



# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

11 September 2019 (WEDNESDAY)  
[FOR THE PERIOD 11.09.2019 - 15.09.2019]



## 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), the axis of the monsoon trough runs across central part of Bangladesh. One of its associated troughs extends up to North Bay. Monsoon is active over Bangladesh and moderate over North Bay. During next 24 hours, light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over Khulna, Barishal, Chattogram & Sylhet divisions and at many places over Rajshahi, Rangpur, Dhaka & Mymensingh divisions with moderately heavy to very heavy falls at places over the country. As per the medium range quantitative district level weather forecast issued by BMD, relatively more rainfall is expected in number of districts in the country from 11<sup>th</sup> to 13<sup>th</sup> September. As a result, it is advised not to apply irrigation, pesticides and fertilisers and also abstain from intercultural operation in these districts where good amount of rainfall is expected during next few days. Day and night temperature may remain nearly unchanged over the country. As per the information received from Bangladesh Water Development Board (BWDB), the Brahmaputra-Jamuna rivers are in rising trend, while the Ganges-Padma and Surma-Kushiyara rivers are in falling trend. Besides, the Brahmaputra-Jamuna rivers may continue rising, while the Ganges-Padma and Surma-Kushiyara rivers may fall in next 24 hours. According to BWDB, there is no indication of flood situation during next five days and as a result no advisories under flood like situation is issued for 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, where good amount of rainfall is likely for next five days, in the country on the standing crops, livestock, poultry and fishery.

### **Agromet Advisories**

#### **Aus Paddy**

- Drain out water completely 15 days before harvesting
- Harvest the crop after the current spell of rainfall.

#### **Aman Paddy**

- Drain out excess water & maintain 5-7 cm standing water up to maximum tillering stage.
- All the intercultural operations should be done after the current spells of rainfall.
- 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. Last 1/3 nitrogen as top dressing should be applied 5-7 days before panicle initiation. All these operations should be done after the current spells of rainfall.
- 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.
- 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 Chloropyrifos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water.
- In some places, crops are attacked either by stem borer or leaf eating insects. To control broadcast granular insecticides like Carbofuran 3G (at 12 kg per acre) or Phorate 10G (at 4 kg per acre).

- All the above mentioned plant protection measure should be taken up after the current spells of rainfall.
- 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**

- Provide adequate drainage facilities to drain out excess water from the field
- Take up sowing of early cabbage and cauliflower seeds in the nursery bed after treating them with Bavistin or Mancozeb.
- Transplant tomato, brinjal and chilli seedlings in main field in ridge furrow system. Use staking during planting of seedlings
- If there is a delay in onset of adequate soil moisture, it is advised for cultivation of creeper under SAC process
- There is a chance of shoot and fruit borer occurrence is noticed in Brinjal. To control, remove the affected fruits, terminal shoot showing boreholes and spray Neem Seed Kernel Extract 5 %.
- There is a chance of occurrence of red spider mite in bhendi. To control, spray Neem Seed Kernel Extract 5 %
- To control the fruit rot in tomato, remove the yellow leaves 15 to 20 cm near the ground and burry them into the soil and spray Mancozeb 250g or Redomil 250 g @ 100 litre of water at an interval of 8-10 days
- High temperature and relative humidity are conducive for leaf curl disease in 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
- All the above mentioned plant protection measure should be taken up after the current spells of rainfall.

### **Horticultural crops**

- Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. If damaged by heavy rainfall, fill the gaps by replanting.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- The current weather is congenial for fruit blight and fruit rot disease in pomegranate, To control, spray Mancozeb 600g and Carbendazim 100 g @ 200 litre of water. . To control thrips in pomegranate, spray Spinosad 2.5 SC @ 10 ml per 10 liters of water .
- Use fruit fly trap to control fruit fly damage in guava orchards and cucurbits. Farmers are advised to remove foot rot infected plants from rice field and avoid ponding of water to check further spreading of infection.
- To control fruit blight and fruit rot disease in pomegranate, spray Mancozeb 600g and Carbondazim 100 g @ 200 litre of water.
- All the above mentioned plant protection measure should be taken up after the current spells of rainfall.

## Coconut

- Prepare pit for plantation of saplings of coconut
- Due to prolonged rains, there is a chance of bud rot in coconut. Keep three perforated Mancozeb sachets (5 g per packet) around spindle leaves as a prophylactic measure against bud rot after the current spell of rainfall.
- Collect all the fallen coconuts from the 12 field to avoid sprouting.

## Banana

- Rake up the accumulated mud from the root zone of banana for better aeration.
- Plantation of banana crop should be done
- 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%) after the current spell of rainfall.
- There is a chance of erwinia rot in banana due to heavy rainfall in this season. As a precaution, apply lime in the banana basin or bleaching powder in the irrigation channels. To enhance the disease resistance, drench the basin with Pseudomonas @ 20g per litre of water. Affected plants can be protected by drenching the basin with 5 g bleaching powder or 3 g Copper oxychloride or 2g Copper hydroxide per one litre of water after the current spell of rainfall.
- Severely affected plants should be cut and removed to prevent the spread of disease.

## 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
- There is a chance for early shoot borer incidence in sugarcane, farmers are advised to spray Chlorpyrifos@2.5ml/L or Monochrotophos@1.6ml/L for control.
- 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 Lambda cyhalothrin @2ml/litre of water.
- All the above mentioned plant protection measure should be taken up after the current spell of rainfall.

## Betelvine:

- 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.
- Pluck muddy leaves from the lower parts of betel nut plants.
- 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 after the current spell of rainfall.
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**Cotton: Sowing stage**

- Continue sowing of cotton.
- As there is a forecast of humid weather conditions, there may be increase in population of insect pest of cotton. Farmers are advised to install pest specific pheromone traps in the fields for monitoring the insect. If sucking pest's population is above ETL, spraying of Imidacloprid 17.8 % SC @ 1.0 ml / 3 litre or Trizophos 40 EC @ 1.0 ml/litre of water is advised against all type of borers after the current spell of rainfall.

**Turmeric:**

- High relative humidity may cause leaf spot in turmeric, spray Mancozeb 1 kg/ha after the current spell of rainfall.
- To control Rhizome rot disease turmeric, drench the affected area with 0.3% Mencozeb 75 WP @ 2g/l of water after the current spell of rainfall

**Ginger:**

- Prepare drainage channel properly.
- To control Rhizome rot disease in ginger, drench the affected area with 0.3% Mencozeb 75 WP @ 2g/l of water after the current spell of rainfall.

