PART I : PROJECT INFORMATION

Title of Project/Programme: Towards a climate risks shield in the Mono River Basin (Benin, Togo): Strengthening adaptation and resilience to climate change through integrated water resources and flood management (Project: BOUCLIER-CLIMAT/Mono)

Countries: Benin and Togo
Thematic Focal Area: Transboundary water management
Type of Implementing Entity: Regional Implementing Entity (RIE)
Implementing Entity: Sahara and Sahel Observatory (OSS)
Executing Entities: Mono Basin Authority (MBA)
Global Water Partnership in West Africa (GWP-WA)

Amount of Financing Requested: 14,000,000 (in U.S Dollars Equivalent)

1. Project Background and Context

1. The transboundary Mono River Catchment, located in West Africa with its main course of nearly 530 km, covers almost 24,300 km². The catchment is shared by Benin (with 3,000 km², i.e. 2.14% of the country's territory) and Togo (with 21,300 km², i.e. 38% of the country's territory) and has two climatic zones: the sub-equatorial zone in the southern part with two rainy seasons and two dry seasons in the year, and the tropical zone in the northern part with one rainy season and one dry season. The average annual rainfall ranges from 900 mm in the south-eastern plains to 1200 mm in the north-western highlands. The average annual temperature is around 28°C.

2. The catchment has a rich set of wetland ecosystems consisting mainly of large marine and coastal ecosystems. Three Ramsar sites have been recognized namely Lake Toho in Benin and the Protected Area Complex of Togodo and the Coastal part in Togo.

3. The current population is estimated at 4,000,000 inhabitants with a high spatial density of 70 to 300 inhabitants/km², of which 58% live in Togo and 42% on Benin. The rural population of the basin is around 70%. The main economic activities are: Subsistence and cash crop agriculture (extensive and rain-fed), fishing, traditional agri-food processing, small-scale livestock farming and forestry. Other growing economic sectors are industry, trade, mining, energy, leisure and tourism. The Nangbeto power dam (1.7 billion m³; 60 MW and 148 GWh/year), is built on the Mono River and is common to the two states to which it contributes to the satisfaction of their electricity needs. Regarding the economic situation, even though it has improved in the recent years, Benin and Togo are still among the poorest in the world: Gross Domestic Product (GDP) per capita in 2019 is US$ 1201 for Benin and US$ 845 for Togo.

4. The natural resources that characterizes the Mono river catchment are of vital importance to the economic structure and the development of the riparian countries. However, the project area faces major challenges to meet the growing

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1 Since the two countries are francophone, the acronym “Bouclier Climat” (French meaning of “Climate Shield”) will be adopted.
2 Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.
4 Extrapolated value based on 2010 population data: 3,400,000 inhabitants in 2010 with an annual growth rate of 2.5
development needs and fully contribute to the improvement of the communities’ socio-economic conditions. The most important challenges are related to the significant degradation of the catchment environment, which is strongly exacerbated by the impacts of climate change, making the communities and ecosystems very vulnerable to these climatic effects. Indeed, over the past 30 years, several changes in the climate regime have been observed in this catchment\textsuperscript{[6,7,8,9]}.

This main changes include: i) an increase in the average annual temperature of up to 1°C; ii) a reduction in the number of rainy days; and iii) an increase in the frequency and intensity of droughts and extreme rainfall events. Similarly, prediction provided by climate models indicate (i) a continued increase in the mean annual temperature up to 2100, (about 2.7°C in 2100 compared to 2015) and (ii) an increase in intra-annual precipitation variability.

5. The direct effects of these changes, particularly on rural communities, include\textsuperscript{10,11}: 

- Cyclical and catastrophic flooding (between June and October). For example, the floods of 2010, have affected vast areas, especially in the downstream part of the catchment and its lower basin. During October 2019, exceptional rains have caused serious damages in the localities of the Mono administrative department (in Benin) and the Maritime region (in Togo)\textsuperscript{12,13}:
  - Flooding of about 4,100 hectares in the downstream part;
  - About 15,000 households and more than 60,000 people in nearly 200 villages are affected;
  - The inaccessibility and degradation of several public buildings and basic social infrastructures (health centers, schools, water points, roads, etc.).

