



CALL FOR TENDER

<u>Project :</u>	Reversing Ecosystem and Water Degradation in the Volta River Basin (REWarD – Volta River Basin)
<u>Component:</u>	Component1. Improved knowledge base and development of management tools for informed decision-making
<u>Outcome:</u>	Outcome 1.1. Transboundary data collection/processing network provides up-to-date information for decision-making and basin planning to respond to environmental threats at regional, national and local level
<u>Product:</u>	Product 1.1.2. Assessment of environmental capital, ecosystem services and functions completed and socio-anthropological impacts in the Volta Basin assessed
<u>Activities:</u>	<ul style="list-style-type: none">- Activity 1.1.2.1. Review of existing assessment instruments highlighting the relationships between gender, ecosystems and their services- Activity 1.1.2.2. Determination of socio-economic and environmental indicators
<u>Titre:</u>	<i>Mission for Valuation of Environmental Capital, Ecosystem Services and Functions, and Socio-Anthropological Impacts in the Volta Basin</i>
<u>Duration:</u>	<i>Five (5) Men-Months (MM) over a calendar period of twelve (12) months</i>
<u>Publication Date:</u>	24/04/2024
<u>Closing Date:</u>	24/05/2024

1. BACKGROUND AND JUSTIFICATION

1.1. Brief overview of the Volta basin

The Volta basin is the 9th largest transboundary river basin in sub-Saharan Africa. It covers an area of around 398,390 km². The basin's resources are shared by its six (6) riparian countries: Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo.

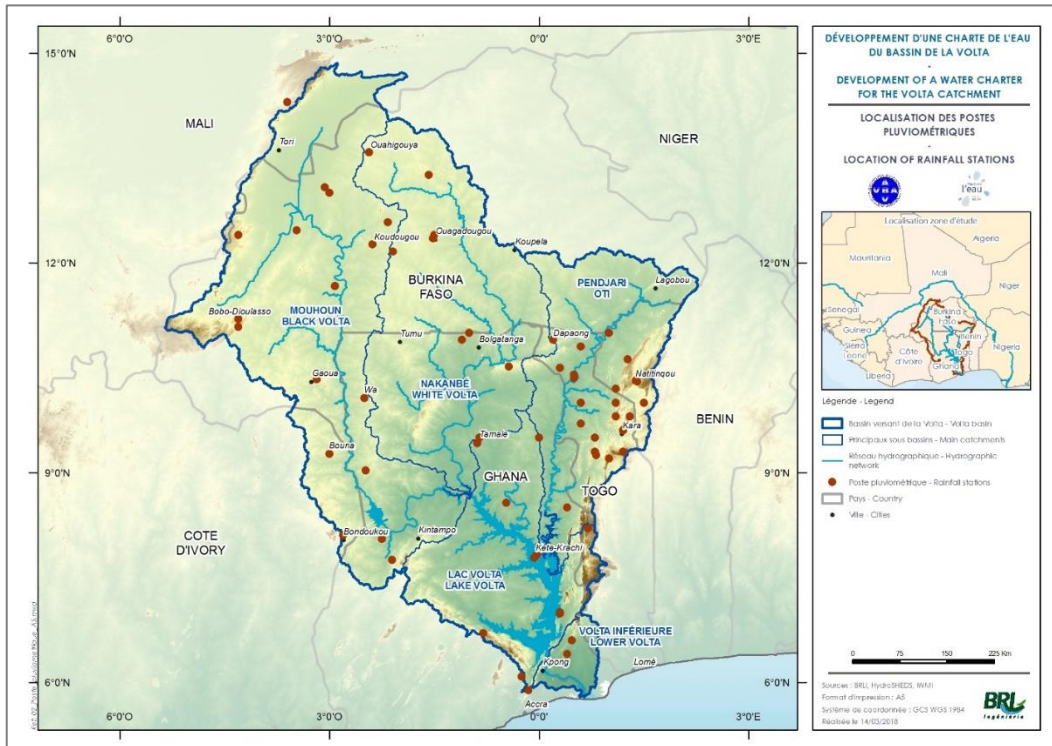


Figure 1 : Carte du bassin de la Volta

The population of the basin was estimated at 19 million in 2000, 25 million in 2010, 29.1 million in 2016 and, according to forecasts, will reach 35 million by 2025. This population is 70% rural, with very dynamic annual growth rates between 2.5% and 3% depending on the countries (World Bank data since 2000), with the main concentrations around the basin's major cities (Accra/Tema, Tamale, Ouagadougou, Bobo Dioulasso, Koudougou, Kara) and on the southern shores of the Lake Volta.

