REPUBLIC OF LIBERIA
MINISTRY OF TRANSPORT
DIVISION OF METEOROLOGY
LIBERIA METEOROLOGICAL SERVICE (LMS)
Contact us: +231886565078/+231776679045

Email: meteoliberia.transport@yahoo.com/website: https://meteoliberia.com

VOLUME N° 09: FIRST DEKAD OF MAY 2026






Summaries

- **RAINFALL ANALYSIS**
- **TEMPERATURE ANALYSIS**
- **POTENTIAL EVAPOTRANSPIRATION**
- **LIVELIHOOD COMFORTABILITY INDEX**
- **VEGETATIVE CONDITION**
- **MONTHLY CLIMATE OUTLOOK**
- **FARMER ADVISORY**

AGROMETEOROLOGICAL CONDITION

Rainfall during the first Dekad of MAY 2026: The first Dekad of May 2026 was characterized by an increase in rainfall amounts across the country. Nationwide, rainfall totals ranged from **38.0mm** to **91.5mm**, with the south-central part of River Gee, eastern Sinoe, and southwestern Grand Cape Mount County experiencing the highest rainfall amounts during this period. The southern, central, and northern parts of the country experienced moderate rainfall, while the western region and parts of the south recorded the lowest rainfall amounts during the period (figure 1).

Normal rainfall (1990-2020): As compare to the rainfall normal, most parts of country experienced normal rainfall situation while the western region experienced normal rainfall condition (figure 2).

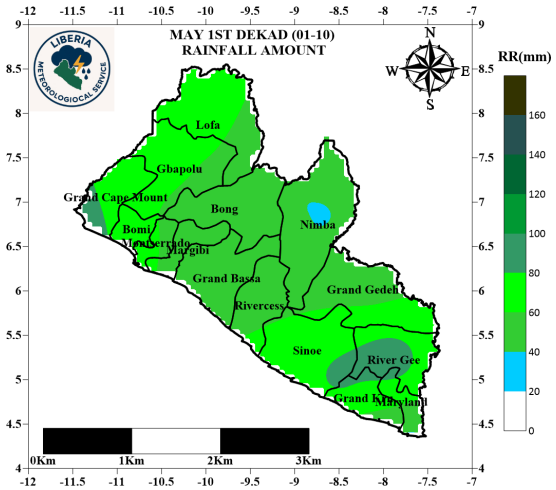


Figure 1: Rainfall Amount

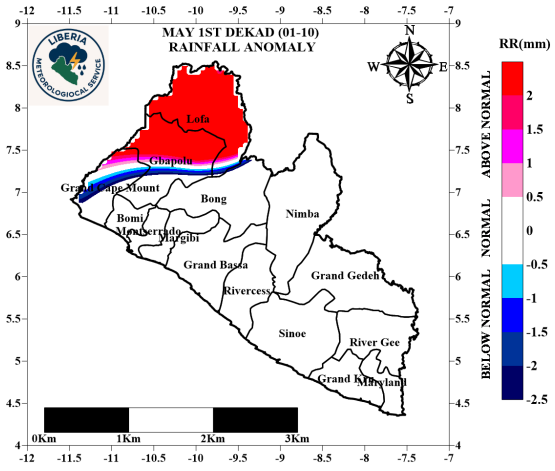


Figure 2: Rainfall Normal (1990-2020)

Number of rainy days during the first Dekad of May 2026: During the first **Dekad** of May 2026, most parts of the country received rainfall between four to nine days. However, Lofa and north of Gbapolu county recorded the highest number of rainy days while Nimba and northwest of Grand Gedeh county experienced less rainy days (figure 3).

Soil Moisture Index (SMI) during the first Dekad of MAY 2026: The first DEKAD of MAY 2026 shows a steady increase in soil moistures content across the country. Most part of the country experienced above normal moisture content in the soil. However, South, central of Rivergee, east of Sinoe, west of Grand Kru and southwest of Grand Cape Mount and south of Montserrado observed high increased in moisture content in the soil. Nimba, Northwest of Grand Gedeh and east of Bong experienced normal moisture content in the soil (figure 4).

