

NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

23 October 2019 (WEDNESDAY) [FOR THE PERIOD 23.10.2019 - 27.10.2019]









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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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), the well-marked low over West-central Bay and adjoining Southwest Bay now lies over West central Bay off Andhra coast. Trough of low lies over North Bay. According to BMD, during next 24 hours, rain/thunder showers accompanied by temporary gusty wind is likely to occur at a few places over Khulna, Barishal & Dhaka divisions and at one or two places over Rangpur, Rajshahi, Mymensingh, Sylhet & Chattogram divisions. As per the medium range quantitative district level weather forecast issued by BMD, there will be no rainfall or very less rainfall in different districts of the country. As a result, it is advised to apply irrigation, pesticides and fertilisers and also carry out intercultural operation. Day temperature may remain nearly unchanged and night temperature may fall slightly over the country.

As per the information received from Bangladesh Water Development Board (BWDB), All the major rivers of the Country are following below their respective danger levels. All the major rivers are in falling trend, which may continue in next 72 hours.

Considering the realized weather along with weather forecast, following salient agromet advisories on the standing major crops, livestock, poultry and fishery are issued for different districts where dry condition prevailed during last four days & also dry condition is likely for next five days in the country.

General Advisories:

- **Monsoon is withdrawn from the district; farmers are advised to harvest matured crops and vegetables and also utilize the expected sunny sky conditions for hay making and drying harvested produce
- **Before rabi crop sowing, clean fields and add well decomposed FYM or compost before sowing of crops as it improves the physical and biological properties of soil and thus increases the water retention capacity as well as nutrient status of the soil.
- **Field sanitization is advised before sowing of rabi crop. Bunds, channels, uncultivated fields and field roads should be cleaned, by removing weeds.
- **Night temperature has started falling/ will fall in the district; farmers should make proper arrangements to protect their milch animals and their young ones from morning/evening cold by covering them with gunny bags during night and ample exposure to sunlight during day time to avoid pneumonia.

Aman Paddy

- Monsoon is withdrawn and as dry condition prevailed during last four days & also dry condition is likely for next five days, apply irrigation, and maintain 2-5 cm water level at panicle initiation to hardening of grain.
 - Remove water completely from the matured paddy field 15 days before harvesting.
 - Harvest the fully matured crop as sunny weather will prevail.
- Continuous monitoring of the economically harmful insects like stem borer, leaf roller, sheath blight, blast, brown spot, leaf blight, Gandhi bug, Brown Plant Hopper (BPH) should be done. Monitoring at 2-3 days interval is advised. For this light trap should be used. Light trap should be placed at some distance from the crop and bulb should be lightened from evening 06.30 PM to 10.30 PM and

- collected insects should be destroyed in the morning hours. Since fair weather is predicted in the coming 5 days, farmers can continue spraying of insecticides/ fungicides in the field.
- For leaf roller attack spray Chlorpyrifos@2.0 ml/lit of water or Malathion @ 2ml. per litre water.
- For sheath blight spray Hexaconazol @ 1ml//litre water or Tebuconazol @ 1ml/litre water.
- For stem borrer attack: For this pheromone traps 10 nos. per acre can be installed and egg groups of stem borer should be collected by hand and destroyed. Spray Carbofuran @10kg per ha or Cartap @14kg per ha or Fipronil @ 1ml. per litre of water or Diazinon @ 17kg per ha.
- For bacterial leaf blight apply Thiovit+Potash along with fertiliser management
- To control brown spot disease, spray Mancozeb @ 2.5 g/litre or Thiovit+Potash or Fertilizer management
- For management of blast disease in paddy at booting stage, carry out alternative wetting and drying without cracking of the soil. Spray Nativo 75wg/ Trooper@ 0.6g/litre of water or Amister top 325 sp@ 1ml/litre of water. Spraying should be done after 3 PM so that disease can be effectively controlled. The spray should be repeated after 10-12 days as per intensity of the disease.
- During dough to milky stage, there is chance of incidences of Gandhi bug & BPH. For BPH Spray Isoprocarb @ 2.5g per litre water or Imidachloprid @ 2.5g per litre water. For Gandhi bug Spray Malathion @ 2ml. per litre water or Chlorpyrifos @ 2ml. per litre water.