The combined effects of climate change and growing demographic pressure, with ever-increasing demand for water to meet a wide range of vital needs in the basin, have generated environmental phenomena such as deforestation, land and water degradation, pollution from various sources (agricultural, small-scale, industrial and especially mining), the silting-up and drying-up of water bodies and rivers, the proliferation of invasive aquatic plants, the loss of aquatic and terrestrial biodiversity.

Aware of the decreasing trends in the availability of water resources (quantity and quality) and the staggering increase in water demands, whether for different uses or for aquatic and terrestrial ecosystems, the Member States have initiated projects for the rational management and optimum use of water resources, according to their specific characteristics, with a view to strengthening their cooperation and the resilience of their populations to the adverse effects of climate change in the basin.

In the same way, the Heads of State and Government of the Volta Basin countries adopted the Convention on the status of the Volta River and the establishment of the VBA, as well as the Statutes of the VBA respectively on January 19 and November 16, 2007.

The vision of the VBA is *"a basin shared by partners driven by goodwill and a spirit of cooperation, managing water resources rationally and sustainably for their overall socio-economic development"*. Its mandate is to *"promote permanent consultation and sustainable development for the equitable sharing of benefits with a view to poverty reduction and improved socio-economic integration"*.

To fulfil its mandate, in 2013 the VBA adopted a Strategic Action Programme (SAP) 2014-2024 for the basin, which was developed based on the conclusions of the Transboundary Diagnostic Analysis (TDA) of the basin (UNEP-GEF Volta, 2012) and the results of a wide consultation process with stakeholders. The Volta Basin SAP is implemented through projects and programs including the project **"Reversing Ecosystem and Water Degradation in the Volta River Basin (REWARD - Volta River Basin)"** developed in close collaboration with the United Nations Environment Programme (UNEP), the International Union for Conservation of Nature (IUCN), the Volta Basin Authority (VBA), the Global Water Partnership in West Africa (GWP-WA) and national stakeholders.

The REWARD - Volta River Basin project, funded by the Global Environment Facility (GEF), aims to reverse ecosystem and water resources degradation and support integrated ecosystem-based development in the Volta Basin by strengthening transboundary governance, ecosystem restoration and conservation for sustainable livelihoods.

1.2. Mission Justification

The Volta Basin hosts an abundance of natural resources as well as a rich set of ecosystems, many of which are of global importance, including Ramsar sites which provide essential and diverse ecosystem services, both terrestrial and aquatic. These ecosystems include:

- (i) Terrestrial ecosystems of global importance: dense semi-deciduous forests, dense dry or deciduous forests, savannahs and steppes;
- (ii) Azonal ecosystems such as riverine forests, grasslands, mangroves, as well as protected areas containing specific ecosystems and forest plantations;
- (iii) Aquatic ecosystems represented by springs, ponds, lagoons and lakes;
- (iv) Marine and coastal ecosystems, and the river estuary in Ghana and Togo, which are endowed with diverse and rich habitats. The basin also offers vast biological diversity and a considerable number of varied species, many of which are endemic, threatened or of global importance.

Ecosystem resources such as freshwater, lake habitats, protected areas and forest ecosystems play an essential role in economic development and community resilience to current and future climate-related challenges. The distribution of these ecosystem services varies considerably across the basin, and their direct and indirect contributions help to ensure the continued existence of living organisms and support livelihood opportunities for humans. However, the

basin's ecosystems are continually threatened by multiple factors linked to anthropogenic actions and the effects of climate variability and change.

