ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

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

Maintenance of Personal Health & Hygiene

- Social distancing of at least 1 to 2 metre 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 winter farmers should take sufficient precautionary measures to avoid infection of cold and cough.

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 required for post-monsoon months.
- Divert excess canal water through the approach channel and/ or inlet-pipe to ponds/tanks/water harvesting structures
- Desilt drainage channels to maintain its carrying and drainage capacity.
- WUAs are advised to prepare the irrigation schedule for *rabi* 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

- Utilise paddy straw for mulching of crops during rabi season in rainfed areas. 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 rabi 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.

Crop management

Rice

- Incase of late sown *boro/dalua* nursery, cold injury is a problem. Irrigate the nursery in the evening and drain out the cold water in the morning, wherever feasible.
- Timely transplanting of Boro rice by mid-January is useful in avoiding heat stress at flowering and grain filling stage.
- Standing water after transplanting of boro rice is useful in managing weeds, early vigour of rice plant and avoidance of blast incidence.

Wheat

- Second and third irrigation to wheat crop must be given at tillering stage (40-45 days after sowing) and late jointing stage (70-75 days after sowing).

Moong

- Moong seed should be treated with Thiram or Bavistin @ 2.5 g/kg of seeds followed by rhizobium culture for enhancing yield.
- For getting higher yield moong crop should be given light irrigation at an interval of 15 days.

Sweet Corn

- To increase the profit, the farmers should grow sweet corn variety Sugar-75 with a row spacing 90 cm and plant spacing of 30 cm.

Horticultural crop management

- Due to cold weather prevalence, emergence of inflorescence in mango is late in Odisha condition, so farmers are advised to spray potassium nitrate (4%) during end of January

to initiate flowering. Spay should be done either in the early morning or late afternoon to avoid leaf burn.

- In order to control mango hoppers during January imidacloprid @ 0.3 ml per liter of water should be sprayed at early stages of panicle formation, if hopper population persists and found to be is more than 5 per panicle, thiamethoxam @ 0.2 g per liter of water or acephate @ 1.5 g per liter of water should be sprayed after fruit set.
- Dimethoate should be sprayed @ 0.06 % at bud burst to avoid attack of inflorescence midge in mango during January.
- It is ideal time to raise seedlings for summer season tomato, brinjal, cucumber and cowpea.
- Apply recommended dose of fertiliser and manure in perennial fruit trees like mango, guava, coconut, custard apple and ber.

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, tics and mites in the animal sheds by using mosquito nets, cleaning the sheds, application of lime on floor.
- Dip/ spray the animals with 50 ppm (mg/Litre) solution of cypermethrin /deltamethrin to prevent from tics, mites and other arthropod vectors.
- Give de-worming medicines to the animals based on faecal sample examination. Allow the animals to graze after the dew disappears from the grass. Prevent the animals from drinking water from ditches/ ponds.