



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

19 FEBRUARY 2020 (WEDNESDAY)
[FOR THE PERIOD 19.02.2020 – 23.02.2020]



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, weather may remain dry with temporary partly cloudy sky over the country. Light to moderate fog may occur at places over the country during late night to morning. Night and day temperature may rise slightly over the country. As per the outlook issued by BMD for next 72 hrs, no marked change is likely. During last four days, dry condition prevailed over the country and as per the quantitative medium range weather forecast, dry condition is likely over the district during next five days.

Thus, under the prevailing weather condition and expected dry condition during next five days, moisture stress may occur in isolated places. Though crops in many fields are in harvesting stage. But sowing of new crops or transplanting of paddy may be affected due to moisture stress. Irrigation may be arranged and mulching may be provided in vegetable field to retain the moisture. Due to possibility dry weather in next four days' farmers are advised to keep in notice the sucking pest and take appropriate measures. Apply needful irrigation, chemical and fertilizer in rabi crops during the period. Under the present weather conditions & forecast, following advisories are issued

Vegetables

- Under prevailing dry weather condition & also dry condition is likely during next five days, soil moisture may not be sufficient to meet the demand of the crop. So, farmers are advised to irrigate the field every alternate day.
- Go for effective weed management measures.
- 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.
- It is advised to apply mulch and well rotten FYM in vegetable crops.
- 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.
- In view of dry weather, regular monitoring is advised for thrips infestation in onion.

Boro Paddy:

Seedbed to Transplanting

- Seedling of 35 to 45 days old may be transplanted.
- Complete transplanting at the earliest --Keep the field and irrigation channel weed free
- Transplanting should be done @ 2 - 3 seedlings per hill. Plant to plant distance should be 15-20 cm and 20-25 cm between the two rows.
- Dead hills are to be replanted within 7-10 days of transplanting of Boro paddy
- Maintain thin layer of water (1 - 2 cm) in the main field up to 15 days after transplanting

Early Vegetative or Vegetative

- The present stage is critical for rice productivity. Moisture stress at this stage may reduce the yield substantially. As dry condition prevailed during last four days & also dry condition is likely during next five days, irrigation may be provided in the boro rice fields to maintain standing water of 3-7 cm depth.
- Keep the field and irrigation channel weed free

- Apply 13 kg urea as first top dressing after 20-25 days after transplanting.
- 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.
- Since there is no possibility of getting rainfall in the coming 5 days & increased temperature may favour the egg laying 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. Spray Nativio 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 11:00 a.m.

Wheat

- As dry condition prevailed during last four days & also dry condition is likely during next five days, apply third irrigation after 75-80 old plant during grain formation so as to maintain sufficient moisture in the field. 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 Nativio 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.

Mustard

- Mustard sown during October is at maturity stage. Taking advantage of clear weather forecast in the coming 5 days, 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.
- As dry condition prevailed during last four days & also dry condition is likely during next five days. Irrigate mustard crop at seed formation stage (60-65 days).
- If the mustard crop is at pod formation stage; go for intercultural operations

- Farmers are advised not to spray any insecticide during the flowering stage, 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 Chlorpyrifos 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.
- Be watchful for aphid in mustard crop. If seen, spray of Malathion @2ml/ L water.
- 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.
- 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.
- Present weather may favour the infestation of leaf webber. To control leaf webber spray 200 ml Ithofenprox or Deltamethrin per acre.
- Spray 1 kg Cuppor Oxychloride or 800 g Dethane-M 45/acre in 200 litre water to control leaf blight disease.

Maize

- Ensure proper moisture level during flowering and grain development stages in maize crop.
- As dry condition prevailed during last four days & also dry condition is likely during next five days, apply third irrigation between 60-70 days after sowing of the crop.
- Tasseling stage is sensitive to the moisture. Maintain optimum moisture in the field through irrigation. Mulching is essential to hold the moisture in the field.
- 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. Chlorpyrephos @1ml./litre water, Lambda- Cypermethrin @1ml./litre water.
- 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.
- 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 stem borer 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.
- Due to increase in bright sun shine hours and temperature, farmers are advised for water management in their crop.

- As dry condition prevailed during last four days & also dry condition is likely during next five days, apply light irrigation.
- 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.
- 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
- 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.

