



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

24 June 2020 (WEDNESDAY)
[FOR THE PERIOD 24.06.2020 – 28.06.2020]



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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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 trough runs through Uttar Pradesh, Bihar, West Bengal to Assam across northern part of Bangladesh. Monsoon is fairly active over Bangladesh and weak to moderate 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 Rangpur, Mymensingh & Sylhet divisions and at a few places over Rajshahi, Khulna, Barishal, Chattogram & Dhaka divisions with moderately heavy to heavy falls at places over northern part of the country. Day and night temperature may rise slightly over the country. As per the outlook issued by BMD for next 72 hours, rain/thunder showers is likely to increase at the end period. Besides, as per the medium range weather forecast, number of districts (Thakurgaon, Tangail, Sirajganj, Sherpur, Rangpur, Rajshahi, Panchagarh, Pabna, Nilphamari, Natore, Naogaon, Mymensingh, Lalmonirhat, Kurigram, Joypurhat, Jamalpur, Gaibandha, Dinajpur, Chapai Nawabganj, Bogura) in the country will likely to receive heavy to very heavy 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: 22nd June 2020):

Outlook for Next 10 Days:

- ♣ Brahmaputra-Jamuna river system may continue to rise during the next 10 days. There is more than 90% probability of exceedance in Chilmari station of Kurigram, Fulchari station of Gaibandha, Bahadurabad station of Jamalpur, Sariakandi station of Bogura, Sirajganj station of Sirajganj district. This may result in short-medium duration flooding (at least 3 - 5 days) towards the end of this month in low lying areas of these districts.
- ♣ Ganges-Padma River may rise. Padma river at Goalondo station of Rajbari district may rise to warning level (within 50 cm of danger level) during next 10 days.
- ♣ Rivers around Dhaka city may rise. No probability of flooding is forecasted in the rivers around Dhaka city

Special Agromet Advisories due to heavy rainfall & probability of Flood for the Districts (Kurigram, Lalmonirhat, Gaibandha, Jamalpur, Sirajganj, Tangail, Thakurgaon, Sherpur, Rangpur, Rajshahi, Panchagarh, Pabna, Nilphamari, Natore, Naogaon, Mymensingh, Joypurhat, Dinajpur, Chapai Nawabganj, Bogura)

- Drain out excess water from crop field. To prevent water stagnation in seed bed, construct channels around the seed bed for drainage.
- Clean the irrigation channel for draining out extra water from the field.
- Raise the bund around the crop field.
- Community based Aman rice seed bed may be raised on higher places to avoid heavy rainfall & flooding.
- Arrange for elevated bunding around and inside the Aus paddy field so that water current may not affect the standing crops.
- Hold on all agricultural operations like transplanting, application of irrigation, fertilisers, pesticides etc.
- All the plant protection measures should be taken after the current spell of rainfall.

- Immediately harvest the matured vegetables.
- Immediately harvest the matured kharif maize.
- Provide mechanical support to banana & standing vegetables.
- Arrange for popping of sugarcane.
- Arrange boats for migration of essential food items and others from low to high land.
- Arrange for migration of livestock and poultry birds to high land.
- Maintain a good height of embankment around the pond. If possible, provide net or bamboo chatai around the pond to protect from flowing out with flash flood.

Salient Agromet Advisories for Remaining Districts

Aus Paddy:

Recovery to Tillering stages

- Maintain in 3-4 inches water level.
- Inspect & monitor disease-pest e.g Blast, rice bug, stem borers and others and take appropriate plant protection measures
- Drain out water from the field.
- 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
- Select high land for Aman rice seedbed where there is less probability of flooding. Raise seedlings by using floating or Dapog seedbed technology where raised land is not available.
- Apply 25-30 kg manure/decomposed cow dung in each decimal seedbed. In order to get good result, applying 2-3 kg vermicompost in same land size.
- .
- Community based rice nursery may be raised to avoid loss of nursery due to heavy rainfall & flooding.

Maize: (Kharif 1)

- This is the time when comb matures.
- When 70-80% of maize combs become straw colour and leaves are yellowish colour, then harvest the combs in sunny weather.
- Dry the harvested combs in house corridor and hang on bamboo in home yard as well.
- . 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

- Flowering and fruit setting start.
- Drain out excess water, if any, from the land.
- Harvest the matured crop on 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.
- Clear the irrigation channel for draining out excess water from the crop field
- 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

- Drain out excess water
- 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

- During the month, fruit ripening will be started completely. Take special care like fertilization, and sticking and other intercultural operations for transplanted seedling/sapling.
- It is high time for transplanting fruit-tree (Mango, coconut, palm) tree, neem) plantation Arrange for fencing the transplanted seedlings/sapling for controlling cattle attract and keep the garden net and clean.
- During the month fruiting setting starts and banana bunch will grow.
- Besides, need to control banana beetle, panama and others diseases-pests including continue intercultural operations and has to inspect the field regularly.
- 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:

- Foot rot, stem rot, and others diseases-pests may be infested and so has inspect the field regularly.
- 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 be infested 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.
- 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 Semilooper. Spray Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water.

Betel vine:

- During the month, new beetle vine cultivation will start.
- Select disease free 2-3 noded tender shoot (by treated with any fungicide @ 2-3gm/L of water before transplanting) and transplant 12-15 inches X 20-30 inches (cutting to cutting X row to row) on well ploughed land.
- 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
- In this time, stem rot and stem borer and others disease-pest may infest the field and so inspect the land regularly.
- 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.

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.

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.

