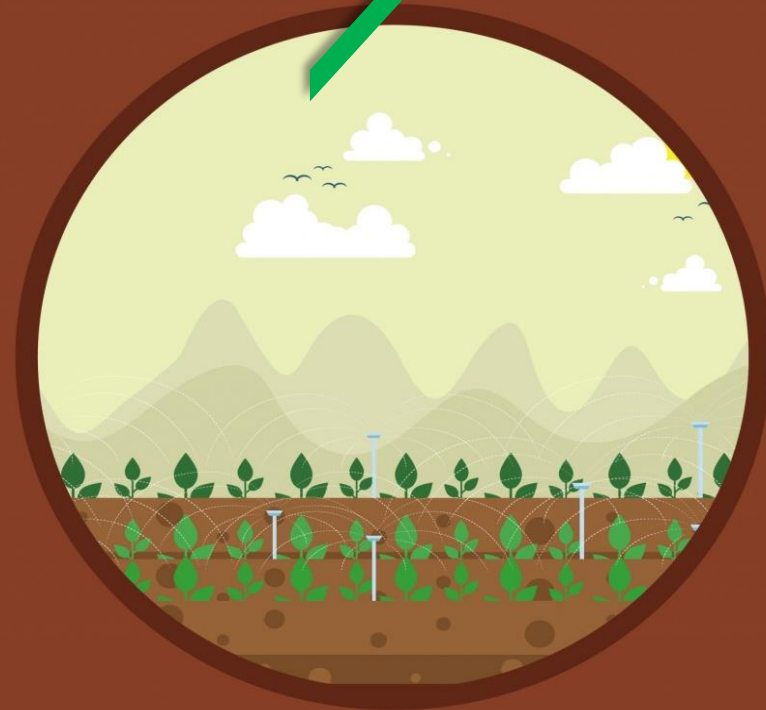




# Agro-Advisory for the State of Maharashtra

January 08-21, 2021



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# Agro-Advisory for the State of Maharashtra for 08-21 January, 2021

Advisory No. NIASM/MH/20-19

Date: January 07, 2020

## 1. Weather Forecast Summary for 08-21 January, 2021 (As per IMD, New Delhi)

- There may be rainfall varying from 1-5 mm/day, remaining above normal in most parts of the state.
- Maximum temperature may vary between 26-30 °C, remaining up to 3 °C below normal in most parts of the state.
- Minimum temperature may vary between 11-16 °C, remaining up to 3 °C below normal in most parts of the state, except in central part of madhya Maharashtra, where it may remain up to 2 °C above normal.

## 2. Agro-advisory for the period 08-21 January, 2021

### 2.1. Crop Management

- Hoeing and weeding should be done in all the *rabi* sown crops.
- Irrigation should be given at critical crop development stages for better yield.
- When berry attains 6-8 mm diameter, maintain 80-90 berries per bunch by manual thinning in table purpose **grape**.
- In **sweet orange** and **acid lime** start watering @ 17-20 L per plant per day for *ambia bahar*; prune the trees for skirting, opening and hygiene purpose
- In dragon **fruit orchard**, perform heavy pruning operations for canopy management this should be followed by spray of Bordeaux mixture 1%.
- In **mango**, start irrigation after 50% fruit set - spray Naphthalene acetic acid (NAA 4.5%) formulation @ 2ml in 4.5 L water, at pea size fruit stage to avoid early fruit drop.
- Orchards of **mango, guava, grapes** and **citrus** should be kept free of weeds, pruned and inter cultural operations should be completed.

### 2.2. Managing Atmospheric Stresses

- To protect **vineyards** from cold, cover the sides up to trellises height to block wind breeze.

### 2.3. Managing Soil Stresses

- Practice mulching in orchards to keep the bunds/ basins moistened, to reduce the salinity build up at root zone and to increase soil temperature for better root growth.
- Apply FYM 25 kg, N 500 g and 1 kg in each of P and K per bearing tree/year in mango orchards.
- Apply 10 tons of compost at the time of field preparation for sowing vegetables such as chili, capsicum etc. and basal dose of N: P: K @ 30:80:80 /ha should be applied at the time of sowing.
- Apply 10 kg urea ha<sup>-1</sup> in spinach and fenugreek with irrigation after first cutting to improve regrowth of these crops.
- After harvesting of sugarcane avoid trash-burning, instead use suitable bio decomposers for converting trash into compost rapidly.

- Start field preparation for sugarcane planting in the field. Apply 12 t ha<sup>-1</sup> of well decomposed FYM or 20 t ha<sup>-1</sup> of compost or 35 t ha<sup>-1</sup> of press mud in the field and then plough the soil for proper mixing. If soil is deficient in sulphur and sodic in nature apply 500 kg of gypsum ha<sup>-1</sup> at the time of ploughing.

