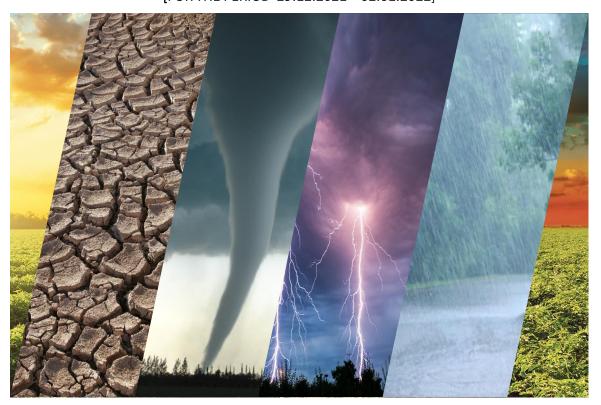


# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

29 December 2021 (WEDNESDAY) [FOR THE PERIOD 29.12.2021 – 02.01.2022]









#### 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 concerned.

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#### ISSUED BY

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' light rain/drizzle is likely to occur at one or two places over Rangpur, Rajshahi, Mymensingh and Dhaka divisions and the regions of Kushtia and Jashore. Weather may remain mainly dry with partly cloudy sky elsewhere over the country. Light to moderate fog may occur at places over the country during midnight to morning. Night temperature may remain nearly unchanged and day temperature may fall by (1-3)°C over the country. During last four days, no rainfall occurs of the districts of the country and as per the quantitative medium range weather forecast is likely no rainfall for next five days. Detail Agromet advisory are given below:

#### Aman

- Brown Plant Hopper may be attacked. In case of high infestation, apply Isoprocarb / MIPC group pesticide at the rate of 175 gm per bigha.
- Use light traps to control insects.
- 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-

- 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.

#### **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.

## Maize:

 Continue sowing the seeds. Apply first irrigation within 15-20 days of sowing, second irrigation within 30-35 days, third irrigation within 60-70 days and fourth irrigation within 85-89 days.

## **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.
- Keep the poultry house dry and clean.
- 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 29 December 2021) and maximum temperature on 28 December and minimum temperature on 29 December 2021 is given below:

Name of Divisions	Name of Stations	Rain fall (mm)	Max. Temp	Min. Temp	Name of Divisions	Name of Stations	Rain fall	Max. Temp	Min. Temp
Divisions	Stations	(11111)	(°C)	(°C)	Divisions	Stations	(mm)	(°C)	(°C)
Dhaka	Dhaka	00	26.1	16.0	Rajshahi	Rajshahi	00	25.7	14.6
	Tangail	00	25.5	14.0		Ishurdi	00	25.5	14.8
	Faridpur	00	26.1	14.9		Bogura	00	26.8	16.0
	Madaripur	00	25.7	13.5		Badalgachhi	Trace	25.5	14.5
	Gopalgonj	00	26.3	13.7		Tarash	00	26.0	15.8
	Nikli	00	24.8	13.5					
					Rangpur	Rangpur	00	25.3	15.7
Mymensingh	Mymensingh	00	25.5	14.8		Dinajpur	Trace	25.1	14.0
	Netrokona	00	25.0	14.8		Sayedpur	Trace	25.8	15.0
						Tetulia	00	XX	11.4
Chattogram	Chattogram	00	27.0	15.0		Dimla	00	25.0	15.1
	Sandwip	00	28.0	13.4		Rajarhat	00	24.0	13.5
	Sitakunda	00	28.0	11.2					
	Rangamati	00	26.3	13.0	Khulna	Khulna	00	26.8	15.0
	Cumilla	00	27.3	13.5		Mongla	00	26.5	15.5
	Chandpur	00	28.5	15.2		Satkhira	00	26.4	16.0
	M.Court	00	25.5	14.8		Jashore	00	26.6	14.8
	Feni	00	27.2	12.2		Chuadanga	00	25.8	15.2
	Hatiya	00	26.5	14.2		Kumarkhali	00	25.5	15.2
	Cox's Bazar	00	29.0	15.5					
	Kutubdia	00	27.3	14.5	Barishal	Barishal	00	27.2	12.5
	Teknaf	xx	27.0	XX		Patuakhali	00	27.2	14.3
						Khepupara	00	27.8	14.3
Sylhet	Sylhet	00	26.2	14.8		Bhola	00	27.2	13\0:tiv
	Srimangal	00	26.8	11.0					Go to S

