

ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

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

- Immediately repair the damages caused due to flood in various soil water conservation structures to store water required for post-monsoon months.
- 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.

- High time to arrest the monsoon rain through different recharge structures like percolation pond, recharge shaft, check dams etc. to recharge groundwater.
- Desilt drainage channels to maintain its carrying and drainage capacity.
- WUAs are advised to monitor the canal water delivery schedule as prepared 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.

Field management

- Repair the damages and seal the field bunds and contour bunds, and reshape it with suitable height to conserve rainwater and nutrients in the field required for paddy.
- 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.
- Provide drainage channels in the rice field under SRI method of cultivation to maintain water level in the field.
- In SRI or line transplanted rice field after irrigation, use cono-weeder / mechanical weeder in between rows three times, i.e. 10 days after transplanting (DAT), 20 DAT and 30 DAT to remove weeds and better root growth.
- Make necessary drainage arrangements through channels to drain out excess rainwater from the non - paddy crop fields to water storage ponds.
- For waterlogging susceptible crops, construct ridges around the crop base and furrows in between for better crop growth and yield during rainy season.

Crop management

Rice

- To control weeds in paddy field apply pre-emergence herbicide pretilachlor 6.0% + pyrazosulfuron ethyl 0.15% at 3-5 days after transplanting. For uniform distribution of granular herbicide, it should be mixed with sufficient amount of sand.
- Places, where paddy was damaged by flash flood, gap filling should be done immediately using aged nursery or split tillers as per the availability or transplant seedlings of short duration rice varieties like Heera.
- 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.
- On the basis of soil health card distributed in zinc deficient soil, spray Zn-EDTA @ 0.5 g/ litre of water at 30 and 45 days after transplanting of rice.
- To manage diverse weed flora in transplanted rice, apply cyhalofop 1% + penoxsulam 5% at 2-3 leaf stage of weed (15-20 days after transplanting) as post-emergence. The volume of water required for spraying of post-emergence herbicide is 375 litre/ha.
- Spray Chlorimuronethyl + Metsulfuron methyl to control the sedge and broadleaf weeds.

Horticultural Crops

1. Mango:

- Drain excess rainwater from mango orchards and apply organic manure @ 50 -100 kg per tree in the tree basin after removing weeds from basin.
 - Control weeds in the mango orchards preferably using rotavator or cultivator for weed control. Deep ploughing should be avoided for minimum root damages.
 - In bearing orchards, apply 1000g nitrogen, 500g phosphorus and 1000 g potash per tree in 30 cm wide and 10-15 cm deep circular trench made at 2 m distance from the tree trunk and maintain moisture.
 - Apply 200 g Zinc sulphate and 100g borax per tree during the month of September-October.
 - Spray with carbosulfan @ 1.5-2.0 ml/litre of water for control of mango leaf webber.
2. Utilizing the available moisture sow capsicum, cabbage, cauliflower, knol-khol during 1st week of September for quality seedlings to be transplanted in the 1st week of October in the main field.
 3. Sow flower seeds of marigold, bulbs of tuberose and gladiolus, and transplant cutting of chrysanthemum at the end of this month.
 4. Sow seeds of both vine type and bush type country bean during this period.

Livestock and Aquaculture Management

- Release fish fries and fish fingerlings 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.