



# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

01 July 2020 (WEDNESDAY)  
[FOR THE PERIOD 01.07.2020 – 05.07.2020]



## 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.

Please Contact: Farhana Hoque, Sabuj Roy | E-mail: [adamisdp@dae.gov.bd](mailto:adamisdp@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**

### **Salient Weather Conditions**

The axis of monsoon trough runs through Rajasthan, Haryana, Uttar Pradesh, Bihar, West Bengal to Assam across central part of Bangladesh. One of its associated trough extends up to North Bay. Monsoon is fairly active over Bangladesh and 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, Chattogram & Sylhet divisions; at a few places over Dhaka, Khulna & Barishal divisions and at one or two places over Rajshahi division. Day and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hours, little change is likely

As per the medium range weather forecast, number of districts (Chattogram, Cox's bazar, Natore, Naogaon, Dinajpur, Chapai Nawabganj, Feni) in the country will likely to receive heavy to very heavy rainfall during next five days. Besides, almost all the district will likely to receive rainfall during next five days. As per the Flood Forecasting & Warning Centre, Bangladesh Water Development Board (Date of Issue 1.07.202), there is chance of stability in flood condition in this district of Kurigram, Gaibandha, Jamalpur, Sirajganj and there is chance of deterioration in flood condition in Tangail, Manikganj, Rajbari and Faridpur districts during next 24 hours.

### **Special Agromet Advisories for the districts due to heavy to very heavy rainfall and Flood Condition)**

- Drain out excess water from crop field. To prevent water stagnation in sed 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.
- Postpone harvesting the matured vegetables.
- Postpone harvesting 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.
- To control infestation of leaf blast & leaf spot in Aus rice, spray Carbendazim @2g/litre of water.
- If the population of Thrips and Green Leaf Hopper exceeds 25%, apply Malathion group insecticide at the rate of 1ml/1 litre of water.
- All the plant protection measure should be taken after the current spell of rainfall.

### **Aman Paddy**

- 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 as sufficient rainfall has been received.
- 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.
- Transplanting of 25-30 days old nursery in the main after getting sufficient rainfall.
- 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.

### **Maize: (Kharif 1)**

- This is the time when comb matures.
- When 70-80% of maize combs become straw color 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.
- All the plant protection measure should be taken after the current spell of rainfall.

### **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.
- All the plant protection measure should be taken after the current spell of rainfall.

### **Vegetables**

- Drain out excess water.
- Make arrangement to avoid plant damage (particularly staked creeper) from anticipated gusty winds. Make arrangement to raise new orchard during monsoon season.
- 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.
- 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).
- 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. Undertake nursery sowing of Tomato, Brinjal and Chillies and direct sowing of Gourds, Beans and Bhendi with assured irrigation.
- All the plant protection measure should be taken after the current spell of rainfall.

### **Horticultural crops**

- Farmers are advised to go for inter cultural operations in mango orchard.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- 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 and coconut as sufficient rainfall has been received.
- Plantation of banana crop should be done after getting sufficient amount of rainfall. Intercultural operation should be done in banana orchard.
- 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. 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.

**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.
- 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.
- 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/ nals 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.
- Prevailing weather conditions are favourable for incidences of Hairy Caterpillar & Semiloper in Jute. Monitor the incidences of these pests. If observed, apply Spray Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water for Hairy Caterpillar & Imidocholoprid/Chlorocyryn/ Nitro @ 1ml/litre of water for Semiloper.
- There may be incidences of stem weevil in jute. To control, apply Dichlorvos @ 3 ml per 4 litre of water or Endosulphan 2 ml per litre of water.
- All the plant protection measure should be taken after the current spell of rainfall.

**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.
- Strengthen the fencing of boundary of betel vine so that the boundary cannot be broken due to strong wind and thunderstorm.
- 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
- All the plant protection measure should be taken after the current spell of rainfall.

**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.
- All the plant protection measure should be taken after the current spell of rainfall.

### **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 01 July 2020) and maximum temperature on 30 June, minimum temperature on 01 July 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	35.5	28.3	Rajshahi	Rajshahi	00	36.0	27.6
	Tangail	00	36.0	26.7		Ishurdi	00	35.7	27.8
	Faridpur	00	35.1	27.6		Bogura	00	34.5	28.4
	Madaripur	00	35.5	27.0		Badalgachhi	00	34.6	27.0
	Gopalganj	00	34.9	27.9		Tarash	00	35.2	28.5
	Nikli	06	32.5	27.0					
Mymensingh	Mymensingh	00	34.5	27.8	Rangpur	Rangpur	28	33.8	26.6
	Netrokona	06	32.5	27.6		Dinajpur	14	33.8	27.7
						Sayedpur	01	32.4	27.5
						Tetulia	00	34.0	26.2
Chattogram	Chattogram	26	32.8	25.8	Dimla	Dimla	04	31.1	26.0
	Sandwip	00	32.6	26.9		Rajarhat	34	32.5	27.0
	Sitakunda	12	33.5	26.9					
	Rangamati	00	34.0	26.5	Khulna	Khulna	00	36.0	27.5
	Cumilla	06	Xx	27.4		Mongla	37	35.8	27.4
	Chandpur	01	35.4	27.5		Satkhira	00	35.6	28.0
	M.Court	04	34.2	27.5		Jashore	16	<u>37.4</u>	26.8
	Feni	00	34.5	26.4		Chuadanga	00	36.6	27.8
	Hatiya	16	33.0	27.0		Kumarkhali	<u>35</u>	34.7	25.5
	Cox's Bazar	06	32.4	26.4					
Kutubdia	12	32.7	27.0	Barishal	Barishal	15	35.7	27.0	
Teknaf	33	32.8	<u>24.6</u>		Patuakhali	00	35.3	27.3	
					Khepupara	00	34.5	27.3	
Sylhet	Sylhet	42	31.8	25.8	Bhola	02	34.8	27.3	
	Srimangal	09	34.5	26.6					

### Highlights:

- Country average bright sunshine hour was 3.66 hours per day during last week.
- Country average free water loss during the previous week was 3.32 mm per day.

