



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

04 MARCH 2020 (WEDNESDAY)
[FOR THE PERIOD 04.03.2020 – 08.03.2020]



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, rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at a few places over Khulna, Rajshahi, Mymensingh, Dhaka & Sylhet divisions and at one or two places over Rangpur, Barishal & Chattogram divisions with hails at isolated places. Day and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72, little change is likely. As per the quantitative medium range weather forecast, light to moderate and even heavy rainfall is likely during next five days. Thus, advisories for postponing of harvesting of rabi crops and reframing from application of irrigation, fertilisers and pesticides are also advised. Considering the realized weather along with weather forecast, and state and stage of the crops, agromet advisories are issued for different districts separately. Following are the salient agromet advisories for the districts where good amount of rainfall is expected during next five days. Salient Agromet Advisories for livestock, poultry and fishery are also mentioned.

Agromet Advisories

Vegetables

- Avoid application of fertilizer, pesticides, irrigation.
- Drain out excess water from the field.
- 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.
- 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 after the current spell of rainfall.
- In view of dry weather, regular monitoring is advised for thrips infestation in onion.

Boro Paddy

Recovery to Tillering Stages:

- Alternate wetting and drying maintain water level 5-7 cm upto the appearance of panicle. Utilise this rainfall for maintaining of water level in main field.
- 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 after the current spell of rainfall for its control.
- Before spray the insecticide, drain out the irrigated water from the plots and after the current spell of rainfall.
- 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. Spray Nativo 75wg/ Trooper@ 0.6g/litre of water . or Amister top 325 sp@ 1ml/litre of water after the current spell of rainfall.

- For brown spot attack spray apply fertilizer management and spray Thiovit+Potash after the current spell of rainfall.
- Spraying should be done during afternoon hours or at morning hours from 10:00 a.m. to 11:00a.m

Wheat

Heading to Hard Dough stages

- Postpone application of 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 as there is chance of the disease due to likely incidence of fog over the district during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease after the current spell of rainfall.
- For the treatment of rust disease of wheat apply Hexaconazol@1ml/litre water or Tebuconazol/Carbendazim @ 1ml/litre water after the current spell of rainfall.
- To control cutworm in wheat crop, apply Carbofuran @ 20 kg/ha or Chlorpyrifos @ 5ml/L water at 15 days interval and after the current spell of rainfall.
- For control of aphids in wheat undertake spray of Malathion group @ 2ml. per litre water after the current spell of rainfall.
- To control Alternaria blight, spraying of Iprodione @2 g / L of water group pesticide is advised after the current spell of rainfall.
- 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 Chlorpyriphos group pesticide is suggested in the evening hour and thereafter irrigation is advised after the current spell of rainfall.

Mustard

- Mustard sown during October is at maturity stage, go for harvesting after the current spell of rainfall and dry the plants under sun for easy threshing and safe storage
- Advise to harvest mustard if the 80% crop is in matured stage after the current spell of rainfall.
- Postpone irrigation mustard crop at seed formation stage (60-65 days) as rainfall is likely.
- If the mustard crop is at pod formation stage; go for inter-cultural operations.
- Farmers are advised not to spray any insecticide during the flowering stage and after the current spell of rainfall. , which may kill the pollinated insects lead to reduce the yield.
- Occurrence of saw fly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- Alternaria blight may infect the mustard plant under the present weather condition. Spraying of Iprodione @2 g / L of water group pesticide is advised after the current spell of rainfall.
- Be watchful for aphid in mustard crop. If seen, spray of Malathion @2ml/ L water after the current spell of rainfall.
- The present weather condition is favorable for incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised after the current spell of rainfall.

- Farmers are advised to keep vigilance on hairy caterpillar.
- There is a chance of incidences of Pod borer. Hand picking followed by burning of the infected parts should be done for its control.
- Present weather condition is favourable for incidence of White mold. Farmers are advised to apply Iprodione group fungicide to control the disease after the current spell of rainfall.
- Present weather may favour the infestation of leaf webber. To control leaf webber spray 200 ml Ithofenprox or Deltamethrin per acre after the current spell of rainfall.
- Spray 1 kg Cuppor Oxylchloride or 800 g Dethane-M 45/acre in 200 litre water to control leaf blight disease after the current spell of rainfall.

Maize

- Ensure proper moisture level during flowering and grain development stages in maize crop.
- Postpone third irrigation between 60-70 days after sowing of the crop as rainfall is likely.
- Monitor the incidences of pests (fall army worm, cut worm, leaf hopper & jassid) & diseases (stalk rot, leaf blight) and if noticed, take appropriate preventive measure.
- 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 after the current spell of rainfall.
- There may be attack of leaf blight in maize field. Spray Carbendazim 1ml./litre of water or Propiconazole 2ml./litre of water after first appearance of the disease after the current spell of rainfall.
- 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.
- During clear/dry days, two spray of Cypermethrin at 100 ml/ hectare is effective against stemborer infestation in maize.
- Weeding and earthing up operations may be continued.

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.
- Avoid irrigation & drain out excess water, if any, from the field.
- Monitor the incidences of pests (aphid & pod borer) & diseases (stemphylium blight, foot rot, rust, fusarium wilt) and if noticed, take appropriate preventive measure.
- There is possibility of spreading fungal infestation under this prevailing weather. If so, apply Carbendazim group fungicide as protective measure.
- 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 after the current spell of rainfall.
- Present weather is conducive for the occurrence of wilt disease in lentil. Hence, spraying of Carbendazim @ 1 g/ litre water twice at weekly interval is recommended 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.

Groundnut

- Avoid irrigation as rainfall is likely.
- 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 after the current spell of rainfall.
- 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 after the current spell of rainfall.
- 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. All these operation should be done after the current spell of rainfall.
- 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 after the current spell of rainfall.

