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° 34:FIRST DEKA OF DECEMBER 2025






Summaries

- Rainfall Analysis
- Temperature Analysis
- Potential Evapotranspiration
- Livelihood Comfortability Index
- Vegetative Condition
- Monthly Forecast
- Farmer Advisory

AGROMETEOROLOGICAL CONDITION

Rainfall during the first Dakad of December 2025: The first DEKAD of December 2025 were characterized by moderate rainfall in Maryland, Grand Kru and some part of Sinoe and River Gee counties. The north and central part of the country recorded low rainfall. Additionally, some counties in the costal region recorded moderate rainfall during this period as shown in blue. Nationwide, rainfall amounts ranged from **8.4mm** to **70.7mm** (Figure 1).

Normal rainfall (1990-2020): As compare to the normal rainfall Lofa and the costal region recorded above normal rainfall as shown in red. However, Grand Cape Mount and part of Gbapolu, Bong and Nimba counties recorded normal rainfall as show in white (figure 2).

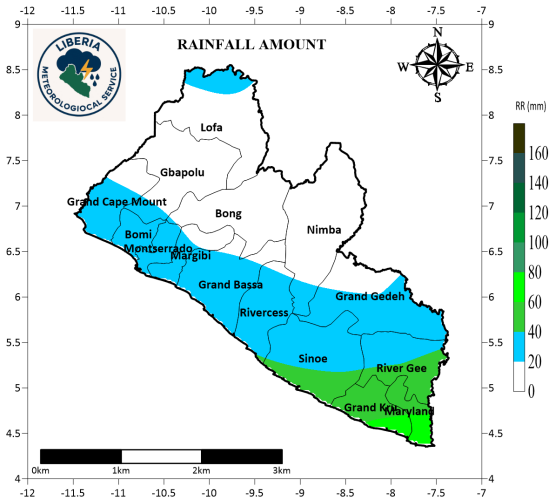


Figure 1: Rainfall amount during the first DEKAD of December 2025

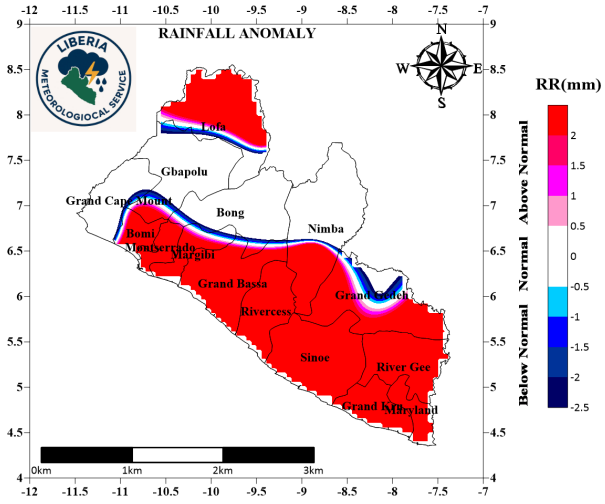


Figure 2: Rainfall Normal considering 1990-2020

Number of rainfall days during the first DEKAD of December 2025: During the first DEKAD of December 2025, most parts of the country received rainfall between two to six days. However, Maryland and Grand Kru counties recorded the highest rainfall days (figure 3).

Soil Moisture Index (SMI) during the first DEKAD of December 2025: The first DEKAD of December 2025 shows that costal counties such as Maryland, Grand Kru, River Gee and Sinoe has above normal moisture content in the soil. Additionally, north and northwest parts of the country observed below normal moisture content in the soil as shown in yellow and brown. The rest of the counties experienced normal soil moisture content in the soil (figure 4).

