



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

11 MARCH 2020 (WEDNESDAY)
[FOR THE PERIOD 11.03.2020 – 15.03.2020]



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 may remain mainly dry with temporary partly cloudy sky over the country, having chances of rain/thunder showers at one or two places over Rajshahi, Khulna & Dhaka divisions. Day and night temperature may rise slightly over the country. As per the outlook issued by BMD for next 72, little change is likely. During last four days, almost dry condition prevailed over the country and as per the quantitative medium range weather forecast, almost dry condition is likely during next five days in most of the districts except Jhenaidah, Chuadanga, Kushtia, Manikganj, Rajshahi where more than 5mm rainfall is expected. Detail Agromet advisories issued to the district, where dry condition prevailed during last four day and dry condition is expected during next five days are given below.

Vegetables.

- 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.
- 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.

Boro Paddy

- Alternate wetting and drying maintain water level 5-7 cm upto the appearance of panicle.
- Maintain 2-5 cm water level upto from panicle initiation to booting stages
- 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.
- 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 and
- 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

Wheat

- If not done, apply 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 after the current spell of rainfall and thereafter irrigation is advised.

Mustard

- Because of cloudy weather conditions, there are chances of aphids in late sown mustard crop. If observed, then spraying of Chlorpyrifos 20% EC@ 1.0 litre/ha or Monocrotophos 36 % S.L. @ 500 ml/ha with 500-600 litre of water solution on clear sky is advised.
- Mustard sown during October is at maturity stage, go for harvesting and dry the plants under sun for easy threshing and safe storage
- Advise to harvest mustard if the 80% crop is in matured stage.
- If the mustard crop is at pod formation stage; go for intercultural operations.
- Alternaria blight may infect the mustard plant under the present weather condition. Spraying of Iprodione @2 g / L of water group pesticide is advised.
- Be watchful for aphid in mustard crop. If seen, spray of Malathion @2ml/ L water There is a chance of incidences of Pod borer. Hand picking followed by burning of the infected parts should be done for its control.
- Spray 1 kg Cuppor Oxychloride or 800 g Dethane-M 45/acre in 200 litre water to control leaf blight disease

Maize

- It is advised to prepare silage from the harvested maize and other pulse crops to overcome shortage of green fodder.
- 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.
- Apply 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.

Lentil

- Undertake harvest of matured earlier sown lentil. Collect the crop at morning to reduce shattering losses. All these operations should be done
- Avoid irrigation & drain out excess water, if any, from the field.
- There is chance of incidence of Stemphylium blight under the present weather condition. If noticed, spray of Iprodione/ Tebuconazole or mixture of these two fungicides @ 2 g / liter of water 3-4 times with 7 days' interval and
- 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.

Potato

- Early to medium duration variety of potato matures within 80-120 days. Farmers are advised to stop irrigation and remove the upper leaves/parts of the crop before 7 – 10 days of digging
- Early sown & where 80% plants found mature complete harvesting the matured potato tubers and transfer it to a safer location as early as possible.
- When plant leaves became yellow harvest the crop and keep the tubers in shed at a height of 1.2 to 2 ft for hardening of tuber skin.
- Dig the potato carefully to avoid damage of crop. Hip the potato in the field for hardening. For better marketing grade the potato in three sizes. Store the smallest size for seed purpose for next season.
- Keep the irrigation channel weed free.
- If required, second weeding followed earthing may be taken up after 55-60 days. Do proper earthing up with friable soil.
- Monitor the incidences of pests (termite) & diseases (late blight, bacterial wilt, fusarium wilt, leaf roll virus) and if noticed, take appropriate preventive measure.
- Smoking around the field is the preventive measures against the attack of disease pathogens.
- As there is chance of the late blight disease in the district. If noticed, prophylactic spray of Mancozeb @2gm/L water.
- Due to favourable weather conditions attack of red ant may be observed in the potato field. Farmers are advised to apply Phorate 10% granules @ 2kg/bigha or Malathion 5% dust @ 5kg/bigha in the soil at the time of earthing up and
- Present weather is congenial for Katui pest infestation. For pest control use of pheromone trap. Also spray Carbofuran @ 20 kg/ha/ Chlorpyrifos @ 5ml/L water at 15 days' interval and
- Cold and cloudy weather favours the infestation of aphids. Spray Malathion group pesticide

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 Imidachloprid 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) Imidacloprid @ 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.

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.
- To avoid fruit, fall in mango crop, it is advised to spray Planofix regulator 20 ppm and 1% Calbor micronutrient.
- 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.
- avoid moisture stress conditions to the crops which are at flowering to fruiting stage.
- Apply coir compost to conserve moisture in banana
- Young banana plants of 3-4 months' age are prone to attack of pseudostem weevil; spray Chloripyriophos 2 ml/litres of water.
- 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.
- To protect mango plants from mealy bug, spray Imidacloprid 17.8 SL @ 1 ml /3 litres of water
- 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.
- 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

