

NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

29 January 2020 (WEDNESDAY) [FOR THE PERIOD 29.01.2020 – 02.02.2020]









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

Please Contact: Farhana Hoque, Sabuj Roy | E-mail: pdamisdp@dae.gov.bd

Phone No.: 02-55`028414, 02-55028418

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, light rain/drizzle is likely to occur at a few places over Rajshahi, Dhaka, Khulna, Barishal & Chattogram divisions and at one or two places over Rangpur, Mymensingh & Sylhet divisions. Light to moderate fog may occur at places over the country during late night to morning. Night and day temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hrs, weather may improve at the end period. During last four days, dry condition prevailed over the country and as per the quantitative medium range weather forecast, a large number of districts are expected to receive light to moderate rainfall during next five days. Under the present weather conditions & forecast, following special advisories are issued for the districts where good amount of rainfall is likely.

- 1. Avoid application of fertilizer, pesticides, irrigation on the standing crops.
- 2.Immediately harvest matured vegetables & horticultural crops.
- 3. Avoid sowing of new plants/ crops
- 4.Clean the irrigation channel so that there should not be any standing water in the groundnut, maize, mustard, lentil, potato field.
- 5. Arrange for elevated bunding around and inside the seedbed of boro paddy and also boro paddy recently transplanted in the main field so that water current may not affect the standing crops
- 6. Provide mechanical support to the standing crops & vegetables.

Detail Agromet advisories for the district likely to receive good amount of rainfall under low minimum temperature are given below.

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.
- As moderate rainfall is likely during next five days, avoid irrigation in the vegetable field.
- Drain out water.
- Clean the irrigation channel so that there should not be any standing water
- On the occurrence of yellowish brown spot in tomato, spray mancozeb 2.5-3g/litres of water after current spell of rainfall.
- Carry out weeding and hoeing operation in cauliflower and cabbage after current spell of rainfall.
- 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.
- Weather is congenial for sucking pests in vegetables; spray recommended pesticides after current spell of rainfall.

Boro Paddy:

• Continue seedbed preparation.

- 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 after current spell of rainfall.
- Apply 400 gm gypsum per decimal if the seedlings are still not recovered after application of urea. These operations should be done after current spell of rainfall.
- 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.
- 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 current spell of rainfall and after complete preparation of field.
- Arrange for elevated bunding around and inside the seedbed of boro paddy and also boro paddy recently transplanted in the main field so that water current may not affect the standing crops.
- Drain out excess water

Seedbed to Transplanting

- Seedling of 35 to 45 days old may be transplanted. 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

Wheat

- Avoid application of irrigation to 50-55 days old crop as there is chance of moderate rainfall during next five days.
- Drain out water.
- Clean the irrigation channel so that there should not be any standing water in wheat field.
- 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.
- 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 zinc carbonate 2kg dissolved in 1000 liters' water and spray twice at 10 days' interval after the current spell of rainfall.

Mustard

- As moderate rainfall is likely during next five days, avoid second irrigation (50-55 days after sowing) at pod initiation for early sown or normal sown crop
- Drain out water.
- Clean the irrigation channel so that there should not be any standing water
- During flowering stage advise for weeding two times after the current spell of rainfall.

- If the mustard crop is at pod formation stage; go for intercultural operations 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. 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.

Maize

- Avoid third irrigation between 60-70 days after sowing of the crop
- Drain out water.
- Clean the irrigation channel so that there should not be any standing water
- 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.

Lentil

- As moderate rainfall is likely during next five days, avoid light irrigation.
- Drain out water.
- Clean the irrigation channel so that there should not be any standing water
- 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 after the current spell of rainfall.
- 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 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 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 current spell of rainfall.

Potato

- Early sown & where 80% plants found mature complete harvesting after current spell of rainfall.
- Avoid irrigation.
- Drain out water.
- Clean the irrigation channel so that there should not be any standing water
- If required, second weeding followed earthing may be taken up after 55-60 days. Do proper earthing up with friable soil after the current spell of rainfall.
- 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, prophylectic spraying of Krilaksil or Ridomil MZ chemical @ 1.5 g / liter water is recommended after the current spell of rainfall.
- 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 and after the current spell of rainfall.

Groundnut

- As there is chance of moderate rainfall during next five days, avoid irrigation & application of fertilisers.
- Drain out water.
- Clean the irrigation channel so that there should not be any standing water
- 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.
- 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 sowing and after the current spells of rainfall.
- 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 after the current spells 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 spells of rainfall.

