



# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

23 SEPTEMBER 2020 (WEDNESDAY)  
[FOR THE PERIOD 23.09.2020 – 27.09.2020]



## DISCLAIMER

Under the Agro-meteorological Information System Development Project, Agromet Advisory Service Bulletins at National & Sixty Four (64) districts have been prepared on experimental basis. These bulletins are being displayed through the website of Department of Agricultural Extension for valuable comments/ suggestions from all concerned.

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## ISSUED BY

Agro-Meteorological Information Systems  
Development Project  
Department of Agricultural Extension (DAE)  
Ministry of Agriculture  
In collaboration with Bangladesh  
Meteorological Department

## **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 does not visit the field until it is very necessary.

## **Salient Agromet Advisories**

### **Salient Weather Conditions**

The low over Chhattisgarh and adjoining area moved west-northwestwards further and now lies over Madhya Pradesh area. The axis of monsoon trough runs through Rajasthan, Uttar Pradesh, the centre of the low thence northeastwards to Assam across West Bengal and Central part of Bangladesh. One of its associated trough extends up to North Bay. Monsoon is 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/squally wind is likely to occur at most places over Rangpur, Khulna, Barishal, Chattogram & Sylhet divisions and at many places over Rajshahi, Dhaka & Mymensingh divisions with moderately heavy to heavy falls at places over the country. Day and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hours, rainfall activity may decrease.

Due to the presence of low pressure area in Bangladesh and as per the medium range weather forecast the monsoon is active and copious rainfall is likely to occur in number of districts in southern parts of the country. Special advisories for these districts (*Bagerhat, Coxs Bazar, Feni, Jhalokati, Khulna, Lakshmipur, Noakhali & Pirojpur*) are issued. Also important advisories for the low lying areas of the flood affected districts (*Bogura, Brahmanbaria, Chandpur, Dhaka, Dinajpur, Faridpur, Gaibandha, Jamalpur, Kurigram, Lalmonirhat, Madaripur, Manikganj, Munshiganj, Mymensingh, Noagaon, Narayanganj, Natore, Netrokona, Nilphamari, Pabna, Rajbari, Rangpur, Shariatpur, Sirajganj, Sunamganj, Sylhet & Tangail*) are also issued. As Monsoon is active in the country, a number of districts are likely to receive light to heavy rainfall and also in some occasions very heavy rainfall is likely in coming five days. Moreover, spatially and temporarily well distributed rainfall over the different districts is expected. Due to the expectations of cloudy sky and rather heavy to heavy rainfall in isolated places in coming five days, it is advised to prepare a good drainage system. Avoid irrigation. Temperature will drop a little. Salient agromet advisories issued for different crops in various districts are as follows.

## **Salient Agromet Advisories**

### **Special Agromet Advisories for the districts (*Bagerhat, Coxs Bazar, Feni, Jhalokati, Khulna, Lakshmipur, Noakhali & Pirojpur*) in Southern Parts of the Country**

- Withheld harvest the matured vegetables.

- Drain out excess water from the crop field. To prevent water stagnation in Kharif /rabi vegetables, construct channels around the rabi vegetables field for drainage.
- Clean the irrigation channel for draining out extra water from the Aman field.
- Raise the bund around the Aman field.
- Hold on all agricultural operations like application of irrigation, fertilizers, pesticides etc.
- Provide mechanical support to banana & standing vegetables.
- Arrange for popping of sugarcane.
- Keep the livestock shed clean and dry
- Maintain a good height of embankment around the pond. If possible, provide net or bamboo chatai around the pond to protect from flowing out with excess water.

**Advisories for Low lying Flood affected areas of the districts ( Bogura, Brahmanbaria, Chandpur, Dhaka, Dinajpur, Faridpur, Gaibandha, Jamalpur, Kurigram, Lalmonirhat, Madaripur, Manikganj, Munshiganj, Mymensingh, Noagaon, Narayanganj, Natore, Netrokona, Nilphamari, Pabna, Rajbari, Rangpur, Shariatpur, Sirajganj, Sunamganj, Sylhet & Tangail)**

### **Aman Paddy**

- In low land areas, still there is scope for transplanting the crop after receding water. As there is delay in transplanting, cultivation of BR22, BR23, BRR1 DHAN 38, BRR1 46, Binashail, Nigershal and local varieties may be suitable under such circumstances.
- After receding of flood water, in advance prepare seed bed in high land and also arrange for floating seed bed.
- Farmers are informed that after cessation of flash flood, there is a chance of outbreak of diseases like bacterial blight in rice crop. To control the same provide suitable disease management.

### **Horticultural Crops**

#### **Advisories for Low lying Flood affected areas of the districts**

- During this time, it is advised to plant fruit trees and medicinal plants. If damaged by floods, fill the gaps by replanting. This year it is necessary to put more soil on the base of the plant, remove the infected portion of the plant, fencing with sticks, replace the dead plants with new plants and other required activities. Advise for pruning of unwanted parts for mango, jackfruits, litchi. Also clean the leaves of coconut plant

### **Other Rabi Crops**

- In order to minimize the impact of recent flood, it is recommended to start necessary preparation to cultivation of rabi crops. It is advised to make arrangements to cultivate short duration mustard (Tori-7, BARI14, BARI15) in the land where hybrid boro rice will be taken during rabi season. Advised to collect the maize seed, red amaranth, spinach, green amaranth etc. which can be sown without preparation of field.

### **Livestock**

- Prevent feeding the livestock with rotten grasses after flood. Instead, feed the animals with concentrate and green grasses along with vitamins and mineral supplements.

- In flood affected areas of the district, vaccinate domestic livestock like cattle, goat and sheep against BQ, HS, Foot and mouth disease as well as anthrax disease.
- 8. After flood livestock are generally infected by parasite, therefore, it is important to provide anthelmintic treatment (After consultation with Registered Vety. Practitioner) to the livestock to prevent parasitic infection after flood.

### **Fishery**

- There is possibility of muddy water influx from the surrounding areas into the fishery resulting reduction of dissolved oxygen contents. Stirring the water with a bamboo pole will help in increasing the gaseous exchange and protect the fishes from suffocation.
- Due to recent flood over the zone some of the fish grower faces huge losses. Almost entire stock of fishes has flown out with flood water. After draining out of flood water, farmers should follow the following operations before new stocking in the fish pond, a. Apply lime @ 30 kg per bigha of pond. b. 15 days to 20 days after lime application apply 250-300 kg FYM per bigha of pond.
- If possible, provide net around the pond to protect from flowing out with flash flood.