# Highlights:

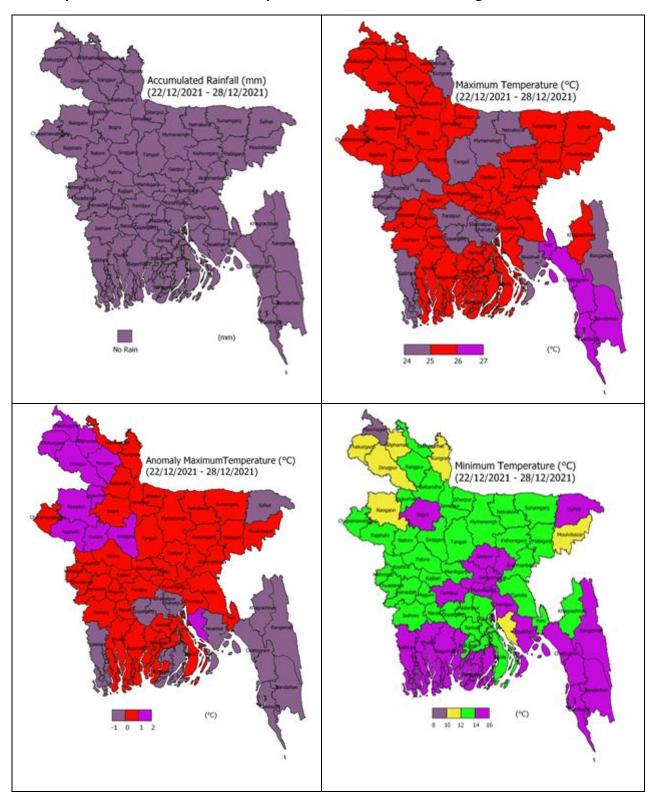
- Country average bright sunshine hour was 7.39 hours per day during last week.
- Country average free water loss during the previous week was 2.45 mm per day.

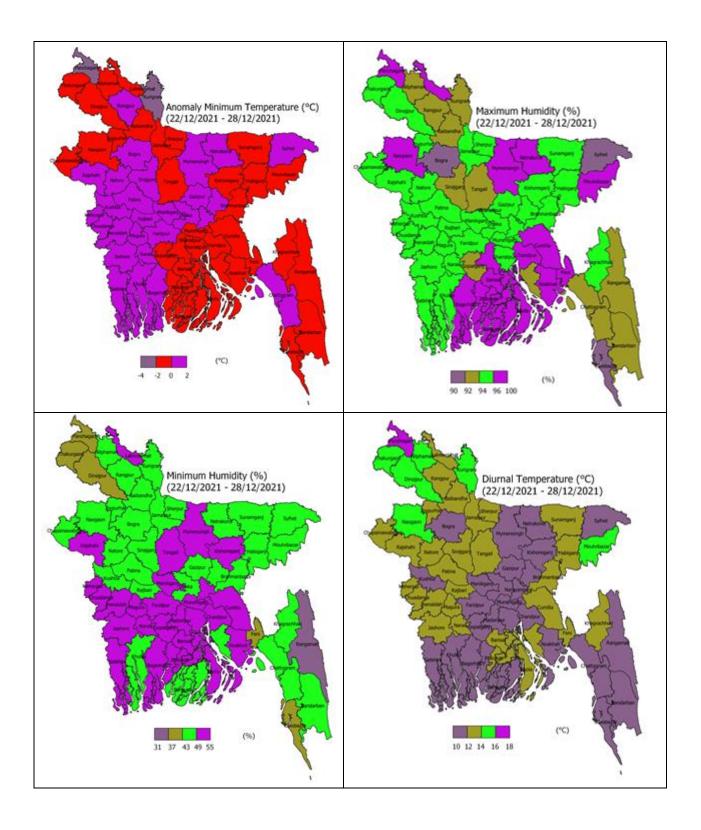
## Weather Forecast Valid for 24 Hours commencing 06 PM Today:

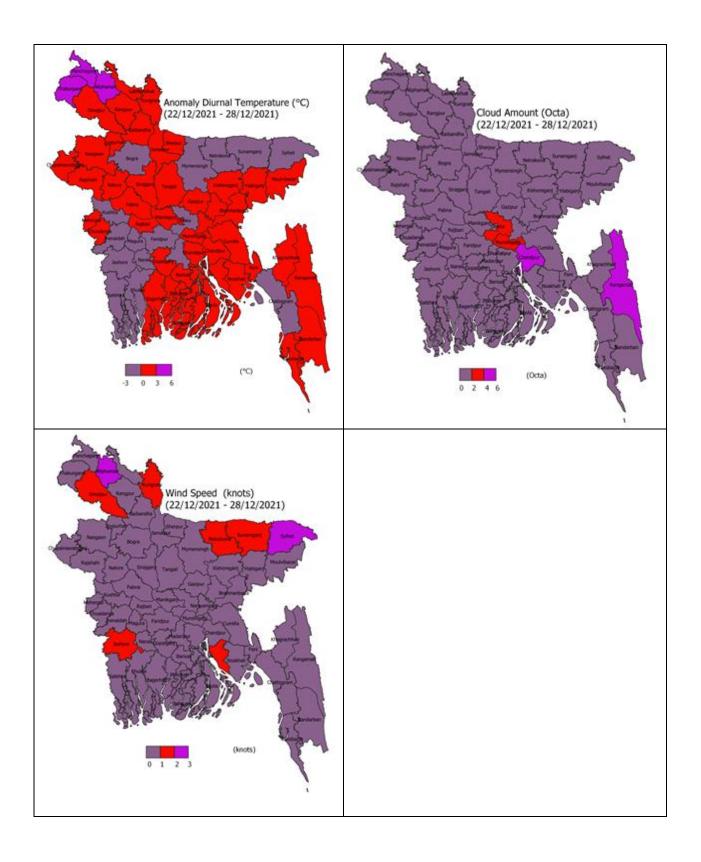
**Forecast:** Light rain/drizzle is likely to occur at one or two places over Rangpur, Rajshahi, Mymensingh and Dhaka divisions and the regions of Kushtia and Jashore. Weather may remain mainly dry with partly cloudy sky elsewhere over the country. Light to moderate fog may occur at places over the country during midnight to morning.

