



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

31 July 2019 (WEDNESDAY)
[FOR THE PERIOD 31.07.2019 - 04.08.2019]



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.

Please Contact: Farhana Hoque, Sabuj Roy | E-mail: sdhmisda@dae.gov.bd
Phone No.: 02-55'028414, 02-55028418

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 fairly active over Bangladesh and moderate over North Bay. Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over Chattogram & Barishal divisions; at many places over Dhaka & Sylhet divisions and at a few places over Rajshahi Rangpur, Mymensingh & Khulna divisions with moderately heavy to heavy falls at isolated places over the country.. According to the medium range weather forecast issued by BMD, substantial amount of rainfall is likely in number of districts on 4th August 2019. Besides, around 28 district was affected by flood conditions recently. As on today, substantial improvement in flood condition was reported by Bangladesh Water Development Board (BWDB). According to BWDB, all the major rivers of the country are in falling trend except the Ganges, which may continue in next 48 hours. The Ganges river may remain steady in next 24 hours. Following agromet advisories are issued for this flood affected district on the standing crops, livestock, poultry and fishery.

1. In heavily flood affected areas, high lands should be selected for raising of community nurseries to meet the seedling requirement of the farmers when water level in the fields subside. Select local varieties for raising seedlings. The seeds of these varieties can be sown in the nursery beds up to 1st week of August.
2. Continue transplanting of paddy seedlings when flood water recedes completely. The seedlings of short and duration varieties (BRRI DHAN 33, BRRI DHAN 39, BRRI DHAN 62, BRRI DHAN 66, BRRI DHAN 71, BRRI DHAN 75) or medium duration varieties (BRRI DHAN 34, BRRI DHAN 37, BRRI DHAN 38, BRRI DHAN 49, BRRI DHAN 52, BRRI DHAN 70, BRRI DHAN 71, BRRI DHAN 79, BRRI DHAN 80 and BR 25) should be transplanted at the earliest.
3. Direct seeding of photo insensitive short duration varieties like BINA 07, BINA16, BINA17 is also advocated for areas where the rice crop was totally damaged due to flood.
4. In order to escape from another flood like situation, submergence tolerant varieties should be considered.
5. Water logged condition is harmful for jute. Hence, to avoid water accumulation, measures should be taken to get rid of excess water from the fields.
6. Complete drain out of water from vegetable field.
7. Start cultivating of early winter vegetables after receding of flood water.
8. Prevent feeding the livestock with rotten grasses after flood. Instead, feed the animals with concentrate and green grasses along with vitamins and mineral supplements.
9. 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.
10. Changing weather condition could lead to viral diseases to the birds. So, farmers may provide sufficient water with 1% salt and mineral mixture. Farmers are also advised to clean the sanitary condition of poultry.

Besides, following agromet advisories are issued to the flood unaffected districts but likely to receive light to heavy rainfall

Aus Paddy

- 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.
- All the above mentioned plant protection measures may be taken up after the current spells of heavy rainfall.

Aman Paddy

- This is the ideal time for transplanting of 25-30 days old nursery in the main field. 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 rice nursery and field bunds free from weeds either by hand weeding or by application of herbicide. Apply recommended herbicide as per recommendation within 1-3 days of transplanting.
- Apply 1/3rd nitrogen as top dressing 15-20 days after transplanting and after the heavy rainfall.

Jute:

- Water logged condition is harmful for jute. Hence, to avoid water accumulation, measures should be taken to get rid of excess water from the fields.
- As pesticide application is not feasible in rainy weather, so arrangement of bamboo perch is an effective measure to control the hairy caterpillar and semi-looper in jute through predatory birds.
- Harvesting and retting of jute may be done preferably at pre-flowering stage (120 days after sowing) to get better quality fibre. At present the water temperature in the retting tanks/ nalas may ideal for retting of jute. Early and timely sown capsularis jute may be harvested during this week and kept in the field in standing position for 3-4 days before retting for proper defoliation.

Vegetables

- Farmers are advised to postpone irrigation and spray operations in existing vegetable crops and drain out excess water. Make arrangement to avoid plant damage (particularly staked creeper) from anticipated gusty winds.
- 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) after current spells of heavy rainfall.
- 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 after the current spells of heavy rainfall.
- Undertake nursery sowing of Tomato, Brinjal and direct sowing of Gourds, Beans and Bhendi.

Horticultural crops

- Farmers are advised to go for inter cultural operations in mango orchard after the current spells of heavy rainfall.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor after the current spells of heavy rainfall.

- 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 50-100 g 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. Prepare pit for plantation of saplings of mango, guava.

Coconut

- There is a chance of bud rot in coconut during rainy season. Keep three numbers each of perforated Mancozeb sachets (5g) around spindle leaves as a prophylactic measure against bud rot.
- 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 is noticed in coconut. Clean the crown of coconut tree to avoid the attack of Rhinoceros beetle in coconut field. To control, collect and destroy the various bio-stages of the beetle from the manure pits (breeding ground of the pest) whenever manure is lifted from the pits.
- High humid and water stagnated condition is highly favourable for the incidence of whitefly attack in coconut, spray organic emulsion Nimbecidine @ 2ml/lit or Verticillium lecanii 1*10⁹ ml spore count for the effective control of white fly pest after the current spells of heavy rainfall.
- Prepare pit for plantation of saplings of coconut.