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**Livestock, Poultry & Fishery**

- Hygiene should be maintained around cattle shed. Avoid water logging in cattle shed.
- 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.
- During the monsoon season, to prevent the livestock from worm infestations, it is advised to give Piperzine or Mebendazole at recommended dose after proper consultation with veterinary doctor.
- 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.
- Protect poultry houses from extreme rain/wind by covering with polythene sheets on the sheds. Provide vitamin B complex @ 7ml/litre in drinking water daily in broiler for healthy growth. Litter should be change periodically and provide clean drinking water and changed the water every day.
- To avoid insect infestation in nursery ponds, apply soap oil emulsion (mixture of cheap soap @ 2.5 kg and kerosene oil @ 13 litre per bigha of pond) and apply gently in nursery ponds.

Detail District-wise 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 11 September'19) and maximum temperature on 10 September, minimum temperature on 11 September'19 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	03	34.0	27.5	Rajshahi	Rajshahi	00	<u>35.8</u>	27.4	
	Tangail	00	35.0	27.0		Ishurdi	00	35.5	27.8	
	Faridpur	00	34.7	25.9		Bogura	Trace	34.3	28.0	
	Madaripur	07	31.6	26.2		Badalgachhi	00	33.5	27.6	
	Gopalganj	02	33.0	26.4		Tarash	00	34.2	27.5	
	Nikli	00	33.0	27.0		Rangpur	Rangpur	04	31.7	27.3
Mymensingh	Mymensingh	01	33.4	27.4	Dinajpur		Trace	33.4	27.8	
	Netrokona	00	33.3	27.4	Sayedpur		04	35.2	27.0	
Chattogram	Chattogram	02	30.3	25.8	Khulna		Tetulia	03	30.5	26.4
	Sandwip	48	30.1	25.4			Dimla	121	33.1	25.5
	Sitakunda	07	30.3	25.5			Rajarhat	04	32.5	27.0
	Rangamati	00	32.0	24.6		Barishal	Khulna	11	34.0	26.0
	Cumilla	00	31.6	26.2			Mongla	08	32.4	25.6
	Chandpur	00	32.7	26.2			Satkhira	02	xx	27.0
	M.Court	99	29.3	26.2	Jashore		64	33.8	26.8	
	Feni	17	31.0	26.0	Chuadanga		00	35.0	27.3	
	Hatiya	16	29.0	26.2	Kumarkhali	00	33.8	27.8		
	Cox's Bazar	140	27.0	24.7	Barishal	Barishal	45	30.2	26.2	
	Kutubdia	81	27.5	25.1		Patuakhali	04	29.8	25.6	
Teknaf	<u>224</u>	27.6	<u>23.5</u>	Khepupara		29	29.3	25.4		
Sylhet	Sylhet	03	32.7	26.5		Bhola	33	31.3	26.1	
	Srimangal	00	33.5	26.4						

### Highlights:

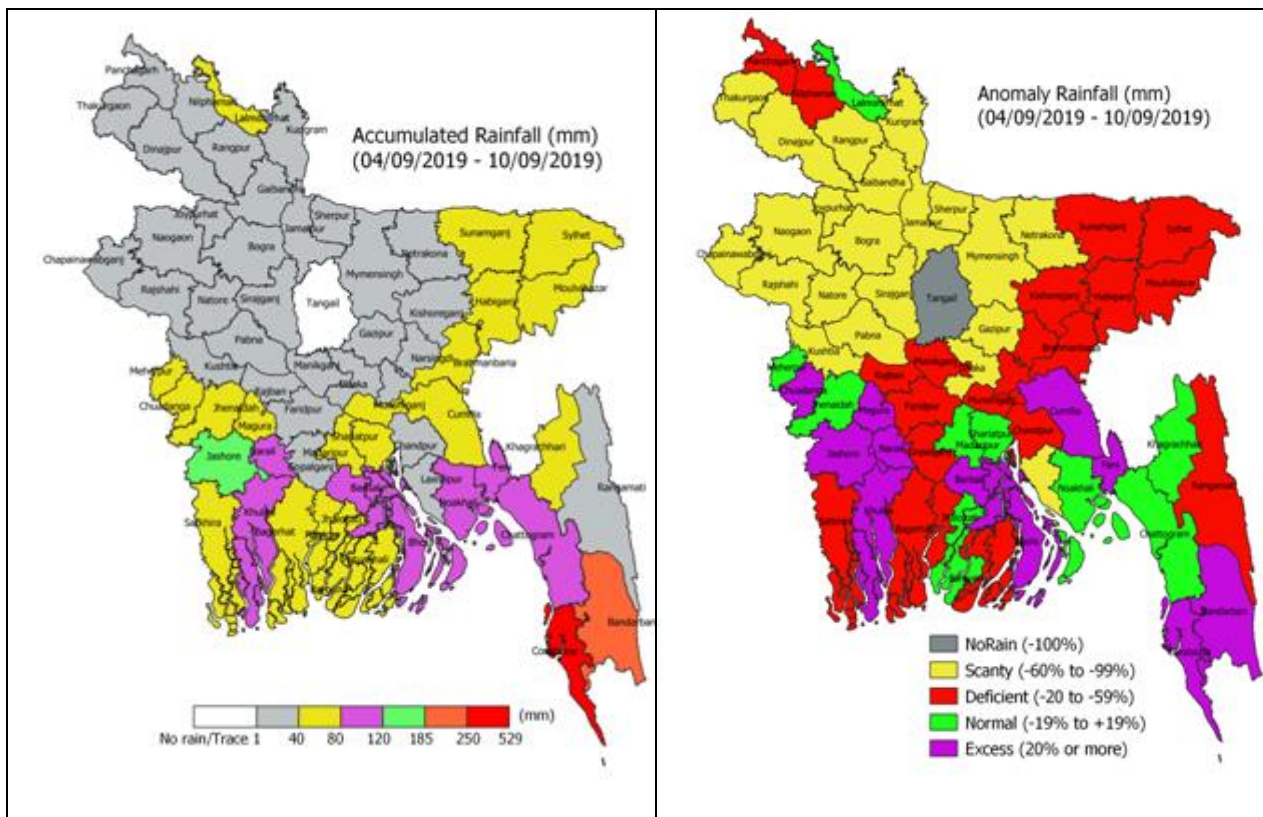
- Country average of bright sunshine hour was 5.63 hours per day during last week.
- Country average of free water loss during the previous week was 3.48 mm per day.

