

NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

09 SEPTEMBER 2020 (WEDNESDAY) [FOR THE PERIOD 09.09.2020 – 13.09.2020]









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

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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

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 Agromet Advisories

Salient Weather Conditions

The axis of monsoon trough runs through Rajasthan, Haryana, Uttar Pradesh, Bihar, West Bengal to Assam across central part of Bangladesh. One of its associated troughs extends up to North Bay. Monsoon is fairly active over Bangladesh and weak over North Bay. As per the weather forecast received from the 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 Sylhet division and at a few places over Rangpur, Rajshahi, Dhaka, Mymensingh, Khulna, Barishal & Chattogram divisions with moderately heavy falls at places over the country. Day and night temperature may remain nearly unchanged over the country. As per the outlook issued by BMD for next 72 hours, no marked change is likely.

As per the medium range weather forecast the monsoon is likely to be fairly active over the country during next 5 days and light to heavy rainfall is likely in different districts in the country. Moreover, spatially and temporarily well distributed rainfall over the different districts is expected and this is very conducive for growing of standing *kharif* crops. Salient agromet advisories issued for different crops in various districts are as follows.

Salient Agromet Advisories

Aus Paddy:

- If excess water is there then immediate drain out the excess water by cutting the bund. This will help in good aeration which will reduce the incidence of pest and disease.
- Maintain 2-3 cm water level at grain hardening stage.
- 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.

- Drain out water from crop field 15 days before harvesting.
- Harvest the matured crop in sunny weather while 80% rice ripen.
- Harvest and dry well the grains in sunny weather (12% moisture contain e.g teeth testing) and keep it shady condition for cooling and finally store it air tight container
- 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.

Aman Paddy

- If excess water is there then immediate drain out the excess water by cutting the bund. This will help in good aeration which will reduce the incidence of pest and disease.
- Maintain 5-7 cm standing water up to maximum tillering stage.
- Looking into the forecast of rainfall in coming day farmers are advised that impounding condition should not be of more than 5 cm. Due to excess impounding condition number of tillers in rice crop are affected. Surplus water should be drained out from the field.
- Keep the bund and field weed free either by hand weeding or by application of herbicide. First weeding should be done 10-15 days after transplanting. Second weeding should be done 30-35 days after transplanting. Weeding may be done either by hand or using weedicides. 2-4 D Amine or Butachlor may be used for weeding
- All the intercultural operations should be done after the current spells of rainfall.
- Taking the advantage of the presence of sufficient amount of soil moisture, apply 1/3rd nitrogen as top dressing 15-20 days after transplanting. Last 1/3 nitrogen as top dressing should be applied 5-7 days before panicle initiation
- 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.
- Where luxurious growth of plants, at tillering stage, is found ,there is chance of sheath blight attack
 may take place due humid weather and water stagnation. Spray Hexaconazol @ 1ml//litre water,
 or Tebuconazol @ 1ml/litre water.
- Farmers are informed that after cessation of flash flood, there is a chance of outbreak of diseases like bacterial blight in rice crop. To control the same provide suitable disease management
- For control of ;wilting, after drain out of water spray Streptocyclene and additional potasic fertilizer to the plants
- Where tillers were affected due to water stagnation, apply urea and potash fertilizer through puddling with the remaining plants for removing the gas inside the soil otherwise plants will turn reddish
- Where Tillering is complete and panicle has started, apply one hand weeding inside the field and also in the bund area, to make ensure proper solarisation inside the row
- Where Tillering is complete and panicle has started there is chance of attack of leaf roller
- Spray Malathion @ 2ml. per litre water or Chlorpyriphos@2ml/liter of water or Endosulfun@1.5ml/liter of water.

- Light trap should be used for control of insects. 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.
- The farmers are advised to continue monitoring field if they found symptom then should go for spray of herbicides / insecticides only in clear weather and when there is no forecasting of rains.

