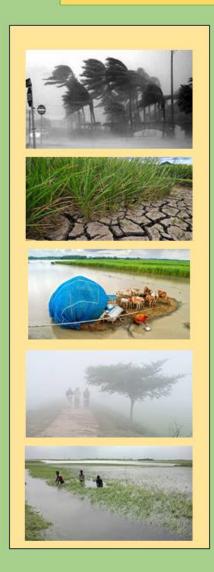








# **National Agromet Advisory Service Bulletin**



Wednesday, 10 April, 2019 (For the Period 10<sup>th</sup> April to 14<sup>th</sup> April 2019)



Issued by
Agro-Meteorological Information Systems Development Project
Department of Agricultural Extension (DAE), Ministry of Agriculture
In collaboration with Bangladesh Meteorological Department





#### Disclaimer

Under the Agro-meteorological Information System Development Project, Agromet Advisory Service bulletins at national and 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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# **Salient Agromet Advisories**

- → As per the weather forecast issued by the Bangladesh Meteorological Department, intensity of wet spells will reduce considerably in most of the districts. Under the prevailing conditions, it is advised to harvest the wheat and start sowing of jute seed after 12<sup>th</sup> April in Gaibandha, Nilphamari, Panchagarh, Rangpur, Thakurgaon and Bagerhat. In the remaining districts, same operation may be started now.
- → As relatively dry condition will prevail in number of districts other than mentioned above, it is advised to provide need based irrigation depending on water level in Boro Paddy field and soil moisture condition in other standing crops (maize, groundnut, green gram, jute) and vegetables field.
- → As the maximum temperature will cross 34 degree Celsius in Pirojpur, Rangamati, Faridpur, Gopalganj, Narayanganj, Chuadanga, Jassore, Jhenaidaha, Khulna, Kushtia, Magura, Meherpur, Narail, Satkhira, Pabna districts, it is advised to monitor the soil moisture conditions especially in vegetable and if required apply frequent irrigation to moist the soil.
- → As there is a chance of high humidity with cloudy and warm condition in number of districts, it is also advised to monitor the incidences of pests and diseases on the standing crop and take appropriate prophylactive measures. Crop wise salient advisories are given below.

#### Boro Paddy: Flowering /Soft dough/Hard dough/Maturity Stages

- Avoid, application of fertilizer and pesticides as rainfall occurred last few days and good amount of rainfall is expected upto 12th April and also clear the irrigation channel for draining out the any excess water from the crop field in Gaibandha, Nilphamari, Panchagarh, Rangpur, Thakurgaon and Bagerhat districts
- Keep the water level up to 5-7 cm by using the realized and expected rainfall in the above mentioned districts. In the non rainy districts, because of more evaporation due to increase in temperature, close monitoring of water level in the paddy field is required and maintain the water level through irrigation.
- Where seedlings are 90-110 days old apply last top dressing with urea and potash in the non rainy districts..
- → At maximum tillering stage, start management of main field regarding all aspects like weed control in the non rainy districts..
- Under high humidity and warm conditions, it is advised to monitor the following pests and diseases incidences and if noticed in the field applies recommended pesticides
- Spray Nativo group of pesticide for control of blast disease after the current spell of rainfall .
- Apply a mixture of Trycyclozole and Hexaconazole@2ml/liter of water at 10 days interval for control of brown spot after the current spell of rainfall
- Apply a mixture of Trycyclozole and Hexaconazole@2ml/liter of water at 10 days interval for control of brown spot after the current spell of rainfall
- Blight disease-Apply 60 gm potash fertilizer, 60 gm thiovit and 20gm zinc fertilizer with 10 liter water per 5 decimal.
- Leaf folder. Spray Malathion/Fenitrothion group insecticides

