



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

22 APRIL 2020 (WEDNESDAY)
[FOR THE PERIOD 22.04.2020 – 26.04.2020]



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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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 with lightning flashes and temporary gusty/squally wind is likely to occur at many places over Rangpur, Mymensingh, Khulna, Barishal, Chattogram & Sylhet divisions and at a few places over Rajshahi and Dhaka divisions. Day and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hours, rain/thunder showers activity is likely to continue. As per the quantitative medium range weather forecast, most of districts in the country are likely to receive either heavy to very heavy rainfall during next five days.

At a glance in the haor area river situation and forecasts are below:

- The water levels of the major rivers in the north-east of the country are increasing.
- According to the BMD and IMD next 72 hours in the northeastern part of the country and in the adjoining regions of Assam, Meghalaya and Tripura in India heavy rains are forecast. In the next 72 hours, the water levels of major rivers in the northeastern part of the country may continue to rise.
- There is no possibility of flash flood situation in the next 24 hours in the northeastern part of the country.

Under such expected heavy to very heavy rainfall conditions, following salient agromet advisories are issued for next five days.

At present avoid application of irrigation, fertilizers, pesticides as well as harvesting of matured crops etc. including draining out excess water from the crop fields. Provide mechanical support to the standing banana and other horticultural crops and also stacking of vegetables. 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 heavy rainfall.

All the following advisories should be carried after the current spells of heavy to very heavy rainfall.

Boro Paddy

- Harvest the matured crop.
- Alternate wetting and drying maintain water level 5-7 cm upto the appearance of panicle stage. Maintain 2-5 cm water level in panicle initiation to the grain formation stages.
- 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
- Keep the field and irrigation channel weed free
- 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
- 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.

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.
- All the plant protection measures should be taken up after the current spell of rainfall.
- 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.

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

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 Methy Uzanol traps @ 6-7 /acre to trap the fruit fly.
- All the plant protection measures should be taken up after the current spell of rainfall.

Aus Paddy:

- Seedbed preparation/Transplanting

Vegetative stage (Kharif 1)

- Apply 3rd irrigation to 60-70 days old plant. It is advised to use the realized and rainfall forecast while irrigating the field.
- Weeding and earthing up operations may be continued
- Arrange thinning operations if the plants are in densely populated

Jute:

- Utilise the expected rainfall in sowing of seeds.
- If already sown, clear the irrigation channel for draining out excess water from the crop field due to expected rainfall.
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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.
- 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 22 April 2020) and maximum temperature on 21 April, minimum temperature on 22 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	01	33.4	23.0	Rajshahi	Rajshahi	01	31.5	21.1
	Tangail	07	32.0	20.4		Ishurdi	03	31.2	21.2
	Faridpur	Trace	32.7	22.3		Bogura	Trace	28.0	21.2
	Madaripur	02	33.0	21.8		Badalgachhi	04	28.5	20.3
	Gopalganj	Trace	33.0	22.2		Tarash	03	30.0	20.2
Mymensingh	Nikli	00	31.0	21.4	Rangpur				
						Rangpur	03	29.2	18.8
Chattogram	Mymensingh	00	29.7	21.0		Dinajpur	08	28.6	17.7
	Netrokona	00	29.8	20.0		Sayedpur	03	31.5	<u>17.2</u>
						Tetulia	04	28.3	17.8
	Chattogram	00	31.6	22.5		Dimla	06	28.0	18.0
	Sandwip	02	32.6	22.8		Rajarhat	05	28.7	19.0
	Sitakunda	03	32.8	22.5	Khulna				
	Rangamati	06	32.5	22.0		Khulna	01	32.5	21.5
	Cumilla	12	31.4	22.6		Mongla	08	<u>34.5</u>	22.9
	Chandpur	00	32.0	23.2		Satkhira	Trace	32.2	22.2
	M.Court	01	33.0	23.4		Jashore	00	32.6	21.4
	Feni	00	32.5	23.0	Barishal	Chuadanga	00	31.7	20.8
	Hatiya	02	32.0	22.4		Kumarkhali	03	32.0	21.0
Sylhet	Cox's Bazar	00	33.5	24.7					
	Kutubdia	06	31.7	23.3		Barishal	09	32.6	21.8
	Teknaf	00	33.8	25.0		Patuakhali	00	32.9	22.5
						Khepupara	01	32.4	22.0
	Sylhet	02	29.7	22.5		Bhola	<u>22</u>	32.0	21.8
	Srimangal	14	31.7	22.2					

Highlights:

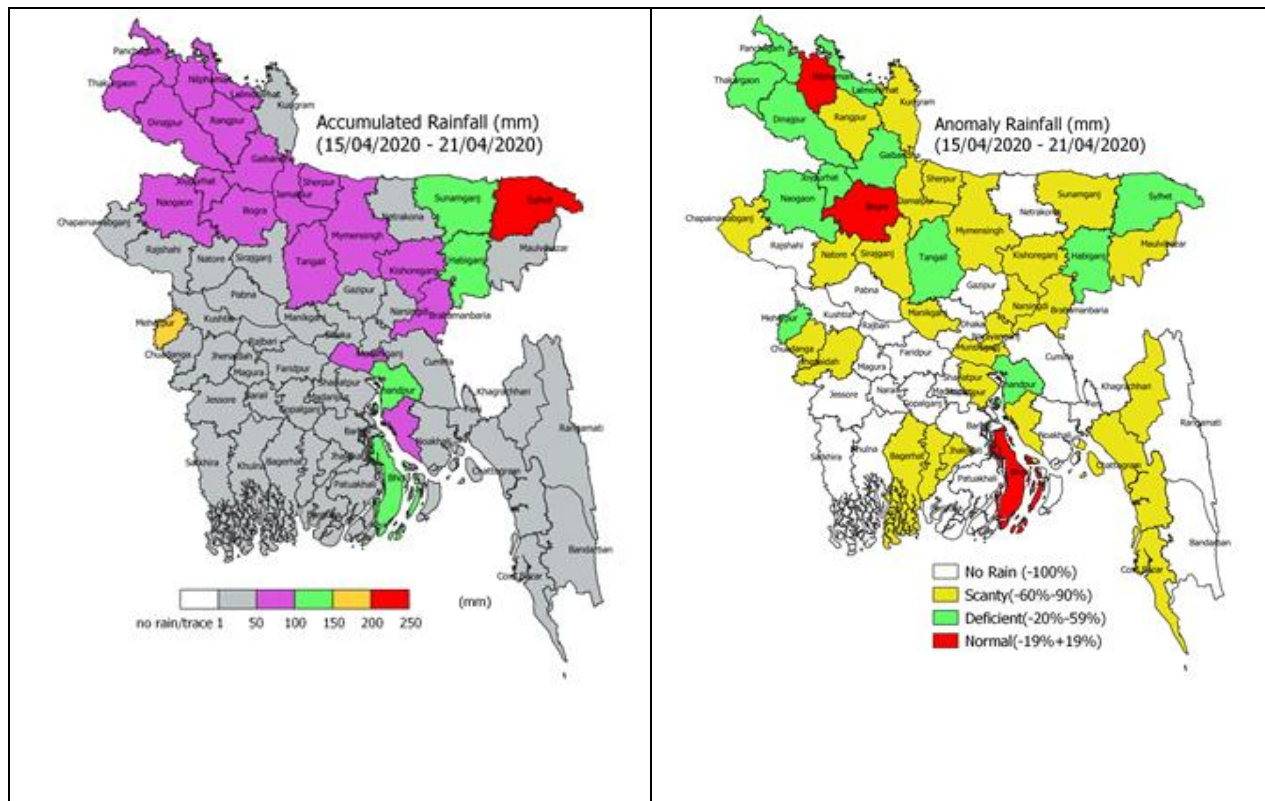
- Country average bright sunshine hour was 4.30 hours per day during last week.
- Country average free water loss during the previous week was 3.00 mm per day.

