

## ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

### Agro-Advisory to farmers under prevailing COVID-19 situation for the month of August, 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.
- Use National Agriculture Market (e-NAM) Platform for marketing agricultural produce.
- Download ‘**Aarogyasetu** mobile app’ for essential health services / information.

#### Water Management advisory

- Follow IMD advisory for detail weather condition and act accordingly.

#### Irrigation Infrastructure development and maintenance

- Harvest rainwater in-situ and divert runoff or excess canal water through the approach channel and/or inlet-pipe to ponds/tanks/water harvesting structures.
- Clean and repair the emergency spillways of percolation ponds, water harvesting structures and grassed waterways for safe disposal of excess runoff water.
- Desilt drainage channels to maintain its carrying and drainage capacity.

- WUAs are advised to prepare the canal water delivery schedule 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.

### **Land preparation**

- Repair the damages and seal the field bunds and contour bunds, and reshape it with suitable height to conserve rainwater in the field required for puddling
- Before transplanting of paddy, do planking or laddering in puddled fields for uniform spread of water.
- Apply 35 kg DAP, 27 kg Potash and 8 kg Urea per acre during last puddling. For sandy soil apply 35 kg DAP, 15 kg Potash and 8 kg Urea per acre during last puddling. Apply zinc sulphate (21%) @ 10kg/acre in zinc deficient soil as mentioned in Soil Health Card.
- Provide drainage channels in the rice field under SRI method of cultivation to maintain water level in the field.
- Make necessary drainage arrangements through channels to drain out excess rainwater from the non - paddy crop fields to water storage ponds.
- For flood washed rice fields, raise rice nursery in rooftops or in homestead gardens using polythene sheet and nutrient solutions.
- For waterlogging susceptible crops, construct ridges around the crop base and furrows in between for better crop growth and yield during rainy season.
- Avoid using urban wastewater for land preparation. 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.

### **Crop management**

#### *Rice*

- Complete transplanting of rice seedlings by first fortnight of August.
- Transplant aged and taller seedlings in flood prone areas.
- Spray pre-emergence herbicide like Pretilachlor (Rifit) @ 1.5 litres/ha when rice crop is at 1-3 days after transplanting (DAT).
- In direct-seeded rice grown in deep and semi-deep areas do beushening keeping 5-10 cm standing water in the field and then apply urea @ 40-45 kg/ha as top dressing. If fertilizer has not been applied during sowing, apply 35 kg of DAP, 15 kg of MOP and 15 kg of Urea per acre after beushening. Do not go for beushening if the crop is more than 45 days old.
- In case of delayed transplanting, adopt higher rate of seedlings i.e. 5-6 seedlings per hill to facilitate desired number of effective tillers per unit area at the time of harvest.
- 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 maximum tillering stage of rice crop.

### ***Horticultural Crops***

- Complete plantation of fruit, vegetable crops and agro-forestry tree species in this month.
- **Mango:** Plant healthy grafted seedlings of suitable varieties viz., Amrapalli, Dusseheri, Chousa, Baganpalli, Totapuri, Bombay green, Suvarnarekha, Himsagar, etc. in pits with a spacing of 10m X 10m. The pit size is 1m X 1m X 1m. Apply two basket compost, 80 g N, 100 g P<sub>2</sub>O<sub>5</sub> and 60 g K<sub>2</sub>O fertilizer at the time of planting.
- Drain excess rainwater from mango orchards and apply organic manure @ 50 kg per tree in the tree basin after removing weeds from basin.
- Spray thiamethoxam @ 0.5 ml/litre of water in second week of August and after 15 days of the first spray, apply carbosulfan @ 1.5-2.0 ml/litre of water to control shoot gall psylla infestation in mango plants. Sticker should be added during the spray. Spray carbosulfan @ 1.5-2.0 ml/litre of water to control mango leaf webber.
- **Guava:** Apply Neem cake (250-500 g/ plant), *T. harzianum* or *T. viride* (25-50 g/plant), in basin of root-knot infected guava trees. Don't grow root-knot nematode susceptible crops (brinjal, tomato, chilli, sugar beet, tobacco, watermelon, beans, potato, pumpkin, basil, rose, garlic, cabbage, maize, groundnut, onion, etc.) in guava orchards during this period.
- **Coconut:** Clean the basin area and remove weeds, then apply 1 kg Urea, 2 kg SSP and 2 kg MOP along with 5 kg Neem cake per plant by making a ring around the plant. Apply 200 g micronutrient mixture in two splits along with borax @ 50g per coconut tree to avoid bottom shedding during August.

### **Livestock and Aquaculture Management**

- Release fish fries and fish fingerlings towards the end of this month to the pond.
- Administer deworming medicines to your domestic animals based on faecal sample examination. If faecal sample examination is not possible, then give two doses of broadspectrum anthelmintic like Albendazole+Ivermectin combination drug at 7-10 days interval.
- Provide sufficient clean drinking water before letting the animals free for grazing and prevent the animals from drinking muddy water in ditches to reduce chance of contamination of diseases and endoparasites.