



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

30 October 2019 (WEDNESDAY)
[FOR THE PERIOD 30.10.2019 - 03.11.2019]



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), trough of low lies over North Bay.. According to BMD, during next 24 hours, weather is likely to remain mainly dry with temporary partly cloudy sky over the country.. As per the medium range quantitative district level weather forecast issued by BMD, there will be no rainfall or very less rainfall in different districts of the country. As a result, it is advised to apply irrigation, pesticides and fertilisers. Day and night temperature may remain nearly unchanged over the country.

As per the information received from Bangladesh Water Development Board (BWDB), all major rivers of the country are flowing below their respective danger levels. The Brahmaputra river is in steady state which may fall in next 24 hours, while the Jamuna river is in rising trend which may remain steady in next 24 hours. The Ganges-Padma rivers are in steady state which may remain steady in next 24 hours. The Surma-Kushiyara rivers are in falling trend, which may continue falling in next 48 hours.

Considering the realized weather along with weather forecast, following salient agromet advisories on the standing major crops, livestock, poultry and fishery are issued for different districts where dry condition prevailed during last four days & also dry condition is likely for next five days in the country.

General Advisory:

** Farmers are advised to harvest matured crops and vegetables and also utilize the expected sunny sky conditions for hay making and drying harvested produce

**Field sanitization is advised before sowing of rabi crop. Bunds, channels, uncultivated fields and field roads should be cleaned, by removing weeds.

Aman Paddy

- Remove water completely from the matured paddy field 15 days before harvesting.
- Harvest the fully matured crop as sunny weather will prevail.
- Apply irrigation & maintain 2-5 cm water level at panicle Initiation to hardening of grain stages.
- Continuous monitoring of the economically harmful insects like stem borer, leaf roller, sheath blight, blast, brown spot, leaf blight, Gandhi bug, Brown Plant Hopper (BPH) should be done. Monitoring at 2-3 days interval is advised. 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. Since fair weather is predicted in the coming 5 days, farmers can continue spraying of insecticides/ fungicides in the field.
- For leaf roller attack spray [Chlorpyrifos@2.0 ml/lit](#) of water or Malathion @ 2ml. per litre water.
- For sheath blight spray Hexaconazol @ 1ml/litre water or Tebuconazol @ 1ml/litre water.
- For stem borer attack: For this pheromone traps 10 nos. per acre can be installed and egg groups of stem borer should be collected by hand and destroyed. Spray Carbofuran @10kg per ha or Cartap @14kg per ha or Fipronil @ 1ml. per litre of water or Diazinon @ 17kg per ha.
- For bacterial leaf blight apply Thiovit+Potash along with fertiliser management.

- To control brown spot disease, spray Mancozeb @ 2.5 g/litre or Thiovit+Potash or Fertilizer management.
- For management of blast disease in paddy at booting stage, carry out alternative wetting and drying without cracking of the soil. Spray Nativo 75wg/ Trooper@ 0.6g/litre of water or Amistar top 325 sp@ 1ml/litre of water. Spraying should be done after 3 PM so that disease can be effectively controlled. The spray should be repeated after 10-12 days as per intensity of the disease.
- During dough to milky stage, there is chance of incidences of Gandhi bug & BPH. For BPH Spray Isoprocarb @ 2.5g per litre water or Imidachloprid @ 2.5g per litre water. For Gandhi bug Spray Malathion @ 2ml. per litre water or Chlorpyrifos @ 2ml. per litre water.

Vegetables

- Preparation for nursery sowing of tomato, brinjal, chillies and capsicum can be done and seed treatment by Thiram should be done @ 2 gram/ kg. seed. Winter vegetables like cauliflower, cabbage and knolkhol early varieties should be selected. Nursery sowing can be done. It is advised to transplant all cole crops (knol khol, cabbage, cauliflower and broccoli) without any delay. Continue the transplanting of tomato seedlings. Regular monitoring is advised in early transplanted tomato crop against attack of insect-pest and diseases
- In cucurbits, to control downy mildew, spray Ridomil M Z 72 @ 20 gm/10 litre of water. Install fruit fly trap Naurojicurtin cucurbit @ 10 trap per ha for management of fruit fly.
- Spot application of Propargite 57 EC @ 2 ml/lit or Fenazaquin 10 EC 1 ml/lit water for the control of red spider mites in brinjal is advised. For control of white fly spray Diafenthiuron 50% WP 10 g/10 lit of water. Uproot and burn little leaf infected plant and spray systemic insecticide.
- There is a chance of fruit fly in vegetables. It is suggested that remove and destroy the affected and decayed fruits. Use special pheromone traps like cuelure (6 nos/acre) for vegetable fruit fly. Thulasi/fruit traps can be used. If the attack is not reduced, spray mixture of Malathion 2 ml per one litre of water + jaggery 10 g at flowering and fruit initiation.
- For early detection of papaya mealy bug, it is advised to regularly monitor the plantations and remove and burn the infested parts/plants. Destroy the ant colonies in vicinity of the crop to restrict the spread of the pest to the adjacent healthy crops. ☐ Spot spraying of Neem oil (1 to 2%) or Chlorpyrifos 20 EC (2 ml/l) or Dimethoate 30 EC (2 ml/l) or Imidacloprid 17.8 SL (0.6 g/l) under fair weather condition can considerably reduce the pest population.

Boro Paddy:

- Take appropriate action for preparation of seedbed for boro paddy especially as this season is cyclone prone, it is advised to prepare the seedbed in high land and also make arrangement for draining out of water and also advised for community based seedbed preparation.

