



# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

28 August 2019 (WEDNESDAY)  
[FOR THE PERIOD 28.08.2019 - 01.09.2019]



#### 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

## **Salient Agromet Advisories**

As per the weather forecast received from the Bangladesh Meteorological Department (BMD), monsoon is less active over Bangladesh and weak to moderate over North Bay. Thus, it is expected reduction in rainfall activities in different districts of Bangladesh next few days. During next 24 hours, Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at a few places over Rangpur, Mymensingh, Khulna, Barishal, Chattogram & Sylhet divisions and at one or two places over Rajshahi & Dhaka divisions with moderately heavy falls at places. As per the medium range quantitative district level forecast issued by BMD, relatively more rainfall is expected in Rangamati, Banderban, Khagrachari, Kurigram, Narsingdi and Satkhira district during next five days. Day and night temperature may remain nearly unchanged over the country. As on today, substantial improvement in flood condition was reported by Bangladesh Water Development Board (BWDB). According to BWDB, there is no indication of flood situation during next five days. Considering the realized weather along with weather forecast and information received on water level on major rivers in the country, following salient agromet advisories are issued for different districts in the country on the standing crops, livestock, poultry and fishery.

### **Agromet Advisories**

#### **Aus Paddy**

##### **Harvesting Stage**

- Drain out water completely 15 days before harvesting
- Harvest the crop on sunny days immediately and keep it dry and safe place.

##### **Hard dough to Ripening Stage**

- Check the bund around the field and store the amount of rainfall to be received during next few days.
- Apply irrigation & maintain 2-5 cm water level up to hardening of grain.
- 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 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.
- If incidence of rice case worm is noticed on rice crop, then flood the field with water followed by dragging the rope to dislodge the cases and drain out water from field after 1-2 hrs. Collect the cases and destroy them.

##### **Aman Paddy**

- Apply irrigation & maintain 5-7 cm standing water up to maximum tillering stage. Impounding condition should not be of more than 7 cm in rice crop. In excess impounding condition, number of tillers is affected.
- Undertake intercultural operations.
- Weeding should be done at regular interval as per requirement. However, first weeding should be done 10-15 days after transplanting. 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

- Apply 1/3rd nitrogen as top dressing 15-20 days after transplanting. Weeding should be done before application of nitrogenous fertilizer.
- In the rice crop, continuous monitoring of the economically harmful insects like stem borer, rice hispa, rice caseworm, gall midge should be done. For this light trap should be used. 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.
- If rice hispa is noticed, delay the first top dressing, manual collection and killing of beetles, the shoot tips can be cut, and then spray Quinalphos at the rate of 0.5 ml per 1 L water.
- Make proper surveillance of the incidences sheath blight and sheath rot and if noticed, apply appropriate fungicides to control the diseases incidences.
- 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.

### **Vegetables**

- Sow the seeds of gourd and bean
- This is the proper time to start production of seedlings of winter vegetables. For seedling preparation, it is advised to select high land with sufficient sunlight and aeration.
- Prepare the seed bed with 1 metre width and straight land as per the availability of land where seedling of cauliflower, cabbage, brinjal, tomato can be prepared.
- If there is a delay in onset of adequate soil moisture, it is advised for cultivation of creeper under SAC process.
- Make arrangement to avoid plant damage (particularly staked creeper) from anticipated gusty winds.
- Farmers are advised that they should go for transplanting of vegetables
- Farmers are advised for the application of recommended dose of fertilizers in vegetables.
- Need based intercultural operation should be done in tomato, brinjal, chilli, okra and other vegetable crops.
- Farmers are advised for the control of leaf spot disease in vegetables by spraying copper fungicide @ 3 gram/liter of water or Clorotheloniol @ 2 gram/liter of water for the effective measure.
- If shoot borer in brinjal is noticed, install Pheromone trap and spray 4 g Sevin WP or 2 ml Malathion in 1 litre water alternatively.
- If root rot is noticed in pointed gourd, spray 10 g Plantomycine along with 20g Blitox 50 in 10 litre water.
- Papaya plant may get affected by mosaic and leaf curl during the rainy. To control the disease farmers are suggested to rouge out the affected plant or spray with Rogar @ 0.1%.
- High temperature and relative humidity are conducive for leaf curl disease in chilli and brinjal and papaya. For effective control of the disease, apply Rogar or Dimethoate @ 1.5 ml per litre of water on a non rainy day
- Drenching the soil around seedlings with Diethane M-45@2.5g/liter of water for preventing wilting in sunny days.
- 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.
- Cloudy and humid weather is conducive for the attack of Leaf Curl disease in Summer Brinjal, to manage the attack, apply Imidachloprid @ 2ml per liter of water.

### **Horticultural crops**

- During this time, it is advised to plant fruit trees and medicinal plants. If damaged by heavy rainfall, 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, lichi. Also clean the leaves of coconut plant.
- To control fruit blight and fruit rot disease in pomegranate, spray Mancozeb 600g and Carbendazim 100 g @ 200 litre of water.
- 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.
- For the orchards of the guava, add 20-25 kg cow dung and 50 gms of heptachlor in the soil extracted from the pit and fill it again. For mango, amla and berry orchards add 30 kg of cow dung, 250 grams of single super phosphate and 50-100g heptachlor in the soil extracted from the pit and fill it again. These operations may be done.
- Farmers are advised to start digging of pit of appropriate size and distance for new orchard establishment. Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. It is the congenial period for planting. Farmers may choose the different varieties of mango plants based on the maturity (ripening) period.

### **Coconut**

- There is a chance of bud rot in coconut during rainy season. As a preventive measure, small perforated sachets containing 2 g of mancozeb may be tied to the top leaf axil. When rains, a small quantity of the fungicide is released from the sachets to the leaf base and thus protecting the palm. Spray 1% Bordeaux mixture on the crown of palms.
- Present weather is favourable for occurrence of Ganoderma disease in the coconut plantations. As prophylactic measure against the disease make provisions for proper drainage and sanitation in the orchards.
- In the prevailing weather condition, rhinoceros beetle occurrence may be noticed in coconut. Take out the beetles from the attacked palm crown using beetle hook. Swab the hole made by the beetles with Bordeaux paste to prevent entry of fungus through the cut surface. The top most three leaf axils around the spindle may be filled with 1) Application of 250 gm neem cake mixed with equal volume of sand. 2) Crown cleaning followed by the application of 20g cartap hydrochloride 4G + 200g sand this should be done
- High humid and water stagnated condition is highly favourable for the incidence of whitefly attack in coconut, spray organic emulsion Nimbecidine @ 2ml/lit or Verticilliumlecanii\*109 ml spore count for the effective control of white fly pest.
- Prepare pit for plantation of saplings of coconut.

