



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

02 September 2020 (WEDNESDAY)
[FOR THE PERIOD 02.09.2020 – 06.09.2020]



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 axis of monsoon trough runs through Rajasthan, Uttar Pradesh, Bihar, West Bengal to Assam across central part of Bangladesh. One of its associated troughs extends up to North Bay. Monsoon is fairly active over Bangladesh and weak over North Bay. As per the weather forecast received from the Bangladesh Meteorological Department (BMD) during next 24 hours, light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Khulna & Barishal divisions; at a few places over Rajshahi, Dhaka & Chattogram divisions and at one or two places over Rangpur, Mymensingh & Sylhet divisions with moderately heavy falls at isolated places over southern part of the country. Temperature: Day temperature may rise by (1-2)°C and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hours, little change is likely.

As per the medium range weather forecast and as the monsoon is fairly active over the country, light to heavy rainfall is likely in different districts in the country. However, the rainfall activity in number of districts is likely to increase on 6th September when heavy rainfall is expected in these districts. heavy rainfall. As per the Flood Forecasting & Warning Centre, Bangladesh Water Development Board on 2.09.2020, no flood condition is reported as well as no flood forecast is issued over the country.

Salient Agromet Advisories

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 water level 5-7 cm. 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 during afternoon hours or at morning hours from 10:00 a.m. to 11:00a.m
- All the plant protection measure should be taken after the current spell of rainfall.
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Aman Paddy

- If excess water is there then immediate drain out the excess water by cutting the bund. This will help in good aeration which will reduce the incidence of pest and disease.
- Complete transplanting of rice seedlings at the earliest
- In case of any kind of damage to hills due to flood/stress or any other reason, fill those gaps by splitting healthy hills of same age.
- Place comparatively high woody plant branch/2.5 decimal of land after immediate seedling transplanting to control insect-pest specially stem borer in environment friendly way.
- Insert around 7-8 numbers of bamboo 'T' perches in per bigha paddy field, which will act as a resting place for predatory birds that will devour insect larvae and egg masses.
- Arrange the bunding tightly so that no drainage can take place after light rain or moderate rain
- Avoid deep planting for better crop establishment and fill up the gaps within a week. Maintain 5-7 cm standing water up to maximum tillering stage. Keep the bund and field weed free either by hand weeding or by application of herbicide. Apply recommended herbicide as per recommendation within 1-3 days of transplanting.
- Taking the advantage of the presence of sufficient amount of soil moisture, apply 1/3rd nitrogen as top dressing 15-20 days after transplanting.
- Don't use urea more than the proper dose otherwise plants become soften due to its cooling effect and plants become more susceptible for disease pest attack.
- Due to substantial decrease in sunshine hours with occasional rain there is chance of attack of Yellow stem borer in Aman rice; to manage the attack, spray Carbofuran @10kg per ha.
- August is very conducive for heavy infestation of rice (which is at tillering stage) with Rice Hispa. Therefore, farmers are advice to be ready for tackling the situation.
- Early transplanted rice plants will be remained at maximum tillering stage. In this time, leaf roller, green leaf hopper, lust, bacterial blight, leaf blight, ufra, sheath blight and others diseases-pests infestation may found and so there is need to inspect field regularly.
- All the plant protection measure should be taken after the current spell of rainfall.

Vegetables

- Prepare the seed bed of early winter vegetables (Cabbage, cauliflower, tomato). --Prepare main field by making ridge for transplanting of saplings. Make the drainage facility properly in the field.

- To avoid damage of seedlings due to rainy season, farmers should apply portable transparent Polythene shade on bed of nursery seedlings. The height of shade should be 75cm in the middle portion and 60 cm in the both side. These practices will be beneficial for better germination and get healthy seedlings just from 20-25 days after sowing.
- In case of Cucurbitaceous crop, trailing the plant on ladder like bamboo structure may be arranged. Maintain proper drainage, Weeding and earthing up in the vegetable crop field to avoid water stagnation and to support crop stand
- If the attack of fruit fly, red pumpkin beetle and epilechna beetle in summer gourds may be observed, spray malathion 50 EC@ 1ml per litre of in the field to control these insects when the weather is sunny.
- All the plant protection measure should be taken after the current spell of rainfall.
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Horticultural crops

- Farmers are advised to go for inter cultural operations in mango orchard.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- Plantation of banana crop should be done.
- Intercultural operation should be done in banana orchard.
- Due to deluge with rainy days farmers are advised not to apply fertilizer to the banana plant. Moreover, ensure to harvest the mature banana at proper stage.
- Provide mechanical support to banana, to prevent the crops from lodging due to strong winds.
- Due to monsoon showers, there is a chance of Sigatoka disease in banana. As a precaution, spray Pseudomonas 20g/litre. In case of severe attack, spray 2 ml hexaconazole or 1 ml propiconazole per one litre of water by mixing it with a sticker and spray on both the surface of the leaf.
- Drain out excess water from the banana land, as rainfall is expected. Besides, control Banana beetle, panama and others diseases-pests including continue intercultural operations and also inspect the field regularly
- Besides, to control Banana beetle, panama and others diseases-pests including continue intercultural operations it is advised to inspect the field regularly.
- Though possibilities of rain, application of fertilizer at 2 months after planting in papaya may be performed.
- Attack of Papaya mealy bug on papaya fruit can be controlled by dusting of Chlorpyrifos 1.5% dust or Malathion 5% dust around the healthy plants; also destruct ant colonies with drenching of Chlorpyrifos 20 EC @ 2 ml/litre.