### **Salient Advisories for the remaining districts**

#### **Aus 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.
- Maintain 2-5 cm water level from soft to hard dough stage
- Maintain 2-3 cm water level at grain hardening stage.
- To control of insects like steam 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.
- To control infestation of leaf blast & leaf spot in Aus rice, spray Carbendazim @2g/litre of water.
- 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.
- Drain out water from crop field 15 days before harvesting.
- Harvest the matured crop in sunny weather while 80% rice ripen.
- Harvest and dry well the grains in sunny weather (12% moisture contain e.g teeth testing) and keep it shady condition for cooling and finally store it air tight container
- Due to large diurnal temperature, there is chance of blast disease. If noticed, adopt appropriate plant protection measures.
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Spraying should be done after the current spell of rainfall and during afternoon hours or at morning hours from 10:00 a.m. to 11:00a.m

## 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.
- Maintain 5-7 cm standing water up to maximum tillering stage.
- Keep the rice land up to 3-4 inches water from panicle initiation stage to hard dough stage.
- Second weeding should be done 30-35 days after transplanting. Weeding may be done either by hand or using weedicides. 2-4 D Amine or Butachlor may be used for weeding.
- All the intercultural operations should be done after the current spells of rainfall.
- Taking the advantage of the presence of sufficient amount of soil moisture, apply 1/3rd nitrogen as top dressing 15-20 days after transplanting. Last 1/3 nitrogen as top dressing should be applied 5-7 days before panicle initiation. Before the top-dress of Nitrogenous fertilizer in the field farmers are advised to weeding their rice plot by manually or using herbicide
- 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.
- Where luxurious growth of plants, at tillering stage, is found, there is chance of sheath blight attack may take place due humid weather and water stagnation. Spray Hexaconazol @ 1ml//litre water, or Tebuconazol @ 1ml/litre water. Regular inspection should be continued for disease attack observation
- There is chance of attack of leaf folder /rice hispa in seedling and tillering stage. If there is one damage leaf per hill due to attack of leaf folder or appearance of one adult hispa per hill is observed, the farmers are advised to spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water.
- Due to persistence of high humidity and cloudy weather. false smut may appear in rice, spray with Kocide 46 DF (Chopper hydroxide) @ 500 g in 200 litres of water per acre to control false smut and after 10 days of its application spray Tilt 200 ml in 200 litres of water.
- For control of ;wilting, after drain out of water spray Streptocyclene and additional potasic fertilizer to the plants
- There is chance of considerable BLB attack due to high temperature and humidity, As the spore spread by air and water, drain out all the water and apply potash fertilizer. Follow community spraying otherwise infection cannot be controlled.-To control the disease it is advised to make fertilizer management and spray Thiovit+Potash. Avoid excess urea application.
- Where tillers were affected due to water stagnation, apply urea and potash fertilizer through puddling with the remaining plants for removing the gas inside the soil otherwise plants will turn reddish
- Where Tillering is complete and panicle has started, apply one hand weeding inside the field and also in the bund area, to make ensure proper solarisation inside the row.
- Where Tillering is complete and panicle has started there is chance of attack of leaf roller
- Spray Malathion @ 2ml. per litre water or Chlorpyriphos@2ml/liter of water or Endosulfun@1.5ml/liter of water.
- Light trap should be used for control of insects. Light trap should be placed at some distance from the crop and bulb should be lightened from evening 06.30 PM to 10.30 PM and collected insects should be destroyed in the morning hours.
- All the intercultural operations & plant protection measures should be done after the current spells of rainfall.

## Vegetables

- Drain out water from the crop field.
- **Cucumber:** Apply 18 kgs Urea/bigha at around 20-25 days after sowing of the plants. If you notice Irregular brown spots on the leaves, sometimes with yellow edges, it may be Alternaria Leaf Blight. Spray Tricyclazole 75WP @ 0.6 ml per liter of water at clear weather condition
- There is chance of fungal wilting due to heavy rain and high humidity in early winter vegetables. Drain out water from field. During clear weather drenching the soil around the base with Streptocyclin@0.1g/liter of water.
- **Brinjal:** Bacterial wilting- Wilting starts at the top when the plant starts flowering and fruit setting and eventually the whole plant shows wilt symptoms Cure: Infected plants must be eradicated. Roots of the seedlings must be treated (2.5gm carbendazim + 2 ml Teramycin capsule/litre water) before planting. Bleaching powder (3kg/acre) can be applied with irrigation water
- **Tomato: Late Blight:** Water-soaked lesion is seen in edges of leaves. Later on, leaves dries up. Nowadays late blight is first seen in the stem then it spreads to the leaves. Cure 1) Precaution must be taken during the initial infection stage. 2) Spray 2.5-gram Metalaxyl + Mancozeb/lit of water 3) Mix 3 gram Trichoderma with per kg of seed during seed treatment. 4) Avoid excess nitrogen fertilizer and close spacing of plants
- **Cabbage/Cauliflower:** Downy mildew: First brown spot appear in the lower side of the leaves, and the upper side of the infected portion becomes yellowish. Later on, the spots enlarged and destroy the whole leaf. This disease is present in seeds and other parts of the leaves. Cure: 1) Mix 3-gram Thiram with per kg of seed during seed treatment. 2) Spray 2.5 gram Metalaxyl + Mancozeb/lit of water
- **Winter/Rabi vegetables:** Good drainage for seedbed and direct-seeded plots, 2) Adapting raised seedbed practice, 3) Use systemic fungicide Thiophanate methyl 70 % WP @2 gram/lit with a sticker to avoid fungal diseases
- All the plant protection measures should be done after the current spells 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:**

- 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.
- All the plant protection measures should be done after the current spells of rainfall.

#### **Sugarcane:**

- During the month, sugarcane plant. in grand growth stage
- In this time, stem rot and stem borer and others disease-pest may infest the crop and so inspect the land regularly and take appropriate plant protection measure.
- All the plant protection measures should be done after the current spells of rainfall.

#### **Cotton**

- Complete seed sowing at tith conditioned land considering seed rate 2 kg/33 decimal.
- Maintain row to row distance 25-35 inches and seed to seed distance 10-15 inches.
- High yielding varieties like CB-12, DM-2, Rupali and Suvro may be chosen for sowing.