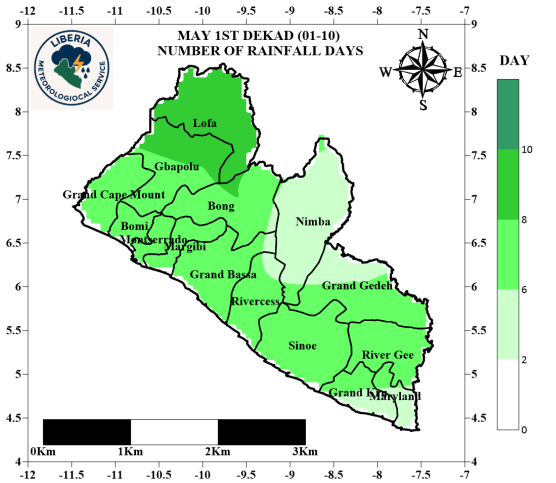


Figure 3: Number of rainy days

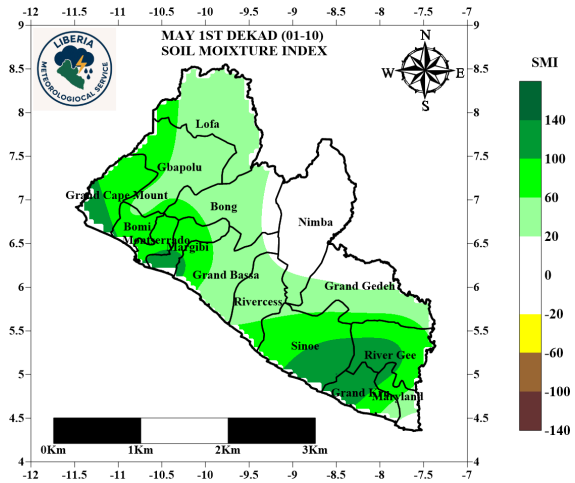


Figure 4: Soil Moisture Index

EVOLUTION OF TEMPERATURES

Maximum Temperature: The first dekad of May 2026 was marked by an increase in maximum temperature across the country. The northwestern region experienced relatively low maximum temperature. However, parts of Lofa and Gbapolu recorded the lowest maximum temperature. During this period, maximum temperature ranged between **28.8°C** and **31.2°C** (Figure 6).

Compared to the long-term mean (1990–2020), Gbapolu, south of Lofa northeast Grand Cape Mount and extreme north of Bomi was cooler than normal while the southeast and part of Grand Bassa and Margibi counties experienced warmer condition than normal. Nevertheless, the rest of the counties experienced normal condition during this period (Figure 7).

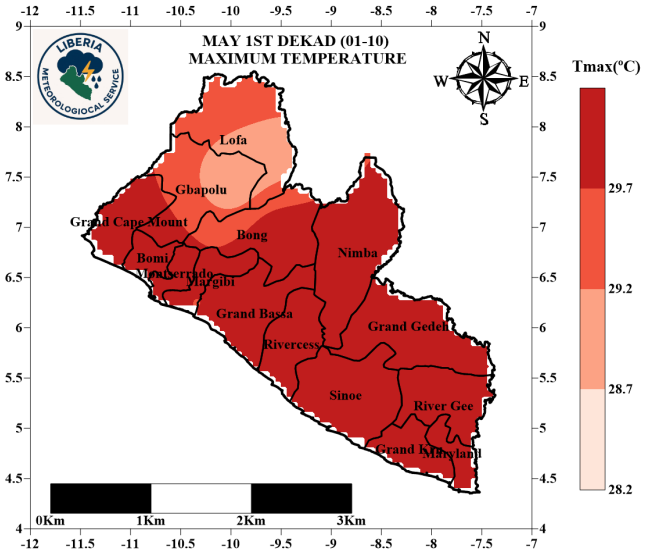


Figure 5: Maximum temperatures at 2m

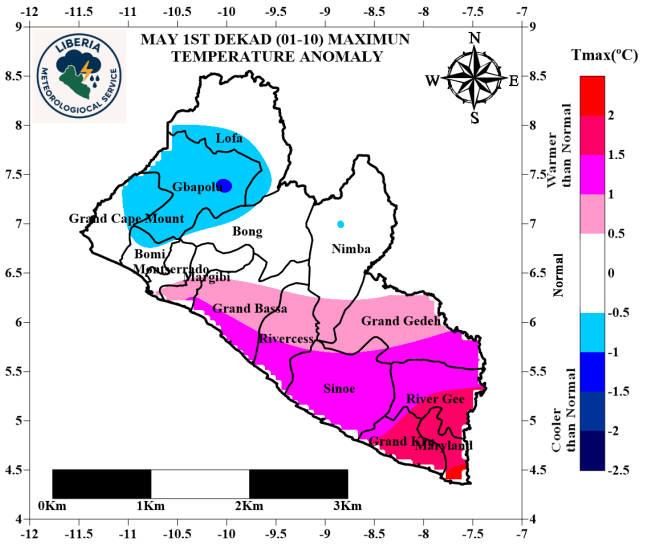


Figure 6: Maximum Temperature Anomaly (1991-2020)