Vegetables

- Preparation for nursery sowing of tomato, brinjal, chillies and capsicum can be done and seed treatment by Thiram should be done @ 2 gram/ kg. seed. Winter vegetables like cauliflower, cabbage and knolkhol early varieties should be selected. Nursery sowing can be done. It is advised to transplant all cole crops (knol khol, cabbage, cauliflower and broccoli) without any delay. Continue the transplanting of tomato seedlings. Regular monitoring is advised in early transplanted tomato crop against attack of insect-pest and diseases
- As dry condition prevailed during last four days & dry condition is likely for next five days and more evaporation is likely due to sunny weather, apply irrigation to vegetable crops.
- In cucurbits, to control downy mildew, spray Ridomil M Z 72 @ 20 gm/10 litre of water. Install fruit fly trap Naurojicurtin cucurbit @ 10 trap per ha for management of fruit fly.
- Spot application of Propargite 57 EC @ 2 ml/lit or Fenazaquin 10 EC 1 ml/lit water for the control of red spider mites in brinjal is advised. For control of white fly spray Diafenthiuron 50% WP 10 g/10 lit of water. Uproot and burn little leaf infected plant and spray systemic insecticide.
- There is a chance of fruit fly in vegetables. It is suggested that remove and destroy the affected
 and decayed fruits. Use special pheromone traps like cuelure (6 nos/acre) for vegetable fruit fly.
 Thulasi/fruit traps can be used. If the attack is not reduced, spray mixture of Malathion 2 ml per
 one litre of water + jaggery 10 g at flowering and fruit initiation.
- For early detection of papaya mealy bug, it is advised to regularly monitor the plantations and remove and burn the infested parts/plants. Destroy the ant colonies in vicinity of the crop to restrict the spread of the pest to the adjacent healthy crops. ☑ Spot spraying of Neem oil (1 to 2%) or Chlorpyriphos 20 EC (2 ml/l) or Dimethoate 30 EC (2 ml/l) or Imidacloprid 17.8 SL (0.6 g/l) under fair weather condition can considerably reduce the pest population.

Horticultural crops

Present weather conditions are favorable for the planting of horticultural crops viz, papaya, mango, Banana, guava etc, farmers are advised for the planting the same at the earliest.

Livestock & Poultry

- Suggested to go for routine vaccination for livestock and poultry against the dreaded virus. The floor and dairy shed should be cleaned with suitable antiseptic solution and maintain a proper sanitation.
- Keep animal shed clean and de-worm domestic animals. For Foot and Mouth disease, wash the wound with potassium permanganate solution.
- After rainy season till the availability of grazing land lambs/kids/adult/ship and goat shall be dewormed after each 30–40 days. Similarly, faecal examination of 10 % sample shall be undertaken from veterinarian so that specific dewormer can be administered.
- Balanced diet (green fodder 15-20 kg and wheat or rice husk 2-3 kg) per day should be given to the buffaloes and cows so that milk production did not affect by the fluctuating weather

Fishery

- Growing carp is floating upward due to oxygen deficiency. Follow the following.
- Apply lime in pond water. Apply lime according to pH.
- Remove all aquatic weeds from bottom of pond
- Cut the bushes beside the surrounding for getting better sunlight.
- Agitate water for better growth of fish.
- Administer feeding on sunny days. Provide false netting for better growth of fish.