Beetle vine:

- Farmers may continue the planting of betel vine cuttings upto August. Cuttings should be obtained from disease free garden and treated with a solution consisting of Bordeaux mixture 0.5% and streptomycin 500 ppm for half an hour before planting
- Present weather situation is conducive for attack of betel vine with Phytophthora leaf and root rot, Bacterial leaf spot. Therefore, farmer should be careful about stagnant water near root zone and

apply four drenches and eight sprays of Bordeaux mixture @ 1.0% and 0.5% respectively Farmers may continue the planting of betel vine cuttings upto August. Cuttings should be obtained from disease free garden and treated with a solution consisting of Bordeaux mixture 0.5% and streptomycin 500 ppm for half an hour before planting

- In this time and under the prevailing weather, foot rot and stem rot diseases affected plants start to die. So, affected plants and its branches have to deposit in particular hole or burning and never deposit betel vine waste in irrigated water sources like channel /pond. Otherwise, unaffected vine land will be contaminated. In this case, all vine growers collectively have to take this initiative (deposit all vine waste in particular hole away from the vine growing area) and as a result all vine land will be disease free condition.
- All the plant protection measure should be taken after the current spell of rainfall.

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 measure should be taken after the current spell of rainfall.
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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. Sheep/goats must be dewormed for maximum weight gain and good health. There is chance of Raniket, gumbra diseases in poultry; provide antibiotic drugs through water or through feed. Protect the birds from wet weather and wet floor.
- Consented feed has to keep airtight condition and above the ground for avoiding fungal infestation
- Livestock may be affected by foot and mouth disease due to rainy weather. Following measures may be taken up.
- Feed them only dry food
- Keep the shed clean and dry
- If wound found at foot and mouth wash the wound with potassium permanganate 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

- Keep thickness of litter 1inch but never exceed 1^{1/2} inch
- Keep the chicks thin layer of litter
- Rearrange the litter with lime

- Never allow chickens or ducks to eat wet or damp feed during this rainy season. It is very important to provide a particular amount of dewormers for both roundworm and tapeworm to poultry at this time.
- Apply lime bleaching powder and copper sulphet solution spray before placing them in farm
- 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

- Repair damaged dykes of fisheries ponds and takes care so that fishes do not escape. Maintain outlet pipe from the pond so that excess water pass away and the water level is maintaining.
- 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 06 AM on 02 September 2020) and maximum temperature on 01 September, minimum temperature on 02 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	29	31.0	26.0	Rajshahi	Rajshahi	11	30.7	25.0
	Tangail	20	29.5	24.0		Ishurdi	38	29.3	25.0
	Faridpur	27	29.3	26.0		Bogura	91	29.4	25.6
	Madaripur	00	32.8	26.3		Badalgachhi	14	31.0	25.0
	Gopalganj	12	30.7	25.5		Tarash	73	29.7	25.8
	Nikli	19	30.0	25.0					
Mymensingh	Mymensingh	87	28.6	26.0	Rangpur	Rangpur	21	29.0	25.4
	Netrokona	48	29.2	25.0		Dinajpur	03	30.0	25.4
						Sayedpur	12	29.6	26.4
Chattogram	Chattogram	01	31.2	25.7		Tetulia	07	32.0	25.5
	Sandwip	15	31.3	25.0		Dimla	57	30.5	25.5
	Sitakunda	01	31.8	25.1		Rajarhat	94	28.5	24.5
	Rangamati	06	33.0	24.5	Khulna	Khulna	05	30.0	26.0
	Cumilla	12	31.7	25.5		Mongla	01	29.5	26.0
	Chandpur	00	31.6	26.4		Satkhira	11	28.4	25.5
	M.Court	03	32.6	26.0		Jashore	07	29.4	24.8
	Feni	01	33.0	25.5		Chuadanga	76	29.5	24.2
	Hatiya	35	31.1	26.5	Kumarkhali	40	28.5	24.0	
	Cox's Bazar	02	31.0	25.5					
Kutubdia	Trace	31.8	25.6	Barishal	Barishal	00	31.2	26.2	
Teknaf	02	30.8	24.5		Patuakhali	06	30.5	26.2	
					Khepupara	16	30.3	25.6	
Sylhet	Sylhet	55	32.5	24.8		Bhola	01	31.8	26.5
	Srimangal	41	32.0	25.2					

Highlights:

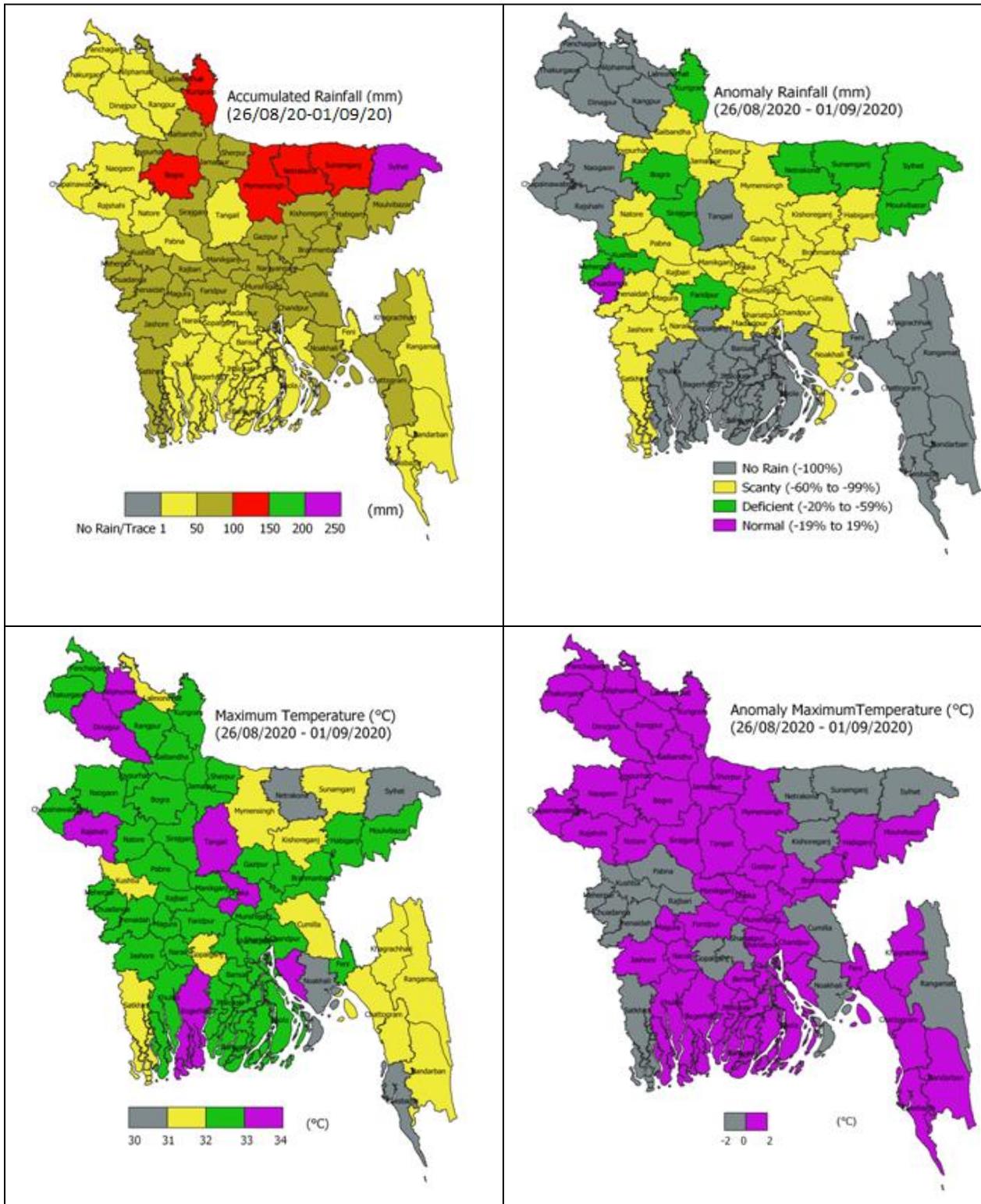
- Country average bright sunshine hour was 4.36 hours per day during last week.
- Country average free water loss during the previous week was 2.81 mm per day.

