



OBSERVATOIRE DU SAHARA ET DU SAHEL
SAHARA AND SAHEL OBSERVATORY

ADAPT-WAP PROJECT

**“INTEGRATION OF CLIMATE CHANGE ADAPTATION AND MITIGATION
MEASURES IN THE CONCERTED MANAGEMENT OF THE WAP
TRANSBOUNDARY COMPLEX”**

**Elaboration of preparatory studies and development
of the ADAPT-WAP project full proposal for
submission to the adaptation fund**

TERMS OF REFERENCE

[AP/OSS/ADAPT-WAP/291117]

November 2017

1. CONTEXT

The W-Arly-Pendjari (WAP) Complex is one of Africa's most important set of terrestrial transboundary ecosystems. It is considered as the largest and most important continuum of intact ecosystems in West Africa. Shared by Benin, Burkina and Niger, this network of protected areas consists of a number of areas with different status and protection regimes at the national level. In addition to the W Transboundary Biosphere Reserve (WTBR) shared by the three countries, the WAP complex covers the Arly National Park in Burkina Faso and the Pendjari National Park in Benin.

Including the riparian zones, the WAP Complex extends over a total area of 50,000 km² (43% in Benin, 36% in Burkina Faso and 21% in Niger). The WAP Complex is located nearby the West African savanna belts. It displays considerable biological diversity that contributes to the economic and social development of the sub-region. In the peripheral areas of the Complex and at a distance of about 40 km from its protected areas, there are about 350 towns and villages of a total population estimated at one million inhabitants (about 700 000 in Benin, 200 000 in Burkina Faso and 100,000 in Niger).

Like the entire region, the WAP Complex is subject today to the adverse effects of climate change manifested in a change in precipitation patterns both in time and space, a constant increase of temperature and seasonal shift. Climate projections for the WTBR region by 2032 and 2050 show an annual temperature increase of 2 °C to 2, 5°C and a precipitations decrease of 9%.

The alternation of seasons determines the active period of vegetation. The latter does not exceed four months for the WAP Complex. Currently, a reduction and shift in the vegetation active period is observed at the Complex level.

The frequency of rainfall deficit periods characterizing the region since the 1970s has actually increased. This shift in climate parameters has a direct effect on animal reproduction, on the fauna and flora and on the production of the biomass in the WTBR and threatens its ecological balance. In addition, according to climate change projections, the WAP adjacent population will also be highly affected, especially in terms of natural resources and ecosystems management and agricultural and pastoral practices.

The natural resources of the WAP Complex represent a major asset for the local populations whose livelihoods rely mainly on agriculture, livestock breeding, fishery, forest resources (wood and non-wood products), and tourism.

However, the WAP Complex is subject to multiple pressures and threats, mainly conflicts of use, poaching, overgrazing, agricultural lands expansion, transhumance, bushfires, surface water pollution, climate change and variability, unsustainable use of wood and non-wood products, and fishery. Added to this, the WAP Complex is located in an agro-pastoral region characterized by high inter-annual variability, exacerbated by climate change which makes it more vulnerable.

In view of all these observations and with the aim of strengthening the resilience of the WAP Complex's populations and ecosystems, the Sahara and Sahel Observatory (OSS) in collaboration of the three riparian countries (Benin, Burkina Faso, and Niger), has developed a proposal for a regional project entitled "ADAPT-WAP". The proposal has been submitted to the Adaptation Fund and a Concept Note has been developed. The next step will be the elaboration of a detailed project proposal (Full Proposal). Accordingly, these Terms of Reference have been elaborated with the aim of specifying the content of the preparatory studies necessary for the finalization of the project Full Proposal.

2. OBJECTIVES OF THE ADAPT-WAP PROJECT

The ADAPT-WAP project aims to strengthen the resilience of ecosystems and to improve the populations' livelihoods of the WAP Complex in the face of climate change through the establishment of a Multi-Hazard Early Warning System (MHEWS) and the implementation of concrete adaptation measures.

The ADAPT-WAP project will help consolidate synergy between the three beneficiary countries by strengthening the sustainable and participatory management of the WAP Complex's natural resources and by contributing to the resolution of conflicts between the different users.

The project specific objectives are:

- Improve strategic reference documents, i.e. development and management plans, by integrating climate change issues.
- Improve populations' resilience through an Early Warning System and provide relevant and timely information on the occurrence of extreme weather events related to climate change in the WAP Complex and its adjacent areas.
- Improve ecosystems' resilience (fauna and flora) and populations' livelihoods through the consolidation of infrastructure, for example transhumance corridors, drinking troughs, and anti-flood structures, etc.
- Ensure the sustainability of adaptation measures through the mobilization and awareness-raising of beneficiaries and partners to master the tools developed and execute the work needed.

