

# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

27 July 2022 (WEDNESDAY) [FOR THE PERIOD 27.07.2022 – 31.07.2022]









#### **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' Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Rangpur, Mymensingh & Sylhet divisions and at a few places over Rajshahi, Dhaka, Khulna, Barishal & Chattogram divisions with moderately heavy to heavy falls at isolated places over the country. Day and night temperature may rise slightly over the country. As per the outlook issued by BMD for next 72 hours rainfall activity is likely to continue. During last four days, light to heavy rainfall occurred many of the districts 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.

#### Aus Paddy:

#### **Tillering to Harvesting stages**

- Maintain in 3-4inches water level. Maontain water level 5-7 cm from panicle initiation stage. Maintain 2-3 cm water level at grain hardening stage.
- Due to high humidity (warm and humid weather) possibility of pest and disease build up is more in crop. Take prophylactic measures accordingly.
- To control of insects like steam borer gall midge and white & brown hopper apply Corbofuron 3 G@33 kg or phorat 10G @ 10 kg per /hectare and for cut worm Clorpyrifos or Daiclorovash.
- Since cloudy weather is prevailed, there is a chance of leaf folder attack in Paddy. It can be controlled by using Trichogramma cards.
- To save the rice crop from sheath blight, keep the bunds of the field clean by removing grasses.
- To control infestation of leaf blast & leaf spot in Aus rice, spray Carbendazim @2g/litre of water.
- There is chance of Gandhi bug and Brown plant hopper attack. For Gandhi bug spray Carbaryl 50 WP@2g/liter of water. Avoid excess irrigation in the field otherwise base will be rotten. Where early transplanted paddy found 80% maturity, harvest and transfer it to safe place immediately. Spray Buprofezin 25% SC@106ml/bigha for BPH attack. Maintain proper distance within the farmers during spraying.

- Harvest the matured crop after the current spell of rainfall or on non-rainy days.
- Drain out water from crop field 15 days before harvesting.
- Due to large diurnal temperature, there is chance of blast disease. If noticed, adopt appropriate plant protection measures.
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Spraying should be done during afternoon hours or at morning hours from 10:00 a.m. to 11:00a.m
- All the plant protection measure should be taken after the current spell of rainfall.
- Drain out excess water from the field.

## **Aman Paddy**

- Complete transplanting of rice seedlings at the earliest as sufficient water is there in the field; maintain proper drainage in field/nursery to avoid flooding due to continuous rain.
- Ensure weed free seed bed.
- Farmers may start the preparation of main land for transplanting after getting sufficient rainfall.
- At the last stage of land preparation of field for transplanting of Aman paddy, apply per hectare 90 kg TSP, 70 kg MOP, 11 kg Zinc, and 60 kg gypsum.
- Due to substantial decrease in sunshine hours with occasional rain there is chance of attack of Yellow stem borer in Aman rice; to manage the attack, spray Carbofuran @10kg per ha.
- Transplanting of 25-30 days old nursery in the main after getting sufficient rainfall.
- Arrange the bunding tightly so that no drainage can take place after light rain or moderate rain
- Transplanting of aman paddy in the main field is going on due to sufficient amount of water present in the field. Thereby, it is recommended that before transplanting the seedling in the main field, farmers are advised to uprooted seedlings are washed and then the root portion is dipped in 0.02% solution of chlorpyriphos (1ml/lit of water) along with 1% urea (10gm/lit of water) for three hours as protective measure against stem borer, gall midge and hopper
- Avoid deep planting for better crop establishment and fill up the gaps within a week. Maintain 5-7 cm standing water up to maximum tillering stage. Keep the rice nursery and field bunds free from weeds either by hand weeding or by application of herbicide. Apply recommended herbicide as per recommendation within 1-3 days of transplanting.
- Due to substantial decrease in sunshine hours with occasional rain there is chance of attack of Yellow stem borer in Aman rice; to manage the attack, spray Carbofuran @10kg per ha.
- All the plant protection measure should be taken after the current spell of rainfall.
- Drain out excess water from the field.