Horticultural crops

- Young banana plants of 3-4 months' age are prone to attack of pseudostem weevil; spray Chlorpyriphos 2 ml/litres of water after the current spell of rainfall.
- There is a chance of Boron deficiency in banana. It is advised to spray one-gram Borax per one litre of water after the current spell of rainfall.
- Weather is congenial for bud rot disease in coconut; spray Bordeaux mixture 1% on spindle leaves and crown of disease affected as well as neighbouring palms 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.
- At flowering stage there may be attack of hopper in mango plant. These hoppers suck the juice of the plant particularly from the soft stem and flower and make the plant weak. Malathion @ 2ml per liter of water may be sprayed to manage the attack after the current spell of rainfall.
- Flowering in mango crop has started. Therefore at 50% flowering, irrigation should be given strictly at an interval of 15 days after the current spell of rainfall. More frequent irrigation leads to conversion of flower to vegetative phase.
- There is chance of blackening of tender fruit due to fungal attack in jackfruit. Pluck and destroy the affected fruit.-For preventing the attack spray Carbendazin @ 2g/liter of water after the current spell of rainfall.

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

- 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 04 March'2020) and maximum temperature on 03 March, minimum temperature on 04 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	14	29.8	20.0	Rajshahi	Rajshahi	00	31.6	17.7
	Tangail	00	30.0	17.6		Ishurdi	00	29.5	17.8
	Faridpur	10	27.7	17.8		Bogura	19	30.5	18.8
	Madaripur	16	30.3	17.3		Badalgachhi	00	29.8	18.5
	Gopalganj	06	28.5	18.0		Tarash	00	30.1	18.6
	Nikli	14	30.2	17.0					
Mymensingh	Mymensingh	Trace	29.2	17.6	Rangpur	Rangpur	00	30.0	17.5
	Netrokona	00	29.3	17.6		Dinajpur	00	30.0	17.7
						Sayedpur	00	30.1	17.2
						Tetulia	00	28.9	15.1
Chattogram	Chattogram	00	31.7	20.0	Rangpur	Dimla	00	28.6	16.9
	Sandwip	00	30.5	18.9		Rajarhat	00	29.6	16.0
	Sitakunda	00	32.0	16.3					
	Rangamati	00	30.5	16.5	Khulna	Khulna	01	29.8	19.5
	Cumilla	01	29.2	18.5		Mongla	Trace	30.8	20.5
	Chandpur	28	29.0	18.3		Satkhira	02	29.8	19.7
	M. Court	07	28.6	18.3		Jashore	07	29.8	17.4
	Feni	17	30.0	17.8		Chuadanga	01	30.5	17.5
	Hatiya	00	30.0	19.5		Kumarkhali	02	28.0	18.5
	Cox's Bazar	00	30.4	17.0					
	Kutubdia	00	31.3	19.0	Barishal	Barishal	05	30.2	17.8
	Teknaf	00	30.0	18.0		Patuakhali	00	31.4	20.6
						Khepupara	00	30.7	20.7
Sylhet	Sylhet	00	30.2	17.8	Bhola	02	30.0	17.8	
	Srimangal	01	30.4	15.7					

Highlights:

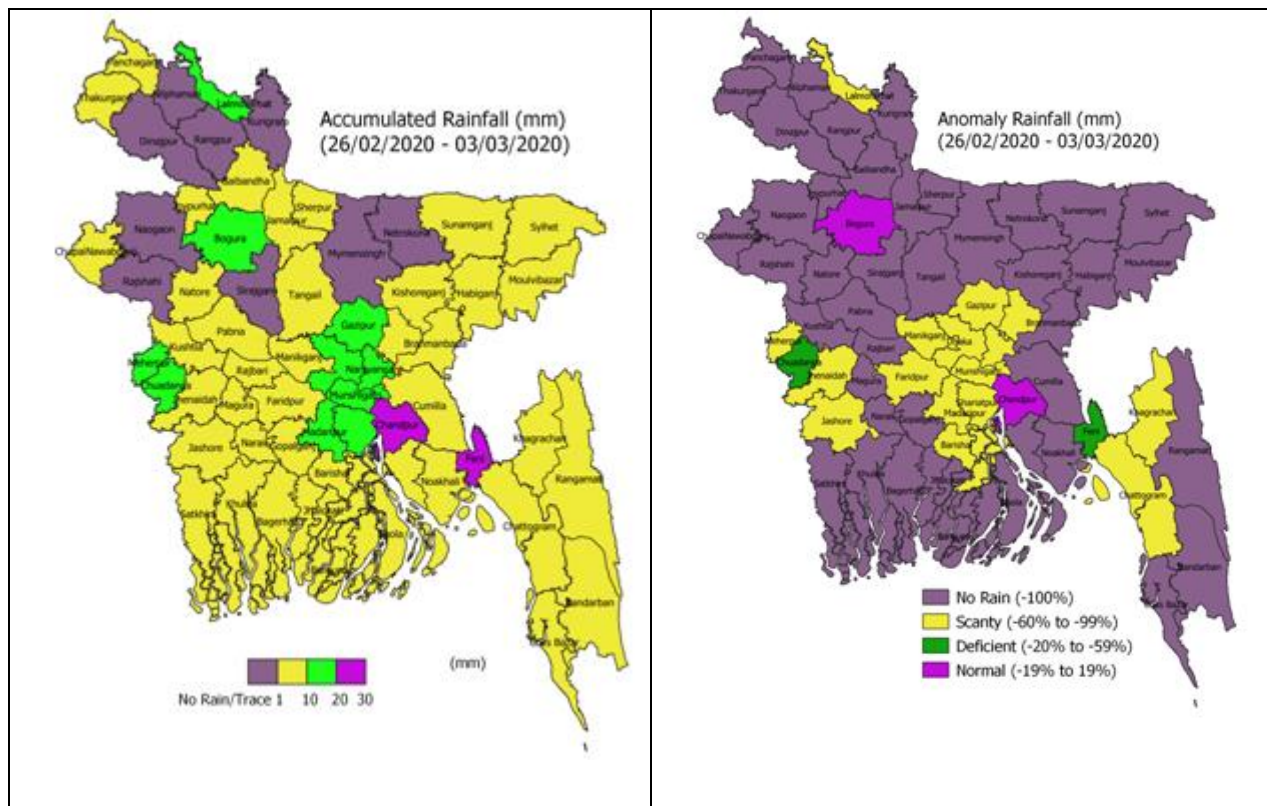
- Country average bright sunshine hour was 5.64 hours per day during last week.
- Country average free water loss during the previous week was 2.83 mm per day.

