



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

17 June 2020 (WEDNESDAY)
[FOR THE PERIOD 17.06.2020 – 21.06.2020]



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

Salient Agromet Advisories

Salient Weather Conditions

Monsoon is active over Bangladesh and strong 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/squally wind is likely to occur at most places over Khulna, Barishal, Chattogram & Sylhet divisions and at many places over Rangpur, Rajshahi, Dhaka & Mymensingh divisions with heavy to very heavy falls at places over the country. Heavy (44-88 mm/day) to very heavy (≥ 89 mm/day) rainfall is likely to occur at places over Barishal, Chattogram & Sylhet divisions during next 24 hours. Day and night temperature may fall by 1-2° C over the country. As per the outlook issued by BMD for next 72 hours, rain/thunder showers may continue. Besides, as per the medium range weather forecast, almost all the districts in the country will likely to receive very good amount of rainfall during next five days.

Outlook on River System & Flood Situation for Next 10 Days issued by Flood Forecasting and Warning Center, Bangladesh Water Development Board (Date of Issue : 15th June 2020):

Outlook for Next 10 Days:

- ♣ Brahmaputra-Jamuna river system may continue to rise during the next 10 days. Water level may rise within 1m of danger level. No probability of flooding (danger level exceedance) is forecasted during next 10 days.
- ♣ Ganges-Padma River may steadily rise. No probability of flooding is forecasted in Ganges basin.
- ♣ Rivers around Dhaka city may rise. No probability of flooding is forecasted in the rivers around Dhaka city.

Special Agromet Advisory under Heavy to Very Heavy Rainfall Forecast for the districts in Barishal, Chattogram and Sylhet Division

1. Advise for abstaining from application of fertilisers, pesticides and irrigation.
2. Immediately harvest the matured vegetables and horticultural crops on non rainy days and store it in dry and safe place or harvest after the current spells of heavy rainfall..
3. Keep all the farm produce in safe place.
4. Made suitable arrangements for draining out excess water from the crop field.
5. Arrange for elevated bunding around and inside the Aus paddy field so that heavy rainfall may not affect the standing crops
6. Provide mechanical support like popping of sugarcane crops (tying of three to four plants together), support of horticultural crops particularly banana with three to four bamboos support to fruit plants and stacking of vegetables.
7. Arrange nets around the ponds so that fishes may not come out due to heavy rainfall.

Salient Agromet Advisories

Boro Paddy

Continue harvesting the matured crop on non-rainy days or after the current spell of rainfall

- After the harvest, immediately keep it in safe and dry place for drying of grains.
- Complete harvesting as early as possible
- After harvesting, 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
- Hire the labour from the same village of cultivated land
- Maintain proper distance during harvesting.
- Harvested crop should immediately be transported to a safer place to avoid post-harvest loss considering the probability of rain during in coming days. Plough the field immediately after harvesting or sow the green manure crops.
- Drain out water from crop field 15 days before harvesting.

Aus Paddy

- Maintain in 3-4inches water level.
- Inspect & monitor disease-pest e.g blast, rice bug, stem borers and others and take appropriate plant protection measures
- After decrease in water level from aus paddy field, apply potash fertilizer as top dress by filling gap after 5-7 days and also urea fertilizer after 3-5 days. Urea fertilizer should not be applied if the paddy is in early tillering stage. After 5-7 days, if necessary, urea fertilizer should be applied by breaking the tillers and filling the gap. At this time, it is better to use additional 5 kg of potash fertilizer per bigha in all types of aus paddy fields.
- If the population of Thrips and Green Leaf Hopper exceeds 25%, apply Malathion group insecticide at the rate of 1ml/1 litre of water.

Aman Paddy

- Advise for preparation of seeded for Aman paddy in *kharif season*.
- Start sowing of dry seeded long duration paddy after proper tillage operation like ploughing, weeding etc.
- Before sowing seed should be treated by Diethane M-45 properly
- Farmers are advised to practice Dapog method for raising nursery bed.
- Community based rice nursery may be raised to avoid loss of nursery due to heavy rainfall & flooding.

Maize:

Silk stage (Kharif 1)

- Undertake harvesting of matured cobs of maize. At the time of grain filling and maturity stage birds damage the maize cobs. Hence, set up a scarecrow dressed in light flowing clothes that may help in avoiding birds attack in maize crop. Also attach strips of aluminum foil to the scarecrow to increase the reflection of sunlight so as to restrict the bird infestation

- To control Fall of Army worm in maize, manual destruction of egg masses and caterpillars may be done. Pheromone traps @ 4/ha for monitoring and 10/ ha for mass trapping of adult insects may be done. Spray Emamectin Benzoate 5% SG @6/15 litre water if infestation is above ETL.

Groundnut

- Drain out excess water, if any, from the land.
- Harvest the matured crop on non-rainy days
- Monitor the incidences of pests (hairy caterpillar, jassid, thrips, leaf miner, spodoptera & termite) & diseases (leaf spot/tikka disease, leaf rust, foot rot/stem rot, collar rot, bud necrosis) and if noticed, take appropriate preventive measure.
- Prevailing weather condition are favorable for tikka leafspot in groundnut. To control spray with hexaconazol @2ml. or carbendazim @1 g. per litre of water.

Vegetables

- Hand pollination is effective for more production in case of tassel gourd and pointed gourd. Moreover, advised to cut aged leaves and continue others intercultural operations in vegetables land.
- Wash away sticky mud from base and stems of vegetable plants by spraying fresh water; to prevent rotting, spray Copper hydroxide or copper oxychloride@4g per litre of water. Staking of bamboo should be provided to crops like tomato, chilli and brinjal for better support.
- Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields. Avoid irrigation, intercultural operation and application of plant protection measures and fertilizers to the standing crops. Harvest the matured crop immediately and store the harvested products at safe places.

