



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

18 MARCH 2020 (WEDNESDAY)
[FOR THE PERIOD 18.03.2020 – 22.03.2020]



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, weather is likely to remain dry with partly cloudy sky over the country. Day temperature may rise slightly and night temperature may fall slightly over the country. As per the outlook issued by BMD for next 72, rain/thunder showers is likely. During last four days, almost dry condition prevailed over the country and as per the quantitative medium range weather forecast, number of districts are likely to receive light to moderate rainfall during next five days... Detail Agromet advisories issued to the district, where dry condition prevailed during last four day and light to moderate rainfall is expected during next five days are given below.

Boro Paddy

- Alternate wetting and drying maintain water level 5-7 cm upto the appearance panicle initiation stage. Maintain 2-5 cm water level from panicle initiation to grain formation stage. Utilise the rainfall in maintaining water level in crop field. Drain out excess water, if any
- Keep the field and irrigation channel weed free
- Apply one weeding. Complete one hand weeding before top dressing. Weeding may be done at 20 and 40 days after transplanting of seedling in the field and after the current spell of rainfall.
- 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 for its control.
- 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
- All the plant protection should be done after the current spell of rainfall.

Wheat

- Postpone last & third irrigation after 75-80 old plant during grain formation. Also drain out excess water from the field.
- Monitor the incidences of pests (stem borer, aphid, jassid, cutworm, and rat) & diseases ((blast, leaf rust, leaf blight, brown spot, foot rot and powdery mildew) and if noticed, take appropriate preventive measure.
- Special monitoring of blast disease is required. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- For the treatment of rust disease of wheat apply Hexaconazol@1ml/litre water or Tebuconazol/Carbendazim @ 1ml/litre water.
- To control cutworm in wheat crop, apply Carbofuran @ 20 kg/ha or Chlorpyrifos @ 5ml/L water at 15 days interval.
- For control of aphids in wheat undertake spray of Malathion group @ 2ml. per litre water.
- To control Alternaria blight, spraying of Iprodione @2 g / L of water group pesticide is advised.

- Monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, application of the mixture of 20kg sand with Chlorpyrifos group pesticide is suggested in the evening hour and thereafter irrigation is advised.
- All the plant protection should be done after the current spell of rainfall.

Maize

- It is advised to prepare silage from the harvested maize and other pulse crops to overcome shortage of green fodder.
- Postpone third irrigation between 60-70 days after sowing of the 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.
- All the plant protection should be done after the current spell of rainfall.

Lentil

- Undertake harvest of matured earlier sown lentil. Collect the crop at morning to reduce shattering losses. All these operations should be done after the current spell of rainfall..
- Looking to the weather condition there is possibility of infestation of pod borer. Hand picking followed by burning of the infected parts should be done for its control.
- To protect the pulse grains from storage pests, application of oils of castor/linseed/honge/neem oil @ 3-5 ml per kg of grains is advised after the current spell of rainfall.

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.
- Current moderate temperature favours thrips infestation. Spray 400 ml Dimethoate or 50 ml midachlopid in 200 litre water per acre.
- Present weather conditions are favourable for leaf miner incidence in early sown groundnut. For control of leaf miner to spray Chloripyriophos 2.5 ml/l or quinalphos 2 ml/l of water.
- Present weather conditions are favourable for, spodoptera, jassid in groundnut. To control leaf minor and spodoptera, spray Chloripyriophos @ 2.5 ml (or) Quinalphos @ 2 ml or Thiodicarb 1 g per litre of water; for sucking pest, spray Monochrotophos @1.6 ml (or) Imidaclopid @ 0.3 ml (or) Dimethoate @ 2 ml per litre of water and for tikka leaf spot, spray Mancozeb @ 400 g + Carbendazim @ 200 g (or) Hexaconazole @ 400 g per acre.
- There is a chance of infestation of collar rot disease in early sown rabi groundnut crop. Spray of Thiophanatemethyl 1.5 g/liter water is advised.
- All the plant protection should be done after the current spell of rainfall.

Vegetables

- Postpone 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 after the current spell of rainfall.
- There is chance of blight disease in tomato and brinjal which are at fruiting stage. Apply Streptocyclene@3g/10 liter of water after the current spell of rainfall.
- For the management of stem and fruit borer in brinjal crop, it is advised to install 10 Pheromone trap in one acre

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 after the current spell of rainfall.
- 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.
- To avoid fruit fall in mango crop, it is advised to spray Planofix regulator 20 ppm and 1% Calbor micronutrient after the current spell of rainfall.
- Mango is in tender fruiting stage and there is chance of hopper attack. If noticed, apply a mixture of Diethane M-45@2.5g/liter of water and Dimethoate@1.5ml/liter of water after the current spell of rainfall.
- Wherever flowering is delayed in mango, farmers are advised to give irrigation and spray potassium nitrate 10 g and Urea 5 g per litre of water to enhance the flowering after the current spell of rainfall.
- Apply coir compost to conserve moisture in banana
- Young banana plants of 3-4 months' age are prone to attack of pseudostem weevil; spray Chlorpyrifos 2 ml/litres of water after the current spell of rainfall.
- There is a chance powdery mildew disease incidence before flowering and after fruit formation in mango. To control, spraying of Carbaryl, 50WP @4g/litre of water or Imidachlorprid @ 0.3ml/ litre of water is advised after the current spell of rainfall.
- To protect mango plants from mealy bug, spray Imidacloprid 17.8 SL @ 1 ml /3 litres of water after the current spell of rainfall.
- Coconut harvested during November can be sown in nursery bed for raising seedling. Nuts should be placed horizontally with widest of the three segments upward which helps in germination and healthy growth of seedlings. In 1m wide nursery beds, the nuts should be placed at a spacing of 30cm x 30cm

Jute:

- Land is to be ploughed and laddered 5-6 times to obtain a fine seed bed. In termite and cricket infested fields, the soil is to be treated with malathion 5% dust @ 30 kg/ha after the current spell of rainfall.
- If there is enough soil moisture, start sowing of seeds.