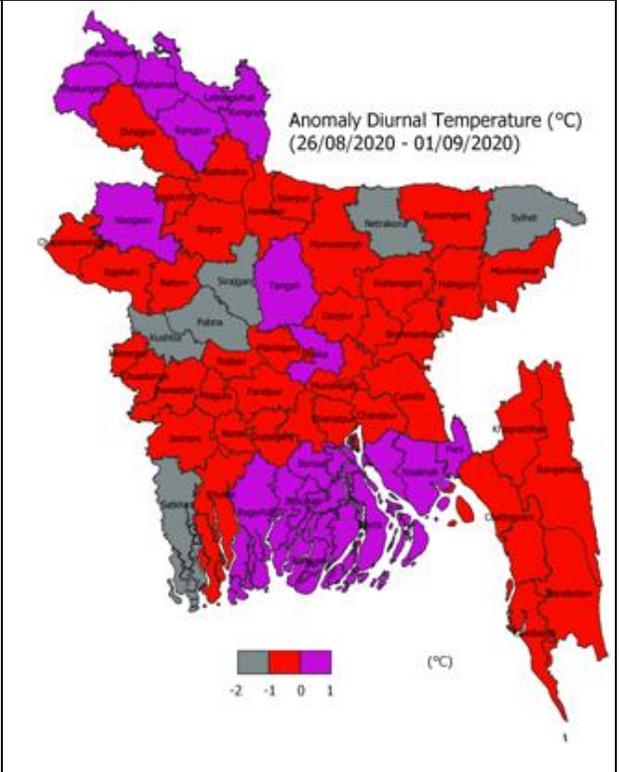
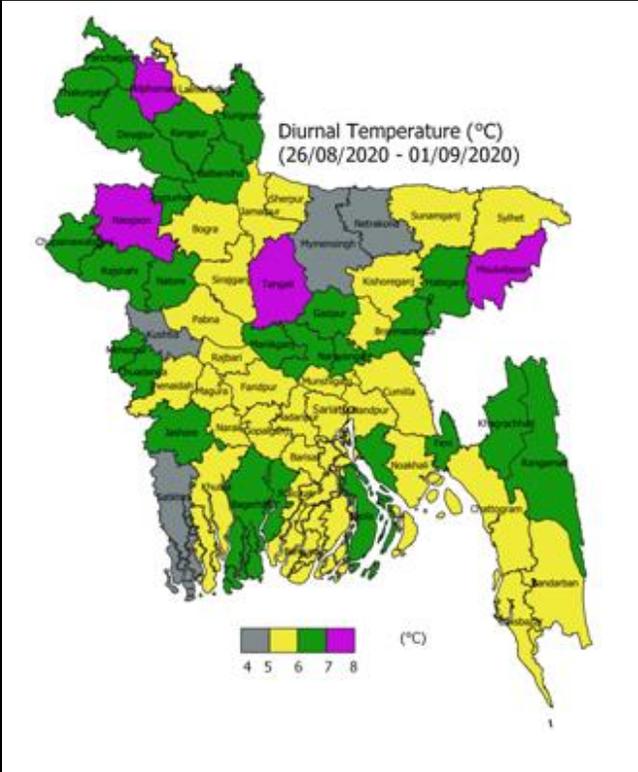
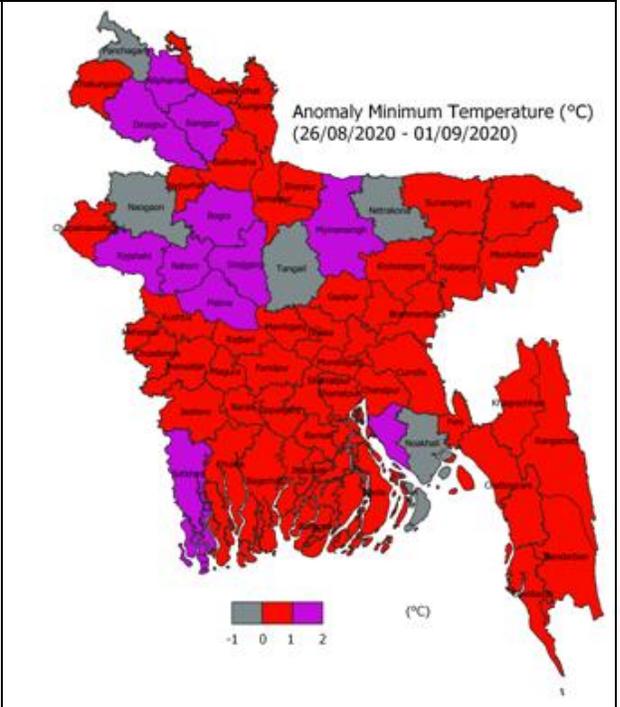
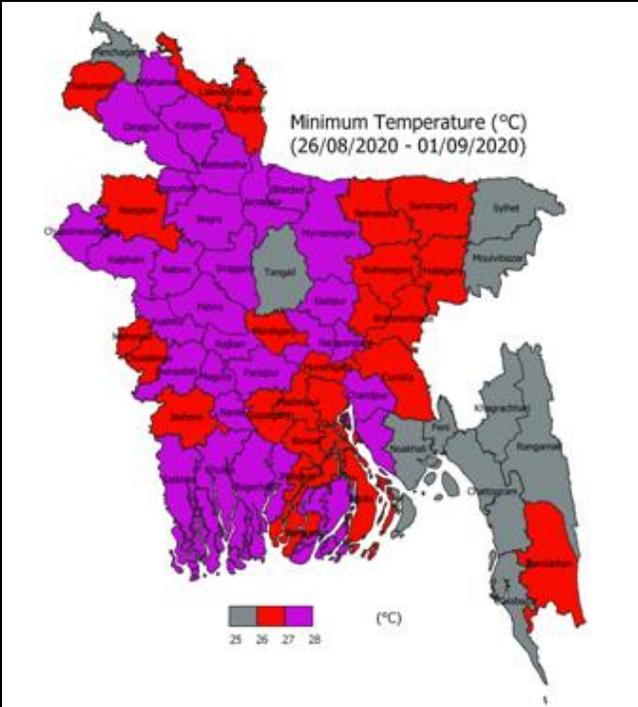
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

