



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

04 September 2019 (WEDNESDAY)
[FOR THE PERIOD 04.09.2019 - 08.09.2019]



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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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 fairly active over Bangladesh and moderate to strong elsewhere 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 Dhaka, Mymensingh, Rajshahi, Rangpur, Khulna, Barishal, Chattogram & Sylhet divisions with moderately heavy falls at places over the country. As per the medium range quantitative district level forecast issued by BMD, relatively more rainfall is expected in Sylhet, Sunamganj, Sirajganj, Sherpur, Satkhira, Rangamati, Noakhali, Lakhshampur, Jamalpur, Gazipur, Cox's Bazar, Barguna & Banderban district during next five days. Day temperature may rise slightly 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

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

Aman Paddy

- 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

- Drain out water from the crop field.
- 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 Clorothalonil @ 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.
- 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, and 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.
- 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 after the current spell of rainfall.

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 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 04 September'19) and maximum temperature on 03 September, minimum temperature on 04 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	Trace	34.6	27.9	Rajshahi	Rajshahi	00	34.5	27.0
	Tangail	00	34.7	27.0		Ishurdi	00	34.2	27.6
	Faridpur	00	34.4	27.0		Bogura	06	33.5	27.6
	Madaripur	07	33.3	26.8		Badalgachhi	12	32.6	27.0
	Gopalganj	12	31.0	26.2		Tarash	00	34.0	27.5
	Nikli	05	34.2	27.4					
Mymensingh	Mymensingh	08	34.4	26.0	Rangpur	Rangpur	Trace	34.1	27.6
	Netrokona	37	34.0	25.3		Dinajpur	16	35.3	27.7
Chattogram	Chattogram	05	33.8	26.5		Sayedpur	00	34.4	27.8
	Sandwip	00	32.5	27.0		Tetulia	02	35.5	27.0
	Sitakunda	05	33.5	26.2		Dimla	Trace	34.0	28.0
	Rangamati	00	33.4	<u>25.0</u>	Rajarhat	00	34.0	26.6	
	Cumilla	00	34.2	26.8	Khulna	Khulna	05	31.8	27.4
	Chandpur	00	34.7	26.1		Mongla	09	32.5	27.0
	M.Court	00	33.6	27.6		Satkhira	01	32.6	26.5
	Feni	03	34.3	26.2		Jashore	10	31.4	26.6
	Hatiya	00	31.0	27.6		Chuadanga	01	33.6	27.0
	Cox's Bazar	02	31.4	25.5		Kumarkhali	00	33.3	27.2
	Kutubdia	00	32.5	26.0	Barishal	Barishal	04	32.5	27.2
	Teknaf	33	31.4	<u>25.0</u>		Patuakhali	15	32.5	27.1
						Khepupara	21	32.1	27.2
Sylhet	Sylhet	<u>45</u>	<u>36.5</u>	25.7	Bhola	05	32.0	26.4	
	Srimangal	21	35.5	25.3					

Highlights:

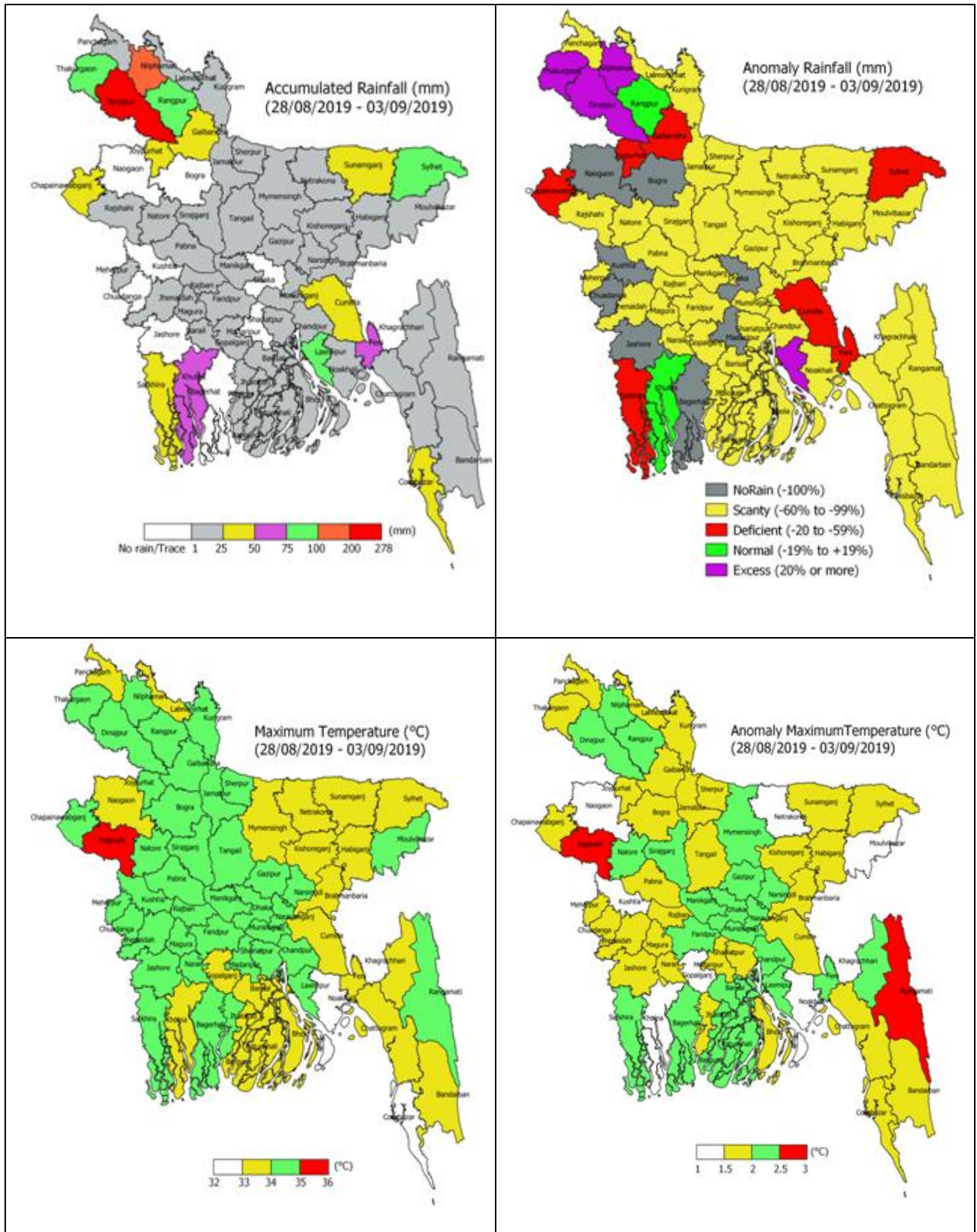
- Country average of bright sunshine hour was 6.01 hours per day during last week.
- Country average of free water loss during the previous week was 3.61 mm per day.

