



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

15 January 2020 (WEDNESDAY)
[FOR THE PERIOD 15.01.2020 - 19.01.2020]



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 issued from the Bangladesh Meteorological Department (BMD), during next 24 hours weather may remain dry with temporary partly cloudy sky over the country. Mild cold wave is sweeping over Rangpur division and the regions of Rajshahi, Naogaon, Jashore, Chuadanga & Srimangal and it may continue. Moderate to thick fog may occur at places over the country during midnight to noon. Night and day temperature may rise slightly over the country. As per the outlook issued by BMD for next 72 hrs, night and day temperature may rise further. During last four days, no rainfall occurred in the district. As per the quantitative medium range weather forecast, dry condition is likely over the district. Thus, advisories for harvesting of rabi crops and application of irrigation, fertilisers and pesticides are also advised. Special care should be taken for the standing crops, livestock, poultry and fishes which are likely to be affected by cold temperature, fog along with cloudiness.

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 issued for the major crops & in the districts of the country during next five days. Salient Agromet Advisories for livestock, poultry and fishery are also mentioned.

Agromet Advisories

Vegetables

- As dry conditions prevailed during last four days and also dry condition is likely during next five days, apply irrigation in the vegetable field.
- Protect young plants of vegetable from low temperature.
- In perennial vegetables, apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature
- On the occurrence of yellowish-brown spot in tomato, spray mancozeb 2.5-3g/litres of water Carry out weeding and hoeing operation in cauliflower and cabbage
- In case of cold conditions, there may be infestation of yellow vein mosaic in okra. Farmers are advised to go for spraying of systemic fungicides.
- Protect young plants from low temperature. Remove the stock sprout, suckers and water sprout from budded/grafted vegetable plants.
- Monitoring is advised for infestation of fruit borers in brinjal, tomato, chilli. If infestation occurs, installation of pheromone traps @ 3-4 traps per acre is advised.

Boro Paddy:

- Continue seedbed preparation with assured irrigation. Simultaneously start preparation of main field for transplanting of paddy.
- Remove the dew deposited in the morning hours on seedlings.
- If the seedbed becomes yellow, apply urea at the rate of 283 gm urea per decimal.
- Apply 400 gm gypsum per decimal if the seedlings are still not recovered after application of urea.
- Also spread ash over the seedbed for better germination.
- Cover the entire nursery bed in the day time with polythene sheets and remove in the evening to avoid the effect of cool temperatures on germination and growth of nursery. Irrigate the nursery

with water in night time and remove water in early morning to speed up nursery growth in cold weather conditions. Keep 2-3 cm water level on seed bed.

Wheat

- As dry conditions prevailed during last four days and also dry condition is likely during next five days, apply irrigation.
- Monitor the incidences of blast disease periodically as there is chance of the disease due to likely incidence of light to moderate fog over the district during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- For the treatment of rust disease of wheat apply zinc carbonate 2kg dissolved in 1000 liters water and spray twice at 10 days interval. To prevent crops from frost/ fog, timely irrigation should be applied in the wheat field.
- If symptoms of sulphur deficiency noticed in wheat crop, broadcast one quintal gypsum/acre followed by a light irrigation or if the soil is in proper moisture condition is advised.

Mustard:

- As dry conditions prevailed during last four days and also dry condition is likely during next five days, apply irrigation in the mustard field at the time of flowering for late sown crop or pod initiation for early sown crop and also advise for weeding in mustard field.
- Regularly check the mustard crop for pest population. Monitor the crop against attack of leaf eating caterpillars.
- Monitor the crop against attack of painted bug.
- Occurrence of saw fly may be seen in the mustard crops. 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. It is advised to spray Rovral-5- WP @ 2% (mix 2gm in 1 litre water) three to four times at an interval of 10-12days.
- Light to scattered clouds to be appeared, during this week therefore, watchful for aphid in mustard crop. If seen, spray Chlorpyrifos 20% EC @ 1.0 litre/ha or Monocrotophos 36 % S.L. @ 500 ml/ha with 500-600 litre of water solution.

Maize:

- As dry conditions prevailed during last four days and also dry condition is likely during next five days, apply second irrigation after 30-35 days. Apply first dose of urea at the rate 350 gm per decimal.
- Farmers are advised to monitor fall army worm incidence in maize. If symptoms are noticed, spray any one of the following insecticides to control. Chloropyrephos @1ml./litre water, Lambda-Cypermethrin @1ml./litre water.
- Remove extra seedlings after 30 days of sowing of seeds.
- Remove the weeds upto one month after sowing of seeds.

Lentil

- As dry conditions prevailed during last four days and also dry condition is likely during next five days, apply light irrigation.
- These are in vegetative to flowering stage. Apply intercultural operation by removing weeds from the field when the plants are of 30-35 days old.
- There is chance of incidence of Stemphylium blight under the present weather condition. If noticed, spray Rovral 50 WP or Phalitur 250 EC or mix both the fungicides and mix with water @ 2% three to four times after 7 days interval under light sunny condition in the morning hours between 9-10 am.