### **Banana**

- Rake up the accumulated mud from the root zone of banana for better aeration.
- Plantation of banana crop should be done

- Intercultural operation should be done in banana orchard after current spells of rainfall.
- 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. Cut and burn all severely affected leaves. Spray 1% Bordeaux mixture with sticker soon after the appearance of symptoms (5 to 6 sprays at fortnightly intervals). Spray 1% petroleum based mineral oils. Spray 0.1% carbendazim or 0.2% Mancozeb alternatively @ fortnightly intervals. Spray Azoxystrobin, Tebuconazole, Difenoconazole (0.1%).
- Weather is congenial for Pseudostem weevil in banana, spray 2.5 ml of Chlorpyrifos or 2 ml of Quinalphos mixing with gum per one litre of water in leaf axils and by inserting the nozzle through the boreholes made by the larva.
- It is advised to apply fertilizer in the 3 months old banana plantations @ 120g Urea, 200g SSP and 275g MOP per plant.

#### **Sugarcane:**

- Farmers are advised to go for propping operation in sugarcane crop i.e. mechanical support to the crop so that strong wind cannot damage the crop from lodging.
- To control red rot disease of sugarcane water stagnation in the field should be avoided and roguing of the affected plants should be practiced.
- To control red rot disease in sugarcane, avoid water stagnation in the field and removing of the affected plants should be practiced.
- To minimize infestation of top shoot borer in sugarcane, spray Lamba cyhalothrin @2ml/litre of water. Apply plant protection measures.
- To control, spray Dimethoate @ 2 ml or Acephate @ 1.5 g per litre of water after the heavy rainfall. Undertake nursery sowing of Tomato, Brinjal and Chillies and direct sowing of Gourds, Beans and Bhendi
- The attack of top borer can be checked by applying 10 kg Ferterra 0.4 GR or 12 kg Furadan/ Diafuran/ carbofuran encapsulated 3 G at the base of the shoots. Apply granules only if attack exceeds 5% level.
- In the crop of sugarcane need based intercultural operations and earthing should be done. Proper drainage system in the sugarcane fields should be maintained to minimize outbreaks of Pyrilla pests.

#### **Betelvine:**

- Betelvine Green leaf stage –
- Strengthen the fencing of boundary of betel vine so that the boundary cannot be broken due to strong wind and thunderstorm.
- Keep the drainage channels clean and arrange proper aeration in the betel vine gardens.
- Farmers can continue to plant the cuttings of betel vine in the main field. Select disease free cuttings and before planting treat them with Bordeaux mixture 0.5% and Streptocycline 500 ppm for half an hour. Before planting, drenching of soil with Mancozeb 75 WP (2.5 gram per litre of water) is advocated.

#### **Cotton: Sowing stage**

- Continue sowing of cotton.
- Farmers are suggested to go for cotton sowings @1 kg/ac seed rate, with spacing of 105X60 cm spacing Pendimethalin 30% @ 1.3-1.6 lit/ac or alachlor 50% @ 1.5-2.0 lit/ac can be applied as a pre emergence herbicides immediately after sowing or a day after sowing on non-rainy days.
- Monitor cotton fields for leaf curl infection and for white fly infestation.

#### **Livestock & Poultry**

- During rainy days, goats may be affected with viral enteritis. As and when diarrhoea is noticed, immediate treatment should be done at the veterinary dispensary and do not allow the goats to graze outside.
- Hygiene should be maintained around cattle shed. Avoid water logging in cattle shed.
- Bushes, parthenium weeds should be uprooted and pits etc. should be filled so that mosquitoes control is there.
- If there is any injury to milch cows, then himex should be applied.
- On animal's bodies, external parasites should be taken out and should be sprayed with Ivermectin medicine
- Vaccinate cattle and buffalos against the rainy season diseases. Protect cattle from sun.
- 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.

Detail Districtwise Agromet Advisories are available in BAMIS Portal ( www. <https://www.bamis.gov.bd/> )

## Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 28 August'19) and maximum temperature on 27 August, minimum temperature on 28 August' 2019 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	00	35.3	27.8	Rajshahi	Rajshahi	00	35.7	26.5
	Tangail	00	35.0	27.0		Ishurdi	00	34.5	26.5
	Faridpur	01	34.3	26.0		Bogura	00	35.0	28.2
	Madaripur	00	34.0	26.2		Badalgachhi	00	34.0	27.5
	Gopalganj	00	33.7	26.8		Tarash	00	35.0	27.4
	Nikli	07	35.2	28.0					
Mymensingh	Mymensingh	00	34.7	27.4	Rangpur	Rangpur	00	35.0	28.3
	Netrokona	00	33.6	28.2		Dinajpur	00	35.2	28.4
						Sayedpur	00	35.4	28.0
Chattogram	Chattogram	00	32.8	26.4	Khulna	Tetulia	00	35.2	26.5
	Sandwip	01	32.4	26.4		Dimla	00	36.0	28.6
	Sitakunda	00	33.0	26.8		Rajarhat	00	35.8	27.4
	Rangamati	00	34.2	25.4	Barishal	Khulna	00	34.2	26.8
	Cumilla	Trace	33.5	26.5		Mongla	00	33.8	27.0
	Chandpur	00	34.6	26.8		Satkhira	Trace	34.8	26.4
	M.Court	00	33.5	27.2		Jashore	00	34.4	27.0
	Feni	00	33.7	26.0		Chuadanga	00	35.0	26.3
	Hatiya	02	31.7	27.0		Kumarkhali	00	34.0	27.8
	Cox's Bazar	00	31.6	25.5					
Kutubdia	00	32.3	25.6	Barishal	Barishal	00	33.3	26.0	
Teknaf	00	32.2	25.0	Patuakhali	00	32.4	26.7		
Sylhet	Sylhet	71	35.6	25.5	Khepupara	02	31.2	26.4	
	Srimangal	Trace	35.5	26.4	Bhola	07	33.0	26.4	