Detail District-wise Agromet Advisories are available in BAMIS Portal (www. https://www.bamis.gov.bd/

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 23 October'19) and maximum temperature on 22 October, minimum temperature on 23 October'19 is given below:

Name of	Name of	Rain	Max.	Min.	Name of	Name of	Rain	Max.	Min.
Divisions	Stations	fall (mm)	Temp (°C)	Temp (°C)	Divisions	Stations	fall (mm)	Temp (°C)	Temp (°C)
Dhaka	Dhaka	Trace	32.6	25.7	Rajshahi	Rajshahi	00	32.5	22.4
	Tangail	00	33.4	23.8	-	Ishurdi	00	32.8	22.0
	Faridpur	00	33.0	24.0		Bogura	00	32.2	23.0
	Madaripur	00	33.0	25.2		Badalgachhi	00	31.0	21.0
	Gopalgonj	00	32.8	24.8		Tarash	00	31.6	23.0
	Nikli	00	31.5	24.0					
					Rangpur	Rangpur	00	31.0	21.0
Mymensingh	Mymensingh	00	32.6	23.5		Dinajpur	00	31.0	20.7
	Netrokona	00	32.0	23.0		Sayedpur	00	32.0	20.6
						Tetulia	00	29.7	19.0
Chattogram	Chattogram	00	34.0	25.8		Dimla	00	30.2	21.0
-	Sandwip	01	33.5	24.8		Rajarhat	00	30.5	19.6
	Sitakunda	00	33.5	24.3					
	Rangamati	00	33.2	24.6	Khulna	Khulna	00	33.2	25.8
	Cumilla	Trace	33.0	25.8		Mongla	00	33.2	25.3
	Chandpur	00	32.8	26.4		Satkhira	02	33.5	25.5
	M.Court	00	32.2	26.0		Jashore	00	33.4	24.6
	Feni	00	32.7	24.8		Chuadanga	00	33.6	23.0
	Hatiya	00	32.6	25.5		Kumarkhali	00	32.8	25.4
	Cox's Bazar	00	34.0	25.6					
	Kutubdia	01	33.7	25.5	Barisha1	Barishal	00	32.4	24.5
	Teknaf	00	32.8	25.0		Patuakhali	Trace	33.2	25.2
						Khepupara	20	34.5	25.1
Sylhet	Sylhet	00	32.5	22.5		Bhola	00	32.3	25.0
	Srimanga1	Trace	32.3	22.2					

Highlights:

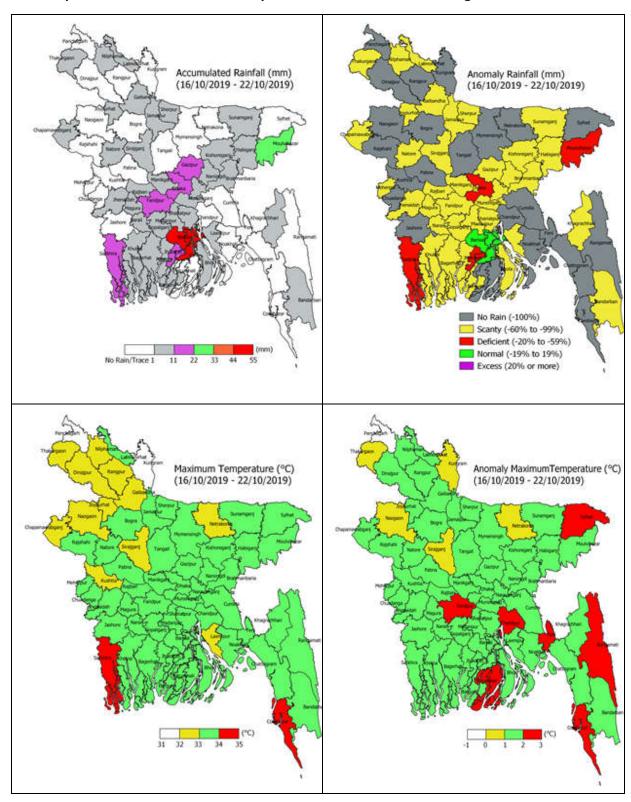
- Country average bright sunshine hour was 7.47 hours per day during last week.
- Country average free water loss during the previous week was 3.39 mm per day.