Horticulture

- Weather is congenial for sigatoka leaf spot disease in banana; cut and remove all severely affected leaves and spray Propiconazol 1ml/ litre of water. Weather is congenial for burrowing nematode in banana; apply neem cake (1 kg/plant) at the time of planting to reduce the pest population. Store the harvested banana bunches in dry places to prevent disease incidence due to rainfall.
- Provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Keep cattle/goats indoor during thunderstorm/dust storm.
- Weather is congenial for bud rot disease in coconut; spray 1% Bordeaux mixture on the spindle leaf and crown of palms. Make provisions for small drains at required interval in the orchards to drain out excess water.

Jute:

- Keep the jute land weed free by weeding and uproot comparatively under growth plant during the time.
- There is a chance of incidences of Semilooper. Spray Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water. Semilooper and mites may infest in drought and humid weather and so placing 10-12

bamboo sticks/ plant branch @33 decimal land for controlling insects as environment friendly way. Besides, inspect the land regularly.

- Drain out excess water from the fields
- It is now in vegetative stage. Monitor the pest & diseases incidences and take appropriate measures.
- To protect capsularis jute crop (>4 ft tall) from lodging due high wind speed, the peripheral jute plants (round the field) need to be tied together by taking 4-5 jute plants in a consecutive manner.
- There is a chance of incidences of Hairy Caterpillar. Following control measures is advised.
- Collect the egg mass and destroy
- Use light traps.
- Spray Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water.
- There is a chance of incidences of Semiloper. Spray Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water.

Betel vine:

- At Leaf growing stage the fencing and structure of betel vine garden broken due to “strong wind. Repair the structure as early as possible and if required took down the creeper from the structure.
- Wet the plant and the base soil with copper oxychloride solution --Spray 1% Bordeaux mixture at the base.
- Intercultural operations need to continue as others month.
- Hail storm and western storm may be possible at this time, so special care should be given for beetle leaves

Sugarcane-

- During the month, sugarcane plant. in grand growth stage
- Cultivated summer pulse crops, leafy vegetables need to be harvested in the sugarcane field as relay/inters cropping.
- 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.
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Livestock

- Keep animals indoor during heavy rainfall. For cow and buffalo HS and BS vaccine should be given. During Monsoon keep chicks & birds in a relatively warmer places or use electrical bulbs.
- Immunize the farm cattle against FMD (Foot & Mouth Disease), HS (Hemorrhagic Septicemia) and BQ (Black Quarter) diseases after consultation with local veterinary doctor.
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Poultry

- For all age groups of poultry birds including local, broiler and layers give one dose of vaccine against Newcastle/Raniket disease in drinking water (Lasota/ F-1vaccine). Maintain free circulation of Air in poultry shed.
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Fishery

- Repair damaged dykes of fisheries ponds and take care so that fishes does not escape. Maintain outlet pipe from the pond so that excess water pass away and the water level is maintain.
- Fish grower framers are advised to collect the healthy fingerlings from the authentic sources as there is enough water in the fish pond.
- Remove the unwanted fishes and predator by repeated netting before leaving the new fingerling in the fish pond. → In Lower Brahmaputra Valley Zone of Assam,
- This is time for release of new batches of fishes in fish ponds.
- 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%.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 17 June 2020) and maximum temperature on 16 June, minimum temperature on 17 June 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	04	33.6	26.8	Rajshahi	Rajshahi	02	<u>36.0</u>	27.0
	Tangail	16	34.5	25.0		Ishurdi	03	34.0	26.8
	Faridpur	01	32.9	26.7		Bogura	02	33.7	26.6
	Madaripur	03	33.0	26.2		Badalgachhi	81	33.3	26.0
	Gopalganj	02	33.3	25.3		Tarash	10	34.0	27.0
	Nikli	03	33.1	24.5					
Mymensingh	Mymensingh	24	34.0	26.5	Rangpur	Rangpur	xx	34.0	26.5
	Netrokona	25	32.6	26.5		Dinajpur	01	33.1	26.5
						Sayedpur	07	32.6	26.5
Chattogram	Chattogram	32	33.2	25.4		Tetulia	27	29.2	24.6
	Sandwip	30	32.8	25.9		Dimla	57	33.3	25.2
	Sitakunda	xx	33.6	xx		Rajarhat	23	33.3	26.1
	Rangamati	26	32.8	25.3	Khulna	Khulna	15	33.2	25.6
	Cumilla	43	32.5	25.7		Mongla	23	31.4	26.4
	Chandpur	14	31.5	26.0		Satkhira	33	32.8	26.0
	M.Court	18	31.6	26.2		Jashore	18	35.0	25.6
	Feni	14	33.5	26.0		Chuadanga	20	33.7	26.0
	Hatiya	34	30.5	25.8		Kumarkhali	16	32.6	26.0
	Cox's Bazar	<u>123</u>	30.2	25.5	Barishal	Barishal	54	31.8	25.7
	Kutubdia	84	xx	26.0		Patuakhali	08	30.8	26.3
	Teknaf	xx	30.2	<u>23.5</u>		Khepupara	28	31.0	25.6
						Bhola	40	30.0	26.3
Sylhet	Sylhet	04	34.9	26.4					
	Srimangal	Trace	35.0	25.8					

Highlights:

- Country average bright sunshine hour was 5.00 hours per day during last week.
- Country average free water loss during the previous week was 3.50 mm per day.