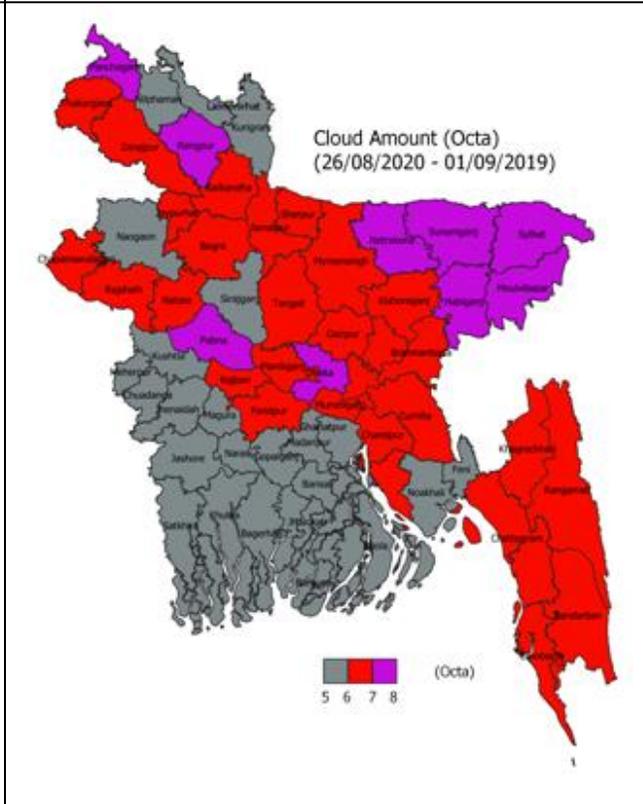
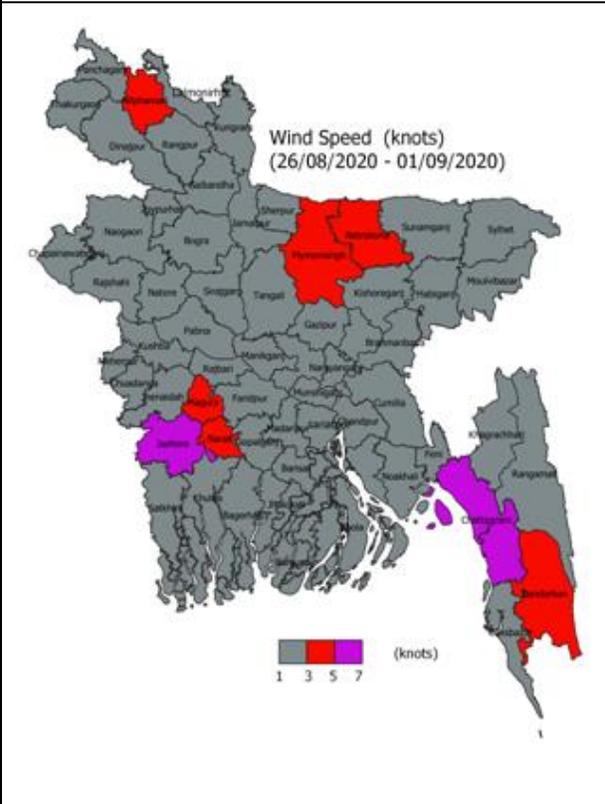
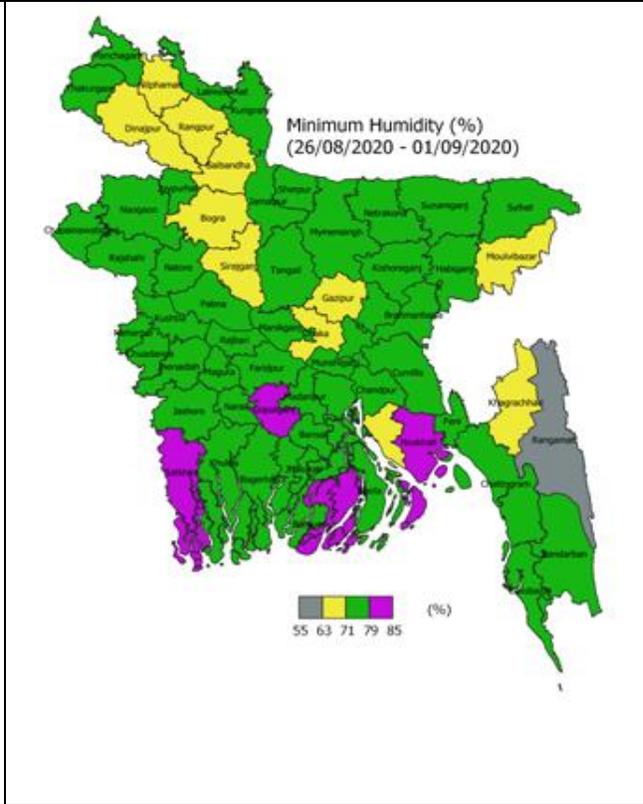
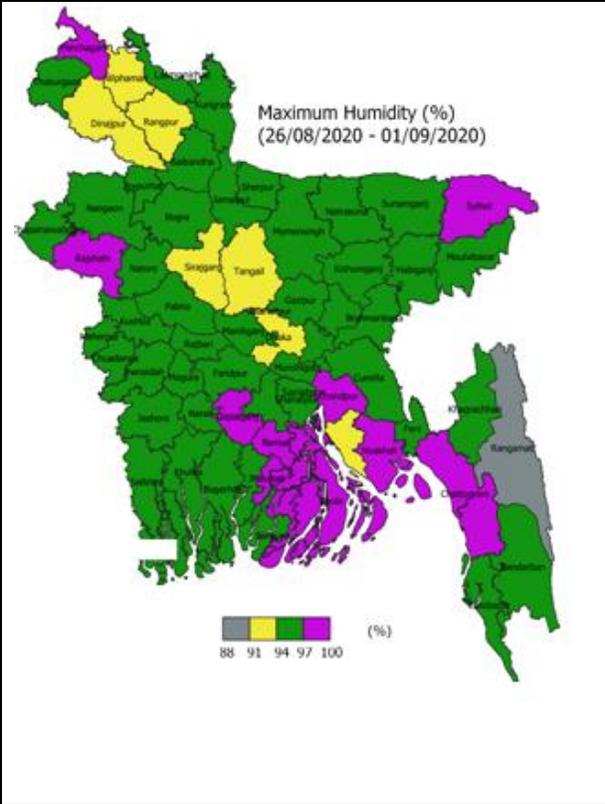
Forecast: Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Khulna & Barishal divisions; at a few places over Rajshahi, Dhaka & Chattogram divisions and at one or two places over Rangpur, Mymensingh & Sylhet divisions with moderately heavy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