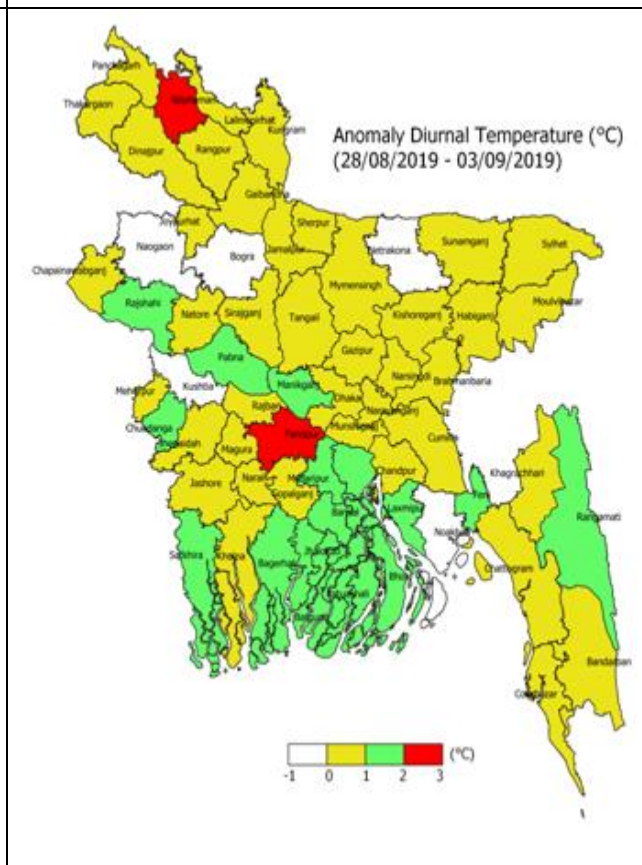
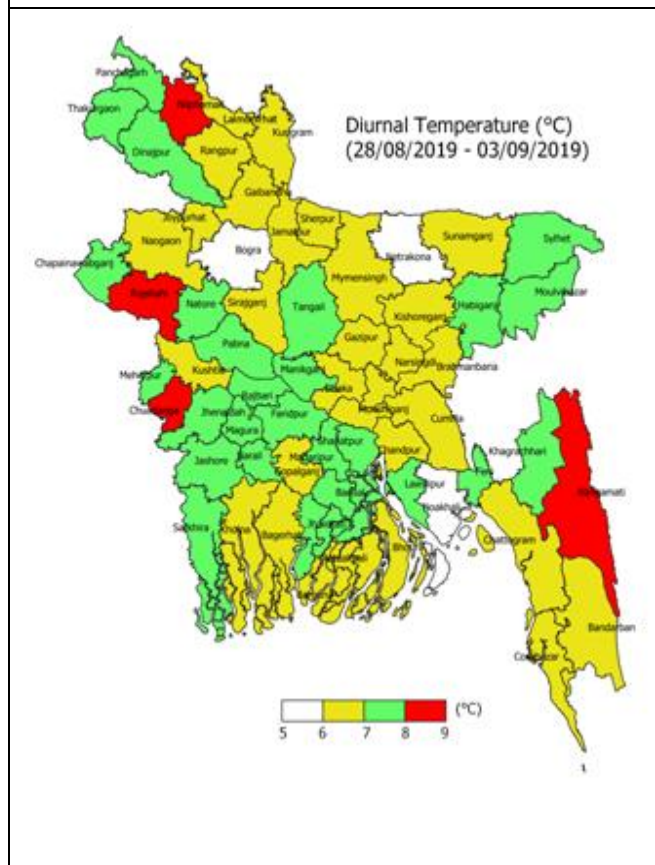
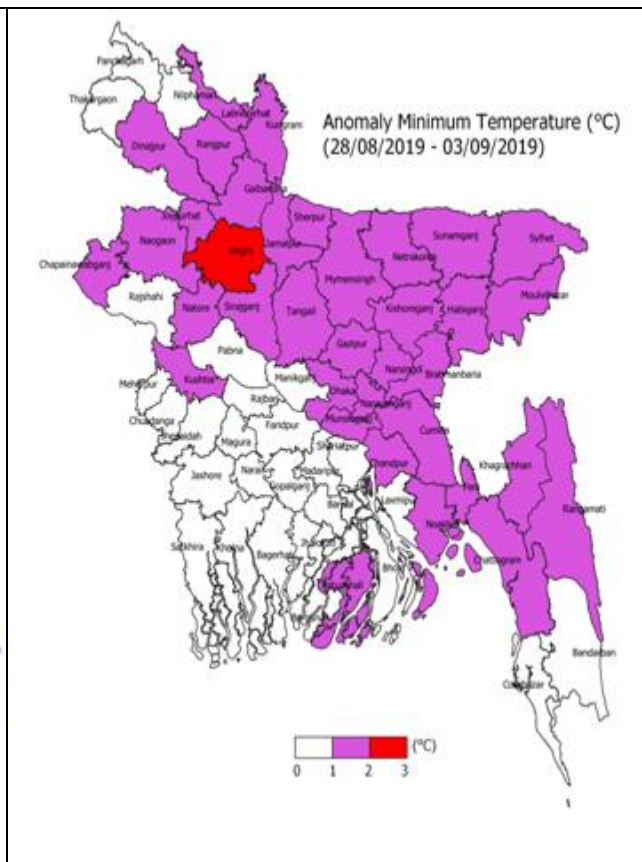