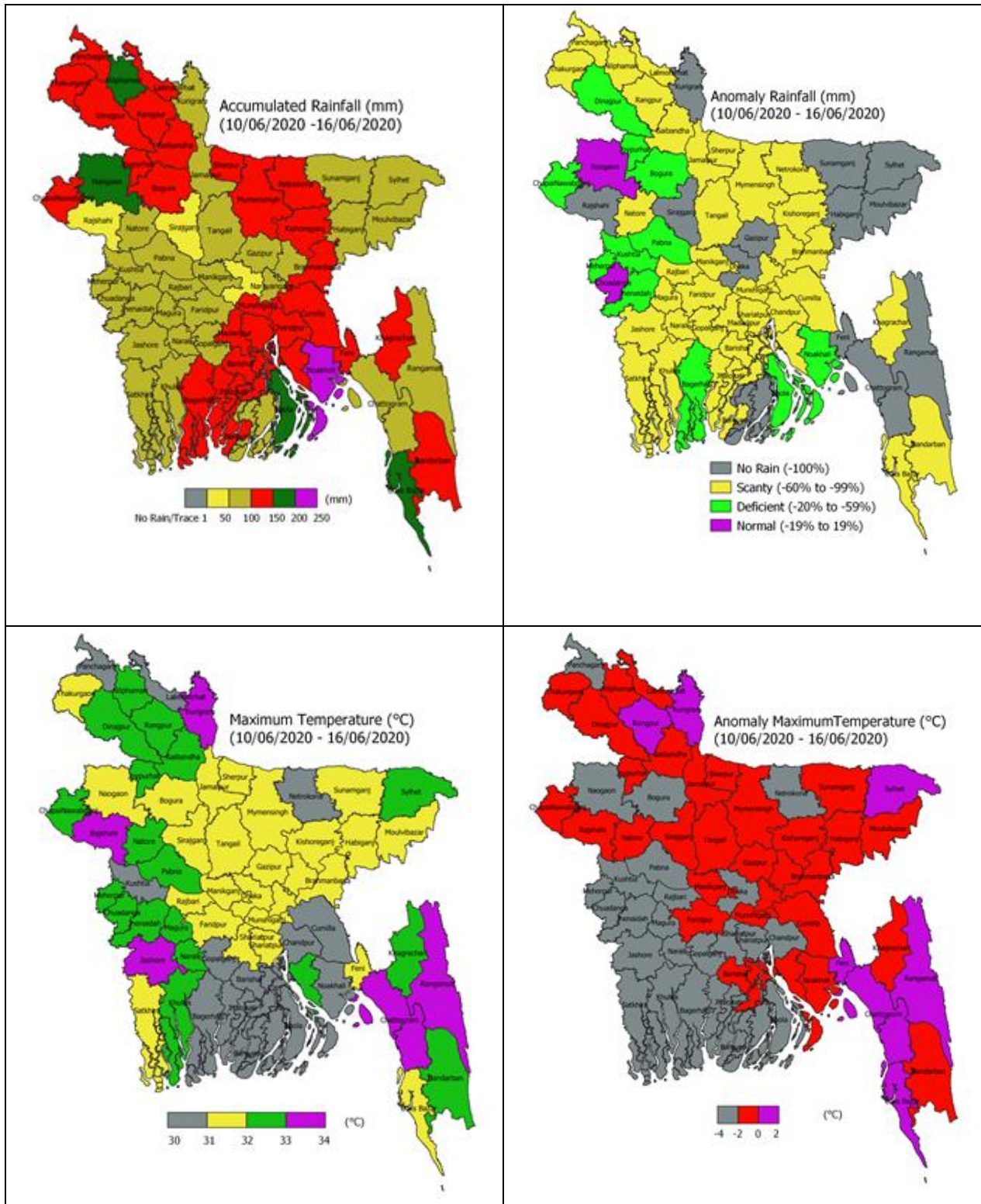
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