- The increase in the frequency and the intensification of drought is resulting in more lengthy dry seasons and a delay in the starting of the rainy season\textsuperscript{14,15} and its duration. Drought episodes includes drying of soils, reduced surface runoff, and utilized agricultural land thus increasing food insecurity and affecting community livelihoods. For example, climate change has been shown to reduce yields of maize, the main food crop in the catchment\textsuperscript{16} by about 25%. In the same way, cessation of flow due to the drying up of the river has been noted in some parts of the basin in recent years which has had as an impact, the shortage of water supply for irrigation, mainly in certain rice production areas such as Dézé\textsuperscript{17}.

- The Atlantic Ocean level rise the in coastal areas, resulting in the saline intrusion in coastal aquifers;

6. It is also established that the effects of these floods are amplified by the release of water from the Nangbeto hydroelectric dam as well as the closure of the river's outlet in Benin "la bouche du Roi". The collateral damage of these climatic risks includes (i) health and hygiene risks due to contamination of drinking water sources by spilled latrine water, (ii) spread of water-borne and hydro-fecal diseases (cholera, diarrhea diseases, malaria, etc); (iii) food insecurity.

7. In order to better identify and implement appropriate approaches to managing the catchments’ transboundary environmental problems and challenges, the two states recently created (in 2014) the Mono Basin Authority (MBA). The present proposal aims to support the MBA in addressing the priority climate problems in the catchment through the implementation of concrete adaptation actions.

2. Project Objectives

8. The global objective of the project is to enhance the resilience of vulnerable communities in the Mono catchment through the development of adaptive capacities to recurrent floods risks and promotion of sustainable and equitable water resources and related ecosystems uses and management.

9. The specific objectives of the project are:

- To ensure the long-term monitoring of climate risks through the production of reliable scientific data and information, at local, national and trans boundary levels in the Mono River Basin;


\textsuperscript{5} https://www.unbonn.org/news/researchers

\textsuperscript{6} Scenarios A1B and B1 put forward by the Intergovernmental Panel on Climate Change (IPCC), and predictions for climate parameters at the 2020, 2025, 2050, 2075 and 2100 horizons were then made by running Atmospheric Ocean General Circulation Models (AOGCM).

\textsuperscript{7} https://www.scrip.org/pdf/AGIS_2015122316114570.pdf


\textsuperscript{10} UNDP & ANPC (2020). Inondations de 2019 au Bénin - Rapport d’évaluation des besoins post catastrophe. 133p

\textsuperscript{11} Gouvernement du Bénin, 2011. Deuxième Communication Nationale sur les changements climatiques.


\textsuperscript{14} Jean GUEDESSOU (2009). Enjeux des changements climatiques dans la mise en œuvre du projet d’aménagement hydroagricole de la basse vallée du fleuve Mono. 14è colloque international de l’EIPF et du SIFEE; Niamey 2009

\textsuperscript{15} UNDP & ANPC (2020). Inondations de 2019 au Bénin - Rapport d’évaluation des besoins post catastrophe. 133p


\textsuperscript{17} Jean GUEDESSOU (2009). Enjeux des changements climatiques dans la mise en œuvre du projet d’aménagement hydroagricole de la basse vallée du fleuve Mono. 14è colloque international de l’EIPF et du SIFEE; Niamey 2009
- To develop and implement a regional flood early warning system for vulnerable communities disaster risk reduction;
- To implement concrete adaptation actions to build the resilience of the most vulnerable communities;
- To strengthen the institutional and technical capacities of the MBA and its stakeholders.