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

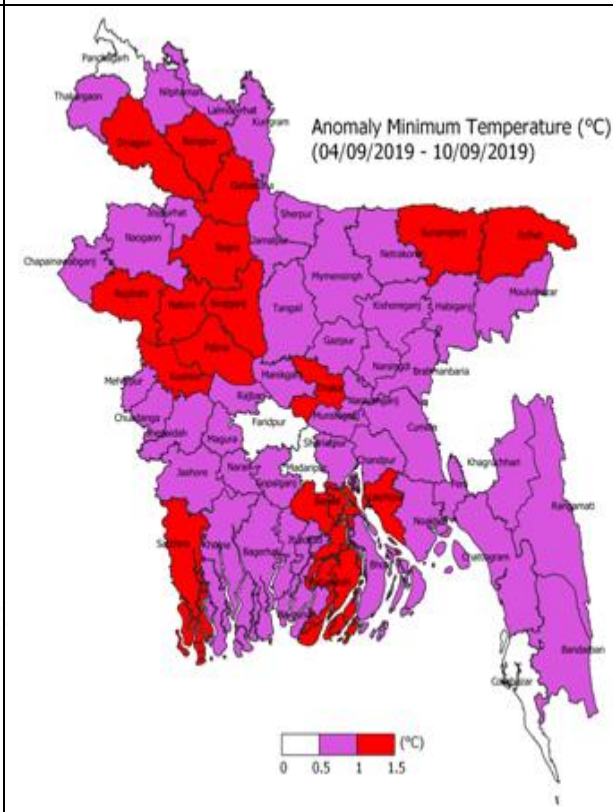
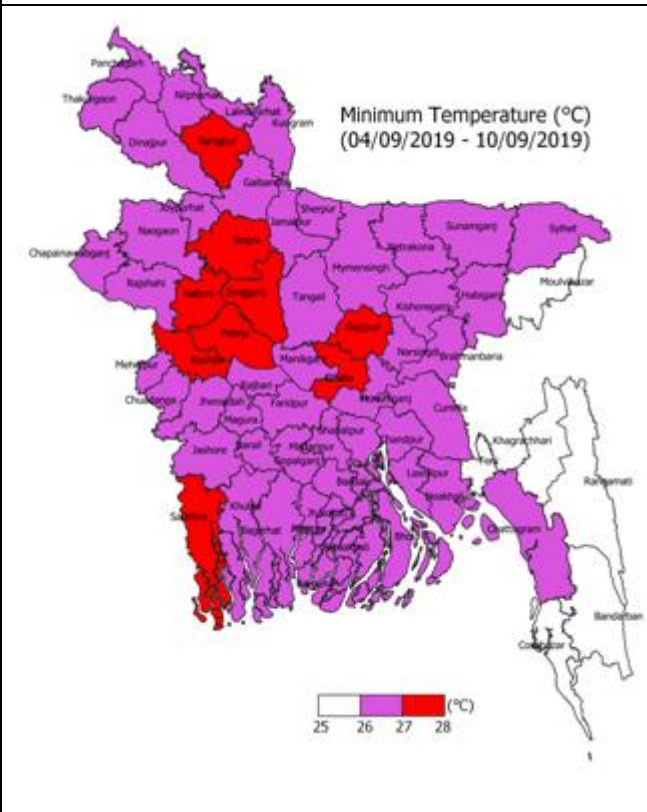
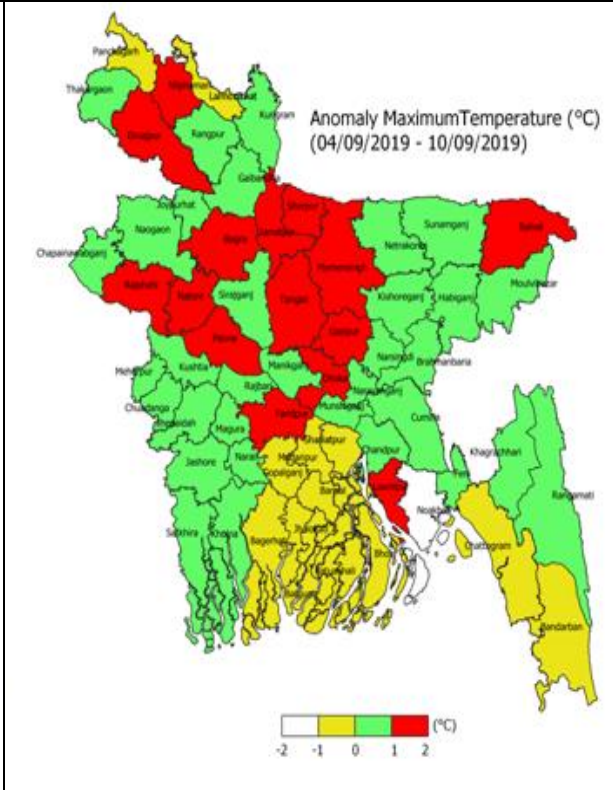
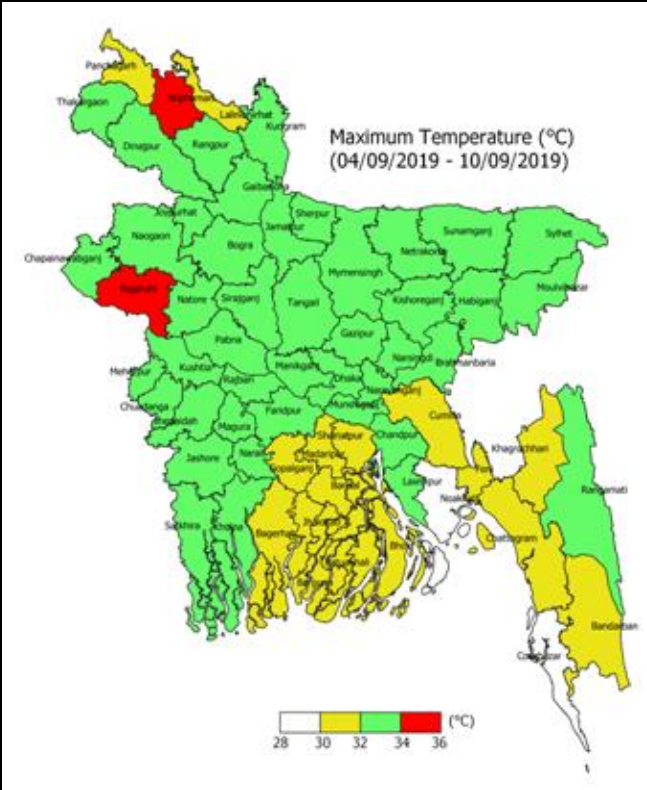
**Forecast:** Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over Khulna, Barishal, Chattogram & Sylhet divisions and at many places over Rajshahi, Rangpur, Dhaka & Mymensingh divisions with moderately heavy to very heavy falls at places over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