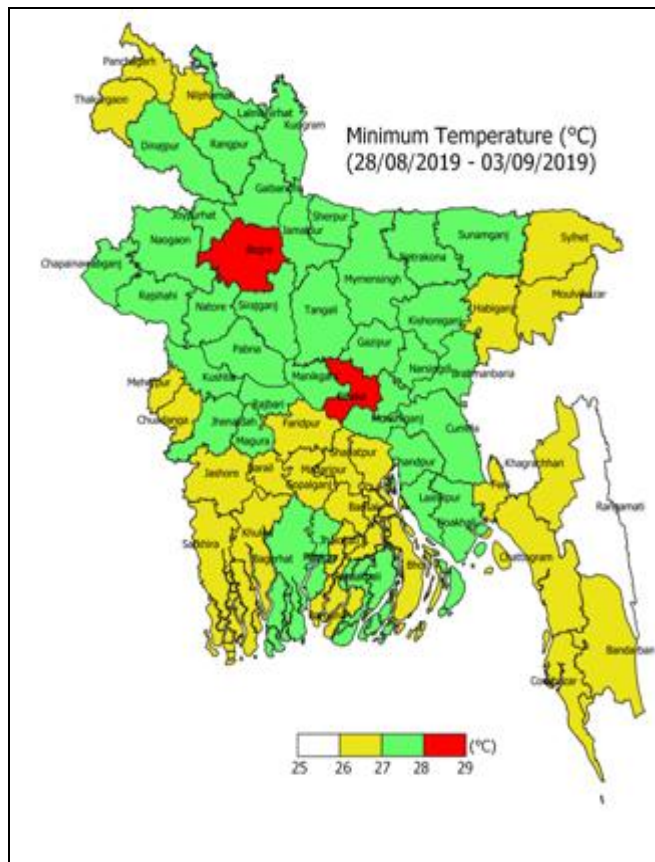
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

