

# ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

## Agro-Advisory to farmers for the month of March, 2023

### Water Management advisory

- Follow the advisory of IMD with respect to occurrence of rain as well as other weather parameters through TV/Radio/Newspaper 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.

### 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 rabi and *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.

### Crop management

#### Boro rice/Dalua rice

- For the late transplanted crop, maintain saturated soil condition before herbicide application
- For the early transplanted crop, top-dress urea at 80 kg/ha at 3 week stage with standing water level of about 1 cm. Immediately after top-dressing, operate conoweeder so that fertilizer as well as young weed seedlings are incorporated well into the soil. Allow ponded water level of 3 to 5 cm at 2 to 3 days after fertilizer application.

- For wet direct seeded rice, top-dress urea at 50 kg/ha at 3 week stage. Weeder should be operated immediately after urea application for incorporation of fertilizers. Allow ponded water level of 2 to 3 cm after 2 days of fertilizer application.

### **Water management in non paddy crops**

#### **Greengram and blackgram**

- After threshing, the seeds of blackgram and green gram should be sundried well before storage in the bins.

#### **Sunflower**

- In sunflower crop, irrigation must be given during flowering and grain filling stage of the crop

#### **Wheat**

- In wheat, irrigation must be given at flowering and milk stage of the crop.

#### **Maize / Sweet Corn**

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

#### **Finger Millet**

- Maintain sufficient soil moisture at primordial initiation, flowering and grain filling stages of summer finger millet to ensure optimum grain and straw yield.
- In case of infestation blast and leaf spot diseases in summer finger millet spray fungicide Edifenphos @ 0.1% or Carbendazim @ 0.2% or Mancozeb @ 0.2% in 500 lit of water per hectare.

### **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, summer marigold and ornamental sunflower.
- In the first week of March, 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.
- 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.