

NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

01 APRIL 2020 (WEDNESDAY) [FOR THE PERIOD 01.04.2020 – 05.04.2020]









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

Please Contact: Farhana Hoque, Sabuj Roy | E-mail: pdamisdp@dae.gov.bc
Phone No.: 02-55'028414, 02-55028418

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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) during next 24 hours, weather may remain mainly dry with temporary partly cloudy sky over the country. Mild heat wave is sweeping over the regions of Dhaka, Faridpur, Sandwip, Sitakunda, Feni, Rangamati, Cox's Bazar, Mongla, Jashore, Khepupara and Bhola and it may continue. Day temperature may rise slightly and night temperature may rise by (1-2) °C over the country. As per the outlook issued by BMD for next 72 hours rain/thunder showers activity is likely. and as per the quantitative medium range weather forecast, dry condition is likely during next five days in most of the districts in the country. Detail Agromet advisories issued to the districts, where dry condition prevailed during last four day and dry condition is expected during next five days are given below.

Boro Paddy

- Alternate wetting and drying maintain water level 5-7 cm upto the appearance of panicle. Maintain 2-5 cm water level in panicle initiation to booting stages.
- Keep the field and irrigation channel weed free.
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Where seedlings are 90-110 days old apply last top dressing with urea and potash.
- There is chance of stem borer in rice in the main field. If noticed, the pest may be identified and controlled by using light traps and also constant monitoring is required for its level of incidences. To attract the butterflies, place 5 Pheromone Traps/acre, collect the adults and destroy them by burying under soil or by burning. Also spray Carbofuran @10kg per ha.
- Before spray the insecticide, drain out the irrigated water from the plots
- Increased difference between daily maximum and minimum temperature (diurnal temperature) may favour the infestation of blast in main field as well as in the nursery. At peak tillering stage of the crop there is more chance of this fungal disease. Spray Nativo 75wg/ Trooper@ 0.6g/litre of water or Amister top 325 sp@ 1ml/litre of water.
- For brown spot attack spray apply fertilizer management and spray Thiovit+Potash.
- Spraying should be done during afternoon hours or at morning hours from 10:00 a.m. to 11:00a.

Wheat

- When leaves and stems of wheat crop start drying and become yellowish brown due to rise in temperature, harvest the crop and store the grains after sun drying. Store the grains at 12% moisture for longer storage life
- Apply last & third irrigation after 75-80 old plant during grain formation. Also drain out excess water from the field.
- Monitor the incidences of pests (stem borer, aphid, jassid, cutworm, and rat) & diseases ((blast, leaf rust, leaf blight, brown spot, foot rot and powdery mildew) and if noticed, take appropriate preventive measure.
- Monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is
 observed in the crop field, application of the mixture of 20kg sand with Chlorpyriphos group
 pesticide is suggested in the evening hour and thereafter irrigation is advised.

Maize

- It is advised to prepare silage from the harvested maize and other pulse crops to overcome shortage of green fodder.
- Weather is congenial for incidence of sheath blight in maize which is at cob development stage. Spray hexaconazole @ 2 ml or propiconazole @ 1 ml per litre
- As maize crop is most sensitive moisture stress at 45 to 65 days after sowing, ensure optimum moisture availability by providing irrigation to avoid yield loss at harvest.
- Ensure proper moisture level during flowering and grain development stages in maize crop.
- Apply third irrigation between 60-70 days after sowing of the crop.
- If symptoms of fall army worm incidence are noticed, spray any one of the following insecticide to control. Chloropyrephos @1ml./litre water, Lambda- Cypermethrin @1ml./litre water.
- There may be chance of incidence of and Katui pest. These pests may be identified and controlled by using sex pheromone traps and also constant monitoring is required for its level of incidences.

Lentil

- Complete harvesting of matured earlier sown lentil. Collect the crop at morning to reduce shattering losses. All these operations should be done.
- To protect the pulse grains from storage pests, application of oils of castor/linseed/honge/neem oil @ 3-5 ml per kg of grains is advised.

