



NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

12 FEBRUARY 2020 (WEDNESDAY)
[FOR THE PERIOD 12.02.2020 – 16.02.2020]



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 concerned.

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ISSUED BY

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 dry with temporary partly cloudy sky over the country.. Light fog may occur at places over the river basins of the country during early morning. Mild cold wave is sweeping over the regions of Rajshahi, Pabna, Panchagarh, Kurigram, Sayedpur, Jeshore, Kushtia & Srimangal and it may continue. Night temperature may fall slightly & day temperature may remain nearly unchanged over the country... As per the outlook issued by BMD for next 72 hrs, Temperature may rise. During last four days, almost dry condition prevailed over the country and as per the quantitative medium range weather forecast, almost dry condition is likely over the country. Under the present weather conditions & forecast, following advisories are issued.

Vegetables

- As dry condition prevailed during last four days & also dry condition is likely during next five days, Irrigate winter vegetable crops.
- Apply requirement-based irrigation in evening hours to protect the crops from low temperature and apply recommended doses of fertilizers in existing vegetable crops and monitor for insect-pests and diseases. Go for effective weed management measures.
- Due to winter season, there is a chance of powdery mildew in vegetables. Spraying of 20 g Trichoderma per one litre of water is advised.
- 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.
- It is advised to apply mulch and well rotten FYM in vegetable crops.
- 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.

Boro Paddy:

- Continue seedbed preparation.
- If the seedbed becomes yellow, apply urea at the rate of 283 gm urea per decimal
- Apply 400 gm gypsum per decimal if the seedlings are still not recovered after application of urea.
- . Keep 2-3 cm water level on seed bed.
- The main field should be prepared for transplanting of boro paddy with 3-4 times ploughing followed by laddering and Levelling should be done properly to retain water uniformity.
- Apply 13 kg urea (1/3 of total urea) as first basal dose and also 13 kg TSP, 20 kg MOP, 15kg gypsum and 15 kg zinc per bigha after complete preparation of field.

Seedbed to Transplanting

- Seedling of 35 to 45 days old may be transplanted.
- Complete transplanting within 10 days --Keep the field and irrigation channel weed free
- Transplanting should be done @ 2 - 3 seedlings per hill. Plant to plant distance should be 15-20 cm and 20-25 cm between the two rows.
- Complete transplanting of Boro paddy seedlings at the earliest.
- Dead hills are to be replanted within 7-10 days of transplanting of Boro paddy
- Maintain thin layer of water (1 - 2 cm) in the main field up to 15 days after transplanting

Early Vegetative or Vegetative

- As dry condition prevailed during last four days & also dry condition is likely during next five days, irrigation may be provided in the boro rice fields to maintain standing water of 3-7 cm depth.
- Keep the field and irrigation channel weed free
- Apply 13 kg urea as first top dressing after 20-25 days after transplanting.
- Apply one weeding
- Prevailing weather conditions are congenial for the incidence of stem borer in rice. If noticed, the pest may be identified and controlled by using light traps and also constant monitoring is required for its level of incidences. Also spray Carbofuran group of insecticide for its control.

Wheat

- As dry condition prevailed during last four days & also dry condition is likely during next five days , apply third irrigation after 75-80 old plant during grain formation so as to maintain sufficient moisture in 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.
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog over the district during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease
- For the treatment of rust disease of wheat apply zinc carbonate 2kg dissolved in 1000 liters water and spray twice at 10 days interval.
- To control cutworm in wheat crop, apply Carbaryl 50% WP @ 800g in 800 litres of water/acre or Dichlorvos 76% EC@ 112-150ml in 200-400 litres of water/acre.
- For control of aphids in wheat undertake spray of dimethoate or Methyl demeton group pesticide.
- To control Alternaria blight, spraying of Indofil or Diathen group pesticide is advised
- 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 Chlorpyrifos group pesticide is suggested in the evening hour and thereafter irrigation is advised

Mustard

- Advise to harvest mustard if the 80% crop is in matured stage.
- As dry condition prevailed during last four days & also dry condition is likely during next five days, irrigate mustard crop at seed formation stage (60-65 DAS).
- Where plants are found mature complete harvesting --No irrigation should be applied
- If the mustard crop is at pod formation stage; go for inter-cultural operations
- Occurrence of saw fly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyrifos 20 EC @ 5 ml/litre of water on fair weather.
- Alternaria blight may infect the mustard plant under the present weather condition. It is advised to spray Rovral-5- WP @ 2% (mix 2gm in 1 litre water) three to four times at an interval of 10-12days on fair weather.
- Be watchful for aphid in mustard crop. If seen, spray Chlorpyrifos 20% EC @ 1.0 litre/ha or Monocrotophos 36 % S.L. @ 500 ml/ha with 500-600 litre of water solution

- The present weather condition is favorable for incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Farmers are advised to keep vigilance on hairy caterpillar.
- ❖ There is a chance of incidences of Pod borer. Hand picking followed by burning of the infected parts should be done for its control.
- ❖ Present weather condition is favourable for incidence of White mold. Farmers are advised to apply Iprodione group fungicide to control the disease.

Maize

- Ensure proper moisture level during flowering and grain development stages in maize crop. As dry condition prevailed during last four days & also dry condition is likely during next five days, apply third irrigation between 60-70 days after sowing of the crop .
- Tasseling stage is sensitive to the moisture. Maintain optimum moisture in the field through irrigation. Mulching is essential to hold the moisture in the field.
- Monitor the incidences of pests (fall army worm, cut worm, leaf hopper & jassid) & diseases (stalk rot, leaf blight) and if noticed, take appropriate preventive measure.
- 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 attack of leaf blight in maize field. Spray Mancozeb group pesticide at 10 days interval after first appearance of the disease.
- 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.
- During clear/dry days, two spray of Cypermethrin at 100 ml/ hectare is effective against stemborer infestation in maize.
- Weeding and earthing up operations may be continued.