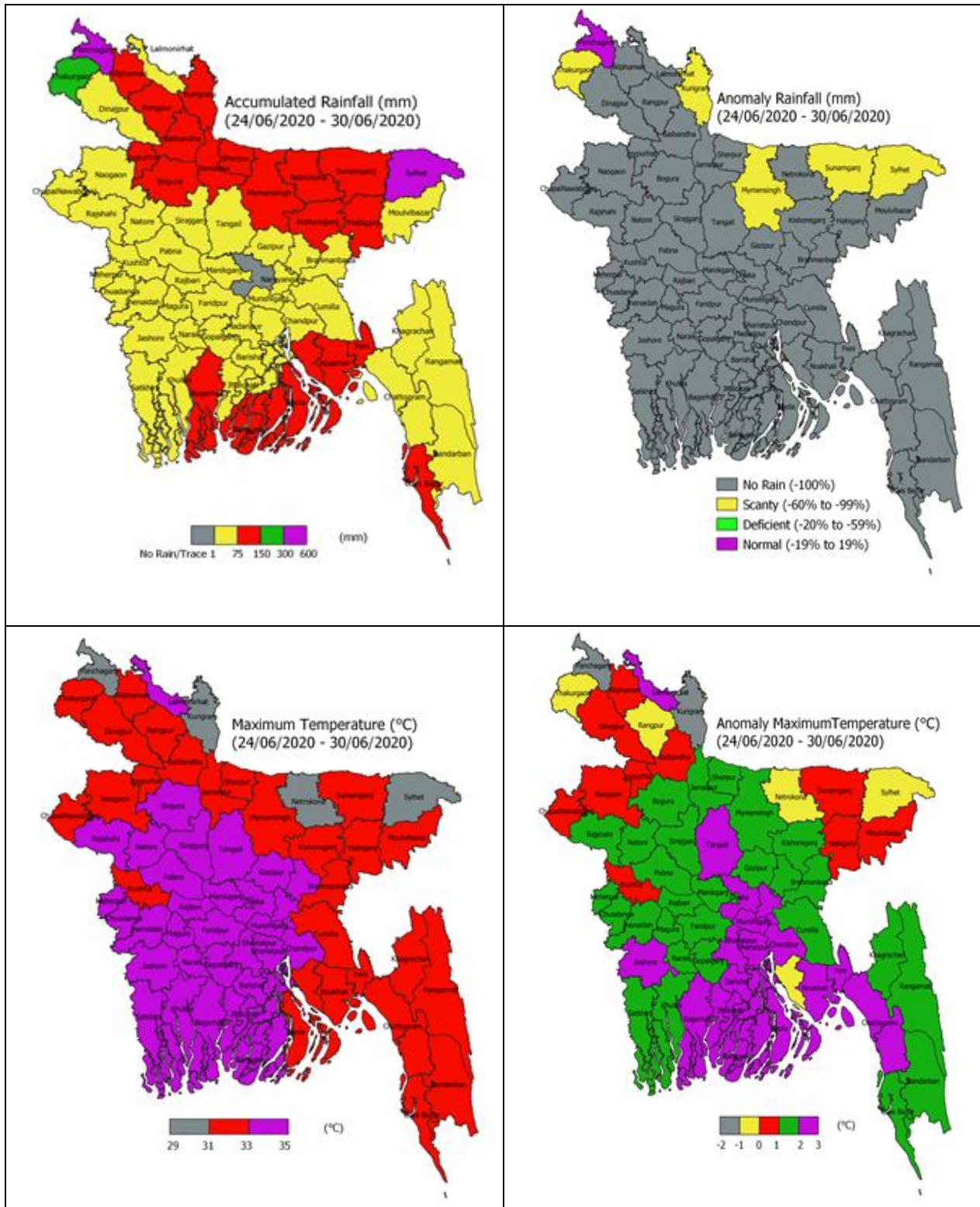
### Weather Forecast Valid for 24 Hours commencing 06 PM Today:

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

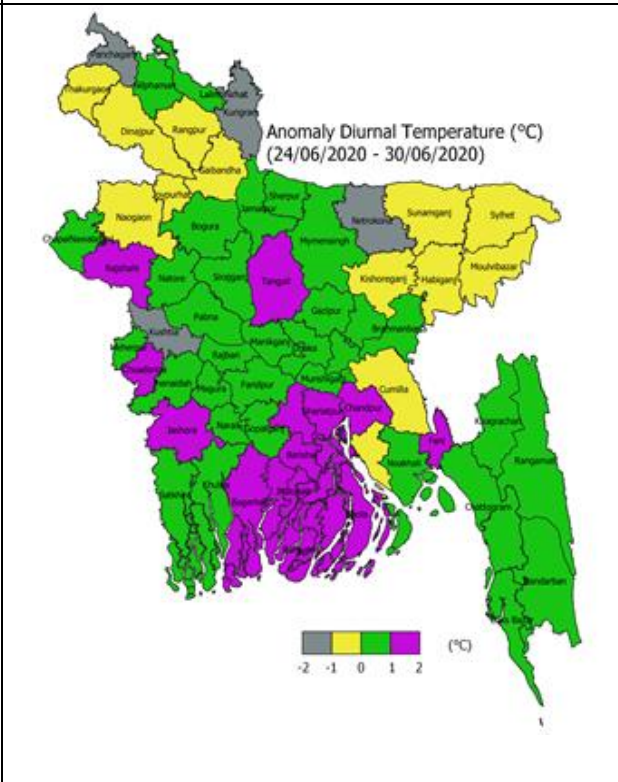
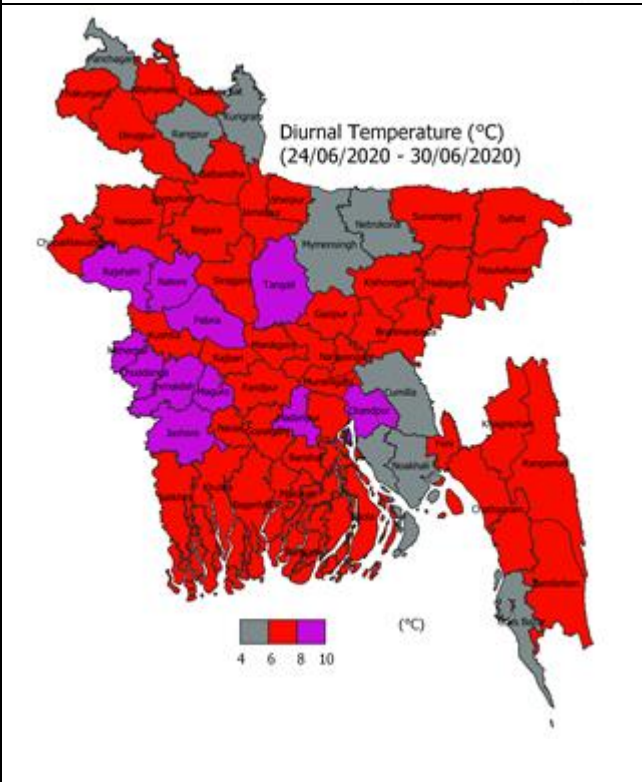
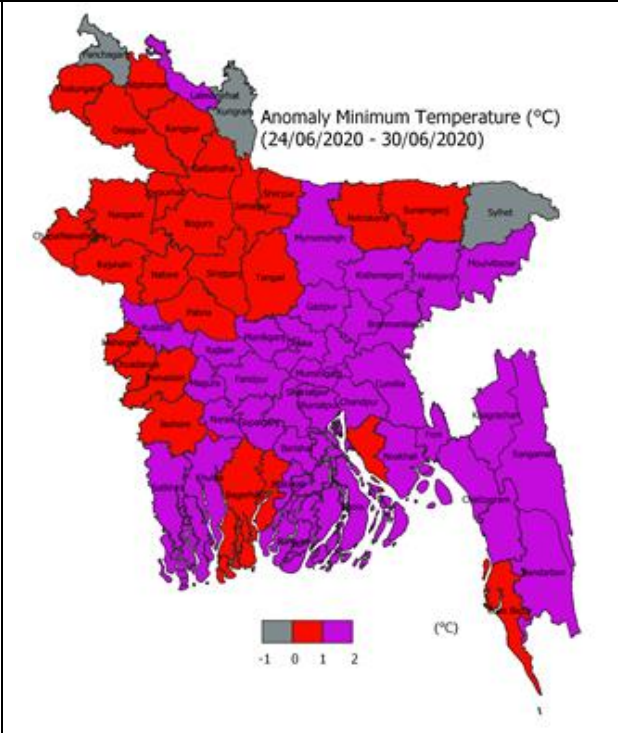
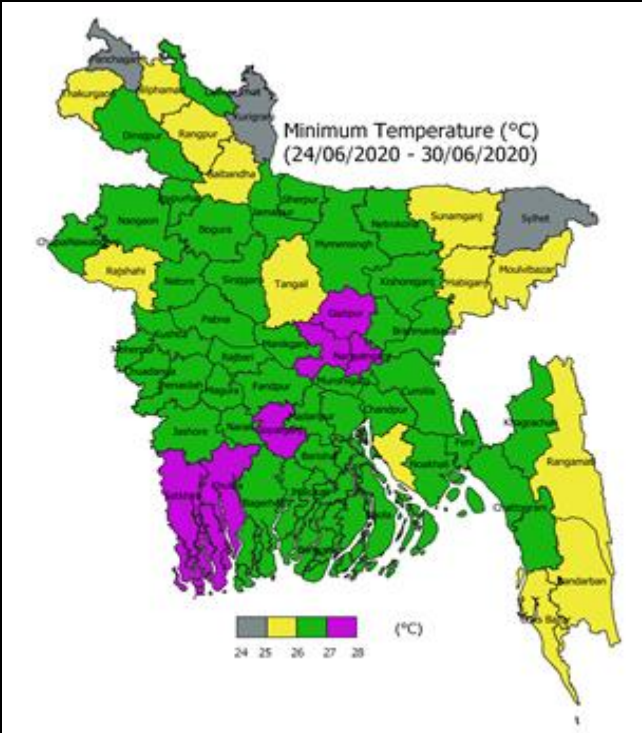
**Temperature:** Day and night temperature may remain nearly unchanged over the country.