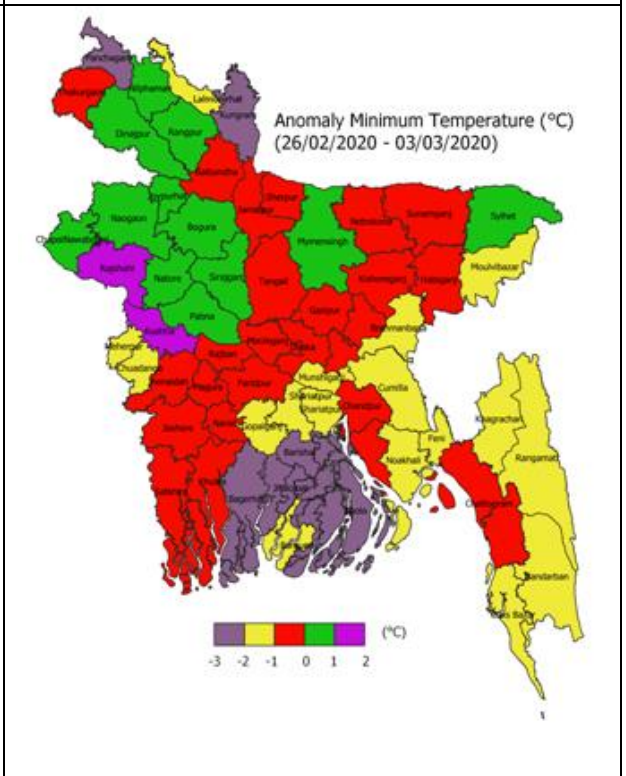
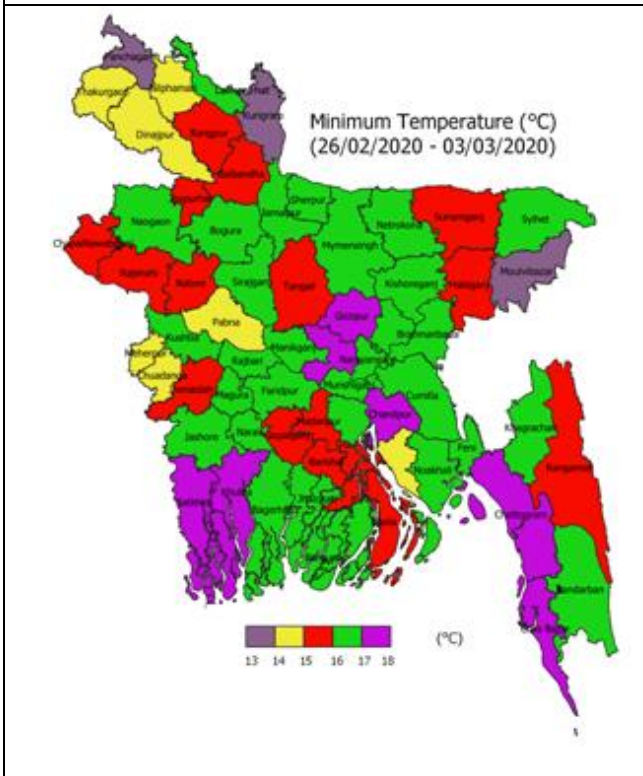
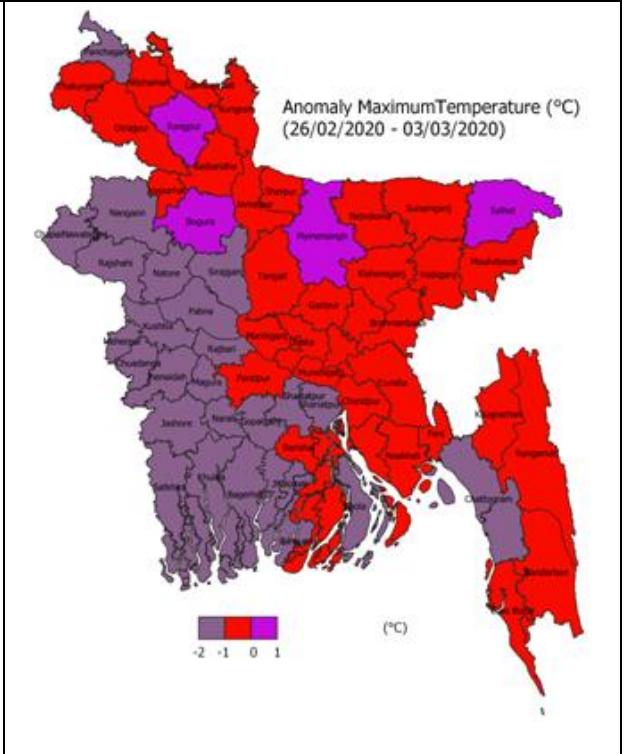
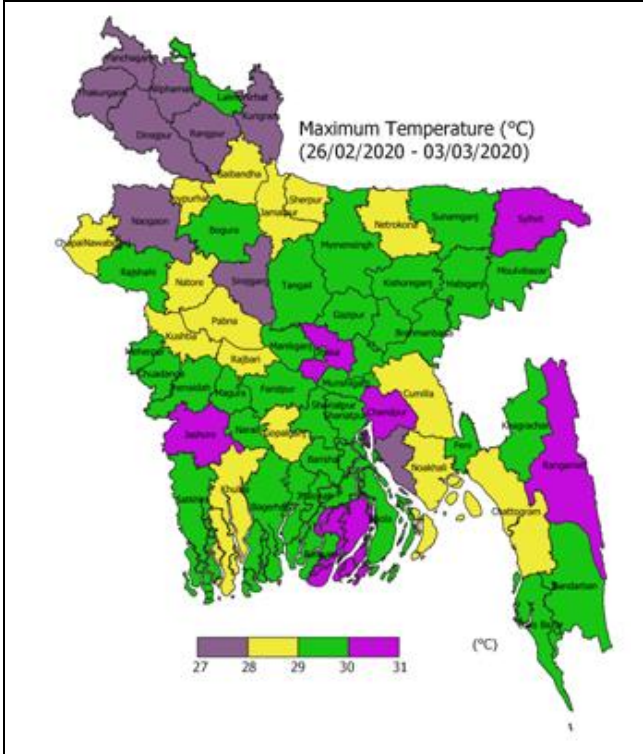
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