Lentil

- Undertake harvest of matured earlier sown lentil
- Due to increase in bright sun shine hours and temperature, farmers are advised for water management in their crop.
- As dry condition prevailed during last four days & also dry condition is likely during next five days, apply light irrigation.
- Monitor the incidences of pests (aphid & pod borer) & diseases (stemphylium blight, foot rot, rust, fusarium wilt) and if noticed, take appropriate preventive measure.
- There is possibility of spreading fungal infestation under this prevailing weather. If so, apply Carbendazim group fungicide as protective measure.
- There is chance of incidence of Stemphylium blight under the present weather condition. If noticed, spray Rovral 50 WP or Phalikul 250 EC or mix both the fungicides and mix with water @ 2% three to four times after 7 days interval under light sunny condition in the morning hours between 9-10 am
- Present weather is conducive for the occurrence of wilt disease in lentil. Hence, spraying of Carbendazim @ 1 g/ litre water twice at weekly interval is recommended
- Looking to the weather condition there is possibility of infestation of pod borer. Hand picking followed by burning of the infected parts should be done for its control.

Potato

- Early to medium duration variety of potato matures within 80-120 days. Farmers are advised to stop irrigation and remove the upper leaves/parts of the crop before 7 – 10 days of digging
- Early sown & where 80% plants found mature complete harvesting.
- When plant leaves became yellow harvest the crop and keep the tubers in shed at a height of 1.2 to 2 ft for hardening of tuber skin.
- Keep the irrigation channel weed free.
- If required, second weeding followed earthing may be taken up after 55-60 days. Do proper earthing up with friable soil.
- Monitor the incidences of pests (termite) & diseases (late blight, bacterial wilt, fusarium wilt, leaf roll virus) and if noticed, take appropriate preventive measure.
- Smoking around the field is the preventive measures against the attack of disease pathogens.
- As there is chance of the late blight disease due to likely incidence of light to moderate fog over the district during late night till morning. If noticed, prophylactic spraying of Krilaksil or Ridomil MZ chemical @ 1.5 g / liter water is recommended.
- Due to favourable weather conditions attack of red ant may be observed in the potato field. Farmers are advised to apply Phorate 10% granules @ 2kg/bigha or Malathion 5% dust @ 5kg/bigha in the soil at the time of earthing up.
- Present weather is congenial for Katui pest infestation. For pest control apply Chlorpyrifos group pesticide.
- Cold and cloudy weather favours the infestation of aphids. Spray Malathion group pesticide.

Groundnut

- As dry condition prevailed during last four days & also dry condition is likely during next five days, apply light irrigation.
- 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.
- Present weather conditions are favourable for leaf miner and thrips incidence in early sown groundnut. For control of leaf minor to spray chloripyriophos 2.5 ml/l or quinalphos 2 ml/l of water sowing and
- Present weather conditions are favourable for leaf minor, spodoptera, jassid and tikka leaf spot 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.

Horticultural crops

- Protect young plants of horticulture crops from low temperature.
- It is advised to cover the small horticulture plants with grass to avoid cold paralysis.

- Apply light and frequent irrigation /sprinkler irrigation in the evening to protect the crops from frost / cold injury. To protect young fruit plants from chilly winds, cover young fruit plants with straw/polythene sheets/ gunny bags.
- Young banana plants of 3-4 months age are prone to attack of pseudostem weevil; spray Chlorpyrifos 2 ml/litres of water.
- Weather is congenial for bud rot disease in coconut; spray Bordeaux mixture 1% on spindle leaves and crown of disease affected as well as neighbouring palms.
- Due to high relative humidity and low minimum temperature, sooty mould disease may occur in mango. Spray Phosphamidon @ 2ml/ litre + 5% maida.
- Due to dry weather, there is a chance of Boron deficiency in banana. It is advised to spray one gram Borax per one litre of water.
- There is a chance of leaf hopper and powdery mildew disease incidence before flowering and after fruit formation in mango. To control, spraying of Carbaryl, 50WP @4g/litre of water or Imidachlorprid @ 0.3ml/ litre of water is advised.
- To protect mango plants from mealy bug, spray Imidacloprid 17.8 SL @ 1 ml /3 litres of water.

Livestock

- Possibility of fall in night temperature, keep the animal under sheds and clean the surroundings to control fly and mosquito in cattle shade. Provide the cattle /animals 50 grams iodized salt 15 and 50 to 100 grams mineral mixture daily along with animal feed/fodder, green fodder to keep them healthy.
- Due to fall in night temperature and cloudy weather keep the animals under shed. Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep them healthy.
- Vaccinate and de-worm farm animals at regular intervals in winter season.
- Farmers are advised to give protein enriched diets to the animals. Avoid feeding of paddy straw to prevent liver fluke infection in dairy animals.

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, darkplague and against Gamboro disease in two weeks old chicks may be carried out after consultation with local veterinarian.
- Farmers are advised to protect the poultry from cold injury by keeping the coop clean and dry and use dry paddy straw as litter material and cover the sides of the coop with thick cloths during night.
- Provide artificial brooding to chicks to maintain adequate temperature. Provide artificial brooding to chicks to maintain adequate temperature.
- Arrange light from Bulb 1-2 hours after evening and not to cover the cage by polythene. It favours more production of eggs and reduce the chance of incidences of diseases.
- It is advised to align the long axis of poultry shed in east-west direction. This will prevent the direct sunshine over the birds.