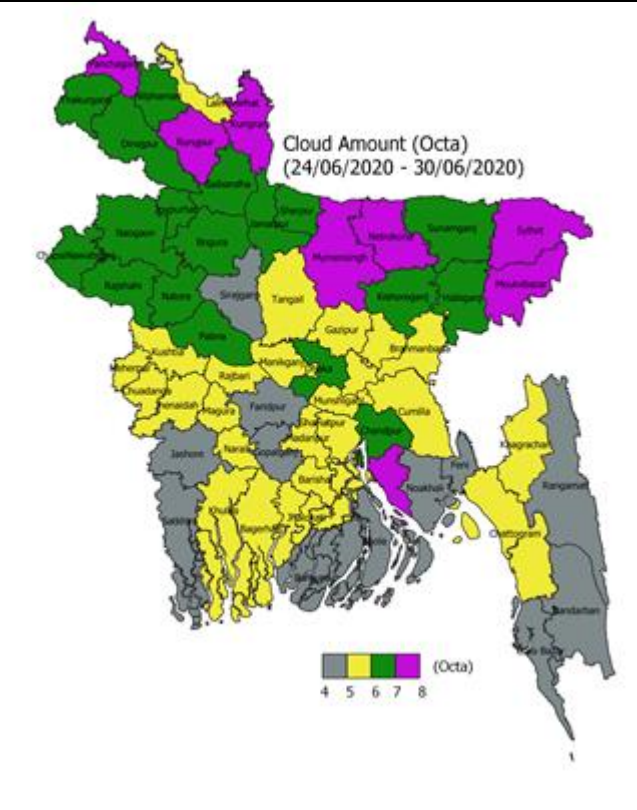
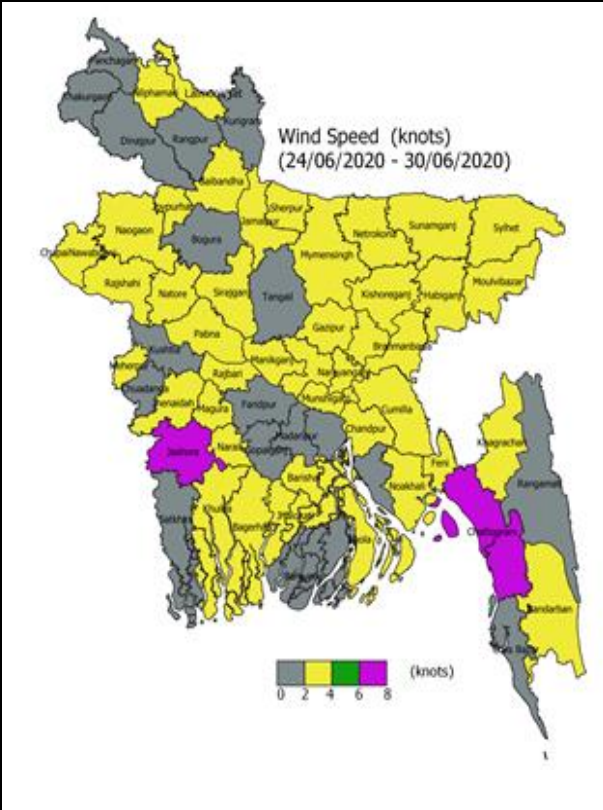
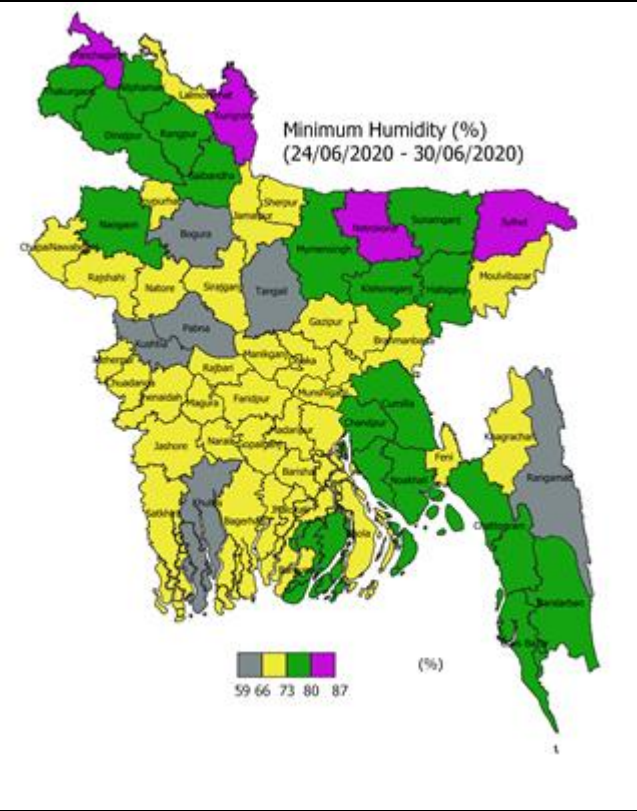
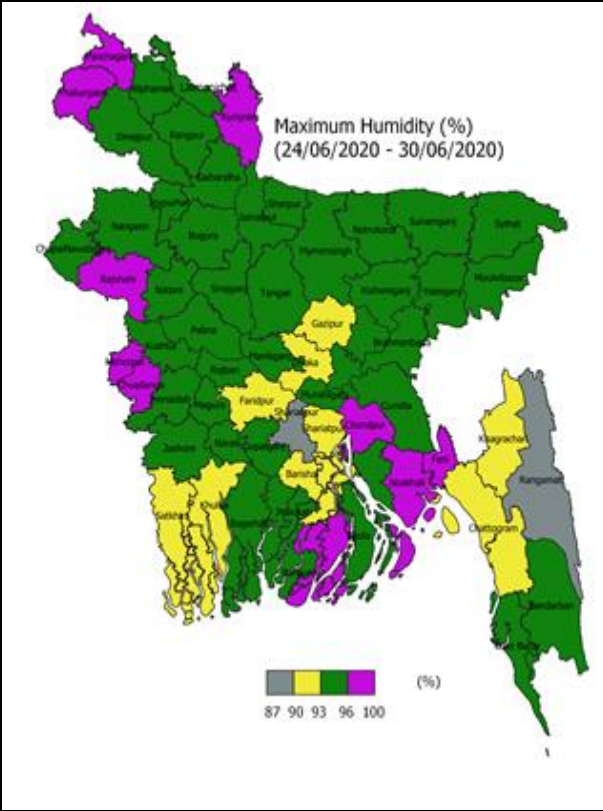


