



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

07 August 2019 (WEDNESDAY)
[FOR THE PERIOD 07.08.2019 - 11.08.2019]



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.

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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 information received from the Bangladesh Meteorological Department (BMD), monsoon is fairly active over Bangladesh and strong over North Bay. Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at most places over Khulna, Barishal & Chattogram divisions; at many places over Rajshahi & Dhaka divisions and at a few places over Rangpur, Mymensingh & Sylhet divisions with moderately heavy to heavy falls at places over the country. As per the medium range weather forecast, a number of districts are likely to receive moderate to heavy rainfall also. As per the Bangladesh Water Development Board, there is no immediate chance of flood any part of the country; however, there may be chance of flood in some parts of Haor area during the last week of the month. Based on the above information and realized weather experienced during last few days, agromet advisories are prepared district wise. Some of the salient advisories for the districts experienced flood conditions recently are given below.

Aus Paddy (Areas Unaffected by Flood)

- Drain out excess water & maintain 2-5 cm water level in the Aus Paddy field.
- 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 stem 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 measure may be taken up after the current spells of heavy rainfall.

Aman Paddy (Areas Unaffected by Flood)

- Complete the sowing operations of aman paddy as soon as possible. Ensure weed free seed bed.
- Farmers may start the preparation of main land for transplanting.
- At the last stage of land preparation of field for transplanting of aman paddy, apply per hectare 90 kg TSP, 70 kg MOP, 11 kg Zinc, and 60 kg gypsum.
- 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 current spells of heavy rainfall

Advisories for Areas Affected by Floods

The district was affected by flood conditions recently. No flood condition is reported now for the district. However, next five days, the district is likely to receive 59.5 mm rainfall. Following agromet advisories are issued for this flood affected district on the standing crops, livestock, poultry and fishery.

1. In heavily flood affected areas and under high rainfall forecast, 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 and excess water due to high rainfall drained out completely. The seedlings of short and duration varieties (BRR DHAN 33, BRR DHAN 39, BRR DHAN 62, BRR DHAN 66, BRR DHAN 71, BRR DHAN 75) or medium duration varieties (BRR DHAN 34, BRR DHAN 37, BRR DHAN 38, BRR DHAN 49, BRR DHAN 52, BRR DHAN 70, BRR DHAN 71, BRR DHAN 79, BRR 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 and high rainfall forecast, 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 as there is high rainfall forecast.
6. Complete drain out of water from vegetable field.
7. Start cultivating of early winter vegetables after receding of flood water and after the high rainfall expected during next five days.
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. In flood affected areas of the district, vaccinate domestic livestock like cattle, goat and pigs against BQ, HS, Foot and mouth disease as well as anthrax disease.
10. Keep the animal in raised platform.
11. Supply adequate amount of clean and pure drinking water to animals.
12. Maintain a proper distance of the animals from the free flowing flooding streams and rivers.
13. 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.
14. 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, agromet advisories issued for other crops for some districts in the country are also mentioned below.

Jute:

- For late sown crop, 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.
- For late sown crop, 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.
- Complete the harvesting operation of jute (four months old). At the time of harvesting, cut the leaves in the main-field itself and afterward mix the leaves with top soil by ploughing. Harvesting and retting of jute may be done now to get better quality fibre. Early and timely sown capsularis jute may be 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.
- If seedlings of brinjal are ready for transplanting, transplant the seedlings on ridges and furrow with spacing of 60 x 60 cm. sowing of kharif vegetables such as lady's finger, pumpkin, cucumber, sponge gourd, bottle gourd.
- Weed management should be done in brinjal, tomato, lady finger and cauliflower.
- Need based intercultural operations should be done in tomato, brinjal, chilli, okra and other vegetable crops.
- 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 7th August when heavy rainfall is expected.
- 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 7th August when heavy rainfall is expected.
- Cloudy and humid weather is conducive for the attack of Leaf Curl disease in Summer Brinjal, Chilly etc. To manage the attack, apply Imidachloprid @ 2ml per liter of water after 7th August when heavy rainfall is expected.
- 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 Nimbicidine @ 2ml/lit or Verticilliumlecani1*109 ml spore count for the effective control of white fly pest after 7th August when heavy rainfall is expected.
- 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.
- 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 after the heavy rainfall.
- It is advised to apply fertilizer in the 3 months old banana plantations @ 120g Urea, 200g SSP and 275g MOP per plant after 7th August when heavy rainfall is expected.

