



# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

15 APRIL 2020 (WEDNESDAY)  
[FOR THE PERIOD 15.04.2020 – 19.04.2020]



## 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**

As per the weather forecast received from the Bangladesh Meteorological Department (BMD) during next 24 hours, rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at many places over Rangpur & Rajshahi divisions; at a few places over Khulna, Dhaka & Mymensingh divisions and at one or two places over Barishal, Chattogram and Sylhet divisions with hails at isolated places. Mild heat wave is sweeping over the Khulna division and the regions of Faridpur, Madaripur, Rangamati, Rajshahi, Pabna & Sylhet and it may abate from some places. Day and night temperature may fall slightly over the country. As per the outlook issued by BMD for next 72 hours, rain/thunder showers is likely to continue. As per the quantitative medium range weather forecast, a number of districts the country especially in Haor region in are likely to receive moderately heavy rainfall to very heavy rainfall from 17 to 21 April. Special Agromet Advisories issued to Haor region is mentioned below. Detail Agromet advisories issued to the districts, where dry condition prevailed during last four day and dry condition is expected during next five days are also given below.

### **Special Agro-meteorology Advisories under Flash Flood Condition in Haor Region**

- If the transplanted boro paddy is matured 80%, harvest immediately immediately and keep it safe and dry place
- Immediately harvest the matured wheat, lentil & vegetables.
- Clean the irrigation channel so that there should not be any standing water in the paddy field.
- Increase the height of bunds around the crop fields.
- Make suitable arrangements so that excess water can be drained out of the crop fields.
- Avoid application of fertilizer, pesticides, irrigation.
- All the plant protection measures should be taken up after the current spell of rainfall.
- Provide mechanical support to the standing banana and other horticultural crops and also stacking of vegetables.
- 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.
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### **Agromet Advisories for the districts where dry condition is expected during next five days**

#### **Boro Paddy**

- Alternate wetting and drying maintain water level 5-7 cm in the present crop stage.
- Keep the field and irrigation channel weed free.
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Where seedlings are 90-110 days old apply last top dressing with urea and potash.
- There is chance of stem borer in rice in the main field. If noticed, the pest may be identified and controlled by using light traps and also constant monitoring is required for its level of incidences. To attract the butterflies, place 5 Pheromone Traps/acre, collect the adults and destroy them by burying under soil or by burning. Also spray Carbofuran @10kg per ha.
- Before spray the insecticide, drain out the irrigated water from the plots

- Increased difference between daily maximum and minimum temperature (diurnal temperature) may favour the infestation of blast in main field as well as in the nursery. At peak tillering stage of the crop there is more chance of this fungal disease. Spray Nativo 75wg/ Trooper@ 0.6g/litre of water or Amister top 325 sp@ 1ml/litre of water.
- For brown spot attack spray apply fertilizer management and spray Thiovit+Potash.
- Spraying should be done during afternoon hours or at morning hours from 10:00 a.m. to 11:00a.m
- As boro cultivation is going on full swing, it is advised to monitor the incidences of other pests and diseases and take appropriate plant protection measures as advised by the upazila Agriculture Office or Sub-Assistant Agriculture Officer.

### **Maize**

- It is advised to prepare silage from the harvested maize and other pulse crops to overcome shortage of green fodder.
- Weather is congenial for incidence of sheath blight in maize which is at cob development stage. Spray hexaconazole @ 2 ml or propiconazole @ 1 ml per litre
- As maize crop is most sensitive moisture stress at 45 to 65 days after sowing, ensure optimum moisture availability by providing irrigation to avoid yield loss at harvest.
- Ensure proper moisture level during flowering and grain development stages in maize crop.
- If symptoms of fall army worm incidence are noticed, spray any one of the following insecticide to control. Chloropyrephos @1ml./litre water, Lambda- Cypermethrin @1ml./litre water.
- There may be chance of incidence of and Katui pest. These pests may be identified and controlled by using sex pheromone traps and also constant monitoring is required for its level of incidences.

### **Groundnut**

- 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**

- Apply light irrigation.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Emamectin benzoate 5% SG 4 g/10 litre or Dimethoate 30 % EC 1.0 ml/litre for the control of thrips & aphids.
- Intercultural operation is advised in early sown onion/garlic crop. Provide light and frequent irrigation at an interval of 10-15 days as per requirement.
- For the management of stem and fruit borer in brinjal crop, it is advised to install 10 Pheromone trap in one acre.
- There is chance of blight disease in tomato and brinjal which are at fruiting stage. Apply Streptocyclene@3g/10 liter of water.
- Avoid moisture stress conditions to the crops which are at flowering to fruiting stage.

- Considering the increase in temperature, apply light irrigation in standing crops and vegetables as per requirement.
- Because of increase in temperature, there is chance of sucking pest in vegetable crops. To control, application of 2% neem oil emulsion once in a week or spray of Lecanicillium lecani at 20 g per litre of water is advised.

### **Horticultural crops**

- Due to continuous dry spell, there are chances of termite attack in horticulture, forestry tree and shrubs. Hence, to control apply Aldrin termiticides for termites.
- Farmers are advised to keep vigilance on insect-pest and diseases and follow proper weed control measures and cover fruit seedling with rice straw (parali)/thatches in nursery.
- Prevailing weather condition is favorable for black headed caterpillar incidence in coconut. To control, it is advised to spray the under surface of the fronds with Dichlorovos 100EC 0.02%, Malathion 50 EC 0.05% @ 1ml/litre.
- Prevailing weather condition is favorable for canker disease incidence in citrus. To control, spray of Streptomycin sulphate 500-1000 ppm or Phytomycin 2500 ppm or Copper oxychloride 0.2% at fortnight interval is advised.
- To avoid fruit fall in mango crop, it is advised to spray Planofix regulator 20 ppm and 1% Calbor micronutrient.
- The prevailing weather conditions are favorable for incidence fruit fly in mango. Farmers are advised to keep Methyl Uzanol traps @ 6-7 /acre to trap the fruit fly

### **Jute:**

- Continue sowing of seeds.