Vegetables

- Drain out excess water.
- Transplant early winter vegetables in the main field.
- Saplings of early winter vegetables should be planted on the ridge. -Before planting the roots should be dipped into fungicide solution.
- Before transplanting of early winter vegetables soil of main field should be sterilized with Di-ethane M-45 for preventing wilting due to splash of rain.
- In Ladies finger, there is chance of Fruit borer/ Collect and destroy the affected fruits. Spray Neem oil @ 50ml/l at clear weather condition.
- In Brinjal, there is chance of incidences of borer under the prevailing weather conditions Collect infected fruit and shoot and burn them. If we remove the weeds and dry leaves so the pupa will not be able to develop. Control: 1) We can use pheromone trap 2) Spray of 1.5 gram B.T per lit of water during evening. 3) Spray Cartap (50%) 1gram or Spinosad (45%) 0.2 ml or Thiodicarb 1.5 gram per lit of water
- In Bitter gourd, there is chance of Epilachna beetle- under the prevailing weather conditions. At the initial stage of infestation its good to remove and burn the eggs with leaves and baby beetle.

 2) If the infestation is high then apply 2.5 gram Carbaryl or 2 ml carbosulfan or 1.5 ml of (Cholrpyriphos+ Cypermethrin) per lit of water
- If the attack of fruit fly, red pumpkin beetle and epilechna beetle in summer gourds may observed, spray malathion 50 EC@ 1ml per litre of in the field to control these insects when the weather is sunny.
- All the plant protection measure should be taken after the current spell of rainfall.

Horticultural crops

- Planting of new saplings of fruit plants such as mango, litchi, jackfruit, guava, blackberry, custard apple, lemon is advised. If damaged by heavy rainfall, fill the gaps by replanting.
- The farmers are advised to take up plant protection measures carefully in horticultural crops like, pomegranate for bacterial blight and lime for leaf minor.
- The current weather is congenial for fruit blight and fruit rot disease in pomegrante, To control, spray Mancozeb 600g and Carbendazim 100 g @ 200 litre of water.
- To control thrips in pomegranate, spray Spinosad 2.5 SC @ 10 ml per 10 liters of water
- Use fruit fly trap to control fruit fly damage in guava orchards and cucurbits. Farmers are advised to remove foot rot infected plants from rice field and avoid ponding of water to check further spreading of infection.
- To control fruit blight and fruit rot disease in pomegrante, spray Mancozeb 600g and Carbondazim 100 g @ 200 litre of water.

 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.

Beetle vine:

- In this time and under the prevailing weather, foot rot and stem rot diseases affected plants start to die. So, affected plants and its branches have to deposit in particular hole or burning and never deposit beetle vine waste in irrigated water sources like channel /pond. Otherwise, unaffected vine land will be contaminated. In this case, all vine growers collectively have to take this initiative (deposit all vine waste in particular hole away from the vine growing area) and as a result all vine land will be disease free condition.
- All the plant protection measure should be taken after the current spell of rainfall.

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 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.

Cotton

- Complete seed sowing at tilth conditioned land considering seed rate 2 kg/33 decimal.
- Maintain row to row distance 25-35 inches and seed to seed distance 10-15 inches.
- High yielding varieties like CB-12, DM-2, Rupali and Suvro may be chosen for sowing.

Livestock

- Farmers are advised to spread lime at the entry of cattle sheds to prevent any kind of infection from outside. Farmers should take care that if external parasites is seen on the body of animals, it should be taken out immediately and affected parts should be sprayed with Ivermectin medicine @ 1 mL/10 kg of body weight.
- 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
- If wound found at foot and mouth wash the wound with potassium per manganate solution.
- For control of biting fly, hang the alovera plant in the animal shed.
- If any malady symptom is shown in the animal then immediately consult with the veterinary doctor for proper treatments.
- In September months goats & sheep should be given Entoroctosimia Vaccine at the age of 6-10 weeks to lambs the disease vaccine.
- Feed the milk bearing cow boiled broad leaf fodder for better milk production for indigenous cow for preventing worm infection.
- Always allow them to graze in dry land area.