3. Project Components and Financing

<table>
<thead>
<tr>
<th>Project Components</th>
<th>Expected Outcomes</th>
<th>Expected Outputs</th>
<th>Countries</th>
<th>Amount (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operationalizing effective decision support tools to strengthen climate change adaptation planning in the catchment through improved knowledge and the development of a basin-wide flood early warning system</td>
<td>1.1. Tools for effective and sustainable responses to extreme climate risks and adaptation, supported by required data and information are tailored and operationalized in the Mono basin</td>
<td>1.1.1. The hydro-agro-climatic monitoring network (surface/groundwater, meteo) of the basin is optimized and made operational; 1.1.2 Innovative hydro-climatic data and information monitoring tools (remote sensing, GIS/geo-portal, remote transmission, automated stations) are deployed to support in situ tools (hydro-agro-climatic monitoring network); 1.1.3 A basin wide integrated climate risk assessment and monitoring model is developed and implemented; 1.1.4 A basin-wide flood early warning system is tailored and operationalized</td>
<td></td>
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<tr>
<td>2. Implementing priority actions in the most vulnerable zone to climate change in the basin with the aim of building community resilience</td>
<td>2.1 Water resources availability (quantity and quality) is enhanced and ecosystem services as well as vulnerable communities livelihoods and incomes are diversified and strengthened</td>
<td>2.1.1. The degraded riverbanks in the critical areas (hotspots) are rehabilitated and stabilized through the realization of at least 150 ha of vegetal material protection (reforestation, agroforestry, Assisted Natural Regeneration, etc.) and 2,000 linear meters (lm) of mechanical protection; 2.1.2 - Basin heads of the Mono River main course and 2 of its major tributaries’ are protected through the rehabilitation and development of at least 350 ha in critical areas via, reforestation, afforestation, soil conservation protection actions, etc; 2.1.3 Livelihoods and incomes of the most vulnerable communities, particularly youth and women, are increased through support for (i) the implementation of income-generating activities targeting 5,000 beneficiaries and (ii) the development of 4 small-scale (02 in each country) non-timber forest product processing units benefiting 500 beneficiaries</td>
<td></td>
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<tr>
<td>3. Capacity building, awareness raising and knowledge sharing</td>
<td>3.1. The operational capacities of the target stakeholders (MBA Executive Secretariat, national hydrological department and communities) are strengthened in response to climate change and knowledge is capitalized.</td>
<td>3.1. The capacities (training and office equipment) of the MBA Executive Secretariat, the national hydrological departments and the National Civil Protection Agencies of both countries are strengthened. 3.1.2. Communities in the target areas are provided with awareness and training in climate change resilience. 3.1.3. Communication products are developed and lessons learned from the project are disseminated/shared</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Project/Programme Execution cost (9.5% of Total Project Cost) 1,040,000
7. Total Project/Programme Cost 12,000,000
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable) 6.5% of Total Project Cost 960,000,000

Amount of Financing Requested 14,000,000

4. Project Duration
05 years (60 months)

PART II: PROJECT / PROGRAMME JUSTIFICATION

10. Component 1: Operationalizing effective decision support tools to strengthen climate change adaptation planning in the Basin through improved knowledge and the development of a basin-wide flood early warning system (US $ 3,000,000). This component Outcome is to operationalize a modern and efficient regional flood early warning system (EWS) in the Mono basin and to support the production of reliable data and information for the effective functioning of the EWS. Therefore, the achievement of this goal will be based on the optimization and strengthening of the hydro-climatic data collection network as well as the provision of such data, the development of a climate risk management model and the development of the flood EWS and its operationalization. The operationalization of the flood EWS will build on existing ones in both countries, notably the national flood management and response plans, and will involve stakeholders at all levels (regional, national and local/community). In order to be truly effective, an implementation scheme for this plan (to be further refined at concept note and full proposal phase) is drawn as follow:
- **At the national and local levels:** Establishment of the (i) *Mono flood EWS National Coordination Unit* involving existing national EWS actors and which will ensure national coordination, (ii) *Local Early Warning Units*, set up in localities bordering the river in vulnerable target areas and (iii) *Community Relays* whose role is to support the activities of local antennas.

