



## Agromet Advisory Bulletin for Bandarban District

		
		
<p><b>Agro-Meteorological Information Systems Development Project</b>  <b>Component-C of BWCSR</b>  <b>Department of Agricultural Extension</b></p>		
<b>Date: 23rd August 2020</b> <b>Bulletin No. 174</b>	<b>Agromet Advisory Bulletin for Bandarban District (23rd August to 27th August 2020)</b>	

### Weather Conditions for last four days (19th August to 22nd August 2020)

Weather Parameters	19.08.20	20.08.20	21.08.20	22.08.20	Range
<b>Rainfall (mm)</b>	6.0	6.0	61.0	71.0	6.0-71.0 (144.0)
<b>Maximum Temperature (° C)</b>	29.2	29.5	32.3	28.5	28.5-32.3
<b>Minimum Temperature (° C)</b>	25.0	24.8	25.1	25.0	24.8-25.1
<b>Relative Humidity (%)</b>	80.0-97.0	85.0-95.0	69.0-99.0	96.0-98.0	69-99
<b>Wind Speed (km/h)</b>	16.7	16.7	14.8	11.1	11.1-16.65
<b>Cloud Amount (Okta)</b>	8	8	7	8	7-8
<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 (23rd August to 27th August 2020)

Weather Parameters	Range
<b>Rainfall (mm)</b>	16.6-54.9 (198.6)
<b>Maximum Temperature (° C)</b>	28.0-29.0
<b>Minimum Temperature (° C)</b>	24.0-24.8
<b>Relative Humidity (%)</b>	88.0-99.0
<b>Wind Speed (Km/h)</b>	2.6-4.0
<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 follow the guidelines of Government of Bangladesh to avoid infection and social transmission of CORONA virus (COVID-19). Precautions and safety measures should be taken up to prevent the Carona virus spread. Simple measures include social distancing, maintaining personal hygiene by washing hands with soap, wearing of face mask, drink hot water, stay at home and cleaning of implements and machinery. Farmers should not work in a group; consult with a doctor in case of any symptom. Please stay at home do not visit the field until it is very necessary.

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

The well-marked low over West Madhya Pradesh of India and adjoining area persists. The axis of monsoon trough runs through Rajasthan, centre of the well-marked low, Bihar, West Bengal to Assam across central part of Bangladesh. One of its associated troughs extends upto North Bay. Monsoon is active over Bangladesh and moderate 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, a low pressure area is likely to form over North Bay. During last four days, light to heavy rainfall occurred and as per the quantitative medium range weather forecast, moderate to heavy rainfall is likely during next five days. Detail Agromet advisories are given below.

### **Aus Paddy**

#### **Panicle Initiation to Hard Dough stages**

- If excess water is there then immediate drain out the excess water by cutting the bund. This will help in good aeration which will reduce the incidence of pest and disease.
- 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.
- 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.
- There is chance of Gandhi bug and Brown plant hopper attack. For Gandhi bug spray Carbaryl 50 WP@2g/liter of water. Avoid excess irrigation in the field otherwise base will be rotten. Where early transplanted paddy found 80% maturity, harvest and transfer it to safe place immediately. Spray Buprofezin 25% SC@106ml/bigha for BPH attack. Maintain proper distance within the farmers during spraying.
- All the plant protection measure should be taken after the current spell of rainfall.

## Aman Paddy

- If excess water is there then immediate drain out the excess water by cutting the bund. This will help in good aeration which will reduce the incidence of pest and disease.
- Complete transplanting of rice seedlings at the earliest
- In case of any kind of damage to hills due to flood/stress or any other reason, fill those gaps by splitting healthy hills of same age.
- 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.
- Insert around 7-8 numbers of bamboo 'T' perches in per bigha paddy field, which will act as a resting place for predatory birds that will devour insect larvae and egg masses.
- Arrange the bunding tightly so that no drainage can take place after light rain or moderate rain
- 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 bund and field weed free either by hand weeding or by application of herbicide. Apply recommended herbicide as per recommendation within 1-3 days of transplanting.
- Taking the advantage of the presence of sufficient amount of soil moisture, apply 1/3rd nitrogen as top dressing 15-20 days after transplanting.
- Don't use urea more than the proper dose otherwise plants become soften due to its cooling effect and plants become more susceptible for disease pest attack
- 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.
- August is very conducive for heavy infestation of rice (which is at tillering stage) with Rice Hispa. Therefore farmers are advised to be ready for tackling the situation.
- Early transplanted rice plants will be remained at maximum tillering stage. In this time, leaf roller, green leaf hopper, lust, bacterial blight, leaf blight, 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

- Drain out excess water.
- Prepare the seed bed of early winter vegetables (Cabbage, cauliflower, tomato). --Prepare main field by making ridge for transplanting of saplings. Make the drainage facility properly in the field.
- To avoid damage of seedlings due to rainy season, farmers should apply portable transparent Polythene shade on bed of nursery seedlings. The height of shade should be 75cm in the middle portion and 60 cm in the both side. These practices will be beneficial for better germination and get healthy seedlings just from 20-25 days after sowing.
- In case of Cucurbitaceous crop, trailing the plant on ladder like bamboo structure may be arranged. Maintain proper drainage, Weeding and earthing up in the vegetable crop field to avoid water stagnation and to support crop stand
- If the attack of fruit fly, red pumpkin beetle and epilechna beetle in summer gourds may be observed, spray malathion 50 EC@ 1ml per litre of in the field to control these insects when the weather is sunny.
- 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.
- Though possibilities of rain, application of fertilizer at 2 months after planting in papaya may be performed.
- 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.

### **Beetle vine:**

- Farmers may continue the planting of betel vine cuttings upto August. Cuttings should be obtained from disease free garden and treated with a solution consisting of Bordeaux mixture 0.5% and streptomycin 500 ppm for half an hour before planting
- Present weather situation is conducive for attack of betel vine with Phytophthora leaf and root rot, Bacterial leaf spot. Therefore farmer should careful about stagnant of water near root zone and apply four drenches and eight sprays of Bordeaux mixture @ 1.0% and 0.5% respectively Farmers may continue the planting of betel vine cuttings upto August. Cuttings should be obtained from disease free garden and treated with a solution consisting of Bordeaux mixture 0.5% and streptomycin 500 ppm for half an hour before planting
- 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 betel 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.
- All the plant protection measure should be taken after the current spell of rainfall.

### **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.
- Feed the milk bearing cow boiled broad leaf fodder for better milk production for indigenous cow for preventing worm infection
- Always allow them to graze in dry land area

## **Poultry**

- Keep thickness of litter 1inch but never exceed 1<sup>1/2</sup> inch
- Rearrange the litter with lime
- 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.