## Spatial Distribution of weather parameters for the Week ending 30 June 2020









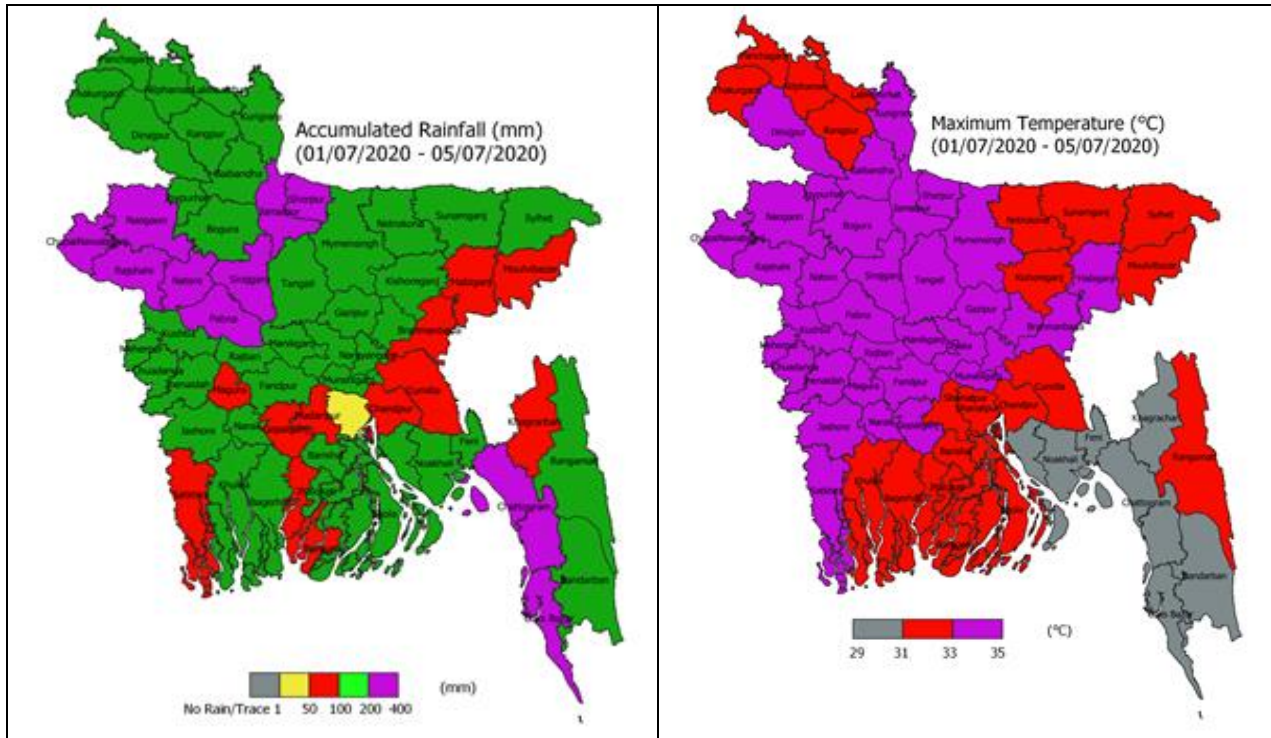


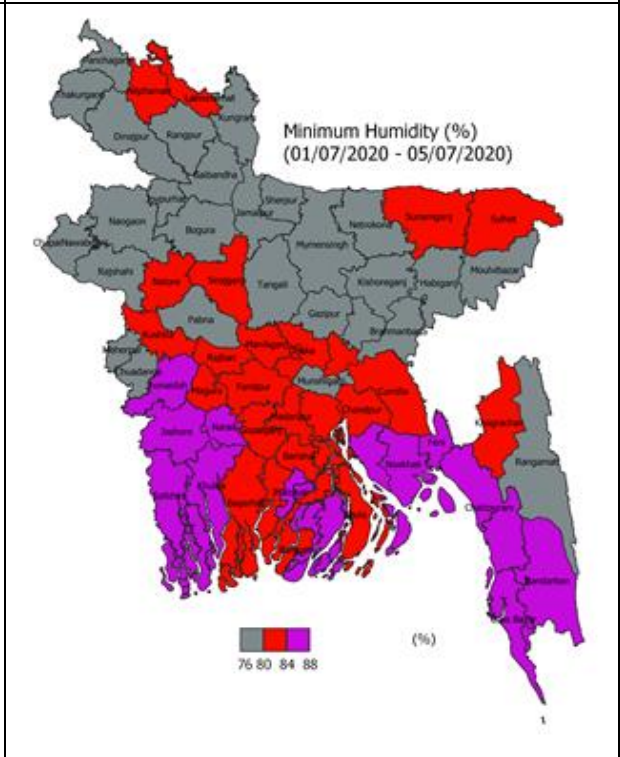