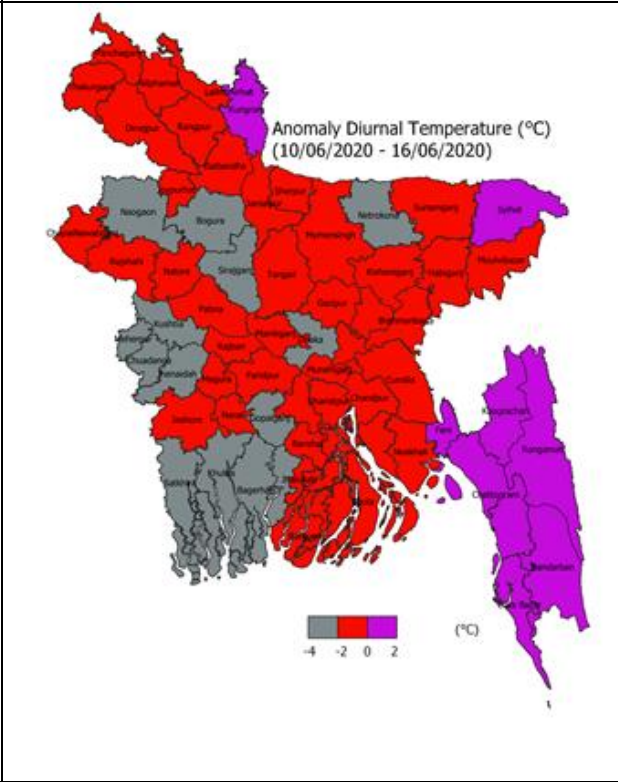
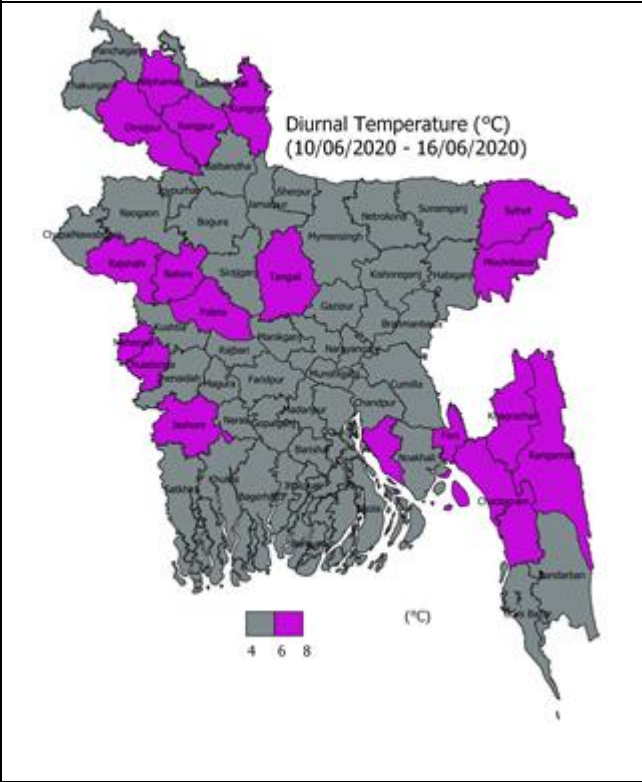
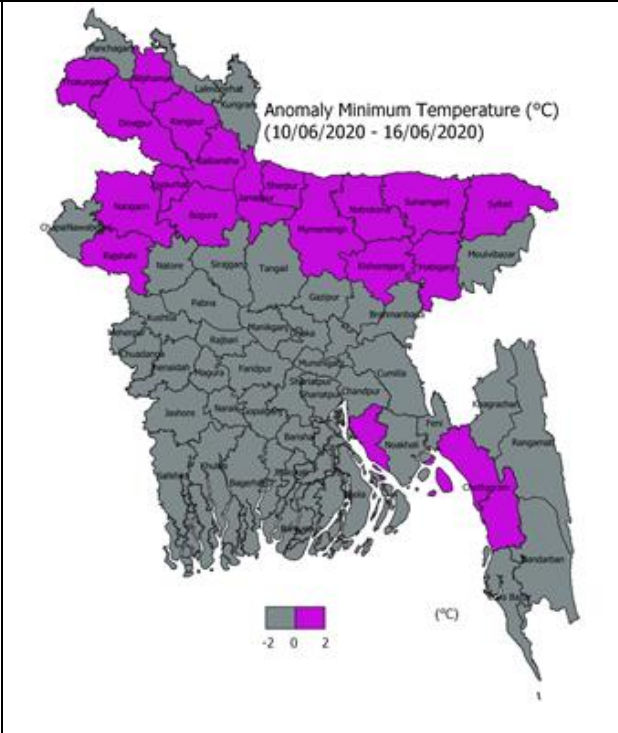
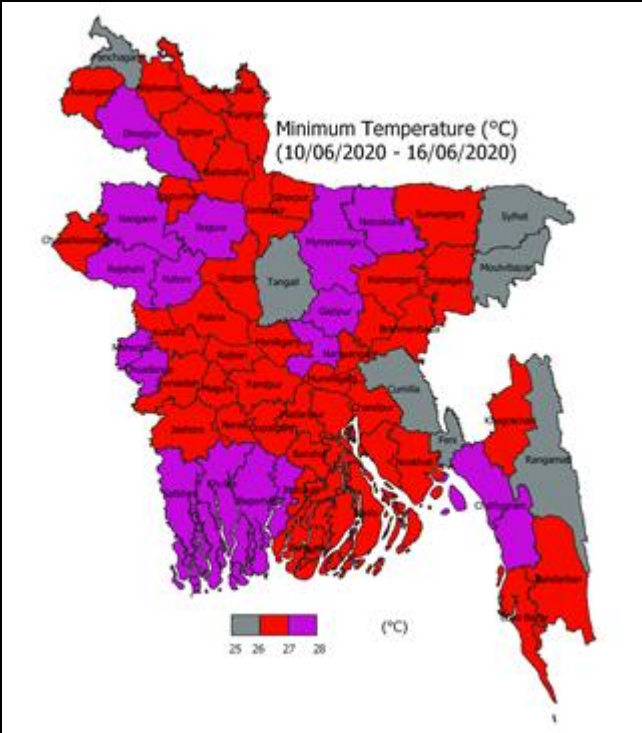
Forecast: Light to moderate rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at most places over Khulna, Barishal, Chattogram & Sylhet divisions and at many places over Rangpur, Rajshahi, Dhaka & Mymensingh divisions with heavy to very heavy falls at places over the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