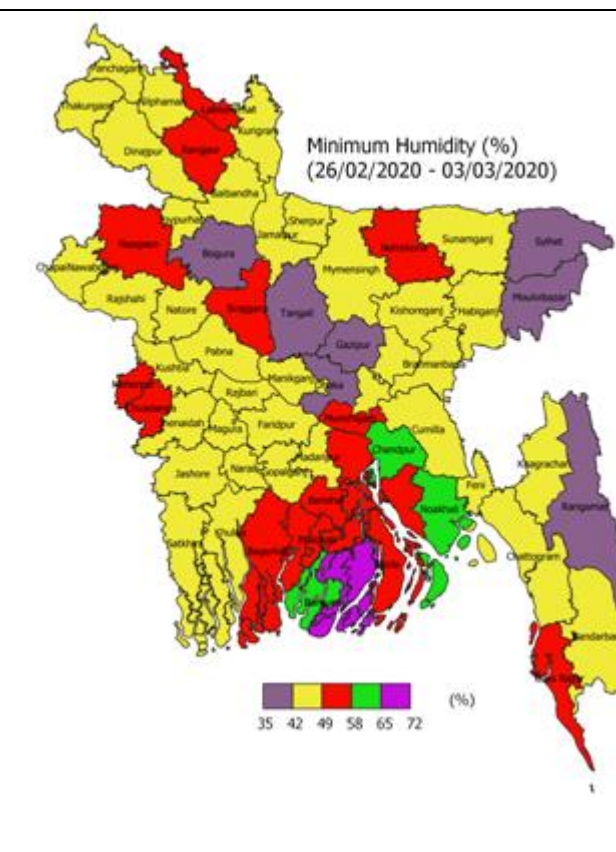
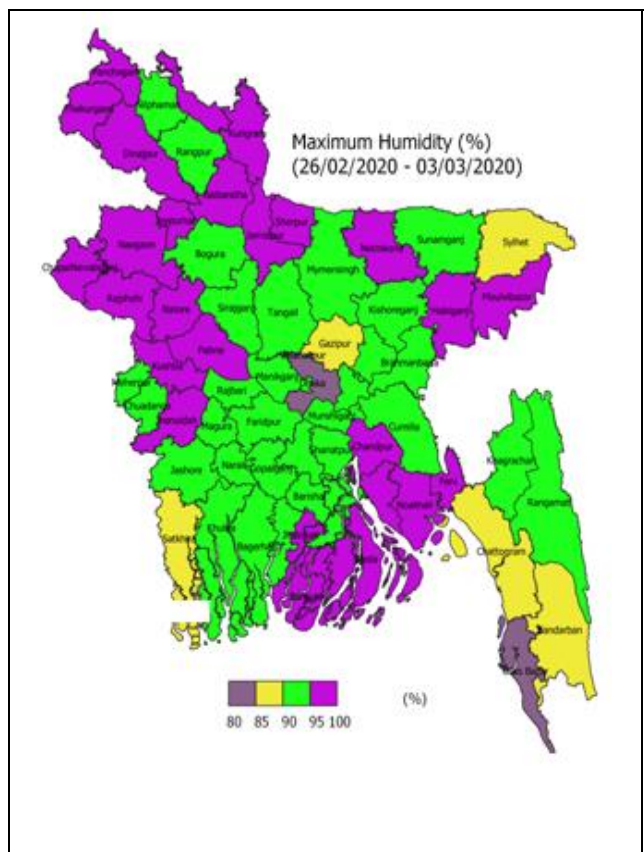
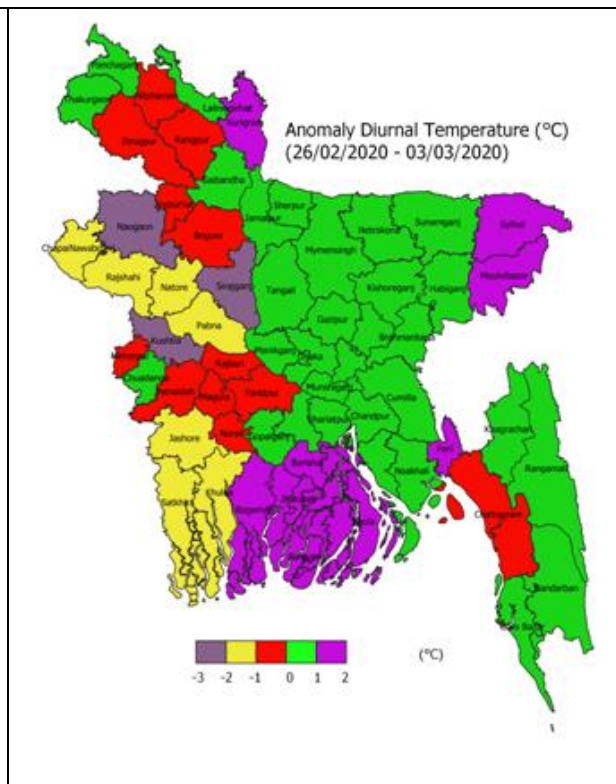
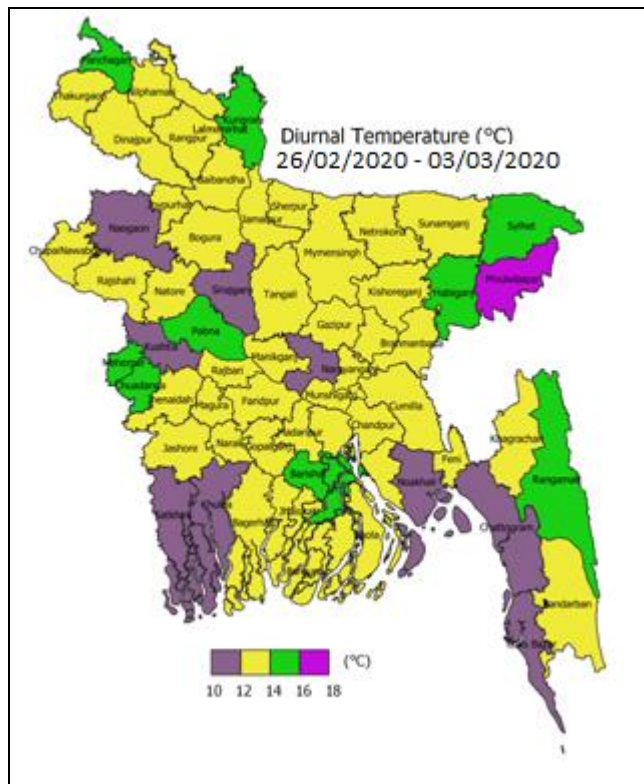
Forecast: Rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at a few places over Khulna, Rajshahi, Mymensingh, Dhaka & Sylhet divisions and at one or two places over Rangpur, Barishal & Chattogram divisions with hails at isolated places.