Minimum Temperature: The first Dekad of May 2026 was marked by variation in minimum temperature. Some parts of the coastal counties experienced high minimum temperature, while the north of Lofa, Nimba and extreme north of Bong county experienced the lowest. Minimum temperature during this period ranged from **22.7°C** to **27.2°C** (figure 7).

Compared to the long-term mean (1990–2020), Lofa, Gbapolu, Bong, north of Grand Cape Mount, north of Margibi, west of Grand Bassa and Grand Gedeh experienced warmer condition than normal while the other parts of the country experienced normal condition (figure 8).

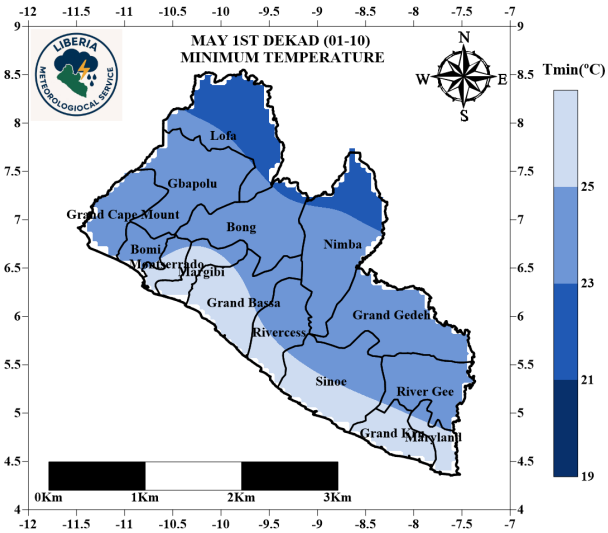


Figure 7: Minimum Temperature at 2m

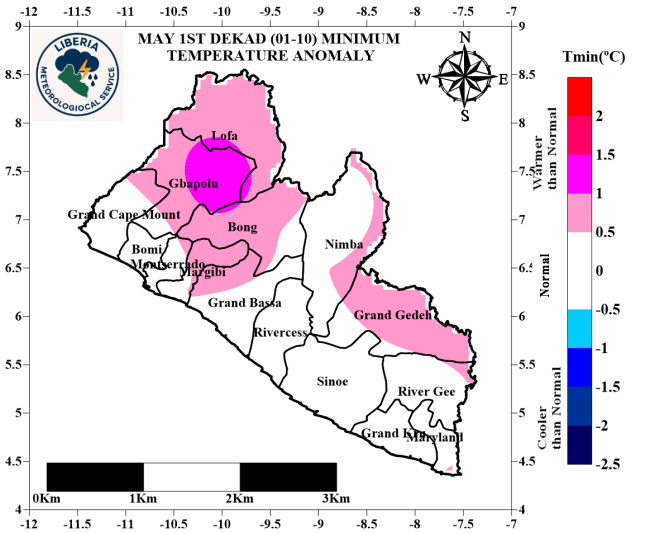


Figure 8: Minimum Temperature Anomaly (1991-2020)

POTENTIAL EVAPOTRANSPIRATION

During the first Dekad of May 2026, most parts of the Country experienced intense sunshine with high evapotranspiration rates. However, west of Montserrado, south of Margibi and Grand Kru, west of Grand Bassa county experienced lowest evapotranspiration rate while counties in the north and western regions experienced high evapotranspiration rate (Figure 9).

Livestock Comfortability Index (LCI): During the first Dekad of May 2026, livestock experienced moderate thermal stress due to rising daytime temperature, moderate humidity, and reduced wind speed. Animals show moderate discomfort and reduced feeding during peak afternoon hours, but no major health risk are anticipated with proper shade and hydration (Figure 10).