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, 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.
- 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 11 March'2020) and maximum temperature on 10 March, minimum temperature on 11 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	30.6	18.3	Rajshahi	Rajshahi	00	30.0	15.9
	Tangail	00	30.0	16.1		Ishurdi	00	30.0	15.3
	Faridpur	00	30.3	17.3		Bogura	00	29.2	17.0
	Madaripur	00	30.8	16.8		Badalgachhi	00	28.5	15.9
	Gopalganj	00	30.0	18.4		Tarash	00	28.0	17.3
	Nikli	00	29.4	16.2					
Mymensingh	Mymensingh	00	29.5	16.1	Rangpur	Rangpur	00	29.0	16.0
	Netrokona	00	29.0	15.8		Dinajpur	00	28.5	15.0
						Sayedpur	00	29.5	15.5
Chattogram	Chattogram	00	29.8	19.5		Tetulia	00	29.0	14.5
	Sandwip	00	30.4	16.5		Dimla	00	28.0	15.7
	Sitakunda	00	30.7	15.4		Rajarhat	00	28.7	14.5
	Rangamati	00	31.0	15.3	Khulna	Khulna	00	29.8	19.6
	Cumilla	00	29.6	17.3		Mongla	00	30.8	20.2
	Chandpur	00	31.0	18.8		Satkhira	00	30.2	19.6
	M. Court	00	29.4	19.0		Jashore	00	<u>31.4</u>	17.6
	Feni	00	30.3	16.8		Chuadanga	00	30.4	16.5
	Hatiya	00	30.0	17.2		Kumarkhali	00	29.8	18.0
	Cox's Bazar	00	31.0	19.5	Barishal	Barishal	00	30.9	17.7
Kutubdia	00	29.5	17.6	Patuakhali		00	31.1	19.0	
Teknaf	00	30.5	21.2	Khepupara		00	<u>31.4</u>	19.0	
Sylhet	Sylhet	00	30.5	16.9		Bhola	00	30.5	18.2
	Srimangal	00	30.0	<u>12.6</u>					

Highlights:

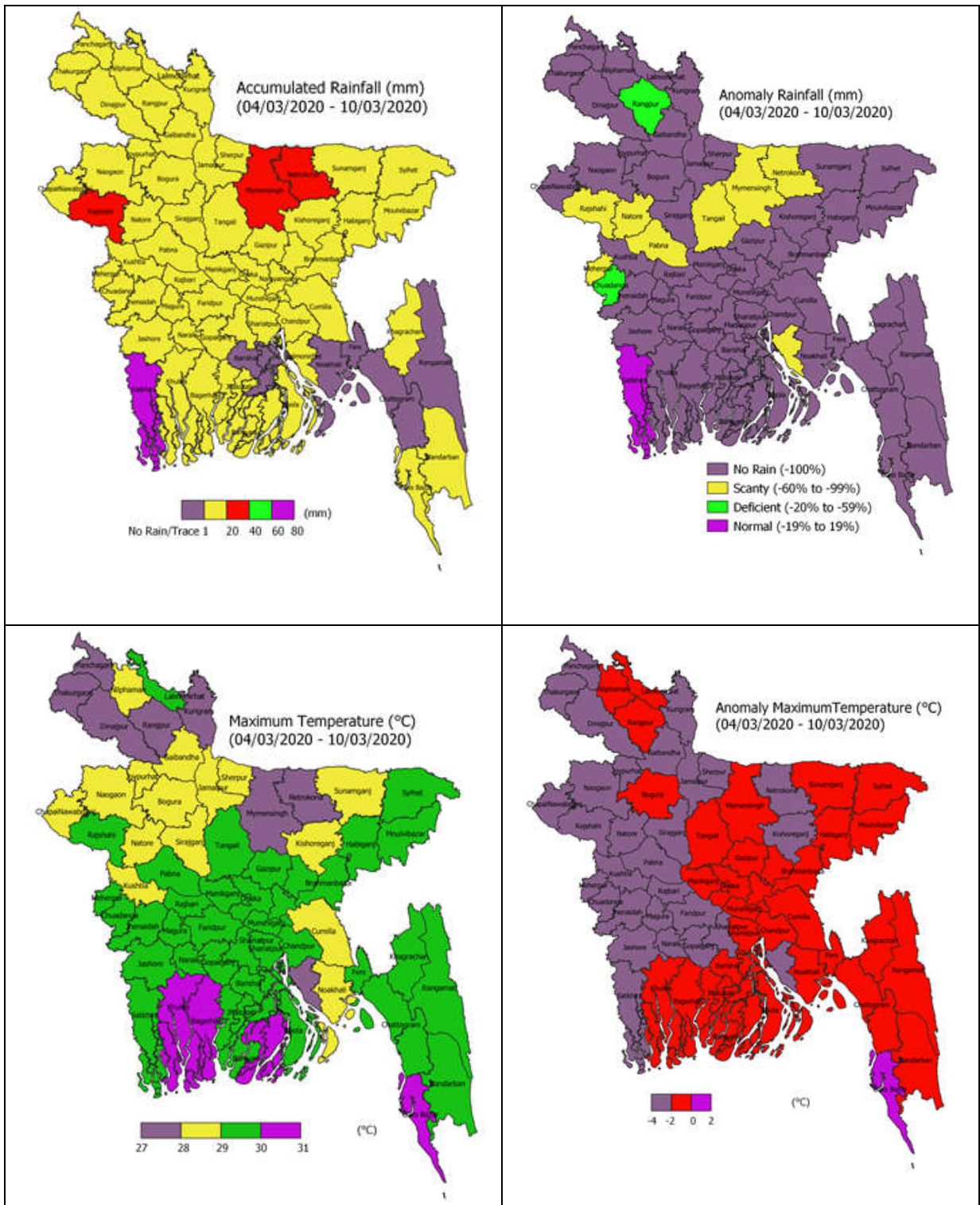
- Country average bright sunshine hour was 5.40 hours per day during last week.
- Country average free water loss during the previous week was 3.03 mm per day.