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.
- Avoid 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 water after the current spells 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 spells of rainfall.
- 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 spells of rainfall.

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 29 January'2020) and maximum temperature on 28 January, minimum temperature on 29 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	01	21.9	15.6	Rajshahi	Rajshahi	03	20.5	12.8
	Tangail	Trace	22.4	12.2	*	Ishurdi	<u>05</u>	20.7	12.2
	Faridpur	Trace	23.3	13.7		Bogura	00	22.4	14.4
	Madaripur	00	24.0	14.2		Badalgachhi	01	22.0	13.5
	Gopalgonj	01	23.5	14.8		Tarash	Trace	21.3	15.0
	Nikli	00	23.0	13.5					
					Rangpur	Rangpur	00	23.8	12.4
Mymensingh	Mymensingh	00	22.7	12.4		Dinajpur	00	24.4	11.7
	Netrokona	00	23.0	12.9		Sayedpur	00	24.5	11.0
						Tetulia	00	25.4	09.1
Chattogram	Chattogram	Trace	22.5	14.4		Dimla	00	24.5	09.1 10.9
	Sandwip	00	23.6	12.8		Rajarhat	00	24.4	10.1
	Sitakunda	00	22.3	10.2		_			
	Rangamati	00	21.0	13.0	Khulna	Khulna	01	24.0	15.5
	Cumilla	Trace	22.4	13.0		Mongla	00	24.0	15.8
	Chandpur	00	24.5	14.1		Satkhira	00	23.4	15.5
	M.Court	00	23.4	14.8		Jashore	01	24.4	14.0
	Feni	00	23.2	13.0		Chuadanga	01	23.2	13.1
	Hatiya	00	23.0	11.8		Kumarkhali	03	21.2	14.0
	Cox's Bazar	00	25.5	15.4					
	Kutubdia	00	25.2	15.5	Barishal	Barishal	Trace	23.5	13.0
	Teknaf	00	27.2	13.8		Patuakhali	Trace	23.8	14.7
						Khepupara	Trace	22.3	15.0
Sylhet	Sylhet	00	25.0	12.5		Bhola	00	23.5	13.5
	Srimangal	00	25.4	09.8					

Highlights:

- Country average bright sunshine hour was 6.47 hours per day during last week.
- Country average free water loss during the previous week was 2.57 mm per day.

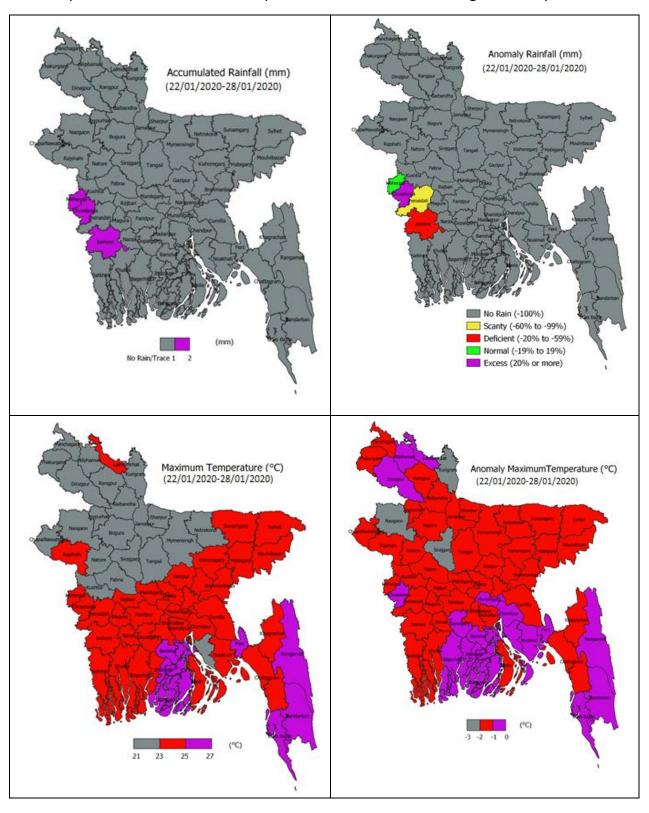
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