Mustard:

- The present weather condition is ideal for land preparation and sowing of mustard. Recent rainfall increases the level of residual moisture and ultimately it will favour sowing of mustard.

Maize:

- Start land preparation and sowing of boro maize. make arrangement for draining out of water from the crop field. Make arrangement for draining out of water.

Pulse:

- This present weather condition is ideal for land preparation & sowing of pulse crop. Pulses cultivation should be made in medium to high land and also no chance of flood condition.

Potato

- This present weather condition is ideal for land preparation & plantation of potato. Recent rainfall increases the level of residual moisture will favour potato plantation. Collect seeds of recommended varieties of potato from reliable sources and start planting in the field

Horticultural crops

- Present weather conditions are favorable for the planting of horticultural crops viz, papaya, mango, Banana, guava etc, farmers are advised for the planting the same at the earliest.

Livestock

- Night temperature has started falling/ will fall in the district; farmers should make proper arrangements to protect their milch animals and their young ones from morning/evening cold by covering them with gunny bags during night and ample exposure to sunlight during day time to avoid pneumonia.
- Suggested to go for routine vaccination for livestock against the dreaded virus like targa, khura and PPR.
- The floor and dairy shed should be cleaned with suitable antiseptic solution and maintain a proper sanitation.
- Keep animal shed clean and de-worm domestic animals. For Foot and Mouth disease, wash the wound with potassium permanganate solution.
- After rainy season till the availability of grazing land lambs/kids/adult/sheep and goat shall be dewormed after each 30–40 days. Similarly, faecal examination of 10 % sample shall be undertaken from veterinarian so that specific dewormer can be administered.
- Balanced diet (green fodder 15-20 kg and wheat or rice husk 2-3 kg) per day should be given to the buffaloes and cows so that milk production did not affect by the fluctuating weather.
- Provide fresh grass to livestock which will increase milk production and reproduction

Poultry

Suggested to go for routine vaccination for poultry against the dreaded diseases /virus Vaccination (RDF1) of the one week old chicks against Raniket disease, darkplague and against Gamboro disease in two weeks old chicks may be carried out after consultation with local veterinarian. Clean poultry shed twice in a week.

Arrange light from Bulb 1-2 hours after evening. It favours more production of eggs and reduce the chance of incidences of diseases.

Fishery

- Growing carp is floating upward due to oxygen deficiency. Follow the following.
- Apply lime in pond water. Apply lime according to pH.
- Remove all aquatic weeds from bottom of pond
- Cut the bushes beside the surrounding for getting better sunlight.

- Agitate water for better growth of fish.
- Administer feeding on sunny days. Provide false netting for better growth of fish.

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 30 October'19) and maximum temperature on 29 October, minimum temperature on 30 October'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 | 00 | 32.6 | 22.3 | Rajshahi | Rajshahi | 00 | 31.0 | 21.2 |
| | Tangail | 00 | 31.5 | 20.8 | | Ishurdi | 00 | 30.8 | 21.2 |
| | Faridpur | 00 | 32.1 | 20.7 | | Bogura | 00 | 32.0 | 21.5 |
| | Madaripur | 00 | 31.3 | 21.2 | | Badalgachhi | 00 | 30.2 | 20.2 |
| | Gopalganj | 00 | 31.2 | 20.2 | | Tarash | 00 | 30.2 | 22.0 |
| | Nikli | 00 | 32.0 | 23.8 | Rangpur | Rangpur | 00 | 31.0 | 21.2 |
| Mymensingh | Mymensingh | 00 | 32.0 | 21.8 | | Dinajpur | 00 | 31.0 | 20.1 |
| | Netrokona | 00 | 31.7 | 21.9 | | Sayedpur | 00 | 31.2 | 19.9 |
| Chattogram | | | | | | Tetulia | 00 | 32.2 | 16.7 |
| | Chattogram | 00 | 32.0 | 24.2 | | Dimla | 00 | 30.5 | 19.1 |
| | Sandwip | 00 | 32.6 | 22.4 | | Rajarhat | 00 | 30.6 | 19.7 |
| | Sitakunda | 00 | 33.0 | 23.5 | Khulna | Khulna | 00 | 31.5 | 22.0 |
| | Rangamati | 00 | 33.3 | 24.3 | | Mongla | 00 | 32.0 | 21.5 |
| | Cumilla | 00 | 32.2 | 23.0 | | Satkhira | 00 | 31.3 | 21.4 |
| | Chandpur | 00 | 32.8 | 23.2 | | Jashore | 00 | 31.6 | 21.4 |
| | M. Court | 00 | 33.0 | 23.6 | | Chuadanga | 00 | 31.0 | 20.3 |
| | Feni | 00 | 33.0 | 23.0 | | Kumarkhali | 00 | 30.6 | 22.5 |
| | Hatiya | 00 | 32.5 | 22.8 | Barishal | Barishal | 00 | 32.4 | 21.0 |
| | Cox's Bazar | 00 | 32.5 | 24.8 | | Patuakhali | 00 | 32.0 | 22.1 |
| | Kutubdia | 00 | 32.0 | 23.8 | | Khepupara | 00 | 31.3 | 21.4 |
| | Teknaf | 00 | xx | 24.8 | | Bhola | 00 | 31.8 | 21.6 |
| Sylhet | Sylhet | 00 | 32.7 | 22.6 | | | | | |
| | Srimangal | 00 | 33.0 | 22.2 | | | | | |

Highlights:

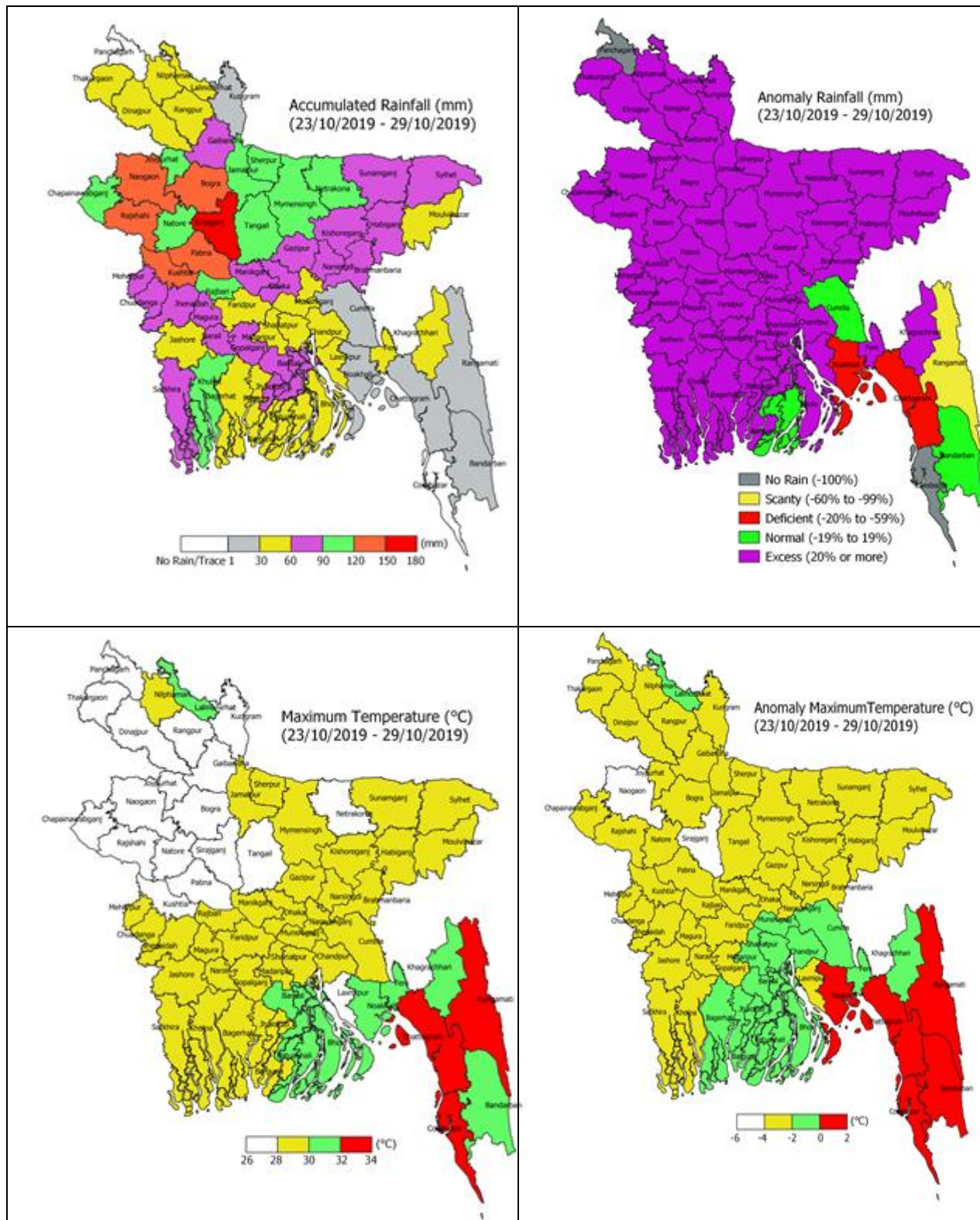
- Country average bright sunshine hour was 7.47 hours per day during last week.
- Country average free water loss during the previous week was 3.39 mm per day.