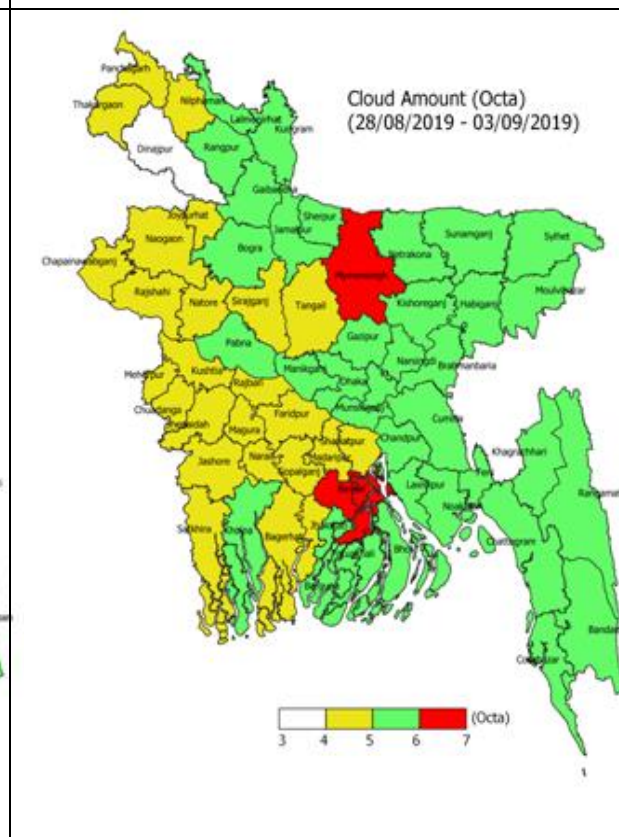
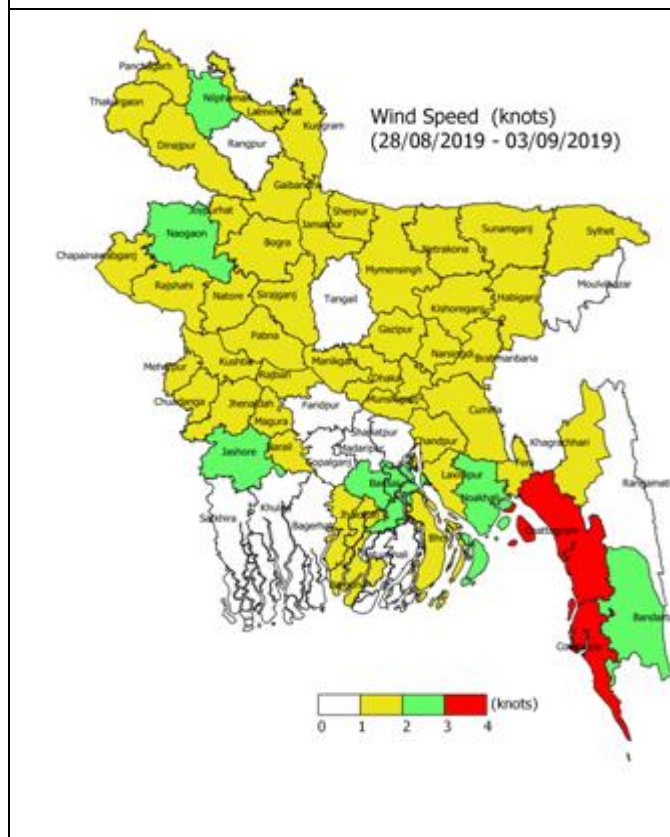
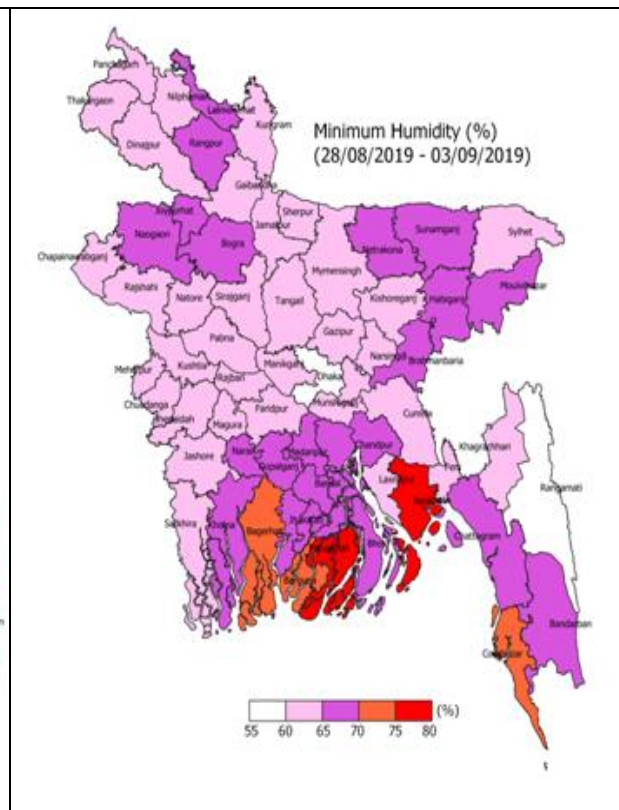
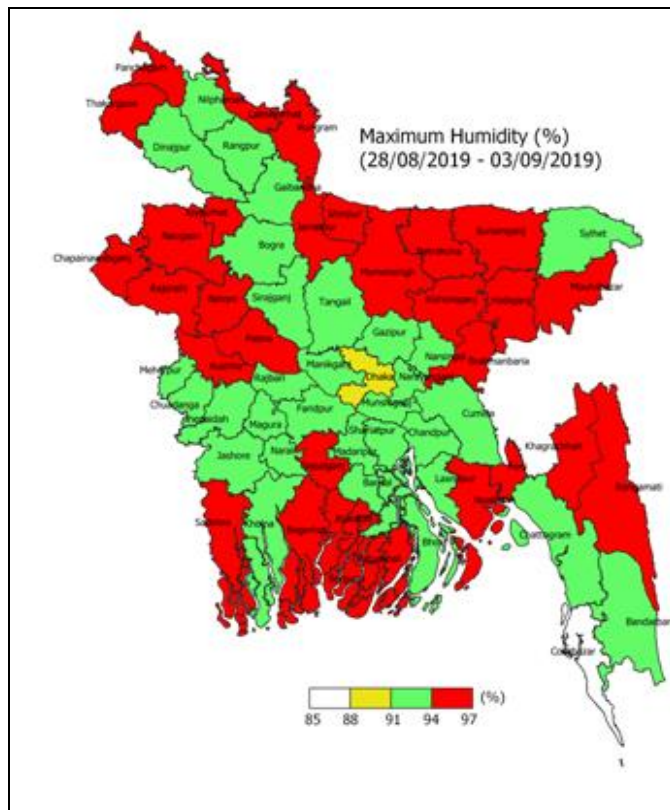
Forecast: Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Khulna & Barishal divisions and at a few places over Rangpur, Rajshahi, Dhaka, Mymensingh, Chattogram & Sylhet divisions with moderately heavy to heavy falls at places over the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