Potato

- As dry conditions prevailed during last four days and also dry condition is likely during next five days, apply second irrigation at 60 days and third at 80 days after planting of the tubers.
- Smoking around the field is the preventive measures against the attack of disease pathogens.
- Monitor the incidences of late blight disease periodically as there is chance of the disease due to likely incidence of light to moderate fog over the district during late night till morning. If noticed, prophylactic spraying of Krilaxil or Ridomil MZ chemical @ 1.5 g / liter water is recommended.
- Those who have already planted the crop should adopt mulching by using water hyacinth, straw etc. to enhance the tuber quality and yield.
- One weeding followed by one earthing up in potato crop is advocated during this time. Earthing up is to be done if the crop has attained stolon formation stage (25 days after planting and attained a height of 15-22 cm. Do proper earthing up with friable soil. Apply light irrigation 2-3 days before the earthing up operation.
- Due to favourable weather conditions attack of red ant and cut worm 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.

Groundnut

- As dry conditions prevailed during last four days and also dry condition is likely during next five days, apply light irrigation.
- Present weather conditions are favourable for leaf minor and thrips incidence in early sown groundnut. For control of leaf minor to spray chlorpyrifos 2.5 ml/l or quinalphos 2 ml/l of water.
- Present weather conditions are favourable for leaf minor, spodoptera, sucking pest and tikka leaf spot in groundnut. To control leaf minor and spodoptera, spray Chlorpyrifos @ 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.

Horticultural crops

- Protect young plants of horticulture crops from low temperature.
- It is advised to cover the small horticulture plants with grass to avoid cold paralysis.
- Apply light and frequent irrigation /sprinkler irrigation in the evening to protect the crops from frost / cold injury. To protect young fruit plants from chilly winds, cover young fruit plants with straw/polythene sheets/ gunny bags.

- In fruit crops, apply organic mulches after earthing up and weeding to conserve residual soil moisture as well as to maintain the soil temperature.
- Young banana plants of 3-4 months age are prone to attack of pseudostem weevil; spray Chlorpyrifos 2 ml/litres of water.

Livestock

- Possibility of fall in night temperature, keep the animal under sheds and clean the surroundings to control fly and mosquito in cattle shade. Provide the cattle /animals 50 grams iodized salt 15 and 50 to 100 grams mineral mixture daily along with animal feed/fodder, green fodder to keep them healthy.
- Due to fall in night temperature and cloudy weather keep the animals under shed. Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep them healthy.
- Vaccinate and de-worm farm animals at regular intervals in winter season.
- Farmers are advised to give protein enriched diets to the animals. Avoid feeding of paddy straw to prevent liver fluke infection in dairy animals.

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.
- Farmers are advised to protect the poultry from cold injury by keeping the coop clean and dry and use dry paddy straw as litter material and cover the sides of the coop with thick cloths during night.
- Provide artificial brooding to chicks to maintain adequate temperature. Arrange light from Bulb 1-2 hours after evening and not to cover the cage by polythene. It favours more production of eggs and reduce the chance of incidences of diseases.
- It is advised to align the long axis of poultry shed in east-west direction. This will prevent the direct sunshine over the birds.

Fishery

- Protect the fish population against various bacterial diseases prevalent in winter season; apply Potash @ 4-5 mg/litre of water or Sukrena WS @ 1 litre per bigha of water.
- During winter months, fish are under stress and may show symptoms like erratic swimming 11 behaviour, not eating, gasping at the surface and others including mortalities. If such symptoms are observed, immediately stop feeding, liming and manuring. Consult an expert for remedial measures.
- Keep pisciculture farm ponds clean. During winter, reduce the amount of food for fishes and provide feed between 2-3PM.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 15 January'2020) and maximum temperature on 14 January, minimum temperature on 15 January'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	26.0	14.2	Rajshahi	Rajshahi	00	25.3	09.8
	Tangail	00	25.6	11.0		Ishurdi	00	25.8	10.3
	Faridpur	00	26.2	10.7		Bogura	00	26.2	12.5
	Madaripur	00	25.3	11.3		Badalgachhi	00	25.0	09.5
	Gopalganj	00	26.3	13.2		Tarash	00	25.0	12.6
	Nikli	00	22.5	13.0					
Mymensingh	Mymensingh	00	25.0	13.5	Rangpur	Rangpur	00	25.3	10.8
	Netrokona	00	25.0	14.0		Dinajpur	00	24.1	09.6
						Sayedpur	00	25.6	09.7
Chattogram	Chattogram	00	27.0	14.2		Tetulia	00	26.3	07.5
	Sandwip	00	26.8	12.5		Dimla	00	25.7	10.0
	Sitakunda	00	28.3	11.2		Rajarhat	00	25.5	08.8
	Rangamati	00	25.9	12.6	Khulna	Khulna	00	26.4	13.0
	Cumilla	00	25.5	11.0		Mongla	00	26.5	13.9
	Chandpur	00	25.6	14.2		Satkhira	00	26.0	11.6
	M.Court	00	26.0	14.5		Jashore	00	27.0	09.0
	Feni	00	27.0	12.2		Chuadanga	00	25.5	08.9
	Hatiya	00	26.5	13.4	Kumarkhali	00	25.4	11.4	
	Cox's Bazar	00	27.7	16.0					
Kutubdia	00	26.0	14.5	Barishal	Barishal	00	26.5	12.3	
Teknaf	00	27.4	14.6		Patuakhali	00	27.0	13.3	
Sylhet	Sylhet	00	26.0	12.6		Khepupara	00	27.4	12.5
	Srimangal	00	25.3	10.0		Bhola	00	26.4	13.1

Highlights:

- Country average bright sunshine hour was 4.58 hours per day during last week.
- Country average free water loss during the previous week was 2.03 mm per day.