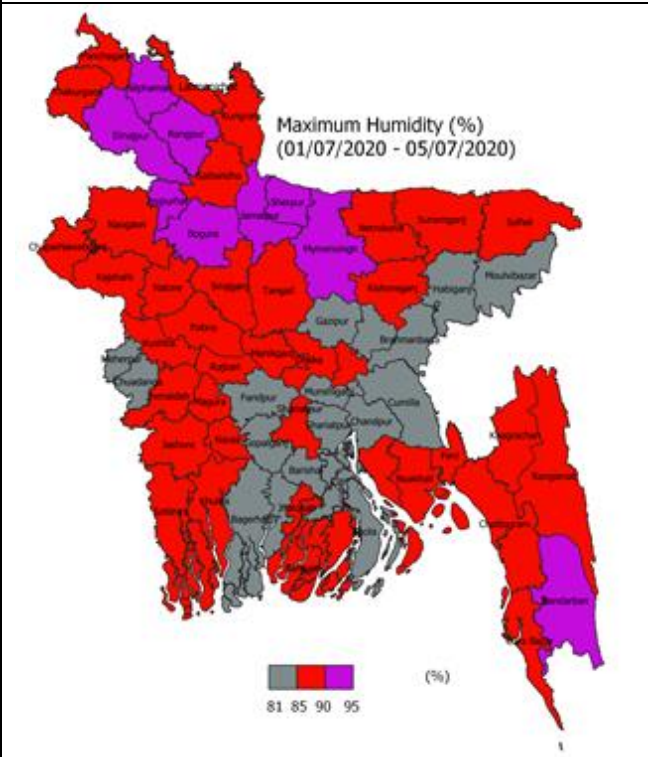
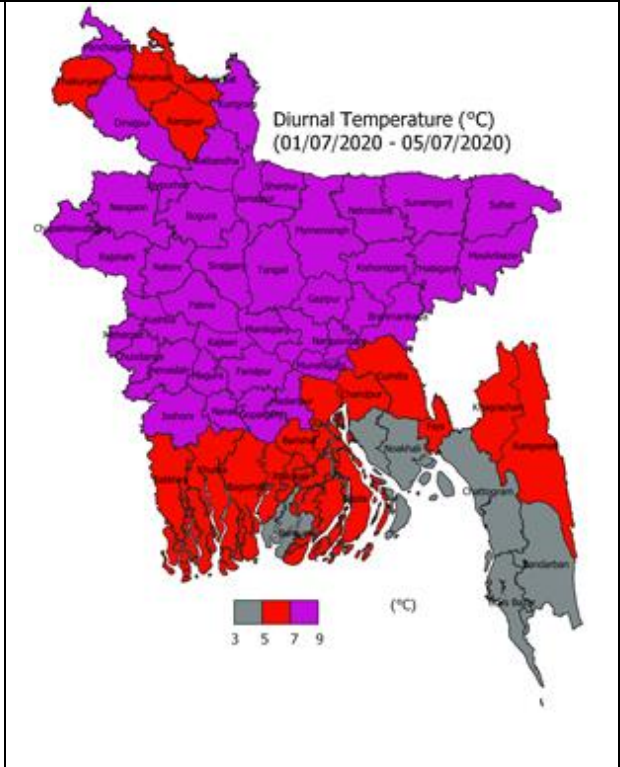
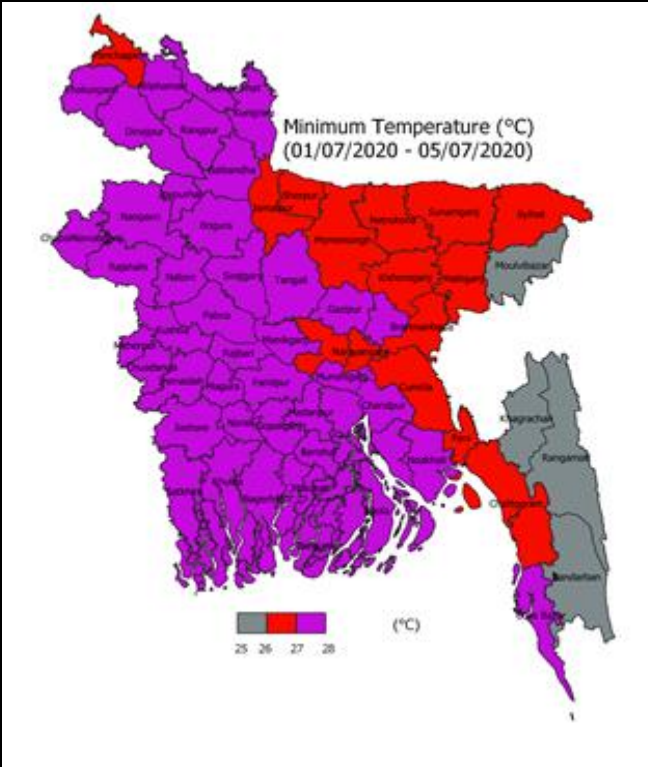
### Weather Forecast and Advisory for the Period of 01.07.2020 to 07.07.2020

