



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

**20 April 2022 (WEDNESDAY)
[FOR THE PERIOD 20.04.2022 – 24.04.2022]**



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.

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' rain/thunder showers with intense lightning flashes accompanied by temporary gusty/squally wind is likely to occur at many places over Rangpur, Dhaka, Mymensingh, Chattogram & Sylhet divisions; at a few places over Rajshahi division and at one or two places over Khulna & Barishal divisions with hails at isolated places over the country. Mild heat wave is sweeping over the regions of Rajshahi, Pabna, Jashore & Rangamati and it may abate. Day temperature may fall by (1-3)°C and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hours' rain/thunder showers activity is likely to continue. During last four days, light to heavy rainfall occurred at a few district over the country and as per the quantitative medium range weather forecast; there is a possibility of rainfall most of the districts in the country during next five days. Detail Agromet advisory are given below.

Boro Paddy:

- Apply irrigation and maintain the required water level in the land.
- In case of bacterial leaf blight, in the initial stage of the disease, apply 60 gm MOP, 60 gm thiovit in 10 liters of water and apply on 5% of the land. In case of disease, 5 kg potash fertilizer should be applied per bigha.
- To control blast disease, retain water in the soil and apply a balanced dose of fertilizer.
- For control of blast disease, application of urea fertilizer in the affected land should be stopped and 8 gm of Trooper or 6 gm of Nativo or Tricyclazol / Strobilin group fungicide should be mixed in 10 liters of water and applied twice in 5-7 days interval in every 5% of the land.
- In case of infestation of stem borer insects, collect and destroy the pile of eggs, use light traps, if the infestation is high, use approved pesticides.
- Use light traps to control leaf-rolling insects and perch on the ground. Avoid excessive use of urea fertilizer. If 25% of the leaves are damaged, apply one of the approved pesticides of Sevin 85 SP, Darsban 20 EC or Mipsin 75 WP in the correct dosage.
- 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.

- Rice bug infestation may occur during grain formation stage. Apply Carbaryl or Isoprocarb / MIPC group pesticides in approved doses if one Gandhi insect is found in 2-3 bunches on average.
- Apply pesticide after rain.
- Drain out water from the land 15 days before harvest.
- Collect mature crops in dry weather and keep them in a safe place.

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.
- Chilly 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.
- Drain out excess water from the field.
- Apply pesticide after rain.

Horticultural crops

- Fruit orchards need to be inter-cultural operation.
- 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.
- Mango can be attacked by sucking insects (hoppers) and anthracnose at different stages. When the buds attack, the flowers fall off. Soak the leaves, buds and stalks of the tree well once and once a month after flowering for bud control but before flowering, mix Cypermethrin (Ripcord / Simbush / Phenom / Basathrin) 10 EC 1 ml and Tilt 250 EC 0.5 ml per liter of water. Need to spray.
- In order to control coconut spiders, sprouts should be applied to the affected trees by cutting and burning the young coconut. In addition, spider mites should be applied on the young leaves of nearby trees.
- 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.
- Drain out excess water from the field.
- Apply pesticide after rain.

Livestock:

- Keep the cow house open

- Take appropriate measures to repel mosquitoes.
- Give the cattle plenty of clean water to drink.
- Feed raw grass to cattle.
- Vaccinate cattle regularly to prevent disease.

Poultry:

- Vaccinate chickens regularly to prevent disease.
- Keep the poultry house clean.

Fishery:

- Quickly create a suitable environment for releasing fish with lime and fertilizer in empty ponds.
- Release the fish by calculating the species and number.

Special agro-meteorological advisories for Sylhet, Sunamganj and Netrokona districts due to possible flash floods:

According to the Special Report on Rainfall and Flash Floods (April 10 to April 17, 2022) from the Flood Forecasting and Warning Center of Bangladesh Water Development Board and According to the forecast of rainfall received from Bangladesh Meteorological Department and other global meteorological agencies, more than normal rainfall is expected in the north and northeastern regions of Bangladesh this week. Heavy rainfall is expected in north and northeastern regions of India and adjoining parts of Assam (Barak Basin) and Meghalaya provinces of India from 10 April to 17 April. In this situation, as a result of rainfall from 10 April to 17 April, Surma, Kushiya, Jadukata, Luvachhara, Sarigoin, Dhalagang, Piain, Jhalukhali, Someshwari, Bhugai-Kangs and Dhanu-Baulai rivers could be increased and exceed the danger level at some points. As a result, there is a possibility of flash floods in **Sylhet, Sunamganj and Netrokona districts in the last half of this period.** Subject to analysis of data obtained from Bangladesh Water Development Board with the consent of Director General for the Department of Agricultural Extension, the following urgent advisories have been made to protect standing crops from the damaging effects of flash floods in Sylhet, Sunamganj and Netrokona districts:

- If the transplanted boro paddy is matured 80%, harvest immediately and keep it safe and dry place.
- Immediately harvest the matured vegetables.
- Clean the irrigation channel so that there should not be any standing water in the paddy field.
- Increase the height of bunds around the crop fields.
- Make suitable arrangements so that excess water can be drained out of the crop fields.
- Avoid application of fertilizer, pesticides, irrigation.
- Apply pesticide after rainfall.
- Provide mechanical support to the standing banana and other horticultural crops and also stacking of vegetables.

