

REPUBLIC OF LIBERIA MINISTRY OF TRANSPORT LIBERIA METEOROLOGICAL SERVICE (LMS)

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YOLUME N° 25 FIRST DEKA OF SEPTEMBER 2025

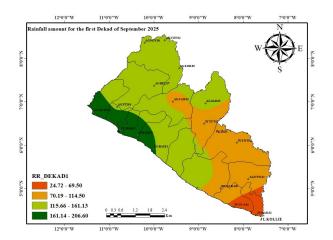
Summaries

- Rainfall Analysis
- ♦ Temperature Analysis
- ♦ Evapotranspiration
- ♦ Vegetative Condition
- ♦ Seasonal Forecast
- ♦ Farmer Advisory

Rainfall Analysis

The first ten days of September 2025 were characterized by moderate to heavy rainfall in the northern, southern, and southwestern parts of the country, represented in deep green and light green shades. In contrast, the southeastern and parts of the central region received less rainfall during the same period, as shown in red and orange colors. Nationwide, the rainfall amounts ranged from **24.72mm** to **206.60mm**, and soil moisture levels remained very high. Parts of Maryland, Grand Kru, and River Gee recorded the lowest rainfall, which may be linked to shifts in the movement of the ITCZ over the country (Figure 1).

When compared to the climatological mean (1991–2020) for the same period, the southeastern region received below-average rainfall, indicated in red, while the northern, northwestern, and southwestern regions experienced above-average rainfall. Historically, rainfall during this period typically ranges between **1.09mm** and **113.64mm** (Figure 2).



12-070°W 11-070°W 10-070°W 5-070°W 5-070°W 7-070°W 7-070°W 10-070°W 10-070°

Figure 1: Rainfall amount for the first DEKAD of September 2025

Figure 2: Cumulative rainfall in the first DEKAD of September 2025 compare to the normal (1991-2020)

Considering the seasonal rainfall from July 1, 2025, to September 10, 2025, total rainfall during this period ranged from **11.55 mm** to **1,100.00 mm**. The northwestern and southwestern regions recorded the highest rainfall, while the southeastern region experienced the lowest rainfall (Figure 3).

When compared to the climatological normal (1991–2020), the southeastern counties received below-average rainfall, whereas the northwestern and southwestern counties recorded above-average rainfall. The central region experienced near-normal to moderate rainfall (Figure 4).

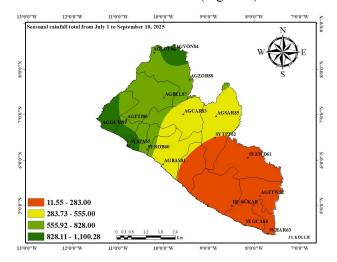


Figure 3: Seasonal rainfall total from July 1 to September 10, 2025

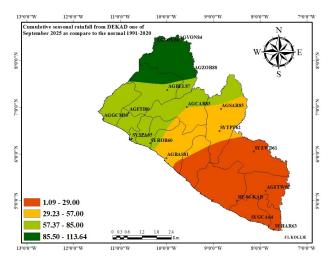


Figure 4: Cumulative seasonal rainfall from July 1 to September 10, 2025 compare to normal 1991-2020

Analysis of 2025 and 2024 dekad one of September

During the first ten days of September 2025, rainfall increased compared to the same period in 2024 (Figure 5). The total rainfall recorded during the first DEKAD of September 2025 was about **2,161.8mm**, whereas in 2024 it was **977.8mm** (Figure 5). From September 1-10, 2025, rainfall amounts ranged from **24.78mm** to **206.6mm**, while during the same period in 2024, the values ranged from **0.00mm** to **139.18 mm**. In 2025, the southwestern region received higher rainfall, while in 2024 the northern areas recorded the highest. The southeastern region consistently recorded lower amounts of rainfall (Figure 6).

