

# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

12 January 2022 (WEDNESDAY) [FOR THE PERIOD 12.01.2022 – 16.01.2022]









#### 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

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#### <u>ISSUED BY</u>

Agro-Meteorological Information Systems
Development Project
Department of Agricultural Extension (DAE)
Ministry of Agriculture
In collaboration with Bangladesh
Meteorological Department

#### Special Agromet Advisories for CORONA virus (COVID-19) transmission in Bangladesh

#### **Agromet Advisories**

Farmers and all other farm managements are advised to follow the guidelines of Government of Bangladesh to avoid infection and social transmission of CORONA virus (COVID-19). Precautions and safety measures should be taken up to prevent the Carona virus spread. Simple measures include social distancing, maintaining personal hygiene by washing hands with soap, wearing of face mask, drink hot water, stay at home and cleaning of implements and machinery. Farmers should not work in a group; consult with a doctor in case of any symptom. Please stay at home does not visit the field until it is very necessary.

#### **Salient Weather Conditions & Forecast**

As per the weather forecast of Bangladesh Meteorological Department (BMD) during next 24 hours' rain/thunder showers accompanied by temporary gusty wind is likely to occur at a few places over Rangpur, Rajshahi, Dhaka, Mymensingh & Sylhet divisions and at one or two places over Khulna, Barishal & Chattogram divisions. Light to moderate fog may occur at places over the country during late night to morning. Night temperature may fall by (1-2)°C and day temperature may fall by (2-3)°C over the country. Rainfall activity may decrease and night temperature may fall. During the last four days, light rainfall occurs in some districts of the country and as per the quantitative medium range weather forecast light rainfall likely occurs at some of the districts of the country for next five days. Detail Agromet advisory are given below:

#### Aman

- Drain out water from the paddy field 15 days before harvesting
- If the crop is 80% mature, collect it in a sunny day.

#### **Boro Paddy:**

#### Seedbed-

- Cover the seedbed with polythene sheet from evening to morning to minimize the effects
  of low temperature on germination and seedling growth of Boro rice seeds. However, if
  the cold spell continues for a long time, the seedlings should always be covered with
  polythene day and night and the polythene should be kept partially open on both sides of
  the seedbed.
- The accumulated dew should be dropped every morning.
- To control seedling burns or scorching disease, in the early stages of the disease, 2 ml of azooxystrobin or pyroclostrobin in one liter of water should be mixed and sprayed on the seedbed in the afternoon.
- When the seedlings turn yellow in the seedbed, urea fertilizer should be applied at the rate of 280 gm per decimal of land. If the seedlings are not green even after application of urea, gypsum fertilizer should be applied at the rate of 400 gm per decimal of land.

- Use light traps to protect the seedbed from the attack of brown tree hoppers. Catch the insects with the net and kill them. In case of infestation, apply 125 ml imidacloprid per hectare.
- In case of thrips infestation, apply nitrogen fertilizer on the affected land. In case of high infestation apply 1.12 liter malathion or 1.7 kg carbaryl or 1.12 kg isoprocarb / MIPC per hectare.

#### Wheat:

- Apply first irrigation during three leaf cycle (17-21 days after sowing), second irrigation at heading stage (50-55 days after sowing) and third irrigation at grain formation (75-80 days after sowing).
- In case of rust disease of wheat leaves, Propiconazole should be mixed at the rate of 0.5 ml per liter of water or Tebuconazole at the rate of 1 ml per liter of water and sprayed 2-3 times after 10 days.
- In case of root rot disease in wheat field, Carbendazim or Carboxin + Thiram should be mixed at the rate of 2 gm per liter of water and sprayed in the soil at the base of the plant.
- Due to the rain, the heading of wheat is wet for 12-24 hours and the temperature is 16 degrees Celsius. Or more than that can lead to blast disease. As a precautionary measure to control the disease, it is necessary to spray Nativo 75WG or Navita 75WG at the rate of 6 gm per 10 liters of water once and after 12-15 days.

#### **Potato:**

- In case of infestation of cutworm, look for infected cut potato plant, turn the soil around it, find the worm, collect it and kill it. Insect infestation is high and pheromone traps and insecticides can be used to control insects. In addition, Chlorpyrifos 20 EC at the rate of 5 ml per liter of water should be mixed and sprayed on the roots and soil of the plant.
- Late blight is more likely to occur in the current weather. In this condition, after 7 days,
  the approved fungicide of Mancozeb group should be sprayed at the rate of 2 gm per
  liter of water and the plant should be well soaked. In case of disease, irrigation should be
  stopped in the affected land till the disease is controlled. As soon as the disease appears
  in one's own field or in the adjoining field, the plants should be well watered by spraying
  the approved fungicide.
- Apply irrigation, as per requirement.