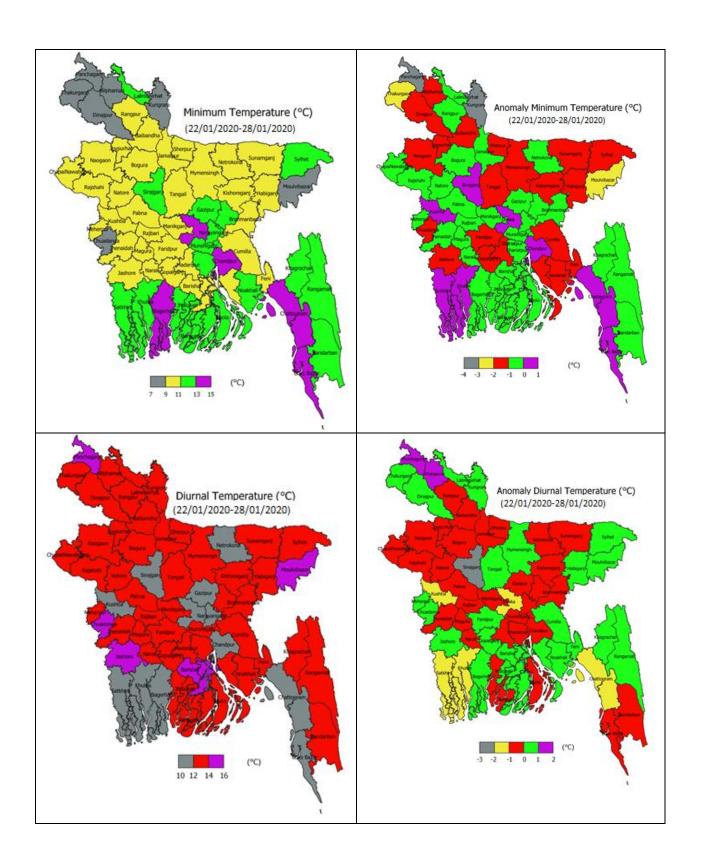
Forecast: Light rain/drizzle is likely to occur at a few places over Rajshahi, Dhaka, Khulna & Barishal divisions and at one or two places over Rangpur, Mymensingh, Sylhet & Chattogram divisions.

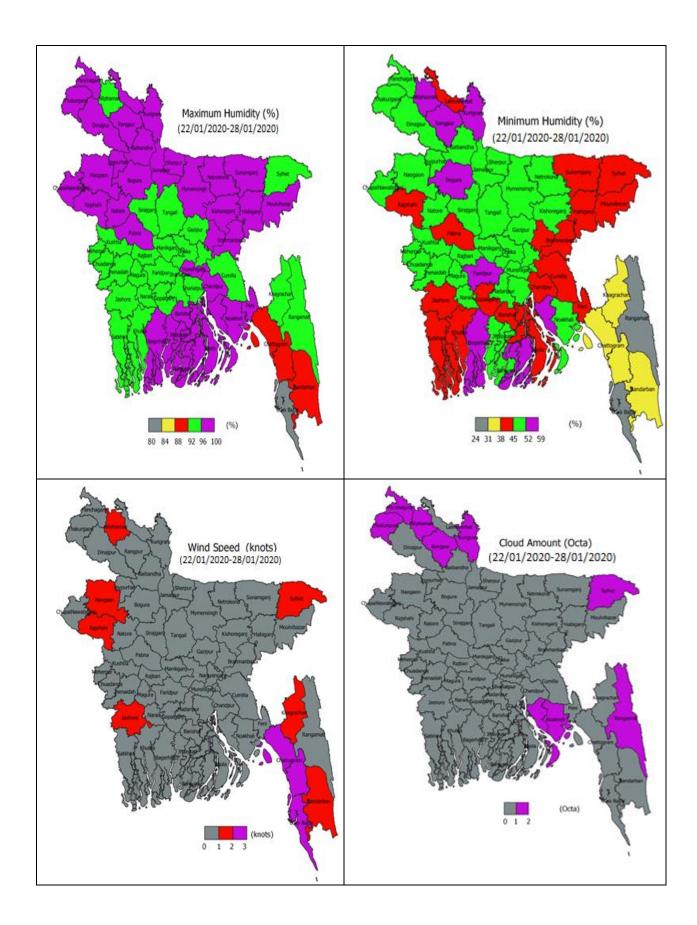
Fog: Light to moderate fog may occur at places over the country during late night to morning.

