

Strengthening Disaster Risk Reduction Coordination, Planning and Policy Advisory Capacity of the Economic Community of Central African States (ECCAS)

TECHNICAL ASSISTANCE FOR STRENGTHENING HYDROMET SERVICES AND FLOOD/DROUGHT MANAGEMENT IN CENTRAL AFRICA

Terms of Reference

Background

Central Africa as other Africa building blocks accounts for only 4% of global greenhouse gas emission (GHG), whereas it remains among the most vulnerable regions to the adverse impacts of climate change, owing to its limited adaptive capacity. More than 70% of natural disasters in the sub region are of meteorological origin. This leads to the fact that frameworks for consensual forecasting and information systems deserve to be privileged and consolidated in this way to enable policy makers to make arrangements that will minimize disaster risk.

Unfortunately, the low capacity to face natural hazards and adapt to climate change is further exacerbated by the fact that many economies are low-income. In front of this situation, governments are often struggling with competing priorities for investment, and the National Meteorological and Hydrological Services (NMHSs) are rarely prioritized. Inadequate funding inhibits the NMHSs in providing the much-needed services to contribute to climate-resilient development and adaptation planning. Consequently, countries are lacking efficient early warning systems which puts the population and assets at higher risk if a disaster strikes.

If left unaddressed, increased climate variability and extreme weather, water and climate events will jeopardize Central Africa's hard-won development gains and aspirations for industrialization, growth and poverty reduction. Improving hydrological, meteorological and climate (hydromet) services is critical to strengthening cross-cutting climate and disaster resilience across all the sub region. Specifically, hydromet information is a critical requirement to create an enabling environment for private and public sector to invest for growth, sustainable development and poverty reduction. The weather, water and climate services provided by NMHSs, which include early warnings, alerts and advisories for climate change adaptation, are critical for sectors that drive Central African economies and directly supports (i) smart agriculture; (ii) water resources for irrigation, hydropower, renewable energy and water supply; (iii) better planning for health services; (iv) improving access to safe air, marine and road transport; and, (v) reducing the socio-economic impacts of floods, drought and other natural hazards. They also support disaster and climate risk mapping, and disaster/climate risk financing and insurance solutions. Furthermore, they help contain fragility and promote peace-building by promoting sustainable natural resource management and growth, apart from boosting tourism and travel sectors that promote economic development and employment.

The European Union (EU) and the African, Caribbean and Pacific Group of States (ACP) have established the intra-ACP program of Strengthening Resilience to Natural Hazards in Regions, Countries and Communities of Sub-Saharan Africa, funded under the 10th European Development Fund (EDF) whose overall objective is to strengthen the resilience of regions, countries and communities in sub-Saharan Africa to the impacts of natural disasters. To achieve this goal, five Results Areas have been selected and implemented by several partner organizations, including the African Development Bank (AfDB), the African Union Commission (AUC), the United Nations Office for Disaster Risk Reduction (UNISDR) and the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR).

Result Area 2 (R2) managed by the GFDRR / World Bank supports 4 African Regional Economic Communities, including ECCAS, to strengthen operational capacities for coordination, planning and policy advice on Disaster Risk Reduction, to support respective Member States and regional and sub-regional programs.

The Economic Community of Central African States (ECCAS) is mandated to promote regional cooperation and integration in 11 Central African Member States¹, covering a population of nearly 182 million. It is also responsible for leading the general policy dialogue on Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) in these countries. At ECCAS Secretariat, the DRR and CCA unit is incorporated in the Department of Physical, Economic and Monetary Integration (DIPEM).

The implementation of the ECCAS R2 program focuses on four key components: (i) building regional knowledge on hazards, vulnerabilities and risks through the mapping of trans-boundary hazards; (ii) reinforcing regional and national capacities on DRR and CCA; (iii) strengthening the policy dialogue and legislation on DRR and CCA; and (iv) enhancing regional capacity for response and post disaster assessment and reconstruction Planning. A fifth component reinforces the overall technical and managerial capacity of ECCAS and facilitates program implementation.

In the framework of this program, the 1st ECCAS Hydromet Forum took place in Libreville in November 2018 and stressed the urgent need for adequate investment in modernizing and integrating hydrological, meteorological and early warning systems and services. In 2014 ECCAS developed a regional synthesis study on the NMHSs in the region with the Global Water Partnership based on several national analysis.

The World Bank is recruiting a service provider, such as a consultancy firm, university, think tank, technical institution or consortium either based in the Central Africa region or with substantial physical presence in the Central Africa region to provide analysis and guidance notes on hydrometeorological and early warning systems.

Overall Objective of the assignment

The overall objective of this assignment is to better understand the state of meteorology, hydrology and climate services and early warning systems in Central Africa and draft a regional framework to improve decisions making for flood and drought management in Central Africa.

Specific objectives:

More specifically, the assignment has the following objectives:

- (i) Draft a regional synthesis report on state of hydrometeorological and climate services and early warning systems (EWS) in Central Africa
- (ii) Develop a guidance note for improving early warning systems in Central Africa
- (iii) Elaborate a draft regional framework for hydrometeorological services improvement with an action plan for Central Africa.
- (iv) Support the World Bank in organizing the 2nd HYDROMET Forum in Central Africa

Description of Tasks

The assignment consists of the following tasks:

¹ Angola, Burundi, Cameroon, Chad, Republic of Congo, Gabon, Equatorial Guinea, Central African Republic (CAR), Democratic Republic of Congo (DRC), Rwanda and Sao Tome and Principe