Fishery

- Repair damaged dykes of fisheries ponds and take 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.
- 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.
- 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 24 June 2020) and maximum temperature on 23 June, minimum temperature on 24 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	00	33.4	28.5	Rajshahi	Rajshahi	01	<u>36.2</u>	27.7
	Tangail	00	34.5	27.6		Ishurdi	00	35.0	28.0
	Faridpur	00	32.6	27.7		Bogura	02	34.4	28.4
	Madaripur	02	32.0	27.3		Badalgachhi	05	33.5	27.3
	Gopalganj	03	31.2	26.4		Tarash	00	33.8	28.4
	Nikli	00	34.0	27.5					
Mymensingh	Mymensingh	Trace	33.6	28.4	Rangpur	Rangpur	02	34.5	27.2
	Netrokona	05	33.0	28.0		Dinajpur	03	34.2	27.3
						Sayedpur	19	34.0	26.5
Chattogram	Chattogram	04	33.1	26.1		Tetulia	06	31.5	<u>25.7</u>
	Sandwip	02	32.6	27.3		Dimla	06	31.5	27.0
	Sitakunda	00	33.6	28.3		Rajarhat	38	34.0	26.6
	Rangamati	01	33.7	26.4	Khulna	Khulna	16	32.0	27.0
	Cumilla	05	31.7	26.5		Mongla	12	32.5	27.6
	Chandpur	<u>46</u>	32.1	26.5		Satkhira	05	32.4	28.0
	M.Court	17	33.2	26.0		Jashore	Trace	34.0	27.2
	Feni	23	33.0	26.0		Chuadanga	12	34.7	27.8
	Hatiya	12	31.5	27.5	Kumarkhali	00	33.8	28.6	
	Cox's Bazar	13	32.2	26.4	Barishal	Barishal	22	32.6	26.8
Kutubdia	08	33.5	27.4	Patuakhali		19	33.5	27.9	
Teknaf	10	32.7	26.2	Khepupara		03	33.4	28.2	
Sylhet	Sylhet	13	34.8	27.0		Bhola	14	33.4	26.5
	Srimangal	00	34.0	27.2					

Highlights:

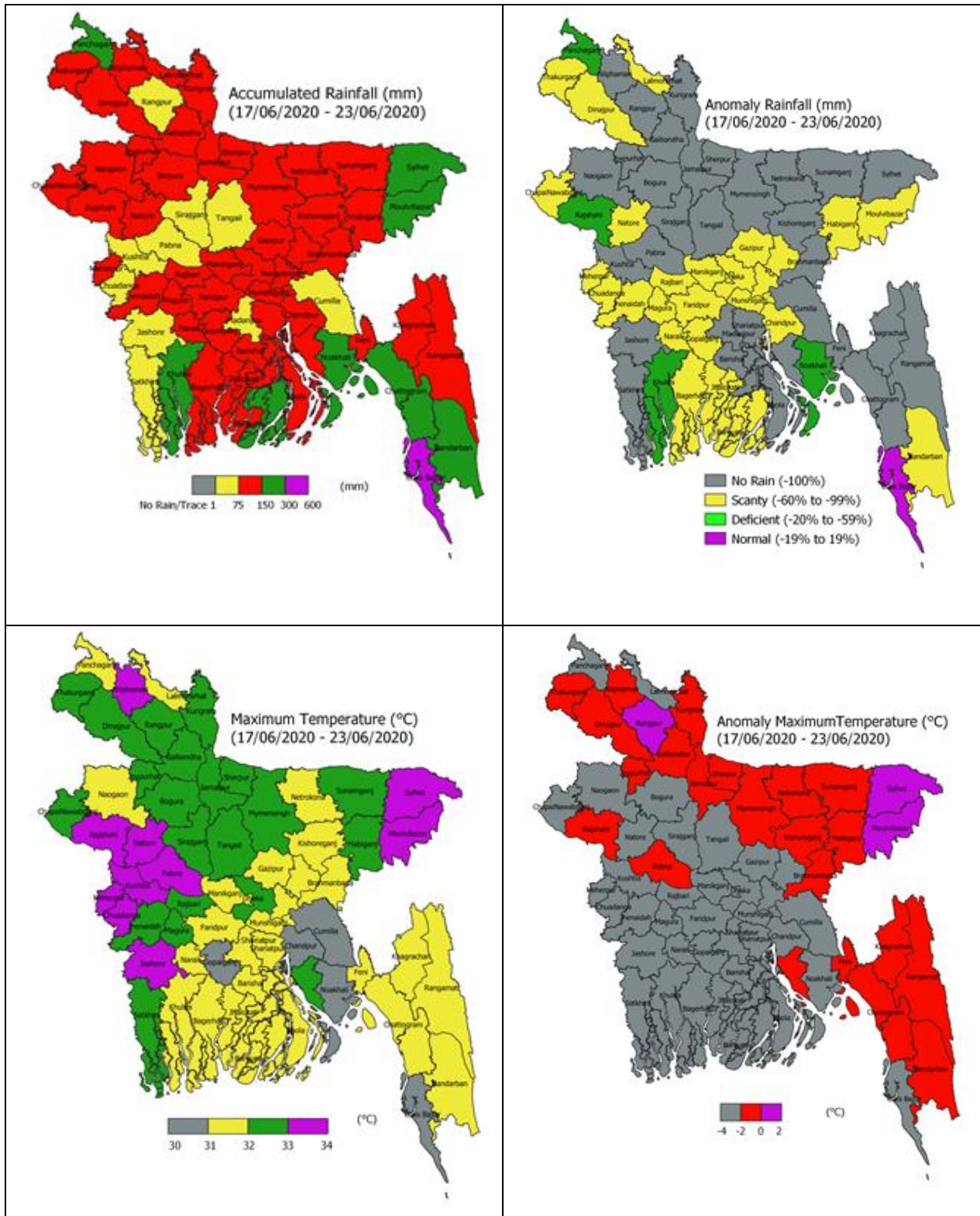
- Country average bright sunshine hour was 3.30 hours per day during last week.
- Country average free water loss during the previous week was 3.25 mm per day.