Poultry

- In poultry farms, appropriate space should be kept @ 1 sq. ft. per broiler and 2-2.5 sq. ft./ layer.
- Keep the chicks thin layer of litter
- Rearrange the litter with lime
- Never allow chickens or ducks to eat wet or damp feed during this rainy season. It is very important
 to provide a particular amount of dewormers for both roundworm and tapeworm to poultry at this
 time.
- Apply lime bleaching powder and copper sulphet solution spray before placing them in farm
- Follow proper vaccination at proper interval
- Apply dry food and clean tap water for drinking purpose.
- For breathing problem in hen, give multivitamin syrup @ 200 to 250 ml / 50 liters of water for 200 to 300 hens or Enflox vet BC @ 0.5 ml/lit. water for 2 to 3 days.
- There is chance of Raniket, gumbra diseases in poultry; provide antibiotic drugs through water or through feed. Protect the birds from wet weather and wet floor.
- Spray water on poultry shade during hot weather condition. Viral ganboro disease infection may
 be high due to high temperature and humidity. Early cautionary and vaccination are prevented
 measures.

Fishery

- If there is oxygen deficiency due to increase in temperature, then stir the pond water by wheel. Apply lime for cleaning the water.
- Repair damaged dykes of fisheries ponds and takes care so that fishes do not escape. Maintain outlet pipe from the pond so that excess water pass away and the water level is maintaining.
- Remove the unwanted fishes and predator by repeated netting before leaving the new fingerling in the fish pond.
- Select healthy, diseases free breeds of fishes from authentic sources after consulting with fishery officials. Before releasing, the fingerlings should be treated with Potassium permanganate (@ 3-5%.
- To keep in touch with local fisheries office for more information.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 09 AM on 09 September 2020) and maximum temperature on 08 September, minimum temperature on 09 September 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	Trace	34.5	27.2	Rajshahi	Rajshahi	16	34.0	26.0
	Tangail	Trace	33.0	25.4		Ishurdi	13	33.0	26.3
	Faridpur	26	33.2	26.2		Bogura	00	31.8	27.0
	Madaripur	00	35.0	26.8		Badalgachhi	00	32.0	26.0
	Gopalgonj	02	34.7	26.5		Tarash	00	33.3	27.1
	Nikli	30	33.4	26.0					
					Rangpur	Rangpur	01	32.0	26.7
Mymensingh	Mymensingh	00	29.2	26.9		Dinajpur	00	32.3	26.8
	Netrokona	10	28.6	26.0		Sayedpur	00	33.5	26.3
						Tetulia	24	28.5	23.5
Chattogram	Chattogram	11	34.0	26.0		Dimla	01	31.0	25.0
	Sandwip	02	34.1	27.0		Rajarhat	00	30.6	25.5
	Sitakunda	00	35.5	26.0					
	Rangamati	00	34.5	26.5	Khulna	Khulna	01	35.2	28.0
	Cumilla	00	34.8	27.6		Mongla	08	35.0	27.5
	Chandpur	00	35.6	28.0		Satkhira	00	35.5	28.0
	M.Court	00	34.2	27.8		Jashore	Trace	33.8	26.4
	Feni	01	34.4	27.5		Chuadanga	40	33.6	25.5
	Hatiya	00	33.2	27.2		Kumarkhali	21	33.0	26.5
	Cox's Bazar	07	34.2	26.0					
	Kutubdia	05	33.3	26.5	Barishal	Barishal	Trace	35.6	27.5
	Teknaf	46	33.5	25.0		Patuakhali	00	36.2	28.0
						Khepupara	00	36.2 35.2	27.5
Sylhet	Sylhet	113	30.7	25.2		Bhola	00	34.8	27.6
	Srimangal	113 03	34.4	25.6					

Highlights:

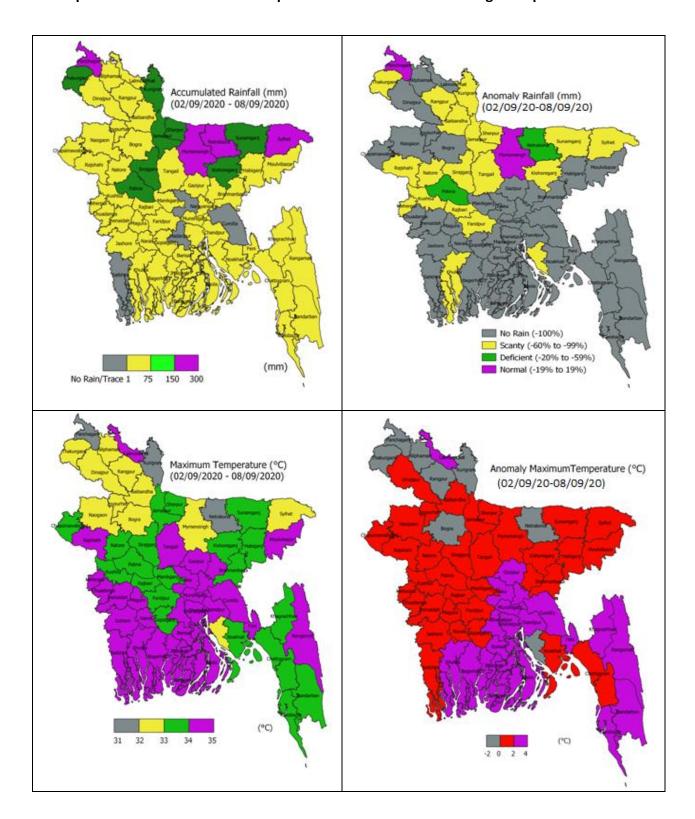
- Country average bright sunshine hour was 5.70 hours per day during last week.
- Country average free water loss during the previous week was 3.42 mm per day.

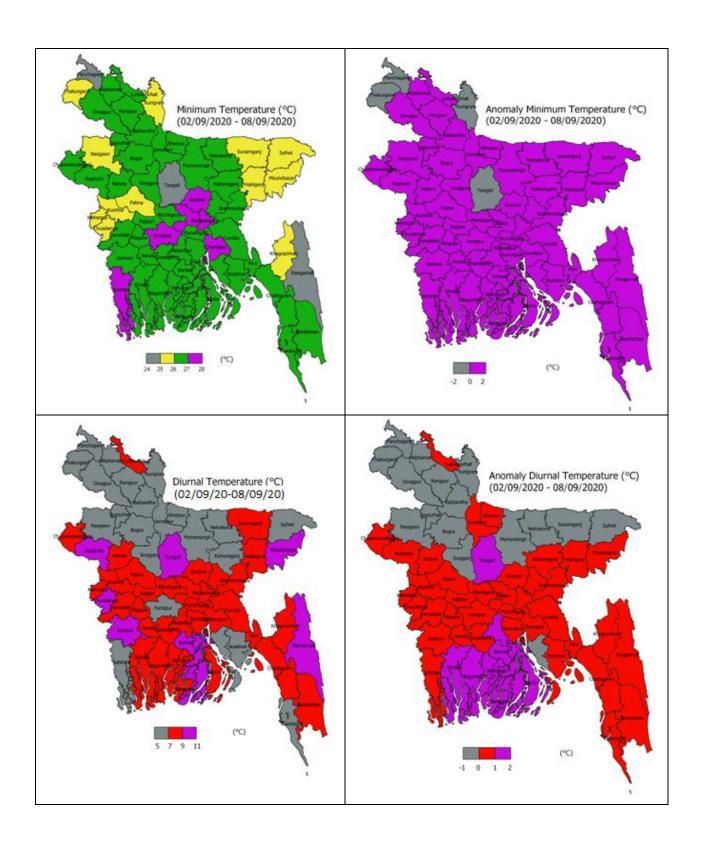
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

