Gramin Krishi Mausam Sewa

Agromet Advisory Bulletin for NAGPUR District

Central Institute for Cotton Research,

Nagpur

Agromet Advisory Bulletin

Date : 2025-05-02

Weather Forecast of District NAGPUR (Maharashtra) Issued On : 2025-05-02 (Valid Till 08:30 IST of the next 5 days)

Parameter	2025-05-03	2025-05-04	2025-05-05	2025-05-06	2025-05-07
Rainfall(mm)	10.5	13.2	10.2	5.6	0.0
Tmax(°C)	42.1	42.6	41.9	42.8	39.9
Tmin(°C)	28.2	29.1	29.2	28.5	27.5
RH-I(%)	66	56	53	64	57
RH-II(%)	35	27	25	48	46
Wind Speed(kmph)	11	11	16	14	11
Wind Direction(Degree)	180	302	302	175	231
Cloud Cover(Octa)	4	4	5	6	5
Warning	Thunderstorms & Lightning, Squall etc; Strong Surface Winds	Thunderstorms & Lightning, Squall etc; Strong Surface Winds	Thunderstorms & Lightning, Squall etc; Strong Surface Winds	Thunderstorms & Lightning, Squall etc; Strong Surface Winds	Thunderstorms & Lightning, Squall etc

Forecast Summary:

• As per the district level value added forecast given by, IMD, RMC, Nagpur, sky will be partly to partially cloudy during next 5 days i.e. 03 May to 07 May, 2025. • Light to moderate rainfall is very likely to occur at few places on 4 May, 2025. • Light rainfall is very likely to occur at isolated places on 3, 5, 6 and 7 May, 2025. • During next 5 days, Maximum temperature is likely to be occurs between 39.9 to 42.8 degree Celsius, whereas minimum temperature is likely to be occur between 27.5 to 29.2 degree Celsius. Morning relative humidity is likely to be occurs between 53 to 66 per cent, whereas afternoon relative humidity is likely to be occurs between 25 to 48 per cent. • There will be no large change in maximum temperature during next 24 hours thereafter maximum temperature will be fall by 2-3 degree Celsius over Vidarbha.

Weather Warnings (Valid Till 08:30 IST of the next day)

• Thunderstorm with lightning accompanied with gusty winds (40-50 kmph) likely to occur at isolated pockets on 3, 4, 5 and 6 May, 2025. • Thunderstorm with lightning accompanied with gusty winds (30-40 kmph) likely to occur at isolated pockets on 07 May 2025.

Likely impacts of weather warnings on Agriculture and associated Agromet advisories

Thunderstorms and lightning can cause injury or death to livestock, farmers or farm workers. Strong winds can cause fruit to fall from trees, damage to barns or stored fodder in the field. Rain can damage mature crops and spoil the crop. Rain can cause agricultural produce brought for sale by farmers to the Agricultural Produce Market Committee or open markets to spoil when exposed to rain.

General Advisory:

• Considering the forecast of possible rains, priority should be given to completing the harvesting and threshing of green gram, groundnut etc. The harvested crop should be stored in a dry and safe place. If threshing is not possible, the harvested crop should be covered with a plastic sheet or tarpaulin. • Intercultural operations (hoeing, weeding, etc.) in seasonal crops, orchards, and vegetable crops, spraying of agrochemicals for pest and disease management and fertilizer application in standing crops should be postponed for the next 3-4 day. • Considering the forecast of thunder, lightning and gusty wind, livestock should be avoided from grazing in open grazing areas. Fodder and water should be provided to the animals in the barn. While working in the field, as soon as there is a thunderstorm, take shelter in a safe place. Considering the past incidents in the district, avoid taking shelter under palas, neem and any other tree during thunderstorms. • Considering the forecast of gusty winds, marketable fruits and vegetable crops should be harvested and sold. Fruit trees should be supported with the help of a tree stump. • To prevent damage to the agricultural produce brought for sale by farmers to the Agricultural Produce Market Committee or open market, avoid storing agricultural produce in the open, store agricultural produce in sheds.