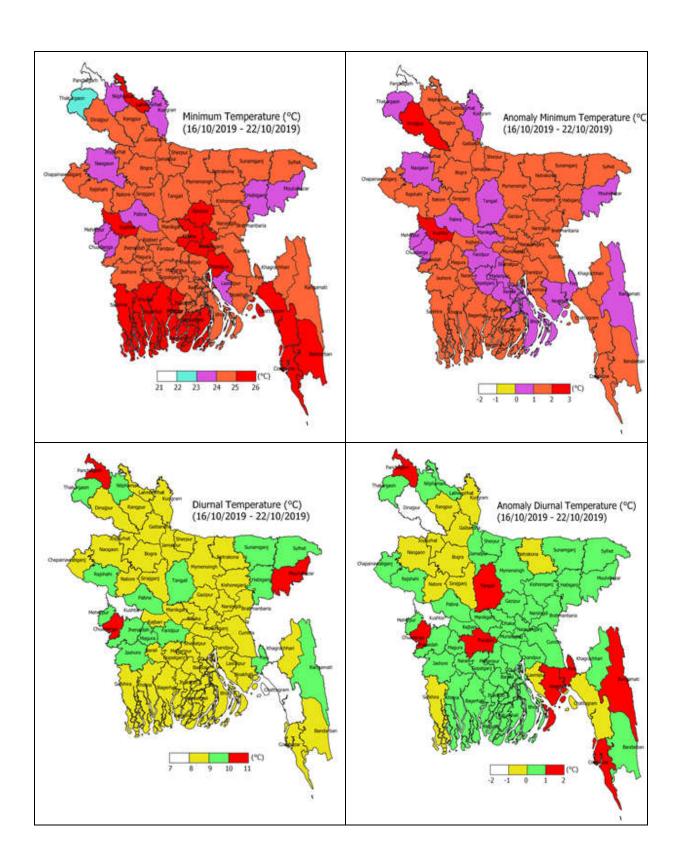
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

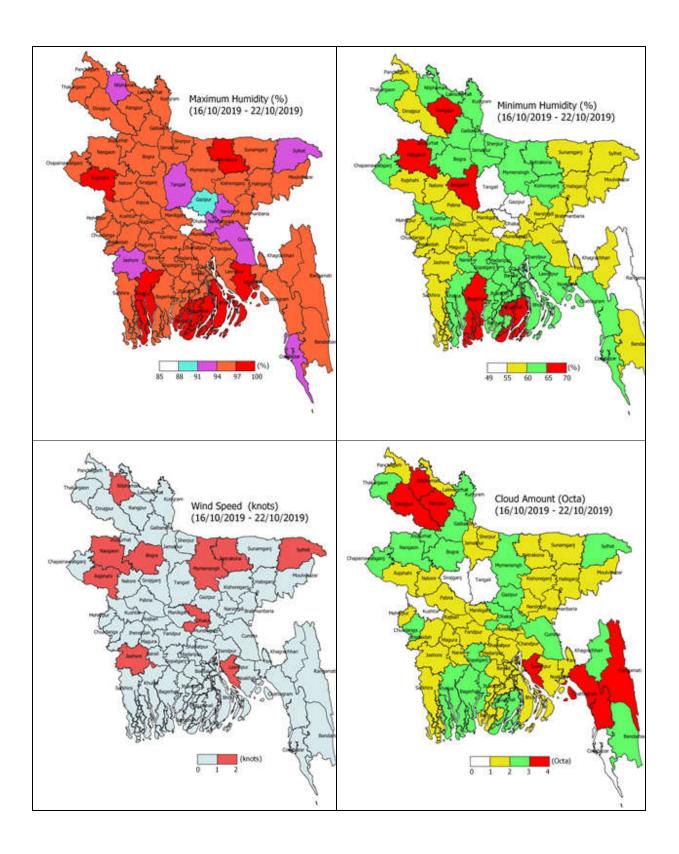
Forecast: Rain/thunder showers accompanied by temporary gusty wind is likely to occur at a few places over Khulna division and at one or two places over Rangpur, Rajshahi, Dhaka, Mymensingh, Barishal, Chattogram & Sylhet divisions.

Temperature: Day temperature may fall slightly over the country. Night temperature may rise slightly over north-western part and it may remain nearly unchanged elsewhere over the country.