Fishery

- Protect the fish population against various bacterial diseases prevalent in winter season; apply Potash @ 4-5 mg/litre of water or Sukrena WS @ 1 litre per bigha of water.
- During winter months, fish are under stress and may show symptoms like erratic swimming 11 behaviour, not eating, gasping at the surface and others including mortalities. If such symptoms are observed, immediately stop feeding, liming and manuring. Consult an expert for remedial measures.
- Keep pisciculture farm ponds clean. During winter, reduce the amount of food for fishes and provide feed between 2-3PM.
- It is advised to maintain good amount of water in pond to save fishes from low temperature.

Realized Weather at different locations in the country

Rainfall for last 24 hours (till 06 AM on 12 February'2020) and maximum temperature on 11 February, minimum temperature on 12 February'2020 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	00	27.0	16.4	Rajshahi	Rajshahi	00	26.6	09.6
	Tangail	00	26.5	10.6		Ishurdi	00	26.3	09.7
	Faridpur	00	26.8	12.8		Bogura	00	27.5	11.7
	Madaripur	00	26.5	12.6		Badalgachhi	00	25.5	11.2
	Gopalganj	00	26.4	10.5		Tarash	00	25.2	12.0
	Nikli	00	26.8	14.4					
Mymensingh	Mymensingh	00	27.4	15.0	Rangpur	Rangpur	00	27.1	10.4
	Netrokona	00	26.5	14.5		Dinajpur	00	26.6	10.2
						Sayedpur	00	27.7	10.0
Chattogram	Chattogram	00	26.8	14.0		Tetulia	00	26.9	07.3
	Sandwip	00	27.6	12.6		Dimla	00	27.4	10.4
	Sitakunda	00	28.5	11.8		Rajarhat	00	26.5	08.7
	Rangamati	00	27.2	11.0	Khulna	Khulna	00	26.0	12.2
	Cumilla	00	27.0	13.0		Mongla	00	26.3	13.0
	Chandpur	00	27.5	14.2		Satkhira	00	26.7	11.2
	M. Court	00	27.0	15.0		Jashore	00	27.2	09.8
	Feni	00	27.4	12.2		Chuadanga	00	26.5	08.4
	Hatiya	00	27.3	12.7		Kumarkhali	00	26.4	11.0
	Cox's Bazar	00	27.8	15.0	Barishal	Barishal	00	27.2	11.0
	Kutubdia	00	26.3	15.6		Patuakhali	00	27.2	12.5
Teknaf	00	28.8	14.0	Khepupara		00	27.2	11.5	
				Bhola		00	27.2	11.8	
Sylhet	Sylhet	00	28.2	14.1					
	Srimangal	00	27.2	09.7					

Highlights:

- Country average bright sunshine hour was 7.03 hours per day during last week.
- Country average free water loss during the previous week was 2.68 mm per day.

Weather Forecast Valid for 24 Hours commencing 06 PM Today:

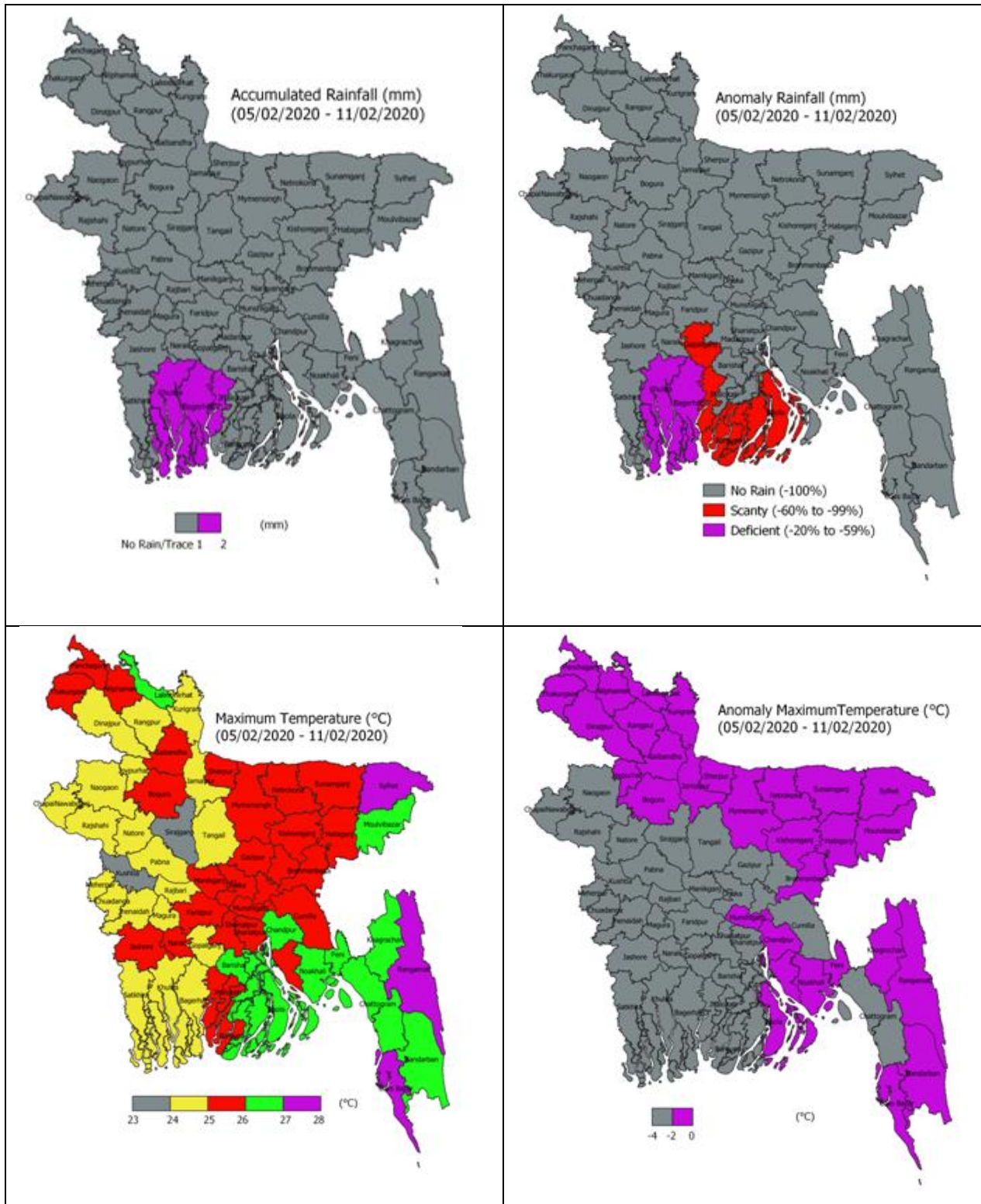
Forecast: Weather may remain dry with temporary partly cloudy sky over the country.