3. COMPONENTS OF THE ADAPT-WAP PROJECT

The ADAPT-WAP project is structured around four main components:

Component 1: Integration of climate change aspects and emergency plan (MHEWS) in the WAP Complex management

The first component of the project will be dedicated to the elaboration of a regional master plan and the update of existing national and local action plans by integrating the climate change dimension and by defining concrete adaptation and mitigation measures. The regional master plan will help improve and harmonize existing management tools, studies, databases, digital and mapping materials.

Component 2: Design and establishment of a Multi-Hazard Early Warning System (MREWS) (drought, flood, and fire)

Component 2 of the ADAPT-WAP project aims to set up a Multi-Hazard Early Warning System and an emergency plan for the benefit of the WAP Complex users, including the population.

The MHEWS will be community-based and adapted to the socio-ecological context of the WAP Complex for a better preparation to natural disasters and extreme weather events management.

Component 3: Improving the resilience of ecosystems and populations livelihoods through the implementation of concrete adaptation and mitigation actions

This component will be devoted to the implementation of concrete adaptation measures (development of infrastructure: water points, transhumance corridors, etc.) and the promotion of other activities as agroforestry and small-scale irrigation with a view to increasing the resilience of ecosystems and populations to climate change. These measures will help reduce the negative impacts of climate change on natural resources and to maintain and preserve ecosystem services.

Component 4: Awareness-raising and capacity building for the concerted, integrated and sustainable management of the WAP Complex

Component 4 will be entirely dedicated to awareness-raising, communication and capacity building. It will concern the different targeted groups and will focus on the major challenges and problems facing the WAP Complex. A communication and awareness-raising action plan will be elaborated and will serve as a decision-support tool for the Complex managers and concerned authorities.

4. OBJECTIVES OF THE CONSULTANCY

The main objective of these Terms of Reference is the elaboration of a project document which meets the Adaptation Fund's requirements. This could be achieved through the implementation of preparatory studies and additional thematic analyses that will serve as a basis for the finalization of the project document (Full Proposal).

5. CONSISTENCY OF THE CONSULTANCY

The Consulting Firm will be in charge of conducting a series of studies and analyses which will help to develop the project document and of taking part in national and regional consultation workshops.

3.1 - Studies and Analyses

The first section relative to the studies and analyses will be structured around five major Parts:

Part A- Assessment of populations and natural resources vulnerability to the adverse effects of climate change,

Part B- Identification of needs in terms of infrastructure (watchtower, reforestation, basin, etc.), early warning tools and income-generating activities and **evaluation of their economic cost-effectiveness**

Part C - Environmental and Social Evaluation of the project and identification of mitigation measures for the negative impacts of the project activities,

Part D- Integration of the Gender dimension in the project activities

Part E- Elaboration of the project document (Full proposal)

The project Concept Note, validated by the Adaptation Fund, is one of the main documents to be consulted and taken into account by the Consulting Firm in executing its work.

A detailed description of the objectives and activities to be conducted under each Part is given in the following:

Part A – Assessment of populations and natural resources vulnerability to the adverse effects of climate change

Objectives

The main objective of this Part is to evaluate and analyze the vulnerability of ecosystems and populations to the adverse effects of climate change in the project areas of interest according to current data and climate projections.

Consistency

This Part will focus on the implementation of an assessment based on a bibliographic research. This includes:

- Literature review and analysis of existing documents, national communications, studies, and projects reports dealing with the WAP Complex vulnerability.
- Establishing a general overview on the Complex vulnerability
- Identifying and delineating the most vulnerable areas
- Classifying the identified areas by degree of vulnerability and type of risk (flooding, bush fires and drought)
- Proposing adequate actions to mitigate ecosystems and populations' vulnerability in the most vulnerable sites

Part B- Identification of needs in terms of infrastructure (watchtower, reforestation, basin, etc.), early warning tools and income-generating activities and evaluation of their economic cost-effectiveness

Part B will focus on taking an inventory of existing infrastructure and of the users and beneficiaries' needs and assessing the economic benefits and profitability of the infrastructure and activities implemented.

