

## Agromet Advisory Bulletin for Bandarban District

		
	 <b>Agro-Meteorological Information Systems Development Project</b> <b>Component-C of BWCSR</b> <b>Department of Agricultural Extension</b>	
<b>Date: 12th August 2020</b> <b>Bulletin No. 171</b>	<b>Agromet Advisory Bulletin for Bandarban District (12th August to 16th August 2020)</b>	

### Weather Conditions for last four days (08th August to 11th August 2020)

Weather Parameters	08.08.20	09.08.20	10.08.20	11.08.20	Range
<b>Rainfall (mm)</b>	0.0	1.0	2.0	39.0	0.0-39.0 (42.0)
<b>Maximum Temperature (° C)</b>	32.8	33.0	32.5	30.5	30.5-33.0
<b>Minimum Temperature (° C)</b>	26.0	27.0	27.0	27.0	26.0-27.0
<b>Relative Humidity (%)</b>	73.0-90.0	69.0-93.0	73.0-93.0	87.0-98.0	69-98
<b>Wind Speed (km/h)</b>	11.1	13.0	14.8	13.0	11.1-14.8
<b>Cloud Amount (Okta)</b>	7	6	6	7	6-7
<b>Wind Direction</b>	South/South-westerly	South/South-westerly	South/South-westerly	South/South-westerly	South/South-westerly

### Weather forecast as per Bangladesh Meteorological Department for the next 5 days (12th August to 16th August 2020)

Weather Parameters	Range
<b>Rainfall (mm)</b>	0.0-34.1 (63.2)
<b>Maximum Temperature (° C)</b>	29.1-30.2
<b>Minimum Temperature (° C)</b>	24.2-25.0
<b>Relative Humidity (%)</b>	86.0-97.0
<b>Wind Speed (Km/h)</b>	3.6-5.4
<b>Cloud status</b>	Partly Cloudy Sky
<b>Wind Direction</b>	South/South-westerly

## **Agromet Advisories**

### **Special Agromet Advisories for CORONA virus (COVID-19) transmission in Bangladesh**

Farmers and all other farm managements are advised to maintain the social distancing (at least 3 meters), cover their faces with masks and follow other guidelines of Government of Bangladesh to avoid infection and social transmission of CORONA virus (COVID-19).

### **Salient Weather Conditions & Forecast**

The axis of monsoon trough runs through Rajasthan, Haryana, Uttar Pradesh, Bihar, West Bengal to Assam across central part of Bangladesh. One of its associated troughs extends upto North Bay. Monsoon is fairly active over Bangladesh and strong over North Bay. As per the weather forecast received from the Bangladesh Meteorological Department (BMD) during next 24 hours, light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over the district with moderately heavy to very heavy falls at places over the district. Day and night temperature may remain nearly unchanged over the district. As per the outlook issued by BMD for next 72 hours, rain/thunder showers activity may increase at the end period. During last four days, trace to light rainfall occurred and as per the quantitative medium range weather forecast, trace to moderate heavy rainfall is likely during next five days. Detail Agromet advisories are given below.

### **Aus Paddy**

#### **Panicle Initiation to Flowering stages**

- Maintain 5-7 cm water level from panicle initiation stage.
- To control infestation of leaf blast & leaf spot in Aus rice, spray Carbendazim @2g/litre of water.
- Due to high humidity (warm and humid weather) possibility of pest and disease build up is more in crop. Take prophylactic measures accordingly.
- To control of insects like stem borer gall midge and white & brown hopper apply Corbofuron 3 G@33 kg or phorat 10G @ 10 kg per /hectare and for cut worm Clorpyrifos or Daiclorovash.
- Since cloudy weather is prevailed, there is a chance of leaf folder attack in Paddy. It can be controlled by using Trichogramma cards.
- To save the rice crop from sheath blight, keep the bunds of the field clean by removing grasses.
- All the plant protection measures should be taken up after the current spell of rainfall.