Weather Forecast Valid for 24 Hours commencing 06 PM Today:

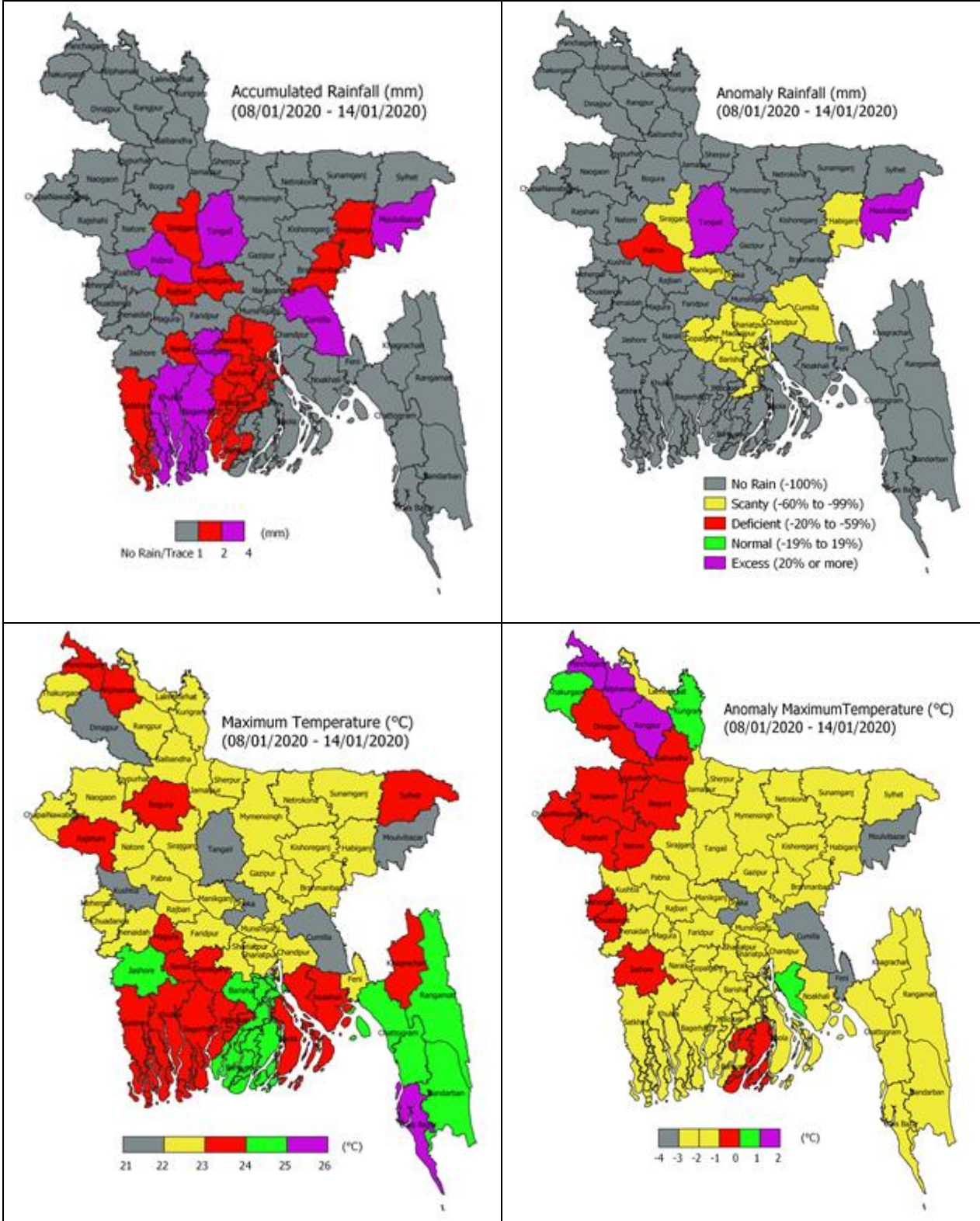
Forecast: Weather may remain dry with temporary partly cloudy sky over the country.