Livestock & Poultry

- Vaccinate cattle and buffalos against the rainy season diseases. Protect cattle from rain and arrange dry bedding for cattle. Avoid water logging in cattle shed.
- 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.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 07 July'19) and maximum temperature on 06 July, minimum temperature on 07 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 | 13 | 33.1 | 27.4 | Rajshahi | Rajshahi | 00 | 33.5 | 27.8 | |
| | Tangail | 00 | 34.0 | 27.2 | | Ishurdi | 00 | 32.8 | 27.6 | |
| | Faridpur | 08 | 31.6 | 26.1 | | Bogura | 03 | 34.4 | 28.0 | |
| | Madaripur | 45 | 30.3 | 26.1 | | Badalgachhi | 19 | 33.3 | 27.2 | |
| | Gopalganj | 13 | 30.6 | 25.8 | | Tarash | 04 | 32.5 | 28.4 | |
| | Nikli | 03 | 34.2 | 28.4 | | | | | | |
| Mymensingh | Mymensingh | 06 | 33.6 | 27.6 | Rangpur | Rangpur | 00 | 35.8 | 27.5 | |
| | Netrokona | 03 | 33.6 | 26.6 | | Dinajpur | 02 | 34.7 | 27.1 | |
| | | | | | | Sayedpur | 00 | 35.8 | 27.2 | |
| Chattogram | Chattogram | 11 | 31.8 | 26.4 | | Tetulia | 70 | 34.6 | 24.5 | |
| | Sandwip | 09 | 31.6 | 26.0 | | Dimla | 12 | 34.5 | 26.0 | |
| | Sitakunda | 12 | 32.2 | 26.5 | | Rajarhat | 23 | 34.5 | 26.1 | |
| | Rangamati | 02 | 31.5 | 25.0 | Khulna | Khulna | 12 | 31.5 | 27.4 | |
| | Cumilla | 06 | 32.5 | 27.3 | | Mongla | 13 | 31.0 | 26.5 | |
| | Chandpur | 04 | 31.8 | 26.1 | | Satkhira | 10 | 31.2 | 26.7 | |
| | M.Court | 31 | 31.6 | 25.8 | | Jashore | 05 | 31.8 | 27.4 | |
| | Feni | 28 | 32.5 | 26.8 | | Chuadanga | 04 | 31.6 | 26.0 | |
| | Hatiya | 50 | 29.5 | 24.8 | | Kumarkhali | 02 | 31.6 | 26.6 | |
| | Sylhet | Cox's Bazar | 10 | 30.5 | 25.0 | Barishal | Barishal | 00 | 30.7 | 26.2 |
| Kutubdia | | 06 | 31.0 | 25.5 | Patuakhali | | 18 | 30.7 | 26.4 | |
| Teknaf | | 62 | 30.6 | 24.0 | Khepupara | | 31 | 30.6 | 25.7 | |
| | | | | | Bhola | | 40 | 30.7 | 26.4 | |
| Sylhet | | 01 | 36.5 | 27.8 | | | | | | |
| Srimangal | | 01 | 35.0 | 26.5 | | | | | | |

Highlights:

- Country average of bright sunshine hour was 3.91 hours per day during last week.
- Country average of free water loss during the previous week was 3.08 mm per day.

Weather Forecast Valid for 24 Hours commencing 06 PM Today:

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

Temperature: Day temperature may remain nearly unchanged and night temperature may fall by (1-3)°C over the country.