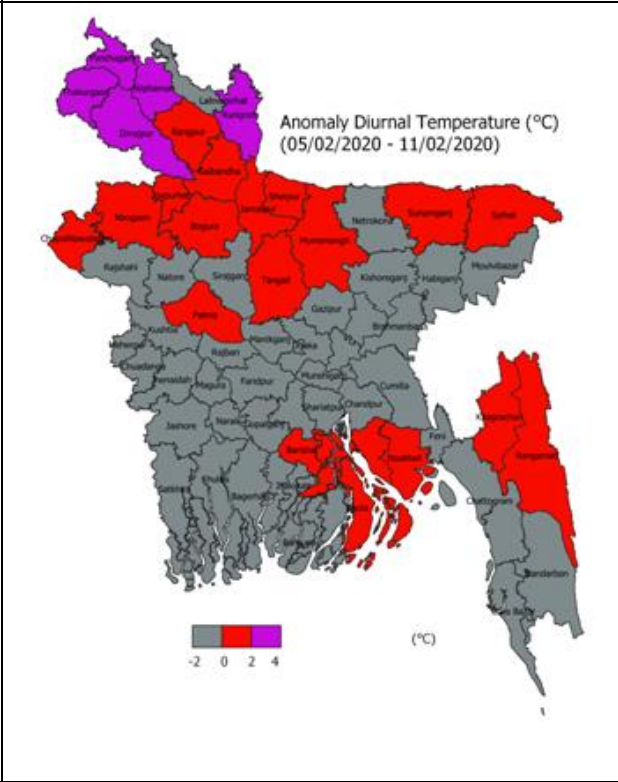
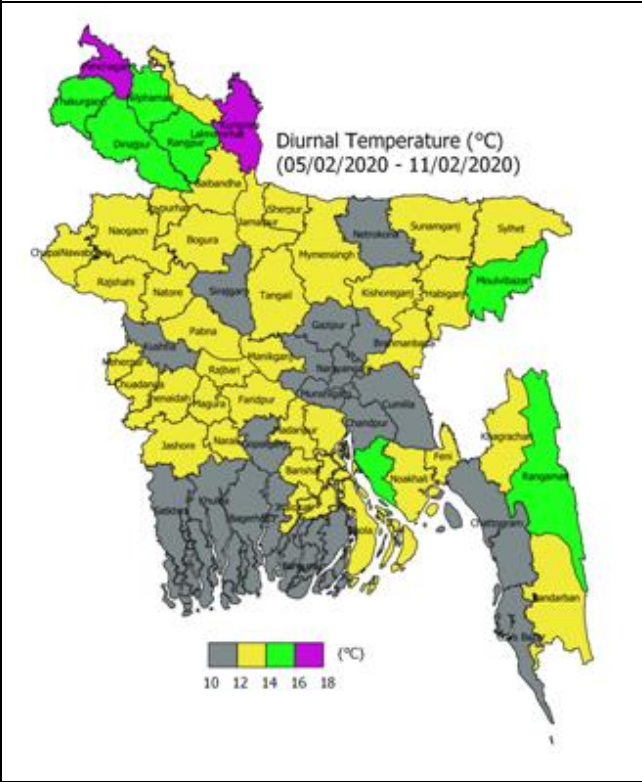
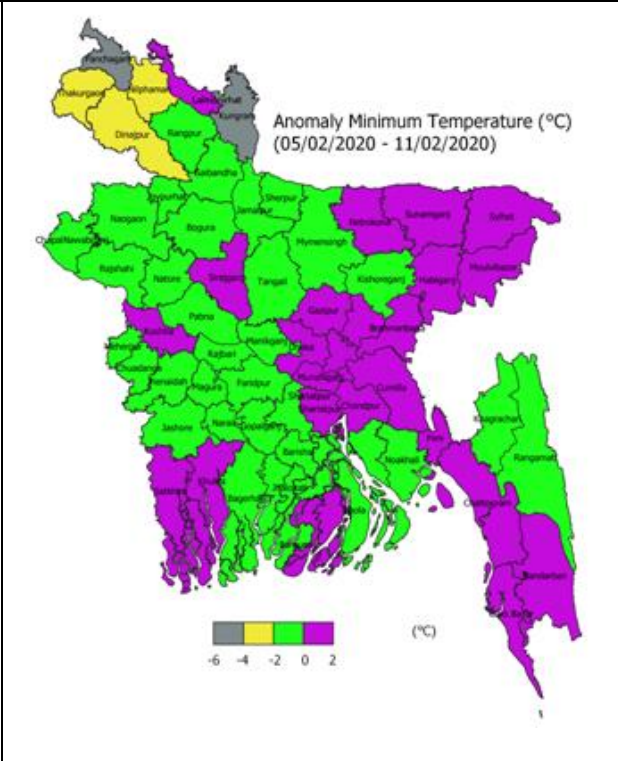
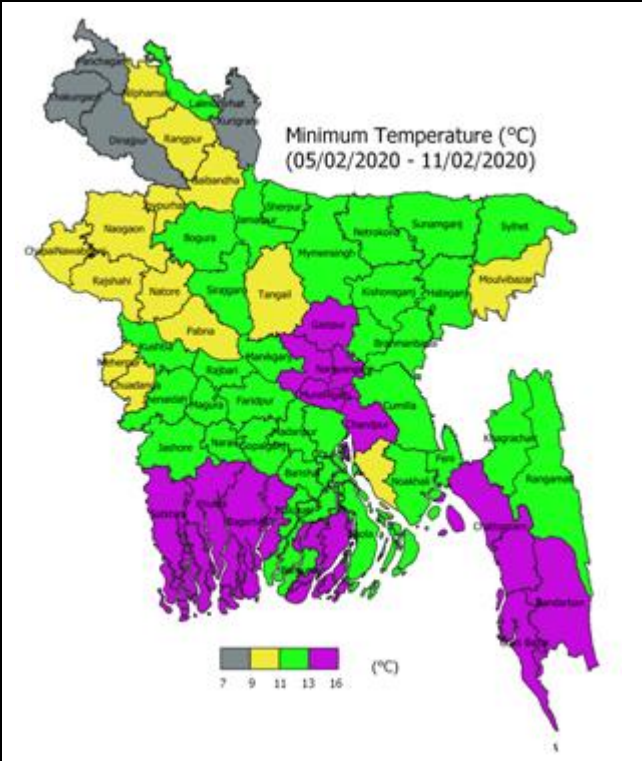
Fog: Light fog may occur at places over the river basins of the country during early morning.

