

ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

Agro-Advisory to farmers under prevailing COVID-19 situation for the month of April, 2021

Maintenance of Personal Health & Hygiene

- Social distancing of at least 2 meter to be maintained among the farm workers during all agricultural operations.
- Always wear mask during farm operations. Chunnis, gamchas, towels or other fine clothes with three folds can be used as mask to cover nose and mouth. The masks once wore may be cleaned and sanitized for next wear.
- All farm equipments and accessories used for harvesting, threshing and other activities to be sanitized by keeping in 3% bleaching powder solution for 30 minutes before, after and during farm operations.
- Maintenance of personal hygiene and frequent washing of hands up to elbow, feet and face with soap is advisable during every farm operations like harvesting, threshing, etc. and eating.
- Do not touch eyes, mouth and nose with dirty hands.
- Immediately take a bath with soap after reaching home before meeting with family members.
- Restrict your movement as much possible and try to stay home.
- National Agriculture Market (e-NAM) Platform can be used for marketing agricultural produce along with mandis and local markets.
- Download 'Aarogyasetu mobile app' for essential health services / information.
- During summer, farmers should wear gamuchha or pagadi or turban on their head and should take sufficient drinking water and umbrella along with them to avoid sunstroke casualty.

Water Management advisory

- Follow weather forecasting of IMD for all the districts of Odisha from TV, radio and newspapers during this month and act accordingly.

Irrigation Infrastructure development and maintenance

- Immediately repair the damages in various soil water conservation structures to store water before arrival of monsoon.
- Desilt drainage channels to maintain its carrying and drainage capacity.
- Desiltation of the ponds or other water bodies should be carried out for enhancing their storage capacity.
- WUAs are advised to prepare the irrigation schedule for *summer* crops based on the cropping pattern and water requirement of the crops grown in the command area in

consultation with the farmers to deliver water equally to head, medium and tail region and to monitor the canal water delivery schedule as prepared.

Field management

- Utilize paddy straw for mulching of crops during *summer* season. Paddy straw will help to conserve moisture, weed control and soil temperature control.
- Avoid burning paddy straw/farm wastes as it deteriorates soil health by reducing soil moisture, soil organic carbon, and evolves green-house-gases.
- Avoid using raw urban wastewater for irrigating *summer* crops during dry spell. If it is the only water source, then do not use directly from wastewater channels or source. Allow to settle for at least 48 hours after using bleaching powder at the rate of 4-5 gram per 1000 litre water.
- Collect farm wastes and paddy straw and leftover fodder after feeding animals for composting/vermicomposting.
- Deep summer ploughing should be done to expose the rhizomes of perennial weeds and microbes to sunlight for their destruction.

Crop management

Summer rice

- If the crop is at primordial initiation stage, top dress the required N fertilizer at saturated soil condition. Allow shallow depth of water (2 to 3 cm) at 2 days after fertilizer topdressing.
- In case of bacterial blight initiation, stop field to field irrigation to avoid disease spread. Also, application of K fertilizers and avoidance of N fertilizer reduces the disease spread.
- If the crop is at flowering stage, shallow depth of water (2 to 5 cm) must be maintained. The crop growth stage is most susceptible to deficit water stress.
- It is high time for surveillance of Brown Plant Hopper (BPH) incidence. Regularly monitor the field for pest population. As a preventive measure, the water level in field may be fluctuated from 0 to 5 cm to deter the pest build up.

Water management in non paddy crops

Sunflower

- Light irrigation is recommended to sunflower crop during grain filling stage in a calm and windless evening to prevent lodging of the crop.

Wheat

- Farmers should not wait until dead ripe of wheat for harvest. Crop should be harvested with 20-30% of grain moisture content and then dried before threshing.

Maize / Sweet Corn

- In summer maize/ sweet corn should be irrigated frequently depending on weather condition. Tasselling to silking stage should not be kept water stressed.

Summer pearl millet

- Pearl millet should be irrigated during earhead emergence and grain filling stage.

Horticultural crop management

- For more fruit retention in mango crop and better fruit development with quality, farmers are advised to spray 0.5% borax, 0.5% sulphate of potash and 0.5% zinc sulphate
- To avoid incidence of mango fruit borer farmers are advised to spray with Dimethoate @ 2.0 ml/litre of water at marble stage(30-40 days after fruit set) of fruit and repeat a spray after 15 days if needed.
- Apply recommended dose of fertiliser in perennial fruit orchard (mango, guava, sapota, custard apple, coconut) in the month of April and mulching should be done in the fruit tree basin with dry leaves/ paddy straw.
- For establishment of new fruit orchard field layout and pit digging should be started in this month of April so that soil solarisation helps to kill harmful micro-organism and weeds from soil.

Livestock and Aquaculture Management

- No or minimal water exchange should be followed in carp polyculture / low-density shrimp monoculture.
- Periodic application of liming material helps in maintaining water quality.
- Preferably avoid over-feeding, over-fertilization and over-medication in aquaculture.
- Keeping consumer demand during COVID-19 pandemic, phased harvesting of fish involving minimal work force is recommended.
- Prevent the animals from entering the agricultural fields, where pesticides have been sprayed.
- Control the vectors like mosquitoes, flies, ticks and mites in the animal sheds by using mosquito nets, cleaning the sheds, application of lime on floor.
- Provide ample quantity of clean and cool drinking water to animals during the day time.
- Tethered animals (animals tied with rope for grazing) should be tied under shade during the day and free-ranging animals should be allowed to graze during the cool hours of morning and afternoon.
- Vaccinate your animals for Haemorrhagic Septisemia and Foot and Mouth Disease.