



## ADAPTATION FUND

AFB/PPRC.21/33  
29 September 2017

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Adaptation Fund Board  
Project and Programme Review Committee  
Twenty-First Meeting  
Bonn, Germany, 10-11 October 2017

Agenda Item 7 f)

**PROPOSAL FOR (BENIN, BURKINA FASO, CÔTE D'IVOIRE, GHANA,  
MALI, TOGO)**

## Background

1. The strategic priorities, policies and guidelines of the Adaptation Fund (the Fund), as well as its operational policies and guidelines include provisions for funding projects and programmes at the regional, i.e. transnational level. However, the Fund has thus far not funded such projects and programmes.
2. The Adaptation Fund Board (the Board), as well as its Project and Programme Review Committee (PPRC) and Ethics and Finance Committee (EFC) considered issues related to regional projects and programmes on a number of occasions between the Board's fourteenth and twenty-first meetings but the Board did not make decisions for the purpose of inviting proposals for such projects. Indeed, in its fourteenth meeting, the Board decided to:
  - (c) *Request the secretariat to send a letter to any accredited regional implementing entities informing them that they could present a country project/programme but not a regional project/programme until a decision had been taken by the Board, and that they would be provided with further information pursuant to that decision*

*(Decision B.14/25 (c))*
3. In its eighth meeting in March 2012, the PPRC came up with recommendations on certain definitions related to regional projects and programmes. However, as the subsequent seventeenth Board meeting took a different strategic approach to the overall question of regional projects and programmes, these PPRC recommendations were not included in a Board decision.
4. In its twenty-fourth meeting, the Board heard a presentation from the coordinator of the working group set up by decision B.17/20 and tasked with following up on the issue of regional projects and programmes. She circulated a recommendation prepared by the working group, for the consideration by the Board, and the Board decided:
  - (a) *To initiate steps to launch a pilot programme on regional projects and programmes, not to exceed US\$ 30 million;*
  - (b) *That the pilot programme on regional projects and programmes will be outside of the consideration of the 50 per cent cap on multilateral implementing entities (MIEs) and the country cap;*
  - (c) *That regional implementing entities (RIEs) and MIEs that partner with national implementing entities (NIEs) or other national institutions would be eligible for this pilot programme, and*
  - (d) *To request the secretariat to prepare for the consideration of the Board, before the twenty-fifth meeting of the Board or intersessionally, under the guidance of the working group set up under decision B.17/20, a proposal for such a pilot programme based on consultations with contributors, MIEs, RIEs, the Adaptation*

*Committee, the Climate Technology Centre and Network (CTCN), the Least Developed Countries Expert Group (LEG), and other relevant bodies, as appropriate, and in that proposal make a recommendation on possible options on approaches, procedures and priority areas for the implementation of the pilot programme.*

*(Decision B.24/30)*

5. The proposal requested under (d) of the decision above was prepared by the secretariat and submitted to the Board in its twenty-fifth meeting, and the Board decided to:

- (a) Approve the pilot programme on regional projects and programmes, as contained in document AFB/B.25/6/Rev.2;*
- (b) Set a cap of US\$ 30 million for the programme;*
- (c) Request the secretariat to issue a call for regional project and programme proposals for consideration by the Board in its twenty-sixth meeting; and*
- (d) Request the secretariat to continue discussions with the Climate Technology Center and Network (CTCN) towards operationalizing, during the implementation of the pilot programme on regional projects and programmes, the Synergy Option 2 on knowledge management proposed by CTCN and included in Annex III of the document AFB/B.25/6/Rev.2.*

***(Decision B.25/28)***

6. Based on the Board Decision B.25/28, the first call for regional project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on 5 May 2015.

7. In its twenty-sixth meeting the Board decided *to request the secretariat to inform the Multilateral Implementing Entities and Regional Implementing Entities that the call for proposals under the Pilot Programme for Regional Projects and Programmes is still open and to encourage them to submit proposals to the Board at its 27th meeting, bearing in mind the cap established by Decision B.25/26.*

***(Decision B.26/3)***

8. In its twenty-seventh meeting the Board Board decided to:

*(a) Continue consideration of regional project and programme proposals under the pilot programme, while reminding the implementing entities that the amount set aside for the pilot programme is US\$ 30 million;*

*(b) Request the secretariat to prepare for consideration by the Project and Programme Review Committee at its nineteenth meeting, a proposal for prioritization among regional project/programme proposals, including for awarding project formulation grants, and for establishment of a pipeline; and*

*(c) Consider the matter of the pilot programme for regional projects and programmes at its twenty-eighth meeting.*

**(Decision B.27/5)**

9. The proposal requested in (b) above was presented to the nineteenth meeting of the PPRC as document AFB/PPRC.19/5. The Board subsequently decided:

a) *With regard to the pilot programme approved by decision B.25/28:*

(i) *To prioritize the four projects and 10 project formulation grants as follows:*

1. *If the proposals recommended to be funded in a given meeting of the PPRC do not exceed the available slots under the pilot programme, all those proposals would be submitted to the Board for funding;*
2. *If the proposals recommended to be funded in a given meeting of the PPRC do exceed the available slots under the pilot programme, the proposals to be funded under the pilot programme would be prioritized so that the total number of projects and project formulation grants (PFGs) under the programme maximizes the total diversity of projects/PFGs. This would be done using a three-tier prioritization system: so that the proposals in relatively less funded sectors would be prioritized as the first level of prioritization. If there are more than one proposal in the same sector: the proposals in relatively less funded regions are prioritized as the second level of prioritization. If there are more than one proposal in the same region, the proposals submitted by relatively less represented implementing entity would be prioritized as the third level of prioritization;*

*(ii) To request the secretariat to report on the progress and experiences of the pilot programme to the PPRC at its twenty-third meeting; and*

b) *With regard to financing regional proposals beyond the pilot programme referred to above:*

- (i) *To continue considering regional proposals for funding, within the two categories originally described in document AFB/B.25/6/Rev.2: ones requesting up to US\$ 14 million, and others requesting up to US\$ 5 million, subject to review of the regional programme;*
- (ii) *To establish two pipelines for technically cleared regional proposals: one for proposals up to US\$ 14 million and the other for proposals up to US\$ 5 million, and place any technically cleared regional proposals, in those pipelines, in the order described in decision B.17/19 (their date of recommendation by the PPRC, their submission date, their lower "net" cost); and*

(iii) *To fund projects from the two pipelines, using funds available for the respective types of implementing entities, so that the maximum number of or maximum total funding for projects and project formulation grants to be approved each fiscal year will be outlined at the time of approving the annual work plan of the Board.*

**(Decision B.28/1)**

10. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.
11. The following pre-concept project document titled “Integrating flood and drought management and early warning for climate change adaptation in the Volta Basin” was submitted by the World Meteorological Organization (WMO), which is a Multilateral Implementing Entity of the Adaptation Fund.
12. This is the first submission of the pre-concept proposal. The present submission was received by the secretariat in time to be considered in the thirtieth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number AFR/MIE/DRR/2017/2, and completed a review sheet.
13. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with the WMO, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.
14. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. The proposal is also submitted with changes between the initial submission and the revised version highlighted.