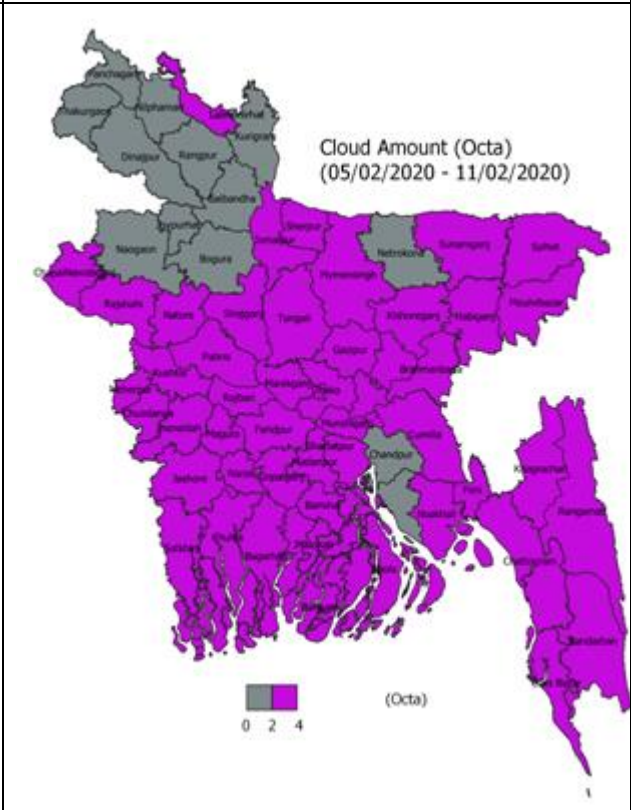
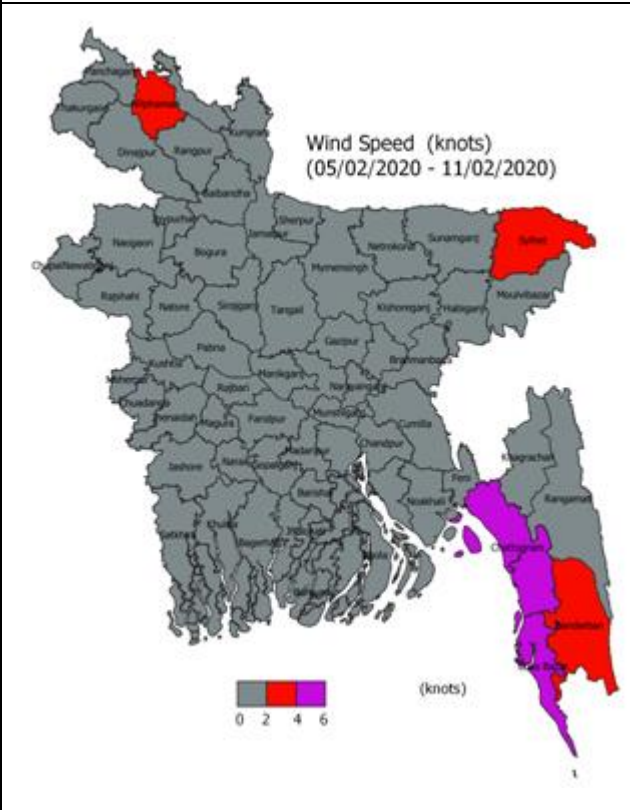
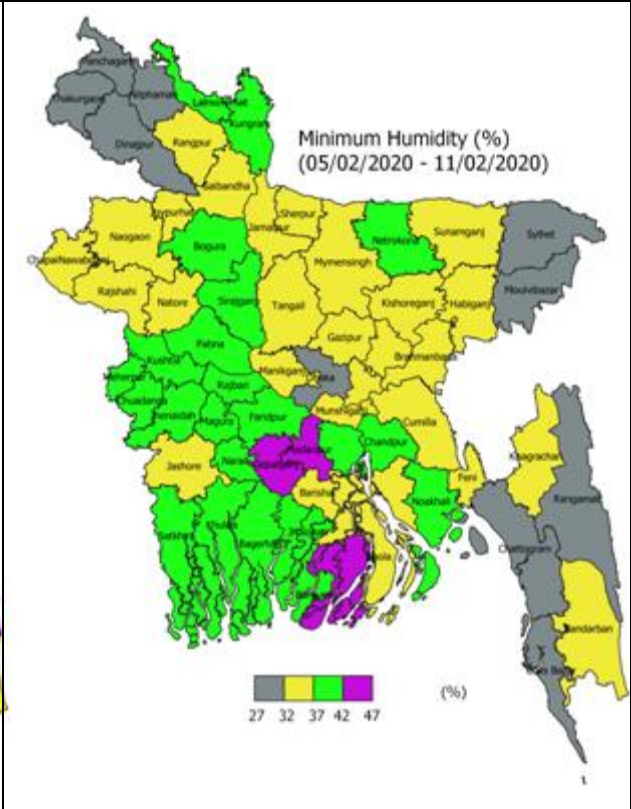
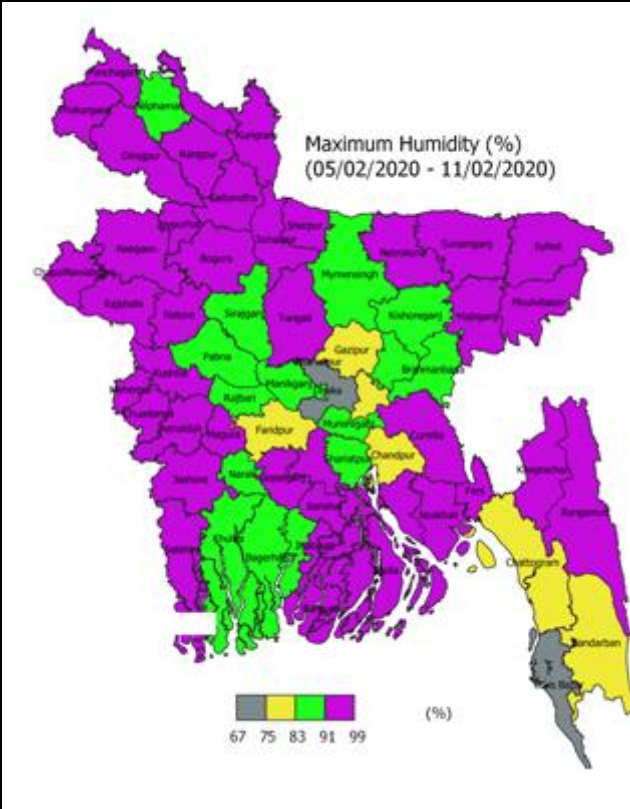
Cold wave: Mild cold wave is sweeping over the regions of Rajshahi, Pabna, Panchagarh, Kurigram, Sayedpur, Jeshore, Kushtia & Srimangal and it may continue.