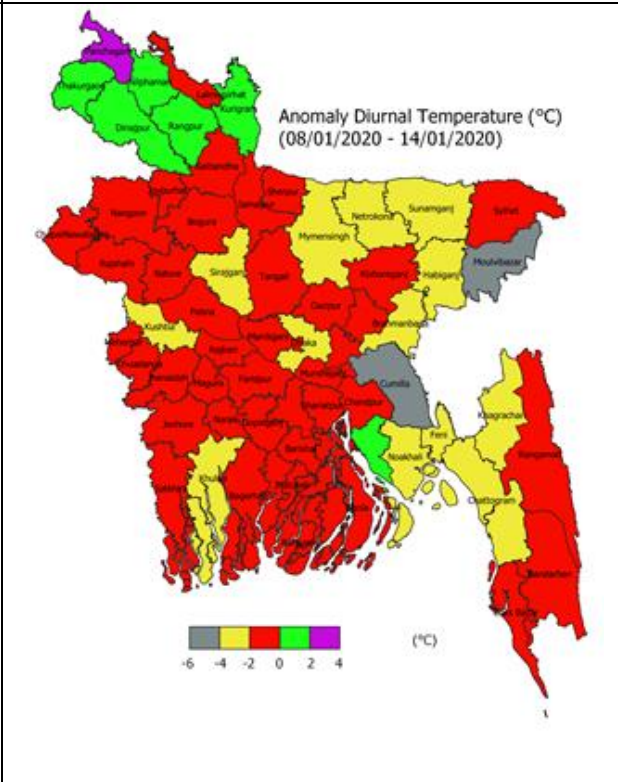
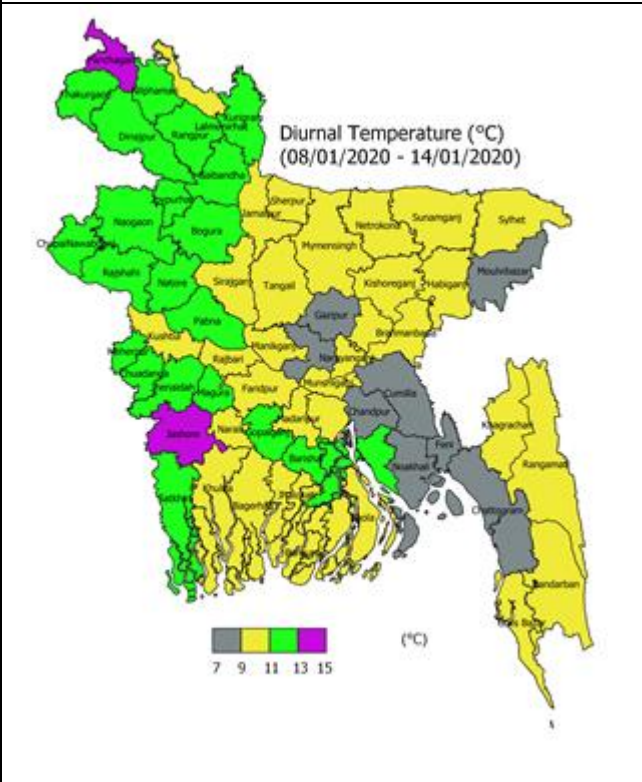
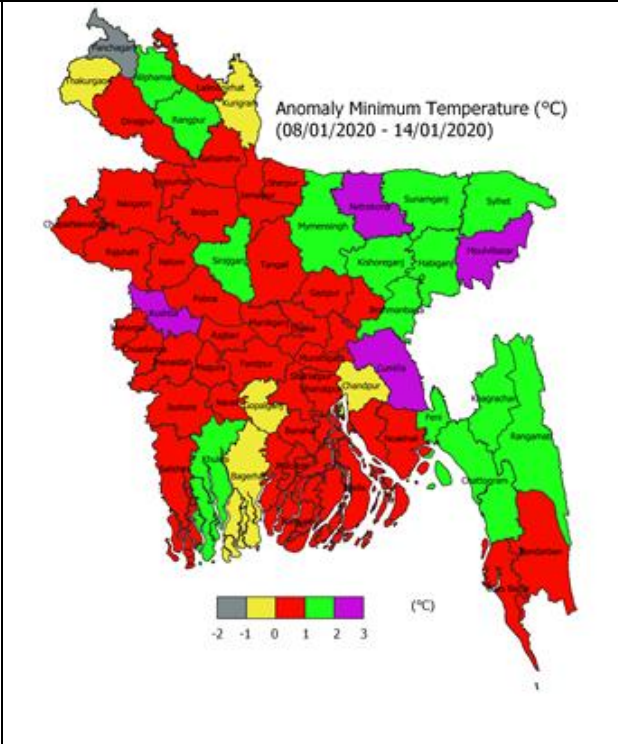
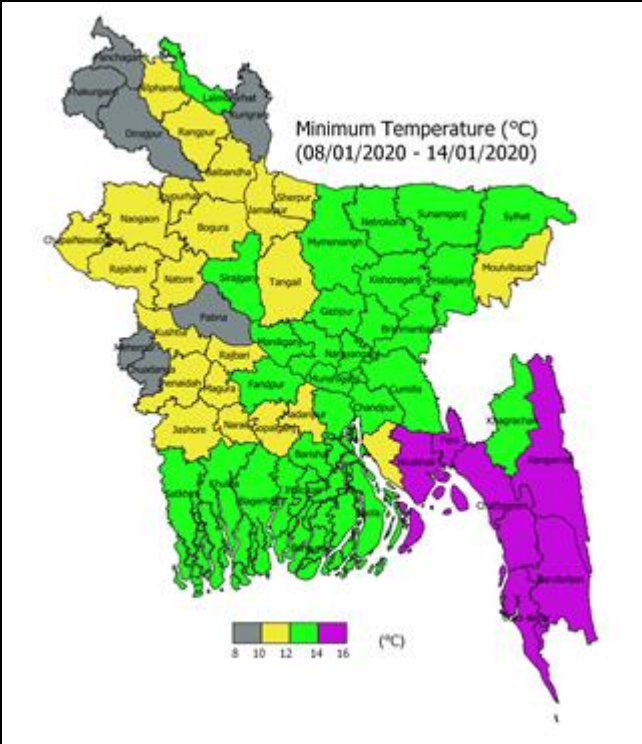
Fog: Moderate to thick fog may occur at most places over the country during midnight to morning, it may continue at places till noon.