### **Aman Paddy**

- Cut the tips of leaves before transplanting of seedlings for reducing the population of stem borer as the eggs are laid on that site.
- Farmers should arrange to inundate their paddy fields by repairing of old bunds/ construction of new bunds. This will facilitate easy puddling and transplanting.
- If the rice seedbed is underwater, it is expected to be damaged and advised for preparation seedbed in trays (if possible) in some raised structure. The farmers who had already completed their transplanting are advised to maintain drainage.

- Complete transplanting of rice seedlings at the earliest as sufficient water is there in the field; maintain proper drainage in field/nursery to avoid flooding due to continuous rain.
- Ensure weed free seed bed.
- Due to substantial decrease in sunshine hours with occasional rain there is chance of attack of Yellow stem borer in Aman rice; to manage the attack, spray Carbofuran @10kg per ha.
- Transplanting of 25-30 days old nursery in the main after getting sufficient rainfall.
- Place comparatively high woody plant branch/2.5 decimal of land after immediate seedling transplanting to control insect-pest specially stem borer in environment friendly way.
- Arrange the bunding tightly so that no drainage can take place after light rain or moderate rain
- Transplanting of aman paddy in the main field is going on due to sufficient amount of water present in the field. Thereby, it is recommended that before transplanting the seedling in the main field, farmers are advised to uprooted seedlings are washed and then the root portion is dipped in 0.02% solution of chlorpyrifos (1ml/lit of water) along with 1% urea (10gm/lit of water) for three hours as protective measure against stem borer, gall midge and hopper
- Avoid deep planting for better crop establishment and fill up the gaps within a week. Maintain 5-7 cm standing water up to maximum tillering stage. Keep the rice nursery and field bunds free from weeds either by hand weeding or by application of herbicide. Apply recommended herbicide as per recommendation within 1-3 days of transplanting.
- Apply 1/3rd nitrogen as top dressing 15-20 days after transplanting and after the current spells of heavy rainfall.
- After reduction of rainfall activity mechanical weeding can be started to control the weed at initial stage. For chemical control (only if the sky is clear and no rainfall 7 to 8 hours after application) you can spray Pretilachlor 50% EC @500 gm per acre within 2-5 days after transplanting.
- Due to stagnation of water in the field and high relative humidity Sheath blight - Fungal disease is common. Excess Nitrogen fertilizer application can accelerate this disease. August to October is the high time for this disease attack. Control: 1) Drain out excess water from infected field. 2) Reduce the dose of Nitrogen fertilizer. 3) Bio fungicide like Trichoderma, Pseudomonas Fluorescens is also good. 4) Spray Propiconazol+ Difenoconazole 1ml/liter of water or Carbendazim + Flusilazole 1.5 ml/lit or Carbendazim (Bavistin) 1 gram/liter of water
- Early transplanted rice plants will be remained at maximum tillering stage. In this time, stem borer, rice hispa, leaf roller, green leaf hopper, blust, bacterial blight, leaf blight, ufra, sheath blight and others diseases-pests infestation may found and so there is need to inspect field regularly.
- All the plant protection measure should be taken after the current spell of rainfall.

### **Vegetables**

- Due to continuous heavy rainfall and water stagnation the vegetable crops like Brinjal, pointed gourd, Bottle gourd, Ridge gourd, Chili, etc suffer from rotting. Make proper drainage channels to drain out water. Avoid spraying and application of fertilizer till the clear sky.
- Make arrangement to avoid plant damage (particularly staked creeper) from anticipated gusty winds. Make arrangement to raise new orchard during monsoon season.
- In pumpkin, ridge-gourd, pointed gourd and cucumber, there is a chance of attack of Red-Pumpkin Beetle during current weather condition. To control, apply Dimecron or rogor (1ml per litre of water).