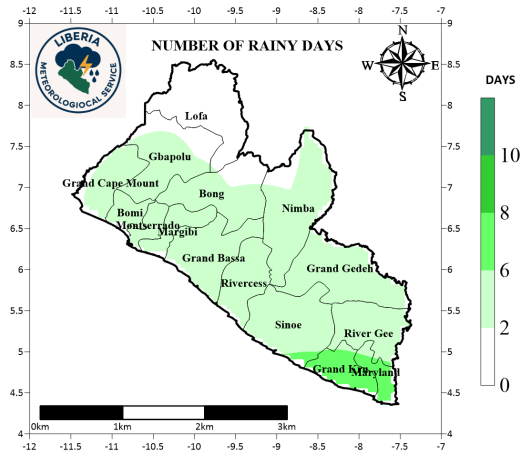


Figure 3: Number of rainfall days

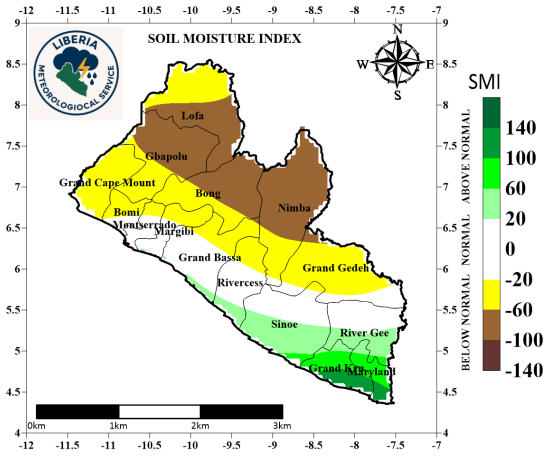


Figure 4: Soil Moisture Index

EVOLUTION OF TEMPERATURES

Maximum Temperature: The first DEKAD of December 2025 was marked by a increase in maximum temperatures across the country. Areas shaded in deep red indicate locations that recorded the highest maximum temperatures, while Lofa and Grand Kru recorded the lowest. Maximum temperatures ranged between **27.7°C** and **29.6°C** (Figure 6).

Compared to the long-term mean (1990–2020), all parts of the countries experienced normal maximum temperature anomaly (Figure 7).

