ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

Agro-Advisory to farmers under prevailing COVID-19 situation for the month of November, 2020

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.
- Only one person is allowed on two wheelers. Only one person except the driver is allowed in four wheelers.
- 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 during this month.

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

- Under dry-spell conditions, if irrigation water is available from auxiliary water storage ponds in canal command areas then apply a shallow depth of water i.e. about 2-3 cm to maintain the available soil moisture during the flowering/reproductive stage of rice crop.
- In late maturing paddy, channels (kandi) should be prepared taking 8-10 rows together for penetration of sunlight to reduce BPH infestation.
- Provide drainage channels in the rice field to drain out water from the field during ripening stage.
- Make necessary drainage arrangements through channels to drain out excess rainwater from the non - paddy crop fields to water storage ponds for raising of early rabi crops.
- Sow/transplant *rabi* crops utilizing the residual soil moisture in rice field after harvesting of paddy.
- 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.

Crop management

Rice

- Harvest the crops, which have reached maturity soon to avoid adverse effects of cyclonic rainfall if any. After threshing, paddy grains need to be sun-dried to 14% moisture for grain purpose while to 12% moisture for seed purpose.
- Store paddy with 14 % moisture after sun drying in a covered place and collect farm wastes and remaining paddy straw after feeding animals for composting/ vermicomposting.

Mustard

- Apply sulphur @ 20 and 40 kg/ha to rainfed and irrigated mustard, respectively in addition to NPK doses for increasing seed yield and oil content.
- Apply pre-emergence herbicides (pendimethalin at 0.50-0.75 kg/ha or oxadiargyl 150 g/ha or isoproturon 150 g/ha) at 2-3 days after sowing. The volume of water required for spraying of pre-emergence herbicide is 500 L/ha. Perform mechanical weeding (hoeing) as an integrated weed management approach, depending upon the weed diversity and degree of its infestation. Remove weeds before seed formation to avoid seed bank pressure for next season.

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.