- Arrange boats for migration of essential food items and others from low to high land.
- Arrange for migration of livestock and poultry birds to high land.
- Maintain a good height of embankment around the pond. If possible, provide net or bamboo chatai around the pond to protect from flowing out with flash flood.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 20 April 2022) and maximum temperature on 19 April and minimum temperature on 20 April 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 | 00 | 35.7 | 20.2 | Rajshahi | Rajshahi | 18 | <u>36.5</u> | 20.3 |
| | Tangail | 12 | 35.0 | 20.0 | | Ishurdi | 24 | 36.2 | 21.0 |
| | Faridpur | 00 | 35.4 | 20.9 | | Bogura | 21 | 33.3 | 20.2 |
| | Madaripur | 00 | 35.5 | 25.8 | | Badalgachhi | 35 | 31.7 | 19.0 |
| | Gopalganj | 00 | 35.2 | 24.5 | | Tarash | 30 | 34.2 | 21.9 |
| | Nikli | 00 | 34.0 | 20.6 | | | | | |
| Mymensingh | Mymensingh | 00 | 32.6 | 20.0 | Rangpur | Rangpur | <u>60</u> | 31.5 | 19.4 |
| | Netrokona | 08 | 32.1 | 20.5 | | Dinajpur | 17 | 31.0 | 19.5 |
| | | | | | | Sayedpur | 51 | 31.2 | 19.0 |
| | | | | | | Tetulia | 08 | 31.5 | <u>18.6</u> |
| Chattogram | Chattogram | 00 | 33.6 | 26.6 | | Dimla | 34 | 31.0 | 20.5 |
| | Sandwip | 00 | 33.6 | 24.5 | | Rajarhat | 32 | 30.4 | 18.8 |
| | Sitakunda | 00 | 34.0 | 24.5 | Khulna | Khulna | 00 | 35.0 | 27.4 |
| | Rangamati | 00 | 36.0 | 25.8 | | Mongla | 00 | 35.3 | 27.1 |
| | Cumilla | 07 | 34.0 | 20.0 | | Satkhira | 00 | 34.4 | 27.4 |
| | Chandpur | 00 | 35.5 | 21.0 | | Jashore | 00 | 36.2 | 26.6 |
| | M.Court | 00 | 35.2 | 20.0 | | Chuadanga | 00 | 35.2 | 24.3 |
| | Feni | 06 | 34.6 | 20.0 | | Kumarkhali | 00 | 35.2 | 21.5 |
| | Hatiya | 00 | 34.5 | 26.3 | Barishal | Barishal | 00 | 34.6 | 26.4 |
| | Cox's Bazar | 00 | 34.5 | 27.5 | | Patuakhali | 00 | 34.5 | 26.4 |
| Kutubdia | 00 | 33.7 | 25.3 | Khepupara | | 00 | 34.4 | 27.1 | |
| Teknaf | xx | 34.4 | xx | Bhola | | 00 | 35.0 | 22.0 | |
| Sylhet | Sylhet | 27 | 33.5 | 19.5 | | | | | |
| | Srimangal | 04 | 35.0 | 20.3 | | | | | |

Highlights:

- Country average bright sunshine hour was 5.09 hours per day during last week.
- Country average free water loss during the previous week was 3.63 mm per day.

