





# Agence suédoise pour le développement international

# Partenariat Régional sur l'Eau et l'Environnement en Afrique Centrale et Occidentale (PREE)

Development of the Investment Plan for Climate towards strengthening climate resilience in the Volta basin (Volta IPC) from a diagnosis review on the current issues and challenges on water resources management and climate change

Step I: Carrying out the situational inventory of climate change and its impacts in the Volta basin

Terms of reference for the services of the Consultant

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#### 1. BACKGROUND

The Volta Basin Authority (ABV) is seeking the services of a qualified consultant(s) to conduct studies relating on the the inventory of climate change and their impacts in the context of the development of Investment Plan for strengthening climate resilience in the Volta Basin (Volta IPC). This mission is part of the implementation of the "Regional Partnership on Water and Environment in Central and West Africa (PREE)" project initiated by the International Union for the Conservation of Nature (IUCN) in Central and West Africa with the financial support of the Swedish International Development Agency (ASDI).

This Terms of Reference outlines the details of mission, the context and the justification, the objectives and the expected results and the profile and the mandate of the service provider

#### 2. CONTEXT AND JUSTIFICATION

The Volta Basin is Located in West Africa between latitudes 5 ° 30 'N and 14 ° 30' N and longitudes 2 ° 00"E and 5 ° 30"W, the Volta basin is the 9th largest river basin of sub-Saharan Africa with an area of approximately 400,000 km². It's resources are shared between six (06) countries: Benin, Burkina Faso, Ivory Coast, Ghana, Mali and Togo.

Socio-economically, the countries sharing the Volta Basin are among the poorest in the world with underdeveloped economies and populations living below the poverty line.

The basin brings together a fairly rich set of ecosystems, several of which are of global importance, including the ten (10) Ramsar sites. These are: i) terrestrial ecosystems such as dense semi-deciduous forests, dense dry or deciduous forests, savannas and steppes; ii) azonal ecosystems such as riparian forest environments, grasslands, mangroves, as well as protected areas which contain specific ecosystems and forest plantations; iii) aquatic ecosystems represented by springs, ponds, lagoons and lakes; and iv) marine, coastal and river estuary ecosystems in Ghana and Togo, which are endowed with diverse and rich habitats.

These ecosystems play an essential role in economic development and physical resilience in the face of current and future challenges related to climate and water resources. They contribute to the survival of living organisms and promote livelihood possibilities for humans. However, these ecosystems in the basin are continually threatened by human activities (use of environmental pollutants and increased pollution), but also by constraints due to variability and climate change.

Indeed, West Africa - including the Volta Basin - remains one of the regions most affected by climate change, and this state of affairs will likely continue despite its low

contribution to greenhouse gas emissions. Greenhouse. According to the IPCC Special Report on Managing the Risks of Disasters and Extreme Events for Adaptation to Climate Change (IPCC, 2012), the basin is marked by much more severe and longer droughts in recent years. decades, with widespread ecological, political and socioeconomic consequences. In addition, floods in the basin are increasingly recurrent and damaging and are seen as potential consequences of climate change.

The different temperature projections under different CC scenarios indicate an average increase between 1.5 ° C to 2.5 ° C by 2050, with a high frequency of floods and droughts. Due to the increase in temperature, the annual potential evapotranspiration of the basin, in general, will increase by about 22%. The rains will be irregular and unpredictable, but will experience a reduction of around 11% on average in the basin. Substantial reductions in stream flows are projected to be between 24% by 2050, and 45% by 2100. This decrease will also be observed in groundwater recharge over the next few years (Mc Cartney, M. et al. 2012).

As a result, the water resources of the basin will decrease considerably with adverse effects on human health, food security and on several development sectors which depend directly on water resources, notably agriculture, energy and hydro- electricity, navigation, tourism, as well as the environmental sector. This decline in water resources could also lead to an increase in security risks, violent conflicts or migration, which are among the most worrying impacts of climate change on the African continent. The IPCC stresses that increased migration could lead to human rights violations, situations of political instability and conflict. These are the dangers that African countries must avoid in order to protect their populations and continue to develop.