### Highlights:

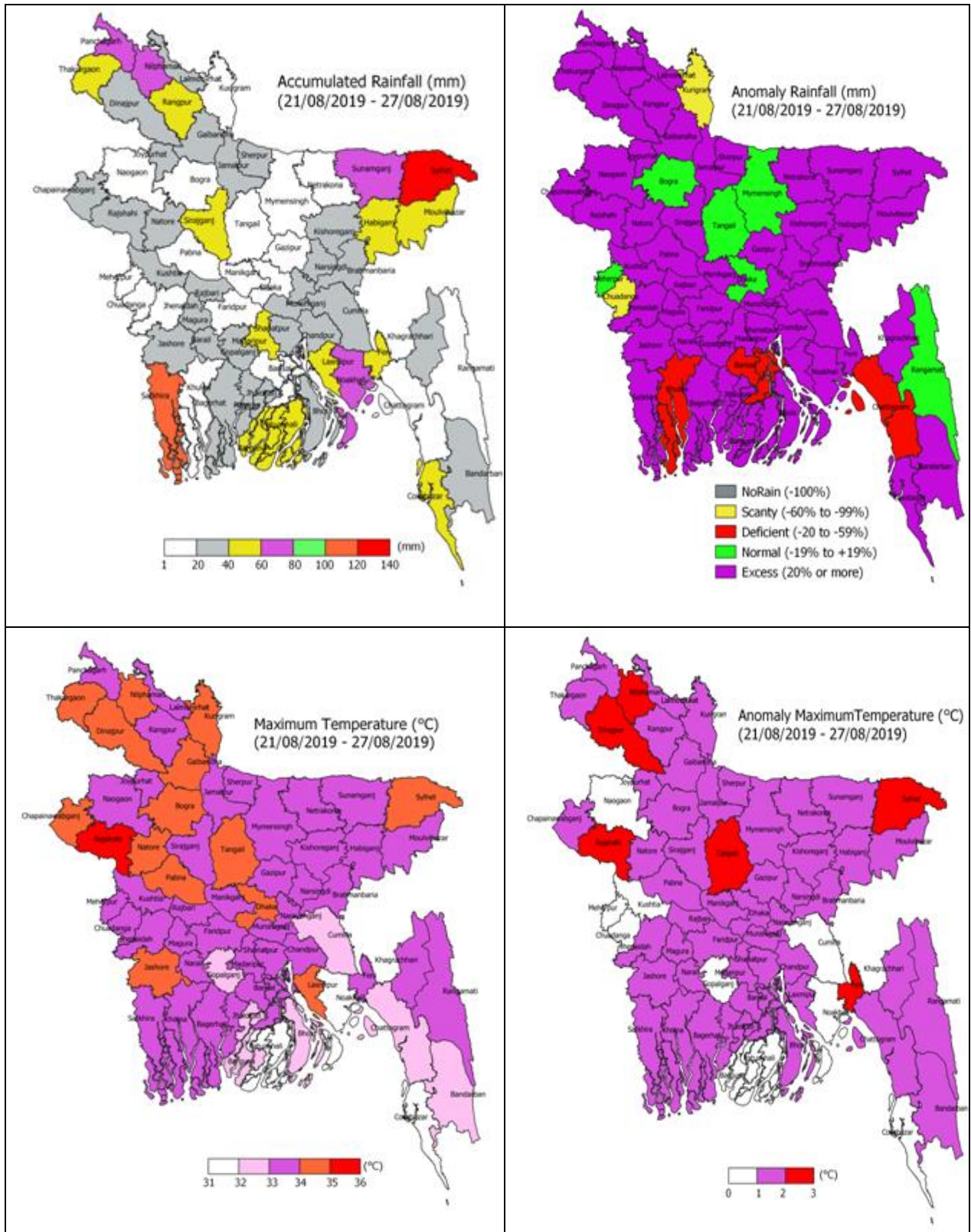
- Country average of bright sunshine hour was 3.90 hours per day during last week.
- Country average of free water loss during the previous week was 2.96 mm per day.

