

NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

05 FEBRUARY 2020 (WEDNESDAY) [FOR THE PERIOD 05.02.2020 - 09.02.2020]









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.

Please Contact: Farhana Hoque, Sabuj Roy | E-mail: pdamisdia@dae.gov.bd Phone No.: 02-55`028414, 02-55028418

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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 mainly 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. Mild to moderate cold wave is sweeping over Rangpur division and the regions of Pabna & Srimangal and it may abate from some places. Night temperature may rise slightly over north-western part and it may fall slightly elsewhere over the country. Day temperature may fall slightly over southern part and it may remain nearly unchanged elsewhere over the country.As per the outlook issued by BMD for next 72 hrs, rainfall/drizzle is likely at the end period. 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 over the country except some districts like Sylhet, Sunamganj, Satkhira, Shariatpur, Madaripur, Khulna, Gopalganj, Cumilla, Chandpur and Bagerhat where light rainfall is likely on 9th February during next five days. Under the present weather conditions & forecast, following advisories are issued for the districts where light amount amount of rainfall is expected.

Vegetables

- In order to get more production of the vegetables like cauliflower, cabbage, tomato, brinjal, cucumber, green peas etc proper care and management is required.
- Do not apply irrigation.
- On the occurrence of yellowish brown spot in tomato, spray mancozeb 2.5-3g/litres of water after the current spell of rainfall on 9thFebruary.
- Carry out weeding and hoeing operation in cauliflower and cabbage
- 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.
- Farmers are advised to use pheromone traps for the control of tobacco caterpillar and fruit borer in vegetables.
- Weather is congenial for sucking pests in vegetables; spray recommended pesticides

Boro Paddy:

- Continue seedbed preparation.
- 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.
- Keep 2-3 cm water level on seed bed.
- The main field should be prepared for transplanting of boro paddy with 3-4 times ploughing followed by laddering and Levelling should be done properly to retain water uniformity.
- Apply 13 kg urea (1/3 of total urea) as first basal dose and also 13 kg TSP, 20 kg MOP, 15kg gypsum and 15 kg zinc per bigha after complete preparation of field.

Seedbed to Transplanting

- Seedling of 35 to 45 days old may be transplanted.
- Complete transplanting within 10 days -- 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.
- Maintain thin layer of water (1 2 cm) in the main field up to 15 days after transplanting

Early Vegetative or Vegetative

- As there is possibility of getting light rainfall in the coming 5 days, need based irrigation may be provided in the boro rice fields to maintain standing water of 3-7 cm depth.
- Apply 13 kg urea as first top dressing after 20-25 days after transplanting.
- Prevailing weather conditions are congenial for the incidence of stem borer in rice. If noticed, the pest may be identified and controlled by using light traps and also constant monitoring is required for its level of incidences. Also spray Carbofuran group of insecticide for its control.

Wheat

- Do thinning operations if the plants have been sown in dense condition after the current spell of rainfall on 9thFebruary.
- Apply need based irrigation to 50-55 days old crop as there is no chance of rainfall during next five days.
- Monitor the incidences of pests (stem borer, aphid, jassid and rat) & diseases ((blast, leaf rust, , leaf blight, , brown spot, foot rot and powdery mildew) and if noticed, take appropriate preventive measure after the current spell of rainfall on 9thFebruary..
- 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 on 9thFebruary.
- For the treatment of rust disease of wheat apply zinc carbonate 2kg dissolved in 1000 liters water and spray twice at 10 days interval.
- 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.

Mustard

- One need based irrigation should be applied either at 50% flowering or at early silica formation stage.
- Advise to harvest mustard if the 80% crop is in matured stage after the current spell of rainfall on 9thFebruary..
- Where plants are found mature complete harvesting after the current spell of rainfall on 9thFebruary --No irrigation should be applied
- During flowering stage advise for weeding two times after the current spell of rainfall on 9thFebruary
- If the mustard crop is at pod formation stage; go for intercultural operations after the current spell of rainfall on 9thFebruary.
- 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 after the current spell of rainfall on 9thFebruary.

- Alternaria blight may infect the mustard plant under the present weather condition. It is advised to spay Rovral-5- WP @ 2% (mix 2gm in 1 litre water) three to four times at an interval of 10-12days on fair weather.
- Be watchful for aphid in mustard crop. If seen, spray Chlorpyriphos 20% EC @ 1.0 litre/ha or Monocrotophos 36 % S.L. @ 500 ml/ha with 500-600 litre of water solution after the current spell of rainfall on 9thFebruary
- 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 on 9thFebruary.
- Farmers are advised to keep vigilance on hairy caterpillar.