Livestock

- Provide sufficient clean drinking water to animals. Contact departmental personnel for vaccination.
- Keep the animal shed clean and dry.
- Green fodder mixed with dry straw should be provided for feed.

- In case of skin disease, dairy farmers are advised to mix zinc oxide and vaseline in equal proportion and apply on affected parts.
- Keep away mosquitos from animal shed by suitable technique.
- At this time goat may be attack by Blister disease which is generally a viral disease that affect any age group of goat. The disease may be seen particularly in the facial/ nasal area. To protect from the disease wash with Potassium per manganate (PP) and consult nearby Veterinary Dispensary for anti-biotic cream and further treatment.
- Feed mineral especially calcium and vitamin supplement to the dairy cattle to have good productive and reproductive performance

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, darkplaigue 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 foods for fishes @ 5 kg/day/ acre area of pond.
- 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.
- To avoid bacterial disease liming should be done at appropriate dose.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 18 March 2020) and maximum temperature on 17 March, minimum temperature on 18 March 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	31.7	21.0	Rajshahi	Rajshahi	00	32.6	17.8
	Tangail	00	31.4	18.2		Ishurdi	00	31.5	17.5
	Faridpur	00	31.9	19.6		Bogura	00	31.0	19.7
	Madaripur	00	32.3	19.3		Badalgachhi	00	33.0	17.0
	Gopalganj	00	31.8	19.5		Tarash	00	29.2	19.5
	Nikli	00	31.0	18.0					
Mymensingh	Mymensingh	00	30.0	18.8	Rangpur	Rangpur	00	29.5	15.4
	Netrokona	00	29.3	17.8		Dinajpur	00	29.4	15.6
						Sayedpur	00	30.5	15.0
Chattogram	Chattogram	00	33.5	21.0		Tetulia	00	29.8	<u>13.2</u>
	Sandwip	00	33.6	19.0		Dimla	00	29.3	14.8
	Sitakunda	00	34.3	19.0		Rajarhat	00	30.0	14.0
	Rangamati	00	33.8	17.0	Khulna	Khulna	00	32.2	21.2
	Cumilla	00	31.5	19.3		Mongla	00	33.0	21.6
	Chandpur	00	32.6	20.0		Satkhira	00	32.4	21.0
	M. Court	00	32.5	20.8		Jashore	00	33.4	19.0
	Feni	00	33.0	20.0		Chuadanga	00	31.6	18.5
	Hatiya	00	32.3	19.7		Kumarkhali	00	30.8	20.4
	Cox's Bazar	00	35.0	23.0					
Kutubdia	00	32.0	20.4	Barishal	Barishal	00	32.5	19.0	
Teknaf	00	<u>37.6</u>	xx		Patuakhali	00	33.4	20.9	
					Khepupara	00	33.4	21.2	
Sylhet	Sylhet	00	32.0	18.0		Bhola	00	32.0	19.3
	Srimangal	00	31.4	14.9					

Highlights:

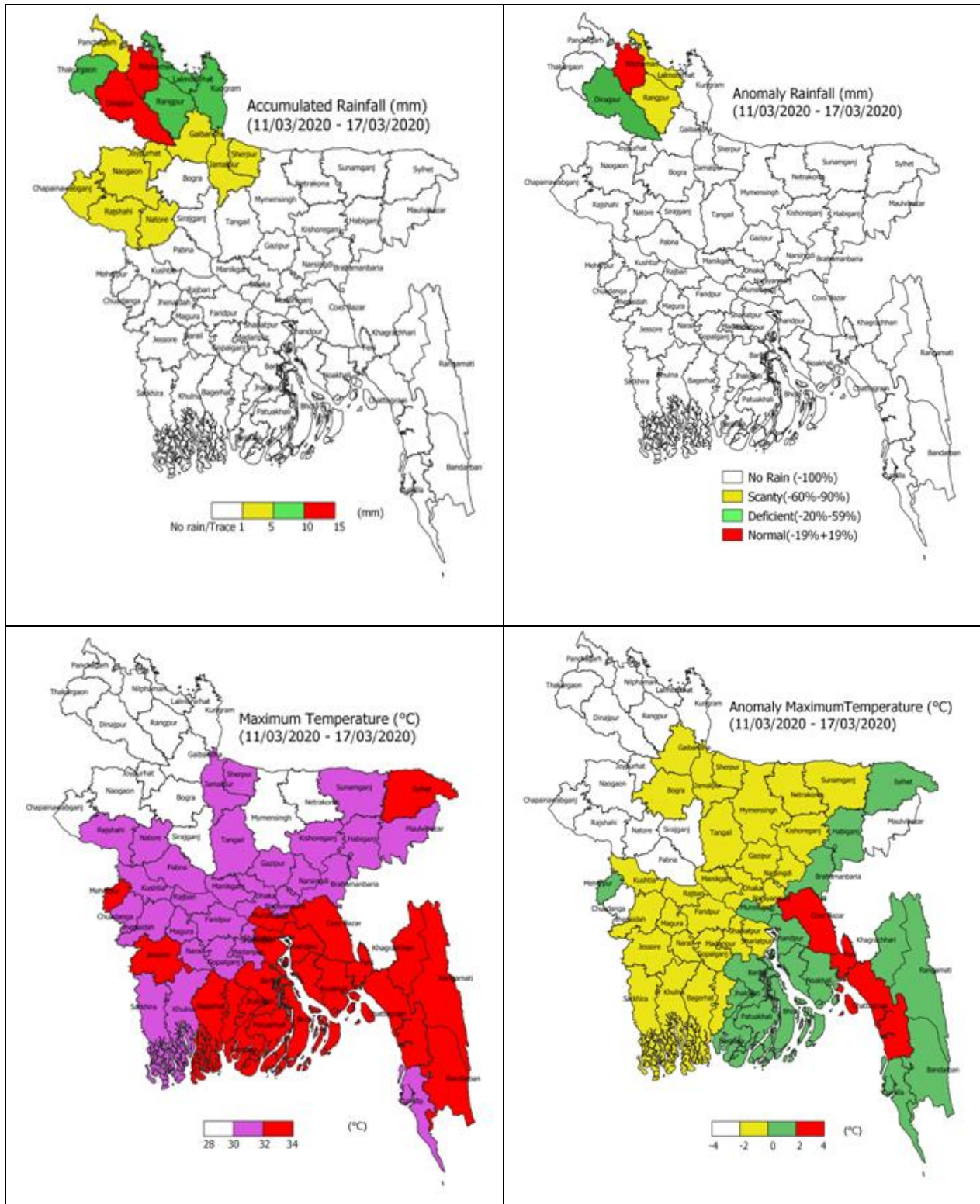
- Country average bright sunshine hour was 7.72 hours per day during last week.
- Country average free water loss during the previous week was 3.54 mm per day.