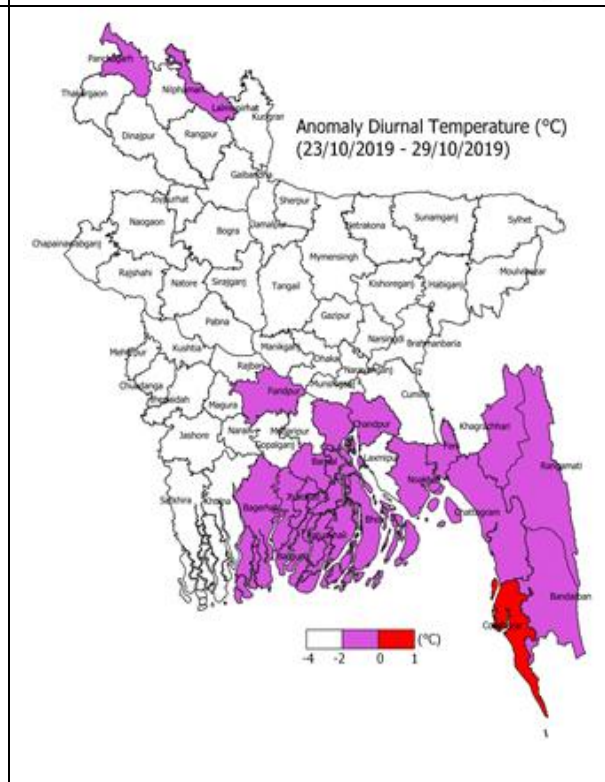
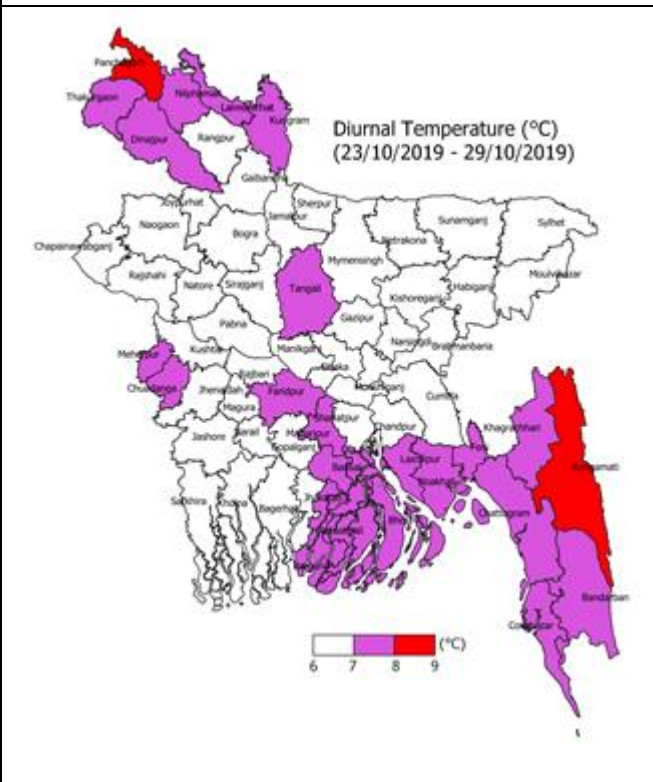
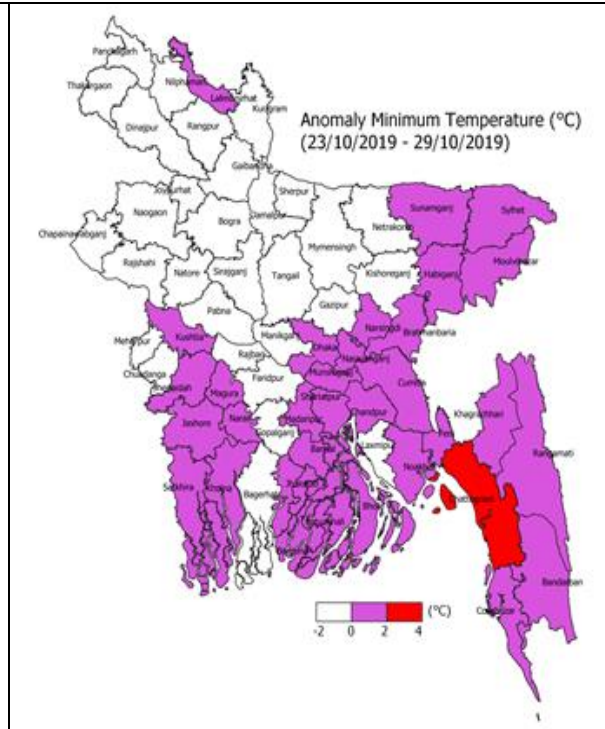
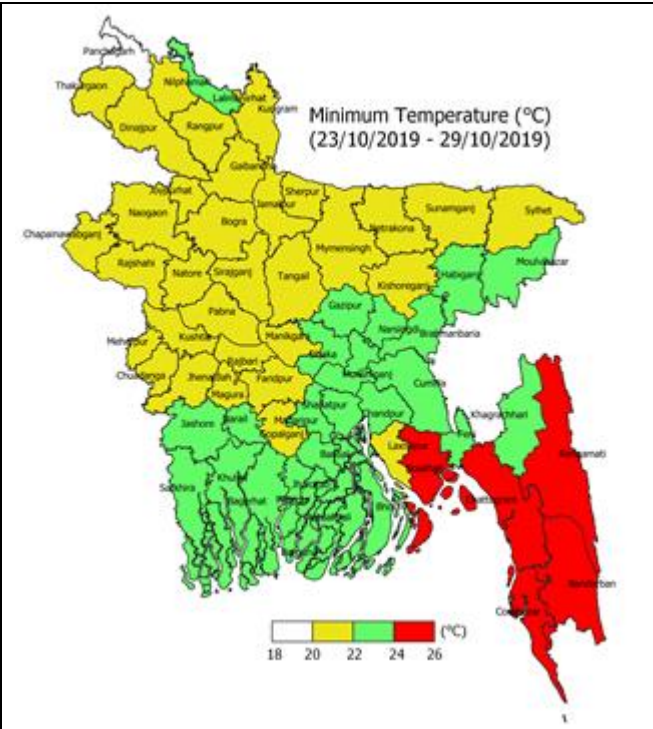
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