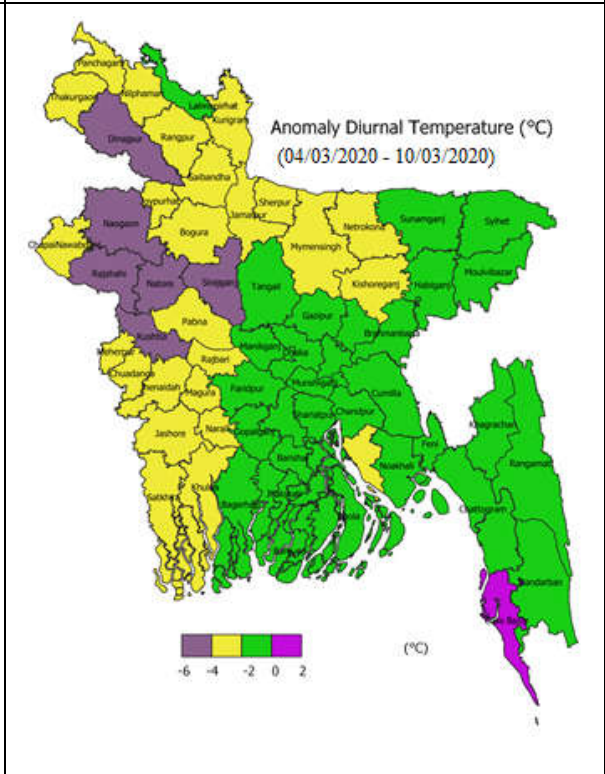
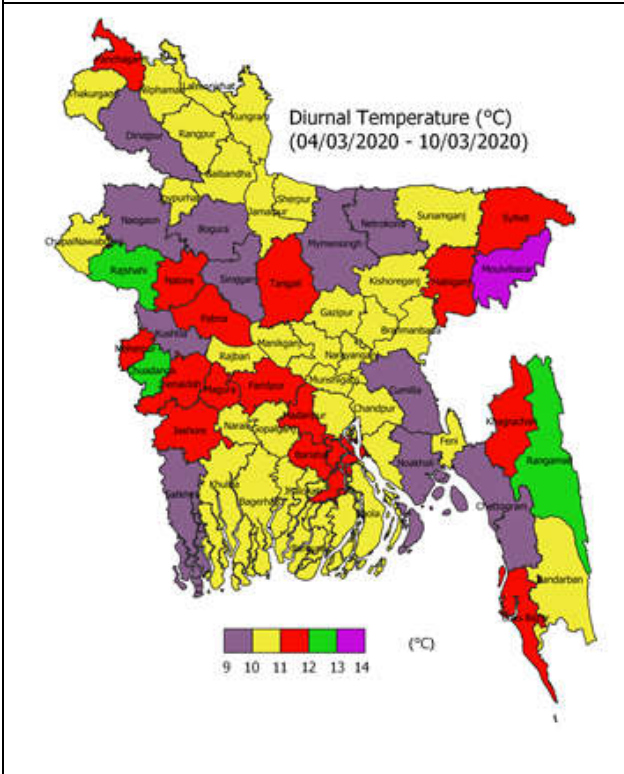
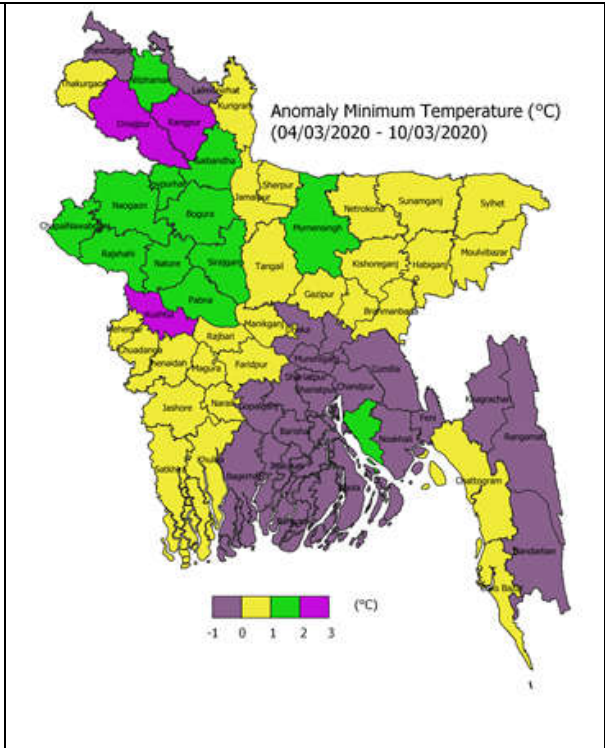
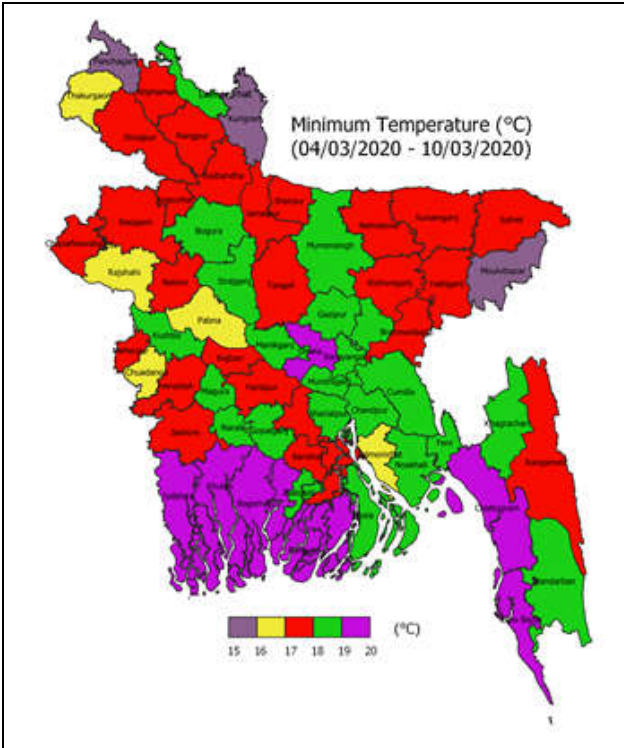
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