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

Spatial Distribution of weather parameters for the Week ending 3rd September 2019







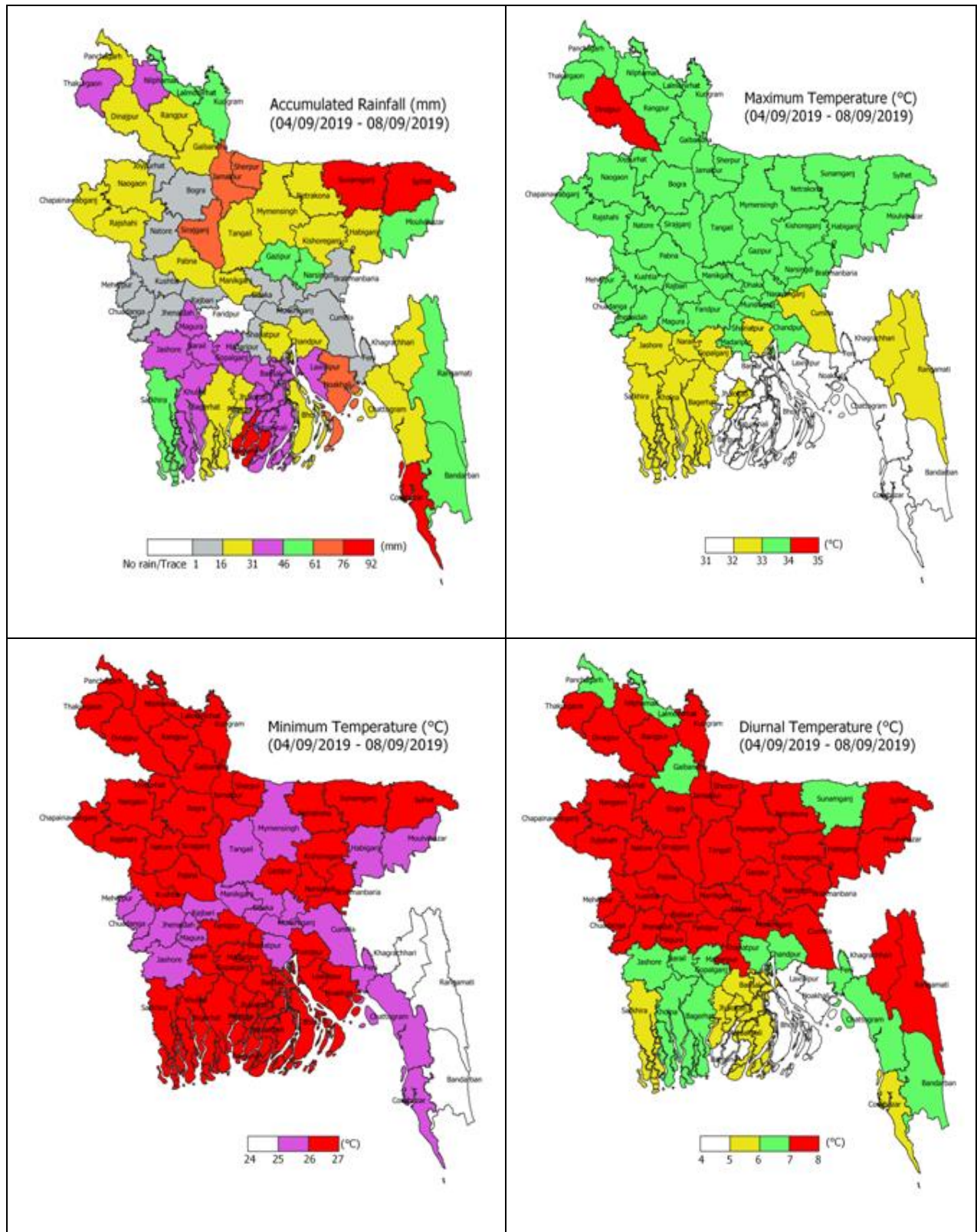
Weather Forecast and Advisory for the Period of 01.09.2019 to 07.09.2019