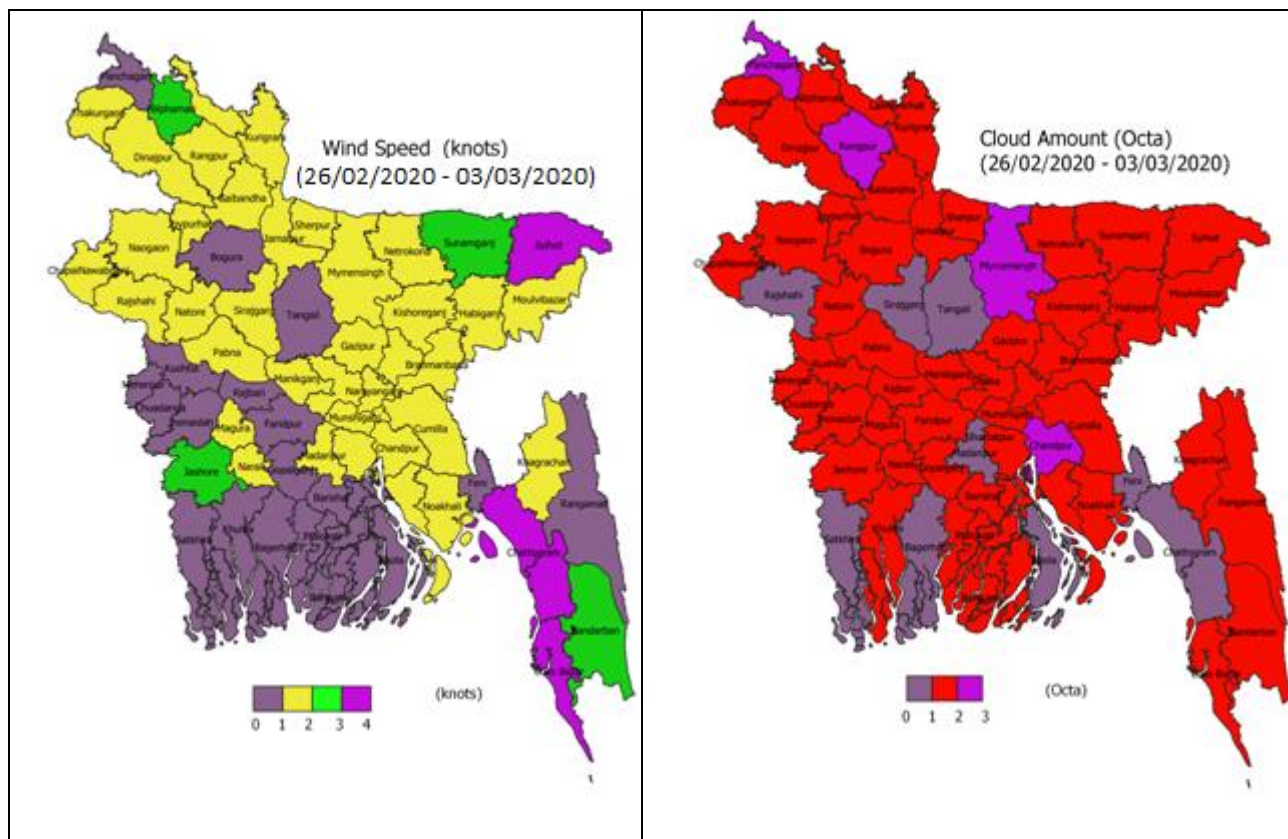
Temperature: Day and night temperature may remain nearly unchanged over the country.