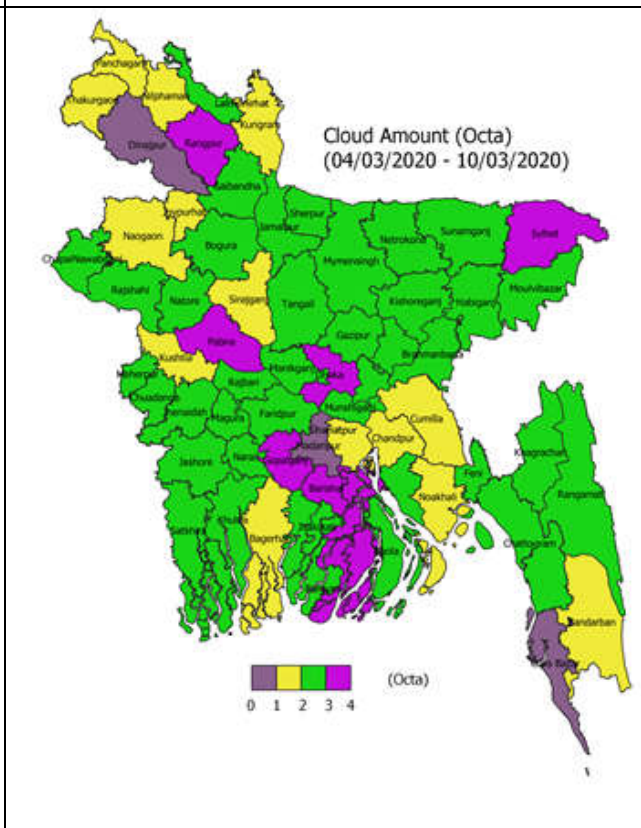
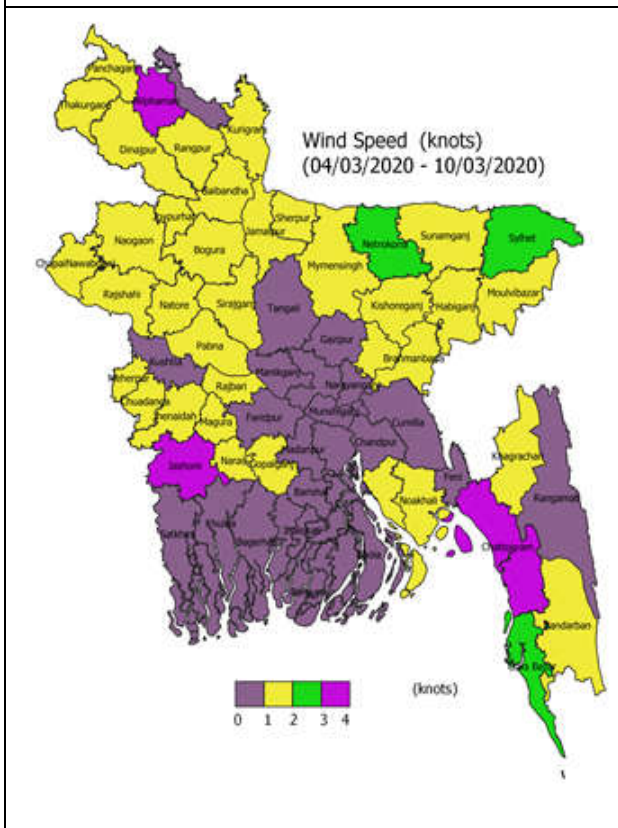
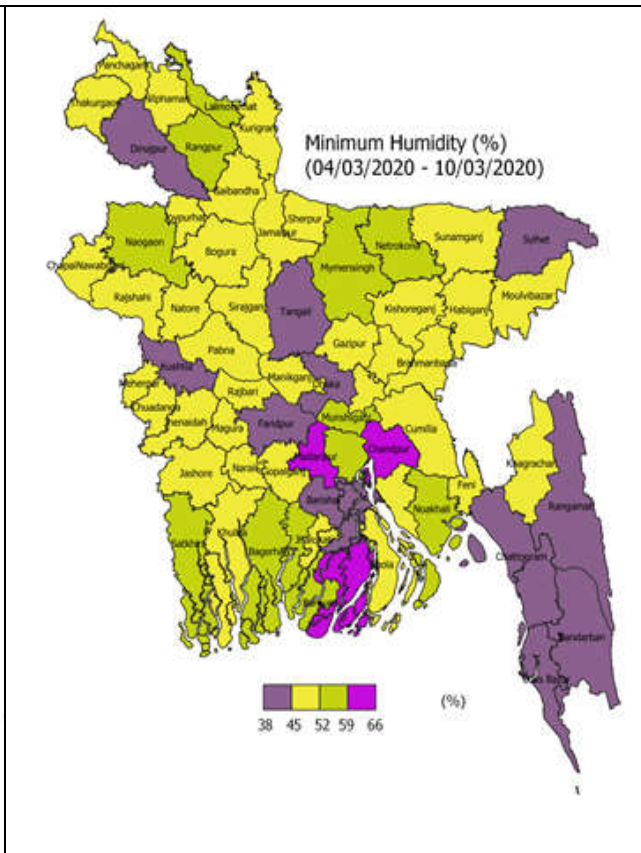
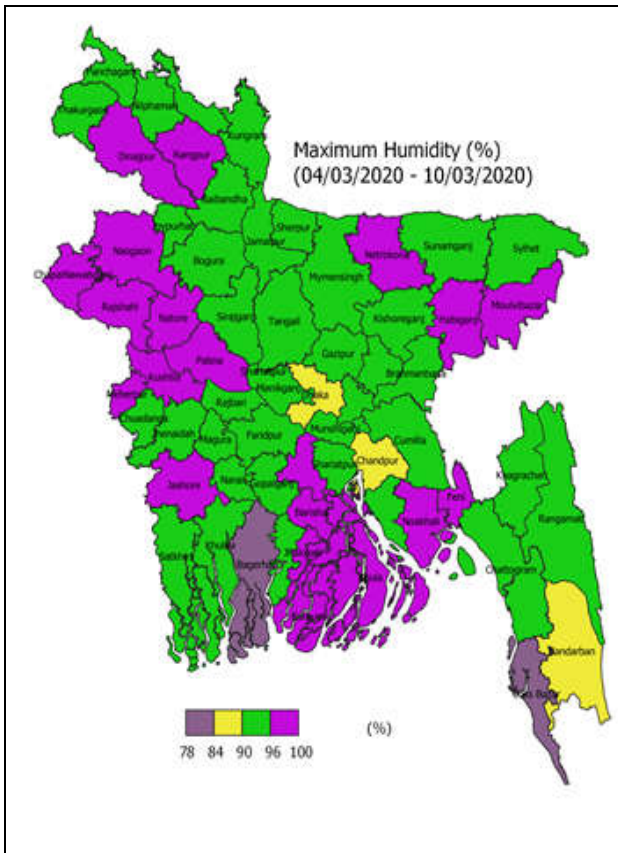
Forecast: Weather may remain mainly dry with temporary partly cloudy sky over the country, having chances of rain/thunder showers at one or two places over Rajshahi, Khulna & Dhaka divisions.