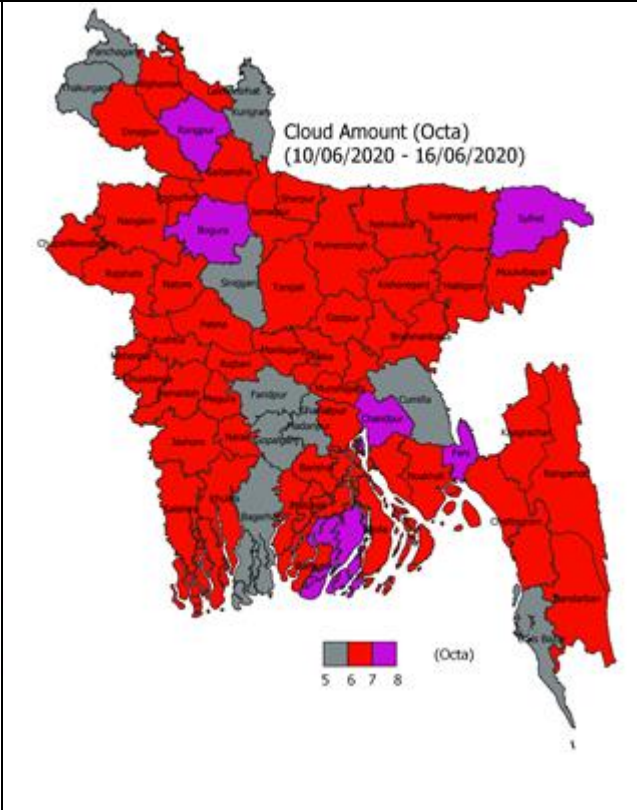
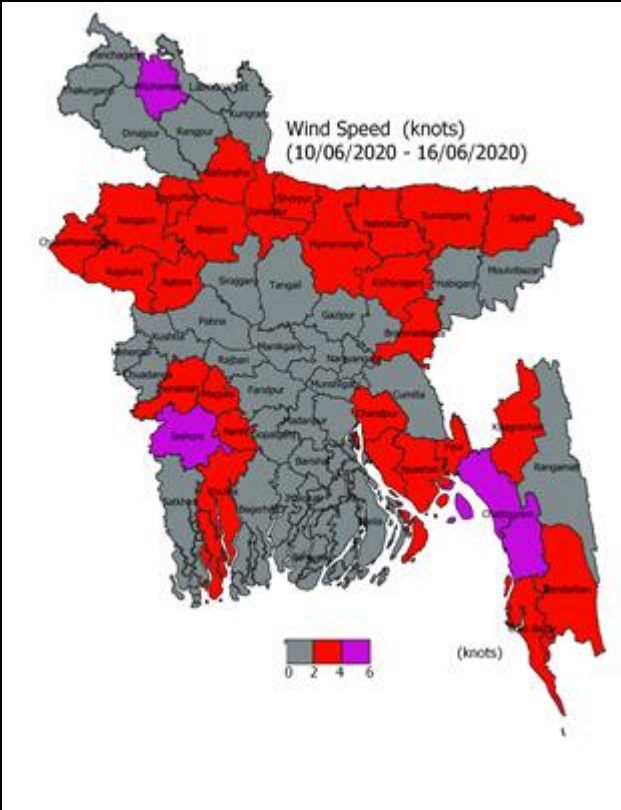
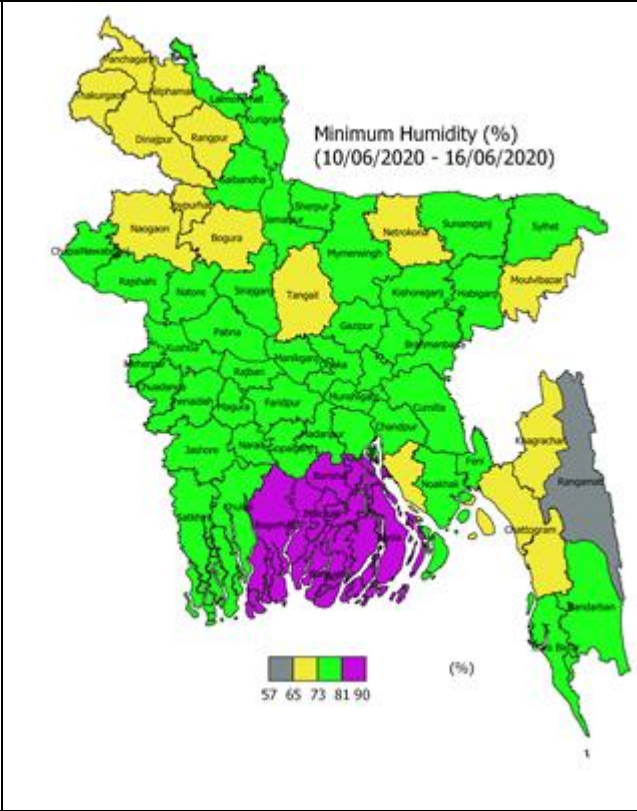
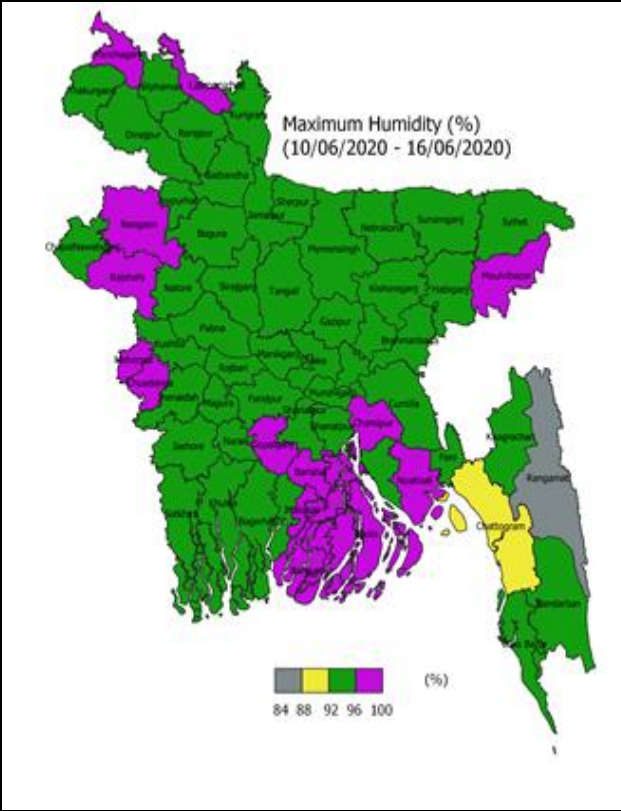
Heavy Rainfall: Heavy (44-88 mm/day) to very heavy (≥ 89 mm/day) rainfall is likely to occur at places over Barishal, Chattogram & Sylhet divisions during next 24 hours.

Temperature: Day and night temperature may fall by 1-2°C over the country.