- Stem borer in rice. Soil and air temperatures are becoming favourable for the attack of stem borer in boro rice. Constant monitoring is required for its level of incidences. The pest may be identified and controlled by using light traps. The pest may also be controlled by spraying carbofuran/Cartap/Fipronil/Diazinon group of insecticide.
- Above application may be performed now in Rajbari, Jessore, Madaripur, Kushtia, Narail, Khagrachhari, Meherpur, Faridpur, Gopalganj, Chattogram, Rangamati, Cox;s Bazar, Banderban, Barguna, Pirijpur, Chapainawabganj, Panchagarh, Thakurgaon, Pabna, Narayanganj, Cumilla, Chandpur, Feni, Lakshmipur, Noakhali, Khulna, Barisal, Patuakhali, Jhalokati, Bhola, Bagerhat, Satkhira, Cox's Bazar districts.
- As boro cultivation is going on full swing, it is advised to monitor the incidences of other pests and diseases and take appropriate plant protection measures as advised by the upazila Agriculture Office or Sub-Assistant Agriculture Officer





Maize: Silk stage to initial Cob formation/Ripening/Maturity Stages (Rabi). Vegetative stage (Kharif 1)

- Apply 3rd irrigation to 60-70 days old plant. It is advised to used the realized and rainfall forecast while irrigating the field. Hold the irrigation up to 12th April in the districts where rainfall is likely upto 12th April.
- Clear the irrigation channel and drain out the excess water from the crop field in the districts where rainfall is expected
- Weeding and earthing up operations may be continued after the current spell of rainfall.
- Arrange thinning operations if the plants are in densely populated after the current spell of rainfall.

- In other non rainy districts, these operations may be continued.
- •



#### Wheat: Harvesting stages.

→ Harvest the matured crop immediately and keep it in dry place .

#### **Green Gram: Vegetative/ Pod formation Stages**

- The crop is sensitive to moisture condition. Drain out excess water immediately from the crop field due to rainfall.
- Advise weeding for 25-30 days old crop
- There is a chance of incidences of cercospora disease. If found, spay 1 gm Carbendazyme group fungicide mixing with one litre water in 10 days intervals
- There is a chance of incidence of leaf rot disease. If found, apply 2 ml tebuconazole group fungicide mixing with 1 lite water
- There is a chance of incidence of powdery mildew. If found, apply 1 ml propinazole group fungicide mixing with 1 lite water
- Under warm & humid condition, there is a chance of incidences of thrips. If found ,apply 1 ml diacylhydrazine group insecticides like intrepid mixing like with 1 lite water
- These above operations may be continued in the non rainy districts but apply the same after the current spell of rainfall in the remaining districts

#### **Groundnut**; Flowering/Pod formation to Maturity stage

- Drain out excess water from the crop field due to good and continuous rainfall.
- Prevailing weather condition are favorable for tikka leafspot in groundnut. To control spray
  with hexaconazol @2ml. or carbendazim @1 g. per litre of water after the current spell of
  rainfall.
- These above operations may be continued in the non rainy districts
- Mango: Fruiting stage
- Advisories for mango growing districts Rajshahi,Rangpur,Chapainawabganj,Kusthia,Naogaon,
   Dinajpur and Natore are as follows.
- •
- → Occasional high wind may disturb the fruit setting. Spray NAA @ 20 ppm to increase the fruit retention. Application of 1% Potassium Nitrate (10g/lit.) at mustard size will increase the fruit set and retention of fruits
- → Fungal attack due to moist weather --Apply Di-Ethane M-45 and any pesticide as preventing measure --Spray fresh water at afternoon hours on the tree
- The prevailing weather conditions are congenial for incidence of hoppers in mango. Control
  the pest by spraying Cypermethrin/dichlorvos @ 1 ml per liter of water. Prevailing weather
  conditions are congenial for the incidence of Powdery mildew in mango. Spray Hexaconazole
  @ 2 ml per litre of water

Vegetables: Brinjal, Pointed Gourd, Cucumber, Bitter gourd, Ridge gourd, Yard long bean & Lady's finger