Spatial Distribution of weather parameters for the Week ending 03 March 2020







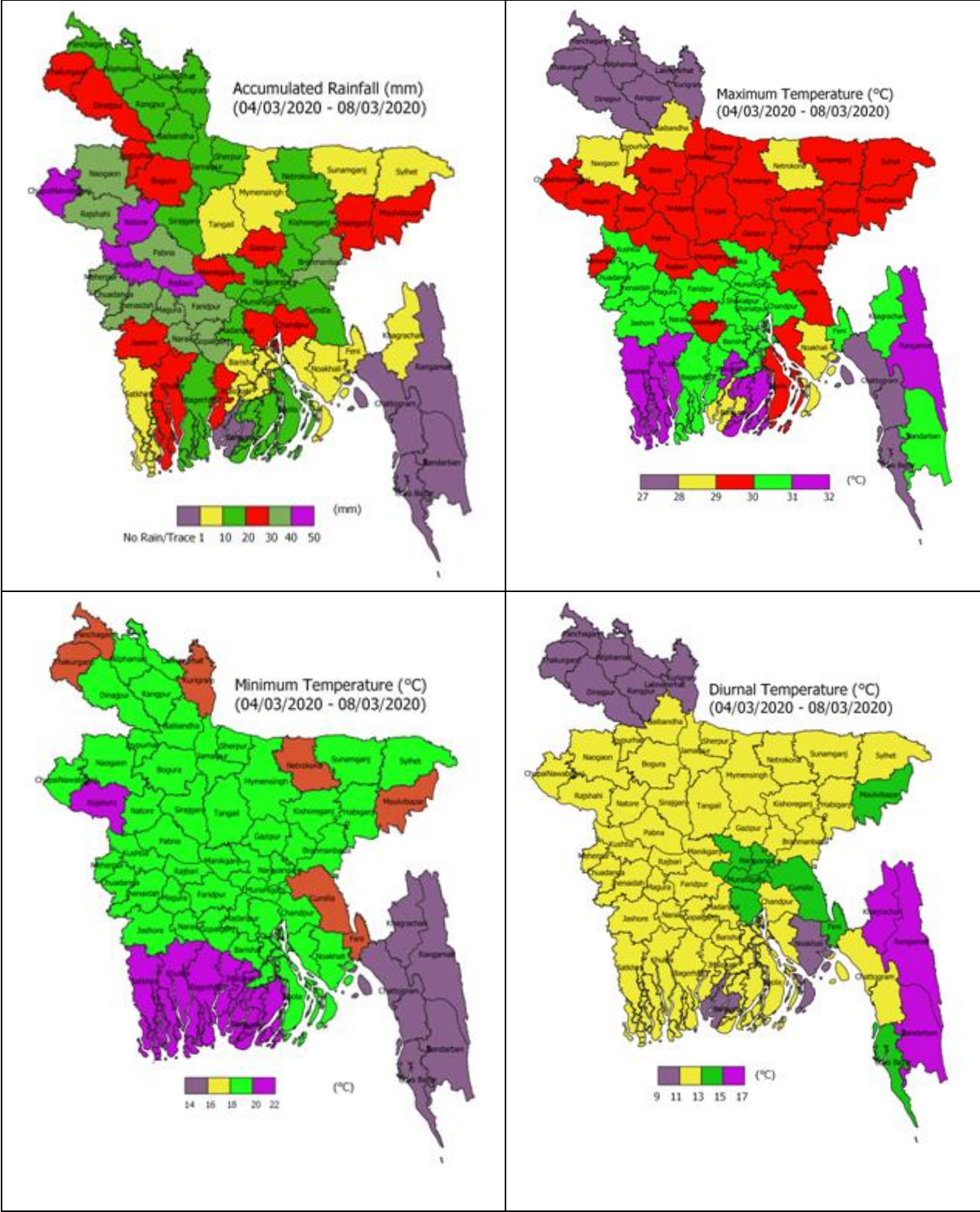


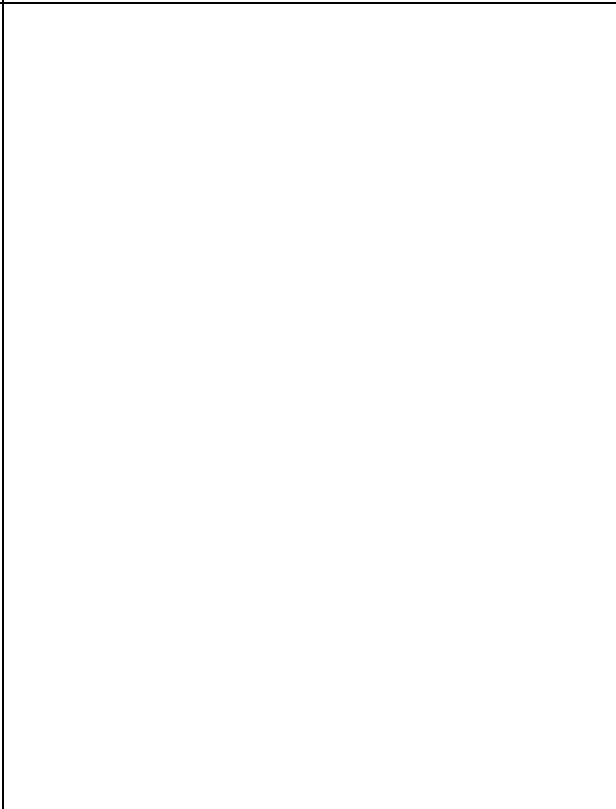
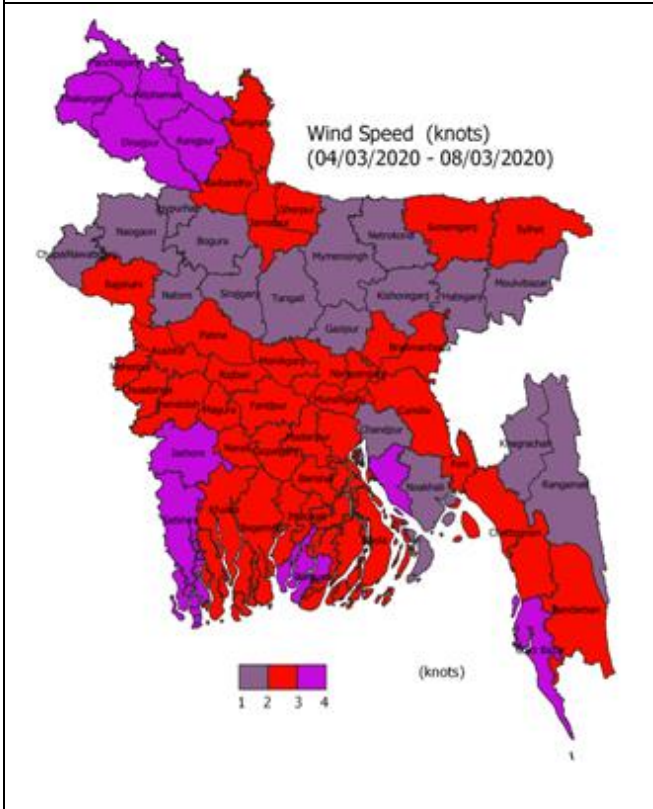
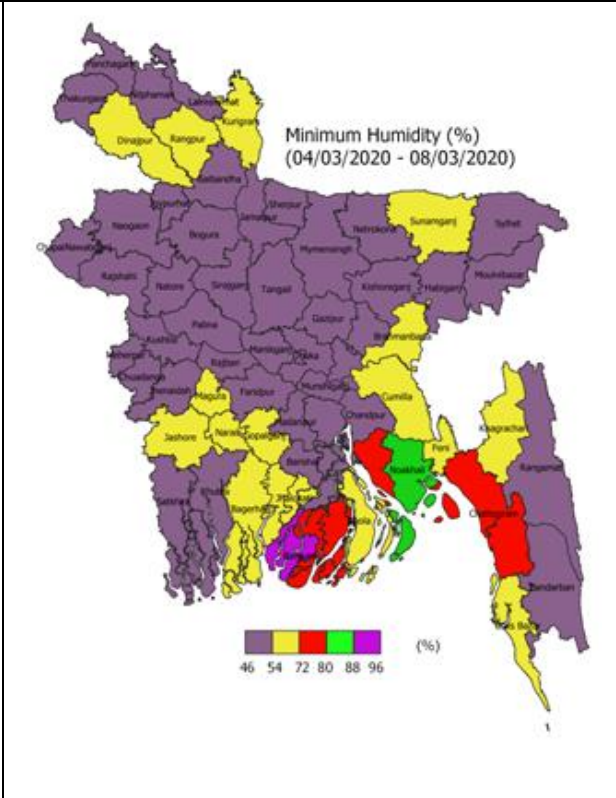
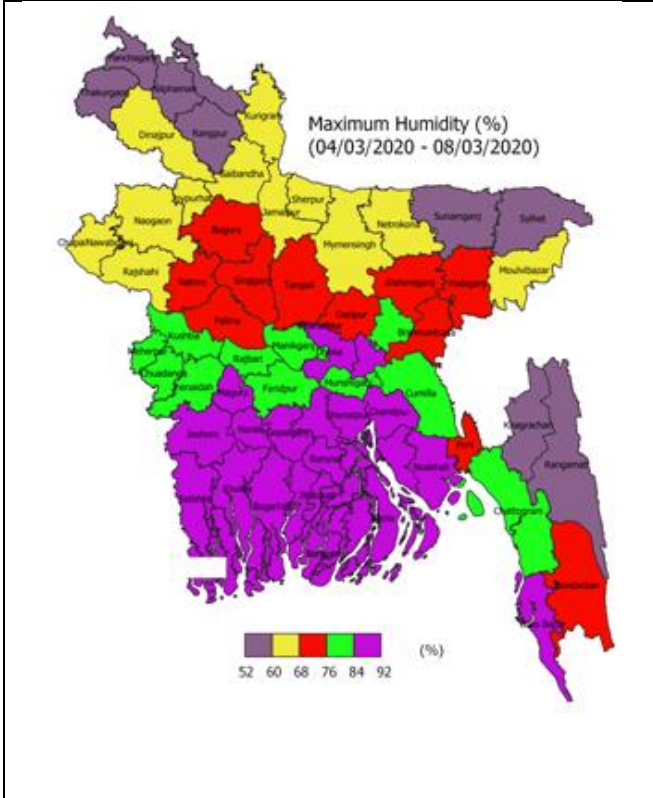
Weather Forecast and Advisory for the Period of 01.03.2020 to 07.03.2020

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 2.50 to 3.50 mm per day during this week.

