

Winter Outlook

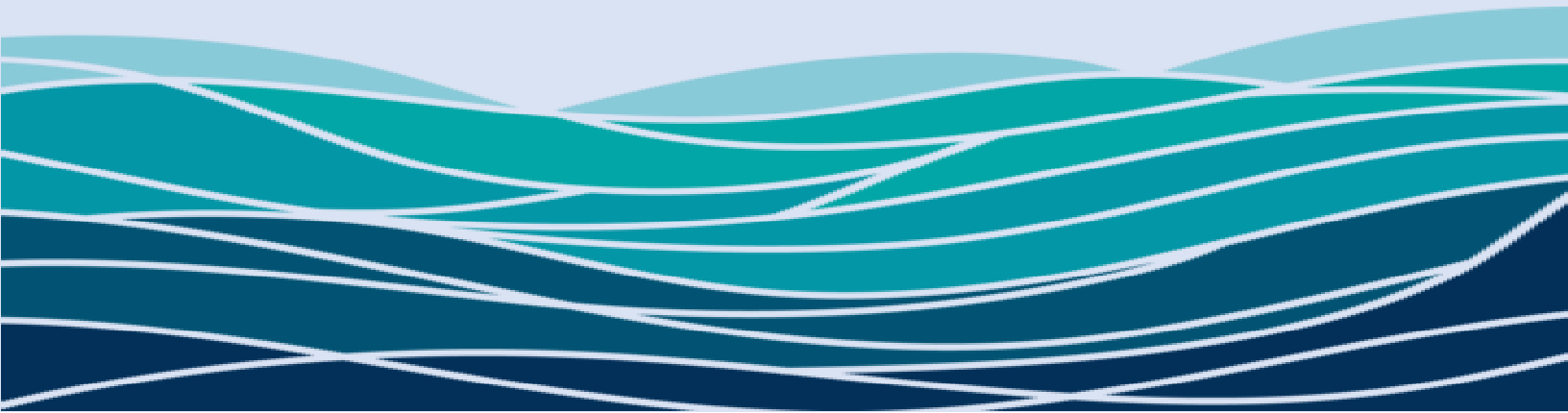
Guidance for Decision Makers

November-December-January (NDJ) 2025-2026

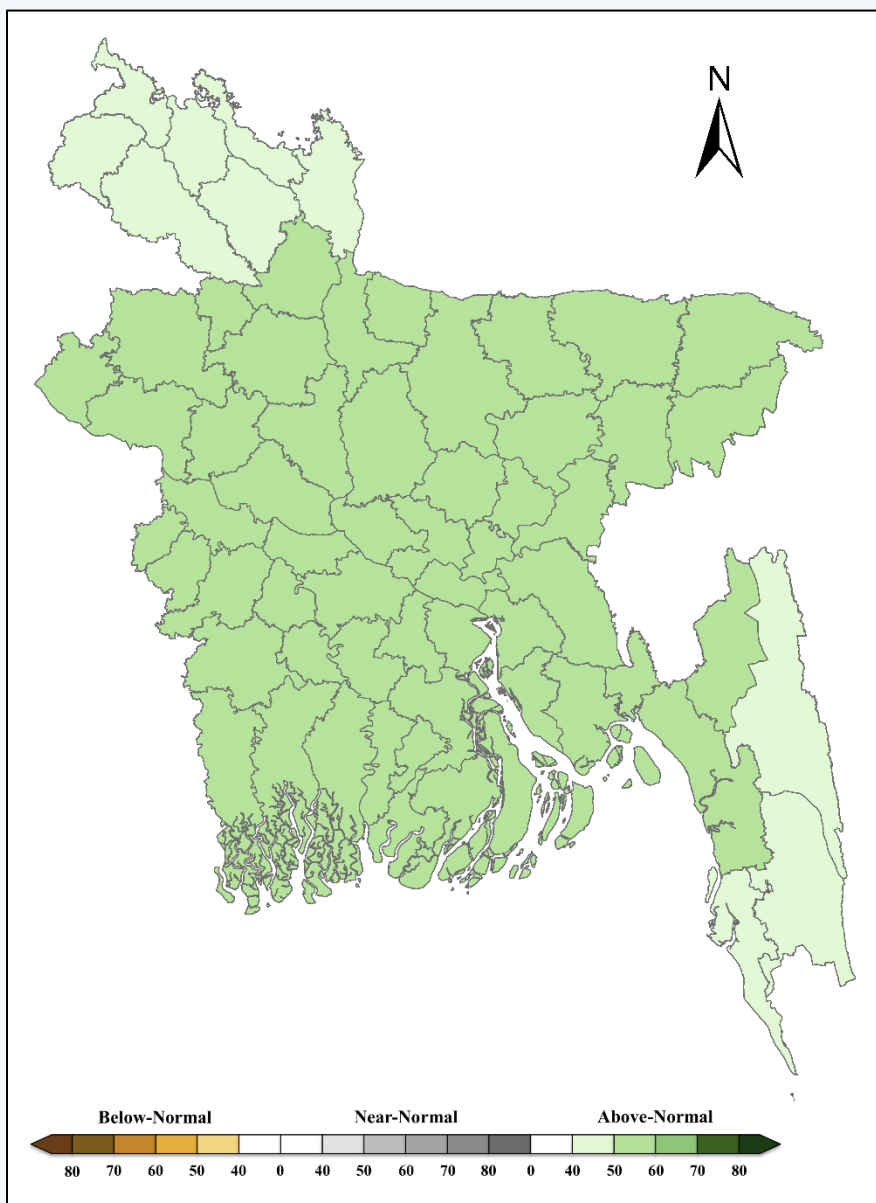




Forecast



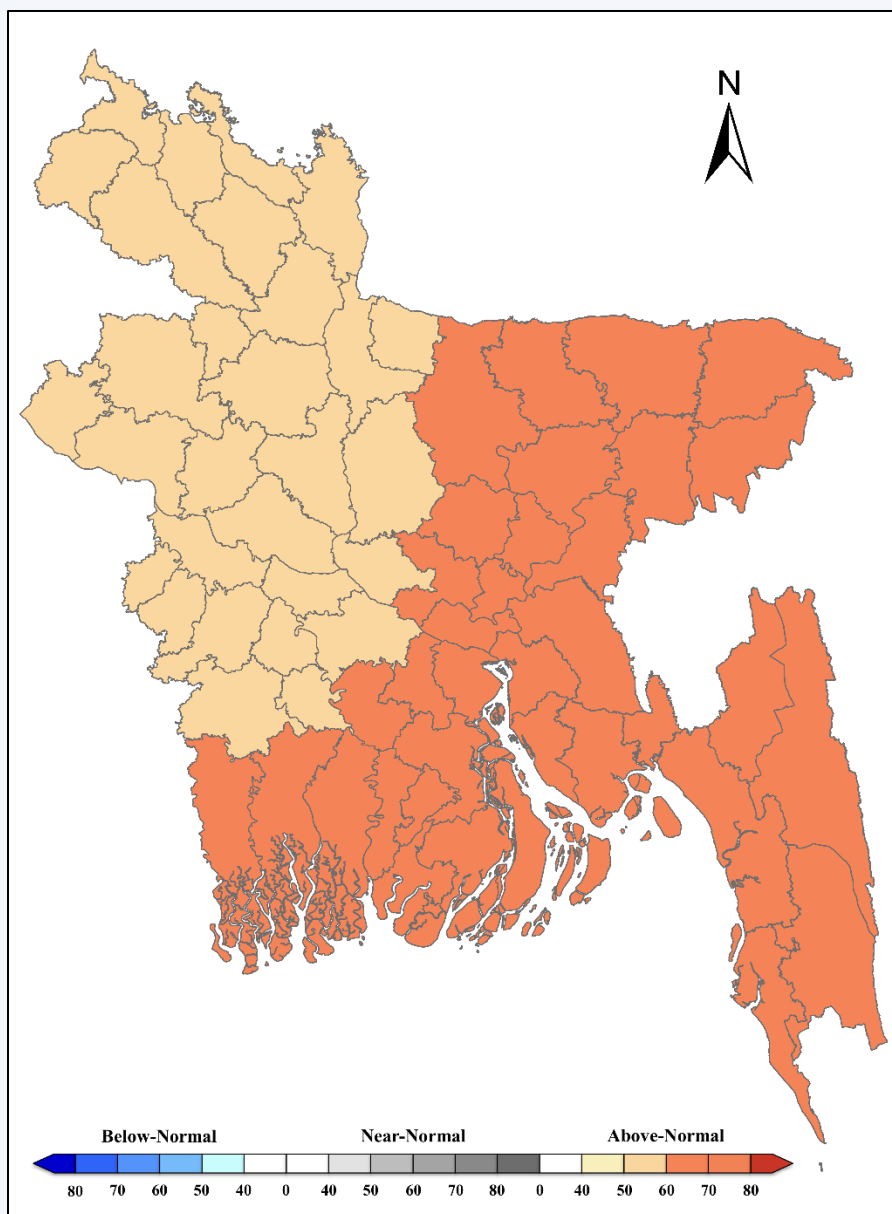
Forecast of Rainfall, November 2025



According to the forecast of BMD,

Above Normal Rainfall is expected over the country in November 2025. However, except a few districts of northwestern, Chittagong Hill tracks and Cox's Bazar, rest of the regions have 60% probability to receive Above Normal Rainfall. Whereas the districts of northwestern, Chittagong Hill tracks and Cox's Bazar have 50% probability of Above Normal Rainfall.