- The prevailing weather conditions are congenial for incidence sucking pests in vegetables. To control, spray Dimethoate @ 2 ml or Acephate @ 1.5 g per litre of water. Undertake nursery sowing of Tomato, Brinjal and Chillies and direct sowing of Gourds, Beans and Bhendi with assured irrigation.
- Weed management should be done in brinjal, tomato, lady finger and cauliflower.
- Need based intercultural operations should be done in tomato, brinjal, okra and other vegetable crops.
- Collect Maskali and winter vegetable seed
- Vegetables like gourd, country bean, eggplant and others vegetables seedling may be raised on small polybag/earthen top/broken plate. 25-30 days aged seedling or 3-5 leaves seedling may be plant in prepared land.
- Foot rot, ants and others diseases and pests infestation may be high in Chili and others vegetables and existing crops act as disease-pest hosts due to flood water. So, inspect the field regularly.
- Cut aged leaves and continue others intercultural operations in vegetables land.
- All the plant protection measure should be taken after the current spell of rainfall.

#### **Horticultural crops**

- Farmers are advised to go for inter cultural operations in mango orchard.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- Plantation of banana crop should be done.
- Intercultural operation should be done in banana orchard.
- Due to deluge with rainy days farmers are advised not to apply fertilizer to the banana plant. Moreover, ensure to harvest the mature banana at proper stage.
- Provide mechanical support to banana, to prevent the crops from lodging due to strong winds.
- Due to monsoon showers, there is a chance of Sigatoka disease in banana. As a precaution, spray Pseudomonas 20g/litre. In case of severe attack, spray 2 ml hexaconazole or 1 ml propiconazole per one litre of water by mixing it with a sticker and spray on both the surface of the leaf.
- Drain out excess water from the banana land, as rainfall is expected. Besides, control Banana beetle, panama and others diseases-pests including continue intercultural operations and also inspect the field regularly
- Besides, to control Banana beetle, panama and others diseases-pests including continue intercultural operations it is advised to inspect the field regularly.
- Attack of Papaya mealy bug on papaya fruit can be controlled by dusting of Chlorpyrifos 1.5% dust or Malathion 5% dust around the healthy plants; also destruct ant colonies with drenching of Chlorpyrifos 20 EC @ 2 ml/litre.

**Jute:**

- Harvesting and retting of jute may be done preferably at pre-flowering stage (120 days after sowing) to get better quality fibre. At present the water temperature in the retting tanks/ nalas may ideal for retting of jute. Early and timely sown capsularis jute may be harvested during this week and kept in the field in standing position for 3-4 days before retting for proper defoliation.
- If there is stagnant water in the jute field and there is no scope to drain out the water within 2-3 days, it is advised for immediate harvest the matured crop and put in water for retting.
- Drying the jute fiber in sunny day by hanging on bamboo rack/house shade/wall

#### **Beetle vine:**

- There is chance of incidences of Phytophthora root rot and chital disease. For Phytophthora root rot apply 1% Bordeaux mixture at the base at 1-month interval. For Chitla apply 0.5% Bordeaux mixture at 15-20 days' interval.
- Maintain free air movement inside the garden.
- Protect the crop from hail and high wind.
- Harvest the beetle vine leaf from old plants
- Also transplant the new beetle vine plant
- All the plant protection measures should be taken up after the current spell of rainfall.
- In this time and under the prevailing weather, foot rot and stem rot diseases affected plants start to die. So, affected plants and its branches have to deposit in particular hole or burning and never deposit beetle vine waste in irrigated water sources like channel /pond. Otherwise, unaffected vine land will be contaminated. In this case, all vine growers collectively have to take this initiative (deposit all vine waste in particular hole away from the vine growing area) and as a result all vine land will be disease free condition.