According to the Transboundary Diagnostic Analysis (TDA) carried out in 2012, the Volta basin is experiencing high levels of water quality and flow degradation, coastal erosion, increased river sedimentation, aquatic invasive species, loss of soil and vegetation cover and ecosystem degradation. Deforestation in the basin is leading to the loss of important ecosystems such as wetlands and species such as Ephemeroptera, an important food resource for fish in the Volta River.

A study carried out on the dynamics of land use in the Volta basin showed that almost 59% of the basin's surface area is affected by a regression of forests and wooded savannahs, and an extension of cultivated and grazed areas. Today, the significant degradation to which the basin's ecosystems are subjected, has repercussions on the services provided to populations who depend heavily on them for their basic needs.

Reversing the current negative dynamic requires, among other things, the adoption of more respectful and sustainable ways of planning, managing and using natural resources, which will contribute to increasing the environmental asset base and improving the capacity of ecosystems to continually provide people with goods. This requires quality data and information on the socio-economic and ecological characteristics and values of key resources.

To this end, under the Component 1. “Improved knowledge base and development of management tools for informed decision-making” as well as the Outcome 1.1. “Transboundary data collection/processing network provides up-to-date information for decision-making and basin planning to respond to environmental threats at regional, national and local level” with the view to the Product 1.1.2. “Assessment of environmental capital, ecosystem services and functions completed and socio-anthropological impacts in the Volta Basin assessed” of the **REWARD - Volta River Basin Project**, it is planned to carry out the mission for **valuation of the Environmental Capital, Ecosystem Services and Functions, and Socio-Anthropological Impacts in the Volta Basin**. The mission is part of the implementation of: (i) Activity 1.1.2.1: Review of existing assessment instruments highlighting the relationships between gender, ecosystems and their services and (ii) Activity 1.1.2.2: Determination of socio-economic and environmental indicators of the REWARD - Volta River Basin Project.

These terms of reference describe the objectives, expected results and methodological approach of the mission.

2. OBJECTIVES OF THE MISSION

The main objective of this mission is to improve the processes of planning and judicious decision-making for the rational management and sustainable development of the basin's natural resources.

The specific objectives linked to this main objective are as follows:

- To map the basin's ecosystems and their services, as well as the related socio-economic impacts of their use;

- To conduct a gender analysis of the relationships between water uses, environmental services and water resources, and their mutual impacts in the Volta basin;
- To analyse existing assessment tools for ecosystems and their services, and propose the appropriate methodological approach for defining and quantifying socio-economic and environmental indicators for the basin's ecosystems, while assigning them non-economic and economic reference values ;
- To support the integration of baseline values of environmental capital and basin ecosystem services into the Decision Support System (DSS) to guide dialogues and decisions on natural resource management and use, as well as DSS-based trade-offs that will better take into account the interests of farmers and other stakeholders whose livelihoods depend on the sustainability of natural resources.

3. EXPECTED RESULTS FROM THE MISSION

The expected results from the mission are:

- An inventory and mapping of the ecosystems of the Volta basin and their services, as well as the related socio-economic impacts of their use, are carried out, indicating their typologies, current status and potential at ecological and biodiversity, social, economic, cultural, levels;
- An analysis of the major threats affecting the various ecosystems and ecosystem services in the basin and their impact on human well-being and biodiversity is carried out;
- Appropriate actions/activities to be implemented for the protection and restoration of these ecosystems are proposed;
- Gender analysis of the relationships between water uses, environmental services and water resources, and their mutual impacts in the Volta basin is carried out;
- Existing assessment tools for ecosystems and their services are analysed and an appropriate methodology is proposed for conducting the assessment, then identifying and quantifying the socio-economic and environmental indicators of the basin's ecosystems, while assigning values non-economic and economic - to them ;
- The socio-economic and environmental indicators of the basin's ecosystems and their services and their reference values are defined;
- Strategic directions and recommendations are formulated for the integration of reference values of environmental capital and ecosystem services of the basin into the DSS.