## Maize: (Kharif 1)

- This is the time when comb matures.
- When 70-80% of maize combs become straw colour and leaves are yellowish colour, then harvest the combs in sunny weather.

- Dry the harvested combs in house corridor and hang on bamboo in home yard as well.
- Drain out excess water from the field.

#### Vegetables

- Drain out excess water.
- Make arrangement to avoid plant damage (particularly staked creeper) from anticipated gusty winds. Make arrangement to raise new orchard during monsoon season.
- If seedlings of brinjal are ready for transplanting, transplant the seedlings on ridges and furrow with spacing of 60 x 60 cm. Sowing of kharif vegetables such as lady's finger, pumpkin, cucumber, sponge gourd, bottle gourd.
- In pumpkin, ridge-gourd, pointed gourd and cucumber, there is a chance of attack of Red-Pumpkin Beetle during current weather condition. To control, apply Dimecron or rogor (1ml per litre of water).
- The prevailing weather conditions are congenial for incidence sucking pests in vegetables. To control, spray Dimethoate @ 2 ml or Acephate @ 1.5 g per litre of water. Undertake nursery sowing of Tomato, Brinjal and Chillies and direct sowing of Gourds, Beans and Bhendi with assured irrigation.
- At flowering to fruiting stag of bitter gourd, there is chance of Rotting at the base of flower, apply SAF @2g/liter of water.
- Weed management should be done in brinjal, tomato, lady finger and cauliflower.
- Need based intercultural operations should be done in tomato, brinjal, okra and other vegetable crops.
- Undertake nursery sowing of Tomato, Brinjal and Chillies and direct sowing of Gourds, Beans and Bhendi.
- Collect Maskali and winter vegetable seed
- All the plant protection measure should be taken after the current spell of rainfall.

## Horticultural crops

- Farmers are advised to go for inter cultural operations in mango orchard.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- For the orchards of the guava, add 20-25 kg cow dung and 50 gms of heptachlor in the soil extracted from the pit and fill it again. For mango, amla and berry orchards add 30 kg of cow dung, 250 grams of single super phosphate and 50-100 g heptachlor in the soil extracted from the pit and fill it again. These operations may be done.
- Farmers are advised to start digging of pit of appropriate size and distance for new orchard establishment. Prepare pit for plantation of saplings of mango, guava and coconut as sufficient rainfall has been received.
- Plantation of banana crop should be done after getting sufficient amount of rainfall. Intercultural operation should be done in banana orchard.
- Due to deluge with rainy days farmers are advised not to apply fertilizer to the banana plant. Moreover, ensure to harvest the mature banana at proper stage.
- Provide mechanical support to banana, to prevent the crops from lodging due to strong winds.

- Due to monsoon showers, there is a chance of Sigatoka disease in banana. As a precaution, spray Pseudomonas 20g/litre. In case of severe attack, spray 2 ml hexaconazole or 1 ml propiconazole per one litre of water by mixing it with a sticker and spray on both the surface of the leaf.
- Attack of Papaya mealy bug on papaya fruit can be controlled by dusting of Chlorpyriphos 1.5% dust or Malathion 5% dust around the healthy plants; also destruct ant colonies with drenching of Chlorpyriphos 20 EC @ 2 ml/litre.
- Drain out excess water from the field.

#### Jute:

- If there is stagnant water in the jute field and there is no scope to drain out the water within 2-3 days, it is advised for immediate harvest the matured crop and put in water for retting.
- Harvesting and retting of jute may be done preferably at pre-flowering stage (120 days after sowing) to get better quality fibre. At present the water temperature in the retting tanks/ nalas may ideal for retting of jute. Early and timely sown capsularis jute may be harvested during this week and kept in the field in standing position for 3-4 days before retting for proper defoliation.

#### **Betel vine:**

- There is chance of incidences of Phytopthora root rot and chital disease. For Phytopthora root rot apply 1% Bordeaux mixture at the base at 1-month interval. For Chitla apply 0.5% Bordeaux mixture at 15-20 days interval.
- Maintain free air movement inside the garden.
- All the plant protection measure should be taken after the current spell of rainfall.
- Drain out excess water from the field.

