



AFRICAN DEVELOPMENT  
BANK GROUP

**Republic of Liberia**

**ENVIRONMENTAL PROTECTION AGENCY  
Monrovia, Liberia**

**(CONSULTING SERVICES)**

**NAME OF PROJECT: ENHANCING CLIMATE INFORMATION SYSTEMS FOR  
RESILIENT DEVELOPMENT (LIBERIA CIS PROJECT)**

Assignment Title: **Consultancy for International Consultants to Develop and  
Operationalize an Automated Decision Management System for Climate Services**

Financing Agreement reference:  
Project ID No: SAP018  
Reference No. EPA/CIS/ICS/2025/004  
Issue Date: **Monday, April 6, 2026**  
End Date: **Monday, April 13, 2026**

## **1. Background**

The Environmental Protection Agency (EPA) in Liberia was created by an act of the Legislature on November 26, 2002, and published as a handbill on April 30, 2003, to ensure sound environmental management and sustainable use of natural resources. The EPA functions to ensure long-term economic prosperity through sustainable development and establish a legal framework for environmental management.

The EPA received funding from the Green Climate Fund to implement a five-year project called "Enhancing Climate Information Systems for Resilient Development in Liberia" (the Liberia CIS Project).

The Liberia CIS Project is a US\$11,431,969 GCF, AFDB, and GOL-funded project that aims to increase the resilience of Liberia's population and infrastructure to climate change. In particular, the project will strengthen the country's adaptive capacities to integrate better long-term climate risk reduction and adaptation measures in national planning and development through the development of a well-functioning Multi-Hazard Impact-Based Forecasting and Early Warning System (MH-IBF-EWS).

The implementation of the project will entail training and equipping the existing Liberia Meteorological Service (LMS), Liberia Hydrological Service (LHS), Environment Protection Agency (EPA) and National Disaster Management Agency (NDMA) to collect weather and climate data; introduce and maintain modelling, forecast weather events and

provide early warnings systems; and scale-up evidence-based climate-informed decision-making, planning, and response actions Countrywide. The objective of the project is to strengthen Liberia's climate-related observation and monitoring capabilities, early warning and early action systems, and other environment-related information systems. The objective seeks to drive a paradigm shift towards evidence-based climate-informed decision-making, planning, and response by integrating green growth, environmental resilience, and adaptation into national development planning through effective climate information systems in Liberia.

## **2. Purpose of the Consultancy**

The main objective of the consultants is to develop and operationalize an Automated Decision Management System (ADMS) to support the Liberia Climate Information System (CIS) Project, funded under the Green Climate Fund SAP018 initiative. The ADMS will strengthen Liberia's capacity for climate-informed, evidence-based decision-making, planning, and climate risk reduction. It will integrate diverse climate data sources such as satellite imagery, meteorological and hydrological observations, and historical climate trends into a centralized platform. Through predictive analytics and decision-support tools, the system will generate timely and localized climate information for key sectors including agriculture, water, health, and infrastructure. It will also support monitoring, evaluation, and reporting (M&E) of the CIS project outcomes, ensuring compliance with GCF's results-based framework. Ultimately, the consultancy will contribute to Liberia's long-term climate resilience by promoting adaptive planning and institutionalizing a data-driven, technology-enabled system that improves national coordination and governance for climate services and early warning in Liberia.

## **3. The Scope of the Services to be performed**

The consultant will work closely with EPA through the PIU and also have the opportunity to consult with the relevant agencies and ministries (e.g., LMS, LHS, NDMA, sector ministries etc.) to gather the relevant information needed to perform the assessment as stated below.

### **A. Needs Assessment**

- Conduct in-depth stakeholder consultation process, targeting national agencies including the EPA, LMS, LHS, and NDMA to identify critical information needs, user profiles, and decision-making workflows related to climate risk management.
- Conduct a comprehensive mapping of available climate data sources including satellite imagery, hydrometeorological records, and early warning inputs
- Assess and identify users' specific needs while exploring various data sources available for integration.
- Develop detailed technical specifications for the Automated Decision Management System (ADMS) to ensure it effectively meets the identified requirements.