SMS Advisory:

• To prevent damage to the agricultural produce brought for sale by farmers to the APMC or open market, avoid storing agricultural produce in the open.

Crop Specific Advisory:

Crop (Stage)	Crop Specific Advisory
GROUNDNUT	• Harvesting and threshing of matured groundnut should be done in the view of rainfall forecast. • Summer groundnut crop should be irrigated with two rows at an interval of 8 to 10 days. • If the infestation of sucking pests (e.g.,Aphid, Jassids, Thrips is found in groundnut crop and if it is reaching economic loss level, spray with Imidacloprid (17.8% SL) 2.5 ml. or Lambda Cyhalothrin (5% EC) 5 ml. or Quinolphos (25% EC) 14 ml. mixed in 10 liters of water for management. • If the infestation of leaf-boring/rolling caterpillar is found in groundnut crop and if it is reaching economic loss level, spray with Deltamethrin (2.8% EC) 12.5 ml. or Quinolphos (25% EC) 20 ml. or Lambda Cyhalothrin (5% EC) 5 ml. mixed in 10 liters of water for management. • If the infestation of leaf-eating caterpillar is found in groundnut crop and if it is reaching the economic loss level, for management, Quinolphos (20% AF) 16 ml. or Methomyl 40 percent SP 15 g or Flubendiamide 20 percent WG. 6 g should be mixed in 10 liters of water and sprayed. • If the infestation of white grub is found and if it is reaching the economic loss level, for management, Carbofuron 3 percent granular 33 kg, should be mixed in the soil per hectare.
CITRUS	• Fruitlet blight: Black spots on the fruit are called fruitlet blight' • The fruits are injured due to the infestation of spider mites or Thrips, through which the bacteria Pantoea ananatis is transmitted and black spots appear on the fruits. • Deep, irregularly shaped dark black or brown spots appear on the skin of the affected small fruits. These spots feel oily when touched. Starting from small black spots, the entire fruit turns black, resulting in the fruits often falling off. • Management: To reduce the loss of small fruits caused by black spots, spray a mixture of copper oxychloride 50% WP 25 grams in 10 liters of water. • In order to get Mrig Bahar in citrus orchards in medium soil type, water stress should be applied for 50 days from 25th April to 15th June • The citrus orchards with Ambia bahar fruits should be irrigated regularly. For this, drip irrigation method should be used. A 5 inch thick cover of leafy greens, cow dung should be applied in the fall. This will reduce fruit drop. • The acid lime fruits of hand spring should be harvested, sorted and sold.

Horticulture Specific Advisory:

Horticulture (Stage)	Horticulture Specific Advisory
ONION	• Harvesting of matured onion should be done. • Irrigate the onion crop after transplanting, subsequently at 7-10 days interval depending upon the soil moisture. • Foliar spray of Carbosulfan (2 ml/L) along with Tricyclazole (1