## **Project Summary**

Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Togo – Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin

Implementing Entity: *World Meteorological Organization (WMO)*

Project/Programme Execution Cost: USD 750,000

Total Project/Programme Cost: USD 6,500,000

Implementing Fee: USD 670,000

Financing Requested: USD 7,920,000

### Project Background and Context:

With a total population over 14 million living on the Volta Basin, integrated management of water resources and measures to reduce natural risks related to flood and drought, are essential for the socio-economic and environmental development of the six West African riparian countries - Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo. The geographic setting of the Volta Basin, covering an area of about 400 000 km<sup>2</sup> and extending from semi-arid to sub-humid areas, is highly vulnerable to meteorological and hydrological events. Over the last 20 years, almost two million people have been affected by floods in the Volta Basin. Climate predictions foresee on an annual mean a reduction of precipitation and an increase of temperature which will modify the current distribution of water resources over the different climatic zones aggravating an already existing situation of conflict between the competing uses. Drought increase and more severe and frequent pattern of floods are predicted. The main objective of the proposed project is to assist the six countries in the implementation of a basin-wide transboundary management framework and concrete disaster risk reduction and adaptation solutions. The project will also include the selection and implementation of appropriate end-to-end early warning systems for floods and drought allowing to integrate short-term to seasonal indicators into the long-term management framework.

Component 1: Develop capacity and establishing frameworks at the local, national and regional levels to ensure risk informed decision-making (USD 1,500,000)

This component will seek to improve climate and risk informed decision making including vulnerable stakeholders through knowledge sharing and participatory mechanisms and by integrating risk management strategies into development plans. It will integrate policies, regulatory instruments, and coordination institutions for risk reduction and climate change impacts at the scale of the watershed and allow to evaluate the impact of individual measures on the whole water cycle and on the related agricultural development.

Component 2: Develop concrete adaptation and environmentally friendly mitigation actions with an integrated approach (USD 4,000,000)

This component will seek to develop and implement concrete solutions for an end-to-end early warning system for floods and droughts at the scale of the Volta watershed. The system will cover the global chain from vulnerability and risk mapping to forecasting, warning dissemination and decision making, making use of ongoing projects and concentrating on the most vulnerable river courses, on flash floods and coastal areas. The component will also develop medium and long-

term adaptation and mitigation measures in prioritized areas and strengthen awareness of vulnerable people on hydro-meteorological risks through education programs.

Component 3: Strengthening policy and institutional capacity for integrated flood and drought management at the local, national and transboundary levels (USD 1,000,000)

This component will seek to enhance capacity and coordination mechanisms between institutions and communities by improving planning tools, providing risk management training and developing a collaborative process to take the instruments and strategies to the community level.



## ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

ADAPTATION FUND

PROJECT/PROGRAMME CATEGORY: Pre-Concept for a Regional Project

Countries/Region: **Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo / Africa**  
Project Title: **Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin**  
Thematic focal area: **Disaster risk reduction and early warning systems**  
Implementing Entity: **World Meteorological Organization (WMO)**  
Executing Entities: **World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership West Africa (GWP-WAF)**  
AF Project ID: **AFR/MIE/DRR/2017/2**  
IE Project ID: **AFR/MIE/DRR/2017/2** Requested Financing from Adaptation Fund (US Dollars): **US\$ 7 920 000**  
Reviewer and contact person: **Anni Rein Gaudechoux** Co-reviewer(s): **Astrid Hillers** IE Contact Person(s): **Jean-Paul Gaudechoux**

Review Criteria	Questions	Initial Review Comments	Final Review Comments
Country Eligibility	1. Are all of the participating countries party to the Kyoto Protocol?	Yes.	
	2. Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?	Yes.	



Project Eligibility	1. Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme?	No. Of the six participating countries, five have included an endorsement letter from a Designated Authority. For Mali, the endorsement letter has been signed by a person that is not the DA of Mali according to the Adaptation Fund records.	
		<b>CR1:</b> Please provide an endorsement letter for the project signed by the Designated Authority of Mali or inform the AFB secretariat of the new DA of Mali.	<b>CR1:</b> Addressed. An endorsement letter signed by the Designated Authority of Mali has been provided.

	<p>2. Has the pre-concept provided necessary information on the problem the proposed project/programme is aiming to solve, including both the regional and the country perspective?</p>	<p>No. The Volta Basin is lacking a functional basin-wide flood and drought warning system and the proposal is addressing this issue. However, more information on the current and expected flood and drought events, expected beneficiaries and specifications on project design is requested. Floods (i.e. fast onset riverine risks) and droughts (i.e. much more area wide, slow onset events) require different forecasting capabilities, need to reach differing stakeholders, and require different responses. The proposal needs to be more explicit in this.</p> <p><b>CR2:</b> Please provide more information on the climate-related threats, specifically floods and drought, on both regional and country level.</p> <p><b>CR3:</b> Please provide more information on key affected stakeholders and types of communities (urban/rural, nonsedentary groups/pastoralists) with major climate-related impacts. <b>CR4:</b> Please explain how the project plans to address both floods and droughts with the combined approach. <b>CR5:</b> Please explain how the project plans to address flash floods by the</p>	<p><b>CR2:</b> Addressed sufficiently for the preconcept stage.</p> <p><b>CR3:</b> Partially addressed. A general description of a key beneficiary group (agriculture-dependent population of Volta Basin) has been provided but more information on the direct beneficiaries (including population size, locations) of the project should be provided. Please correct a typo in the Volta population figure (14 vs. 24 million).</p> <p><b>CR4:</b> Addressed.</p>
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		<p>project design as EWS for these kinds of events is challenging.</p> <p><b>CR6:</b> Please indicate if the Volta Basin countries have a data exchange agreement/protocol and if that is covering the type and frequency of data and information needed. <b>CR7:</b> Please describe any existing basin, hydrological model for the Volta basin, which the project could expand on. E.g. the 2017 institutional analysis carried out with WB CIDA support states that a Water Resources Information system has been installed at the Volta Observatory and there are several non-coordinated efforts ongoing in this respect already. Financing additional systems would require a solid baseline assessment and identification of gaps.</p> <p><b>CR8:</b> Please explain what the existing capacities for drought or flood forecasting are and what gap the project is addressing.</p>	<p><b>CR5:</b> Addressed.</p> <p><b>CR6:</b> Addressed.</p> <p><b>CR7:</b> Addressed. Examples of existing projects that the proposed project could build on has been given. More information is required at the project concept stage.</p> <p><b>CR8:</b> Not addressed.</p>
	<p>3. Have the project/programme objectives, components and financing been clearly explained?</p>	<p>Requires clarification. The design logic of the project lacks a logical progression of steps to address flood or drought risks – and it may want to focus on one and not both as a start. Based on the structure of the components, it is unclear how the project will involve the range of actors needed to go beyond the data acquisition, modelling and forecasting, to translating of that information to risks to communities (urban and rural) and</p>	