### **Livestock**

- Farmers are advised to keep the floor of the animal habitation dry to avoid hoof infection and to prevent fly breeding.
- Vaccinate (ET vaccine) sheep and goats against Enterotoxemia. Proper ventilation should be maintained for free circulation of air in the sheds
- Feed 50-60 grams of mineral mixture to pregnant animals every day to boost their immunity.
- Provide green fodder and clean fresh water to cattle twice a day.

### **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.
- It is advised to align the long axis of poultry shed in east-west direction. This will prevent the direct sunshine over the birds.
- Regularly inspect the droppings of the poultry bird for any disease symptoms and immediately separate/remove the diseased and dead birds from the healthy ones.

## **Fishery**

- Because of increase in temperature, it is advised to add cow dung and lime or rice bran and mustard cake in the pond as a natural food for fishes @ 5 kg/day/ acre area of pond.
- Feed the major carp with rice bran and ground nut oil cake at 1:1 ratio at the rate of 5 % of body weight
- Maintain 1 to 1.5mt average depth of water in the pond.
- As the temperature is rising, farmers can start feeding their fishes with available fish feed or they can feed their fishes with a mixture Rice bran and MOC in 1:1 ratio @3% of body weight of the total biomass in their ponds.

## Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 15 April 2020) and maximum temperature on 14 April, minimum temperature on 15 April 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	33.2	26.9	Rajshahi	Rajshahi	00	28.0	25.8
	Tangail	00	30.6	25.8		Ishurdi	00	30.2	25.8
	Faridpur	00	33.4	25.8		Bogura	00	30.0	26.2
	Madaripur	00	35.0	25.3		Badalgachhi	00	27.0	24.7
	Gopalganj	00	35.0	25.5		Tarash	00	29.0	25.5
	Nikli	00	31.0	25.0					
Mymensingh	Mymensingh	00	29.6	24.6	Rangpur	Rangpur	00	27.8	25.6
	Netrokona	00	29.5	23.8		Dinajpur	00	24.4	<b>20.2</b>
						Sayedpur	00	24.5	26.1
						Tetulia	00	22.9	21.5
Chattogram	Chattogram	00	32.5	25.5	Dimla	Dimla	00	25.7	23.6
	Sandwip	00	33.6	24.5		Rajarhat	00	28.0	23.0
	Sitakunda	00	34.0	25.3					
	Rangamati	00	<b>37.8</b>	24.8	Khulna	Khulna	00	35.0	25.0
	Cumilla	00	33.2	25.3		Mongla	00	37.0	25.5
	Chandpur	00	35.0	26.1		Satkhira	00	34.4	26.4
	M. Court	00	35.8	25.6		Jashore	00	34.6	25.8
	Feni	00	35.3	25.5	Chuadanga	00	31.7	25.8	
	Hatiya	00	35.0	24.0	Kumarkhali	00	29.6	26.6	
	Cox's Bazar	00	33.5	24.7					
Kutubdia	00	32.5	24.4	Barishal	Barishal	00	35.6	25.0	
Teknaf	00	xx	xx		Patuakhali	00	35.3	24.7	
					Khepupara	00	34.6	24.8	
Sylhet	Sylhet	00	33.5	24.2	Bhola	00	34.5	25.5	
	Srimangal	00	35.0	23.0					

### Highlights:

- Country average bright sunshine hour was 5.50 hours per day during last week.
- Country average free water loss during the previous week was 3.50 mm per day.