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

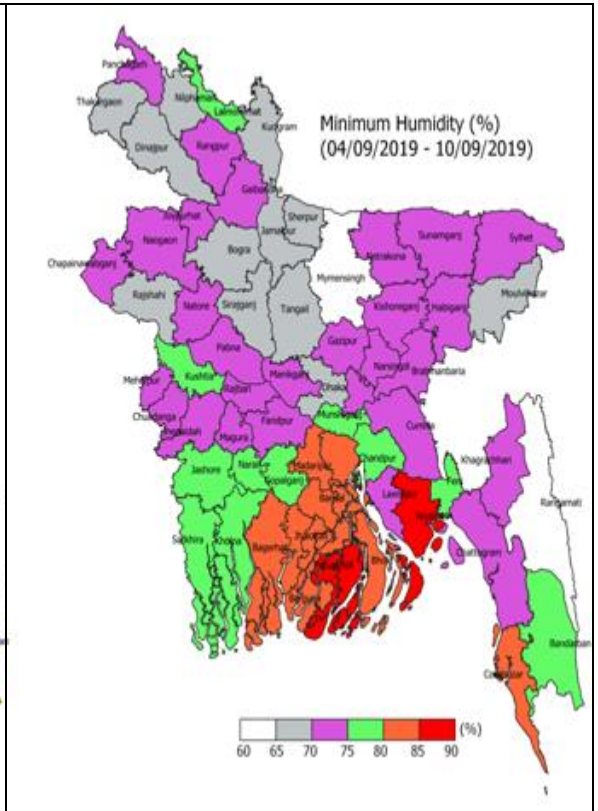
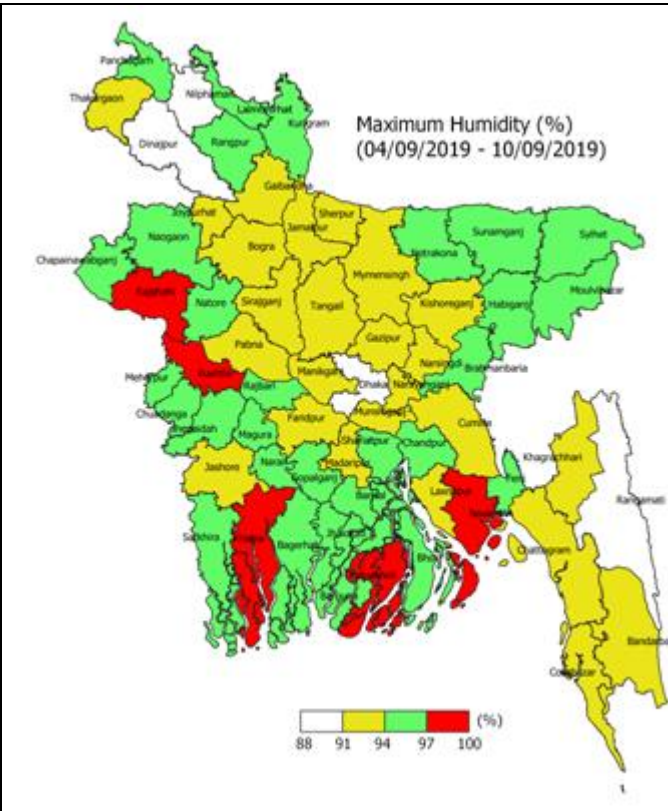
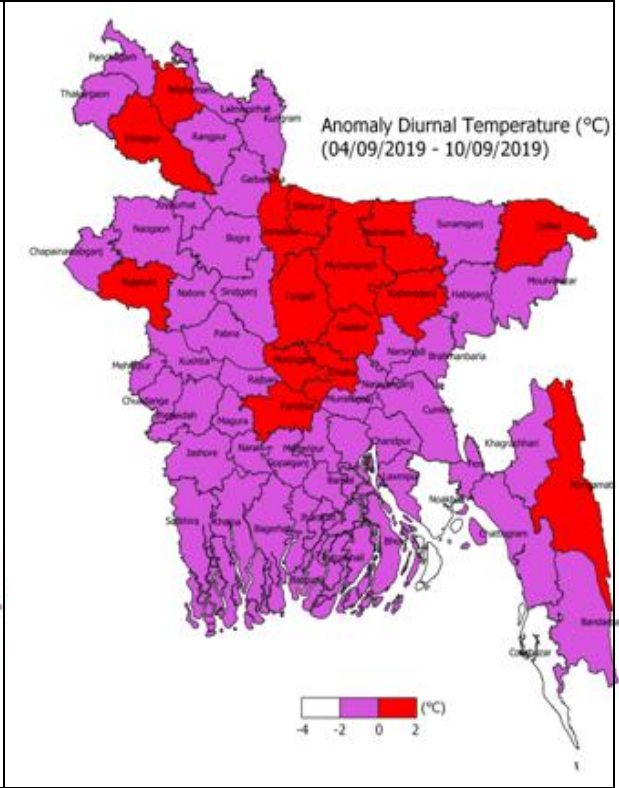
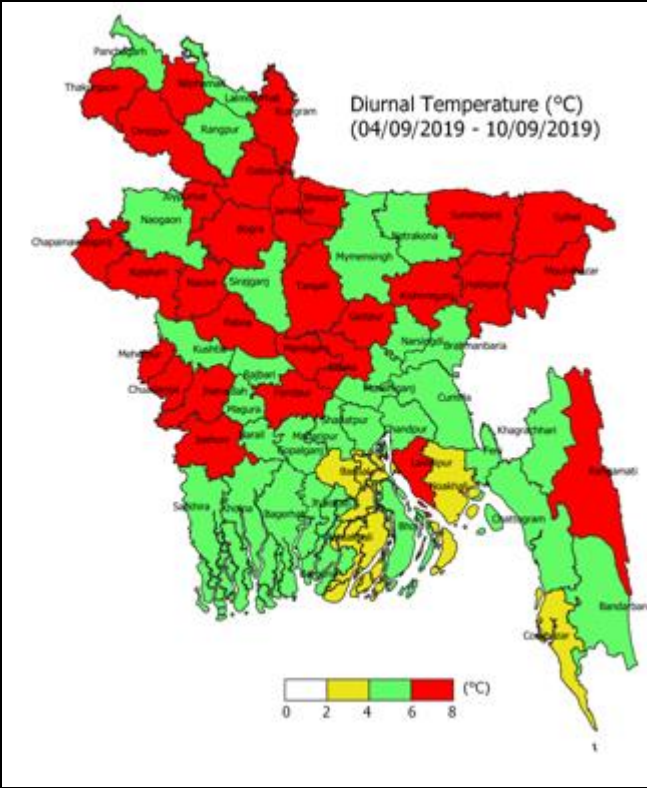
**Spatial Distribution of weather parameters for the Week ending 10 September 2019**