#### **Livestock**

- It is very important to provide a particular amount of dewormers for both roundworm and tapeworm to any cattle, goats,
- Vaccinate the livestock for Black Quarter and foot and mouth diseases.
- 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.
- 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**

- There is chance of fungal attack due to high humidity,keep the poultry house dry and clean and apply lime with litter
- In poultry farms, appropriate space should be kept @ 1 sq. ft. per broiler and 2-2.5 sq. ft./ layer.
- 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
- 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.
- 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**

- Apply lime for cleaning the water.
- Sufficient water accumulated in the pond. Start new stocking of quality fingerlings/ yearlings. Feeding may be done properly with quality and floating feed containing 20 percent crude protein. There is chance of oxygen deficiency due to increase in temperature. To maintain the dissolve oxygen regular aeration may be done using hand or bamboo splashing or using mechanical aerator
- To avoid insect infestation in nursery ponds, apply soap oil emulsion (a mixture of cheap soap @ 2.5 kg and kerosene oil @ 13 litter per bigha of pond) and apply gently in nursery ponds
- 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.



## Realized Weather at different locations in the country

Rainfall for last 24 hours (till 09 AM on 23 September 2020) and maximum temperature on 22 September, minimum temperature on 23 September 2020 is given below:

Name of Divisions	Name of Stations	Rain fall (mm)	Max. Temp (°C)	Min. Temp (°C)	Name of Divisions	Name of Stations	Rain fall (mm)	Max. Temp (°C)	Min. Temp (°C)
Dhaka	Dhaka	01	32.0	27.5	Rajshahi	Rajshahi	43	31.8	26.4
	Tangail	02	30.6	25.5		Ishurdi	08	30.7	27.3
	Faridpur	11	31.2	27.0		Bogura	59	29.2	26.3
	Madaripur	11	29.5	26.3		Badalgachhi	39	28.5	26.5
	Gopalganj	06	30.5	26.0		Tarash	53	29.2	26.3
	Nikli	19	29.7	26.0					
Mymensingh	Mymensingh	04	28.7	26.6	Rangpur	Rangpur	66	27.7	25.0
	Netrokona	24	28.5	<b>23.8</b>		Dinajpur	43	26.5	25.0
						Sayedpur	56	27.5	25.0
Chattogram	Chattogram	35	30.8	25.2		Tetulia	87	26.6	24.0
	Sandwip	31	<b>33.5</b>	24.4		Dimla	41	27.0	25.2
	Sitakunda	48	xx	25.6		Rajarhat	74	26.7	24.0
	Rangamati	08	30.5	26.8	Khulna	Khulna	10	31.0	26.5
	Cumilla	<b>98</b>	30.2	25.7		Mongla	12	31.0	26.5
	Chandpur	25	30.8	26.4		Satkhira	04	32.2	26.8
	M.Court	13	31.2	26.0		Jashore	19	32.2	26.8
	Feni	53	31.0	26.0		Chuadanga	08	32.0	27.2
	Hatiya	10	30.3	26.2		Kumarkhali	07	31.5	27.0
	Cox's Bazar	81	28.4	25.7	Barishal	Barishal	41	30.5	26.2
Kutubdia	13	30.0	26.0	Patuakhali		72	31.2	26.2	
Teknaf	65	27.7	25.0	Khepupara		40	32.0	25.5	
Sylhet	Sylhet	53	29.3	25.3	Bhola	36	30.7	26.3	
	Srimangal	16	31.2	25.6					

### Highlights:

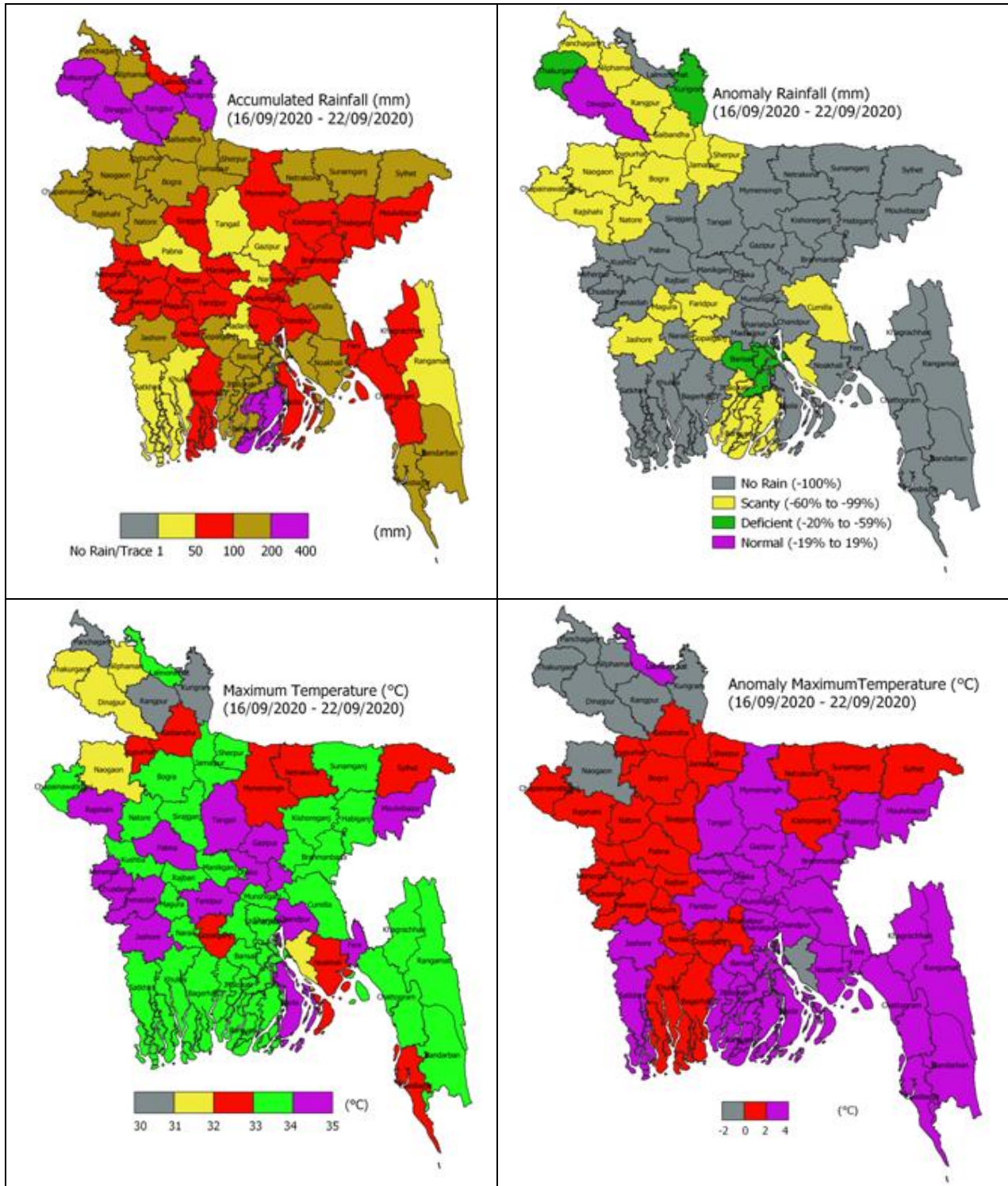
- Country average bright sunshine hour was 4.40 hours per day during last week.
- Country average free water loss during the previous week was 3.13 mm per day.