Maize

- Apply need based third irrigation between 60-70 days after sowing of the crop
- Also arrange thinning operations if the plants are in densely populated. There should be 60 cm line spacing and 25 cm spacing from plant to plant. Apply 350 gm urea as second top dressing to 40-50 days old plant after the current spell of rainfall on 9thFebruary..
- 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 after the current spell of
 rainfall. on 9thFebruary.
- 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 Mancozeb group pesticide at 10 days interval 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.

Lentil

- As light rainfall is likely during next five days, do not apply light irrigation.
- These are in vegetative to flowering stage. Apply intercultural operation by removing weeds from the field when the plants within 30-35 days after sowing and.
- Monitor the incidences of pests (aphid & pod borer) & diseases (stemphylium blight, foot rot, rust, fusarium wilt) and if noticed, take appropriate preventive measure after the current spell of rainfall on 9thFebruary.
- There is chance of incidence of Stemphylium blight under the present weather condition. If noticed, spray Rovral 50 WP or Phalikur 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 and after the current spell of rainfall on 9thFebruary.
- 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 after the current spell of rainfall on 9thFebruary.
- . 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 after the current spell of rainfall on 9thFebruary.
- 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, prophylectic spraying of Krilaksil or Ridomil MZ chemical @ 1.5 g / liter water is recommended after the current spell of rainfall on 9thFebruary.
- 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 after the current spell of rainfal on 9thFebruary I.
- Present weather is congenial for Katui pest infestation. For pest control apply Chlorpyrifos group pesticide after the current spell of rainfall on 9thFebruary.

Groundnut

- As there is chance of light rainfall during next five days, avoid irrigation & application of fertilisers.
- 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 after the current spell of rainfall on 9thFebruary.
- Present weather conditions are favourable for leaf miner and thrips incidence in early sown groundnut. For control of leaf minor to spray chloripyriophos 2.5 ml/l or quinalphos 2 ml/l of water after the current spell of rainfall on 9thFebruary.
- Present weather conditions are favourable for leaf minor, spodoptera, jassid and tikka leaf spot 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 the plant protection measures should be taken after the current spell of rainfall on 9thFebruary.
- 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 on 9thFebruary.

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.
- Do not 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.

- Young banana plants of 3-4 months age are prone to attack of pseudostem weevil; spray Chlorpyriphos 2 ml/litres of wate after the current spell of rainfall on 9thFebruary.
- 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 on 9thFebruary.
- Due to high relative humidity and low minimum temperature, sooty mould disease may occur in mango. Spray Phosphamidon @ 2ml/ litre + 5% maida after the current spell of rainfall on 9thFebruary.
- 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 after the current spell of rainfall on 9thFebruary.
- There is a chance of leaf hopper and 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 on 9thFebruary.

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, darkplaigue 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.

It is advised to maintain good amount of water in pond to save fishes from low temperature.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 05 February'2020) and maximum temperature on 04 February, minimum temperature on 05 February'2020 is given below:

Name of	Name of	Rain	Max.	Min.	Name of	Name of	Rain	Max.	Min.
Divisions	Stations	fall (mm)	Temp	Temp (°C)	Divisions	Stations	fall (mm)	Temp	Temp (°C)
		` ′	(°C)				` '	(°C)	
Dhaka	Dhaka	00	26.0	14.8	Rajshahi	Rajshahi	00	24.7	10.5
	Tangail	00	25.0	11.2		Ishurdi	00	25.0	10.0
	Faridpur	00	26.2	12.6		Bogura	00	24.7	11.9
	Madaripur	00	26.0	12.6		Badalgachhi	00	24.5	11.0
	Gopalgonj	00	26.1	12.5		Tarash	00	23.0	13.4
	Nikli	00	25.0	13.0					
			1		Rangpur	Rangpur	00	24.5	09.6
Mymensingh	Mymensingh	00	25.2	12.4		Dinajpur	00	24.5	07.7
	Netrokona	00	24.9	13.0		Sayedpur	00	25.5	09.0
		1				Tetulia	00	24.7	06.6
Chattogram	Chattogram	00	25.2	14.0		Dimla	00	25.0	09.0
	Sandwip	00	26.7	13.0		Rajarhat	00	24.6	08.0
	Sitakunda	00	27.0	10.7		1			
	Rangamati	00	26.5	11.8	Khulna	Khulna	00	26.2	14.2
	Cumilla	00	26.0	14.0		Mongla	00	26.2	14.0
	Chandpur	00	27.2	14.6		Satkhira	00	26.2	14.5
	M.Court	00	26.3	15.0		Jashore	00	26.4	12.0
	Feni	00	26.5	14.2		Chuadanga	00	26.2	11.0
	Hativa	00	26.5	11.5		Kumarkhali	00	26.0	12.8
	Cox's Bazar	00	26.5	13.8					
	Kutubdia	00	24.8	13.2	Barishal	Barishal	00	26.6	12.1
	Teknaf	00	26.1	14.6		Patuakhali	00	26.5	13.0
		"		24.0		Khepupara	00	26.0	12.5
Sylhet	Sylhet	00	26.2	12.5		Bhola	00	26.6	12.8
	Srimangal	00	26.0	09.7		Diloia		20.0	12.0
	Jsar		20.0	05.7					