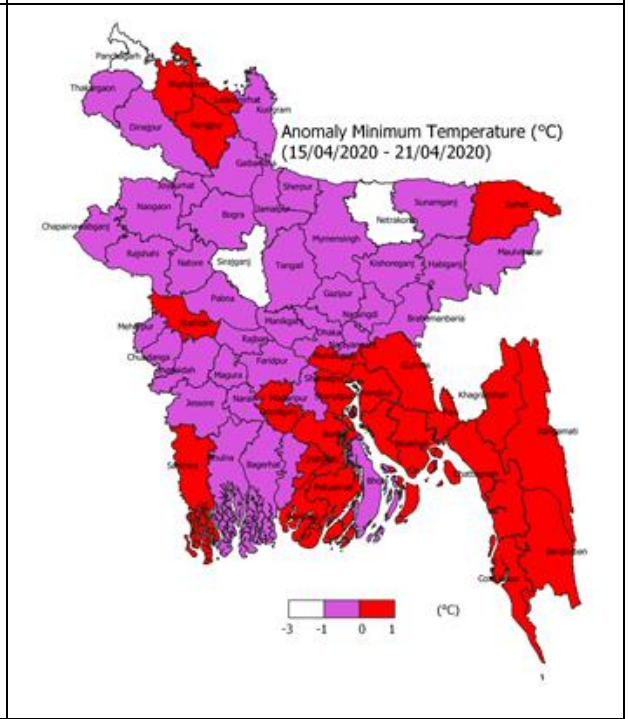
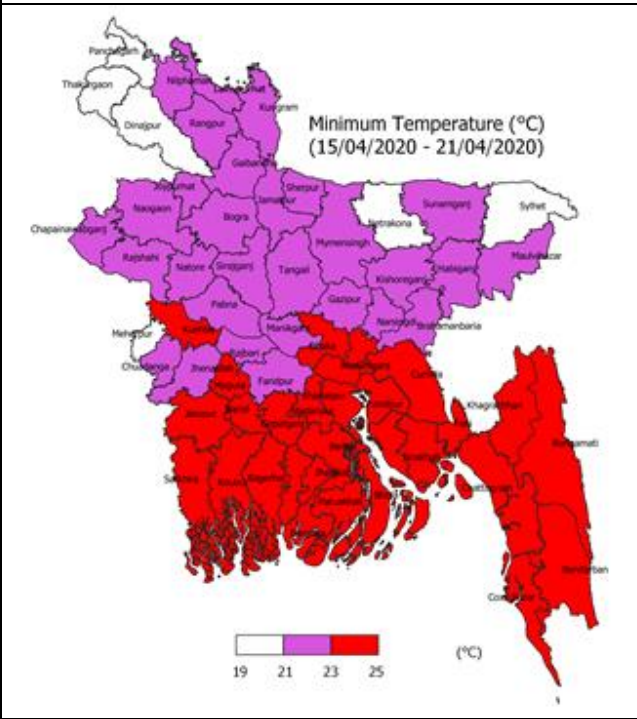
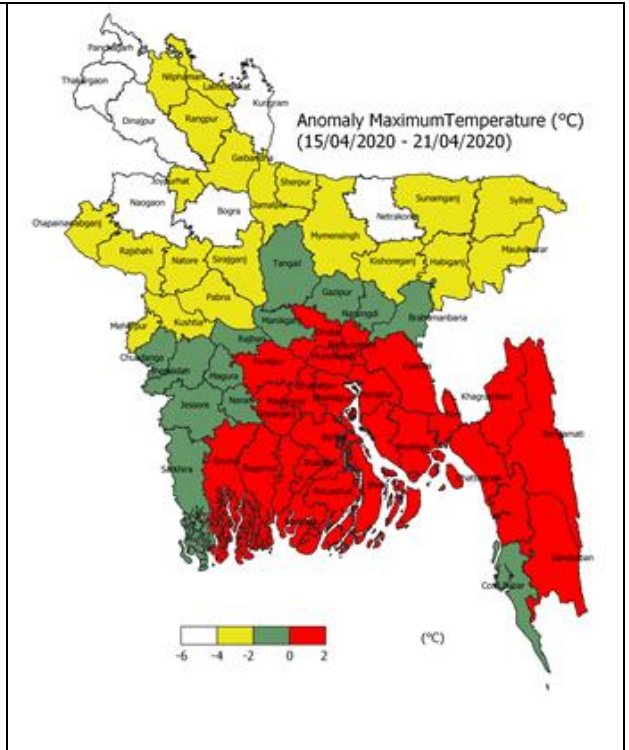
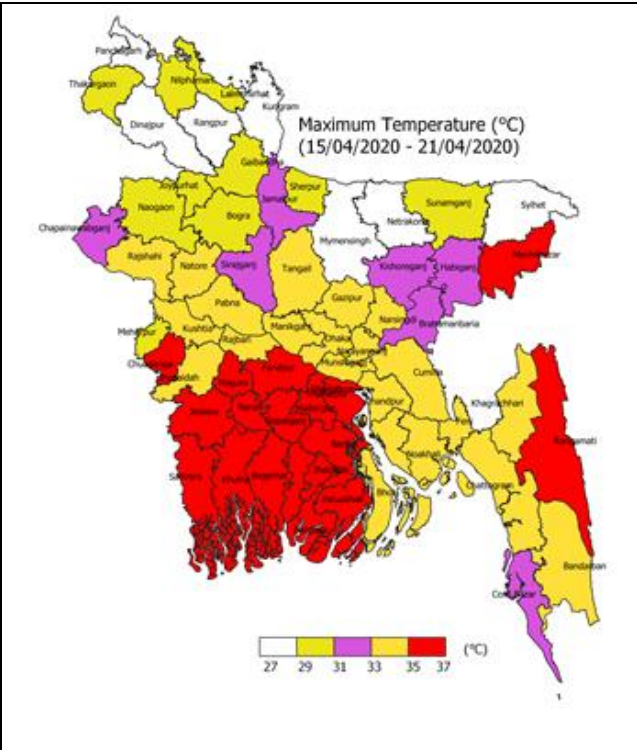
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