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

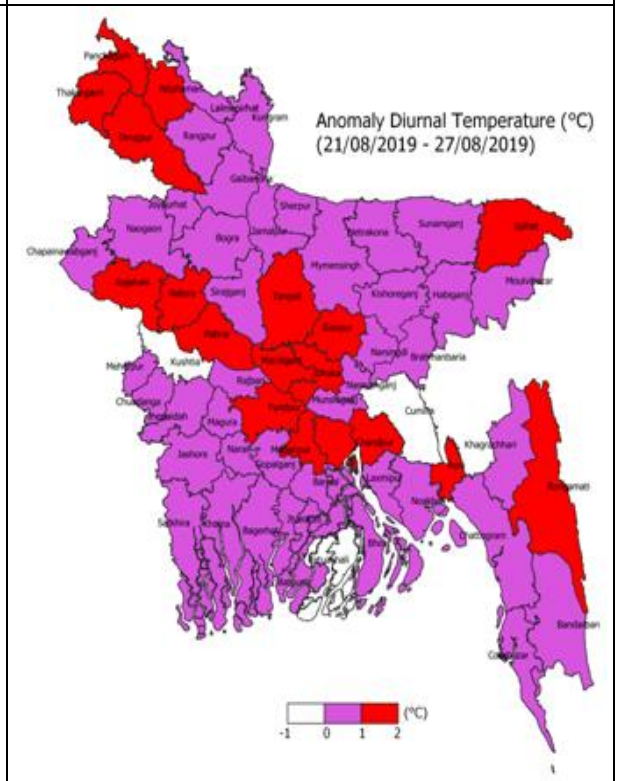
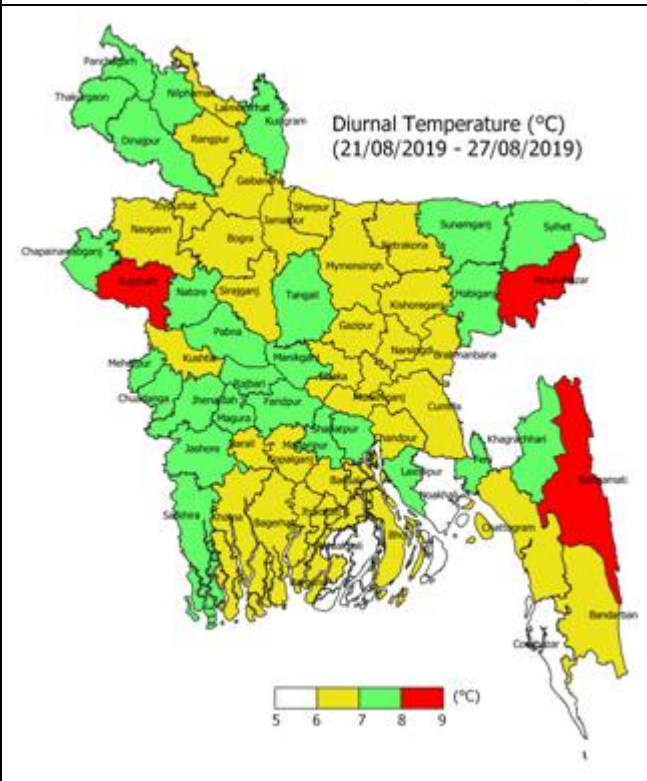
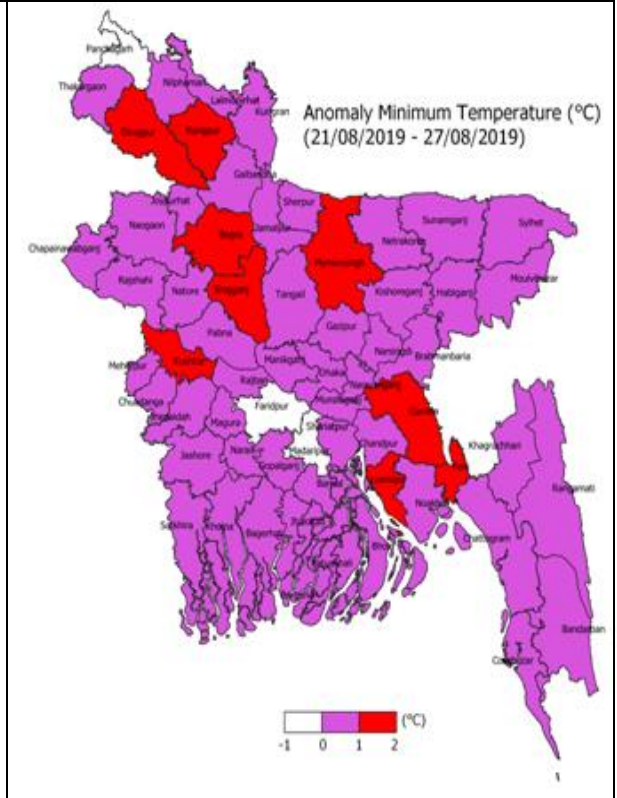
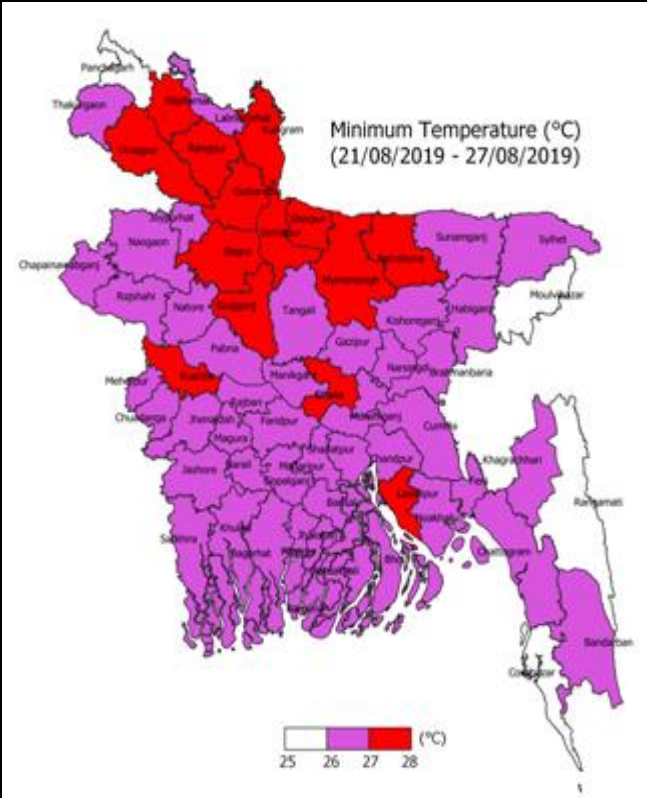
**Forecast:** Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at a few places over Rangpur, Khulna, Barishal, Chattogram & Sylhet divisions and at one or two places over Rajshahi, Dhaka & Mymensingh divisions with moderately heavy falls at places over the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