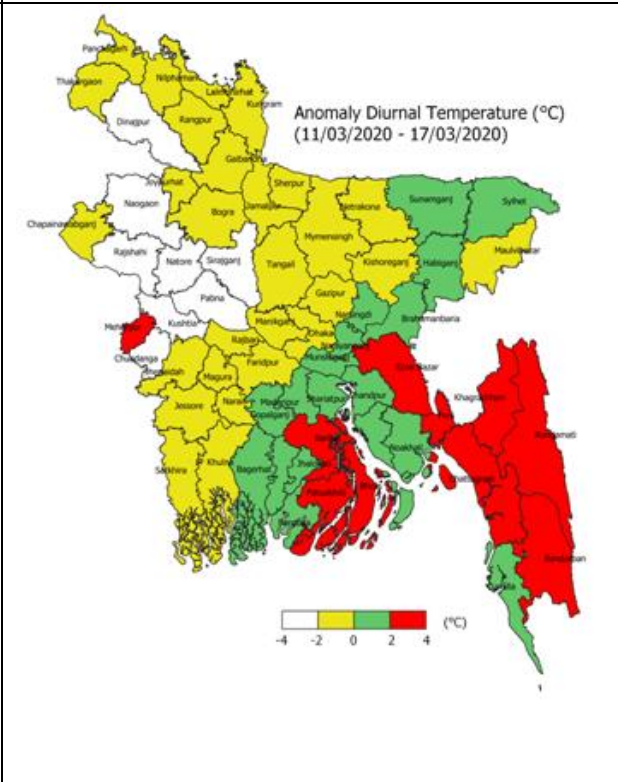
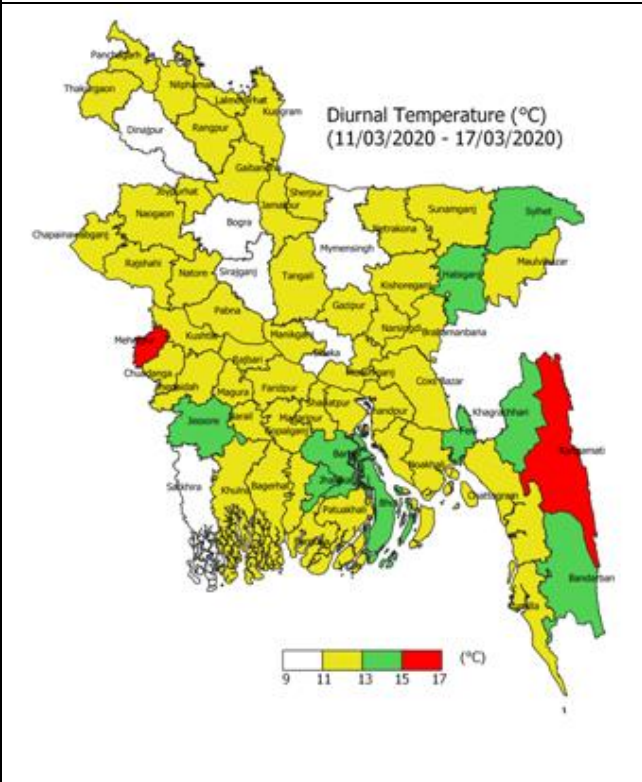
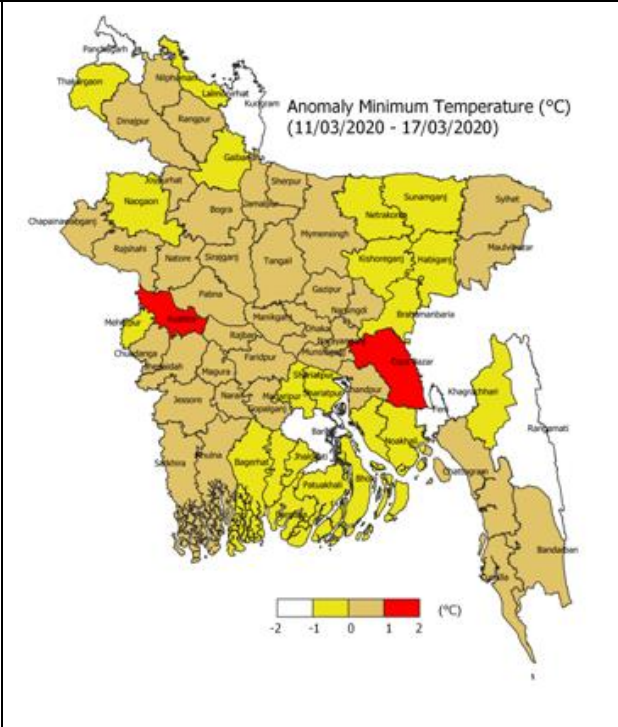
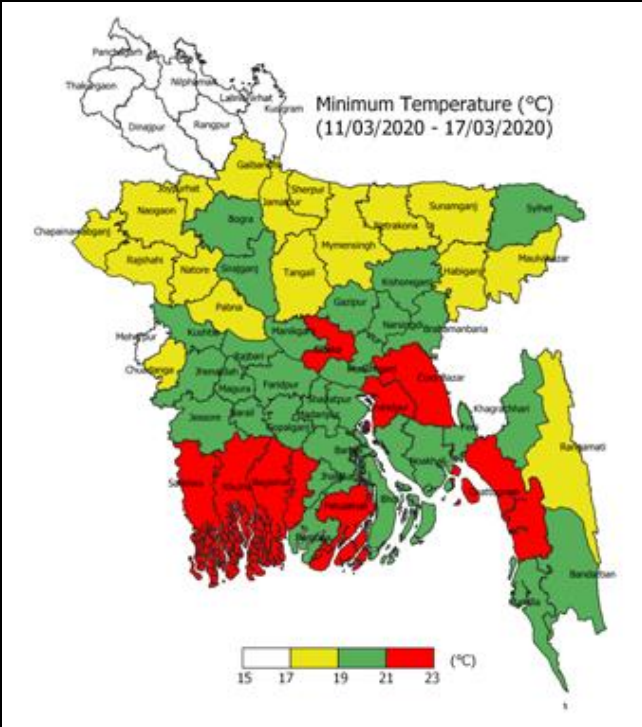
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