Temperature: Night temperature may fall slightly & day temperature may remain nearly unchanged over the country.

Spatial Distribution of weather parameters for the Week ending 11 February 2020





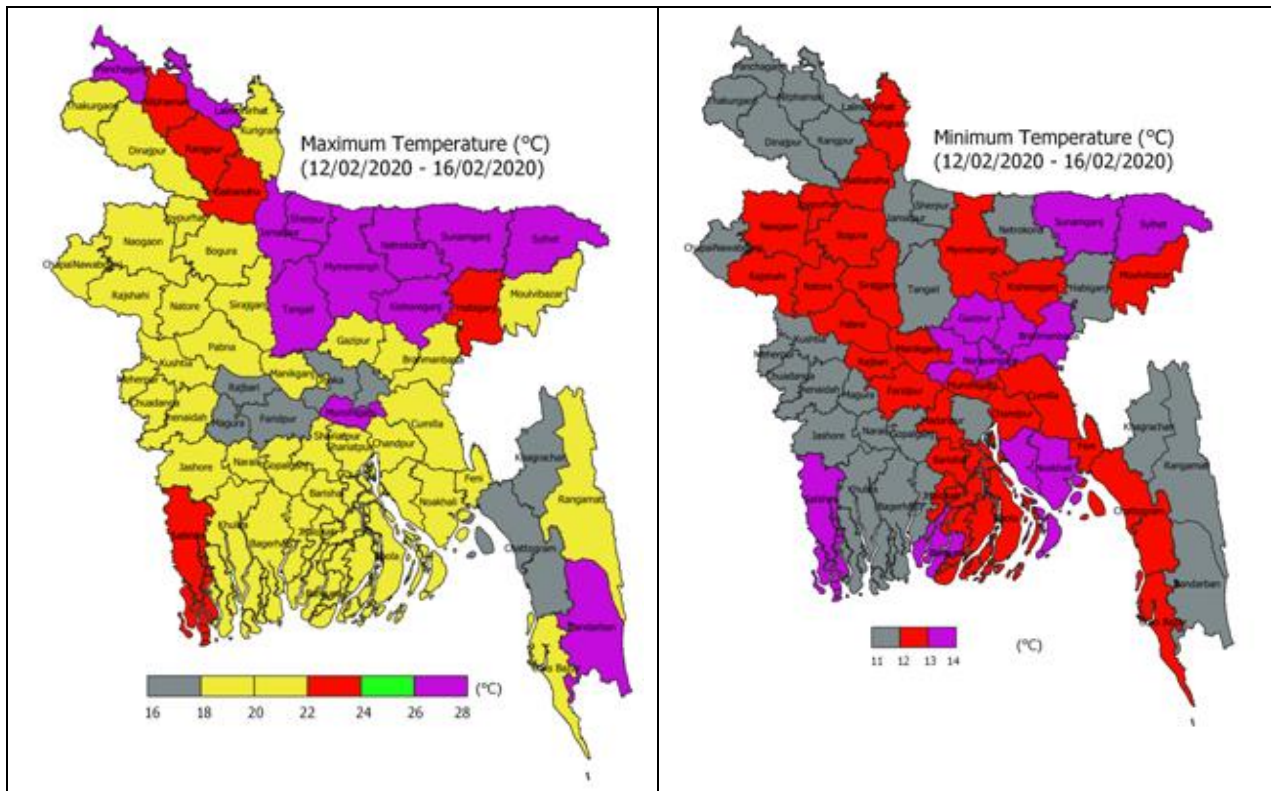