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. Heap 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 due to likely incidence of light to moderate fog over the district during late night till morning. 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.
- 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.
- Cold and cloudy weather favours the infestation of aphids. Spray Malathion group pesticide.

Groundnut

- As dry condition prevailed during last four days & also dry condition is likely during next five days, apply light irrigation.

- 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 sowing and
- 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

- Young banana plants of 3-4 months' age are prone to attack of pseudostem weevil; spray Chloripyriophos 2 ml/litres of water.
- Due to dry weather, there is a chance of Boron deficiency in banana. It is advised to spray one-gram Borax per one litre of water.
- 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.
- 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.
- 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.
- Flowering in mango crop has started. Therefore, at 50% flowering, irrigation should be given strictly at an interval of 15 days. 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

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 19 February'2020) and maximum temperature on 18 February, minimum temperature on 19 February'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	28.8	16.2	Rajshahi	Rajshahi	00	28.3	12.8
	Tangail	00	28.1	14.5		Ishurdi	00	27.5	12.7
	Faridpur	00	28.9	14.1		Bogura	00	27.8	15.8
	Madaripur	00	28.5	11.8		Badalgachhi	00	27.0	15.4
	Gopalganj	00	29.0	14.0		Tarash	00	26.5	16.2
	Nikli	00	28.5	15.6	Rangpur	Rangpur	00	27.0	15.5
Mymensingh	Mymensingh	00	28.0	15.2		Dinajpur	00	26.8	13.2
	Netrokona	00	27.2	16.0		Sayedpur	00	27.7	14.5
Chattogram						Tetulia	00	26.3	13.4
	Chattogram	00	28.2	16.2		Dimla	00	26.5	16.0
	Sandwip	00	29.7	15.1		Rajarhat	00	26.5	13.5
	Sitakunda	00	30.3	13.3	Khulna	Khulna	00	29.2	17.0
	Rangamati	00	30.2	13.5		Mongla	00	29.8	16.6
	Cumilla	00	28.5	15.2		Satkhira	00	29.3	16.4
	Chandpur	00	28.5	16.6		Jashore	00	29.8	13.8
	M. Court	00	29.3	16.0		Chuadanga	00	28.8	12.7
	Feni	00	29.2	15.3		Kumarkhali	00	28.0	15.4
	Hatiya	00	29.0	16.0	Barishal	Barishal	00	29.6	14.4
	Cox's Bazar	00	30.0	16.8		Patuakhali	00	30.4	16.6
	Kutubdia	00	29.3	16.3		Khepupara	00	30.1	18.0
	Teknaf	00	29.3	15.0		Bhola	00	29.5	14.2
Sylhet	Sylhet	00	30.0	16.8					
	Srimangal	00	29.0	13.6					

Highlights:

- Country average bright sunshine hour was 6.75 hours per day during last week.
- Country average free water loss during the previous week was 2.77 mm per day.