#### Sugarcane:

- During the month, sugarcane plant. in grand growth stage
- In this time, stem rot and stem borer and others disease-pest may infest the field and so inspect the land regularly.
- Cultivated summer pulse crops, leafy vegetables need to be harvested in the sugarcane field as relay/inters cropping.
- In this time, stem rot and stem borer and others disease-pest may infest the crop and so inspect the land regularly and take appropriate plant protection measure.
- All the plant protection measure should be taken after the current spell of rainfall.
- Drain out excess water from the field.

#### Livestock

- Livestock may be affected by foot and mouth disease due to rainy weather. Following measures may be taken up.
- Feed them only dry food.

- Keep the shed clean and dry.
- Disinfect the shed with bleaching powder.
- Don't allow to graze the cattle in submerged field.
- If wound found at foot and mouth wash the wound with potassium per manganate solution.
- Vaccinate livestock regularly.
- If any disease symptoms appear, seek veterinary doctor advice immediately for proper treatment.

## **Poultry**

- Apply lime bleaching powder and copper sulphet solution spray before placing them in farm
- Provide vaccinations as advised by the doctor.
- Apply dry food and clean tap water for drinking purpose.
- Prevailing hot and humid weather condition may lead to gastrointestinal parasites infection to the poultry. Clean sanitary conditions of poultry sheds are very much important

## **Fishery**

- Repair damaged dykes of fisheries ponds and take care so that fishes do not escape.
- Drain excess water from the pond.
- There is enough water, so release the fry into the pond.
- Remove the unwanted fishes before leaving the new fry into the pond.
- Contact the local fisheries office for any advice.

## Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 27 July 2022) and maximum temperature on 26 July and minimum temperature on 27 July 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	31.2	26.5	Chattogram	Chattogram	00	32.6	26.3
	Tangail	04	31.5	25.2		Sandwip	Trace	31.7	24.9
	Faridpur	05	31.5	25.5		Sitakunda	00	32.0	25.0
	Madaripur	00	31.8	26.0		Rangamati	00	30.5	24.5
	Gopalgonj	Trace	32.2	25.4		Cumilla	32	29.7	24.8
	Nikli	00	31.5	26.0		Chandpur	03	31.1	26.0
	5.000.0000	4850	SOVERES A.	03650		M.Court	11	30.0	25.2
Rajshahi	Rajshahi	00	32.6	26.7		Feni	22	29.8	24.8
	Ishurdi	00	32.7	26.5		Hatiya	00	30.7	24.8
	Bogura	08	30.1	25.6		Cox's Bazar	00	33.2	26.5
	Badalgachhi	09	30.3	25.6		Kutubdia	00	33.6	26.0
	Tarash	06	30.6	25.0		Teknaf	00	33.2	26.1
Rangpur	Rangpur	09	30.5	25.8	Khulna	Khulna	02	33.0	26.4
	Dinajpur	03	31.3	26.0	Section 1974	Mongla	Trace	32.0	25.5
	Sayedpur	03	31.0	25.0		Satkhira	14	31.7	25.4
	Tetulia	19	31.5	24.0		Jashore	Trace	32.0	26.0
	Dimla	17	29.4	24.5		Chuadanga	12	34.1	26.3
	Rajarhat	17	29.5	25.3		Kumarkhali	05	32.0	25.8
Mymensingh	Mymensingh	Trace	31.0	25.8	Barishal	Barishal	01	31.5	25.4
	Netrokona	01	32.2	26.0	#10.0100000	Patuakhali	02	31.4	25.5
	4	825	20.5	24.0		Khepupara	00	31.0	25.0
Sylhet	Sylhet Srimangal	47 04	30.6 29.6	24.9 24.9		Bhola	02	31.5	25.4