#### **Livestock**

- Keep the cattle comparatively high area.
- Cattle shelter free from rain water logging
- Do not allow animals to get wet during rainy season. Apply sufficient amount of Calcium Carbonate or bleaching powder to avoid germs. Never let a cow or goat graze in a place where there is standing water. It should be noted that cows or goats should not take paddy in any way at this time. If it takes a lot of paddy and the stomach starts to swell, then feed a spoonful of mustard oil. It will stop the production of gas in the stomach. In addition, blotocil or blotonil should be given in certain doses. If necessary, take the advice of a nearby veterinarian.
- It is very important to provide a particular amount of dewormers for both roundworm and tapeworm to any cattle, goats,
- Schedule vaccination and de-worming (by measuring weight) have to provide for healthy has to provide for healthy (not diseased) cattle. Vaccinate cattle and buffalos against the rainy season diseases. Protect cattle from rain and arrange dry bedding for cattle. Avoid water logging in cattle shed.

- Vaccinate the livestock for Black Quarter and foot and mouth diseases. Sheep/goats must be dewormed for maximum weight gain and good health. There is chance of Raniket, gumbra diseases in poultry; provide antibiotic drugs through water or through feed. Protect the birds from wet weather and wet floor.
- Consented feed has to keep airtight condition and above the ground for avoiding fungal infestation
- Livestock may be affected by foot and mouth disease due to rainy weather. Following measures may be taken up.
- Feed them only dry food
- Keep the shed clean and dry
- If wound found at foot and mouth wash the wound with potassium per manganate solution.
- For control of biting fly, hang the alovera plant in the animal shed.
- Farmers who have not vaccinated their goat against Enterotoxaemia last month should vaccinate the goats strictly this month.
- If any malady symptom is shown in the animal then immediately consult with the veterinary doctor for proper treatments

### **Poultry**

- Never allow chickens or ducks to eat wet or damp feed during this rainy season. It is very important to provide a particular amount of dewormers for both roundworm and tapeworm to poultry at this time.
- Apply lime bleaching powder and copper sulphet solution spray before placing them in farm
- Keep the chicks thin layer of litter
- Follow proper vaccination at proper interval
- Apply dry food and clean tap water for drinking purpose.
- For breathing problem in hen, give multivitamin syrup @ 200 to 250 ml / 50 liters of water for 200 to 300 hens or Enflox vet BC @ 0.5 ml/lit. water for 2 to 3 days.
- Vaccinate cattle and buffalos against the rainy season diseases. Protect cattle from rain and arrange dry bedding for cattle. Avoid water logging in cattle shed.
- Vaccinate the livestock for Black Quarter and foot and mouth diseases. Sheep/goats must be dewormed for maximum weight gain and good health. There is chance of Raniket, gumbra diseases in poultry; provide antibiotic drugs through water or through feed. Protect the birds from wet weather and wet floor.
- Spray water on poultry shade during hot weather condition. Viral ganboro disease infection may be high due to high temperature and humidity. Early cautionary and vaccination are prevented measures.

### **Fishery**

- Arrange fencing the pond dyke with bamboo materials
- Rising the pond specially nursery pond dyke so that protection fish cannot go out from the pond.
- Feed problem may arise while increasing pond water and so has provide necessary feed in pond as recommendation dose.
- In this, time, stocking of 2-3 inches (5-7.5 cm) sized fish fry may be done in mini pond.

- Apply the required quantity of calcium carbonate or lime in the submerged ponds. Check the overflow of water, fishes may drain out with overflowed water, for this Use fishing net in the possible exit points. Don't use excess feed to avoid water pollution.
- Repair damaged dykes of fisheries ponds and take care so that fishes do not escape. Maintain outlet pipe from the pond so that excess water pass away and the water level is maintaining.
- Fish grower framers are advised to collect the healthy fingerlings from the authentic sources as there is enough water in the fish pond.
- Remove the unwanted fishes and predator by repeated netting before leaving the new fingerling in the fish pond.
- Select healthy, diseases free breeds of fishes from authentic sources after consulting with fishery officials. Before releasing, the fingerlings should be treated with Potassium permanganate (@ 3-5%.
- To keep in touch with local fisheries office for more information.