Temperature: Day temperature may rise by (1-2)°C and night temperature may remain nearly unchanged over the country.

Spatial Distribution of weather parameters for the Week ending 01 September 2020





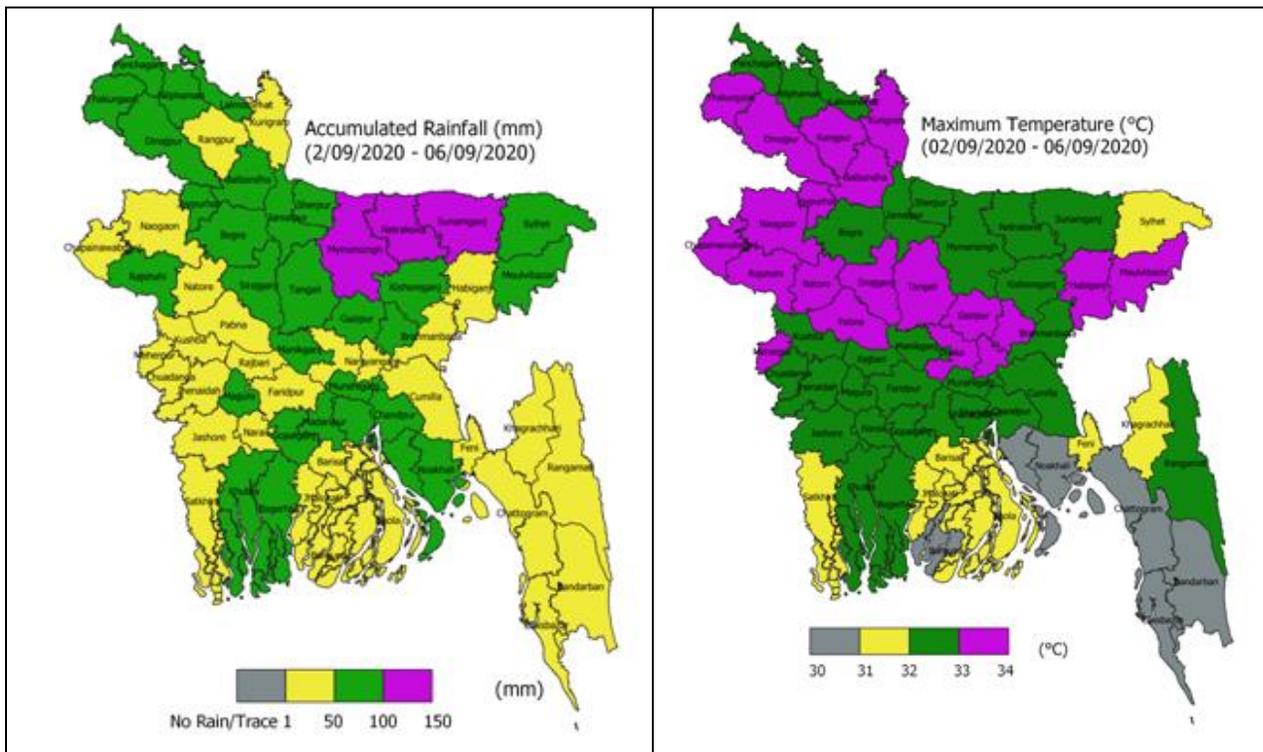