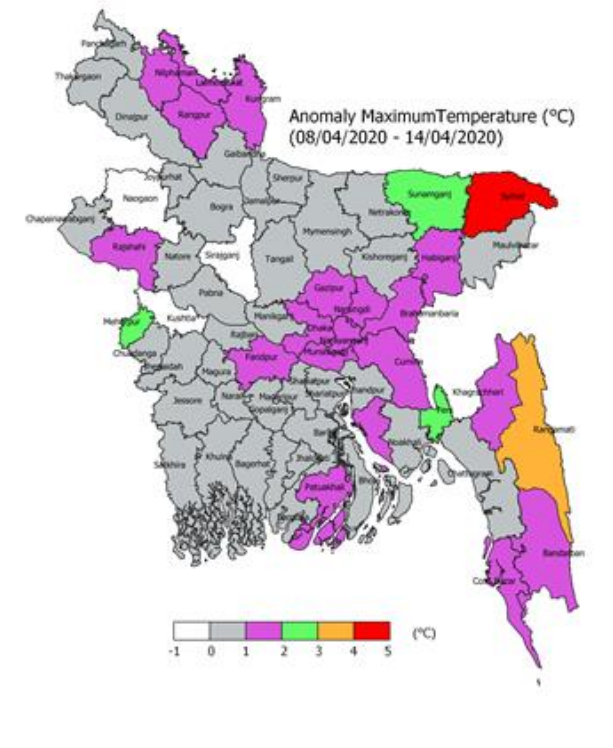
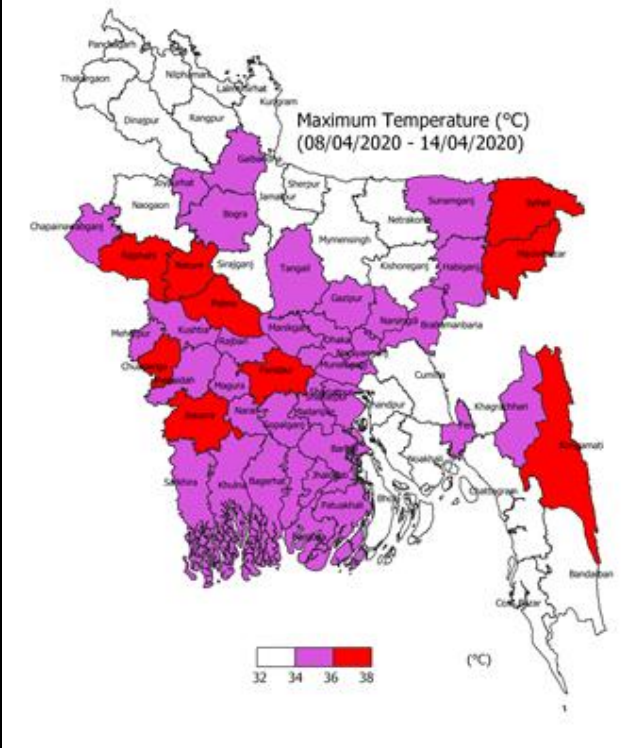
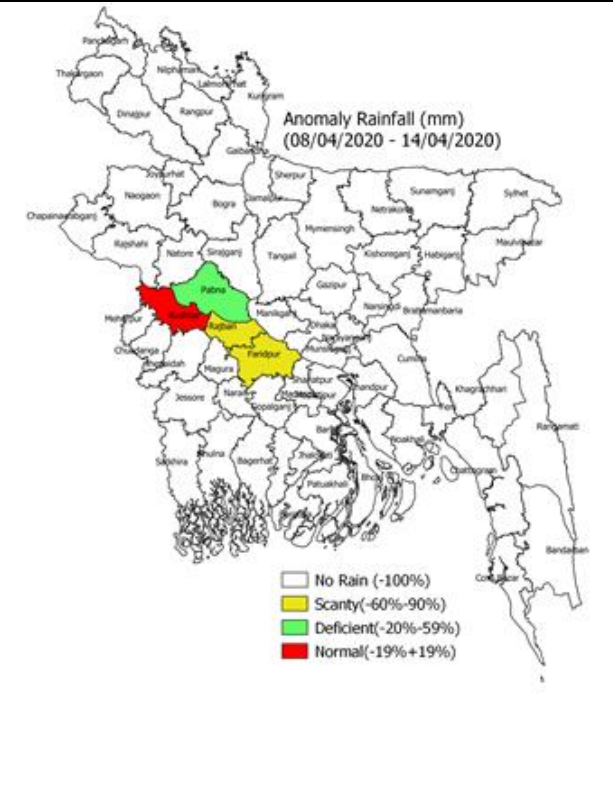
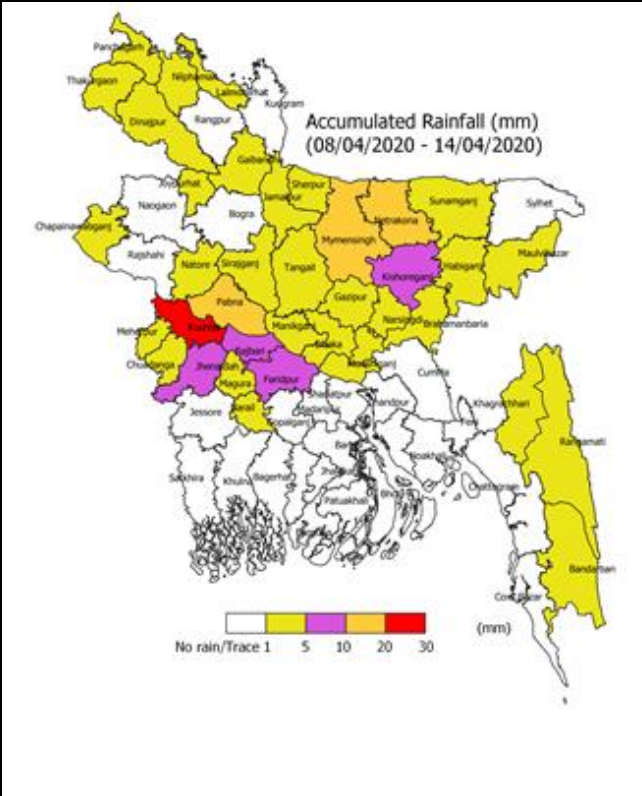
### Weather Forecast Valid for 24 Hours commencing 06 PM Today:

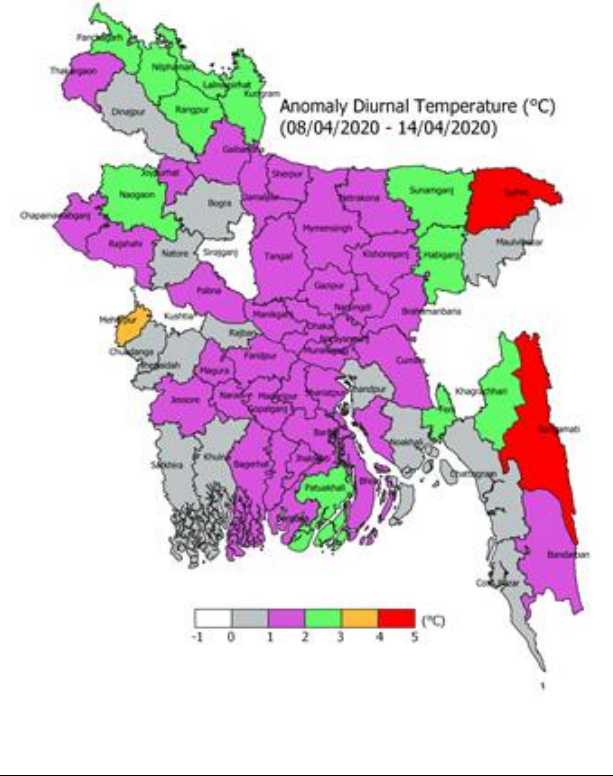
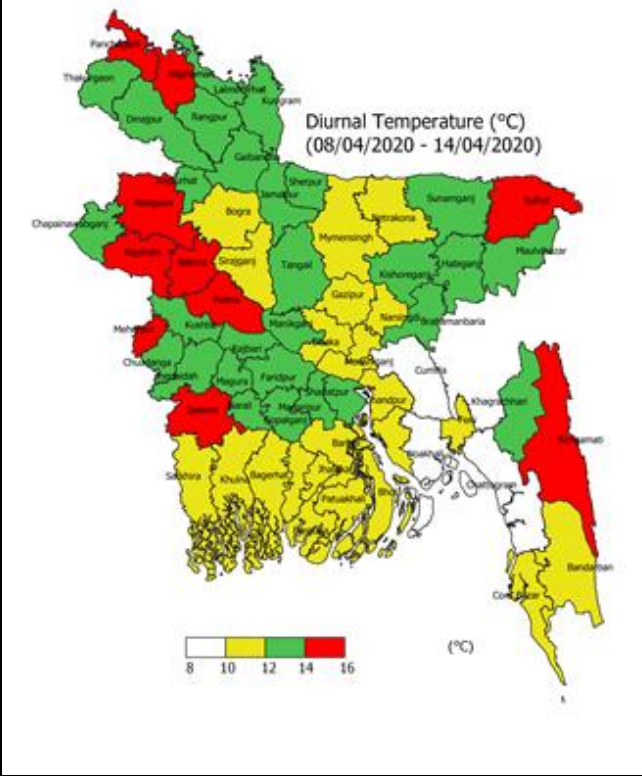
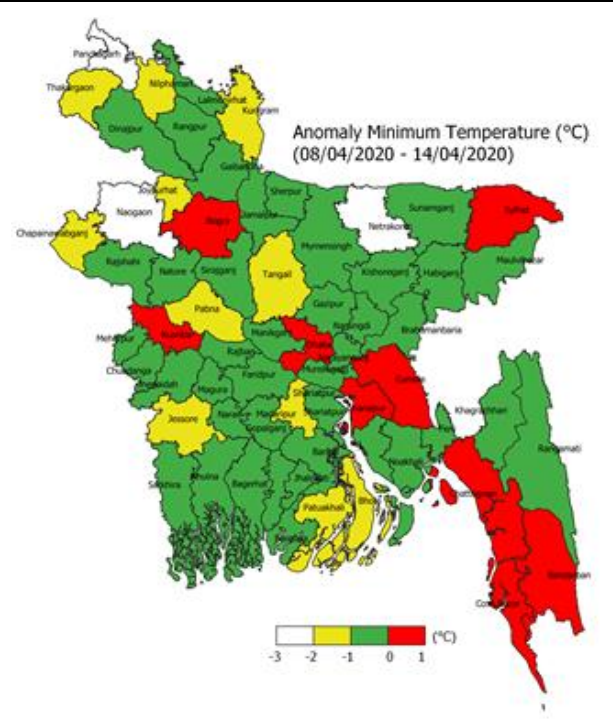
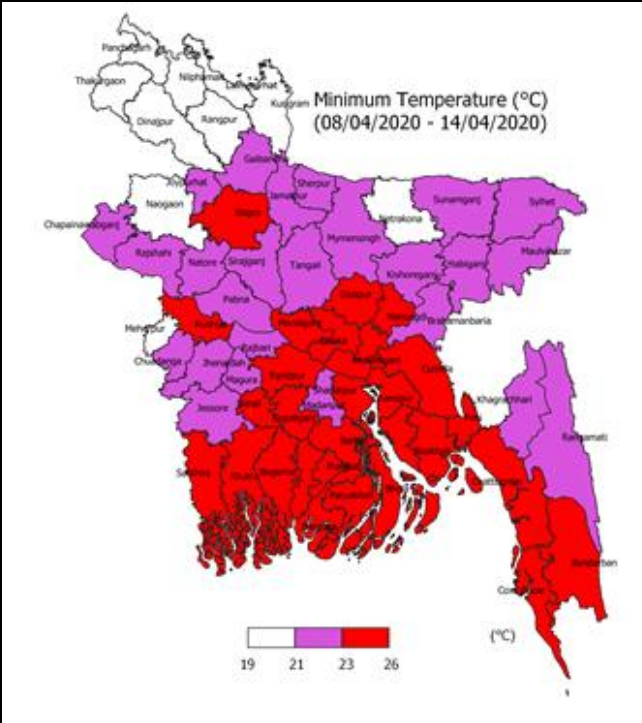
**Forecast:** Rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at many places over Rangpur & Rajshahi divisions; at a few places over Khulna, Dhaka & Mymensingh divisions and at one or two places over Barishal, Chattogram and Sylhet divisions with hails at isolated places.