## Fruit Setting/ Vegetative

Apply need based irrigation as the temperature will be relatively high for next five days

- → For pointed gourd, cucumber, ridge gourd and bitter gourd periodic hand weeding should be followed. Hand pollination in pointed gourd early in the morning helps to set cent percent fruit. If downy mildew appears in the leaf, alternate spraying with Mancozeb 64% + Metalaxyl 8%( Putamil 72 WP, AP-1350)-@2gm/litre or Mancozeb 50% + Phenamidone 10% (Secure 600 WG )AP-628 @2gm/litre at 7-10 days interval is very effective.
- → Seeds of cucumber, bitter gourd, Yard long bean, ridge gourd, Lady's finger are to be sown.

For whitefly and jassid attack in Lady's finger, spray 0.5% concentration soap water or 5 ml liquid soap/ litre. Preserve spider in the fields ( one spider kills 2-15 jassids per day). Grind 500gm neem seeds and mix with 10 litre water and keep it 12 hours. After filtering the liquid spay the same to jassid affect field as this may reduce the incidences of the pest. For control of the white fly spary Profenofos 40%+ Cypermethrin 2.5%-Shobicron 425 EC () AP-322 @ 2ml/ litre at 10 days intervals.

For control of jassids, spray Thaamethpxam-Aktara 25 WG (Syngenta Bangladesh Limited), AP-428 @ 0.25gm/litre or Imidocloropid-Admire 20 SL (Bayer Crop Science Limited), AP-486, @ 0.5ml/litre

→ At early growth stage and during flowering of cucurbits, apply nitrogenous fertilizers

# Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 10 April'19) and maximum temperature on 09 April, minimum temperature on 10 April'2019 are 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	29	29.2	18.2	Rajshahi	Rajshahi	11	31.4	18.7
	Tangail	14	28.0	18.0		Ishurdi	03	30.0	18.7
	Faridpur	03	29.7	18.8		Bogura	17	29.8	18.0
	Madaripur	10	31.9	19.4		Badalgachhi	10	28.2	17.4
	Gopalgonj	20	32.0	19.0		Tarash	10	28.3	18.2
	Nikli	34	30.0	18.2					
					Rangpur	Rangpur	06	27.0	19.0
Mymensingh	Mymensingh	24	25.5	18.0		Dinajpur	19	28.0	19.0
	Netrokona	34	24.4	18.0		Sayedpur	13	28.2	18.2
						Tetulia	07	27.1	18.8
Chattogram	Chattogram	15	31.0	19.8		Dimla	05	27.6	18.9
	Sandwip	11	30.7	18.5		Rajarhat	03	26.1	17.4
	Sitakunda	65	31.4	19.4		"			_
	Rangamati	65 24	32.5	18.4	Khulna	Khulna	15	34.5	19.0
	Cumilla	31	29.2	18.2		Mongla	47	34.6	19.5
	Chandpur	07	34.5	19.1		Satkhira	53	33.4	19.2
	M.Court	26	32.4	18.6		Jashore	03	33.6	20.4
	Feni	21	32.0	18.4		Chuadanga	02	31.1	19.8
	Hatiya	22	32.5	19.4		Kumarkhali	07	28.8	19.4
	Cox's Bazar	02	31.5	21.0					
	Kutubdia	06	31.5	20.0	Barishal	Barishal	22	33.2	20.0
	Teknaf	00	32.0	20.0		Patuakhali	11	34.3	20.5
						Khepupara	20	32.4	19.4
Sylhet	Sylhet	18	24.0	18.2		Bhola	15	33.0	19.6
•	Srimangal	26	25.0	18.0					

## Highlights:

- Country average of bright sunshine hour was 6.25 hours per day during last week.
- Country average of free water loss during the previous week was 3.35 mm per day