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

Spatial Distribution of weather parameters for the Week ending 10 March 2020





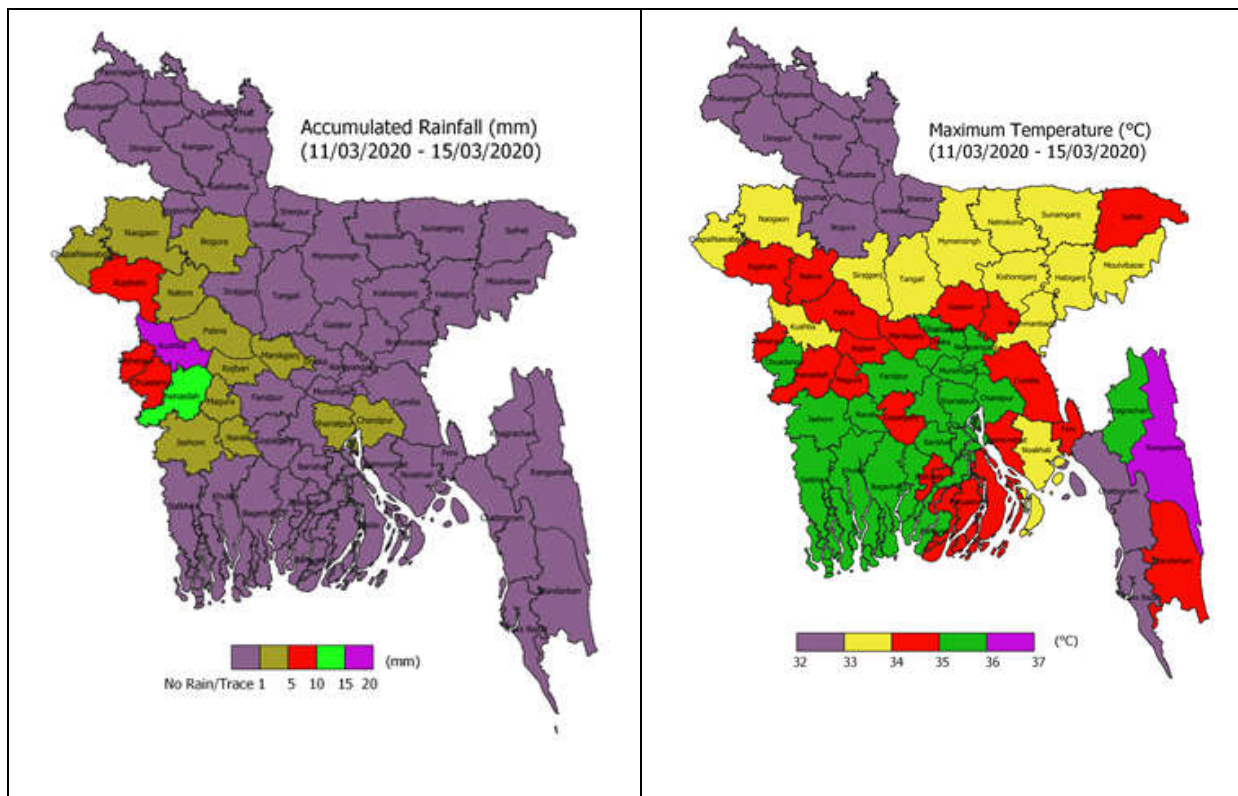


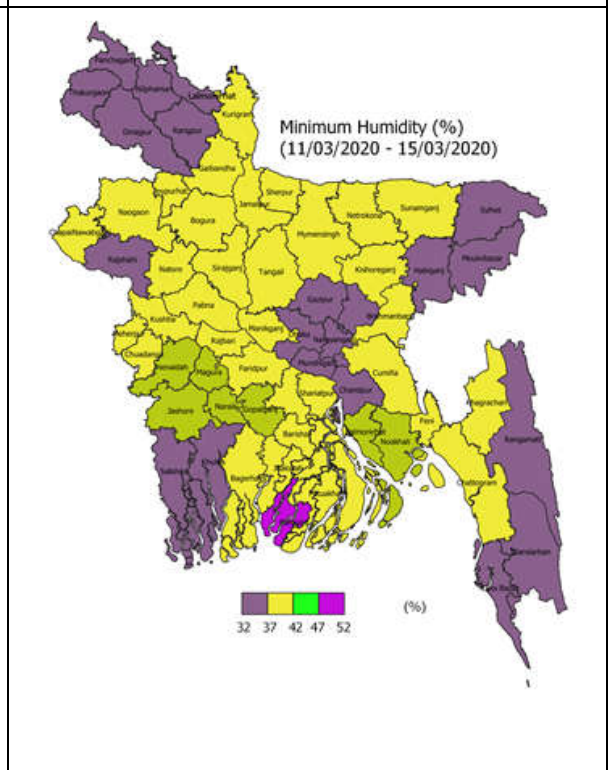