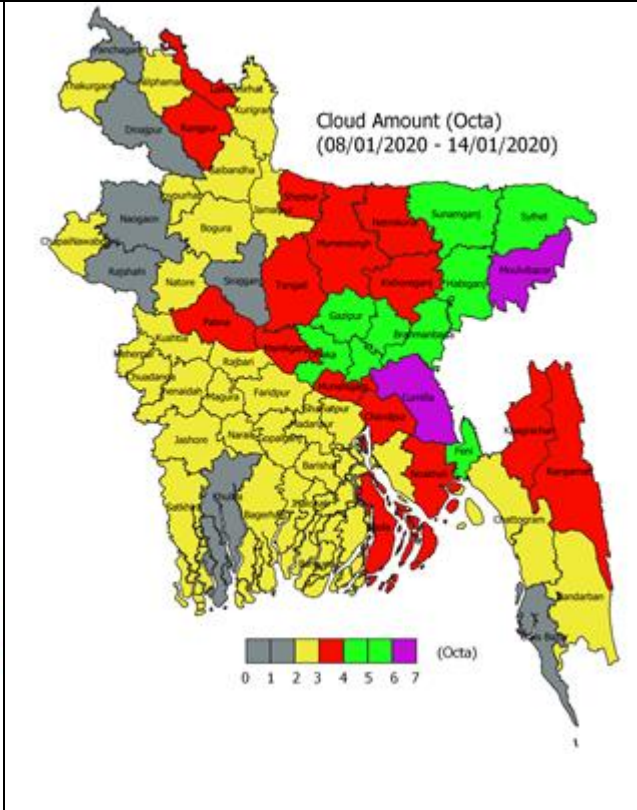
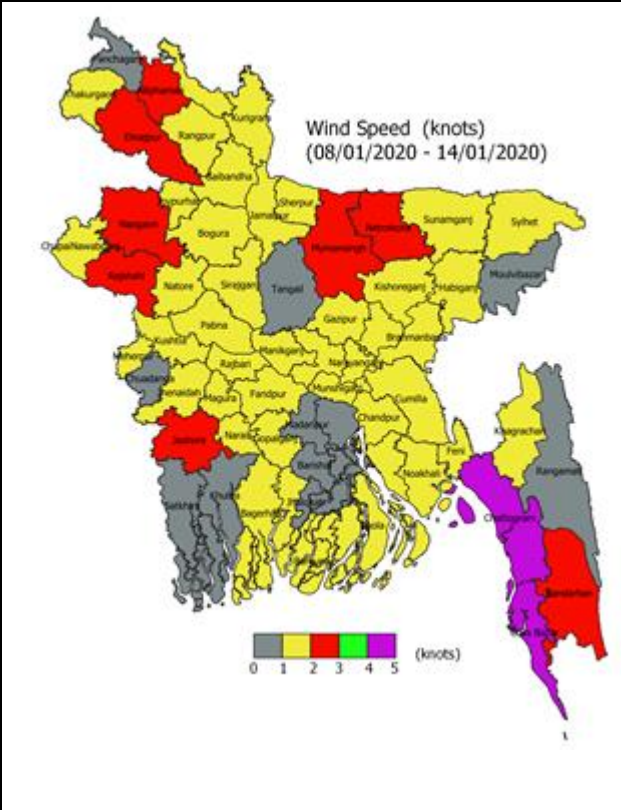
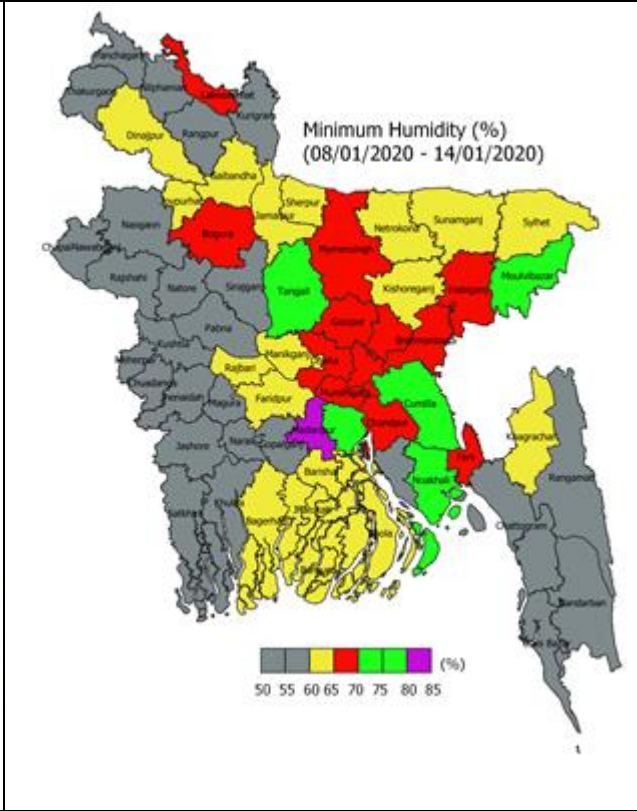
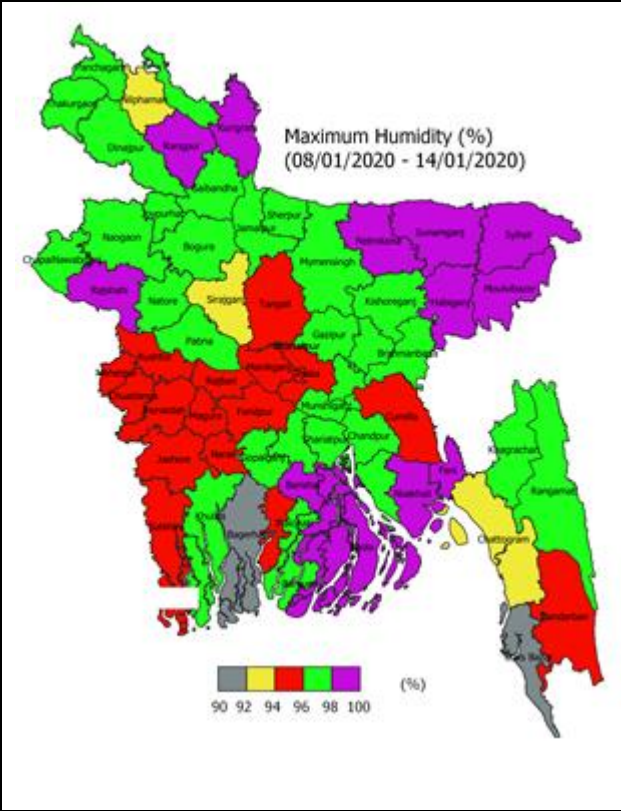
Cold Wave: Mild cold wave is sweeping over Rangpur division and the regions of Rajshahi, Naogaon, Jashore & Chuadanga and it may abate from some places.