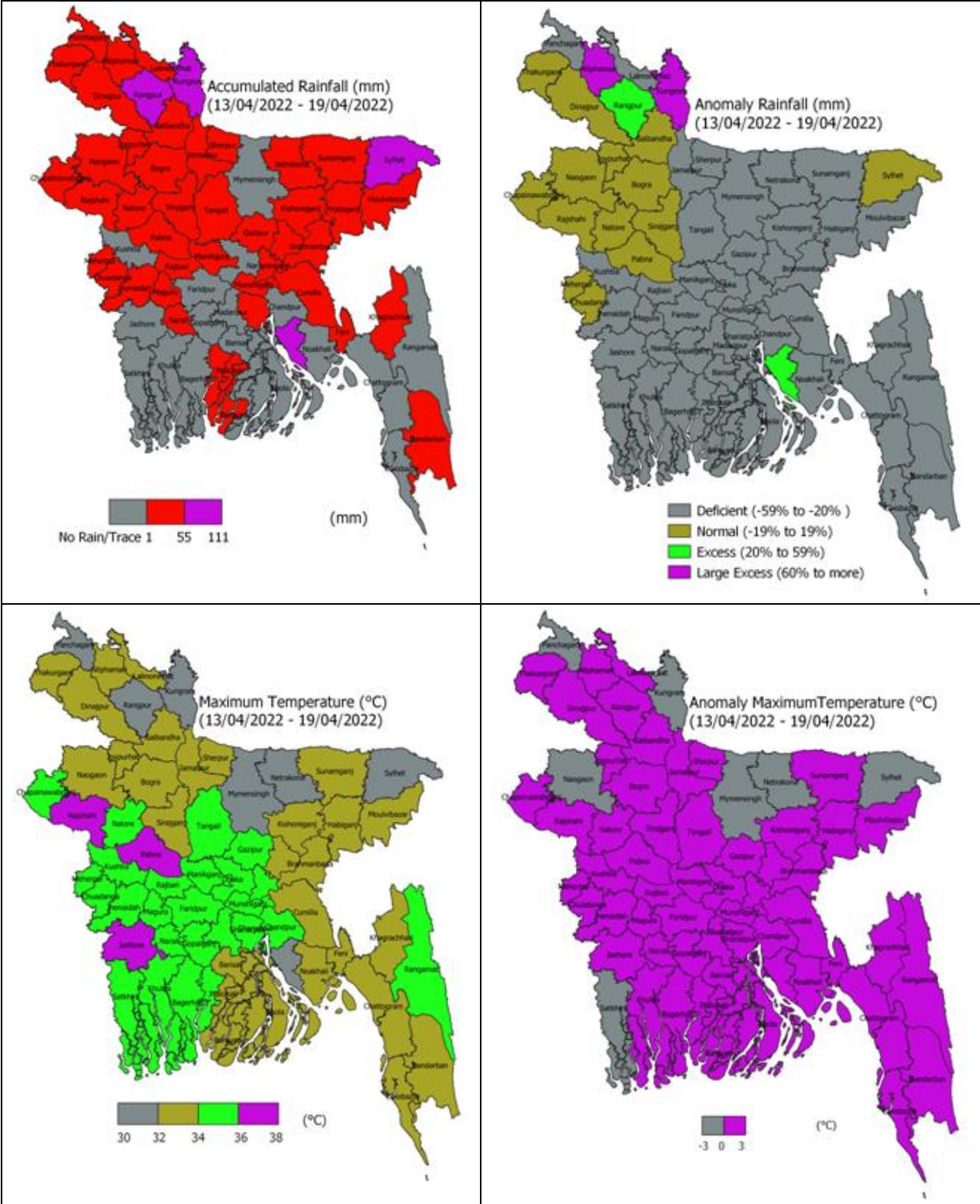
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