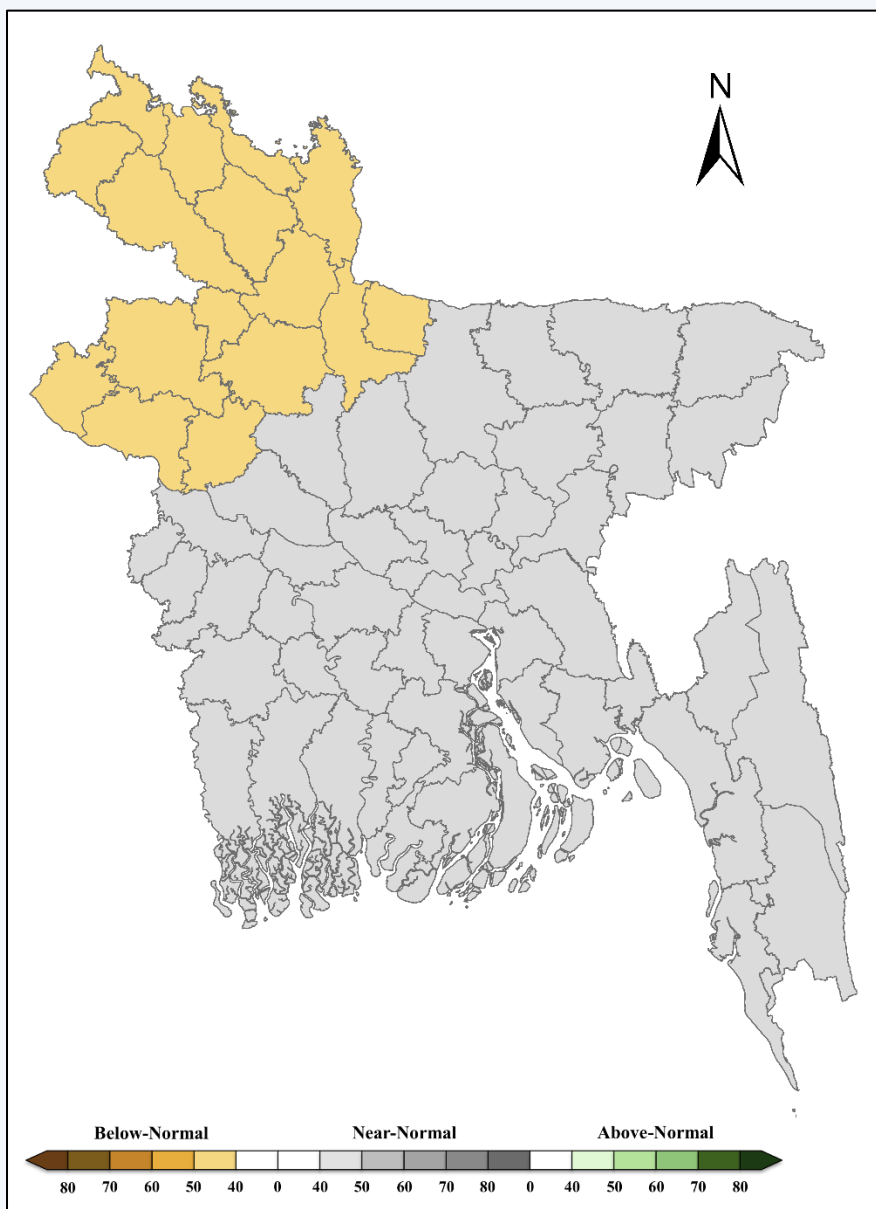
Forecast of Mean Temperature, November 2025



According to the forecast of BMD,

In November 2025, Above Normal Mean Temperature is expected all over the country, where north-western and some districts of western part of the country have 50% probability of Above Normal Mean Temperature and eastern and southern part of the country is likely to have of Above Normal Mean Temperature with 60% probability.

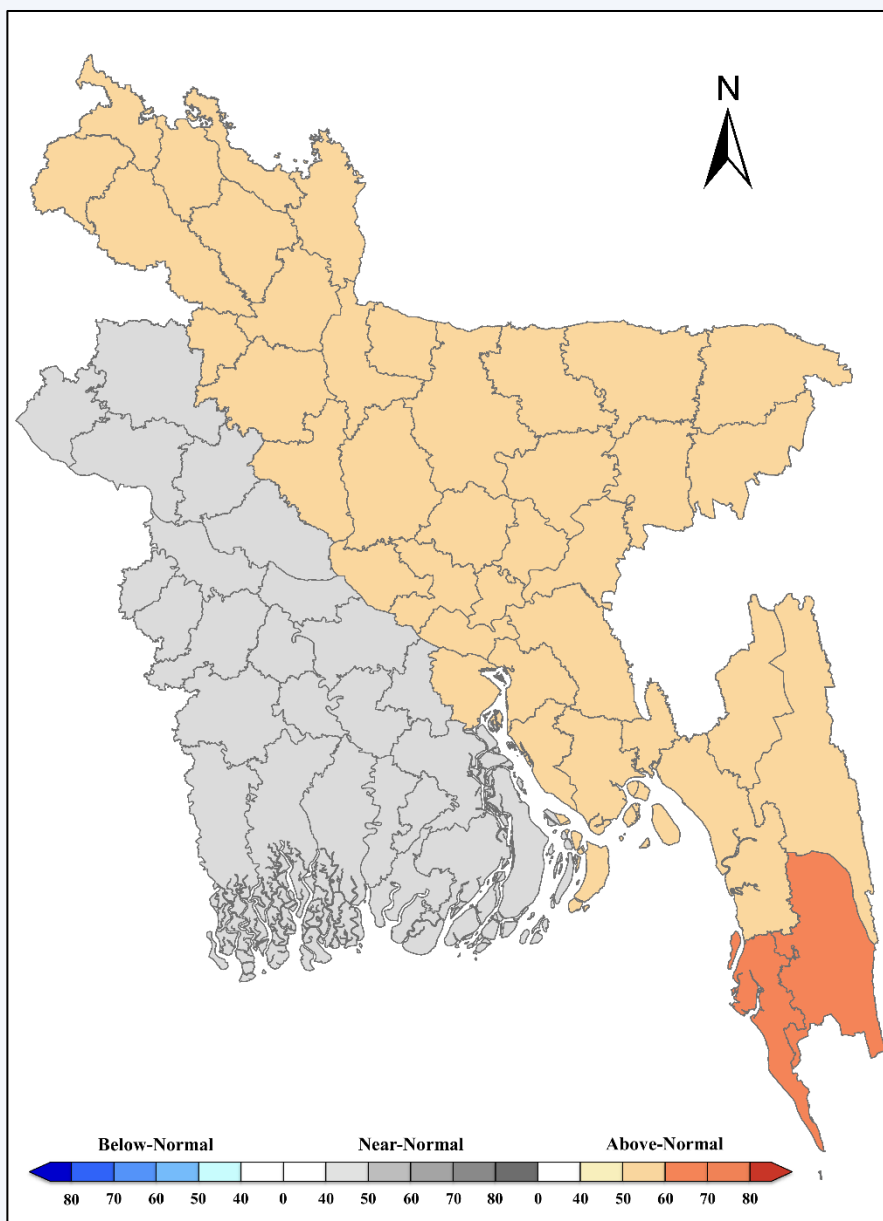
Forecast of Rainfall, December 2025



According to the forecast of BMD,

In December 2025, there is 40% probability of Near Normal Rainfall expected almost all over the country except the northwestern region. Whereas the northwestern part of the country has 40% probability of receiving Below Normal Rainfall.