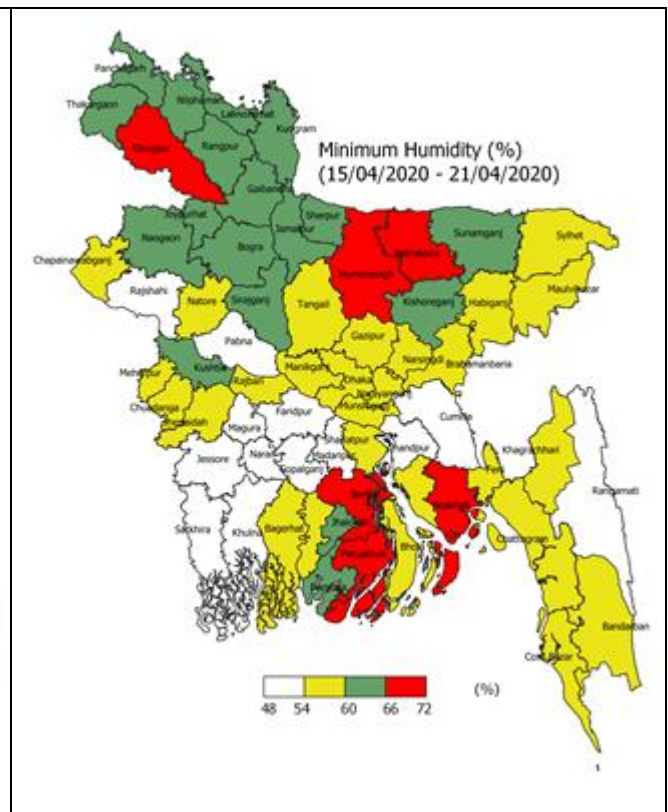
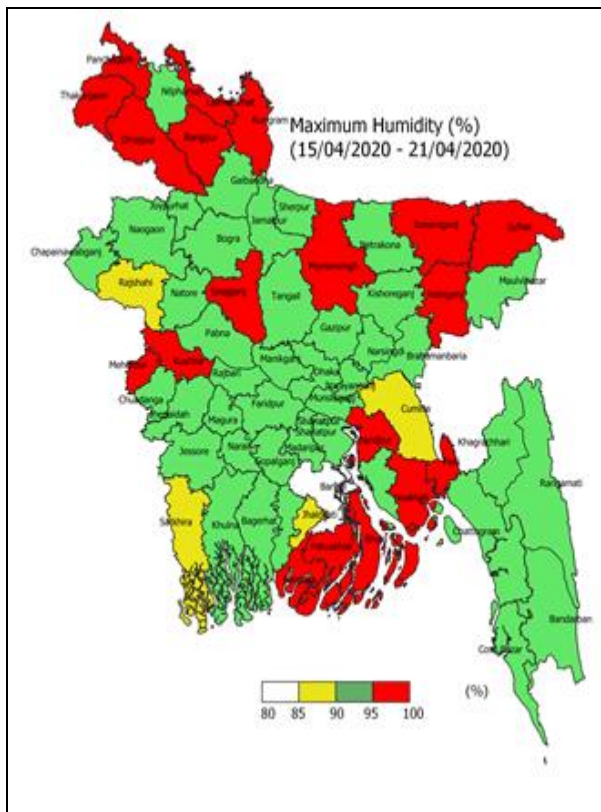
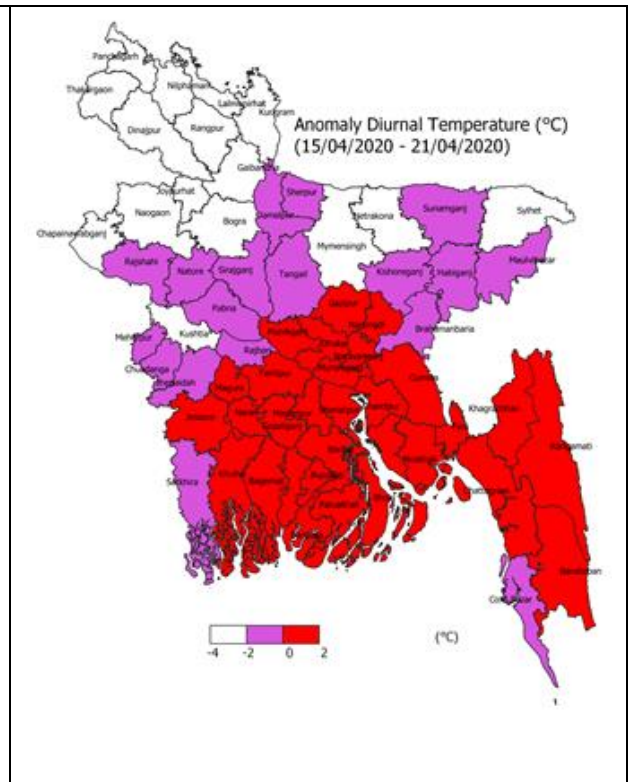
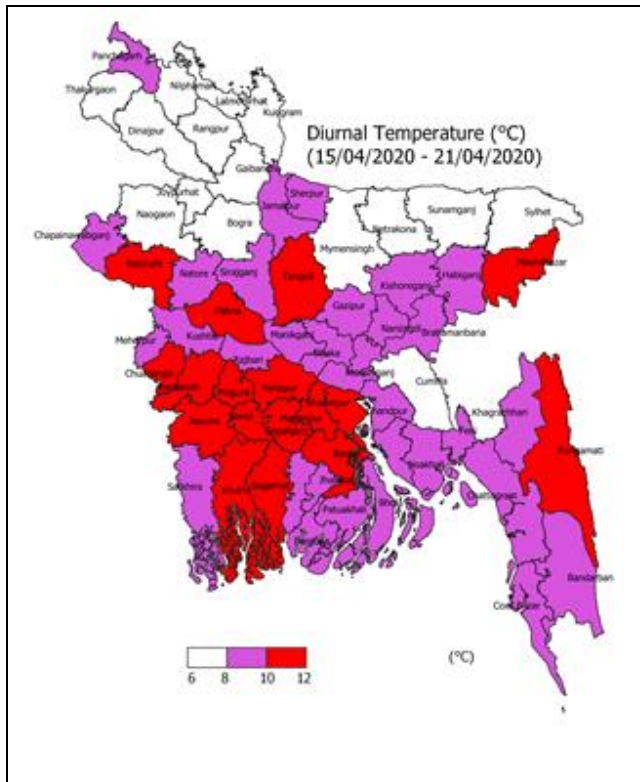
Forecast: Rain/thunder showers with lightning flashes and temporary gusty/squally wind is likely to occur at many places over Rangpur, Khulna, Barishal & Sylhet divisions and at a few places over Rajshahi, Mymensingh, Dhaka and Chattogram divisions.