- **At the regional level:** The Mono Basin Regional Early Warning Unit hosted by the Executive Directorate of the Mono Basin Authority (MBA) will be set up and linked to each of the two National Units operating in the two countries. It will constitute the main interface of the Mono Basin regional EWS with the major duties of (i) ensuring the junction and the relay between the 2 National Units, (ii) supporting the implementation of the activities of the National Units, by contributing to the reinforcement of capacities for the deployment of emergency plans.

11. **Component 2:** Implementing priority actions in the most vulnerable zone to climate change in the basin with the aim of building community resilience (USD 8,000,000). This component intends to deploy concrete actions on the ground to strengthen communities' adaptation and resilience. The priority proposed actions include the rehabilitation and protection of about 500 ha of land (headwaters of rivers and degraded river banks) by biophysical protection means (reforestation, agroforestry, Assisted Natural Regeneration, etc), the installation of about 2000 linear meters of mechanical bank protection, the implementation of income generating activities (IGAs) and capacity building actions targeting at least 6500 direct beneficiaries in vulnerable areas. The IGAs will be targeted primarily at vulnerable groups, particularly women and young people or groups of such beneficiaries. It is planned to support the implementation of the actions through two financial mechanisms:

- One-off grants for community activities and/or micro-projects generating environmental benefits such as water and soil conservation, agroforestry, reforestation, fishing, development and management of grazing areas, etc.
- Revolving funds (Low-interest micro-credits) for income-generating activities (IGAs) targeting activities such as small-scale irrigation/ market gardening, fishing, livestock, non-timber forest product processing, ecotourism, beekeeping products for the benefit of women and young people, etc.). The implementation of revolving funds will enable to reach a large number of beneficiaries and will contribute to not only the activities scaling-up but also to the actions sustainability. The management modalities of these micro-credits will be specified at the full proposal stage.

The choice of the above listed priority actions and target areas is ruled by the results and conclusions from the recent assessment study (current situation)\(^\text{18}\) of the Mono basin, carried out in 2020. This study, even being preliminary, synthesizes the main challenges raised by various stakeholders including the local communities. The final recommendations will be made after extensive consultations are undertaken during the full proposal phase.

12. **Component 3:** Capacity building, awareness raising and knowledge sharing (USD 1,000,000) will consolidate the project implementation framework and ensure dissemination of lessons learned through capacity building, communication and training. It will support the development of innovative knowledge management mechanisms for information sharing, training and exchange of experiences, data collection and analysis, dissemination and capitalization of best practices. This will be supported by the development of a web platform and innovative communication tools. Some expected outputs of this component are: technical reports; manuals on lessons learned, videos, radio and television programmes, experience sharing visits, awareness campaigns, etc. The component also includes the development of a communication plan for target groups, in particular vulnerable communities (women, youth, the elderly and the disabled) and water users.

13. Some activities of component 3 will be specifically dedicated to the strengthening of the technical and institutional capacities of the MBA. Other key stakeholders targeted for capacity building include local communities, NGOs, youth and women organizations as well as extension services staff from various national and local sectors such as water, agriculture, environment and forestry. The training topics may include awareness raising campaigns on climate change impacts such as land degradation, water quality, inter alia and concrete adaptation solutions.

- **Added value through the regional approach**

14. The transboundary nature of the Mono basin makes a regional approach essential to promote collaboration, data and information exchange and experience sharing between national partners and the MBA. This underpins transparent decision-making, which is particularly important for preventing conflicts of use, especially with regard to the shared resources (water, soil and associated ecosystems) of the Mono basin.