Banana

- Plantation of banana crop should be done
- Intercultural operation should be done in banana orchard after the current spells of heavy 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. As a precaution, spray Pseudomonas 20g/litre after current spells of heavy rainfall. 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.
- It is advised to apply fertilizer in the 3 months old banana plantations @ 120g Urea, 200g SSP and 275g MOP per plant after the heavy rainfall..

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 31 July'19) and maximum temperature on 30 July, minimum temperature on 31 July' 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	11	31.6	27.3	Rajshahi	Rajshahi	00	35.0	26.7
	Tangail	01	34.0	26.0		Ishurdi	00	34.5	26.6
	Faridpur	04	32.2	26.2		Bogura	00	33.0	27.6
	Madaripur	24	31.5	25.8		Badalgachhi	00	33.6	27.0
	Gopalganj	10	31.3	25.2		Tarash	04	33.5	27.0
	Nikli	18	31.2	25.5	Rangpur	Rangpur	06	34.0	27.2
Mymensingh	Mymensingh	00	32.4	27.4		Dinajpur	03	<u>35.6</u>	27.5
	Netrokona	23	31.6	26.5		Sayedpur	00	34.6	27.4
Chattogram	Chattogram	27	32.0	25.2		Tetulia	00	32.5	26.4
	Sandwip	62	30.7	<u>23.6</u>		Dimla	01	34.0	27.5
	Sitakunda	32	32.0	25.0		Rajarhat	00	33.7	27.0
	Rangamati	28	30.7	25.0	Khulna	Khulna	06	32.0	26.0
	Cumilla	46	29.3	25.1		Mongla	39	31.5	25.6
	Chandpur	19	32.2	26.1		Satkhira	04	32.2	26.0
	M.Court	43	33.0	25.5		Jashore	08	33.8	26.6
	Feni	<u>86</u>	30.6	24.5		Chuadanga	00	32.8	26.5
	Hatiya	08	32.0	24.9		Kumarkhali	00	31.6	26.8
	Cox's Bazar	03	30.5	25.0	Barishal	Barishal	16	30.8	25.5
	Kutubdia	04	31.4	24.5		Patuakhali	15	32.8	26.8
	Teknaf	31	31.0	24.5		Khepupara	06	32.4	26.6
						Bhola	21	31.7	25.4
Sylhet	Sylhet	Trace	33.1	26.2					
	Srimangal	16	31.8	25.0					

Highlights:

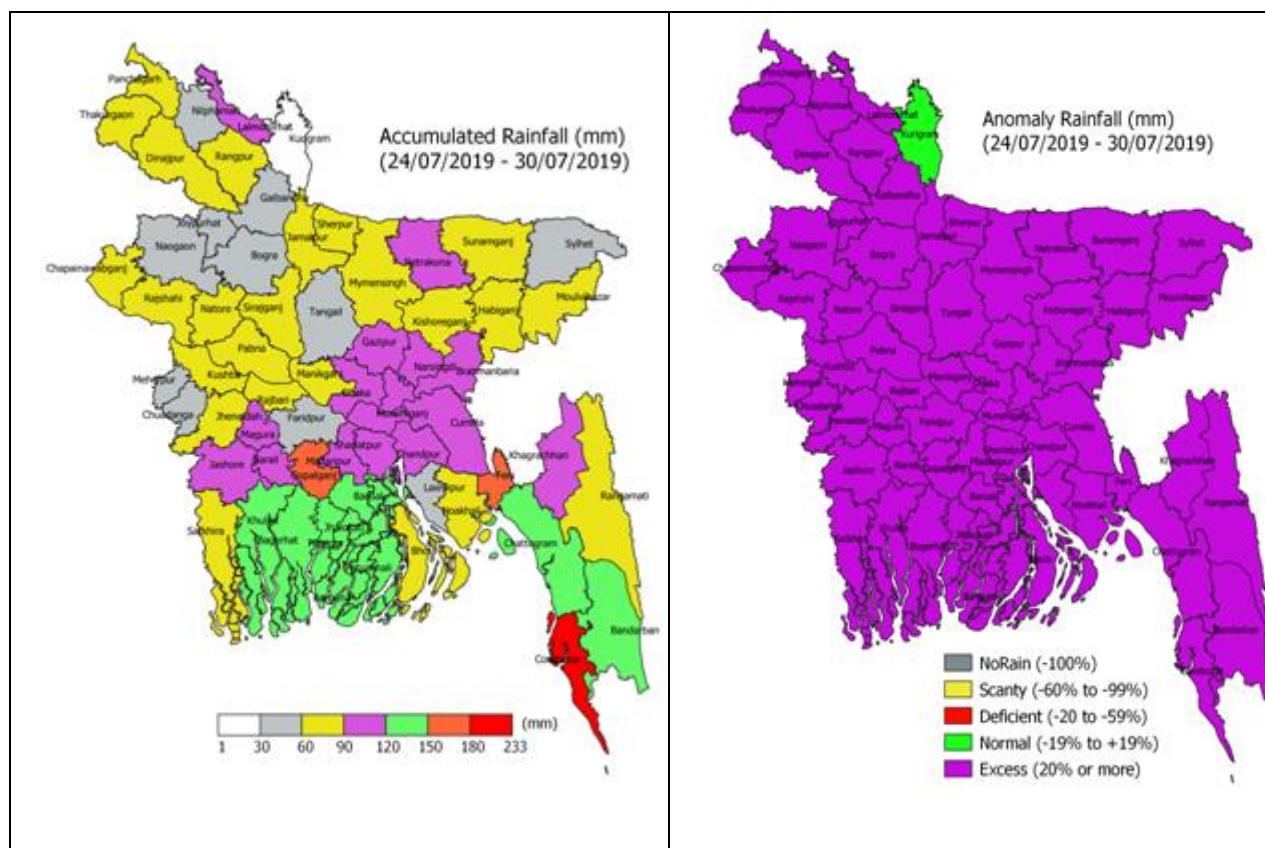
- Country average of bright sunshine hour was 6.22 hours per day during last week.
- Country average of free water loss during the previous week was 3.59 mm per day.