**Heat Wave:** Mild heat wave is sweeping over the regions of Rangamati & Mongla and it may abate.

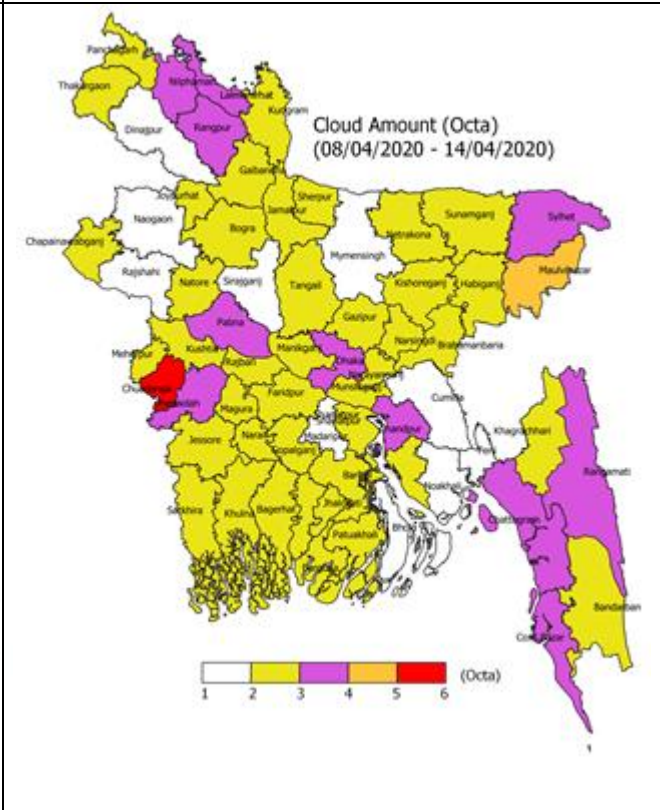
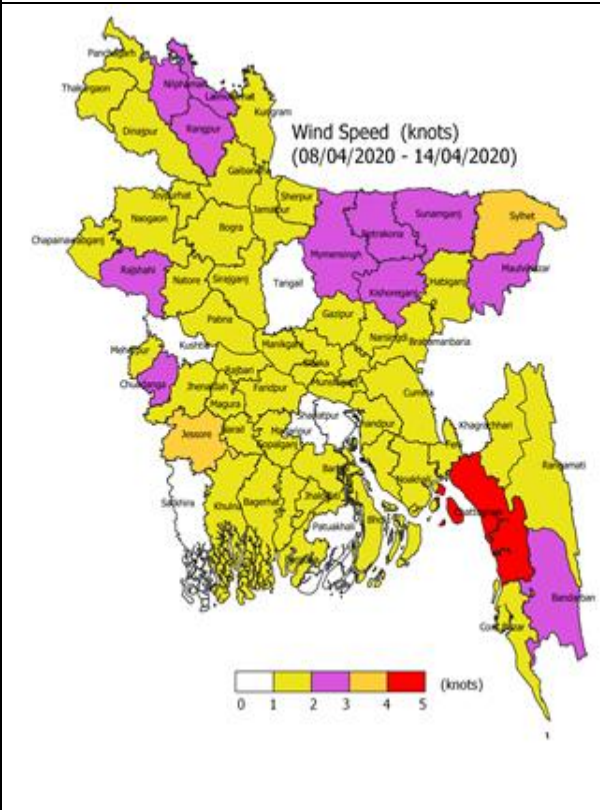
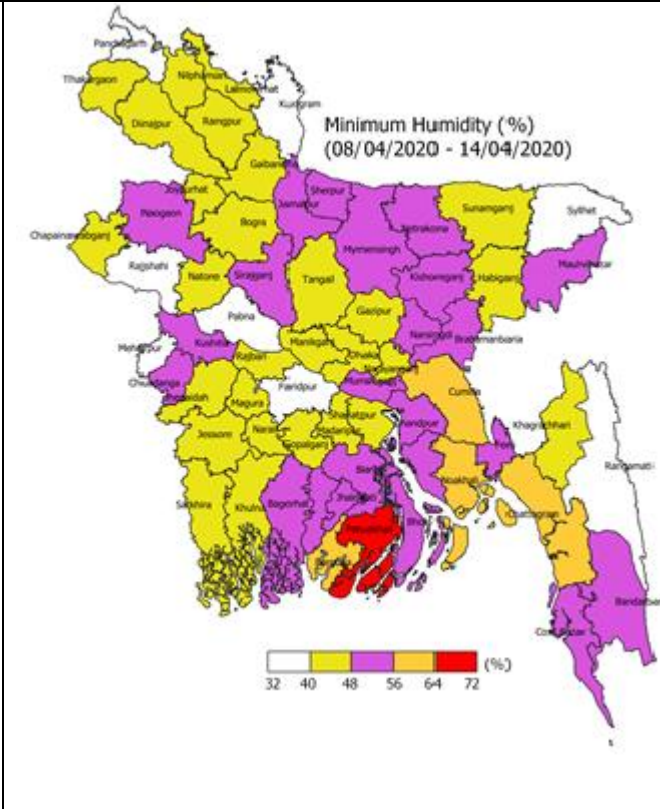
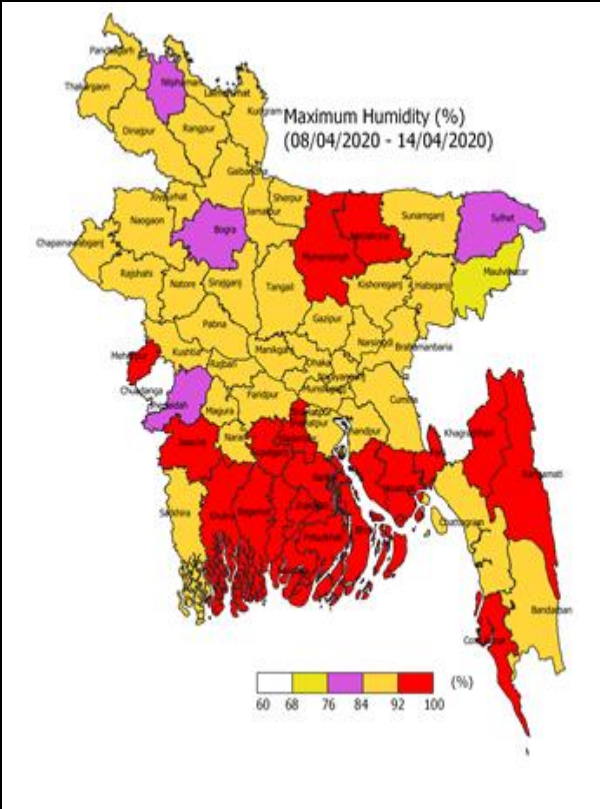
**Temperature:** Day and night temperature may remain nearly unchanged over the country.