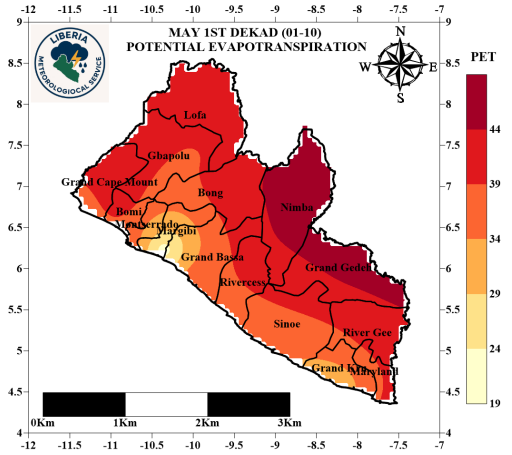


Figure 9: First DEKAD Potential Evapotranspiration

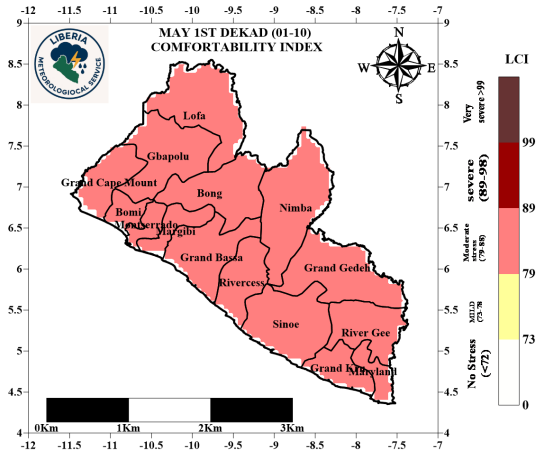


Figure 10: First DEKAD Livestock Comfortability Index

Normalized difference Vegetation Index (NDVI): During the first Dekad of May , vegetation is gradually becoming dense. The coastal region experienced moderate increase in vegetation while the northern region experienced less dense vegetation during this period (Figure 10).

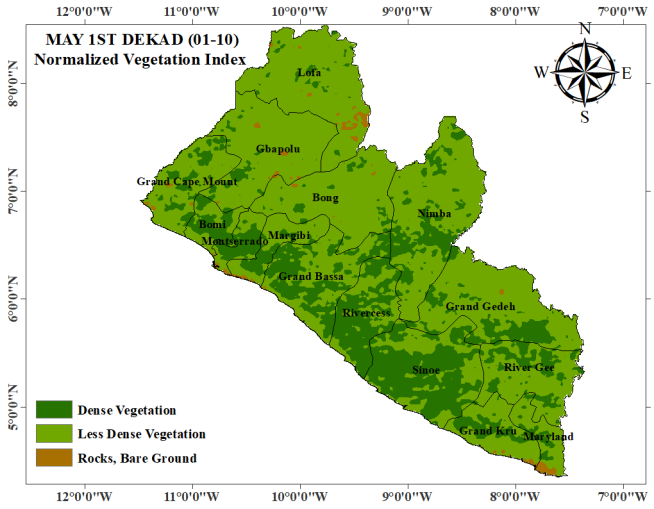


Figure 11: First DEKAD NDVI

FORECAST FOR THE MONTH OF MAY 2026

RAINFALL: In May 2026, the forecasted cumulative rainfall amount across all counties is anticipated to be between 181.9mm and 388.7mm. The coastal region is anticipated to record the highest rainfall amount. The central region is anticipated to record rainfall amount between 220-270mm during the period under review. Nevertheless, the north of the country is predicted to experience low rainfall between 170-220.0mm during the period under review (figure 11).