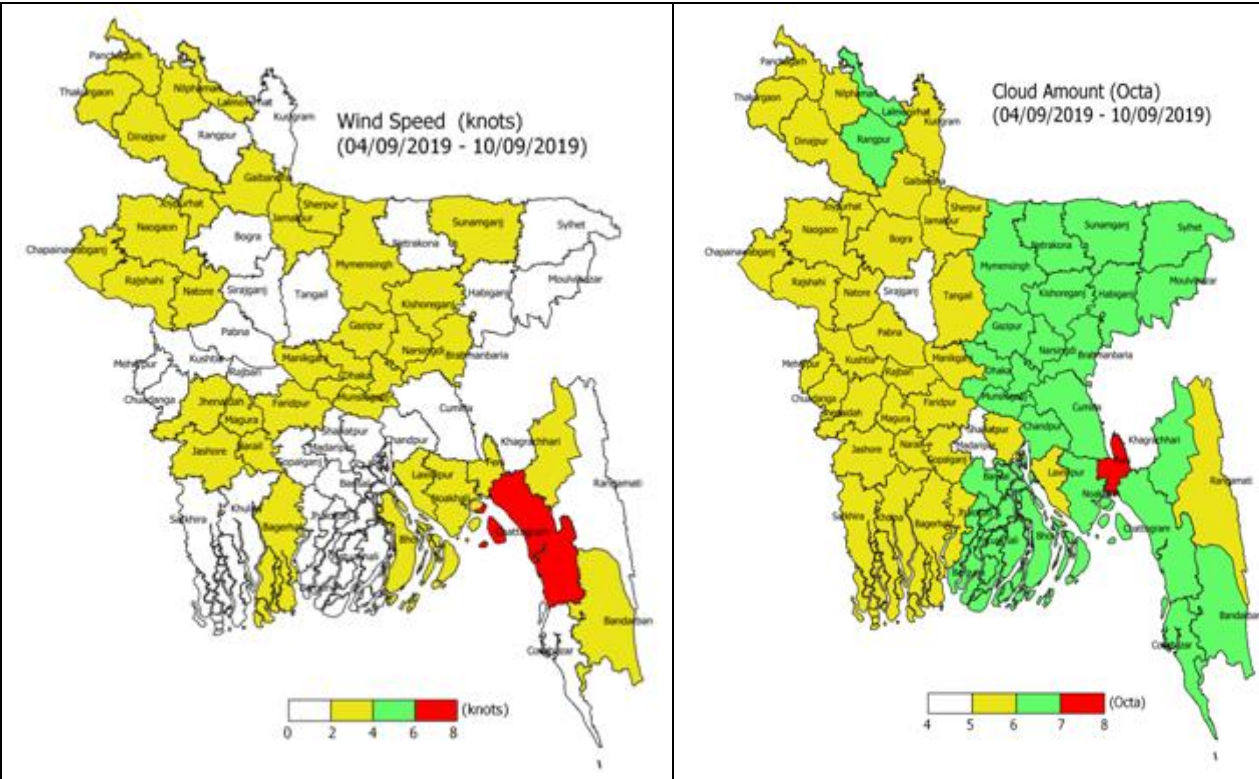












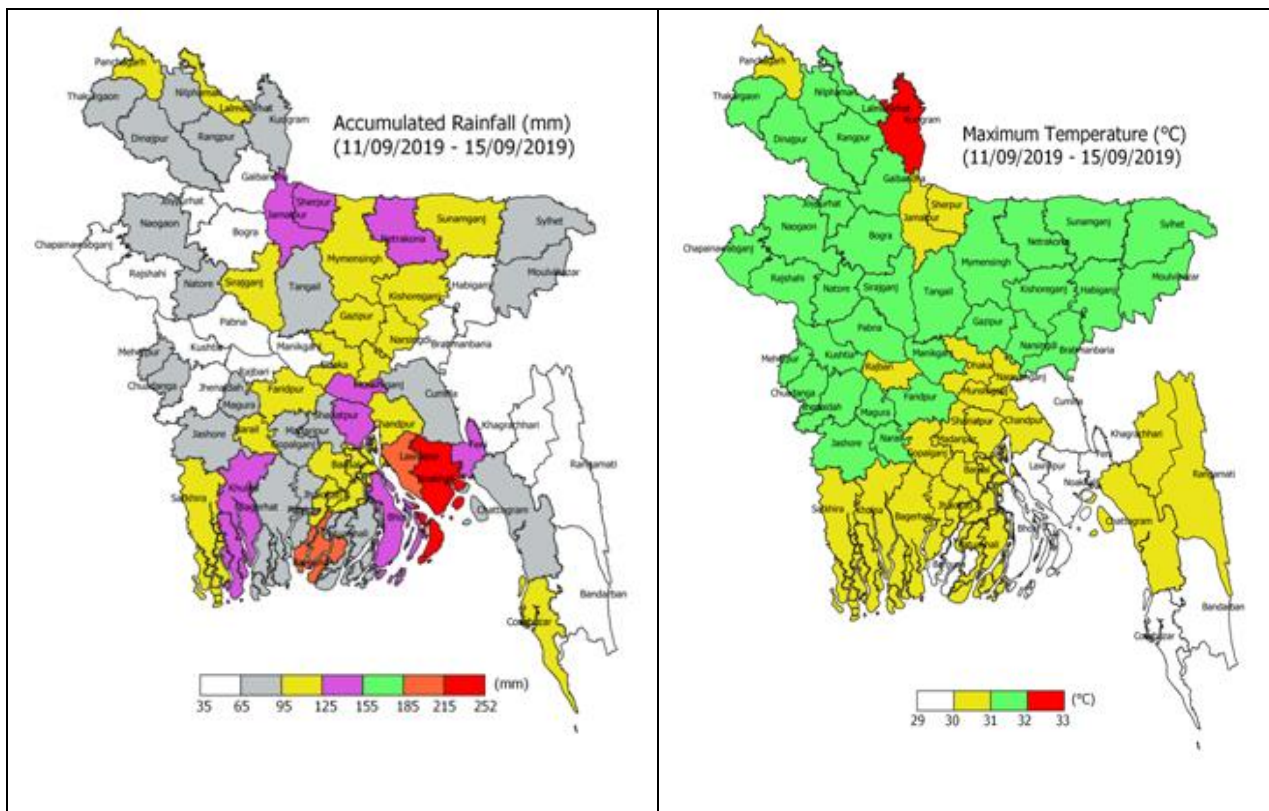
**Weather Forecast and Advisory for the Period of 08.09.2019 to 14.09.2019**