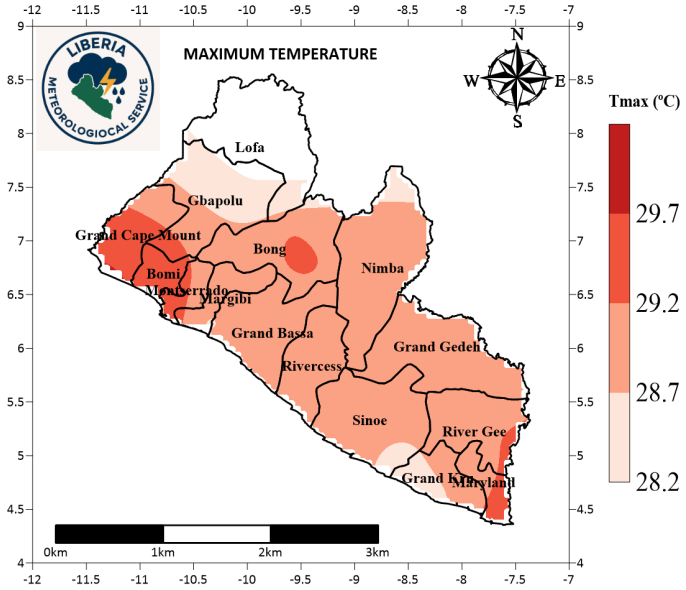


Figure 5: Maximum temperatures at 2m

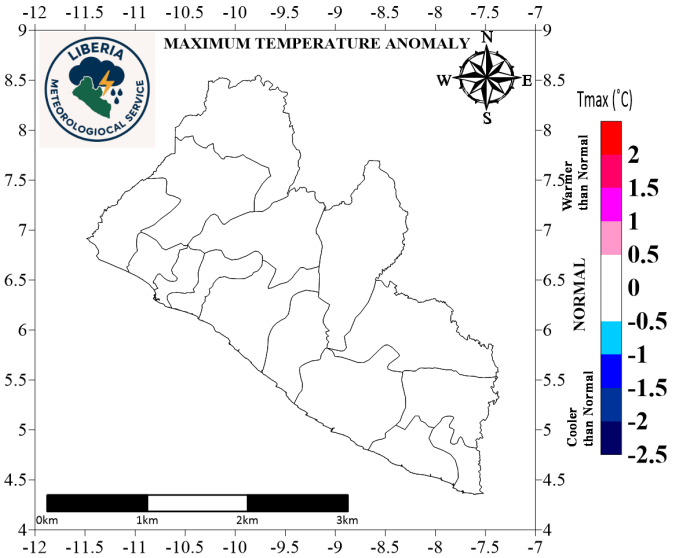


Figure 6: Maximum Temperature Normal considering (1991-2020)

Minimum Temperature: The first DEKAD of November 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 **18.3°C** to **25.2°C** (figure 7).

Compared to the long-term mean (1990–2020), Gbapolu and part of Lofa, Grand Cape Mount, Montserrado Margibi and Bong experienced an increase in minimum temperature while the other parts of Country experienced normal condition (figure 8).

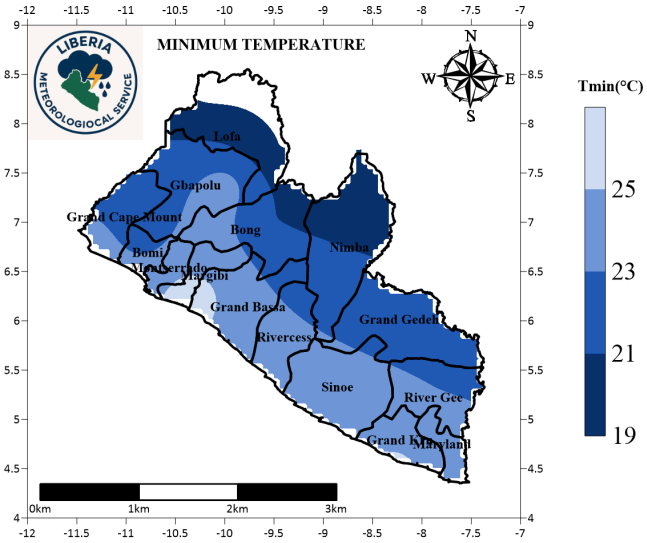


Figure 7: Minimum temperatures at 2m during the first DEKAD of November 2025

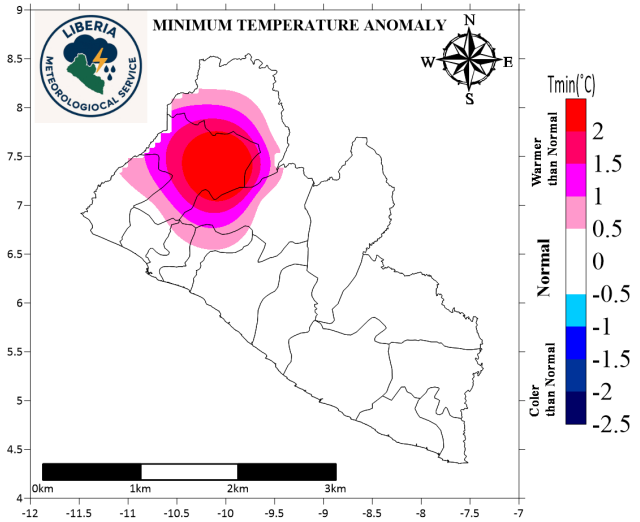


Figure 8: Minimum Temperature Normal considering (1991-2020)

POTENTIAL EVAPOTRANSPIRATION

During the first DEKAD of December 2025, the north and northwest parts of the country experienced high evapotranspiration rates. The central region experienced moderate evapotranspiration rate while the costal region experienced low evapotranspiration rates (Figure 9).

Livestock Comfortability Index (LCI): During the first DEKAD of December 2025, livestock experienced mild thermal stress due to rising daytime temperatures, moderate humidity, and reduced wind speeds. Animals shows slight discomfort and reduced feeding during peak afternoon hours, but no major health risks are anticipated with proper shade and hydration (Figure 10).