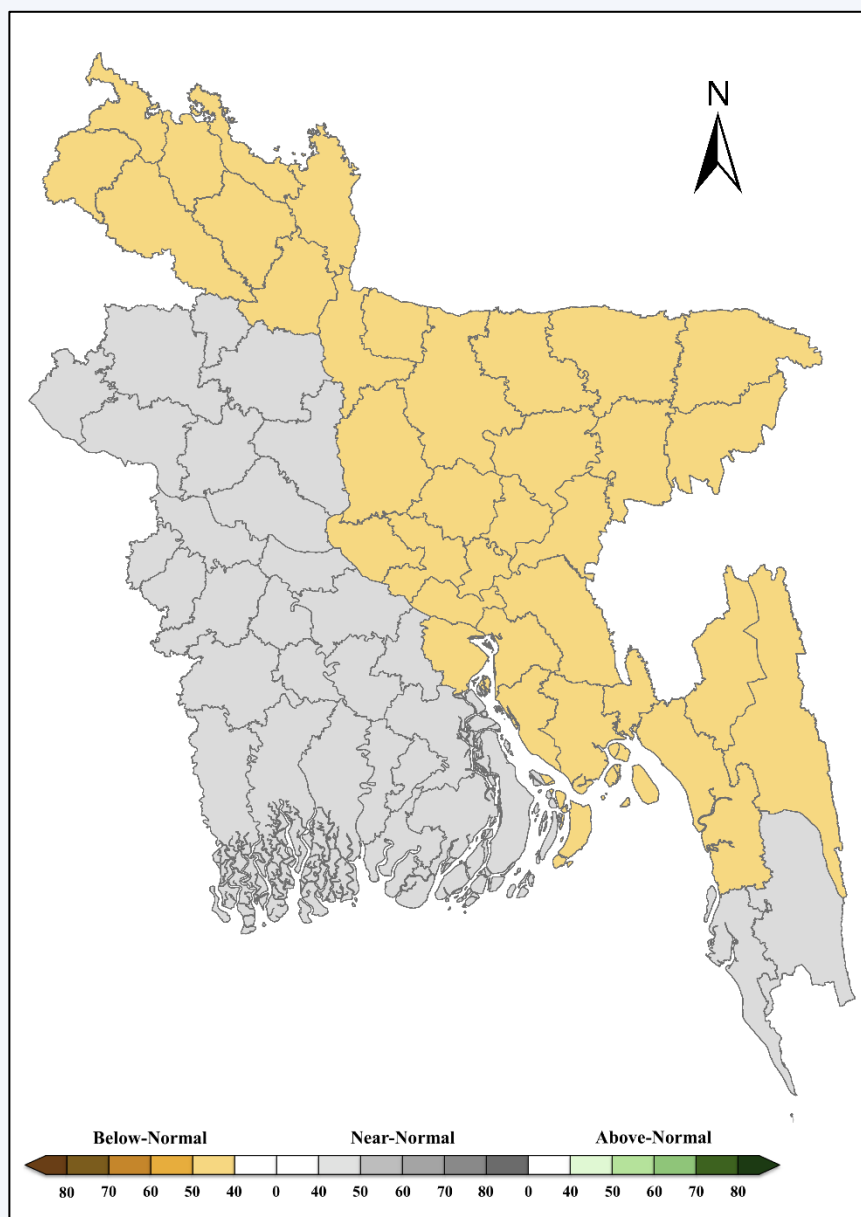
Forecast of Mean Temperature, December 2025



According to the forecast of BMD,

In December 2025, Near Normal Mean Temperature is expected with 40% probability in the western and southwestern parts of the country. Whereas Above Normal Mean Temperature with 50% probability is expected over northwestern, northeastern, eastern and southeastern part of the country and 60% probability of having Above Normal Mean Temperature is expected in the southeastern border districts.