Spatial Distribution of weather parameters for the Week ending 6th August 2019

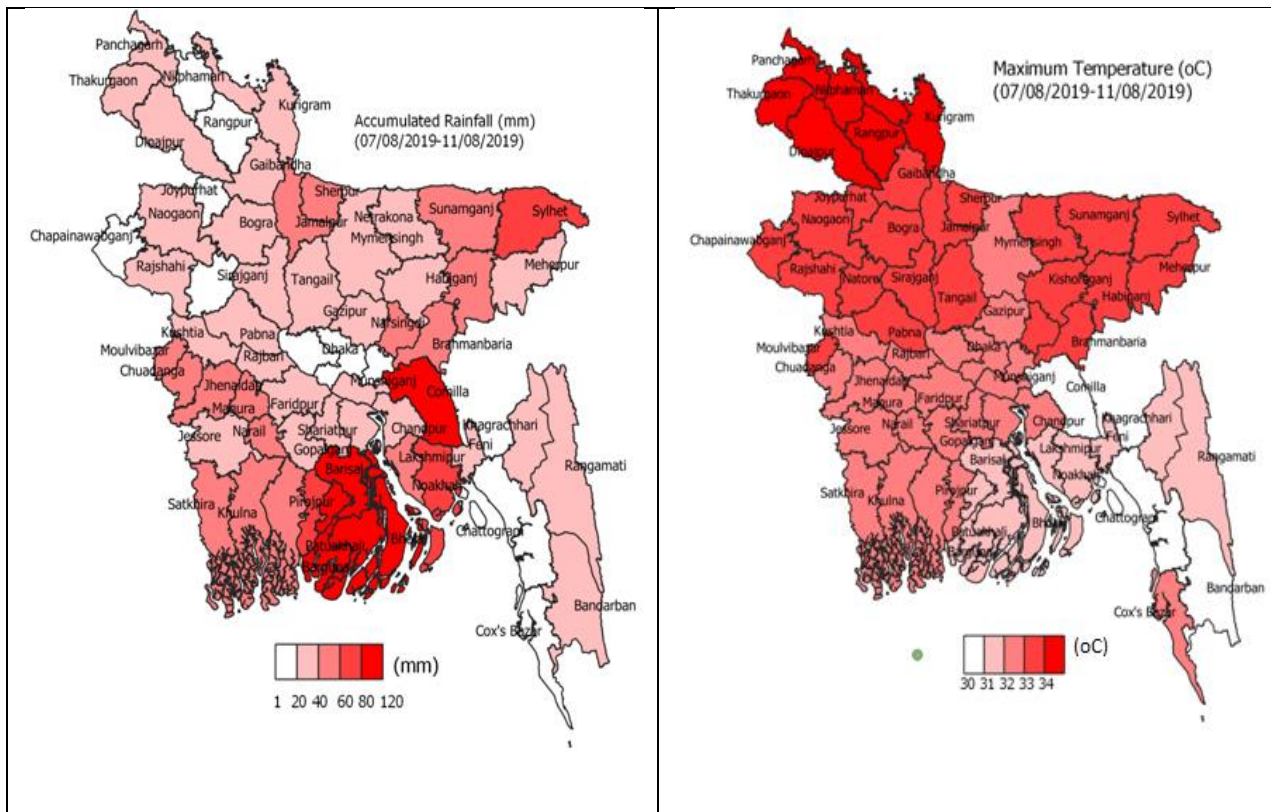
Map is not available due to technical problem.