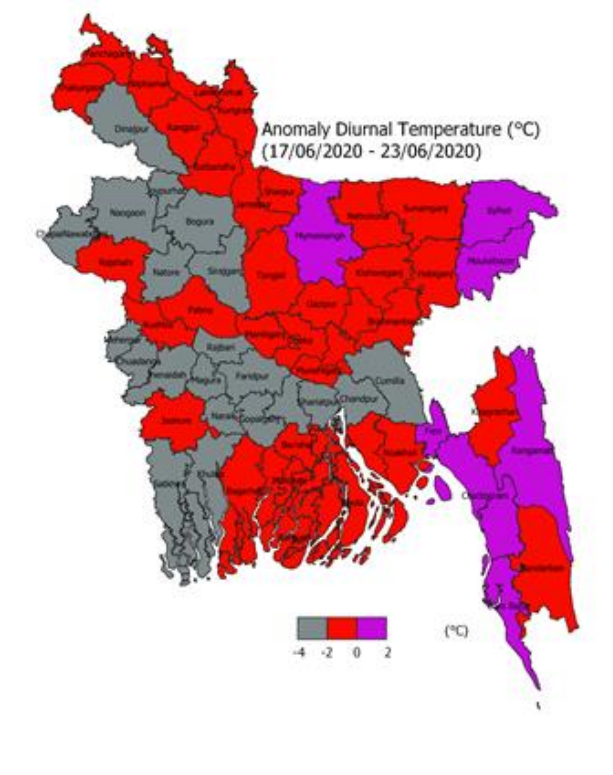
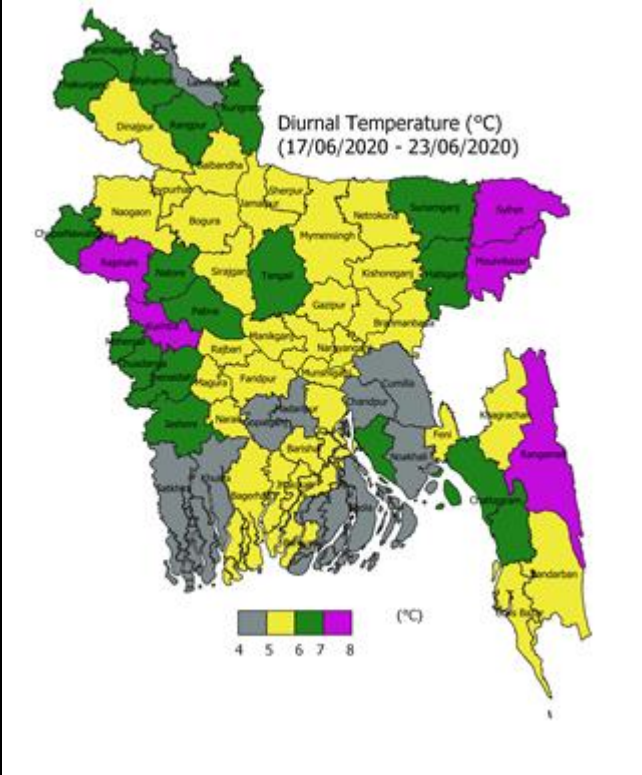
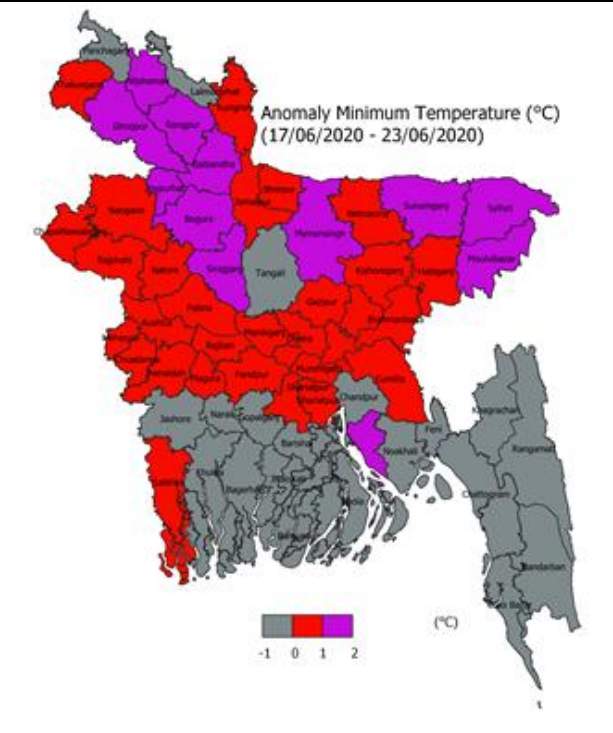
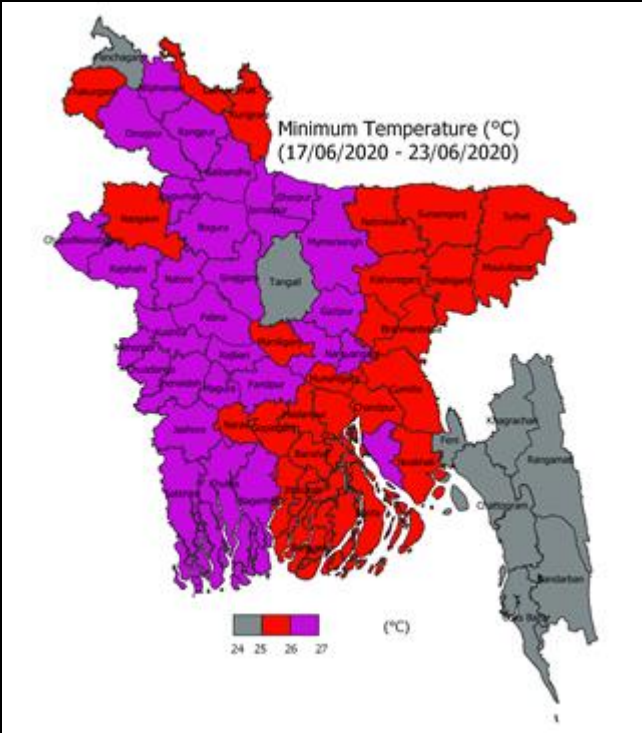
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