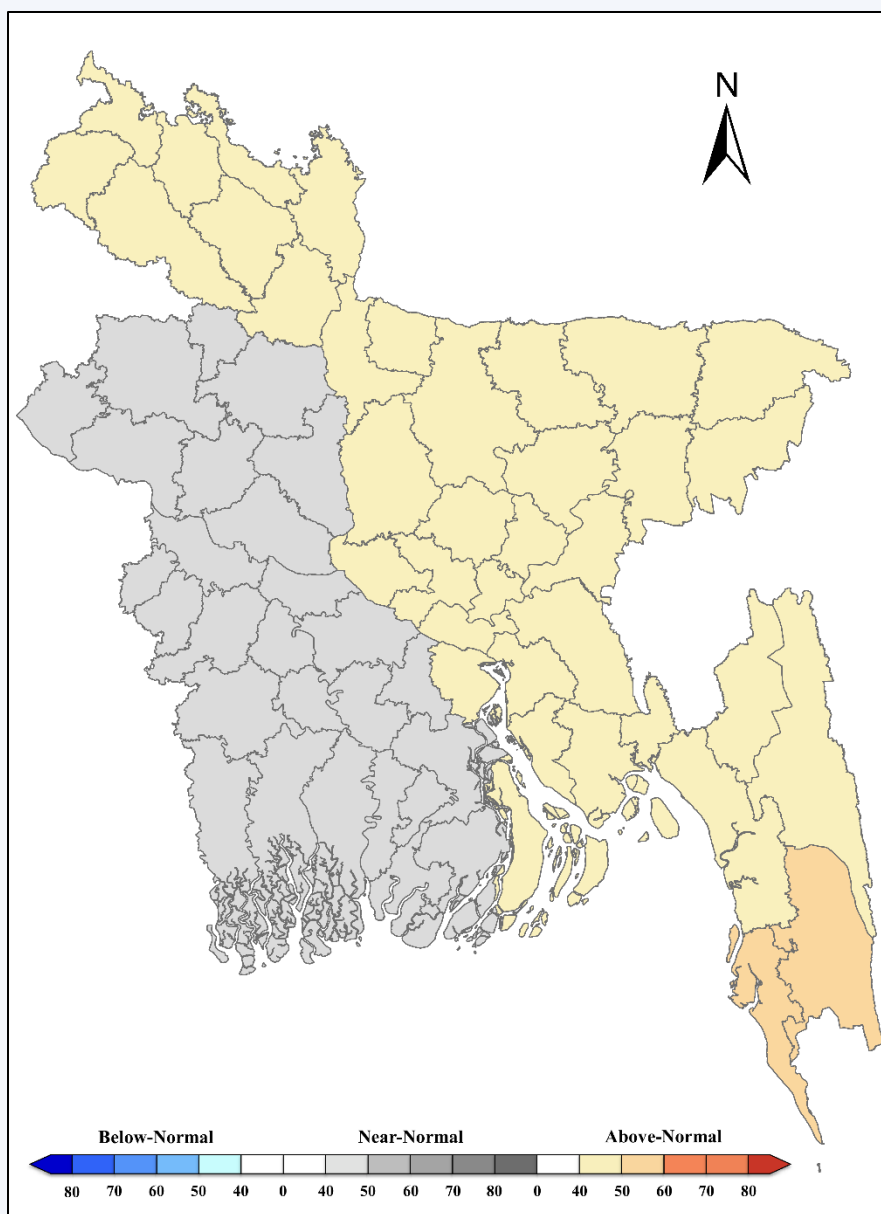
Forecast of Rainfall, January 2026



According to the forecast of BMD,

In January 2026, Near Normal Rainfall with 40% probability is expected over the western, southwestern region and few districts of southeastern border of the country. Whereas the northwestern, northwestern, eastern and southeastern part of the country have 40% probability of receiving Below Normal Rainfall.

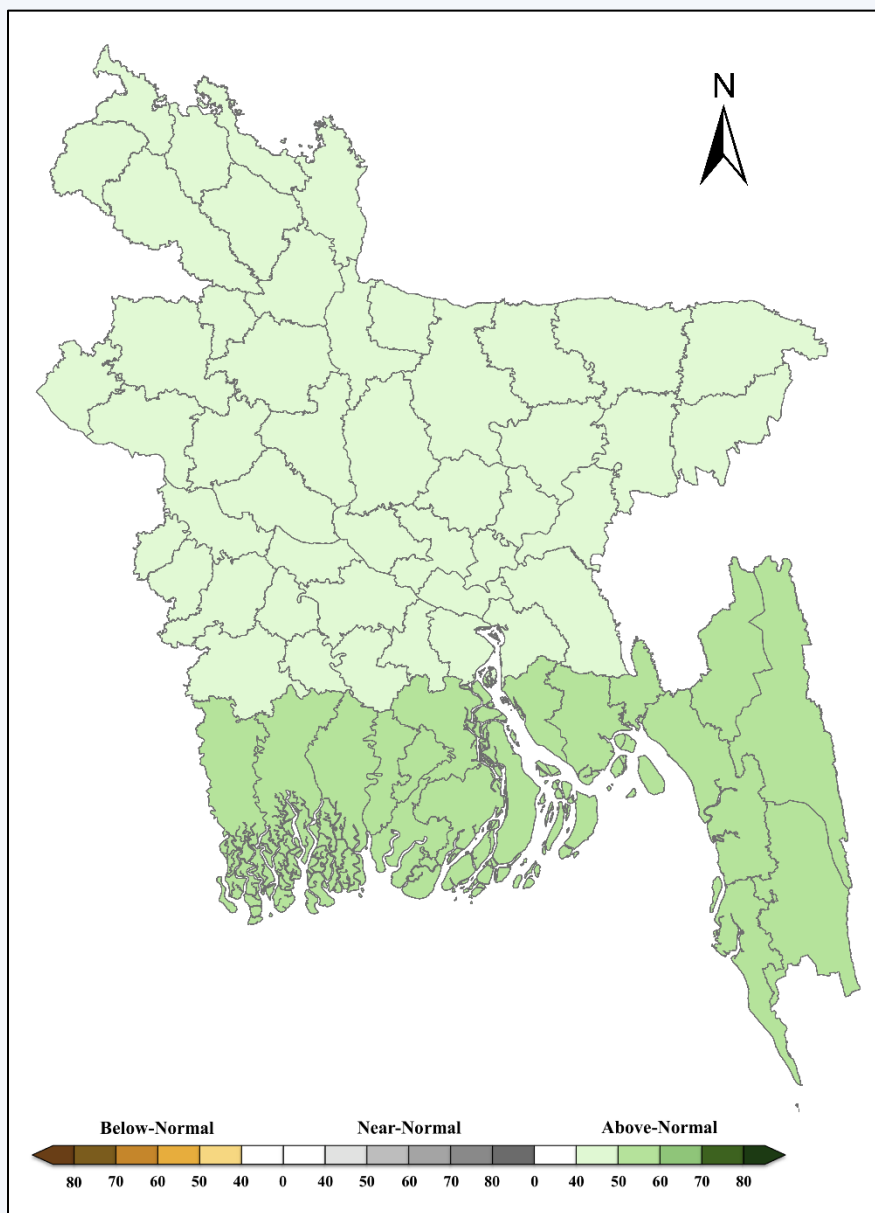
Forecast of Mean Temperature, January 2026



According to the forecast of BMD,

In January 2026, Near Normal Mean Temperature is expected with 40% probability in western and southwestern part of the country. Whereas 40% probability of Above Normal Mean Temperature is likely to have in northwestern, northeastern, eastern and southeastern part of the country and 50% probability of Above Normal Mean Temperature in the southeastern border.