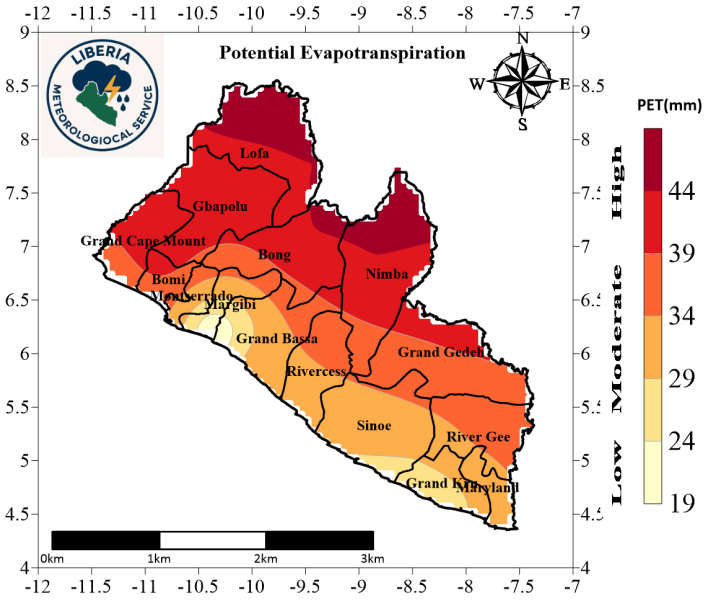


Figure 9: DEKAD one Potential Evapotranspiration

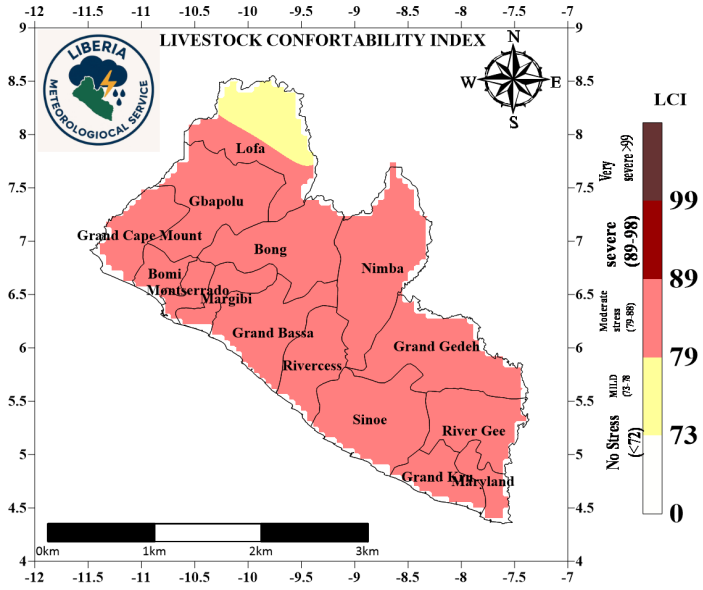


Figure 10: DEKAD one Livestock Comfortability Index

Normalized difference Vegetation Index (NDVI): During the first DEKAD of December 2025, the south and the southwestern part of the country were covered by dense vegetation. However, the southern region experienced less dense vegetation (Figure 10)

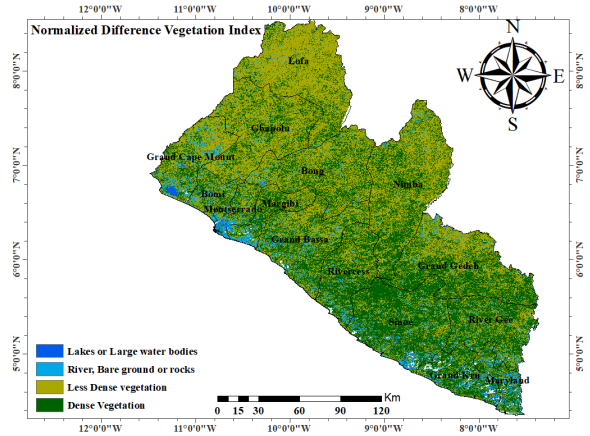


Figure 11: NDVI

FORECAST FOR THE MONTH OF DECEMBER 2025

RAINFALL: In December 2025, the forecasted cumulative rainfall amount across the counties is anticipated to be between 25.3 mm and 119.4 mm. The south-east coastal counties are expected to record rainfall amounts between 60.0 mm and 110.0mm. Rainfall amounts of below 60.0 mm are predicted over the northern counties figure 11.