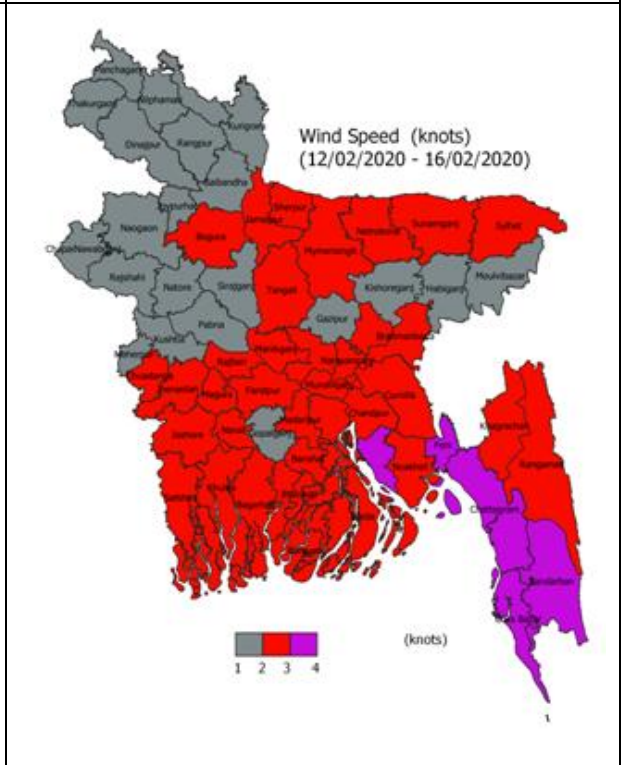
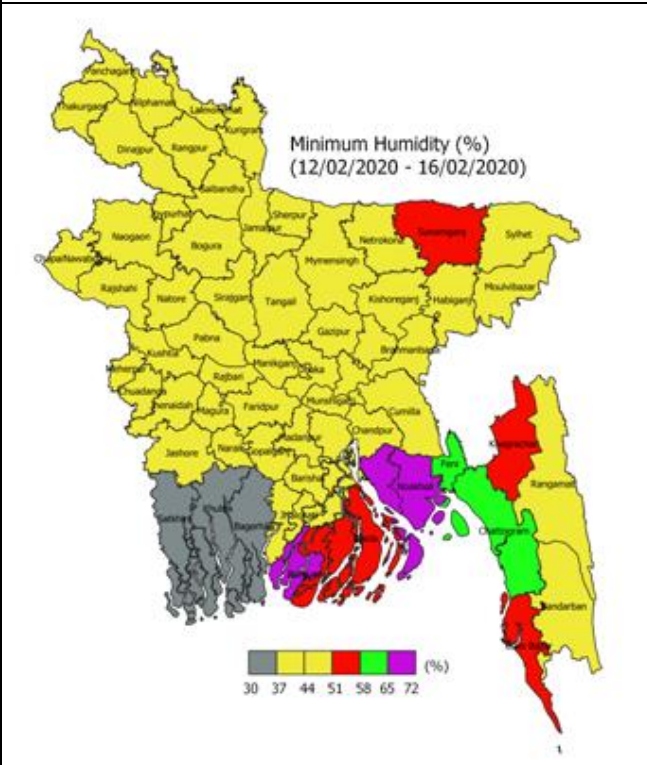
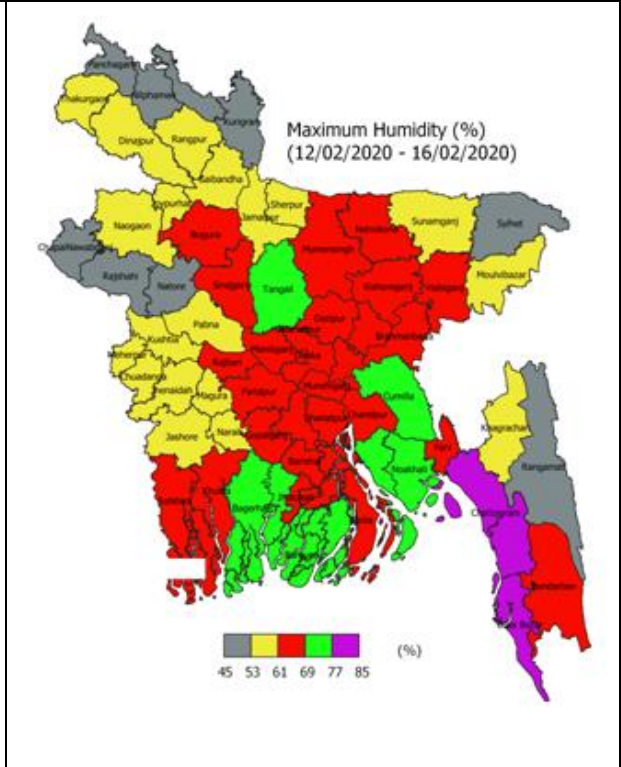
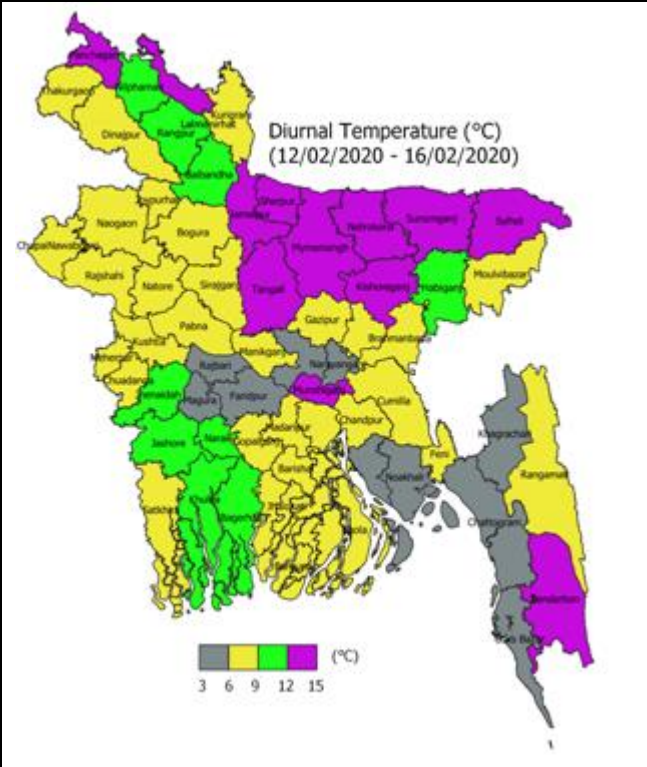
Weather Forecast and Advisory for the Period of 09.02.2020 to 15.02.2020