4. MAIN DELIVERABLES OF THE MISSION

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

- **Deliverable 1:** The mission inception report including the detailed methodology and data collection tools as well as the detailed mission execution timeline;
- **Deliverable 2:** The report including :
 - (i) Part 1_ Inventory and mapping of the ecosystems of the Volta basin and their services, then the impacts linked to their uses, accompanied by their typologies, their current states and their potential in terms of ecological and biodiversity, social, economic, cultural, etc.;
 - (ii) Part 2_ Detailed gender analysis of the relationships between water uses, environmental services and water resources, as well as their mutual impacts;
 - (iii) Part 3_ Analysis of the spatio-temporal dynamics of ecosystems and ecosystem services as well as major threats accompanied by short, medium and long term actions/activities to be undertaken for the protection and restoration of these ecosystems;
- **Deliverable 3:** The analysis report of existing assessment instruments of ecosystems and their services with the proposed assessment methodology including the appropriate tools to be used within the framework of this mission;
- **Deliverable 4:** The report on:
 - (i) The results of the application of the appropriate evaluation methodology proposed and adopted;
 - (ii) Validated multi-criteria analyzes and compromise analyzes of the results resulting from the application of the selected evaluation methodology ;
 - (iii) Validated case studies and results from the application of the selected evaluation methodology.
- **Deliverable 5:** The strategic directions and recommendations note to ensure the integration of the values of environmental capital and ecosystem services of the Volta basin into the DSS, the natural resources management and use decisions and trade-offs based on the DSS which will better take into account the interests of farmers and other stakeholders whose livelihoods depend on the sustainability of natural resources.

5. CONSULTANT MANDATE

The Consultant's main tasks are as follows:

- To develop and get approved the methodological note, together with a timetable for carrying out the assignment, based on a participatory approach;
- To prepare the inception report including, among other things, the detailed methodological note and data collection tools, as well as the mission execution schedule, etc.;
- To produce an inventory and map of ecosystems in the Volta basin, indicating their typologies, current status and potential in terms of ecology and biodiversity, social,

economic and cultural aspects, etc.;

- To identify and analyze ecosystem services in the basin, with particular attention to those used for socio-economic activities in the basin;
- To analyze the spatio-temporal dynamics of ecosystems and their services in the Volta basin over the last 30 years;
- To identify and analyze the major threats affecting the various ecosystems in the basin and their impact on human well-being and biodiversity, while proposing short-, medium- and long-term actions/activities to be initiated to protect and restore these ecosystems;
- To conduct a comprehensive gender analysis of the relationships between water uses, environmental services and water resources, and their respective impacts, based on a review of existing studies such as « WISE UP to Climate »;
- To identify and analyze existing assessment tools for ecosystems and their services, then propose and validate the appropriate assessment methodology for:
 - Identifying factors affecting the socio-economic and environmental system;
 - identify relevant socio-economic and environmental effects;
 - Deducing dependencies and interactions between socio-economic and environmental causes and effects;
 - Understanding the parameterization of socio-economic and environmental effects and determine their representative indicators;
 - Implementing appropriate assessment methods.
- To apply the valuation methodology chosen for:
 - Identifying socio-economic and environmental indicators for the ecosystems of the basin;
 - Establishing functional relationships between drivers and impacts;
 - Deducing rules for quantifying social, economic and environmental indicators;
 - Establishing an inventory of heuristic methods for indicator response and production functions.
- To validate the results of the application of the selected evaluation methodology with case studies:
 - To develop scenarios and their scope in collaboration with key stakeholders for the purposes of: (i) establishing an environmental baseline; (ii) identifying and providing a qualitative assessment of the potential impacts of policy options on ecosystem services; (iii) quantifying the impacts of policy options on specific ecosystem services; (iv) assessing the effects on human well-being; and (v) valuing changes in ecosystem services;
 - To simulate scenarios and calculate indicators;
 - To carry out comparative scenario analyses;

- To validate the results of applying the chosen evaluation methodology with multi-criteria and trade-off analyses:
 - Quantify and evaluate scenarios applying the following methods : (i) cost Benefit-Analysis ; (ii) multi-Criteria-Analysis ; (iii) trade-Off-Analysis ;
 - Applying the Robust Decision Making method quantify uncertainties of indicators and their implications on the scenario evaluations.
- To formulate strategic directions and recommendations to ensure the integration of the Volta Basin's environmental capital and ecosystem service values into the DSS, natural resource management and use decisions and DSS-based trade-offs that will better take into account the interests of farmers and other stakeholders whose livelihoods depend on the sustainability of natural resources.