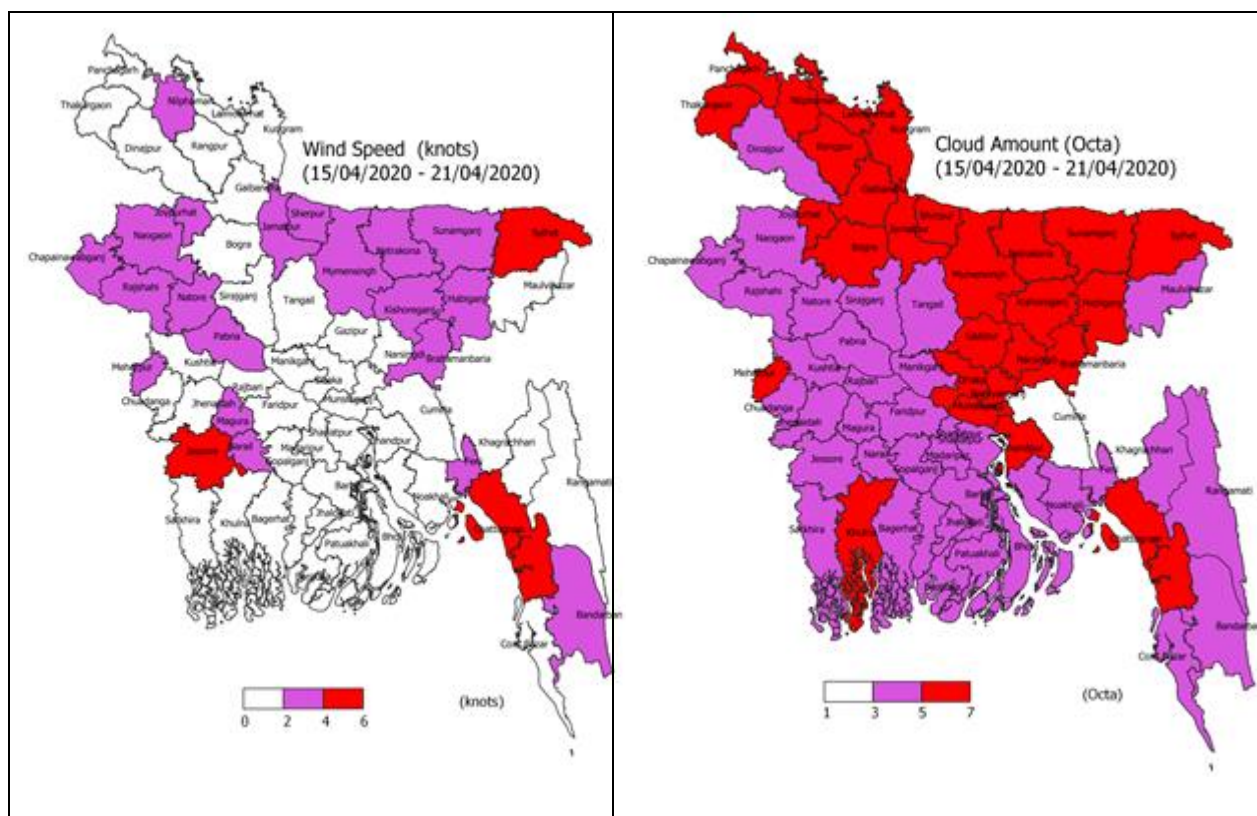
Temperature: Day and night temperature may remain nearly unchanged over the country.