Spatial Distribution of weather parameters for the Week ending 14 April 2020







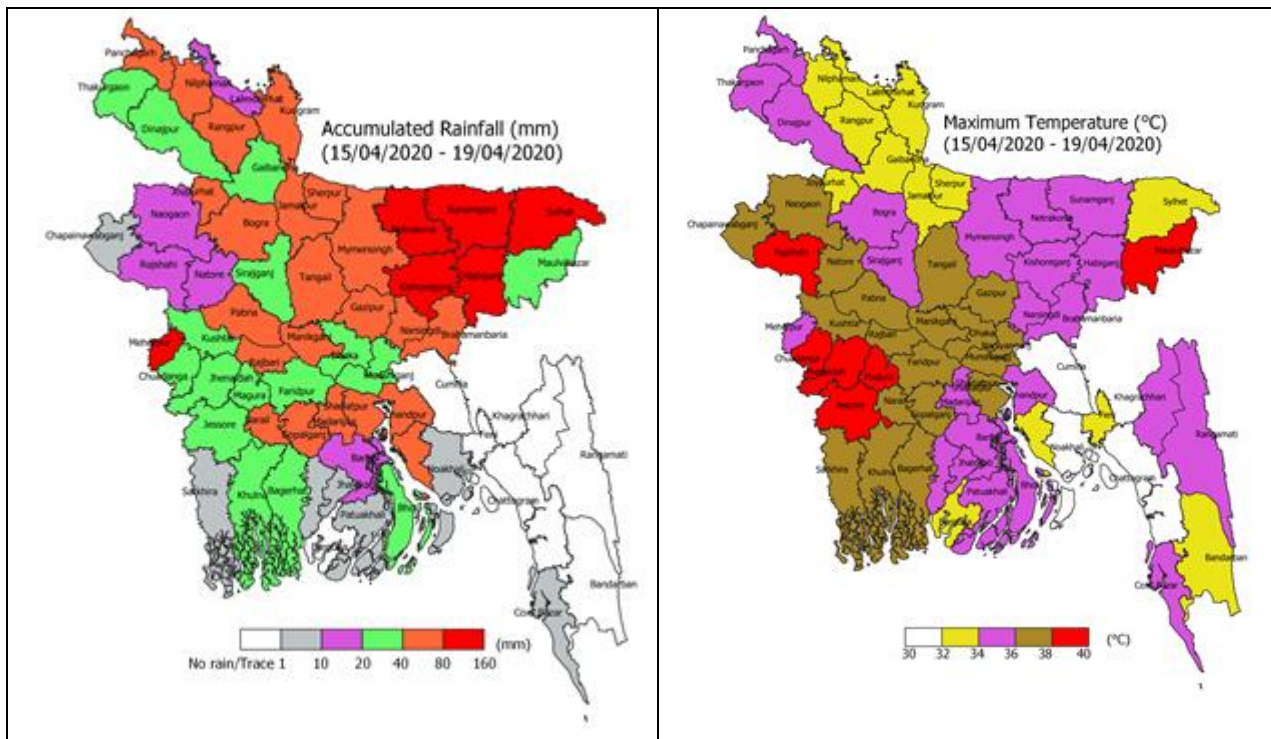


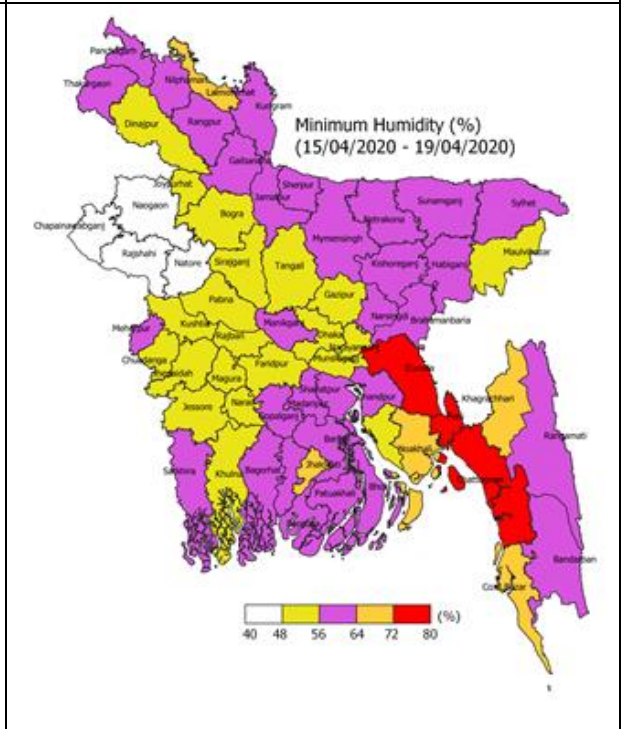
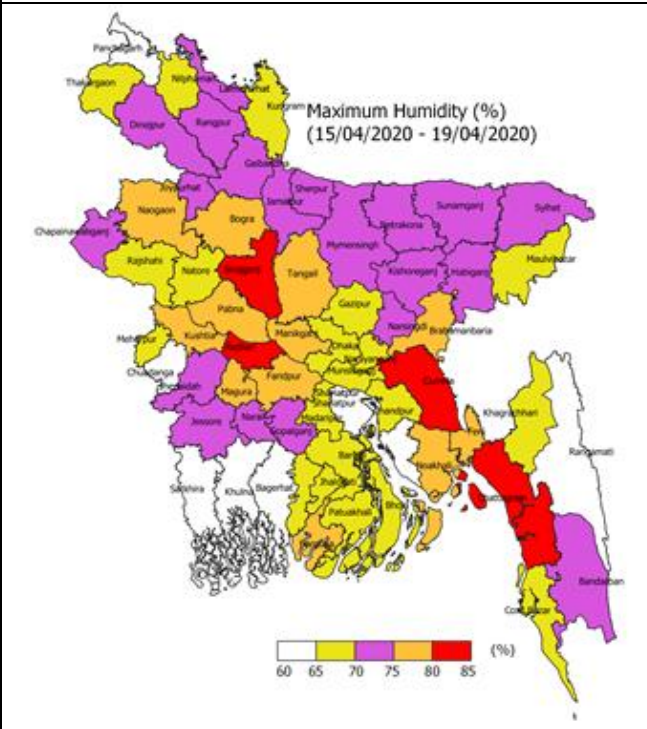
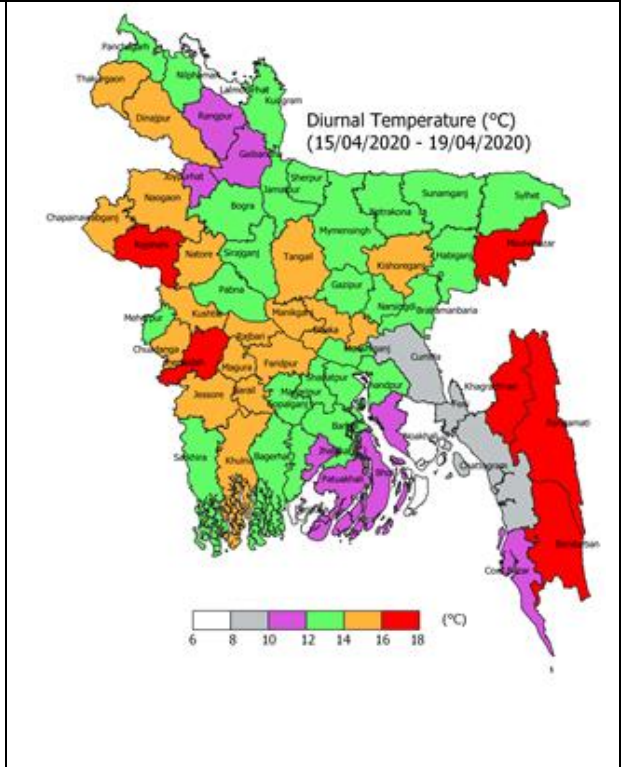
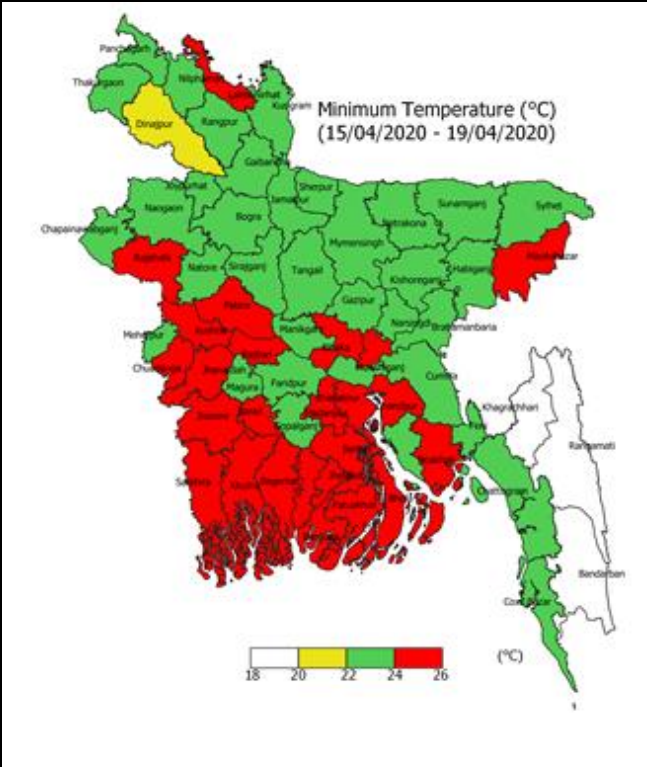
## Weather Forecast and Advisory for the Period of 15.04.2020 to 21.04.2020