Groundnut

- Monitor the incidences of pests (hairy caterpillar, jassid, thrips, leaf miner, spodoptera & termite)
 & diseases (leaf spot/tikka disease, leaf rust, foot rot/stem rot, collar rot, bud necrosis) and if noticed, take appropriate preventive measure.
- Current moderate temperature favours thrips infestation. Spray 400 ml Dimethoate or 50 ml Imidachloprid in 200 litre water per acre.
- Present weather conditions are favourable for leaf miner incidence in early sown groundnut. For control of leaf miner to spray Chloripyriophos 2.5 ml/l or quinalphos 2 ml/l of water.
- Present weather conditions are favourable for, spodoptera, jassid in groundnut. To control leaf minor and spodoptera, spray Chloripyriophos @ 2.5 ml (or) Quinalphos @ 2 ml or Thiodicarb 1 g per litre of water; for sucking pest, spray Monochrotophos @1.6 ml (or) Imidacloprid @ 0.3 ml (or) Dimethoate @ 2 ml per litre of water and for tikka leaf spot, spray Mancozeb @ 400 g + Carbendazim @ 200 g (or) Hexaconazole @ 400 g per acre.
- There is a chance of infestation of collar rot disease in early sown rabi groundnut crop. Spray of Thiophanatemethyl 1.5 g/liter water is advised.

Vegetables

- Apply light irrigation.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Emamectin benzoate 5% SG 4 g/10 litre or Dimethoate 30 % EC 1.0 ml/litre for the control of thrips & aphids.

- Intercultural operation is advised in early sown onion/garlic crop. Provide light and frequent irrigation at an interval of 10-15 days as per requirement.
- For the management of stem and fruit borer in brinjal crop, it is advised to install 10 Pheromone trap in one acre.
- There is chance of blight disease in tomato and brinjal which are at fruiting stage. Apply Streptocyclene@3g/10 liter of water.
- Avoid moisture stress conditions to the crops which are at flowering to fruiting stage.
- Considering the increase in temperature, apply light irrigation in standing crops and vegetables as per requirement.
- Because of increase in temperature, there is chance of sucking pest in vegetable crops. To control, application of 2% neem oil emulsion once in a week or spray of Lecanicillium lecani at 20 g per litre of water is advised.

Horticultural crops

- Due to continuous dry spell, there are chances of termite attack in horticulture, forestry tree and shrubs. Hence, to control apply Aldrin termicides for termites.
- Farmers are advised to keep vigilance on insect-pest and diseases and follow proper weed control measures and cover fruit seedling with rice straw (parali)/thatches in nursery.
- Prevailing weather condition is favorable for black headed caterpillar incidence in coconut. To control, it is advised to spray the under surface of the fronds with Dichlorovos 100EC 0.02%, Malathion 50 EC 0.05% @ 1ml/litre.
- Prevailing weather condition is favorable for canker disease incidence in citrus. To control, spray
 of Streptomycin sulphate 500-1000 ppm or Phytomycin 2500 ppm or Copper oxychloride 0.2% at
 fortnight interval is advised.
- To avoid fruit fall in mango crop, it is advised to spray Planofix regulator 20 ppm and 1% Calbor micronutrient.
- The prevailing weather conditions are favorable for incidence fruit fly in mango. Farmers are advised to keep Methyl Uzanol traps @ 6-7 /acre to trap the fruit fly

Jute:

- Land is to be ploughed and laddered 5-6 times to obtain a fine seed bed. In termite and cricket infested fields, the soil is to be treated with malathion 5% dust @ 30 kg/ha.
- Under optimum soil moisture condition, start sowing of seeds.

Livestock

- Famers are advised to keep the floor of the animal habitation dry to avoid hoof infection and to prevent fly breeding.
- Vaccinate (ET vaccine) sheep and goats against Enterotoximia. Proper ventilation should be maintained for free circulation of air in the sheds
- Feed 50-60 grams of mineral mixture to pregnant animals every day to boost their immunity.
- Provide green fodder and clean fresh water to cattle twice a day.