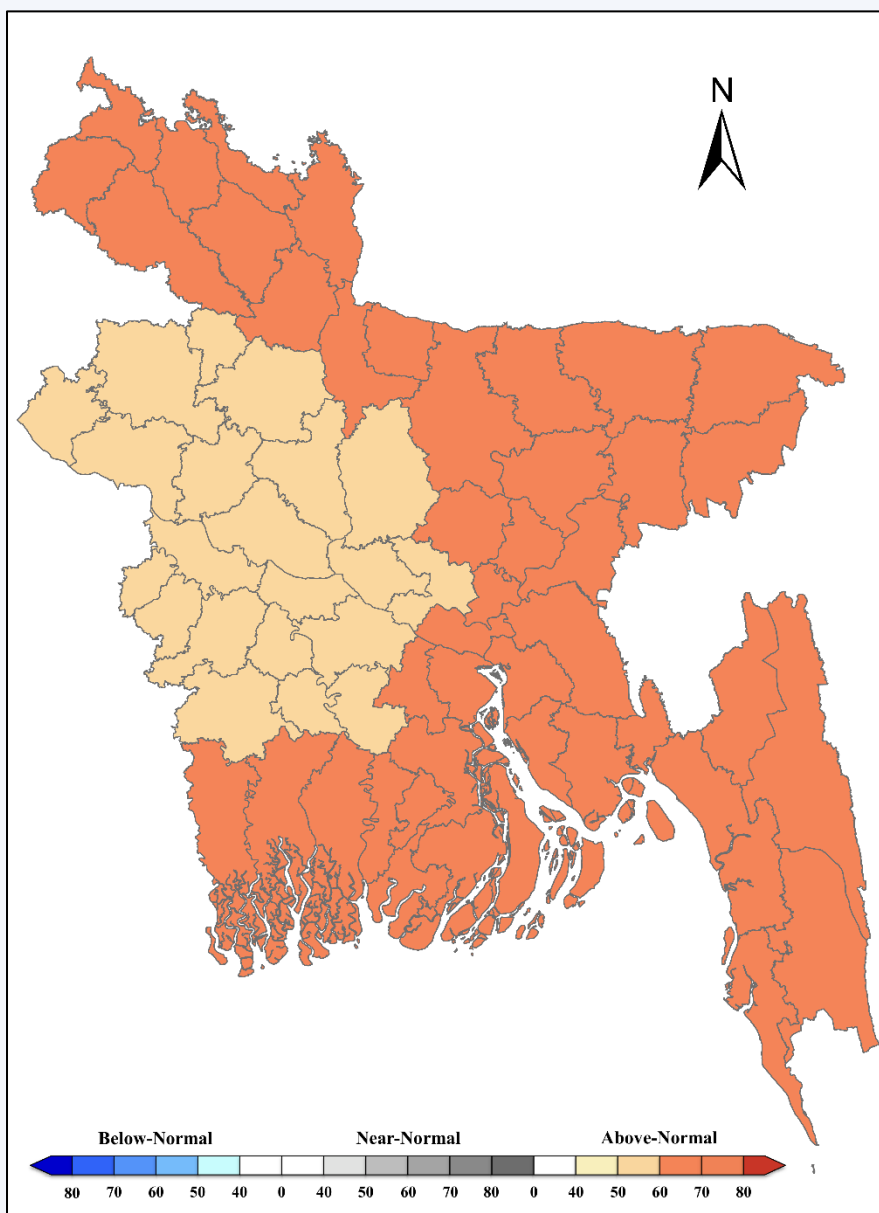
Forecast of Rainfall, Nov-Dec-Jan 2025-26



According to the forecast of BMD,

Above Normal Rainfall is expected over the country during December 2025 to January 2026. However, the southern coastal districts including Chattogram Hill Tract regions are expected to receive Above Normal Rainfall with 50% probability. Whereas rest of the part of the country have 40% probability to receive Above Normal Rainfall.

Forecast of Mean Temperature, Nov-Dec-Jan 2025-26



According to the forecast of BMD,

Above Normal Mean Temperature is expecting all over the country during December 2025 to January 2026. Above Normal Mean Temperature with 60% probability is expected in most of the regions of country except the western part. The districts in the western part of the country have 50% probability to receive Above Normal Mean Temperature.



Sector Specific Advisories





Expected Sectoral Impact and Advisories for Nov-Dec-Jan, 2025-26

Expected Impact:

- Excess rainfall may cause waterlogging, delay crop growth, cause lodging and grain spoilage in T. Aman harvest.
- Rainfall may benefit through irrigation water availability for Boro Rice. Excess rainfall may damage seedbeds,
- Warm temperatures may boost but weaken seedling growth of Boro rice and increase pest and disease risk.

Advisories:

- Ensure drainage in low-lying fields to manage excess water and prevent waterlogging.
- Use raised, well-drained seedbeds for Boro.
- Consider early sowing of winter crops like wheat, mustard, and lentils to avoid peak temperatures during sensitive growth stages.
- Plant short-duration, pest- and heat-tolerant varieties for haor areas.
- Higher temperatures can increase evapotranspiration, leading to quicker moisture loss. Schedule irrigation more frequently to ensure crops receive adequate moisture, particularly in drought-prone soils.
- Use techniques like drip irrigation or alternate wetting and drying (AWD) for rice fields to conserve water, maintain moisture levels, and minimize water stress in hotter conditions.
- Monitor and control pests and fungal diseases.
- Maintain optimal water levels; avoid over-irrigation.