B.1 - Identification of needs in terms of infrastructure, early warning tools and income-generating activities

Objectives

This subpart aims at the identification of the infrastructure needed for an efficient and sustainable implementation of the project (buildings, roads, structures for farmers and populations, etc.), as well as of necessary equipment and tools for establishing the Multi-hazard Early Warning System and creating the income-generating activities envisaged by the project (cf. Project Concept Note).

Consistency

In order to achieve this objective, the Consulting Firm will have to consider the following activities:

- Inventory, evaluation and description of existing infrastructure in the WAP Complex in the three countries concerned.
- Identification of needs in terms of infrastructure and necessary equipment for the development of the WAP Complex and improvement of its current situation.
- Evaluation and identification of the equipment needed for establishing the early warning system (weather stations, sensors, piezometers, servers, processing units, softwares, GPS, etc.), type of data (biophysical, socio-economic, mapping, etc.) and broadcast tools (beacon, flags, sirens, signals, loud speakers, etc.).
- Definition and description of needs in terms of infrastructure and specific equipment for the income-generating activities envisaged by the project (cf. Concept Note).

B.2- Estimation of the project Cost Effectiveness:

Objectives

The subpart will focus on the project “Cost Effectiveness” in order to assess the economic and financial contribution of the project activities for the Complex’s populations and users. The Consulting Firm will be required to analyse the project overall profitability taking into account the infrastructure and equipment’s cost-effectiveness as well as the project added-value at the environmental, social and economic levels.

Consistency

In order to attain this objective, the Consulting Firm will be required to undertake, among others, the following activities:

- Estimation of the development actions costs (reforestation, constructions, etc...)
- Estimation of the EWS equipment costs
- Estimation of the average revenue of the households that would have benefited from the income generating activities and analysis of the cost and cost-effectiveness of the different infrastructure to be implemented.

Part C - Environmental and Social Evaluation of the project and identification of mitigation measures for the negative impacts of the project activities,

Objectives

The main objective of the environmental and social impact study is to provide the ADAPT-WAP project managers with an environmental and social management tool during the project execution and to mitigate the potential negative impacts that could be generated by the project activities.

Consistency

The specific objectives of this part are the following:

- Identify and evaluate the predictable environmental and social impacts (positive and negative) of the proposed project
- Identify and analyse possible alternatives to the proposed project
- Propose effective mitigation measures for the negative impacts at a reasonable cost and improvement measures for the positive impacts to be implemented during and after the project execution
- Verify the project compliance with national legislation (per park and per country) and with the OSS and the Adaptation Fund's safeguards
- Prepare benchmark data for the project monitoring and evaluation and integrate the M&E of the mitigation measures.
- Develop the Environmental and Social Management Plan (ESMP)

This Part should be addressed separately and compiled in a full document to be submitted to the national authorities in charge of the environment in the three beneficiary countries: Benin, Burkina Faso and Niger.

More details about this study and its overall plan are given in annexe 1 of this document.

Part D - Integration of the Gender dimension in the ADAPT-WAP project activities

Objectives

The purpose of this component is to integrate the gender dimension into the various activities of the project, including in particular all the upstream studies related to the initial estimates, needs assessment, as well as the profitability studies of the project activities. Gender mainstreaming should also be a prerequisite in the implementation of infrastructure development actions, at the level of the development of AGRs and more generally at the level of communication, training and awareness actions to be undertaken in the project framework.

Consistency

This Part will include the following activities:

- Analysis of the current situation of women, youth and vulnerable groups in the WAP Complex and surrounding villages (main activities, AGRs and associations)
- Highlighting successful experiences and challenges faced by previous projects and initiatives implemented at the Complex level
- Definition of the target groups and the number of beneficiaries in the different project areas
- Clarification of specific project activities for women, youth and vulnerable groups and their added value
- Proposal of an approach adapted to the study area and proposal of recommendations guaranteeing the reinforcement of the involvement of vulnerable groups based on the lessons learned from past experiences, taking into account past experiences in the area.

Part E – Development of the project full proposal

Objectives

The project full proposal will be developed in accordance with the Adaptation Fund's requirements and template. The full proposal should integrate the data and information collected and generated in the analyses and studies mentioned in the previous Parts.

Consistency

The Consulting Firm should finalize the project full proposal based on the following references and documents:

- The major outcomes and conclusions of the first 5 Parts
- The comments and annotations of the Adaptation Fund on the Concept Note
- The guidelines and policies of the Adaptation Fund
- The outputs and recommendations of workshops and meetings conducted with the project actors and stakeholders.