Bright sunshine hour is likely to be from 5.50 to 6.00 hours per day during this week. Average of free water loss during the next week is likely to be from 3.00 to 4.00 mm per day.

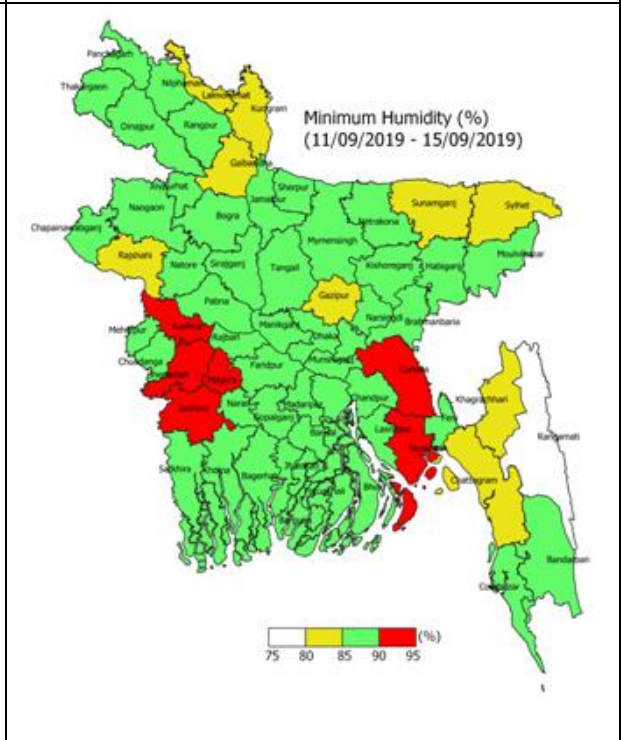
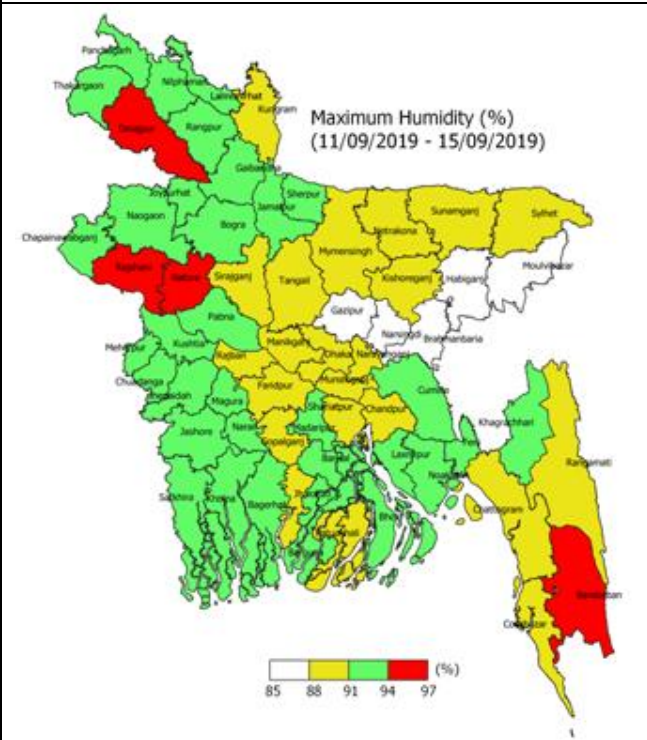
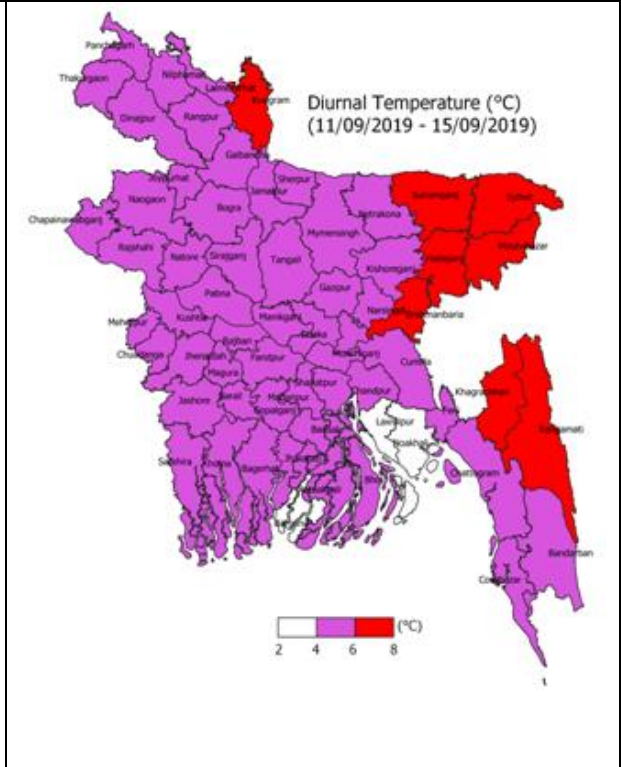
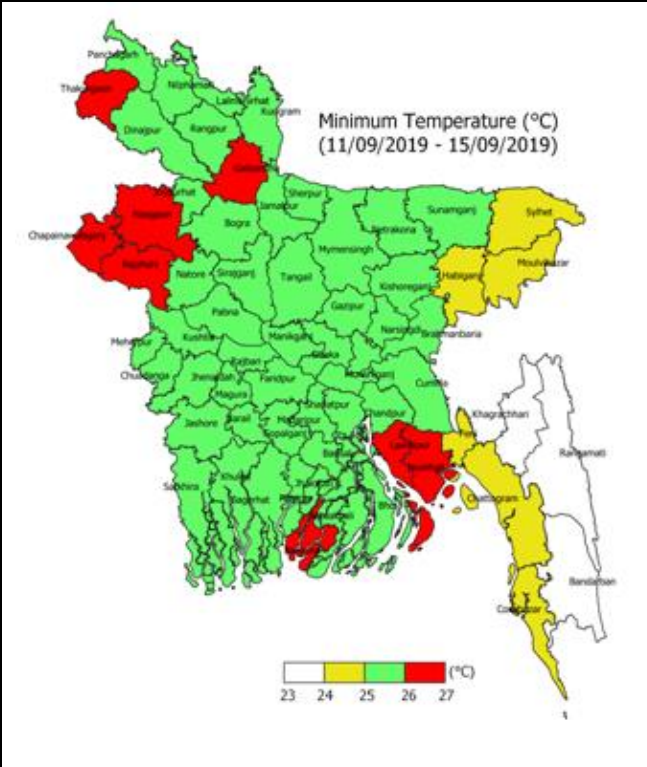
Light (04-10 mm/d) to moderate (11-22 mm/d) rain/thunder shower is likely to occur at many places over the country, with chances of moderately heavy (23-43 mm/d) falls at places during this period.