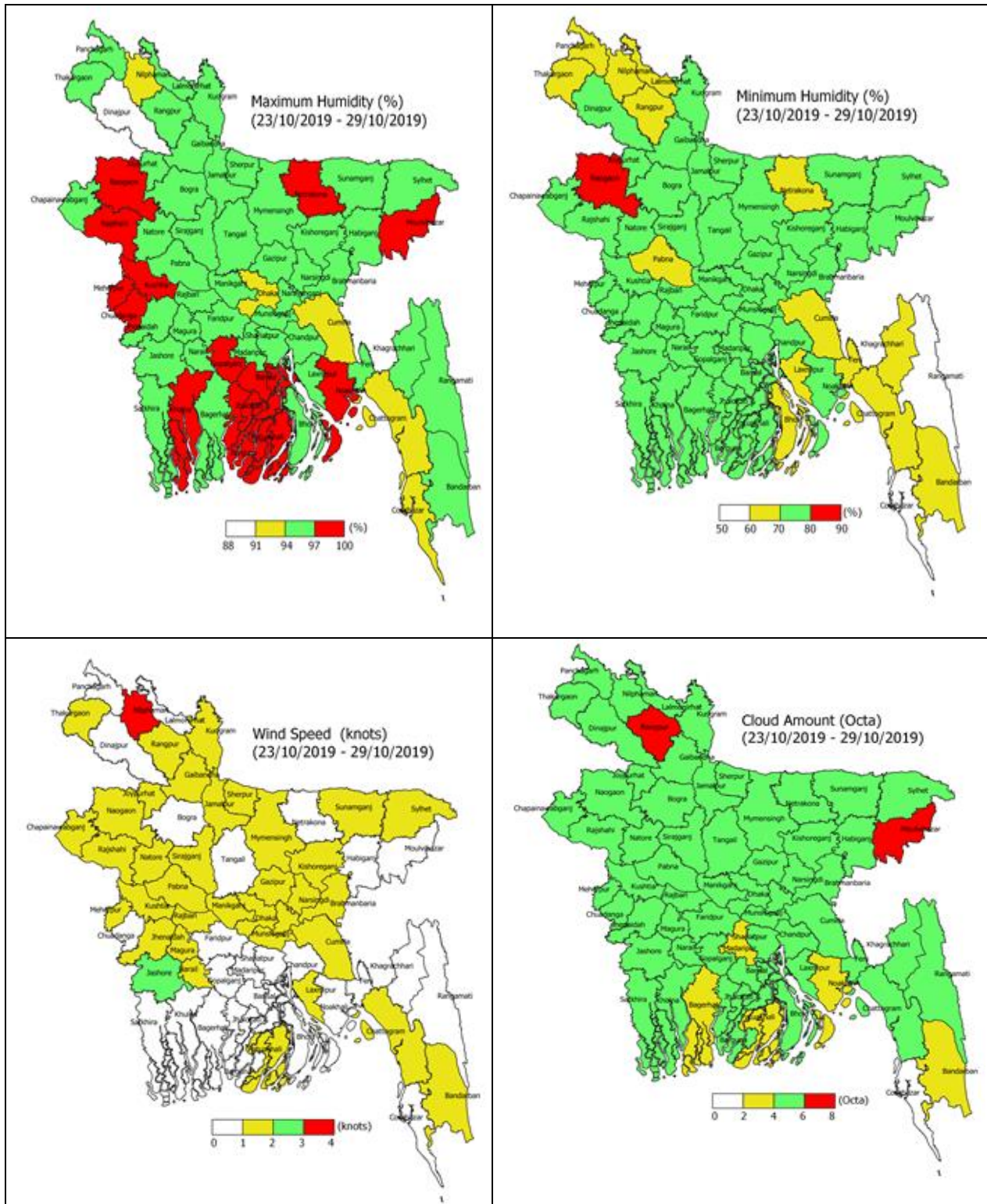
Forecast: Weather may remain mainly dry with temporary partly cloudy sky over the country.

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

Spatial Distribution of weather parameters for the Week ending 29 October 2019







Weather Forecast and Advisory for the Period of 22.10.2019 to 02.11.2019

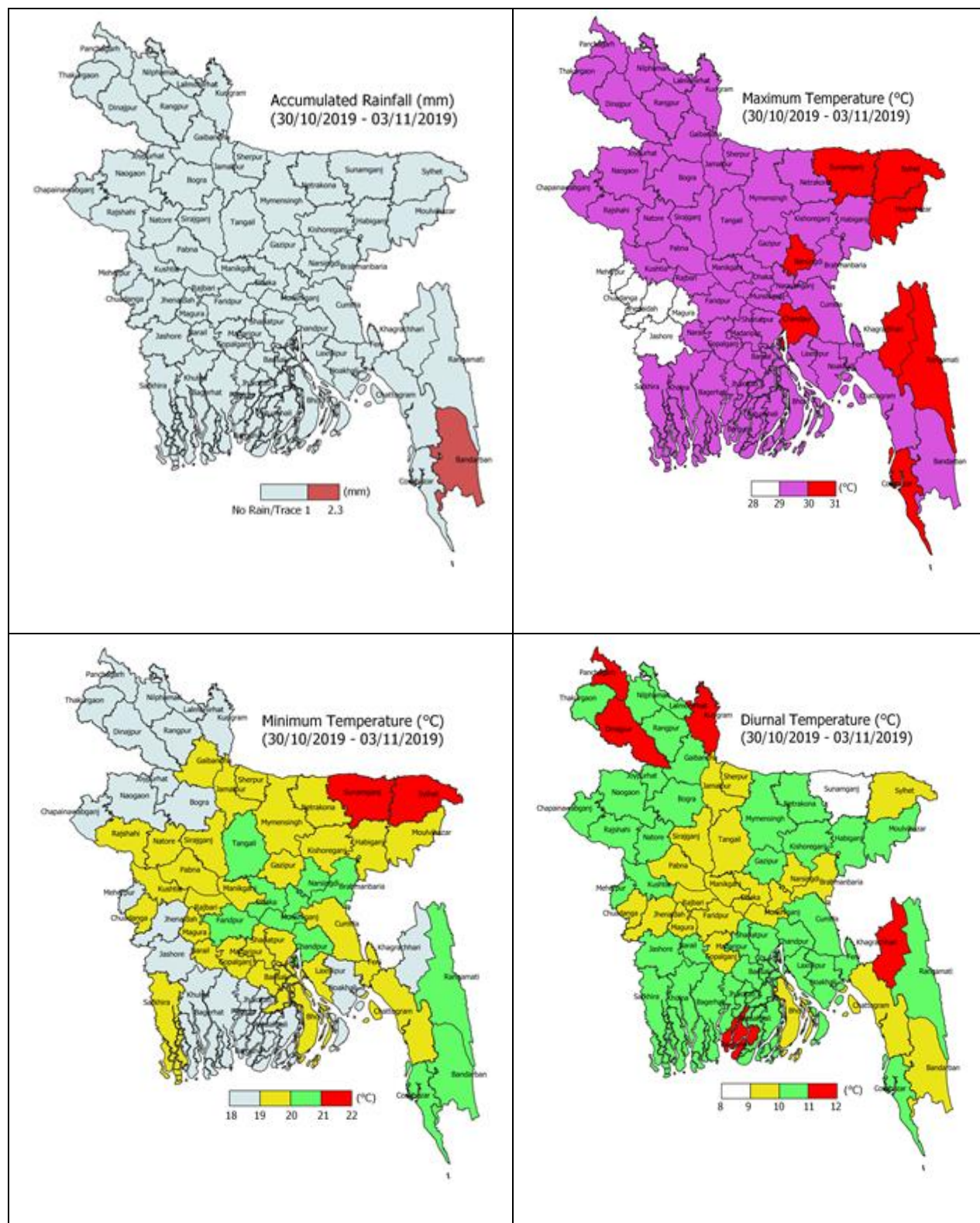
Bright sunshine hour is likely to be from 6.00 to 7.00 hours per day during this week. Average free water loss during the next week is likely to be from 2.50 to 3.50 mm per day.