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		<p>the formulation of structured response plan on national and local levels, as well as triggering flood and drought mitigating measures via changing the operation of existing infrastructure. While the need for coordination with existing/past projects is mentioned, more clarification on the existing capacities and gaps for drought or flood forecasting and EWS would be needed, e.g.:</p> <ul style="list-style-type: none"> <li>- WACDEP: One of the activities includes EWS</li> <li>- Ongoing GEF global Floods and Droughts project has the Volta basin as one of its three pilots. How is anticipated project going to build on this effort?</li> <li>- UNEP and IUCN are preparing a GEF SAP implementation project with VBA and flood- and drought EWS as anticipated efforts. Coordination to avoid overlap and assuring that projects focus on different aspects would be recommended.</li> <li>- The WB funded WACA program <ul style="list-style-type: none"> <li>- OSS project in Benin, Burkina Faso and Niger in preparation phase: one of the components include design and implementation of multi-risk early warning system</li> </ul> </li> </ul>	<p><b>CR9:</b> Partially addressed. The overall objective should be further clarified and the cohesion between the objectives,</p>
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		<p><b>CR9:</b> Please clarify the overall objective of the proposed project and explain how the project plans to address both flood and droughts within the scope of the project.</p> <p><b>CR10:</b> Please specify if mitigation as part of the outputs of Component 2 refers to only flood and drought mitigation, as the AF does not fund climate change mitigation activities.</p> <p><b>CR11:</b> Please elaborate on the coordination with existing, past and planned projects.</p>	<p>outcomes and outputs further strengthened.</p> <p><b>CR10:</b> Not addressed. Should be further clarified.</p> <p><b>CR11:</b> Addressed but more information will be needed at the concept stage.</p>
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	<p>4. Has the project/programme been justified in terms of how:</p> <ul style="list-style-type: none"> <li>- it supports concrete adaptation actions? - it builds added value through the regional approach?</li> <li>- it promotes new and innovative solutions to climate change adaptation? - it is cost-effective? - it is consistent with applicable strategies and plans?</li> <li>- it incorporates learning and knowledge management?</li> <li>- it will be developed through a consultative process with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund?</li> <li>- it will take into account sustainability?</li> </ul>	<p>Requires clarification. It is not clear if majority of the project funding is targeted towards concrete adaptation actions through Component 2. The basin-wide, regional approach seeks to strengthen transboundary coordination and exchange of knowledge and provide the first large scale and transboundary implementation of integrated flood and drought management strategies, which can be seen as added value built through regional approach. Also the learning and knowledge exchange have been taken into account in an adequate manner for the pre-concept stage.</p> <p><b>CR12:</b> Please clarify the planned proportions of sub-components 2.1, 2.2 and 2.3 to demonstrate that the project is focused on concrete adaptation measures.</p> <p><b>CR13:</b> Please explain how the project would promote new and innovative solutions.</p> <p><b>CR14:</b> Please clarify how the project is consistent with national strategies and regional plans, e.g. Volta Strategic Action Plan.</p> <p><b>CR15:</b> Please indicate which key stakeholders and vulnerable groups will be consulted in the project preparation phase.</p> <p><b>CR16:</b> Most planning activities do not have direct impacts, but they do entail significant secondary and indirect ESP risks through the activities they plan</p>	<p><b>CR12:</b> Partially addressed. The planned proportions of subcomponents 2.1-3 has not been provided but based on the explanation given, the component 2 seems to be focused on concrete adaptation measures.</p> <p><b>CR13:</b> Addressed.</p> <p><b>CR14:</b> Not fully addressed. Alignment with VSAP has not been explained.</p> <p><b>CR15:</b> Partially addressed. The proposal should further specify the</p>
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		<p>and promote. Hence, these plans should be guided by the AF ESP, and the proposal should specify how this will be achieved. In this, there should be specific recognition for the importance of flood dynamics and flood cycles and pulses for certain natural habitats, with the flood pulse events as key biodiversity elements. Planning should ensure adequate consideration for (seasonal) wetlands and other areas of global importance as natural habitats or biodiversity hot-spots. Other specific indirect risks include core labour rights (worse forms of child labour) and protected areas. Output 2.2 may actually generate direct ESP risks.</p> <p><b>CR17:</b> The proposal states that the project will seek 'long-term commitment from countries'. Such commitment and some initial co-finance to in-kind commitments (e.g. staff time, office space) should be secured for the fully developed proposal as country involvement and ownership by the relevant national and local entities will be key to the success and long-term support. Please explain how this aspect is considered from the sustainability point of view.</p>	<p>consultative process as regards to the expected beneficiaries and vulnerable communities.</p> <p><b>CR16:</b> Partially addressed. The proposal should further elaborate on how it would be achieved that the planned activities are guided by the Adaptation Fund ESP.</p> <p><b>CR17:</b> Partially addressed. Sustainability is explained only as regards to capacity building components of the proposed project. The proposal should specify how sustainability will be taken into account not only in terms of capacity building but also in terms of other components, especially Components 2.1 and 2.2.</p>
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	<p>5. Does the pre-concept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/subnational level, and how coordination would be arranged? Does it explain how national institutions, and when possible, national implementing entities (NIEs) would be involved as partners in the project?</p>	<p>Organizations at international, national, and regional transboundary level are identified. However, it is not clear what the division of labor between VBA and GWP WA and if the NIE of Benin is planned to be involved in the project.</p> <p><b>CR18:</b> Please clarify the division of labor between VBA and GWP WA, the other two executing entities.</p> <p><b>CR19:</b> Please indicate if and how the National Implementing Entity of Benin, National Environment and Climate Fund (FNEC), is involved as a partner in the project.</p> <p><b>CR20:</b> Please clarify if and what roles has been considered organizations such as VBA Observatory and OSS (the latter regarding drought forecasting, groundwater observation).</p>	<p><b>CR18:</b> Addressed.</p> <p><b>CR19:</b> Addressed.</p> <p><b>CR20:</b> Partially addressed. The role of VBA Observatory has been clarified but that of OSS remains unclear.</p>
Resource Availability	<p>6. Is the requested project / programme funding within the funding windows of the pilot programme for regional projects/programmes?</p>	<p>Yes, the requested funding is US\$ 7.92 million.</p>	
	<p>7. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget?</p>	<p>Yes. The administrative costs are at 19.6 per cent of the total project budget. (IE management fee 670 000 + Execution Costs 750 000/(7 920 000 – 670 000))</p>	