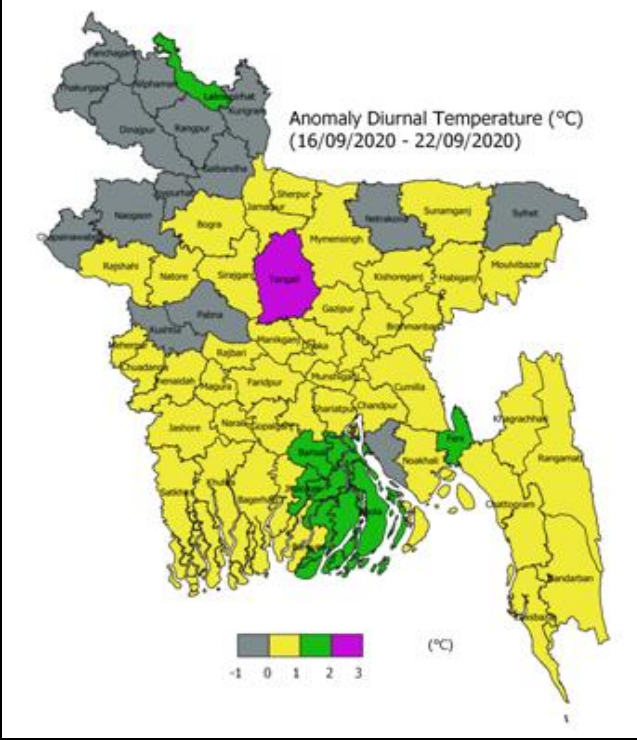
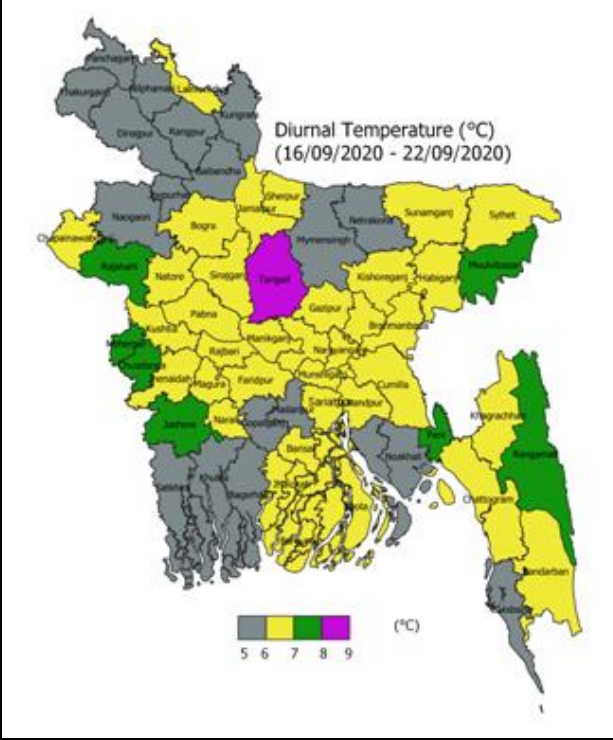
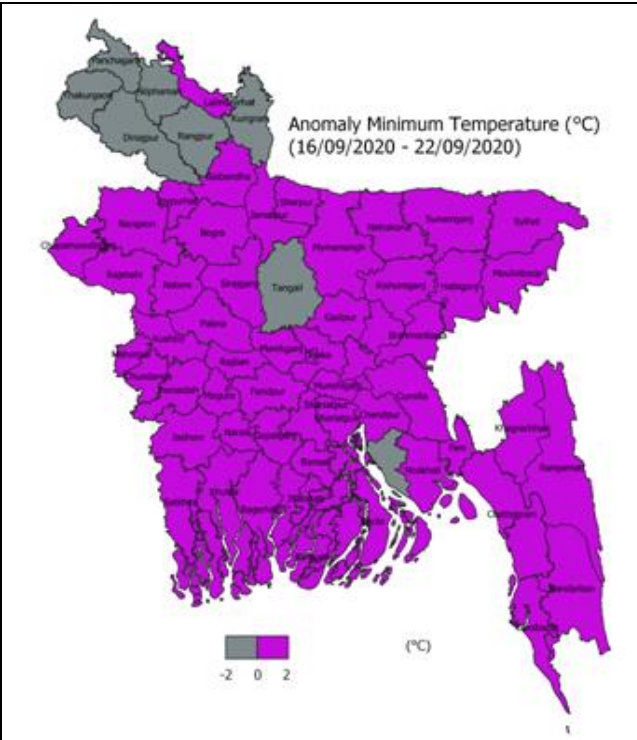
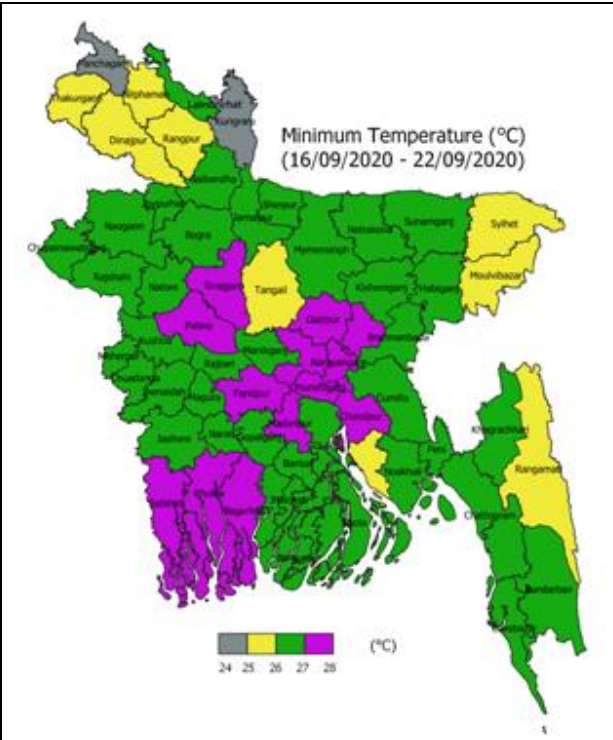
### Weather Forecast Valid for 24 Hours commencing 06 PM Today:

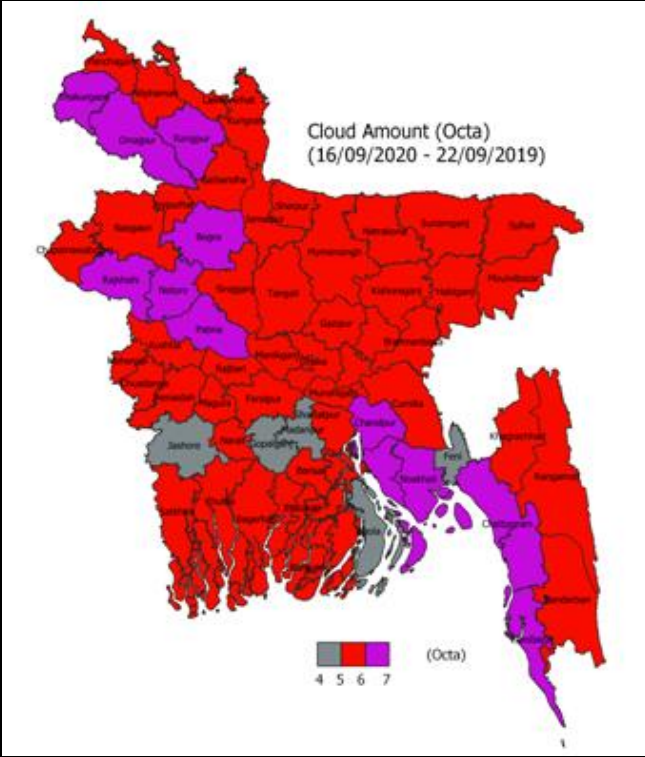
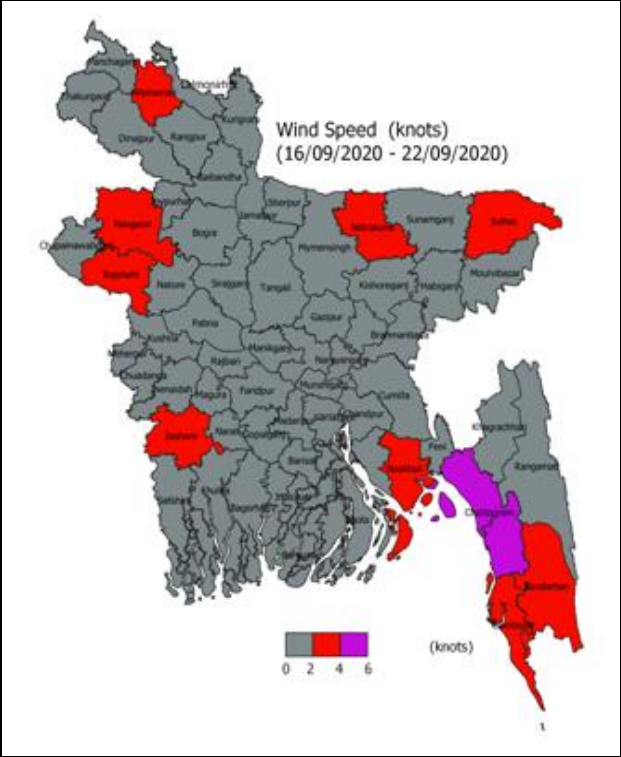
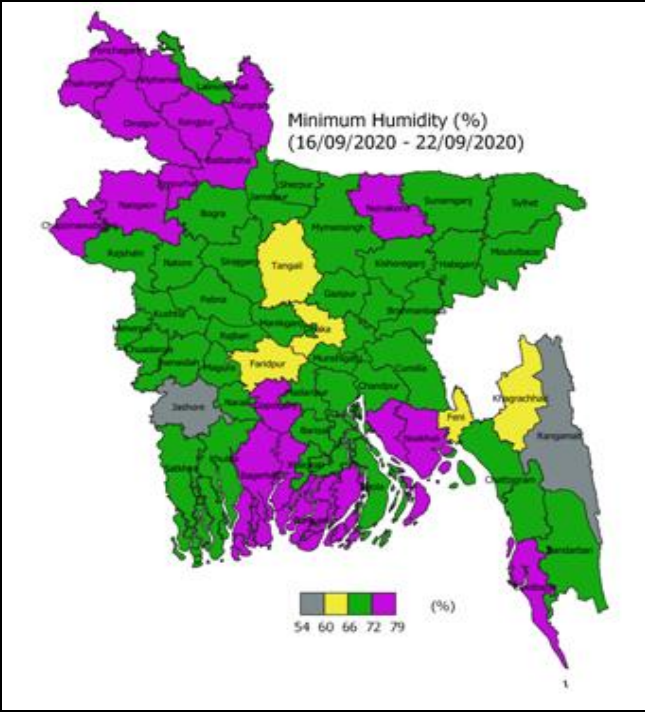
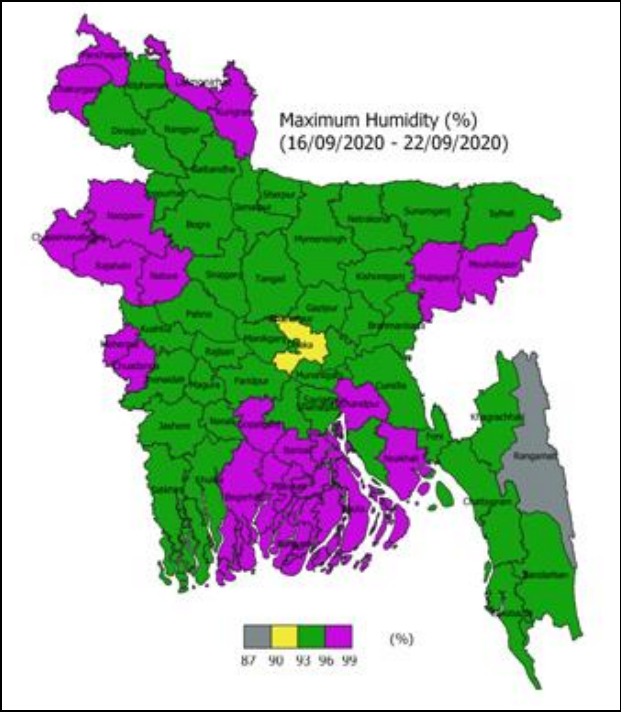
**Forecast:** Light to moderate rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at most places over Rangpur, Khulna, Barishal, Chattogram & Sylhet divisions and at many places over Rajshahi, Dhaka & Mymensingh divisions with moderately heavy to heavy falls at places over the country.