Wheat:

Stage: Grain Formation

- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog from late night till morning. If notified, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to do 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyrifos 20EC @ 4.0 ml/later in the soil at evening hours.

Rice T. Aman:

Stage: Harvesting

- Ensure field drainage and quick drying.
- Dry and store T. Aman grains properly to prevent fungal attacks.

Rice Boro:

Stage: Seedbeds

- Use heat- and disease-tolerant varieties; treat seeds before sowing.
- It is better to maintain water level 2-3 cm in seed bed so that it can control the weeds and seed damage due to birds
- Construct drain in between two seedbeds. This will be used for draining out extra water and irrigation as well.
- As this season is cyclone prone, it is advised to prepare the seedbed in high land and make arrangements for draining out of water and advise for community-based seedbed preparation.
- Maintain optimum soil moisture in Boro seedbeds; irrigate regularly.

Stage: Transplanting

- The main field should be prepared for transplanting boro paddy with 3-4 times ploughing followed by laddering and levelling should be done properly to retain water uniformity.
- Keep adequate moisture in seedbeds and provide partial shade to prevent heat stress.
- Apply 13 kg urea (1/3 of total urea) as first basal dose and 13 kg TSP, 20 kg MOP, 15kg gypsum and 01 kg zinc per bigha during final preparation of field.
- The basal fertilizer dose may vary location to location based on land type and soil texture.
- In char area, 2/3 MoP (14.0 kg/bigha) to be applied with basal dose and rest 1/3 MoP with last top dress of urea.
- Seedlings of 35 to 45 days old are to be transplanted.
- Maintain a distance of 20-25cm line to line & 15-20cm plant to plant.
- Dead hills are to be replanted within 7-10 days of transplanting.

- Maintain a thin layer of water (1-2 cm) in the main field for up to 15 days after transplanting.
- Maintain 5-7 cm land water level based on growth stage.
- Monitor fields for pests and fungal infections and apply IPM practices.
- Begin land preparation early after rainfall when soil is workable

Mustard:

Stage: Pod initiation

- Occurrence of sawflies may be seen in mustard crops under the present environmental conditions. To control this pest spray Chlorpyrifos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

Horticulture:

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather conditions. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazim @ 2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl (Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

Action Needed/ Responsible Org

DAE, BRRI, BARI, BMDA and BADC

Expected Sectoral Impact and Advisories for Nov-Dec-Jan, 2025-26

Advisories:

- Provision needs to be kept for stakeholders like BWDB and local administration for regular operation & maintenance of water infrastructures e.g. barrages, embankment, polders, bank revetment etc.
- Excessive use of ground water should be avoided. Maximum utilization of surface water needs to be ensured.
- Special attention needs to be given on drought prone areas of Bangladesh for proper surface water storage and management.
- Adoption of low flow forecasting system in major river basins of Bangladesh is encouraged (N/A). Currently FFWC's 'Dry Bulletin' & experimental drought forecasting can be followed to monitor hydrological droughts.

Action Needed/Responsible Organization

- FFWC and BWDB



Expected Sectoral Impact and Advisories for Nov-Dec-Jan, 2025-26

Potential Health Risk for November 2025:

- Rise in vector-borne diseases (especially dengue and chikungunya) due to residual mosquito breeding.
- Food- and water-borne diseases (diarrhea, typhoid) from stagnant water.
- Heat stress in vulnerable populations (elderly, outdoor workers).

Advisory / Recommended Actions for November 2025:

- Strengthen vector control and larval source reduction campaigns.
- Ensure continuous health education on water and food hygiene.
- Alert health facilities for possible dengue and diarrhea cases.
- Promote hydration and use of light clothing.

Potential Health Risk for December 2025:

- Cold-related illnesses: pneumonia, bronchitis, asthma, COPD exacerbations.
- Seasonal influenza and respiratory infections.
- Health risks among elderly, children, and low-income populations without warm clothing.

Advisory / Recommended Actions for December 2025:

- Issue cold wave health alerts through DGHS & local health offices.
- Strengthen service readiness of hospitals for respiratory illness.
- Coordinate with local administration to distribute blankets and warm clothing.
- Promote awareness on indoor ventilation and influenza vaccination.

Potential Health Risk for January 2026:

- Respiratory problems aggravated by poor air quality (asthma, COPD, bronchitis).
- Increase in seasonal influenza, cold-related morbidity, and pneumonia, particularly among children and the elderly.
- Air pollution-related eye and skin irritation, and cardiovascular stress in urban areas.
- Possible road accidents due to fog and low visibility.

Advisory / Recommended Actions for January 2026:

- Strengthen surveillance of respiratory, pediatric, and influenza-like illnesses.
- Ensure availability of essential medicines, oxygen supply, and pediatric care services at health facilities.
- Promote public awareness by minimizing outdoor exposure during high pollution or fog episodes.
- Encourage mask use, air quality monitoring, and coordination with DoE and transport authorities for pollution and fog-related advisories.
- Promote use of clean fuel and discourage open burning.