#### **Mustard:**

- The first irrigation should be given within 20-25 days of sowing (before flowering) and the second irrigation should be given within 50-55 days (during fruiting).
- Aphid insects may attack during flowering and fruiting of mustard plants. Only 50 g of neem seeds should be broken and soaked in 1 liter of water for 12 hours. In case of severe infestation, Malathion 57 EC should be mixed in 2 ml per liter of water and sprayed twice in 10 days' interval after 3 pm.

• In cold and humid weather, mustard stem rot can be attacked. As soon as the disease appears, apply Roveral 2.0 g / liter in water 3 times (growth stage, flower and pod formation stage).

#### **Vegetables**

- In case of infestation of eggplant tip and fruit borer insects, cut and destroy the affected tip along with the insects. Insect reproduction can be greatly reduced by using pheromone traps. Only use moderate amounts of specific potent chemical pesticides or locally recommended organic pesticides if absolutely necessary.
- In case of infestation of flies in pumpkin vegetables, use pheromone and bisotop traps together. Pesticides of alpha cypermethrin group can be used.
- In case of powdery mildew in Gourd vegetables, apply hexaconazole or mancozeb.
- In case of infestation of aphid insects in beans and cabbage, apply approved pesticides of Chlorpyrifos group.
- Thrips infestation can be controlled using adhesive white traps (40 per hectare). If the infestation is severe, fipronil or dimethoate can be sprayed at the rate of 10 ml in 10 liters of water.
- Apply light irrigation and pesticides, if necessary.

#### **Horticultural crops**

- Fruit orchards need to be intercultural operation.
- In case of spider infestation on the coconut tree, all the young caconut of the affected tree should be cut down and burnt. In addition, spider mites should be applied on the young leaves of nearby trees.
- In case of symptoms of Sigatoka disease on banana leaves, 0.5 ml of Score or 2 g of Noin or Bavistin or 0.1 ml of Econazole / Folico should be mixed in every liter of water and sprayed 2-3 times at intervals of 15-20 days.
- Apply Isoprocarb (MIPC) group pesticide if banana beetle infestation occurs.
- If millibugs attack guava, use approved pesticides. This insect can also be controlled by spraying powdered soap at the rate of 5 grams per liter of water.
- Take necessary action in case of infestation of fruit flies in guava.
- Apply light irrigation and pesticides, if necessary.

#### Livestock:

- In addition to hay, cattle should be given grass, leaf or granular food especially khail and pulses.
- Vaccinate cattle regularly to prevent disease.
- Keep the cow house dry and clean.
- Black polythene or sacks can be used around the house to protect the floor from the cold and wind to prevent cold.

#### **Poultry:**

- Vaccinate poultry to prevent disease.
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- Black polythene or sacks can be used around the hood to protect it from the wind.

## **Fishery**

- Sell big fish for sale at the beginning of winter.
- Stop applying all types of fertilizers and reduce food application.
- Clean the stalks and weeds of the trees along the pond and provide adequate sunshine to the pond.
- Refrain from storing new fish and injecting water from other ponds or beels.
- Apply 300-500 gms of lime and salt per cent according to pH value and water depth.
- Apply floating food as much as possible.
- Nets cannot be pulled without necessity. If necessary, dry / sterilize the net in hot sun and use it.

## Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 12 January 2022) and maximum temperature on 11 January and minimum temperature on 12 January 2022 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	27.8	18.4	Rajshahi	Rajshahi	01	24.5	15.3
	Tangail	08	26.6	16.0		Ishurdi	07	25.0	16.5
	Faridpur	01	27.2	17.6		Bogura	00	25.2	16.7
	Madaripur	00	27.0	16.0		Badalgachhi	00	26.4	16.3
	Gopalgonj	00	27.3	18.6		Tarash	01	24.8	17.2
	Nikli	04	26.0	17.0					
					Rangpur	Rangpur	00	26.2	17.4
Mymensingh	Mymensingh	06	25.5	17.8		Dinajpur	00	25.5	16.2
	Netrokona	07	25.4	18.0		Sayedpur	Trace	26.5	15.2
						Tetulia	00	25.5	14.9
Chattogram	Chattogram	00	29.0	17.0		Dimla	00	24.0	14.5
	Sandwip	00	29.6	17.0		Rajarhat	00	25.6	16.0
	Sitakunda	00	30.0	15.0					
	Rangamati	00	28.5	15.0	Khulna	Khulna	00	27.5	18.6
	Cumilla	00	29.1	17.6		Mongla	00	27.4	18.2
	Chandpur	00	28.1	17.5		Satkhira	08	27.1	16.9
	M.Court	00	27.6	18.2		Jashore	02	28.0	16.8
	Feni	00	28.8	14.0		Chuadanga	09	25.5	16.7
	Hatiya	00	28.0	17.8		Kumarkhali	09 08	25.5	17.0
	Cox's Bazar	00	29.6	18.5					
	Kutubdia	00	28.2	18.0	Barishal	Barishal	00	29.0	16.4
	Teknaf	00	29.8	15.5		Patuakhali	00	28.4	17.7
						Khepupara	00	28.9	17.5
Sylhet	Sylhet	01	27.9	17.9		Bhola	00	28.8	17.3
	Srimangal	01	27.8	17.5					

## Highlights:

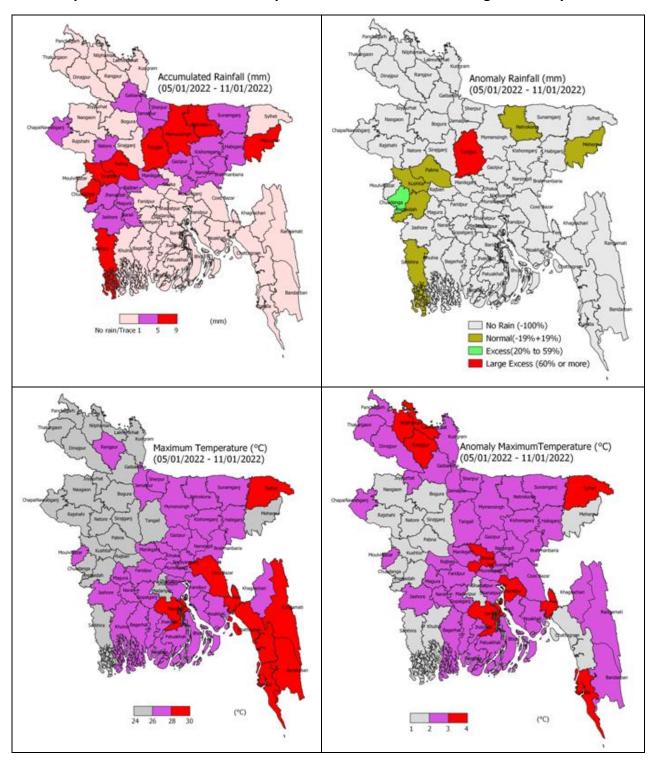
- Country average bright sunshine hour was 6.04 hours per day during last week.
- Country average free water loss during the previous week was 2.11 mm per day.

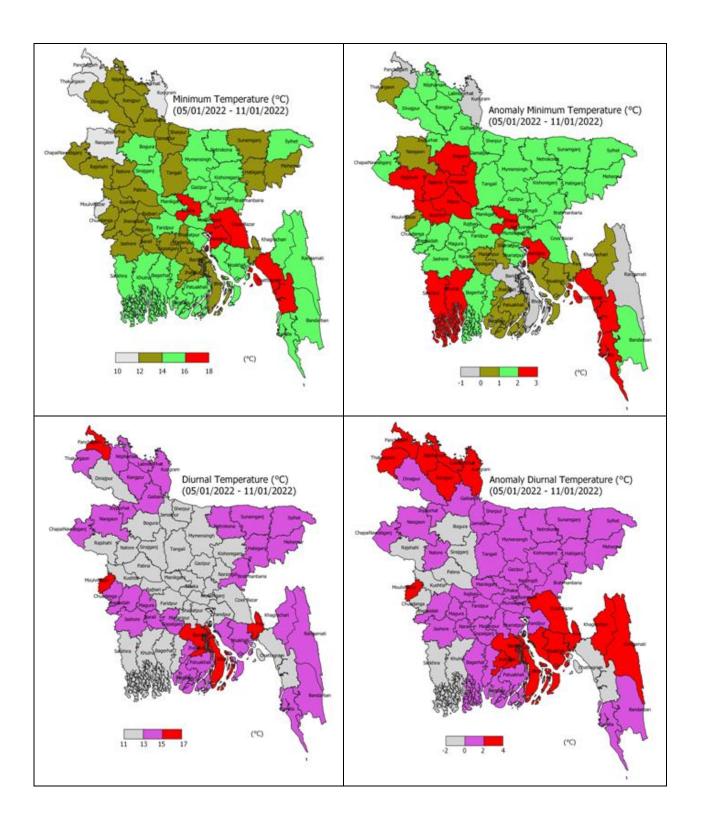
## Weather Forecast Valid for 24 Hours commencing 06 PM Today:

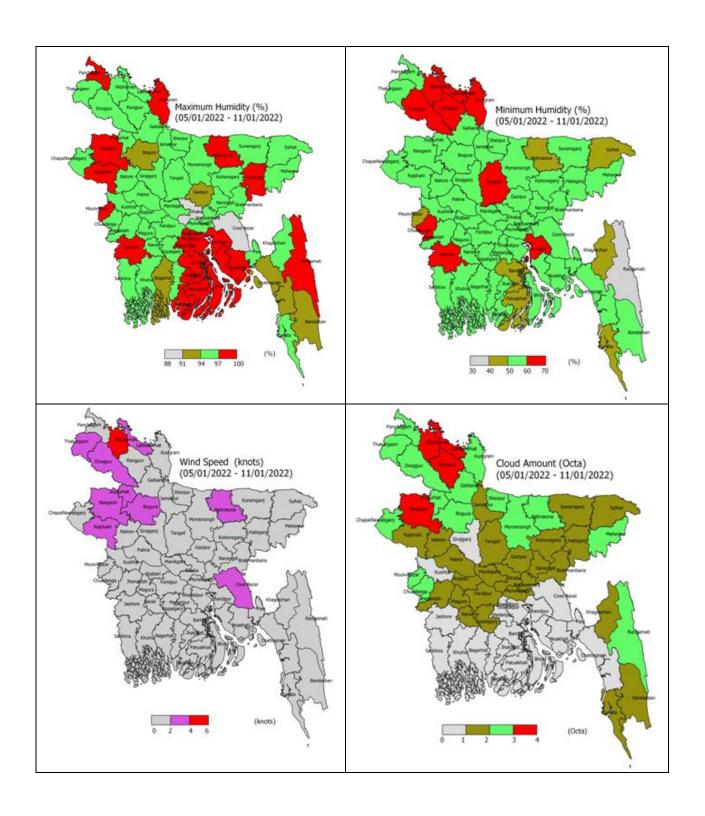
**Forecast:** Rain/thunder showers accompanied by temporary gusty wind is likely to occur at a few places over Rangpur, Rajshahi, Dhaka, Mymensingh & Sylhet divisions and at one or two places over Khulna, Barishal & Chattogram divisions. Light to moderate fog may occur at places over the country during late night to morning.