**Temperature:** Day and night temperature may remain nearly unchanged over the country.

## Spatial Distribution of weather parameters for the Week ending 22 September 2020





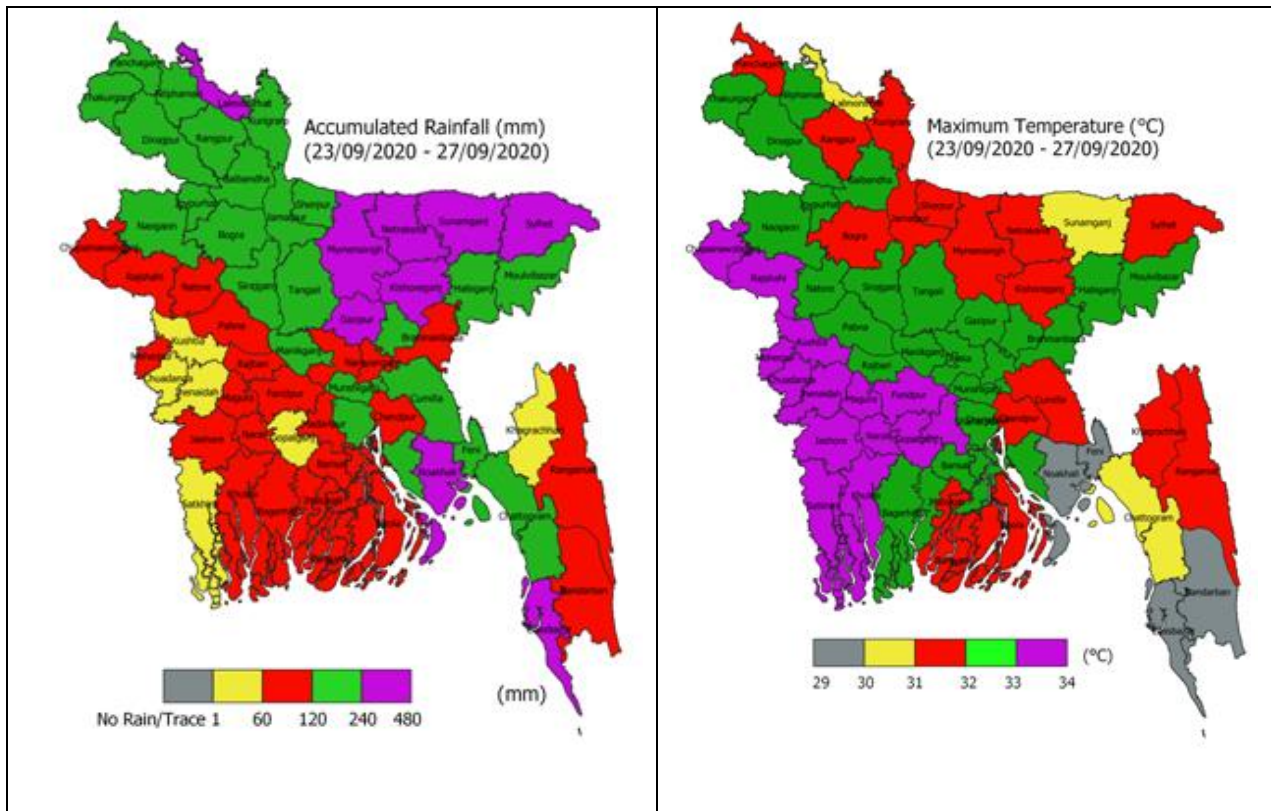


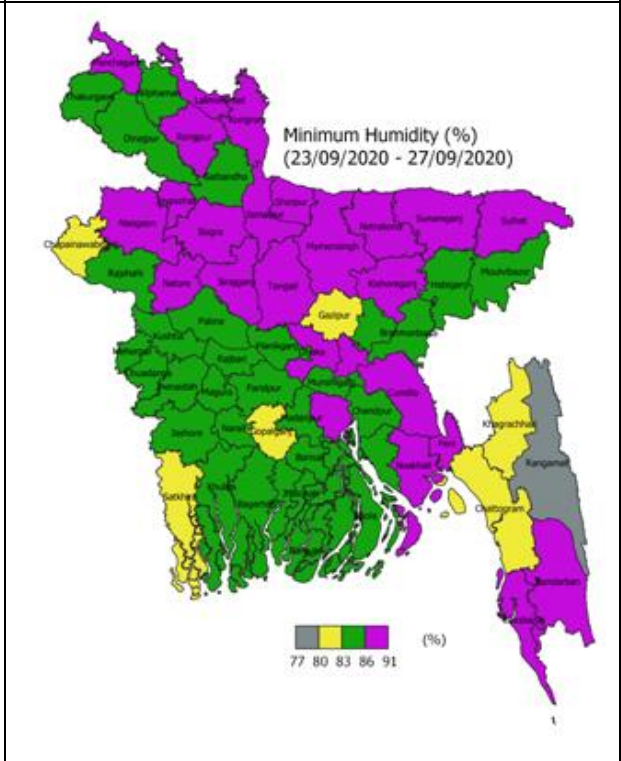
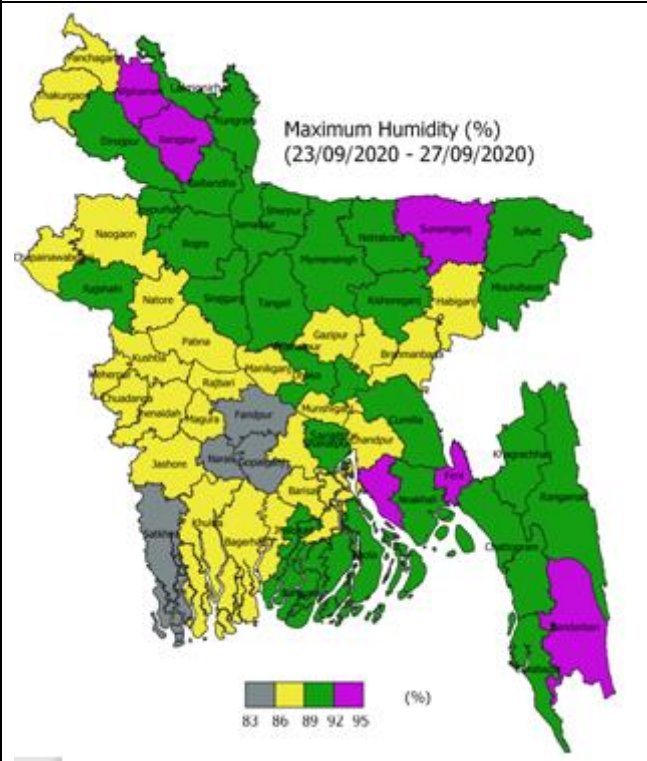
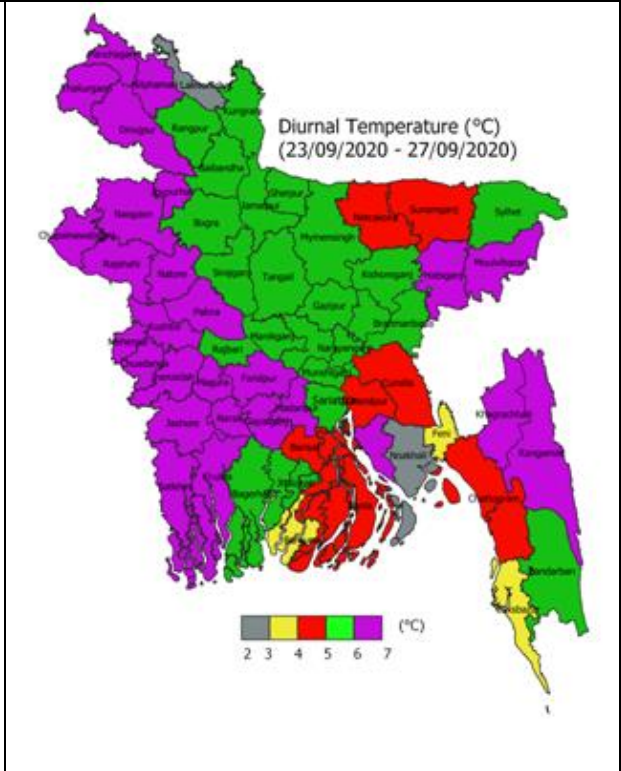