Poultry

- Suggested to go for routine vaccination for poultry against the dreaded diseases /virus Vaccination (RDF1) of the one week old chicks against Raniket disease, darkplaigue and against Gamboro disease in two weeks old chicks may be carried out after consultation with local veterinarian.
- It is advised to align the long axis of poultry shed in east-west direction. This will prevent the direct sunshine over the birds.
- Regularly inspect the droppings of the poultry bird for any disease symptoms and immediately separate/remove the diseased and dead birds from the healthy ones.

Fishery

- Because of increase in temperature, it is advised to add cow dung and lime or rice bran and mustard cake in the pond as a natural food for fishes @ 5 kg/day/ acre area of pond.
- Feed the major carp with rice bran and ground nut oil cake at 1:1 ratio at the rate of 5 % of body weight
- Maintain 1 to 1.5mt average depth of water in the pond.
- As the temperature is rising, farmers can start feeding their fishes with available fish feed or they can feed their fishes with a mixture Rice bran and MOC in 1:1 ratio @3% of body weight of the total biomass in their ponds.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 01 April 2020) and maximum temperature on 31 March, minimum temperature on 01 April 2020 is given below:

Name of	Name of	Rain	Max.	Min.	Name of	Name of	Rain	Max.	Min.
Divisions	Stations	fall	Temp	Temp	Divisions	Stations	fall	Temp	Temp
		(mm)	(°C)	(°C)			(mm)	(°C)	(°C)
Dhaka	Dhaka	00	36.0	21.8	Rajshahi	Rajshahi	00	36.8	18.5
	Tangai1	00	36.0	18.8		Ishurdi	00	37.0	18.0
	Faridpur	00	37.2	19.2		Bogura	00	35.5	19.6
	Madaripur	00	36.0	18.3		Badalgachhi	00	35.3	17.3
	Gopalgonj	00	36.5	18.0		Tarash	00	33.5	19.0
	Nikli	00	34.9	17.6					
					Rangpur	Rangpur	00	33.7	18.0
Mymensingh	Mymensingh	00	33.5	18.0		Dinajpur	00	33.9	17.6
	Netrokona	00	33.0	17.4		Sayedpur	00	33.6	17.6
						Tetulia	00	33.3	17.0
Chattogram	Chattogram	00	35.0	22.6		Dimla	00	32.8	18.0
	Sandwip	00	35.7	19.0		Rajarhat	00	33.5	16.2
	Sitakunda	00	36.8	17.5		-		1	
	Rangamati	00	37.0	17.3	Khulna	Khulna	00	36.0	21.4
	Cumilla	00	34.6	18.5		Mongla	00	37.7	22.0
	Chandpur	00	35.9	21.1		Satkhira	00	36.2	21.0
	M.Court	00	36.0	20.0		Jashore	00	38.0	18.8
	Feni	00	36.1	18.8		Chuadanga	00	37.8	18.4
	Hatiya	00	35.0	20.0		Kumarkhali	00	36.6	20.0
	Cox's Bazar	00	34.5	23.2					
	Kutubdia	00	34.1	22.2	Barishal	Barishal	00	36.7	16.0
	Teknaf	00	34.2	24.0		Patuakhali	00	36.8	20.6
						Khepupara	00	36.0	22.0
Sylhet	Sylhet	00	35.8	20.0		Bhola	00	36.4	19.4
	Srimanga1	00	35.5	13.8					

Highlights:

- Country average bright sunshine hour was 8.47 hours per day during last week.
- Country average free water loss during the previous week was 4.26 mm per day.