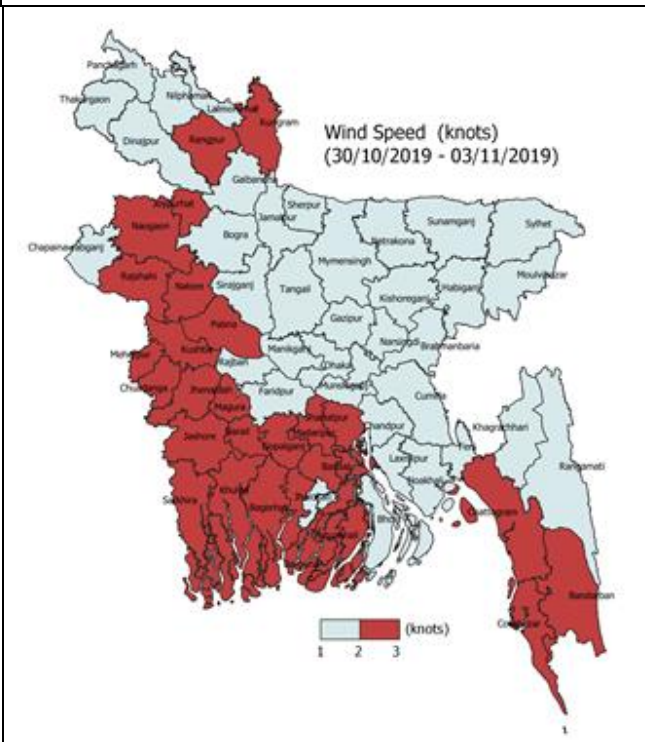
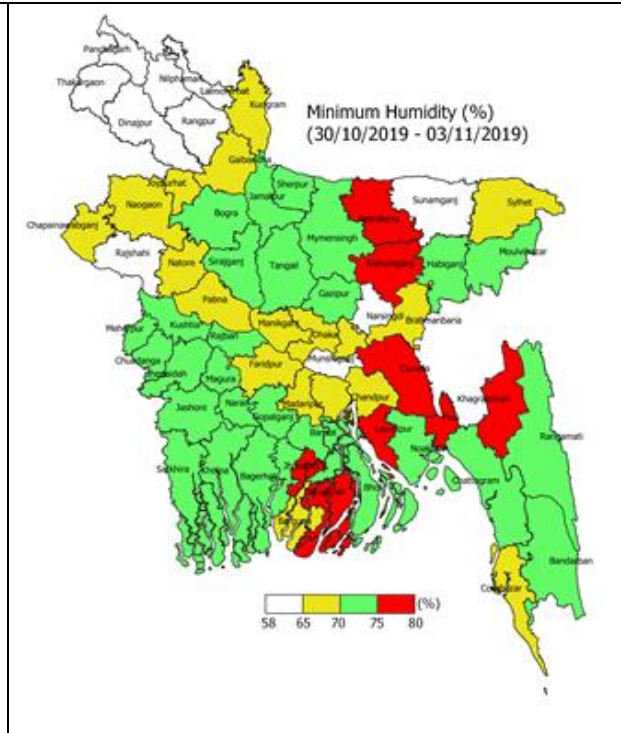
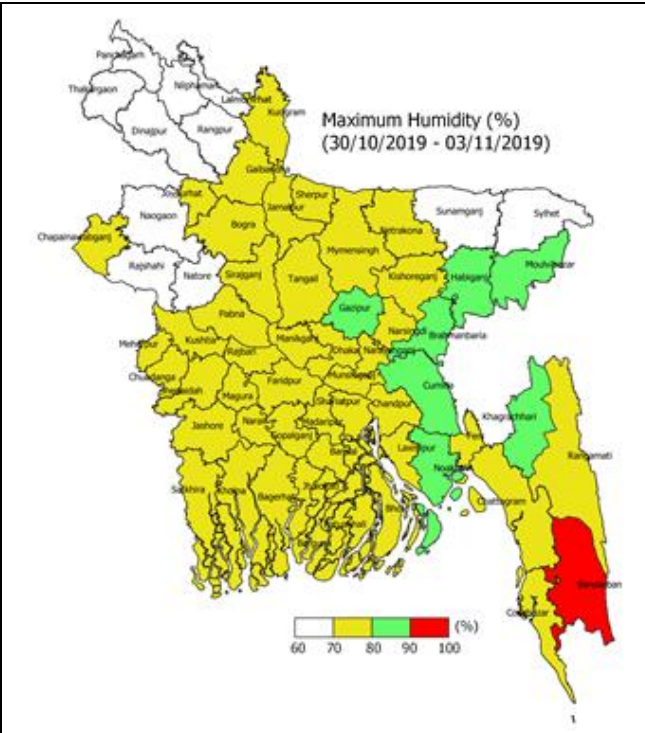
Light (04-10 mm/day) to moderate (11-22 mm/day) rain/thunder shower is likely to occur at many places over the country, with chances of moderately heavy (23-43 mm/day) to heavy (44-88 mm/day) falls at places over the country during the first half of this period. Slight rise in Day and Night temperature during this period.