Action Needed/ Responsible Org

DGHS



Expected Sectoral Impact and Advisories for Nov-Dec-Jan, 2025-26

Advisories and Expected Impact

- Provision of curtains is very effective to protect animals/birds from wind.
- Providing dry bedding materials/rubber floor mats will help to reduce energy loss and is particularly important for pregnant animals and newborn calves.
- Exposure of animals to direct sunlight is important. If possible, take out the animals from shed during full sunshine hours of the day.
- Tree branches putting shade on the animal shed can be chopped off to expose the shed to direct sunlight.
- Cover/dress-up the animals with warm clothing or gunny bags to protect them from cold.
- Supply lukewarm water instead of normal for drinking/bathing.
- Cattle and buffaloes may require up to 20% more feed during cold weather. Supply sufficient feed to provide adequate maintenance energy.
- Slatted-floor housing is effective for goats and sheep; at least provide a portion of the house with slatted-floor.
- Proper brooding is very much important for baby chick. Provide brooding for kids/lambs during extreme cold.
- Increase the depth of litter in poultry houses. Regular turning of litter and manure removal is helpful to reduce moisture inside the shed/coop and thereby reduce cold stress.
- Carefully check the day length in winter and provide supplemental lighting for laying hen. For optimal egg production, chickens should have about 16 hours of light daily.

Action Needed/ Responsible Org

DLS and BLRI



Expected Sectoral Impact and Advisories for Nov-Dec-Jan, 2025-26

Expected Impact

Positive Impact:

- Above-normal rainfall can help maintain suitable water levels in ponds and improve dissolved oxygen for fish growth. It may also dilute pond water pollutants and lower temperature stress.

Negative Impact:

- Heavy rainfall and runoff can cause overflow or flooding, leading to fish escape and loss. Nutrient leaching and turbidity may deteriorate water quality.
- There is a higher risk of pathogen spread and fish disease outbreaks due to fluctuating temperature and water parameters.
- Elevated temperatures may reduce dissolved oxygen levels in ponds, causing fish stress or mortality.
- Ammonia concentration may rise, degrading water quality.

Advisories

- Strengthen pond embankments and install safety nets to prevent fish loss.
- Avoid overfeeding or applying fertilizers during heavy rain.
- Ensure clean water intake and stable temperature for broodstock.
- Protect juveniles and fingerlings from sudden water fluctuations.
- Regularly monitor pH, dissolved oxygen, turbidity and ammonia levels.
- Check aeration systems (paddle wheels, blowers) and keep them ready for use.
- Aerate ponds if Oxygen level drops.
- Keep aeration devices ready and apply lime if acidity rises.
- Increase water depth in ponds (by adding water) to reduce heat stress.
- Plant trees or install shading nets around ponds to reduce direct sunlight.
- Clean pond bottom and remove excess organic matter to avoid oxygen depletion.
- Stock fish at optimum density – avoid overcrowding to minimize oxygen competition.
- Prepare water quality management materials (lime, zeolite, probiotics) in advance.
- Schedule feeding for early morning or late evening; avoid feeding during midday.
- Inspect hatcheries for adequate cooling and water circulation systems.

Action Needed/ Responsible Org

DoF and MoFL

Annex

Division wise Climatology of Monthly Rainfall (mm)

Divisions	November	December	January
Dhaka	26	09	08
Chattogram	39	10	08
Sylhet	25	23	08
Mymensingh	14	08	09
Rangpur	06	05	09
Rajshahi	12	08	08
Khulna	29	07	12
Barishal	44	06	09

Division wise Climatology of Mean Temperature (°C)

Divisions	November	December	January
Dhaka	24	20	18
Chattogram	25	21	20
Sylhet	24	20	18
Mymensingh	24	20	18
Rangpur	23	19	17
Rajshahi	24	20	17
Khulna	24	20	18
Barishal	25	21	19

Interpretation of Climate Outlooks

In general, the climate outlooks are presented in two different ways. But first we need to explain Normal. Normal in climate terms is the Long Period Average (LPA) of the rainfall over a location using 30 years or more of rainfall data (measured at a station). The average is considered as the “Normal” rainfall for the region. And seasonal climate outlook is to estimate if the season will have more than Normal, less than Normal rainfall or equivalent to normal rainfall.

Forecast methods:

1. **Deterministic:** Deterministic forecast explains the percentage (%) departure from the Normal. If we expect 20% or less than Normal rainfall, we call it be Below Normal, if we expect 20% or more, we can it Above Normal and anything within the $\pm 20\%$ is called the Near Normal rainfall for the season.
2. **Probabilistic:** The probabilistic approach explains the possibility (chance) of a certain amount of rainfall happening. For example, what is the chance of the season to be Below normal, or Normal or above Normal. If we say 45% Below normal, 30 % Normal and 25 % Above Normal. There is highly likely chance for the season to be Normal to Below Normal with a combined (75%) chance.

Important Note

Below Normal rainfall does not indicate there will be no or less extreme rainfall events. There can be high intensity rainfall within short period of time followed by extended dry spells which may still sum up as Below Normal for the month. Users are advised to follow short and medium range forecast of BMD to keep track of extreme weather events.

A person is seen from behind, walking away on a sunlit path. They are carrying a large, heavy bundle of palm fronds or similar long, thin leaves on their back. The path is paved and has a white line marking. The background is filled with trees and foliage, with sunlight filtering through the leaves, creating a dappled light effect on the path. The overall atmosphere is peaceful and natural.

The Monsoon Forum is an established institutional mechanism between the Bangladesh Meteorological Department (BMD) and other mandated warning institutions in the country like the Flood Forecasting and Warning Center (FFWC), and their stakeholder sectoral institutions, for regular dialogue vis-à-vis generation and applications of user-driven multi-timescales, multi-hazard risk information. Through an iterative process that is built on the monsoon for ensuring sustainability, the Monsoon Forum provides opportunities for sectoral stakeholders to seasonally review their forecast-based, anticipatory preparedness plans and implementation thereof, and how these could be improved in subsequent season(s); and for BMD and FFWC to constantly evolve/tailor forecasts/warnings to suit user requirements.