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

Spatial Distribution of weather parameters for the Week ending 28 December 2021





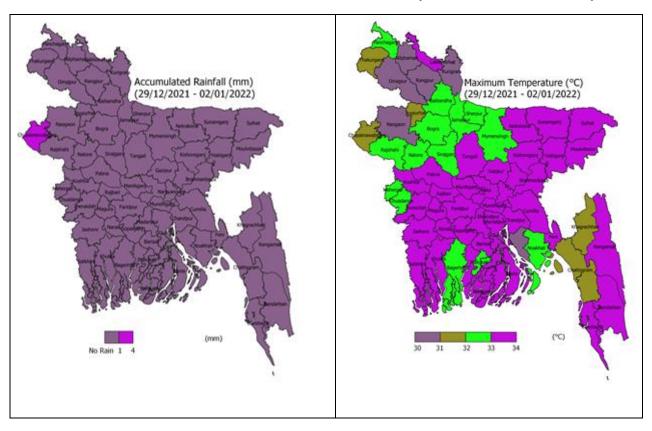


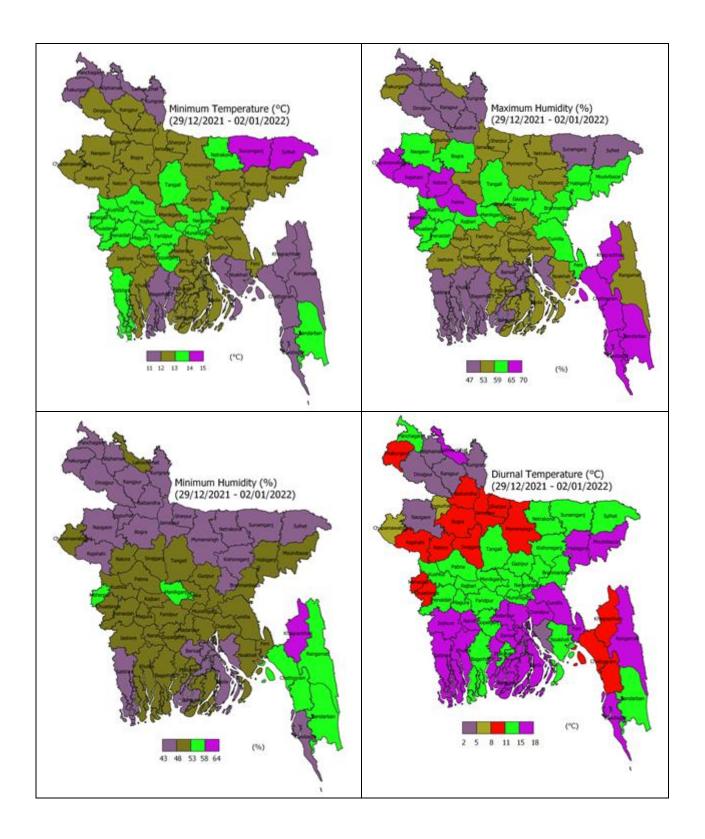
# Weather Forecast and Advisory for the Period of 22.12.2021 to 31.12.2021

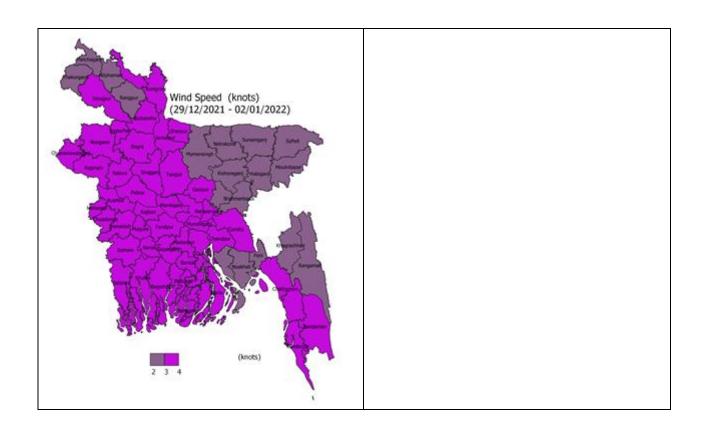
Bright sunshine hour is likely to be from 6.25 to 7.25 hours per day during this week. Average free water loss is likely to be from 2.20 to 3.20 mm per day during this week.

- Light (04-10 mm/day) rain/ drizzle is likely to occure at one or two places over Rangpur, Mymensingh & Sylhet divisions and weather may remain mainly dry elsewhere over the country during the period.
- Light to moderate fog may occur at places over the country during the morning of this period.
- Day & night temperature may remain nearly unchanged and it may rise slightly over the country during end of the period.

# District Wise Quantitative Weather Forecast for next Five days from 29 Dec.-02 January 2022

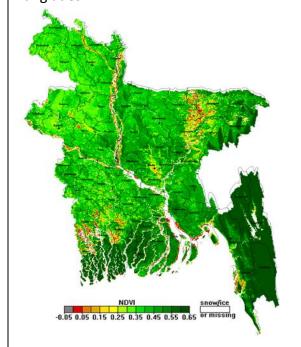




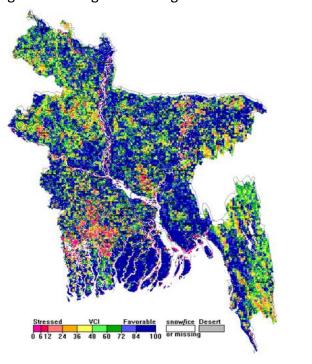


# **Different Satellite Products over Bangladesh**

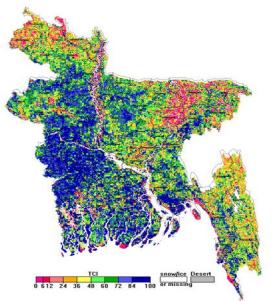
NOAA/VIIRS BLENDED NDVI composite for the week. No. 50 (10 December-16 December) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VCI composite for the week No. 50 (10 December-16 December) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 50 (10 December-16 December) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 50 (10 December-16 December) over Agricultural regions of Bangladesh