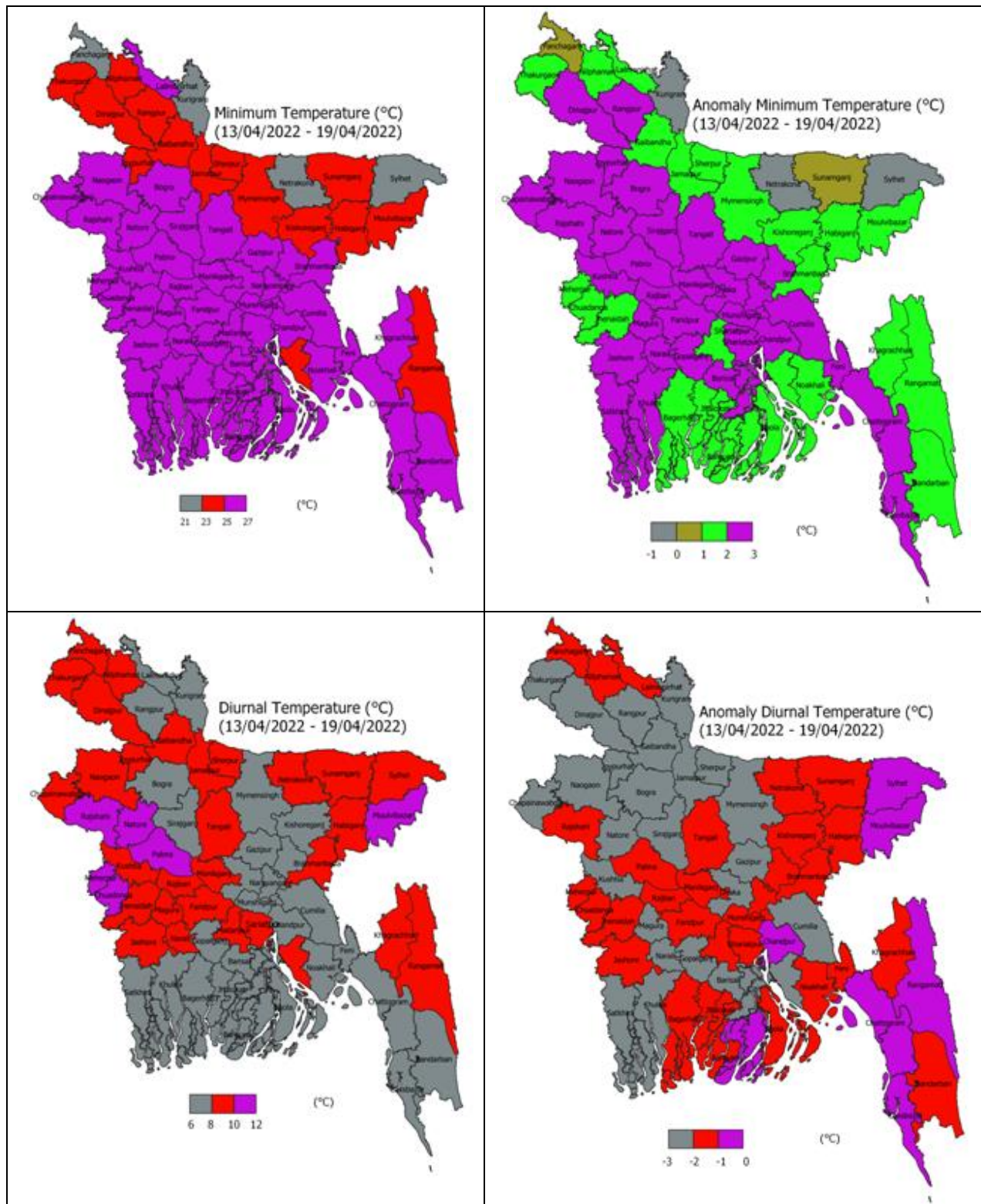
Forecast: Rain/thunder showers with intense lightning flashes accompanied by temporary gusty/squally wind is likely to occur at many places over Rangpur, Dhaka, Mymensingh, Chattogram & Sylhet divisions; at a few places over Rajshahi division and at one or two places over Khulna & Barishal divisions with hails at isolated places over the country.