Weather may remain mainly dry with temporary partly cloudy sky having chances of isolated rain at one or two places over the country during the second half of this period.

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

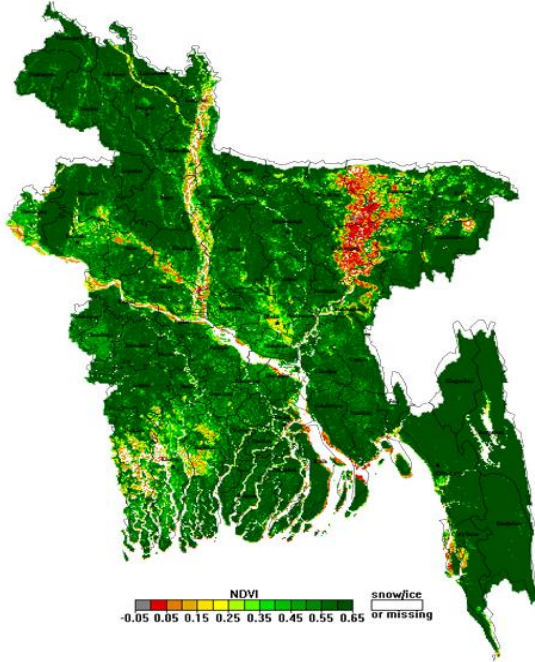
District Wise Quantitative Weather Forecast for next Five days from 30 October -03 November'19



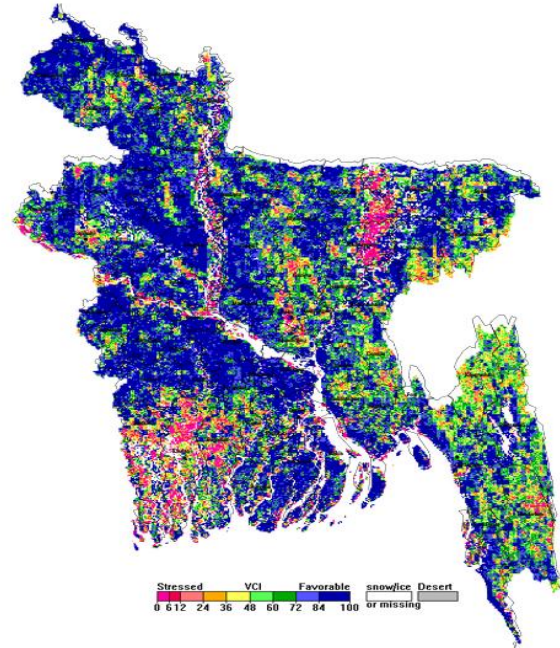


Different Satellite Products over Bangladesh

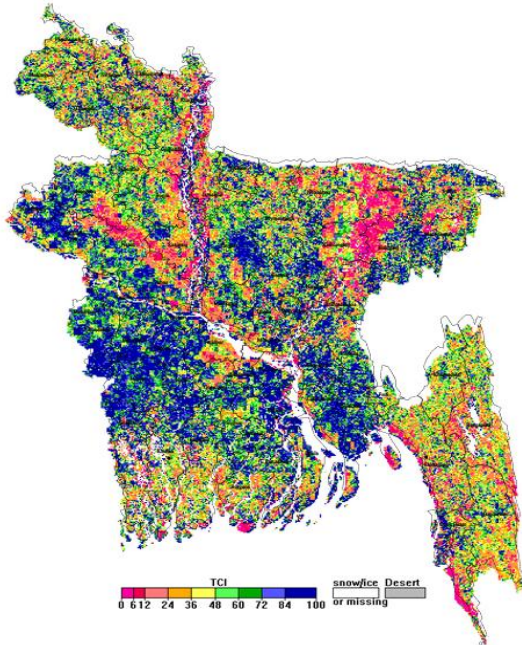
NOAA/VIIRS BLENDED NDVI composite for the week number No. 42 (11 October-17 October) over Agricultural regions of Bangladesh