Eligibility of IE	8. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes.	
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Technical Summary	<p>The pre-concept note presents a project in the Volta Basin in Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo. The proposed project aims to address climate-related risks, mainly floods and drought, through a basinwide transboundary management framework and selecting and implementing an end-to-end early warning system. The proposed project would have three components.</p> <ol style="list-style-type: none"> <li>1. <i>Develop capacity and establishing frameworks at the local, national, and regional levels to ensure risk informed decision making;</i></li> <li>2. <i>Develop concrete adaptation and environmentally friendly mitigation actions with an integrated approach;</i></li> <li>and 3. <i>Strengthening policy and institutional capacity for integrated flood and drought management at the local, national and transboundary levels.</i></li> </ol> <p>The initial review acknowledged that the pre-concept has several merits, however the pre-concept could be further strengthened in terms of climate justification, expected beneficiaries and specifications on project design and logic. Furthermore, information on coordination between existing and past projects, consistency with national strategies and regional plans, key stakeholder groups to be consulted, and division of labor between the executing entities could be provided.</p> <p><u>Comments on the PFG Application:</u> No comments or clarification requests related to the PFG Application were made.</p> <p>The initial technical review made several Clarification Requests (CR) and the proposal was revised accordingly.</p> <p>The final technical review found that most of the Clarification Requests had been addressed. The following pending issues should be resolved during the preparation of the project concept document. The Secretariat recommends that the project concept should provide more information on the direct beneficiaries, strengthen the cohesion between the objectives, outcomes and outputs, specify the consultative process as regards to the expected beneficiaries and vulnerable communities, and specify sustainability aspect in terms of Component 2. Finally, consideration of the difference of regional coverage and stakeholders with regards to flood and drought forecasting is recommended to be included.</p>
Date:	15 September 2017



## **PART I: PROJECT/PROGRAMME INFORMATION**

Title of Project/Programme:	Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin
Countries:	Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo
Thematic Focal Area:	Disaster risk reduction and early warning systems
Type of Implementing Entity:	Multilateral Implementing Entities (MIE)
Implementing Entity:	World Meteorological Organization (WMO)
Executing Entities:	World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership West Africa (GWP-WAF)
Amount of Financing Requested:	7 920 000 USD (in U.S Dollars Equivalent)

### **Project / Programme Background and Context:**



## PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

With a total population over 14 million living on the Volta Basin, integrated management of water resources and ~~measures to reduction-reduce of~~ natural risks, ~~such as related to~~ flood and drought, ~~have a crucial impact on the~~ are essential for socio-economic and environmental development of the six West African riparian countries, hence on their pursuit of the Sustainable Development Goals. Transboundary coordination, exchange of knowledge and mutualisation of technical infrastructures are therefore becoming a challenge as growing population and impact of climate change add increasing pressure on natural resources. Key affected stakeholders are mainly people working in the agricultural sector: around 68% of the 24 million people living in the basin are largely dependent on agriculture, which is mainly rainfed, poorly mechanized and consists of small family farms particularly vulnerable to climate related impacts, especially risks of drought and floods. Moreover, people affected by poverty tend to move to urban areas and, due to the lack of land-use planning and alternatives, mostly live in areas prone to risks such as valley floors and slopes, particularly vulnerable to floods and landslides).

The geographic setting of the Volta Basin, covering an area of about 400 000 km<sup>2</sup> and extending from semi-arid to sub-humid areas, is highly vulnerable to ~~changes of~~ meteorological and hydrological ~~regime events~~. Over the last 20 years, almost two million people have been affected by floods in the Volta basin. Moreover, Climate predictions foresee on an annual mean a global reduction of precipitation together with and an increase of temperature. That This will modify the current distribution of water resources in the various areas of the watershed over the different climatic zones, therefore aggravating an already existing situation of potential conflicts between the competing uses. If drought increase is evident, more severe and frequent pattern of drought and floods are also predicted, due to dry and eroded soil conditions exacerbating the surface runoff during the scarce, nevertheless intense, rainfall events. Overall, dry seasons are expected to be longer and drier, while rain seasons are going to be shorter but characterized by more intense precipitation events. Combined with the socio-economic context (majority of people depending on rain-fed agricultural production and internal migration towards urban centres, currently not tailored to absorb additional people), this will translate in a hampered food security situation, loss of income and livelihood for farmers and increase of people living in informal settlements located in flood prone areas of urban centres.

In 2016, assessment of capacity building needs on the six riparian countries and the Volta Basin was performed by national experts in a consultative process with the main relevant stakeholders ~~in order~~ to form the basis for integrated flood management projects<sup>1</sup>. The main conclusions of these participative consultations highlighted major priorities to build on the current context and to prepare the region to future economic and environmental changes, such as integration of disaster risk reduction in the national management frameworks, enhancement of synergy and coordination mechanisms at regional level to foster integrated flood and drought management, availability of standardised data, especially real time data, coordination of information channels and procedures developed for end-to-end early warning systems, as well as increase knowledge of communities on risks, early warning systems and strategies to manage disaster risks and their involvement into flood preparedness and contingency plans.

- ~~Integration of disaster risk reduction in the national management frameworks and in the development of projects/programmes~~
- ~~Capacity building of the regional, national and basin institutions involved in flood and drought management and enhancement of synergy and coordination mechanisms between them to enhance integrated flood and drought management.~~
- ~~Availability and exchange of standardised data, especially real time data~~
- ~~Development of global action scheme and increase of information exchanges between the various actors of disaster risk reduction plans, as well as coordination of information channels and procedures developed for end-to-end early warning systems~~
- ~~Synergies of activities and programmes related to climate change adaptation, climate change mitigation and disaster risk reduction~~

<sup>1</sup> (2016): Evaluation des besoins de renforcement des capacités. Préparation des projets de gestion intégrée des inondations pour le Bénin, Burkina Faso, Côte d'Ivoire, Ghana, Mali et Togo et le bassin de la Volta en Afrique de l'Ouest. Series of seven reports GWP West Africa.

- ~~• Increase knowledge of communities on risks, early warning systems and strategies used to manage disaster risks and their involvement into flood preparedness and contingency plans~~ **Project /**

### **Programme Objectives:**

The main objective of the Flood and Drought Volta programme is to assist the six countries in **the implementation of coordinated and joint measures to improve** their existing management plans at regional, national and local level and to build on the lessons learned from the past and current projects related to **disaster risk reduction and climate adaptation**. The six riparian countries will therefore benefit not only from a **basin-wide transboundary management framework to ensure long-term environmental and economic development, as well as concrete solutions** to alleviate a potential increase of vulnerability and to build an effective network of actors. As droughts and floods are a common feature in the Volta basin region, integrated water resources management and development of early warning systems must be implemented to increase resilience to floods and droughts and ensure socioeconomic sustainable development. Equilibrated management of the water resources will be sought to make better use of the water surplus during floods to be stored in view of drought events. Furthermore, at local scale, agricultural production will be tailored to these challenges with provision of knowledge and early warnings that will enable farmers to adapt their production methods.