6. METHODOLOGICAL APPROACH

To produce the expected deliverables, the Consultant will have to deploy a participatory approach involving all stakeholders at local, national and regional levels. The methodological approach, with a precise implementation schedule, will be presented by the Consultant and validated by the stakeholders during the inception phase of the assignment.

The Consultant will work closely with the Project Management Unit as well as with implementing partners and other project stakeholders to whom he must report regularly on the execution of the assignment.

In addition, the assignment takes into account the interactions of the team of Consultants with the DHI team, which provides technical assistance for the design and application of the DSS to support regional and national decision-making with regard to water needs, water allocation and the development and implementation of new water infrastructure, taking into account future climate change, population growth, etc.

7. CONSULTANT PROFILE

Given the complexity of the assignment, it will be entrusted to a consultancy firm with at least ten (10) years' experience in the sustainable management of natural resources, and capable of putting together a team of experts specializing in ecology, environmental economics and sociology, gender analysis, spatial analysis and GIS.

The team of experts from the proposed consultancy firm should include at least:

- **A Team Leader, Chief of the mission:** He/She must hold a Master's or Doctorate degree in Environmental Sciences, Environmental Economics or any other related discipline, and have at least ten (10) years' proven experience in characterizing the state of ecosystems, ecosystem goods and services, and in assessing the economic, monetary or non-monetary values of ecosystem functions, goods and services. He/she must have proven experience in developing tools or approaches for the sustainable management of natural ecosystems. He/she must justify a high standard of report writing skills. Specific experience in

transboundary ecosystem management would be an advantage. The Chief of Mission must also have a good knowledge of the Volta Basin and the Integrated Water Resources Management (IWRM) approach;

- **A Socio-economist Expert:** He/ She must hold a Master degree in sociology or economics. He/she must justify at least seven (7) years' experience in conducting socio-economic studies and gender analysis, etc., with a perfect knowledge of IT tools and database management. He/she must have at least 3 years' practical experience in conducting similar studies;
- **An Expert in Remote Sensing or Cartography** with extensive experience in the analysis and processing of satellite images. He/ She must hold a Master degree in GIS. He/she must have at least five (5) years' experience in Remote Sensing or Cartography, with at least three (3) similar practical experiences.

Each expert must have a good level of proficiency in at least one of the VBA's two working languages (French and English), and a good knowledge of the other.

8. MISSION DURATION

The duration of this assignment is five (05) Men-Months (M-M) spread over a 12-month calendar period (including the management of workshops for validating the various deliverables) from the date of the service order to the delivery of the final deliverables of the assignment.

9. PRESENTATION OF TENDER OFFERS

Interested **consultancy firms** with the required qualifications and experience in relation to the assignment are invited to submit their proposals, including a technical offer and a financial offer.

Proposals must be submitted in French or English and must include following documents:

For the technical offer:

- A dated and signed letter of submission to the Executive Secretary of GWP-AO, mentioning the immediate availability of the Firm or experts;
- A presentation of the consultancy firm with up-to-date administrative documents;
- The understanding and comments on the terms of reference;
- The envisaged detailed methodology to carry out the assignment, describing the steps, methods and tools proposed, as well as the deliverables;
- A detailed schedule of activities for each deliverable;
- The detailed Curricula Vitae of the Mission Team Leader and Experts, describing their experience in relation to the mission, with the necessary proof (references from the client, certificate of successful completion) and their diplomas;

- The list of similar assignments with references and certificates of completion from the consulting firm;
- The equipment required to carry out the assignment.