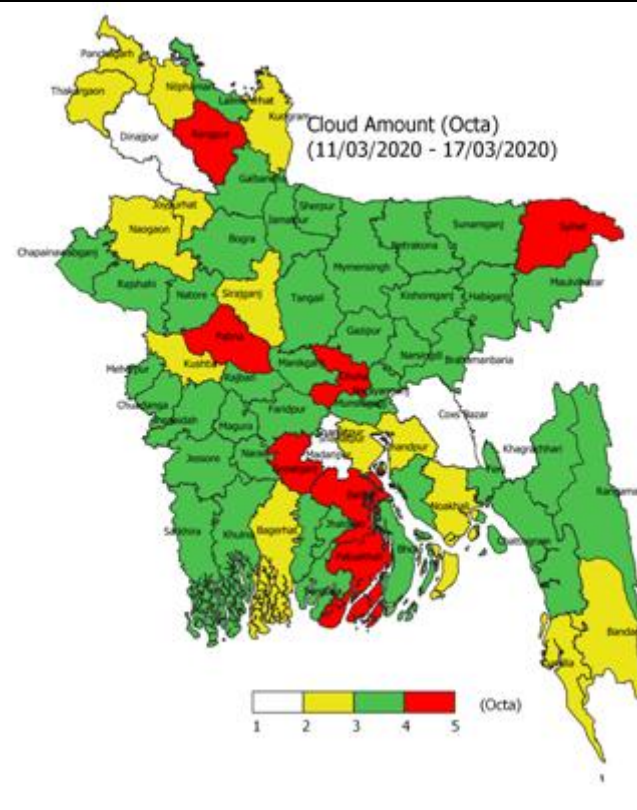
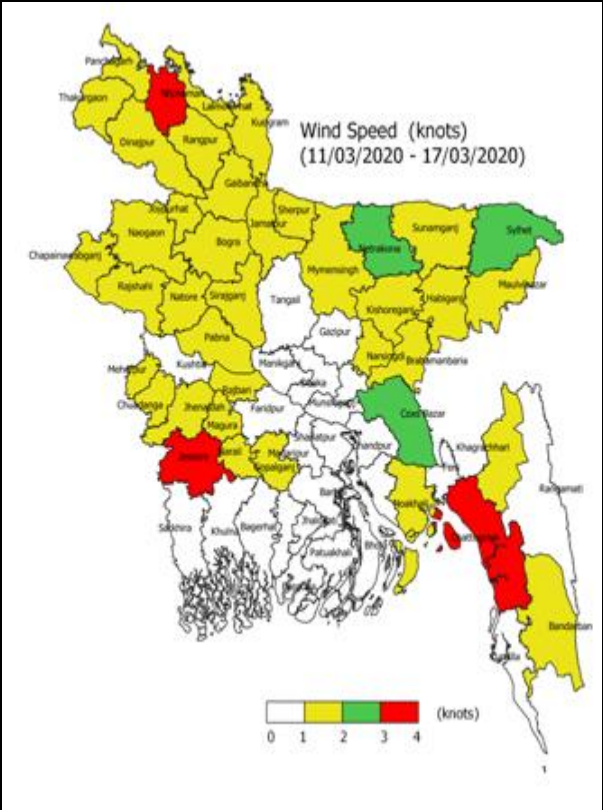
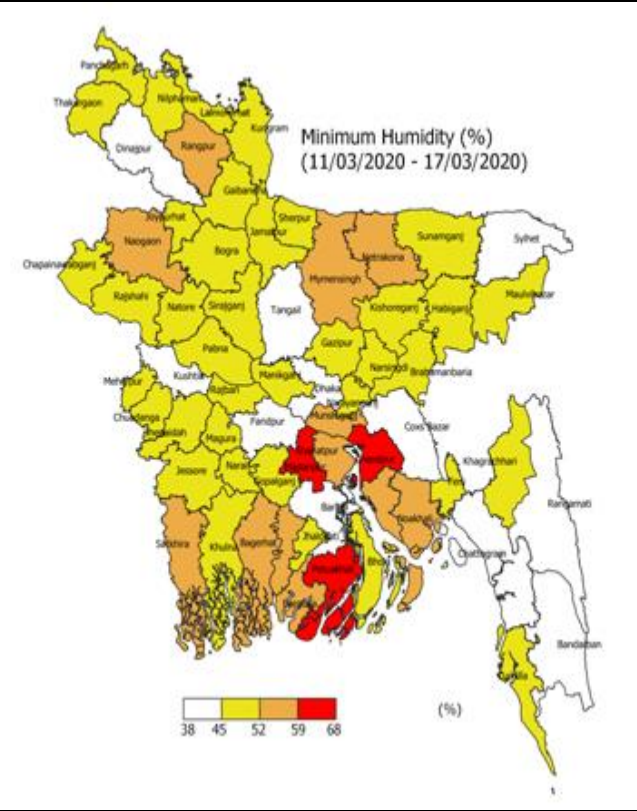
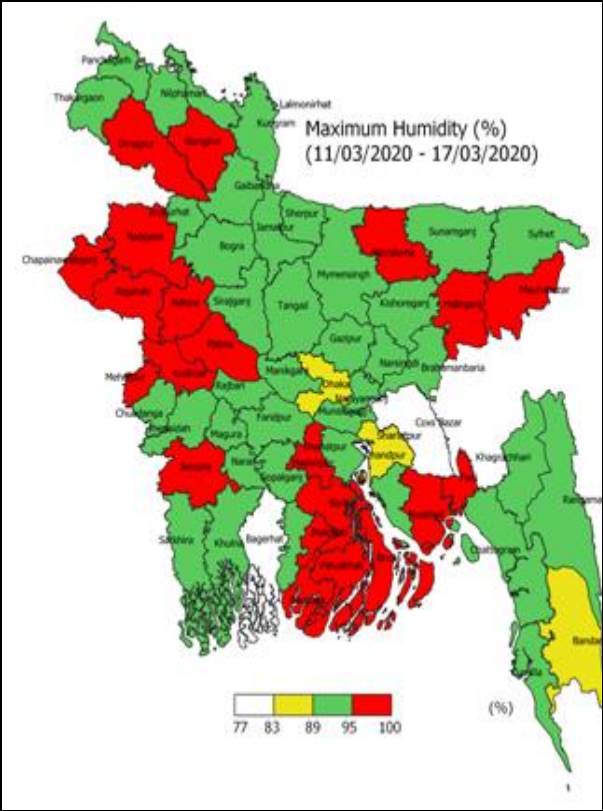
Forecast: Weather is likely to remain dry with partly cloudy sky over the country.