Highlights:

- Country average bright sunshine hour was 4.80 hours per day during last week.
- Country average free water loss during the previous week was 2.22 mm per day.

Weather Forecast Valid for 24 Hours commencing 06 PM Today:

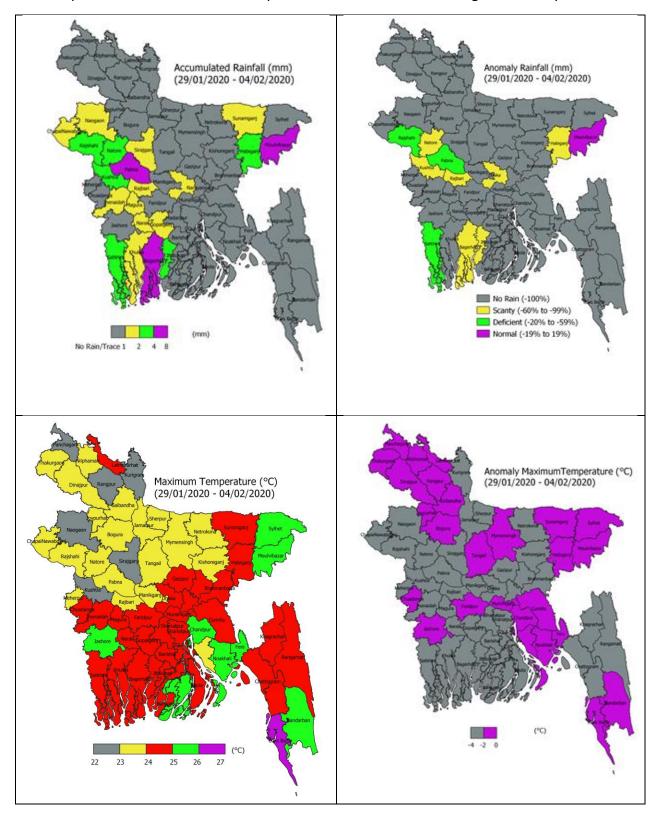
Forecast: Weather may remain mainly dry over the country.

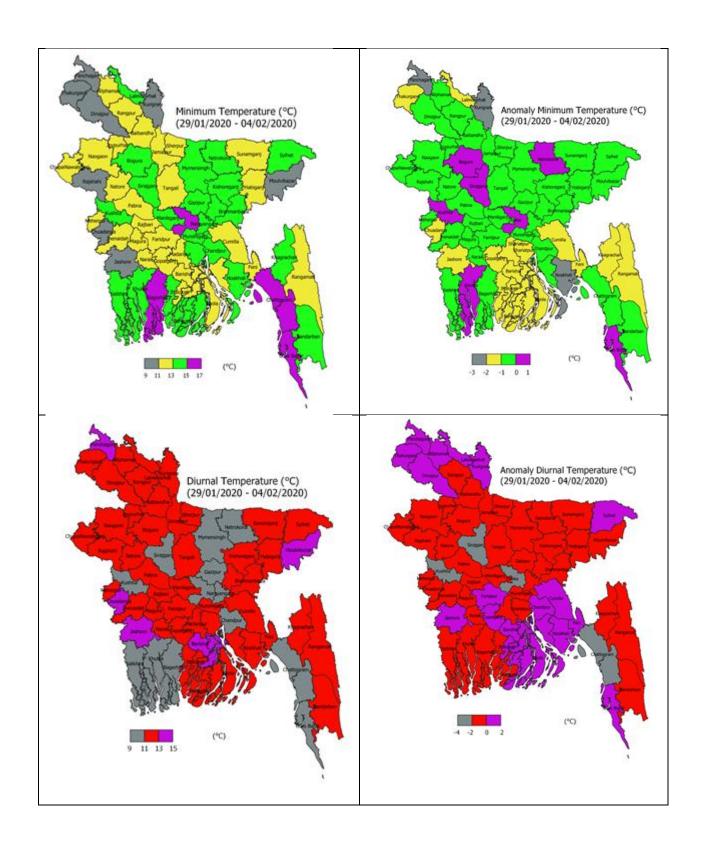
Fog: Light to moderate fog may occur at places over the country during late-night to morning.