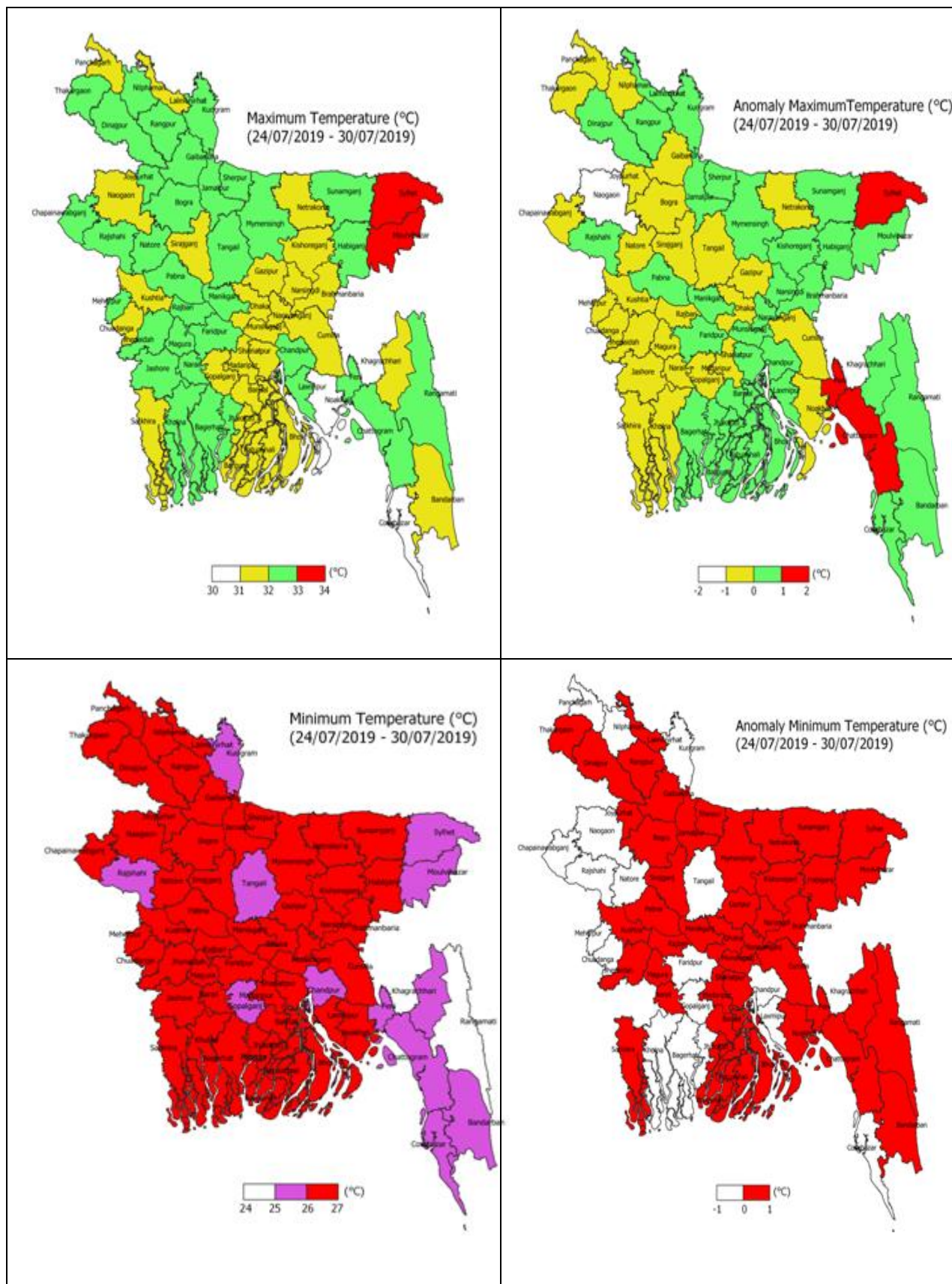
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