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

Spatial Distribution of weather parameters for the Week ending 17 March 2020





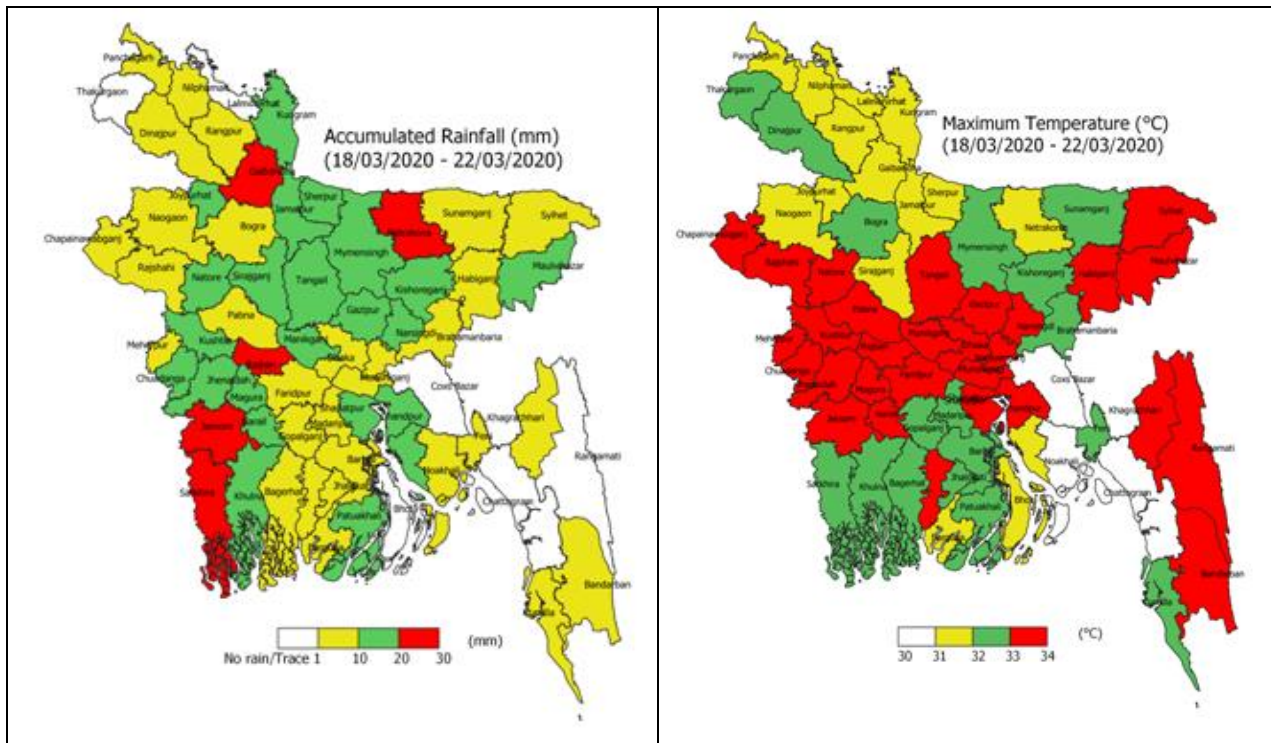


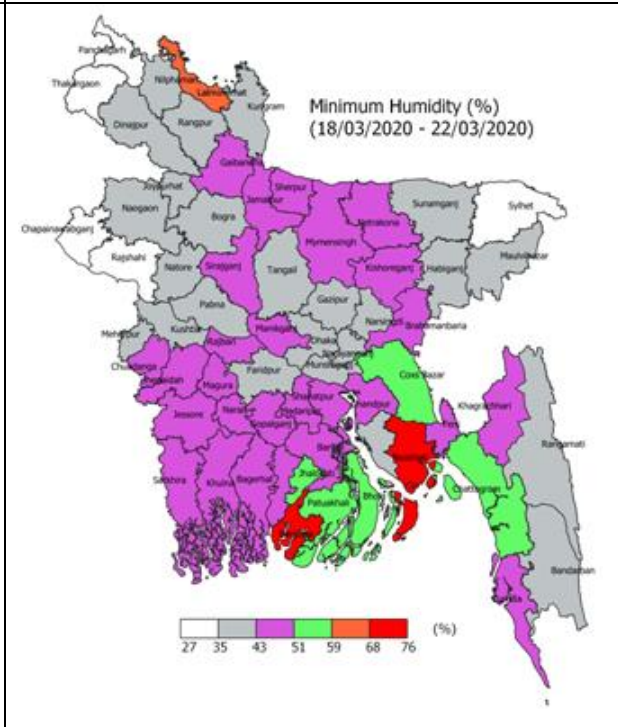
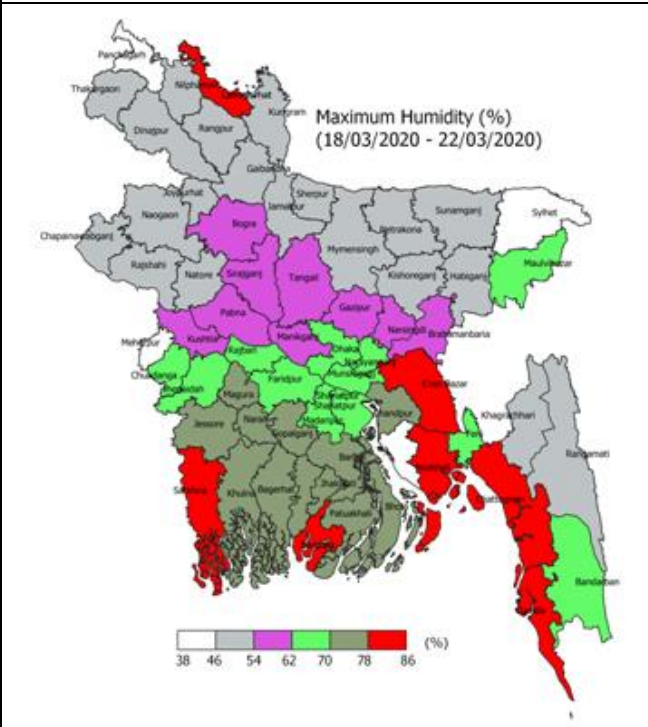
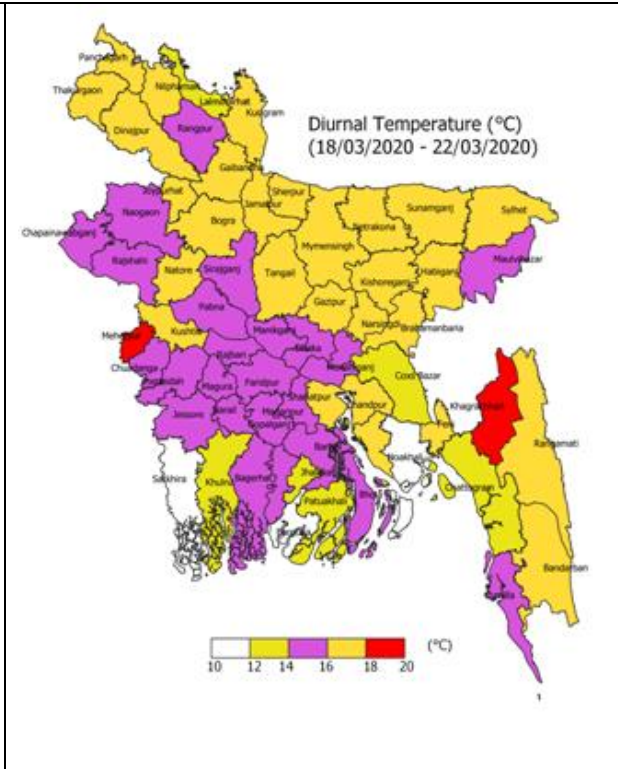
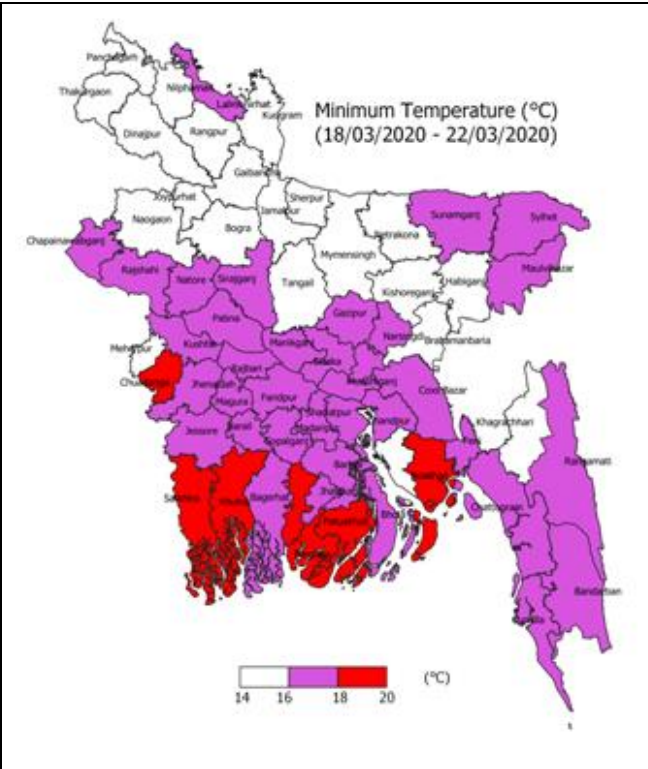
Weather Forecast and Advisory for the Period of 15.03.2020 to 21.03.2020