## **Highlights:**

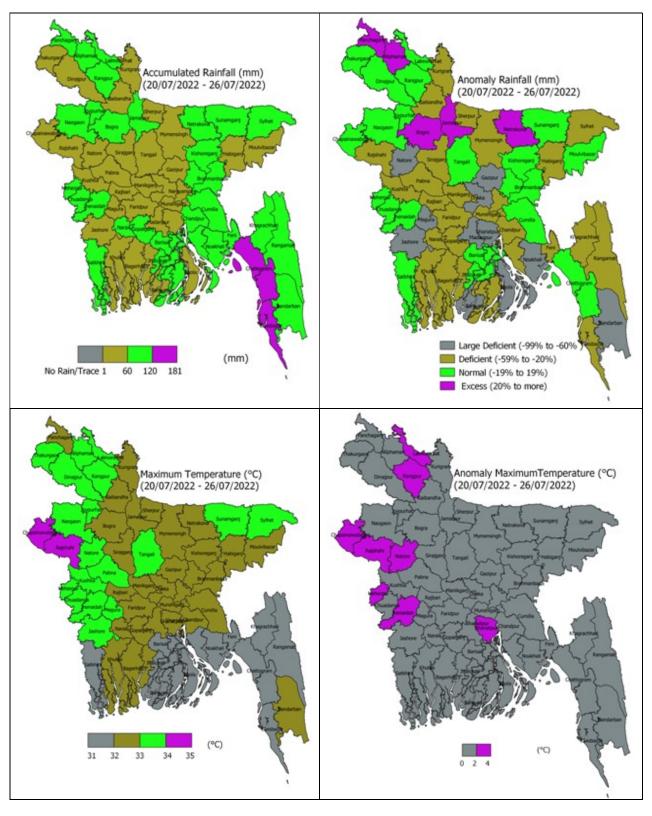
- Country average bright sunshine hour was 7.11 hours per day during last week.
- Country average free water loss during the previous week was 4.23 mm per day.

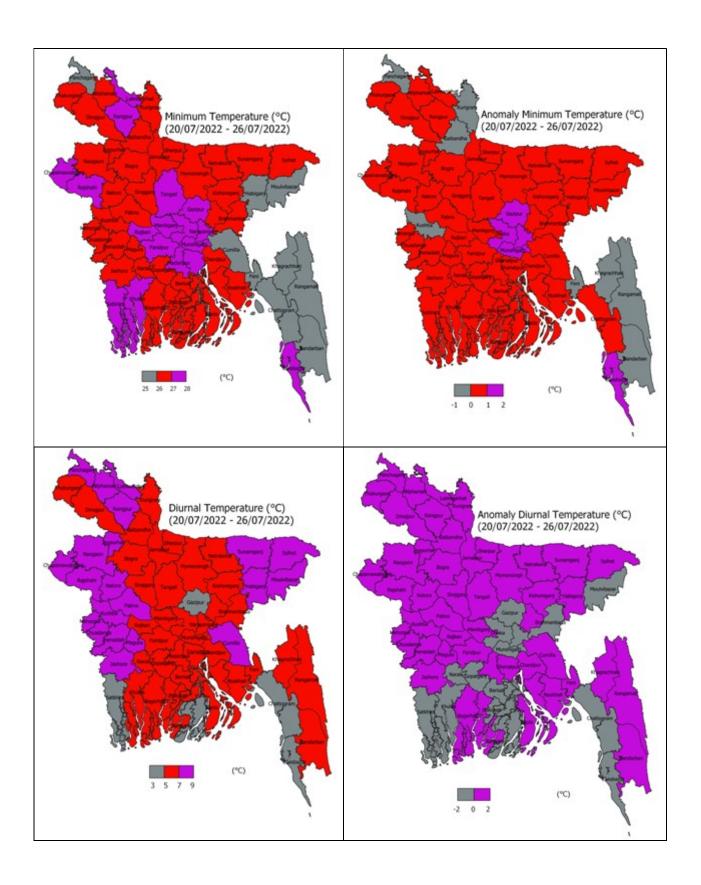
## Weather Forecast Valid for 24 Hours commencing 06 PM Today:

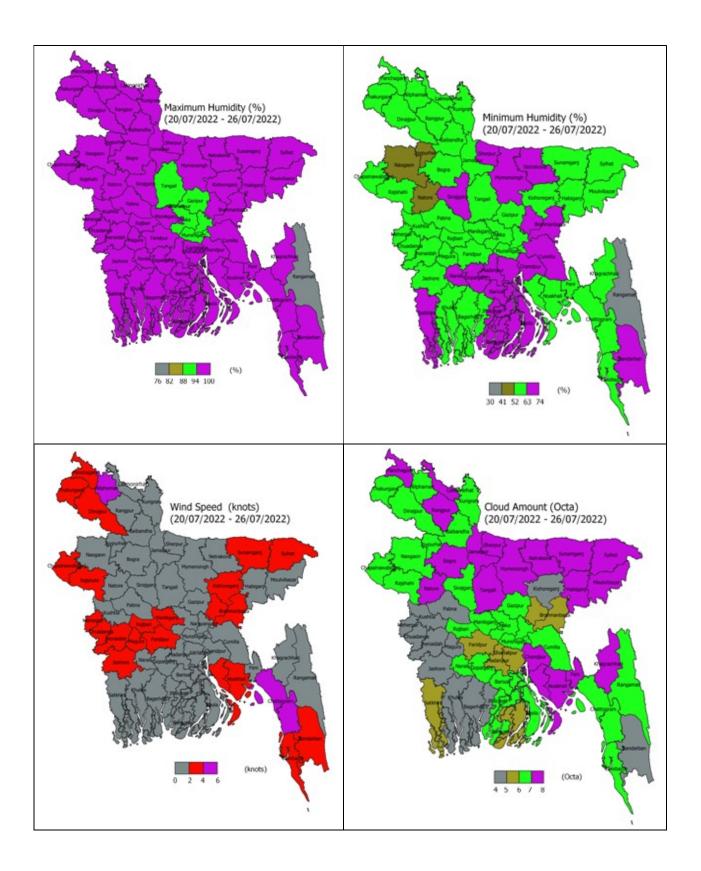
**Forecast:** Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Rangpur, Mymensingh & Sylhet divisions and at a few places over Rajshahi, Dhaka, Khulna, Barishal & Chattogram divisions with moderately heavy to heavy falls at isolated places over the country.

