ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

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

Boro rice/Dalua rice

- Rice transplanting should be completed by using 4 to 5 week seedlings as soon as possible. A shallow submergence of 2 to 5 cm is desired for easy crop establishment and weed management.
- For already transplanted crop, standing water of 5 cm for initial 15 to 20 days helps in easy root proliferation, crop growth and weed management.
- At tillering stage, alternate wetting and drying should be practiced using perforated pipe inserted in soil for water saving.

Wet direct sown rice

- Maintain a thin film of water for proper establishment and early growth of seedlings.
- With increase in seedling height, a shallow submergence for 5 to 10 days is desired for fast establishment, crop health and weed management.

Wheat

- Third and fourth irrigation to wheat crop should be applied at 70-75 DAS(late jointing stage) and 90-95 DAS(Days after sowing), respectively.

Gram

- Do not give heavy irrigation to gram crop and avoid irrigation during flowering stage for getting higher yield.

Maize / Sweet Corn

- In maize/ sweet corn crop, tasselling to silking stage should not be kept water stressed.

Horticultural crop management

- For control of Blossom blight diseases of mango spray mixed composition of Carbendazim 12 + Mancozeb 63 WP @ 2 g per litre of water on appearance of first symptoms.
- Farmers are advised to apply planofix 2ml/4lit of water at pea stage in mango crop to avoid the flower and fruit dropping at the beginning.
- Farmers are advised to do foliar spray of Dimethoate @ 2 ml per litre or Bifenthrin @ 0.7 ml / litre of water to control inflorescence midge of mango along with sticker (1 ml/l of water).
- It is ideal time to raise seedlings for summer annuals like cosmos, zinnia, gallardia mix, gomperiana and summer marigold. Ornamental sunflower seeds should be sown during this time.
- At the end of February, seedlings of summer season vegetables like tomato, brinjal, should be transplanted to the main field and cuttings of pointed gourd & spine gourd should be planted. Seeds of cucumber and cowpea should be sown.

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.