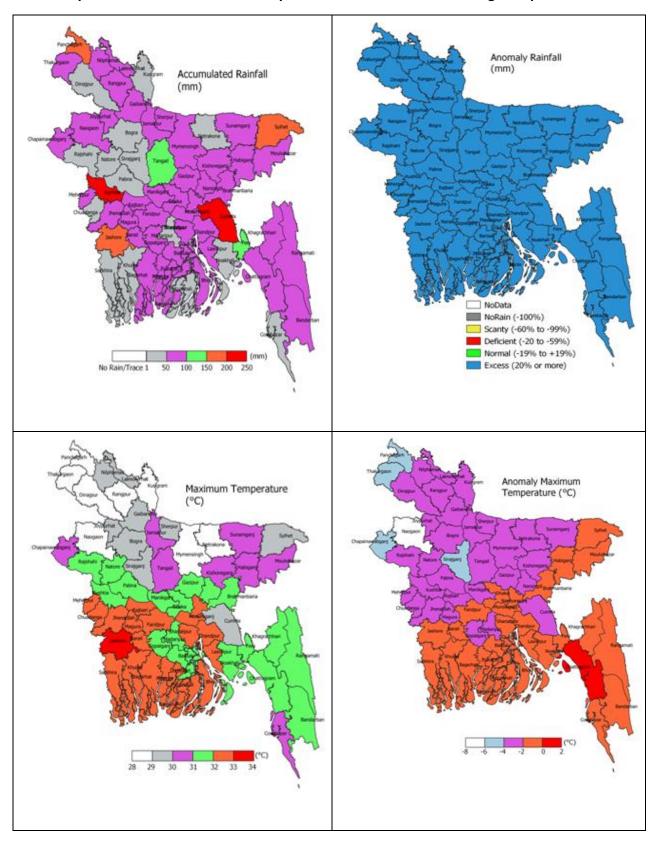
# Weather Forecast Valid for 24 Hours commencing 06 PM Today:

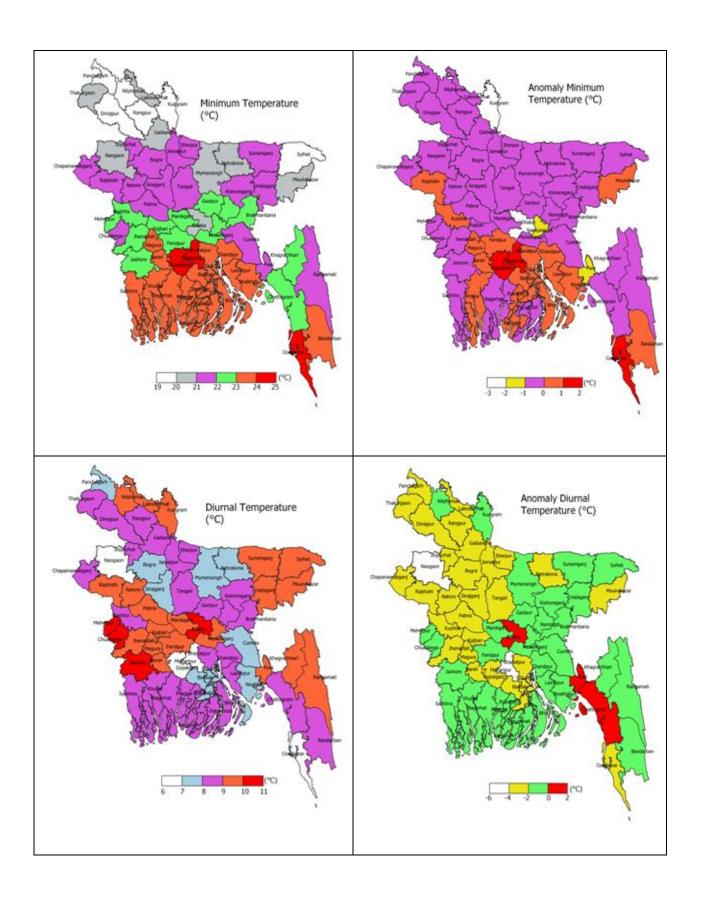
#### Forecast:

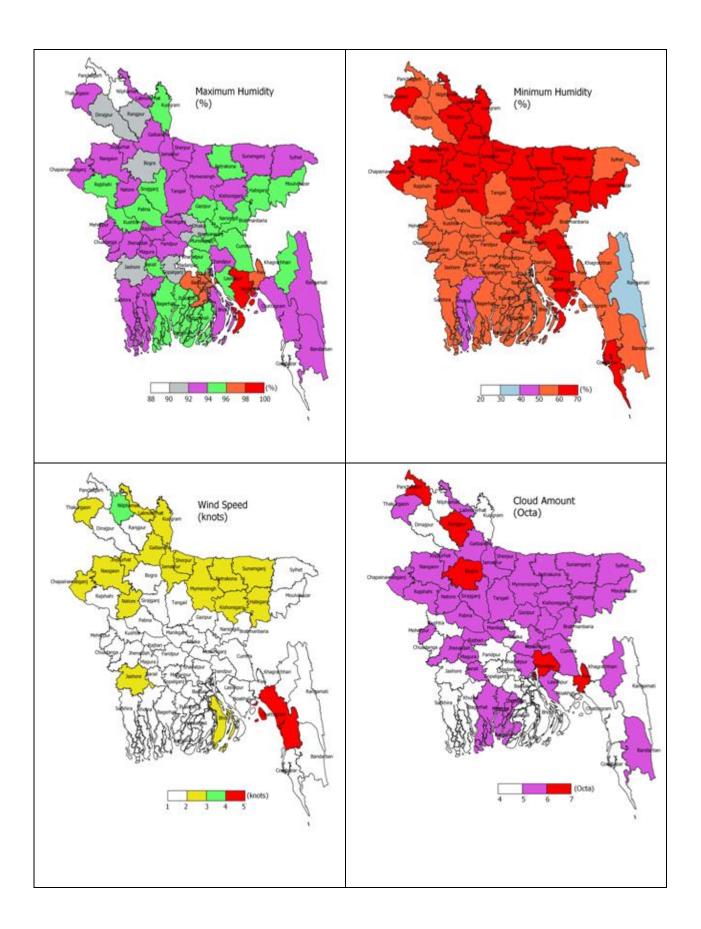
Rain/thunder showers accompanied by temporary gusty/squally wind is likely to occur at many places over Dhaka, Khulna, Barishal, Chattogram& Sylhet divisions and at one or two places over Rajshahi, Rangpur &Mymensingh divisions with hails at isolated places.