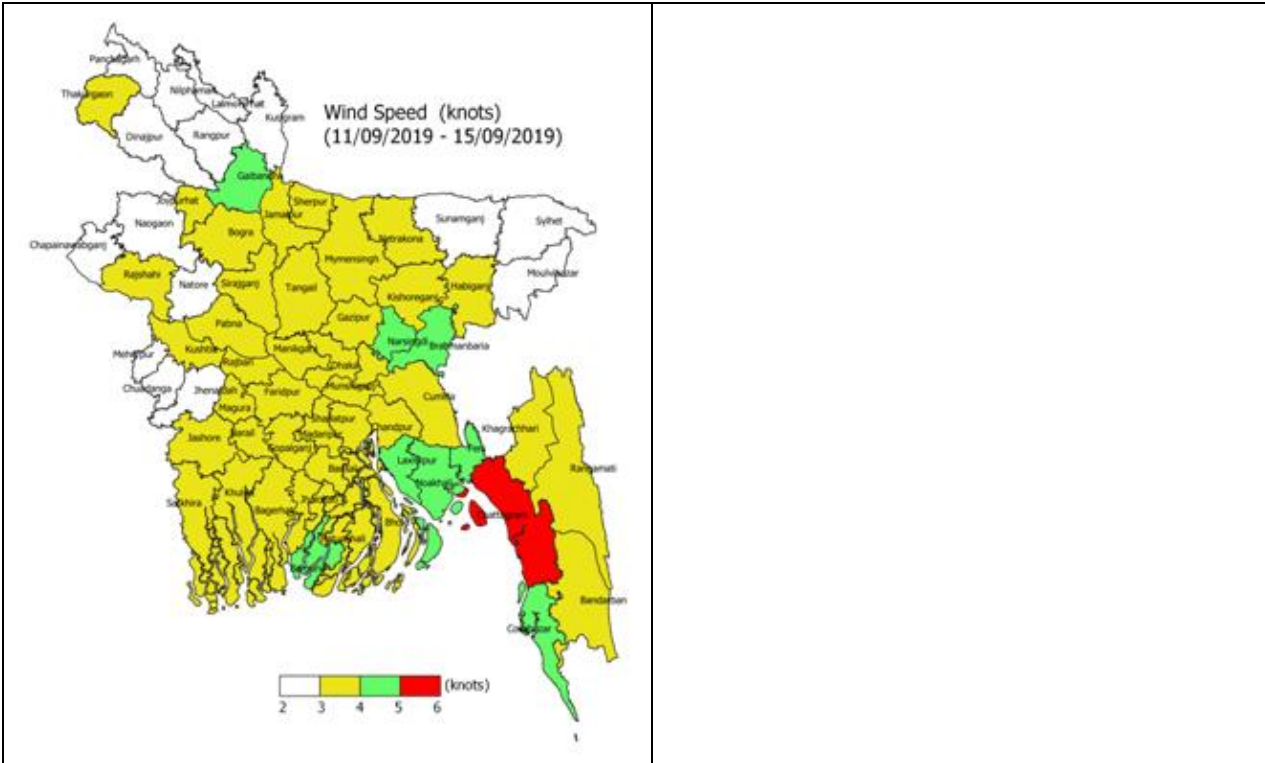
Day and night temperature may fall slightly over the country during this period.