Horticulture (Stage)	Horticulture Specific Advisory
	g/L) is recommended to control diseases and pests, if required. • Second foliar spray of profenophos (1 ml/L) along with Hexaconazole (1 g/L) is recommended after 15 days of previous spray, if required. • Third foliar spray of Fipronil (1 ml/L) along with Propiconazole (1 g/L) is recommended after 15 days of previous spray, if required.
GARLIC	• Harvesting of matured onion should be done. • Garlic crop requires less but regular irrigation. After germination, irrigation should be given at intervals of 8 to 10 days according to the soil moisture status and crop need. Generally, 12 to 15 irrigations are required. • First prophylactic spray of Carbosulfan (2 ml/L) along with Tricyclazole (1 g/L) is recommended to control diseases and pests, if required. • Second spray of Profenophos (1 ml/L) along with Hexaconazole (1 g/L) is recommended after 15 days of first spray, if required. • If first two sprays were over, third spray of Fipronil (1 ml/L) along with Propiconazole (1 g/L) is recommended after 15 days of second spray, if required. • If there is incidence of red spider mite, foliar spray with elemental sulphur (2 g/L) or dicofol (2 ml/L) is recommended.
MANGO	• Harvest the market ready fruits and sale.
WATER MELON	• Harvest the market ready fruits and sale. • Over watering frequently is not recommended as it promotes excessive vegetative growth. Stop the irrigation during ripening as it will adversely affect fruit quality and leads to fruit cracking. Don't allow water stagnation. Avoid water stress during pre-flowering, flowering and fruit development stages. Irrigate only the root zones and avoid wetting the vegetative growth, flowers and fruits. • Prune the excessive vine growth manually to restrict vegetative growth and promote higher female: male flower ratio. If apical shoot is pinched and 2-4 side shoots are allowed to grow, it gives significantly higher yield. Thin the fruits to retain only maximum of 4-5 fruits per vine to improve fruit size and yield.
MANDARIN ORANGE	• Due to intense heat, young tops of cuttings/plants planted last year dry up and leaves fall off. • For this, organic matter such as grass/mulch/cow dung/weeds should be covered with a 10 cm layer within a radius of at least 2 to 3 feet around the cuttings/plants. • Sow dhencha seeds in a circular pattern within a radius of 2 feet around the cuttings/plants. Since dhencha grows rapidly, there is shade all around, which provides protection from intense sun and hot winds. Or, bamboo or bamboo stick should be tied in a triangle on all three sides of the seedling/plant and a green shade net should be placed with the help of the bamboo to protect the plants from the intense sunlight and heat on the south and west sides. • There is a method of watering the trees with new seedlings (1 to 3 years old) by placing a small water tank at the base. In this, a pot should be placed around the tree, half buried in the ground and water should be poured into it, which will provide enough water for a week. In this, a very small hole should be made at the bottom of the pot and a piece of cloth should be placed in that hole so that the water in the pot seeps into the ground through the cloth and reaches the roots slowly, and evaporation does not occur too much. • Due to the intense sunlight and heat, the rate of evaporation and transpiration is high, so the leaves of the seedlings/plants wilt quickly. In such cases, potassium nitrate (13:0:45) mixed with 1 kg in 100 liters of water should be sprayed at an interval of 20-25 days. This reduces the rate of transpiration in the leaves and does not slow down the process of food formation in the leaves. • In orchards with water shortage and to save water, cover them with a 10 cm layer of organic matter such as grass / mulch / straw / cow dung / weeds during the summer season or cover them with black polythene paper (100 microns) to help retain moisture near the trees. Due to the cover, weeds do not grow due to lack of sunlight, and the temperature of the soil is controlled. It helps in the growth of beneficial bacteria in the soil, if there is a cover of organic matter; it decomposes over time and provides excellent organic fertilizer, helps in maintaining the right temperature in the soil and reduces soil erosion. Covering can increase the interval between the two irrigation in summer. • While using cover, 2-3 kg of vermicompost should be given per tree. Using organic fertilizers to the maximum also increases the water retention capacity of the soil. • If there is severe water shortage in summer, avoid taking out the Bahar. Instead of taking out the Ambia Bahar, plan for the Mrig bahar because the Mrig bahar gets rain water during the monsoon and can be taken out by managing the moisture to a small extent. However, Ambia bahar needs abundant water in summer, but due to water shortage, it is not possible to give it. • Light soil has less water retention