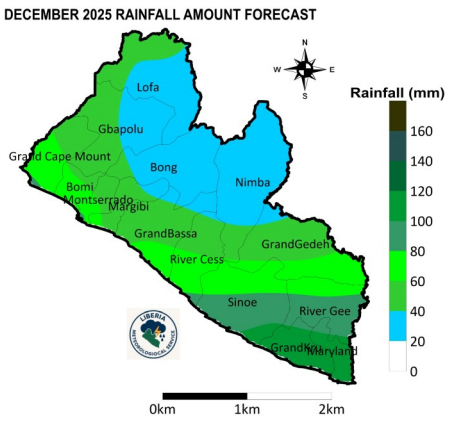


Figure 12: Rain forecasts for December 2025

FORECAST FOR THE MONTH OF DECEMBER 2025

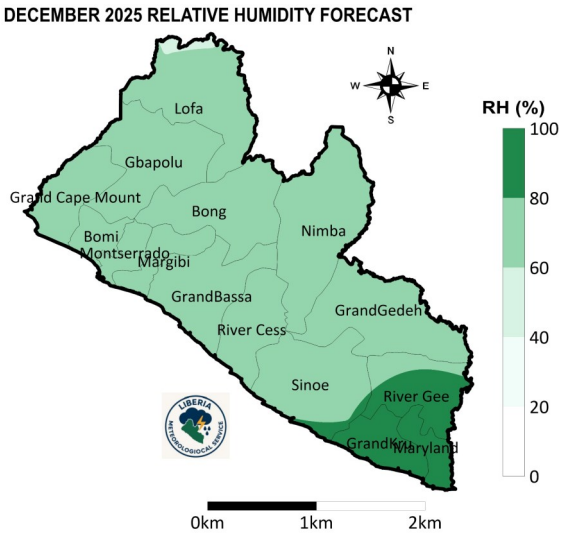


Figure 13: Relative humidity forecasts for December 2025

Relative Humidity: Relative humidity across Liberia for December 2025 is predicted to range from 69% to 83%, as shown in Figure 12. The highest range of values (80–83%) is expected in the southern counties. The extreme north is expected to record the lowest relative humidity, 69% while the rest of the country is expected to record a range of 70% to 80%.

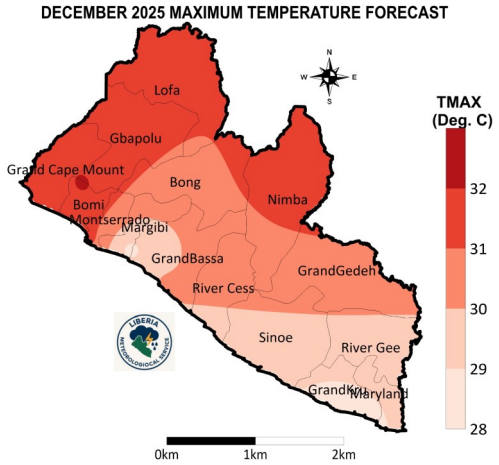


Figure 14: Tmax forecasts for December 2025

Maximum Temperature: The maximum temperature in December 2025 is anticipated to be 28.6°C to 32.1°C across the counties. The lowest and highest maximum daytime temperatures of 28.6°C and 32.1°C are predicted over Margibi and Grand Cape Mount counties (figure 13).