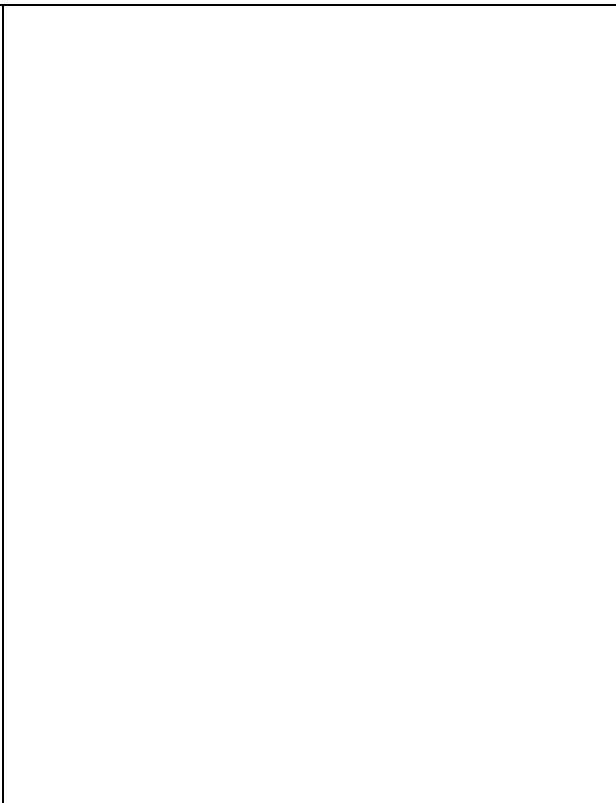
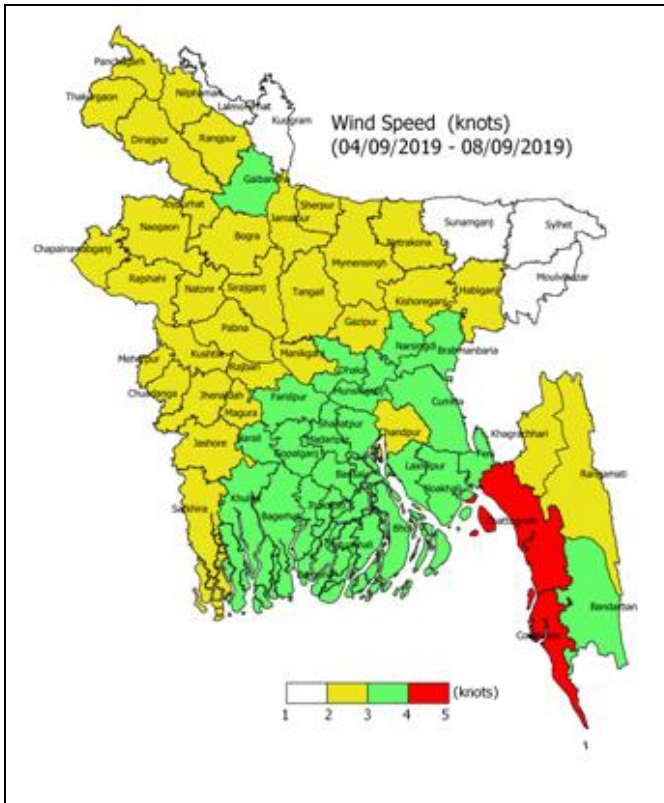
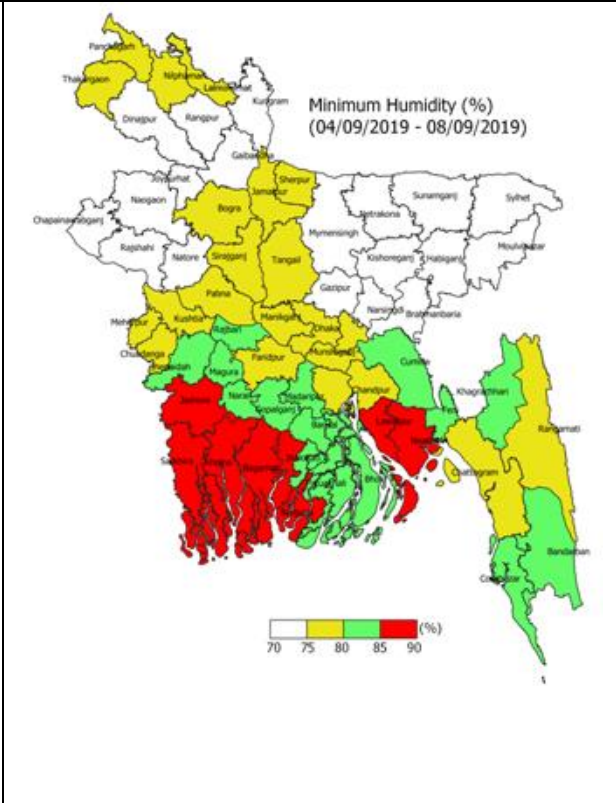
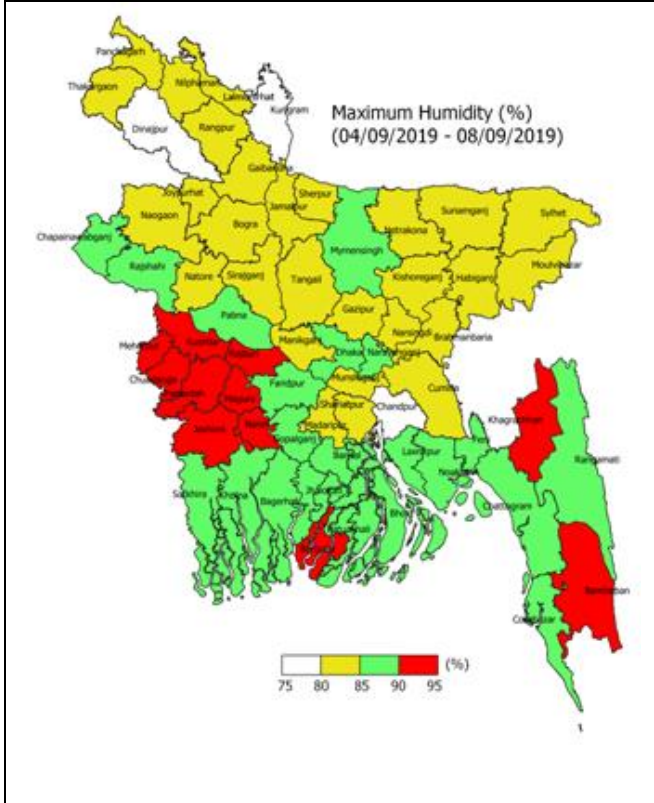
Bright sunshine hour is likely to be from 5.00 to 6.00 hours per day during this week. Average of free water loss during the next week is likely to be from 3.00 to 4.00 mm per day.