Horticulture (Stage)	Horticulture Specific Advisory
	capacity than heavy soil, so light soil needs to be irrigated more frequently, and heavy soil has more water retention capacity, so the garden can be watered even if the interval between irrigation is long. Drip irrigation is a very economical method of using and giving water. This method provides the facility of giving water drop by drop. In drip irrigation, water can be metered, so there is no wastage of water and 40 to 50 percent water is saved and more area can be brought under irrigation. Chemical fertilizers can also be metered through drip irrigation, and this saves up to 30 percent of fertilizers. While watering through drip irrigation, 80 percent of the transpiration should be given daily, thus saving up to 40 percent water. • If the water content in the tree decreases due to heat, the rate of cracking of the bark on the trunk of the tree may increase. In such a case, in order to protect the tree from fungal and other diseases, Bordeaux mixture should be applied to the trunk in the beginning of summer, and the Bordeaux mixture should be applied to a height of one to one and a half meters. Applying Bordeaux paste helps in keeping the trunk temperature low and reflecting the sun's rays. • Due to heat, the water in the tree evaporates into the air in large quantities, which makes the trees pale and brittle. At such times, the amount of transpiration can be reduced by using an evaporative cooler. In summer, the orchard should be sprayed with a 2% kaolin or 1% potassium nitrate (13:0:45) evaporative cooler. Kaolin should be sprayed after light irrigation. • To keep the sprinkler running to maintain humidity in the garden, remove the sprinkler riser and keep the nozzle close to the ground. • If there is a severe water shortage due to excessive moisture, dig holes 2 to 3 feet deep and 1 foot wide at a distance of 4 to 5 feet from the main trunk on the opposite side of the developed tree and fill them with water. This will ensure efficient use of available water and protect the fruit trees. • If water is available, it i

Live Stock Specific Advisory:

Live Stock	Live Stock Specific Advisory
COW	• To increase milk production, clean water should be available to dairy cows/buffaloes 24 hours a day to drink whenever they want. The water trough should always be kept clean and limed. The water trough should always be kept in the shade and in a place where bird droppings do not fall into the water. • During a heat wave, it is crucial to take special care of animals to protect them from heat stress. Keep them in the shade and provide plenty of clean and cold water to keep them hydrated. Avoid making them work between 11 AM and 4 PM when temperatures are at their peak. To reduce heat in animal sheds, cover the roof with straw, paint it white, or plaster it with dung-mud. Use cooling measures like fans, water sprays, and foggers in the shed to maintain a comfortable environment. During extreme heat, spraying water on animals and taking them to a water body can help cool them down. Ensure they receive a balanced diet with green grass, protein-fat bypass supplements, mineral mixtures, and salt while allowing grazing only during cooler hours. In poultry houses, proper ventilation and curtains should be provided to maintain airflow. Additionally, avoid grazing or feeding cattle during noon hours to prevent heat-related health issues.

Likely impacts of weather warnings (General)

Thunderstorms and lightning can cause injury or death to livestock, farmers or farm workers. Strong winds can cause fruit to fall from trees, damage to barns or stored fodder in the field. Rain can damage mature crops and spoil the crop. Rain can cause agricultural produce brought for sale by farmers to the Agricultural Produce Market Committee or open markets to spoil when exposed to rain.