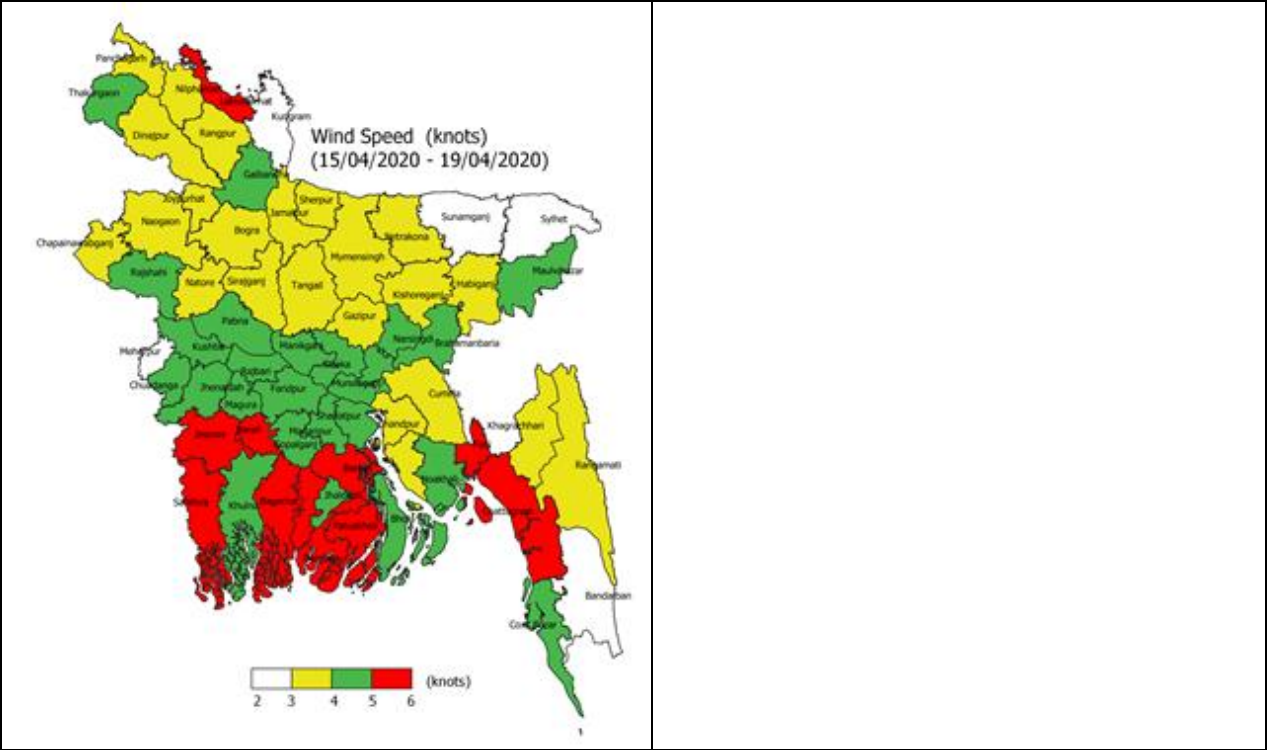
Bright sunshine hour is likely to be from 5.00 to 6.00 hours per day during this week. Average free water loss is likely to be from 3.00 to 4.00 mm per day during this week.