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

Day and night temperature may remain nearly unchanged over the country during this period.

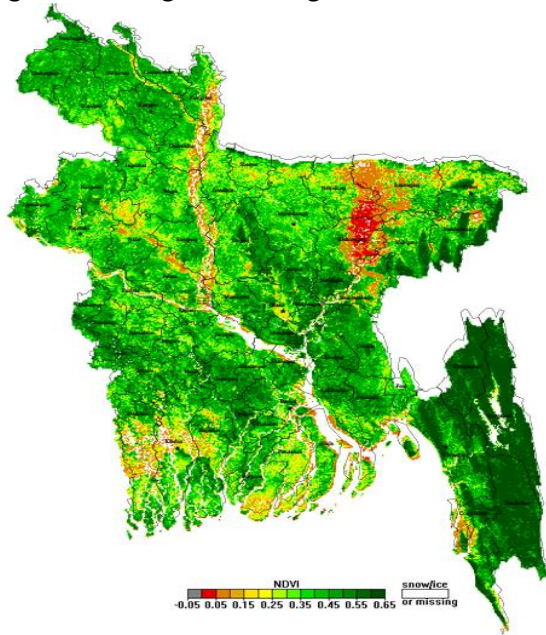
District Wise Quantitative Weather Forecast for next Five days from 04 Sept. -08 September'19



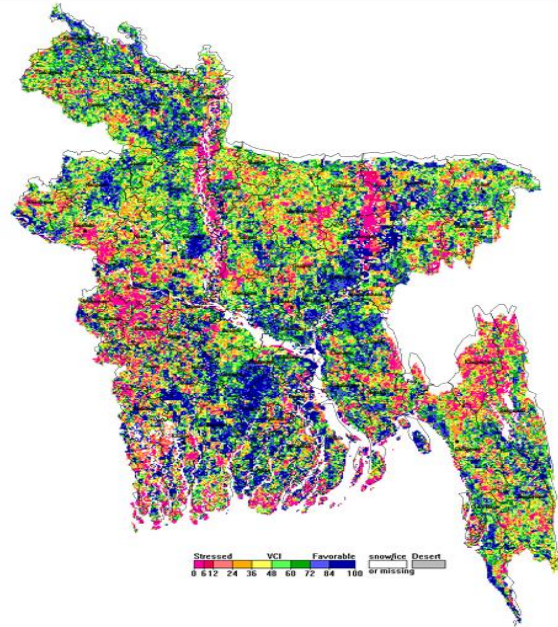


Different Satellite Products over Bangladesh

NOAA/VIIRS BLENDED NDVI composite for the week number No. 34 (18 August -24 August) over Agricultural regions of Bangladesh