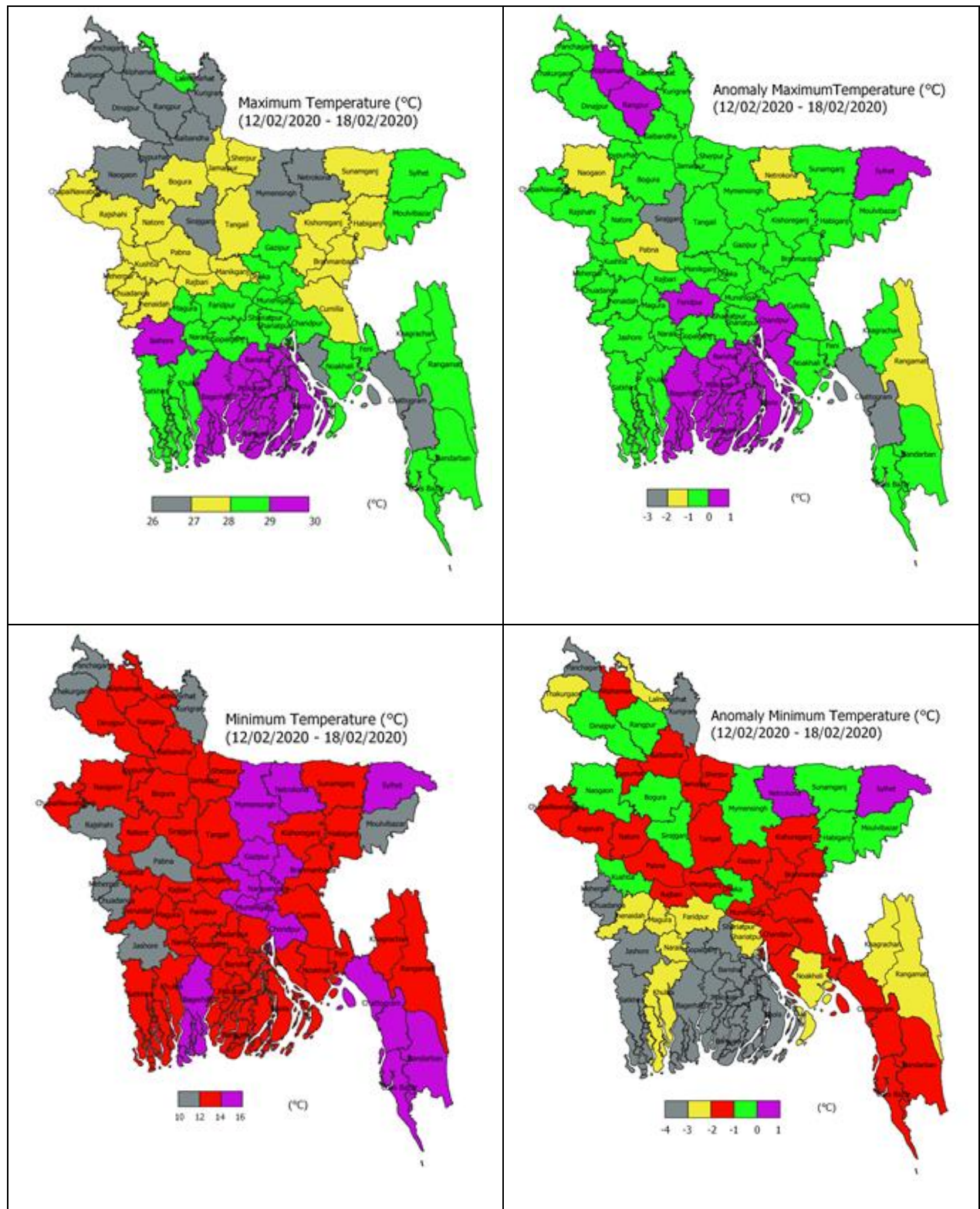
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