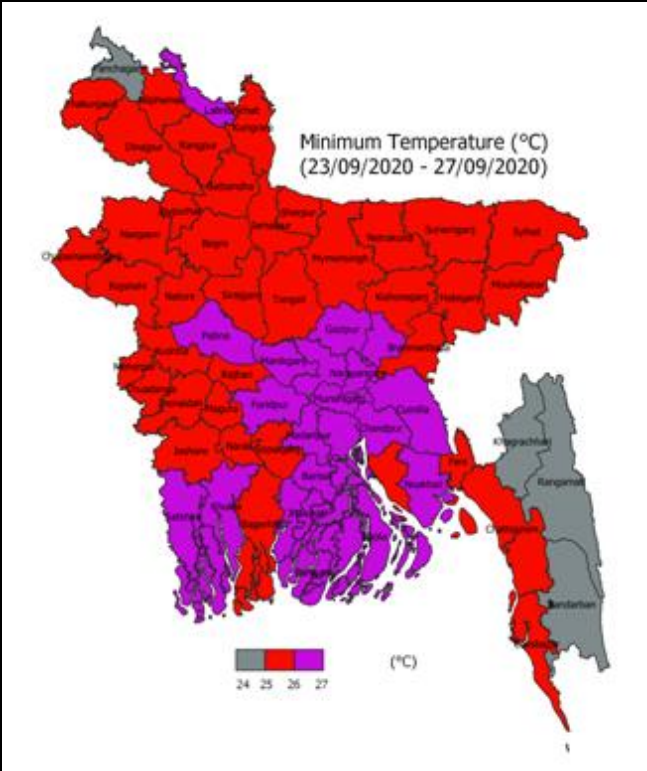
### Weather Forecast and Advisory for the Period of 22.09.2020 to 30.09.2020

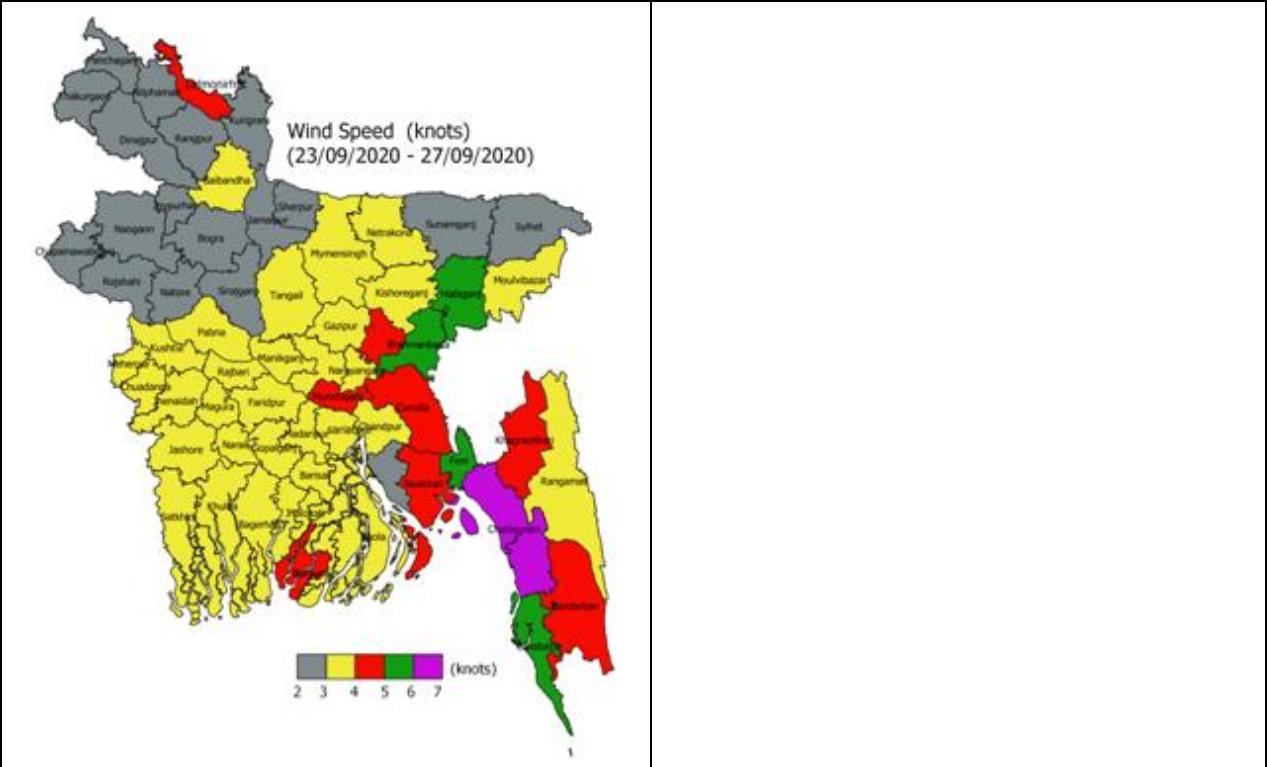
Bright sunshine hour is likely to be from 3.50 to 4.50 hours per day during this week. Average free water loss is likely to be from 3.00 to 4.00 mm per day during this week.