**District Wise Quantitative Weather Forecast for next Five days from 11 Sept. -15 September'19**



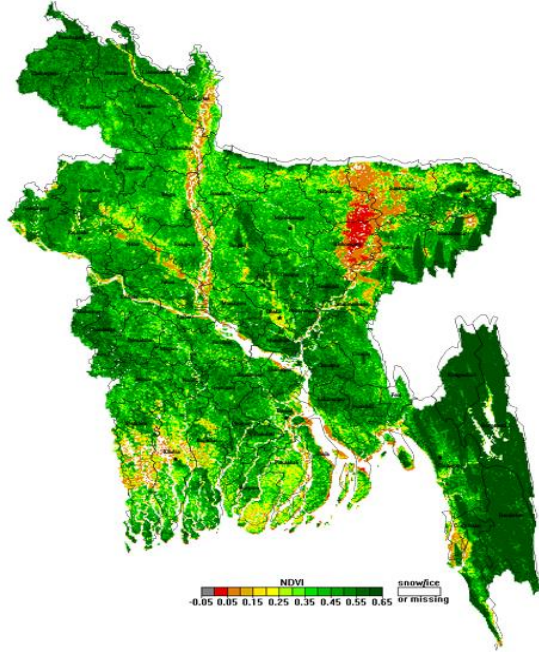




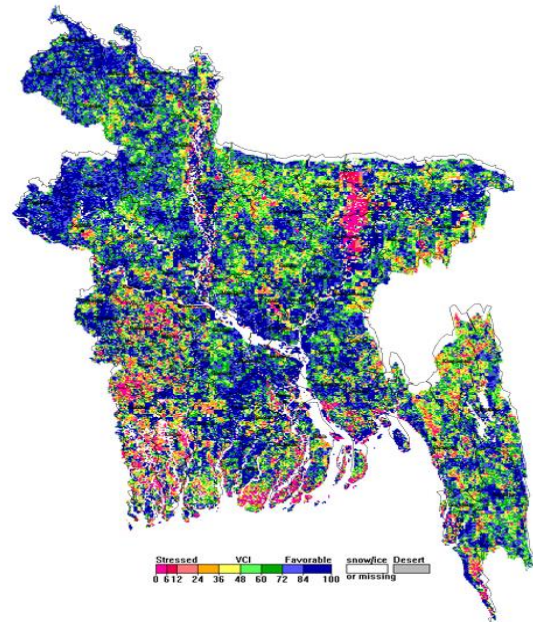


## Different Satellite Products over Bangladesh

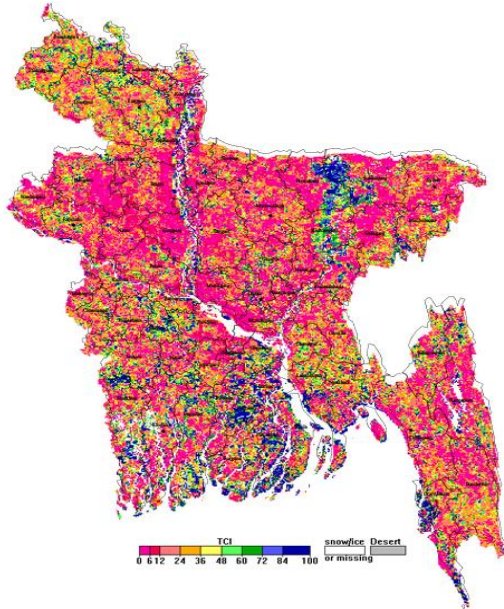
NOAA/VIIRS BLENDED NDVI composite for the week number No. 35 (25 August -30 August) over Agricultural regions of Bangladesh



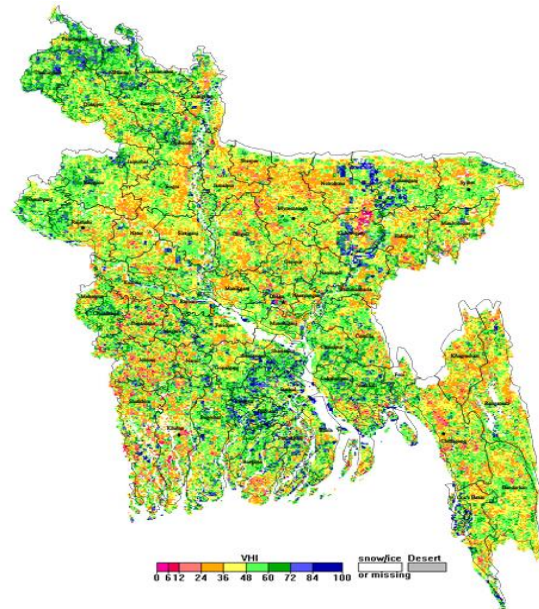
NOAA/AVHRR BLENDED VCI composite for the week number No. 35 (25 August -30 August) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED TCI composite for the week number No. 35 (25 August -30 August) over Agricultural regions of Bangladesh



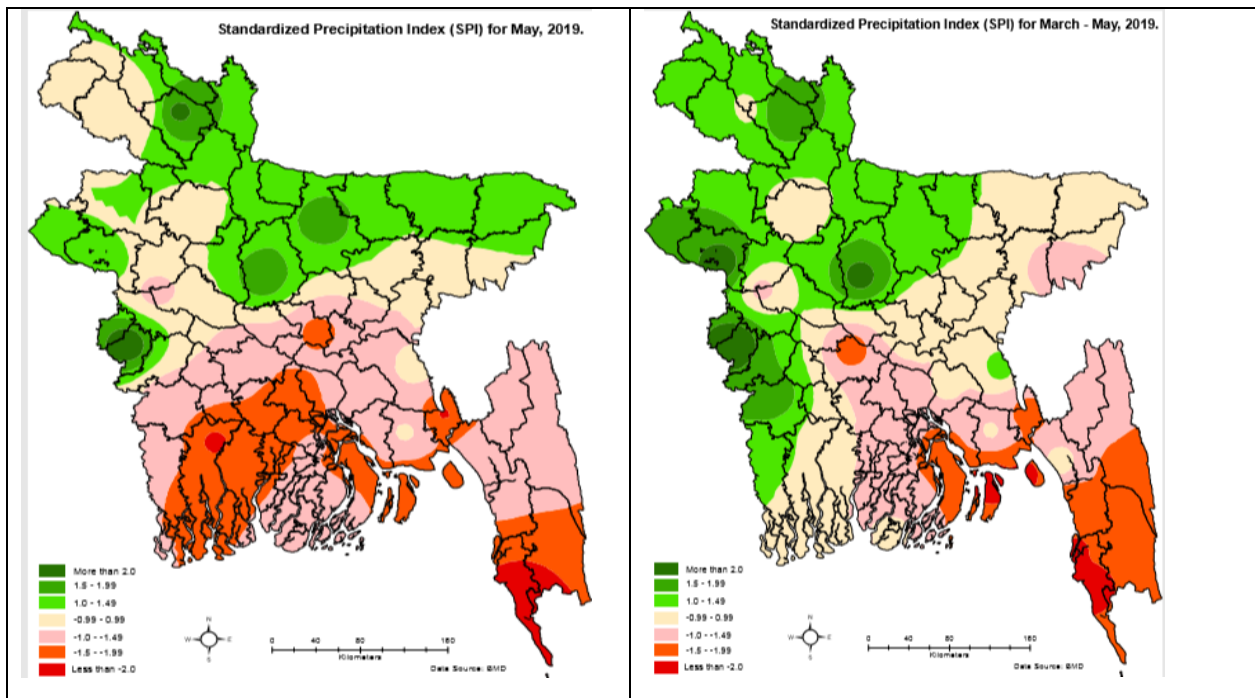
NOAA/AVHRR BLENDED VHI composite for the week number No. 35 (25 August -30 August) over Agricultural regions of Bangladesh



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 SEPTEMBER 11, 2019**

(Source: Bangladesh Water Development Board)

**Outlook:**

- The Brahmaputra-Jamuna rivers are in rising trend, while the Ganges-Padma and Surma-Kushiyara rivers are in falling trend.
- The Brahmaputra-Jamuna rivers may continue rising, while the Ganges-Padma and Surma-Kushiyara rivers may fall in next 24 hours.

**General River Condition**

Monitoring Water Level Stations	93	Water Level Steady in last 24 hours	03
Water Level Rise in last 24 hours	41	Total not Reported	00
Water Level Fall in last 24 hours	49	Above Danger Level	00