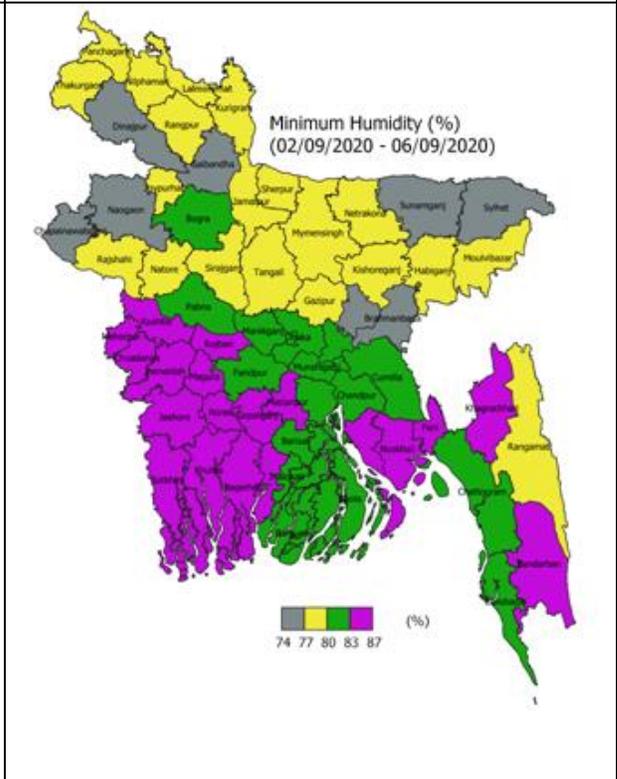
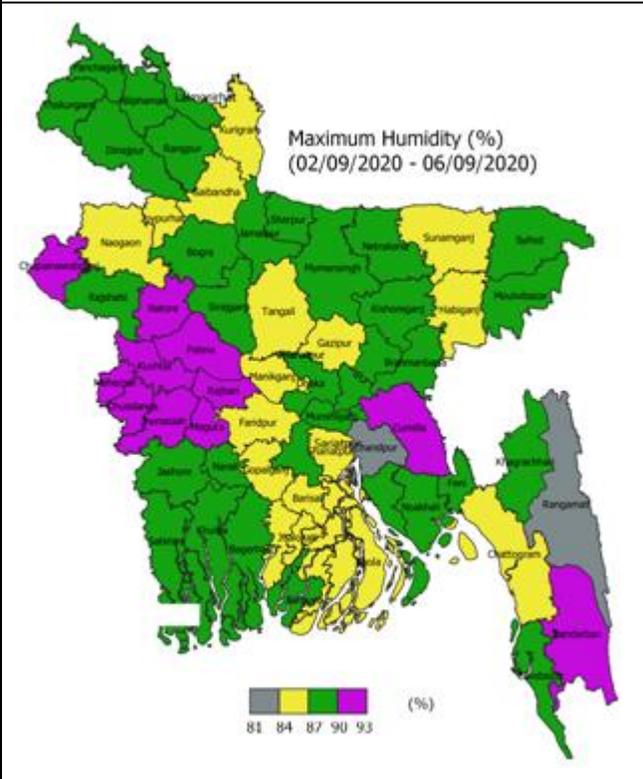
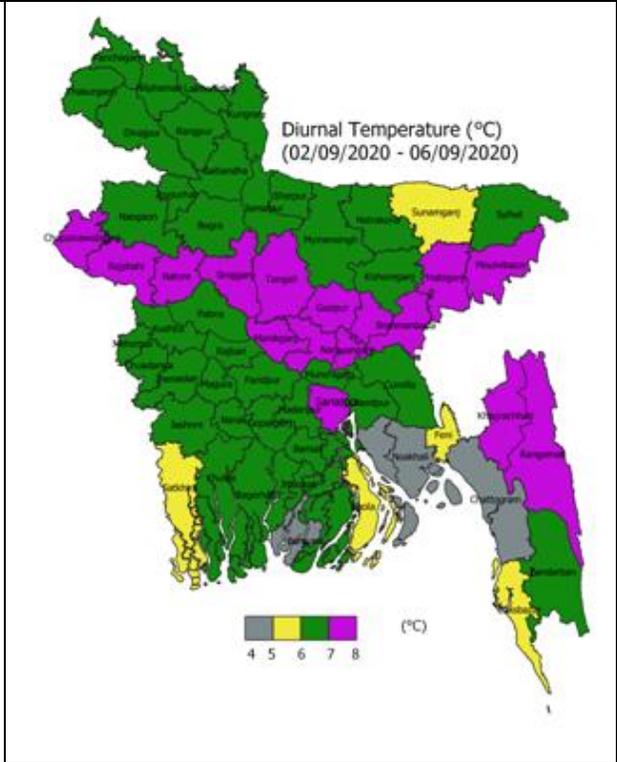
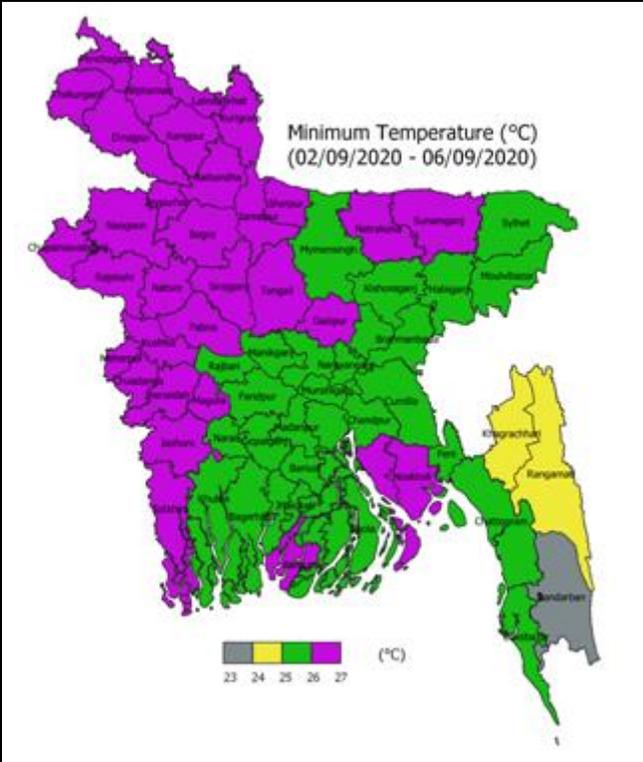
Weather Forecast and Advisory for the Period of 01 .09.2020 to 07.09.2020