Spatial Distribution of weather parameters for the Week ending 16 June 2020





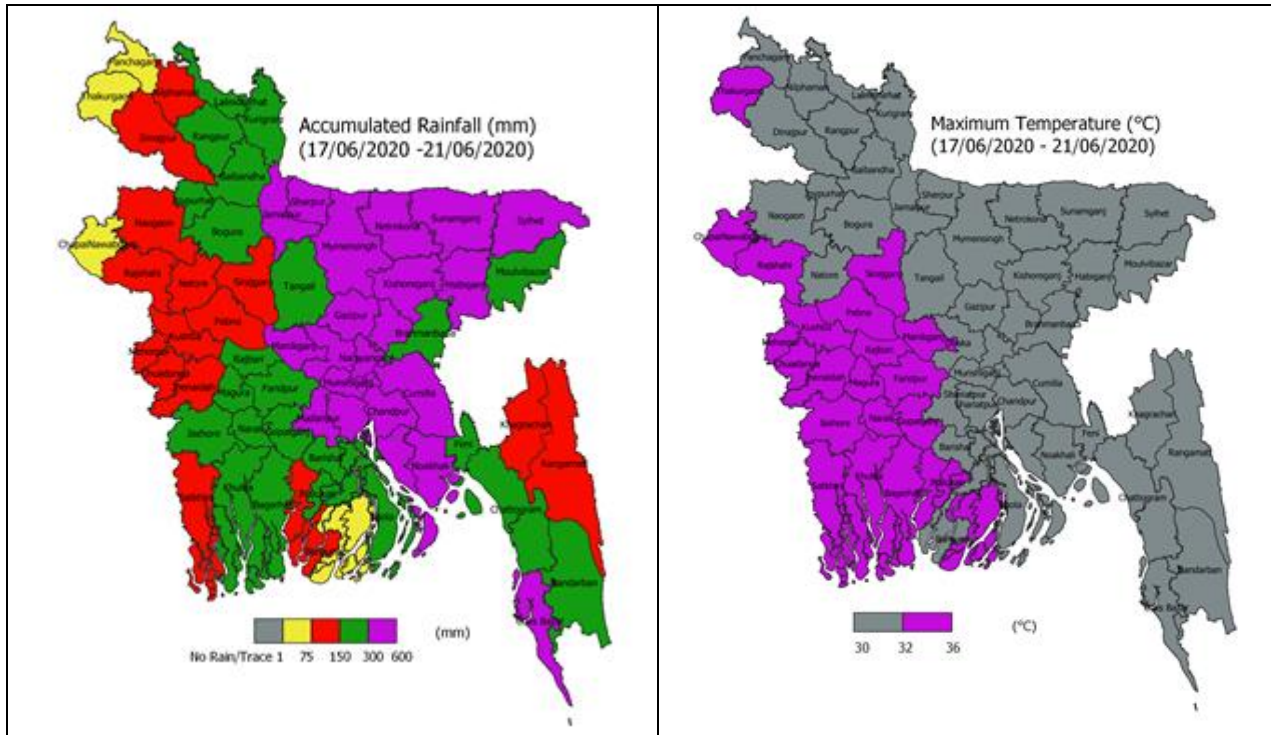


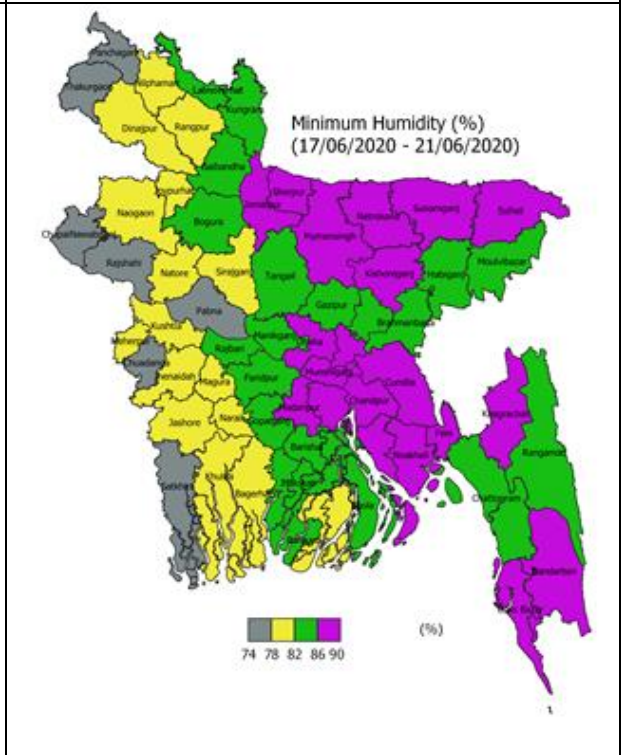
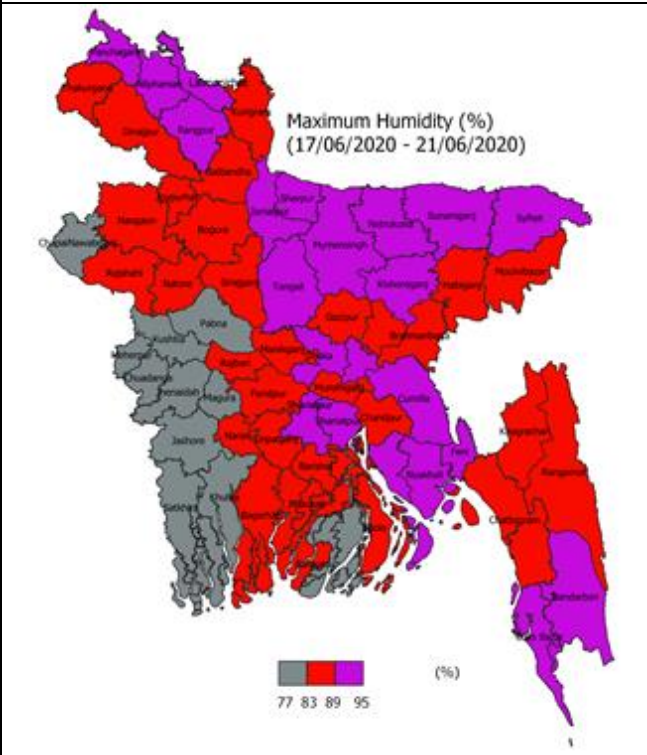
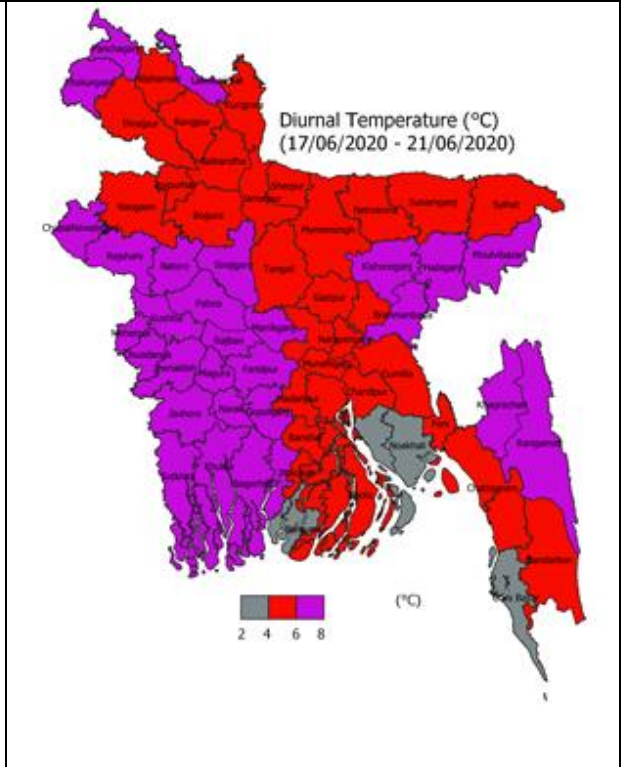
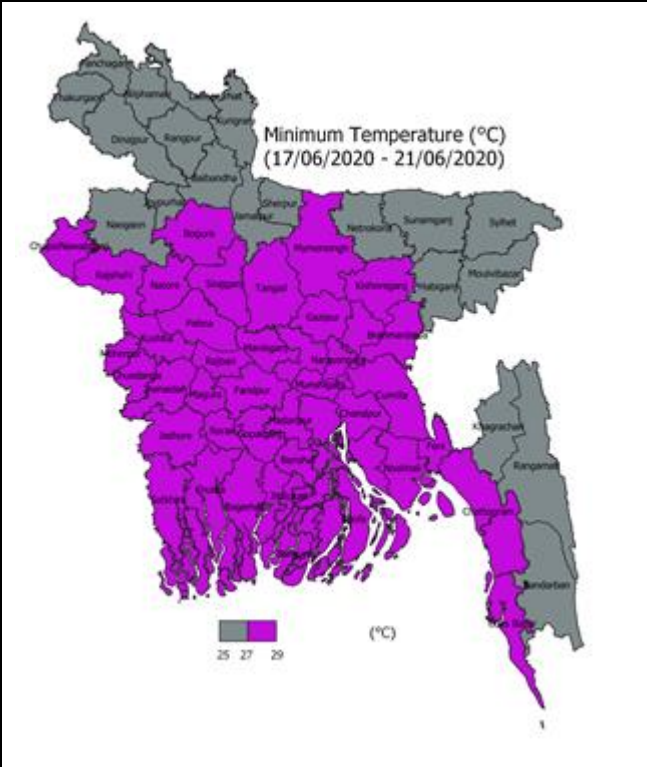
Weather Forecast and Advisory for the Period of 11.06.2020 to 17.06.2020

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

- Light (04-10 mm/d) to moderate (11-22 mm/d) rain /thunder shower accompanied