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

Spatial Distribution of weather parameters for the Week ending 14 January 2020





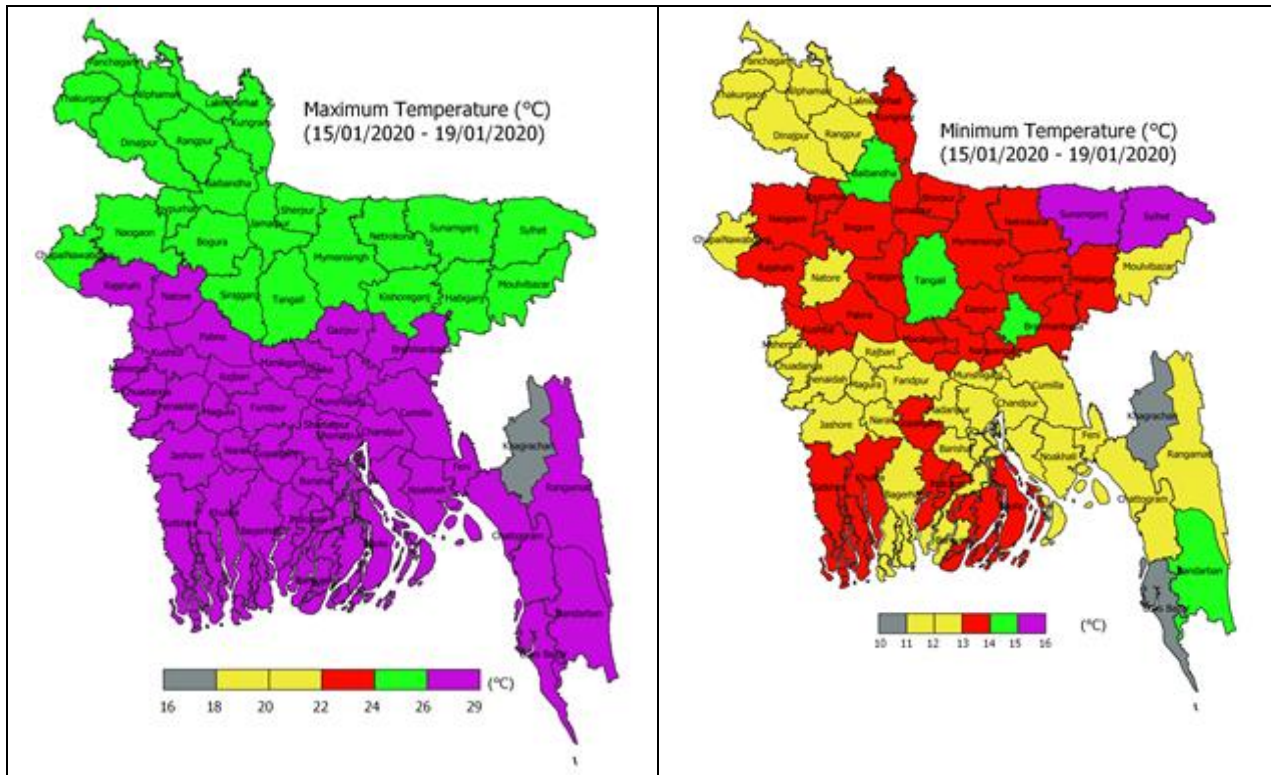


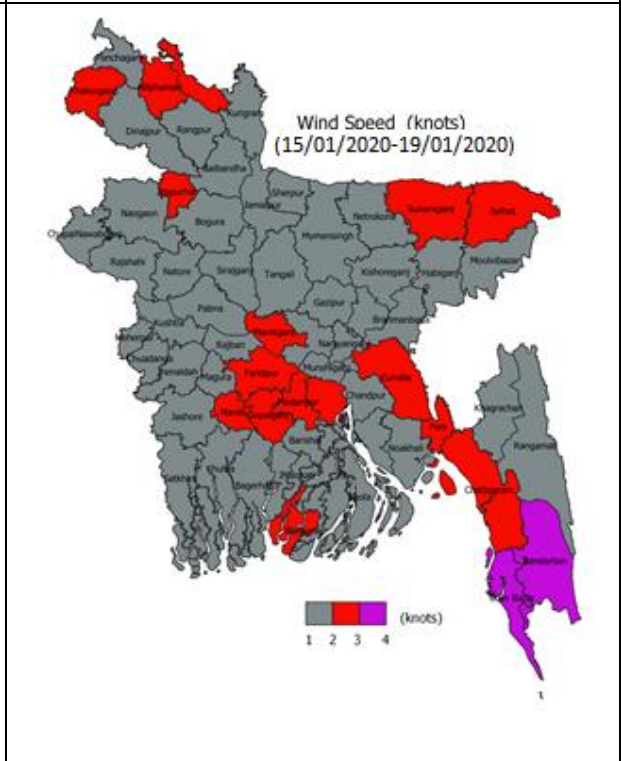
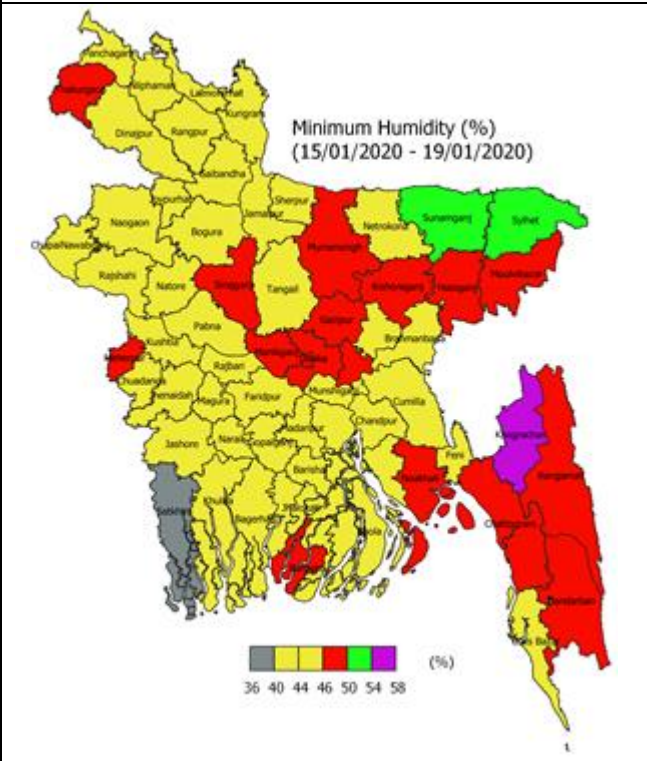