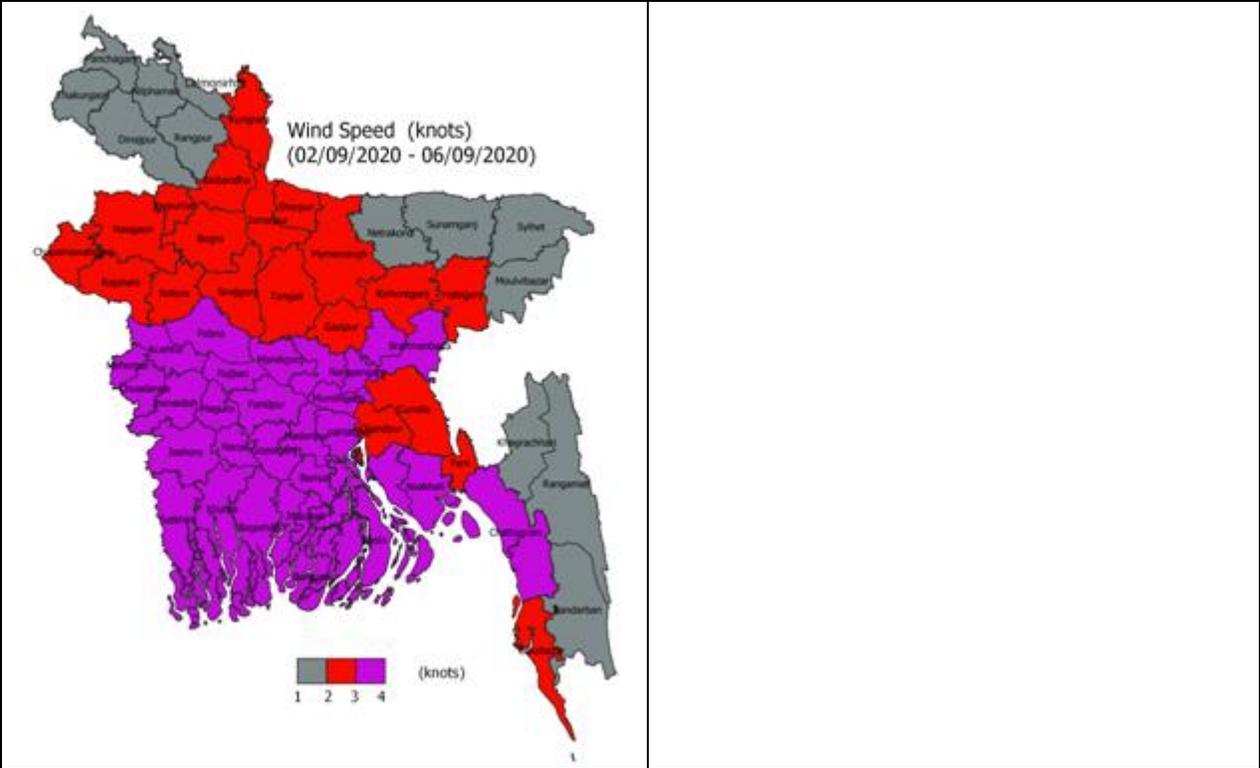
Bright sunshine hour is likely to be from 4.50 to 5.50 hours per day during this week. Average free water loss is likely to be from 2.75 to 3.75 mm per day during this week.

- Light (04-10 mm/d) to Moderate (11-22 mm/d) rain/thunder shower accompanied by temporary gusty wind is likely to occur at many places over Sylhet, Chattogram, Dhaka and Mymensingh divisions and at a few places over Rajshahi, Rangpur, Khulna and Barishal divisions during the 1st half of this period. And at most places over the country during the 2nd half of this period, with a chances of moderately heavy (23-43 mm/d) to heavy (44-88 mm/day) falls at places over the country during this period.
- Slight fall in day and night temperature over the country during this period

District Wise Quantitative Weather Forecast for next Five days from 02 Sept. -06 Sept.'2020