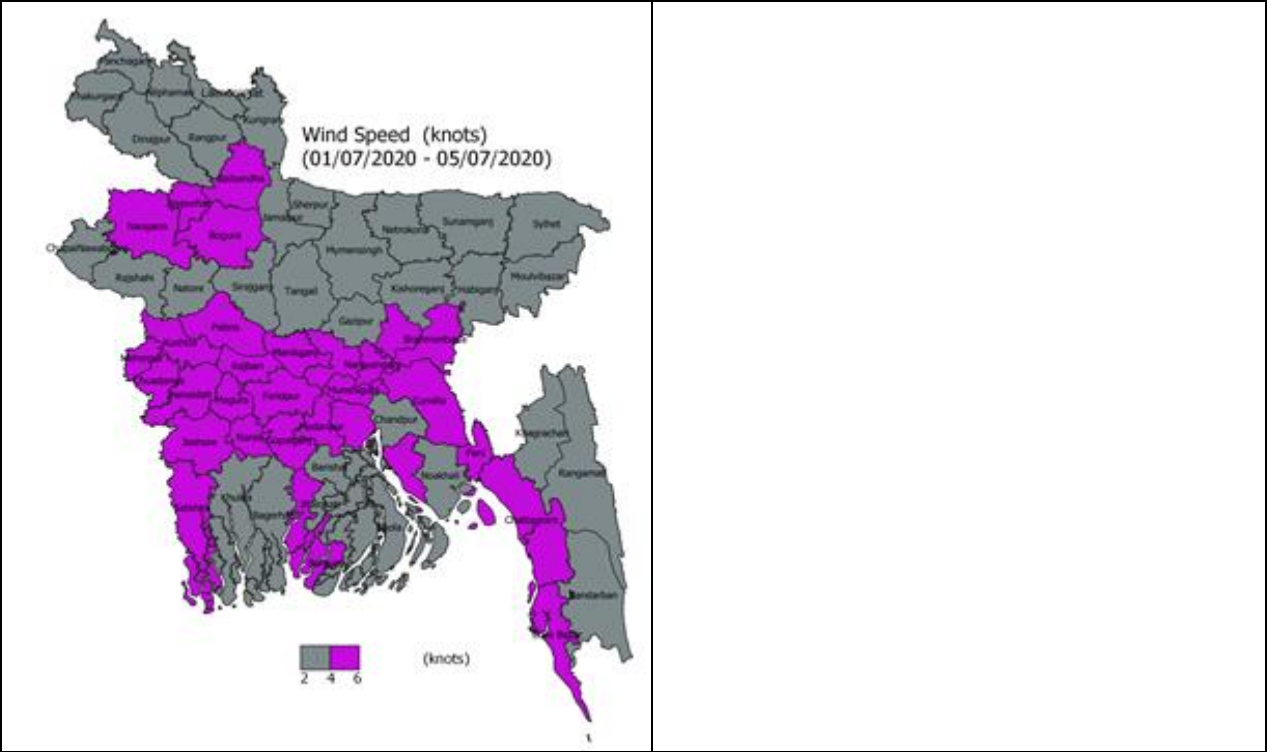
Bright sunshine hour is likely to be from 4.00 to 5.00 hours per day during this week. Average free water loss is likely to be from 3.00 to 4.00 mm per day during this week.

- Light (04-10 mm/d) to moderate (11-22 mm/d) rain /thunder shower accompanied by temporary gusty wind is likely to occur at many places over Rajshahi, Rangpur, Mymensingh, Chattogram and Sylhet divisions and a few places over Khulna, Barishal and Dhaka divisions and moderately heavy (23-43 mm/day) to heavy (44-88 mm/day) falls at places over the northern part of 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 01 July -05 July'2020