Spatial Distribution of weather parameters for the Week ending 21 April 2020







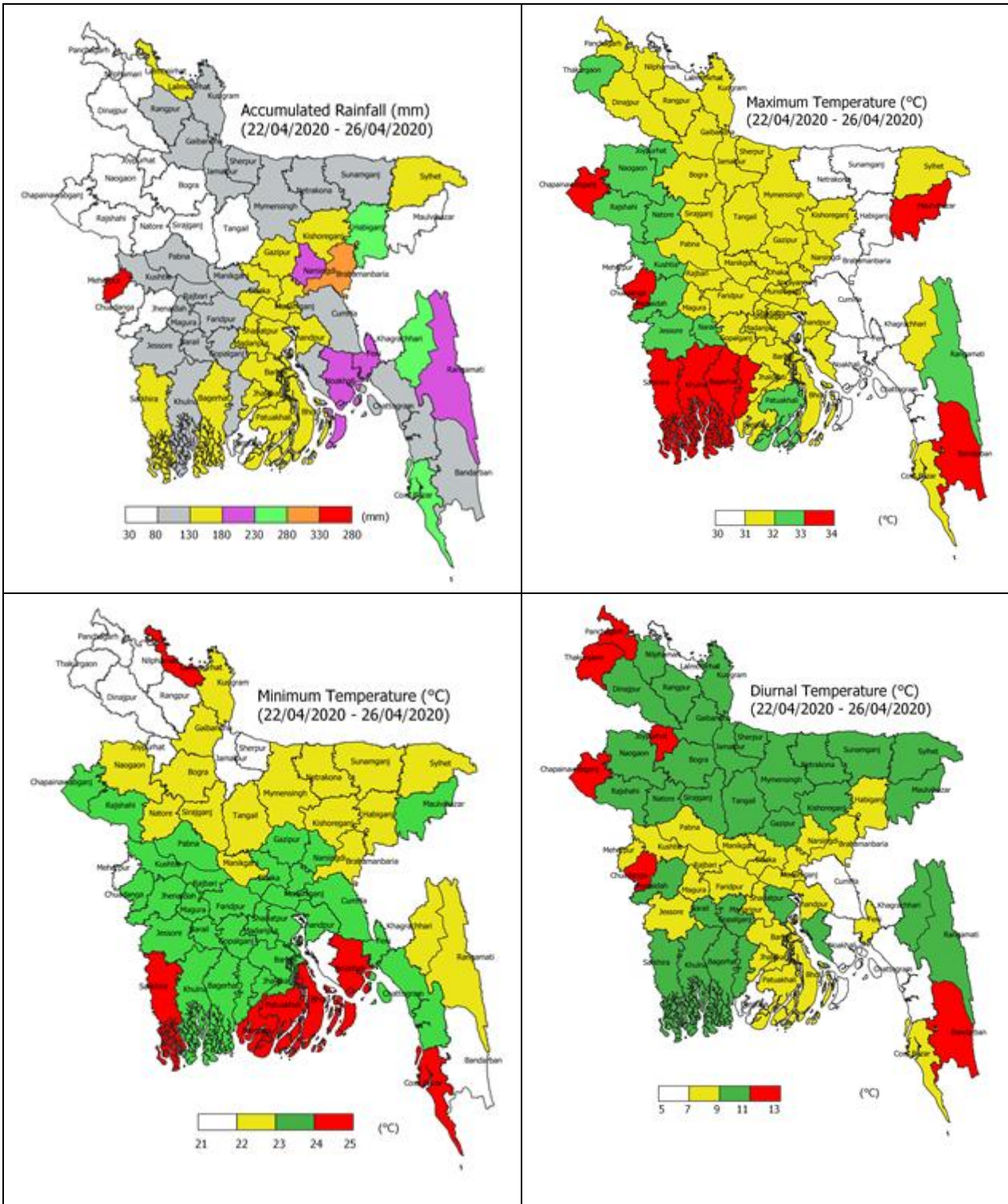


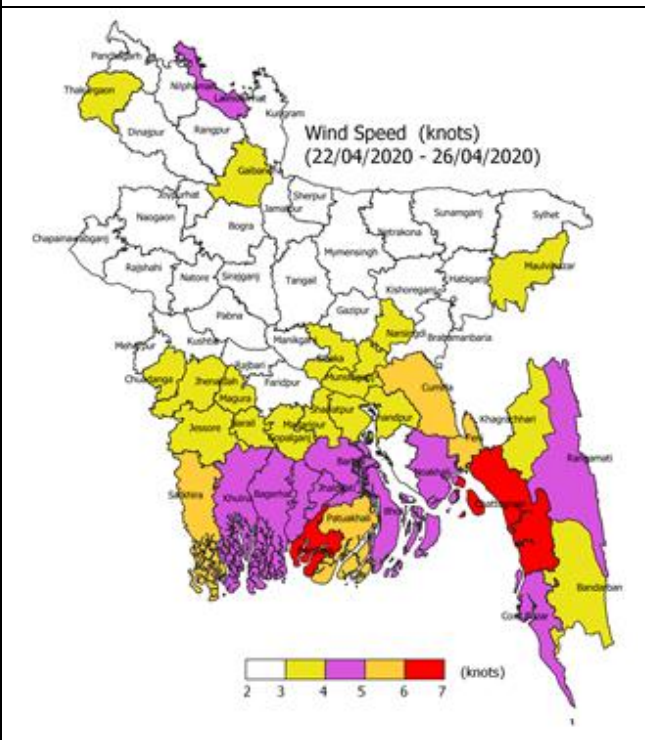
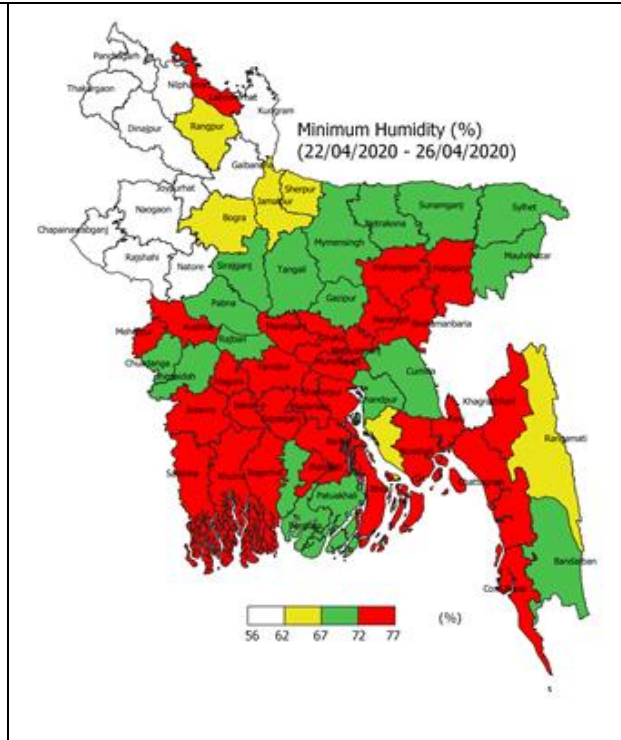
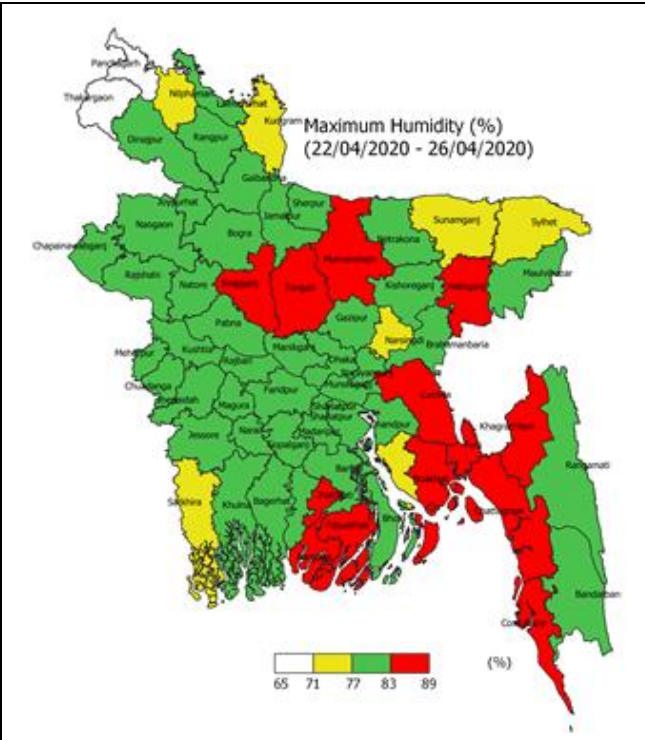
Weather Forecast and Advisory for the Period of 22.04.2020 to 30.04.2020

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 2.50 to 3.50 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 