## 2.4. Managing Biotic Stresses

- **Fall Armyworm** (FAW) in maize: Erect 8 pheromone traps/acre. Spray the crop with Azadirachtin at weekly interval at 3 ml L<sup>-1</sup> of water. Under severe condition spray the crop with Emamectin benzoate at 0.2 g L<sup>-1</sup> or Spinetoram 11.7% SC 2 ml L<sup>-1</sup> of water.
- In mango during flowering, to control **hopper and aphid** infestation spray Deltamethrin 2.8 EC 0.5 ml L<sup>-1</sup> water and for powdery mildew spray Hexaconazole 5EC @ 1.0 ml L<sup>-1</sup>.
- To avoid **blight** on young mango leaves, precautionary spray of Carbendazim (12%) + Mancozeb (63%) @ 1 g L<sup>-1</sup> should be given.
- Spray Hexaconazole (5EC @ 1ml L<sup>-1</sup>) + Profenophos (1 ml L<sup>-1</sup>) for management of **blight and thrips** in onion and garlic.
- To control **aphid** in safflower spray the crop with Dimethoate 30 EC @ 2 ml L<sup>-1</sup> of water.
- To control **pod borer** in pigeon pea and chick pea: set up heli lure and Spodo lure pheromone traps at 8 traps/acre. Spray the crop with Flubendiamide 480 SC at 0.5 ml L<sup>-1</sup> of water.

## 2.5. Managing stresses in Animals

### 2.5.1. Livestock

- To protect animals from cold during the night hours, keep the animals in a protected areas.
- Feed animals with sufficient quantity of dry fodder to maintain the milk production and body heat of the dairy animals.
- Keep the floor of the animal shed clean and dry.
- The sidewalls of the animal shed need to be half covered to protect the animals from cold winds.
- To provide warmth to the animals during night in the shed switch on one electric bulb (60-100 watts).
- To protect the new born calves from cold, provide straw/hay bedding to young calves, keep the bedding material dry and change it regularly.
- Provide mineral mixture 30-40 g/day to cattle for improving the production and reproduction efficiency.
- Haemorrhagic Septicaemia (HS) is most likely to occur in Ahmednagar district, which is having high risk and Nashik districts are having very high risk.
- There is very high risk of Peste des Petits Ruminants (PPR) in seven districts of Maharashtra; Ahmednagar, Thane, Beed, Jalgaon, Nagpur, Nashik and Pune districts. Vaccination for Haemorrhagic Septicaemia and Peste des Petits Ruminants (animals above 3 month of age) may be done in consultation with the local veterinarians and as decided by state animal husbandry authorities.
- There is very high risk of Sheep and Goat pox in Ahmednagar district and Black quarter (BQ) in Ahmednagar and Nagpur districts. Vaccination may be done in consultation with the local veterinarians.

## 2.5.2. Fisheries

- During winter season, the temperature of water at surface is cooler than that at the bottom and fish prefers bottom layer, hence it is recommended to maintain the water level up to 6-7 feet.
- During winter season, the length of the day and intensity of the light decreases, the dissolved oxygen (DO) depletes due to reduced photosynthetic activity, hence it is recommended to maintain DO by adding fresh water or by using aerators.
- Generally, in colder season feed intake of the fish is reduced due to reduced temperature and the digestive systems of the fish shrinks, hence it is recommended that feeding of the fish should be reduced by 50-75 % and even can be stopped in case of severe cold.
- Feed fish with low protein diet in cool season.
- Farmers are suggested not to use organic manure viz. cow dung, poultry droppings, and pig dung in the pond.
- During winter, the chance of microbial infection are more, hence recommended to treat pond water with potassium permanganate @ 2.5-5 kg ha<sup>-1</sup> or limestone @ 125-250 kg ha<sup>-1</sup> and salt @ 250 kg ha<sup>-1</sup>.

## 3. COVID 19 - Precautionary measures for agricultural activities

### 3.1. General advisory as per Ministry of Agriculture, Govt. of India

- As with passing day more and more relaxation has been provided from Government side, more care needs to be taken particularly social distancing and avoiding contacts with outsiders with unknown history or persons migrated from red zone.
- In manual field operations of harvesting/picking, accomplish the operation in 4-5 feet spaced strips assigning one strip to one person.
- Stagger the field operations wherever possible and avoid engaging more number of persons on the same day.
- Prefer mechanized operations over the manual wherever feasible.
- All machines should be sanitized at the entry point and at regular intervals.
- All transport vehicles, gunny bags or other packaging material should be sanitized.

### 3.2. Livestock and Poultry

- Wash hands with soap and water before and after milking of lactating animals and clean the utensils thoroughly.
- Don't allow visitors to enter animal premises and use mask and maintain social distancing while distribution/sell of milk.
- Use of hand sanitizer or washing hands frequently need to be practiced routinely while carrying out various day to day operations.
- All the bio-security measures need to be followed strictly in the poultry farms.

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