To respond to the needs expressed in 2016 by a large number of stakeholders, the programme will ~~be~~ include ~~ing~~ **the selection and implementation of appropriate End-to-End Early Warning Systems for Floods and Drought** allowing to integrate short-term to seasonal indicators into the long-term management framework. The system will embed both hazards that will be forecasted using different methodologies (indicators using different criteria to assess risk; hydrological and hydraulic models informing on threshold level; maps showing levels of risk through color-coding). As per the dissemination of warnings, existing systems (e.g. on White Volta and Oti basin) Within the same warning approach will be implemented within a common platform, the system will embed both hazards that will be forecasted using different methodologies. The system will be built ~~as much as possible~~ on the basis of open-source codes and free technologies, ~~the~~ future integration of modules covering additional natural and health hazards will be foreseen ~~in order~~ to allow its upgrading towards a Multi Hazard Early Warning System.

The Volta programme has the ambition to provide the first large scale and transboundary implementation of Integrated Flood ~~Management (IFM)~~ and ~~Integrated~~ Drought Management (~~IDM~~) strategies by empowering the National Meteorological and Hydrological Services (NMHS) and other competent authorities of the six riparian countries with robust and innovative solutions for disaster risk reduction and climate adaptation, including green solutions and gender sensitive participative approaches. Existing national hydrological modelling systems, decision support and early warning platform will be integrated into the transboundary Early Warning sSystem.

The programme will tackle climate adaptation issues, ensuring transversal solutions from governance to technical and decision making. It will develop the underlying capacity of national and regional institutions to maintain long-term sustainability and to scale up the results. It will support stakeholders at all levels by providing **policy and management guidance and by sharing scientific information, knowledge and best practices for Integrated Disaster Risk Reduction and Climate Adaptation.** One main purpose will be to support the implementation of the MoU between VBA and the six riparian countries to promote data sharing, which is currently not sufficiently structured and demand-driven.

### **Project / Programme Components and Financing:**



Project/Programme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US\$)
1. Develop capacity and establishing frameworks at the local, national and regional levels to ensure risk informed decision-making	Improved climate and risk informed decision-making , including vulnerable stakeholders	<p>1.1. Improved knowledge of risks, climate change impacts and risk management capacities through knowledge sharing and participatory mechanisms</p> <p>1.2. Bridging the gap towards integration of knowledge into future scenarios (economic, urban, climate, etc.)</p> <p>1.3. Risk management strategies identified in <del>the</del> short, medium and long-term <del>for being to be</del> integrated into development plans (economic, social, environmental aspects)</p>	Volta Basin in West Africa (Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo)	1 500 000
2. Develop concrete adaptation and <u>environmentally friendly</u> mitigation actions with an integrated approach	Development of water management plans and upgraded at the basin, sub-basin and urban levels to include climate change adaptation and flood and drought risk mitigation strategies at the local, national and regional levels	<p>2.1. Improved flood and drought forecasting instruments and EWS and coordination at the transboundary level to reduce disaster risks in vulnerable communities</p> <p>2.2. Development of medium and long-term adaptation and mitigation measures (structural and non-structural) in <del>the</del> prioritized areas and updates based on lessons learned and monitoring instruments</p> <p>2.3. Strengthened awareness of vulnerable people on hydro-meteorological risks, prevention, preparedness, response and mitigation strategies through education programs using participative solutions</p>	Volta Basin in West Africa (Benin, Burkina Faso, Côte d'Ivoire , Ghana, Mali, and Togo)	4 000 000
3. Strengthening policy and institutional capacity for integrated flood and drought management at the local, national and transboundary levels	Enhanced capacity and coordination mechanisms between institutions and communities to adapt to climate induced risks	<p>3.1. Planning tools and operational mechanisms improved and tested to ensure effective preparation and response to floods and drought</p> <p>3.2. Local, national and regional institutions (including meteorological and hydrological sectors) are trained on risk management and have a clear comprehension of their role and coordination mechanisms</p> <p>3.3. A collaborative process is developed to ensure those instruments and strategies are accepted by local communities and adapted to context</p>	Volta Basin in West Africa (Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, and Togo)	1 000 000
6. Project/Programme Execution cost				750 000
7. Total Project/Programme Cost				6 500 000
8. Project/Programme Cycle Management Fee charged by the Implementing Entity				670 000
<b>Amount of Financing Requested</b>				<b>7 920 000</b>

**Project Duration:** 4 years

## PART II: PROJECT / PROGRAMME JUSTIFICATION

The approach at the scale of hydrological basin ensures that the existing knowledge benefits from a global and unified framework and that further improvements can be easily integrated into a common structure. It provides a powerful tool to foster collaboration and exchanges of experiences to national partners, and to the Volta basin Authority, as any action on the basin at short (due to crisis events) or longer term (due to climate change impact) influences the future socio-economic development of the six countries. The 3 components of the programme target 3 thematic areas identified by the partner countries in their recent needs assessment: 1) risk informed decision making from local to regional level, 2) development of integrated risk reduction and adaptation measures, 3) policy coordination and community capacity building at transboundary level.

The development and implementation of concrete solutions for an End-to-end Early Warning System for floods and droughts at the scale of the Volta watershed is the key component of the programme (component 2.1). Due to the inadequate sharing of information for forecasting and responding to natural disasters, the system will cover the global chain from vulnerability and risk mapping to forecasting, warning dissemination and decision making, making use of existing ongoing projects (such as CREW in Ghana, project SAP in Benin, SAP-IC/CONEDD in Burkina Faso, etc.) and concentrating on the most vulnerable river courses, on flash floods (benefiting from WMO successful implementation of the Flash Flood Guidance System ← FFGS, implemented since 2009 in more than 50 countries using remote sensing, meteorological observation networks and soil moisture data) and coastal areas. It will stay opened to additional features, thereby integrating other natural hazards, such as fire and erosion, and also linking with agricultural and health components, ensuring that wetlands and other areas of global importance for ecosystems will be protected and integrated among the adaptation strategies (component 2.2). In line with the Environment and Social Policy of the Adaptation Fund and its principles, the ecosystem approach is fundamental in the concept of IFM supported by WMO and GWP and it will be one of the major aspects considered when developing medium and long-term adaptation measures. This will be achieved by taking into account the existing guidance material developed by the Associated Programme on Flood Management (APFM) with its partners based on the IFM concept (e.g. IFM Tool Series and WWF Flood Green Guide). Awareness on prevention, preparedness and response (component 2.3) will mostly involve national agencies, Civil Protection, NGOs, to develop education programs using participative solutions.