Dhaka, Mymensingh, Sylhet, Rajshahi, Rangpur, Khulna, Barishal and Chattogram divisions with moderately heavy (23-43 mm/day) to heavy (44-88 mm/day) falls at places over Sylhet, Mymensingh and Chattogram divisions during this period.
- Day and night temperature may remain nearly unchanged over the country during this period.

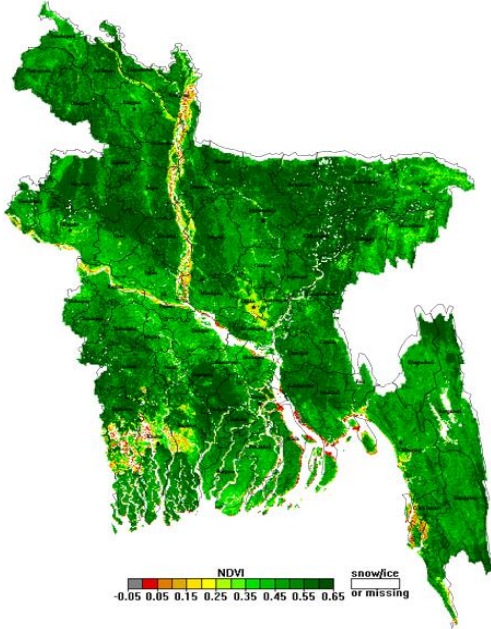
District Wise Quantitative Weather Forecast for next Five days from 22 April -26 April'2020