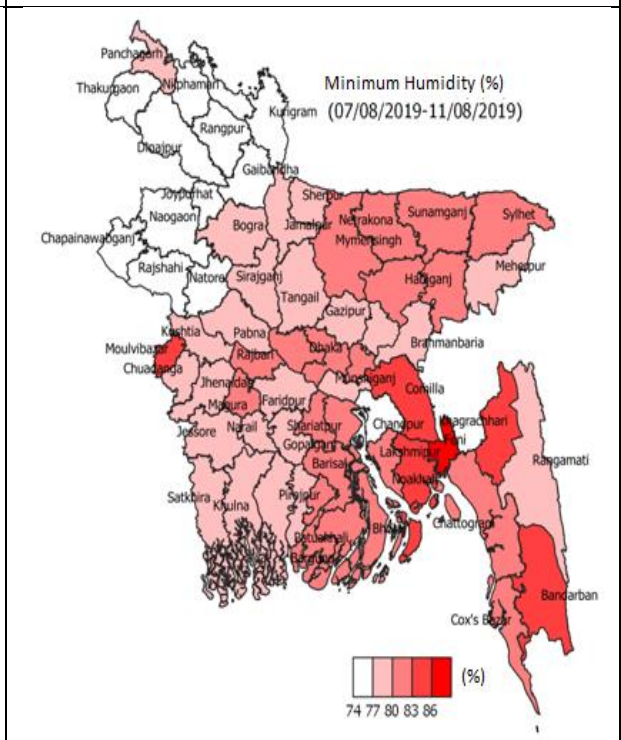
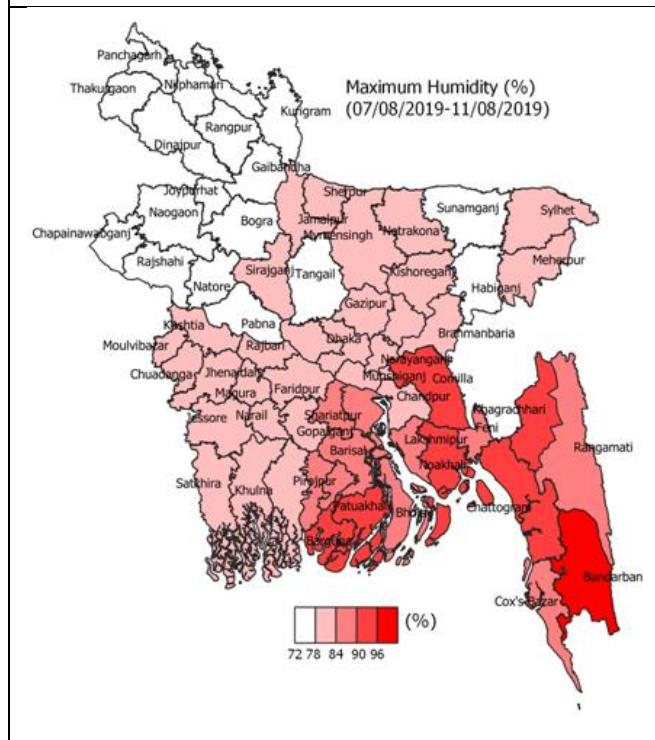
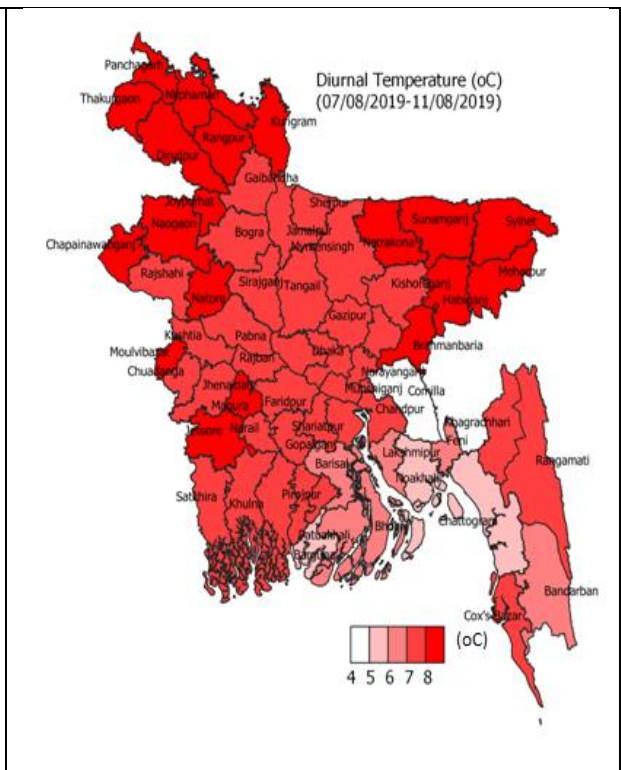
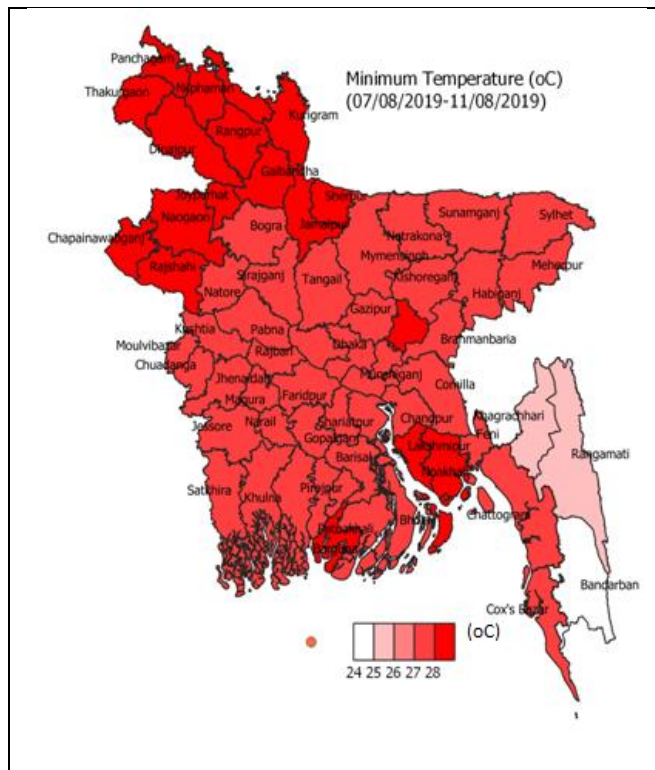
Weather Forecast and Advisory for the Period of 01.08.2019 to 07.08.2019