**Temperature:** Day temperature may remain nearly unchanged and night temperature may rise by (12)°C over the country.

Spatial Distribution of weather parameters for the Week ending 9th April 2019





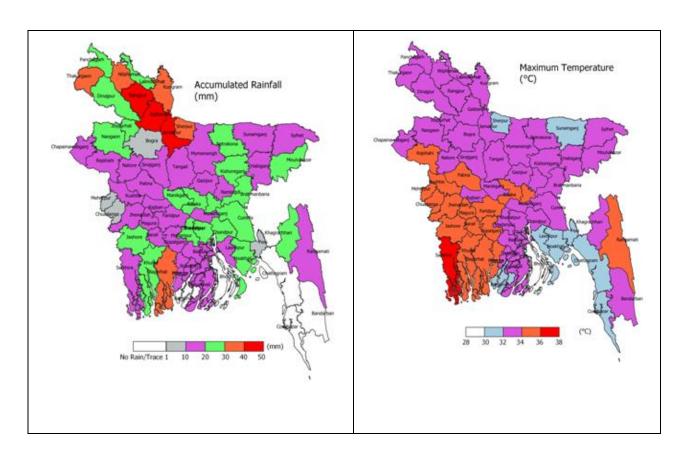


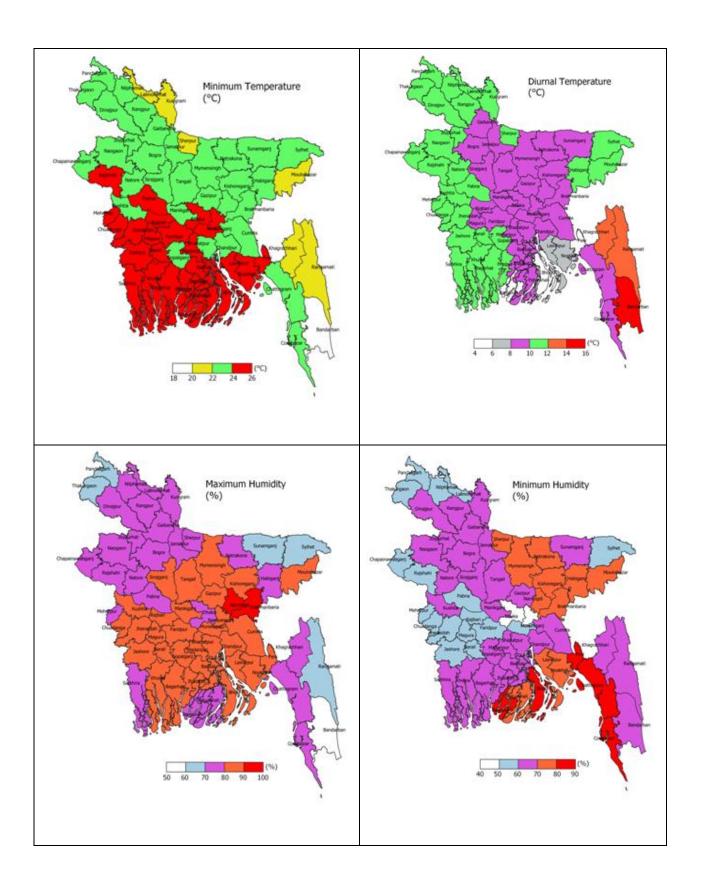
#### Weather Forecast and Advisory for the Period of 08.04.2019 to 14.04.2019

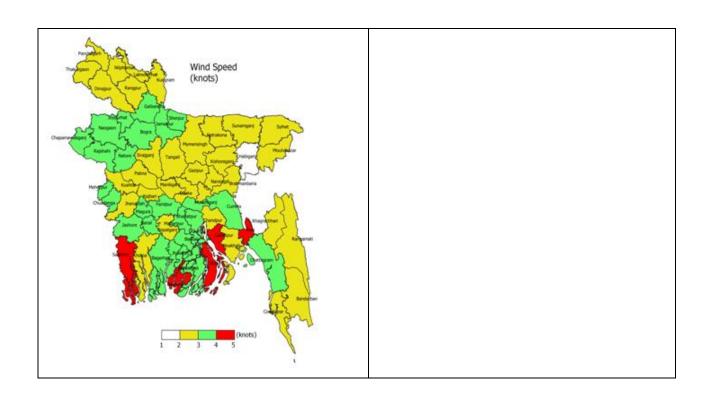
Bright sunshine hour is likely to be from 6.50 to 7.50 hours per day during this week. Average of free water loss during the next week is likely to be from 3.00 to 4.00 mm per day.

- Light (04-10 mm/d) to moderate (11-22 mm/d) rain/thunder showers with hail is likely to occur at many places over Dhaka, Mymensingh, Sylhet, Chattogram, khulna & Barishal divisions and at a few places over Rajshahi & Rangpur divisions, With a chance of moderately heavy (23-43 mm/d) falls with hail at isolated places over the country during this period.
- Slight rise in day and night temperature over the country of this period.