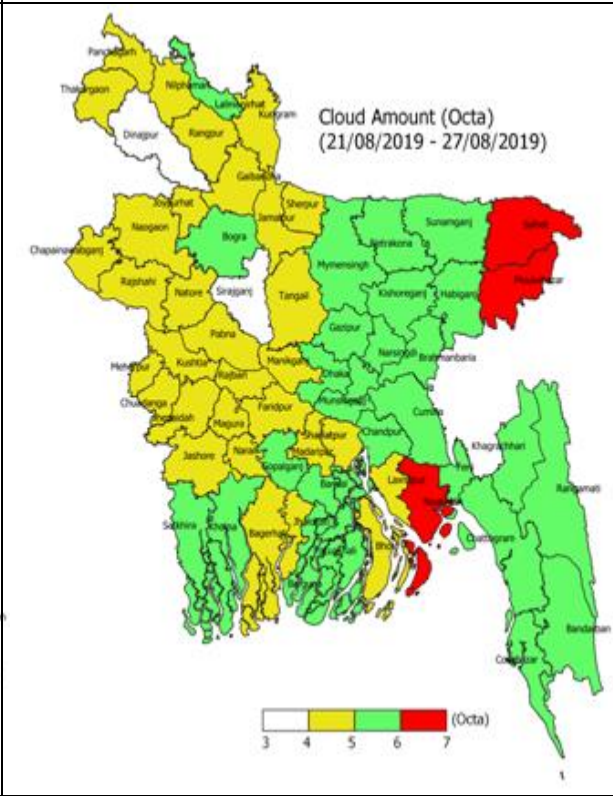
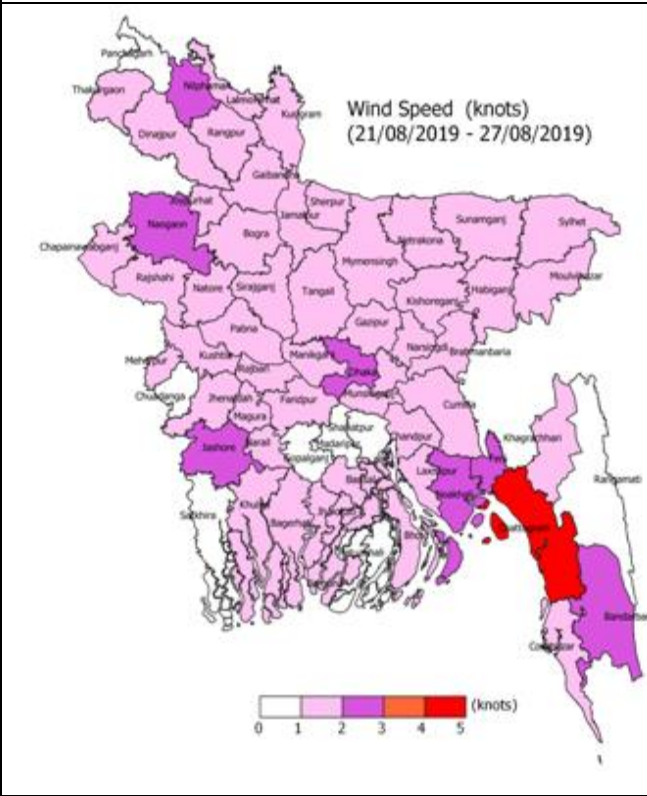
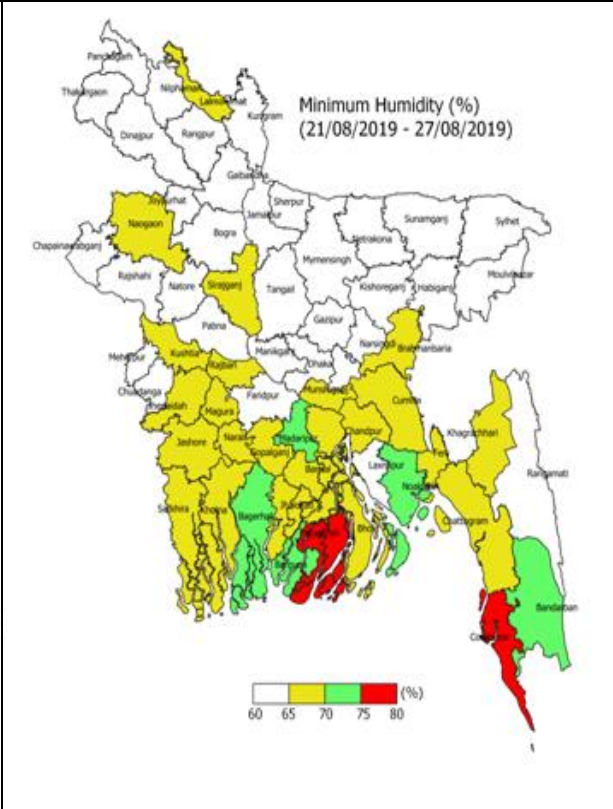
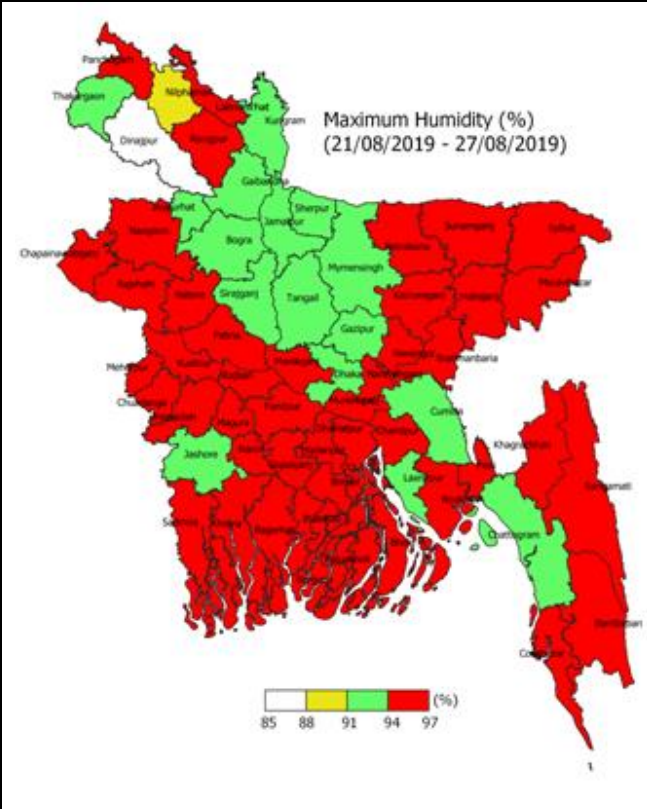
**Temperature:** Day and night temperature may remain nearly unchanged over the country.