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

Spatial Distribution of weather parameters for the Week ending 28 January 2020





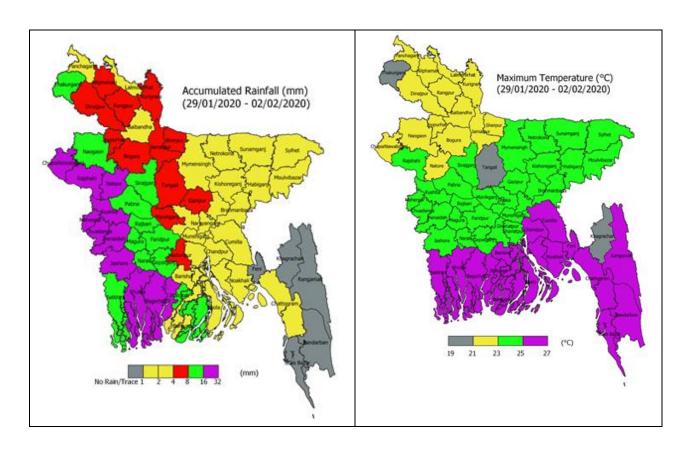


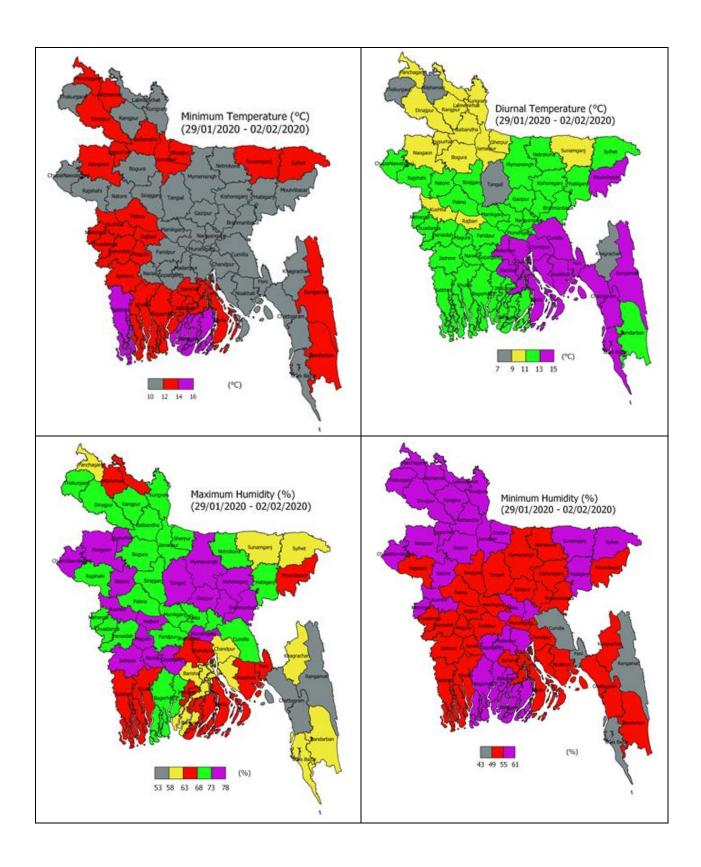
Weather Forecast and Advisory for the Period of 22.01.2020 to 01.02.2020

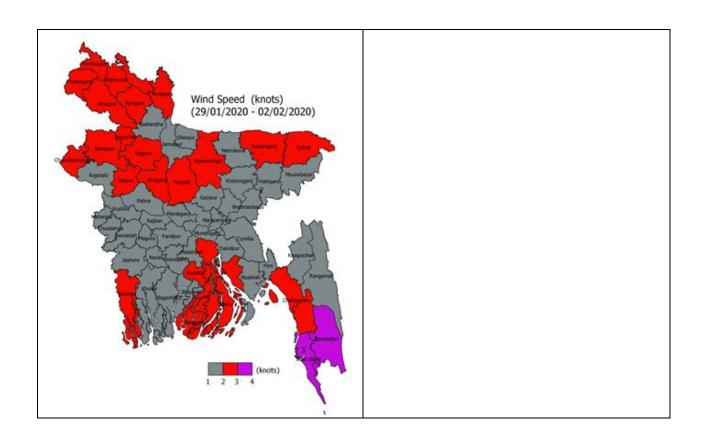
Bright sunshine hour is likely to be from 6.00 to 7.00 hours per day during this week. Average free water loss is likely to be from 2.00 to 3.00 mm per day during this week.

- Weather may remain dry over the country during the first half of this period and Light (0410mm/day) rain or drizzle may occur at few places over Dhaka, Rajshahi, Mymensingh, Sylhet, Khulna and Barishal divisions (one or two days) during the second half of this period.
- Light to moderate fog may occur at places over the country during late night to morning.
- Day and night temperature may fall slightly during the 1st half of this period and slight rise is expected over the second half of this period.

District Wise Quantitative Weather Forecast for next Five days from 29 Jan. -02 February'2020







Different Satellite Products over Bangladesh