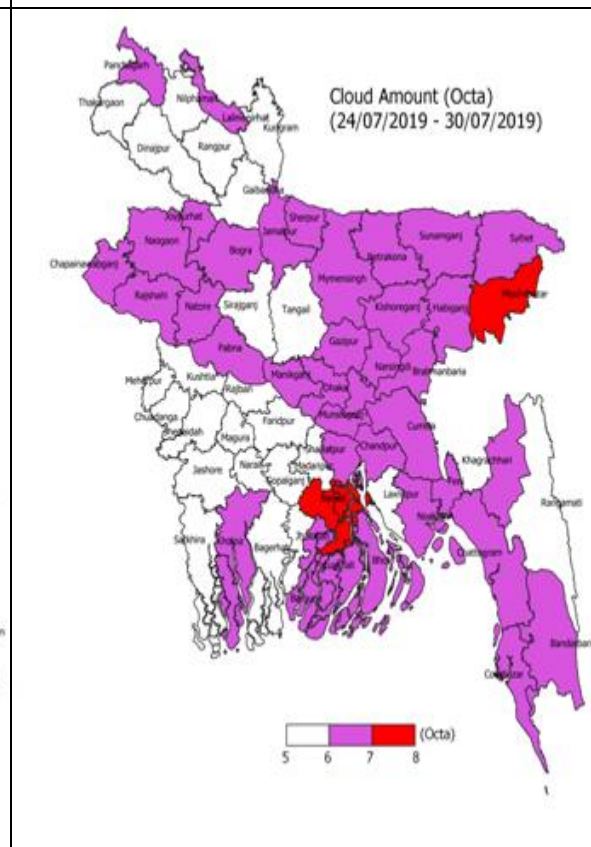
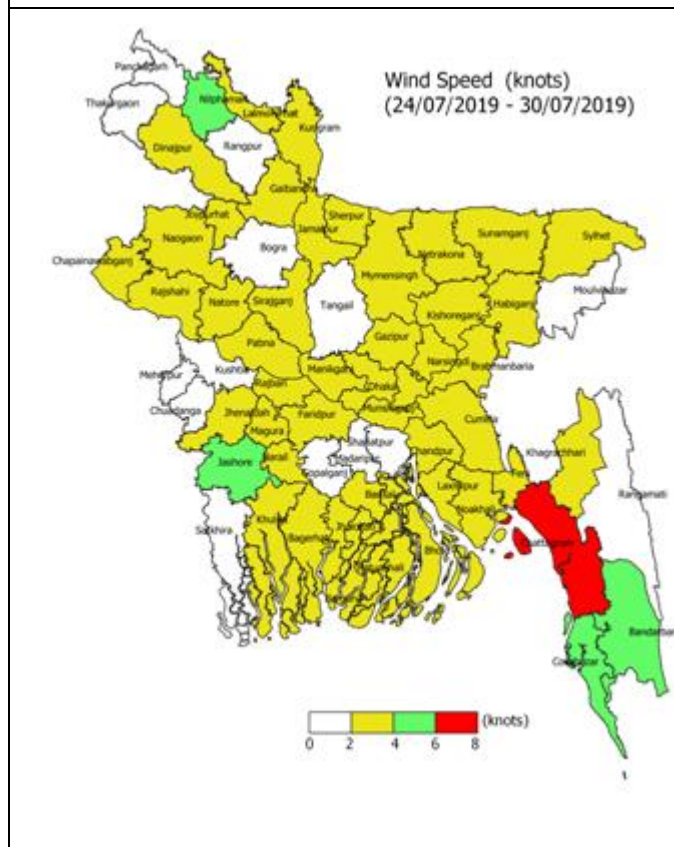
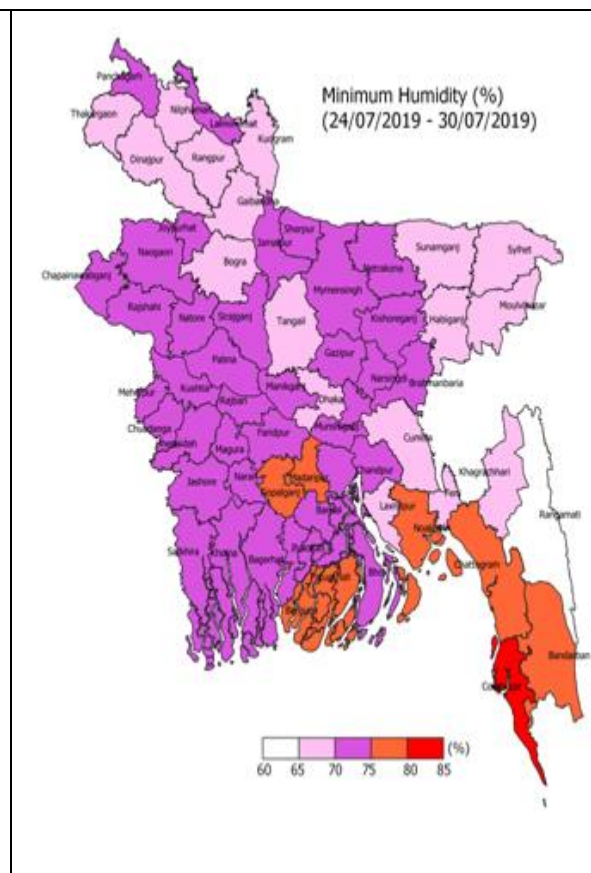
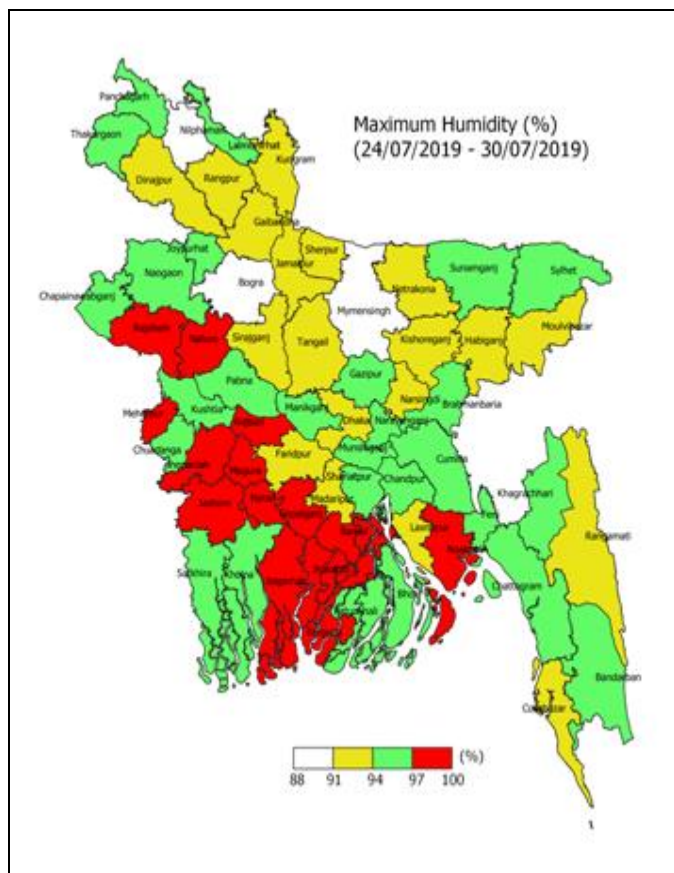
Forecast: Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over Chattogram & Barishal divisions; at many places over Dhaka & Sylhet divisions and at a few places over Rajshahi Rangpur, Mymensingh & Khulna divisions with moderately heavy to heavy falls at isolated 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 30th July 2019