Bright sunshine hour is likely to be from 7.00 to 8.00 hours per day during this week. Average free water loss is likely to be from 3.25 to 4.25 mm per day during this week.

- Weather may remain mainly dry over the country having chances of light (04-10 mm/d) rain /thunder shower at isolated places with hail by temporary gusty wind during the first half of this period. And light (04-10 mm/d) to moderate (11-22 mm/d) rain /thunder shower with hail by temporary gusty/squally wind at a few places over the country during the second half of this period.
- Slightly rise in day and night temperature over the country during this period.

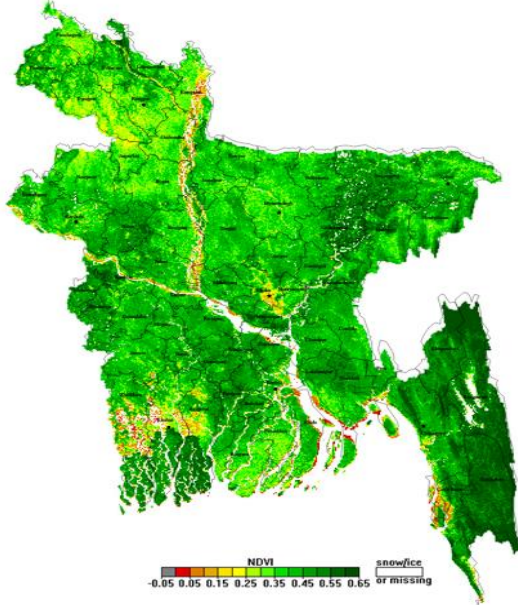
District Wise Quantitative Weather Forecast for next Five days from 18 March -22 March'2020