## Spatial Distribution of weather parameters for the Week ending 27<sup>th</sup> August 2019









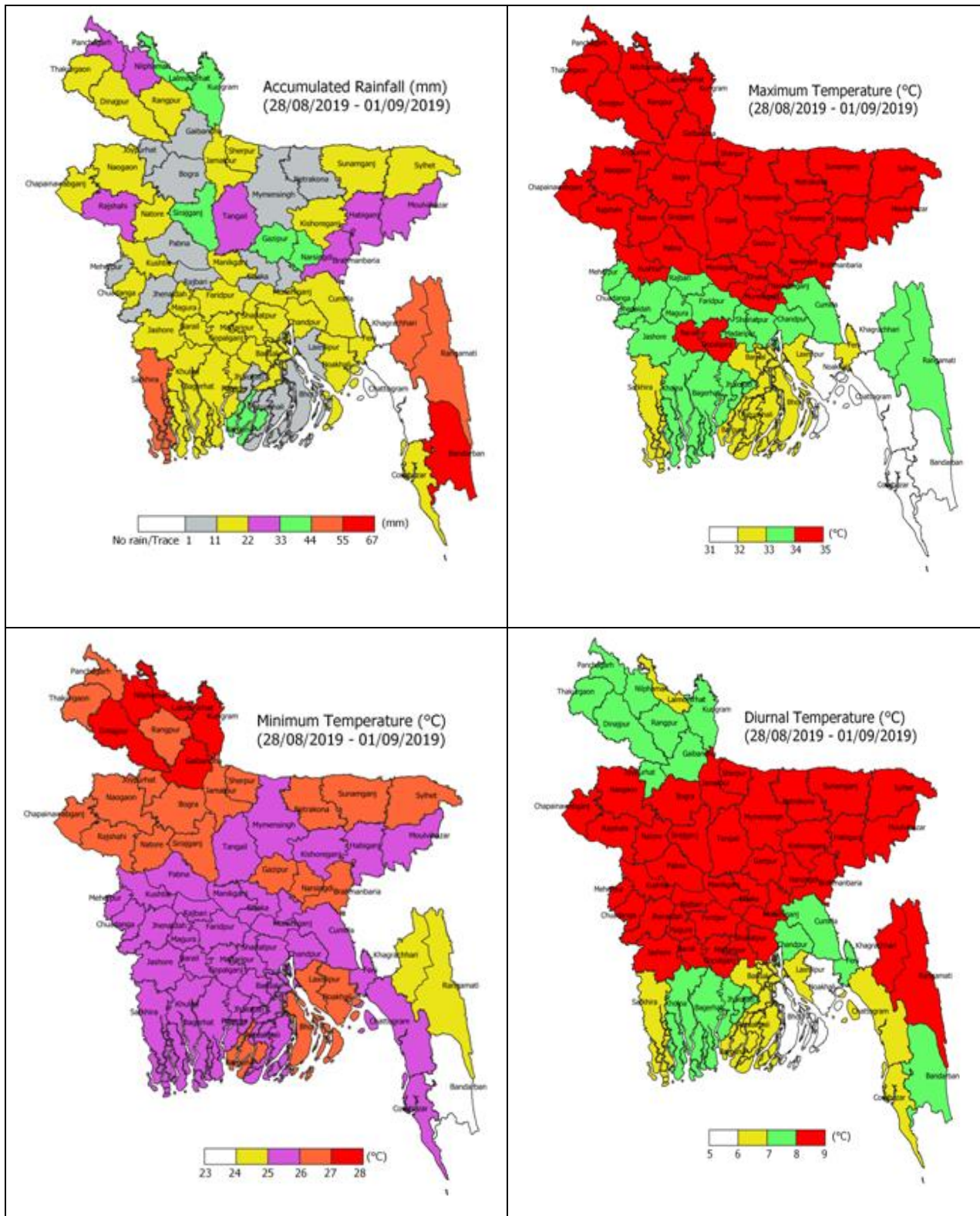
### **Weather Forecast and Advisory for the Period of 25.08.2019 to 31.08.2019**