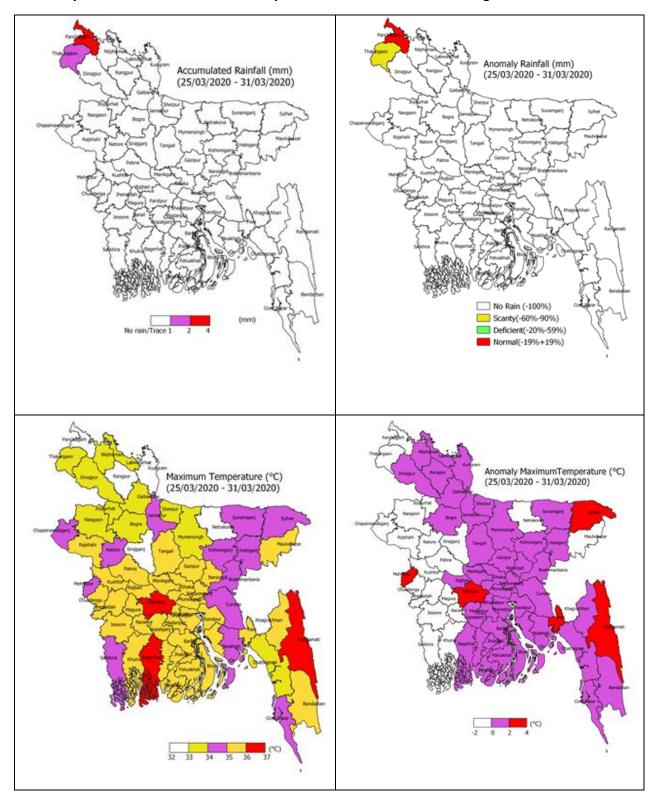
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

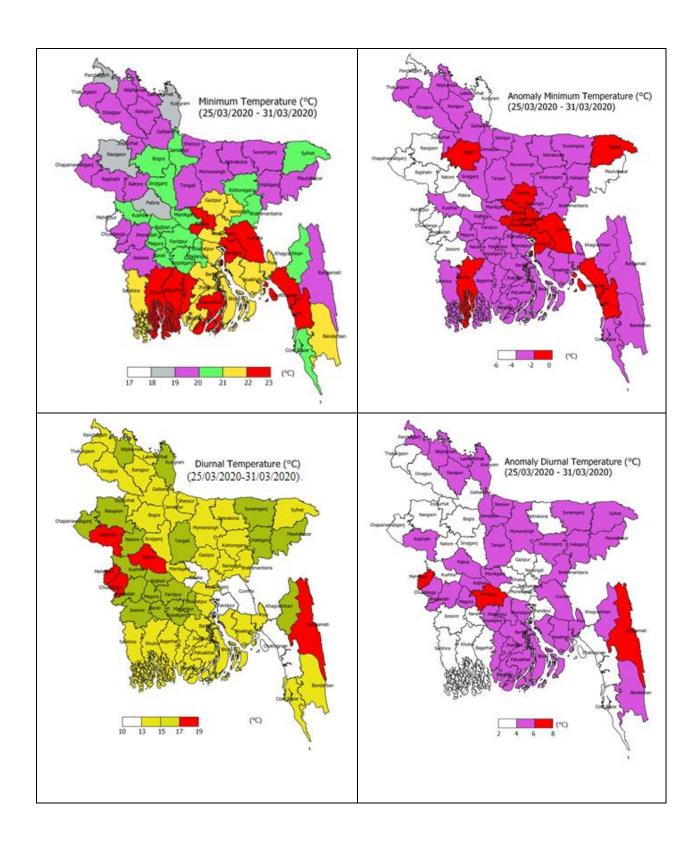
Forecast: Weather may remain mainly dry with temporary partly cloudy sky over the country.