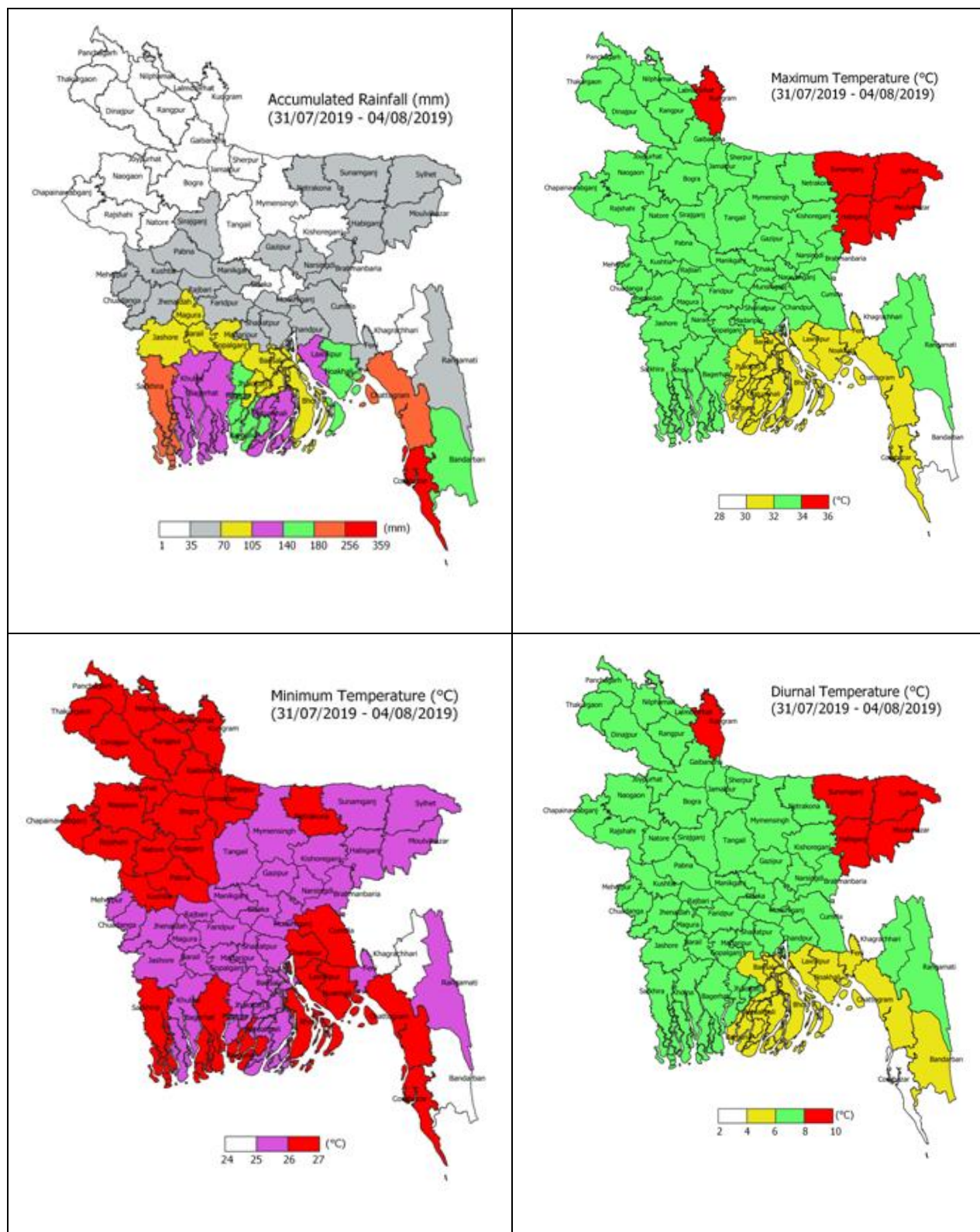


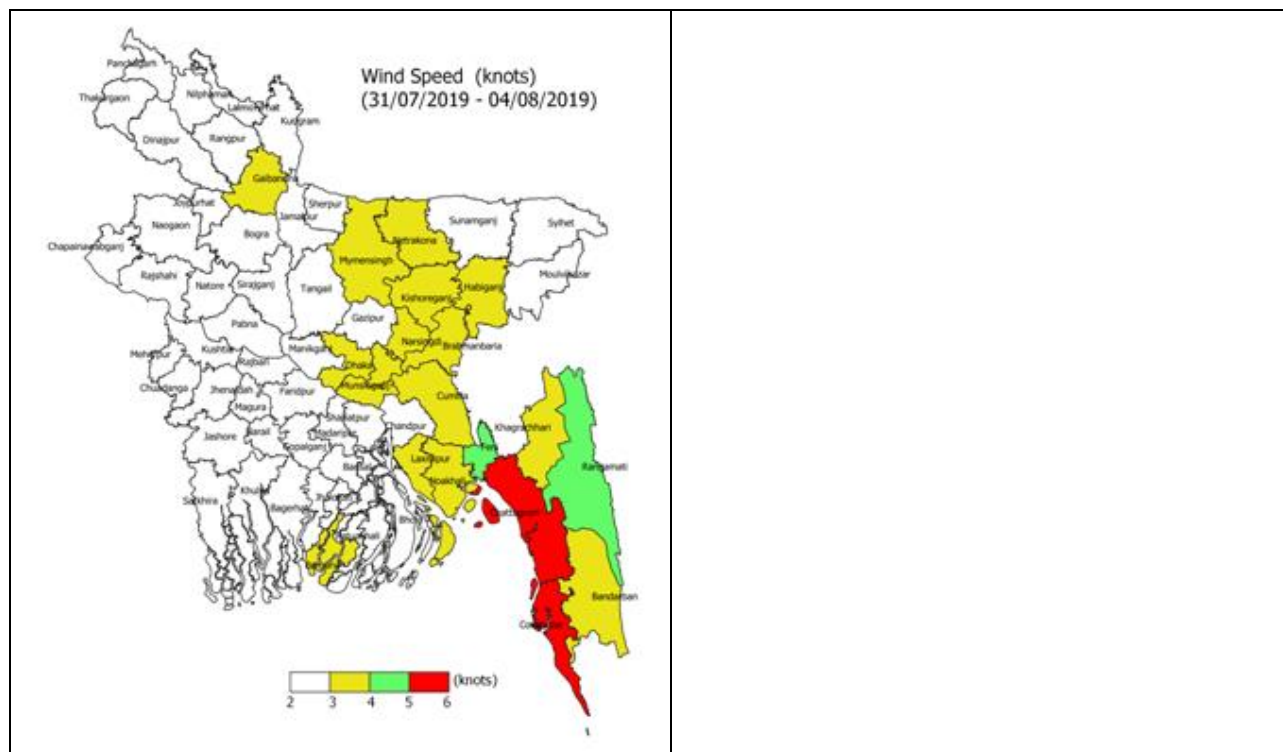