**Temperature:** Day and night temperature may rise slightly over the country.

Spatial Distribution of weather parameters for the Week ending 26 July 2022





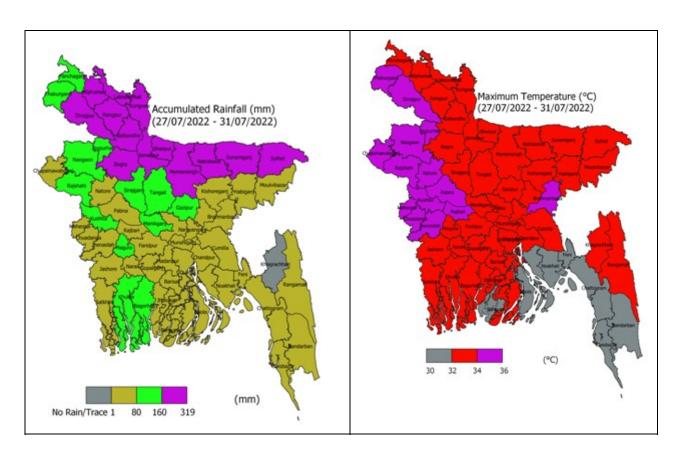


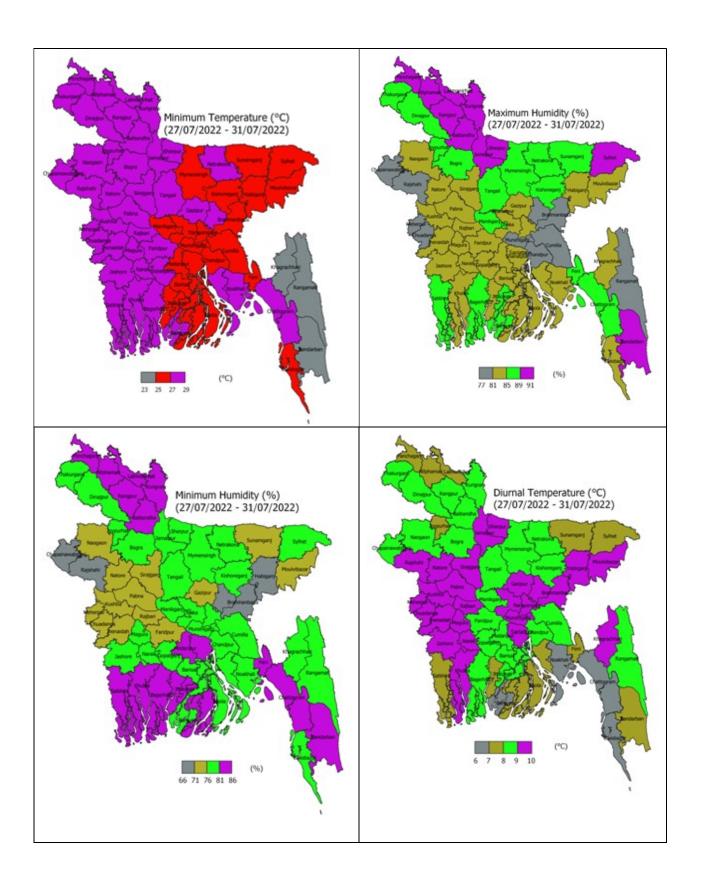
## Weather Forecast and Advisory for the Period of 25.07.2022 to 31.07.2022

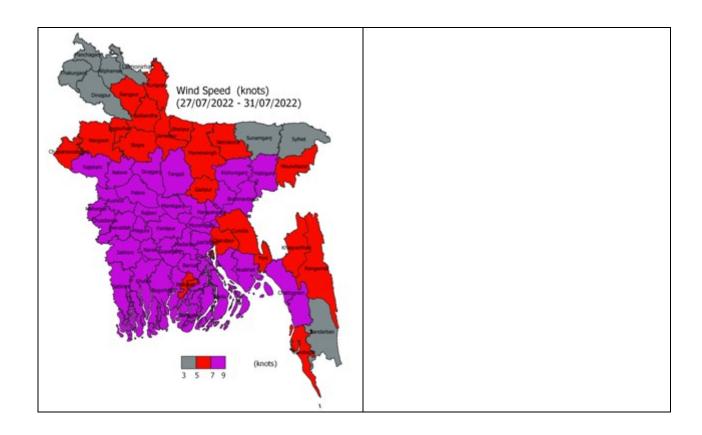
Bright sunshine hour is likely to be from 5.50 to 7.50 hours per day during this week. Average free water loss is likely to be from 3.75 to 4.75 mm per day during this week.

- Light (04-10 mm/day) to moderate (11-22 mm/day) rain /thunder showers accompanied by temporary gusty/squally wind with lightning flashes is likely to occur at most places (76%-100% area) over Sylhet, Mymensingh & Rangpur divisions with heavy (44-88 mm/day) to very heavy falls (>88 mm/day) at isolated places and at many places (50%-75% area) over Dhaka, Rajshahi Khulna, Barishal & Chattogram divisions during this period.
- Day and night temperature may fall slightly over the country during this period.

## District Wise Quantitative Weather Forecast for next Five days from 27 July-31 July 2022







# **Different Satellite Products over Bangladesh**

NOAA/VIIRS BLENDED NDVI composite NOAA/ AVHRR BLENDED VCI composite for for the week. No. 29 (09 July-15 July) over the week No. 29 (09 July-15 July) over Agricultural regions of Bangladesh Agricultural regions of Bangladesh -0.05 0.05 0.15 0.25 0.35 0.45 0.55 0.65 NOAA/ AVHRR BLENDED VHI composite for AVHRR **BLENDED** NOAA/ TCI composite for the week No. 29 (09 July-15 the week No. 29 (09 July-15 July) over Agricultural regions Agricultural regions of Bangladesh July) over of Bangladesh