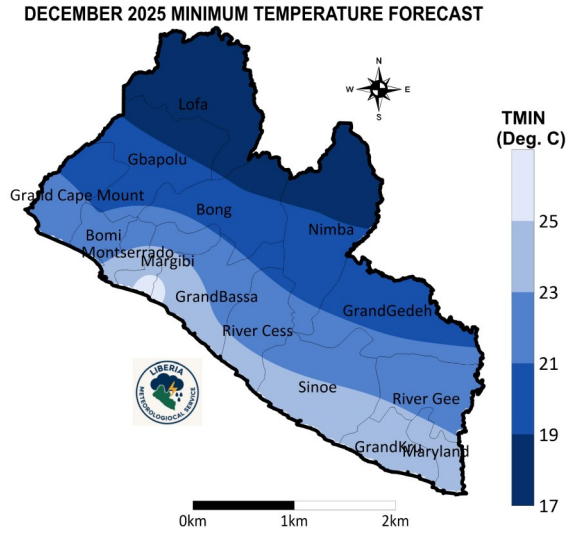


Figure 15: Tmin forecasts for December 2025

Minimum Temperature: Nighttime temperatures across the country in December 2025 are anticipated to range between 17.4°C and 25.9°C. The lowest nighttime temperature range of 17.4°C to 19.0°C is anticipated in Lofa, parts of Gbapolu, Bong and Nimba counties, while the highest nighttime temperature of 25.9°C is expected over parts of Margibi County (Figure 14).

Farmers Advisories

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

- **Field Preparation:**
  Properly prepare fields to reduce the risk of flooding and minimize potential crop damage.
  Create drainage channels where possible to prevent waterlogging.

- **Crop Management:**
  Plant water-resistant or flood-tolerant crop varieties to reduce the risk of losses.
  Monitor crops regularly for signs of disease or stress caused by excess moisture.
  Irrigate only when you observe reduced soil moisture, and avoid overwatering during wet periods

- **Livestock Management:**
  Move animals to higher ground to avoid flooding and reduce the risk of waterborne diseases.
  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.
  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 December 2025

Stations	Temperature at ten (10) meters			Precipitation	Humidity
	Ave. Tx	Ave. Tn	Ave. Temp	Rainfall Sum	Ave. Hum.
AGBAS81	29.1	24.3	26.7	37.5	83.1
AGBEL87	28.4	24.0	26.2	11.9	82.0
AGCAR83	29.3	21.2	25.3	11.9	85.3
AGFOY86	27.8	18.3	23.1	20.2	74.8
AGFTI80	29.5	22.0	25.8	23.2	86.1
AGFTW82	29.1	23.2	26.2	41.5	87.0
AGGCM89	29.7	24.1	26.9	23	82.7
AGSAR85	29.1	20.6	24.9	8.4	85.6
AGVON84	27.8	18.3	23.1	22.1	74.8
AGZOR88	27.8	19.0	23.4	14.8	74.3
RF-06-KAB	28.6	24.4	26.5	44.2	88.3
SYGCA64	28.6	25.2	26.9	62.5	82.4
SYHAR63	29.4	24.3	26.9	70.7	84.0
SYROB60	28.6	26.4	27.5	21.8	78.0
SYSPA65	29.6	24.2	26.9	39.4	83.0
SYTPT62	29.0	21.6	25.3	13.3	87.2
SYZWD61	28.9	21.9	25.4	19.5	87.5

LIBERIA METEOROLOGICAL SERVICE

Ministry of Transport

Corner of Carey and Warren Streets
Monrovia, Liberia

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

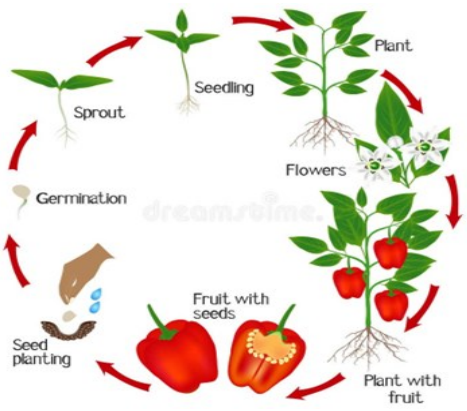
Motto: Weather is everybody business

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