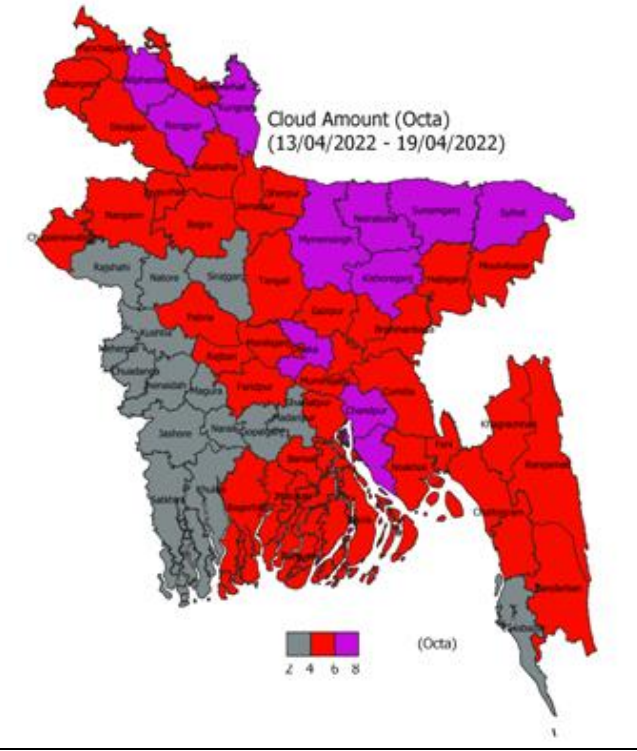
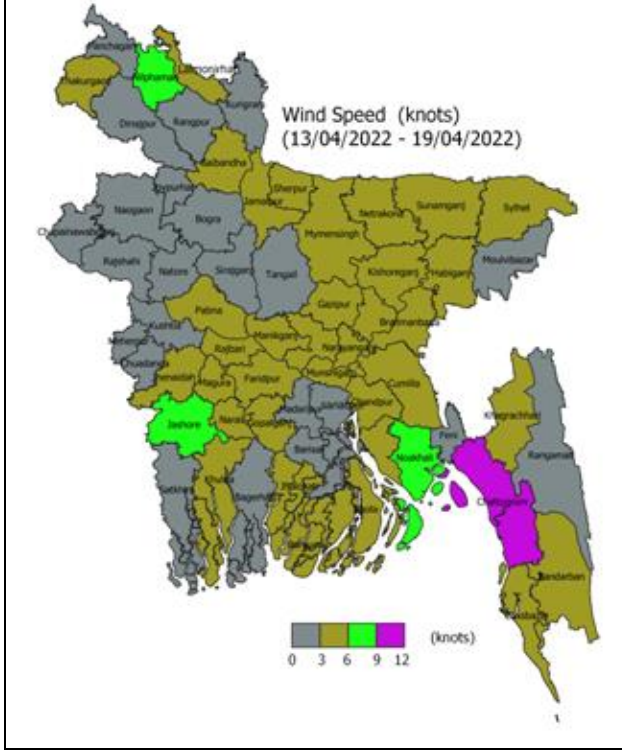
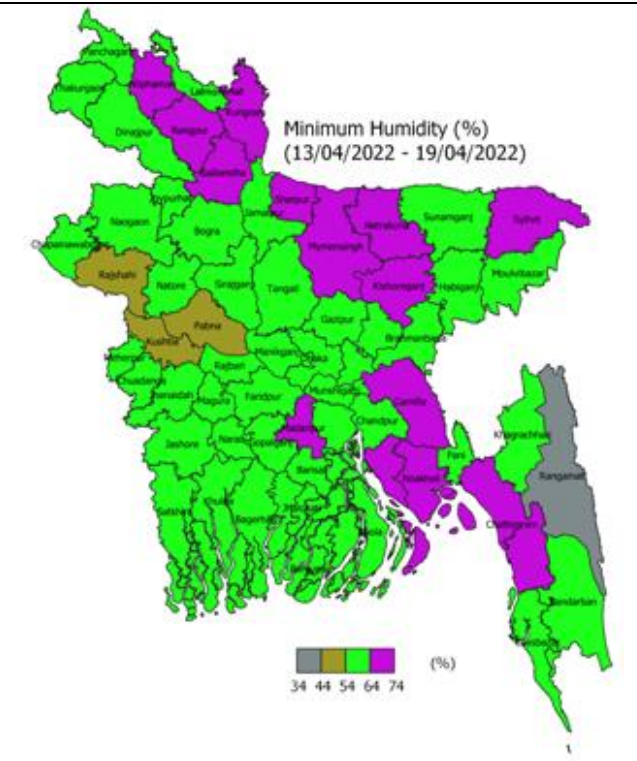
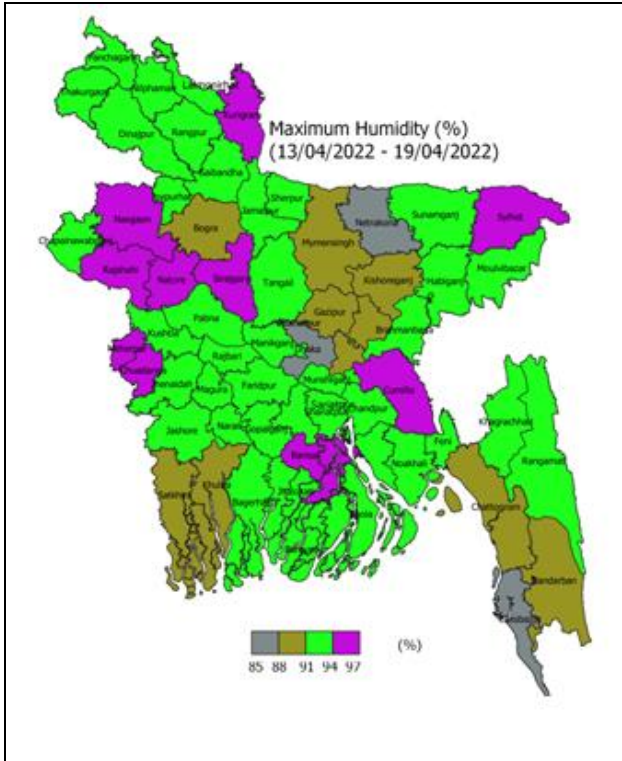
Heat wave: Mild heat wave is sweeping over the regions of Rajshahi, Pabna, Jashore & Rangamati and it may abate.