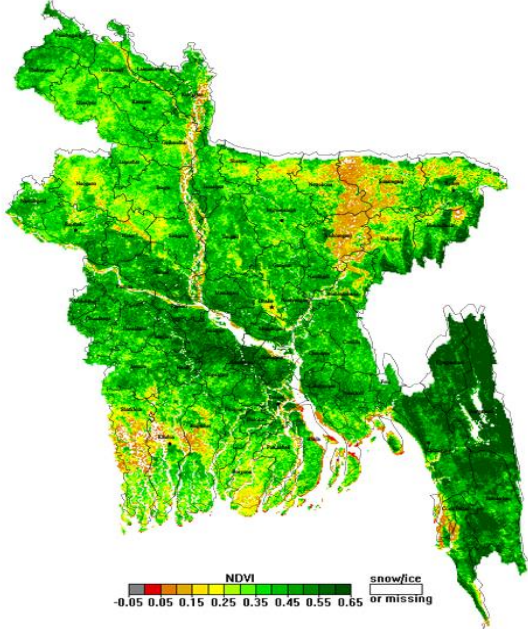




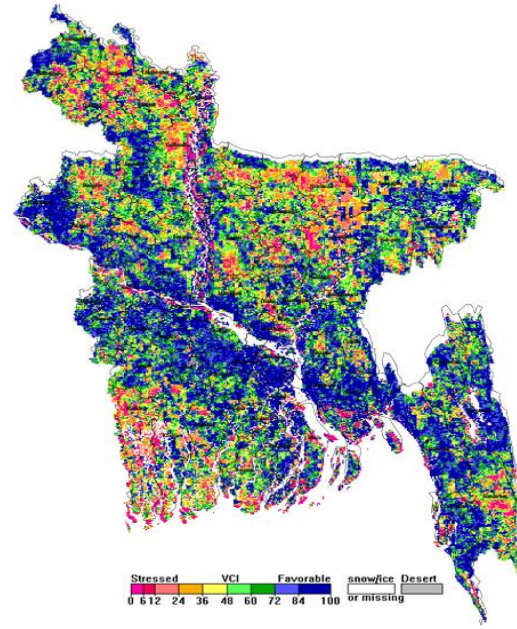


## Different Satellite Products over Bangladesh

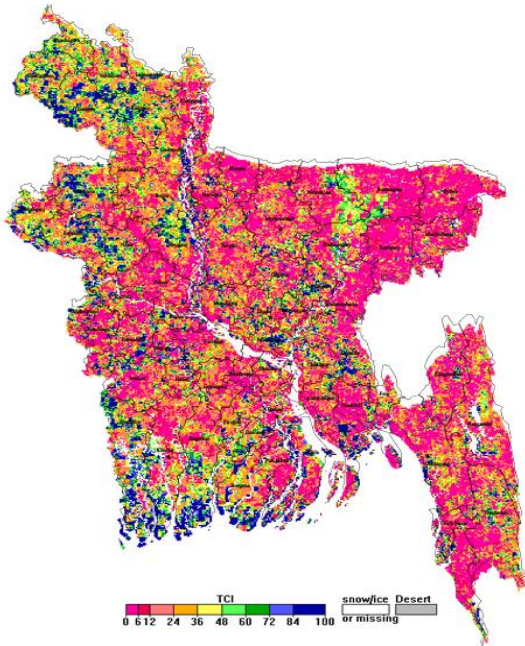
NOAA/VIIRS BLENDED NDVI composite for the week No. 25 (16 June-22 June 2020) over Agricultural regions of Bangladesh



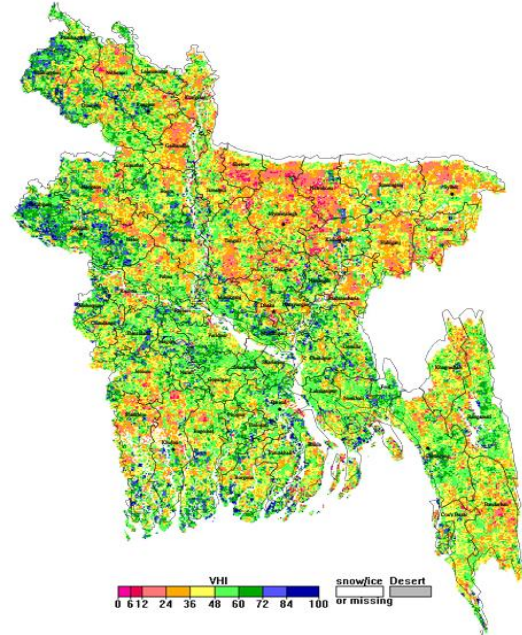
NOAA/ AVHRR BLENDED VCI composite for the week No. 25 (16 June-22 June 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 25 (16 June-22 June 2020) over Agricultural regions of Bangladesh



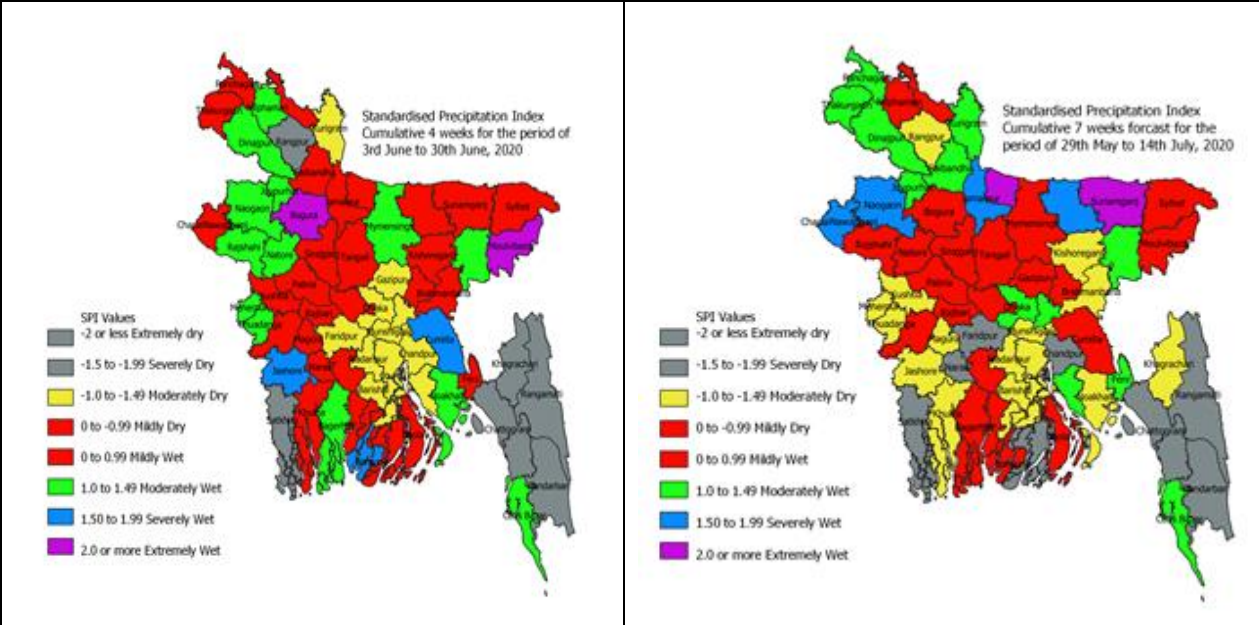
NOAA/ AVHRR BLENDED VHI composite for the week No. 25 (16 June-22 June 2020) over Agricultural regions of Bangladesh





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

It has been observed that during last four weeks (in June 2020) mild to moderately wet conditions prevails in districts located northwestern parts, except in Rangpur, where it is observed severely dry conditions and mild to moderately wet condition prevails in southern and central parts as well as northeastern parts of Bangladesh and southeastern part was prevailed dry conditions for last four weeks.



Data source: Bangladesh Meteorological Department