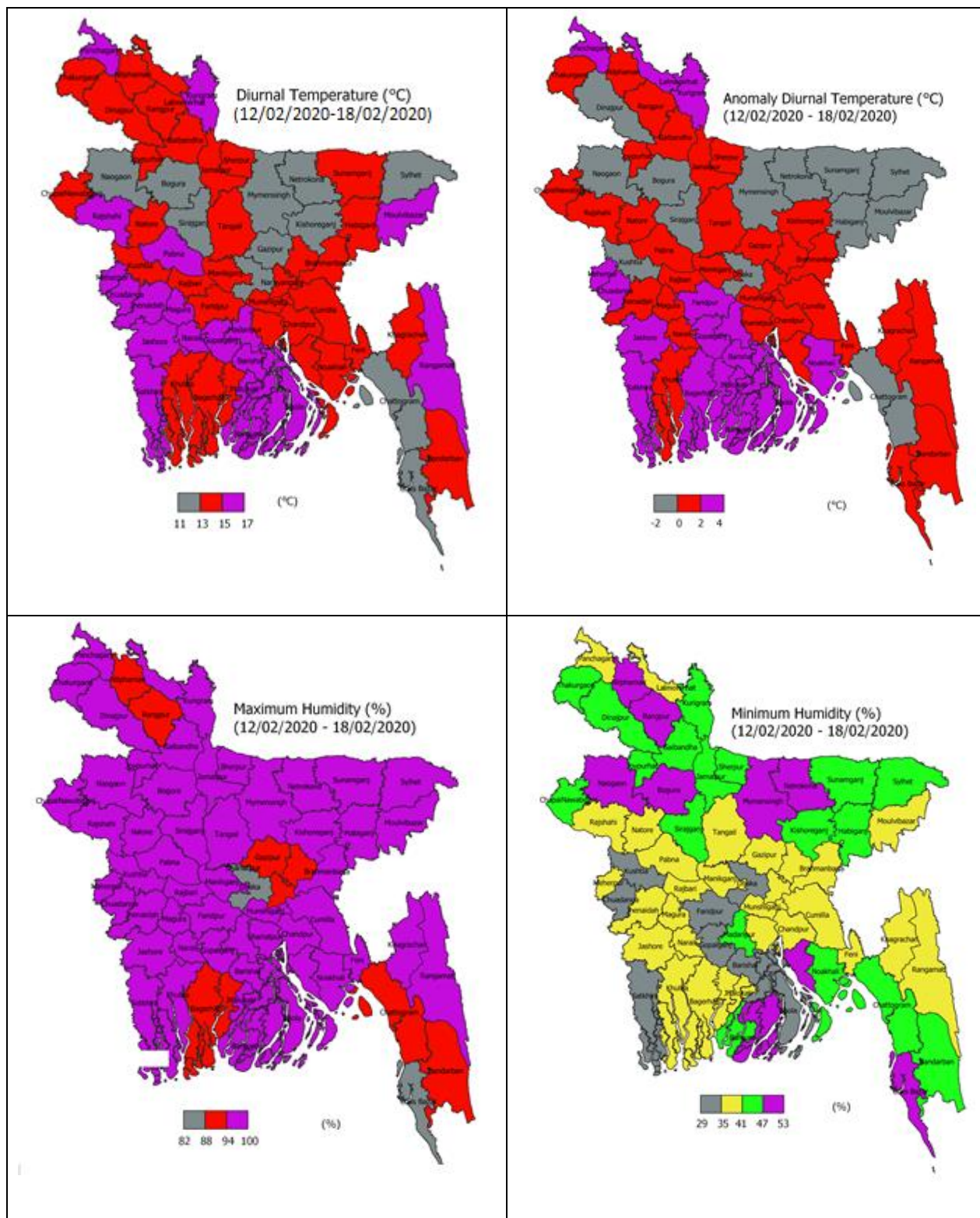
Forecast: Weather may remain dry with temporary partly cloudy sky over the country.

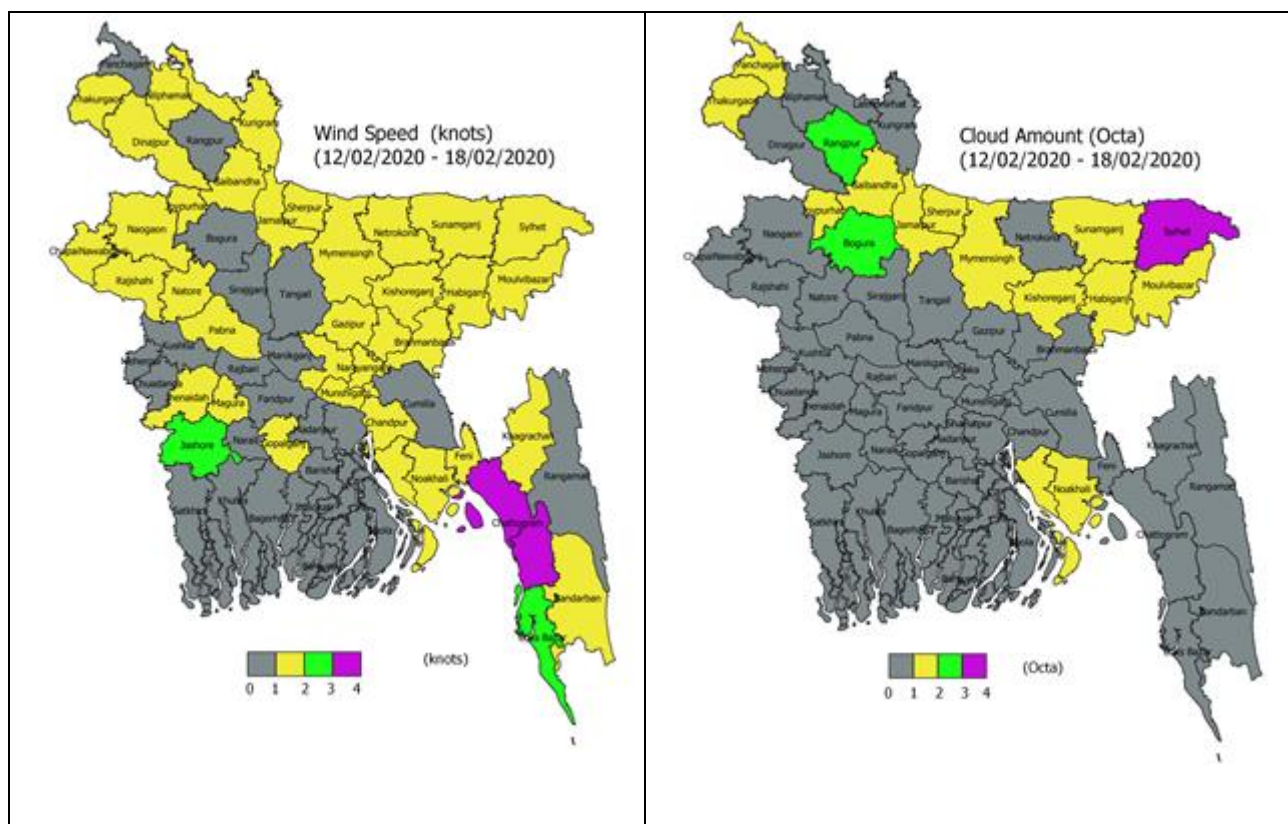
Fog: Light to moderate fog may occur at places over the country during late night to morning.