## **B. System Design and Development**

- Design and develop a cloud-based ADMS using artificial intelligence (AI) and machine learning (ML) algorithms.
- Forecast climate variability and generate actionable alerts for disaster risks such as floods, droughts, and extreme weather events and interoperable with national databases and regional climate networks, incorporating data from meteorological stations, satellite sources, and hydrological models.
- Develop a user-centric to facilitate integration with other decision-support platforms, ensuring broad usability.
- Provide analytical tools to assess climate-related impacts on agriculture, water resources, infrastructure, and other key sectors, thus supporting adaptive planning and investment decisions.

## **C. System Deployment & Operationalization**

- Launch a Minimum Viable Product (MVP) in selected pilot counties to validate system performance and gather user feedback.
- Test the effectiveness of the forecasting, analytics, and alert dissemination features under real conditions.
- Following pilot success, a full-scale national rollout should be conducted, expanding system access to all 15 counties.
- Oversee secure cloud/server hosting arrangements and implement robust cybersecurity protocols to ensure data integrity, privacy, and resilience against cyber threats.

## **D. Capacity Building and Knowledge Transfer**

- Conduct a comprehensive training programs for technical staff from EPA, LMS, LHS, NDMA, and key partners, focusing on system operation, maintenance, and data interpretation.
- Develop a suite of user manuals, standard operating procedures (SOPs), and technical documentation to support long-term institutional ownership.

### **Minimum Qualification, Skills, and Experience:**

The completion of this work dependent on an Individual. The selected person should have a minimum of a Master's degree in Computer Science, Environmental Informatics, Meteorology, Hydrology, Data Science, or a related field, with preference given to candidates with a PhD or additional certifications in AI/ML applications, climate analytics, or geospatial technologies. The successful Individual should have at least 10 years of

cumulative working experience in designing and implementing climate information platforms, particularly in developing countries or climate-vulnerable regions.

Also, the individual should have the following technical skills:

- a) Climate modeling and forecasting systems;
- b) Artificial Intelligence (AI) and Machine Learning (ML) for predictive analytics;
- c) Cloud-based systems development and system architecture design;
- d) API development and systems interoperability protocols;
- e) Geospatial data integration and visualization tools (e.g., QGIS, ArcGIS, Google Earth Engine);
- f) Cybersecurity and data protection compliance frameworks;
- g) Strong command of programming languages such as Python, R, Java, and SQL for data engineering.

Professionalism: the ability to make ad-hoc changes as and when the need arises; the ability to perform under stress; and the willingness to keep flexible working hours.

<b>Duty Station:</b>	<b>Monrovia</b>
<b>Start Date:</b>	<b>Monday, April 20, 2026</b>
<b>End Date:</b>	<b>Monday, July 10, 2026</b>
<b>Duration of Assignment:</b>	<b>16 Weeks</b>

The Environmental Protection Agency (EPA) now invites eligible individual consultants to indicate interest in providing these services by submitting their Curriculum Vitae (CV), demonstrating experience in performing similar assignments with references, and showing responsiveness to the qualifications requirements outlined in this REOI. Eligibility criteria and the selection procedure shall be in accordance with the African Development Bank's "Procurement Policy Framework for Bank Group Funded Operations" October 2015, which is available on the Bank's website at <http://www.afdb.org>.

Further information can be obtained at the address below during office hours, i.e. from 0900 to 1700 hours (GMT) on working days.

Expressions of interest must be delivered in a written form to the address below by either hard copy or email by **Monday, April 13, 2026** @ 1700 hours (GMT) and mention "Provision of Consultancy Services for International @ 1700 hours (GMT) and mention "Provision of Consultancy Services for International Consultant to Develop and Operationalize an Automated Decision Management System for Climate Services in Liberia (Liberia CIS Project)."

**Attn. Williema Digker**  
**CIS Procurement Officer**

**Environmental Protection Agency**  
**Monrovia, Liberia**  
**E-mail:** [info.cis2025@gmail.com](mailto:info.cis2025@gmail.com)