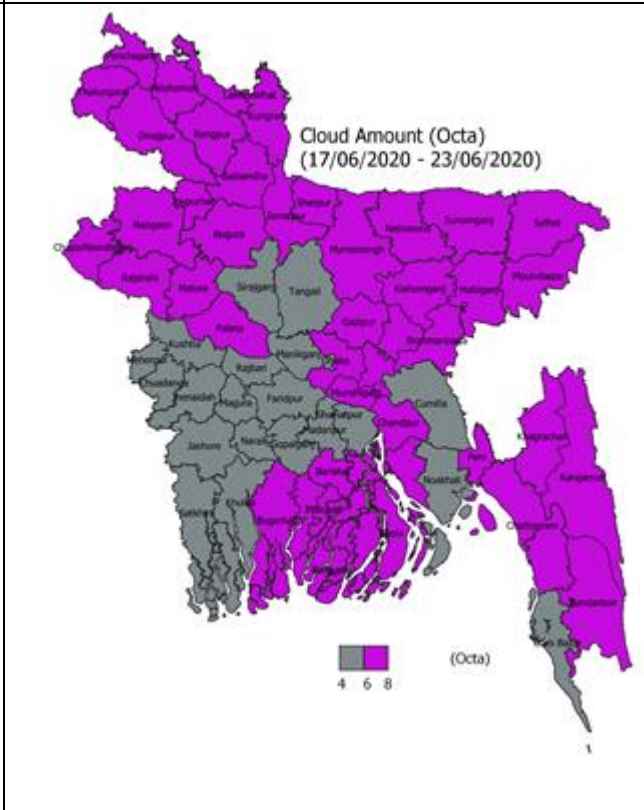
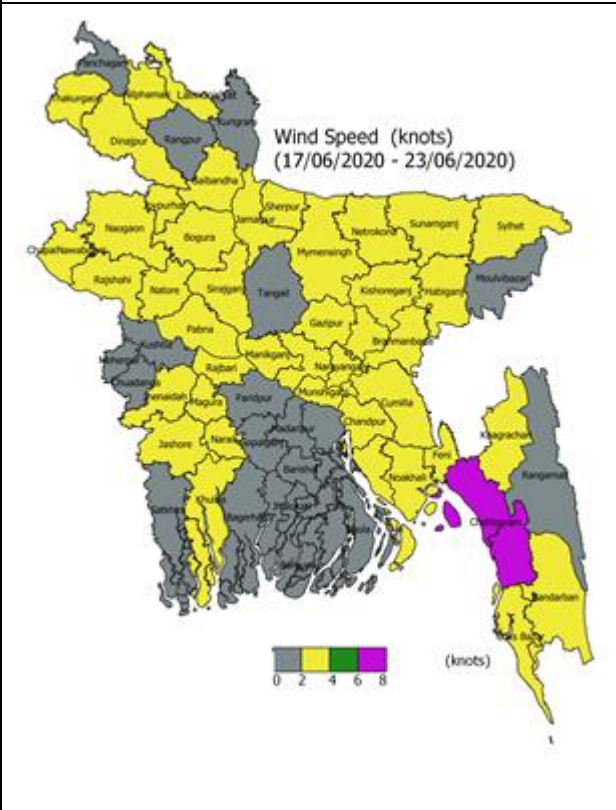
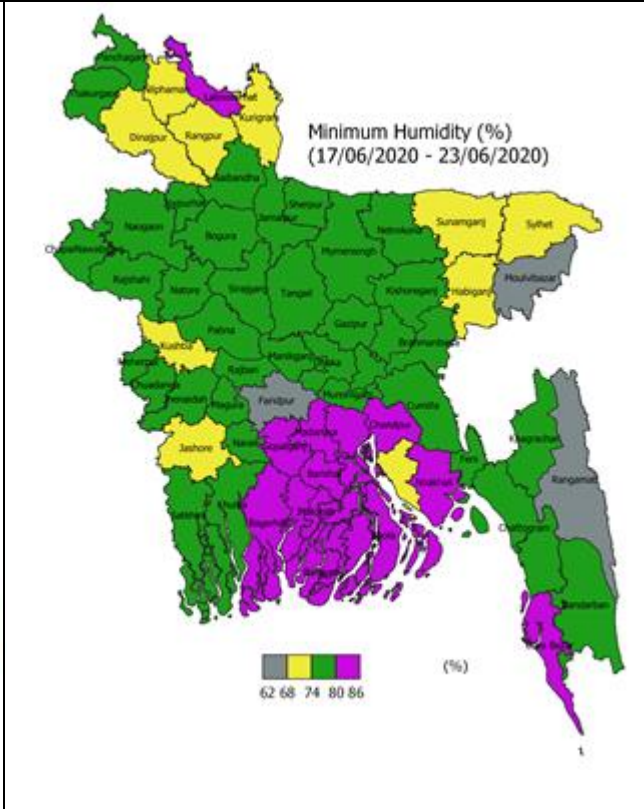
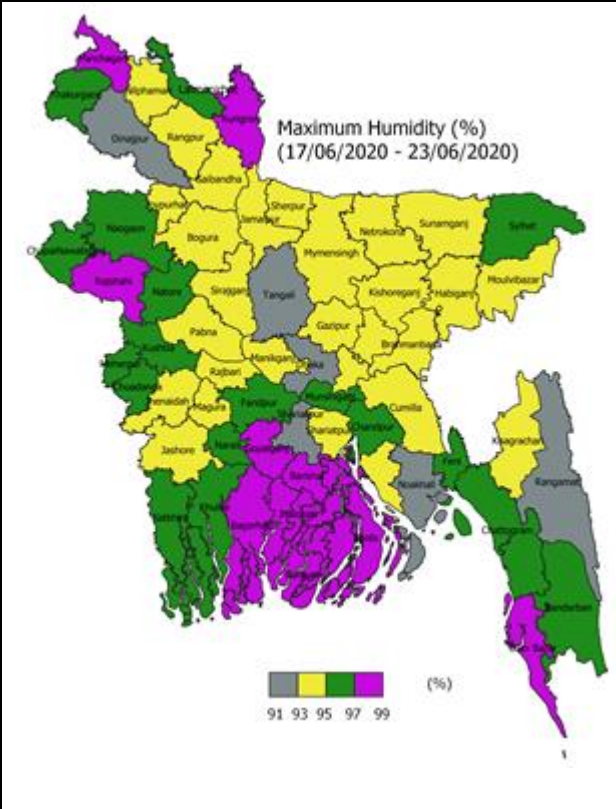
Forecast: Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Rangpur, Mymensingh & Sylhet divisions and at a few places over Rajshahi, Khulna, Barishal, Chattogram & Dhaka divisions with moderately heavy to heavy falls at places over northern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