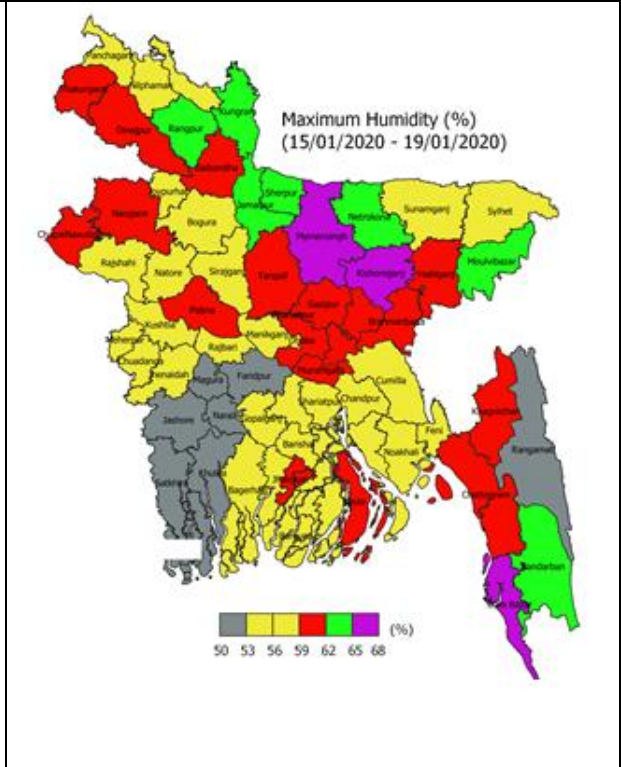
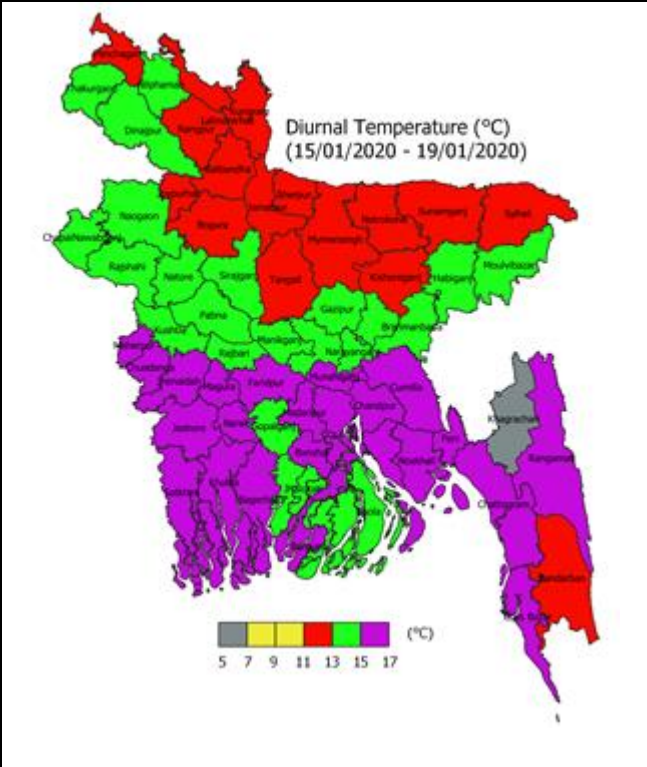
Weather Forecast and Advisory for the Period of 15.01.2020 to 21.01.2020

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 2.00 to 3.00 mm per day during this week.