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

### District Wise Quantitative Weather Forecast for next Five days from 15 April -19 April'2020





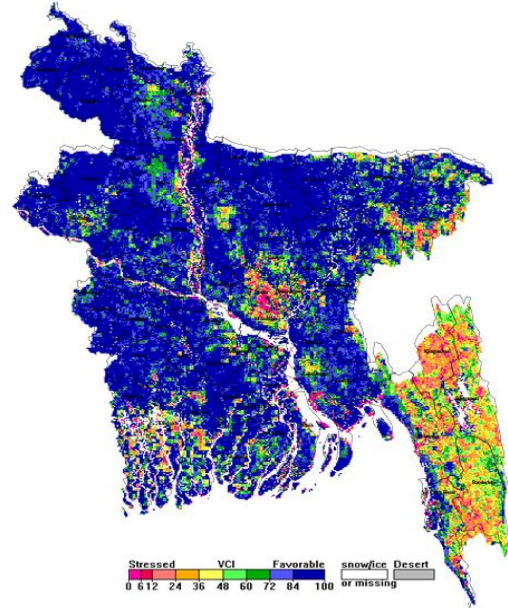


## Different Satellite Products over Bangladesh

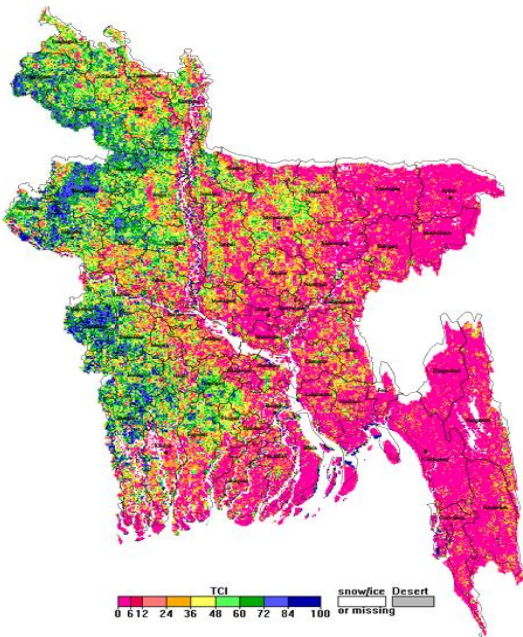
NOAA/VIIRS BLENDED NDVI composite for the week No. 14 (31 March-06 April 2020) over Agricultural regions of Bangladesh



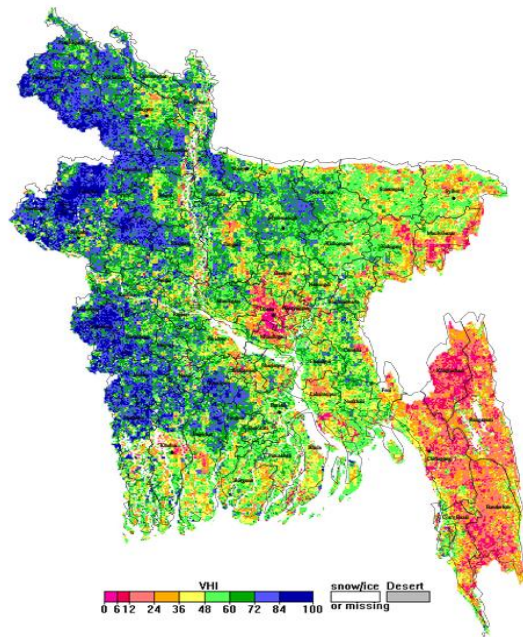
NOAA/ AVHRR BLENDED VCI composite for the week No. 14 (31 March-06 April 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 14 (31 March-06 April 2020) over Agricultural regions of Bangladesh

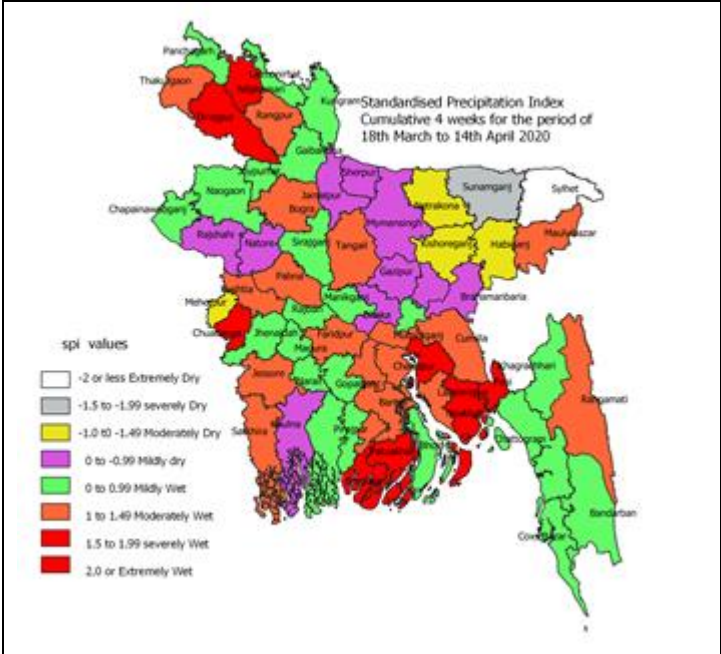


NOAA/ AVHRR BLENDED VHI composite for the week No. 14 (31 March-06 April 2020) over Agricultural regions of Bangladesh



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

It has been observed that during last four weeks including March 2020 extremely wet conditions prevails in districts located in southern and northwestern and mild to moderately wet condition prevails in central parts and extremely dry conditions prevailed in northeast parts of Bangladesh for last four weeks.



Data source: Bangladesh Meteorological Department