Temperature: Day and night temperature may rise slightly over the country.

Spatial Distribution of weather parameters for the Week ending 23 June 2020





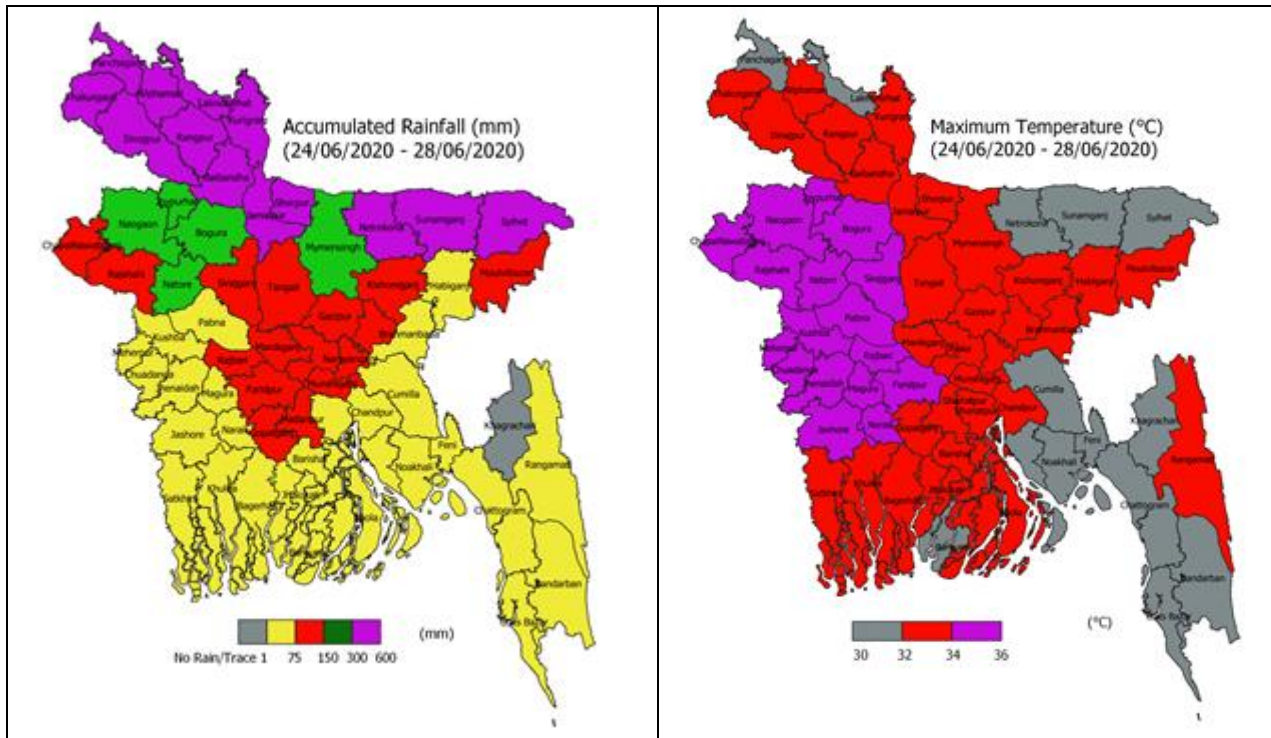