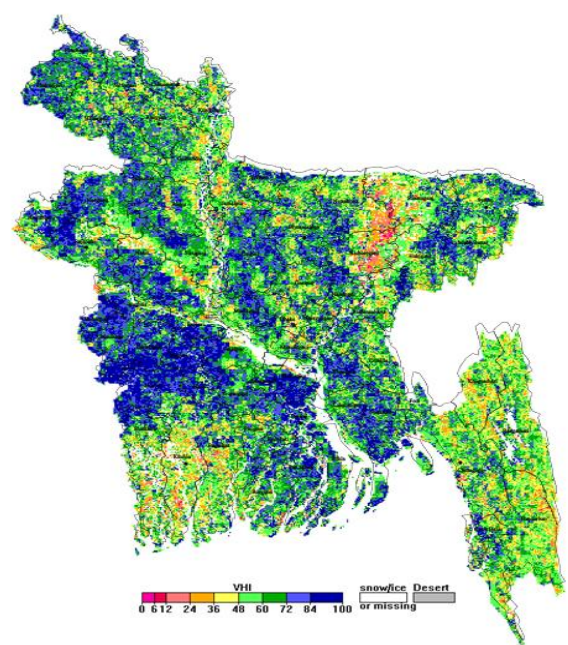
NOAA/ AVHRR BLENDED VCI composite for the week number No. 42 (11 October-17 October) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week number No. 42 (11 October-17 October) over Agricultural regions of Bangladesh

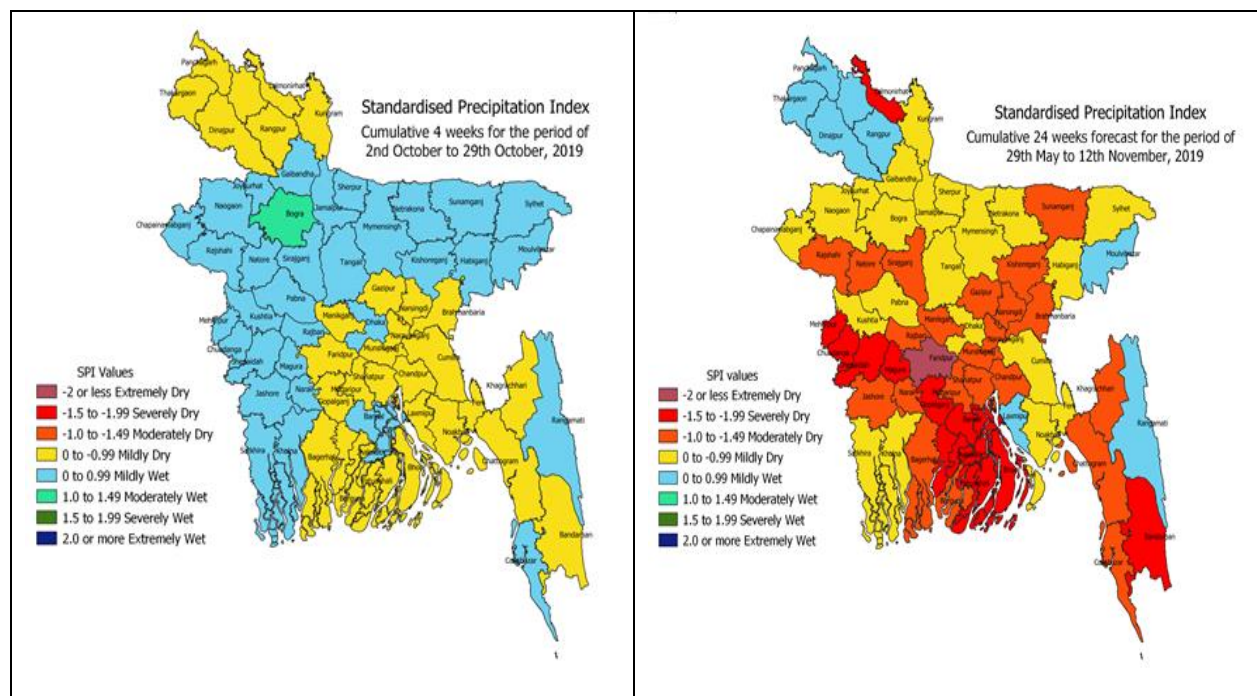


NOAA/ AVHRR BLENDED VHI composite for the week number No. 42 (11 October-17 October) over Agricultural regions of Bangladesh



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

It has been observed that during last four weeks as well as in October mild dry conditions prevails in districts located in northwest, south as well as southeast parts of Bangladesh except a few districts whereas the districts in northeast, western side and central parts of Bangladesh are under mild wet condition.



Data source: Bangladesh Meteorological Department

RAINFALL AND RIVER SITUATION SUMMARY AS ON OCTOBER 30, 2019

(Source: Bangladesh Water Development Board)

Outlook:

All major rivers of the country are flowing below their respective danger levels.

The Brahmaputra river is in steady state which may fall in next 24 hours, while the Jamuna river is in rising trend which may remain steady in next 24 hours.

The Ganges-Padma rivers are in steady state which may remain steady in next 24 hours.

The Surma-Kushiyara rivers are in falling trend, which may continue falling in next 48 hours

General River Condition

| | | | |
|-----------------------------------|----|-------------------------------------|----|
| Monitoring Water Level Stations | 93 | Water Level Steady in last 24 hours | 04 |
| Water Level Rise in last 24 hours | 28 | Total not Reported | 00 |
| Water Level Fall in last 24 hours | 61 | Above Danger Level | 00 |