by temporary gusty/squally wind is likely to occur at most places over Khulna, Barishal, Dhaka, Mymensingh, Sylhet, Chattogram, Rajshahi and Rangpur divisions and moderately heavy (23-43 mm/day) to heavy (44-88 mm/day) falls at a few places over the country during this period.
- Day and night temperature may fall over the country during this period

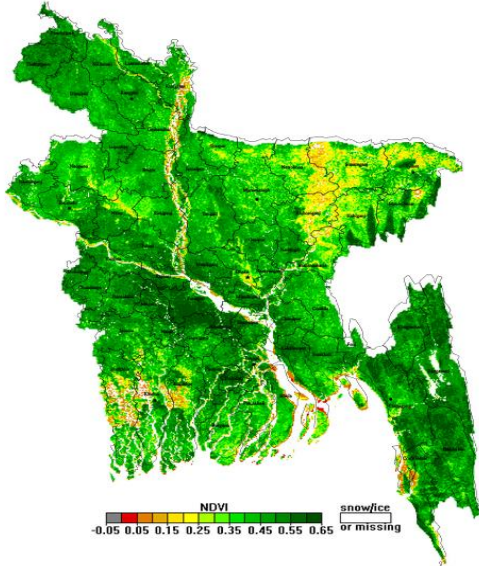
District Wise Quantitative Weather Forecast for next Five days from 17 June -21 June'2020