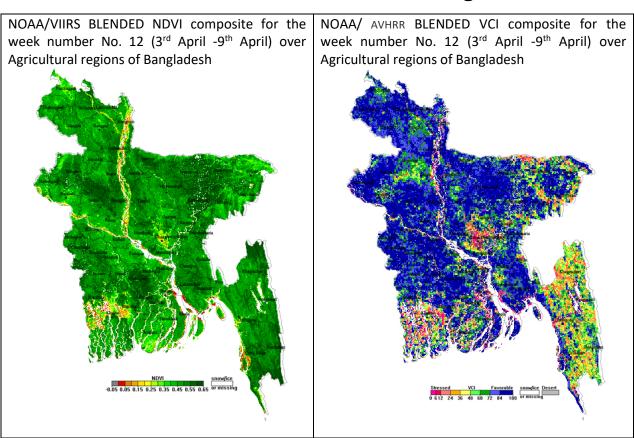
#### District wise Quantitative Weather Forecast for next Five days from 10 April -14 April'19

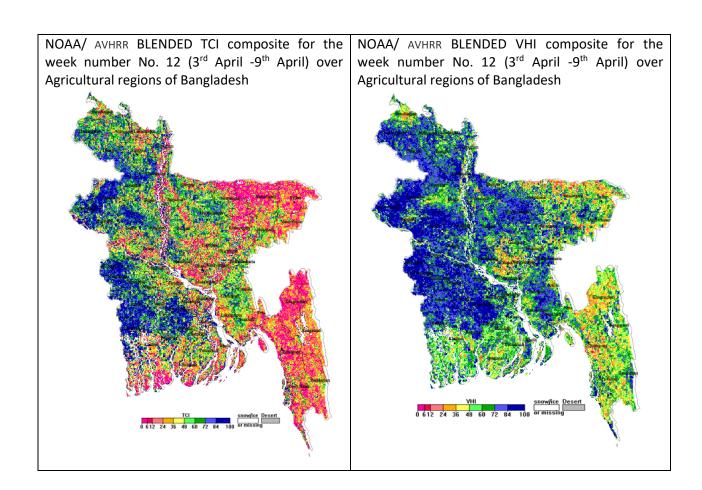






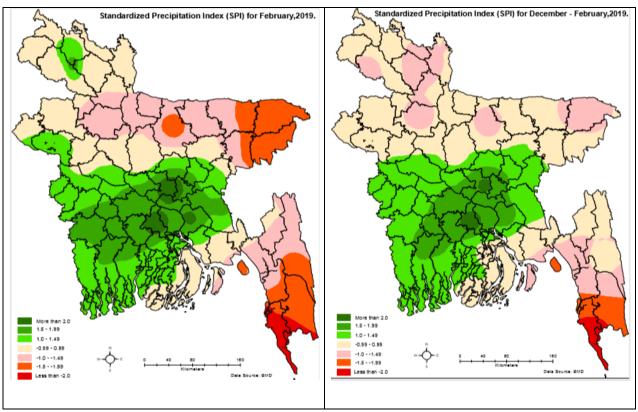
# **Different Satellite Products over Bangladesh**





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

It has been observed that during last three months as well as in February, wet conditions prevails in districts located in south, southwest and a few districts in central parts of Bangladesh whereas the districts in north, northwest, northeast, southeast and a few districts in central parts are under dry condition.



Source: Bangladesh Meteorological Department

# Flash Flood Monitoring in Haor Region( Source: Bangladesh Water Development Board)

## **RIVER SITUATION SUMMARY AS ON April 10, 2019**

- The major rivers of the North-Eastern region of the Country are rising in trend.
- According to the information of Bangladesh and Indian Meteorological Departments, there is chance of light to medium rainfall in the North Eastern part of the Country and adjoining Assam, Meghalaya and Tripura regions of India in next 48 hours.
- Water levels of the major rivers in north-eastern region may continue rising in next 24 hours but will remain below danger level.

#### **General River Condition**

Monitored Water Level Station	39	Inactive Gauge	01
Rise	23	Gauge Reading Missing	04
Fall	10	Total Not Reported	05
Steady	01	Above Danger Level	0

Source: FFWC, BWDB