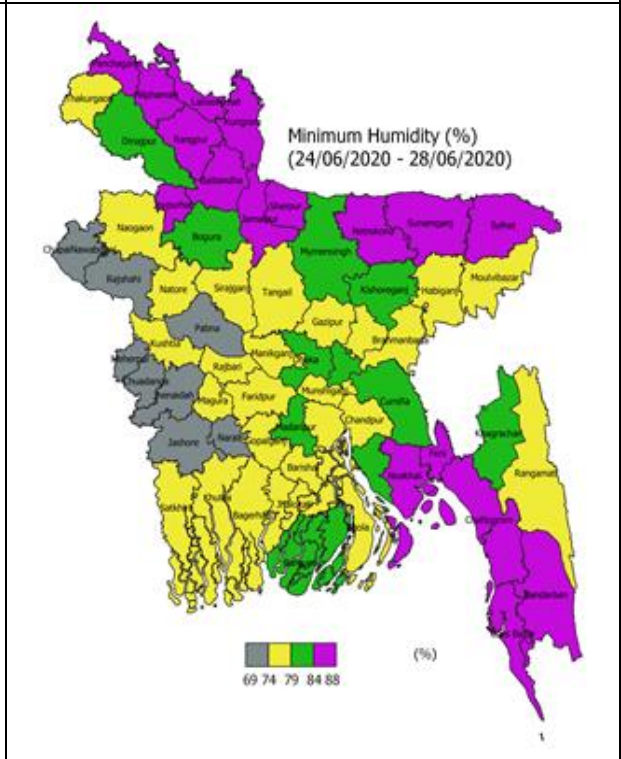
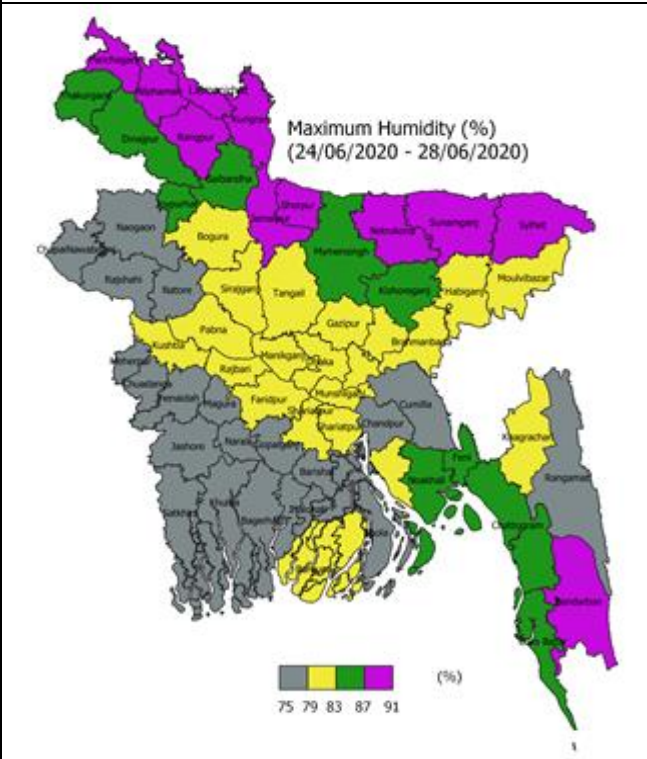
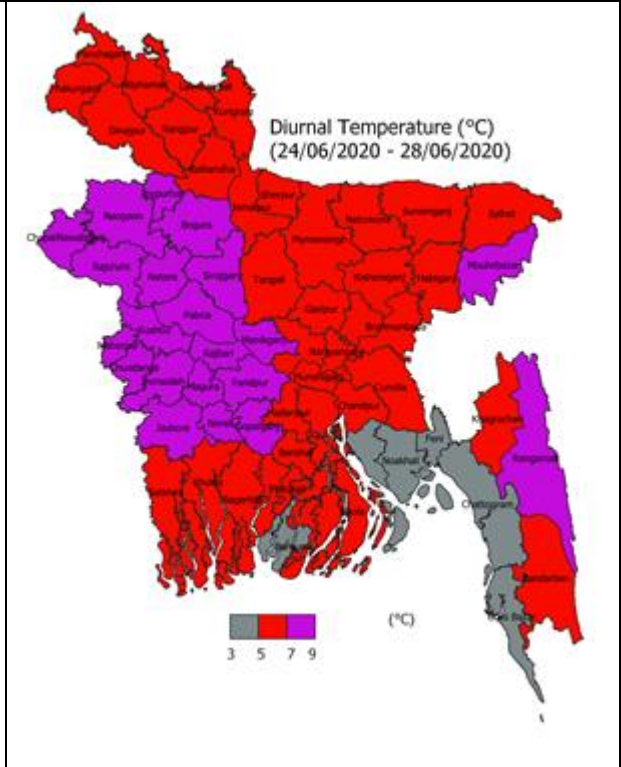
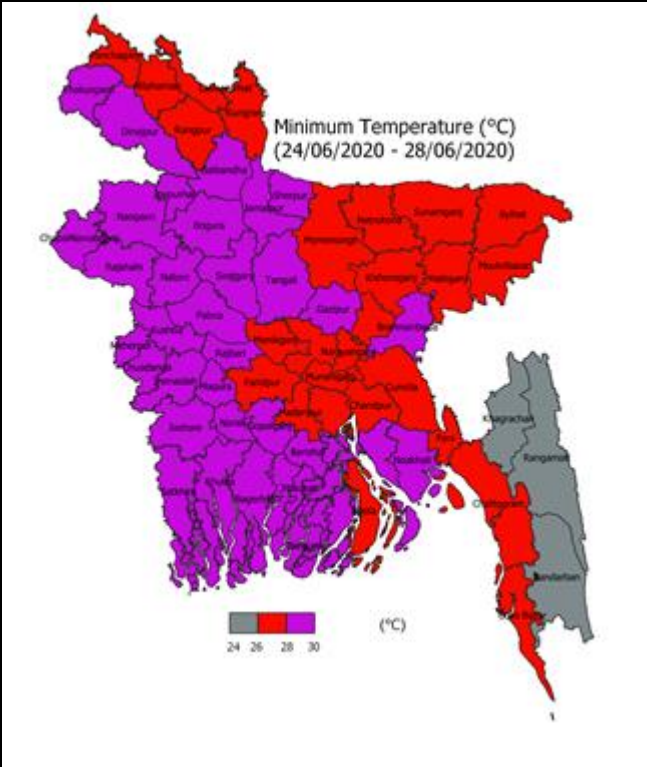
Weather Forecast and Advisory for the Period of 18.06.2020 to 24.06.2020