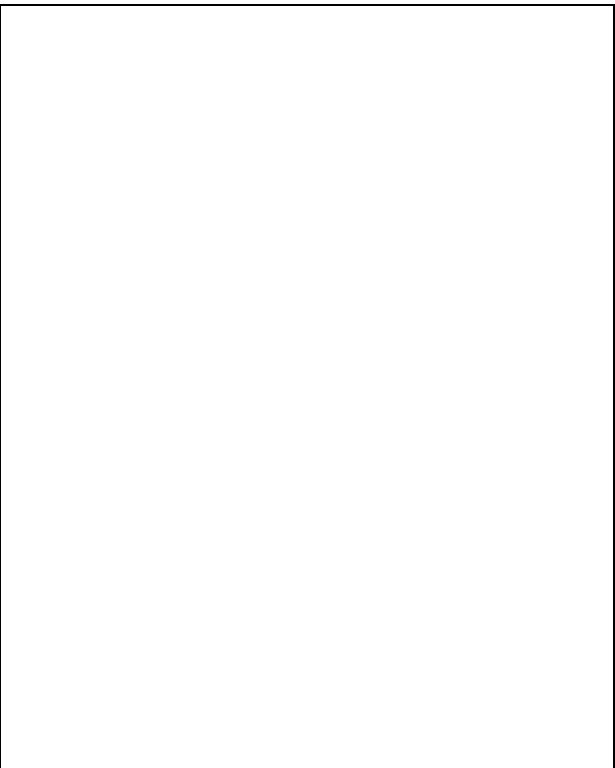
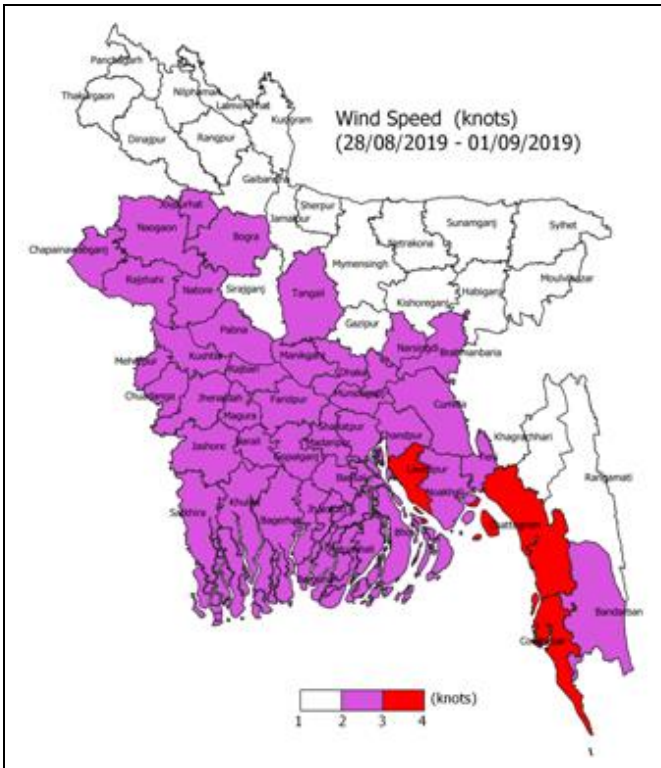
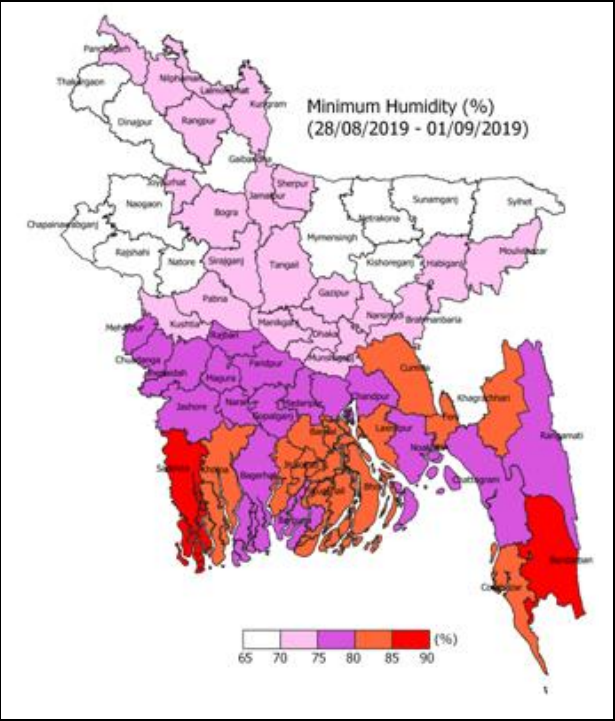
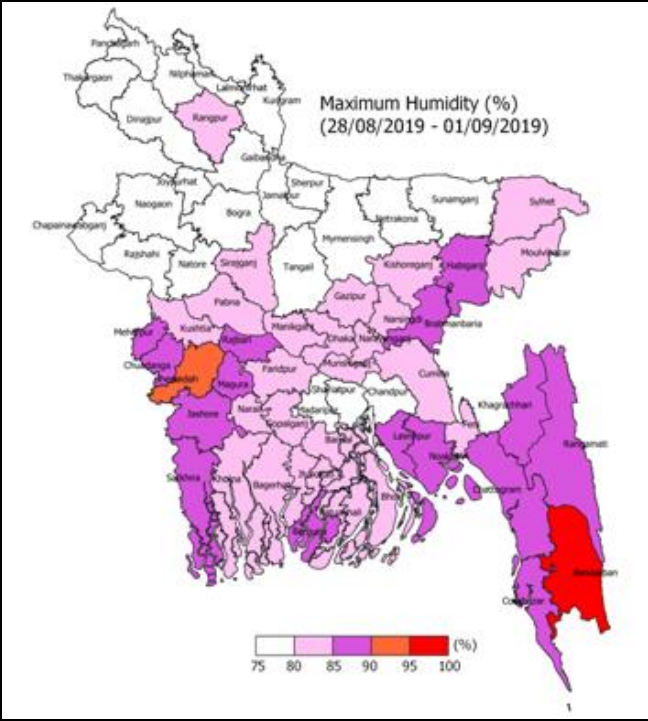
Bright sunshine hour is likely to be from 5.00 to 6.00 hours per day during this week. Average of free water loss during the next week is likely to be from 2.75 to 3.75 mm per day.

- Light (04-10 mm/d) to moderate (11-22 mm/d) rain/thunder shower is likely to occur at many places over Dhaka, Mymensingh and Sylhet divisions and at a few places elsewhere over the country, with chances of moderately heavy (23-43 mm/d) to heavy (44-88 mm/d) falls at places over the country during this period.

Day and night temperature may rise slightly over the country during this period.

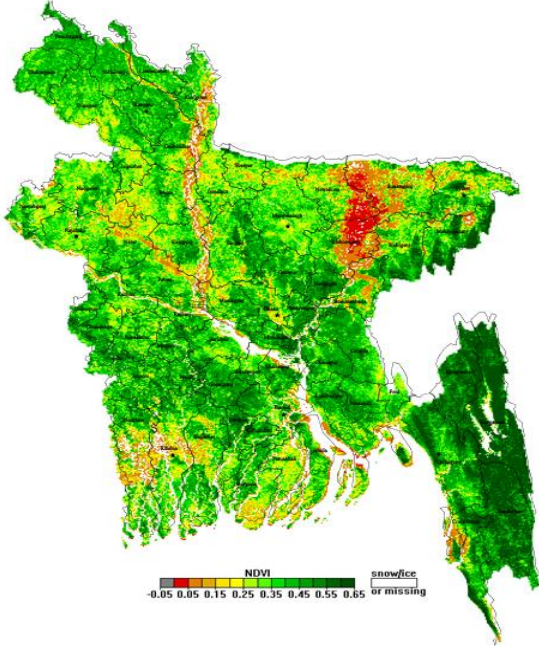
District Wise Quantitative Weather Forecast for next Five days from 28 August -01 September'19