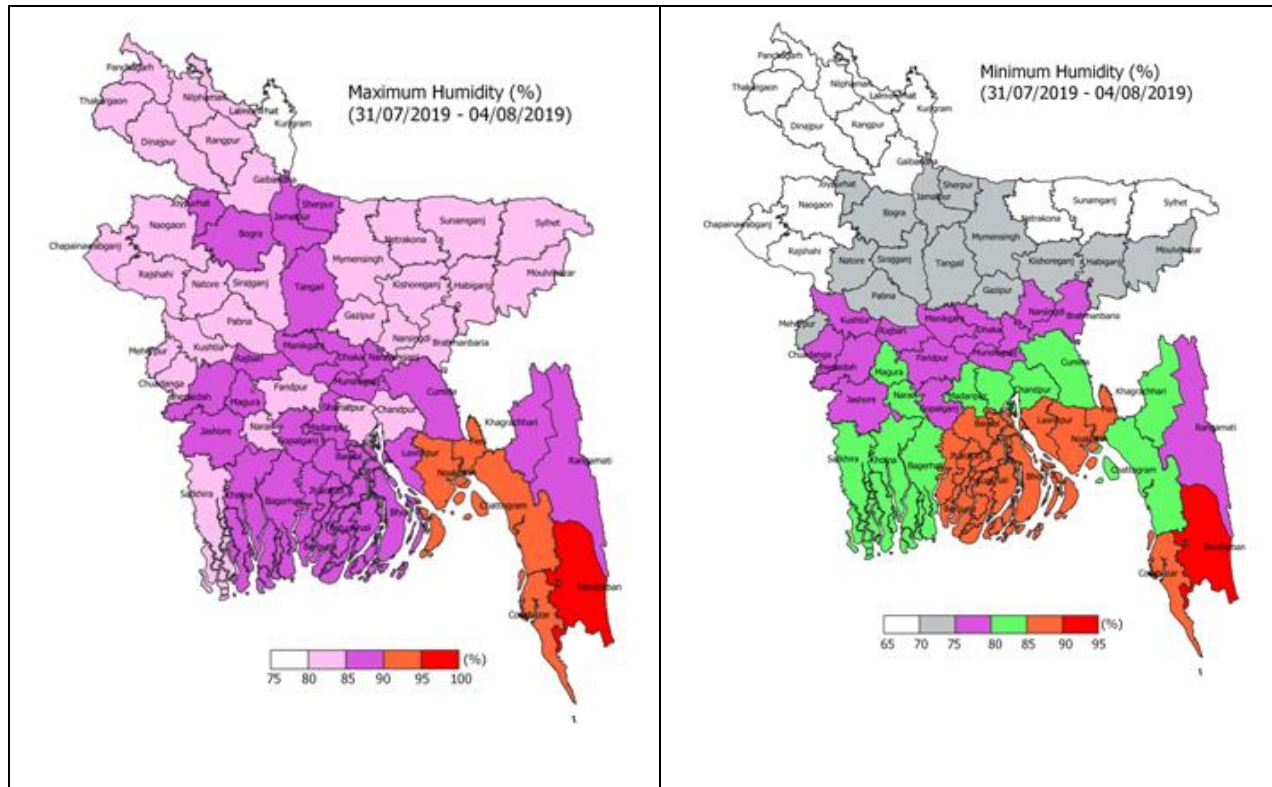
Weather Forecast and Advisory for the Period of 22.07.2019 to 31.07.2019