Temperature: Night and day temperature may rise slightly over the country

Spatial Distribution of weather parameters for the Week ending 18 February 2020





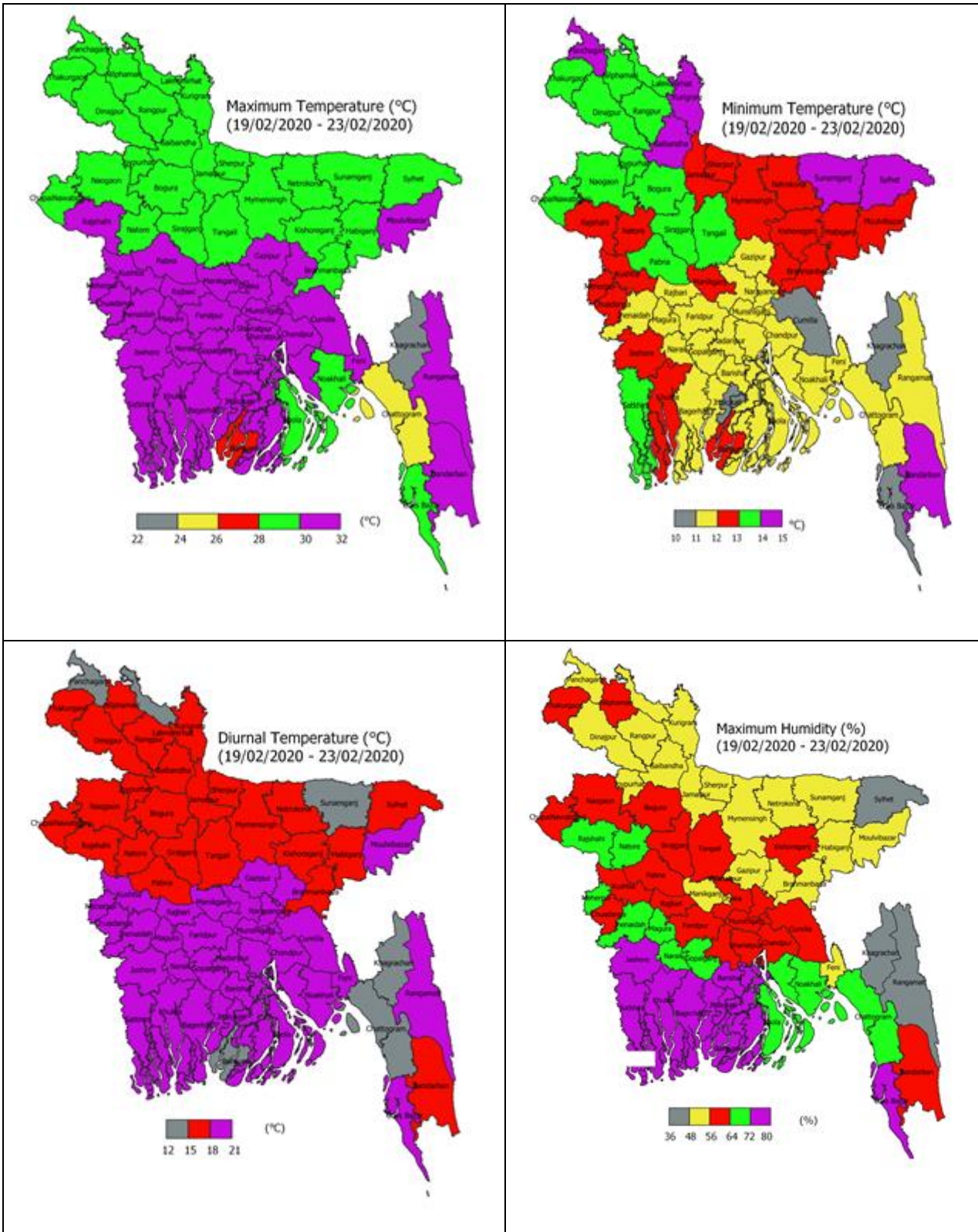


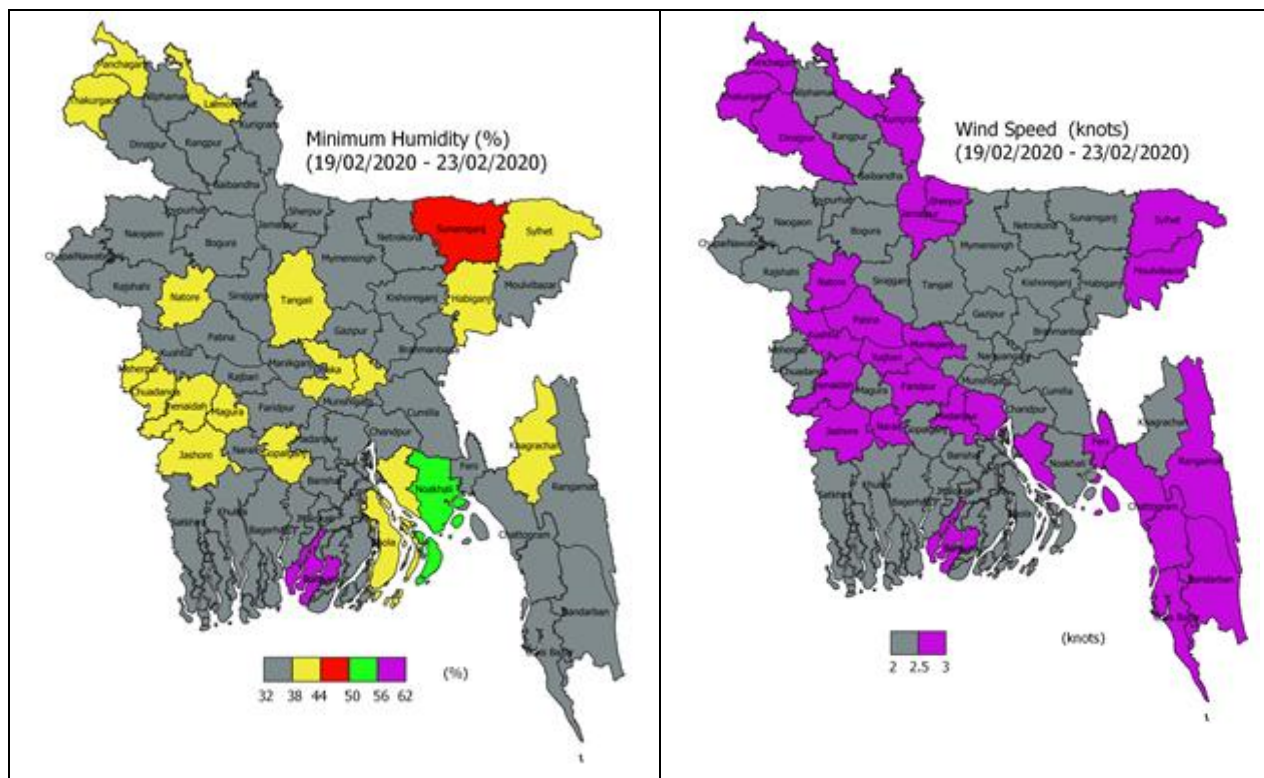
Weather Forecast and Advisory for the Period of 16.02.2020 to 22.02.2020

Bright sunshine hour is likely to be from 6.50 to 7.50 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 with temporary partly cloudy sky over the country during this period. With chances of light rain at one or two places over Rangpur, Rajshahi divisions and Chuadanga & Jashore region during the end of this period.
- Light fog may occur at places over the country during late night to morning of this period.
- Slightly rise in day and night temperature over the country during this period.