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

Spatial Distribution of weather parameters for the Week ending 19 April 2022





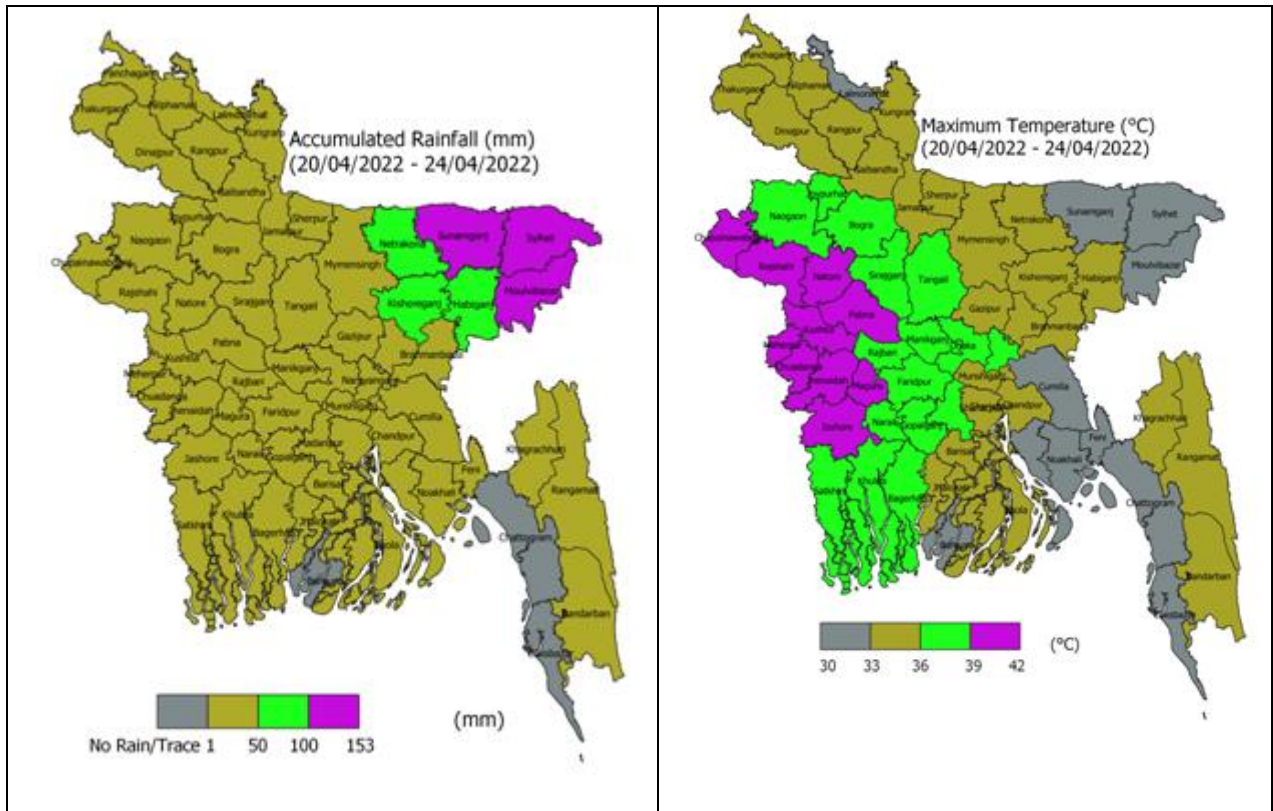


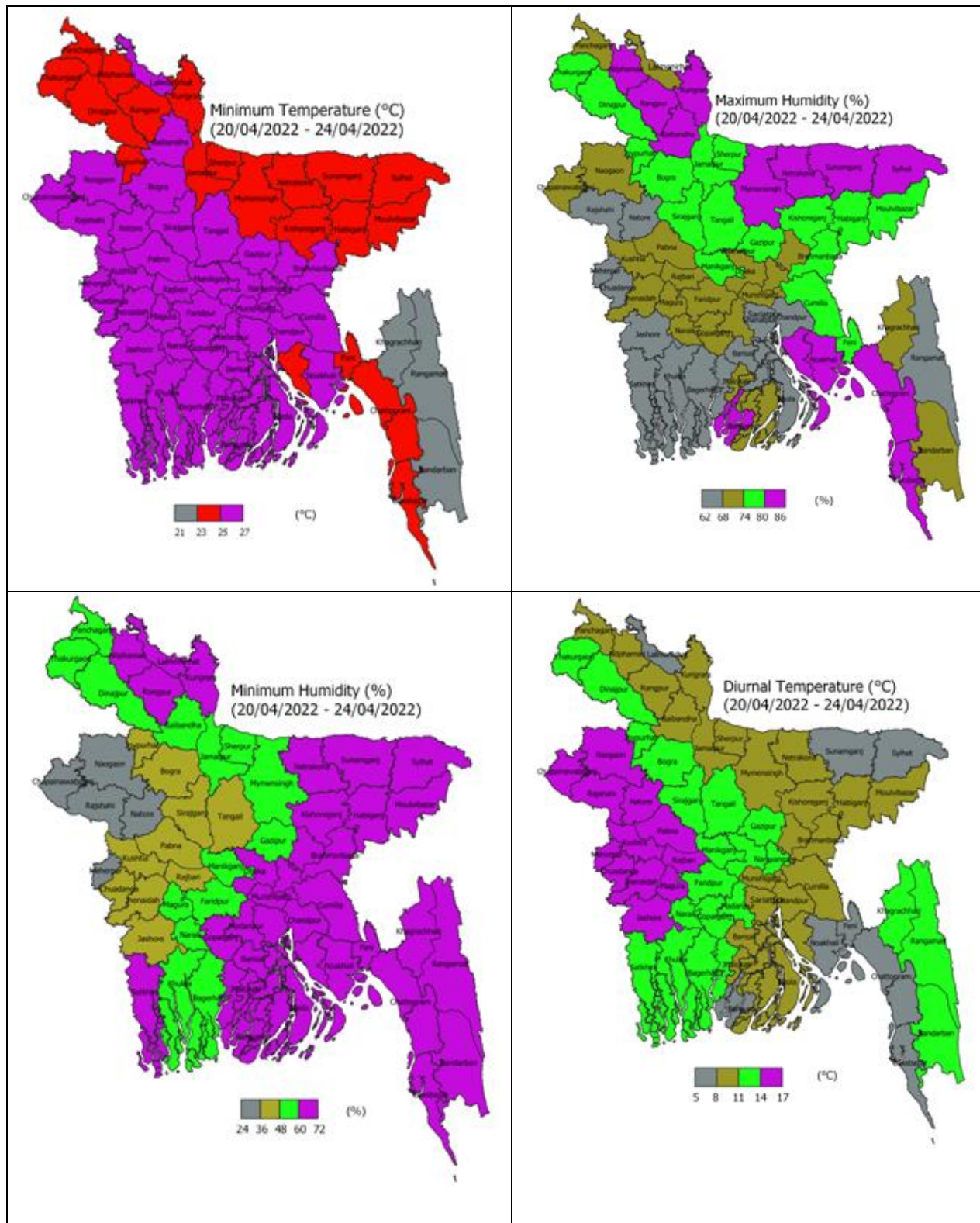
Weather Forecast and Advisory for the Period of 17.04.2022 to 23.04.2022