National policies, regulatory instruments, coordination institutions for risk reduction and climate change impacts are already in place at the level of each individual country but an integrated approach at the scale of the watershed will allow to evaluate the impact of individual measures on the whole water cycle and on the related agricultural development (component 1).

Hydro-meteorological Early Warning System provide successful results when the transfer of information is suited to the needs of the services in charge of action in the field; therefore calling for their contribution to the development of the visualization interfaces and the selection of the decision criteria (component 3). The benefits of Early Warning and risk reduction measures (at short and long term) are greatly increased with community preparedness. Training and awareness sessions at local level will ensure that highly technical knowledge is conveyed to the population, especially the most vulnerable groups.

New solutions will be implemented to improve risk reduction and climate change adaptation and special attention will be given to their promotion through Community of Users, guidance material, decisionsupport games, online training, social networks and crowdsourcing. All these solutions will need to be tailored according to the local needs and capacities, factoring social and cultural issues. The End-to-End Early Warning Systems will be tested with additional climate projections to study the impact of future scenarios on spatial and urban planning and their consequences on the socio-economic development. The programme will use the methodology developed by WWF and USAID in the Flood Green Guide to reduce flood risk and to help selecting the best (results and cost efficiency) combination of structural and non-structural methods, including natural and nature-based flood solutions. Special sessions on urban development will be developed, WMO will also test the methodology proposed in the forthcoming training manual for mainstreaming gender in Flood management, and its facilitator guide to support trainers. Online learning and training, the participation to Community of Practice on Flood Management and End-to-End Early Warning Systems, as well as “living lab” will be part of the methods used to create a larger participation of all concerned parties.

The basin scale approach is a suitable way to identify and implement cost-effective measures. By involving the six-countries, previous knowledge and funding, as well as current projects, can be considered to ensure minimum overlap and transfer of methodologies from one area to the other. The development and maintenance of the End-to-End Early Warning System and all related functionalities can be mutualized and shared depending on the individual needs and uses. The developed methodologies can be tested at larger scale within the basin, or easily adapted to similar types of environments, therefore creating a community of users. Jointly considering climate change perspectives will also foster the integration of risk and climate approaches.

The programme builds on a number of risk reduction masterplans, [such as the Volta Basin Strategic Action Programme](#), development strategies and adaptation measures that have been listed in the 2<sup>nd</sup> [Second](#) edition of the Disaster risk management Program published by the Global Facility for Disaster Reduction and Recovery (GFDRR) of the World Bank in 2009. Four of the six Volta Basin countries (Burkina Faso, Ghana, Mali and Togo) are identified as major priorities due to their vulnerability to natural hazards and low resilience to climatic events and variability. Even though considerable funding has already been (or is being) attributed to the six countries, a large coordination effort, joint methodologies and shared tools are necessary to ensure that the results and outputs of the national projects are integrated at transboundary level. The programme offers also an opportunity to explore how coordination efforts will be beneficial to the concerned institutions, such as the integrated programmatic approach proposed for the National Council for Emergency Relief and rehabilitation (CONASUR) and the National Council on Environmental and Sustainable Development (SP/CONEDD) in Burkina Faso. In Ghana, the National Disaster Management Organization (NADMO) will be able to ~~and~~ implement new solutions from national to local level through the involvement of the Zonal offices.

Long term maintenance of the tools and methodologies will be sought through commitment of the countries [in order to provide sufficient resources for the sustainability of the new system](#). [Capacity building at the national and local level will be key to ensure long term commitment in the countries. This will be ensured through a wide curriculum of trainings covering aspects such as end-to-end early warning systems for flood management, integrated drought management, hydrological status and outlooks, community based flood management, roving seminars for farmers on agro-meteorology.](#) In Burkina Faso, relationships will be built with the Institut Supérieur d'Etudes de Protection Civile (ISEPC) to mainstream technical results into training and operational actions. The aim of the programme is not only to provide technical support and new decision aid tools to operational centres but also to foster exchanges, to create groups of users and form trainers.

WMO build on lasting collaborations with the Volta basin countries, as the pilot project AOC-HYCOS and the subsequent Volta-HYCOS programme endorsed 15 years ago by the six countries. Through the coordination of GWP-WAF, the involvement of vulnerable groups, will be facilitated on issues related to gender mainstreaming and community based management. The detailed programme activities, the share of duties and responsibilities and the financial issues will be discussed [with representatives of VBA, the Country Water Partnerships, NMHSs and national disaster management authorities](#) during the Workshop organized by GWP with the support of ~~the Volta Basin Authority~~VBA between October 30 and November 3, 2017 in Ouagadougou. The country-driven needs assessments conducted in 2016 by ~~the partners~~GWP is an important step into strengthening regional cooperation strategies while supporting national priorities. [In addition to this strong network already established, representatives from sectorial groups will be also consulted in the preparation phase, together with civil society organizations and institutional representatives at each administrative level on issues including disaster management and civil protection, water resources management, environmental protection and agriculture.](#)

Even though the national policies must be accounted for, ~~the Volta Basin Authority~~VBA will extend its operational activities and become a valuable support to maintain the programme results on the longer term, therefore strengthening the Volta basin Strategic Action Programme (SAP). Major institutions in charge of coordination and civil defence activities from national to local level will be integrated while detailing the programme components and they will be participating to the training and operational activities, such as for example NADMO and the Water Resource Commission in Ghana, and the General Directorate of Water Resources (DGRE), the Permanent Secretariat of the Action Plan for Integrated Water Resources Management (SP-PAGIRE), CONASUR and CONEDD in Burkina Faso, and the similar institutions in the four other countries of the basin. By involving the NMHSs and the country partners of GWP-WAF, the programme activities aim at covering the whole spectrum of capacities.

The six countries of the Volta basin count a large number of stakeholders and institutions that will contribute to the development of technologies and trainings proposed in the Programme. Risk mapping, risk prevention measures and nature-based solutions, Early Warning System designed to integrate further natural and agricultural hazards, enhanced community (particularly vulnerable groups such as women) preparedness to risk and climate change impact will provide economic, environmental and social benefits. Linking with similar initiatives in the Economic Community of West African States (ECOWAS), and especially its Coordination Unit for Water Resources, is also one of the goals of the programme.

