Gramin Krishi Mausam Sewa

Agromet Advisory Bulletin for NAGPUR District

Central Institute for Cotton Research,

Nagpur

Agromet Advisory Bulletin

Date : 2024-12-24

Weather Forecast of District NAGPUR (Maharashtra) Issued On : 2024-12-24 (Valid Till 08:30 IST of the next 5 days)

Parameter	2024-12-25	2024-12-26	2024-12-27	2024-12-28	2024-12-29
Rainfall(mm)	0.0	0.0	0.0	17.6	16.7
Tmax(°C)	29.1	29.4	29.6	29.5	28.3
Tmin(°C)	15.7	15.9	16.9	17.2	16.9
RH-I(%)	76	71	79	81	88
RH-II(%)	57	58	63	67	71
Wind Speed(kmph)	9	8	8	4	11
Wind Direction(Degree)	64	51	53	115	39
Cloud Cover(Octa)	4	3	4	6	6

Weather Summary/Alert:

• As per the district level value added forecast given by, IMD, RMC, Nagpur, sky will be partly to partially cloudy during next five days i.e. 25th to 29th, December, 2024. • Weather is very likely to be dry on 25th, 26th and 27th, December, 2024. • Light to moderate rainfall is likely to occur at isolated places on 28th, December, 2024. • Light to moderate rainfall is likely to occur at few places on 29th, December, 2024. • Thunderstorm with lightning likely to occur at isolated pockets on 29th, December, 2024. • Maximum temperature is likely to be 28.3 to 29.6 degree Celsius whereas minimum temperature is likely to be 15.7 to 17.2 degree Celsius during next 5 days. • No large change in minimum temperature for next five days over the Vidarbha. No large change in maximum temperature for next three days thereafter falls by 2-3 degree Celsius in subsequent days.

General Advisory:

• Considering the possibility of rain after the next 3 days, cotton picking should be completed in the next 2 to 3 days. The harvested cotton should be stored in a dry and safe place according to the variety. Cotton bags should be used instead of plastic/gunny bags for harvesting and storage of cotton and to prevent further infection. • Harvesting and threshing of mature paddy crop should be completed in the next 2 to 3 days as soon as possible. If the harvested crop is spread out in the field, it should be collected at one place and covered with plastic sheet or tarpaulin. • Marketable fruits and vegetables should be harvested and sold. • Intercultural operations, irrigation, spraying of agrochemicals (insecticides, fungicides, etc.) and fertilizer application in standing crops should be done in the next 3 days, depending on the local clear weather conditions. • Considering the thunderstorm and lightning forecast, it is advised to avoid letting cow, buffalo, goats, sheep, and other cattle's/animals graze in open spaces as there is a possibility of rain and lightning. Animals should be kept away from open water sources, rivers or lakes and tractors and metal. Cconsidering the thunderstorm and lightning forecast it is advised to carry out farm operations during early morning hours. • Carry out farm operations by considering the local weather forecast and warnings. Take shelter at safe places, it is ensuring to keep maximum distance between two farm labours while working in the field. Avoid shelter near to water bodies (Lake, Well, River and Moist places) tractors and metal implements. Avoid taking shelter under a tree in any situation as the lightning attracts on tallest object. • At APMC and Mandis buyer of

agricultural commodities are advised that, do not store the farmer produced at open places to avoid the contact with rain. • The farm produce arrival by farmer should be store under shade only to avoid the damaged due to rain.

SMS Advisory:

• Considering the rainfall forecast, priority should be given to completing cotton picking, paddy harvesting and threshing in the next 2 to 3 days.

Crop Specific Advisory:

Crop (Stage)	Crop Specific Advisory
COTTON	• Considering the possibility of rain after the next 3 days, cotton picking should be completed in the next 2 to 3 days. The harvested cotton should be stored in a dry and safe place according to the variety. Cotton bags should be used instead of plastic/gunny bags for harvesting and storage of cotton and to prevent further infection.
RICE	• Harvesting and threshing of mature paddy crop should be completed in the next 2 to 3 days as soon as possible. If the harvested crop is spread out in the field, it should be collected at one place and covered with plastic sheet or tarpaulin.
MAIZE	• Maize crops should be irrigated at various stages such as seedling stage (25 to 30 days after sowing), ear emergence (45 to 50 days after sowing), flowering stage (60 to 65 days after sowing) and grain filling (75 to 80 days).
BENGAL GRAM/ CHICK PEA	• For optimum yield in gram crop, the first irrigation should be given 30 to 40 days after sowing i.e. when the crop is in flowering stage and the second irrigation should be given 60 to 70 days after sowing i.e. in the pod filling stage. • To prevent the occurrence of wilt disease in gram crop avoid excess irrigation to avoid water stagnation in crop field and drenching of Trichoderma biological fungicide mixed with 40 grams per 10 liters of water should be sprayed or drenched or thiophanate methyl 70 WP 25 grams mix with 10 liters of water should sprayed. • For integrated management of Gram Pod Borer 20 bird perches per hectare should be install up in the field. For control of gram pod borer install pheromone traps (Hexalur) two per acre or five per hectare. If eight to ten moths are found in the trap for three consecutive days, recommended management measures should be taken. In case of pest infestation by observing the crop or when the crop is in 40 to 50 % flowering stage, preference should be given to botanicals or biological pesticides. For this, first spraying should be taken of neem extract 5% or Azadiractin 300 ppm 50 ml per 10 liters of water with Knapsack sprayer pump. If spraying should be done with a power sprayer, apply three times the amount of pesticide. If Gram Pod Borer has reached the ETL, spraying should be done with Quinalphos 25 % EC 20 ml or Emamectin benzoate 5 % SG 3 gm or Flubendiamide 20 % WG 5 gm or Chlorantraniliprole 18.5 SC 2.5 ml per 10 liters of water. At Wafsa condition hoeing and weeding must be carried out twice; first at 20 and second at 30 days old plants to ensure weed free environment during the critical period of crop weed competition for better water and nutrient use efficiency.
MUSTARD	• Cloudy weather and lowering night temperature favours aphid incidence in mustard. For control of aphid incidence undertake spray of Thiometon 25 EC 8 ml per 10 lit of water or Dimethoate 30 EC 10 ml per 10 lit of water. Undertake need based irrigation for higher productivity in mustard. In case of availability of one irrigation schedule it at flowering stage, for availability of two irrigations schedule it at 30 days and flowering stage, for availability of three irrigations schedule it at 25 to 30 days interval. • For the management of Alternaria blight in mustard crops, spray Metalaxyl 8% + Mancozeb 64% WP 1000 grams per acre mixed with 400 liters of water.

Crop (Stage)	Crop Specific Advisory
WHEAT	• Wheat crop should be irrigated first at 18 to 20 days after sowing at crown root initiation stage. Water stress at CRI stage reduces production by up to 33 %. • Considering the availability of limited irrigation for wheat crop, irrigate 42 days after sowing if single irrigation is available, irrigate at 21 and 65 days after sowing if two irrigation is available, and if three irrigation available irrigate at 21, 42 and 65 days after sowing. • Under the availability of adequate irrigation facility, first irrigation should be apply at crown root initiation stage (18-20 days after sowing), second irrigation should be apply at maximum tillering stage (30 to 35 days after sowing), third irrigation should be apply at late jointing stage (45 to 50 days after sowing), fourth irrigation should be apply at the flowering stage (65 to 70 days after sowing), the fifth irrigation should be apply at the milky stage of the grain (80 to 85 days after sowing) to the wheat crop.
PIGEON PEA (RED GRAM/ARHAR)	• 1 or 2 protected irrigations should be given to pigeon pea crop at flowering and pod filling stage. • For the management of pod borer & leaf borer, plume moth, pod fly and leaf roller Maruca caterpillar on arhar crop, • 20 bird traps should be set up per hectare in the field. So that the birds eat the larval insect. • First spray (when the crop is at 50 percent flowering) Neem extract 5 percent or Azadirachtin 300 ppm 50 ml. or Azadirachtin 150 ppm 25 ml. or H.A.N.P.V. (1x10' P.O.B./ml) 500 L.E./ha. or Bacillus thuringiensis 15 ml. or Quinolphos 25 EC 20 ml. should be mixed and sprayed per 10 liters of water. • Second spray (15 days after the first spray) Emamectin Benzoate 5% 3 SG gm or Lambda Cyhalothrin 5% 10 ml or Chlorantraniliprole 18.5% SC 2.5 ml per 10 liters of water. If the infestation of larvae is large, put a sack under the arhar tree and shake the tree, so that the larvae on the tree can be collected and destroyed. • For the control of leaf-rolling maruca caterpillar, spray with Flubendiamide 20 WG 6 gm or Novaluron 5.25 + Indoxacarb 4.50 % SC 16 ml per 10 liters of water.

Horticulture Specific Advisory:

Horticulture (Stage)	Horticulture Specific Advisory
ONION	• Irrigate the onion crop after transplanting, subsequently at 7-10 days interval depending upon the soil moisture. In general Rabi onion crop needs 12-15 irrigations.
GARLIC	• 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.
MANDARIN ORANGE	• Marketable fruits should be harvested and sold, keeping in mind the rainfall forecast. • Harvesting of Ambia bahar fruits should be completed as far as possible and the trees should be put on water stress by withdrawing irrigation. For adequate stress spray cycocel @ 2 ml/lit of water. Dead wood pruning may be done after harvest of Ambia fruits which should be immediately followed by spraying of fungicide, Carbendazim @ 1 gm/litre water. Nurserymen should start budding programme. Budding should be done 20 to 25 cm above ground level. Drip irrigation on Mrig bahar bearing trees of Nagpur mandarin and sweet orange should be continued. Apply by drip irrigation 41 litres water/day/tree to 6 years tree and 82 litres water/day/tree to 10 years and above trees. Continue drip irrigation for Mrig bahar crop. In case of incidence of citrus mite that cause brownish patches on the outer skin of the fruits spray dicofol @ 2 ml or Wettable sulphur @ 3 g or propargite @ 1 ml per litre of water. After 15 days second application should be given with any one of the two above miticides to check “Lalya” effectively. For citrus leaf miner management particularly in nursery pluck and destroy the affected leaves and spray thiamethoxam @ 0.3 g or Imidacloprid @ 0.5 ml or Quinalphos @ 2 ml or dimethoate @ 2 ml/lit water. Second spray with any of the above insecticides should be given for better result after 15 days. If there