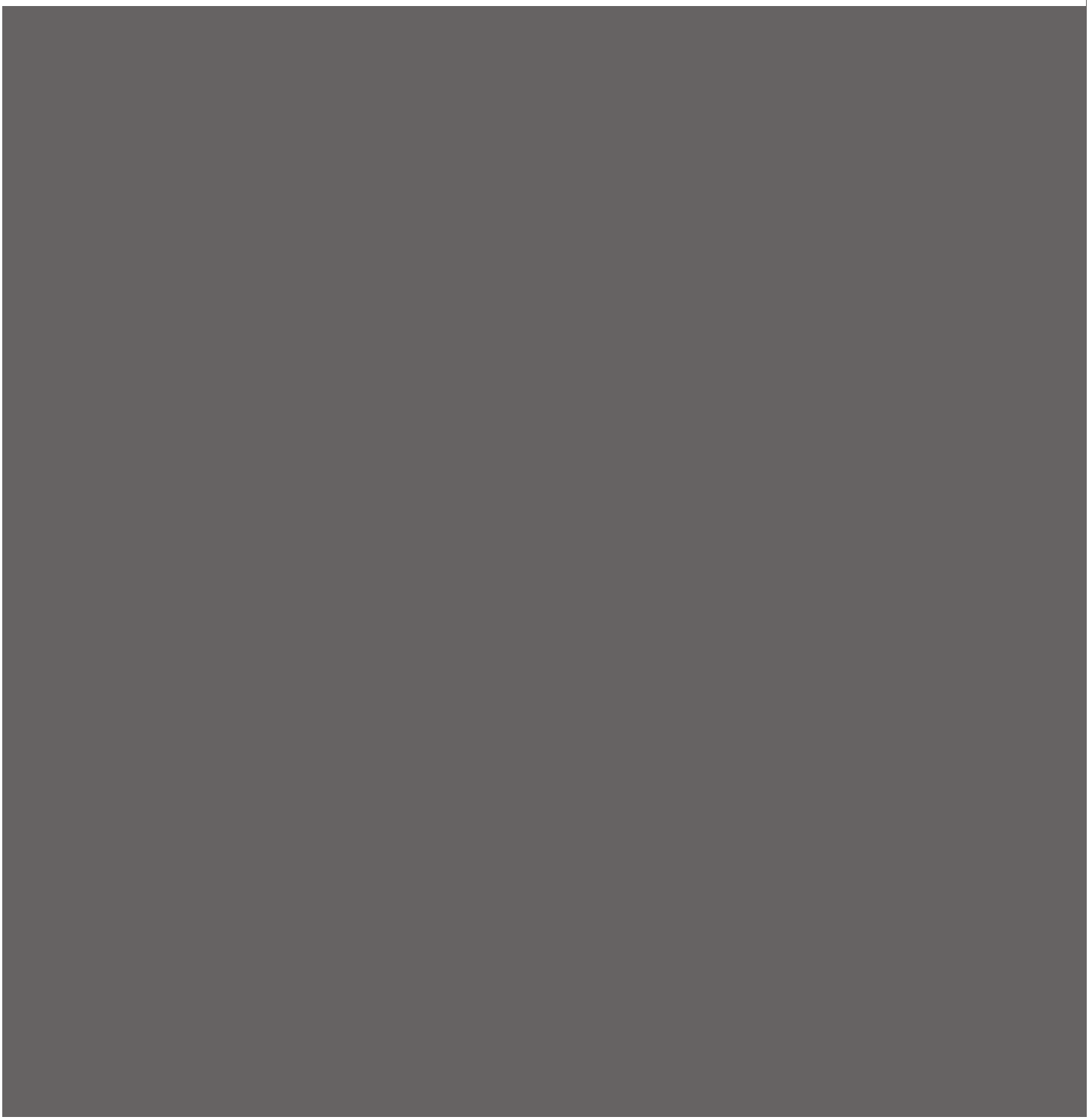
Impact based advisories (General)

• Considering the forecast of possible rains, priority should be given to completing the harvesting and threshing of green gram, groundnut etc. The harvested crop should be stored in a dry and safe place. If threshing is not possible, the harvested crop should be covered with a plastic sheet or tarpaulin. •

Intercultural operations (hoeing, weeding, etc.) in seasonal crops, orchards, and vegetable crops, spraying of agrochemicals for pest and disease management and fertilizer application in standing crops should be postponed for the next 3-4 day. • Considering the forecast of thunder, lightning and gusty wind, livestock should be avoided from grazing in open grazing areas. Fodder and water should be provided to the animals in the barn. While working in the field, as soon as there is a thunderstorm, take shelter in a safe place. Considering the past incidents in the district, avoid taking shelter under palas, neem and any other tree during thunderstorms. • Considering the forecast of

Farmers are advised to download Unified “Mausam” and "Meghdoot" android application on mobile for Weather forecast and weather based Agromet Advisories and "Damini" android application for forecast of Thunderstorm and lightening.

Mausam MobileApp link: https://play.google.com/store/apps/details/

Meghdoot MobileApp link: https://play.google.com/store/apps/details

Damini MobileApp link : https://play.google.com/store/apps/details