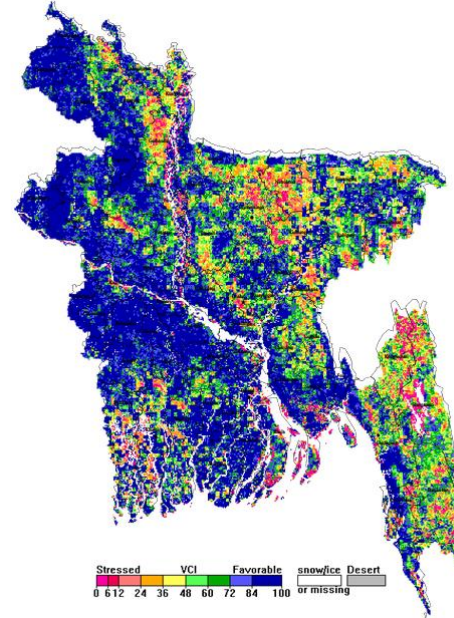


Different Satellite Products over Bangladesh

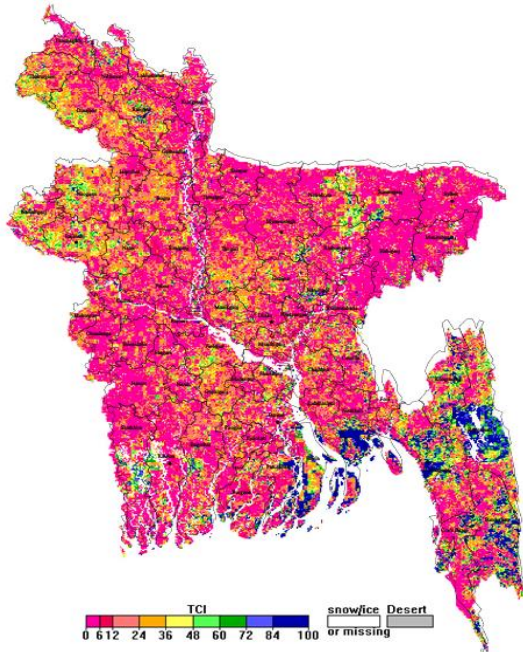
NOAA/VIIRS BLENDED NDVI composite for the week No. 23 (02 June-08 June 2020) over Agricultural regions of Bangladesh



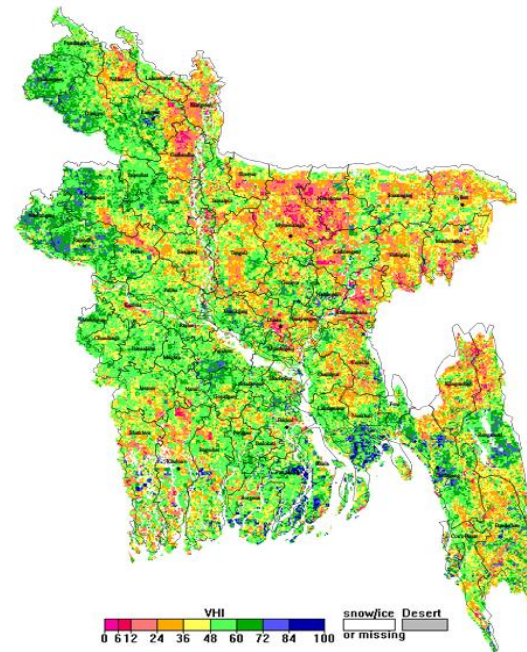
NOAA/ AVHRR BLENDED VCI composite for the week No. 23 (02 June-08 June 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 23 (02 June-08 June 2020) over Agricultural regions of Bangladesh

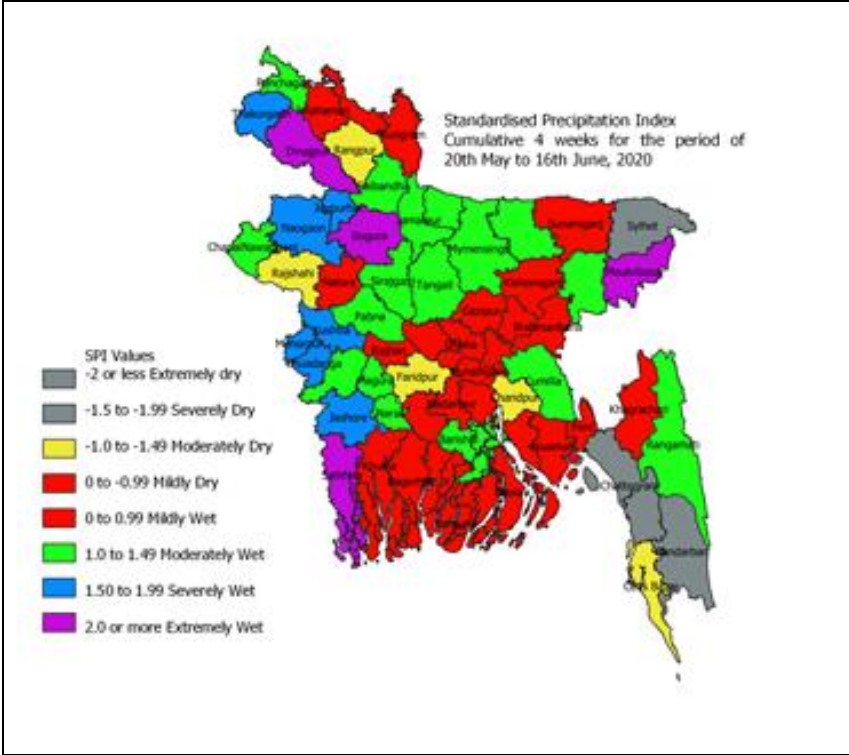


NOAA/ AVHRR BLENDED VHI composite for the week No. 23 (02 June-08 June 2020) over Agricultural regions of Bangladesh



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

It has been observed that during last four weeks (including May) 2020 extremely wet conditions prevails in districts located northwest parts and mild to moderately wet condition prevails in southern and central parts and northeast, southeast part of Bangladesh was prevailed dry conditions for last four weeks.



Data source: Bangladesh Meteorological Department