In addition, the Volta basin is characterized by a significant deficit in terms of adaptation - national and local authorities are not equipped to deal with current climatic hazards, and all the less with projected extreme climatic eventsin the years to come. This deficit is directly linked to the level of development and human and technical capacities of the countries of the basin which are for the most part counted among the Least Developed Countries (LDCs) with limited resources, leaving the populations alone in the face of the impacts of climate change management which requires significant financial resources that are very difficult for countries to mobilize. In these circumstances, financial resource mobilization solutions must be clearly identified in order to ensure the pursuit of sustainable development for adaptation to climate change (CCA) and the strengthening of the resilience of communities, ecosystems, infrastructure and institutions in the basin.

This process is underway to provide the basin with an investment plan for the strengthening of climate resilience in the volta basin (volta IPC) with the aim of increasing investments in favor of water security and climate resilience in the region,

through a transformational gender approach that takes into account the most vulnerable and marginalized groups.

That process covers three stages: i) inventory of climate change and its impacts in the Volta basin; ii) diagnosis and proposal of investment scenarios aimed, among other things, at strengthening the resilience of populations in the face of climate change, and; iii) Mobilization of funding for the implementation of the IPC.

#### 3. OBJECTIVES

## 3.1 Main objectif

The overall objective of the consultant's mission is to carry out situational inventory of climate change and its impacts in order to have relevant data and information for the development of the Investment Plan for the strengthening of climate resilience in the Volta basin (PIC Volta).

# 3.2 Objectifs spécifiques

THE SPECIFIC OBJECTIVES OF THE SERVICE PROVIDER'S MISSION ARE AS FOLLOWS:

- Identify all national and regional reference documents on the issue of climate change and the resilience of populations in the Volta Basin;
- Develop a documentary review on knowledge of climate change, its impacts and on the resilience of populations in the Volta basin for each of the six (06) national portions as well as at the regional level;
- Prepare the inventory report of climate change and its impacts at the level of each development sector in connection with Integrated Water Resources Management (manifestation of climate change and its impacts in connection with water resources, agriculture, livestock, fisheries and aquaculture, energy, infrastructure, biodiversity, mining, transport, industry and crafts, tourism, health, AEP, etc.), all accompanied by issues and challenges sensitive to gender and endogenous knowledge to be taken up to ensure water security and climate resilience in the Volta basin.

#### 4. EXPECTED RESULTS OF THE MISSION

At the end of the mission, the main expected results are as follows:

• national and regional reference documents on the issue of climate change and the resilience of populations in the Volta Basin for each national portion as well as at the regional level, are listed;

- the point of knowledge is established on climate change (manifestation of climate change and its impacts in connection with water resources, agriculture, livestock, fisheries and aquaculture, energy, infrastructure, biodiversity, mines, transport, industry and crafts, tourism, health, AEP, etc.), all accompanied by issues and challenges sensitive to gender and endogenous knowledge to be taken up to ensure water security and resilience climate in the Volta basin;
- climate change status report is prepared.

#### 5. MAIN DELIVERABLES EXPECTED FROM THE MISSION

At the end of the mission, the deliverables will be submitted by the service provider and validated by the VBA with the support of the Working Group of the Volta IPC Development Process (GT-PIC Volta) and the participation of other stakeholders. The following steps in terms of deliverables will be followed:

- Deliverable 1: Mission inception report including the methodological framework note for the conduct of the mission, the tools for collecting data and information, the work plan, the detailed timetable for the conduct of the mission;
- Deliverable 2: Report on the current state of the issues of water resources management, climate change and their impacts in the Volta basin, together with the issues and challenges to be met to ensure water security and resilience climate in said basin.

The service provider must also:

- take into account the comments of the ABV and the GT-PIC Volta in the drafts of each deliverable iteratively, until the approval of the final versions;
- work in close collaboration with the Executive Directorate of the VBA and the GT-PIC Volta throughout the duration of the mission;
- participate in meetings with the VBA and the GT-PIC Volta (MS Teams, Skype, Zoom or face-to-face) for the framing of the mission, discuss the main lines and structure of each deliverable, conduct the necessary interviews to collecting quality data, regularly monitoring the progress of the mission;
- ensure that the mission execution schedule is strictly respected.