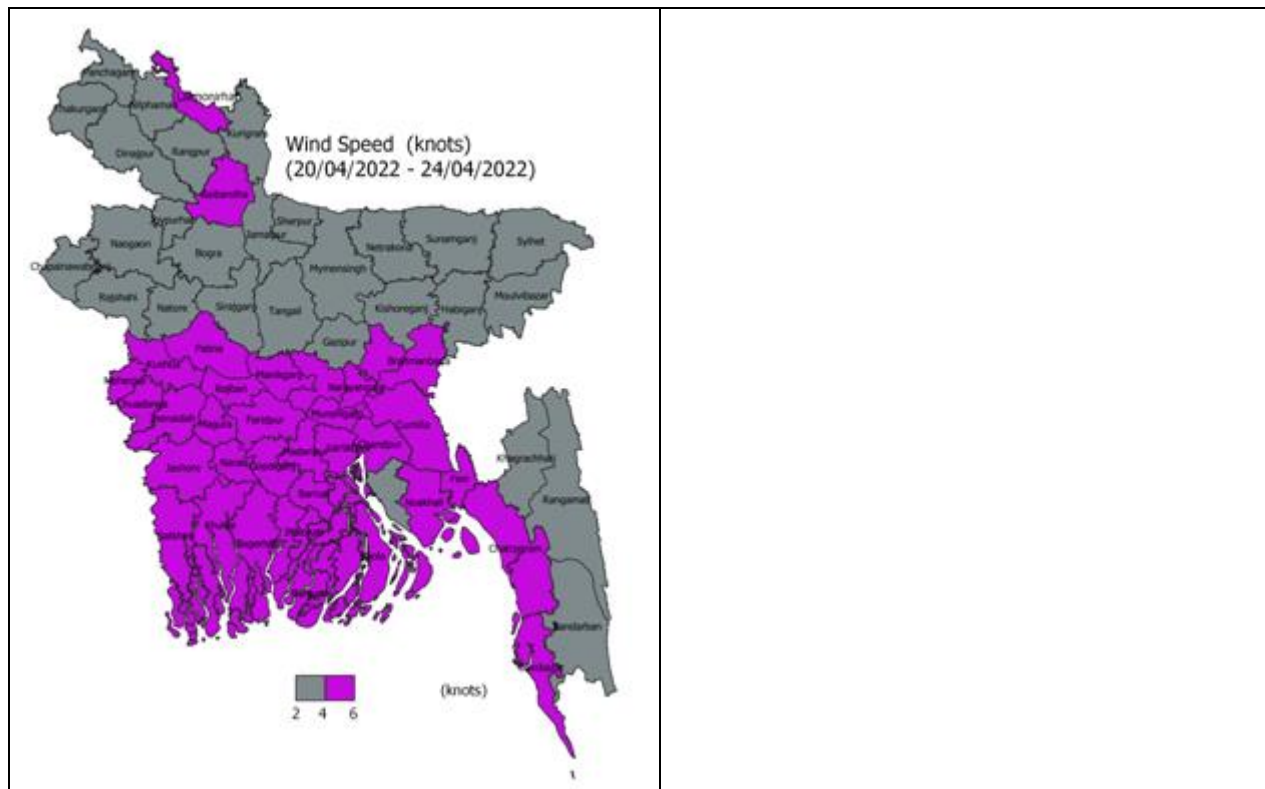
Bright sunshine hour is likely to be from 5.00 to 6.00 hours per day during this week. Average free water loss is likely to be from 3.00 to 4.00 mm per day during this week.