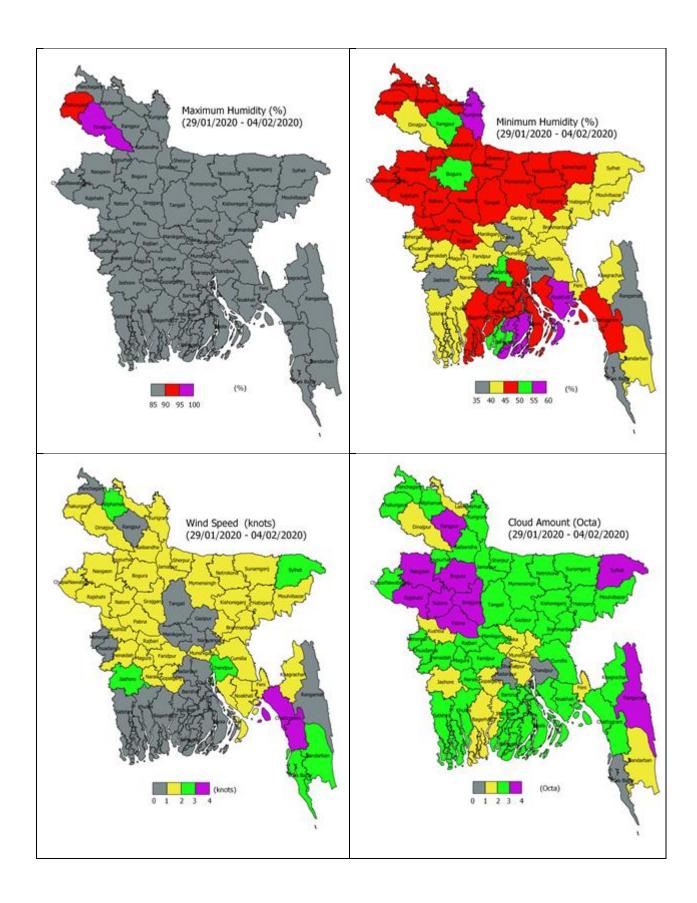
Cold wave: Prevailing cold wave condition is likely to continue.