- (i) *For the draft regional synthesis report on state of hydrometeorological and climate services and EWS in Central Africa:*
 - Support the World Bank in the review of technical reports related to baseline study reports on state of hydrometeorological and EWS of Cameroon, Chad, Republic of Congo, Gabon, Central African Republic (CAR), Democratic Republic of Congo (DRC) and Sao Tome and Principe conducted in 2015;
 - Complete the above technical report conducting baseline studies on the state of hydro meteorological services and EWS in five countries in Central Africa (Angola, Burundi, Equatorial Guinea, Rwanda);
 - Prepare a regional synthesis report on state of hydrometeorological and climate services and EWS in Central Africa;
- (ii) *For developing a guidance note for improving early warning systems in Central Africa:*
 - Support the World Bank with guidance and illustrating global best practice and expertise on EWS for Central Africa
 - Organize and facilitate a regional technical stakeholder consultation workshop (including water basin commissions);
- (iii) *For the elaboration of a draft regional framework for hydrometeorological services improvement with an action plan:*
 - Organize a technical meeting (10 participants) in Brazzaville (Congo) to discuss draft regional hydrometeorological and climate services framework and action plan for improvement;
 - Elaborate a first draft of regional hydrometeorological services framework and action plan
 - Organize a stakeholder workshop (30 participants) in Yaoundé (Cameroun) to discuss, enrich and approve regional hydrometeorological and climate services framework and action plan (this workshop can be done with the one in (ii))
 - Prepare and submit final version of regional hydrometeorological and climate services framework and action plan
- (iv) *For the support to the World Bank in organizing the 2nd HYDROMET Forum in Central Africa*
 - Provide a guidance report for the organization of the Forum – keynote speakers, sessions topics, good practices to be shared

Outputs and Deliverables

The assignment will include the following deliverables to be submitted in French with a summary in English

- 1) An inception report to demonstrate a shared understanding with the World Bank including the conceptualization of the assignment by the consultant, detailed work plan for the assignment, preliminary desk review of relevant documents and initial brief systematic consultations with key stakeholders before proceeding with the assignment;
- 2) Baseline reports on state of hydrometeorological and climate services for four countries;
- 3) Regional synthesis report on state of hydrometeorological and climate services in Central Africa;
- 4) Proceedings of the regional consultations
- 5) A draft regional framework and action plan for hydrometeorological and climate services improvement
- 6) A guidance report related to the Hydromet Forum in Central Africa

Duration of the assignment and timelines

The assignment is expected to last nine (9) months, starting July 1st, 2019. It is expected that the inception report will be delivered within 4 weeks upon signature of the agreement.

Expertise Required

The service provider will provide a number of experts with solid experience from Central Africa with at least the following qualifications:

Team Leader

- Team leader, with at least 10 years of experience, must have an advanced University Degree in Disaster Risk Management, Development Sciences/ Studies, Economics, Sustainable Development, Environmental Sciences, and any related Social Science disciplines or related fields. Possession of a PhD will be an added advantage;
- Team leader must have a good understanding of the disaster risk management and humanitarian assistance agenda and challenges in the Central Africa region;
- Team leader must have sound knowledge of the regional institutions and governance structures in central Africa.
- Excellent language skills (written and spoken): French and English

Team members

- Relevant master's degree (or PhD) with not less than 5 years of postgraduate work experience;
- Relevant expertise on:
 - Governance, policies and legislation related to meteorology, water resources management and disaster risk management in regional organizations and transboundary basins organizations
 - Hydrometeorological data management with a particular focus on global standards and best practices for data exchange, including relevant protocols at basin and regional level;
 - Hydrological forecasting and hydraulic modeling
 - Numerical weather prediction and severe weather forecasting
 - Observing equipment (procurement and maintenance)
 - Transboundary flood management
 - Drought management and agro-meteorological services
 - Climate prediction and application
 - Multi-hazard early warning systems
 - Public private partnerships

All team members must be fluent in French (written and spoken). They must possess excellent written and oral communication skills. Substantive work experience in Central Africa is a particular advantage.

Language skills in Portuguese and Spanish are desirable assets.

Payment

The contract will be a lump sum contract with the following payment schedule:

- a. 10 % upon submission and acceptance of inception report
- b. 20 % upon submission and acceptance of the review of technical reports
- c. 30% upon submission and acceptance of the regional consultation agenda and indicative budget
- d. 20% upon submission and acceptance of the guidance report related to the ECCAS Hydromet Program
- e. 20% upon successful completion and review of all deliverables.

Language

All deliverables including data collected should be submitted in French and reports should include an executive summary in English in addition to French.

Reporting

The consultant shall report to the World Bank task team leader based in Washington DC.

Guidance

The consultant will cover the entire participants travel expenses for the regional consultation according to the following standards:

- Economy class flight (return)
- Per diem for meals valets and tips appropriate for the location and agreed with the World Bank (paid usually in US\$)
- Hotel accommodation (3-star hotel accommodation) as appropriate and agreed with the World Bank
- Transport and visas expenses, airport pick up and drop off on the basis of actuals as per policy.

The regional consultation will be designed for approximately 30 persons, covering a period of two/three days plus travel time to and from any of ECCAS' Member States. On average it is expected that two participants from each Member States participates in the regional consultation, as well as participants from regional stakeholders, such as ECCAS Secretariat, river basin organizations, etc.

In addition, the contract holder will provide all necessary pedagogic material to participants for as well as adequate facilities such as:

- Lecture rooms and break out rooms
- Projectors, internet access, flip charts, etc.
- Coffee and tea breaks, lunch and water during the sessions
- Workshop stationery
- Adequate interpretation (English, Portuguese and Spanish) with adequate equipment for instant interpretation (e.g. head-sets and microphones, interpretation booth).