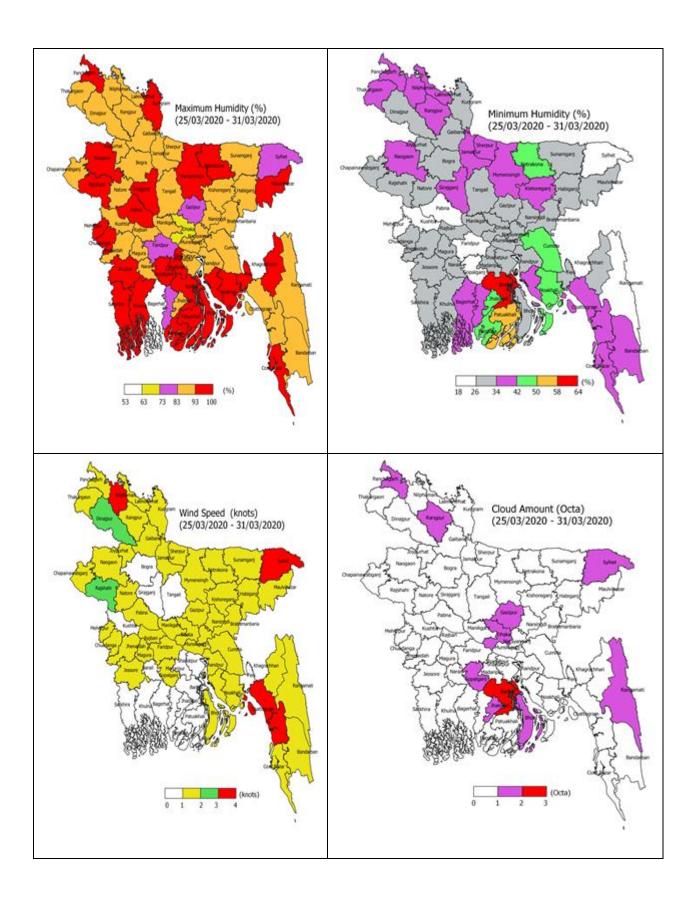
Heat Wave: Mild heat wave is sweeping over Dhaka, Khulna & Barishal divisions and the regions of Sitakunda, Feni, Rangamati, M.Court, Rajshahi and Pabna and it may continue.

Temperature: Day temperature may rise slightly and night temperature may rise by (1-2) °C over the country.

Spatial Distribution of weather parameters for the Week ending 31 March 2020





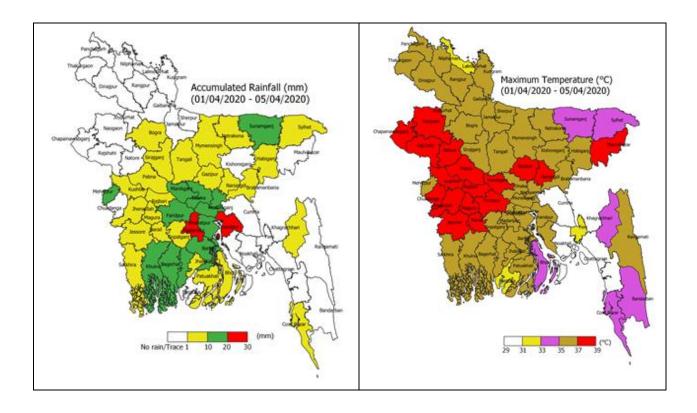


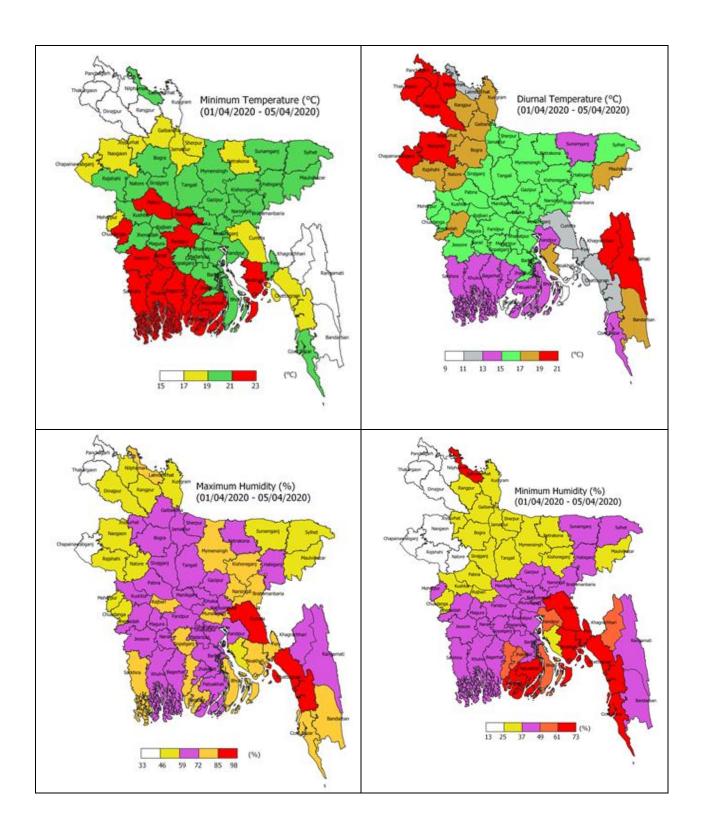
Weather Forecast and Advisory for the Period of 01.04.2020 to 07.04.2020