Spatial Distribution of weather parameters for the Week ending 23 October 2019







Weather Forecast and Advisory for the Period of 22.10.2019 to 02.11.2019

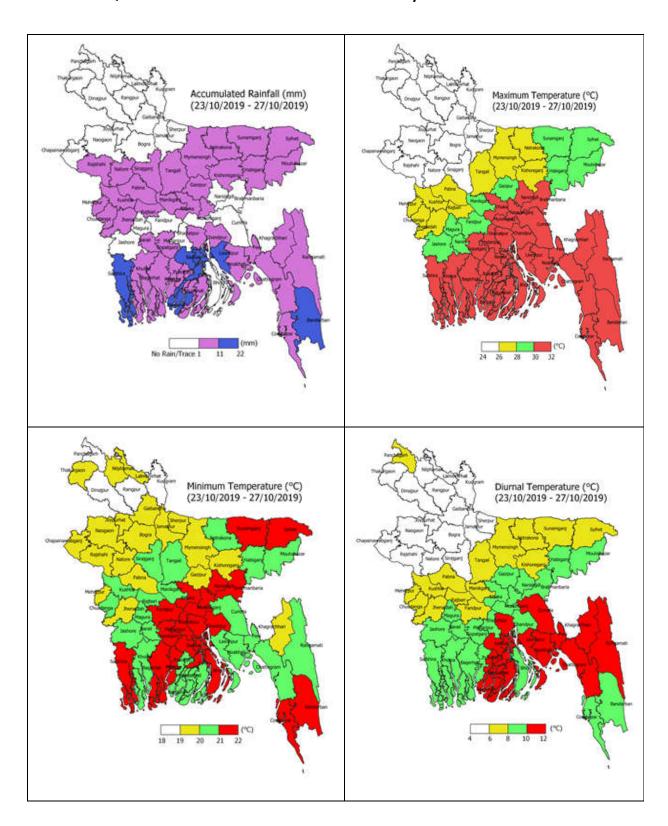
Bright sunshine hour is likely to be from 6.00 to 7.00 hours per day during this week. Average free water loss during the next week is likely to be from 2.50 to 3.50 mm per day.

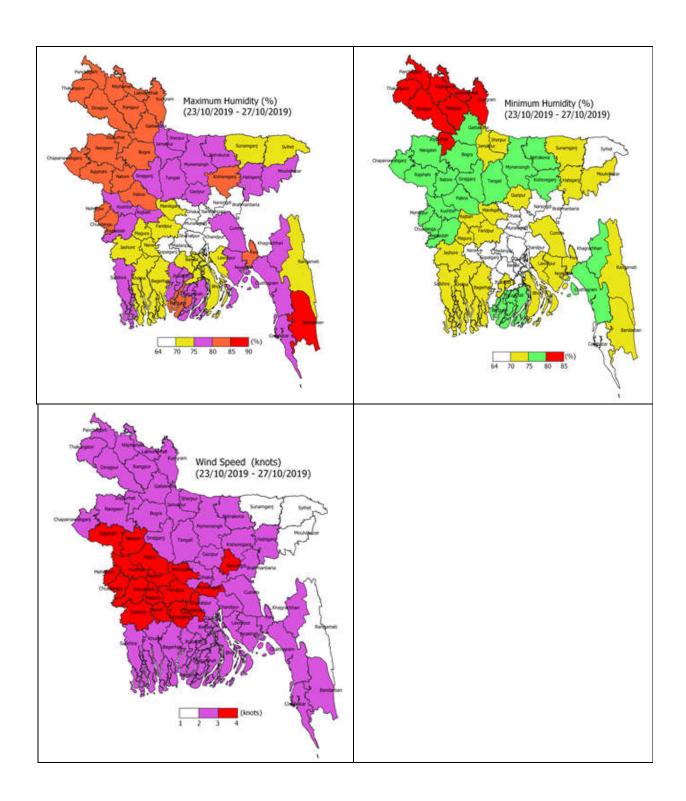
Light (04-10 mm/day) to moderate (11-22 mm/day) rain/thunder shower is likely to occur at many places over the country, with chances of moderately heavy (23-43 mm/day) to heavy (44-88 mm/day) falls at places over the country during the first half of this period. Slight rise in Day and Night temperature during this period.