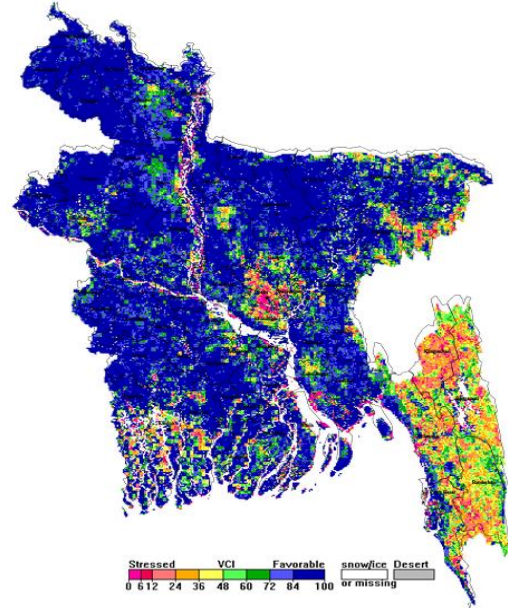


Different Satellite Products over Bangladesh

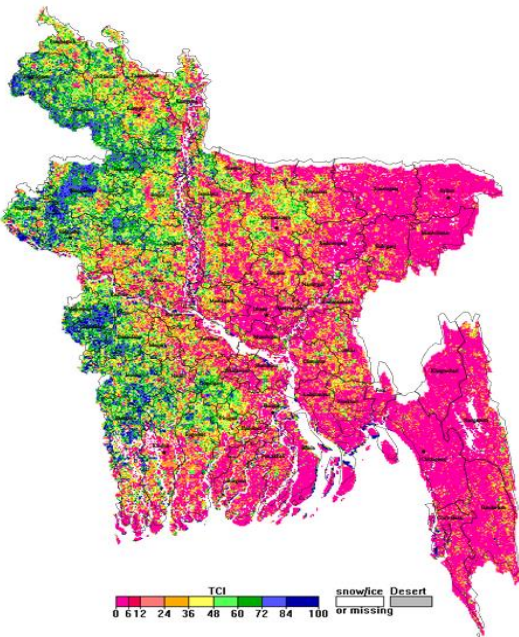
NOAA/VIIRS BLENDED NDVI composite for the week No. 15 (07 April -13 April 2020) over Agricultural regions of Bangladesh



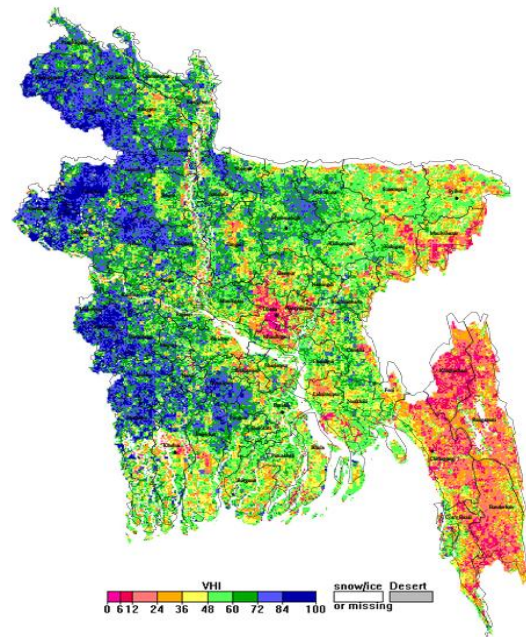
NOAA/ AVHRR BLENDED VCI composite for the week No. 15 (07 April -13 April 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 15 (07 April -13 April 2020) over Agricultural regions of Bangladesh

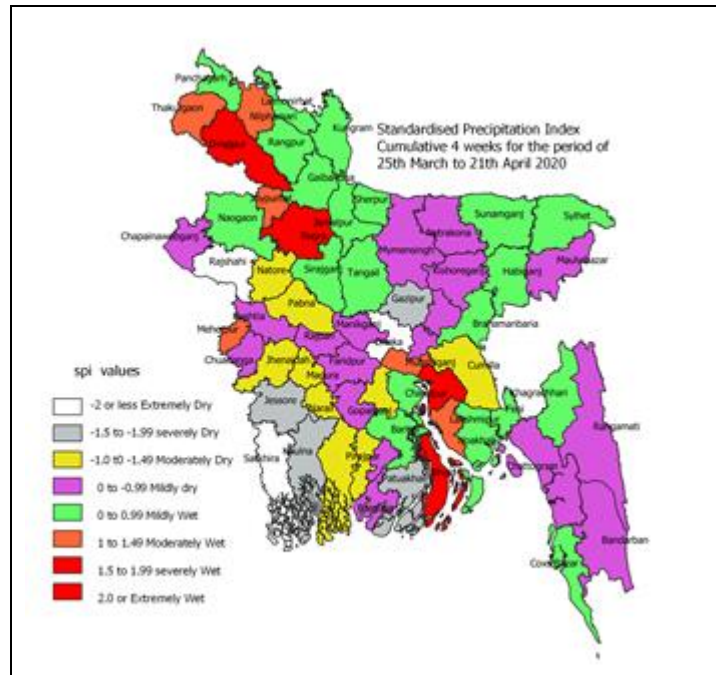


NOAA/ AVHRR BLENDED VHI composite for the week No. 15 (07 April -13 April 2020) over Agricultural regions of Bangladesh



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