3.2 – Consultation Workshop

It should be noted that the Consulting Firm should designate an expert to take part in the regional and national workshops that will be organized in the project beneficiary countries (Benin, Burkina Faso and Niger).

The expert mission will be the following:

- Prepare the ToRs, the programs and all the necessary documents of the workshops (evaluation sheet, project abstract, survey sheet, list of participants, etc.)
- Facilitate and co-facilitate/supervise the workshops organization and workflow
- Finalize/develop the workshops minutes/reports and recommendations. The reports should include photos and illustrations.

NB: All these documents must be validated by OSS.

6. OSS RESPONSIBILITIES

The ADAPT-WAP project will be managed by OSS (Environment Program) which will be responsible for the supervision of the present consultancy. The OSS team in charge of the project must validate all the documents resulting from the tasks assigned to the consulting firm.

In order to facilitate this mission, the OSS undertakes to make available to the consulting firm all the necessary documentation at its disposal. It is also committed to facilitating contact and access to data from national project institutions and partners.

7. DELIVERABLES

The following deliverables will be expected by the end of this consultancy:

Expected Products	Estimated effort person-days	Dates of receipt
A report on populations and ecosystems vulnerability	20	30 days upon signature of the contract
A report on the infrastructure development activities needed and the necessary tools and equipment that should be acquired and provided by the project for the early warning system and income generating activities	10	
A report on the project cost-effectiveness	10	
A report on the environmental and social evaluation of the project	25	80 days upon signature of the contract
A report on the integration of the gender dimension in the project activities	20	
The project « Full proposal », Final version developed both in French and English.	25	90 days upon signature of the contract
Total	110	
OSS deliverables endorsement/validation		10
Total général		100

8. REQUIRED PROFILE AND TASKS DISTRIBUTION

For a better execution of the required activities, the Consulting Firm should provide the following profiles:

Profile	Qualification	Required experience
An expert in environment and forests /natural resources management or other similar field with at least a postgraduate degree (3 rd cycle)	<ul style="list-style-type: none"> - Must have a good knowledge in the fields of environment, climate change and natural resources management - Has previously elaborated development projects documents in Africa - Must have a good knowledge of the natural contexts of the project beneficiary countries. - Must have participated in the design/development of at least 3 projects funded by multi-lateral stakeholders and addressing the theme of climate change vulnerability 	15 years at least
An expert in rural socio-economics/economics or similar field with at least a postgraduate degree (3 ^{ème} cycle)	<ul style="list-style-type: none"> - Must have a good knowledge and command of the evaluation of projects socio-economic impacts. - Must have a good command of the gender dimension and the approaches and methods of its integration in development activities - Must have participated in at least three socio-economic evaluation studies. 	10 years at least

An expert in environment and climate change with at least a postgraduate degree (3 rd cycle)	<ul style="list-style-type: none"> - Must have a good experience in environmental studies and early warning systems - Must have a good knowledge of data processing and exploitation techniques and modeling systems for drought monitoring and management - Must have participated in at least 2 projects/studies in relation with the design and/or identification of Early Warning Systems 	10 years at least
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9. DURATION, EXCHANGES AND FEES

The overall level of effort estimated is 110 person/days distributed over 90 calendar days not including the duration of the OSS validation (10 days) . The daily rate is fixed at US \$. 500.

The payment of the amount of the fees will be done by the OSS on the account specified by the Design Office to the validation by the OSS of the requested work. The payment of the Consulting firm will be made in two (2) installments as follows:

- 40% of the total amount after validation of the five (5) component reports;
- 60% of the total amount after receipt and validation of the Full Proposal of the Project.

Exceptionally, if the Consulting Firm selected requests an advance, **the latter must submit to the OSS in advance a bank guarantee payable on first request for the same amount.**

10. PRÉSENTATION OF APPLICATION PACKAGE

The application package must include:

1. A methodological note of 3 pages for the execution of the consultancy
2. A detailed calendar defining the steps, activities and deadlines of the mission
3. The references of the Consulting Firm indicating its field of intervention and expertise in relation with the themes of the present consultancy
4. A detailed *curriculum vitae* of the experts to be involved ; (use the OSS standard model downloadable on: http://www.oss-online.org/sites/default/files/fichier/CV-template-OSS-ENG_4.doc)
5. Any other useful documents.

NB: The references of the experts to be selected will also be useful for justifying their competence for the mission. Also Note that the consulting firm is required to provide a commitment statement from each expert to this mission.