15. The regional approach will enable the synergy of action through a coordinated planning and implementation of activities both during project preparation and implementation, and thereby ensure that no redundancies or

duplications occur. For example, the MBA is currently preparing the Transboundary Diagnostic Analysis (TDA) with a Strategic Action Plan (SAP) 2023-2027 for the Mono River Basin with the GEF/IUCN support who’s granted the project in June 2021 (RIWE-Mono project)\. The GEF/IUCN project will establish the technical and scientific basis (e.g. regional database and hydrological model) as well as tools for long-term planning and governance of water resources in the basin (e.g. TDA/SAP, governance bodies, etc.). Indeed, the AF support will contribute to this strategic action plan in particular with regard to the consideration and integration of climate change adaptation interventions. It will also improve and upscale the function the GEF established technical and scientific tools through collection and distribution of hydro-climatic data (database, hydrological models, etc.). During the next stages of the project preparation, the ongoing or planned actions in the Mono basin under other initiatives and projects will be taken into account and considered to avoid duplication. A broad participative approach and consultations with all stakeholders working on climate issues in the catchment (GEF, WMO, WACA, ANPC from Togo and Benin, etc.) will be carried out.

16. Regarding the regional flood EWS, the regional approach will ensure its effective deployment and implementation under the coordination of the MBA. Indeed, according to the Convention on the status of the Mono River and the creation of the MBA (article 6), the latter has among other missions, the regional coordination of flood management of upstream-downstream data and information sharing.

- **Coherence with regional and national policies**

  **At regional level:** The project will contribute to the implementation of the global planning and management framework of the MBA, mainly the strategic plan (2016) and the update assessment report (current status). Indeed, the project's actions are based on the Strategic Plan which highlights all the problems of the Mono basin, in particular recurrent floods, loss of biodiversity, ecosystems degradation, climate change, human pressure on natural resources and the poor knowledge of surface and groundwater resources. The report on the "current status of the Mono basin" provides an updated reference (2020) for the choice of priority actions to be implemented and their intervention sites. Furthermore, the project idea was submitted to the MBA Technical Committee of Experts (CTE) composed of representatives of different sectoral ministries from both countries, which approved it. **At national level:** Benin and Togo both have (i) a national water policy with a National Action Plan for the integrated management of water resources and ecosystems, (ii) a climate change adaptation policy and a National Adaptation Programme of Action (NAPA), (iii) a NDC and (iv) a strategic framework for flood management. Thus, this project proposal is consistent with the different orientations of those documents.

- **Innovation**

17. The project's various activities are underpinned by knowledge building, which is a prerequisite for the implementation of an effective adaptation strategy. Indeed, for the fulfillment of different needs and uses in a context of increasing human pressures, a rational and sustainable management of the resources is required. It is therefore essential to provide further solutions for an optimized management of the catchment, which is a prerequisite for sustainable development. An important part of the contributions from this project (component 2 in particular) to the challenges in the project area are "nature-based solutions". In this context, the nature-based solutions represent a relevant ecosystem approach, accessible to the communities because of its cost-effectiveness, in terms of observation, evaluation and monitoring of the land evolution, both in the past and in real time.

- **Cost-effectiveness of the proposed project**

18. The project will help to restore specific degraded ecosystems and to restore and protect small-scale irrigation, fisheries infrastructure and grazing lands. This will be combined with income-generating activities to serve as motivation for sustainable land and water resources management. The project will change the top-down approach to a bottom-up approach involving local people through participation in the planning and implementation of activities. The underlying principle of this project is that when income-generating activities are made consistent with environmental management and, ecosystem and land restoration interventions, they can serve as motivations to actively engage communities in project planning and management activities. The involvement of local communities is crucial to secure public goods and to establish local bodies for the management of the basin’s resources and to increase local collective benefits. The planned activities will be undertaken in selected sites relevant for immediate development.

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\[20\] Convention signed on 30 December 2014 by the Heads of State of Benin and Togo
and tangible concrete results that will provide an anchor for local bodies while promoting the protection of common resources and benefit sharing.