Weather may remain mainly dry with temporary partly cloudy sky having chances of isolated rain at one or two places over the country during the second half of this period.

Day and night temperature may remain nearly unchanged over the country during this period.

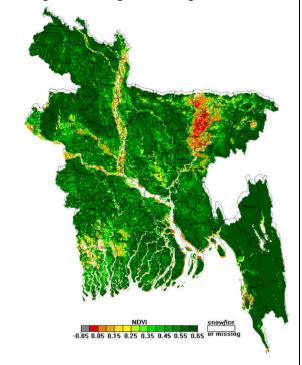
District Wise Quantitative Weather Forecast for next Five days from 23 October -27 October'19



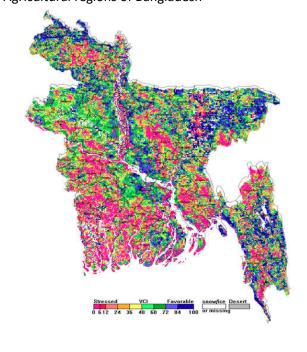


Different Satellite Products over Bangladesh

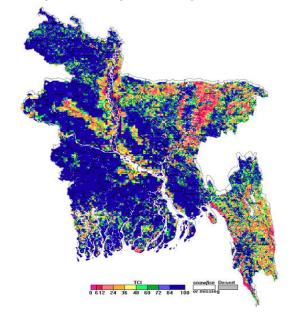
NOAA/VIIRS BLENDED NDVI composite for the week number No. 41 (04 October-10 October) over Agricultural regions of Bangladesh



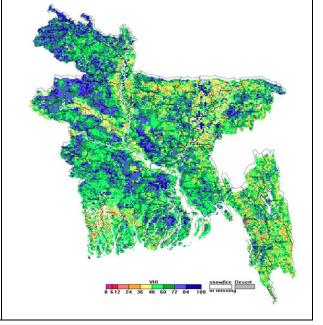
NOAA/ AVHRR BLENDED VCI composite for the week number No. 41 (04 October-10 October) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week number No. 41 (04 October-10 October) over Agricultural regions of Bangladesh

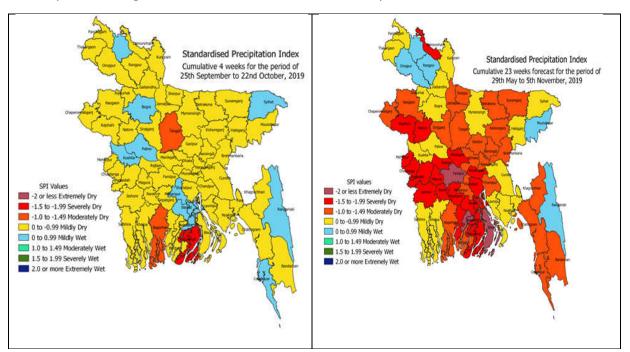


NOAA/ AVHRR BLENDED VHI composite for the week number No. 41 (04 October-10 October) over Agricultural regions of Bangladesh



Monitoring Meteorological Drought in Bangladesh using Standardized Precipitation Index (SPI)

It has been observed that during last four weeks as well as in September to October mild dry conditions prevails in districts located in northwest as well as southeast parts of Bangladesh except a few districts whereas the districts in south, northeast, some parts of western side and central parts of Bangladesh are under mild to moderate dry condition.



Data source: Bangladesh Meteorological Department

RAINFALL AND RIVER SITUATION SUMMARY AS ON OCTOBER 23, 2019

(Source: Bangladesh Water Development Board)

Outlook:

All the major rivers of the Country are following below their respective danger levels.

All the major rivers are in falling trend, which may continue in next 72 hours

General River Condition

Monitoring Water Level Stations	93	Water Level Steady in last 24 hours	04
Water Level Rise in last 24 hours	09	Total not Reported	00
Water Level Fall in last 24 hours	80	Above Danger Level	00