- Light (04-10 mm/d) to moderate (11-22 mm/d) rain /thunder shower with temporary gusty wind is likely to occur at a few places over Dhaka, Mymensingh, Rajshahi and sylhet divisions and one or two places over Chattogram, Rangpur, Khulna and Barishal divisions during this period.
- Slightly rise in day and night temperature over the country during this period.

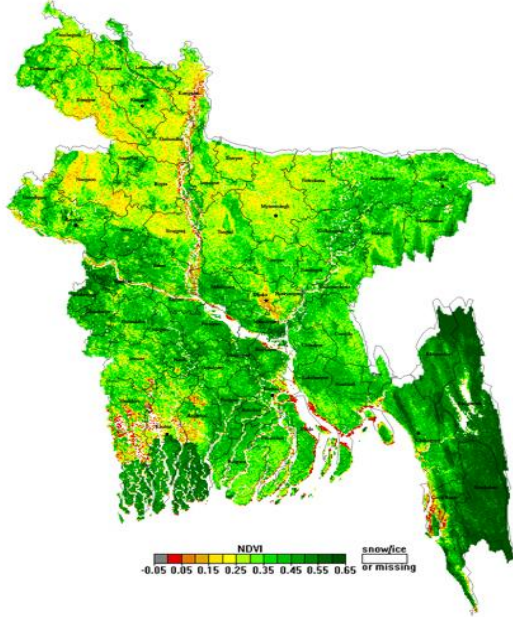
District Wise Quantitative Weather Forecast for next Five days from 04 March -08 March'2020