- **Consultative process during project preparation and compliance with environmental and social standards, policies and safeguards**

19. At the national level, an initial consultation was conducted with relevant agencies and ministries. Similarly, the project idea is analyzed and validated by the MBA Technical Committee of Experts (representatives of different sectoral ministries in both countries) in line with national water resources management policies. The MBA has also developed a regional assessment and mechanisms for stakeholder involvement in water and related resources management in the basin. This facilitates stakeholder’s consultation during the project development process. In addition, the MBA is progressively operationalizing the basin's consultative bodies (Basin Committees, Users' Organization, Scientific Committee, etc.) which involve various stakeholders in the public and private sectors, central and local authorities, youth and women's groups, NGOs, inter alia. It also considers the different water-related sectors. The involvement of these different bodies will ensure thorough stakeholders participation in the project preparation.

20. The Project design and implementation at all levels will comply with the Sahara and Sahel Observatory (OSS) and the Adaptation Fund’s Environmental and Social Policy (ESP), as well as the national environmental regulation of each member countries and technical standards. In addition, an Environmental and Social Impact Assessment (ESIA), an Environmental and Social Risk Management Plan (ESRMP) and a gender assessment will be undertaken for the proposed project with inputs from the respective national authorities and implementing entities, in collaboration with the OSS. In addition to all identified beneficiaries and target population at local and national levels, vulnerable groups and gender considerations will be taken into account in line with the ESP at all project stages and implementation scales.

- **Sustainability of project outcomes and economic, social and environmental benefits**

21. The commitment to sustainability will guide the implementation of the project activities aiming at environmental, social and economic benefits, and the capacity building of the MBA will ensure the achievement of the expected results. The project will promote a user-centred, iterative and open to innovation approach to the development of the proposed tools to achieve the objectives of ownership and sustainability. In addition, the project will build on and strengthen existing knowledge, skills and tools. The implementation of concrete adaptation actions, will be complemented by a participatory approach.

- **Knowledge management**

22. The knowledge generated by this project will be disseminated and spread at national and regional level. Knowledge management and dissemination of lessons learned will be key activities of Component 3. At the project's inception, a knowledge management strategy aiming at capitalizing on existing climate information, facilitating information sharing between stakeholders and disseminating the project results will be developed and implemented. Knowledge materials will be developed, disseminated and made available, responding to the demand and needs of different stakeholders.

23. Particular emphasis will be given to the designing of appropriate knowledge and information management tools for the benefit of local communities, as they are key actors in the actions' replication and sustainability. At further stages of this project preparation, coherence/complementarity will be systematically developed in this respect with programmes/projects operating in the catchment with a similar scope, in particular the GEF/IUCN project (RIWE-Mono project), which is also being developed.

- **Socio-economic and environmental benefits**

24. Through effective and sustainable flood management and protection of the population as well as the development of income-generating activities, this project will contribute to civil protection in the basin, agricultural productivity and thus food security. As mentioned above (§.1. Background, paragraph 5), the cyclical floods have significant negative impacts on socio-economic and environmental systems in the catchment. Each year, hundreds of villages are affected, thousands of hectares of crops destroyed, tens of thousands of people affected, and the economies of poor and vulnerable populations collapse. The implementation of an efficient community-based EWS in the catchment will contribute to substantially reduce these disasters and thus improve peoples' livelihoods and their resilience to combat climate change. Other benefits of the project activities are increased income, poverty reduction and improved access to health services for the beneficiaries, education and jobs creation. In addition, actions based on the « Nature-based Solutions approach » will result in positive environmental impacts.
that contribute to strengthening the conservation of the natural environment, in particular the protection of soils and the strengthening of their productivity, the regeneration of natural ecosystems, the strengthening of the availability of water (surface and groundwater) in quantity and quality.