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 showers is likely to occur at many places over Sylhet, Mymensingh, Chattogram, Rangpur, Barisal and Dhaka divisions and a few places over Khulna and Rajshahi divisions, With a chance of moderately heavy (23-43 mm/d) to heavy falls (44-88 mm/d) at places over the country during this period.
- Rainfall activities may increase gradually during this period.
- Slight falls in day and night temperature during this period.

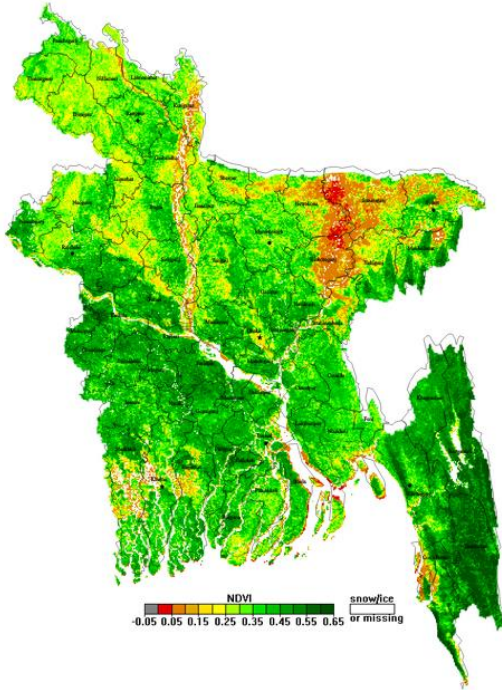
District Wise Quantitative Weather Forecast for next Five days from 31 July -04 August'19



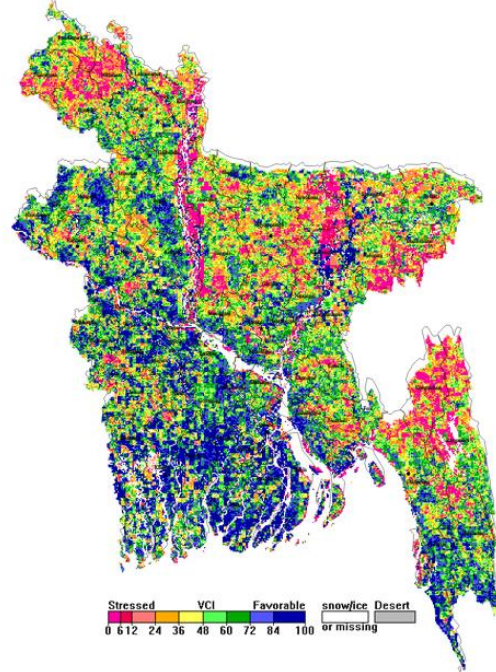


Different Satellite Products over Bangladesh

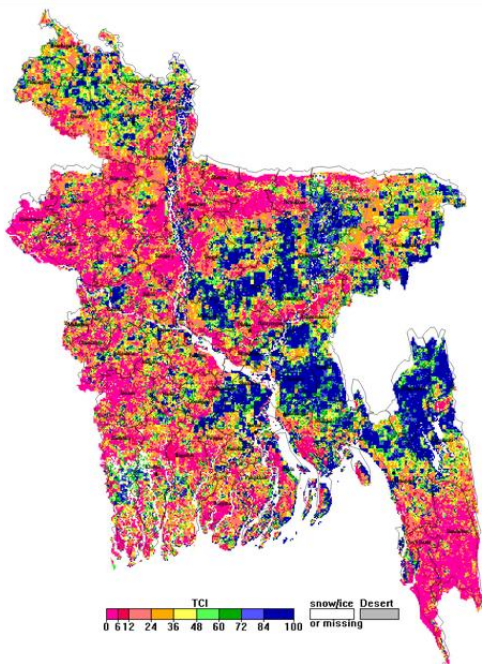
NOAA/VIIRS BLENDED NDVI composite for the week number No. 29 (14 July -20 July) over Agricultural regions of Bangladesh