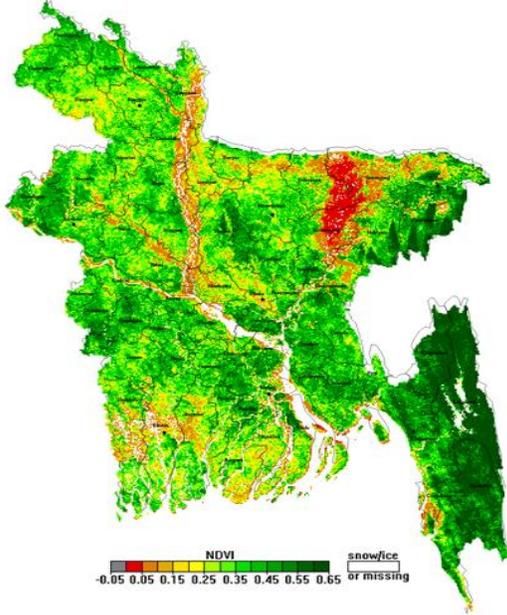




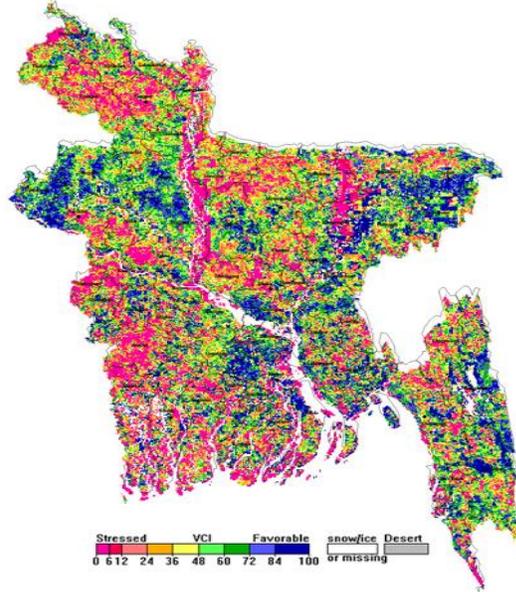


Different Satellite Products over Bangladesh

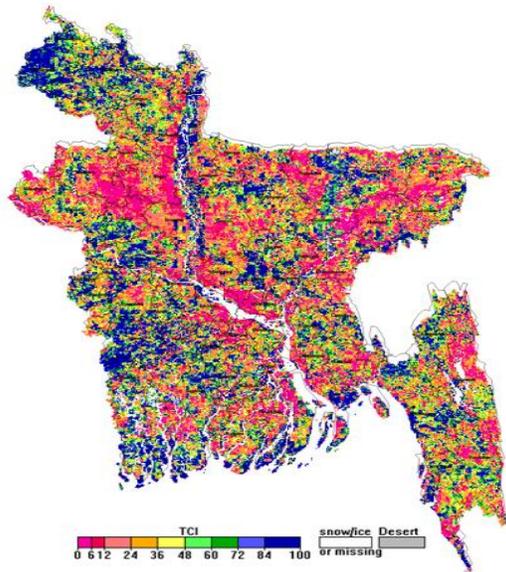
NOAA/VIIRS BLENDED NDVI composite for the week No. 34 (18 August -24 August) over Agricultural regions of Bangladesh



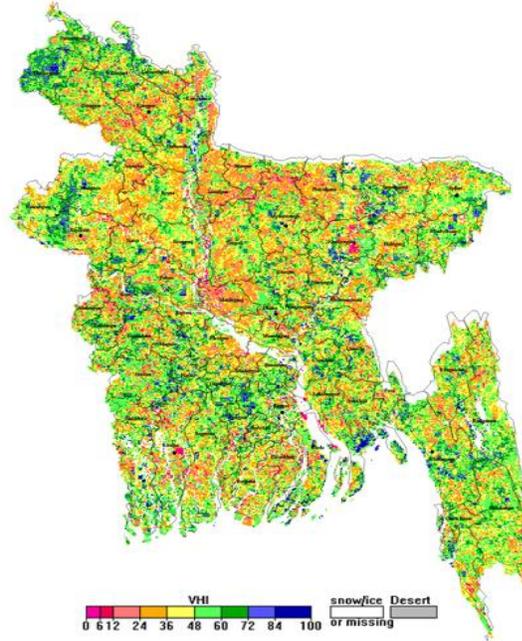
NOAA/ AVHRR BLENDED VCI composite for the week No. 34 (18 August -24 August) over Agricultural regions of Bangladesh



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

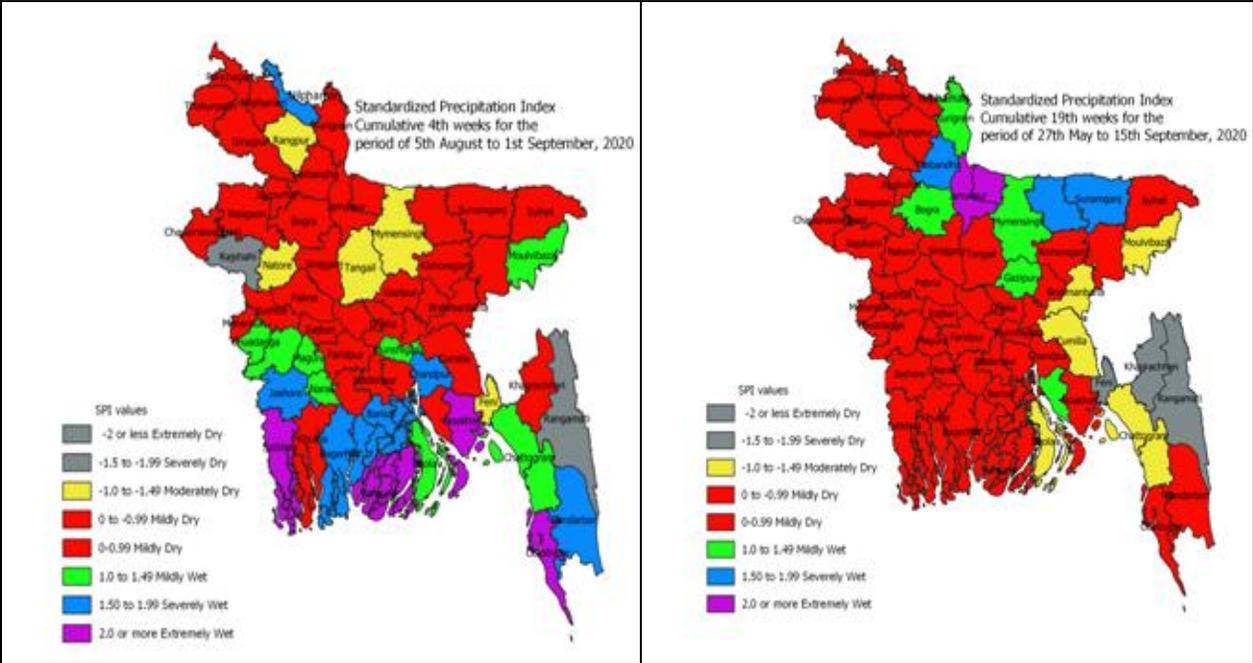


NOAA/ AVHRR BLENDED VHI composite for the week No. 34 (18 August -24 August) over Agricultural regions of Bangladesh



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

It has been observed that during last four weeks (in August 2020) severe to extremely dry conditions prevails in districts located west and southeastern part and mild to moderately wet condition prevails in central parts of Bangladesh and southern part was prevailed extremely wet conditions for last four weeks.



Data source: Bangladesh Meteorological Department