The programme components will take into account the results (resources, infrastructures and services) obtained by past and on-going projects to ensure mutualisation of knowledge and to avoid overlap of funding. Different ways are already planned to widen the dissemination of the programme outputs to a larger circle of institutions and communities, including consultative and participatory meetings with local communities, policy makers, expert groups, advisory committees and other relevant stakeholders (NGOs). Workshops will be organized at different stages of the programme gathering key representatives and international partners of ongoing and past projects to ensure the exchange of information, collection of feedback and coordination of activities. This task is a major challenge as some projects are relatively ancient and their integration into the new technologies must be assessed. Funding is provided by UNDP, World Bank and other Development Banks, GEF, FAO, WWF, national development agencies (AFD, DANIDA), the European Commission, the Consultative Group on International Agricultural Research (CGIAR), the International Water Management Institute (IWMI), the Red Cross. These programmes and projects will be screened for duplication and synergies: the new White Volta Warning and Flood Forecasting System developed in Ghana, the GEF Flood and Drought Management Tools project, the WMO-GWP Integrated Drought Management Programme West Africa (IDMP WAF), CREWS-Burkina Faso, AMCOWGWP Water, Climate and Development Programme (WACDEP), the GLOWA Volta Project, the CGIAR challenge program on water and food, the future ADAPT-WAP project submitted by the Sahara and Sahel Observatory.

The total budget of the Volta programme is estimated to USD 7.92 million to support implementation over the six riparian countries. Funding for project management is evaluated to USD 750,000. Additional funding of USD 670,000 is included to cover the expenses of the Implementing entity.

### PART III: IMPLEMENTATION ARRANGEMENTS

At the regional transboundary level, two organizations to the side of WMO, selected as Executing Entities, will fulfill the coordination and ~~the~~ relationships with the institutions and stakeholders on the basin: - The Volta Basin Authority (VBA) will be the focal point for data sharing and dissemination through its Observatory, transboundary coordination and links with the national structures

- The Global Water Partnership West Africa (GWP-WAF) will ensure an integration of communities and local stakeholders, while connecting with national policy makers.

At national level, WMO count on the support of the Permanent Representatives and their Hydrological Advisers of the National Hydrometeorological Services (NMHSs), forming a network of technical assistance ~~and an opportunity~~ to disseminate the programme results towards the related Ministries in charge of Water Resources, Hydraulics, Environment and Civil Defense, and international level within the 191 WMO member countries and territories. The NMHSs can be envisaged as focal points for the technical activities. The network of GWP country partners (in the order of several dozen related to the programme activities) will disseminate and mainstream the programme results at local level. Additional national entities, such as FNEC in Benin, will be invited to join the advisory programme committee (see CR19). In the future, FNEC could finance national projects for the additional themes identified during or after the completion of the proposed Volta programme in order to gain long term sustainability of the programme outputs.

WMO, as Implementing and Executing Entity, will be involved at several levels into the programme activities and supervision, allowing to benefit from international as well local presence:

- ~~the Department of Regional Activities at WMO headquarters will be helped by~~ the WMO Field Office for North, Central and West Africa, will coordinate with national authorities, especially their NMHSs.
- ~~the~~ Technical Support Unit (TSU) ~~of the Associated Programme on Flood Management (APFM) and the Integrated Drought Management Programme (IDMP), both hosted in the Climate and Water Department of WMO, as Executing Entity,~~ will ensure as Executing Entity close contact with both regional Executing Entities (VBA and GWP-WAF). Other WMO teams in This TSU includes a team of

~~hydrologists, agronomists and climate specialists that have developed the knowledge base of the Associated Programme on Flood Management (APFM) and the Integrated Drought Management Programme (IDMP). The TSU is supported by a network of Support Base Partners issued from research centers to engineering companies and organizations having close links with beneficiaries in the field.~~

- ~~the relevant WMO teams of~~ the Climate and Water Department, especially the Global Framework for Climate Services (GFCS), Climate Prediction and Adaptation Branch, Flash Flood Guidance System, HydroHub project, will contribute to the activities and extend the reach of the programme.

## PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

**A. Record of endorsement on behalf of the government<sup>2</sup>** *Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.*

République du <b>Bénin</b> - Mr Euloge LIMA, Point focal de la CCNUCC, Ministère du cadre de vie et du développement durable	Date: July 26, 2017
<b>Burkina Faso</b> – Mr Ambroise KAFANDO, Adaptation Fund National Designated Authority, Director General of Cooperation, Ministry of Economy, Finance and development	Date: July 21, 2017
République de <b>Côte d’Ivoire</b> – Mr Jean Douglas ANAMAN, Head of Adaptation Unit at National Climate Change Programme, Ministry of Urban Sanitation, Environment and Sustainable Development	Date: July 17, 2017

<b>Ghana</b> – Mr Fredua AGYEMAN – Director (Environment), Ministry of Environment, Science, Technology & Innovation	Date: August 18, 2017
République du <b>Mali</b> – Mr Boureïma CAMARA, Director General, Environment and Sustainable Development Agency, Ministère de l’environnement, de l’assainissement et du développement durable	Date: <del>July 28</del> <u>September 4</u> , 2017
République du <b>Togo</b> – Mr Essobiyou Thiyu KOHOGA, Director of Environment, Ministry of Environment and Forest Resources	Date: July 25, 2017

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

**B. Implementing Entity certification** *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

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 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.

Mary Power, Director, Development and Regional Activities Department, WMO



Signature.....  
Implementing Entity Coordinator

Date: August 7, 2017

Tel. and Email: +41 22 730 8003  
MPower@wmo.int

Project Contact Person: Jean-Paul Gaudechoux and Giacomo Teruggi

Tel. And Email: +41 79 514 4261; +41 22 730 8354  
jpgaudechoux@wmo.int; gteruggi@wmo.int







Ouagadougou, le

25 JUIL 2017

**Letter of Endorsement by Government**

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

**Subject :** Endorsement for project "Integrated flood and drought management and early warning for climate change adaptation in the Volta Basin"

In my capacity as designated authority for the Adaptation Fund in Burkina Faso, I confirm that the above regional project proposal is in accordance with the government's (select national or regional) priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Burkina Faso.

Accordingly, I am pleased to endorse the above project/program proposal with support from the Adaptation Fund. If approved, the project/program will be implemented by World Meteorological Organization (WMO) and executed by World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership (GWP) West Africa.