PART III: IMPLEMENTATION ARRANGEMENTS

25. The proposed institutional arrangement of the project is as follows:

- **Implementing Entity**

26. The project will be implemented by the Sahara and Sahel Observatory (OSS), which will serve as the Regional Implementing Entity (RIE) and will be responsible for all financial, monitoring and reporting aspects of the Adaptation Fund. OSS has several years of experience working with both countries in the preparation and implementation of several development projects. This experience will facilitate the exchange with the main national partners and the successful implementation of the project.

- **Executing Entities**

27. **At regional level:** At the regional level, the MBA and GWP-AO will be the two main executing entities of the project.

- The main role of the Mono Basin Authority (MBA) will be to ensure transboundary coordination, strengthen relations with national structures, and ensure the sharing and dissemination of data, supervision of all activities in the field and capitalization of achievements. To this end, a Regional Project Management Unit (RPMU), under the responsibility of the MBA, will be set up to assume the management of the project and will coordinate the execution with all other stakeholders involved in the project activities.

- The GWP-AO will be responsible for all activities related to dialogues, mobilization and integration of local communities and stakeholders, as well as capacity building of stakeholders.

28. **At the national and local levels:** The RPMU will be supported by "National Management Units" (NMUs) hosted by the National Technical Department in charge of water resources management in each country and will involve stakeholders from various sectors (water, environment, forest and agriculture). As the project includes important activities of national and local scope, the NMUs will lead the activities implementation at local level through various NGOs and beneficiary groups (representatives of socio-professional/community organizations), women's cooperatives, youth cooperatives, etc.

- **Regional Steering Committee (RSC)**

29. The RSC will be the highest decision-making body for the whole project. It will periodically evaluate the results of the project and provide guidance for its effective management. The RSC will be composed of permanent representatives from i) MBA ii) OSS iii) regional and national civil society organizations (GWP-AO, PNE-Benin, PNE-Togo, users of the basin's natural resources) who will represent the users and the private sectors iv) Technical Departments in charge of water/environment in each of the two countries. Other regional bodies and organizations having technical partnerships with MBA such as the ECOWAS (CGRE), AMCOW, and the Global Mechanism (UNCCD)) may also participate in the RSC.
PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government

| BENIN | Prof. Martin Pépin AINA  
Directeur Général de l’Environnement et du Climat  
Ministère du Cadre de vie et du Développement Durable | Date: August, 03, 2021 |
|------|--------------------------------------------------|
| TOGO | Mr. Essobiyou Thiyu Kohoga  
Directeur de l’Environnement | Date: August, 03, 2021 |

B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Benin’s Government Action Plan, National Adaptation Plan (NAP) and National action plan for Integrated Water Resources Management and Togo’s Long-term Development Strategy Vision 2030, National Adaptation Plan (NAP) and National action plan for Integrated Water Resources Management) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Mr. Nabil BEN KHATRA – Executive Secretary of the Sahara and Sahel Observatory (OSS) as the Implementing Entity Coordinator

Name & Signature

Date: August 09, 2021  
Tel.: (+216) 71 206 633  
Email: nabil.benkhatra@oss.org.tn; boc@oss.org.tn

Project Contact Person: Mrs. Khouloua JAOUI
Tel. And Email: (+216) 71 206 633 / khouloua.jaoui@oss.org.tn

Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.
Endorsement letters

Letter of Endorsement by Government

Cotonou, August 03, 2021

To: The Adaptation Fund Board
    c/o Adaptation Fund Board Secretariat
    Email: Secretariat@Adaptation-Fund.org
    Fax: 202 522 3240/5

Subject: Endorsement for the « Towards a climate risks shield in the Mono River Basin (Benin, Togo): Strengthening adaptation and resilience to climate change through integrated water resources and flood management »

In my capacity as designated authority for the Adaptation Fund in Benin, I confirm that the above national grant proposal is in accordance with the government’s national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Mono River basin.

Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented by the Sahara and Sahel Observatory (OSS) and executed by the Mono Basin Authority (MBA) and the Global Water Partnership- West Africa (GWP-AC).

Sincerely,

Prof. Martin Pépin AïNA
General Director of the Environment and Climate
Ministry of the Living Framework and Sustainable Development
Subject: Endorsement for the « Towards a climate risks shield in the Mono River Basin (Benin, Togo): Strengthening adaptation and resilience to climate change through integrated water resources and flood management »

In my capacity as designated authority for the Adaptation Fund in Togo, I confirm that the above national grant proposal is in accordance with the government’s national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Mono River basin.

Accordingly, I am pleased to endorse the above grant proposal with support from the Adaptation Fund. If approved, the project will be implemented by the Sahara and Sahel Observatory (OSS) and executed by the Mono Basin Authority (MBA) and the Global Water Partnership-West Africa (GWP-AO).

Sincerely,

Mr. Essobiyou Thiyu Kohega
Director of the Environment Ministry of the Environment and Forest Resources
Project Formulation Grant (PFG)

Submission Date: August 09, 2021

Adaptation Fund Project ID:
Country/ies: Benin and Togo
Title of Project/Programme: Towards a climate risks shield in the Mono River Basin (Benin, Togo): Strengthening adaptation and resilience to climate change through integrated water resources and flood management

Type of IE (NIE/MIE) : RIE
Implementing Entity: Sahara and Sahel Observatory (OSS)
Executing Entity/ies: Mono Basin Authority (MBA) and Global Water Partnership- West Africa (GWP-AO).

A. Project Preparation Timeframe

<table>
<thead>
<tr>
<th>Start date of PFG</th>
<th>Upon Pre-Concept Note approval date</th>
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</thead>
<tbody>
<tr>
<td>Completion date of PFG</td>
<td>4 months after Pre-Concept Note approval date</td>
</tr>
</tbody>
</table>

B. Proposed Project Preparation Activities ($)

Describe the PFG activities and justifications:

<table>
<thead>
<tr>
<th>List of Proposed Project Preparation Activities</th>
<th>Output of the PFG Activities</th>
<th>USD Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulnerability assessments</td>
<td>Vulnerability Assessment; Institutional Capacities Analysis; Preliminary study on climate change impacts and risks in each country complying with the Adaptation Fund ESP and GP; Communities and beneficiaries mapping including vulnerable groups and indigenous people.</td>
<td>7 500</td>
</tr>
<tr>
<td>Workshops</td>
<td>One regional consultation workshops with stakeholders and local communities representatives</td>
<td>6 000</td>
</tr>
<tr>
<td>Travel/participation</td>
<td>Travels costs and technical support (Implementing Entity)</td>
<td>5 000</td>
</tr>
<tr>
<td>Other costs</td>
<td>Management fees (8.5%)</td>
<td>1 500</td>
</tr>
<tr>
<td>Total Project Formulation Grant</td>
<td></td>
<td>20 000</td>
</tr>
</tbody>
</table>
### C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board’s procedures and meets the Adaptation Fund’s criteria for project identification and formulation.

<table>
<thead>
<tr>
<th>Implementing Entity Coordinator, IE Name</th>
<th>Signature</th>
<th>Date (Month, day, year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Nabil BEN KHATRA</td>
<td></td>
<td>08/09/2021</td>
</tr>
<tr>
<td>OSS’ Executive Secretary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Contact Person</th>
<th>Telephone</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Khaoula JAOUI</td>
<td>+216 71 206 633</td>
<td><a href="mailto:boc@oss.org.tn">boc@oss.org.tn</a></td>
</tr>
<tr>
<td>Climate Department Coordinator</td>
<td></td>
<td><a href="mailto:khaoula.jaoui@oss.org.tn">khaoula.jaoui@oss.org.tn</a></td>
</tr>
</tbody>
</table>