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

Spatial Distribution of weather parameters for the Week ending 04 February 2020





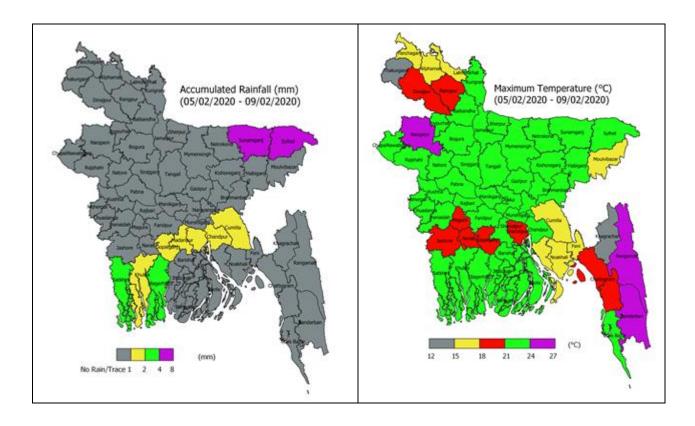


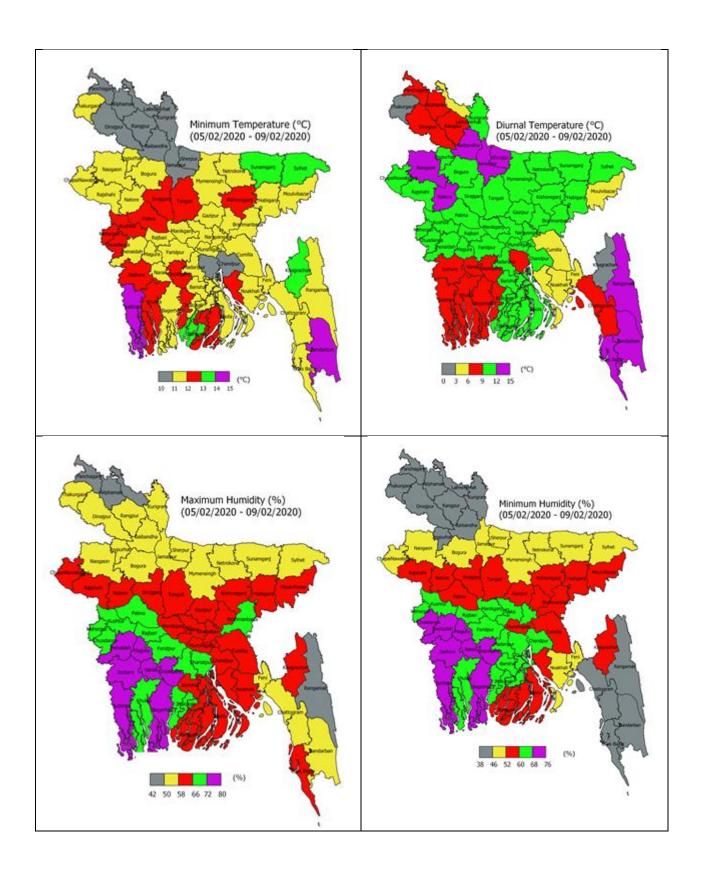
Weather Forecast and Advisory for the Period of 02.02.2020 to 08.02.2020

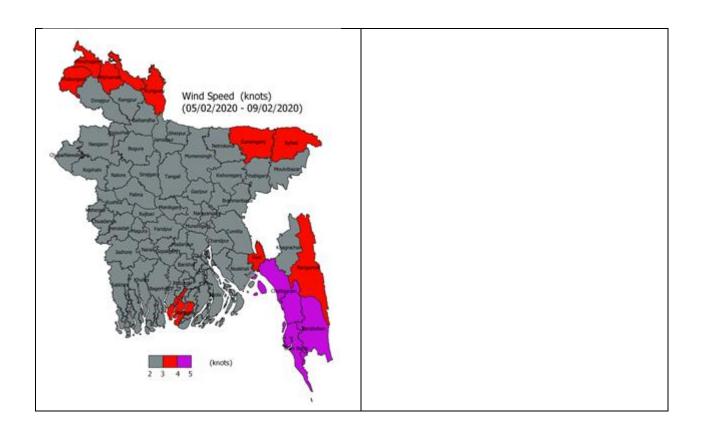
Bright sunshine hour is likely to be from 6.00 to 7.00 hours per day during this week. Average free water loss is likely to be from 2.25 to 3.25 mm per day during this week.

- Weather may remain mainly dry over the country during this period with chances of Light (04-10mm/day) rain or drizzle may occur at one or two places over Dhaka, Rajshahi and Khulna divisions during the end of this period.
- Light to moderate fog may occur at places over the country during late night to morning.
- Day and night temperature may remain nearly unchanged during the 1st half and slight rise is expected over the second half of this period.

District Wise Quantitative Weather Forecast for next Five days from 05 Feb. -09 February'2020

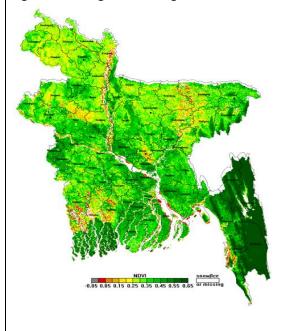




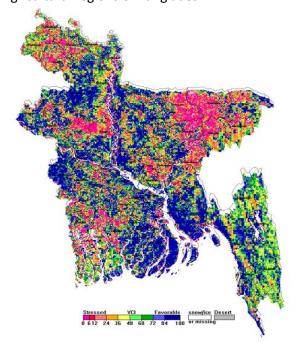


Different Satellite Products over Bangladesh

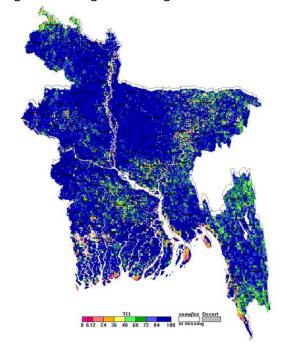
NOAA/VIIRS BLENDED NDVI composite for the week No. 04 (22 January-28 January 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VCI composite for the week No. 04 (22 January-28 January 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 04 (22 January-28 January 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 04 (22 January-28 January 2020) over Agricultural regions of Bangladesh