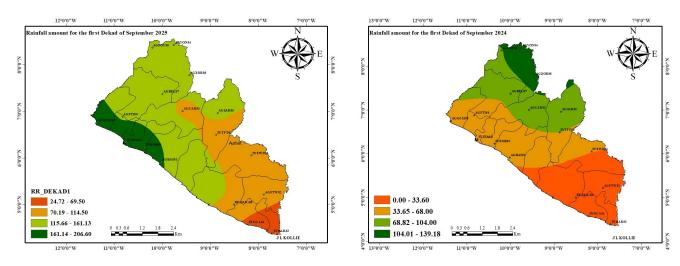


Figure 5: Rainfall amount for the first DEKAD of September 2025

Figure 6: Rainfall amount in the First DEKAD of September 2024

EVOLUTION OF TEMPERATURES

The first DEKAD of September 2025 was marked by a decrease in maximum temperatures across the country. Areas shaded in green indicate locations that recorded the lowest maximum temperatures, while those marked in red recorded the highest. During this period, average maximum temperatures ranged between 25.6°C and 26.8°C (Figure 7).

Compared to the long-term mean (1991–2020) for the same period, most parts of the country experienced a decrease in maximum temperature. The anomaly in maximum temperature ranged from **–1.6°C** to **–0.43°C** (Figure 8)

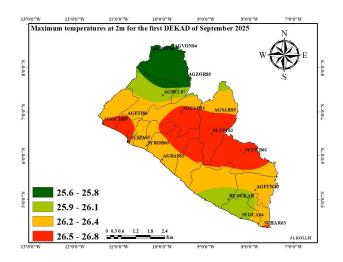


Figure 7: Maximum temperatures at 2m for the first DEKAD of September 2025

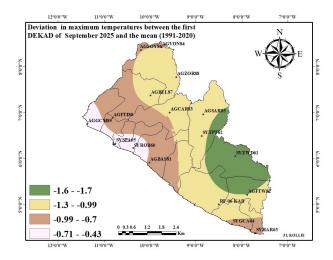


Figure 8: Deviation in maximum temperatures between the first DEKAD of September 2025 and the mean (1991-2020)

The first DEKAD of September 2025 were marked by variations in minimum temperatures. The southern (costal) region experienced highest values, while the northern and northwestern region experienced the lowest. Minimum temperature during this period ranged from 21.1°C to 25.3°C (figure 7).

Compared to the long-term mean (1991–2020) for the same period, maximum temperature increased in the costal region while the central, north and northwestern regions recorded the lowest. The differences ranged between –0.10°C and 1.1° C (figure 8)

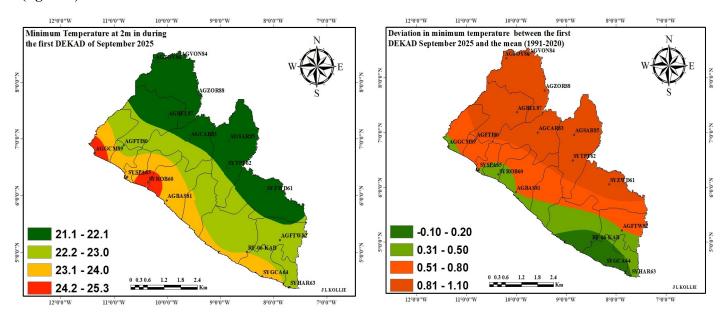


Figure 7: Minimum temperature at 2m in the first DEKAD of September 2025

Figure 8: Deviation of minimum temperature between the first DEKAD September 2025 and the average (1990-2020)

EVAPOTRANSPIRATION

During the first dekad of September 2025, most parts of the country experienced high evapotranspiration rates. The northern region recorded the highest rates, while the southern region experienced comparatively lower values (Figure 9).

Evapotranspiration rate during the first
DEKAD of September 2025

AGELS7

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Figure 9: ETO during the first dekad of Sept. 2025

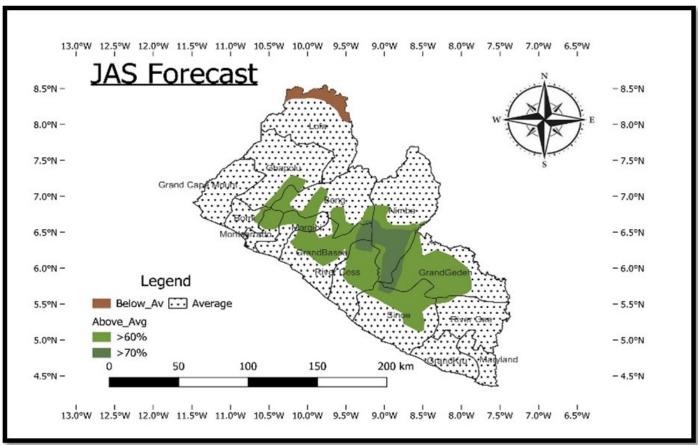
During the first DEKAD of September 2025, the north and the northwestern parts of the country were covered by dense vegetation. However, the southern region experienced less dense vegetation (Figure 10).