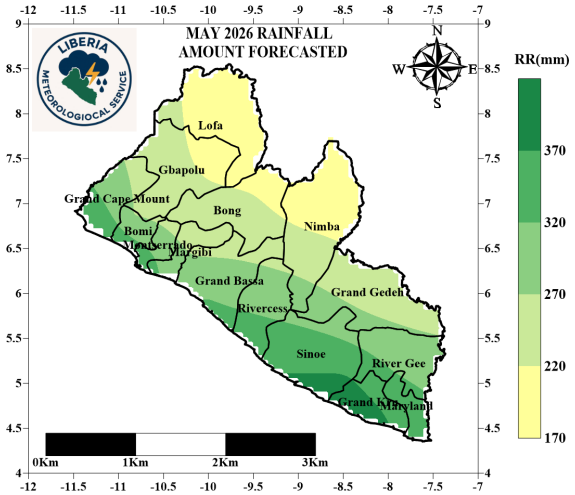


Figure 12: Rain forecasts for May 2026

FORECAST FOR THE MONTH OF MAY 2026

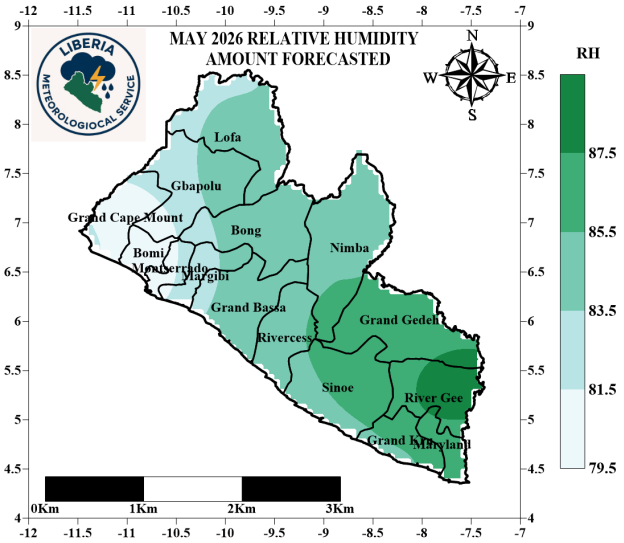


Figure 13: RH forecasts for May 2026

Relative Humidity (RH): During the month of May high relative humidity is predicted in the southeast region affecting Rivergee, Grand Gedeh, Sinoe, Maryland and Grand Kru counties. The western region is expected to receive low relative humidity. However, the central region is predicted to experience moderate relative during this period. Average relative humidity within the month of May 2026 is predicted to range from 79.9% to 86.5% (figure 13).

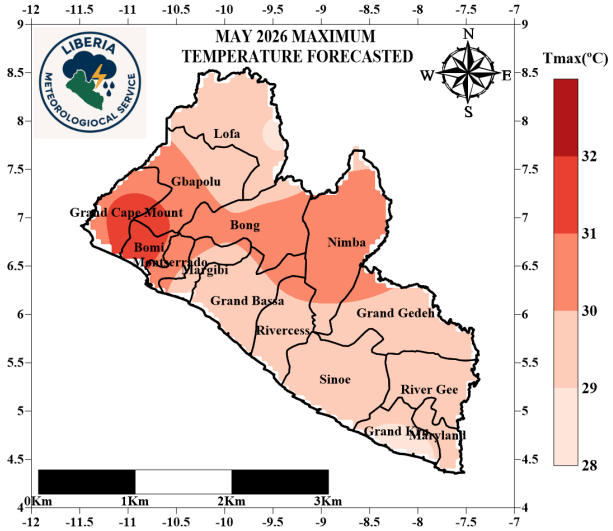


Figure 14: Tmax forecasts for May 2026

Maximum Temperature: The maximum temperature in May 2026 is anticipated to range between 28.8°C to 31.7°C across the Country. High temperature is expected in G. Cape Mount, Bomi, Montrerrado, parts of Gbapolu, Bong and Nimba counties. Other parts of the Country is anticipated to receive moderate temperature (figure 14).

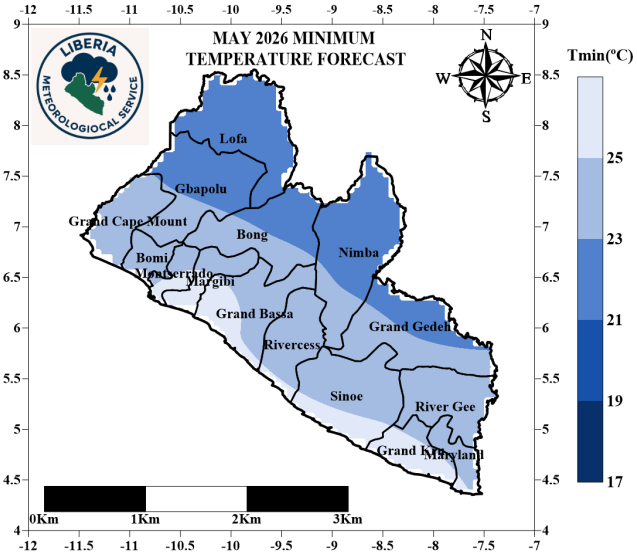


Figure 15: Tmin forecasts for May 2026

Minimum Temperature: Minimum temperature across the country in May 2026 is anticipated to range between 21.6°C and 26.7°C. The highest minimum temperature is anticipated to occur along the coastal region which includes: Maryland, Grand Kru, Sinoe, Rivercess, Grand Bassa, Margibi and Montserrado while the lowest minimum temperature is expected in Lofa and parts of Nimba, Bong, Gbapolu and Grand Gedeh counties (Figure 15).