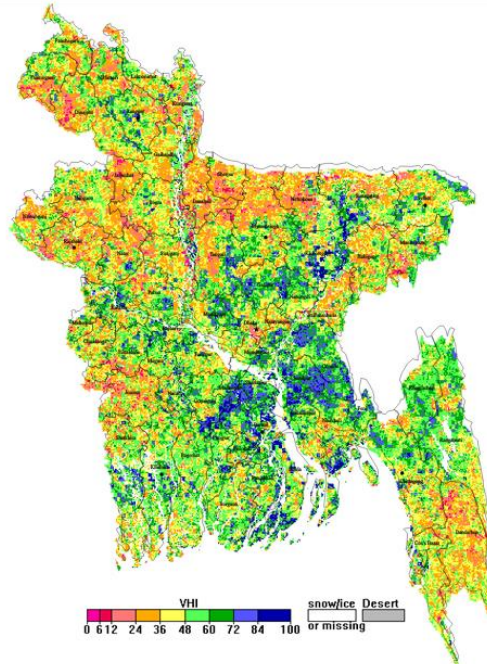
NOAA/ AVHRR BLENDED VCI composite for the week number No. 29 (14 July -20 July) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week number No. 29 (14 July -20 July) over Agricultural regions of Bangladesh

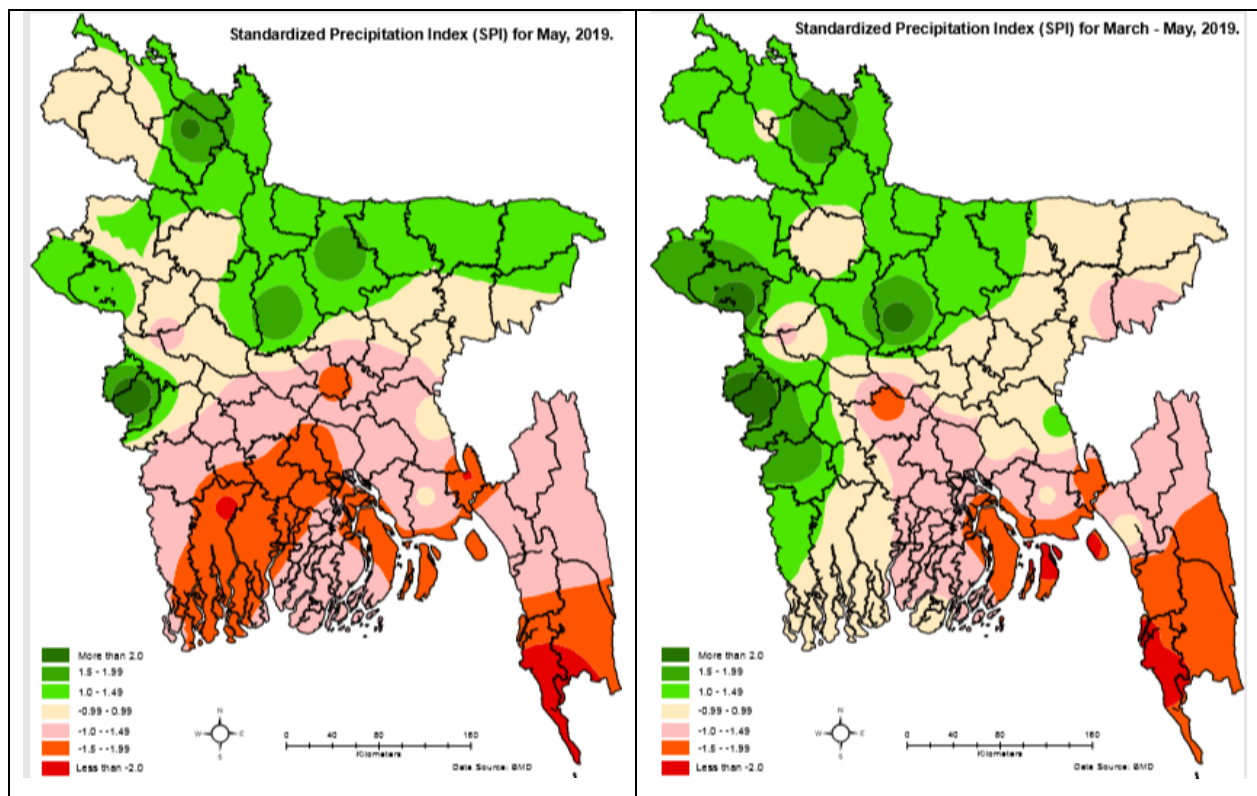


NOAA/ AVHRR BLENDED VHI composite for the week number No. 29 (14 July -20 July) over Agricultural regions of Bangladesh



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

Flash Flood Monitoring in Haor Region (Source: Bangladesh Water Development Board)

RIVER SITUATION SUMMARY AS ON JULY 31, 2019

Outlook:

All the major rivers of the country are in falling trend except the Ganges, which may continue in next 48hours. The Ganges river may remain steady in next 24 hours.

General River Condition

Monitoring Water Level Station	93	Water Level Steady in last 24 hours	02
Water Levels Rise in last 24 hours	22	Total not Reported	00
Water Levels Fall in last 24 hours	69	Above Danger Level	04