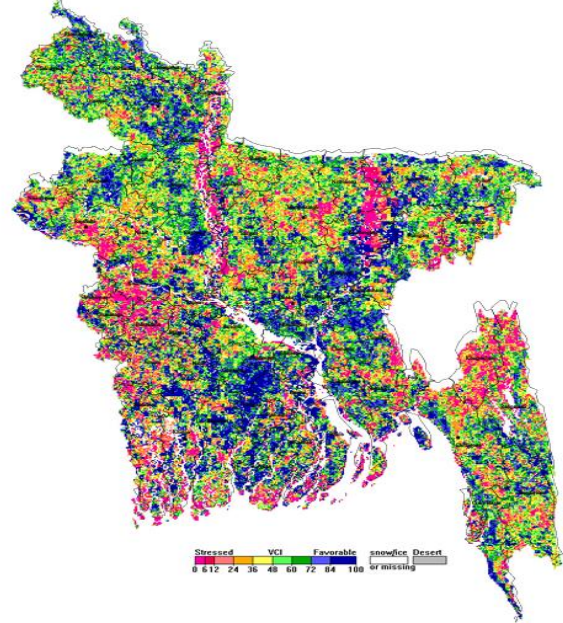


## Different Satellite Products over Bangladesh

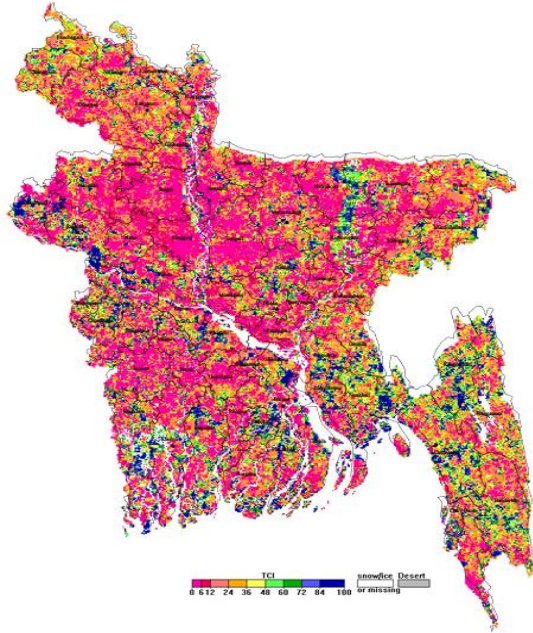
NOAA/VIIRS BLENDED NDVI composite for the week number No. 33 (11 August -17 August) over Agricultural regions of Bangladesh



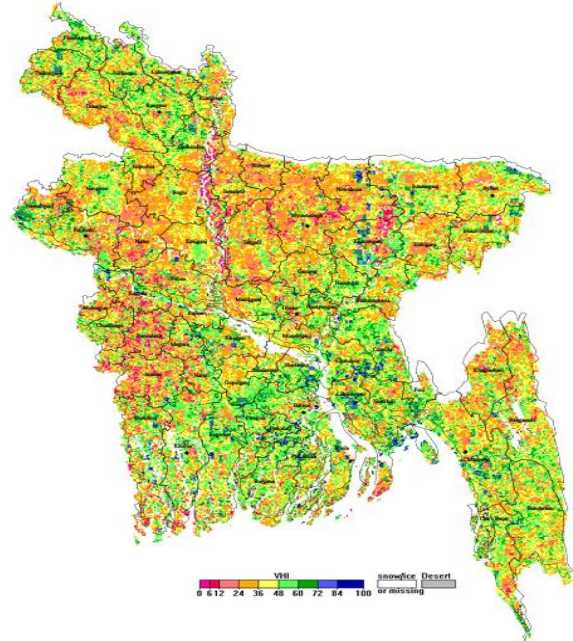
NOAA/ AVHRR BLENDED VCI composite for the week number No. 33 (11 August -17 August) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week number No. 33 (11 August -17 August) over Agricultural regions of Bangladesh

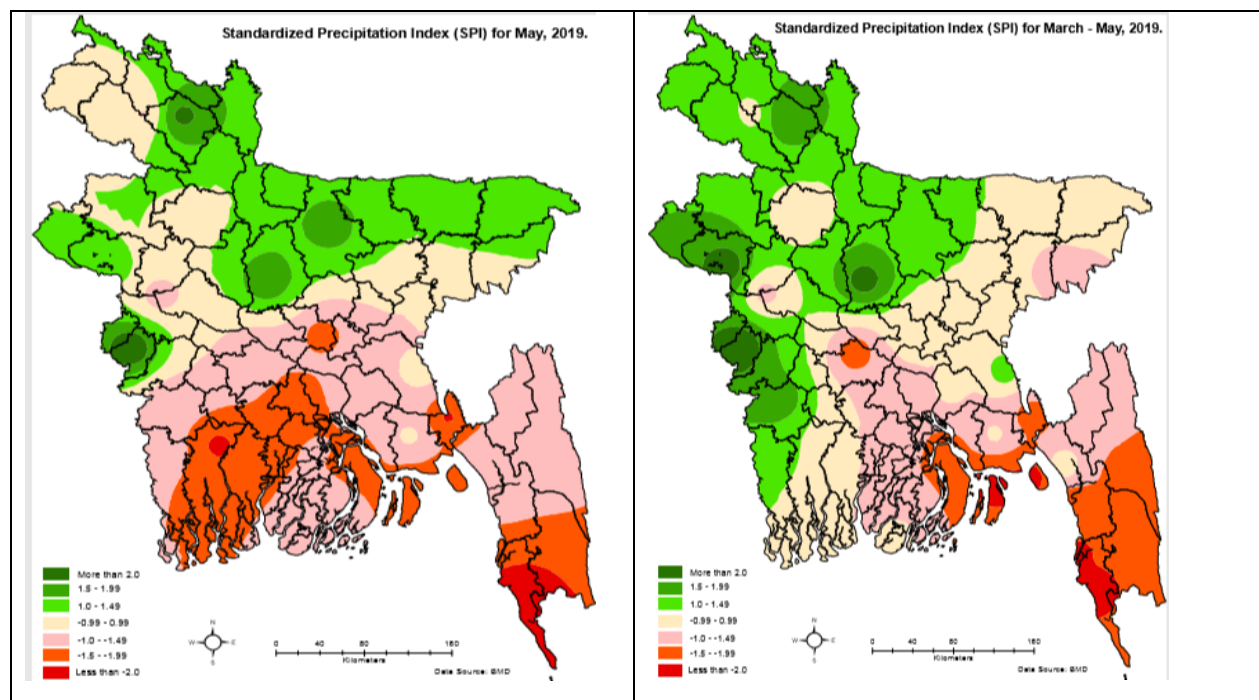


NOAA/ AVHRR BLENDED VHI composite for the week number No. 33 (11 August -17 August) over Agricultural regions of Bangladesh



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

It has been observed that during last three months as well as in May, normal conditions prevails in districts located in northwest, north as well as northeast parts of Bangladesh whereas the districts in south, southeast, southwest and some districts of central parts are under dry condition.



Source: Bangladesh Meteorological Department

### RAINFALL AND RIVER SITUATION SUMMARY AS ON AUGUST 28, 2019

(Source: Bangladesh Water Development Board)

#### Outlook:

- All the major rivers are in falling trend except the Padma.
- All the major rivers may fall in next 48 hours.

#### General River Condition

Monitoring Water Level Stations	93	Water Level Steady in last 24 hours	05
Water Level Rise in last 24 hours	16	Total not Reported	00
Water Level Fall in last 24 hours	72	<b>Above Danger Level</b>	00