Horticulture (Stage)	Horticulture Specific Advisory
	is an incidence of Phytophthora (gummosis) on trunk of tree, scrap out the gum oozing portion, wash it with potassium permanganate solution and apply fosetyl Al or mefenoxam MZ paste.
CHILLI	• Marketable fruits should be harvested and sold, keeping in mind the rainfall forecast. • Due to alternative low and high temperature coupled with high humidity, if the powdery mildew disease is noticed on chilli crop, For the management, spraying should be done of Azoxystrobin 23% SC 200-300 ml per 200 liters of water or Flusilazole 40% EC 40-60 ml per 200 liters of water or Hexaconazole 2% SC 1200 ml per 200 liters of water or Kresoxim methyl 44.3% SC 200 ml per 200 liters of water or Tebuconazole 25.9% EC 200-300 ml per 200 liters of water or Azoxystrobin 18.2% w/w + Difenconazole 11.4% w/w SC 200 ml per 200-300 liters of water or Azoxystrobin 11% w/w + Tebuconazole 18.3% w/w SC 240-280 ml per 200 liters of water or Azoxystrobin 12.5% w/w + Tebuconazole 12.5% w/w SC 320 ml per 150-200 liters of water or Carbendazim 25% + Flusilazole 12.5% w/w % SE 400 ml per 200 liters of water or Chlorothalonil 40% W/W + Difenoconazole 4% W/W SC 400 ml per 200 liters of water or Fluopyram 17.7 W/W + Tebuconazole 17.7 % W/W SC 200 ml per 200 liters of water or Fluxapyroxad 250 g/I + Pyraclostrobin 250 g/I SC 80-100 ml per 200 liters of water or Picoxystrobin 6.78 % + Tricyclazole 20.33 % W/W SC 400 ml per 200 liters of water or Prochloraz 24.4 % + Tebuconazole 12.1 % W/W EW 400 ml per 200 liters of water or Tebuconazole 6.7 % + Captan 26.9 % W/W SC 400 ml per 200 liters of water.
TOMATO	• Marketable fruits should be harvested and sold, keeping in mind the rainfall forecast. • For the management of Alternaria blight, a fungal disease in tomato crops, spray Metiram 70 WG 800 grams per acre mixed with 200 to 280 liters of water.

Live Stock Specific Advisory:

Live Stock	Live Stock Specific Advisory
COW	• Keep cattle inside the sheds during night and provide dry bedding to protect them from cold. Increase protein level and minerals in the feed concentrate to keep the animals healthy to cope up with the cold condition. Give animals' mineral mixture along with salt regularly and also wheat grains, jaggery etc. @ 10%-20% in the daily ration during winter season to meet the energy requirement of the animals. In Poultry, keep the chicks warm by providing artificial light in the poultry sheds.
BUFFALO	• To protect livestock from cold weather, keep the animals indoor during night hours. Provide suitable bedding like paddy straw, wheat straw, saw dust etc. of 4-6-inch thickness to protect the animals from cold. The floor of the animal shed should be kept clean and dry. Provide clean and potable drinking water to animals round the clock. Clean the water trough (once in a week) regularly in livestock. Provide mineral mixture @ 30-40 g/day to cattle for improving the milk production and reproduction efficiency.
GOAT	• Vaccinate the goat against FMD, HS, PPR and enterotoxaemia. Offer clean and cold water (stored in earthen pot) to the animals.

Fishieries Specific Advisory:

Fishieries	Fishieries Specific Advisory
FRESH WATER	• As feed intake decreases with decrease in temperature, it is essential to reduce the feeding rate by 50-75 % depending on the temperature. During winter the surface water of the pond is colder than bottom layer where, fish prefer to spend more time. Hence fish farmer may keep the water depth up to

Fishieries	Fishieries Specific Advisory
	6 feet. The farmers are advised to aerate their ponds either by adding fresh water or by using aerators, especially during early hours of the day.

Others (Soil / Land Preparation) Specific Advisory:

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GENERAL ADVICE	• Nursery brinjal, tomato, cauliflower and cauliflower seedlings should be planted in the field at the age of 4 to 6 weeks. Fenugreek, spinach, cilantro, radish and carrot should be planted in stages.