- Weather may remain dry with partly cloudy sky over the country during the first half of this period. Light rain/ drizzle is likely to occur at a few places over Rangpur, Rajshahi, Dhaka, Mymensingh, Sylhet divisions and the regions of Jashore, Kushtia during the second half of this period.
- Moderate to thick fog may occur over northern part and river basin area from mid night to noon during this period.
- Mild cold wave may sweep over the north & northwestern part of the country during this period.
- Day and night temperature may rise slightly during the first half and may fall during the second half of this period over the country.

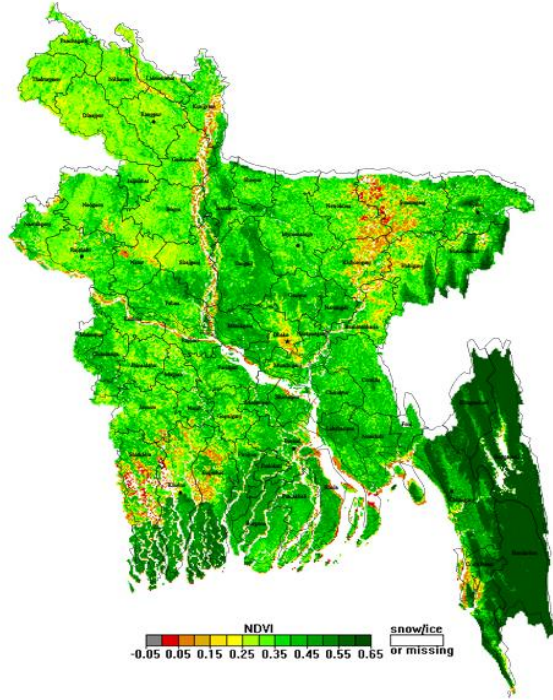
District Wise Quantitative Weather Forecast for next Five days from 15 Jan. -19 January'2020



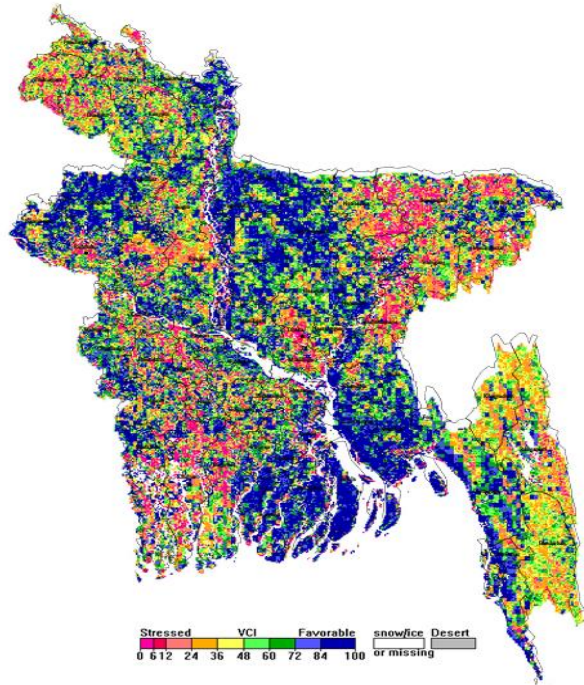


Different Satellite Products over Bangladesh

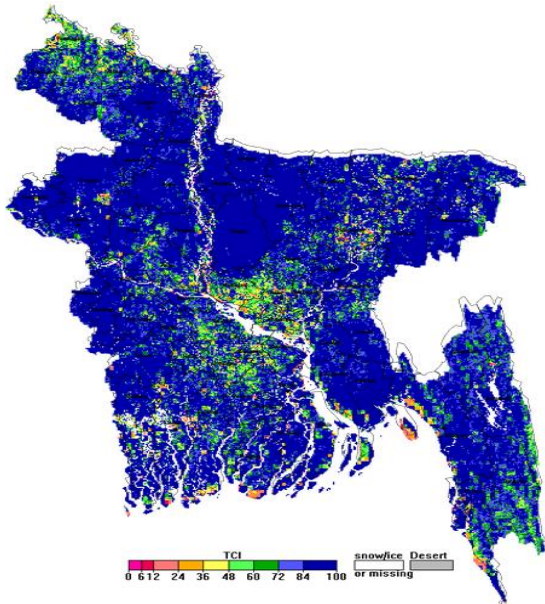
NOAA/VIIRS BLENDED NDVI composite for the week No. 01 (01 January-07 January 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VCI composite for the week No. 01 (01 January-07 January 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 01 (01 January-07 January 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 01 (01 January-07 January 2020) over Agricultural regions of Bangladesh