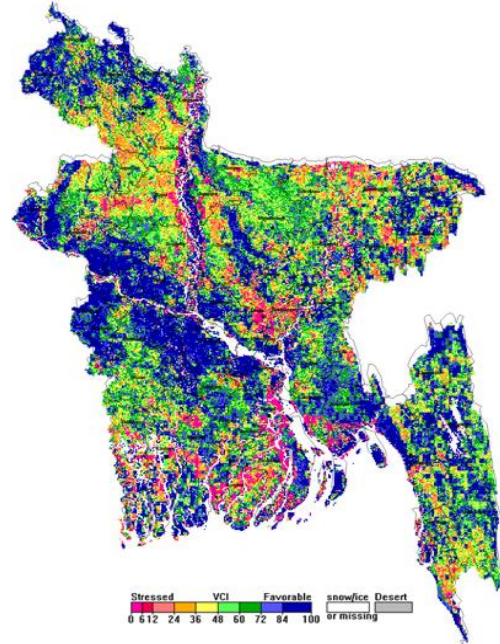


Different Satellite Products over Bangladesh

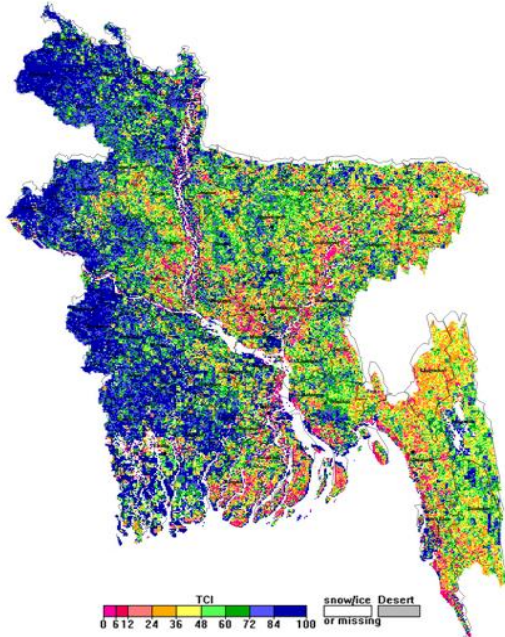
NOAA/VIIRS BLENDED NDVI composite for the week No. 10 (03 March-09 March 2020) over Agricultural regions of Bangladesh



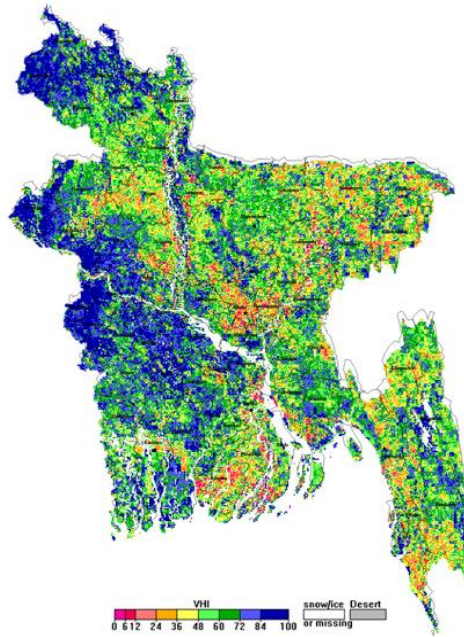
NOAA/ AVHRR BLENDED VCI composite for the week No. 10 (03 March-09 March 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 10 (03 March-09 March 2020) over Agricultural regions of Bangladesh

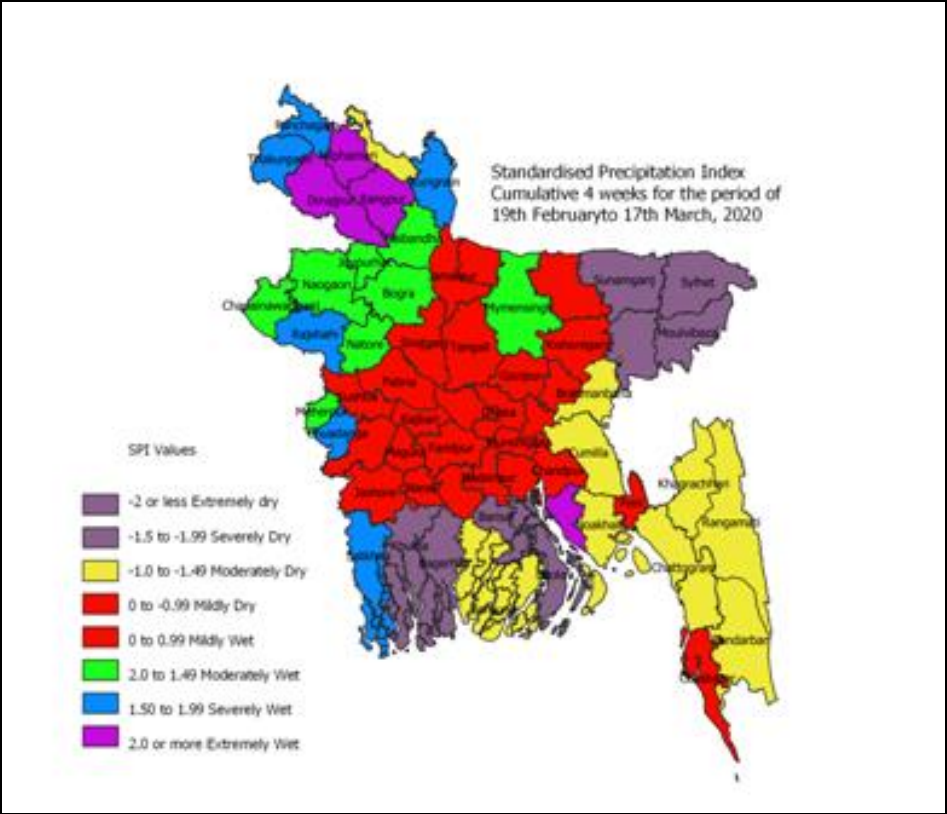


NOAA/ AVHRR BLENDED VHI composite for the week No. 10 (03 March-09 March 2020) over Agricultural regions of Bangladesh



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 southwestern 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