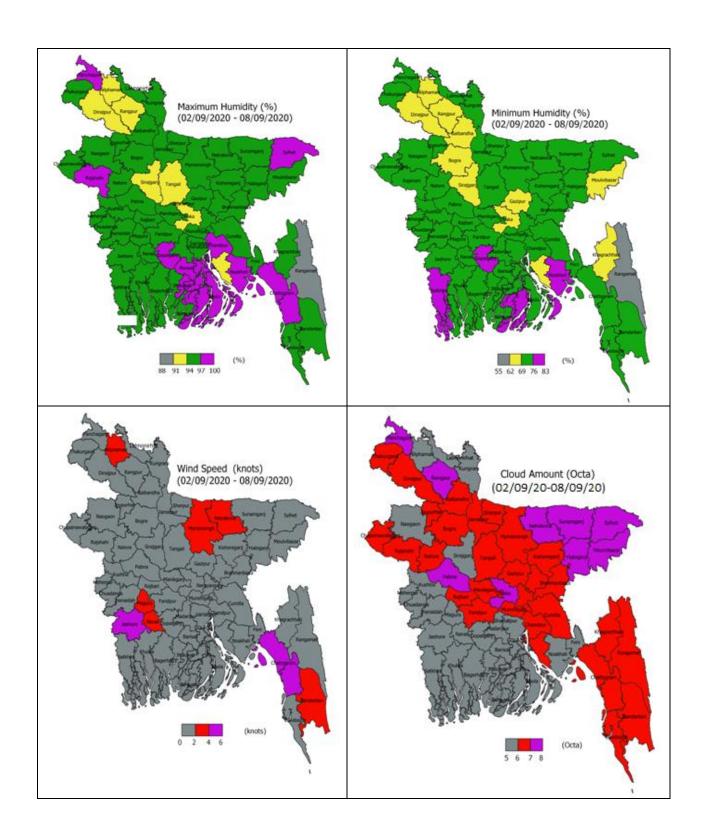
Forecast: Light to moderate rain/thunder showers accompanied by temporary gusty wind is likely to occur at many places over Sylhet division and at a few places over Rangpur, Rajshahi, Dhaka, Mymensingh, Khulna, Barishal & Chattogram divisions with moderately heavy falls at places over the country.

Temperature: Day and night temperature may remain nearly unchanged over the country.