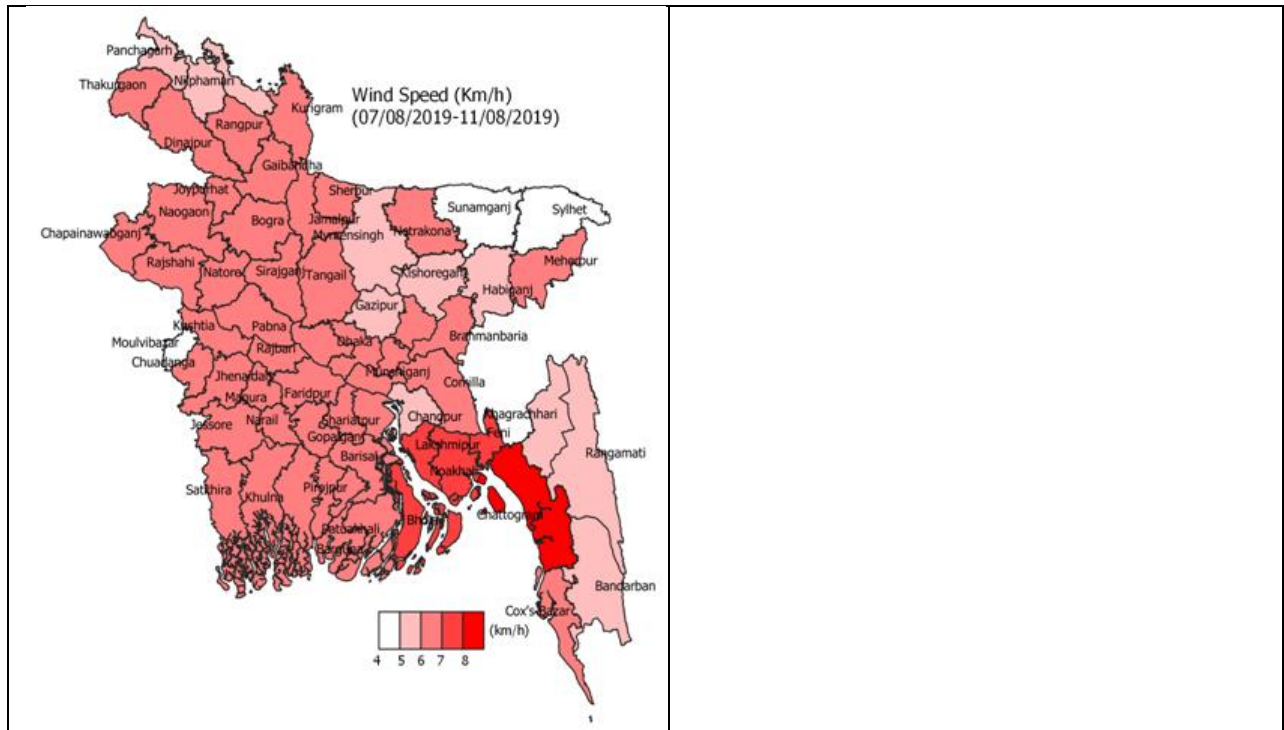
Bright sunshine hour is likely to be from 3.50 to 4.50 hours per day during this week. Average of free water loss during the next week is likely to be from 2.75 to 3.75 mm per day.