- Light (04-10 mm/day) to moderate (11-22 mm/day) rain /thunder showers accompanied by temporary gusty/squally wind associated with isolated hails is likely to occur at many places (50%-75% area) over Rangpur, Mymensingh, Sylhet & Dhaka divisions; at a few places (25%-50% area) over Rajshahi division and at one or two places (less than 25% area) over Barishal, Chattogram & Khulna divisions during this period and heavy (44-88 mm/day) to very heavy (>88 mm/day) falls at places over Sylhet division during the 2nd half of this period.
- Slight fall in day & night temperature is expected over the country during the period.
- Seven days (17.04.2022 to 23.04.2022) accumulative rainfall forecast of WRF model over Bangladesh & are indicating that more than 250 mm rainfall is likely to occur over North-Eastern part of Bangladesh and adjoining Assam & Meghalaya region during this period.
- All related departments are requested to take necessary precautions related to heavy rainfall over North-Eastern part including Haor region of Bangladesh.

District Wise Quantitative Weather Forecast for next Five days from 20 April-24 April 2022

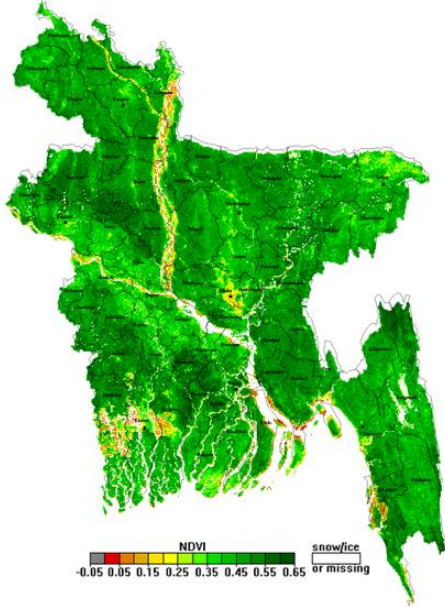




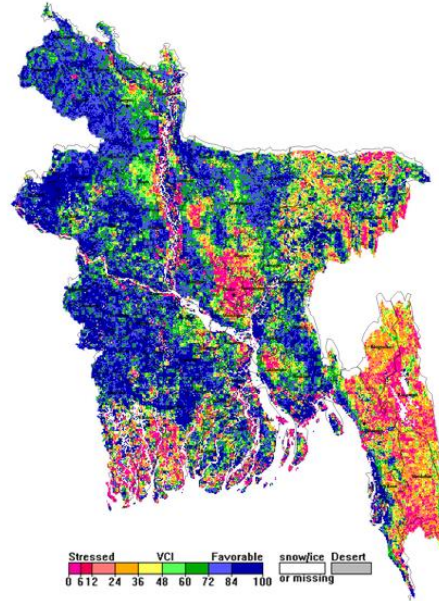


Different Satellite Products over Bangladesh

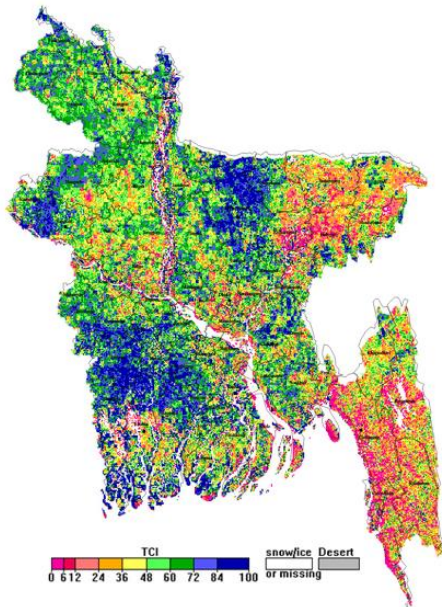
NOAA/VIIRS BLENDED NDVI composite for the week. No. 15 (09April-15April) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VCI composite for the week No. 15 (09April-15April) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 15 (09April-15April) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 15 (09April-15April) over Agricultural regions of Bangladesh