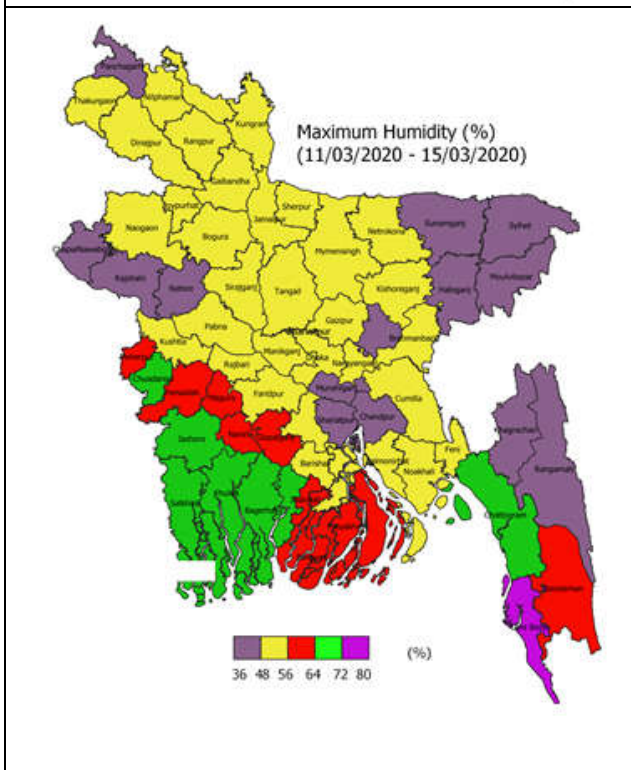
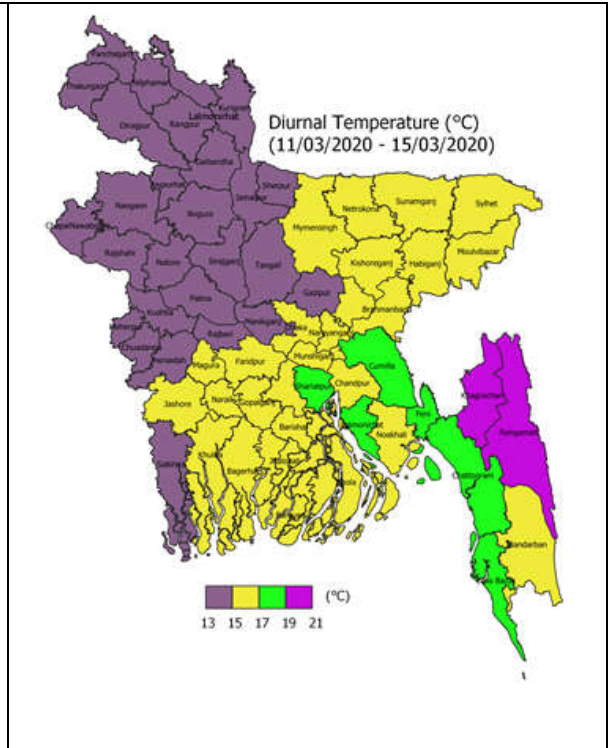
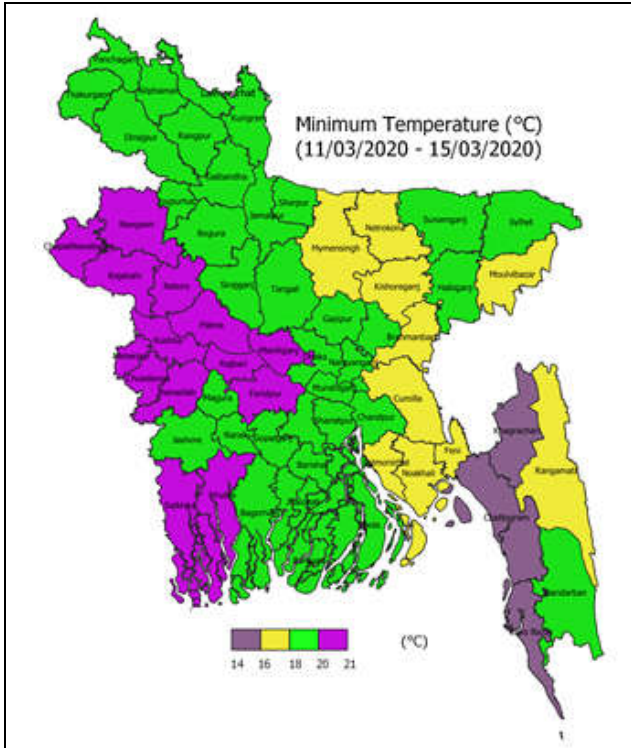
Weather Forecast and Advisory for the Period of 08.03.2020 to 14.03.2020