- Light (04-10 mm/d) to moderate (11-22 mm/d) rain/thunder shower is likely to occur at most places over Dhaka, Mymensingh, Sylhet, Chattogram, Khulna, Barisal and Rajshahidivision and many places over Rangpur division over the country, with a chance 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 07 August -11 August'19

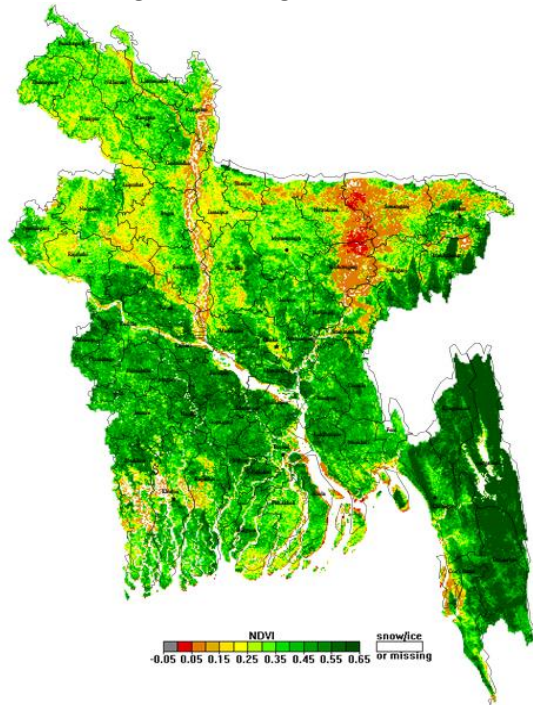




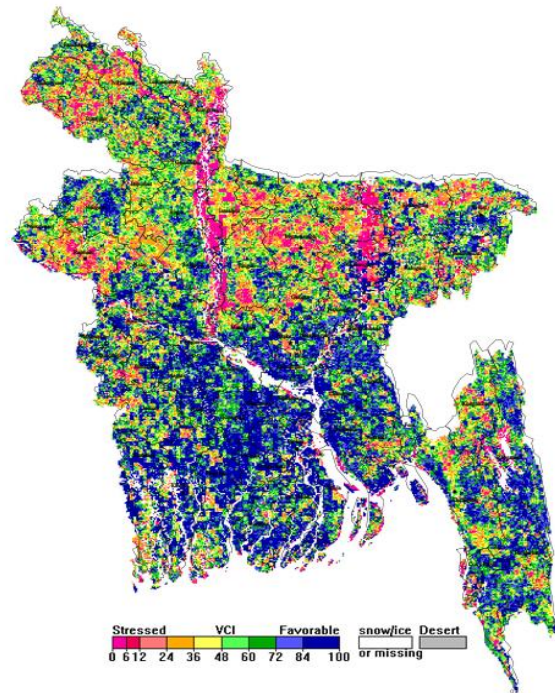


Different Satellite Products over Bangladesh

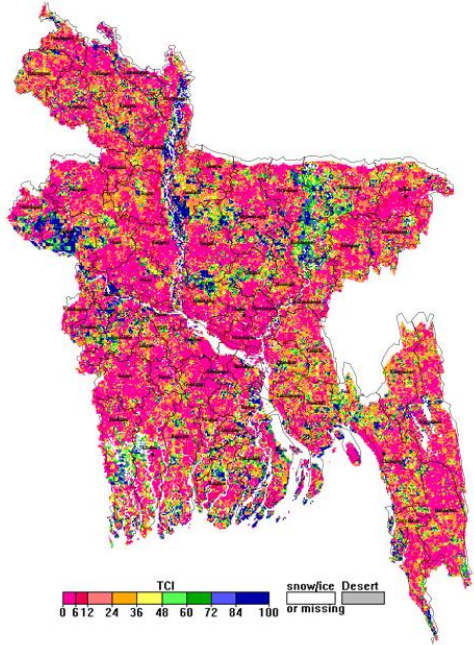
NOAA/VIIRS BLENDED NDVI composite for the week number No. 30 (21 July -27 July) over Agricultural regions of Bangladesh



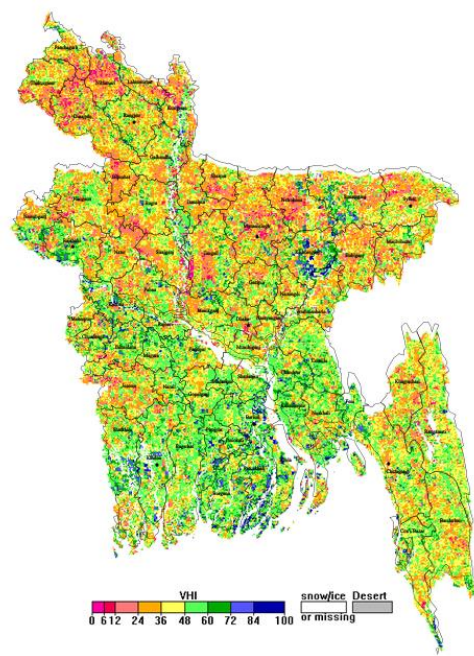
NOAA/ AVHRR BLENDED VCI composite for the week number No. 30 (21 July -27 July) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week number No. 30 (21 July -27 July) over Agricultural regions of Bangladesh