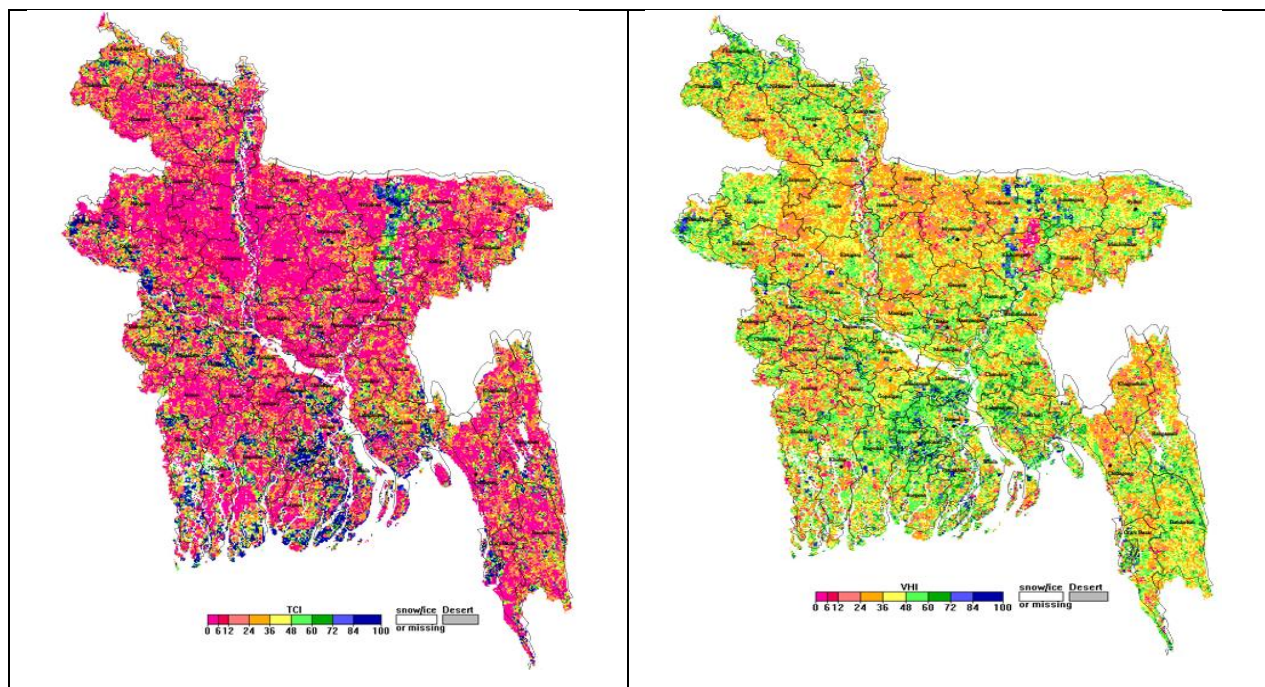


NOAA/ AVHRR BLENDED VCI composite for the week number No. 34 (18 August -24 August over Agricultural regions of Bangladesh



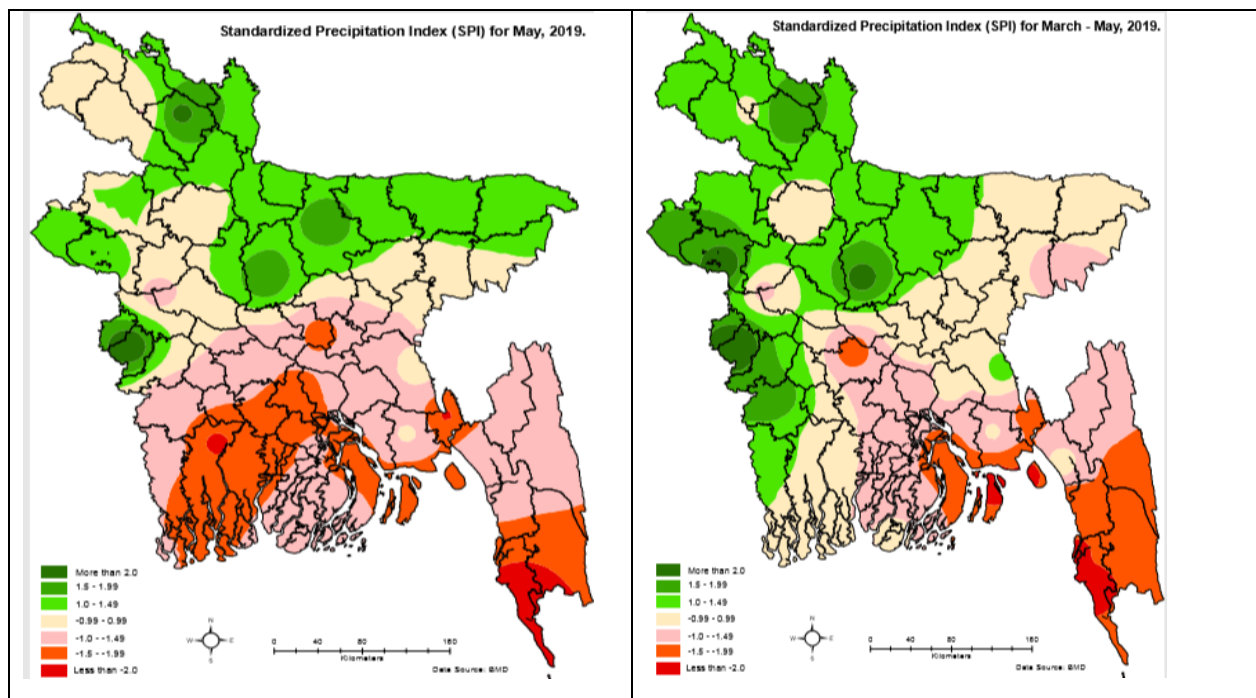
NOAA/ AVHRR BLENDED TCI composite for the week number No. 34 (18 August -24 August over Agricultural regions of Bangladesh

NOAA/ AVHRR BLENDED VHI composite for the week number No. 34 (18 August -24 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 04, 2019

(Source: Bangladesh Water Development Board)

Outlook:

- The Teesta and Ganges-Padma rivers are in rising trend, while the Brahmaputra-Jamuna and the Surma-Kushiyara rivers are in falling trend.
- The Brahmaputra-Jamuna and the Surma-Kushiyara rivers may continue falling, while the Ganges-Padma river may rise 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	33	Total not Reported	00
Water Level Fall in last 24 hours	57	Above Danger Level	00