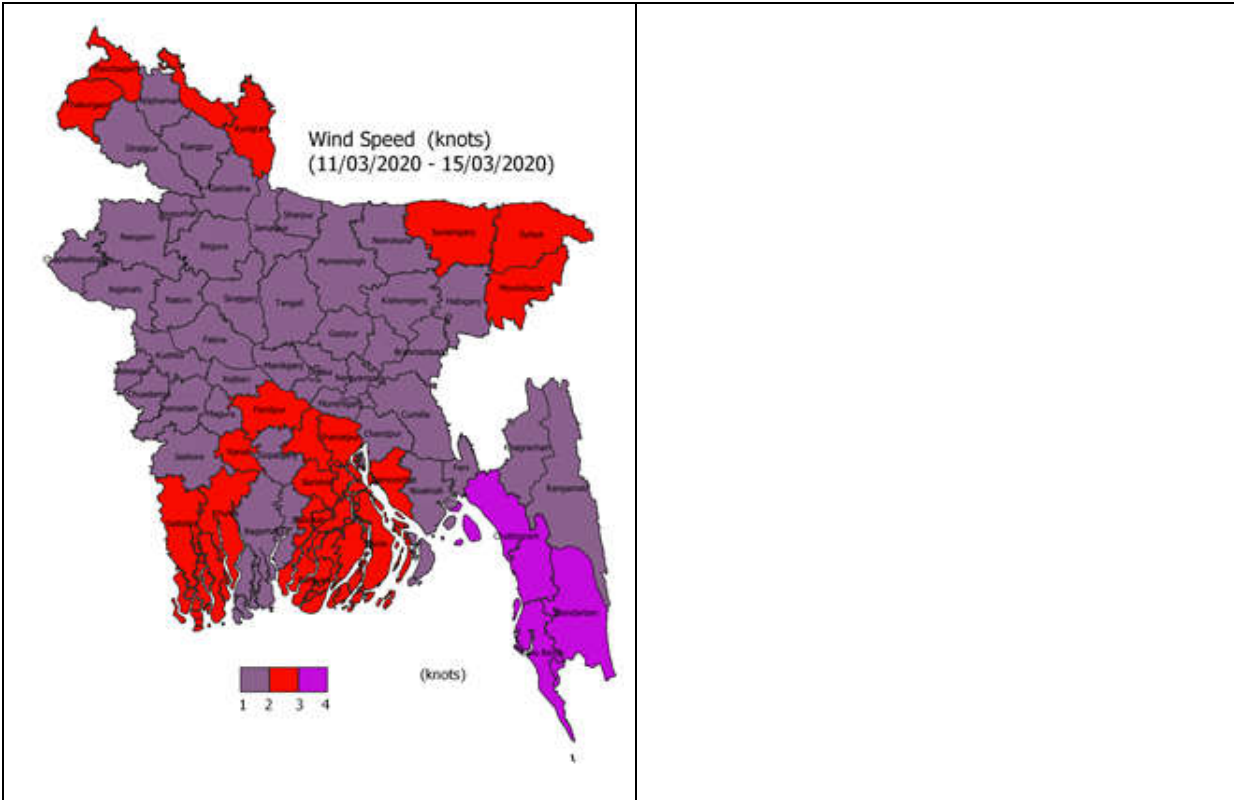
Bright sunshine hour is likely to be from 6.00 to 7.00 hours per day during this week. Average free water loss is likely to be from 2.50 to 3.50 mm per day during this week.

- Weather may remain mainly dry over the country having chances of light (04-10 mm/d) rain/thunder showers at isolated place with hail by temporary gusty wind over the country during this period.
- Day and night temperature may rise slightly over the country during this period

District Wise Quantitative Weather Forecast for next Five days from 11 March -15 March'2020