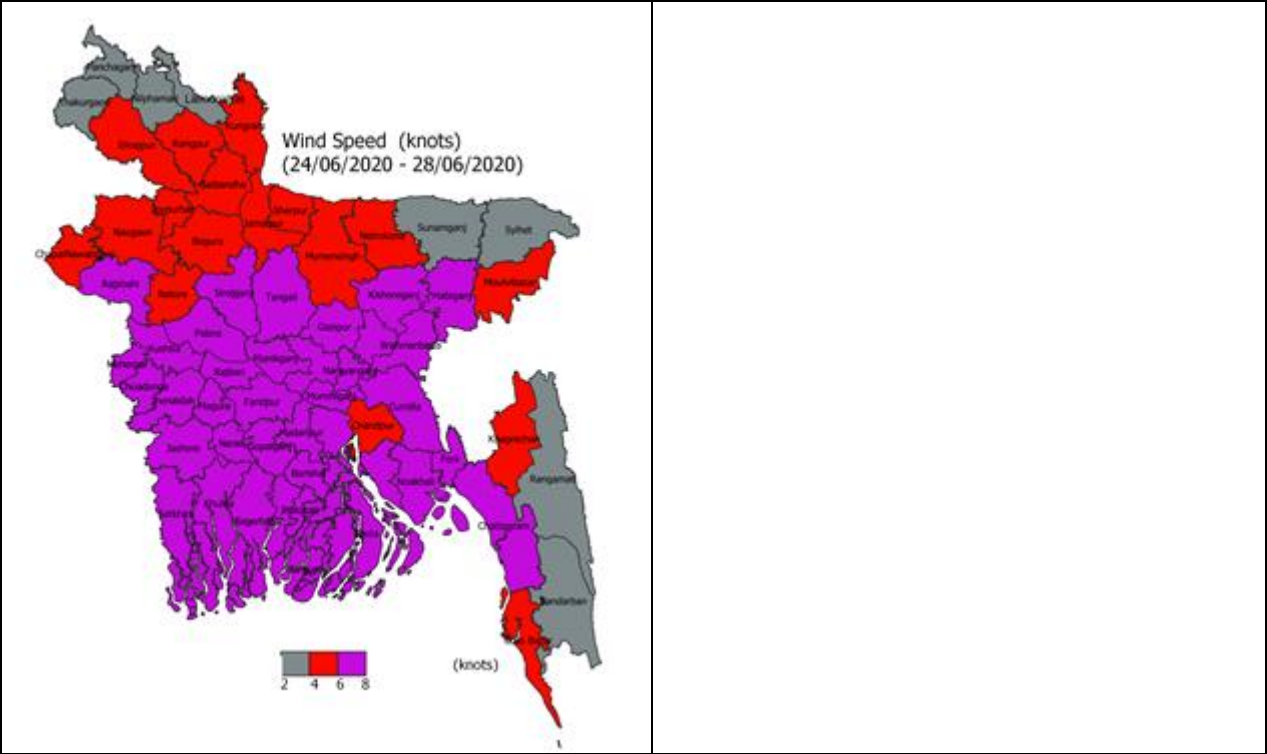
Bright sunshine hour is likely to be from 3.00 to 4.00 hours per day during this week. Average free water loss is likely to be from 2.75 to 3.75 mm per day during this week.

- Under the influence of active monsoon Light (04-10mm/day) to moderate (11-22 mm/day) rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at most places over Dhaka, Mymensingh, Sylhet, Chattogram, Rajshahi, Rangpur, Khulna and Barishal Divisions and moderately heavy (23-43 mm/day) to heavy (44-88 mm/day) falls at places over the country during 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 24 June -28 June'2020