Figure 10: NDVI during the first DEKAD of Sept. 2025

FORECAST FOR JULY-AUGUST-SEPTEMBER (JAS) SEASON

During the period July, August and September Southeast of Gbarpolu, North east of Bomi, North of Montserrado, Margibi, Southwest and southeast Bong, Central and Northeast Grand Bassa, Central and southern Nimba, Central and North of Rivercess, North of Sinoe, Central and Western Grand Gedeh are expected to receive sixty percent (60%) above average rainfall while Southeast Bong, Northeast Grand Bassa, North Rivercess, Central and south Nimba, West Grand Gedeh and Northwest Sinoe are expected to receive seventy percent (70%) above average rainfall. All other areas are expected to receive average rainfall. However, Northern 'Lofa is expected to receive sixty percent (60%) below average rainfall.



Farmers Advisories

As rainfall is expected to increase and soils are already saturated, farmers are strongly encouraged to take the following precautions in their agricultural practices:

• Field Preparation:

- Properly prepare your fields to reduce the risk of flooding and minimize damage to crops.
- Consider creating drainage channels where possible to prevent waterlogging.

• Crop Management:

- Plant water-resistant or flood-tolerant crop varieties to reduce losses.
- Monitor crops regularly for signs of disease or stress caused by excess moisture.

• Livestock Management:

- Move animals to higher ground to avoid flooding and reduce the risk of waterborne diseases.
- Ensure animals are well-housed and maintain hygiene to prevent disease outbreaks.
- Regularly check livestock for symptoms of illness and provide prompt care when needed.

• General Precautions:

- Stay informed about weather updates through the Liberia Meteorological Service to anticipate sudden changes in weather conditions.
- Collaborate with local agricultural extension officers for region-specific advice on crop and livestock management.

By taking these proactive measures, farmers can protect their crops and livestock, reduce losses, and maintain productive agricultural practices during periods of heavy rainfall.

Average values of meteorological parameters for the first Dekad of September 2025

	Temperature at ten (10) meters			Precipitation	Humidity
Stations	Ave. Tx	Ave. Tn	Ave. Temp	Rainfall Sum	Ave. Hum.
AGBAS81	26.3	23.8	25.05	164.5	89.1
AGBEL87	26	21.8	23.03	119.9	92.1
AGCAR83	26.7	22	24.35	110.5	92
AGFOY86	25.6	21.2	23.4	144.4	91
AGFTI80	26.5	22.6	24.55	154.8	93.3
AGFTW82	26.2	22.3	24.25	93	90.6
AGGCM89	26.5	25.3	25.9	183.6	85.9
AGSAR85	26.5	21.8	24.15	121.3	91.8
AGVON84	25.6	21.2	23.4	143.4	91.4
AGZOR88	25.6	21.2	23.4	132.6	91.7
RF-06-KAB	26	23.2	24.6	109	88.4
SYGCA64	26	23.7	24.85	55.6	86.4
SYHAR63	26.5	23.1	24.8	24.6	86.8
SYROB60	26.3	25.2	25.75	191.6	85.3
SYSPA65	26.5	23.7	25.1	206.6	90.1
SYTPT62	26.8	22	24.4	105	91.6
SYZWD61	26.8	21.8	24.3	101.4	91.9

LIBERIA METEOROLOGICAL SERVICE

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Motto: Weather is everybody business

The Liberia Meteorological Service (LMS) is responsible for providing meteorological services to support the social and economic progress of Liberia, ensure the safety and well-being of its population, and fulfil its international obligations.

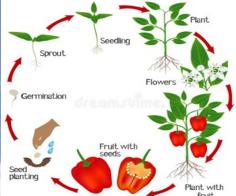
It was created by an Act of Legislation in April 1972 and was placed under the Ministry of Transport. Prior to that, it was under the Ministry of Commerce, Industry and Transportation.



Hot pepper



MET. Observation



Phenology of pepper