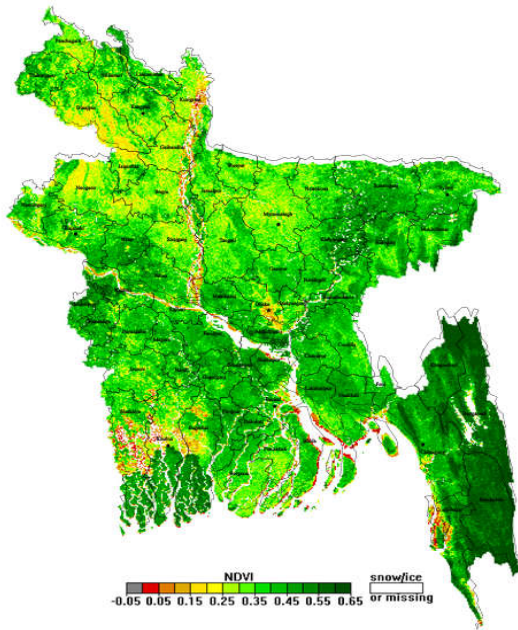




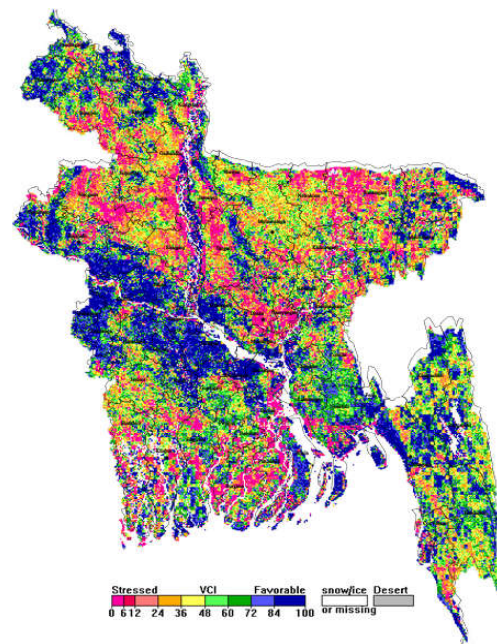


Different Satellite Products over Bangladesh

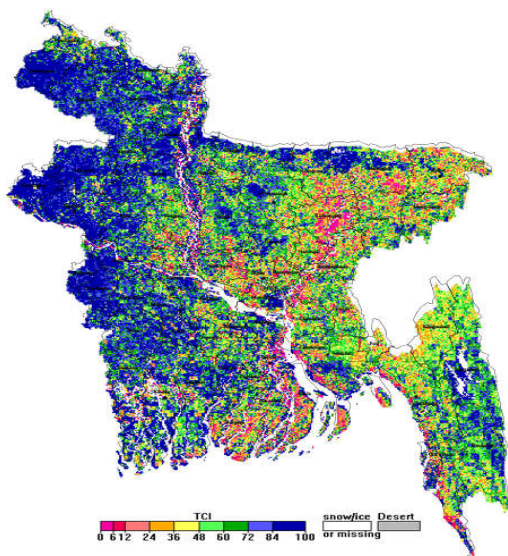
NOAA/VIIRS BLENDED NDVI composite for the week No. 09 (25 February-02 March 2020) over Agricultural regions of Bangladesh



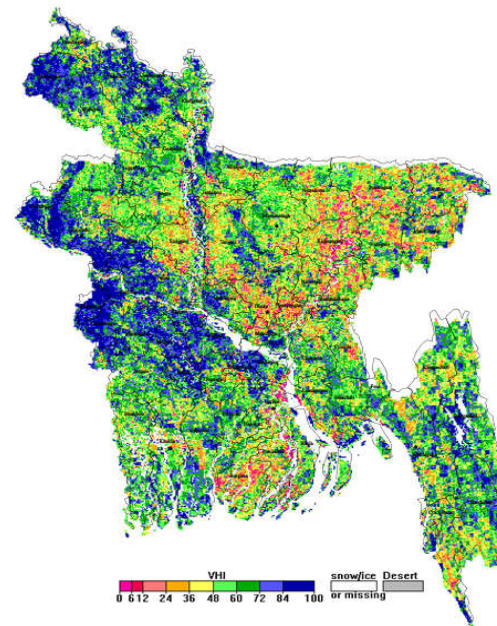
NOAA/ AVHRR BLENDED VCI composite for the week No. 09 (25 February-02 March 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 09 (25 February-02 March 2020) over Agricultural regions of Bangladesh

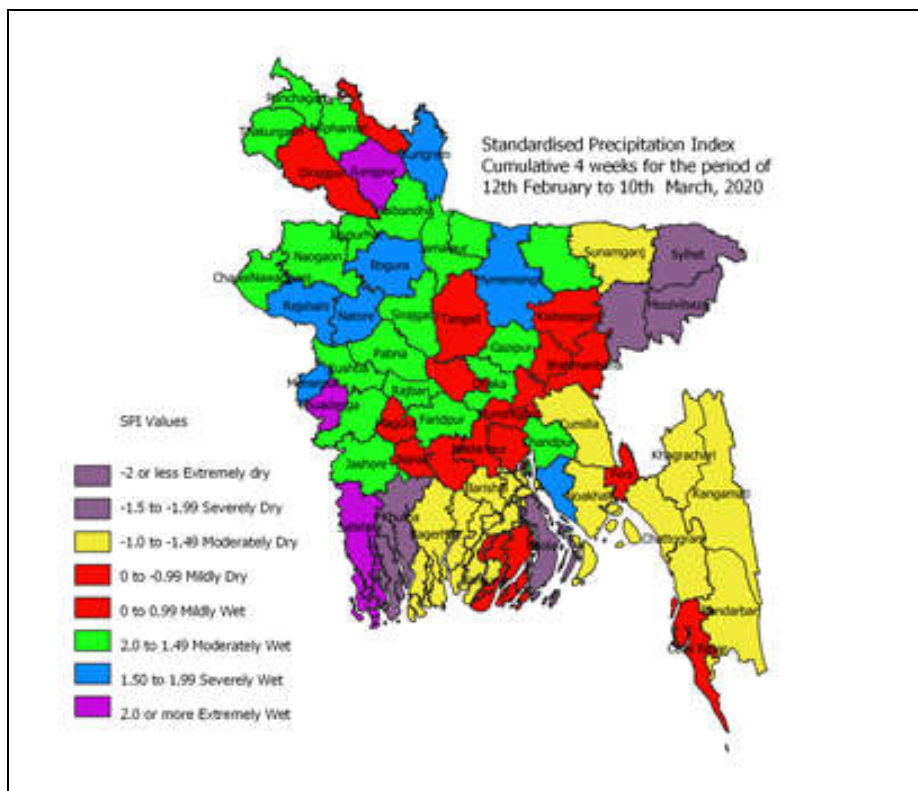


NOAA/ AVHRR BLENDED VHI composite for the week No. 09 (25 February-02 March 2020) over Agricultural regions of Bangladesh



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 (Bogura, Nilphamari) and mild to moderately wet condition prevails in northwest and southeast and northeast parts were prevailed extremely dry conditions of Bangladesh for last four weeks.



Data source: Bangladesh Meteorological Department