Farmers Advisories

- As rainfall has gradually commenced, vegetation is becoming denser, and rainfall is predicted to moderately increase in the coming dekads of May. Additionally, soil moisture is gradually improving. Farmers are therefore strongly encouraged to take the following precautions in their agricultural practices:
- **Field Preparation:**

  Move to upland areas for their vegetable and rice production; this will help reduce the risk of damage and maximize yields for farmers across the country.

  Create drainage channels in low land where possible to prevent waterlogging in case of heavy rainfall.

  Farmers are advised to properly lay out their fields for rice production during the coming season.

  Farmers are also advised to begin preparing upland areas for rice and other crops ahead of the upcoming cropping season.
- **Crop Management:**

  Plant drought- or water-tolerant crop varieties to reduce the risk of losses.

  Monitor crops regularly for signs of disease or stress caused by high evapotranspiration.

  Irrigate when high evaporation and evapotranspiration are observed.
- **Livestock Management:**

  Move animals to upland areas to avoid being affected by heavy rainfall.

  Ensure animals are properly housed and maintain good hygiene to prevent disease outbreaks.

  Provide clean drinking water regularly to prevent dehydration and heat stress.

  Check livestock frequently for symptoms of illness and provide timely treatment when needed.

- **General Precautions:**

  Stay informed about weather updates through the Liberia Meteorological Service website (https://meteoliberia.com).

  Work closely 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 increased rainfall.

Average values of meteorological parameters for the first DEKAD of MAY 2026

Stations	Temperature at two (2) meters			Precipitation	Humidity
	Ave. Tx	Ave. Tn	Ave. Temp	Rainfall Sum	Ave. Hum.
AGBAS81	30.7	25.5	28.1	52.6	83.32
AGBEL87	28.8	24.0	26.4	59	89.91
AGCAR83	30.1	23.4	26.8	58.3	88.53
AGFOY86	29.6	22.7	26.2	68.8	87.28
AGFTI80	30.2	23.8	27.0	63.5	88.73
AGFTW82	30.8	24.3	27.5	91.5	84.56
AGGCM89	30.7	25.1	27.9	90.2	85.78
AGSAR85	30.1	23.2	26.7	39.6	88.09
AGVON84	29.6	22.7	26.2	63.2	87.28
AGZOR88	28.9	22.3	25.6	56.8	89.10
RF-06-KAB	30.4	25.3	27.9	84.4	81.42
SYGCA64	30.2	26.2	28.2	56.9	80.45
SYHAR63	31.2	25.7	28.4	38	80.12
SYROB60	29.6	27.2	28.4	48	79.84
SYSPA65	30.8	25.3	28.0	73.7	84.14
SYTPT62	30.4	23.4	26.9	41.4	87.31
SYZWD61	30.7	23.5	27.1	48.9	84.91

LIBERIA METEOROLOGICAL SERVICE

Ministry of Transport

Corner of Carey and Warren Streets
Monrovia, Liberia

Phone: +231777285950/+231776679045
Email: meteoliberia.transport@yahoo.com

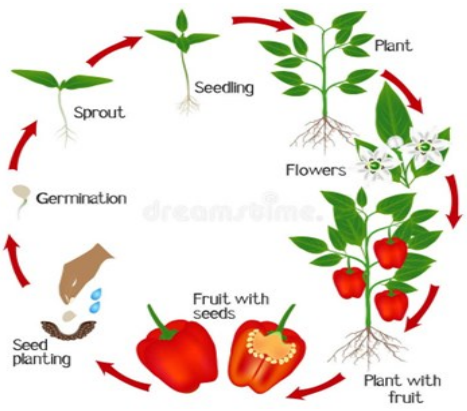
Motto: Weather is everybody's business

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 May 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