11. APPLICATION MODALITIES AND DEADLINES

The applications must be sent to OSS by email at the following address procurement@oss.org.tn no later than: **19 December 2017 at 00h00 (Tunis time)**

With the mention of : «**Call for tenders for the elaboration of a project Full Proposal: INTEGRATION OF CLIMATE CHANGE ADAPTATION AND MITIGATION MEASURES IN THE CONCERTED MANAGEMENT OF THE WAP TRANSBOUNDARY COMPLEXE: ADAPT – WAP PROJECT**»

Email address : procurement@oss.org.tn

ANNEXE 1

Terms of Reference of the Environmental and Social Evaluation

1. **Examine the documentations and literature** relative to the project, the project concept note in particular, taking into account the Environmental and Social Performance Standards (ESP) of the Adaptation Fund as well as of the OSS Social and Environmental Policy.
2. **Elaborate an approach for the identification of the potential social** and environmental impacts of the project and specify if these impacts are minor and could be easily managed; or if there are other important potential impacts on the natural habitat, on the physical and cultural resources or on other concrete working sites which necessitate an in-depth analysis.
3. **Collect information about the project sites** and consult all the stakeholders concerned to confirm the potential risks of the proposed actions compared to the 15 Principles of the Fund's ESP and national regulations.
4. **Analyze of the project social and environmental impacts:** this will be conducted in two phases: identification and analysis.
 - a. The identification phase consists in taking an inventory of all the potential impacts of the project. The inventory will be based on existing literature/ documentation and previous experiences.
 - b. The analysis phase will include the evaluation of these impacts, i.e. assessment of the value of each impact. **Only the important impacts** will be retained as **project impact**. The evaluation of the project impact consists in the assessment of the importance of the most probable impacts.

This assessment will be based on the following elements:

- a. Extent,
 - b. Duration: permanent, temporary or semi-permanent
 - c. Amplitude
 - d. Likelihood
 - e. Importance of the affected component. The consulting firm identify the type of impact: direct or indirect.
5. Elaborate an environmental and social **evaluation report of the project**. The report must include:
- a. a- a clear description of the necessary information for understanding the decision making process leading to the proposed project
 - b. b. a summary of applicable internal and international regulations
 - c. c. an explanation about the AF and/or OSS's principles used for risk assessment
 - d. d- a description of the risk assessment procedure used,
 - e. e. Graphics and images.
6. **Submit the report for public consultation.**

7. Document and sum up the results of the environmental and social evaluation in order to elaborate the final version of section II.I of the Concept Note,

8. Elaborate an Environmental and Social Management Plan (ESMP) to manage risks and/or the negative impacts identified which could not be avoided. The ESMP will be formulated in accordance with the format, content and quality prescribed by the Environmental and Social Policy of the Adaptation Fund and the Environmental and Social Policy of OSS. This should include the following tasks:

- a. Analyse in details and document the safeguards (in accordance with the AF and OSS Environmental and Social Policies) identified by the project and propose a management approach for the safeguards identified. These safeguards will be presented as a part of the ESMP.
- b. The ESMP will comprise: a technical description of the measures, calendar, performance criteria, implementation procedures, involved actors, needs in terms of trainings and implementation and monitoring costs.
- a. Identify the positive and negative impacts incurred by the project activities and propose effective means for managing each of the identified impacts in a grid.
- b. Elaborate a stakeholders involvement plan, including their role and duties, integrate the gender dimension and define specific activities which would enable the vulnerable groups to benefit from the project implementation;
- c. Conduct an evaluation in accordance with the national safeguards and the OSS and AF's safeguards and identify the activities that may require the application of national regulations (study of the Environmental Impact).
- d. Elaborate an approach for the identification of the environmental and social risks of the activities that will be defined during the project development (as the income generating activities), and if needed, develop adapted environmental and social management elements which should complete and be integrated into the ESMP.
- e. Elaborate and present an Environmental Mitigation Plan (EMP) for each safeguard identified and the project activities and a Monitoring Plan (MP) for the implementation of the ESMP.

9. Expand section II.I. of the project Concept Note with the documentation/results obtained by the present consultancy.

10. Elaborate a monitoring program adapted to the actions identified in the ESMP

11. Compile all the findings in a single distinct document (final report) which will have the following structure:

- a- A summary description of the project,
- b. Evaluation and categorization of resulting risks and impacts
- c. Environmental and Social Management Plan
- d. Evaluation and monitoring arrangements

The final report should also include the consultations' details and results and the institutional, operational and financial arrangements for the environmental and social safeguard activities.