For the financial offer:

- The submission letter dated and signed and indicating the amount of the offer;
- A detailed budget linked to each deliverable, fees and costs broken down per man/day and per unit;
- The filled budget presentation framework, dated and signed (Cf. **Appendix 1**).

10. TAX CONDITIONS

In accordance with the tax provisions in force in Burkina Faso, as set out in the relevant Finance Act for the year 2024, a withholding tax will be applied to the Consultant's fees. The percentage of the withholding varies according to the ability of the service provider to show proof of registration with the unique financial identifier. This withholding will be paid by the VBA Executive Directorate to Burkina Faso General Taxes Directorate.

Payment of a Consultant's invoice (if he/she is not from Burkina Faso) will be made net after deduction of 20% withholding tax on the amount before tax if he/she does not provide a certificate of tax domicile, which is a document issued by the tax authorities in his country proving that he/she is in good standing with the tax authorities. This document will enable the withholding tax to be waived in Burkina, in compliance with the regulation on the avoidance of double taxation within the West African Economic and Monetary Union (WAEMU) zone.

11. SUBMISSION OF TENDERS

Technical and financial offers must be signed and must be submitted before 24/05/2024 at 5 :00 p.m., Burkina Faso local time: by email in password-protected PDF format, to gwp.westafrica@gwpao.org and secretariat.abv@gmail.com with the title « **Mission for Valuation of Environmental Capital, Ecosystem Services and Functions, and Socio-Anthropological Impacts in the Volta Basin** ».N.B:

Note Well: The name of the person holding the passwords, his telephone number, Skype number and email address must be mentioned in the email sent. The VBA Executive Directorate will contact this person to take part at the first session, which will be devoted to opening the files, of the committee responsible for assessing tenders. During this first session, the person will communicate the passwords when the evaluation commission opens the files. Firm must not accept password requests from other people.

12. TENDER EVALUATION

The selected offer will be the one presenting the most robust technical offer, supported by the most advanced analysis, and the financial offer presenting the best price/quality ratio according to the criteria below :

- The qualifications of the Team Leader Chief of the Mission (30%);
- The qualifications of all experts on the Consultant's team (20%);
- The quality of the technical offer (30%);
- The financial offer (20%).

13. CONTACTS

For further information, interested Consultants working in the Volta Basin should send an e-mail (gwp.westafrica@gwpao.org) no later than 08/05/2024 at 4.30 p.m., Burkina Faso Local Time, to **Executive Secretary of GWP-AO, located at Ouaga 2000, Avenue Charles Bila KABORE, Gate 1673, 05 PO Box 6552 Ouagadougou 05, Tel : + 226 25 36 18 28/25 37 41 04, BURKINA FASO.**

14. RESERVE NOTE ON THE CANCELLATION OF THIS CALL FOR TENDERS

This invitation to tender may be cancelled under any of the following conditions:

- The insufficient competition;
- No offer conforming to the tender documents has been received;
- The offers accepted at the opening of tenders would have greatly exceeded the available budget.

APPENDIX 1: BUDGET PRESENTATION TEMPLATE (IN FCFA - EXCL. TAX)

N° PRICE	DESIGNATION	U	QTY	UNIT PRICE IN FCFA	TOTAL PRICE IN FCFA
1	Fees				
1.1	Team Leader_ Chief of the mission	M-M			
1.2	Socio-economist Expert	M-M			
1.3	Expert in Remote Sensing or Cartography	M-M			
	<i>sub-total 1</i>				
2	PERDIEMS				
2.1	Head of mission	day			
2.2	Socio-economist Expert	day			
2.3	Expert in Remote Sensing or Cartography	day			
	<i>sub-total 2</i>				
3	OPERATION				
3.1	Communication	ff			
3.2	Travel	ff			
3.3	Secretariat	ff			
	<i>sub-total 3</i>				
	TOTAL (HT) 1+ 2 +3				

Done in....., the.....2024

The tenderer

(Surname, first names, signature and stamp)