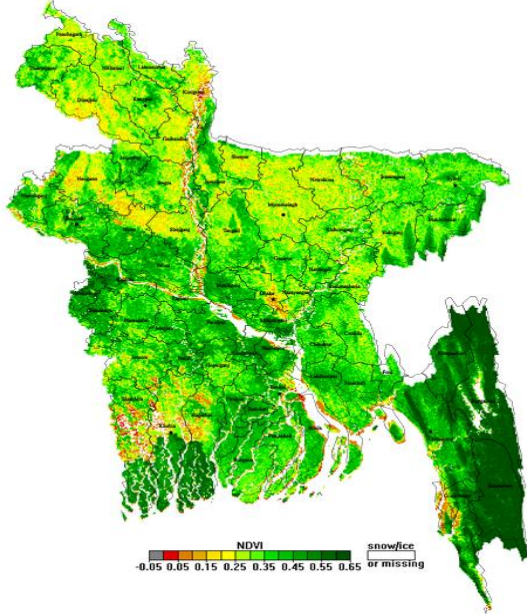
District Wise Quantitative Weather Forecast for next Five days from 19 Feb. -23 February'2020



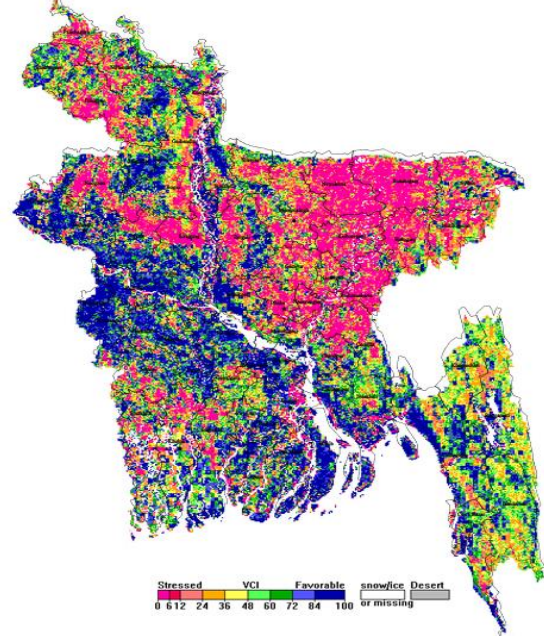


Different Satellite Products over Bangladesh

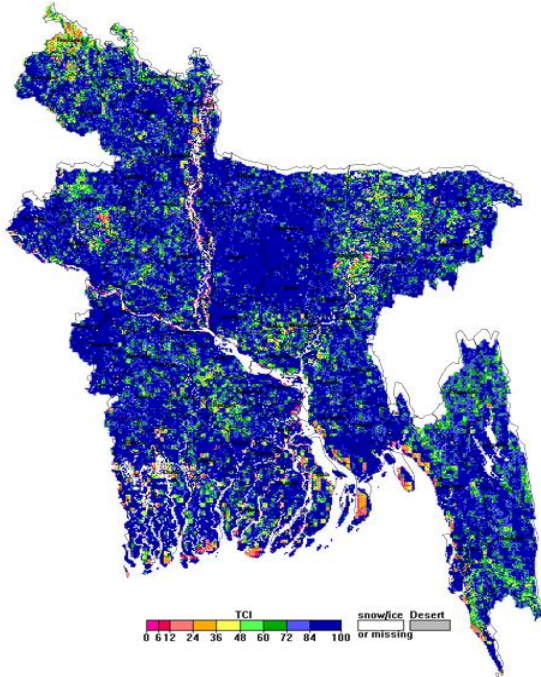
NOAA/VIIRS BLENDED NDVI composite for the week No. 06 (04 February-10 February 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VCI composite for the week No. 06 (04 February-10 February 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 06 (04 February-10 February 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 06 (04 February-10 February 2020) over Agricultural regions of Bangladesh