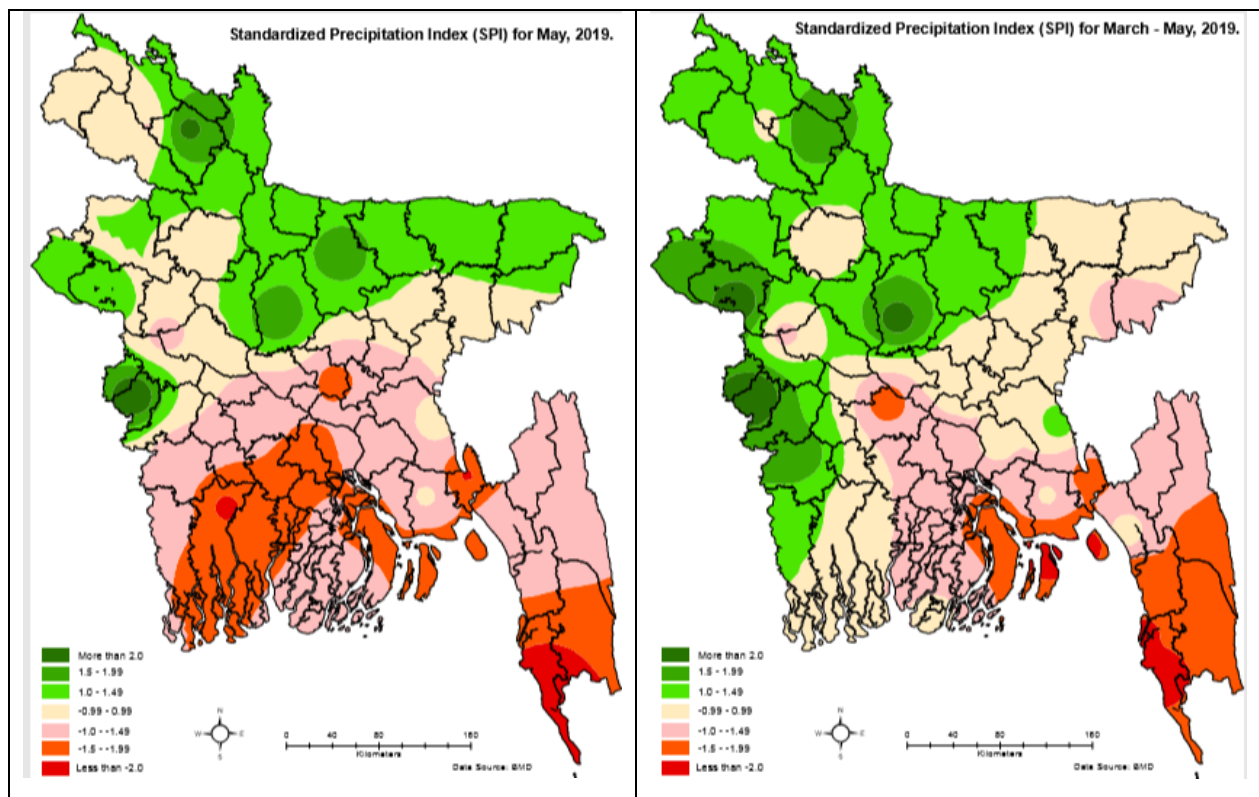


NOAA/ AVHRR BLENDED VHI composite for the week number No. 30 (21 July -27 July) over Agricultural regions of Bangladesh



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 AUGUST 07, 2019

Outlook:

All the major rivers of the country are in falling trend, which may continue in next 48 hours.

General River Condition

| | | | |
|------------------------------------|----|-------------------------------------|----|
| Monitoring Water Level Station | 93 | Water Level Steady in last 24 hours | 04 |
| Water Levels Rise in last 24 hours | 20 | Total not Reported | 00 |
| Water Levels Fall in last 24 hours | 69 | Above Danger Level | 00 |