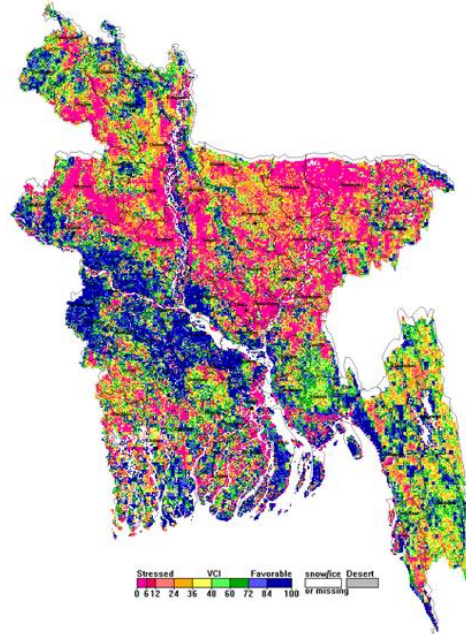


Different Satellite Products over Bangladesh

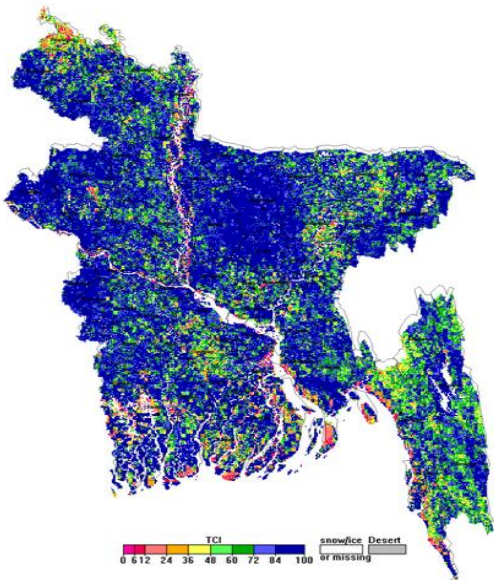
NOAA/VIIRS BLENDED NDVI composite for the week No. 08 (18 February-24 February 2020) over Agricultural regions of Bangladesh



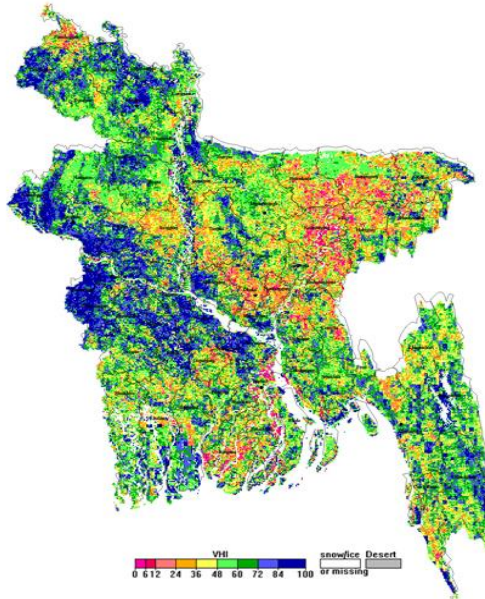
NOAA/ AVHRR BLENDED VCI composite for the week No. 08 (18 February-24 February 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 08 (18 February-24 February 2020) over Agricultural regions of Bangladesh

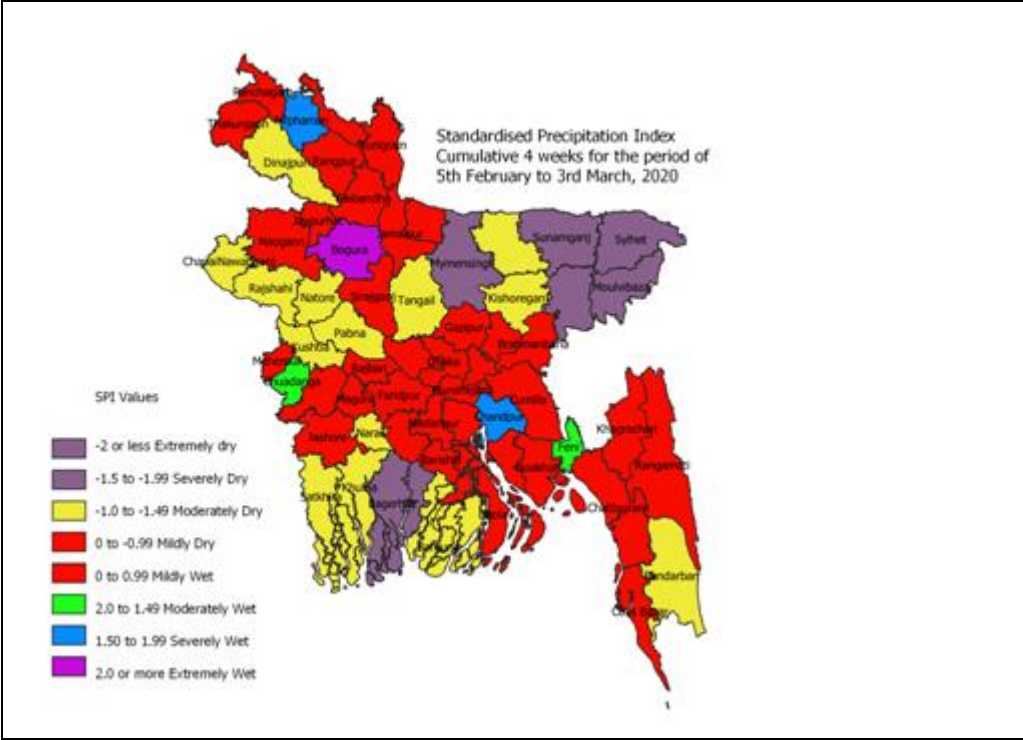


NOAA/ AVHRR BLENDED VHI composite for the week No. 08 (18 February-24 February 2020) over Agricultural regions of Bangladesh



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 (Chandpur) and northwestern (Bogura, Nilphamari) and mild to moderately wet condition prevails in southeast, southwest and northwest and northeast parts were prevailed extremely dry conditions of Bangladesh.



Data source: Bangladesh Meteorological Department