#### 6. CONSULTANTS MANDATE

To carry out this assignment, the service provider must perform the following tasks:

- develop and have validated by the ABV and the GT-PIC Volta, the methodological note for conducting the mission with the tools to be used and the implementation schedule:
- make a thematic synthesis of regional and national strategic documents of VBA member states such as the report of the Transboundary Diagnostic Analysis (TDA) of the Volta basin, the Strategic Action Program (SAP) of the basin of the Volta, the national Integrated Flood Management (ICM) needs assessment reports in the portions

of the Volta Basin, the Volta Basin Water Charter, National Communications on Climate Change, Determined Contributions at the National level (CDN), National Climate Change Adaptation Plans (PNA), National Adaptation Action Programs (NAPA), Biennial Update Reports and other national or regional climate change adaptation programs and State contributions;

- develop and validate the inventory of water resources management issues, climate change and their impacts in the Volta basin, along with the issues and challenges to be taken up as well as the strategic orientations to ensure water security and climate resilience in said basin;
- carry out an analysis of the gender approach to the issue of water resources management and climate change in the Volta basin;
- present the results of the mission during the validation workshop of the provisional final inventory report;
- integrate observations and comments and produce the final version of the deliverables.

#### 7. METHODOLOGY FOR CONDUCTING THE MISSION

A methodological approach with a precise execution schedule will be presented by the service provider and then validated by the technical group set up by the Management of the ABV.

The consultancy will work in close collaboration with the ABV and GT-PIC Volta and will have to report regularly on the execution of the mission to the ABV. It will have to capitalize on the results on the inventory of fixtures in the basin carried out, among others, within the framework of the development of the Water Charter of the basin and the project "Integrating the management of floods and drought and early warning for adaptation to climate change in the Volta basin" (VFDM Project) without forgetting the projects completed and / or under preparation.

#### 8. DURATION OF THE MISSION

The total duration of the mission is estimated at twenty (20) man / days (HJ), spread over a calendar period of two (02) months.

## 9. PROFILE AND QUALIFICATION OF THE SERVICE PROVIDER

To carry out this assignment, a group of two consultants who have capitalized on proven experiences in the conduct of similar assignments is sought. The provider selection process will be by open call for tenders on the basis of the skills sought, proven similar references, and the qualifications and experience of the key personnel assigned to the assignment.

The proposed staff should be composed at least as follows:

- 1) A Head of Mission, Expert in Water Resources Management and Climate Change, with at least a higher education diploma (Bac + 5, Master of Science, DESS or Doctorate) in water sciences , environmental sciences, or any other equivalent diploma. He (she) must have at least three (03) years of experience in the fields of climate change and integrated water resources management,
- In addition, the Head of Mission will:
- demonstrate proven knowledge of the climate and development challenges of the Volta basin;
- have a great capacity for analysis, synthesis and writing;
- demonstrate a perfect command, in writing as well as in speaking French and English;
- have a good team spirit and endure working under pressure.
- 2) A Socio-Economist Expert Planner with at least a higher education diploma (Master or Doctorate) in socio-economics or development planning and capitalize at least two (02) years of proven experience in the development of planning tools or development strategies.

In addition, the Expert Socio-economist - Planner will:

- have a very good knowledge of the environmental challenges of the study area;
- have a very good knowledge of the issue of climate change and the vulnerability of populations and ecosystems in the study area;
- have a great capacity for analysis, synthesis and writing;
- demonstrate a perfect command, both written and oral, of French and English;
- have a good team spirit and endure working under pressure.

#### 10. CONTROL AND MONITORING

The consultant team will report to the Volta Basin Authority, which provides overall oversight of the mission and will work closely with the IPC Volta Development Process Working Group.

#### 11. ESTIMATED MISSION BUDGET

To carry out this inventory, the provisional budget for the consultation amounts to four million (4,000,000) CFA Francs.

#### 12. OFFER OF THE CONSULTANT

Any interested candidate is requested to submit an application file containing, among other things:

i) A technical offer made up of:

- A list of the personnel dedicated to this study indicating the names, first names, diploma, number of years of proven experience and responsibility in the team;
- The detailed Curriculum Vitae of each member of the Team;
- a methodological approach;
- a precise execution schedule;
- ii) a financial offer indicating price details

The financial offer will be separated from the technical offer

#### 13. APPLICATION DEADLINE

All applications must be received no later than **Thursday, September 30<sup>th</sup>, 2021** 

The application package containing the technical offer and the financial offer should be sent to the following address:

Email: secretariat.abv@gmail.com Copie à: rafatoufofana.abv@gmail.com