Spatial Distribution of weather parameters for the Week ending 08 September 2020





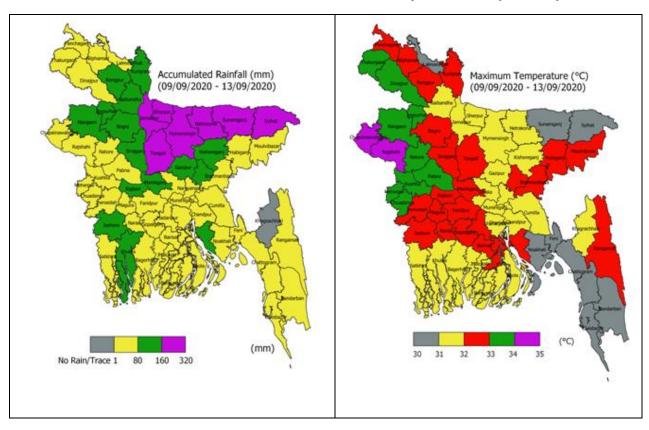


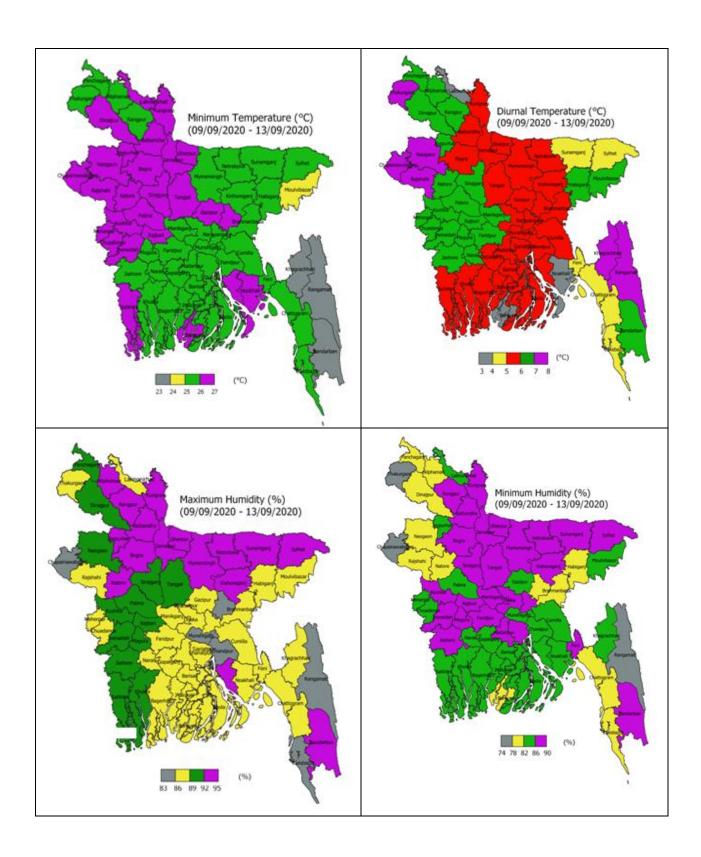
Weather Forecast and Advisory for the Period of 08.09.2020 to 14.09.2020

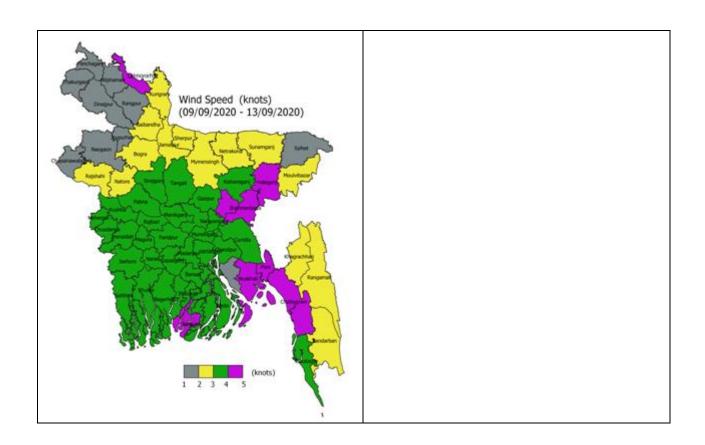
Bright sunshine hour is likely to be from 4.00 to 5.00 hours per day during this week. Average free water loss is likely to be from 2.75 to 3.75 mm per day during this week.

- Light (04-10 mm/d) to Moderate (11-22 mm/d) rain/thunder shower accompanied by temporary gusty wind is likely to occur at many places over Rajshahi, Rangpur, Sylhet and Mymensingh divisions and at a few places over Dhaka, Khulna, Barishal and Chattogram divisions during this period, with chances of moderately heavy (23-43 mm/d) to heavy (44-88 mm/day) falls at places over the country during this period.
- Slight fall in day and night temperature over the country during this period.

District Wise Quantitative Weather Forecast for next Five days from 09 Sep. -13 September'2020







Different Satellite Products over Bangladesh

NOAA/ AVHRR BLENDED VCI composite for the week NOAA/VIIRS BLENDED NDVI composite for the week. No. 35 (25 August -31 August) over No. 35 (25 August -31 August) over Agricultural Agricultural regions of Bangladesh regions of Bangladesh NOAA/ AVHRR BLENDED TCI composite for the NOAA/ AVHRR BLENDED VHI composite for the week week No. 35 (25 August -31 August) over No. 35 (25 August -31 August) over Agricultural Agricultural regions of Bangladesh regions of Bangladesh

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

It has been observed that during last four weeks (in August 2020) severe to extremely wet conditions prevails in districts located northeastern and southeastern part and mild dry condition prevails in central parts of Bangladesh and southern part was prevailed mild wet conditions for last four weeks.