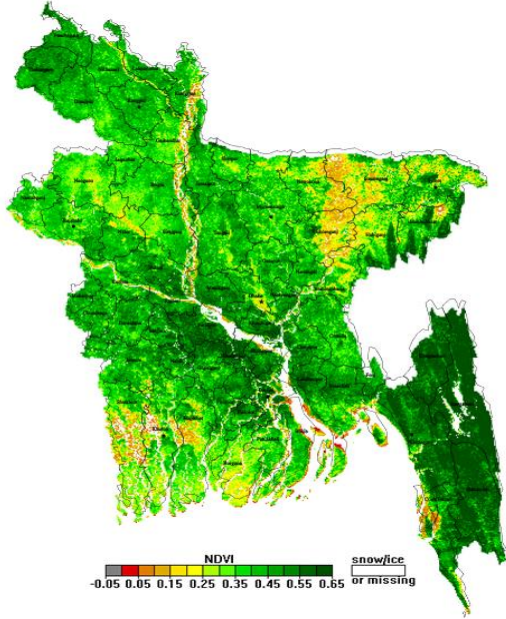




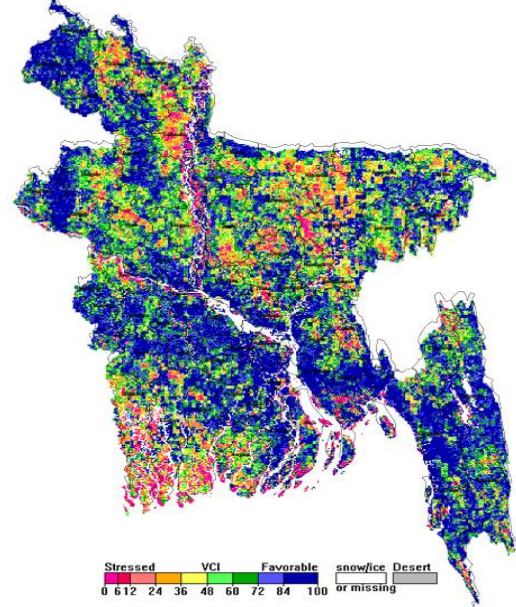


Different Satellite Products over Bangladesh

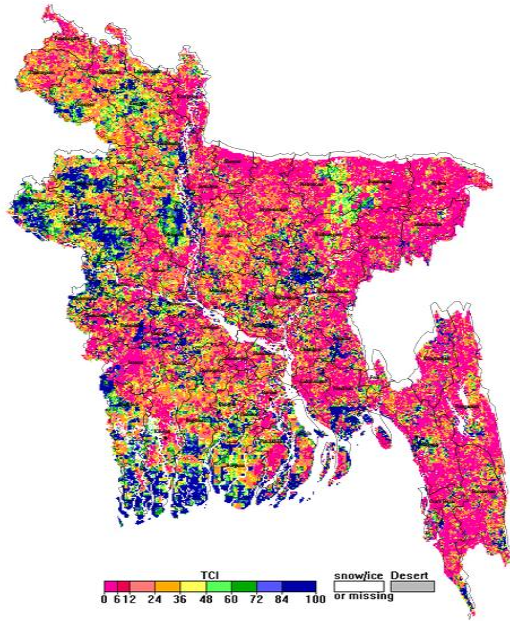
NOAA/VIIRS BLENDED NDVI composite for the week No. 24 (9 June-15 June 2020) over Agricultural regions of Bangladesh



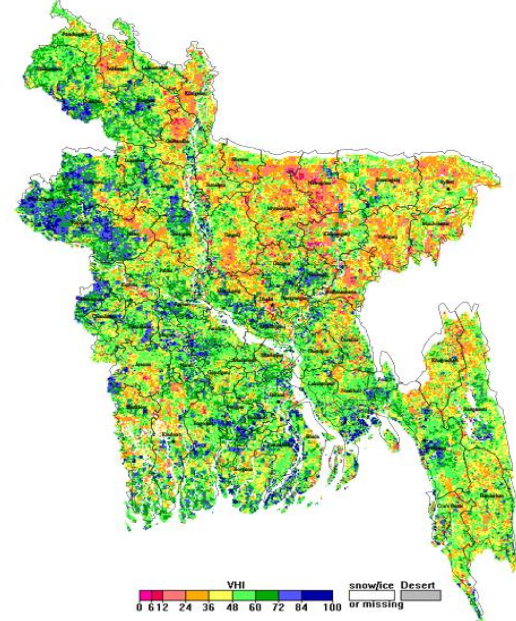
NOAA/ AVHRR BLENDED VCI composite for the week No. 24 (9 June-15 June 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 24 (9 June-15 June 2020) over Agricultural regions of Bangladesh

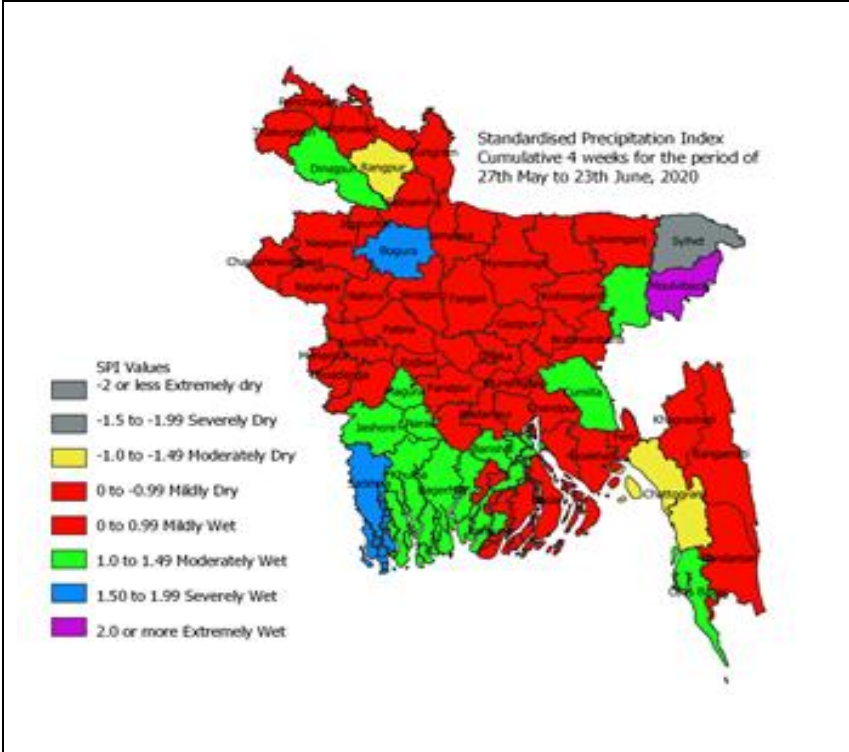


NOAA/ AVHRR BLENDED VHI composite for the week No. 24 (9 June-15 June 2020) over Agricultural regions of Bangladesh



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, northeast part of Bangladesh was prevailed dry conditions for last four weeks.



Data source: Bangladesh Meteorological Department