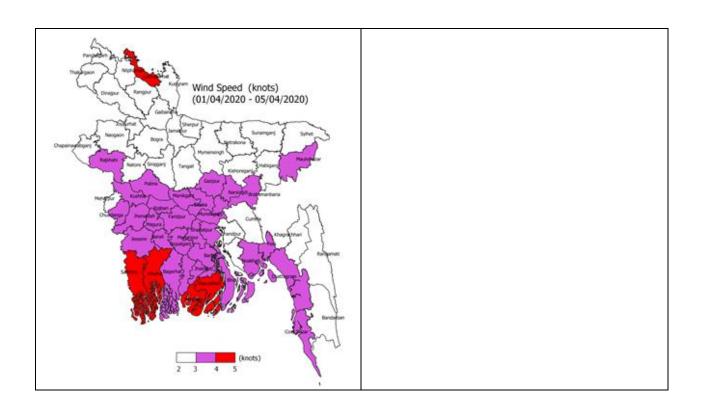
Bright sunshine hour is likely to be from 7.50 to 8.50 hours per day during this week. Average free water loss is likely to be from 3.50 to 4.50 mm per day during this week.

- Weather may remain mainly dry over the country during the 1st half of this period. Light (04-10 mm/d) to moderate (11-22 mm/d) rain/thunder showers with hail by temporary gusty wind at many place over Sylhet, Mymensingh, dhaka divisions and cumilla and noakhali regions and at a few places over Rajshahi, Rangpur, Khulna, Barishal and Chattrogram divisions during the Second half of this period.
- Slight rise in day and night temperature during the 1st half and unchanged during the second half of this period.

District Wise Quantitative Weather Forecast for next Five days from 01 April -05 April'2020

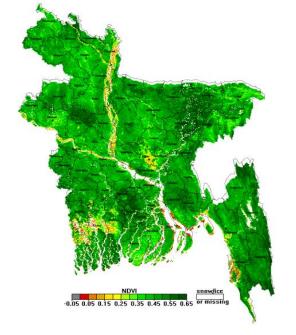




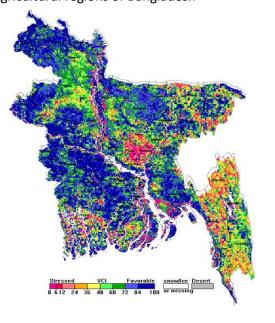


Different Satellite Products over Bangladesh

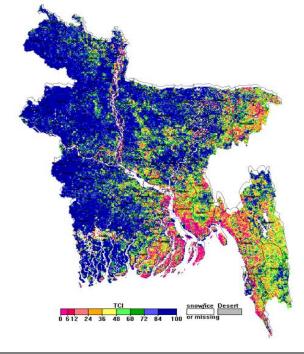
NOAA/VIIRS BLENDED NDVI composite for the week No. 12 (17 March-23 March 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VCI composite for the week No. 12 (17 March-23 March 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 12 (17 March-23 March 2020) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 12 (17 March-23 March 2020) over Agricultural regions of Bangladesh