- Light (04-10mm/day) to moderate(11-22 mm/day) rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over Khulna, Barishal, Sylhet, Chattogram, Mymensingh and Dhaka divisions and at many places over Rangpur and Rajshahi divisions with moderately heavy (23-43 mm/day) to heavy (44-88 mm/day) falls at places over the country during this period.
- Day and night temperature may fall 1-2°C over the country during this period

### District Wise Quantitative Weather Forecast for next Five days from 23 Sep. -27 September'2020

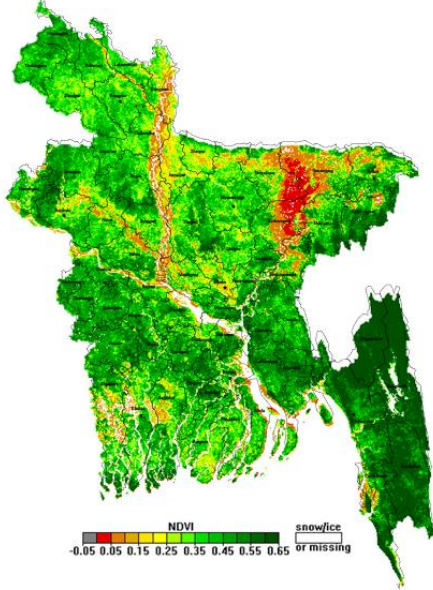




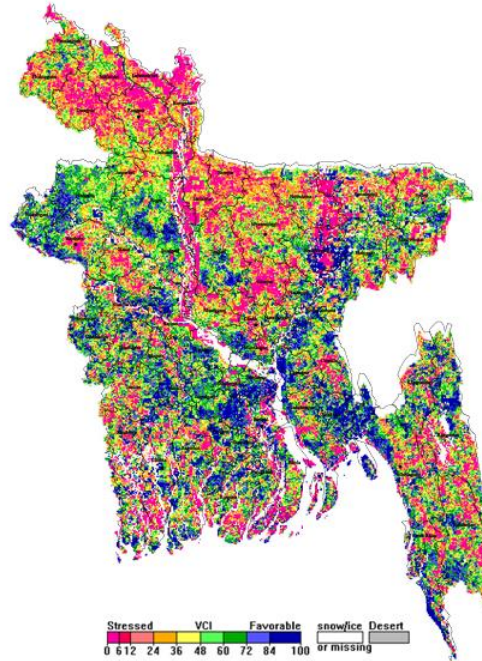


## Different Satellite Products over Bangladesh

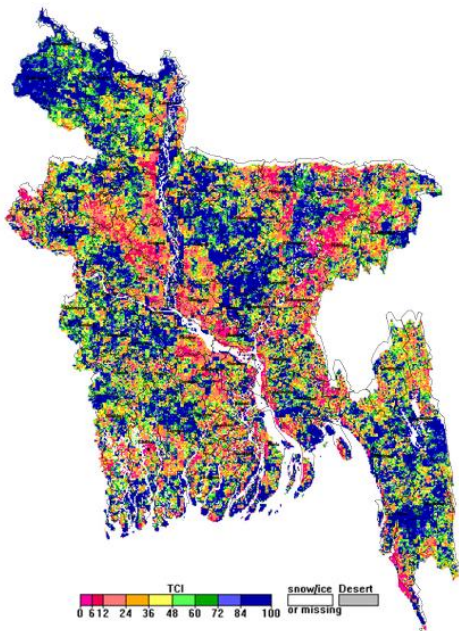
NOAA/VIIRS BLENDED NDVI composite for the week No. 37 (8 September -14 September) over Agricultural regions of Bangladesh



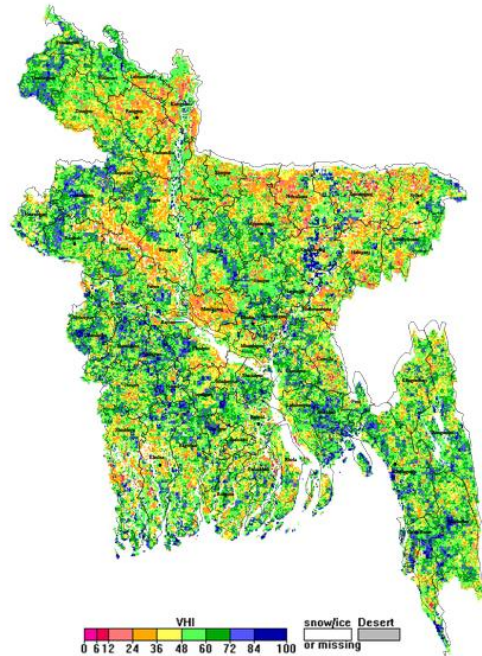
NOAA/AVHRR BLENDED VCI composite for the week No. 37 (8 September -14 September) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED TCI composite for the week No. 37 (8 September -14 September) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED VHI composite for the week No. 37 (8 September -14 September) over Agricultural regions of Bangladesh





**Monitoring Meteorological Drought in Bangladesh using Standardized Precipitation Index (SPI)**

It has been observed that during last four weeks (including August 2020) severe to extremely dry conditions prevails in districts located northeastern and southwestern part and mild wet condition prevails in northwestern parts of Bangladesh and northeastern part was prevailed severe wet condition for last four weeks.