**Temperature:** Night temperature may fall by (1-2)°C and day temperature may fall by (2-3)°C over the country.

Spatial Distribution of weather parameters for the Week ending 11 January 2022





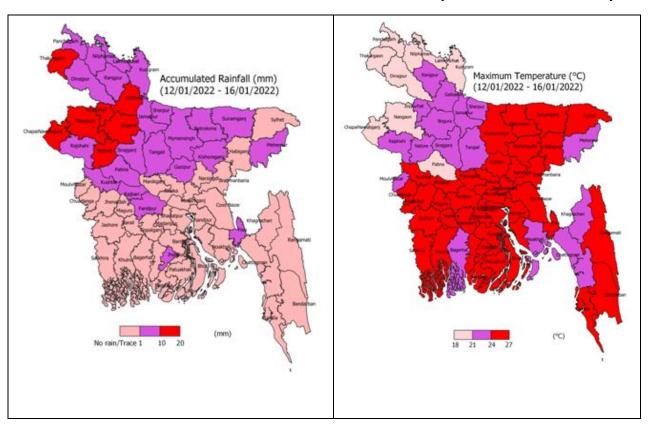


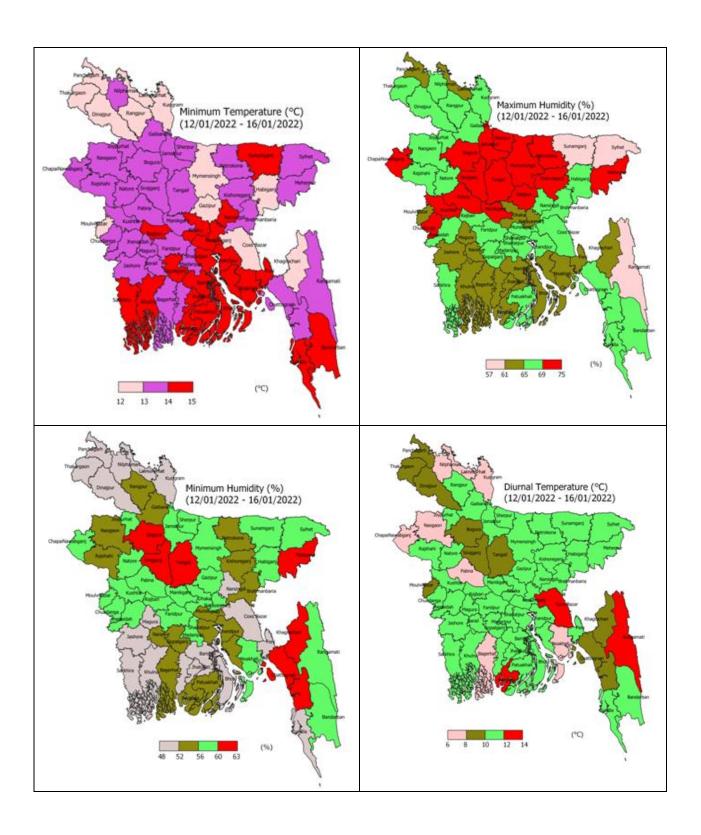
## Weather Forecast and Advisory for the Period of 09.01.2022 to 15.01.2022

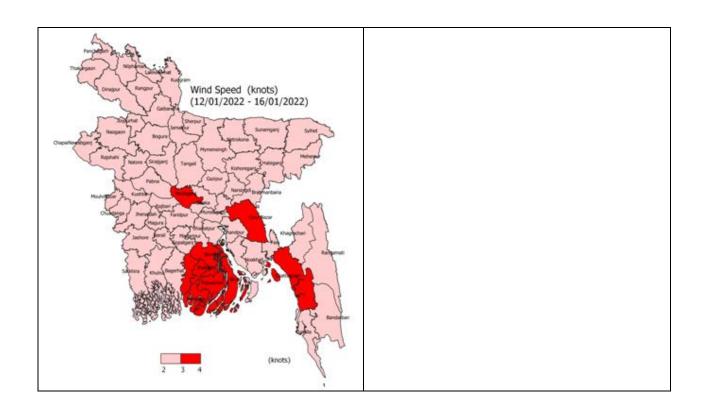
Bright sunshine hour is likely to be from 5.50 to 6.50 hours per day during this week. Average free water loss is likely to be from 2.00 to 3.00 mm per day during this week.

- Light rain(04-10 mm/d)/dizzle is likely to occur at a few places over Rangpur, Rajshahi, Mymensingh & Sylhet divisions and at one or two places over Dhaka, Khulna, Barishal & Chattogram divisions of the country during 11-14 January.
- Moderate to thick fog may occur at places over northern & central parts and Light to moderate fog may occur elsewhere over the country during late night to morning.
- Day and night temperature may fall by 1-4°c over the country during the period

#### District Wise Quantitative Weather Forecast for next Five days from 12 Jan.-16 January 2022





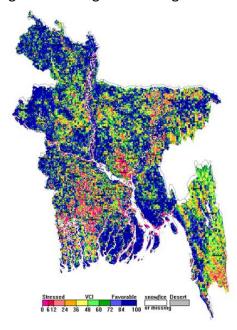


## **Different Satellite Products over Bangladesh**

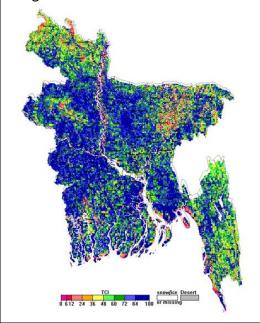
NOAA/VIIRS BLENDED NDVI composite for the week. No. 52 (24 December-30 December) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VCI composite for the week No. 52 (24 December-30 December) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 52 (24 December-30 December) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 52 (24 December-30 December) over Agricultural regions of Bangladesh