Sincerely,



**Mr. Ambroise KAFANDO**

Fund-National Designated Authority  
Director General of Cooperation  
Of Minister of Economy, Finance and Development  
03 BP 7063 Ouagadougou 03 - Tél: (226) 25 33 30 16  
Fax : (226) 25 31 54 09  
Email: ambkafando@gmail.com

# MINISTRY OF ENVIRONMENT, SCIENCE, TECHNOLOGY & INNOVATION

Our Ref: MESTI/006/02

Tel: 0302 - 666 049

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E-mail: [info@mesti.gov.gh](mailto:info@mesti.gov.gh)

Website: [www.mesti.gov.gh](http://www.mesti.gov.gh)



Republic of Ghana

Post Office Box M232  
Ministries, Accra  
Ghana

August 18, 2017

**The Adaptation Fund Board**  
C/O Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptation-Fund.Org](mailto:Secretariat@Adaptation-Fund.Org)  
Fax: 2025223240/5

## **ENDORSEMENT FOR THE INTEGRATING FLOOD AND DROUGHT MANAGEMENT AND EARLY WARNING FOR CLIMATE CHANGE ADAPTATION IN THE VOLTA BASIN**

In my capacity as the designated authority for the adaptation fund board in Ghana, I confirm that the, above regional project proposal is in accordance with the government of Ghana's priorities in implementing adaptation activities to reduce adverse impacts of , and risks, posed by climate change in Ghana

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the programme will be implemented by World Meteorological Organization (WMO) and executed by World Meteorological Organization (WMO), Volta Basin Authority and Global Water Partnership (GWP) West Africa

Accept our assurance of the highest esteem

Thank you

**FREDUA AGYEMAN**  
**DIRECTOR (ENVIRONMENT)**  
**FOCAL POINT FOR ADAPTATION FUND**

MINISTERE DE L'ENVIRONNEMENT,  
DE L'ASSAINISSEMENT ET DU  
DEVELOPPEMENT DURABLE

Agence de l'Environnement et du  
Développement Durable (AEDD)



N° 1290

/MEADD/AEDD-FVC

REPUBLIQUE DU MALI  
*Un Peuple - Un But - Une Foi*

Bamako, le 28 JUIL 2017

*The Director General of the Environment  
and Sustainable Development Agency*

To

The Adaptation Fund Board  
c/o Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptation-Fund.org](mailto:Secretariat@Adaptation-Fund.org)  
Fax: 202 522 3240/5

**Subject : Endorsement for (Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin Project).**

In my capacity as designated authority for the Adaptation Fund in Mali, I confirm that the above project/program proposal is in accordance with the government's (select national or regional) priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the.

Accordingly, I am pleased to endorse the above project/program proposal with support from the Adaptation Fund. If approved, the program will be implemented by World Meteorological Organization (WMO) and executed by World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership (GWP) West Africa.

Sincerely,



The Director general

**Boureïma CAMARA**  
Chevallier de l'Ordre National



MINISTRE DU CADRE DE VIE  
ET DU DEVELOPPEMENT DURABLE  
REPUBLICQUE DU BENIN

01 BP 3502 - 01 BP 3621  
Cotonou  
Tél. : + 229 21 31 80 45  
dgecmcvdd@gmail.com

Cotonou, le 26/07/17

Letter of Endorsement by Government

To  
The Adaptation Fund Board  
C/o Adaptation Fund Board Secretariat  
Email: [Secretariat@Adaptation-Fund.org](mailto:Secretariat@Adaptation-Fund.org)  
Fax: 202 522 3240/5

Subject: Endorsement for project “ Integrated flood and drought management and early warning for climate change adaptation in the Volta Basin”

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

Accordingly, I’m pleased to endorse the above project program proposal with support from the Adaptation Fund. If approved, the project program will be implemented by World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership (GWP) West Africa.

Yours sincerely



**Mr Euloge LIMA**

Point Focal de la CCNUCC

Email : [limeloge@gmail.com](mailto:limeloge@gmail.com)

Tel. : +229 95 93 77 00 / +229 97 89 54 15 ou +229 21 14 21 48

MINISTRY OF ENVIRONMENT AND  
FOREST RESSOURCES

-----  
DIRECTION OF ENVIRONMENT  
-----



REPUBLIQUE TOGOLAISE

Travail-Liberté-Patrie  
-----

N° 0598 /DE

Lomé, le 25 JUIL 2017

Telephone : (228) 22 21 33 21

Fax: (228) 22 21 03 33

Email: [denv\\_togo@yahoo.fr](mailto:denv_togo@yahoo.fr)

[essobiyou@hotmail.com](mailto:essobiyou@hotmail.com)

### Letter of Endorsement by government of Togo

**To : the adaptation Fund Board**

C/o Adaptation Fund Board Secretariat

Email: [Secretariat@Adaptation-Fund.org](mailto:Secretariat@Adaptation-Fund.org)

Fax: 202 522 3240/5

**Subject:** *Endorsement for integrating Flood and Drought Management and Early Warning for climate Change Adaptation in the Volta Basin programme*

In my capacity as designated authority for the adaptation Fund in Togo, I confirm that the above regional programme proposal is in accordance with the government's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate in the region.

Accordingly, I am pleased to endorse the above programme proposal with support from the Adaptation Fund. If approved, the programme will be implemented by World Meteorological Organization(WMO) and executed by World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership (GWP) West Africa.

Sincerely,



**Mr. Essobiyou Thiyu Kohoga**

Director of Environment

**MINISTRY OF URBAN SANITATION,  
ENVIRONMENT AND SUSTAINABLE  
DEVELOPMENT**

-----  
**NATIONAL CLIMATE  
CHANGE PROGRAMME**  
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**REPUBLIQUE DE COTE D'IVOIRE**

*Union – Discipline – Travail*



0 0 0 1 9 0  
N°            /MINSEDD/CAB1 /PNCC/jda

Abidjan, le 17 JUIL 2017

### **Letter of Endorsement by Government of Côte d'Ivoire**

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

**Subject:** Endorsement for Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin Programme

In my capacity as designated authority for the Adaptation Fund in Côte d'Ivoire, I confirm that the above regional programme 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 region.

Accordingly, I am pleased to endorse the above programme proposal with support from the Adaptation Fund. If approved, the programme will be implemented by World Meteorological Organization (WMO) and executed by World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership (GWP) West Africa.

Sincerely,

**Jean Douglas ANAMAN**  
Head of Adaptation Unit at  
National Climate Change Programme



Ouagadougou, le

25 JUIL 2017

**Letter of Endorsement by Government**

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

**Subject :** Endorsement for project "Integrated flood and drought management and early warning for climate change adaptation in the Volta Basin"

In my capacity as designated authority for the Adaptation Fund in Burkina Faso, I confirm that the above regional project proposal is in accordance with the government's (select national or regional) priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Burkina Faso.

Accordingly, I am pleased to endorse the above project/program proposal with support from the Adaptation Fund. If approved, the project/program will be implemented by World Meteorological Organization (WMO) and executed by World Meteorological Organization (WMO), Volta Basin Authority (VBA) and Global Water Partnership (GWP) West Africa.

Sincerely,



**Mr. Ambroise KAFANDO**

Fund-National Designated Authority  
Director General of Cooperation  
Of Minister of Economy, Finance and Development  
03 BP 7063 Ouagadougou 03 - Tél: (226) 25 33 30 16  
Fax : (226) 25 31 54 09  
Email: ambkafando@gmail.com