



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)**

Assignment Title: **International Consultant to Develop Liberia Meteorological and
Hydrological Services (LMHS) Information Portal**

Financing Agreement reference:
Project ID No: SAP018
Reference No. EPA/CIS/ICS/2025/007
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 this consultancy is to deliver a secure, user-friendly, and fully functional portal that enables users to access meteorological and hydrological data in real time and retrospectively. The portal should support climate modeling, forecasting operations, and early warning system functionalities. In addition, it must enhance the accessibility of climate data for policymakers and stakeholders, allowing them to make informed decisions. Lastly, the portal is expected to be scalable, interoperable with related systems, and compliant with global data and information-sharing standards. This endeavor aims to establish a basis for targeted interventions and to support the monitoring, evaluation, and reporting of project activities and outputs under the Green Climate Fund Simplified Approval Process (SAP) Project (SAP018 "Enhancing Climate Information Systems for Resilient Development in Liberia (Liberia CIS)").

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. System Design & Architecture

- Develop a Technical Design Document (TDD) outlining system architecture, data flows, and security protocols.
- Design a web-based portal that is both modular and scalable. It should include:
 - Data Ingestion: Allow data collection through APIs, manual uploads, and IoT sensor integration.
 - Data Processing and Storage: Provide cloud-based solutions or on-premise options for data management.
 - User Access Levels: Set different access levels for the public, researchers, and government users.
 - Visualization Tools: Include easy-to-use features like dashboards, maps, and graphs to help users understand the data.

- Early Warning and Alert System: Offer a system that sends timely alerts to help users respond quickly to potential early warning issues

B. Portal Development & Testing

- Build a user-friendly portal using popular open-source tools like Python for the backend, Django for web framework, PostgreSQL for database management, and GeoServer for mapping data. Make sure the portal works well on mobile devices and includes features that allow users to access it offline.
- Add security measures to protect data, such as encrypting information and requiring users to verify their identity.
- Involve stakeholders in User Acceptance Testing (UAT) to get their feedback and ensure the portal meets their needs.

C. Training & Capacity Building

- Provide comprehensive training to LMHS, NDMA, EPA, and other key stakeholders, focusing on essential skills such as system administration, data management, and troubleshooting techniques.
- Create detailed user manuals and technical documentation to ensure clarity and facilitate ease of understanding for all users.

D. Deployment & Maintenance Plan

- Deploy the portal on a secure server (government-hosted or cloud-based).
- Provide a 6-month post-deployment support and maintenance plan

Minimum Qualification, Skills, and Experience:

The completion of this work dependent on an Individual. The selected person should have a Master's degree in in Computer Science, Geo-informatics, Climate Science, or related field. The successful Individual should have at least 10 years of cumulative working experience in developing climate data portals, GIS platforms, or early warning systems as well as proficiency in web development (Python, JavaScript, Django, React), databases (PostgreSQL, MongoDB), and geospatial tools (GeoServer, QGIS).

Also, the individual should have the following:

- a) Excellent knowledge of gender and women's economic empowerment.
- b) Experience in conducting quantitative and qualitative research and analysis.
- c) Excellent communication (written and verbal) skills and fluency in English.
- d) In-depth knowledge and understanding of Liberia's environmental sectors.
- e) Proactive, able to work with minimal supervision, and with a high degree of initiative, reliability, flexibility, and self-motivation.

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.

Duty Station: Monrovia
Start Date: Monday, April 20, 2026
End Date: Monday, June 20, 2026
Duration of Assignment: 8 Weeks

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 Consultant to Develop Liberia Meteorological and Hydrological Services (LMHS) Information Portal (Liberia CIS Project)."

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