhya Pradesh | For the December sown crop, the remaining urea is applied in the field when the leaves are dry. This is followed by light irrigation. Irrigation is also required in normal sown crop. Due to the rise in temperature and good solar radiation, the occurrence of pod borer will rise. Monitor of pod borer in the field. The pod formation stage needs light sprinkler irrigation applied at 60-65 days at the siliqua formation stage. Monitor the field against mustard aphids. For autumn sugarcane, manures and fertilizers need to be applied. Monitor the crops for pests and diseases. Apply light irrigation as needed as no rainfall for the next two weeks with the rise in air temperature. Weed control in the field. Apply light and frequent irrigation/sprinkler irrigation in vegetables (tomato, brinjal, chilli) during evening hours. In potatoes, earthing up and fertilizer application in the field |
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| 31-01-2025 | North Interior Karnataka | Weather is congenial for the occurrence of leaf reddening take up spraying of Magnesium Sulphate @ 10 grams per litre of water and 2 per cent urea solution. Cotton picking may be taken up sometime after sunrise and the cotton should be sundried before storing. Harvest matured crops and dry the grains under bright sunlight in pigeon pea. Cut the matured cane. Do not burn the trash. Spread the trash in between the rows and apply 20 Kg Urea and 20 Kg Super Phosphate fertilizer per acre on the trash. After this apply 2.5 Kg of trash decomposing bacteria mixed in dung slurry on the trash. This will facilitate the early decomposition of the trash. To manage pod borer in chickpeas, take up spraying of 0.2-gram Emamectin benzoate dissolved in one litre of water. Weather conditions are congenial for capsule borer in safflower, take up spraying of 1 ml Monocrotophos 36 SL or 2 ml Quinalphos 25 EC dissolved in one litre of water. |

| В | ihar | Farmers are advised to remove weeds from late-sown wheat crop, which is in the 30-35 days stage. For this purpose, spraying of a solution of 33 gm Sulfosulfuron and 20 Metsulfuron in 500 litres of water per hectare is advised. 2nd irrigation is suggested when the crop would be in the 40-45 days stage. Apply irrigation to vegetable crops such as French beans, peas, cauliflower etc. in view of poor soil moisture and low-temperature conditions. Farmers are advised to monitor their potato crops as prevailing weather conditions are highly favourable for infestation of late blight disease in crops. Spraying of Diethane M-45 or Redomil @ 1.5 grams/litre of water is advised if an infestation occurs. Before initiation of inflorescence in the mango trees, orchard owners and other individual farmers are advised to spray Carbaryl (Sevin) @2.0 per litre of water or Dimethoate @ 1.0 gm per litres of water over the canopies. |
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| | rn Uttar adesh | Do the second irrigation of wheat when the shoots emerge and the third irrigation when the nodes are formed. For controlling the major pests of mustard like Aphids and Painted Bug, spray using Dimethoate 30% EC 1 L or Dichlorvos 76% EC 500 ml or Imidacloprid 17.8% SL 250 ml dissolved in 500 to 600 litres of water/ hectare. For controlling the Semi looper pest in pulse crops, mix Fipronil 5 SC 500 ml in 600 litres of water and spray at the rate of per hectare. To prevent blight disease in tomatoes and chillies, Manco Me Jeb 75 per cent WP. of 2 kg. Per quantity. Make a solution in 500 to 600 litres of water and spray. |

| Western Uttar Pradesh | Farmers are advised to light irrigation at the tillering and Jointing stages of the wheat crop and top dress urea at optimum moisture during tillering, jointing and PI stages. For late sown wheat crop control of the grassy-leaved weed, spray Clodinafop-propargyl 15% WP @ 700 g/ha, for grassy and broad-leaved weeds, Sulfosulfuron 75% wp @ 33g/ha + Metsulfuronmethyl 20% wp@ 4 g/ha with 300 litres of water solution is to be applied for control of mixed weed flora. • Farmers are advised that light irrigation should be done and top dress urea at the PI stage. Top dress urea at knee height stage in proper moisture available in the soil. Farmers are advised for irrigation of the crop. Farmers are also advised to watch for insects and pests. Irrigation should be done. Pick up mature fruits in standing crop. Watchful insects and pests |
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| Jammu | Postpone irrigation due to chances of rainfall. In late sown wheat crop, apply urea @ 2.5 kg/kanal as 1st top dressing after receipt of rain. Apply 2, 4-D ethyl ester @ 500 ml/ ha in 500 to 600 litres of water after receipt of rain at optimum soil moisture to control broadleaved weeds and to control narrow-leaved weeds Apply Metribuzin @ 200 gm ai. /ha in 500 to 600 litres of water after receipt of rain in 30-35 days old crop to control weeds. Harvest potato crops immediately, where the crop is ready, to avoid rotting due to rainfall. Remove all the haulms of the plant to avoid aphid infection, if potato is required for seed purpose. Apply basting/carbendazim @ 3 gm/litre of water, if an attack of wilt or blight is observed in the crop after receipt of rain. Spray copper oxychloride @ 3 gm/lt in citrus to check dieback, gummosis and canker prevalent due to the present temperature after receipt of rain, Drench the guava basin with carbendazim @ 1 gm/lt in citrus after receipt of rain. |