Bright sunshine hour is likely to be from 6.50 to 7.50 hours per day during this week. Average free water loss is likely to be from 2.50 to 3.50 mm per day during this week.

- Weather may remain mainly dry over the country during this period.
- Light fog may occur at places over the country during late night to morning.
- Day temperature may rise slightly and night temperature may fall slightly over the country during this period.

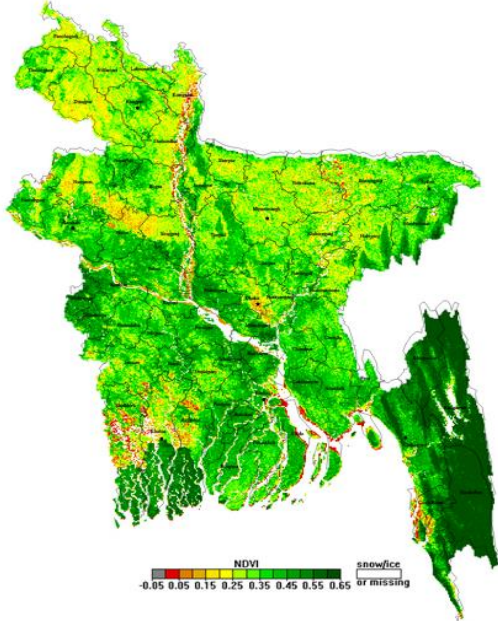
District Wise Quantitative Weather Forecast for next Five days from 12 Feb. -16 February'2020



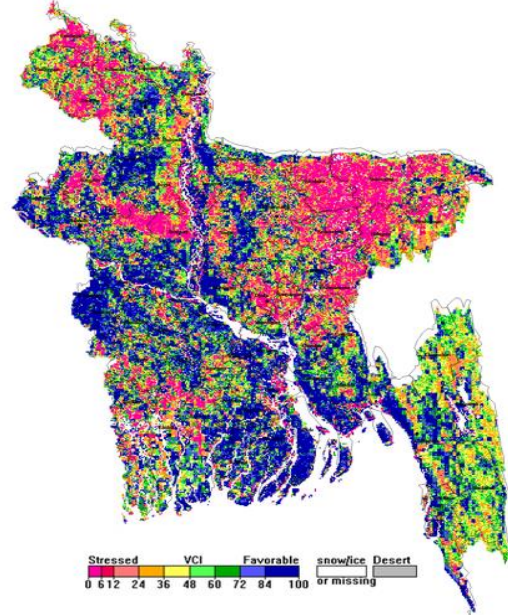


Different Satellite Products over Bangladesh

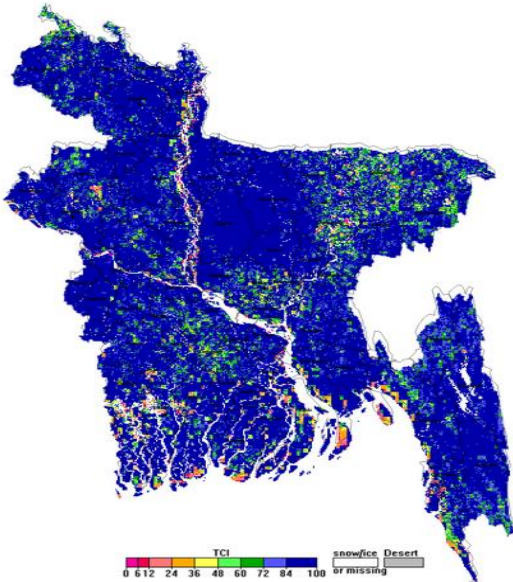
NOAA/VIIRS BLENDED NDVI composite for the week No. 05 (29 January-04 February 2020) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED VCI composite for the week No. 05 (29 January-04 February 2020) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED TCI composite for the week No. 05 (29 January-04 February 2020) over Agricultural regions of Bangladesh



NOAA/AVHRR BLENDED VHI composite for the week No. 05 (29 January-04 February 2020) over Agricultural regions of Bangladesh

